CYPRESS-FAIRBANKS ISD
2024 CY LAKES HIGH SCHOOL RENOVATION
5750 GREEHOUSE RD., KATY, TX 77449

CYPRESS FAIRBANKS
INDEPENDENT SCHOOL DISTRICT
LEARN • EMPOWER • ACHIEVE • DREAM

BOARD OF TRUSTEES

ADMINISTRATION

CFISD PROJECT NO. 24-02-5749-R-RFP

CONSTRUCTION DOCUMENT
NOVEMBER 17, 2024
ISSUE FOR BID & PERMIT

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com

3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

11/14/2024 1:47:55 PM

ARCHITECTURAL ABBREVIATIONS

A	
ABV	ABOVE
A	AIR
A/C	AIR CONDITIONING
A.F.F.	ABOVE FINISHED FLOOR
A.D.	ACCESS DOOR
AC.BD.	ACOUSTICAL BOARD
ACOUS.	ACOUSTICAL
AC.T.	ACOUSTICAL TILE
ADJ	ADJUSTABLE
AGG	AGGREGATE
ALT	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR
A.B.	ANCHOR BOLT
ANOD	ANODIZED
APPROX:	APPROXIMATE
ARCH	ARCHITECT
ASPH	ASPHALT
ASSY	ASSEMBLY
AUTO	AUTOMATIC

B	
BM	BEAM
B.M.	BENCH MARK
BET	BETWEEN
BLK	BLOCK
BLKG	BLOCKING
BD	BOARD
BRKT	BRACKET
BRK	BRICK
BLDG.	BUILDING
B.U.R.	BUILT-UP ROOFING
B.O.	BY OTHERS

C	
CAB	CABINET
CPT	CARPET
C.I.P.	CAST-IN-PLACE
C.I.	CAST IRON
CLG	CEILING
CEM	CEMENT
CTR	CENTER
C.L.	CENTER LINE
CER	CERAMIC
CT	CERAMIC TILE
CB	CHALKBOARD
CL.	CLEARANCE
CLO	CLOSET
CW	COLD WATER
COL	COLUMN
CONC.	CONCRETE
CMU	CONC. MASONRY UNIT
CONST	CONSTRUCTION
CJ	CONTROL JOINT
CONT	CONTINUOUS
CG	CORNER GUARD
CSK	COUNTERSUNK
CF	CUBIC FEET
CY	CUBIC YARD

D	
DP	DAMP PROOFING
DTL	DETAIL
DIAG	DIAGONAL
DIAM	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DR	DOOR
DRS	DOORS
DN	DOWN
DS	DOWN SPOUT
DWR	DRAWER
DWG	DRAWING
DF	DRINKING FOUNTAIN

E	
EA	EACH
ELAS	ELASTIC
EL	ELEVATION
ELEC	ELECTRIC
EDF	ELECTRIC DRINKING FOUNTAIN
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION / EXPOSED
EXP.ANCH.	EXPANSION ANCHOR
EXP.BLT.	EXPANSION BOLT
EJ	EXPANSION JOINT
EXT	EXTERIOR
EW	EYE WASH
EPS	ELECTRIC PROJECTION SCREEN

F	
FAB	FABRICATE
FAS	FASTEN
FGL	FIBER GLASS
FIN	FINISH
FFL	FINISH FLOOR
FE	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.H.C.	FIRE HOSE CABINET
F.H.R.	FIRE HOSE RACK
F.O.	FACE OF
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.M.	FACE OF MASONRY
F.O.P.	FACE OF PRE CAST
F.O.S.	FACE OF STUD
FPRF	FIREPROOFING
FLG	FLASHING
F.H.S.	FLAT HEAD SCREW
FL	FLOOR
FD	FLOOR DRAIN
FL.MTD.	FLOOR MOUNTED
FT	FOOT
FTG	FOOTING
FDN	FOUNDATION
FUT	FUTURE
FHVC	FIRE HOSE VALUE & EXTINGUISHER CABINE
FDS	FIRE DEPARTMENT SIAMESE
FDV	FIRE DEPARTMENT TEST VALVE
FV	FIELD VERIFY

G	
GALV	GALVANIZED
G	GAS
GA	GAUGE
GE	GARAGE EXHAUST
GL	GLASS
GR	GRADE
GRAN	GRANITE
GYP.BD.	GYPSUM WALL BOARD
GYPPLAS	GYPSUM PLASTER
GWB	GYPSUM WALL BOARD

H	
HDWE	HARDWARE
HD	HEAD
H.V.A.C.	HEATING/VENTILATION/ AIR CONDITIONING
HGT	HEIGHT
HP	HIGH POINT
HL	HIGH LINE
HM	HOLLOW METAL
H.B.	HOSE BIBB
HORZ	HORIZONTAL
HCW	HOT AND COLD WATER
HW	HOT WATER

I	
I.D.	INSIDE DIAMETER
IN	INCH
INCL	INCLUDE
INSUL	INSULATION
INT	INTERIOR
INV	INVERT

J	
JAN	JANITOR
JT	JOINT
JST	JOIST

K	
K.PL.	KICK PLATE
KO	KNOCKOUT
KIT	KITCHEN

L	
LAB	LABORATORY
LBL	LABEL
L.B.	LAG BOLT
LAM	LAMINATE
L.H.	LEFT HAND
LL	LOW LINE
LT	LIGHT
LT.WT.	LIGHT WEIGHT
L.WC.	LIGHT WEIGHT CONCRETE
LMS	LIMESTONE
LF	LINEAR FEET
LNTL	LINTEL
LG	LONG
LVR	LOUVER
LP	LOW POINT

M	
MFG	MANUFACTURE
MRB	MARBLE
MAS	MASONRY
M.O.	MASONRY OPENING
MAX	MAXIMUM
MECH.	MECHANICAL
MEMB	MEMBRANE
MTL	METAL
MTL.DK.	METAL DECK
MTL.L.	METAL LATH METER
MEZZ	MEZZANINE
MM	MILLIMETER
MLWK	MILLWORK
MIN	MINIMUM
MISC.	MISCELLANEOUS
MOD	MODULE
M.H.	MOP HOLDER
MLDG	MOLDING
MTG.	MOUNTING
MULL	MULLION
MPS	MANUAL PROJECTION SCREEN
MB	MARKER BOARD
M/G	METAL AND GLASS

N	
NA	NOT APPLICABLE
NAT	NATURAL
NOM	NOMINAL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NO	NUMBER

O	
OC	ON CENTER
OPNG	OPENING
OPP	OPPOSITE
OPH	OPPOSITE HAND
O.D.	OUTSIDE DIAMETER
OA	OVERALL
OH	OVERHEAD

P	
PERF	PERFORATED
PTD	PAINTED
PR	PAIR
PNL	PANEL
PM	PLUGMOLD
PBD	PARTICLE BOARD
PTN	PARTITION
PC	PORTLAND CEMENT
PJ	PRE CAST JOINT
PLAS	PLASTER
PLAM	PLASTIC LAMINATE
PL	PLATE
PWD	PLYWOOD
PR	PRE CAST REVEAL
PTS	POINTS
POL	POLISHED
LB	POUND
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
P.C.PLAS.	PORTLAND CEMENT PLASTER
PC	PRE CAST
PROP	PROPERTY
PP	POWER POLE

Q	
QTY	QUANTITY
Q.T.	QUARRY TILE

R	
RAD	RADIUS
RE:, REF	REFER REFERENCE
REFL.	REFLECTED
REINF	REINFORCE
REQD	REQUIRED
R A	RETURN AIR
REV	REVISE
RES	RESILIENT
RET	RETURN
R	RISER
R.D.	ROOF DRAIN
RFG	ROOFING
RM	ROOM
R.O.	ROUGH OPENING
RUB	RUBBER
R.B.	RESILIENT BASE
R.H.	RIGHT HAND
R.T.	RESILIENT TILE

S	
SAF.GL.	SAFETY GLASS
SCHED	SCHEDULE
SNT	SEALANT
SECT	SECTION
SEP	SEPARATE
SERV	SERVICE
SHT	SHEET
SIM	SIMILAR
S.C.	SOLID CORE
SPCL	SPECIAL
SPEC	SPECIFICATION
SPK.	SPEAKER
SQ	SQUARE
STD	STANDARD
SP	STANDPIPE
STL	STEEL
S.D.	STORM DRAIN
STRUCT	STRUCTURAL
SURF	SURFACE
SUSP	SUSPEND
SSTL	STAINLESS STEEL
SYS	SYSTEM

T	
TEL	TELEPHONE
T.C.	TERRA COTTA
TERR	TERRAZZO
THK	THICKNESS
THD	THREAD
THRES	THRESHOLD
TA-	TOILET ACCESSORY
T.&G.	TONGUE & GROOVE
TPD	TOILET PAPER DISPENSER
TOC	TOP OF CURB
TO.SL.	TOP OF SLAB
T.O.S.	TOP OF STEEL
TB	TACK BOARD
TRAV	TRAVERTINE
T	TREAD
TYP	TYPICAL
TV	TELEVISION
TW	TREATED WATER
TD	TRENCH DRAIN

U	
UC	UNDERCUT
UFAS	UNIFORM FEDERAL
UL	UNDERWRITERS LABORATORIES
UZ	UTILITY ZONE
UNFIN	UNFINISHED
UR	URINAL
UNO	UNLESS NOTED OTHERWISE

V	
V	VACUUM
V.B.	VAPOR BARRIER
VAR.	VARIES
VERT	VERTICAL
VEST	VESTIBULE
V.W.C.	VINYL WALL COVERING
VIF.	VERIFY IN FIELD

W	
W.H.	WALL HUNG
W.C.	WATER CLOSET
WP	WATERPROOFING
WDW	WINDOW
W.W.F.	WELDED WIRE FABRIC
WD	WOOD
W.P.	WORK POINT
W.I.	WROUGHT IRON
W/	WITH
W/O	WITHOUT
WS	WEATHER SEAL

Y	
YD	YARD

DRAWING INDEX

GENERAL

SHEET NUMBER	SHEET NAME
G0.01	DRAWING INDEX, SYMBOLS, ABBREVIATIONS
G1.01	LIFE SAFETY PLANS
G1.02	LIFE SAFETY PLANS - AREAS G & F
G1.03	UL FIRE RATED ASSEMBLIES
G1.10	HCED FIRE CODE REVIEW V8.0 - FINE ARTS / CTE ADDITION
G1.20	HCED FIRE CODE REVIEW V8.0 - GREENHOUSE
G1.30	HCED FIRE CODE REVIEW V8.0 - STORAGE BLDG
G2.00	ADA DETAILS
G2.01	ACCESSORIES MOUNTING REQUIREMENTS

CIVIL

SHEET NUMBER	SHEET NAME
SV.01	SURVEY
SV.02	SURVEY

CIVIL

SHEET NUMBER	SHEET NAME
C1.01	GENERAL NOTES
C1.02	OVERALL CIVIL SITE PLAN
C1.03	DEMOLITION PLAN
C1.04	DEMOLITION PLAN
C1.05	DEMOLITION PLAN
C1.06	FIRE ACCESS PLAN
C2.01	GRADING PLAN (SHEET 1 OF3)
C2.02	GRADING PLAN (SHEET 2 OF3)
C2.03	GRADING PLAN (SHEET 3 OF3)
C3.01	UTILITY PLAN (SHEET 1 OF 3)
C3.02	UTILITY PLAN (SHEET 2 OF 3)
C3.03	UTILITY PLAN (SHEET 3 OF 3)
C3.04	DETENTION POND PLAN
C3.05	STORM WATER POLLUTION PREVENTION PLAN
C5.01	PAVING AND JOINT PLAN
C5.02	PAVING AND JOINT PLAN
C7.01	PAVING DETAILS
C7.02	STORM SEWER DETAILS
C7.03	WATER LINE DETAILS
C7.04	SANITARY SEWER DETAILS
C7.05	STORM WATER POLLUTION PREVENTION DETAILS

LANDSCAPE

SHEET NUMBER	SHEET NAME
L1.00	IRRIGATION MODIFICATION TO SITE
L1.10	IRRIGATION MODIFICATION TO SITE

STRUCTURAL

SHEET NUMBER	SHEET NAME
S001	3D VIEW AND SHEET LIST
S101	GENERAL STRUCTURAL CRITERIA
S102	GENERAL STRUCTURAL CRITERIA
S201	FOUNDATION PLAN - OVERALL
S201F	FOUNDATION PLAN - AREA F
S201G	FOUNDATION PLAN - AREA G
S201H	FOUNDATION PLAN - GREENHOUSE
S201P	FOUNDATION PLAN - PEMB
S201T	TENNIS COURT PLAN AND DETAILS
S202	LOW ROOF FRAMING PLAN - OVERALL
S202F	LOW ROOF FRAMING PLAN - AREA F
S202G	LOW ROOF FRAMING PLAN - AREA G
S203	HIGH ROOF FRAMING PLAN - OVERALL
S203G	HIGH ROOF FRAMING PLAN - AREA G
S301	SCHEDULES
S302	COLUMN AND BASEPLATE SCHEDULE
S401	TYPICAL SLAB ON GRADE DETAILS
S402	TYPICAL GB AND CF DETAILS
S403	SOG @ GB
S404	SOG @ PEMB
S405	SITE DETAILS
S501	TYPICAL STEEL DETAILS
S502	TYPICAL COLD FORMED METAL FRAMING DETAILS
S503	TYPICAL CMU WALL DETAILS
S601	TYPICAL STEEL ROOF DETAILS
S602	STEEL ROOF (OVERFLOW & EJ)

DEMOLITION

SHEET NUMBER	SHEET NAME
D1.00	SITE DEMO
D2.01	1ST FLOOR DEMOLITION PLAN
D2.02	2ND FLOOR DEMOLITION PLAN
D2.10F	1ST FLOOR DEMOLITION PLAN - AREA 'F'
D2.10G	1ST FLOOR DEMOLITION PLAN - AREA 'G'

ARCHITECTURAL - BUILDING

SHEET NUMBER	SHEET NAME
A1.00	ARCHITECTURAL SITE PLAN
A1.01	ENLARGED SITE PLAN
A1.02	ATHLETIC STORAGE BLDG PLANS & DETAILS
A1.03	ATHLETIC OUT BUILDINGS PLANS & DETAILS
A1.04	ENLARGED CANOPY PLANS & DETAILS
A1.05	GREENHOUSE PLAN & DETAILS
A1.06	TENNIS COURT PLANS & DETAILS
A1.10	SITE DETAILS
A2.00	OVERALL FLOOR PLANS
A2.10A	1ST FLOOR PLAN - AREA 'A'
A2.10B	1ST FLOOR PLAN - AREA 'B'
A2.10C	1ST FLOOR PLAN - AREA 'C'
A2.10D	1ST FLOOR PLAN - AREA 'D'
A2.10E	1ST FLOOR PLAN - AREA 'E'
A2.10F	1ST FLOOR PLAN - AREA 'F'
A2.10G	1ST FLOOR PLAN - AREA 'G'
A2.10H	1ST FLOOR PLAN - AREA 'H'
A2.10I	1ST FLOOR PLAN - AREA 'I'
A2.10J	1ST FLOOR PLAN - AREA 'J'
A2.20E	2ND FLOOR PLAN - AREA EAST
A2.20W	2ND FLOOR PLAN - AREA WEST
A2.30	OVERALL & ENLARGED ROOF PLAN
A2.31	SIPLAST TYPICAL LWIC MEMBRANE ROOF DETAILS
A2.32	TYPICAL ROOF ACCESSORY DETAILS
A2.33	TYPICAL ROOF ACCESSORY DETAILS
A3.01	RECEPTION PLANS & DETAILS
A3.10	RESTROOM PLAN & ELEVATIONS
A4.01	DOOR SCHEDULES
A4.02	DOOR SCHEDULES
A4.03	DOOR SCHEDULES
A4.04	DOOR SCHEDULES
A4.10	INTERIOR OPENING TYPES & DETAILS
A4.20	PARTITION TYPES & WALL DETAILS
A5.00	EXTERIOR OPENING TYPES
A6.00	EXTERIOR AERIAL PHOTOS
A6.01	JOINT SEALANT & IRF LOCATION FLOOR PLANS
A6.10	BUILDING ELEVATIONS - OVERALL
A6.11	BUILDING ELEVATIONS-SEALANT REPLACEMENT LOCATIONS
A6.12	BUILDING ELEVATION SEALANT REPLACEMENT
A6.13	BUILDING ELEVATIONS-SEALANT REPLACEMENT
A6.14	BUILDING ELEVATIONS-SEALANT REPLACEMENT
A6.15	BUILDING ELEVATIONS-SEALANT REPLACEMENT
A6.20	NEW FINE ARTS & CTE ADDITION ELEVATIONS
A6.30	BUILDING SEALANT DETAILS
A7.01	BUILDING SECTIONS
A7.02	BUILDING SECTIONS
A8.01	WALL SECTIONS & DETAILS
A8.02	WALL SECTIONS & DETAILS
A8.03	WALL SECTIONS & DETAILS
A8.04	WALL SECTIONS & DETAILS
A9.01	PLAN DETAILS
A10.01	FINE ARTS ELEVATIONS
A10.02	FINE ARTS ELEVATIONS
A10.03	WELDING LAB ELEVATIONS
A10.04	CORRIDOR ELEVATIONS
A10.10	CASEWORK ELEVATIONS
A10.20	CASEWORK SECTIONS & DETAILS
A11.01	1ST FLOOR REFLECTED CEILING PLAN
A11.02	2ND FLOOR REFLECTED CEILING PLAN
A11.10G	REFLECTED CEILING PLAN - AREA 'G'
A12.00	FINISH LEGEND & ROOM SIGNAGE
A12.10	OVERALL FINISH PLANS
A12.10A	FINISH PLAN - AREA 'A'
A12.10G	FINISH PLAN - AREA 'G'
A12.10J	FINISH PLAN - AREA 'J'

MECHANICAL

SHEET NUMBER	SHEET NAME
M0.01	MECHANICAL DEMOLITION FLOOR PLAN - AREA A
M0.02	MECHANICAL DEMOLITION FLOOR PLAN - AREA B
M0.03	MECHANICAL DEMOLITION FLOOR PLAN - AREA C
M0.04	MECHANICAL DEMOLITION FLOOR PLAN - AREA D
M0.05	MECHANICAL DEMOLITION FLOOR PLAN - AREA E
M0.06	MECHANICAL DEMOLITION FLOOR PLAN - AREA F
M0.07	MECHANICAL DEMOLITION FLOOR PLAN - AREA G
M0.08	MECHANICAL DEMOLITION FLOOR PLAN - AREA H
M0.09	MECHANICAL DEMOLITION FLOOR PLAN - AREA I
M0.10	MECHANICAL DEMOLITION SECOND FLOOR PLAN - AREA C
M0.11	MECHANICAL DEMOLITION SECOND FLOOR PLAN - AREA D
M0.12	MECHANICAL DEMOLITION SECOND FLOOR PLAN - AREA E
M0.13	MECHANICAL DEMOLITION SECOND FLOOR PLAN - AREA H
M0.14	MECHANICAL DEMOLITION SECOND FLOOR PLAN - AREA I
M1.01	MECHANICAL SITE PLAN
M1.02	MECHANICAL SITE PLAN - ENLARGED VIEWS
M2.01	MECHANICAL FIRST FLOOR PLAN - AREA A
M2.02	MECHANICAL FIRST FLOOR PLAN - AREA B
M2.03	MECHANICAL FIRST FLOOR PLAN - AREA C
M2.04	MECHANICAL FIRST FLOOR PLAN - AREA D
M2.05	MECHANICAL FIRST FLOOR PLAN - AREA E
M2.06	MECHANICAL FIRST FLOOR PLAN - AREA F
M2.07	MECHANICAL FIRST FLOOR PLAN - AREA G
M2.08	MECHANICAL FIRST FLOOR PLAN - AREA H
M2.09	MECHANICAL FIRST FLOOR PLAN - AREA I
M2.10	MECHANICAL FIRST FLOOR PLAN - AREA J
M2.11	MECHANICAL FIRST FLOOR PLAN - AREA P
M2.12	MECHANICAL SECOND FLOOR PLAN - AREA A
M2.13	MECHANICAL SECOND FLOOR PLAN - AREA B
M2.14	MECHANICAL SECOND FLOOR PLAN - AREA C
M2.15	MECHANICAL SECOND FLOOR PLAN - AREA D
M2.16	MECHANICAL SECOND FLOOR PLAN - AREA E
M2.17	MECHANICAL SECOND FLOOR PLAN - AREA F
M2.18	MECHANICAL SECOND FLOOR PLAN - AREA G
M2.19	MECHANICAL SECOND FLOOR PLAN - AREA H
M2.20	MECHANICAL SECOND FLOOR PLAN - AREA I
M2.21	MECHANICAL SECOND FLOOR PLAN - AREA J
M3.01	MECHANICAL ENLARGED PLANS
M3.02	MECHANICAL ENLARGED PLANS
M4.01	MECHANICAL PIPING DIAGRAM
M5.01	MECHANICAL DETAILS
M6.01	MECHANICAL LEGENDS & SCHEDULES
M6.02	MECHANICAL LEGENDS & NOTES
M7.01	MECHANICAL CONTROLS FIRST FLOOR PLAN - AREA A & J
M7.02	MECHANICAL CONTROLS FIRST FLOOR PLAN - AREA B & C
M7.03	MECHANICAL CONTROLS FIRST FLOOR PLAN - AREA D & I
M7.04	MECHANICAL CONTROLS FIRST FLOOR PLAN - AREA E,F,G & H
M7.05	MECHANICAL CONTROLS FIRST FLOOR PLAN - AREA P
M7.06	MECHANICAL CONTROLS SECOND FLOOR PLAN - AREA A & J
M7.07	MECHANICAL CONTROLS SECOND FLOOR PLAN - AREA B & C
M7.08	MECHANICAL CONTROLS SECOND FLOOR PLAN - AREA D & I
M7.09	MECHANICAL CONTROLS SECOND FLOOR PLAN - AREA E,F,G & H
M7.10	MECHANICAL CONTROLS SECOND FLOOR PLAN - AREA P
M7.11	MECHANICAL CONTROLS SCHEDULES
M7.12	MECHANICAL CONTROLS SCHEDULES

ELECTRICAL

SHEET NUMBER	SHEET NAME
E0.01	ELECTRICAL DEMOLITION FIRST FLOOR PLAN - AREA F
E0.02	ELECTRICAL DEMOLITION FIRST FLOOR PLAN - AREA G
E1.01	ELECTRICAL SITE PLAN
E1.02	ELECTRICAL SITE PLAN - ENLARGED VIEWS
E2.01	ELECTRICAL LIGHTING FIRST FLOOR PLAN - AREA F
E2.02	ELECTRICAL LIGHTING FIRST FLOOR PLAN - AREA G
E2.03	ELECTRICAL LIGHTING FIRST FLOOR PLAN - AREA F
E3.01	ELECTRICAL POWER FIRST FLOOR PLAN - AREA A
E3.02	ELECTRICAL POWER FIRST FLOOR PLAN - AREA B
E3.03	ELECTRICAL POWER FIRST FLOOR PLAN - AREA C
E3.04	ELECTRICAL POWER FIRST FLOOR PLAN - AREA D
E3.05	ELECTRICAL POWER FIRST FLOOR PLAN - AREA E
E3.06	ELECTRICAL POWER FIRST FLOOR PLAN - AREA F
E3.07	ELECTRICAL POWER FIRST FLOOR PLAN - AREA G
E3.08	ELECTRICAL POWER FIRST FLOOR PLAN - AREA H
E3.09	ELECTRICAL POWER FIRST FLOOR PLAN - AREA I
E3.10	ELECTRICAL POWER FIRST FLOOR PLAN - AREA J
E3.11	ELECTRICAL POWER FIRST FLOOR PLAN - NATATORIUM
E3.12	ELECTRICAL POWER SECOND FLOOR PLAN - AREA C
E3.13	ELECTRICAL POWER SECOND FLOOR PLAN - AREA D
E3.14	ELECTRICAL POWER SECOND FLOOR PLAN - AREA E
E3.15	ELECTRICAL POWER SECOND FLOOR PLAN - AREA H
E3.16	ELECTRICAL POWER SECOND FLOOR PLAN - AREA I
E3.17	ELECTRICAL POWER SECOND FLOOR PLAN - AREA J
E4.01	PARTIAL ELECTRICAL DEMOLITION ONE-LINE DIAGRAM
E4.02	PARTIAL ELECTRICAL ONE-LINE DIAGRAM
E5.01	ELECTRICAL PANEL SCHEDULE
E5.02	ELECTRICAL PANEL SCHEDULE
E5.03	ELECTRICAL PANEL SCHEDULE
E5.04	ELECTRICAL PANEL SCHEDULE
E5.05	ELECTRICAL PANEL SCHEDULE
E5.06	ELECTRICAL PANEL SCHEDULE
E5.07	ELECTRICAL PANEL SCHEDULE
E6.01	ELECTRICAL DETAILS, LEGENDS, AND SCHEDULES
E6.02	ELECTRICAL LIGHTING CONTROLS DETAILS

PLUMBING

SHEET NUMBER	SHEET NAME
P0.01	PLUMBING DEMOLITION FIRST FLOOR PLAN - AREA F
P0.02	PLUMBING DEMOLITION FIRST FLOOR PLAN - AREA G
P1.00	PLUMBING COMPOSITE FLOOR PLANS
P1.01	PLUMBING COMPOSITE ROOF PLANS
P1.02	PLUMBING SITE PLAN
P2.06	PLUMBING UNDERFLOOR PLAN - AREA F
P2.07	PLUMBING UNDERFLOOR PLAN - AREA G
P3.06	PLUMBING FIRST FLOOR PLAN - AREA F
P3.07	PLUMBING FIRST FLOOR PLAN - AREA G
P4.01	PLUMBING ROOF PLAN
P4.02	PLUMBING ROOF PLAN - NATURAL GAS
P5.01	PLUMBING ENLARGED PLANS
P5.02	PLUMBING ENLARGED PLAN - GREENHOUSE
P6.01	PLUMBING DETAILS
P6.02	PLUMBING DETAILS
P7.01	PLUMBING SCHEDULES
P7.02	PLUMBING SCHEDULES

TECHNOLOGY

SHEET NUMBER	SHEET NAME
T0.00	TECHNOLOGY LEGENDS AND SCHEDULES
T0.01	TECHNOLOGY DEMOLITION FIRST FLOOR PLAN - AREA D
T0.02	TECHNOLOGY DEMOLITION FIRST FLOOR PLAN - AREA F
T1.01	TECHNOLOGY SITE PLAN
T1.02	TECHNOLOGY COMPOSITE FLOOR PLANS
T2.01	TECHNOLOGY FIRST FLOOR PLAN - AREA A
T2.02	TECHNOLOGY FIRST FLOOR PLAN - AREA B & BB
T2.03	TECHNOLOGY FIRST FLOOR PLAN - AREA C
T2.04	TECHNOLOGY FIRST FLOOR PLAN - AREA D
T2.05	TECHNOLOGY FIRST FLOOR PLAN - AREA E
T2.06	TECHNOLOGY FIRST FLOOR PLAN - AREA F
T2.07	TECHNOLOGY FIRST FLOOR PLAN - AREA G
T2.08	TECHNOLOGY FIRST FLOOR PLAN - AREA H
T2.09	TECHNOLOGY FIRST FLOOR PLAN - AREA I
T2.10	TECHNOLOGY FIRST FLOOR PLAN - AREA J
T2.11	TECHNOLOGY FIRST FLOOR PLAN - AREA P
T3.01	TECHNOLOGY ENLARGED PLANS
T5.01	TECHNOLOGY DETAILS
T5.02	TECHNOLOGY DETAILS
T5.03	TECHNOLOGY DETAILS
T5.04	TECHNOLOGY DETAILS
T5.05	TECHNOLOGY DETAILS
T5.06	TECHNOLOGY DETAILS

AV / THEATRICAL

SHEET NUMBER	SHEET NAME
AV0.01	AV - GENERAL NOTES & LEGENDS
AV0.02	AV - SYSTEMS ASCHEDULES
AV2.10F	AV - 1ST FLOOR PLAN - AREA 'F'
AV2.10T	AV - 1ST FLOOR PLAN - BLACK BOX
AV3.00	AV - SECTIONS & ELEVATIONS - AUDITORIUM
AV3.01	AV - SECTIONS & ELEVATIONS - BLACK BOX
AV4.10F	AV - 1ST FLOOR REFLECTED CEILING PLAN - AREA 'F'
AV4.10T	AV - 1ST FLOOR REFLECTED CEILING PLAN - BLACK BOX
AV5.00	AV - CONNECTOR DETAILS
AV5.01	AV - STANDARD DETAILS
AV5.02	AV - STANDARD DETAILS
AV5.20	AV - PANEL DETAILS
AV5.40	AV - RACK DETAILS
AV5.41	AV - RACK DETAILS
AV7.30	AV - SCHEMATICS
AV7.31	AV - SCHEMATICS
AV7.32	AV - SCHEMATICS
AV7.33	AV - SCHEMATICS
AV7.34	AV - SCHEMATICS
AVD2.10F	AV DEMO - FLOOR PLAN AREA "F"
TE0.00	TE - NOTES AND LEGENDS
TE2.10G	TE - 1ST FLOOR PLAN - AREA G
TE3.00	TE - SECTIONS & ELEVATION
TE4.10G	TE - 1ST FLOOR REFLECTED CEILING PLAN - AREA G
TL0.00	TL - GENERAL NOTES & LEGENDS
TL0.01	TL - SCHEDULES
TL0.02	TL - SCHEDULES
TL2.10F	TL - 1ST FLOOR PLAN - AREA F
TL2.10G	TL - 1ST FLOOR PLAN - AREA G
TL3.00	TL - SECTIONS & ELEVATIONS
TL4.10G	TL - 1ST FLOOR REFLECTED CEILING PLAN - AREA G
TL7.00F	TL - SCHEMATIC - AREA F
TL7.00G	TL - SCHEMATIC - AREA G

DRAWING KEYNOTING SYSTEM

A KEYNOTING SYSTEM IS USED ON THE DRAWINGS FOR MATERIALS, REFERENCES AND NOTES. REFER TO THE MATERIAL KEYNOTE LEGEND ON THE DRAWING FOR THE INFORMATION WHICH RELATES TO EACH KEYNOTE SYMBOL ON THE RESPECTIVE DRAWING.

EACH KEYNOTE SYMBOL CONSISTS OF A 6 DIGIT NUMBER FOLLOWED BY A DASH AND LETTER & NUMBER SUFFIX (FOR EXAMPLE, 054000 - A1). THE 6 DIGIT NUMBER RELATES TO THE SPECIFICATION SECTION WHICH GENERALLY COVERS THE ITEM THAT IS REFERENCED AND THE LETTER / NUMBER SUFFIX COMBINED WITH THE 6 DIGIT NUMBER AND DASH CREATES A KEYNOTE SYMBOL WHICH IDENTIFIES THE SPECIFIC REFERENCE NOTATION USED ON THE DRAWING. THE LETTER SUFFIX DOES NOT RELATE TO ANY CORRESPONDING REFERENCE LETTER IN THE SPECIFICATION OR THE CUT SHEET MANUAL.

THE ORGANIZATION OF THE KEYNOTING SYSTEM ON THE DRAWINGS, WITH THE KEYNOTE REFERENCE NUMBERS RELATED TO THE SPECIFICATION SECTIONS NUMBERING SYSTEM, SHALL NOT CONTROL THE CONTRACTOR IN DIVIDING THE WORK AMONG SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF WORK TO BE PERFORMED BY ANY TRADE.

PLEASE NOTE THAT KEYNOTE NUMBERS ARE NOT ALL CONSECUTIVE FOR THIS PROJECT. THERE MAY BE NUMBERS AND LETTERS THAT ARE SKIPPED - THIS IS INTENTIONAL AND DOES NOT REFLECT A MISSING KEYNOTE OR REFERENCE.

PLAN SYMBOLS

ROOM NAME 8088	ROOM DESIGNATION TAG
80008-9	DOOR DESIGNATION TAG
W8	WINDOW DESIGNATION TAG
A1	WALL DESIGNATION TAG
PT-1	FINISH MATERIAL DESIGNATION TAG
9'-0" ACT-1	CEILING DESIGNATION TAG
8 A10.121 SIM	BUILDING / WALL / DETAIL SECTION DESIGNATION TAG
12 A2.01 SIM	DETAIL DESIGNATION TAG
8 A10.121 SIM	ELEVATION DESIGNATION TAG RE: A12 SERIES DRAWINGS
	ELEVATION DATUM HEIGHT DESIGNATION TAG

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

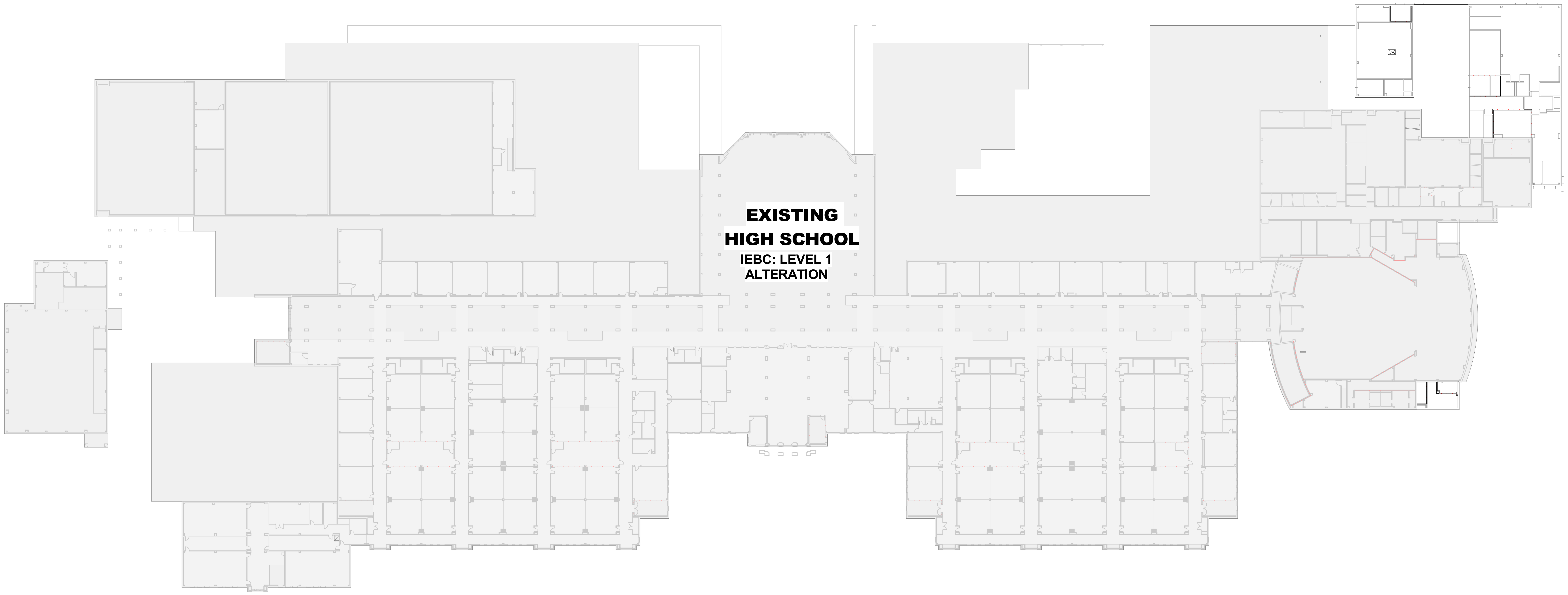
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

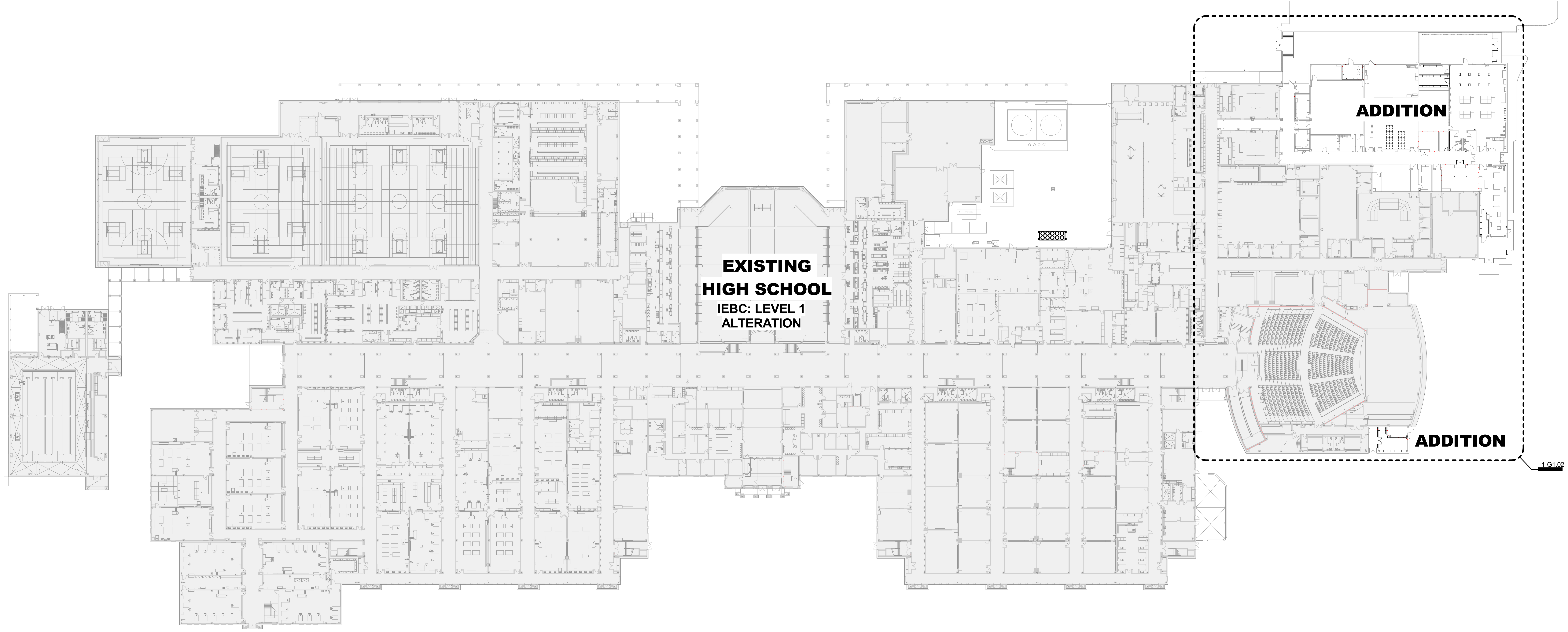
DRAWING INDEX,
SYMBOLS,
ABBREVIATIONS

G0.01
____ of ____

Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



2 2ND FLOOR LIFE SAFETY PLAN
1" = 40'-0"



1 1ST FLOOR LIFE SAFETY PLAN
1" = 40'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

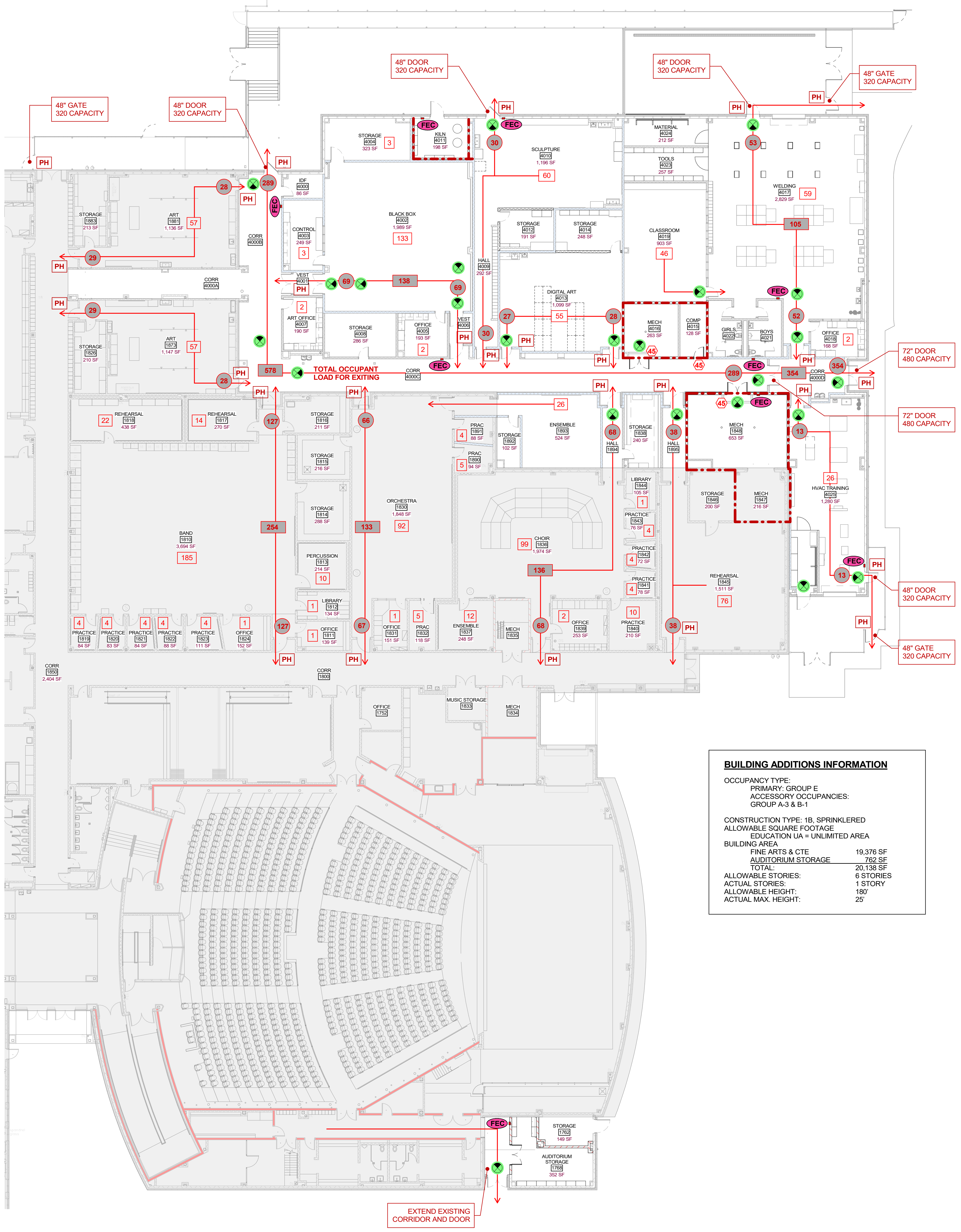
LIFE SAFETY PLANS

G1.01

_____ of _____

11/14/2024 1:39:47 PM

Autodesk Docs://23072_CFSID_Phase_6_/22/23071_Cy-Lakes_HS_r22.rvt



1 ENLG LIFE SAFETY PLAN - AREA G & F

1/16" = 1'-0"

BUILDING ADDITIONS INFORMATION

OCCUPANCY TYPE:
PRIMARY: GROUP E
ACCESSORY OCCUPANCIES:
GROUP A-3 & B-1

CONSTRUCTION TYPE: 1B, SPRINKLERED
ALLOWABLE SQUARE FOOTAGE
EDUCATION UA = UNLIMITED AREA
BUILDING AREA

FINE ARTS & CTE	19,376 SF
AUDITORIUM STORAGE	762 SF
TOTAL:	20,138 SF
ALLOWABLE STORIES:	6 STORIES
ACTUAL STORIES:	1 STORY
ALLOWABLE HEIGHT:	180'
ACTUAL MAX. HEIGHT:	25'

2018 IBC & IFC CODE REVIEW WITH HARRIS COUNTY AMENDMENTS:

SECTION 508 - MIXED USE & OCCUPANCY

508.2.4 SEPARATION OF OCCUPANCIES: NO SEPARATION IS REQUIRED BETWEEN ACCESSORY OCCUPANCIES AND THE MAIN OCCUPANCY

TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES:
- NO OCCUPANCY SEPARATION IS REQUIRED BETWEEN E & A OCCUPANCIES

CHAPTER 8 - FIRE & SMOKE PROTECTION FEATURES:

SECTION 803 - WALL & CEILING FINISHES:
INTERIOR WALL AND CEILING FINISH TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723 SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE-DEVELOPED INDICES:

CLASS A = FLAME SPREAD INDEX 0 - 25; SMOKE DEVELOPED INDEX 0 - 450

CLASS B = FLAME SPREAD INDEX 26 -75; SMOKE DEVELOPED INDEX 0 - 450

CLASS C = FLAME SPREAD INDEX 76 - 200; SMOKE DEVELOPED INDEX 0 - 450

TABLE 803.13 - INTERIOR WALL & CEILING FINISH REQ'D BY OCCUPANCY:

GROUP	SPRINKLERED		
	INTERIOR EXIT STAIRWAYS, RAMPS, & EXIT PASSAGEWAYS	CORRIDOR & ENCLOSURE FOR EXIT ACCESS STAIRWAYS & RAMPS	ROOMS & ENCLOSED SPACES
A-2	B	B	C
A-3	B	B	C
B	B	C	C
E	B	C	C
S	C	B	C

CHAPTER 9 - FIRE PROTECTION SYSTEMS

SECTION 906 - PORTABLE FIRE EXTINGUISHER REQ'D:
GROUP E, B, & A-3 OCCUPANCIES ARE REQUIRED TO HAVE PORTABLE FIRE EXTINGUISHERS

SECTION 906 - INTERNATIONAL FIRE CODE:
IFC TABLE 906.3 - MAXIMUM TRAVEL DISTANCE TO FIRE EXTINGUISHER IS 75'-0"

SECTION 907 - FIRE ALARM & DETECTION SYSTEMS:
GROUP E, A-2, & A-3 OCCUPANCIES ARE REQUIRED TO HAVE MANUAL FIRE ALARM SYSTEMS AND SHALL BE EXTENDED IN NEW ADDITIONS

SECTION 1005 - MEANS OF EGRESS SIZING: W/ SPRINKLER EXCEPTIONS:

1005.3.2 OTHER EGRESS SIZING = .15 INCH PER OCCUPANT
- 3'-0" DOOR @ .15" / OCC = 226 OCCUPANTS
- 4'-0" DOOR @ .15" / OCC = 306 OCCUPANTS
- 3'-0" PAIR DOORS (6'-0") @ .15" / OCC = 453 OCCUPANTS

SECTION 1017 - EXIT ACCESS TRAVEL DISTANCE:

TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE IN A SPRINKLERED BUILDING

GROUP A & E - 250'-0" MAX TRAVEL DISTANCE
GROUP B - 300'-0" MAX TRAVEL DISTANCE

SECTION 1020 - CORRIDORS:

TABLE 1020.2 MINIMUM CORRIDOR WIDTH:
GROUP E - WITH A CORRIDOR HAVING AN OCCUPANT LOAD OF 100 OR MORE, MIN WIDTH IS 72" (6'-0")

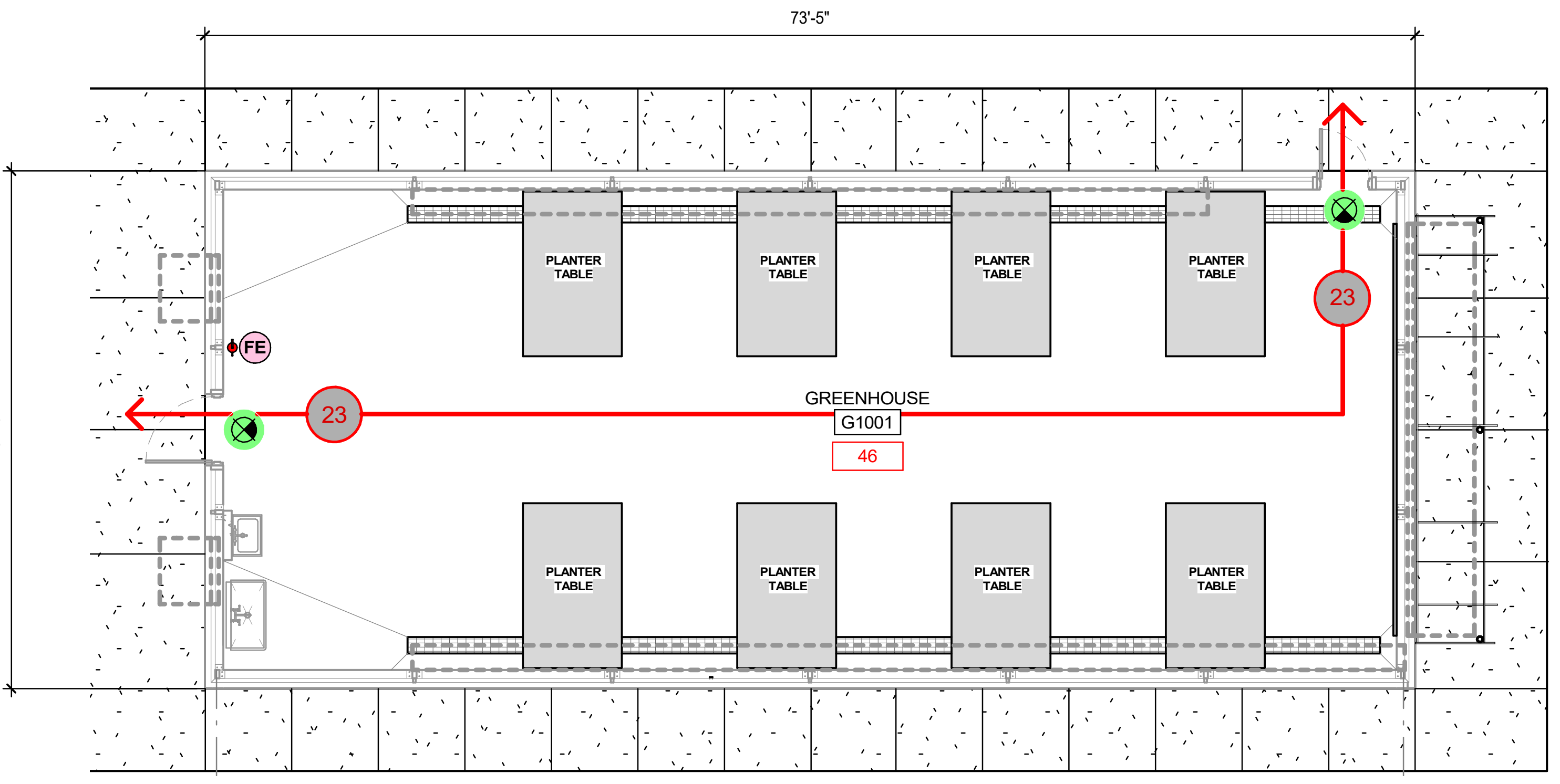
SECTION 1020.4 - DEAD ENDS: MINIMUM DEAD END CORRIDOR LENGTH IS 50'- 0" IN SPRINKLERED GROUPS E, A, & B OCCUPANCIES

SECTION 1010.10 - PANIC AND FIRE EXIT HARDWARE:

SWING DOORS SERVING ROOMS OR SPACES WITH AN OCCUPANT LOAD OF 50 OR MORE IN A GROUP A OR E OCCUPANCY SHALL NOT BE PROVIDED WITH LATCH OR LOCK OTHER THAN PANIC HARDWARE OR FIRE EXIT HARDWARE.

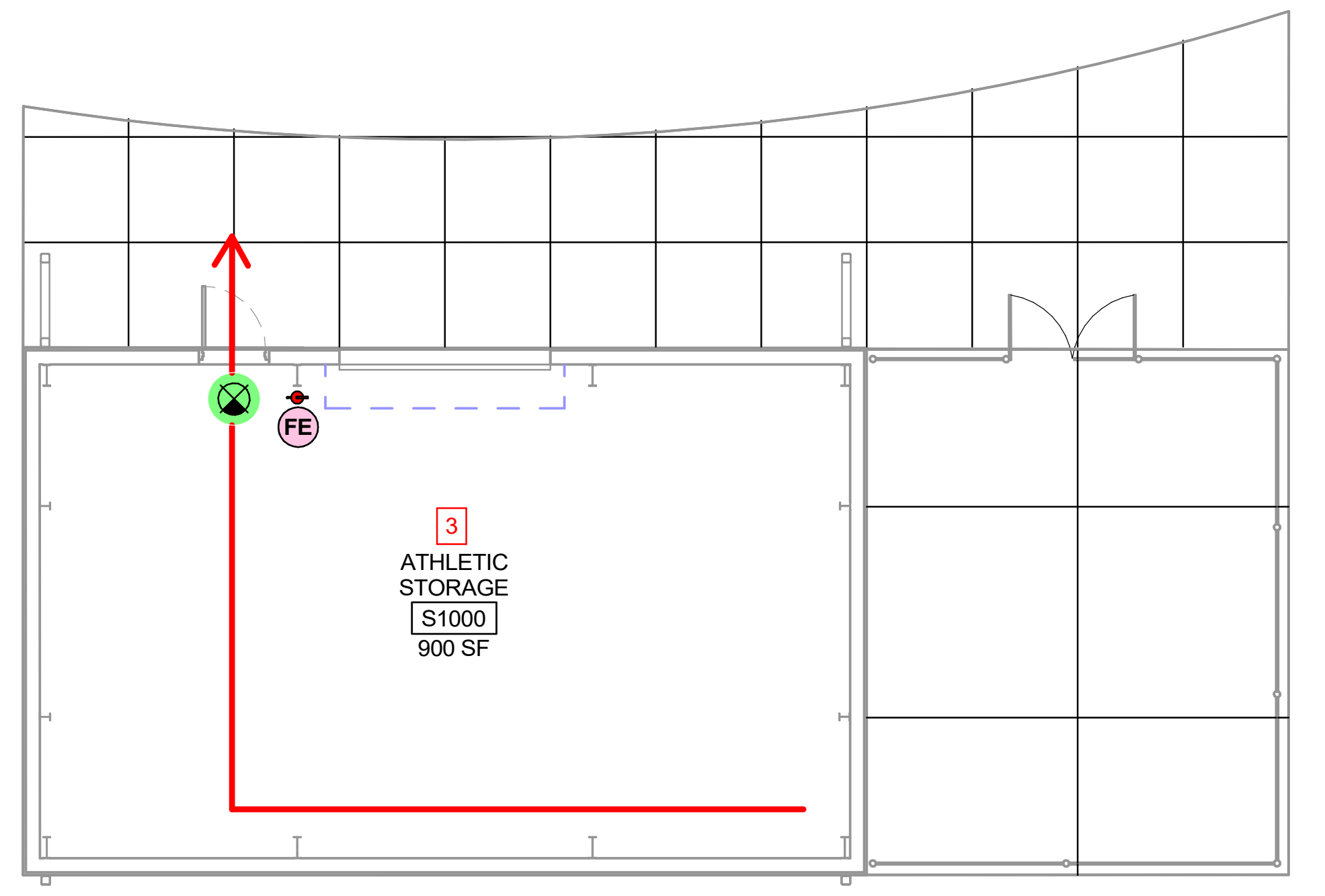
EXCEPTIONS:
1. A MAIN EXIT OF A GROUP A OCCUPANCY SHALL BE PERMITTED TO HAVE LOCKING DEVICES IN ACCORDANCE WITH SECTION 1010.1.9.4, ITEM 2.
2, DOORS PROVIDED WITH PANIC HARDWARE OR FIRE EXIT HARDWARE AND SERVING A GROUP A OR E OCCUPANCY SHALL BE PERMITTED TO BE ELECTRICALLY LOCKED IN ACCORDANCE WITH SECTION 1010.1.9.9 OR 1010.1.9.10

NOTE: DOORS DESIGNATED WITH "**PH**" INDICATES PANIC HARDWARE IS REQUIRED - SEE LEGEND BELOW & LIFE SAFETY PLAN FOR LOCATIONS.



3 ENLG LIFE SAFETY PLAN - GREENHOUSE

1/8" = 1'-0"



2 ENLG LS PLAN - STORAGE BLDG

1/8" = 1'-0"

GREENHOUSE INFORMATION

OCCUPANCY TYPE: E
(VOCATIONAL CLASSROOM)

CONSTRUCTION TYPE: II-B, NS
ALLOWABLE SQUARE FOOTAGE:
EDUCATION = 14,500 SF

BUILDING AREA:	2,310 SF
ALLOWABLE STORIES:	2 STORIES
ACTUAL STORIES:	1 STORY
ALLOWABLE HEIGHT:	55'
ACTUAL MAX. HEIGHT:	17'

ATHLETICS STORAGE BUILDING INFORMATION

OCCUPANCY TYPE: S-2

CONSTRUCTION TYPE: II-B, NS
ALLOWABLE SQUARE FOOTAGE:
STORAGE S-2 = 26,000 SF

BUILDING AREA:	1,000 SF
ALLOWABLE STORIES:	2 STORIES
ACTUAL STORIES:	1 STORY
ALLOWABLE HEIGHT:	55'
ACTUAL MAX. HEIGHT:	17'

GENERAL INFORMATION

CY LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
HARRIS COUNTY
OWNER: CYPRESS-FAIRBANKS I.S.D.

EXISTING BUILDING INFORMATION

2003 INTERNATIONAL BUILDING CODE
OCCUPANCT TYPE: GROUP E
CONSTRUCTION TYPE: 1B, SPRINKLERED
ALLOWABLE SQUARE FOOTAGE
EDUCATION UA = UNLIMITED AREA
BUILDING AREA

1ST FLOOR:	366,241 SF
2ND FLOOR:	129,903 SF
	496,144 SF
SITE BUILDINGS	**5,018 SF**
TOTAL	***501,162 SF***

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A BLACK BOX, ENSEMBLE, ART CLASSROOMS, AUDITORIUM STORAGE ROOM, CTE ADDITION, ATHLETIC STORAGE BUILDING, GREENHOUSE AND 2 TENNIS COURTS AS WELL AS MINOR INTERIOR RENOVATION. INTERIOR RENOVATION INCLUDES NEW FLOORING IN LOCKER ROOMS AND GYMS, NEW HARDWARE, MISC MEPT AND SECURITY UPGRADES. ALL EXTERIOR BUILDING SEALANT JOINTS WILL BE REPLACED.

APPLICABLE CODES AND REGULATIONS

1. TEXAS ACCESSIBILITY STANDARDS (TAS) OF THE ARCHITECTURAL BARRIERS ACT, ED. 2012
2. 2018 INTERNATIONAL BUILDING CODE (IBC) CHAPTERS 2 - 10 WITH HARRIS COUNTY AMENDMENTS
3. 2018 INTERNATIONAL EXISTING BUILDING CODES
4. 2018 INTERNATIONAL FIRE CODE (IFC) WITH HARRIS COUNTY AMENDMENTS
5. 2018 NFPA 101 - LIFE SAFETY CODE
6. 2015 INTERNATIONAL MECHANICAL CODE (IMC) PER STATE OF TEXAS REGULATION - NOT REVIEWED BY HARRIS COUNTY
7. 2015 INTERNATIONAL PLUMBING CODE (IPC) PER STATE OF TEXAS REGULATION - NOT REVIEWED BY HARRIS COUNTY
8. 2014 NFPA 70 (NEC) PER STATE OF TEXAS REGULATION - NOT REVIEWED BY HARRIS COUNTY
9. 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

SECTION 601 - GENERAL TYPES OF CONSTRUCTION:

TABLE 601 - FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS):

	TYPE I-B
PRIMARY STRUCTURAL FRAME	2*
BEARING WALLS	
EXTERIOR	2
INTERIOR	1*
NON-BEARING WALLS & PARTITIONS EXTERIOR (TABLE 602)	0
NON-BEARING WALLS & PARTITIONS INTERIOR	0
FLOOR CONSTRUCTION & SECONDARY MEMBERS	2
ROOF CONSTRUCTION & SECONDARY MEMBERS	1

*** NOTES:**

a. ROOF SUPPORTS: FIRE-RESISTANCE RATINGS OF PRIMARY STRUCTURAL FRAME & BEARING WALLS ARE PERMITTED TO BE REDUCED BY 1 HOURS WHERE SUPPORTING ROOF ONLY.

b. EXCEPT IN GROUP F-1, H, M, AND S-1 OCCUPANCIES, FIRE PROTECTION OF STRUCTURAL MEMBERS SHALL NOT BE REQUIRED, INCLUDING PROTECTION OF ROOF FRAMING AND DECKING WHERE EVERY PART OF THE ROOF CONSTRUCTION IS 20 FEET OR MORE ABOVE ANY FLOOR IMMEDIATELY BELOW. (IBC, TABLE 601, FOOTNOTE B)

CORRIDOR FIRE-RESISTANCE RATING:
0 HOURS (UNRATED) IN SPRINKLERED OCCUPANCIES A, B AND E, WITH AN OCCUPANT LOAD SERVED BY CORRIDOR GREATER THAN 30.
(IBC, TABLE 1020.1)

CHAPTER 10 - MEANS OF EGRESS

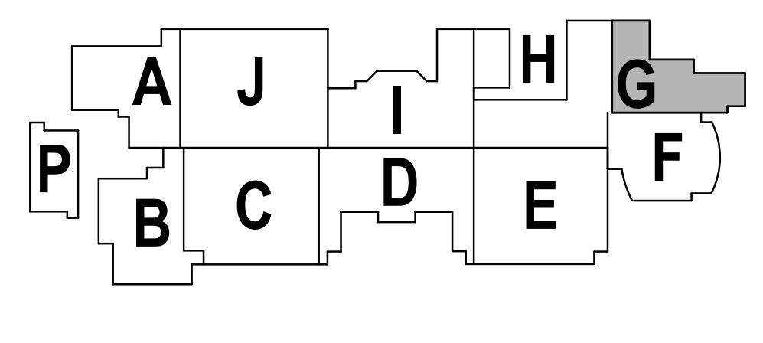
TABLE 1004.1.2 - MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT:

FUNCTION SPACE (IBC, TABLE 1004.1.2)	SF PER OCCUPANT	FUNCTIONAL AREA TYPE
ENTIRE SCHOOL		
ACCESORY STORAGE, MECHANICAL EQUIPMENT ROOM	300 GROSS	STORAGE & MECHANICAL
EDUCATIONAL - CLASSROOM	20 SF	CLASSROOMS
EDUCATIONAL - VOCATIONAL	50	SHOPS & GREENHOUSE
BUSINESS AREA	150 GROSS	OFFICE
ASSEMBLY WITHOUT FIXED SEATS UNCONCENTRATED (TABLES & CHAIRS)	15 NET	BLACK BOX

LIFE SAFETY LEGEND

#	OCCUPANT LOAD IN ROOM
#	TOTAL OCCUPANT LOAD IN AREA
#	OCCUPANT LOAD EXITING DOOR
#	DOOR FIRE-RATING
▬●▬●▬	1HR FIRE-RATED PARTITION
FEC	FIRE EXTINGUISHER & CABINET
FE	FIRE EXTINGUISHER ON WALL HANGER
PH	PANIC HARDWARE
⊗	EXIT SIGN
←	EGRESS TRAVEL PATHWAY TO EXIT

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

LIFE SAFETY PLANS -
AREAS G & F

G1.02

____ of ____

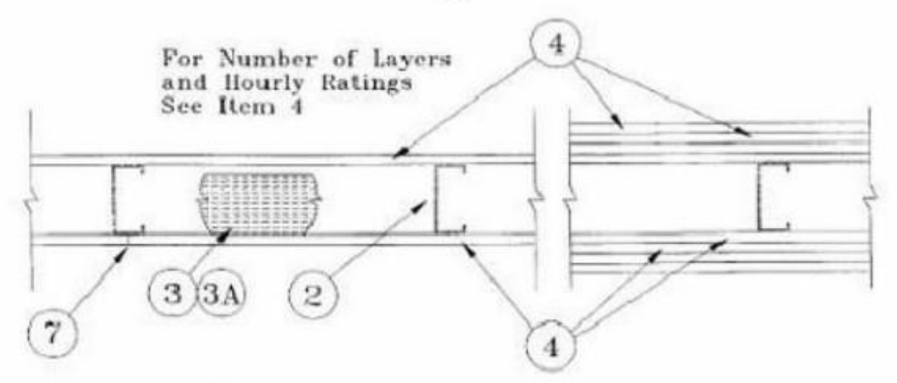
11/14/2024 1:39:48 PM

Autodesk Docs://23072_CFSID_Phase_6_22/23071_Cy-Lakes_HS_r22.rvt

1 Hr. Wall Construction
Non Bearing Interior
UL Design No. U419

Design No. U419

Nonbearing Wall Ratings — ①, 2, 3 or 4 Hr (See Items 3 & 4)



1. **Floor and Ceiling Runners** — (Not shown) — Channel shaped, fabricated from min 25 MSG (min 20 MSG when Item 4A is used) corrosion-protected steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.
2. **Steel Studs** — Channel shaped, fabricated from min 25 MSG (min 20 MSG when Item 4A is used) corrosion-protected steel, min width as indicated under Item 4, min 1-1/4 in. flanges and 1/4 in. return, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
3. **Batts and Blankets*** — (Required as indicated under Item 4) — Mineral wool batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 4. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

3A. **Batts and Blankets*** — (Optional) — Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets (BKNV or BZJZ) Categories** for names of Classified companies.

4. **Gypsum Board*** — Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:

Wallboard Protection on Each Side of Wall

Rating	Min Stud Depth	No. of Layers & Thkns of Panel	Min Thkns of Insulation (Item 3)
1	3-1/2	1 layer, 5/8 in. thick	Optional
1	2-1/2	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
2	3-1/2	1 layer, 3/4 in. thick	3 in.
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	2 layers, 3/4 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 1/2 in. thick	Optional
4	2-1/2	2 layers, 3/4 in. thick	2 in.

CANADIAN GYPSUM COMPANY —1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX or WRC; 3/4 in. thick Type IP-X3, ULTRACODE, ULTRACODE SHC or ULTRACODE WRC.

UNITED STATES GYPSUM CO —1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Type IP-X3, ULTRACODE, ULTRACODE SHC or ULTRACODE WRC.

USG MEXICO S A DE C V —1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC or; 3/4 in. thick Type IP-X3, ULTRACODE, ULTRACODE SHC or ULTRACODE WRC.

4A. **Gypsum Board*** — (As an alternate to Item 4) — 5/8 in. thick gypsum panels, installed as described in Item 4 with Type S-12 steel screws. The length and spacing of the screws as specified under Item 5.
CANADIAN GYPSUM COMPANY —Type FRX
UNITED STATES GYPSUM CO —Type FRX

4B. **Gypsum Board*** — (As an alternate to Items 4 and 4A) — 5/8 in. thick, 2 ft. wide, tongue and groove edge, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 5. Joint covering (Item 7) not required.
CANADIAN GYPSUM COMPANY — Type SHX.
UNITED STATES GYPSUM CO —Type SHX.
USG MEXICO S A DE C V — Type SHX.

5. **Fasteners** — (Not shown) — Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 6). **Single layer systems:** 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Two layer systems: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. **Three-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. **Four-layer systems:** First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.
6. **Furring Channels** — (Optional, not shown, for single or double layer systems) — Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 4A.
7. **Joint Tape and Compound** — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge.
8. **Siding, Brick or Stucco** — (Optional, not shown) — Aluminum, vinyl or steel siding, brick veneer or stucco, meeting the requirements of local code agencies, installed over gypsum panels. Brick veneer attached to studs with corrugated metal wall ties attached to each stud with steel screws, not more than each sixth course of brick.
9. **Caulking and Sealants*** — (Optional, not shown) — A bead of acoustical sealant applied around the partition perimeter for sound control.
UNITED STATES GYPSUM CO —Type AS

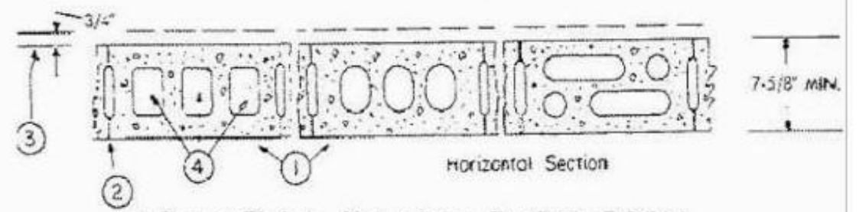
*Bearing the UL Classification Mark

2 Hr. Wall Construction
Typ. CMU Exceeds Requirement
UL Design No. U905

Design No. U905
September 30, 2010

Bearing Wall Rating — 2 HR.

Nonbearing Wall Rating — 2 HR



1. **Concrete Blocks*** — Various designs. Classification D-2 (2 hr).

See **Concrete Blocks** category for list of eligible manufacturers.

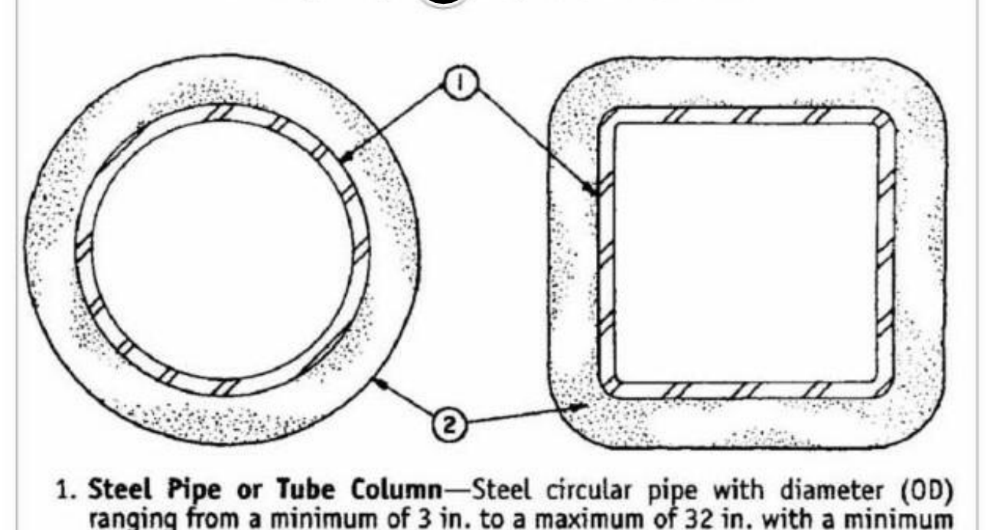
2. **Mortar** — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
3. **Portland Cement Stucco or Gypsum Plaster** — Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).
4. **Loose Masonry Fill** — If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.
5. **Foamed Plastic*** — (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel and Thermax Heavy Duty Plus (HDP)

1 Hr. Column
(Structural Frame)
UL Design No. X771

Design No. X771

Ratings—3/4 ① 1-1/2, 2, 3 and 4 h



1. **Steel Pipe or Tube Column**—Steel circular pipe with diameter (OD) ranging from a minimum of 3 in. to a maximum of 32 in. with a minimum wall thickness of 3/16 in.
Steel square or rectangular tube with outside wall dimensions ranging from a minimum 3 in. to a maximum of 32 in. and a minimum wall thickness of 3/16 in.
The A/P ratio of the steel pipe or tube (see Item 2) shall range from 0.18 to 2.0.
2. **Spray-Applied Fire Resistive Materials***—Applied by mixing with water and spraying in one or more coats to steel surfaces which must be clean and free of dirt, loose scale and oil. Min avg and ind density of 15/14 pcf respectively. For method of density determination, see Design Information Section, preceding these designs.
The hourly rating of the structural member is dependent upon the ratio of A/P and the thickness of Spray-Applied Fire Resistive Materials, where A is the cross sectional area of the pipe or tube and P is the heated perimeter.
The A/P ratio of a circular pipe is determined by:

$$A/P\ \text{pipe} = \frac{t(d-t)}{d}$$

Where:
d is the outer diameter of the pipe (in.)
t is the wall thickness of the pipe (in.)

The A/P ratio of a rectangular or square tube is determined by:

$$A/P\ \text{tube} = \frac{t(a+b-2t)}{a+b}$$

Where:
a is the outer width of the tube (in.)
b is the outer length of the tube (in.)
t is the wall thickness of the tube (in.)

The thickness of Spray-Applied Fire Resistive Materials for ratings of 3/4, 1, 1-1/2, 2, 3 and 4 h of a steel pipe or tube can be determined by the equation:

$$h = \frac{R - 0.20}{4.43\ (A/P)}$$

Where:
R is the hourly rating (hrs).
h is the thickness of Spray-Applied Fire Resistive Materials, minimum 1/4 in., maximum 3-7/8 in.

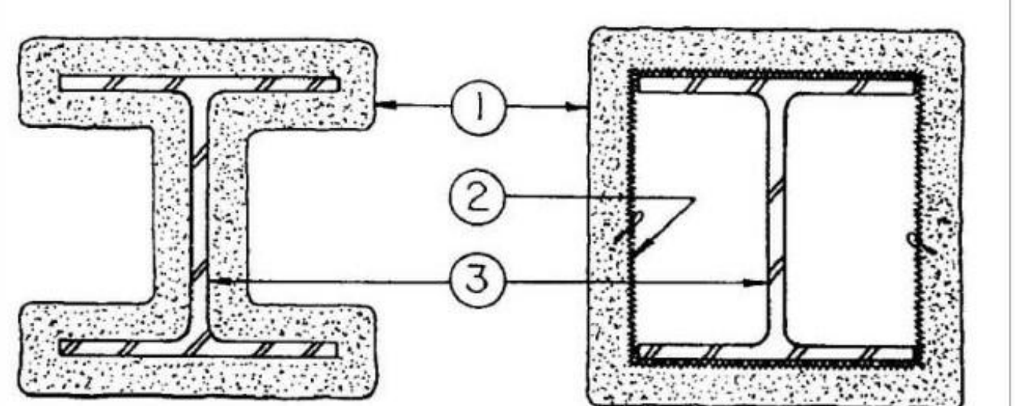
Construction Products Div. W. R. Grace & Co. of Canada Ltd.—Types MK-4, MK-5.
Grace Construction Products—Types MK-4, MK-5, MK-6/HY, MK-6s, RG.
Grace Korea Inc.—Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6s.
Pyrok Inc.—Type LD.
Southwest Vermiculite Co., Inc.—Types 4, 5, 5EF, 5GP, 5MD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.
Vermiculite Prods. Inc.—Types MK-4, MK-5.

*Bearing the UL Classification Marking

1 Hr. Column
(Structural Frame)
UL Design No. X772

Design No. X772

Ratings–① 1-1/2, 2, 3 and 4 h.



1. **Spray-Applied Fire Resistive Materials***—Applied by mixing with water and spraying in more than one coat to the thicknesses shown below, to steel surfaces which are clean and free of dirt, loose scale, and oil. Min avg and min ind density of 15/14 pcf respectively. For method of density determination, see Design Information Section, Sprayed Material.

The thickness of Spray-Applied Fire Resistive Materials to be applied to all surfaces of the column (Item 1) required for rating periods of 1 h, 1-1/2 h, 2 h, 3 h, 4 h may be determined by the equation:

$$h = \frac{R}{1.05\ (W/D) + 0.61}$$

Where:
h = Spray-Applied Fire Resistive Materials thickness in the range 0.25-3.875 in.
R = Fire resistance rating in hours (1 - 4 h)
D = Heated perimeter of steel column in inches
W = Weight of steel column in lbs per foot
W/D = 0.33 to 6.62

As an alternate to the equation, the minimum thickness of Spray-Applied Fire Resistive Materials required for various fire resistance ratings of contour sprayed or boxed columns may be determined from the table below:

Min Column Size	W/D	Min Thk (in) 1 h	1-1/2 h	2 h	3 h	4 h
W6X9	0.33	1-1/8	1-1/2	2	2-1/2	3-1/8
W6x16	0.57	13/16	1-1/4	1-11/16	2-1/2	3-5/16
W8x28	0.67	3/4	1-3/16	1-3/8	2	2-11/16
W10x49	0.83	11/16	7/8	1-1/8	1-11/16	2-1/2
W14x228	2.49	5/16	1/2	9/16	7/8	1-1/4
W14x730	6.62	5/16	5/16	5/16	3/8	9/16

The thicknesses contained in the table below are applicable when the Spray-Applied Fire Resistive Materials applied to columns' flange tips are reduced to one-half that shown in the table below:

Min Column Size	W/D	Min Thk (in) 1 h	1-1/2 h	2 h	3 h	4 h
W6x9	0.33	1-1/8	1-5/8	2-1/16	2-15/16	3-13/16
W6x16	0.57	7/8	1-5/16	1-3/4	2-9/16	3-3/8
W8x28	0.67	13/16	1-3/16	1-1/2	2-1/4	2-15/16
W10x49	0.83	3/4	1-1/16	1-3/8	2-1/16	2-3/4
W14x233	2.49	5/16	1/2	11/16	1-3/16	1-5/8
W14x730	6.62	5/16	5/16	5/16	9/16	3/4

Construction Products Div., W. R. Grace & Co. of Canada Ltd.—Types MK-4 or MK-5.
Grace Construction Products—Types MK-4, MK-5, MK-6/HY, MK-6s, RG.
Grace Korea Inc.—Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6s.
Pyrok Inc.—Type LD.
Southwest Vermiculite Co., Inc.—Types 4, 5, 5EF, 5GP, 5MD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.
Vermiculite Products, Inc.—Type MK-4 or MK-5.

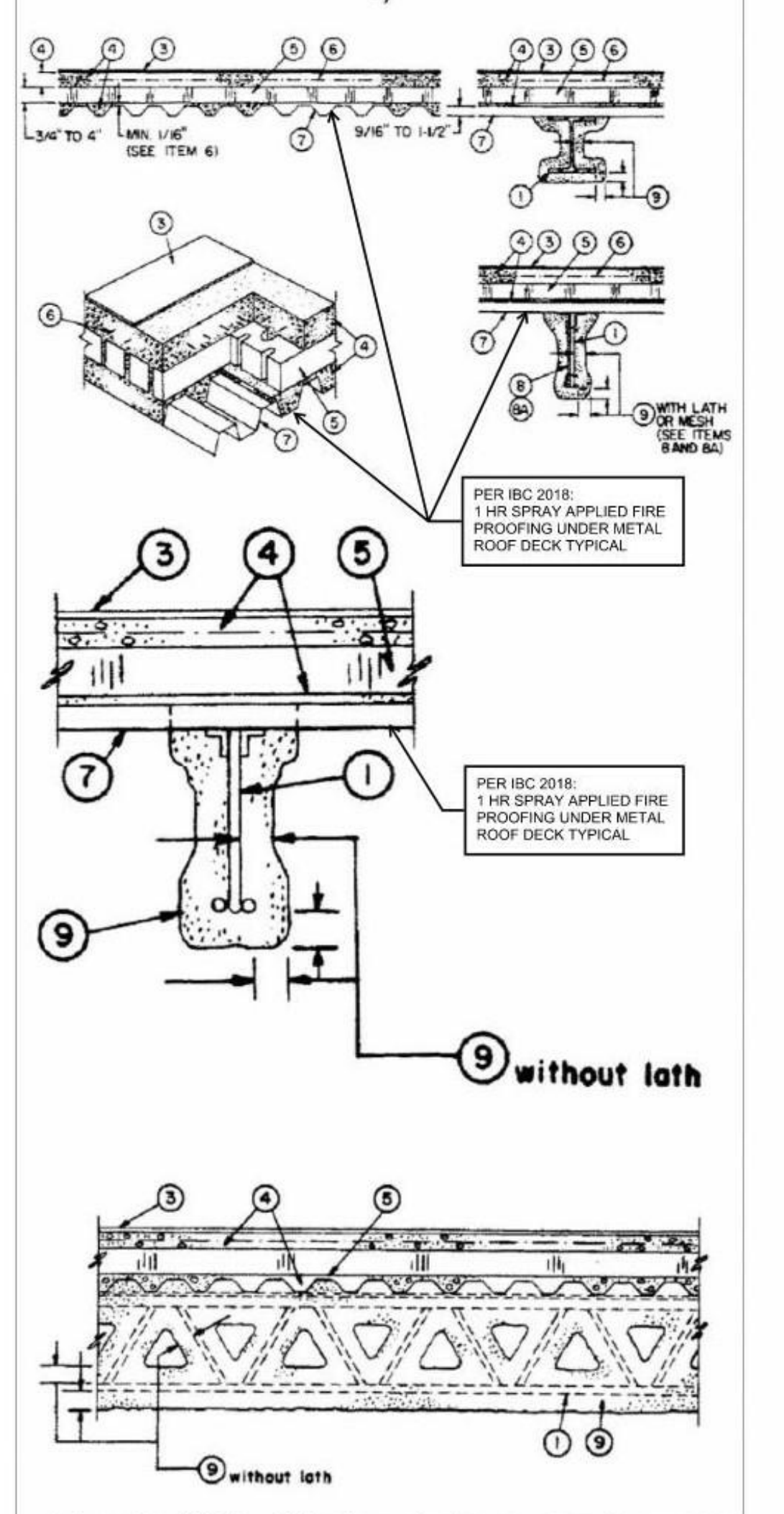
2. **Metal Lath**—(Optional for contour application)—3.4 lb/sq yd galvanized or painted expanded steel lath. Lath shall be lapped 1 in. and tied together with No. 18 SWG galvanized steel; wire spaced vertically 6 in. O.C.
3. **Steel Column**—Wide flange steel column, min sizes as shown in the tables below.

*Bearing the UL Classification Marking

1 HOUR ROOF / CEILING ASSEMBLIES
UL Design No. P921

Design No. P921

Restrained Assembly Rating—1, 1 1/2 or 2 Hr (See Items 4, 6, 7 and 9)
Unrestrained Assembly Rating—0 Hr (See Item 7)
Unrestrained Beam Rating—1, 1 1/2 or 2 Hr (See Items 4, 6, 7 and 9)



PER IBC 2018:
1 HR SPRAY APPLIED FIRE PROOFING UNDER METAL ROOF DECK TYPICAL

PER IBC 2018:
1 HR SPRAY APPLIED FIRE PROOFING UNDER METAL ROOF DECK TYPICAL

1. **Supports**—W6X16 or W8X10 beam. As alternate to steel beams, Joist girders—(Not shown)—20 in. min depth and 13 lb/lin ft min weight.

1A. **Steel Joists**—12K5 or heavier steel joist may be used as secondary support.

2. **Bridging Angles**—(Not shown)—1-1/4 by 1-1/4 by 1/8 in. thick angles for use with steel joists. Angles welded to top and bottom chords of the joists.
3. **Roof Covering***—Consisting of hot mopped or cold application materials compatible with insulation(s) described herein which provide Class A, B or C coverings. See Roofing Materials and Systems Directory-Roof Covering Materials (TEVT).

3A. In lieu of Item 3, roof covering consisting of single-ply **Roofing Membrane*** that is either ballasted, adhered or mechanically attached as permitted under the respective manufacturer's Classification. See Fire Resistance Directory—Roofing Membranes (CHCI).

4. **Vermiculite Concrete**—6 cu ft of **Vermiculite Aggregate*** to 94 lb of Portland cement and 0.11 lb of air entraining agent mixed with approx 25 gal of water. Min compressive strength shall be 125 psi when tested in accordance with ASTM C495. Min thickness above foamed plastic is 2 in. Min thickness between top of steel deck and bottom of foamed plastic shall be 1/16 in. when wire mesh (Item 6) is used and 1/8 in. when the wire mesh is not used. When foamed plastic (Item No. 5 or 5A) is not used the topping thickness of Vermiculite Concrete over the crests of steel deck shall be a min of 2-3/16 in. for the 1 and 1-1/2 h ratings and 2-3/8 in. for the 2 h rating. The max vermiculite concrete thickness shall be determined by job site conditions.
Mandoval Ltd.
Mandoval Vermiculite Products, Inc.
Palmetto Vermiculite Co., Inc.
Siplast Inc.
Strong-Lite Products Corp.
Vermiculite Products, Inc.

4A. **As an alternate to Item 4, Cellular Concrete —Roof Topping Mixture***—Foam concentrate mixed with water and Portland cement per manufacturer's specifications. Cast dry density and 28-day compressive strength of min 190 psi as determined in accordance with ASTM C495-66. Min thickness above foamed plastic is 2 in. Min thickness between the top of steel deck and the bottom of foamed plastic shall be 1/8 in. When foamed plastic is not used, the min thickness of Roof Topping Mixture* above the top of the steel deck shall be 2-3/4 in.
Celcore Inc.—Cast dry density of 31 (+ or -) 3.0 pcf.
Cellufoam Concrete Systems—Cast dry density of 30 (+ or - 3.0) pcf.
Elastizell Corp. of America—Type II. Mix #1 of cast dry density 39 (+ or -) 3.0 pcf, Mix #2 of cast dry density 40 (+ or -) 3.0 pcf, Mix #3 of cast dry density 47 (+ or -) 3.0 pcf.
Lite-Crete, Inc.—Cast dry density of 29 (+ or -) 3.0 pcf.
Mearl Corp., The—Cast dry density 37 (+ or -) 3.0 pcf.
Siplast Inc.—Mix #2. Cast dry density of 36 (+ or -) 3.0 pcf.

4B. **As an alternate to Item 4**—Perlite Concrete—Mix consists of 6 cu ft of **Perlite Aggregate*** to 94 lb of Portland cement and 1-1/2 pints of air-entraining agent. Thickness of perlite concrete topping to be 2 in. min from the top plane of the foamed plastic. Min thickness between the top of steel deck and the bottom of the foamed plastic shall be 1/8 in.
See Perlite Aggregate (CFFX) category in Fire Resistance Directory for names of Classified companies.

4C. **As an alternate to Item 4**—Cellular Concrete—Roof Topping Mixture*—Foam Concentrate mixed with water, Portland Cement and UL Classified Vermiculite Aggregate per manufacturer's application instructions. Cast dry density of 33 (+ or -) 3.0 pcf and 28-day compressive strength of min 250 psi as determined in accordance with ASTM C495-86. A 1/8 in. min slurry coat shall be employed below the foamed plastic (Item 5). The cellular concrete topping thickness, above the foamed plastic, shall be 2 in. min. When foamed plastic is not used, the min thickness of Roof-Topping Mixture, above the top of the steel deck, shall be 2-3/4 in.
Siplast Inc.—Mix #3.
The Mearl Corp.—Mix #3.

5. **Foamed Plastic***(Optional)—Foamed plastic insulation boards with holes and/or slots. Nom size 24 by 48 in. Thickness shall be 3/4 in. to 8 in.
Siplast Inc.
Vermiculite Products, Inc.

5A. **Foamed Plastic***—Nom 24 by 48 in., 48 by 48 in. or 30 by 60 in. by max 8 in. thick polystyrene foamed plastic insulation boards with holes symetrically placed having a max density of 2.0 pcf. For use only with cellular concrete roof topping mixture.
Starrfoam Manufacturing, Inc.

5B. **Foamed Plastic***(Optional)—Nom 24 x 48 by max 8 in. thick polystyrene foamed plastic insulation boards having a density of 2.5 pcf max. Each insulation board shall contain six nom 3 in. diam holes oriented in two rows of three holes each, with the holes spaced 12 in. OC transversely and 16 in. OC longitudinally.
See Foamed Plastic* (BRYX) category in the Building Materials Directory or **Foamed Plastic* (CCVW)** category in Fire Resistance Directory for list of Classified Companies.

6. **Wire Mesh**—No. 19 SWG galv steel wire twisted to form 2 in. hexagons. In addition, straight No. 16 SWG galv steel wire woven into mesh and spaced 3 in. apart for stiffness. Mesh installed without attachment perpendicular to supports and overlapped 6 in. at the sides. As an alternate, 4 by 8 in., No. 12/14 SWG or 2 by 2 in., No. 14/14 SWG welded wire fabric may be used. The wire mesh may be omitted for the **1 and 1-1/2 h Restrained Assembly and Beam Ratings** only. Thickness of vermiculite concrete between the top of the roof deck and the bottom of the foamed plastic insulation shall be 1/8 in. min when wire mesh is not used.
7. **Steel Roof Deck**—(Unclassified)—Noncomposite design, vented or nonvented units, 9/16 in., 15/16 in., 1-5/16 in., 1-1/2 or 2 in. deep galv units, nom 24 to 36 in. wide. When vented or nonvented 9/16 in. deep galv units are used, the **Restrained Assembly and Beam Ratings shall not exceed 1-1/2 h.** Welded to supports with 3/8 in. puddle welds through weld washers spaced 15 in. O. C. Adjacent units overlapped one corrugation. Max support spacings 8 ft O.C. unless otherwise noted for specific Classified units and their recommended loadings. Steel thickness to be No. 24 MSG min when supports are spaced not more than 8 ft O. C., No. 26 MSG min when supports are spaced not more than 6 ft O. C., and No. 28 MSG, 9/16 in. deep steel deck may be used when supports are spaced 4 ft. O. C. Roof deck units to be loaded not more than 75 percent of their max allowable bending stress. For clear spans not more than 7 ft., 8-3/8 in. the **Unrestrained Assembly Rating is equal to the Restrained Assembly Rating.** Or, **Classified Steel Floor and Form Units*** conforming to the same installation, steel thickness, loading requirements and **Restrained Assembly Rating** as described for unclassified units.
BHP Steel Building Products USA Inc.—Types CP32, (1-3/8), B, Ventform and 2W. Two or three—10 ft—0 in. continuous spans may be used for Types B or 2W units, and 12 ft—0 in. simple or continuous spans may be used for Type N units, provided that the total loading on these spans is based on the allowable steel stress and the deflection limitation criteria using the steel (noncomposite) section properties of these units.
Bowman Metal Deck/Wheeling Corrugating Co. Div of Wheeling-Pittsburgh Steel Corp.—Nonvented Types B, FM-2, Strongfoam SF-3, SF-4, SF-5; vented Types B, FM-2, SV-3, SV-4, SV-5. Types SF-4/SV-4 units may be used for a max 10 ft, 0 in. spans. Types SF-5/SV-5 units made from 24 MSG steel may be used for a max 10 ft, 6 in. spans. Types SF-5/SV-5 units made from 22 ga or heavier steel may be used for max 12 ft, 0 in. spans.
Consolidated Systems, Inc.—Consoliform and Comvent Types EHD, HD, S, SD. -Media-Dek Type 1 (vented and nonvented) and Media-Dek Type 2. Type R.
Deck West, Inc.—36 in. wide Type B-DW, BA-DW or 3-DW. The Type 3-DW units made from 22 ga or heavier steel may be used for a maximum 10 ft., 0 in. spans, provided that the total loading on these spans is based on the allowable steel stresses and the deflection limitation criteria using the steel (noncomposite) section properties of these units.
Epic Metals Corp.—Type Metricform.
Marlyn Steel Decks, Inc.—Types B, BV, EF, EVF, F, HF, HVF, SF, SVF.
Robertson, H. H.—Type QL-3 or Sec. 3 with or without up-punched integral hanger tabs, and 3 in. QL-99. The 3 in. deep Type QL-99 units made from 22 ga or heavier steel may be used for max 10 ft, 0 in. spans, provided the total loading on these spans is based on the allowable steel stresses and the deflection limitation criteria using the steel (noncomposite) section properties of these units.
Roll Form Products, Inc.—"Permaform" Type H.
Roof Deck, Inc.—Vented or Nonvented Types EHD Multi-Rib, HD Multi-Rib, S Multi-Rib.
Toman Building Components Inc. —24, 30 or 36 in. wide, Types LXR-B; 30 in. wide, Types LXR-B-N-30 and LXR-B-N-30-I; 35 in. wide, Types LXR-B-35 and LXR-B-35-I.
United Steel Deck, Inc.—Types B, UFX, UFXV, UFX-36, UFXV-36.
Verco Manufacturing Inc.—Types B, 2"B, 2"B Ventlok, Vercor, Vercor-Ventlok, W-2, System 80 and N. Two or three 10 ft 0 in. continuous spans may be used for the following units under the following conditions: (A) For Types B and W-2 units the total loading on these spans shall be based on the allowable steel stress or the deflection limitation criteria using the steel (noncomposite) section properties of these units. (B) For System 80 the min gauge of units is 18 MSG and use is limited to three continuous spans. (C) For 2"B and 2"B Ventlok the total loading on these spans shall be limited to 80 percent of the allowable steel bending stress, or the deflection limitation criteria.
Type N deck may be used on simple or continuous 12 ft 0 in. spans with the total loading on these spans limited by the allowable bending stress and/or the deflection limitation criteria.
Vulcraft, Div. of Nucor Corp.—Types 0.6C, 0.6CPR, 0.6CPRV, 0.6CSV, 1.0C, 1.0CSV, 1.3C, 1.3CSV, 1.5C, 2C, 3C, 1.5B, 1.5BI, 3N, 3NI. Type 1.5B units made from 21MSG or heavier steel may be used on simple or continuous 10 ft 0 in. spans with the total load on these spans limited by the allowable bending stress and/or the deflection criteria of this deck. Type 3N made from 22MSG or heavier steel may be used on simple or continuous 12 ft 0 in. spans with the total load on these spans limited by the allowable bending stress and/or the deflection criteria of this deck.
Wheeling Corrugating Co., Div of Wheeling-Pittsburgh Steel Corp.—Types B, BW, F, TF-50, TF-75, TF-125, TF-H3, TV-50, TV-75, TV-125, TV-H3,.Permaform Type H.
8. **Metal Lath**—(Optional)—Metal lath is used to facilitate the spray application of Spray-Applied Fire Resistive Materials on steel bar joists and trusses. The diamond mesh, 3/8 in. expanded steel lath, 1.7 to 3.4 lb per sq yd, is secured to one side of each steel joist with No. 18 SWG galv steel wire at joist web and bottom chord members, spaced 15 in. OC max. When used, the metal lath is to be fully covered with Spray-Applied Fire Resistive Materials with no min thickness requirements.

8A. **Non-Metallic Fabric Mesh**—(Optional)—As an alternate to metal lath, glass fiber fabric mesh, weighing approximately 2.5 oz per sq yd, polypropylene fabric mesh, weighing approximately 1.25 oz per sq yd or equivalent, is used to facilitate the spray application. The mesh is secured to one side of each joist web member. The method of attaching the mesh must be sufficient to hold the mesh and the spray-applied Spray-Applied Fire Resistive Materials material in place during application until it has cured. An acceptable method to attach the mesh is by embedding the mesh in minimum 1/4 in. long beads of hot melted glue. The beads of glue shall be spaced a maximum of 12 in. O.C. along the top chord of the bar joist. Another method to secure the mesh is by 1-1/4 in. long by 1/2 in. wide hairpin clips formed from No. 18 SWG or heavier steel wire.

9. **Spray-Applied Fire Resistive Materials***—Applied by mixing with water and spraying in more than one coat to the final thickness shown below to joist or beam surfaces which are clean, free of dirt, loose scale and oil. A 1-3/4 in. thickness of Spray-Applied Fire Resistive Materials shall be applied to the bridging bars. Min avg and min ind density of 15/14 pcf respectively. For method of density determination refer to Design Information Section.

Restrained Assembly Rating, HR	Unrestrained Beam Rating, HR	Thickness (In.) Min Tkns on Beam W6x16	W8x10	Min Tkns on Joist (No. Lath)	Min Tkns on Joist (with Lath)
1	1	1	1-3/8	1-1/2+	1-1/2+
1-1/2	1-1/2	1-1/4	1-3/4	2-1/4	1-3/4
2	1-1/2	1-3/8	1-7/8	2-1/4	1-3/4
2	2	1-5/8	2-1/4	2-7/16	1-7/8

Construction Products Div., W. R. Grace & Co. of Canada Ltd.—Type MK-5.
Grace Construction Products—Types MK-4, MK-5, MK-6/HY, MK-6S, RG
Grace Korea Inc.—Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6S
Pyrok Inc.—Type LD.
Southwest Vermiculite Co., Inc.—Types 4, 5, 5EF, 5GP, 5MD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.
Vermiculite Prods., Inc.—Types MK-5, VP5.
+For 1 Hr ratings, the min joist size shall be 14J7.

9A. **Spray-Applied Fire Resistive Materials***—(Not Shown) —In lieu of Item 9 the following Spray-Applied Fire Resistive Materials may be applied by mixing with water and spraying in multiple coats to final thicknesses shown below. Min avg and min ind density 19/18 pcf respectively for Types 7GP, 105. Min avg and min ind density of 22/19 pcf respectively for Types KM-601, Z-106. For method of density determination, refer to Design Information Section, Sprayed Material.

Restrained Assembly Rating, Hr.	Unrestrained Beam Rating, Hr.	Min Tkns on Beam, in W6X16	W8X10
1	1	1-1/16	1-1/2
1-1/2	1-1/2	1-3/8	1-15/16
2	1-1/2	1-1/2	2-1/16
2	2	1-13/16	2-9/16

Grace Construction Products—Types 105, KM-601, Z-106.
Grace Korea Inc.—Type Z-106.
Southwest Vermiculite Co., Inc.—Type 7GP.

9B. **Spray-Applied Fire Resistive Materials***—(Not Shown) —In lieu of Item 9 or 9A the following Spray-Applied Fire Resistive Materials may be applied by mixing with water and spraying in multiple coats to final thicknesses shown below. Min avg and min ind density 40/36 pcf respectively. For method of density determination, refer to Design Information Section, Sprayed Material.

Restrained Assembly Rating, Hr.	Unrestrained Beam Rating, Hr.	Min Tkns on Beam, in W6X16	W8X10
1	1	1-1/16	1-1/2
1-1/2	1-1/2	1-3/8	1-15/16
2	1-1/2	1-1/2	2-1/16
2	2	1-13/16	2-9/16

Grace Construction Products—Type Z-146
Grace Korea Inc.—Type Z-146.

*Bearing the UL Classification Marking

1 UL LISTED FIRE RATED ASSEMBLIES
1" = 1'-0"

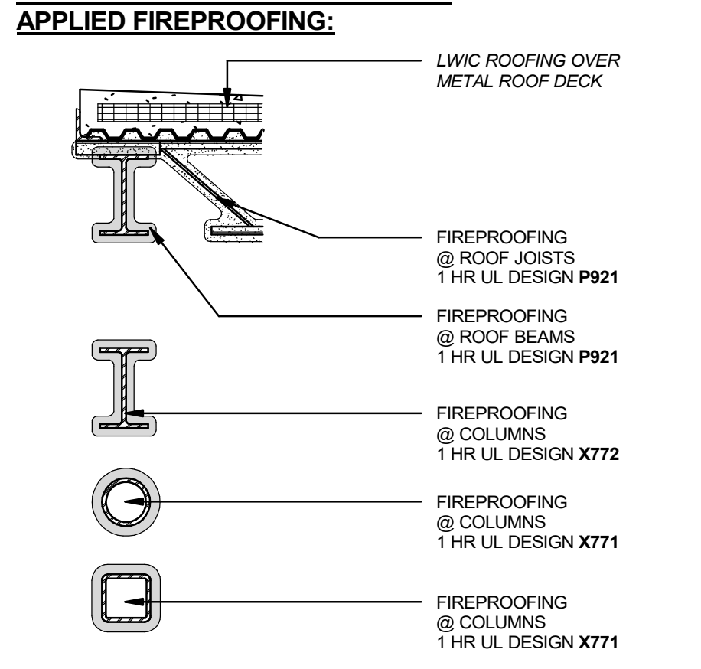
TYPICAL FIRE PROOFING:

1-HR SPRAY FIREPROOF PRIMARY STRUCTURAL FRAMING AND ROOF FRAMING WITH UL-COMPLIANT SPRAY-APPLIED FIREPROOFING

TYPICAL FIREPROOFING NOTES:

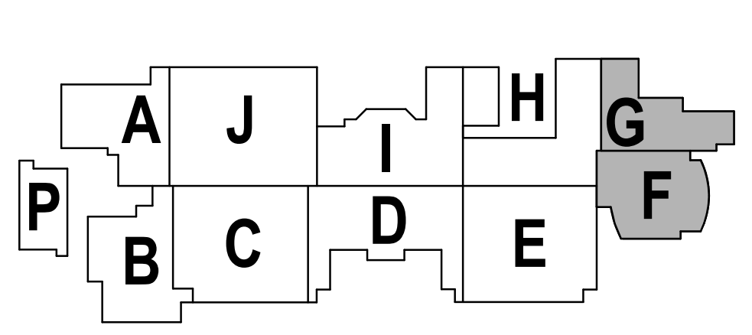
1. ALL COLUMNS AND OTHER PRIMARY STRUCTURAL MEMBERS THROUGHOUT THE BUILDING SHALL BE PROTECTED AS INDICATED ABOVE.
2. ALL ROOF ASSEMBLIES SHALL BE PROTECTED WITH FIREPROOFING AS INDICATED ABOVE.

TYPICAL COLUMN & BEAM SPRAY APPLIED FIREPROOFING:



NOTE:
FIREPROOFING SPRAY THICKNESS VARIES PER STEEL MEMBER SIZE, HOURLY FIRE RATING & UL DESIGN

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

UL FIRE RATED ASSEMBLIES

G1.03
____ of ____

1 BUILDING PLANNING & DESCRIPTION

☐ NEW CONSTRUCTION
☐ LEASE SPACE BUILD-OUT (LSBO)
☐ SUBSTANTIAL IMPROVEMENT
☐ SHELL BUILDING
☐ CHANGE OF OCCUPANCY
☒ OTHER: **RENOVATION & ADDITION**

☒ SINGLE OCCUPANCY
MIXED OCCUPANCY: ☐ SEPARATED USE ☐ NON-SEPARATED USE
(SECTION 508.3 OR 508.4 IBC 2018)

TYPE OF CONSTRUCTION: **TYPE I-B SPRINKLERED** *(CHAPTER 6 IBC 2018)*
HEIGHT LIMITATION: **55 FT** AREA LIMITATION: **UL - UNLIMITED** *(TABLE 504.3 IBC 2018)*
FRONTAGE INCREASE CALCULATIONS ARE SHOWN ON SHEET: **N/A**

BUILDING VALUATION **CY-LAKES HIGH SCHOOL RENOVATION & ADDITION**
BUILDING NUMBER: **1** OF **1**
ADDRESS: **5750 GREENHOUSE ROAD**
CITY, ST: **KATY, TX** ZIP CODE: **77449** SUITE: ____
CALL CENTERPOINT ENERGY AHEAD OF TIME, AT 713-207-4460, TO OBTAIN AN ADDRESS
HCAD #. OR PROPERTY TAX #: **1293610010001** (13 DIGITS)
(http://www.hcad.org)

BUILDING LOCATED IN FLOODPLAIN: YES ☐ NO ☒
GROSS SQUARE FOOTAGE: **20,138 GSF ADDITION** (496,144 GSF EXISTING) #OF FLOORS: **1** (2 EX.) HEIGHT: **25 FT** (45 FT. EX.)
ESTIMATED COST OF CONSTRUCTION: $ **17,500,000.00 (SEE ATTACHED VALUATION LETTER)**
T.D.L.R #: ____ *(REQUIRED FOR CONSTRUCTION OVER $50,000)*
TEXAS DEPARTMENT OF LICENSING AND REGULATIONS
(https://www.tdlr.texas.gov/ab/ab.htm)
TELEPHONE: (512) 463-6599 TOLL FREE (IN TEXAS): 800-803-9202
FAX: (512) 475-2871 RELAY TEXAS-TDD: 800-735-2989

NOTE: PROJECT NOT DEFINED AS SUBSTANTIAL IMPROVEMENT BASED ON VALUATION WITH RENOVATION COSTS

SHELL BUILDING PERMIT #: **N/A** CIVIL PROJECT #: **HC #2410310132**
PUBLIC UTILITIES: YES ☒ NO ☐
OSSF : YES ☐ NO ☐ PROJECT/PERMIT #: ____

LIST BELOW THE PURPOSE/USE OF THE BUILDING OR AREA BEING REVIEWED. INCLUDE DETAILS ON THE PRODUCTS/MATERIALS BEING STORED/FABRICATED AND NOTE HOW THEY ARE BEING PACKAGED.

EXISTING HIGH SCHOOL SHALL BE RENOVATED WITH TWO NEW BUILDING ADDITIONS: ONE AT EXISTING FINE ARTS DEPT. AND ONE AT AUDITORIUM. NEW ADDITIONS TO THE MAIN BUILDING, INCLUDE A BLACK BOX, ENSEMBLE, MUSIC ROOM, ART CLASSROOMS, AUDITIORIUM STORAGE ROOM, & CTE (VO-TECH) SHOPS. MAIN BUILDING SHALL HAVE MINOR INTERIOR RENOVATIONS AT MAIN FRONT ENTRY, AT EXISTING TO NEW BUILDING ADDITION CONNECTION NEW FLOORING IN LOCKER ROOMS & GYMS, NEW HARDWARE, MEPT / SECURITY UPGRADES, & REPLACEMENT OF ALL EXTERIOR BUILDING SEALANTS. SITE ADDITIONS INCLUDE NEW GREENHOUSE, STORAGE BLDG., & TENNIS COURTS.

2 OCCUPANCY TYPE AND LOAD

CHAPTER 2, 3 & TABLE 1004.5 IBC 2018

OCCUPANCY CLASSIFICATION TYPES

A-1	A-2	A-3	A-4	A-5	B	**E**
F-1	F-2	H-1	H-2	H-3	H-4	H-5
I-1	I-2	I-3	I-4	M	R-1	R-2
▨	R-3	R-4	S-1	S-2	U	▨

RESIDENTIAL BOARD AND CARE OCCUPANCIES (REFER TO THE HARRIS COUNTY CODEWORD OF THE SAME NAME AND ALSO COMPLETE THE RESIDENTIAL BOARD AND CARE CERTIFICATION FORM

▨	RBC-8A	RBC-8B	RBC-16A	RBC-16B	▨

BREAK DOWN AREAS AND OCCUPANT LOADS PER FLOOR

OCCUPANCY CLASSIFICATION	SPECIFIC USE	SQUARE FOOTAGE	SF PER OCCUPANT	DESIGN OCCUPANTS
1ST FLOOR				
GROUP A3	ASSEMBLY - MUSIC & BLACK BOX	2,513	15	168
GROUP B	BUSINESS - ADMINISTRATION & OFFICES	800	150	5
GROUP E	EDUCATIONAL - CLASSROOMS	3,197	20	160
GROUP E	EDUCATIONAL - SHOPS & VOCATIONAL	4,111	50	82
GROUP S2	STORAGE, JANITOR, MECH & ELEC	607	300	2
2ND FLOOR				
TOTAL	▨	11,228	▨	417

3 MEANS OF EGRESS

CHAPTER 10 IBC 2018

MEANS OF EGRESS	# OF REQUIRED EXITS	# OF EXITS PROVIDED	SHEET #
STAIRWAYS (PER FLOOR)	N/A	N/A	N/A
EGRESS @ 1ST FL OR LSBO	2 (63" REQ'D WIDTH)	5 (242" ACTUAL WIDTH)	G1.02

(SECTION 1005.3 IBC 2018)

PANIC HARDWARE ON EXIT DOORS? YES ☒ NO ☐ *(SECTION 1008.1.9 IBC 2018)*

STAIRWAYS *(SECTION 1011 IBC 2018)*
MINIMUM CLEAR WIDTH SHOWN ON: ____ *(EACH STAIRWELL)*
EGRESS WIDTHS ARE SHOWN ON: ____
ACCESSIBLE AREAS OF REFUGE & 2-WAY COMMUNICATIONS SHOWN ON: ____
(SECTION 1009.3 TO 1009.8 IBC 2018)

EXIT SIGNS/EGRESS ILLUMINATION *(SECTION 1008 & 1013 IBC 2018)*
REQUIRED AND SHOWN ON: **G1.02, E2.01, & E2.02** *(HIGHLIGHT ON PLANS)*
EXTERIOR MEANS OF EGRESS LIGHTING PROVIDED? YES ☒ *(SECTION 1008 IBC 2018)*

EXIT TRAVEL DISTANCE *(TABLE 1017.2 IBC 2018)*

OCCUPANCY TYPE	MAX TRAVEL DISTANCE	PROVIDE TRAVEL DISTANCE	SHEET #
GROUP E	250 FT	180 FT	G1.02

ELEVATORS
NEW ☐ EXISTING ☒ ELEVATOR KEYBOX LOCATED IN LOBBY? YES ☒ NO ☐
(MUST BE WITHIN 20' OF THE CALL BUTTON) ***(SEE 1A2.00 FOR LOCATION)***

4 FIRE PROTECTION & LIFE SAFETY SYS.

CHAPTER 9 IBC & IFC 2018

ALL FIRE PROTECTION PLANS SHALL BE SUBMITTED FOR REVIEW AFTER BUILDING PERMIT HAS BEEN ISSUED *(I.E. UNDERGROUND FIRE LINE, SPRINKLER SYSTEM, FIRE ALARM SYSTEM, STANDPIPE, FIRE PUMP ROOM, AND FIRE PROTECTION WATER SUPPLY SYSTEMS)*

AUTOMATIC FIRE SPRINKLER SYSTEM/ALTERNATIVE AUTOMATIC FIRE EXTINGUISHING SYSTEM
ALL SPRINKLERS SHALL COMPLY WITH MONITORING AND OCCUPANT NOTIFICATION PER 903.4.2.1
(SECTION 903 HC FICODE AMENDMENTS & SECTION 903.4 IFC 2018)
☒ PROVIDED AS NOTED ON: **P3.06 & P3.07** ☐ NOT REQUIRED PER SECTION 903

SYSTEM PROVIDED:
☒ NFPA 13
☐ NFPA 13R
☐ NFPA 13D
☐ OTHER: ____

SPRINKLER HEAD PROVIDED:
☐ STANDARD
☐ ELO
☐ ESFR
☒ QUICK RESPONSE

FIRE PUMP PROVIDED:
☐ YES
☒ NO

FIRE DEPARTMENT ACCESS TO SPRINKLER CONTROLS:
☐ SPRINKLER RISER ROOM OR POST INDICATOR VALVE SHOWN ON: ____
(SECTION 901.4.6 HC AMENDMENTS IFC 2018)
☒ FDC SHOWN ON: **C1.06** *(FDC SHALL COMPLY WITH SECTION 912 IFC 2018)*

SUPPRESSION SYSTEM PROVIDED *(SECTION 904 IFC 2018)*
☐ REQUIRED AND SHOWN ON: ____
☒ NOT REQUIRED

STANDPIPE SYSTEM & HOSE CONNECTIONS *(SECTION 905 IFC 2018)*
(I.E. IN STAIRWAYS, STAGES, MALLS)
☐ PROVIDED AS NOTED ON: ____, TYPE OF SYSTEM PROVIDED: ____ *(CLASS I, II OR III)*
☒ NOT REQUIRED PER SECTION 905

PORTABLE FIRE EXTINGUISHERS *(SECTION 906 IFC 2018)*
☒ PROVIDED AS NOTED ON: **G1.02**, NUMBER PROVIDED: **8** *(HIGHLIGHT ON PLANS)*

FIRE ALARM & DETECTION SYSTEMS *(SECTION 907 & HC AMENDMENTS IFC 2018)*
☒ FIRE ALARM SYSTEM (DEFERRED SUBMITTAL)
☐ NOT REQUIRED PER SECTION 907
☐ EMERGENCY VOICE EVACUATION
☐ OTHER: ____
☐ DEDICATED FUNCTION (SPRINKLER MONITORING, ELEVATOR RECALL, PRE-ACTION, EMERGENCY ALARM, SMOKE CONTROL)

HVAC & AIR DISTRIBUTION SYSTEM CONTROLS *(SECTION 606 IMC 2018)*
☐ SMOKE DETECTORS PROVIDED TO SHUT DOWN UNITS OVER 2,000 CFM PROVIDED ON: ____
☐ NO HVAC UNITS OVER 2,000 CFM
☐ FIRE/SMOKE DAMPERS IN THE BUILDING SHOWN ON: ____
☒ NO FIRE/SMOKE DAMPERS IN THE BUILDING

SMOKE CONTROL SYSTEMS *(SECTION 909 IFC 2018)(I.E. FOR HIGH RISE, ATRIUMS OR STAIRWAY PRESSURIZATION)*
☐ PROVIDED AS NOTED ON: ____
☒ NOT REQUIRED PER SECTION 909

SMOKE & HEAT VENTILATION *(SECTION 910 IFC 2018)*
☐ CALCULATIONS PROVIDED AS NOTED ON: ____
☒ NOT REQUIRED PER SECTION 910
NOTE: WHERE AREAS OF THE BUILDING ARE EQUIPPED WITH EARLY SUPPRESSION FAST-RESPONSE (ESFR) SPRINKLERS, AUTOMATIC SMOKE AND HEAT VENTS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS, MEETING LOCAL JURISDICTION REQUIREMENTS.

5 FIRE-RESISTANCE RATE CONSTRUCTION

CHAPTER 6, 7 AND 10 IBC 2018

SHOW DETAILS OF FIRE WALLS OR FIRE BARRIERS MEETING HORIZONTAL WALLS AND ROOF DECKS
(SEE SECTION 706.5, 706.6 & 707.5 IBC 2018)

FIRE-RESISTANCE RATING REQUIREMENTS *(TABLES 601 & 602 IBC 2018)*

BUILDING ELEMENTS	HOURS REQUIRED	HOURS PROVIDED	UL OR IBC STANDARD USED & DESIGN DETAIL SHOWN ON
STRUCTURAL FRAME	2*	1	*1hr Reduct. G1.03-X771 & X772
EXTERIOR BEARING WALLS	2	2	n/a
EXTERIOR NON-BEARING WALLS	0*	0*	* DIST. > 30' - G1.03 & A4.20
INTERIOR BEARING WALLS	2	2	n/a
INTERIOR NON-BEARING WALLS	0	0	G1.03 - U419 & U905
FLOOR CONSTRUCTION	2	2	n/a
ROOF CONSTRUCTION	1	1	G1.03 - P921
STAIRWELLS *(SECTION 1023)*	n/a	n/a	n/a
ELEVATOR SHAFTS *(SECTION 713)*	n/a	n/a	n/a
CORRIDORS *(SECTION 1020)*	0	0	G1.02
FIRE RATED DOORS *(TABLE 716.1(2))*	n/a	n/a	n/a
DEMISING/PARTITION WALL *(SECTION 708)*	1	1	G1.03 - U419 & U905
FIRE BARRIER *(SECTION 707)*	n/a	n/a	n/a
FIRE WALL *(SECTION 706)*	n/a	n/a	n/a

DRAFTSTOPS: ☐ YES, SHOWN ON: ____ ☐ NO (SPRINKLED ATTIC) ☒ N/A *(SECTION 718.4)*

HAVE YOU CHECKED WIDTH OF OPENINGS IN FIRE RATED WALLS? YES ☒ NO ☐
(TABLE 705.8, SECTION 706.8 & 707.6 IBC 2018)

FIRE SEPARATION DISTANCE (FEET) *(SECTION 602 IBC 2018)*	NORTH	SOUTH	EAST	WEST
	> 30'-0"	> 30'-0"	> 30'-0"	> 30'-0"

ROOF COVERING CLASSIFICATION PROVIDED: A ☐ B ☒ C ☐
(TABLE 1505.1 IBC 2018)

6 WATER SUPPLY (FOR FIREFIGHTING)

CHAPTER 5, APPENDIX B & C IFC 2018

1,000 GSF GROSS SIZE OF BUILDING IN SQUARE FEET *(INCLUDE ALL OVERHANGS UNDER ROOF)*

PUBLIC WATER SUPPLY WITH FIRE HYDRANTS
(FOR PROPOSED AND EXISTING FIRE HYDRANTS ONLY)
NAME OF THE MUNICIPAL UTILITY DISTRICT: **HC MUD 167**
NUMBER OF HYDRANTS WITHIN 400 FT (NON-SPRINKLED) OR 600 FT (SPRINKLED) OF BUILDING: **3**, SHOWN ON: **C1.06**
REQUIRED GPM: **1,500** DURATION: **2 HRS** *(TABLE B105.1 IFC 2018)*
75% REDUCTION? YES ☐ NO ☒ *(MUST MAINTAIN MINIMUM PER TABLE B105.1.(1) OR B105.1.(2))*

OR

WATER SOURCE FOR RURAL AREAS WITHOUT FIRE HYDRANTS
(COMPLETE THE FIRE FLOW CALCULATOR)
☐ ***DRY HYDRANT
☐ ABOVEGROUND STORAGE
☐ UNDERGROUND STORAGE
☐ OTHER: ____

DESIGN SPECIFICATIONS AND LOCATIONS SHOULD MEET MINIMUM REQUIRED WATER SUPPLY FROM THE FIRE FLOW CALCULATOR NFPA 1142 (AVAILABLE ON THE WEBSITE).

***SUBMIT DRY HYDRANT DESIGN PLANS & CALCULATIONS TO FIRE PROTECTION FOR REVIEW & APPROVAL (AVAILABLE ON THE WEBSITE)

7 FIRE LANE ACCESS

CHAPTER 5 & APPENDIX D IFC 2018

FIRE LANE LAYOUT PLAN, WHICH SHALL INCLUDE THE SITE PLAN, THE FIRE LANE & FIRE HYDRANTS, IS SHOWN ON: **C1.06**. *(HIGHLIGHT THE FIRE HYDRANT LOCATIONS ON THE PLANS)* AERIAL ACCESS LAYOUT, FOR BUILDINGS OVER 30 FT, IS SHOWN ON: **N/A**.

FIRE LANES WILL BE APPROVED CONCEPTUALLY DURING THE CIVIL REVIEW PROCESS. HOWEVER, THE FIRE CODE PLAN REVIEWER MAY CHANGE THE FIRE LANE LAYOUT BASED ON THE BUILDING SPECIFICATIONS.

☐ PROVIDING A REMOTE FIRE HOSE CONNECTION TO COMPLY WITH FIRE LANE HOSE COVERAGE. SUBMIT PLANS TO FIRE PROTECTION FOR REVIEW *(SECTION 918.1 HC AMENDMENTS)*

8 INTERIOR FINISH

CHAPTER 8 & TABLE 803.13 IBC 2018

OCCUPANCY GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES	SHEET #
A3	B	B	C	A12.10
B	B	C	C	A12.10
E	B	C	C	A12.10
S2	C	C	C	A12.10

9 STORAGE: STANDARD & HIGH PILED

CHAPTER 32 IFC 2018 *(REFER TO REGULATIONS FOR REQUIREMENT FOR CONSULTANT ENGINEER SECTION 3201.5 HC AMENDMENTS)*

YES ☐ NO ☒ PRODUCTS BEING STORED: ____
YES ☐ NO ☒ STORAGE PACKAGING *(I.E. PALLETS, RACKS, SOLID PILED, DRUMS, CARDBOARD BOXES, WRAPPED IN PLASTIC, ETC.)*: ____
YES ☐ NO ☒ MAXIMUM HEIGHT OF COMMODITY: ____
YES ☐ NO ☒ ***THIS BUILDING IS DESIGNED FOR THE INTENT OF HIGH PILED STORAGE. IF YES, THEN PROVIDE HIGH PILED STORAGE FORM (http://www.eng.hctx.net/Portals/23/Publications/FC_high_piled_storage_form.pdf).
YES ☐ NO ☒ FIRE DEPARTMENT ACCESS DOORS
YES ☐ NO ☒ HIGH PILED STORAGE RACK LAYOUT/ELEVATIONS, CODE ANALYSIS, ETC. SHOWN ON: ____

10 HAZARDOUS MATERIALS

CHAPTER 50 IFC 2018

YES ☐ NO ☒ DOES THE BUILDING HAVE HAZARDOUS MATERIAL USE OR STORAGE? IF YES, THEN PROVIDE ALL HMIS SUMMARY AND MSDS REPORTS.
YES ☐ NO ☐ IF YES, DO THE QUANTITIES EXCEED THE MAXIMUM ALLOWABLE PER IFC 2018?
IF YES, YOU WILL BE REQUIRED TO PROVIDE THE FOLLOWING:
CODE ANALYSIS BY FIRE PROTECTION ENGINEER TO SHOW COMPLIANCE WITH IFC 2018.
CODES AND REFERENCED STANDARDS SHOWN ON SHEET(S) ____

11 SPECIAL CONDITIONS

PROPERTIES WITH FENCE AND GATES SHALL PROVIDE A 911 KEY BOX AT ENTRY GATE

YES ☐ NO ☒ ATRIUM(S) PER 404 IBC 2018?
YES ☐ NO ☒ HIGH RISE BLDG PER 403 IBC 2018?
YES ☐ NO ☒ ANY FUEL STORAGE TANKS PER 5704 IFC 2018?
YES ☐ NO ☒ CRITICAL FACILITIES (HARRIS COUNTY REGULATIONS AND AMENDMENTS)
YES ☐ NO ☒ OTHER: ____
YES ☐ NO ☒ PAINT SPRAY BOOTHS, COATINGS, DIPPING OR INDUSTRIAL OVENS USED PER 2404, 2405, 2406 AND CHAPTER 30 IFC 2018?
YES ☐ NO ☒ HEALTH DEPARTMENT APPROVAL? REQUIRED FOR ALL ESTABLISHMENTS THAT SERVE/PREPARE FOOD AND BEVERAGES FOR THE PUBLIC OR HAVE REFRIGERATED FOOD STORAGE.

COMMENTS & NOTES

GREENHOUSE BUILDING IS TO BE ADDED NEAR EXISTING SOCCER FIELDS, TO GROW PLANTS FOR THE HORTICULTURE DEPARTMENT.
THIS IS A PRE-ENGINEERED STRUCTURAL BUILDING BUILT ON TOP OF A BRICK AND CONCRETE KNEE WALL.

A COPY OF THESE APPROVED CONSTRUCTION PLANS MUST BE KEPT AT PROJECT SITE FOR THE FINAL INSPECTION OF THE BUILDING

PROJECT NUMBER: IFC 2018

THE PROJECT KNOWN AS
(MUST BE THE NAME OF BUSINESS/DBA IF BUILDING IS FOR A SPECIFIC COMPANY)
5750 GREENHOUSE ROAD, KATY, TX 77449
2024 CY-LAKES HIGH SCHOOL RENOVATIONS
WAS ACCEPTED BY HARRIS COUNTY FOR THE PURPOSES LISTED BELOW:

REVIEWER'S STAMP

REVIEWER'S SIGNATURE BLOCK

PERMIT OFFICE

THE PROJECT WAS REVIEWED, HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER / ARCHITECT LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE PROFESSIONAL'S RESPONSIBILITY AND ACCOUNTABILITY. THIS ACCEPTANCE DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO LAND DEVELOPMENT.

HCED REVIEW:

CERTIFICATION

I, M. CAROLINA WEITZMAN, A LICENSED PROFESSIONAL ENGINEER/ [✓ ARCHITECT] IN THE STATE OF TEXAS DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. [✓ I AM] /AM NOT A DESIGNER OF RECORD FOR THIS PROJECT. THE PROJECT CONSISTS OF DRAWING SHEETS ____ THROUGH ____.
ENGINEERING FIRM ____ FIRM# ____

SEAL: 11/17/2024 15620
SIGNATURE
DATE: 11-17-2024

HARRIS COUNTY (IFC 2018)

FIRE CODE DESIGN AND COMPLIANCE REVIEW SHEET VERSION 8.0 (SEP 2019)

(http://www.eng.hctx.net/permits/Fire/Fire-Code/Fire-Code-Review)

REVISIONS (DO NOT USE THIS BLOCK UNTIL AFTER PERMIT IS ISSUED)

DATE	SHEET NO.(S)	DESCRIPTION	REVIEWER	COUNTY P.E.

FIRE CODE REVIEW
SHEET NUMBER 1 OF 3

1 CY-LAKES HIGH SCHOOL - NEW FINE ARTS & CTE BUILDING ADDITION
1" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024 15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

HCED FIRE CODE REVIEW V8.0 - FINE ARTS / CTE ADDITION

G1.10
____ of ____

1 BUILDING PLANNING & DESCRIPTION

☒ NEW CONSTRUCTION
☐ LEASE SPACE BUILD-OUT (LSBO)
☐ SUBSTANTIAL IMPROVEMENT
☐ SHELL BUILDING
☐ CHANGE OF OCCUPANCY
☐ OTHER: ____

☒ SINGLE OCCUPANCY
MIXED OCCUPANCY: ☐ SEPARATED USE ☐ NON-SEPARATED USE
(SECTION 508.3 OR 508.4 IBC 2018)

TYPE OF CONSTRUCTION: **TYPE II-B (NS)** (CHAPTER 6 IBC 2018)
HEIGHT LIMITATION: **55 FT** AREA LIMITATION: **14,500 SF** (TABLE 504.3 IBC 2018)
FRONTAGE INCREASE CALCULATIONS ARE SHOWN ON SHEET: **N/A**

BUILDING VALUATION **CY-LAKES HIGH SCHOOL STORAGE BUILDING**
BUILDING NUMBER: **1** OF **1**
ADDRESS: **5750 GREENHOUSE ROAD**
CITY, ST: **KATY, TX** ZIP CODE: **77449** SUITE: ____
CALL CENTERPOINT ENERGY AHEAD OF TIME, AT 713-207-4460, TO OBTAIN AN ADDRESS
HCAD #. OR PROPERTY TAX #: **1293610010001** (13 DIGITS)
(http://www.hcad.org)
BUILDING LOCATED IN FLOODPLAIN: YES ☐ NO ☒
GROSS SQUARE FOOTAGE: **2,310 GSF** #OF FLOORS: **1** HEIGHT: **17 FT**
ESTIMATED COST OF CONSTRUCTION: $**265,000.00**
T.D.L.R #: ____ (REQUIRED FOR CONSTRUCTION OVER $50,000)
TEXAS DEPARTMENT OF LICENSING AND REGULATIONS
(https://www.tdlr.texas.gov/ab/ab.htm)
TELEPHONE: (512) 463-6599 TOLL FREE (IN TEXAS): 800-803-9202
FAX: (512) 475-2871 RELAY TEXAS-TDD: 800-735-2989

NOTE: PROJECT NOT DEFINED AS SUBSTANTIAL IMPROVEMENT BASED ON VALUATION WITH RENOVATION COSTS

SHELL BUILDING PERMIT #: **N/A** CIVIL PROJECT #: **HC #2410310132**
PUBLIC UTILITIES: YES ☒ NO ☐
OSSF : YES ☐ NO ☐ PROJECT/PERMIT #: ____

LIST BELOW THE PURPOSE/USE OF THE BUILDING OR AREA BEING REVIEWED. INCLUDE DETAILS ON THE PRODUCTS/MATERIALS BEING STORED/FABRICATED AND NOTE HOW THEY ARE BEING PACKAGED.

EXISTING HIGH SCHOOL SHALL BE RENOVATED WITH TWO NEW BUILDING ADDITIONS AT EXISTING FINE ARTS DEPARTMENT AND AUDITORIUM; A NEW STAND ALONE GREENHOUSE NEAR SOCCER FIELDS; AND A NEW STAND ALONE ATHLETIC EQUIPMENT STORAGE BUILDING AT EXISTING TRACK. THIS FIRE CODE SHEET REPRESENTS THE NEW GREENHOUSE BUILDING: BUILDING IS A PRE-ENGINEERED METAL FRAME & POLYCARBONATE WALL PANELS ON A BRICK & CONCRETE KNEE WALL PEDESTAL. GREENHOUSE IS FULLY VENTILATED TO THE EXTERIOR AND WILL BE BUILT UNDER THE SAME HCED PERMIT.

2 OCCUPANCY TYPE AND LOAD

CHAPTER 2, 3 & TABLE 1004.5 IBC 2018

OCCUPANCY CLASSIFICATION TYPES

A-1	A-2	A-3	A-4	A-5	B	**E**
F-1	F-2	H-1	H-2	H-3	H-4	H-5
I-1	I-2	I-3	I-4	M	R-1	R-2
▨	R-3	R-4	S-1	S-2	U	▨

RESIDENTIAL BOARD AND CARE OCCUPANCIES (REFER TO THE HARRIS COUNTY CODEWORD OF THE SAME NAME AND ALSO COMPLETE THE RESIDENTIAL BOARD AND CARE CERTIFICATION FORM

▨	RBC-8A	RBC-8B	RBC-16A	RBC-16B	▨

BREAK DOWN AREAS AND OCCUPANT LOADS PER FLOOR

OCCUPANCY CLASSIFICATION	SPECIFIC USE	SQUARE FOOTAGE	SF PER OCCUPANT	DESIGN OCCUPANTS
1ST FLOOR				
GROUP E	VO-TECH GREENHOUSE	2,310	50	46
2ND FLOOR				
TOTAL	▨	2,310	▨	46

3 MEANS OF EGRESS

CHAPTER 10 IBC 2018

MEANS OF EGRESS	# OF REQUIRED EXITS	# OF EXITS PROVIDED	SHEET #
STAIRWAYS (PER FLOOR)	N/A	N/A	N/A
EGRESS @ 1ST FL OR LSBO	1	2	G1.02

(SECTION 1005.3 IBC 2018)

PANIC HARDWARE ON EXIT DOORS? YES ☐ NO ☒ (SECTION 1008.1.9 IBC 2018)

STAIRWAYS (SECTION 1011 IBC 2018)
MINIMUM CLEAR WIDTH SHOWN ON: ____ (EACH STAIRWELL)
EGRESS WIDTHS ARE SHOWN ON: ____
ACCESSIBLE AREAS OF REFUGE & 2-WAY COMMUNICATIONS SHOWN ON: ____
(SECTION 1009.3 TO 1009.8 IBC 2018)

EXIT SIGNS/EGRESS ILLUMINATION (SECTION 1008 & 1013 IBC 2018)
REQUIRED AND SHOWN ON: **G1.02** (HIGHLIGHT ON PLANS)
EXTERIOR MEANS OF EGRESS LIGHTING PROVIDED? YES ☒ (SECTION 1008 IBC 2018)

EXIT TRAVEL DISTANCE (TABLE 1017.2 IBC 2018)

OCCUPANCY TYPE	MAX TRAVEL DISTANCE	PROVIDE TRAVEL DISTANCE	SHEET #
GROUP E	200 FT	35 FT	G1.02

ELEVATORS
NEW ☐ EXISTING ☐ ELEVATOR KEYBOX LOCATED IN LOBBY? YES ☐ NO ☐
(MUST BE WITHIN 20' OF THE CALL BUTTON)

4 FIRE PROTECTION & LIFE SAFETY SYS.

CHAPTER 9 IBC & IFC 2018

ALL FIRE PROTECTION PLANS SHALL BE SUBMITTED FOR REVIEW AFTER BUILDING PERMIT HAS BEEN ISSUED *(I.E. UNDERGROUND FIRE LINE, SPRINKLER SYSTEM, FIRE ALARM SYSTEM, STANDPIPE, FIRE PUMP ROOM, AND FIRE PROTECTION WATER SUPPLY SYSTEMS)*

AUTOMATIC FIRE SPRINKLER SYSTEM/ALTERNATIVE AUTOMATIC FIRE EXTINGUISHING SYSTEM
ALL SPRINKLERS SHALL COMPLY WITH MONITORING AND OCCUPANT NOTIFICATION PER 903.4.2.1
(SECTION 903 HC FICODE AMENDMENTS & SECTION 903.4 IFC 2018)
☐ PROVIDED AS NOTED ON: ____ ☒ NOT REQUIRED PER SECTION 903

SYSTEM PROVIDED:	SPRINKLER HEAD PROVIDED:	FIRE PUMP PROVIDED:
☐ NFPA 13	☐ STANDARD	☐ YES
☐ NFPA 13R	☐ ELO	☐ NO
☐ NFPA 13D	☐ ESFR	
☐ OTHER: ____	☐ QUICK RESPONSE	

FIRE DEPARTMENT ACCESS TO SPRINKLER CONTROLS:
☐ SPRINKLER RISER ROOM OR POST INDICATOR VALVE SHOWN ON: ____
(SECTION 901.4.6 HC AMENDMENTS IFC 2018)
☐ FDC SHOWN ON: ____ (FDC SHALL COMPLY WITH SECTION 912 IFC 2018)

SUPPRESSION SYSTEM PROVIDED (SECTION 904 IFC 2018)
☐ REQUIRED AND SHOWN ON: ____
☒ NOT REQUIRED

STANDPIPE SYSTEM & HOSE CONNECTIONS (SECTION 905 IFC 2018)
(I.E. IN STAIRWAYS, STAGES, MALLS)
☐ PROVIDED AS NOTED ON: ____, TYPE OF SYSTEM PROVIDED: ____ (CLASS I, II OR III)
☒ NOT REQUIRED PER SECTION 905

PORTABLE FIRE EXTINGUISHERS (SECTION 906 IFC 2018)
☒ PROVIDED AS NOTED ON: **G1.02**, NUMBER PROVIDED: **1** (HIGHLIGHT ON PLANS)

FIRE ALARM & DETECTION SYSTEMS (SECTION 907 & HC AMENDMENTS IFC 2018)
☒ FIRE ALARM SYSTEM (DEFERRED SUBMITTAL)
☐ NOT REQUIRED PER SECTION 907
☐ EMERGENCY VOICE EVACUATION
☐ OTHER: ____
☐ DEDICATED FUNCTION (SPRINKLER MONITORING, ELEVATOR RECALL, PRE-ACTION, EMERGENCY ALARM, SMOKE CONTROL)

HVAC & AIR DISTRIBUTION SYSTEM CONTROLS (SECTION 606 IMC 2018)
☐ SMOKE DETECTORS PROVIDED TO SHUT DOWN UNITS OVER 2,000 CFM PROVIDED ON: ____
☐ NO HVAC UNITS OVER 2,000 CFM
☐ FIRE/SMOKE DAMPERS IN THE BUILDING SHOWN ON: ____
☒ NO FIRE/SMOKE DAMPERS IN THE BUILDING

SMOKE CONTROL SYSTEMS (SECTION 909 IFC 2018)(I.E. FOR HIGH RISE, ATRIUMS OR STAIRWAY PRESSURIZATION)
☐ PROVIDED AS NOTED ON: ____
☒ NOT REQUIRED PER SECTION 909

SMOKE & HEAT VENTILATION (SECTION 910 IFC 2018)
☐ CALCULATIONS PROVIDED AS NOTED ON: ____
☒ NOT REQUIRED PER SECTION 910
NOTE: WHERE AREAS OF THE BUILDING ARE EQUIPPED WITH EARLY SUPPRESSION FAST-RESPONSE (ESFR) SPRINKLERS, AUTOMATIC SMOKE AND HEAT VENTS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS, MEETING LOCAL JURISDICTION REQUIREMENTS.

5 FIRE-RESISTANCE RATE CONSTRUCTION

CHAPTER 6, 7 AND 10 IBC 2018

SHOW DETAILS OF FIRE WALLS OR FIRE BARRIERS MEETING HORIZONTAL WALLS AND ROOF DECKS
(SEE SECTION 706.5, 706.6 & 707.5 IBC 2018)

FIRE-RESISTANCE RATING REQUIREMENTS (TABLES 601 & 602 IBC 2018)

BUILDING ELEMENTS	HOURS REQUIRED	HOURS PROVIDED	UL OR IBC STANDARD USED & DESIGN DETAIL SHOWN ON
STRUCTURAL FRAME	0	0	G1.02 & A1.05
EXTERIOR BEARING WALLS	0	0	G1.02 & A1.05
EXTERIOR NON-BEARING WALLS	0	0	G1.02 & A1.05
INTERIOR BEARING WALLS	0	0	G1.02 & A1.05
INTERIOR NON-BEARING WALLS	0	0	G1.02 & A1.05
FLOOR CONSTRUCTION	0	0	G1.02 & A1.05
ROOF CONSTRUCTION	0	0	G1.02 & A1.05
STAIRWELLS (SECTION 1023)	n/a	n/a	
ELEVATOR SHAFTS (SECTION 713)	n/a	n/a	
CORRIDORS (SECTION 1020)	n/a	n/a	
FIRE RATED DOORS (TABLE 716.1(2))	n/a	n/a	
DEMISING/PARTITION WALL (SECTION 708)	n/a	n/a	
FIRE BARRIER (SECTION 707)	n/a	n/a	
FIRE WALL (SECTION 706)	n/a	n/a	

DRAFTSTOPS: ☐ YES, SHOWN ON: ____ ☐ NO (SPRINKLED ATTIC) ☒ N/A (SECTION 718.4)

HAVE YOU CHECKED WIDTH OF OPENINGS IN FIRE RATED WALLS? YES ☐ NO ☐
(TABLE 705.8, SECTION 706.8 & 707.6 IBC 2018)

FIRE SEPARATION DISTANCE (FEET) (SECTION 602 IBC 2018)	> 30'-0"	> 30'-0"	> 30'-0"	> 30'-0"
	NORTH	SOUTH	EAST	WEST

ROOF COVERING CLASSIFICATION PROVIDED: A ☐ B ☐ C ☒
(TABLE 1505.1 IBC 2018)

6 WATER SUPPLY (FOR FIREFIGHTING)

CHAPTER 5, APPENDIX B & C IFC 2018

1,000 GSF GROSS SIZE OF BUILDING IN SQUARE FEET (INCLUDE ALL OVERHANGS UNDER ROOF)

PUBLIC WATER SUPPLY WITH FIRE HYDRANTS
(FOR PROPOSED AND EXISTING FIRE HYDRANTS ONLY)
NAME OF THE MUNICIPAL UTILITY DISTRICT: **HC MUD 167**
NUMBER OF HYDRANTS WITHIN 400 FT (NON-SPRINKLED) OR 600 FT (SPRINKLED) OF BUILDING: **1**, SHOWN ON: **C1.06**
REQUIRED GPM: **1,500** DURATION: **2 HRS** (TABLE B105.1 IFC 2018)
75% REDUCTION? YES ☐ NO ☒ (MUST MAINTAIN MINIMUM PER TABLE B105.1.(1) OR B105.1.(2))

OR

WATER SOURCE FOR RURAL AREAS WITHOUT FIRE HYDRANTS
(COMPLETE THE FIRE FLOW CALCULATOR)
☐ ***DRY HYDRANT
☐ ABOVEGROUND STORAGE
☐ UNDERGROUND STORAGE
☐ OTHER: ____

DESIGN SPECIFICATIONS AND LOCATIONS SHOULD MEET MINIMUM REQUIRED WATER SUPPLY FROM THE FIRE FLOW CALCULATOR NFPA 1142 (AVAILABLE ON THE WEBSITE).

***SUBMIT DRY HYDRANT DESIGN PLANS & CALCULATIONS TO FIRE PROTECTION FOR REVIEW & APPROVAL (AVAILABLE ON THE WEBSITE)

7 FIRE LANE ACCESS

CHAPTER 5 & APPENDIX D IFC 2018

FIRE LANE LAYOUT PLAN, WHICH SHALL INCLUDE THE SITE PLAN, THE FIRE LANE & FIRE HYDRANTS, IS SHOWN ON: **C1.06**. (HIGHLIGHT THE FIRE HYDRANT LOCATIONS ON THE PLANS) AERIAL ACCESS LAYOUT, FOR BUILDINGS OVER 30 FT, IS SHOWN ON: **N/A**.

FIRE LANES WILL BE APPROVED CONCEPTUALLY DURING THE CIVIL REVIEW PROCESS. HOWEVER, THE FIRE CODE PLAN REVIEWER MAY CHANGE THE FIRE LANE LAYOUT BASED ON THE BUILDING SPECIFICATIONS.

☐ PROVIDING A REMOTE FIRE HOSE CONNECTION TO COMPLY WITH FIRE LANE HOSE COVERAGE. SUBMIT PLANS TO FIRE PROTECTION FOR REVIEW (SECTION 918.1 HC AMENDMENTS)

8 INTERIOR FINISH

CHAPTER 8 & TABLE 803.13 IBC 2018

OCCUPANCY GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES	SHEET #
E	A	B	C	G1.02, A4.20

9 STORAGE: STANDARD & HIGH PILED

CHAPTER 32 IFC 2018 (REFER TO REGULATIONS FOR REQUIREMENT FOR CONSULTANT ENGINEER SECTION 3201.5 HC AMENDMENTS)

YES ☐ NO ☒ PRODUCTS BEING STORED: ____
YES ☐ NO ☒ STORAGE PACKAGING (I.E. PALLETS, RACKS, SOLID PILED, DRUMS, CARDBOARD BOXES, WRAPPED IN PLASTIC, ETC.): ____
YES ☐ NO ☒ MAXIMUM HEIGHT OF COMMODITY: ____
YES ☐ NO ☒ ***THIS BUILDING IS DESIGNED FOR THE INTENT OF HIGH PILED STORAGE. IF YES, THEN PROVIDE HIGH PILED STORAGE FORM (http://www.eng.hctx.net/Portals/23/Publications/FC_high_piled_storage_form.pdf).
YES ☒ NO ☐ FIRE DEPARTMENT ACCESS DOORS **1 req'd EXIT door + 1 door at back of building**
YES ☐ NO ☒ HIGH PILED STORAGE RACK LAYOUT/ELEVATIONS, CODE ANALYSIS, ETC. SHOWN ON: ____

10 HAZARDOUS MATERIALS

CHAPTER 50 IFC 2018

YES ☐ NO ☒ DOES THE BUILDING HAVE HAZARDOUS MATERIAL USE OR STORAGE? IF YES, THEN PROVIDE ALL HMIS SUMMARY AND MSDS REPORTS.
YES ☐ NO ☐ IF YES, DO THE QUANTITIES EXCEED THE MAXIMUM ALLOWABLE PER IFC 2018?
IF YES, YOU WILL BE REQUIRED TO PROVIDE THE FOLLOWING:
CODE ANALYSIS BY FIRE PROTECTION ENGINEER TO SHOW COMPLIANCE WITH IFC 2018.
CODES AND REFERENCED STANDARDS SHOWN ON SHEET(S) ____

11 SPECIAL CONDITIONS

PROPERTIES WITH FENCE AND GATES SHALL PROVIDE A 911 KEY BOX AT ENTRY GATE

YES ☐ NO ☒ ATRIUM(S) PER 404 IBC 2018?
YES ☐ NO ☒ HIGH RISE BLDG PER 403 IBC 2018?
YES ☐ NO ☒ ANY FUEL STORAGE TANKS PER 5704 IFC 2018?
YES ☐ NO ☒ CRITICAL FACILITIES (HARRIS COUNTY REGULATIONS AND AMENDMENTS)
YES ☐ NO ☒ OTHER: ____
YES ☐ NO ☒ PAINT SPRAY BOOTHS, COATINGS, DIPPING OR INDUSTRIAL OVENS USED PER 2404, 2405, 2406 AND CHAPTER 30 IFC 2018?
YES ☐ NO ☒ HEALTH DEPARTMENT APPROVAL? REQUIRED FOR ALL ESTABLISHMENTS THAT SERVE/PREPARE FOOD AND BEVERAGES FOR THE PUBLIC OR HAVE REFRIGERATED FOOD STORAGE.

COMMENTS & NOTES

GREENHOUSE BUILDING IS TO BE ADDED NEAR EXISTING SOCCER FIELDS, TO GROW PLANTS FOR THE HORTICULTURE DEPARTMENT.
THIS IS A PRE-ENGINEERED STRUCTURAL BUILDING BUILT ON TOP OF A BRICK AND CONCRETE KNEE WALL.

A COPY OF THESE APPROVED CONSTRUCTION PLANS MUST BE KEPT AT PROJECT SITE FOR THE FINAL INSPECTION OF THE BUILDING

PROJECT NUMBER: IFC 2018

THE PROJECT KNOWN AS
(MUST BE THE NAME OF BUSINESS/DBA IF BUILDING IS FOR A SPECIFIC COMPANY)
5750 GREENHOUSE ROAD, KATY, TX 77449
2024 CY-LAKES HIGH SCHOOL RENOVATIONS
WAS ACCEPTED BY HARRIS COUNTY FOR THE PURPOSES LISTED BELOW:

REVIEWER'S STAMP

HCED REVIEW:

REVIEWER'S SIGNATURE BLOCK

PERMIT OFFICE

THE PROJECT WAS REVIEWED, HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER / ARCHITECT LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE PROFESSIONAL'S RESPONSIBILITY AND ACCOUNTABILITY. THIS ACCEPTANCE DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO LAND DEVELOPMENT.

CERTIFICATION

I, M. CAROLINA WEITZMAN, A LICENSED PROFESSIONAL ENGINEER/ [✓ ARCHITECT] IN THE STATE OF TEXAS DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. [✓ I AM]/AM NOT A DESIGNER OF RECORD FOR THIS PROJECT. THE PROJECT CONSISTS OF DRAWING SHEETS ____ THROUGH ____.
ENGINEERING FIRM ____ FIRM# ____

SEAL 11/17/2024 15620
SIGNATURE
DATE 11-17-2024

REVISIONS (DO NOT USE THIS BLOCK UNTIL AFTER PERMIT IS ISSUED)

DATE	SHEET NO.(S)	DESCRIPTION	REVIEWER	COUNTY P.E.

HARRIS COUNTY (IFC 2018)

FIRE CODE DESIGN AND COMPLIANCE REVIEW SHEET VERSION 8.0 (SEP 2019)

(http://www.eng.hctx.net/permits/Fire/Fire-Code/Fire-Code-Review)

FIRE CODE REVIEW
SHEET NUMBER
2 OF 3

1 CY-LAKES HIGH SCHOOL - NEW GREENHOUSE
1" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024 15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

HCED FIRE CODE REVIEW V8.0 - GREENHOUSE

G1.20
____ of ____

1 BUILDING PLANNING & DESCRIPTION

☒ NEW CONSTRUCTION
☐ LEASE SPACE BUILD-OUT (LSBO)
☐ SUBSTANTIAL IMPROVEMENT
☐ SHELL BUILDING
☐ CHANGE OF OCCUPANCY
☐ OTHER: ______

☒ SINGLE OCCUPANCY
MIXED OCCUPANCY ☐ SEPARATED USE ☐ NON-SEPARATED USE

(SECTION 508.3 OR 508.4 IBC 2018)

TYPE OF CONSTRUCTION: **TYPE II-B (NS)** *(CHAPTER 6 IBC 2018)*
HEIGHT LIMITATION: **55 FT** AREA LIMITATION: **26,000 SF** *(TABLE 504.3 IBC 2018)*
FRONTAGE INCREASE CALCULATIONS ARE SHOWN ON SHEET: **N/A**

BUILDING VALUATION **CY-LAKES HIGH SCHOOL STORAGE BUILDING**
BUILDING NUMBER: **1** OF **1**
ADDRESS: **5750 GREENHOUSE ROAD**
CITY, ST: **KATY, TX** ZIP CODE: **77449** SUITE: ______
CALL CENTERPOINT ENERGY AHEAD OF TIME, AT 713-207-4460, TO OBTAIN AN ADDRESS
HCAD #. OR PROPERTY TAX #: **1293610010001** (13 DIGITS)
(http://www.hcad.org)
BUILDING LOCATED IN FLOODPLAIN: YES ☐ NO ☒
GROSS SQUARE FOOTAGE: **1,000 GSF** #OF FLOORS: **1** HEIGHT: **17 FT**
ESTIMATED COST OF CONSTRUCTION: $**160,000.00**
T.D.L.R #: ______ *(REQUIRED FOR CONSTRUCTION OVER $50,000)*
TEXAS DEPARTMENT OF LICENSING AND REGULATIONS
(https://www.tdlr.texas.gov/ab/ab.htm)
TELEPHONE: (512) 463-6599 TOLL FREE (IN TEXAS): 800-803-9202
FAX: (512) 475-2871 RELAY TEXAS-TDD: 800-735-2989

NOTE: PROJECT NOT DEFINED AS SUBSTANTIAL IMPROVEMENT BASED ON VALUATION WITH RENOVATION COSTS

SHELL BUILDING PERMIT #: **N/A** CIVIL PROJECT #: **HC #2410310132**
PUBLIC UTILITIES: YES ☒ NO ☐
OSSF : YES ☐ NO ☐ PROJECT/PERMIT #: ______

LIST BELOW THE PURPOSE/USE OF THE BUILDING OR AREA BEING REVIEWED. INCLUDE DETAILS ON THE PRODUCTS/MATERIALS BEING STORED/FABRICATED AND NOTE HOW THEY ARE BEING PACKAGED.

EXISTING HIGH SCHOOL SHALL BE RENOVATED WITH TWO NEW BUILDING ADDITIONS AT EXISTING FINE ARTS DEPARTMENT AND AUDITORIUM; A NEW STAND ALONE GREENHOUSE NEAR SOCCER FIELDS; AND A NEW STAND ALONE ATHLETIC EQUIPMENT STORAGE BUILDING AT EXISTING TRACK. THIS FIRE CODE SHEET REPRESENTS THE NEW ATHLETIC EQUIPMENT STORAGE BUILDING: BUILDING IS A PRE-ENGINEERED METAL BUILDING, FULLY INSULATED AND FULLY VENTILATED TO THE EXTERIOR AND WILL BE BUILT UNDER THE SAME HCED PERMIT.

2 OCCUPANCY TYPE AND LOAD

CHAPTER 2, 3 & TABLE 1004.5 IBC 2018

OCCUPANCY CLASSIFICATION TYPES

A-1	A-2	A-3	A-4	A-5	B	E
F-1	F-2	H-1	H-2	H-3	H-4	H-5
I-1	I-2	I-3	I-4	M	R-1	R-2
▨	R-3	R-4	S-1	**S-2**	U	▨

RESIDENTIAL BOARD AND CARE OCCUPANCIES (REFER TO THE HARRIS COUNTY CODEWORD OF THE SAME NAME AND ALSO COMPLETE THE RESIDENTIAL BOARD AND CARE CERTIFICATION FORM

▨	RBC-8A	RBC-8B	RBC-16A	RBC-16B	▨

BREAK DOWN AREAS AND OCCUPANT LOADS PER FLOOR

OCCUPANCY CLASSIFICATION	SPECIFIC USE	SQUARE FOOTAGE	SF PER OCCUPANT	DESIGN OCCUPANTS
1ST FLOOR				
GROUP S2	ATHLETIC EQUIPMENT STORAGE BUILDING	1,000	300	3
2ND FLOOR				
TOTAL	▨	1,000	▨	3

3 MEANS OF EGRESS

CHAPTER 10 IBC 2018

MEANS OF EGRESS	# OF REQUIRED EXITS	# OF EXITS PROVIDED	SHEET #
STAIRWAYS (PER FLOOR)	N/A	N/A	N/A
EGRESS @ 1ST FL OR LSBO	1	1	G1.02

(SECTION 1005.3 IBC 2018)

PANIC HARDWARE ON EXIT DOORS? YES ☐ NO ☒ *(SECTION 1008.1.9 IBC 2018)*

STAIRWAYS *(SECTION 1011 IBC 2018)*
MINIMUM CLEAR WIDTH SHOWN ON: **G1.01** *(EACH STAIRWELL)*
EGRESS WIDTHS ARE SHOWN ON: **G1.01**
ACCESSIBLE AREAS OF REFUGE & 2-WAY COMMUNICATIONS SHOWN ON: **N/A**
(SECTION 1009.3 TO 1009.8 IBC 2018)

EXIT SIGNS/EGRESS ILLUMINATION *(SECTION 1008 & 1013 IBC 2018)*
REQUIRED AND SHOWN ON: **G1.02** *(HIGHLIGHT ON PLANS)*
EXTERIOR MEANS OF EGRESS LIGHTING PROVIDED? YES ☒ *(SECTION 1008 IBC 2018)*

EXIT TRAVEL DISTANCE *(TABLE 1017.2 IBC 2018)*

OCCUPANCY TYPE	MAX TRAVEL DISTANCE	PROVIDE TRAVEL DISTANCE	SHEET #
GROUP S-2	300 FT	35 FT	G1.02

ELEVATORS
NEW ☐ EXISTING ☐ ELEVATOR KEYBOX LOCATED IN LOBBY? YES ☐ NO ☐
(MUST BE WITHIN 20' OF THE CALL BUTTON)

4 FIRE PROTECTION & LIFE SAFETY SYS.

CHAPTER 9 IBC & IFC 2018

ALL FIRE PROTECTION PLANS SHALL BE SUBMITTED FOR REVIEW AFTER BUILDING PERMIT HAS BEEN ISSUED *(I.E. UNDERGROUND FIRE LINE, SPRINKLER SYSTEM, FIRE ALARM SYSTEM, STANDPIPE, FIRE PUMP ROOM, AND FIRE PROTECTION WATER SUPPLY SYSTEMS)*

AUTOMATIC FIRE SPRINKLER SYSTEM/ALTERNATIVE AUTOMATIC FIRE EXTINGUISHING SYSTEM
ALL SPRINKLERS SHALL COMPLY WITH MONITORING AND OCCUPANT NOTIFICATION PER 903.4.2.1
(SECTION 903 HC FICODE AMENDMENTS & SECTION 903.4 IFC 2018)
☐ PROVIDED AS NOTED ON: ______ ☒ NOT REQUIRED PER SECTION 903

SYSTEM PROVIDED:
☐ NFPA 13
☐ NFPA 13R
☐ NFPA 13D
☐ OTHER: ______

SPRINKLER HEAD PROVIDED:
☐ STANDARD
☐ ELO
☐ ESFR
☐ QUICK RESPONSE

FIRE PUMP PROVIDED:
☐ YES
☐ NO

FIRE DEPARTMENT ACCESS TO SPRINKLER CONTROLS:
☐ SPRINKLER RISER ROOM OR POST INDICATOR VALVE SHOWN ON: ______ *(SECTION 901.4.6 HC AMENDMENTS IFC 2018)*
☐ FDC SHOWN ON: ______ *(FDC SHALL COMPLY WITH SECTION 912 IFC 2018)*

SUPPRESSION SYSTEM PROVIDED *(SECTION 904 IFC 2018)*
☐ REQUIRED AND SHOWN ON: ______
☒ NOT REQUIRED

STANDPIPE SYSTEM & HOSE CONNECTIONS *(SECTION 905 IFC 2018)*
(I.E. IN STAIRWAYS, STAGES, MALLS)
☐ PROVIDED AS NOTED ON: ______, TYPE OF SYSTEM PROVIDED: ______ *(CLASS I, II OR III)*
☒ NOT REQUIRED PER SECTION 905

PORTABLE FIRE EXTINGUISHERS *(SECTION 906 IFC 2018)*
☒ PROVIDED AS NOTED ON: **G1.02**, NUMBER PROVIDED: **1** *(HIGHLIGHT ON PLANS)*

FIRE ALARM & DETECTION SYSTEMS *(SECTION 907 & HC AMENDMENTS IFC 2018)*
☒ FIRE ALARM SYSTEM (DEFERRED SUBMITTAL)
☐ NOT REQUIRED PER SECTION 907
☐ EMERGENCY VOICE EVACUATION
☐ OTHER: ______
☐ DEDICATED FUNCTION (SPRINKLER MONITORING, ELEVATOR RECALL, PRE-ACTION, EMERGENCY ALARM, SMOKE CONTROL)

HVAC & AIR DISTRIBUTION SYSTEM CONTROLS *(SECTION 606 IMC 2018)*
☐ SMOKE DETECTORS PROVIDED TO SHUT DOWN UNITS OVER 2,000 CFM PROVIDED ON: ______
☐ NO HVAC UNITS OVER 2,000 CFM
☐ FIRE/SMOKE DAMPERS IN THE BUILDING SHOWN ON: ______
☒ NO FIRE/SMOKE DAMPERS IN THE BUILDING

SMOKE CONTROL SYSTEMS *(SECTION 909 IFC 2018)(I.E. FOR HIGH RISE, ATRIUMS OR STAIRWAY PRESSURIZATION)*
☐ PROVIDED AS NOTED ON: ______
☒ NOT REQUIRED PER SECTION 909

SMOKE & HEAT VENTILATION *(SECTION 910 IFC 2018)*
☐ CALCULATIONS PROVIDED AS NOTED ON: ______
☒ NOT REQUIRED PER SECTION 910
NOTE: WHERE AREAS OF THE BUILDING ARE EQUIPPED WITH EARLY SUPPRESSION FAST-RESPONSE (ESFR) SPRINKLERS, AUTOMATIC SMOKE AND HEAT VENTS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS, MEETING LOCAL JURISDICTION REQUIREMENTS.

5 FIRE-RESISTANCE RATE CONSTRUCTION

CHAPTER 6, 7 AND 10 IBC 2018

SHOW DETAILS OF FIRE WALLS OR FIRE BARRIERS MEETING HORIZONTAL WALLS AND ROOF DECKS *(SEE SECTION 706.5, 706.6 & 707.5 IBC 2018)*

FIRE-RESISTANCE RATING REQUIREMENTS *(TABLES 601 & 602 IBC 2018)*

BUILDING ELEMENTS	HOURS REQUIRED	HOURS PROVIDED	UL OR IBC STANDARD USED & DESIGN DETAIL SHOWN ON
STRUCTURAL FRAME	0	0	G1.02 & A1.02
EXTERIOR BEARING WALLS	0	0	G1.02 & A1.02
EXTERIOR NON-BEARING WALLS	0	0	G1.02 & A1.02
INTERIOR BEARING WALLS	0	0	G1.02 & A1.02
INTERIOR NON-BEARING WALLS	0	0	G1.02 & A1.02
FLOOR CONSTRUCTION	0	0	G1.02 & A1.02
ROOF CONSTRUCTION	0	0	G1.02 & A1.02
STAIRWELLS *(SECTION 1023)*	n/a	n/a	
ELEVATOR SHAFTS *(SECTION 713)*	n/a	n/a	
CORRIDORS *(SECTION 1020)*	n/a	n/a	
FIRE RATED DOORS *(TABLE 716.1(2))*	n/a	n/a	
DEMISING/PARTITION WALL *(SECTION 708)*	n/a	n/a	
FIRE BARRIER *(SECTION 707)*	n/a	n/a	
FIRE WALL *(SECTION 706)*	n/a	n/a	

DRAFTSTOPS: ☐ YES, SHOWN ON: ______ ☐ NO (SPRINKLED ATTIC) ☒ N/A *(SECTION 718.4)*

HAVE YOU CHECKED WIDTH OF OPENINGS IN FIRE RATED WALLS? YES ☐ NO ☐ *(TABLE 705.8, SECTION 706.8 & 707.6 IBC 2018)*

FIRE SEPARATION DISTANCE (FEET) *(SECTION 602 IBC 2018)*	NORTH	SOUTH	EAST	WEST
	> 30'-0"	> 30'-0"	> 30'-0"	> 30'-0"

ROOF COVERING CLASSIFICATION PROVIDED: A ☐ B ☐ C ☒ *(TABLE 1505.1 IBC 2018)*

6 WATER SUPPLY (FOR FIREFIGHTING)

CHAPTER 5, APPENDIX B & C IFC 2018

1,000 GSF GROSS SIZE OF BUILDING IN SQUARE FEET *(INCLUDE ALL OVERHANGS UNDER ROOF)*

PUBLIC WATER SUPPLY WITH FIRE HYDRANTS
(FOR PROPOSED AND EXISTING FIRE HYDRANTS ONLY)
NAME OF THE MUNICIPAL UTILITY DISTRICT: **HC MUD 167**
NUMBER OF HYDRANTS WITHIN 400 FT (NON-SPRINKLED) OR 600 FT (SPRINKLED) OF BUILDING: **1**, SHOWN ON: **C1.06**
REQUIRED GPM: **1,500** DURATION: **2 HRS** *(TABLE B105.1 IFC 2018)*
75% REDUCTION? YES ☐ NO ☒ *(MUST MAINTAIN MINIMUM PER TABLE B105.1.(1) OR B105.1.(2))*

OR

WATER SOURCE FOR RURAL AREAS WITHOUT FIRE HYDRANTS
(COMPLETE THE FIRE FLOW CALCULATOR)
☐ ***DRY HYDRANT
☐ ABOVEGROUND STORAGE
☐ UNDERGROUND STORAGE
☐ OTHER: ______

DESIGN SPECIFICATIONS AND LOCATIONS SHOULD MEET MINIMUM REQUIRED WATER SUPPLY FROM THE FIRE FLOW CALCULATOR NFPA 1142 (AVAILABLE ON THE WEBSITE).

***SUBMIT DRY HYDRANT DESIGN PLANS & CALCULATIONS TO FIRE PROTECTION FOR REVIEW & APPROVAL (AVAILABLE ON THE WEBSITE)

7 FIRE LANE ACCESS

CHAPTER 5 & APPENDIX D IFC 2018

FIRE LANE LAYOUT PLAN, WHICH SHALL INCLUDE THE SITE PLAN, THE FIRE LANE & FIRE HYDRANTS, IS SHOWN ON: **C1.06**. *(HIGHLIGHT THE FIRE HYDRANT LOCATIONS ON THE PLANS)* AERIAL ACCESS LAYOUT, FOR BUILDINGS OVER 30 FT, IS SHOWN ON: **N/A**.

FIRE LANES WILL BE APPROVED CONCEPTUALLY DURING THE CIVIL REVIEW PROCESS. HOWEVER, THE FIRE CODE PLAN REVIEWER MAY CHANGE THE FIRE LANE LAYOUT BASED ON THE BUILDING SPECIFICATIONS.

☐ PROVIDING A REMOTE FIRE HOSE CONNECTION TO COMPLY WITH FIRE LANE HOSE COVERAGE. SUBMIT PLANS TO FIRE PROTECTION FOR REVIEW *(SECTION 918.1 HC AMENDMENTS)*

8 INTERIOR FINISH

CHAPTER 8 & TABLE 803.13 IBC 2018

OCCUPANCY GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES	SHEET #
S-2	B	B	C	G1.02, A4.20

9 STORAGE: STANDARD & HIGH PILED

CHAPTER 32 IFC 2018 *(REFER TO REGULATIONS FOR REQUIREMENT FOR CONSULTANT ENGINEER SECTION 3201.5 HC AMENDMENTS)*

YES ☒ NO ☐ PRODUCTS BEING STORED: **Track & Field Equipment: balls, poles, shot puts, discs, javelins, hurdles, etc.**
YES ☐ NO ☒ STORAGE PACKAGING *(I.E. PALLETS, RACKS, SOLID PILED, DRUMS, CARDBOARD BOXES, WRAPPED IN PLASTIC, ETC.)*: ______
YES ☒ NO ☐ MAXIMUM HEIGHT OF COMMODITY: **Equipment on rolling carts, horizontal storage racks, 8'-0" high max.**
YES ☐ NO ☒ ***THIS BUILDING IS DESIGNED FOR THE INTENT OF HIGH PILED STORAGE. IF YES, THEN PROVIDE HIGH PILED STORAGE FORM (http://www.eng.hctx.net/Portals/23/Publications/FC_high_piled_storage_form.pdf).
YES ☒ NO ☐ FIRE DEPARTMENT ACCESS DOORS **1 req'd EXIT door +1 overhead door**
YES ☐ NO ☒ HIGH PILED STORAGE RACK LAYOUT/ELEVATIONS, CODE ANALYSIS, ETC. SHOWN ON: ______

10 HAZARDOUS MATERIALS

CHAPTER 50 IFC 2018

YES ☐ NO ☒ DOES THE BUILDING HAVE HAZARDOUS MATERIAL USE OR STORAGE? IF YES, THEN PROVIDE ALL HMIS SUMMARY AND MSDS REPORTS.
YES ☐ NO ☐ IF YES, DO THE QUANTITIES EXCEED THE MAXIMUM ALLOWABLE PER IFC 2018?
IF YES, YOU WILL BE REQUIRED TO PROVIDE THE FOLLOWING:
CODE ANALYSIS BY FIRE PROTECTION ENGINEER TO SHOW COMPLIANCE WITH IFC 2018.
CODES AND REFERENCED STANDARDS SHOWN ON SHEET(S) ______

11 SPECIAL CONDITIONS

PROPERTIES WITH FENCE AND GATES SHALL PROVIDE A 911 KEY BOX AT ENTRY GATE

YES ☐ NO ☒ ATRIUM(S) PER 404 IBC 2018?
YES ☐ NO ☒ HIGH RISE BLDG PER 403 IBC 2018?
YES ☐ NO ☒ ANY FUEL STORAGE TANKS PER 5704 IFC 2018?
YES ☐ NO ☒ CRITICAL FACILITIES (HARRIS COUNTY REGULATIONS AND AMENDMENTS)
YES ☐ NO ☒ OTHER: ______
YES ☐ NO ☒ PAINT SPRAY BOOTHS, COATINGS, DIPPING OR INDUSTRIAL OVENS USED PER 2404, 2405, 2406 AND CHAPTER 30 IFC 2018?
YES ☐ NO ☒ HEALTH DEPARTMENT APPROVAL? REQUIRED FOR ALL ESTABLISHMENTS THAT SERVE/PREPARE FOOD AND BEVERAGES FOR THE PUBLIC OR HAVE REFRIGERATED FOOD STORAGE.

COMMENTS & NOTES

STORAGE BUILDING IS TO BE ADDED AT THE PRACTICE FIELD TRACK, TO STORE EQUIPMENT USED IN THE TRACK & FIELD SPORT. THIS IS A PRE-ENGINEERED METAL BUILDING THAT SHALL BE VENTILATED VIA EXHAUST FAN AND INTAKE LOUVERS.

A COPY OF THESE APPROVED CONSTRUCTION PLANS MUST BE KEPT AT PROJECT SITE FOR THE FINAL INSPECTION OF THE BUILDING

PROJECT NUMBER: IFC 2018

THE PROJECT KNOWN AS
(MUST BE THE NAME OF BUSINESS/DBA IF BUILDING IS FOR A SPECIFIC COMPANY)
5750 GREENHOUSE ROAD, KATY, TX 77449
2024 CY-LAKES HIGH SCHOOL RENOVATIONS
WAS ACCEPTED BY HARRIS COUNTY FOR THE PURPOSES LISTED BELOW:

REVIEWER'S STAMP

HCED REVIEW:

REVIEWER'S SIGNATURE BLOCK

PERMIT OFFICE

THE PROJECT WAS REVIEWED, HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER / ARCHITECT LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE PROFESSIONAL'S RESPONSIBILITY AND ACCOUNTABILITY. THIS ACCEPTANCE DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO LAND DEVELOPMENT.

CERTIFICATION

I, M. CAROLINA WEITZMAN, A LICENSED PROFESSIONAL ENGINEER/ [✓ ARCHITECT] IN THE STATE OF TEXAS DO HEREBY CERTIFY THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. [✓ I AM]/AM NOT A DESIGNER OF RECORD FOR THIS PROJECT. THE PROJECT CONSISTS OF DRAWING SHEETS ______ THROUGH ______.
ENGINEERING FIRM ______ FIRM# ______

SEAL: MARIA CAROLINA WEITZMAN 11/17/2024 15620
SIGNATURE
DATE: 11-17-2024

REVISIONS (DO NOT USE THIS BLOCK UNTIL AFTER PERMIT IS ISSUED)

DATE	SHEET NO.(S)	DESCRIPTION	REVIEWER	COUNTY P.E.

HARRIS COUNTY (IFC 2018)

FIRE CODE DESIGN AND COMPLIANCE REVIEW SHEET VERSION 8.0 (SEP 2019)

(http://www.eng.hctx.net/permits/Fire/Fire-Code/Fire-Code-Review)

FIRE CODE REVIEW
SHEET NUMBER
3 OF 3

1 CY-LAKES HIGH SCHOOL - NEW STORAGE BUILDING
1" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN 11/17/2024 15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

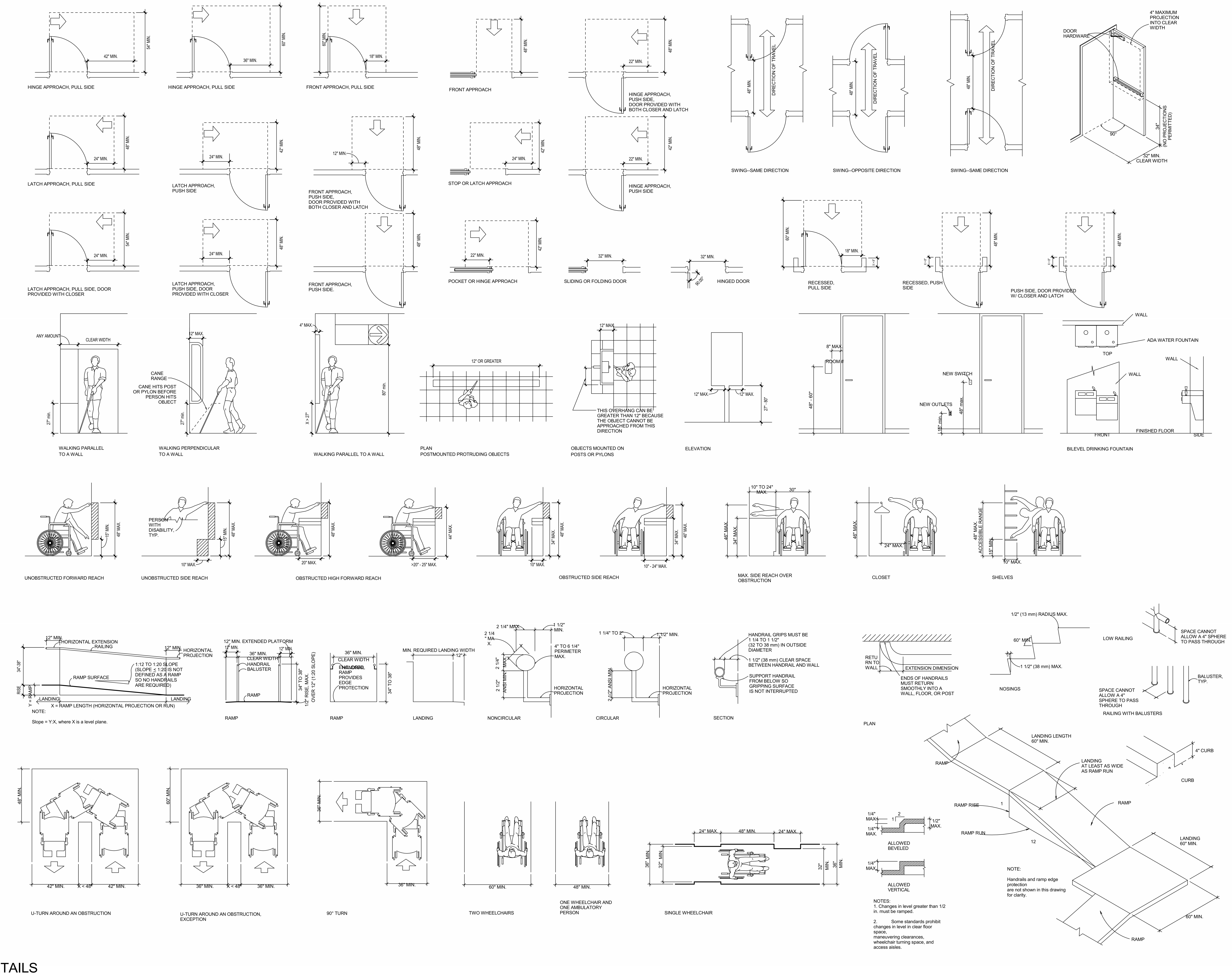
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

HCED FIRE CODE REVIEW V8.0 - STORAGE BLDG

G1.30
of



1 ADA DETAILS

1/2" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

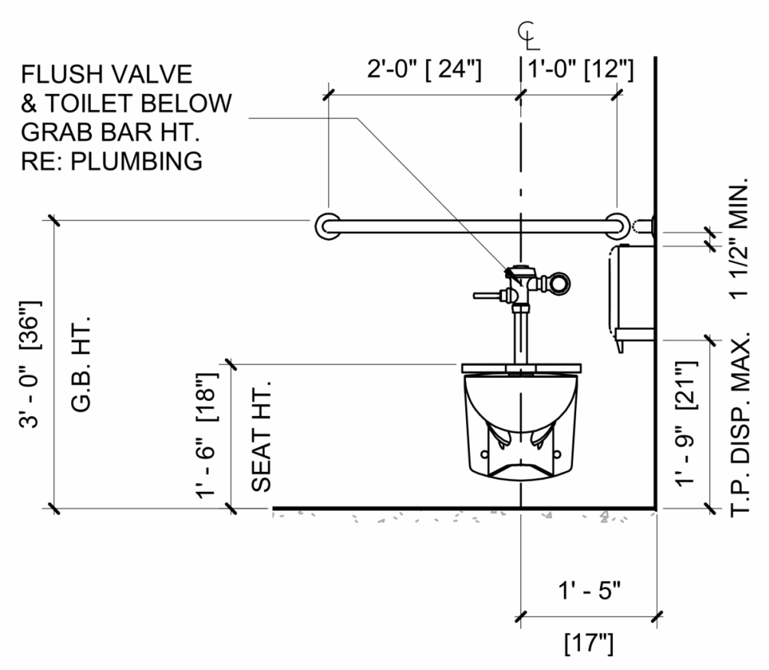
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

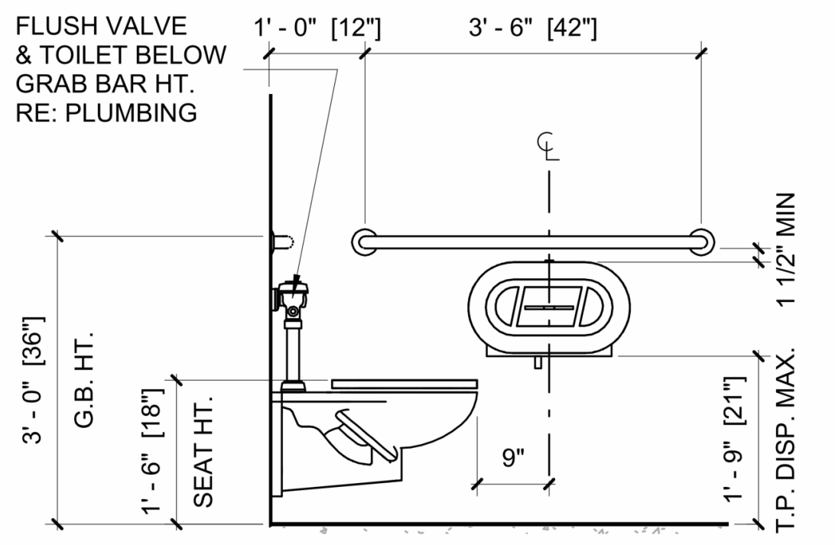
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

ADA DETAILS

11/14/2024 1:40:19 PM



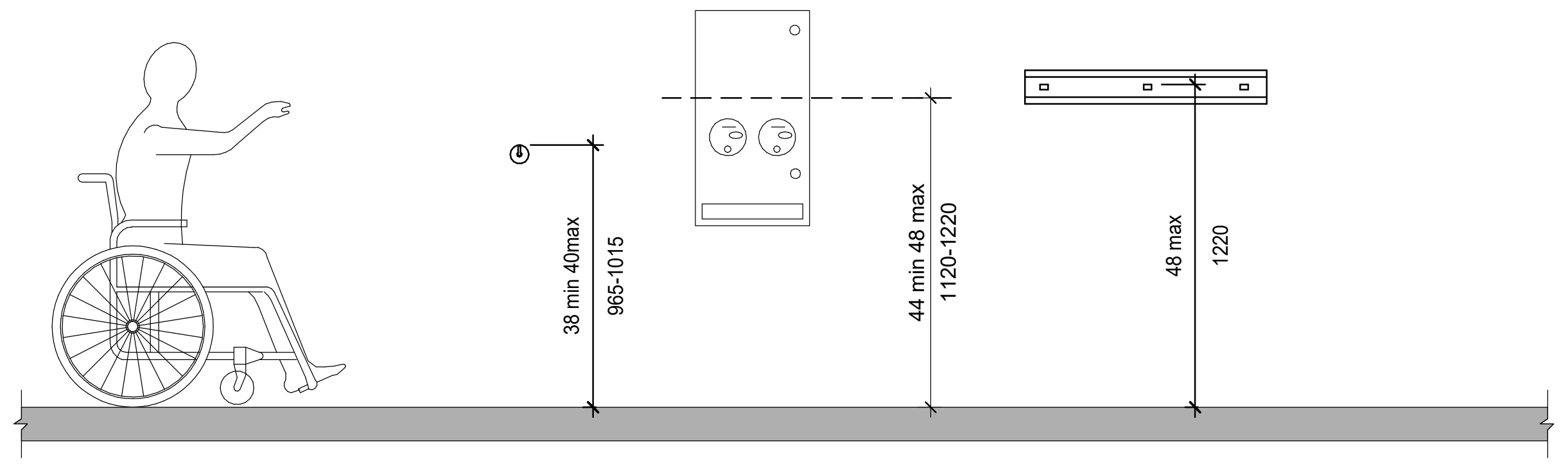
C1 ADA STAFF TOILET FRONT VIEW
1/2" = 1'-0"



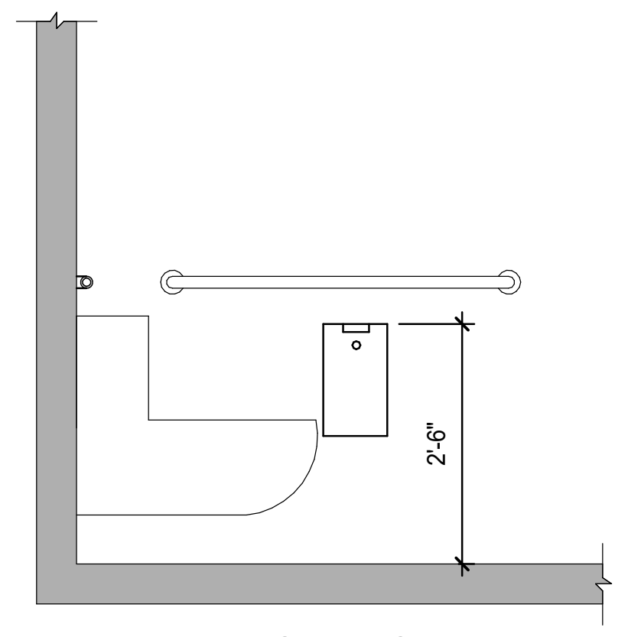
NOTE: *G.C. TO VERIFY CFISD TOILET PAPER DISPENSER PRIOR TO INSTALL. IF DIFFERENT THAN TYPE SHOWN, NOTIFY ARCHITECT*

C2 ADA STAFF TOILET SIDE VIEW
1/2" = 1'-0"

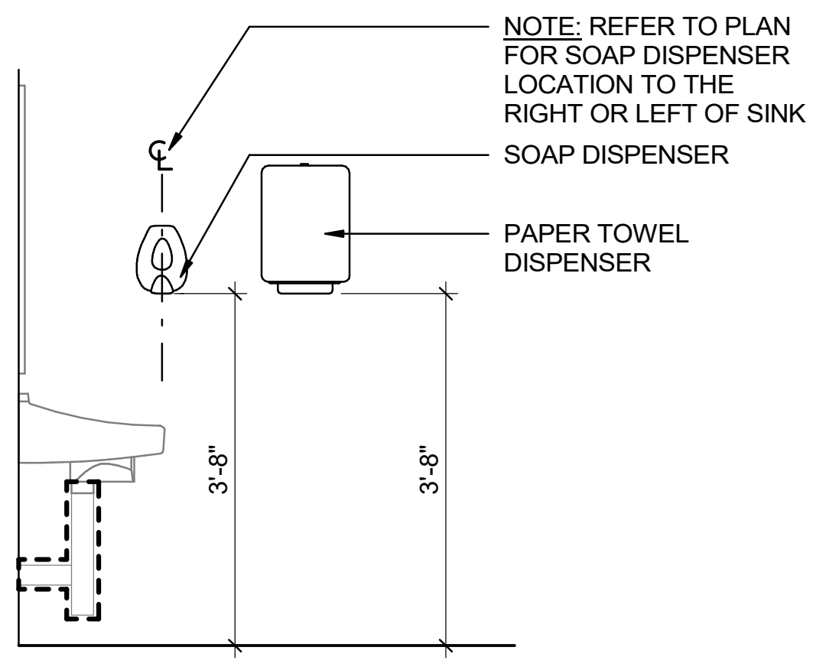
1 ADA TOILET DETAILS
1 1/2" = 1'-0"



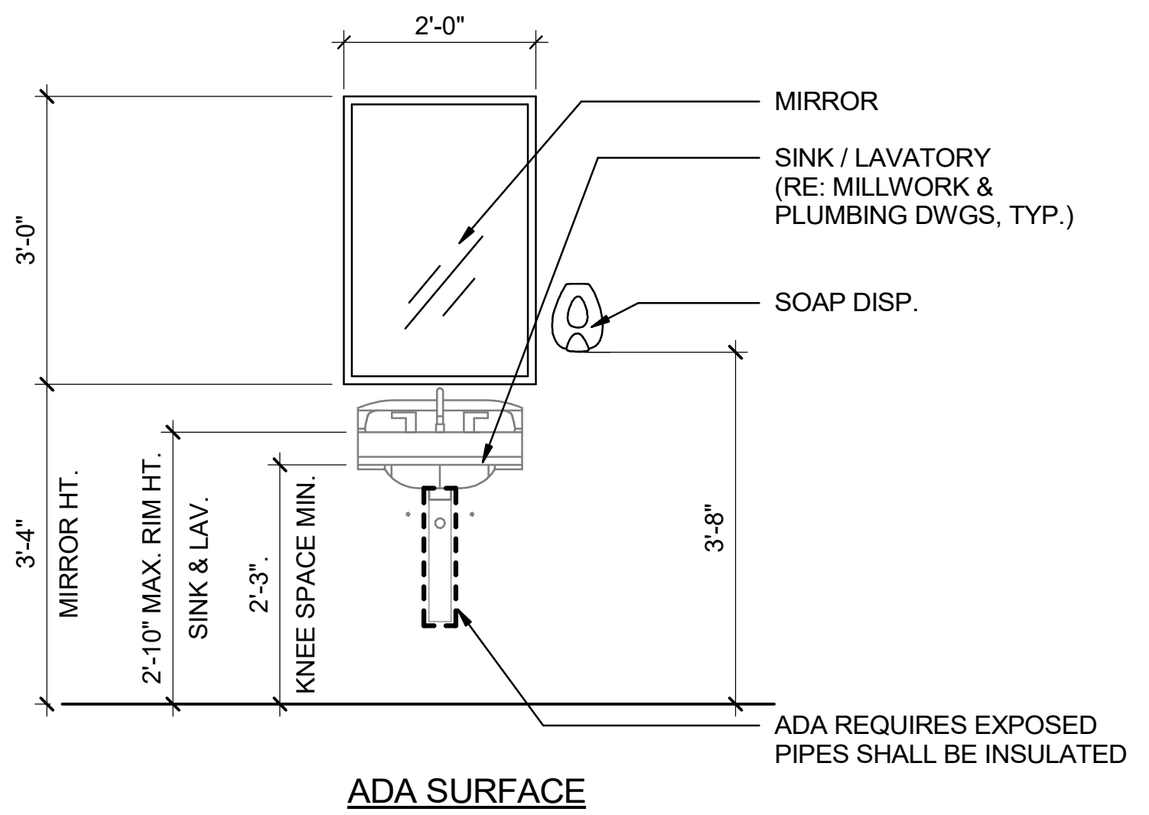
ADA SURFACE COAT HOOK,
SANITARY NAPKIN
DISPENSER AND MOP/ BROOM HOLDER HEIGHT



ADA SURFACE
SANITARY NAPKIN
DISPOSAL HEIGHT

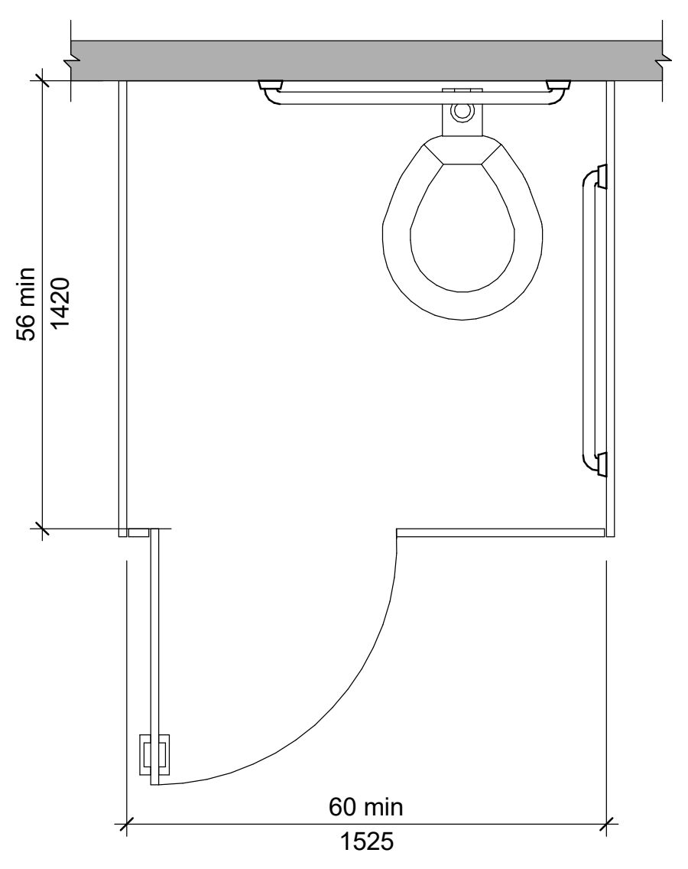


ADA SURFACE MOUNTED PAPER
TOWEL DISPENSER & SOAP
DISPENSER HEIGHTS

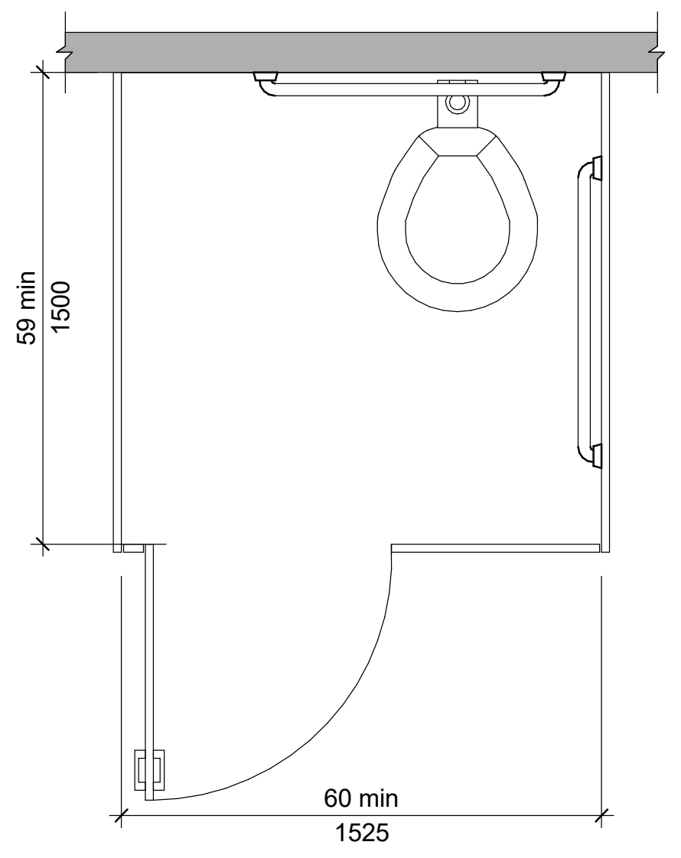


ADA SURFACE
SINK, MIRROR, & SOAP
DISPENSER HEIGHT

2 ADA ACCESSORY DETAILS
1/2" = 1'-0"

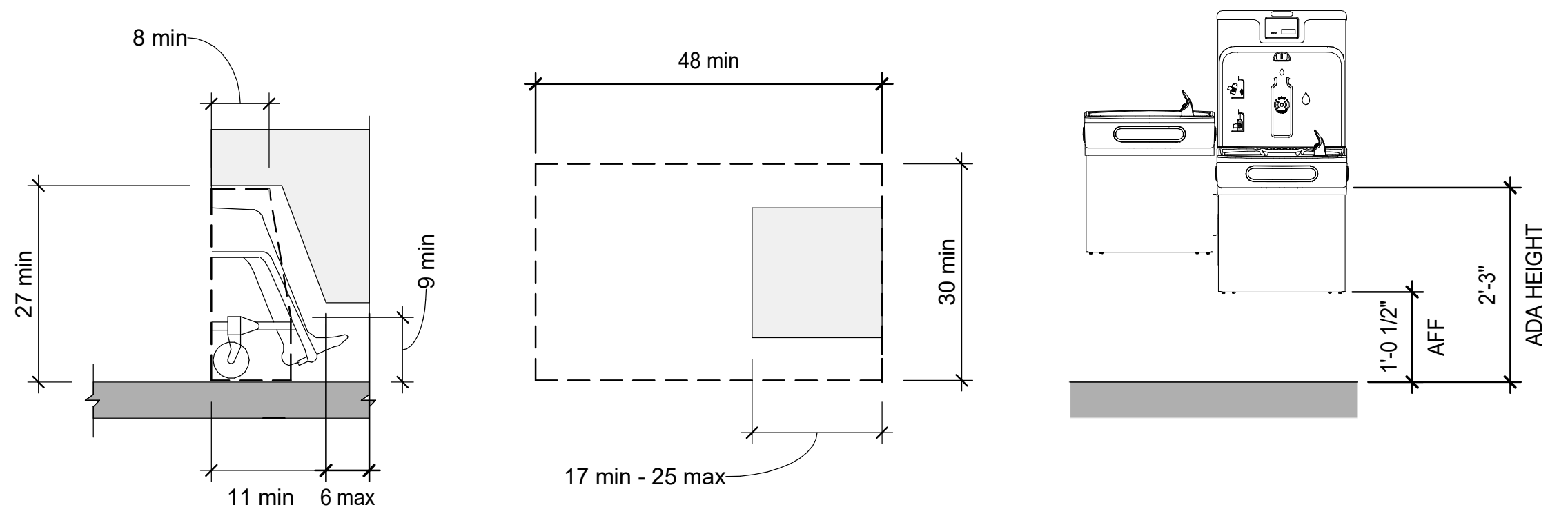


ADULT WALL HUNG WATER
CLOSET

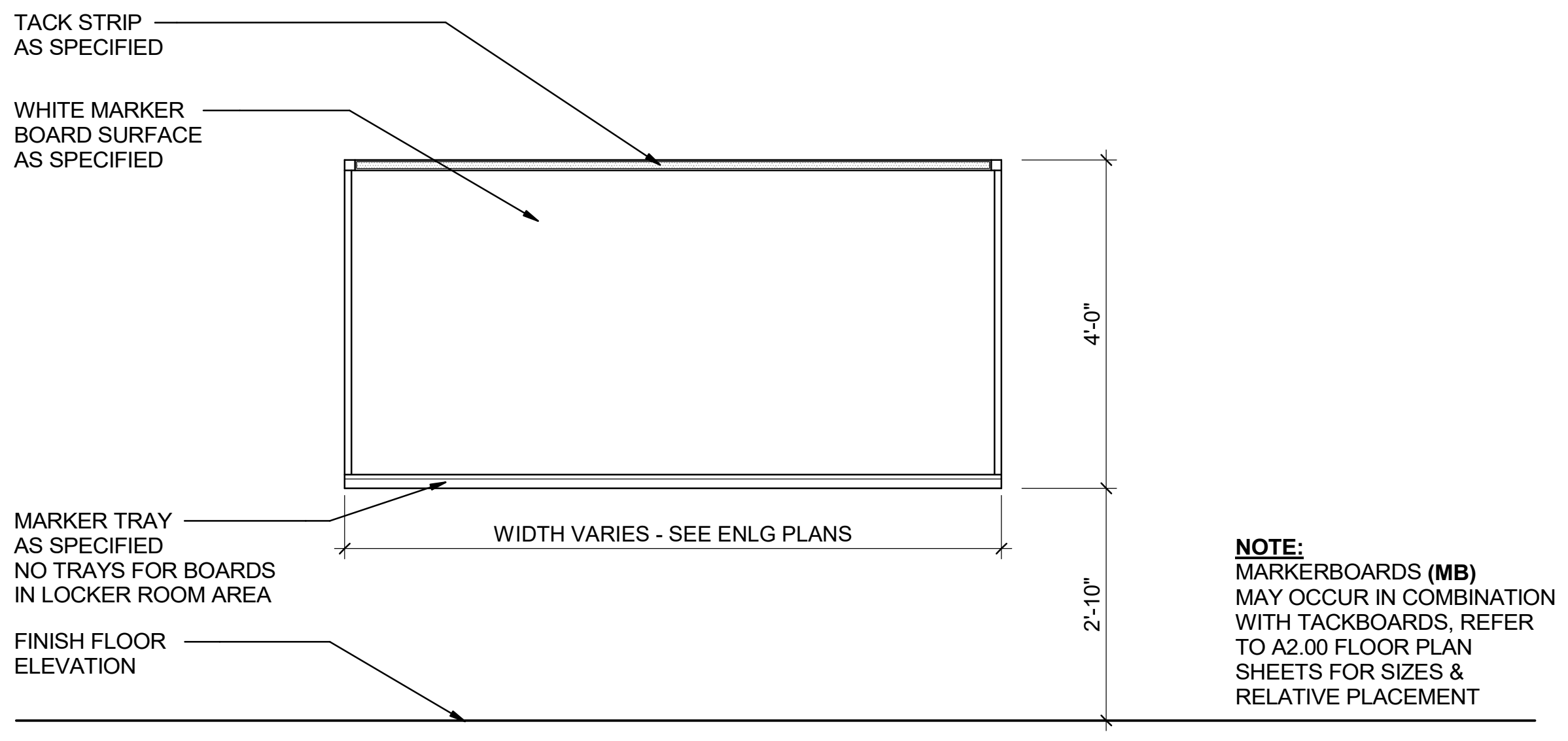


ADULT FLOOR MOUNTED
WATER CLOSEET AND
CHILDREN'S WATER CLOSET

3 ADA TOILET COMPARTMENT
1/2" = 1'-0"



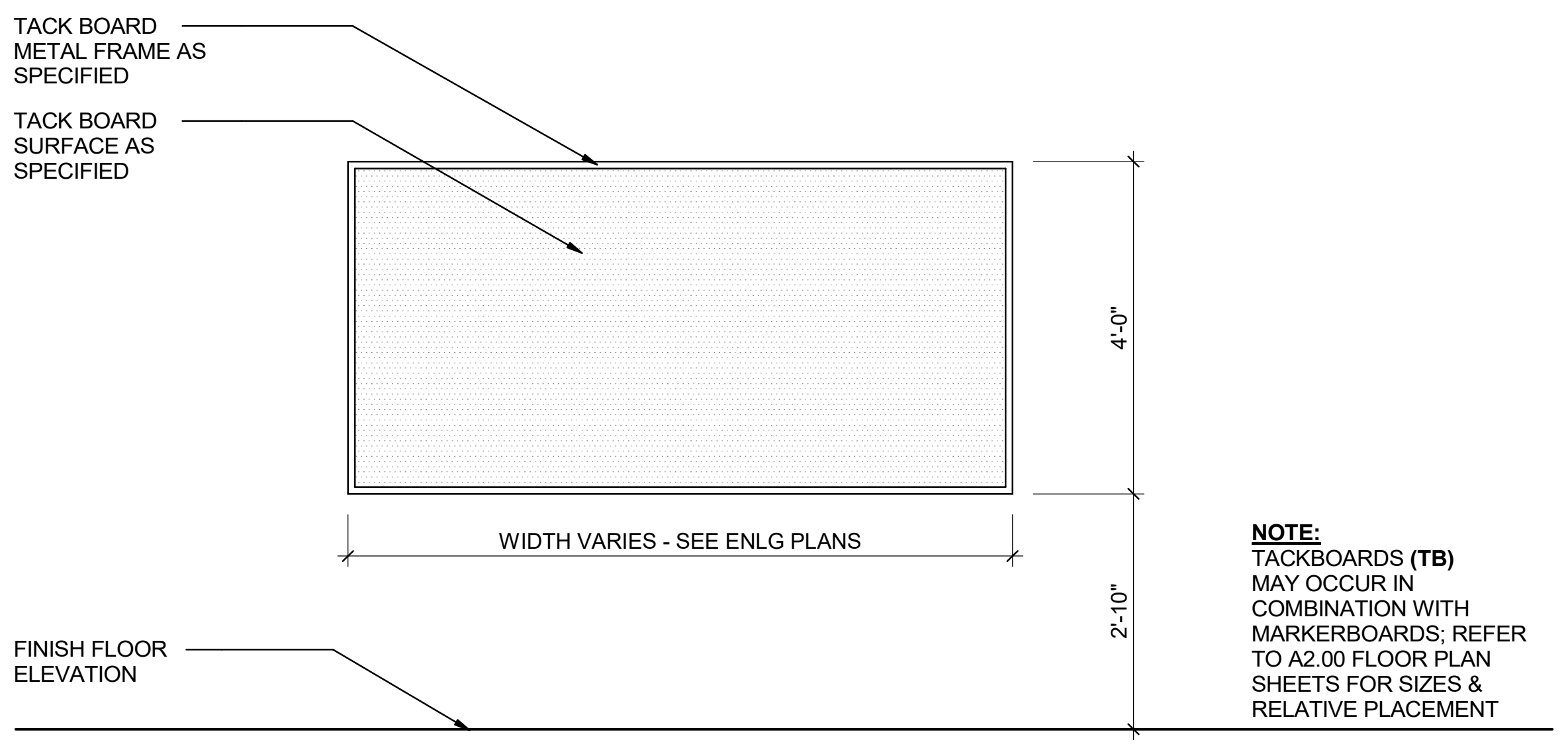
4 ADA DINKING FOUNTAIN
1/2" = 1'-0"



NOTE:
MARKERBOARDS **(MB)**
MAY OCCUR IN COMBINATION
WITH TACKBOARDS, REFER
TO A2.00 FLOOR PLAN
SHEETS FOR SIZES &
RELATIVE PLACEMENT

MB
MARKERBOARD

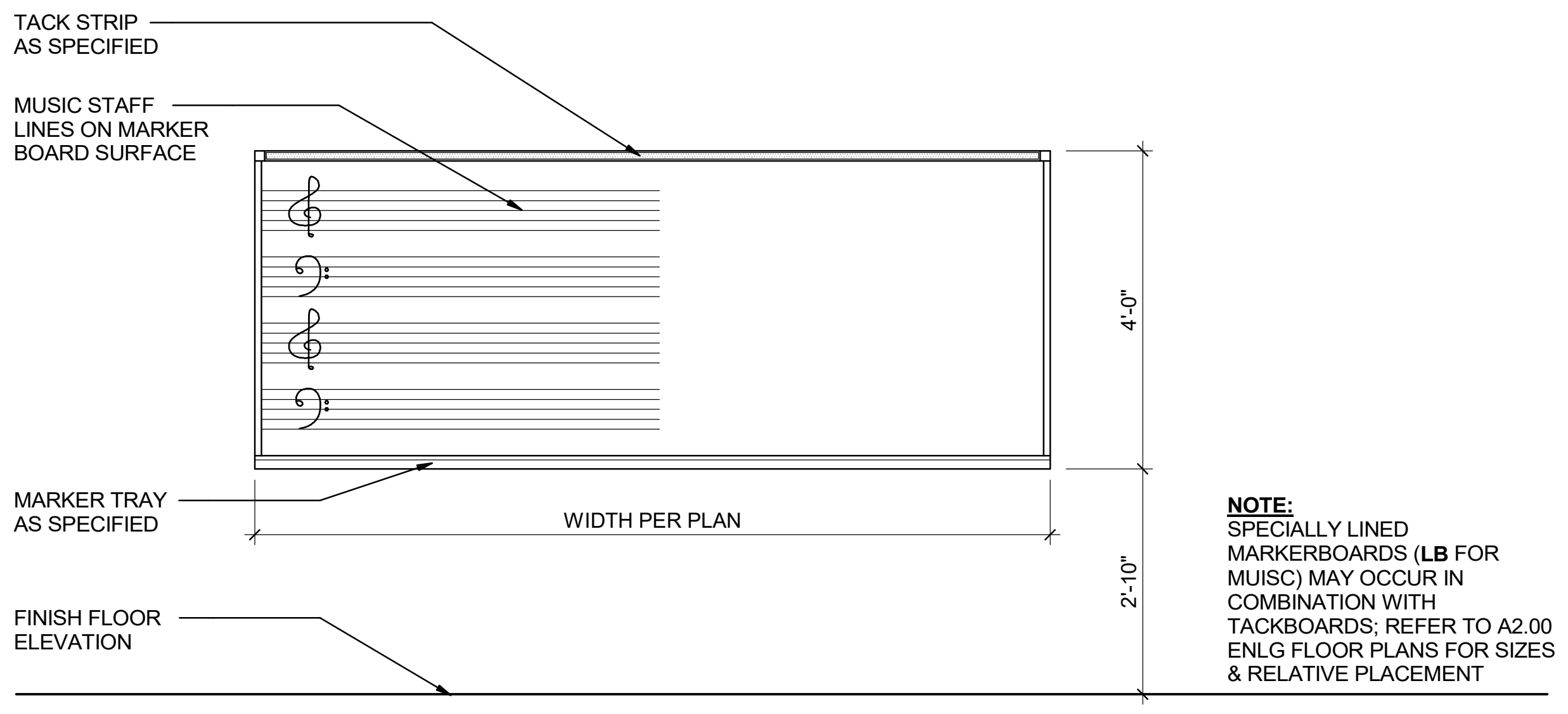
5 MARKERBOARD - STANDARD
1/2" = 1'-0"



NOTE:
TACKBOARDS **(TB)**
MAY OCCUR IN
COMBINATION WITH
MARKERBOARDS; REFER
TO A2.00 FLOOR PLAN
SHEETS FOR SIZES &
RELATIVE PLACEMENT

TB
TACKBOARD

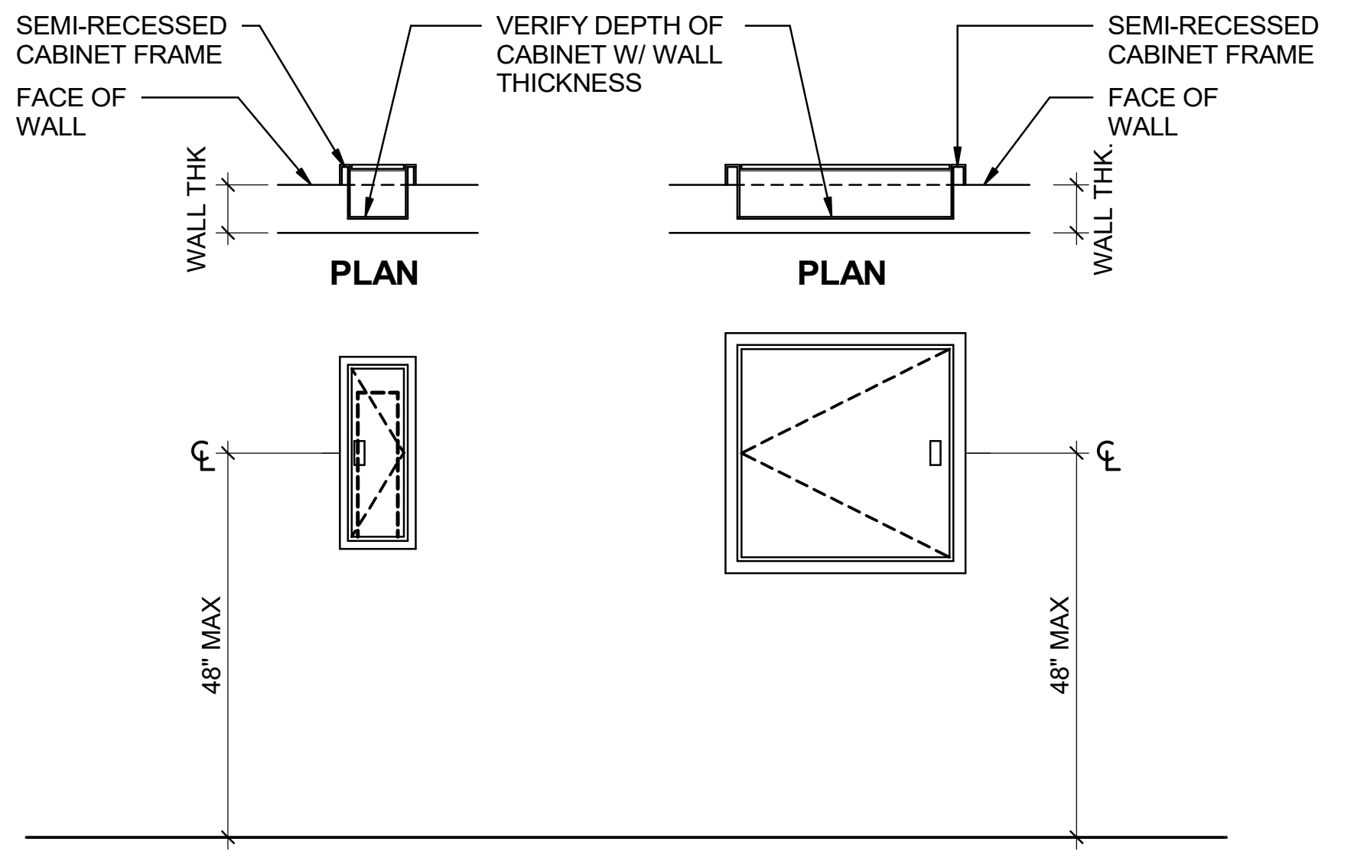
6 TACKBOARD - STANDARD
1/2" = 1'-0"



NOTE:
SPECIALLY LINED
MARKERBOARDS (**LB** FOR
MUISC) MAY OCCUR IN
COMBINATION WITH
TACKBOARDS; REFER TO A2.00
ENLG FLOOR PLANS FOR SIZES
& RELATIVE PLACEMENT

LB
MUSIC MARKERBOARD

7 MARKERBOARD - W/ MUSIC STAFF LINES
1/2" = 1'-0"



SEMI-RECESSED FIRE
EXTINGUISHER
CABINET

SEMI-RECESSED
FIRE HOSE
CABINET

8 FIRE EXTINGUISHER & FIRE HOSE CABINETS
1/2" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

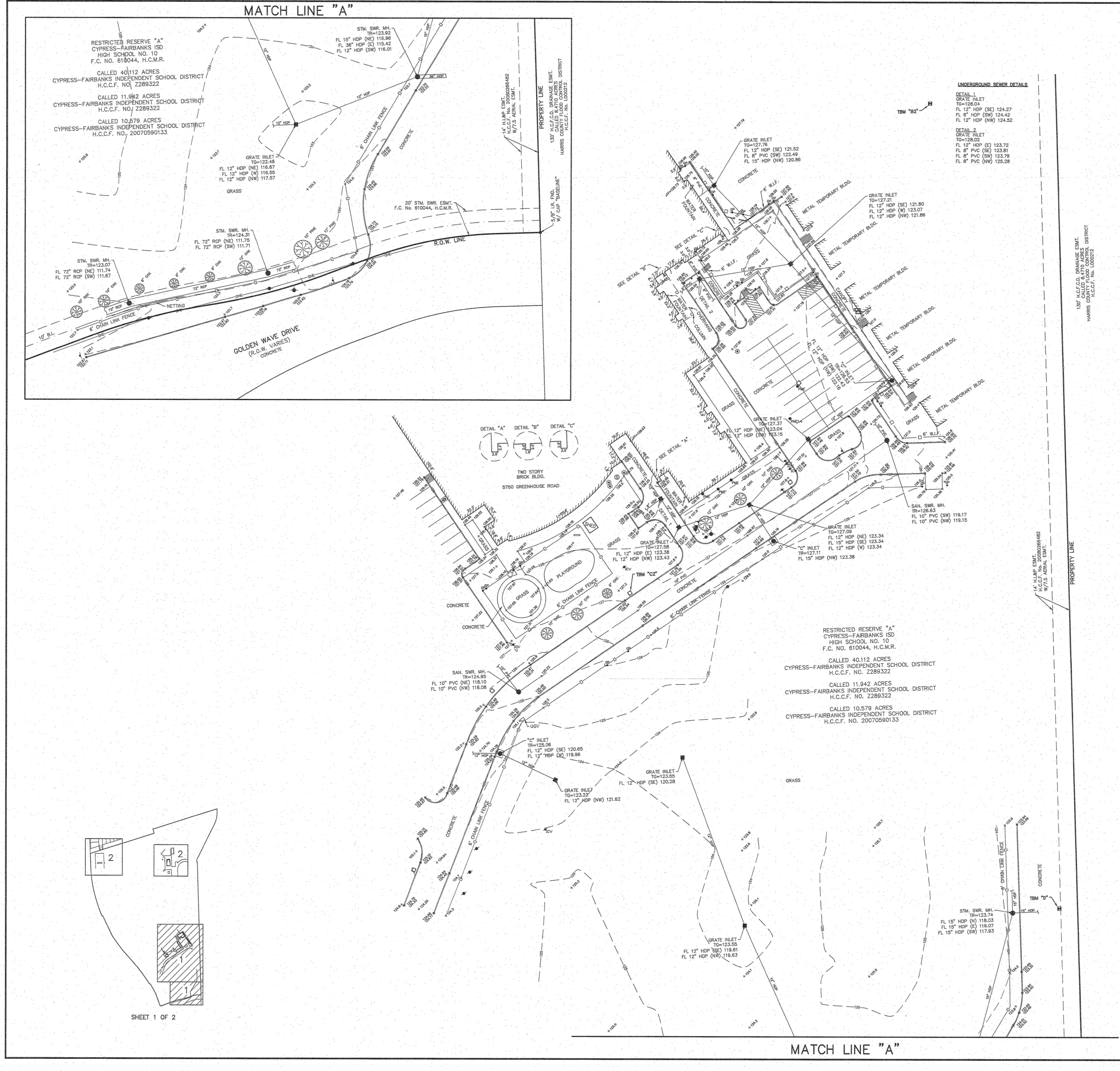
2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

ACCESSORIES
MOUNTING
REQUIREMENTS

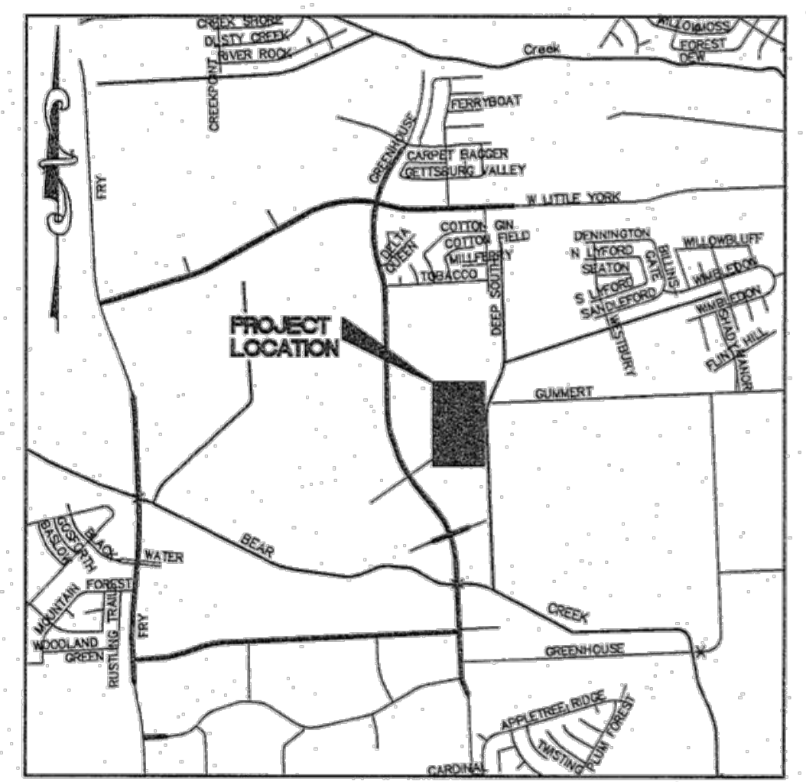
G2.01
of



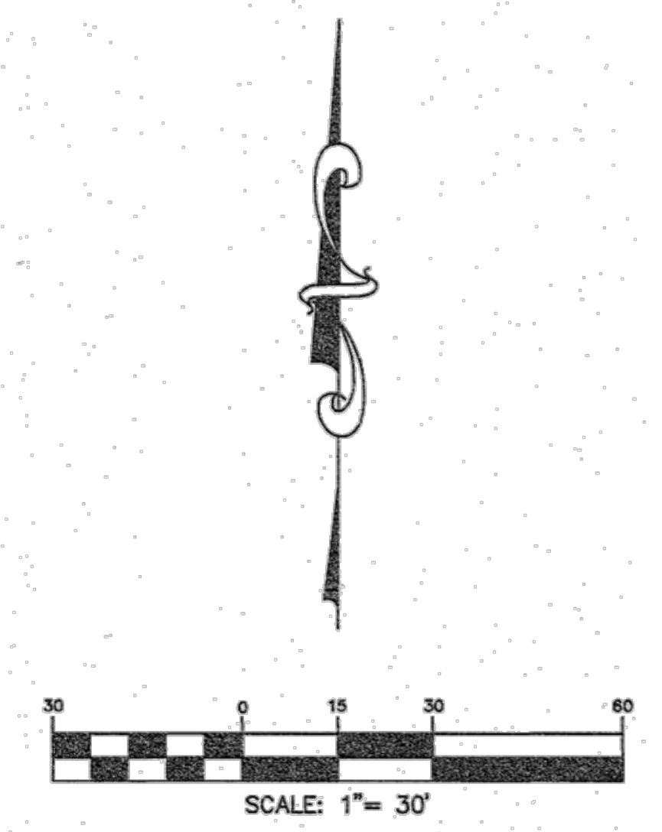
UNDERGROUND SEWER DETAILS

DETAIL 1
GRATE INLET
TG=128.04
FL 12" HDP (SE) 124.27
FL 6" HDP (SW) 124.42
FL 12" HDP (NW) 124.52

DETAIL 2
GRATE INLET
TG=128.02
FL 12" HDP (E) 123.72
FL 8" PVC (SE) 123.81
FL 8" PVC (SW) 123.79
FL 8" PVC (NW) 125.28



KEY MAP 446D
SCALE 1" = 3000'



SCALE: 1"= 30'

LEGEND

⊠	BENCHMARK		IRRIGATION CONTROL VALVE
•	BOLLARD	☐	LIGHT STANDARD
●	"C" INLET	●	MANHOLE
	CLEANOUT		PAINT MARKER (ELECTRIC)
EJB	ELECTRIC JUNCTION BOX		POWER POLE
	FIRE HYDRANT	Ⓢ	SAMPLE WELL
FP	FLAG POLE		SIGN
GP	GATE POST		STAND PIPE
	GUY WIRE	Ⓣ	TRASH CAN
■	INLET		WATER VALVE

ABBREVIATIONS

B.L.—BUILDING LINE
BRS.—BEARS
ESMT.—EASEMENT
FC—FILM CODE
FF—FINISH FLOOR
FL—FLOW LINE
FND.—FOUND
H.C.C.F.—HARRIS COUNTY CLERK'S FILE
H.C.F.C.D.—HARRIS COUNTY FLOOD CONTROL DISTRICT
H.C.M.R.—HARRIS COUNTY MAP RECORDS
HDP—HIGH DENSITY POLYETHYLENE PIPE
I.R.—IRON ROD
MH—MANHOLE
OHE—OVERHEAD ELECTRIC
PVC—POLYVINYL CHLORIDE PIPE
RCP—REINFORCED CONCRETE PIPE
R.O.W.—RIGHT—OF—WAY
SAN.—SANITARY
STM.—STORM
SWR.—SEWER
TG—TOP OF GRATE
TR—TOP OF RIM
U.E.—UTILITY EASEMENT
UGV—UNDERGROUND VAULT
W.I.F.—WROUGHT IRON FENCE
W.L.E.—WATER LINE EASEMENT

TOPOGRAPHIC
SURVEY
(SHEET 1 OF 2)

SV01

JOEL D. WALKER
5189

TO: CYPRESS—FAIRBANKS INDEPENDENT SCHOOL DISTRICT

THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 6, CONDITION I SURVEY AND THE CURRENT MINIMUM REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYING ACT.

8/22/24
DATE

Joel D. Walker
JOEL D. WALKER, R.P.L.S.
TEXAS REGISTRATION NO. 5189

SURVEYOR'S NOTES:

1. THE CAD FILE OF THE DRAWING SHOWN HEREIN IS BASED ON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE SURFACE VALUE (NAD83) AND MAY BE CONVERTED TO GRID BY SCALING THE DRAWING BY THE FOLLOWING COMBINED SCALE FACTOR OF 0.99990281474.

2. ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY—PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THIS STATEMENT IS BASED ON SCALING THE LOCATION OF THE SUBJECT TRACT ON THE ABOVE REFERENCED MAP. THIS INFORMATION IS TO DETERMINE FLOOD INSURANCE RATES ONLY AND IS NOT INTENDED TO IDENTIFY SPECIFIC FLOODING CONDITIONS.

3. ALL UTILITIES SHOWN HEREON ARE LOCATED USING "APPARENT & VISIBLE" EVIDENCE BY ON—SITE OBSERVATION UNLESS OTHERWISE NOTED.

4. THE SUBJECT TRACT IS AFFECTED BY THE CITY OF HOUSTON ORDINANCE No. 85—1878, AMENDED BY ORDINANCE No. 1999—262.

5. UNDERGROUND UTILITY LOCATIONS PROVIDED BY LONESTAR LOCATING, LLC. PAINT MARKS WITH NUMERIC VALUES INDICATES COVER (FEET AND INCHES) DETERMINED BY ELECTRONIC TONING.

ALWAYS CONTACT TEXAS 811 PRIOR TO DIGGING. SOME UTILITIES SUCH AS FIBER OPTIC W/O TRACERS, PLASTIC GAS, FIBERGLASS/PVC ARE NOT LOCATABLE BY TRANSMISSION SIGNAL.

6. —⊰ INDICATES AN UNDERGROUND SEWER LINE WITH UNKNOWN DIRECTION, SIZE OR LOCATION OR A POSSIBLE STUB—OUT.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102—00—00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

CYPRESS—FAIRBANKS
INDEPENDENT
SCHOOL DISTRICT

LIMITED
TOPOGRAPHIC SURVEY

CYPRESS LAKES
HIGH SCHOOL
OUT OF THE
J.C. OGBURN SURVEY,
ABSTRACT NO. 616 AND
W.C. R.R. SURVEY,
SETION 19,
ABSTRACT NO. 905
HARRIS COUNTY, TEXAS

WEST BELT
SURVEYING, INC.

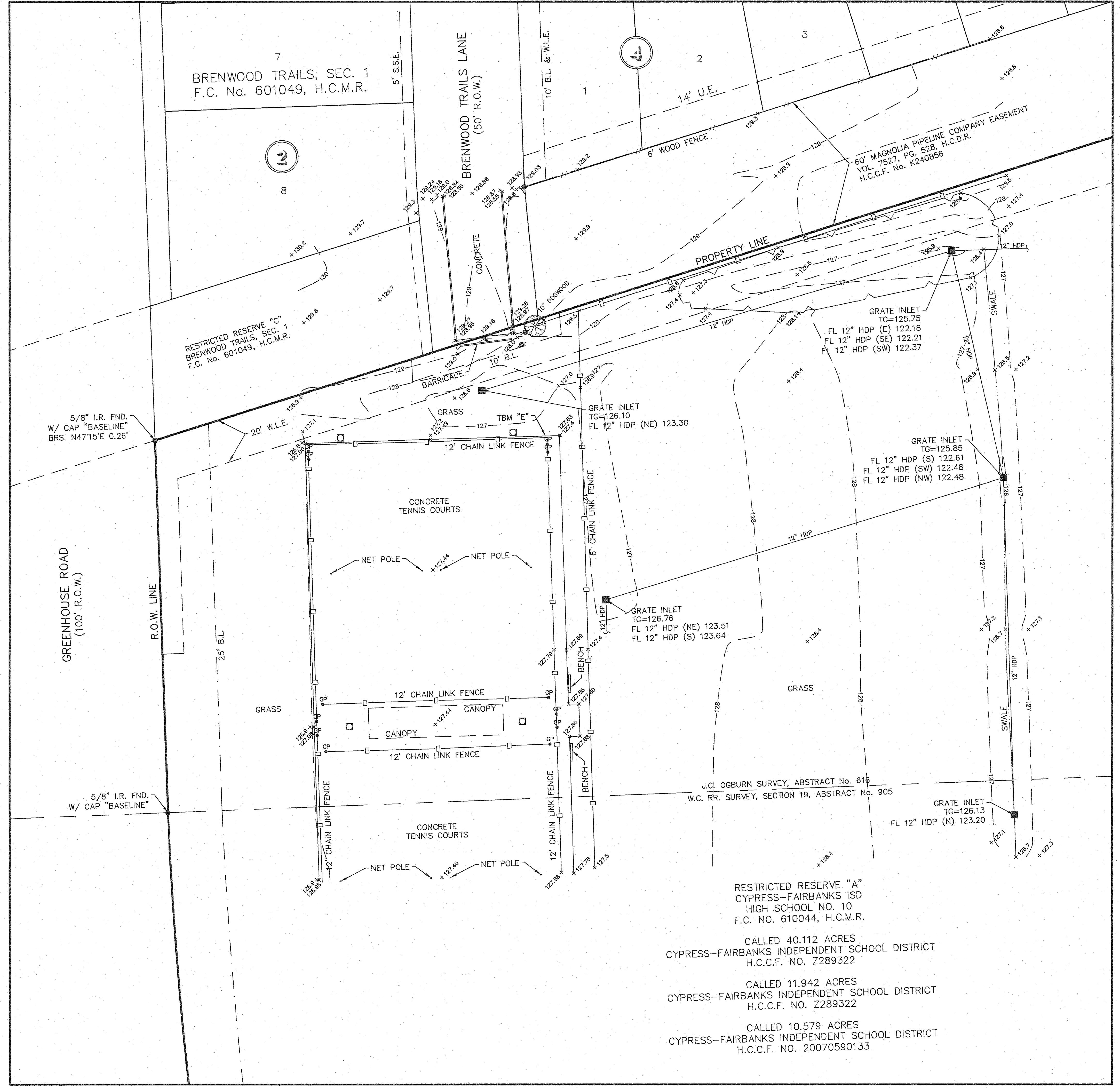
21020 PARK ROW
KATY, TEXAS 77449
PHONE: (281) 599-8288
FAX: (281) 492-6026
CERTIFIED FIRM NO. 10073800

NO.	DATE	REVISIONS	BY
			KMH

DRAWN BY: MDL	CHECKED BY: KMH
SCALE: 1" = 30'	APPROVED BY: JDW
PROJECT NO. S622—0021A	DATE: AUGUST 22, 2024

22 Aug 2024 12:40PM markl
G:\sdsk\proj\S6220021A\EMAIL\EM082224.dwg

INSET "2A"

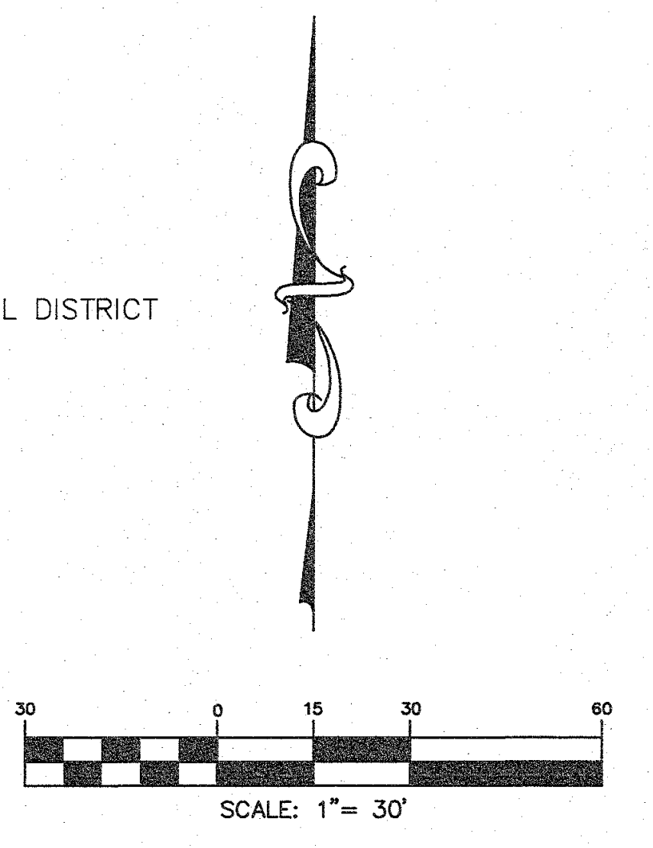


LEGEND

⊠	BENCHMARK	ICV	IRRIGATION CONTROL VALVE
•	BOLLARD	◻	LIGHT STANDARD
◉	"C" INLET	●	MANHOLE
⊙	CLEANOUT	PME	PAINT MARKER (ELECTRIC)
EJB	ELECTRIC JUNCTION BOX	-●-	POWER POLE
-●-	FIRE HYDRANT	Ⓢ	SAMPLE WELL
FP	FLAG POLE	⊥	SIGN
GP	GATE POST	●	STAND PIPE
←	GUY WIRE	Ⓣ	TRASH CAN
■	INLET	●	WATER VALVE

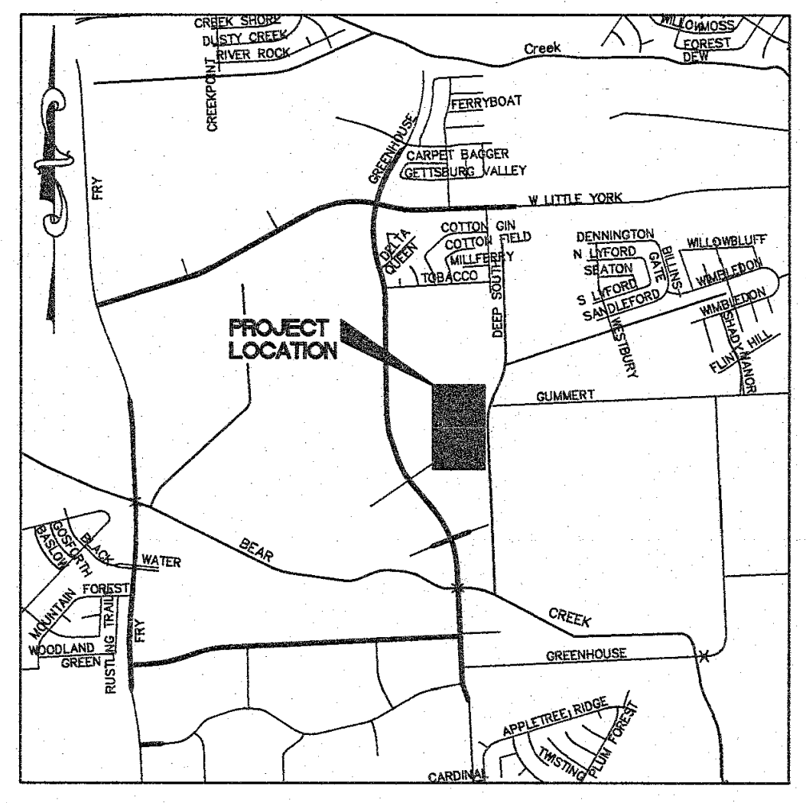
ABBREVIATIONS

B.L.–BUILDING LINE
BRS.–BEARS
ESMT.–EASEMENT
FC–FILM CODE
FF–FINISH FLOOR
FL–FLOW LINE
FND.–FOUND
H.C.C.F.–HARRIS COUNTY CLERK'S FILE
H.C.F.C.D.–HARRIS COUNTY FLOOD CONTROL DISTRICT
H.C.M.R.–HARRIS COUNTY MAP RECORDS
HDP–HIGH DENSITY POLYETHYLENE PIPE
I.R.–IRON ROD
MH–MANHOLE
OHE–OVERHEAD ELECTRIC
PVC–POLYVINYL CHLORIDE PIPE
RCP–REINFORCED CONCRETE PIPE
R.O.W.–RIGHT–OF–WAY
SAN.–SANITARY
STM.–STORM
SWR.–SEWER
TG–TOP OF GRATE
TR–TOP OF RIM
U.E.–UTILITY EASEMENT
UGV–UNDERGROUND VAULT
W.I.F.–WROUGHT IRON FENCE
W.L.E.–WATER LINE EASEMENT



SCALE: 1"= 30'

VICINITY MAP



KEY MAP 446D
SCALE 1" = 3000'

SURVEYOR'S NOTES:

1. THE CAD FILE OF THE DRAWING SHOWN HEREIN IS BASED ON TEXAS SOUTH CENTRAL ZONE NO. 4204, STATE PLANE SURFACE VALUE (NAD83) AND MAY BE CONVERTED TO GRID BY SCALING THE DRAWING BY THE FOLLOWING COMBINED SCALE FACTOR OF 0.99990281474.

2. ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THIS STATEMENT IS BASED ON SCALING THE LOCATION OF THE SUBJECT TRACT ON THE ABOVE REFERENCED MAP. THIS INFORMATION IS TO DETERMINE FLOOD INSURANCE RATES ONLY AND IS NOT INTENDED TO IDENTIFY SPECIFIC FLOODING CONDITIONS.

3. ALL UTILITIES SHOWN HEREON ARE LOCATED USING "APPARENT & VISIBLE" EVIDENCE BY ON–SITE OBSERVATION UNLESS OTHERWISE NOTED.

4. THE SUBJECT TRACT IS AFFECTED BY THE CITY OF HOUSTON ORDINANCE No. 85–1878, AMENDED BY ORDINANCE No. 1999–262.

5. UNDERGROUND UTILITY LOCATIONS PROVIDED BY LONESTAR LOCATING, LLC. PAINT MARKS WITH NUMERIC VALUES INDICATES COVER (FEET AND INCHES) DETERMINED BY ELECTRONIC TONING.

ALWAYS CONTACT TEXAS 811 PRIOR TO DIGGING. SOME UTILITIES SUCH AS FIBER OPTIC W/O TRACERS, PLASTIC GAS, FIBERGLASS/PVC ARE NOT LOCATABLE BY TRANSMISSION SIGNAL.

6. —⟩ INDICATES AN UNDERGROUND SEWER LINE WITH UNKNOWN DIRECTION, SIZE OR LOCATION OR A POSSIBLE STUB–OUT.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

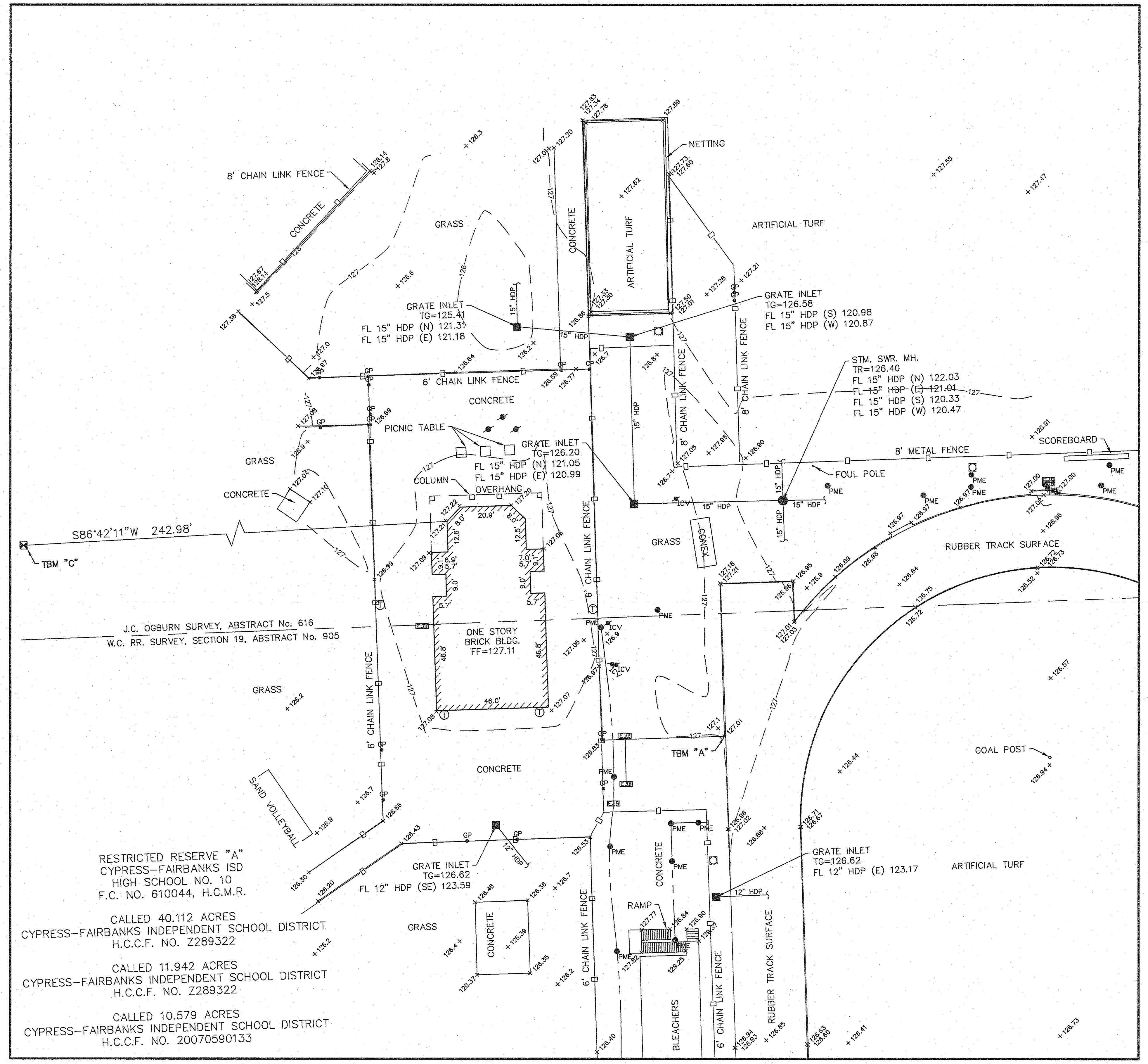
TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

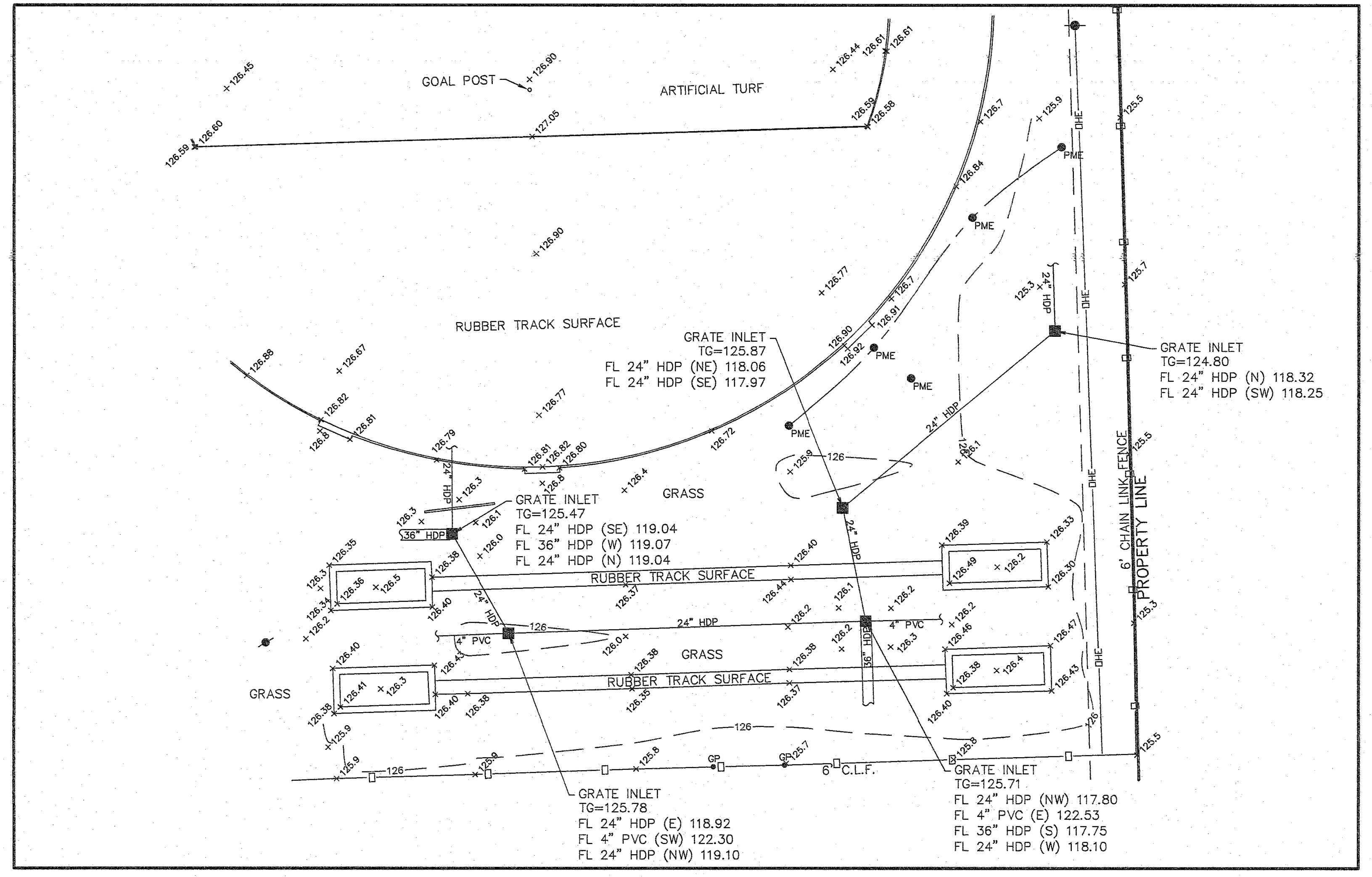
TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

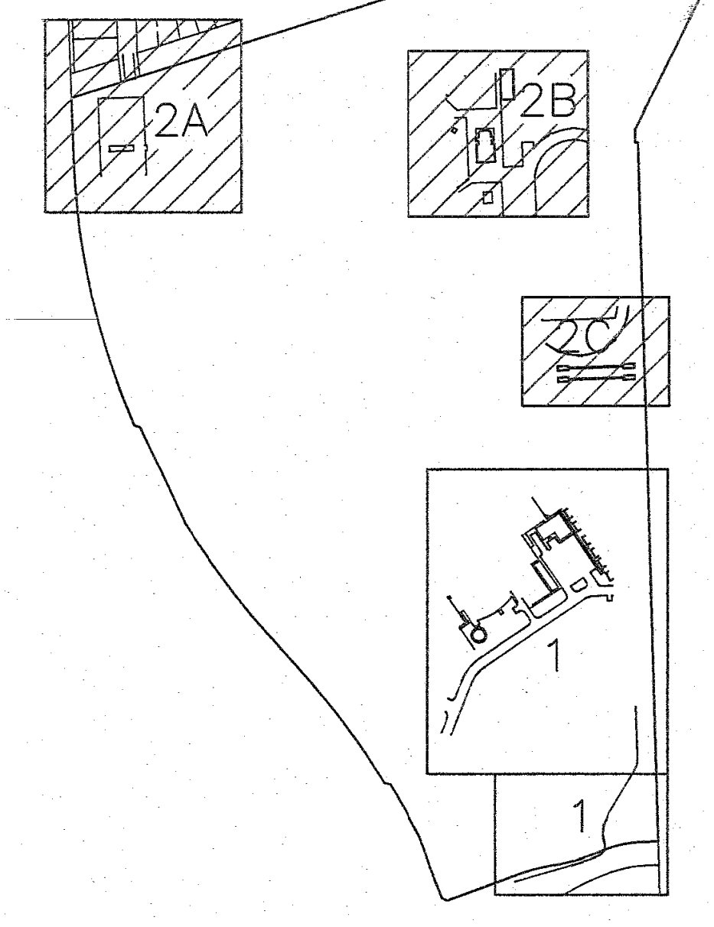
TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

INSET "2B"



INSET "2C" ⚠





SHEET 2 OF 2

TOPOGRAPHIC
SURVEY
(SHEET 2 OF 2)

SV02

JOEL D. WALKER
5189

TO: CYPRESS–FAIRBANKS INDEPENDENT SCHOOL DISTRICT

THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 6, CONDITION I SURVEY AND THE CURRENT MINIMUM REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYING ACT.

10/3/24
DATE

Joel D. Walker
JOEL D. WALKER, R.P.L.S.
TEXAS REGISTRATION NO. 5189

CYPRESS–FAIRBANKS
INDEPENDENT
SCHOOL DISTRICT

LIMITED
TOPOGRAPHIC SURVEY

CYPRESS LAKES
HIGH SCHOOL
OUT OF THE
J.C. OGBURN SURVEY,
ABSTRACT NO. 616 AND
W.C. R.R. SURVEY,
SETION 19,
ABSTRACT NO. 905
HARRIS COUNTY, TEXAS

WEST BELT
SURVEYING, INC.

21020 PARK ROW
KATY, TEXAS 77449
PHONE: (281) 599-8288
FAX: (281) 492-6026
CERTIFIED FIRM NO. 10073800

NO.	DATE	REVISIONS	BY
⚠1	10/3/24	ADDITIONAL TOPO ON SHEET 2	DB

DRAWN BY: MDL	CHECKED BY: KMH
SCALE: 1" = 30'	APPROVED BY: JDW
PROJECT NO. S622–0021A	DATE: AUGUST 22, 2024

03 Oct 2024 10:41AM darrenb
G:\sdsk\proj\S622021B\DWG\T100124.dwg

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION SCHEDULE WITH THE ENGINEER AND/OR ARCHITECT PRIOR TO COMMENCING WORK.

2. CONTRACTOR SHALL CONTACT ALL GOVERNING AGENCIES A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION AND COORDINATE ALL WORK WITH THE SAME.

3. WHETHER SHOWN ON DRAWINGS OR NOT THE CONTRACTOR SHALL PROVIDE ALL PIPING, APPURTENANCES, AND MISCELLANEOUS FITTINGS REQUIRED TO ACCOMPLISH THE DESIGN AS DRAWN AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL CONTACT ENGINEER IF UNSURE OF PIPING LAYOUT, SIZES OR LENGTHS.

4. VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE COMMENCING ANY WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPORT ANY DISCREPANCIES TO THE ENGINEER IN A TIMELY MANNER.

5. ALL DIMENSIONS SHOWN ARE APPROXIMATE AND ARE TO BE VERIFIED BY THE CONTRACTOR. CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENT ARE TO BE APPROVED BY THE ENGINEER.

6. THE DRAWINGS SHOW AS MUCH INFORMATION AS CAN BE REASONABLY OBTAINED FROM AN ON THE GROUND OBSERVATION, SURVEY AND EXISTING CONSTRUCTION DRAWINGS REGARDING THE TOPOGRAPHIC FEATURES, ELEVATIONS AS WELL AS THE LOCATION AND NATURE OF PIPELINES, NATURAL GAS LINES, UNDERGROUND CABLES, UTILITIES, ETC. HOWEVER, THE ACCURACY OF OR COMPLETENESS OF SUCH INFORMATION IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO PRECLUDE DAMAGE TO EXISTING UTILITIES. IN THE EVENT THAT UNDERGROUND UTILITIES NOT SHOWN ON THE DRAWINGS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

7. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN THE AREA A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK IN ANY RIGHT–OF–WAY OR EXISTING EASEMENT. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT (713) 223–4567, 1–800–545–6005 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

8. SOME OF THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON HAVE NOT BEEN FIELD VERIFIED.

9. CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT ALL "POINTS OF CROSSING" TO DETERMINE IF CONFLICT EXISTS BEFORE COMMENCING ANY CONSTRUCTION. NOTIFY THE ENGINEER AT ONCE OF ANY CONFLICT.

10. IN THE EVENT OF DAMAGE TO UNDERGROUND UTILITIES OR FACILITIES, WHETHER SHOWN OR NOT ON THE DRAWINGS, THE CONTRACTOR SHALL MAKE THE NECESSARY REPAIRS TO REPLACE THE UTILITY OR FACILITY BACK IN SERVICE AT NO INCREASE IN THE CONTRACT PRICE. ALL SUCH REPAIRS SHALL CONFORM TO THE REQUIREMENTS OF THE COMPANY OR AGENCY SERVICING THE FACILITY.

11. ALL EXISTING POWER POLES, LIGHT STANDARDS, SIGNS, ETC. WHICH AFFECT THE PROPOSED CONSTRUCTION, SHALL BE REMOVED AND/OR RELOCATED AS REQUIRED WHETHER SHOWN ON DRAWINGS OR NOT AT NO ADDITIONAL COST TO THE OWNER.

12. ALL WORK WITHIN THE PUBLIC RIGHT–OF–WAY SHALL ADHERE TO THE STANDARDS OF THE GOVERNING AUTHORITY.

13. INGRESS AND EGRESS SHALL BE PROVIDED AT ALL TIMES FOR THE PROPERTY OWNERS AND BUSINESSES OF THE ABUTTING PROPERTY AND THE CROSS STREETS WHICH ARE AFFECTED BY THE CONSTRUCTION OF THIS PROJECT.

14. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR MAINTAINING A SAFE PROJECT SITE 24 HOURS A DAY.

15. DURING THE ENTIRE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL MAINTAIN CONSTRUCTION WARNING SIGNS AT EACH END OF THE PROJECT TO WARN MOTORING AND PEDESTRIAN TRAFFIC THAT CONSTRUCTION IS IN PROGRESS AND OF POSSIBLE HAZARDOUS CONDITIONS GENERATED BY THE CONSTRUCTION.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELINEATING THE PERIMETER OF CONSTRUCTION AREA WITH CONSTRUCTION FENCING AT NO ADDITIONAL COST. CONSTRUCTION FENCING SHALL BE ERECTED PRIOR TO CONSTRUCTION AND REMOVED UPON COMPLETION.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING TRAFFIC IN THE IMMEDIATE VICINITY OF CONSTRUCTION. ALL WORK SHALL BE IN SUCH A MANNER AND SEQUENCE AS TO PROVIDE MAXIMUM PROTECTION TO TRAFFIC AND PEDESTRIANS. CONTROLS SHALL BE CONSISTENT WITH THE TYPE OF WORK BEING PERFORMED.

18. CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (TEXAS M.U.T.C.D. MOST RECENT EDITION WITH REVISIONS) DURING CONSTRUCTION.

19. DELINEATORS SHALL BE INSTALLED ALONG THE PAVEMENT EDGE TO WARN TRAFFIC OF ANY ROADSIDE OBJECTS OR HAZARDS AND TO DELINEATE THE ROADWAY EDGE DURING HOURS OF DARKNESS.

20. THE WORK AREA SHALL BE BARRICADED AND ILLUMINATED DURING DARKNESS AND PERIODS OF INACTIVITY, WHEN IN AN AREA OF DIRECT PUBLIC ACCESS.

21. UNOCCUPIED TRENCHES SHALL BE SECURED WITH SAFETY "SNOW" FENCING OR OTHER APPROPRIATE MEANS AT ALL TIMES. TRENCHES WHICH ARE NOT IMMEDIATELY BACKFILLED SHALL BE SECURELY COVERED OVERNIGHT AND BE SURROUNDED BY SAFETY "SNOW" FENCING.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SECURITY TO PROTECT HIS OWN PROPERTY, EQUIPMENT, AND WORK IN PROGRESS.

23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ADEQUATE DRAINAGE BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE GOVERNING AUTHORITY AND/OR ENGINEER..

24. CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION OF ANY TEMPORARY DITCH OR DRAINAGE FACILITIES REQUIRED TO MAINTAIN ADEQUATE SITE DRAINAGE DURING CONSTRUCTION AT NO ADDITIONAL COST TO OWNER

25. THE CONTRACTOR IS TO INSTALL GROUND WATER CONTROL FACILITIES IF NEEDED, AT DIRECTION OF ENGINEER AT NO ADDITIONAL COST TO OWNER.

26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS REQUIRED BY ALL GOVERNING AGENCIES.

27. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETION AND SUBMISSION OF ALL APPLICABLE STATE AND FEDERAL FORMS REQUIRED FOR STORM WATER POLLUTION PREVENTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION, IMPLEMENTATION, MAINTENANCE, AND INSPECTION OF STORM WATER POLLUTION PREVENTION CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, EROSION AND SEDIMENT CONTROLS, STORM WATER MANAGEMENT PLANS, WASTE COLLECTION AND DISPOSAL, OFF–SITE VEHICLE TRACKING, AND OTHER PRACTICES.

28. THE CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND STATE OF TEXAS LAW CONCERNING EXCAVATION, TRENCHING AND SHORING.

29. THE CONTRACTOR SHALL DESIGN AND PROVIDE A TRENCH SAFETY SYSTEM TO MEET APPROPRIATE REQUIREMENTS ESTABLISHED IN OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SAFETY & HEALTH REGULATIONS, 29 CFR 1926, SUBPART P – EXCAVATIONS, TRENCHING AND SHORING, AND OSHA'S PROPOSED STANDARDS ON TRENCHING, EXCAVATION PUBLISHED IN VOLUME 52, NO. 72 OF THE FEDERAL REGISTER, APRIL 15, 1987, PAGES 12288–12339. SHOULD THE REFERENCED OSHA STANDARDS BE MODIFIED OR AMENDED, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

30. CONTRACTOR SHALL PROVIDE SHEETING, SHORING AND BRACING AS NECESSARY TO PROTECT WORKMEN AND EXISTING UTILITIES DURING ALL PHASES OF CONSTRUCTION.

31. IN ORDER TO COMPLY WITH HANDICAP REGULATIONS, THE CONTRACTOR SHALL ENSURE THAT THE SLOPE OF THE SIDEWALK AND/OR PAVING IN THE FIRST FIVE FEET OUTSIDE ANY DOOR DOES NOT EXCEED 2% IN ANY DIRECTION.

32. THE TEXAS DEPARTMENT OF TRANSPORTATION TxDOT 2004 STANDARD SPECIFICATIONS AND STANDARDS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES SHALL BE CONSIDERED PART OF THESE PLANS AND USED AS THE SPECIFICATIONS FOR ITEMS EXCEPT AS SHOWN OTHERWISE ON PLANS OR IN THE PROJECT SPECIFICATIONS.

33. NO CONSTRUCTION WHICH BLOCKS TRAFFIC ON ANY STREET, ALLEY, OR DRIVEWAY WILL BE ALLOWED DURING THE HOURS OF 6:30 A.M. – 8:30 A.M. AND 2:30–6:00 P.M.

34. THE CONTRACTOR MUST CLEAN MUD, DIRT OR DEBRIS TRACKED ONTO EXISTING STREETS BY HIMSELF OR SUBCONTRACTOR'S VEHICLES AND EQUIPMENT DAILY OR AS DIRECTED BY ENGINEER.

35. CONDITION OF THE ROAD AND/OR RIGHT–OF–WAY, UPON COMPLETION OF JOB SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING WORK.

36. ALL AREAS DISTURBED BY CONSTRUCTION WHICH ARE NOT TO BE REPAVED OR OTHERWISE COVERED SHALL BE HYDROMULCHED.

37. CONTRACTOR SHALL STRIP AND STOCKPILE TOPSOIL. TOPSOIL SHALL BE SPREAD OVER ALL AREAS RECEIVING SOD AND OR HYDROMULCH. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AN 85% STAND OF GRASS WITH NO AREAS OF EROSION BEFORE FINAL ACCEPTANCE.

38. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL WASTE MATERIAL GENERATED DURING CONSTRUCTION. WASTE MATERIAL MUST BE REMOVED FROM THE WORK SITE AND DISPOSED OF IN SUCH A MANNER AS TO NOT DAMAGE THE OWNER OR OTHER PERSONS AT NO ADDITIONAL COST.

39. ALL FILL PLACED ON SITE SHALL BE ENGINEERED FILL PER THE RECOMMENDATION OF THE SOILS REPORT OR AS INDICATED IN THE SPECIFICATIONS.

40. FINISH GRADE ELEVATIONS INDICATE FINAL GRADE OF PROPOSED MATERIAL (I.E. SOD, DIRT, MULCH, ETC.). LANDSCAPED AREAS ADJACENT TO BUILDING, INCLUDING, DIRT, MULCH, AND/OR BEDDING MATERIALS SHALL NOT COVER WEEPHOLES. AREAS ADJACENT TO BUILDING, LANDSCAPED, OR OTHERWISE SHALL SHEET FLOW AWAY FROM BUILDING WITH NO AREAS OF STANDING WATER ADJACENT TO BUILDING.

41. GRADING AROUND BUILDINGS INCLUDING WALKWAYS SHALL BE COORDINATED WITH ENGINEER AND/OR ARCHITECT AND FINAL APPROVAL OF GRADES IN GRASS AREAS AND SWALES SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION OF LANDSCAPING MATERIALS.

42. AFTER INSTALLATION OF DRAINAGE SYSTEM, CONTRACTOR SHALL PERFORM FINAL GRADING AS SHOWN ON THE PLANS AND/OR AS DIRECTED BY ENGINEER OR OWNER TO INSURE POSITIVE DRAINAGE OF ENTIRE SITE. FINAL GRADING SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION OF GRASS.

43. THE CONTRACTOR SHALL COORDINATE FINAL GRADING OF LANDSCAPED AREAS WITH THE LANDSCAPE ARCHITECT.

44. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING FINAL GRADES TO ENSURE POSITIVE DRAINAGE.

45. PLACE BACKFILL AS PROMPTLY AS PRACTICABLE AFTER COMPLETION OF EACH STRUCTURE OR PORTION OF A STRUCTURE. DO NOT PLACE BACKFILL AGAINST CONCRETE WALLS OR SIMILAR STRUCTURES UNTIL CONCRETE HAS CURED AT LEAST SEVEN (7) DAYS.

46. ALL STRUCTURES AND SEWER PIPE UNDER OR WITHIN TWO (2) FEET OF PROPOSED OR FUTURE PAVEMENT SHALL BE BEDDED AND BACKFILLED WITH CEMENT STABILIZED SAND UP TO THE BOTTOM OF THE PAVEMENT SUBGRADE.

47. CEMENT–SAND BACKFILL SHALL CONSIST OF NOT LESS THAN 1–1/2 SACKS OF CEMENT PER TON OF SAND WITH SUFFICIENT WATER TO HYDRATE THE CEMENT. THE MATERIAL SHALL BE PLACED IN LIFTS EIGHT (8) INCHES THICK MAXIMUM AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.

48. WHERE PAVEMENT OR CURB IS BEING REMOVED AND REPLACED FULL DEPTH SAW CUT SHALL BE PERFORMED AT STREET CONNECTION.

49. CONCRETE PAVEMENT SHALL HAVE MINIMUM OF FIVE AND ONE–HALF SACKS OF CEMENT PER CUBIC YARD AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS.

50. ALL STEEL REINFORCEMENT SHALL CONFORM TO ASTM A615 GRADE 60.

51. DETAILING AND FABRICATION OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI–318 LATEST EDITION.

52. LAP ALL CONTINUOUS REINFORCING STEEL 36 DIAMETERS AT SPLICES, TEES, AND CORNERS UNLESS NOTED OTHERWISE ON PLANS.

53. WHERE CONCRETE CURB OR WALK IS INDICATED, ELEVATION SHALL BE 6 INCHES ABOVE TOP OF PAVEMENT ELEVATION SHOWN, UNLESS OTHERWISE SHOWN ON DRAWINGS.

54. MOW STRIPS SHALL BE INSTALLED SO AS NOT TO BLOCK ANY SHEET FLOW PATTERNS AS DESIGNED. ANY MOW STRIPS THAT BLOCK DRAINAGE SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER. IF CONTRACTOR HAS ANY QUESTIONS ON CORRECT ELEVATIONS FOR MOW STRIPS, CONTACT ENGINEER OR ARCHITECT.

55. A FIBERBOARD EXPANSION JOINT SHALL BE PLACED BETWEEN THE BUILDING FOUNDATION AND THE CONCRETE PAVEMENT.

56. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL PROPOSED UTILITIES EXITING BUILDING PRIOR TO COMMENCING WORK ON SITE UTILITIES. UPON ANY DISCREPANCIES, ENGINEER IS TO BE NOTIFIED.

57. ELECTRIC METER AND SERVICE LINE INSTALLATION TO BE COORDINATED WITH ELECTRICAL PROVIDER BY THE CONTRACTOR.

58. GAS METER AND SERVICE LINE INSTALLATION TO BE COORDINATED WITH GAS COMPANY BY THE CONTRACTOR.

59. IF WITHIN THE CITY OF HOUSTON A STORM WATER QUALITY PERMIT IS REQUIRED FOR THIS PROJECT, THE CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING ITEMS:

    A.) PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PROVIDE THE CITY OF HOUSTON WITH A PERFORMANCE BOND FOR ALL STORM WATER QUALITY PERMITS ISSUED BY THE CITY OF HOUSTON STORM WATER QUALITY DEPARTMENT.

60. THE CONTRACTOR WILL JET ALL DEBRIS OUT OF THE FLOATABLES COLLECTION SCREEN UNITS INSTALLED AND WILL PROVIDE THE ENGINEER WITH AN AS–BUILT SURVEY, SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR, SHOWING POSITIVE DRAINAGE PRIOR TO ENGINEER ISSUING AN AS–BUILT CERTIFICATE TO THE GOVERNING AGENCY.

61. CONTRACTOR IS RESPONSIBLE FOR PUMPING OUT STORM WATER QUALITY UNITS AND PROVIDING THE ENGINEER WITH A MANIFEST STATING THAT THE SILT AND DEBRIS WAS DISPOSED OF IN A LEGAL MANNER. MANIFEST AND TIME STAMPED PICTURES OF THE CLEAN UNITS MUST BE PROVIDED PRIOR TO ENGINEER SUBMITTING THE STORM WATER QUALITY AS–BUILT CERTIFICATE. CONTRACTOR TO NOTIFY ENGINEER WHEN PUMP OUT WILL TAKE PLACE.

STORM SEWER CONSTRUCTION NOTES

1. ON SITE STORM SEWERS 12–INCH DIAMETER AND LARGER SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE (PER AASHTO M–294, TYPE S, HANCOR SURE–LOK F477 PIPE, OR APPROVED EQUAL,) UNLESS OTHERWISE SHOWN ON PLANS. PRODUCT MUST HAVE GASKET JOINTS.

2. ON SITE STORM SEWERS 10–INCH DIAMETER AND LESS SHALL BE PVC (POLY–VINYL CHLORIDE) PIPE MEETING A.S.T.M. SPECIFICATIONS, ASTM D3034 AND HAVING A S.D.R. OF 26, UNLESS OTHERWISE SHOWN ON PLANS.

3. ANY CONCRETE PIPE USED ON THIS PROJECT SHALL BE REINFORCED CONCRETE MEETING ASTM C–76 CLASS III, AND HAVE BELL AND SPIGOT JOINTS WITH RUBBER GASKETS. CONCRETE PIPE IS ONLY TO BE USED WHERE REQUIRED IN PUBLIC RIGHT–OF–WAY AND/OR AT TIES TO PUBLIC STORM SEWER SYSTEMS. BEDDING BACKFILLING AND INSTALLATION OF PIPE AND CONSTRUCTION OF APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CIVIL DETAIL SHEETS.

4. THE CONTRACTOR SHALL USE PRECAST STORM SEWER MANHOLES AND INLETS. INLET BOTTOM SHALL BE FILLED WITH CONCRETE AND SLOPED TO ENSURE POSITIVE DRAINAGE FROM INLET TO STORM SEWER LINE WITH NO STANDING WATER IN INLET. BRICK MANHOLES AND/OR INLETS MAY BE USED AS APPROVED BY THE ENGINEER WHEN SETTING STRUCTURES ON EXISTING UTILITY LINE. BRICK STRUCTURES MUST BE MORTARED INSIDE AND OUT. COORDINATE EACH INCIDENT WITH ENGINEER.

5. ALL INLETS, MANHOLES, CLEANOUTS, AND HEADWALLS SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND. CEMENT STABILIZED SAND FILL SHALL BE AT LEAST 12" ON BOTTOM OF STRUCTURE AND 12" AROUND OUTSIDE OF STRUCTURE.

6. NO CORNER CONNECTIONS WILL BE ALLOWED TO ANY INLETS, JUNCTION BOXES OR BOX MANHOLES

7. CONTRACTOR SHALL CUT OFF PIPE FLUSH WITH INSIDE FACE OF INLETS AND MANHOLES.

8. CONCRETE FOR DRAINAGE STRUCTURES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS.

9. CULVERT CROSSINGS LOCATED WITHIN 30 FEET OF THE RIGHT–OF–WAY SHALL HAVE MINIMUM 6:1 SLOPING ENDS KNOWN AS SAFETY END TREATMENTS (SETs). THE CULVERT SHALL HAVE SUFFICIENT LENGTH TO ALLOW THE 6:1 SLOPE TO BE ACHIEVED FROM THE EDGE OF PAVEMENT TO THE FLOWLINE AT THE END OF THE SET.

10. CULVERTS LARGER THAN SINGLE 30–INCH DIAMETER (OR LARGER THAN MULTIPLE 24–INCH DIAMETER CULVERTS) SHALL REQUIRE SAFETY PIPE RUNNERS.

11. CONTRACTOR SHALL FLUSH AND CLEAN ALL STORM SEWER LINES AND STRUCTURES PRIOR TO ACCEPTANCE. ALL STORM LINES SHALL ALSO BE INSPECTED VIA CAMERA.

12. UTILITIES ARE TO BE TAKEN TO WITHIN FIVE (5) FEET OF BUILDING. SEE PLUMBING SHEETS FOR CONTINUATION OF SERVICE CONNECTIONS INTO BUILDING.

13. TIE–INS TO EXISTING MANHOLES SHALL BE MADE SUCH THAT THE FINAL CONDITIONS UPON COMPLETION OF THE JOB SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING WORK.

14. THE CONTRACTOR IS TO INSTALL WATER–TIGHT ADAPTORS OF A TYPE COMPATIBLE WITH THE MATERIALS BEING JOINED AT THE POINT OF CONNECTION OF THE SERVICE LINE TO THE BUILDING PLUMBING. NO CEMENT GROUT MATERIALS ARE PERMITTED.

15. THE CONTRACTOR IS TO INSTALL EACH CLEANOUT SO THAT IT OPENS IN A DIRECTION OPPOSITE TO THE FLOW OF THE WASTE AND, EXCEPT IN THE CASE OF A "WYE" BRANCH AND END–OF–THE–LINE CLEANOUTS, CLEANOUTS WILL BE INSTALLED VERTICALLY ABOVE THE FLOW LINE OF THE PIPE. CLEANOUTS WILL BE MADE WITH AIR–TIGHT MECHANICAL PLUG.

PRIVATE UTILITY NOTES

AT&T TEXAS / SWBT FACILITIES

1. THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.

2. THE CONTRACTOR SHALL CALL 1–800–344–8377 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.

3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON–MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.

4. WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.

5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN THE AREA. FOLLOW THE DIRECT BURIED CABLE PROCEDURES TO LOCATE THE AT&T TEXAS/SWBT DIRECT BURIED CABLES AS INDICATED IN THE AT&T TEXAS RESEARCH AND SIGNATURE PROCESS FOR AT&T TEXAS/SWBT FACILITIES.

6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER MR. KEVIN RAY AT (713)614–1983 OR EMAIL HIM AT KR7896@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATION NEAR OUR AT&T TEXAS/SWBT FACILITIES.

CAUTION: UNDERGROUND GAS FACILITIES

LOCATIONS OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY INTRASTATE PIPELINE, LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATES THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1–800–545–6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713) 207–5463 OR (713) 945–8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
- WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON–MECHANIZED EXCAVATION PROCEDURES.
- WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
- FOR EMERGENCIES REGARDING GAS LINES CALL (713) 659–3552 OR (713) 207–4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL FACILITIES

OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:

- ANY ACTIVITY WHERE PERSON OR THINGS MAY COME WITHIN SIX(6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
- OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.

PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207–2222.

ACTIVITIES ON OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT (713) 207–6348 OR (713) 207–5769.

SANITARY SEWER CONSTRUCTION NOTES

1. SANITARY SEWER SHALL BE PVC (POLY–VINYL CHLORIDE) PIPE MEETING A.S.T.M. SPECIFICATIONS, D–3034–08 AND HAVING A S.D.R. OF 26 UNLESS OTHERWISE SHOWN ON PLANS. BEDDING BACKFILLING AND INSTALLATION OF PIPE AND CONSTRUCTION OF APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CIVIL DETAIL SHEETS.

2. THE CONTRACTOR SHALL USE 4000 PSI REINFORCED CONCRETE PRECAST SANITARY SEWER MANHOLES.

3. ALL MANHOLES, AND CLEANOUTS SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND. CEMENT STABILIZED SAND FILL SHALL BE AT LEAST 12" ON BOTTOM OF STRUCTURE AND 12" AROUND OUTSIDE OF STRUCTURE.

4. CONTRACTOR SHALL CUT OFF PIPE FLUSH WITH INSIDE FACE OF MANHOLES. ALL PIPE PENETRATIONS SHALL BE GROUTED INSIDE AND OUT WITH NON–SHRINK GROUT.

5. CONTRACTOR SHALL SEAL INTERIOR SURFACE OF PROPOSED SANITARY SEWER MANHOLES WITH THANECOAT FE–100, OR APPROVED EQUAL AS PER MANUFACTURER'S SPECIFICATIONS.

6. ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED.

7. ALL SANITARY SEWER LINES SHALL BE MANDREL AND AIR TESTED. ALL SANITARY SEWER LINES SHALL ALSO BE INSPECTED VIA CAMERA.

8. UTILITIES ARE TO BE TAKEN TO WITHIN FIVE (5) FEET OF BUILDING. SEE PLUMBING SHEETS FOR CONTINUATION OF SERVICE CONNECTIONS INTO BUILDING.

9. TIE–INS TO EXISTING MANHOLES SHALL BE MADE SUCH THAT THE FINAL CONDITIONS UPON COMPLETION OF THE JOB SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING WORK.

10. THE CONTRACTOR IS TO INSTALL WATER–TIGHT ADAPTORS OF A TYPE COMPATIBLE WITH THE MATERIALS BEING JOINED AT THE POINT OF CONNECTION OF THE SERVICE LINE TO THE BUILDING PLUMBING. NO CEMENT GROUT MATERIALS ARE PERMITTED.

11. THE CONTRACTOR IS TO INSTALL EACH CLEANOUT SO THAT IT OPENS IN A DIRECTION OPPOSITE TO THE FLOW OF THE WASTE AND, EXCEPT IN THE CASE OF A "WYE" BRANCH AND END–OF–THE–LINE CLEANOUTS, CLEANOUTS WILL BE INSTALLED VERTICALLY ABOVE THE FLOW LINE OF THE PIPE. CLEANOUTS WILL BE MADE WITH AIR–TIGHT MECHANICAL PLUG.

12. ALL SANITARY SEWER MANHOLES LOCATED OUTSIDE OF PAVED AREAS SHALL BE SET 3" ABOVE FINISHED GRADE WITH CONCRETE COLLAR.

13. CEMENT–SAND BACKFILL SHALL CONSIST OF NOT LESS THAN 1–1/2 SACKS OF CEMENT PER TON OF SAND WITH SUFFICIENT WATER TO HYDRATE THE CEMENT. THE MATERIAL SHALL BE PLACED IN LIFTS EIGHT (8) INCHES THICK MAXIMUM AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.

WATER LINE CONSTRUCTION NOTES

1. DOMESTIC OR FIRE WATER LINES 4" AND LARGER SHALL BE POLYVINYL CHLORIDE PVC), DR–18, CLASS 150, CONFORMING TO AWWA C900 OR C905, AS CURRENTLY AMENDED UNLESS OTHERWISE NOTED ON THE PLANS.

2. WATER LINES 3" AND SMALLER SHALL BE SCHEDULE 40 PVC.

3. ALL VALVES SHALL BE LEFT HAND (COUNTERCLOCKWISE) OPEN.

4. SEE DETAIL SHEET FOR THRUST BLOCK DETAILS.

5. CONTRACTOR SHALL INSTALL METALLIC TRACER WIRE ON ALL UNDERGROUND PVC PIPING AND SECURE WIRE ENDS AT ALL VALVE BOXES.

6. CONTRACTOR SHALL ADJUST ELEVATION OF WATER LINES AS REQUIRED TO CLEAR OTHER UTILITIES. ADJUSTMENT MUST MEET TCEQ REQUIREMENTS FOR MINIMUM CLEARANCES, TYPE OF PIPE, ETC.

7. MINIMUM VERTICAL CLEARANCE BETWEEN WATER LINES AND OTHER UTILITIES SHALL BE TWELVE INCHES, UNLESS OTHERWISE NOTED ON THE PLANS.

8. EXISTING WATER SERVICES SHALL NOT BE INTERRUPTED DURING CONSTRUCTION.

9. NO CONNECTIONS SHALL BE MADE TO EXISTING WATER LINES UNTIL ALL PROPOSED WATER LINES HAVE BEEN THOROUGHLY CLEANED, TESTED, DISINFECTED AND APPROVED. ALL TESTING PROCEDURES SHALL CONFORM TO THE GOVERNING AGENCY.

10. UTILITIES ARE TO BE TAKEN TO WITHIN FIVE (5) FEET OF BUILDING. SEE PLUMBING SHEETS FOR CONTINUATION OF SERVICE CONNECTIONS INTO BUILDING.

11. METER AND BACKFLOW VAULTS SHALL BE SET 3" ABOVE FINISHED GRADE.

12. CONTRACTOR TO COORDINATE APPROPRIATE NOZZLE SIZE AND TYPE WITH LOCAL FIRE MARSHAL/FIRE INSPECTOR PRIOR TO OBTAINING FIRE HYDRANT.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F–880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

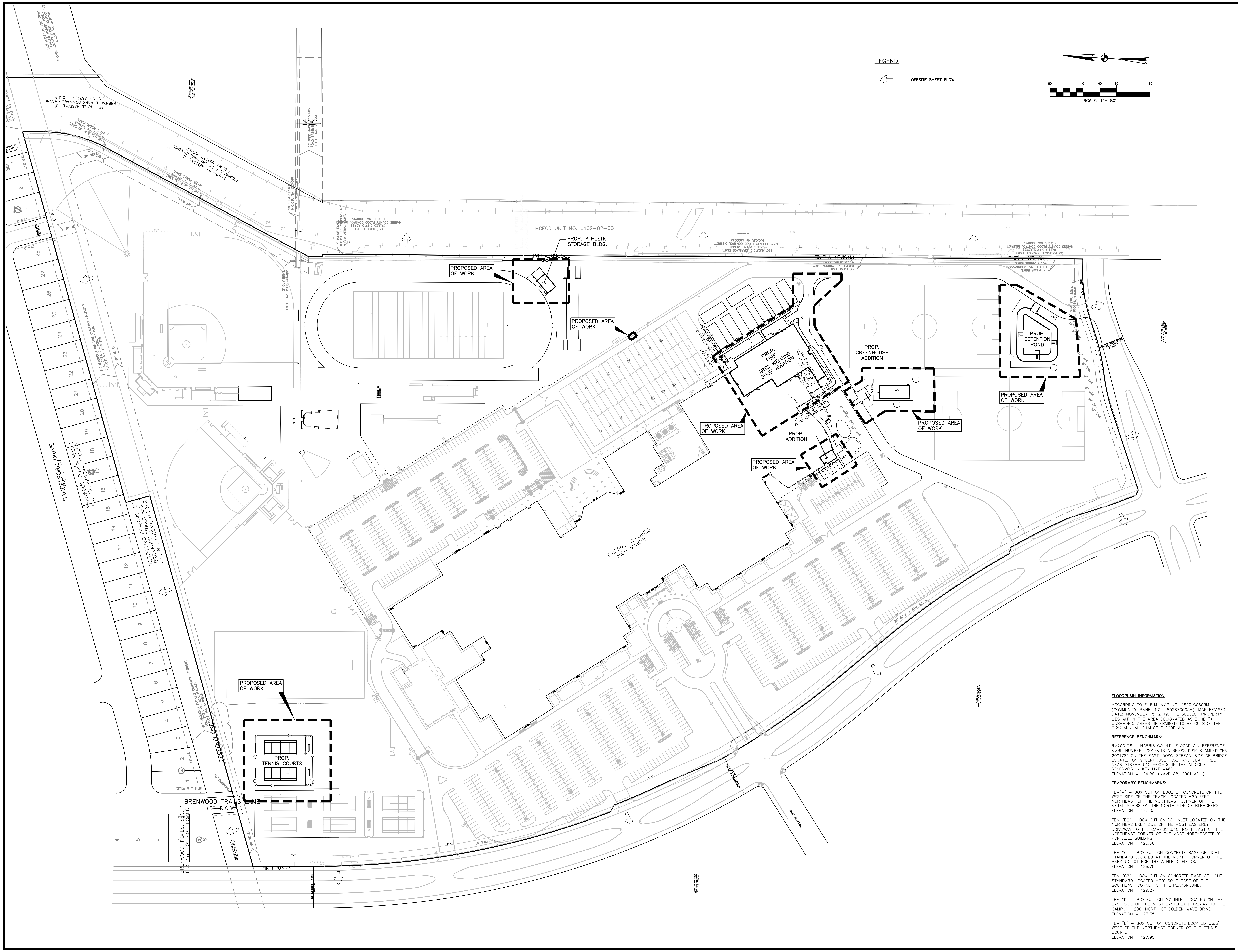
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

GENERAL
NOTES

C1.01

13 Nov 2024 11:51AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C1.01 628-0025 GN.dwg
Includes Xref(s): X-TB.dwg; X-Seal.dwg



FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

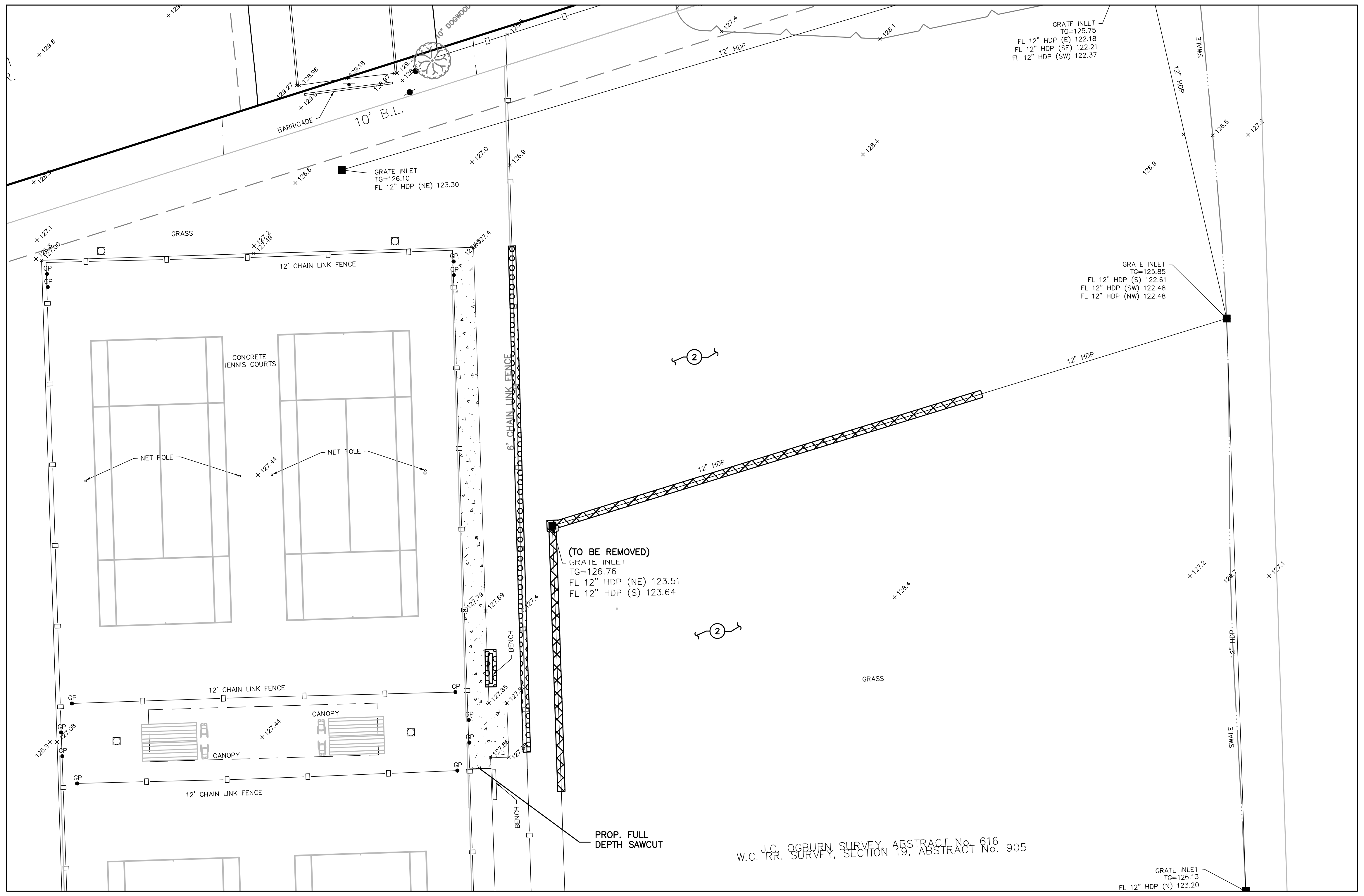
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	

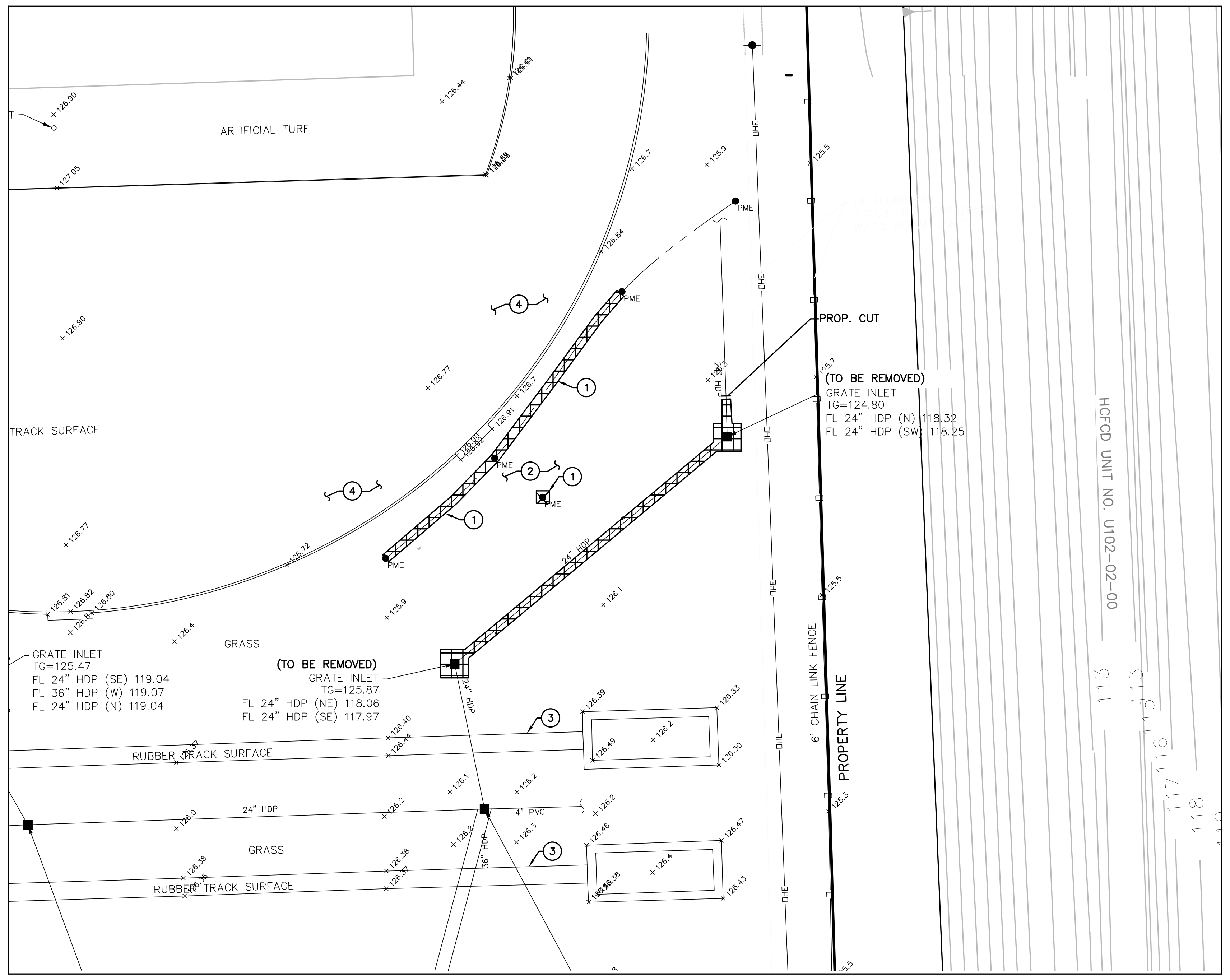
OVERALL CIVIL SITE PLAN

C1.02

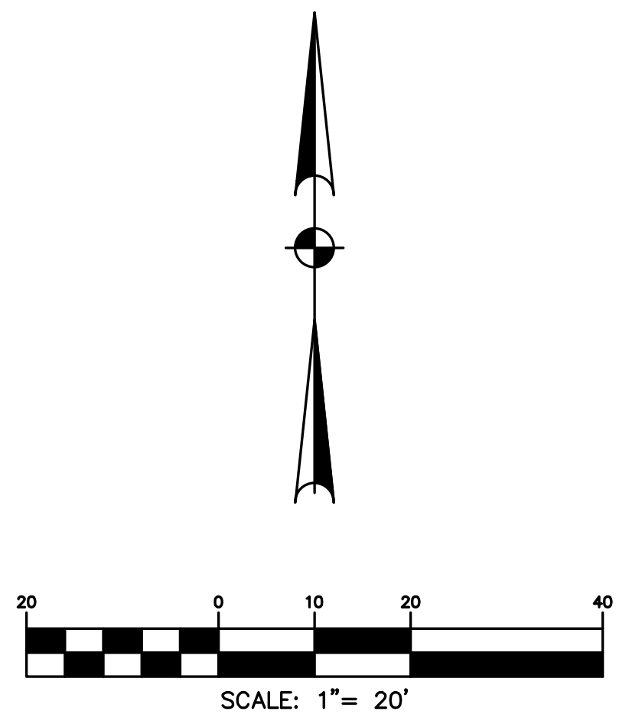
13 Nov 2024 11:19AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C1.02 628-0025 Overall Site Plan.dwg
Includes Xref(s): X-GR.dwg; X-UT.dwg; X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg



TENNIS COURTS



ATHLETIC STORAGE BLDG.



SCALE: 1"= 20'

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

— — — —	PROP. FULL DEPTH SAWCUT
░	EXISTING CONCRETE PAVEMENT, CURB, SIDEWALK AND SLAB TO BE REMOVED.
▩	EXISTING UTILITIES TO BE REMOVED.
▨	EXISTING TREES AND SHRUBS TO BE REMOVED.
○	EXISTING MISCELLANEOUS EQUIPMENT/FENCING TO BE REMOVED.

KEY NOTES:

① CONTRACTOR TO COORDINATE REMOVAL AND RELOCATION OF EXISTING ELECTRICAL CONDUIT/WIRING WITH MEP AND/OR IRRIGATOR CONSULTANT.

② CONTRACTOR TO COORDINATE REMOVAL AND REPLACEMENT OF IRRIGATION LINES/IRRIGATION HEADS/IRRIGATION WIRING AND ALL IRRIGATION ENTITIES WITHIN THE AREA WITH IRRIGATION CONSULTANT.

③ CONTRACTOR TO PROTECT INTEGRITY OF EXISTING LONG JUMP/TRIPLE JUMP EVENT. ANY DAMAGE DONE BY CONTRACTOR OR HIS/HER SUB–CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE TO EXISTING CONDITIONS OR BETTER.

④ CONTRACTOR TO PROTECT INTEGRITY OF EXISTING SYNTHETIC TRACK AN TRACK STRUCTURE. ANY DAMAGE DONE BY CONTRACTOR OR HIS/HER SUB–CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE TO EXISTING CONDITIONS OR BETTER.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT
BROOKS & SPARKS, INC.
F–880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

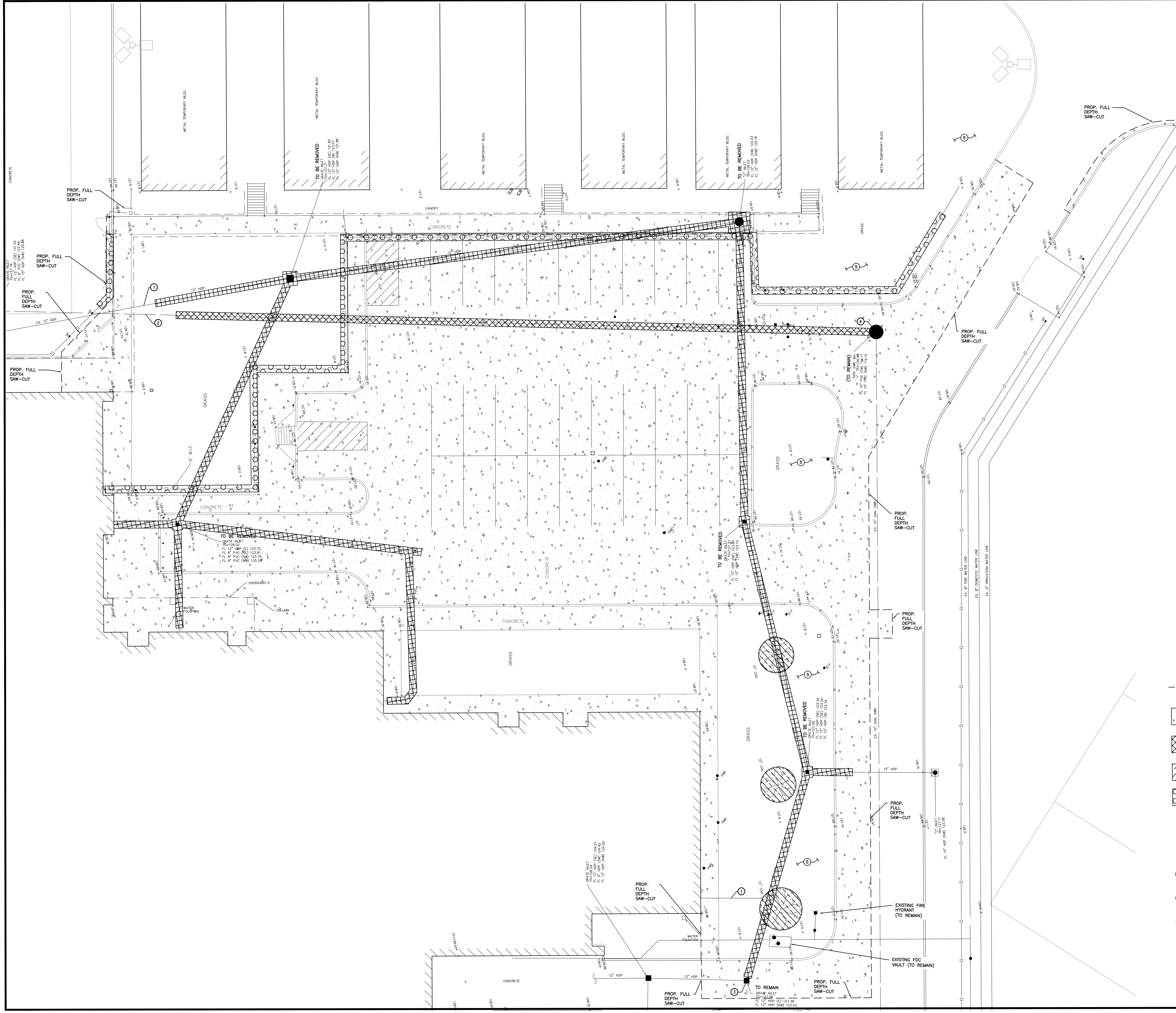
Project Number:	23071
Date:	11-17-2024
Drawn by:	

DEMOLITION
PLAN
(SHEET 1 OF 3)

C1.03

13 Nov 2024 11:47AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C1.03 628-0025 DEMOLITION Plan.dwg
Includes Xref(s): X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg; X-UT.dwg

13 Nov 2024 11:20AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C1.04 628-0025 DEMOLITION Plan 2.dwg
Includes Xref(s): X-GR.dwg; X-UT.dwg; X-TOPO.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg; X-Site.dwg



SCALE: 1"= 10'

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY-PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102-00-00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

— — —	PROP. FULL DEPTH SAWCUT
▭	EXISTING CONCRETE PAVEMENT, CURB, SIDEWALK AND SLAB TO BE REMOVED.
▩	EXISTING UTILITIES TO BE REMOVED.
▨	EXISTING TREES AND SHRUBS TO BE REMOVED.
○○○	EXISTING MISCELLANEOUS EQUIPMENT/FENCING TO BE REMOVED.

KEY NOTES:

① PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STORM SEWER. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

② PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING SANITARY SEWER. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

③ CONTRACTOR TO REMOVED EXISTING STORM PIPING AT EXISTING INLET AND REPAIR GRATE INLET WITH SOLID WALL MATCHING EXISTING WALL THICKNESS.

④ CONTRACTOR TO REMOVED EXISTING SANITARY SEWER PIPING AT EXISTING SANITARY SEWER MANHOLE AND REPAIR SANITARY SEWER MANHOLE WITH SOLID WALL MATCHING EXISTING WALL THICKNESS.

⑤ CONTRACTOR TO COORDINATE REMOVAL AND REPLACEMENT OF IRRIGATION LINES/IRRIGATION HEADS/IRRIGATION WIRING AND ALL IRRIGATION ENTITIES WITHIN THE AREA WITH IRRIGATION CONSULTANT.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

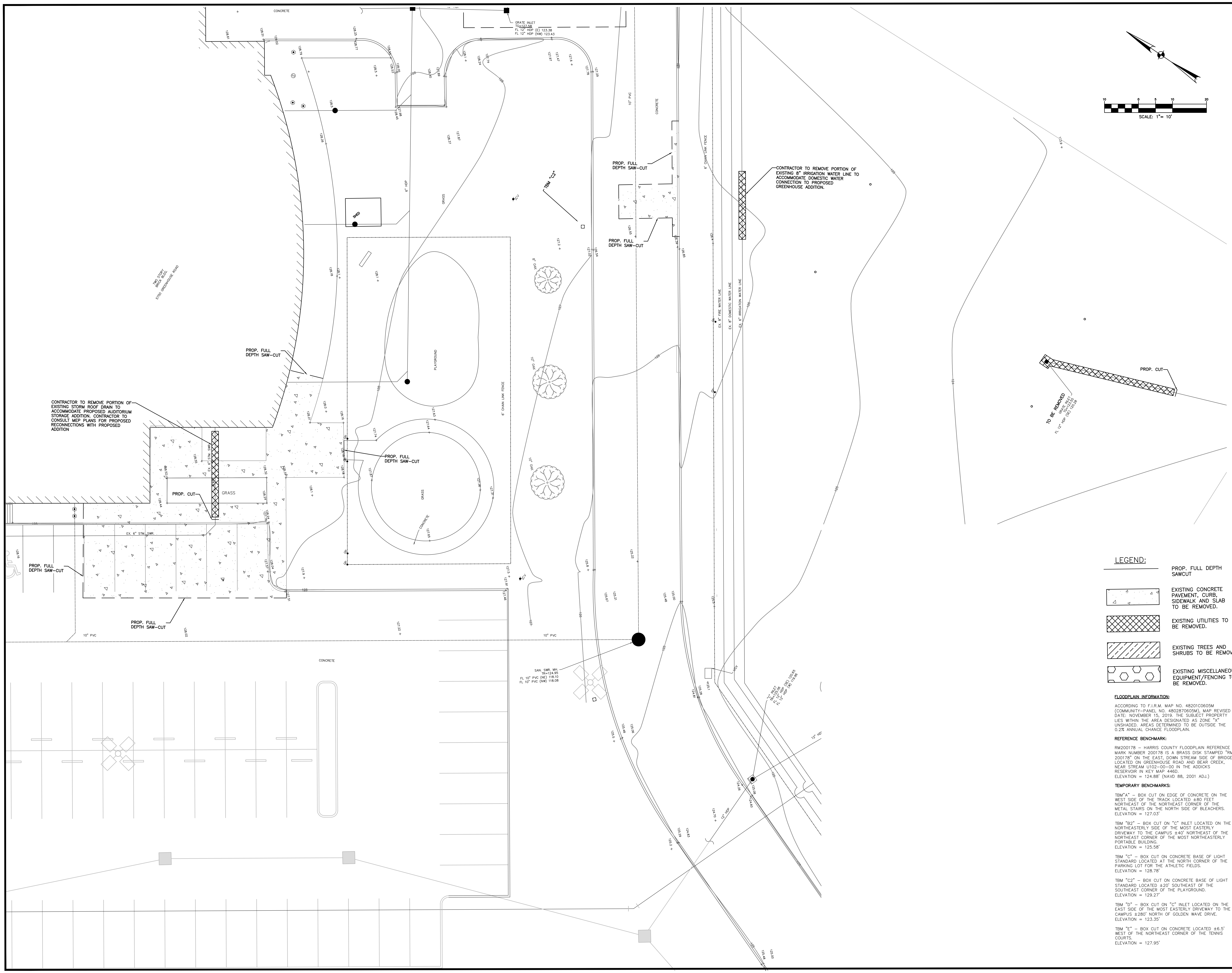
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

DEMOLITION
PLAN
(SHEET 2 OF 3)

C1.04



LEGEND:

----	PROP. FULL DEPTH SAWCUT
▨	EXISTING CONCRETE PAVEMENT, CURB, SIDEWALK AND SLAB TO BE REMOVED.
▩	EXISTING UTILITIES TO BE REMOVED.
▨	EXISTING TREES AND SHRUBS TO BE REMOVED.
⬡	EXISTING MISCELLANEOUS EQUIPMENT/FENCING TO BE REMOVED.

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

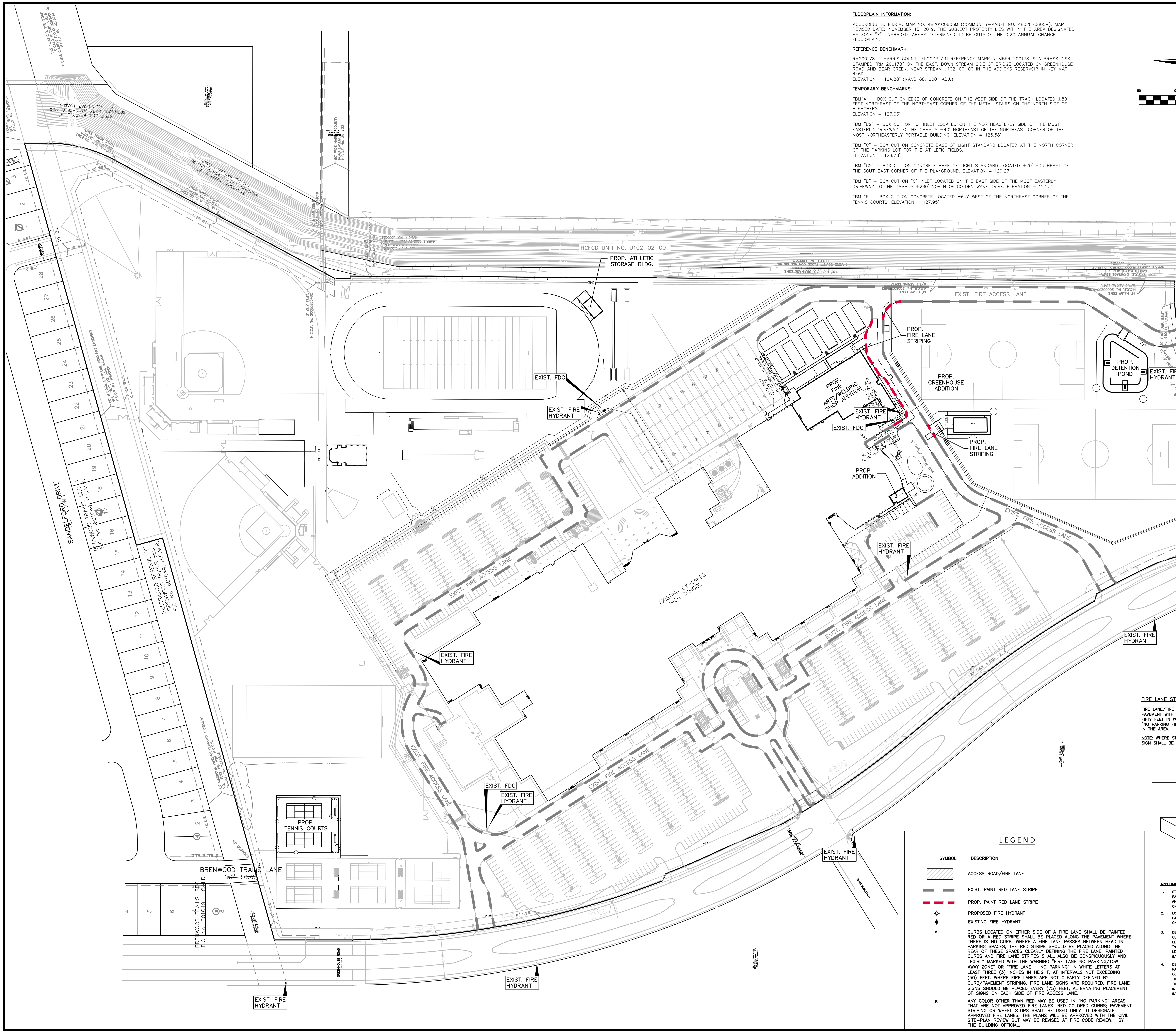
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

DEMOLITION PLAN (SHEET 3 OF 3)

C1.05

13 Nov 2024 11:20AM GregL
F:\project\BROOK_SP\NATEX\628–0025 Cy–Lakes HS Reno\Civil\C1.05 628–0025 DEMOLITION Plan 3.dwg
Includes Xref(s): X–TOPO.dwg; X–Site.dwg; X–TB.dwg; X–Seal.dwg; EM082224.dwg



FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING. ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND. ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE. ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS. ELEVATION = 127.95'

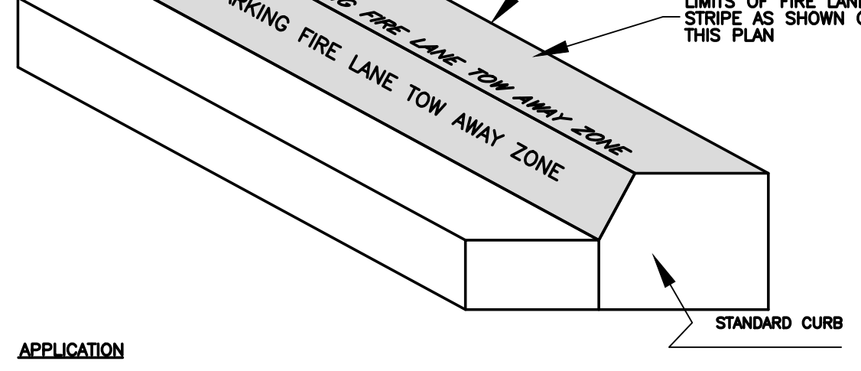
FIRE LANE STRIPING AND SIGN REQUIREMENTS:

FIRE LANE/FIRE ACCESS ROADS SHALL BE MARKED ON THE CURBS OR PAVEMENT WITH A RED STRIPE 4" IN HEIGHT AND STENCILED EVERY FIFTY FEET IN WHITE LETTERS AT LEAST 3" IN HEIGHT WITH THE WORDS "NO PARKING FIRE LANE TOW–AWAY ZONE" SO AS TO PREVENT PARKING IN THE AREA.

NOTE: WHERE STRIPING IS NOT PRACTICAL AN APPROVED FIRE LANE SIGN SHALL BE PLACED EVERY (75) FEET.

LEGEND

SYMBOL	DESCRIPTION
▨	ACCESS ROAD/FIRE LANE
▬ ▬	EXIST. PAINT RED LANE STRIPE
▬ ▬ ▬	PROP. PAINT RED LANE STRIPE
⌖	PROPOSED FIRE HYDRANT
✦	EXISTING FIRE HYDRANT
A	CURBS LOCATED ON EITHER SIDE OF A FIRE LANE SHALL BE PAINTED RED OR A RED STRIPE SHALL BE PLACED ALONG THE PAVEMENT WHERE THERE IS NO CURB. WHERE A FIRE LANE PASSES BETWEEN HEAD IN PARKING SPACES, THE RED STRIPE SHOULD BE PLACED ALONG THE REAR OF THESE SPACES CLEARLY DEFINING THE FIRE LANE. PAINTED CURBS AND FIRE LANE STRIPES SHALL ALSO BE CONSPICUOUSLY AND LEGIBLY MARKED WITH THE WARNING "FIRE LANE NO PARKING/TOW AWAY ZONE" OR "FIRE LANE – NO PARKING" IN WHITE LETTERS AT LEAST THREE (3) INCHES IN HEIGHT, AT INTERVALS NOT EXCEEDING (50) FEET. WHERE FIRE LANES ARE NOT CLEARLY DEFINED BY CURB/PAVEMENT STRIPING, FIRE LANE SIGNS ARE REQUIRED. FIRE LANE SIGNS SHOULD BE PLACED EVERY (75) FEET, ALTERNATING PLACEMENT OF SIGNS ON EACH SIDE OF FIRE ACCESS LANE.
B	ANY COLOR OTHER THAN RED MAY BE USED IN "NO PARKING" AREAS THAT ARE NOT APPROVED FIRE LANES. RED COLORED CURBS; PAVEMENT STRIPING OR WHEEL STOPS SHALL BE USED ONLY TO DESIGNATE APPROVED FIRE LANES. THE PLANS WILL BE APPROVED WITH THE CIVIL SITE–PLAN REVIEW BUT MAY BE REVISED AT FIRE CODE REVIEW, BY THE BUILDING OFFICIAL.



APPLICATION

1. STANDARD 6" CURB:
   PAINT RED LANE STRIPE ON BOTH FACE AND TOP OF CURB PAINT WHITE LETTERS ON FACE AND TOP OF CURB ONLY.
2. LOW CURB (HEADER CURB OR NO CURB):
   PAINT RED LANE STRIPE AND WHITE LETTERS ON TOP OF HEADER CURB OR PAVEMENT.
3. DESIGNATED CURBS SHALL BE PAINTED "RED" CURBS SHALL BE CONSPICUOUSLY AND LEGIBLY MARKED WITH THE WARNING "NO PARKING FIRE LANE TOW–AWAY ZONE" LETTERS AT LEAST 3" IN HEIGHT, AT INTERVALS NOT EXCEEDING 50'.
4. DESIGNATED STRIPE ON PAVEMENT SHALL BE PAINTED "RED". STRIPES SHALL BE CONSPICUOUSLY AND LEGIBLY MARKED WITH THE WARNING "NO PARKING FIRE LANE TOW–AWAY ZONE"
   IN WHITE LETTERS AT LEAST 3" IN HEIGHT, AT INTERVALS NOT EXCEEDING 50'.

FIRE LANE DETAIL
N.T.S.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F–880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

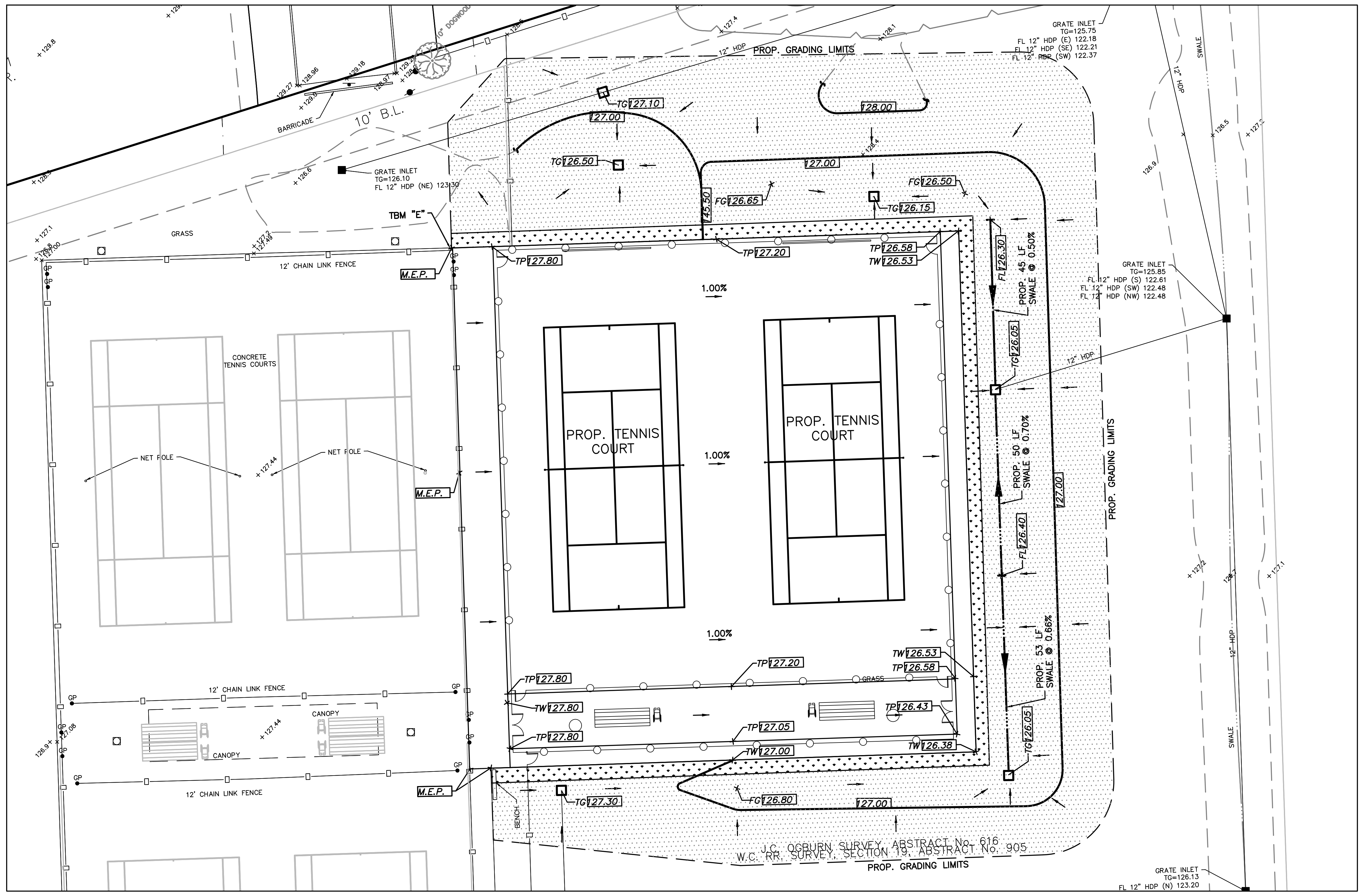
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	

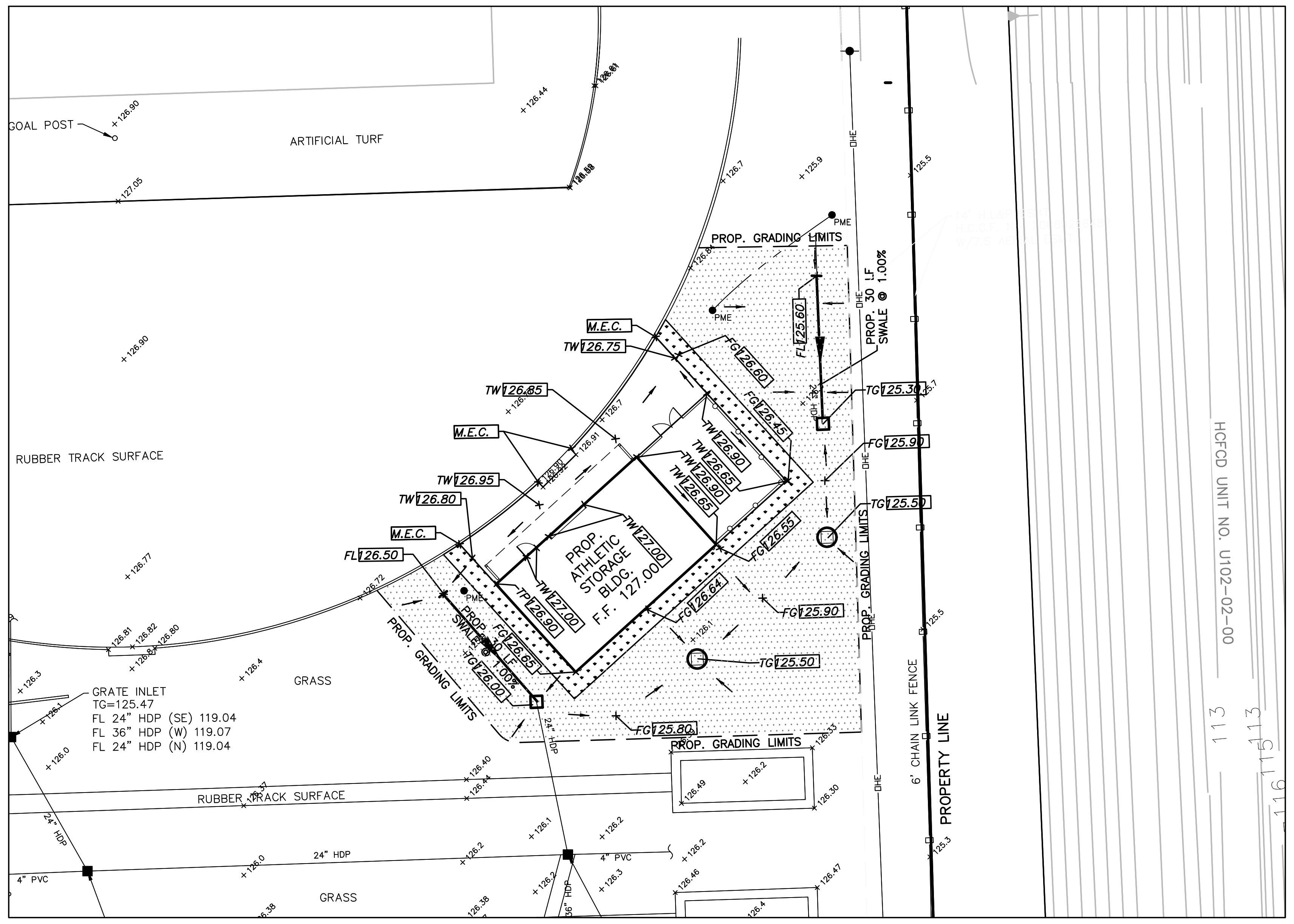
FIRE ACCESS PLAN

C1.06

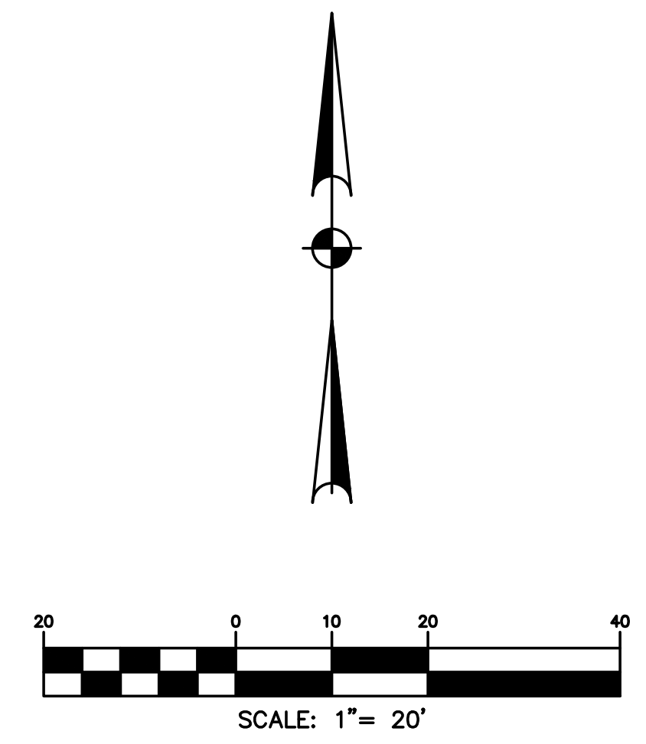
13 Nov 2024 11:20AM GregL
F:\project\BROOK_SP\NATEX\628–0025 Cy–Lakes HS Reno\Civil\C1.06 628–0025 FAP.dwg
Includes Xref(s): X–GR.dwg; X–UT.dwg; X–TOPO.dwg; X–Site.dwg; X–TB.dwg; X–Seal.dwg; EM082224.dwg



TENNIS COURTS



ATHLETIC STORAGE BLDG.



SCALE: 1"= 20'

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

☐	PROPOSED GRATE/CURB INLET
○	PROPOSED STORM SEWER MANHOLE WITH GRATE TOP
TP 127.20	PROPOSED TOP OF PAVEMENT ELEV.
TW 127.25	PROPOSED TOP OF WALK ELEV.
FL 126.30	PROPOSED FLOWLINE ELEV.
FG 126.30	PROPOSED FINISHED GRADE ELEV.
TG 126.80	PROPOSED TOP OF GRATE ELEV.
127.00	PROPOSED CONTOUR
M.E.P.	MATCH EXIST. PAVEMENT
M.E.W.	MATCH EXIST. WALK
→	DIRECTION OF FLOW
▨	PROPOSED LIMITS OF SOLID SOD OF 2" OF TOPSOIL.
▨	PROPOSED LIMITS OF HYDRO–MULCH ON 4" OF TOPSOIL. (CONTRACTOR IS RESPONSIBLE TO IRRIGATE, MOW, FERTILE AND WEED, CONTRACTOR TO ESTABLISH 85% OF GRASS GROWTH BEFORE FINAL ACCEPTANCE)

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F–880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

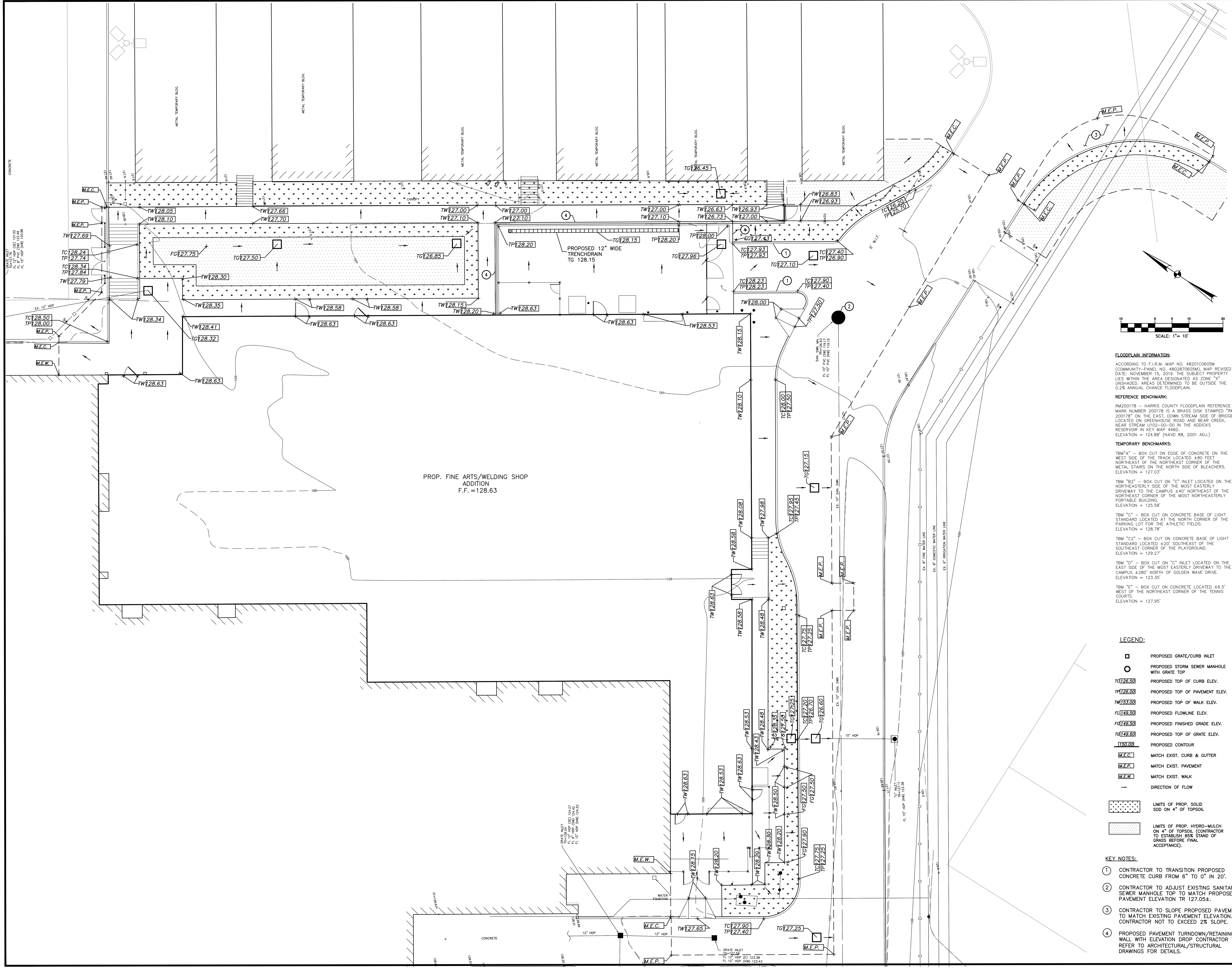
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

GRADING PLAN
(SHEET 1 OF 3)

C2.01

13 Nov 2024 11:21AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C2.01 628-0025 Grading Plan.dwg
Includes Xref(s): X-GR.dwg; X-UT.dwg; X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg



FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

☐	PROPOSED GRATE/CURB INLET
○	PROPOSED STORM SEWER MANHOLE WITH GRATE TOP
TC 126.50	PROPOSED TOP OF CURB ELEV.
TP 126.00	PROPOSED TOP OF PAVEMENT ELEV.
TW 153.00	PROPOSED TOP OF WALK ELEV.
FL 149.50	PROPOSED FLOWLINE ELEV.
FG 149.50	PROPOSED FINISHED GRADE ELEV.
TG 149.60	PROPOSED TOP OF GRATE ELEV.
150.00	PROPOSED CONTOUR
M.E.C.	MATCH EXIST. CURB & GUTTER
M.E.P.	MATCH EXIST. PAVEMENT
M.E.W.	MATCH EXIST. WALK
→	DIRECTION OF FLOW
▨	LIMITS OF PROP. SOLID SOD ON 4" OF TOPSOIL
░	LIMITS OF PROP. HYDRO–MULCH ON 4" OF TOPSOIL (CONTRACTOR TO ESTABLISH 85% STAND OF GRASS BEFORE FINAL ACCEPTANCE).

KEY NOTES:

① CONTRACTOR TO TRANSITION PROPOSED CONCRETE CURB FROM 6" TO 0" IN 20'.

② CONTRACTOR TO ADJUST EXISTING SANITARY SEWER MANHOLE TOP TO MATCH PROPOSED PAVEMENT ELEVATION TR 127.05±.

③ CONTRACTOR TO SLOPE PROPOSED PAVEMENT TO MATCH EXISTING PAVEMENT ELEVATION. CONTRACTOR NOT TO EXCEED 2% SLOPE.

④ PROPOSED PAVEMENT TURNDOWN/RETAINING WALL WITH ELEVATION DROP CONTRACTOR TO REFER TO ARCHITECTURAL/STRUCTURAL DRAWINGS FOR DETAILS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT
BROOKS & SPARKS, INC.
F–880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

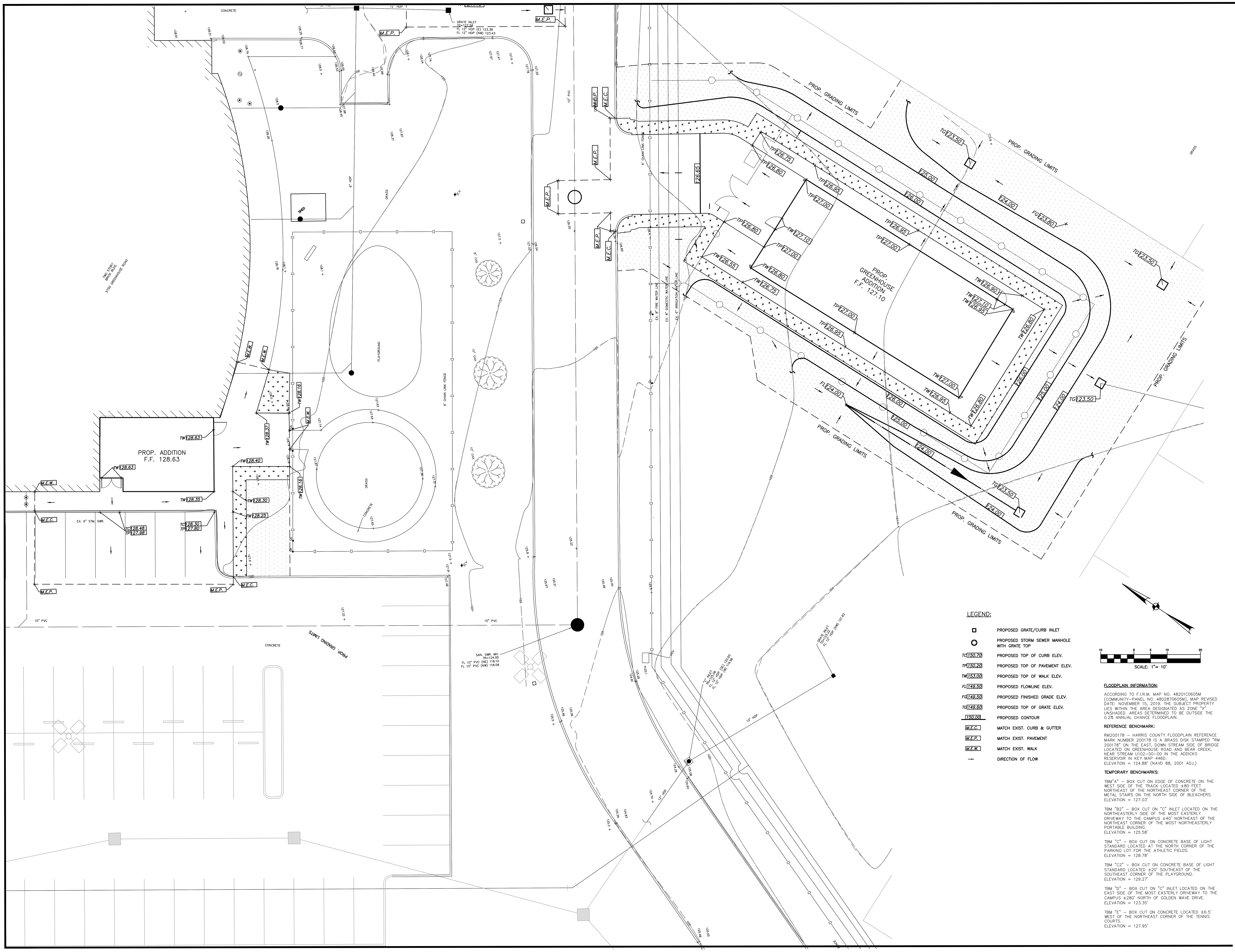
Project Number: 23071
Date: 11-17-2024
Drawn by:

GRADING
PLAN
(SHEET 2 OF 3)

C2.02

13 Nov 2024 11:21AM GregL
F:\project\BROOK_SP\NATEX\628–0025 Cy–Lakes HS Reno\Civil\C2.02 628–0025 Grading Plan 2.dwg
Includes Xref(s): X–GR.dwg; X–UT.dwg; X–TOPO.dwg; X–Site.dwg; X–TB.dwg; X–Seal.dwg; EM082224.dwg

13 Nov 2024 11:22AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C2.03 628-0025 Grading Plan 3.dwg
Includes Xref(s): X-GR.dwg; X-UT.dwg; X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg



LEGEND:

▢	PROPOSED GRATE/CURB INLET
○	PROPOSED STORM SEWER MANHOLE WITH GRATE TOP
TC 150.70	PROPOSED TOP OF CURB ELEV.
TP 150.20	PROPOSED TOP OF PAVEMENT ELEV.
TW 153.00	PROPOSED TOP OF WALK ELEV.
FL 149.50	PROPOSED FLOWLINE ELEV.
FG 149.50	PROPOSED FINISHED GRADE ELEV.
TG 149.60	PROPOSED TOP OF GRATE ELEV.
150.00	PROPOSED CONTOUR
M.E.C.	MATCH EXIST. CURB & GUTTER
M.E.P.	MATCH EXIST. PAVEMENT
M.E.W.	MATCH EXIST. WALK
→	DIRECTION OF FLOW

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

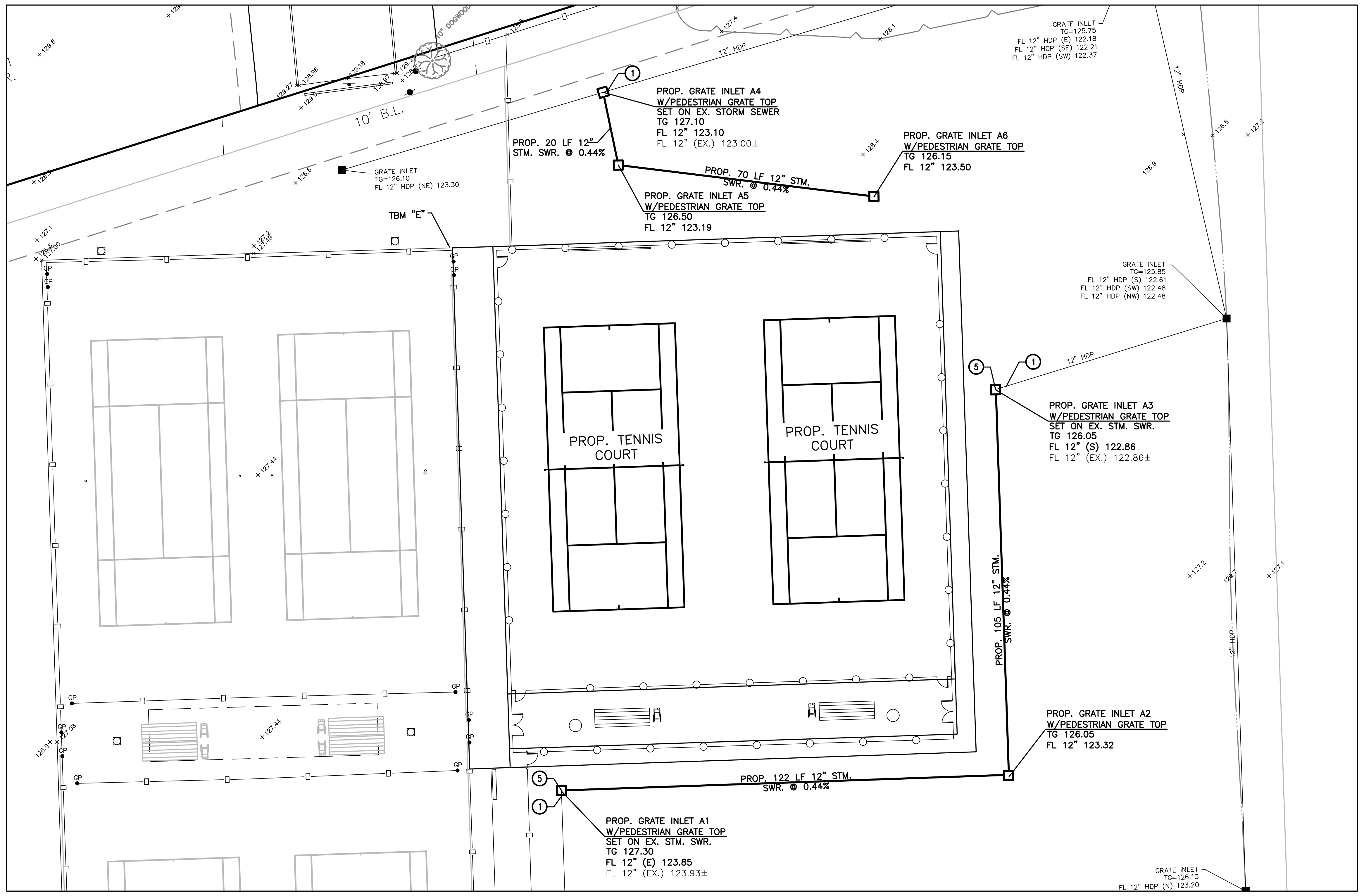
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

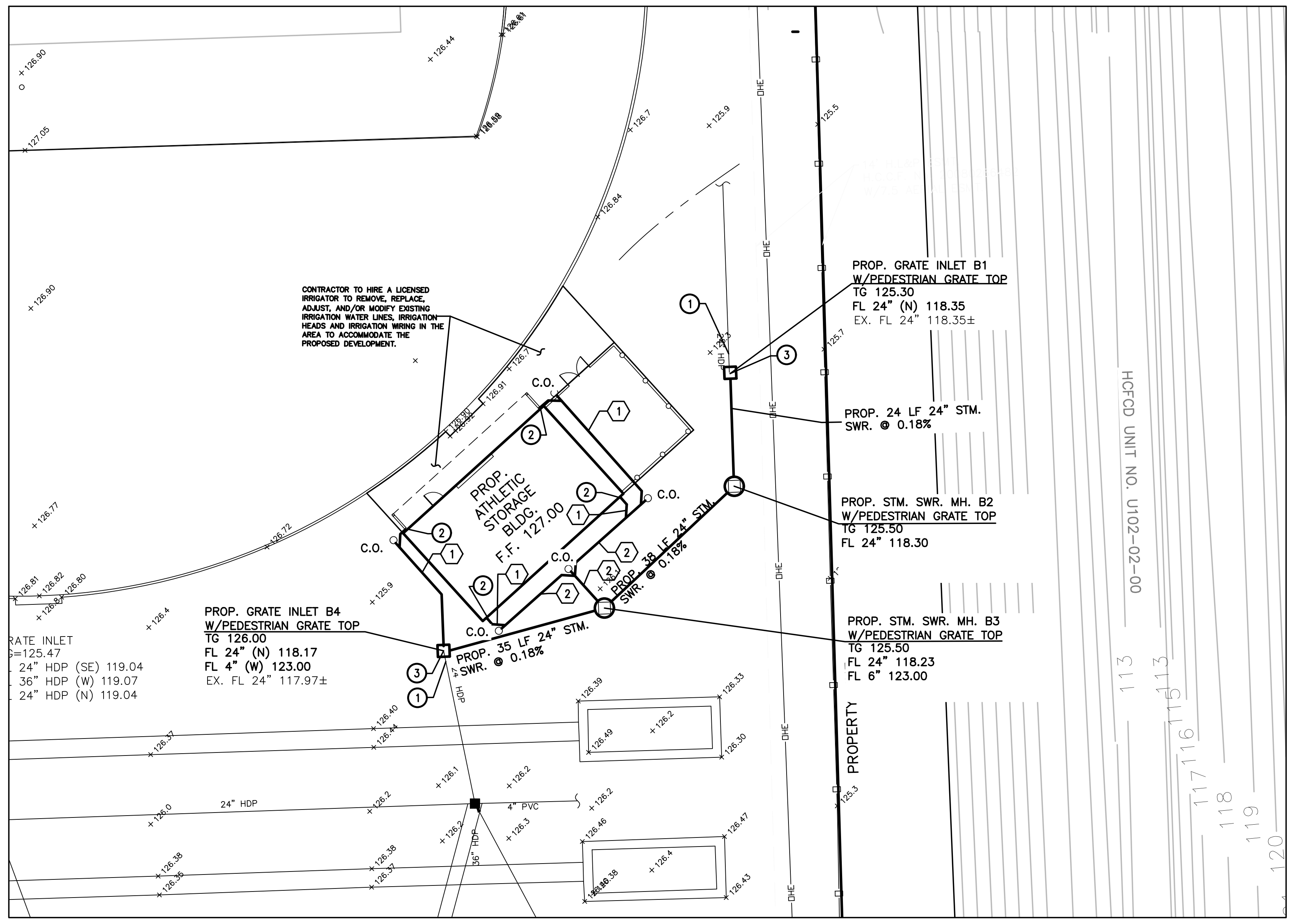
Project Number: 23071
Date: 11-17-2024
Drawn by:

GRADING
PLAN
(SHEET 3 OF 3)

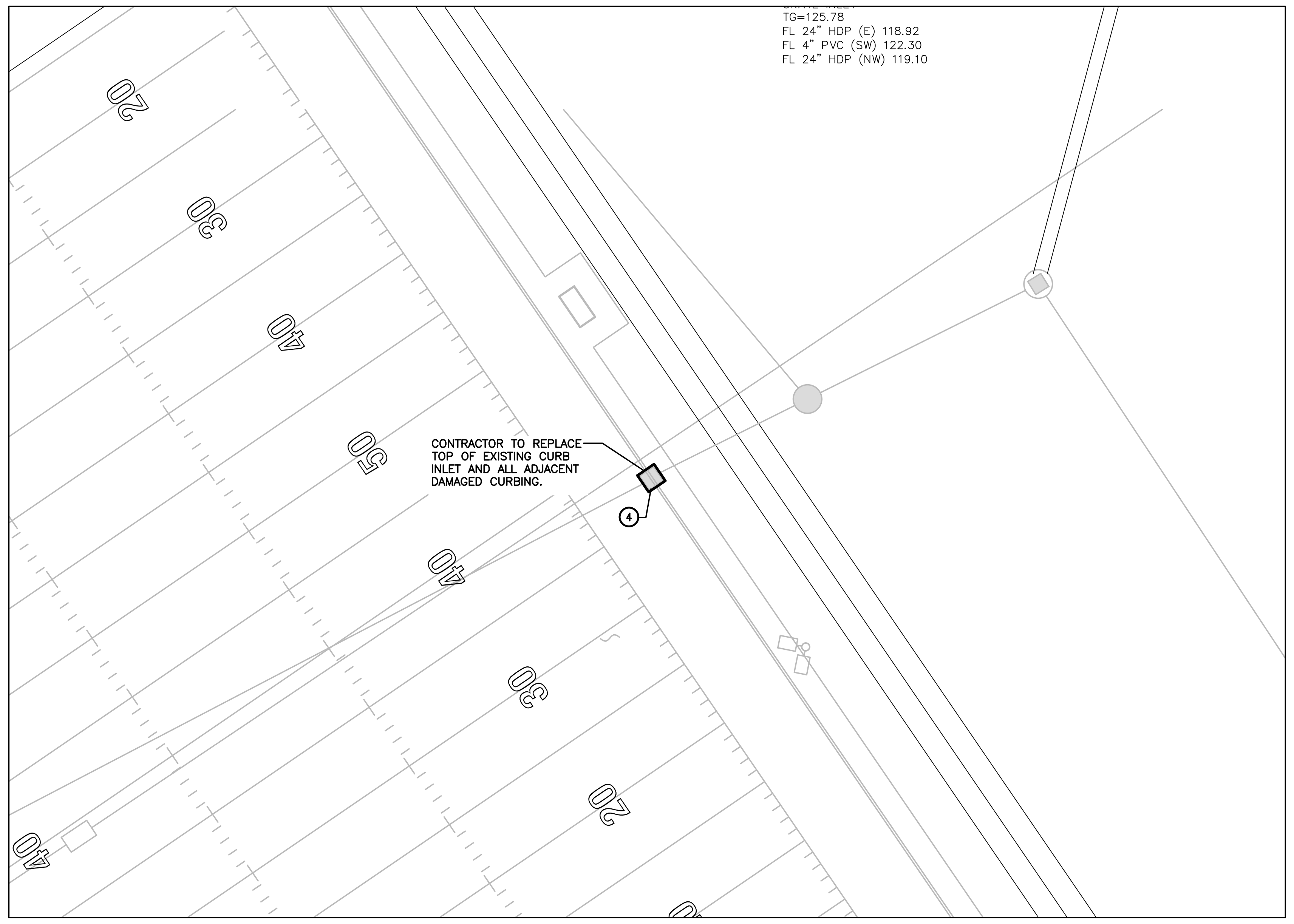
C2.03



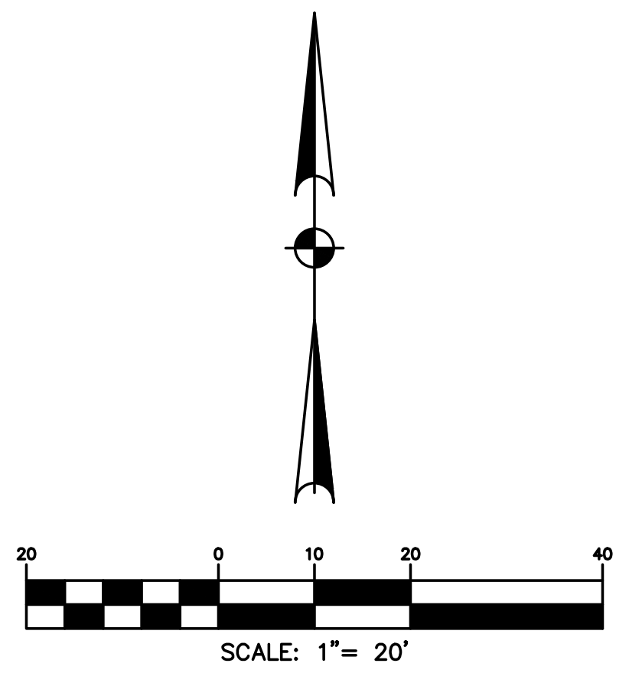
TENNIS COURTS



ATHLETIC STORAGE BLDG.



SOUTH EAST PARKING LOT



FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

○	PROPOSED MANHOLE
⊡	PROPOSED MANHOLE W/GRATE TOP
□	PROPOSED GRATE/CURB INLET
→	DIRECTION OF FLOW
FL	FLOW LINE
• C.O.	PROPOSED CLEANOUT
⟨1⟩	PROP. 4" STM. SWR. @ 1.00% MIN.
⟨2⟩	PROP. 6" STM. SWR. @ 1.00% MIN.

KEY NOTES:

① PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STORM SEWER. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

② PROPOSED DOWNSPOUT. CONTRACTOR TO REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT BOOT DETAILS AND CONNECTION TO UNDERGROUND STORM SEWER.

③ CONTRACTOR TO CONSTRUCT PROPOSED GRATE INLET ON EXISTING 24" STORM SEWER WITH WATER TIGHT CONNECTIONS.

④ IF SUITABLE CURB INLET TOP CANNOT BE OBTAINED CONTRACTOR TO REPLACE ENTIRE CURB INLET AND REPLACE ALL ADJACENT CURBING AND BLOCK OUT. CONTRACTOR TO HYDRO–MULCH ALL DISTURBED AREAS DISTURBED DURING CONSTRUCTION. CONTRACTOR TO ESTABLISHED 85% OF STANDING GRASS BEFORE FINAL ACCEPTANCE.

⑤ CONTRACTOR TO CONSTRUCT PROPOSED GRATE INLET ON EXISTING 12" STORM SEWER WITH WATER TIGHT CONNECTIONS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

STATE OF TEXAS
FRANK E. BROOKS
49225
REGISTERED PROFESSIONAL ENGINEER
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

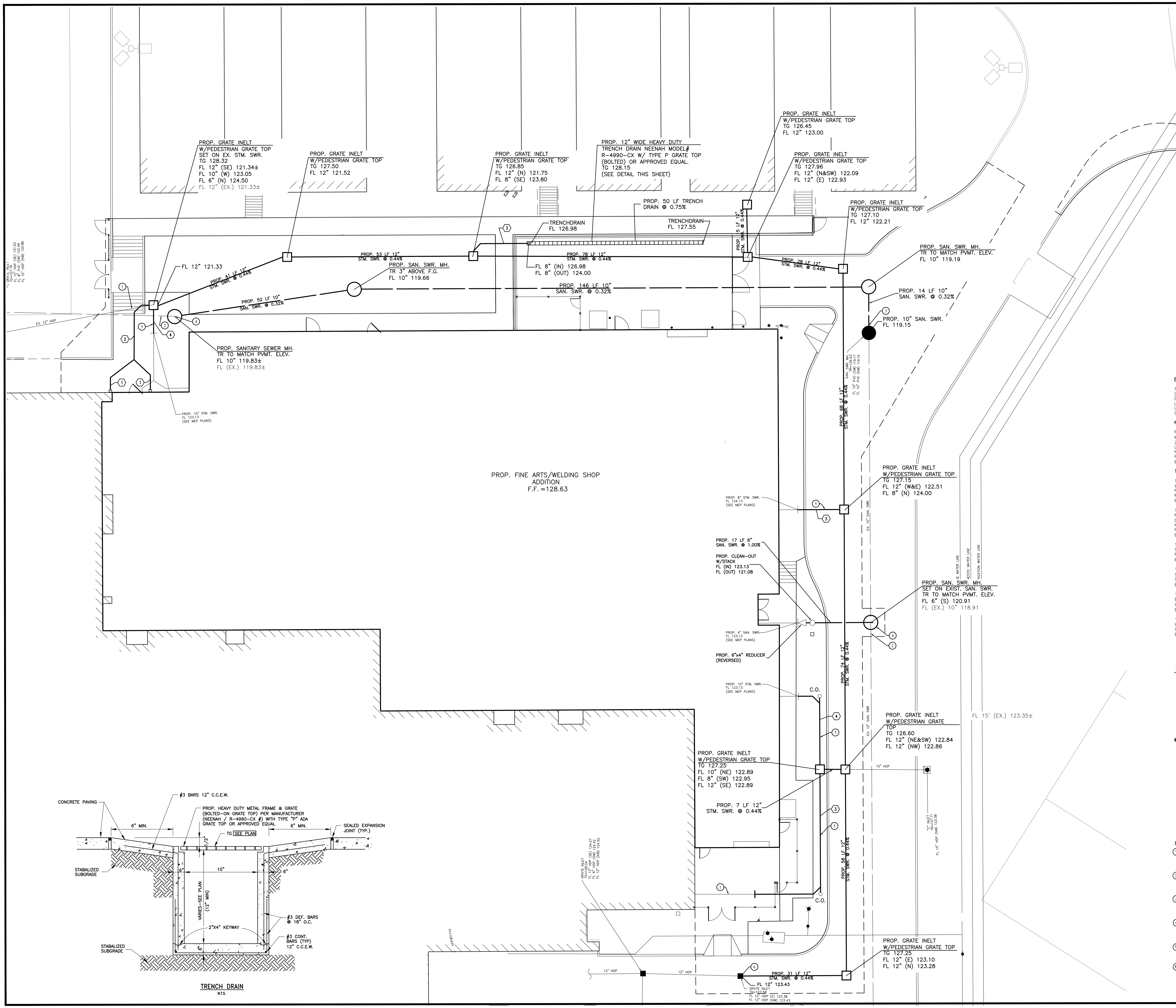
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

UTILITY
PLAN
(SHEET 1 OF 3)

C3.01

13 Nov 2024 11:22AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C3.01 628-0025 Utility Plan 1.dwg
Includes Xref(s): X-GR.dwg; X-TOPO.dwg; X-UT.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg



TRENCH DRAIN

N.T.S.

10 0 5 10 20

SCALE: 1"= 10'

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY-PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102-00-00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

○	PROPOSED MANHOLE
◙	PROPOSED MANHOLE W/GRATE TOP
□	PROPOSED GRATE/CURB INLET
→	DIRECTION OF FLOW
FL	FLOW LINE
° C.O.	PROPOSED CLEANOUT
⟨1⟩	PROP. 4" STM. SWR. @ 1.00% MIN.
⟨2⟩	PROP. 6" STM. SWR. @ 1.00% MIN.
⟨3⟩	PROP. 8" STM. SWR. @ 1.00% MIN.
⟨4⟩	PROP. 10" STM. SWR. @ 1.00% MIN.

KEY NOTES:

① PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STORM SEWER. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

② PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING SANITARY SEWER. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

③ CONTRACTOR TO CONNECT PROPOSED SANITARY SEWER TO EXISTING SANITARY SEWER MANHOLE WITH WATER TIGHT CORED GASKET-ED CONNECTION.

④ CONTRACTOR TO CONSTRUCT PROPOSED SANITARY SEWER MANHOLE ON EXISTING 10" SANITARY SEWER WITH WATER TIGHT GASKET-ED CONNECTIONS.

⑤ CONTRACTOR TO MATCH SIZE AND MATERIAL OF MEP STUB TO FIRST INLET STRUCTURE (NO FERNCO COUPLERS ALLOWED).

⑥ CONTRACTOR TO CONNECT PROPOSED STORM SEWER TO EXISTING GRATE INLET WITH WATER TIGHT CONNECTION.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

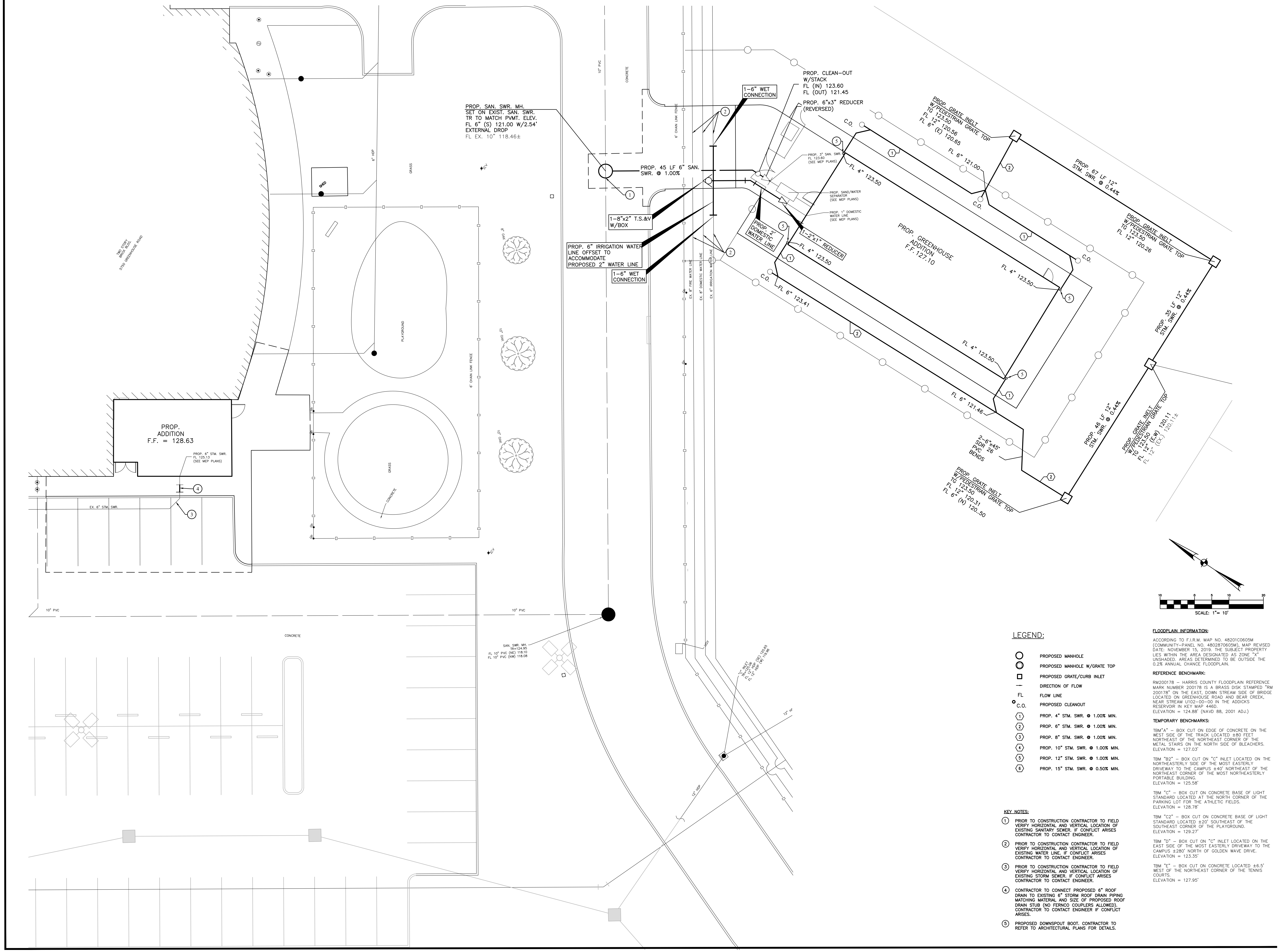
Project Number: 23071
Date: 11-17-2024
Drawn by:

UTILITY
PLAN
(SHEET 2 OF 3)

C3.02

13 Nov 2024 11:22AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C3.02 628-0025 Utility Plan 2.dwg
Includes Xref(s): X-GR.dwg; X-UT.dwg; X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg

13 Nov 2024 11:23AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C3.03 628-0025 Utility Plan 3.dwg
Includes Xref(s): X-GR.dwg; X-UT.dwg; X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg



LEGEND:

○	PROPOSED MANHOLE
⊡	PROPOSED MANHOLE W/GRATE TOP
□	PROPOSED GRATE/CURB INLET
→	DIRECTION OF FLOW
FL	FLOW LINE
° C.O.	PROPOSED CLEANOUT
⟨1⟩	PROP. 4" STM. SWR. @ 1.00% MIN.
⟨2⟩	PROP. 6" STM. SWR. @ 1.00% MIN.
⟨3⟩	PROP. 8" STM. SWR. @ 1.00% MIN.
⟨4⟩	PROP. 10" STM. SWR. @ 1.00% MIN.
⟨5⟩	PROP. 12" STM. SWR. @ 1.00% MIN.
⟨6⟩	PROP. 15" STM. SWR. @ 0.50% MIN.

KEY NOTES:

① PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING SANITARY SEWER. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

② PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING WATER LINE. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

③ PRIOR TO CONSTRUCTION CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING STORM SEWER. IF CONFLICT ARISES CONTRACTOR TO CONTACT ENGINEER.

④ CONTRACTOR TO CONNECT PROPOSED 6" ROOF DRAIN TO EXISTING 6" STORM ROOF DRAIN PIPING MATCHING MATERIAL AND SIZE OF PROPOSED ROOF DRAIN STUB (NO FERNCO COUPLERS ALLOWED). CONTRACTOR TO CONTACT ENGINEER IF CONFLICT ARISES.

⑤ PROPOSED DOWNSPOUT BOOT. CONTRACTOR TO REFER TO ARCHITECTURAL PLANS FOR DETAILS.

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY-PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102-00-00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880
FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

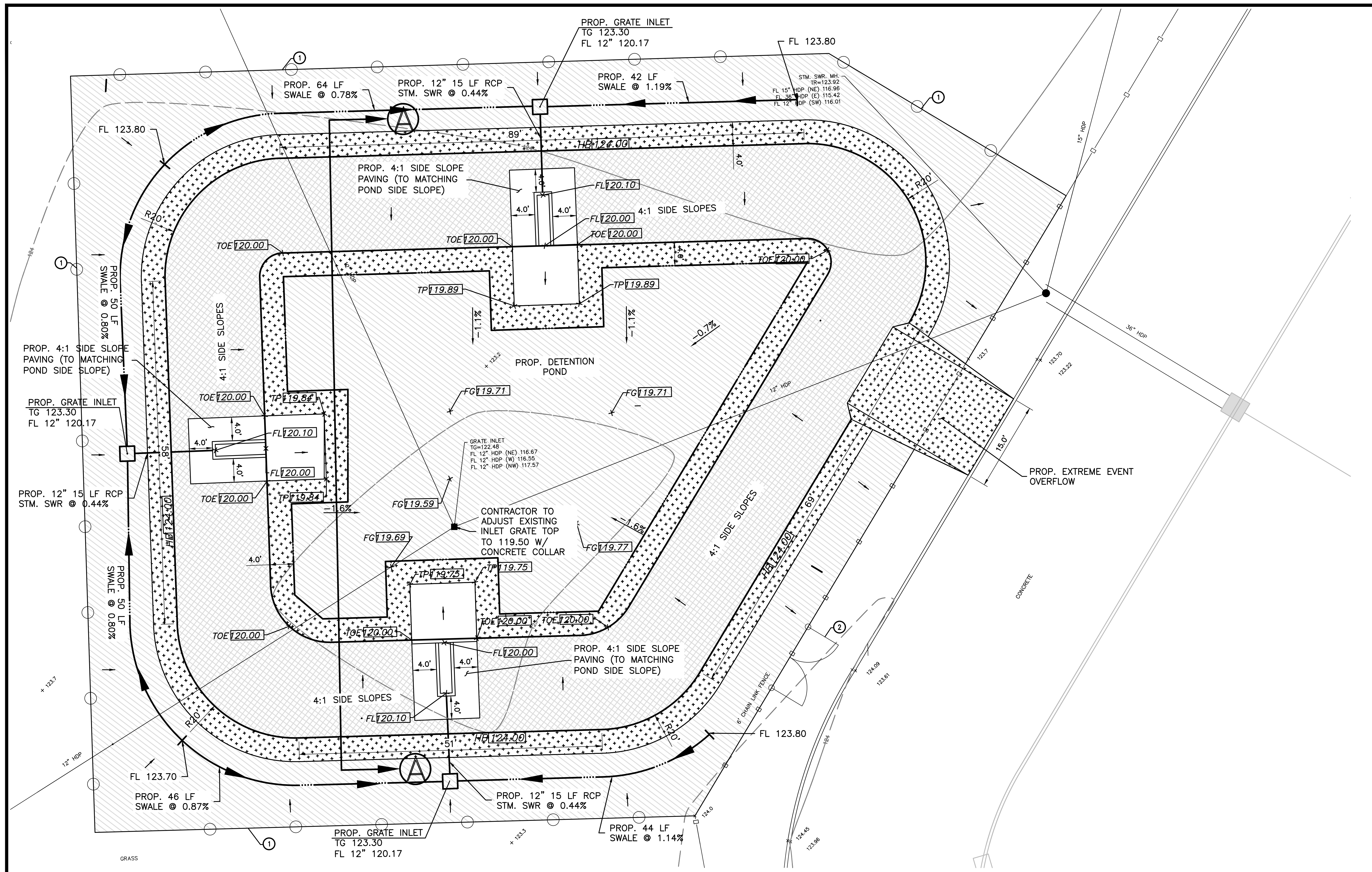
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

UTILITY PLAN
(SHEET 3 OF 3)

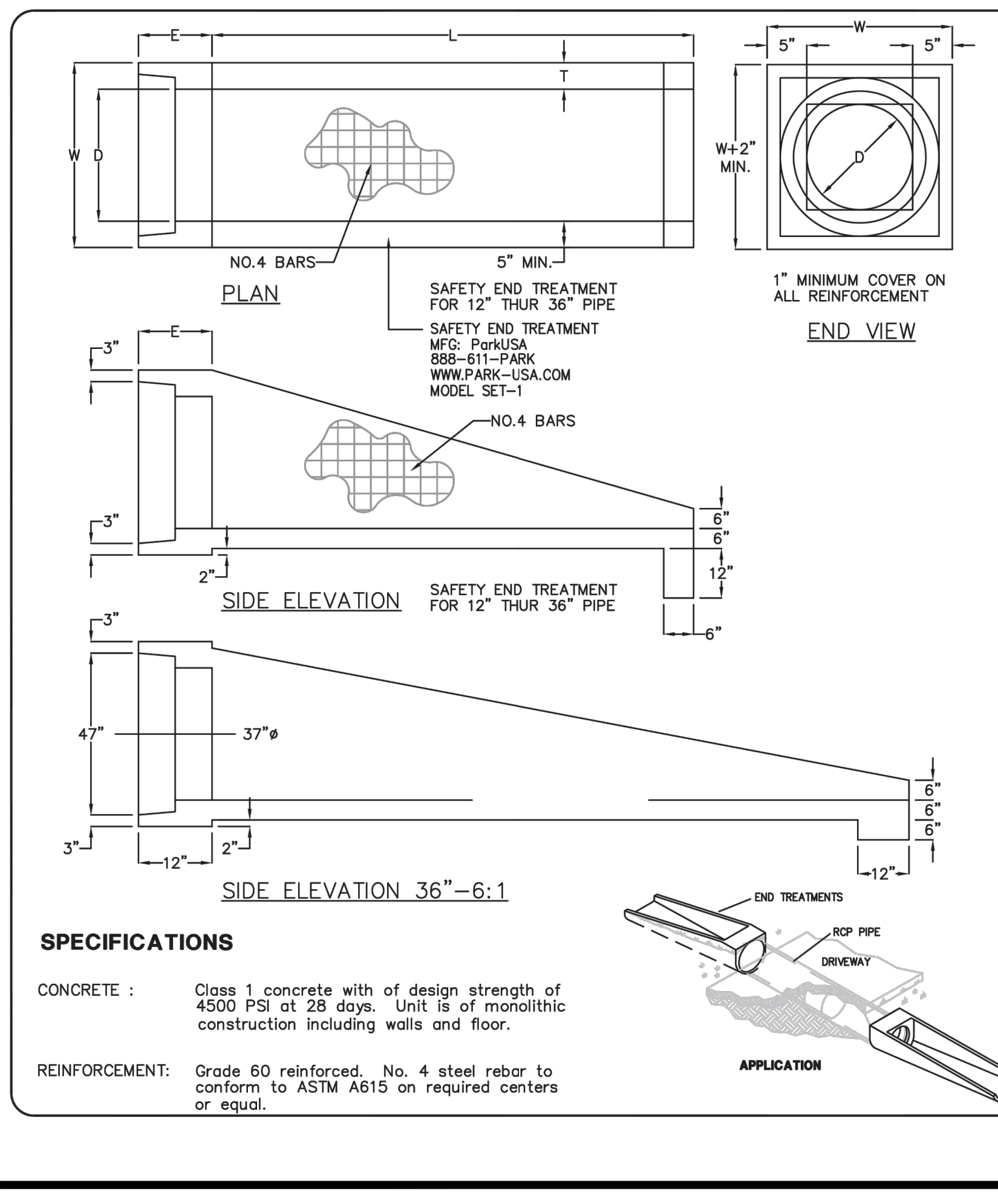
C3.03



STAGE STORAGE TABLE

ELEV	AREA (sq. ft.)	DEPT H (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)
120.000	5,146.80	N/A	N/A	0.00	N/A	0.00
120.500	5,748.67	0.500	2723.87	2723.87	2722.48	2722.48
121.000	6,366.01	0.500	3028.67	5752.54	3027.36	5749.84
121.500	7,007.02	0.500	3343.26	9095.80	3341.98	9091.82
122.000	7,671.67	0.500	3669.67	12765.47	3668.42	12760.24
122.500	8,359.99	0.500	4007.92	16773.39	4006.68	16766.92
123.000	9,071.95	0.500	4357.99	21131.37	4356.77	21123.69
123.500	9,807.58	0.500	4719.88	25851.25	4718.69	25842.38
124.000	10,566.86	0.500	5093.61	30944.86	5092.43	30934.81

3-66



SPECIFICATIONS

CONCRETE : Class 1 concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction including walls and floor.

REINFORCEMENT: Grade 60 reinforced. No. 4 steel rebar to conform to ASTM A615 on required centers or equal.

NOTES:
1. CLASS "C" CONCRETE
2. 12" ARE MADE WITH 12" KNOCK OUT FOR SMALLER PIPE IN 15" SET MOLD
3. 6" WALL IN 36" AS PER CHART
4. REINFORCEMENT:
   12"-24" #4 BARS @ 9" % GRADE 60
   24"-36" #4 BARS @ 6" % GRADE 60

MODEL	D	SLOPE	W	L	T	E	WEIGHT
SET123	12"	3:1	1'-10"	3'-3"	5"	12"	1680
SET124	12"	4:1	1'-10"	4'-4"	5"	12"	2040
SET126	12"	6:1	1'-10"	8'-0"	5"	12"	2760
SET153	15"	3:1	2'-1¼"	4'-0"	5"	12"	1680
SET154	15"	4:1	2'-1¼"	5'-4"	5"	12"	2040
SET156	15"	6:1	2'-1¼"	8'-0"	5"	12"	2760
SET183	18"	3:1	2'-5¼"	4'-9"	5"	12"	2120
SET184	18"	4:1	2'-5¼"	6'-4"	5"	12"	2600
SET186	18"	6:1	2'-5¼"	9'-6"	5"	12"	3560
SET243	24"	3:1	2'-11½"	6'-3"	5"	12"	3120
SET244	24"	4:1	2'-11½"	8'-4"	5"	12"	3880
SET246	24"	6:1	2'-11½"	12'-6"	5"	12"	5400
SET303	30"	3:1	3'-5¼"	7'-9"	5"	12"	4280
SET304	30"	4:1	3'-5¼"	10'-4"	5"	12"	5400
SET306	30"	6:1	3'-5¼"	15'-6"	5"	12"	7600
SET363	36"	3:1	4'-3"	10'-0"	6"	12"	6200
SET364	36"	4:1	4'-3"	12'-0"	6"	12"	9040
SET366	36"	6:1	4'-3"	18'-3"	6"	12"	13,000

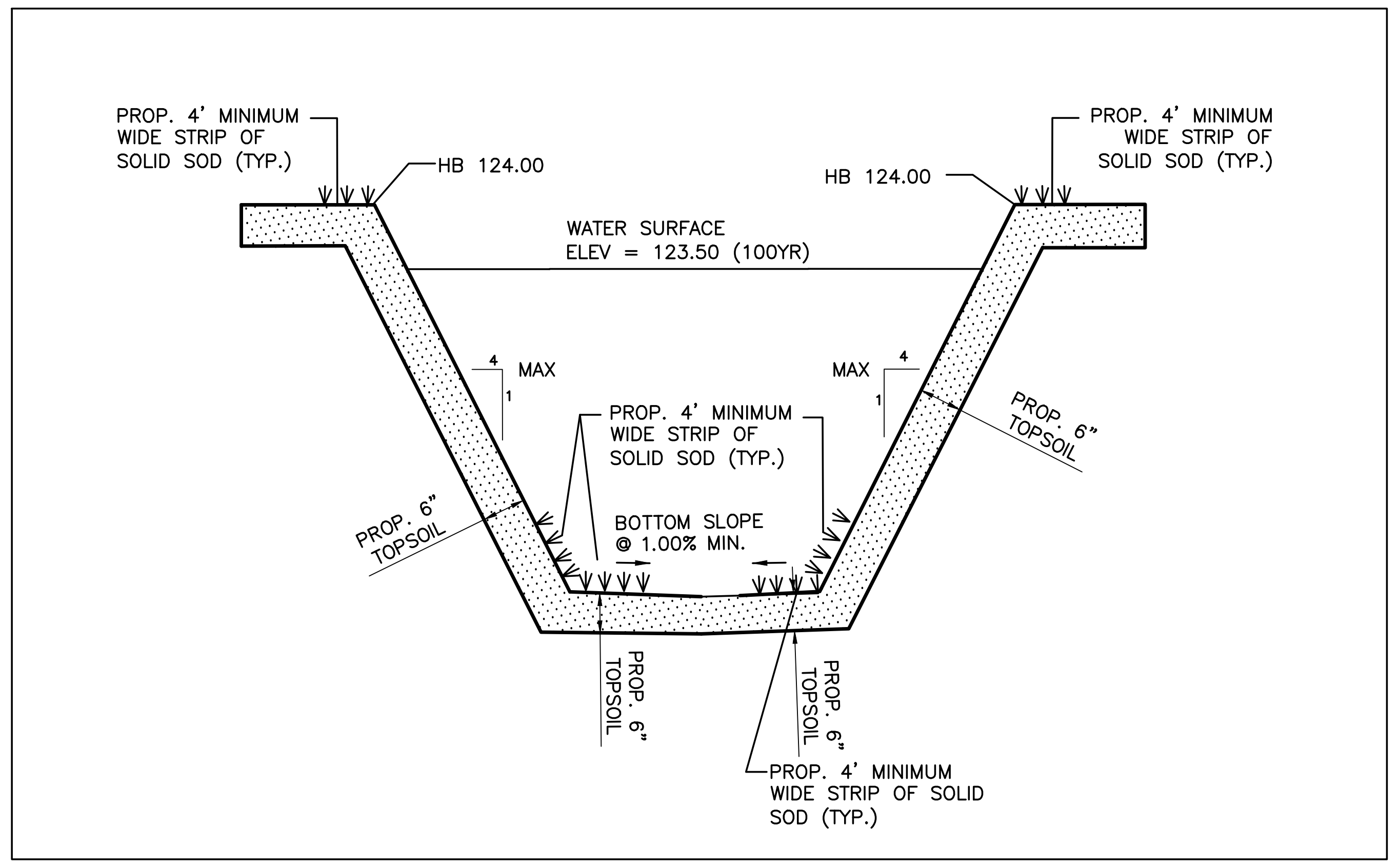
© Park 2012

PROJECT :
CUSTOMER :
DATE :

888.611.7275
www.park-usa.com
PARK
Design for Water

SAFETY END TREATMENT
MODEL SET - 12" THRU 36"

SCALE	DWG. NO.		REV.
NONE		SET-1	
DATE 2012			A



POND SECTION
SECTION A-A

NTS

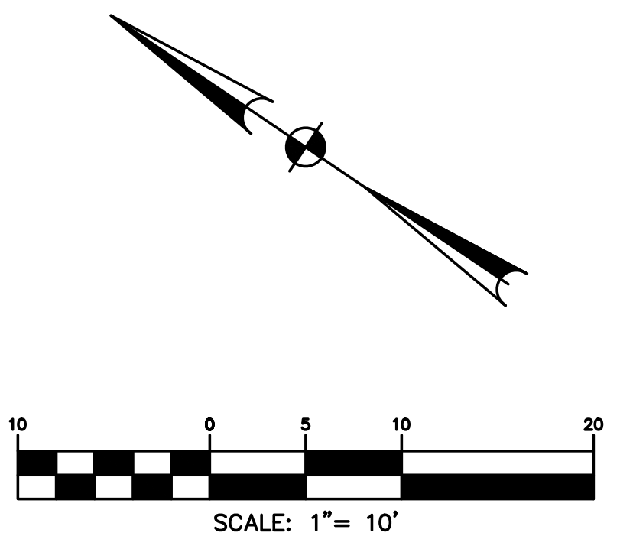
DETENTION POND NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POND THROUGHOUT CONSTRUCTION. POND MUST BE CLEANED, FREE OF EROSION, AND HAVE AN 85% STAND OF GRASS BEFORE FINAL ACCEPTANCE.
2. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN AS-BUILT SURVEY OF POND, SIGNED AND SEALED BY A REGISTERED LAND SURVEYOR FOR VOLUME VERIFICATION AT END OF PROJECT.
3. CONTRACTOR SHALL INSTALL A MINIMUM 4' (FOUR FOOT) WIDE SOD STRIP ALONG THE CONCRETE PILOT CHANNELS AND OUTFALL/INFLUENT STRUCTURES TO PROTECT AGAINST EROSION. SOD SHALL BE PINNED AS IS NECESSARY.
4. AFTER POND IS COMPLETE CONTRACTOR SHALL HYDROMULCH ALL DISTURBED AREAS OF POND NOT RECEIVING SOD OR FLEXTERRA.
5. IN THE EVENT THE PROPOSED DETENTION POND ACCUMULATES STORM RUNOFF DURING CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE TO PUMP OUT WATER FROM DETENTION POND.
6. CONTRACTOR TO CONSTRUCT DETENTION POND PRIOR TO ANY OTHER CONSTRUCTION PROPOSED IN THIS PROJECT.
7. CONTRACTOR TO COMPLETE ALL CIVIL WORK (INCLUDING FINAL ACCEPTANCE OF DETENTION POND FROM CIVIL ENGINEER) PRIOR TO CENTERPOINT ENERGY RELEASING PERMANENT POWER.
8. CONTRACTOR TO MUCK OUT AND REMOVE ALL VEGETATION FROM PROPOSED PILOT CHANNEL PRIOR TO FINAL ACCEPTANCE.
9. CONTRACTOR TO MOW DETENTION POND PERIODICALLY KEEPING GRASS GROWTH UNDER 4". CONTRACTOR TO MAINTAIN GRASS GROWTH IN POND THROUGHOUT DURATION OF PROJECT AND UNTIL FINAL ACCEPTANCE.

DETENTION SUMMARY

1. TOTAL ACREAGE OF SITE ______ 64.594 ACRES
2 TOTAL INCREASED IMPERVIOUS AREA SUBJECT TO DETENTION ______ 0.627 ACRES
3. DETENTION STORAGE RATE= ______ 0.75 AC.FT./AC
4. DETENTION STORAGE VOLUME REQUIRED______ 0.47 AC.FT
5 100-YR DESIGN WATER SURFACE ELEVATION= ______ 123.50 FT.
6. TOTAL STORAGE VOLUME PROVIDED AT WATER SURFACE ELEVATION 123.50 = ______ 0.59 AC.FT.

DETENTION BASIN SHALL BE PROPERLY OPERATED AND MAINTAINED BY PROPERTY OWNER.



FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY-PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102-00-00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

HB 124.00	PROPOSED TOP OF WALL.
FG 119.71	PROPOSED FINISHED GRADE ELEV.
M.E.G.	MATCH EXIST. GRADE
→	DIRECTION OF FLOW
⁘	PROP. LIMITS OF SOLID SOD OVER 6" TOPSOIL
▨	PROP. LIMITS OF FLEXTERRA OVER 6" TOPSOIL (INSTALLED PER MANUFACTURER'S RECOMMENDATIONS)
▨	PROP. LIMITS OF HYDROMULCH OVER 4" TOPSOIL (INSTALLED PER MANUFACTURER'S RECOMMENDATIONS) (CONTRACTOR TO ESTABLISH 85% STAND OF GRASS BEFORE FINAL ACCEPTANCE)

KEY NOTES:

① PROPOSED FENCE. CONTRACTOR TO REFER TO ARCHITECTURAL PLANS FOR DETAILS.

② PROPOSED GATE. CONTRACTOR TO REFER TO ARCHITECTURAL PLANS FOR DETAILS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880
FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

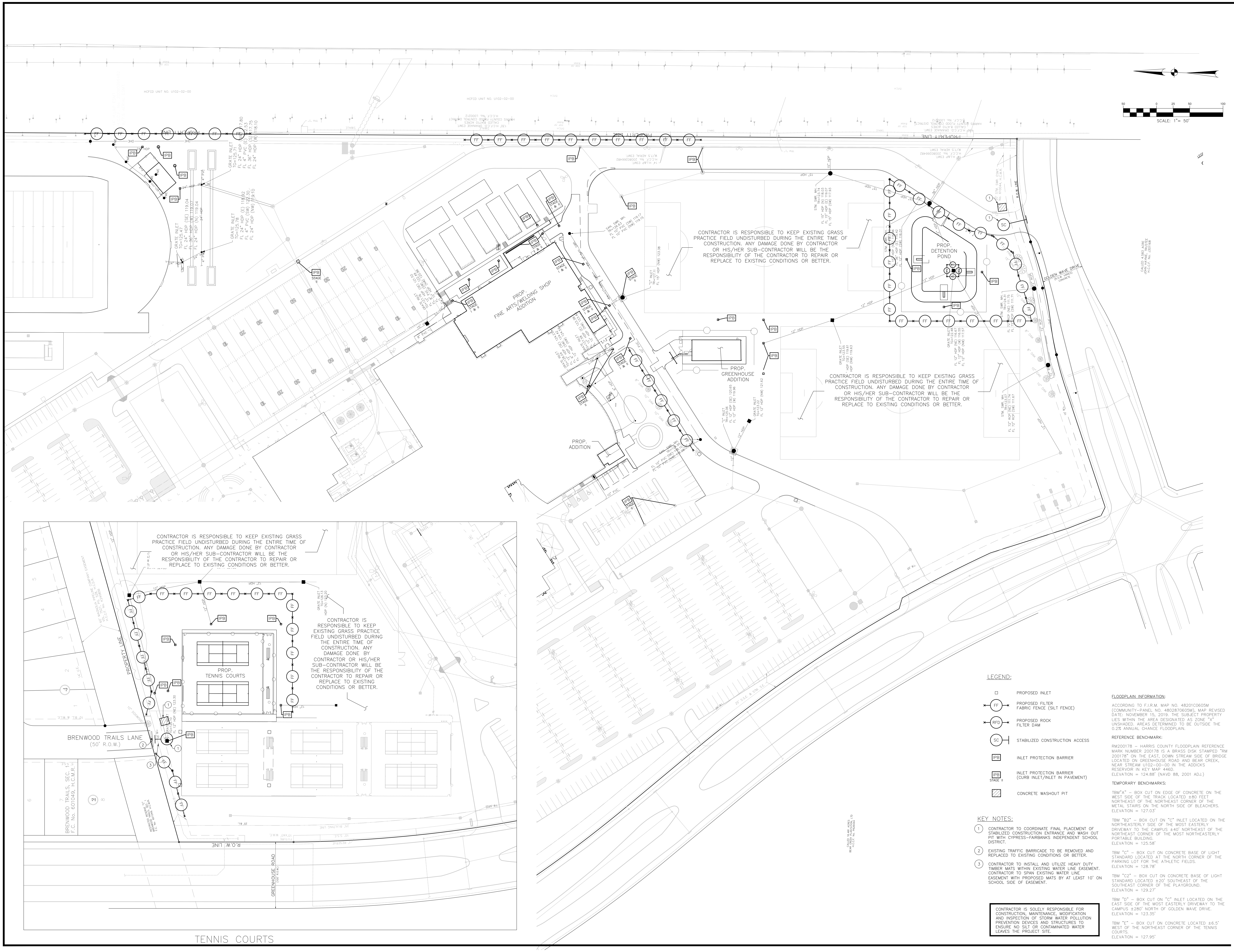
Project Number: 23071
Date: 11-17-2024
Drawn by:

DETENTION POND PLAN

C3.04

13 Nov 2024 11:23AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C3.04 628-0025 DP.dwg
Includes Xref(s): X-GR.dwg; X-UT.dwg; X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg

13 Nov 2024 11:23AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C3.05 628-0025 SWPPP.dwg
Includes Xref(s): X-GR.dwg; X-TOPO.dwg; X-Site.dwg; X-TB.dwg; X-Seal.dwg; EM082224.dwg



CONTRACTOR IS RESPONSIBLE TO KEEP EXISTING GRASS PRACTICE FIELD UNDISTURBED DURING THE ENTIRE TIME OF CONSTRUCTION. ANY DAMAGE DONE BY CONTRACTOR OR HIS/HER SUB-CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE TO EXISTING CONDITIONS OR BETTER.

CONTRACTOR IS RESPONSIBLE TO KEEP EXISTING GRASS PRACTICE FIELD UNDISTURBED DURING THE ENTIRE TIME OF CONSTRUCTION. ANY DAMAGE DONE BY CONTRACTOR OR HIS/HER SUB-CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE TO EXISTING CONDITIONS OR BETTER.

CONTRACTOR IS RESPONSIBLE TO KEEP EXISTING GRASS PRACTICE FIELD UNDISTURBED DURING THE ENTIRE TIME OF CONSTRUCTION. ANY DAMAGE DONE BY CONTRACTOR OR HIS/HER SUB-CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE TO EXISTING CONDITIONS OR BETTER.

CONTRACTOR IS RESPONSIBLE TO KEEP EXISTING GRASS PRACTICE FIELD UNDISTURBED DURING THE ENTIRE TIME OF CONSTRUCTION. ANY DAMAGE DONE BY CONTRACTOR OR HIS/HER SUB-CONTRACTOR WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE TO EXISTING CONDITIONS OR BETTER.

LEGEND:

□	PROPOSED INLET
FF	PROPOSED FILTER FABRIC FENCE (SILT FENCE)
RFD	PROPOSED ROCK FILTER DAM
SC	STABILIZED CONSTRUCTION ACCESS
IPB	INLET PROTECTION BARRIER
IPB STAGE II	INLET PROTECTION BARRIER (CURB INLET/INLET IN PAVEMENT)
▨	CONCRETE WASHOUT PIT

KEY NOTES:

① CONTRACTOR TO COORDINATE FINAL PLACEMENT OF STABILIZED CONSTRUCTION ENTRANCE AND WASH OUT PIT WITH CYPRESS-FAIRBANKS INDEPENDENT SCHOOL DISTRICT.

② EXISTING TRAFFIC BARRICADE TO BE REMOVED AND REPLACED TO EXISTING CONDITIONS OR BETTER.

③ CONTRACTOR TO INSTALL AND UTILIZE HEAVY DUTY TIMBER MATS WITHIN EXISTING WATER LINE EASEMENT. CONTRACTOR TO SPAN EXISTING WATER LINE EASEMENT WITH PROPOSED MATS BY AT LEAST 10' ON SCHOOL SIDE OF EASEMENT.

CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION, MAINTENANCE, MODIFICATION AND INSPECTION OF STORM WATER POLLUTION PREVENTION DEVICES AND STRUCTURES TO ENSURE NO SILT OR CONTAMINATED WATER LEAVES THE PROJECT SITE.

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY-PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102-00-00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880
FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

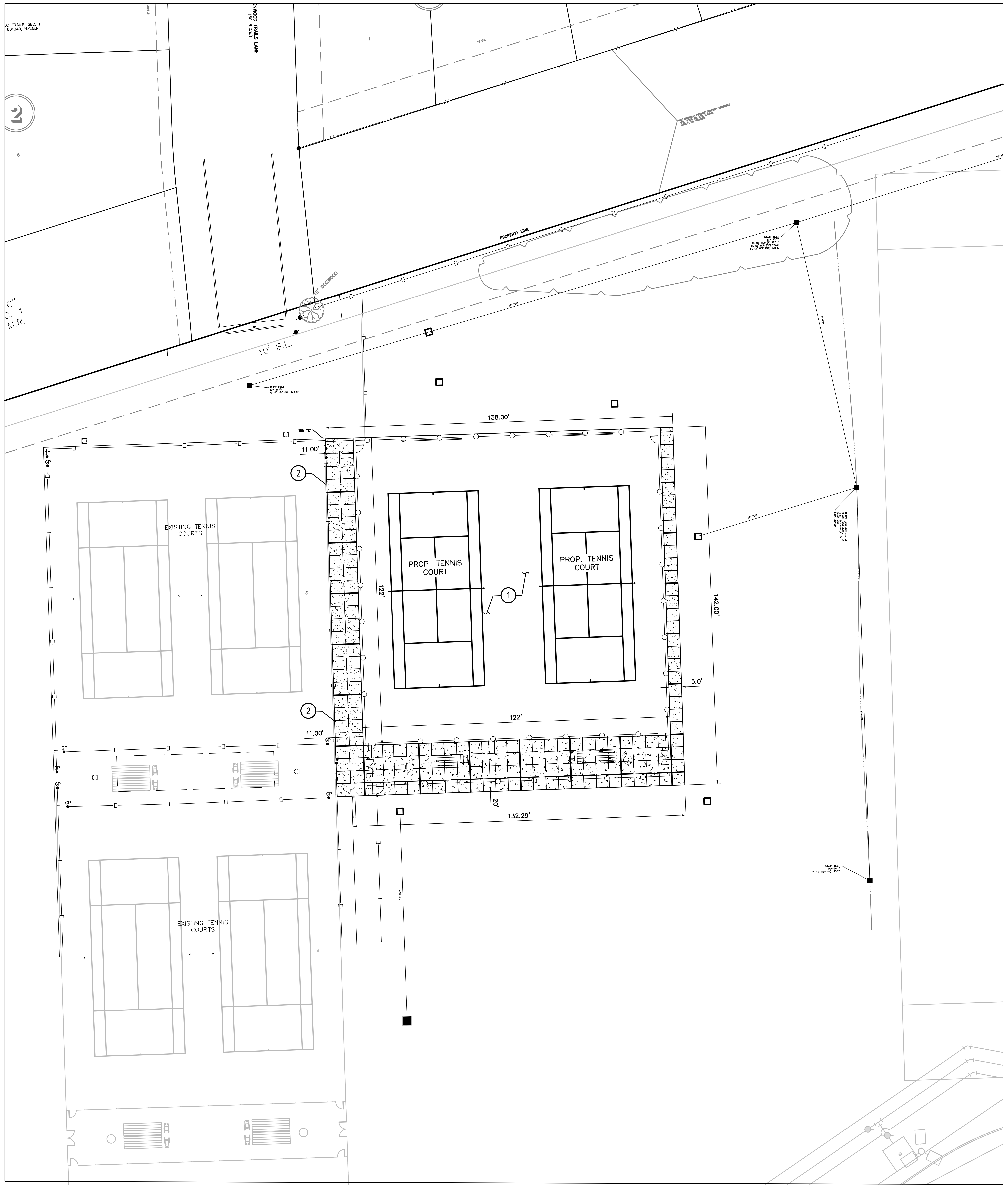
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

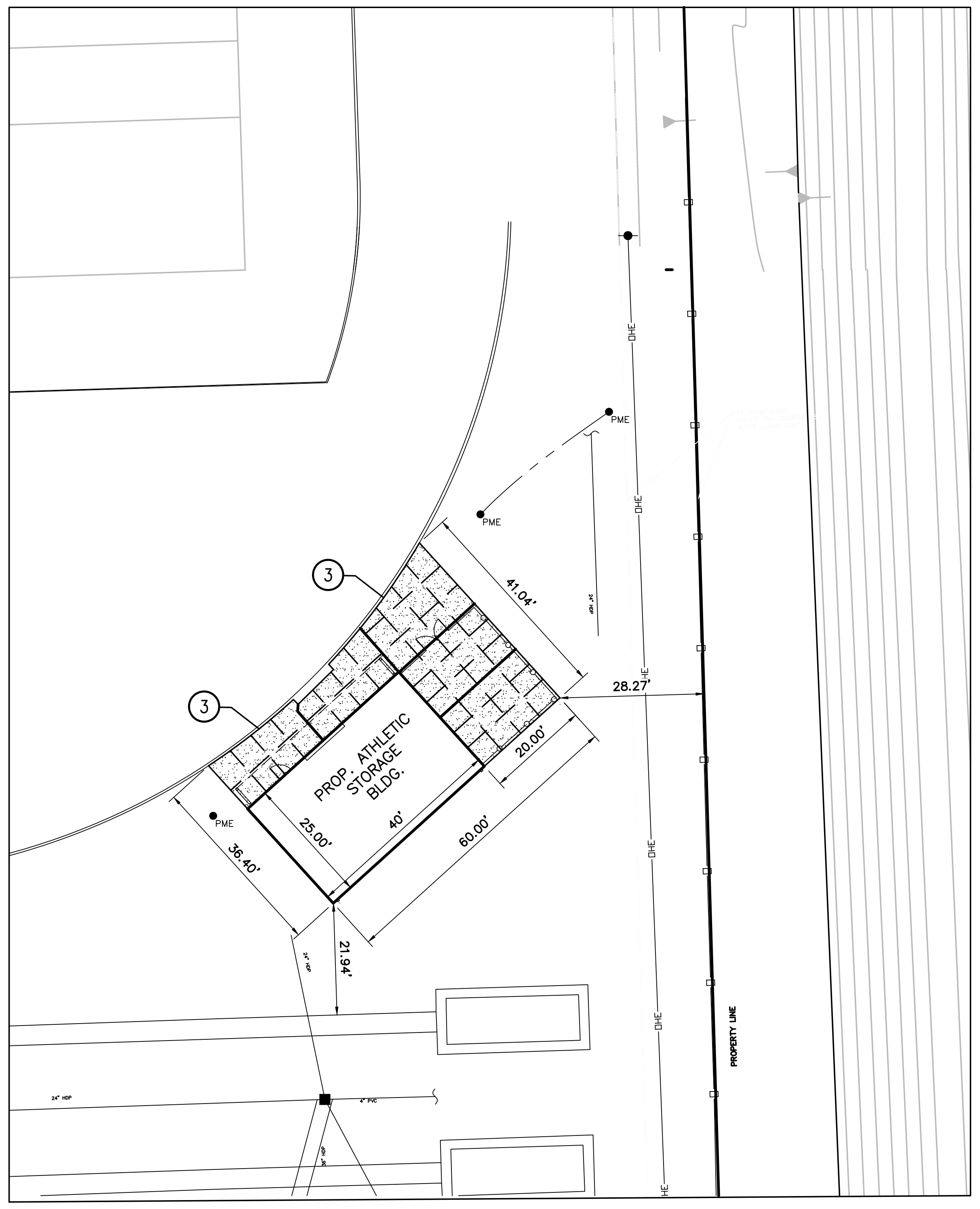
Project Number: 23071
Date: 11-17-2024
Drawn by:

STORM WATER
POLLUTION
PREVENTION PLAN

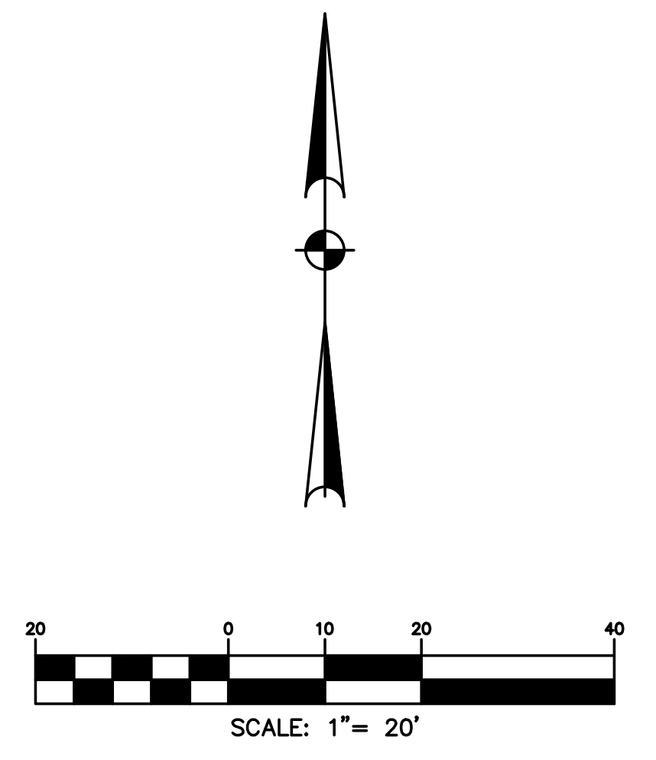
C3.05



TENNIS COURTS



ATHLETIC STORAGE BLDG.



SCALE: 1"= 20'

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

— — — — —	SAWED JOINT
———————	EXPANSION JOINT
▨	PROP. 5" REINFORCED CONCRETE SIDEWALK
▨	PROP. 4 $\frac{1}{2}$ REINFORCED CONCRETE SIDEWALK

NOTES:

1. LOCATE EXPANSION JOINTS AS SHOWN. SAWED JOINTS SHALL BE SPACED EVENLY BETWEEN PAVEMENT EXPANSION JOINTS AT 15' MAXIMUM SPACING.
2. ALL CURBS TO BE 6" UNLESS OTHERWISE NOTED.
3. LINE UP JOINTS IN SIDEWALK W/ JOINTS IN PARKING LOT.
4. INSTALL EXPANSION JOINTS IN ALL DRIVEWAYS AT ROW LINE.

KEY NOTES:

① CONTRACTOR TO REFER TO ARCHITECTURAL/STRUCTURAL PLANS FOR TENNIS COURT POST TENSION SLAB DETAILS AND ALL TENNIS COURT ENTITIES (FENCING, GATES, NETTING, SURFACING BLEACHERS.....ETC.).

② CONTRACTOR TO INSTALL EXPANSION JOINT AT EXISTING TENNIS COURTS AND PROPOSED SIDEWALK. CONTRACTOR TO NOT TIE PROPOSED SIDEWALK TO EXISTING OR PROPOSED TENNIS COURTS.

③ CONTRACTOR TO INSTALL EXPANSION JOINT AT EXISTING TRACK CURB AND PROPOSED SIDEWALK. CONTRACTOR TO NOT TIE PROPOSED SIDEWALK TO EXISTING TRACK CURB

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F–880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

PAVING AND JOINT PLAN (SHEET 1 OF 2)

13 Nov 2024 11:24AM GregL
F:\project\BROOK_SP\NATEX\628–0025 Cy–Lakes HS Reno\Civil\C5.01 628–0025 JT.dwg
Includes Xref(s): X–GR.dwg; X–UT.dwg; X–TOPO.dwg; X–Site.dwg; X–TB.dwg; X–Seal.dwg; EM082224.dwg

SCALE: 1"= 30'

FLOODPLAIN INFORMATION:

ACCORDING TO F.I.R.M. MAP NO. 48201C0605M (COMMUNITY–PANEL NO. 4802870605M), MAP REVISED DATE: NOVEMBER 15, 2019. THE SUBJECT PROPERTY LIES WITHIN THE AREA DESIGNATED AS ZONE "X" UNSHADED. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

REFERENCE BENCHMARK:

RM200178 – HARRIS COUNTY FLOODPLAIN REFERENCE MARK NUMBER 200178 IS A BRASS DISK STAMPED "RM 200178" ON THE EAST, DOWN STREAM SIDE OF BRIDGE LOCATED ON GREENHOUSE ROAD AND BEAR CREEK, NEAR STREAM U102–00–00 IN THE ADDICKS RESERVOIR IN KEY MAP 446D.
ELEVATION = 124.88' (NAVD 88, 2001 ADJ.)

TEMPORARY BENCHMARKS:

TBM"A" – BOX CUT ON EDGE OF CONCRETE ON THE WEST SIDE OF THE TRACK LOCATED ±80 FEET NORTHEAST OF THE NORTHEAST CORNER OF THE METAL STAIRS ON THE NORTH SIDE OF BLEACHERS.
ELEVATION = 127.03'

TBM "B2" – BOX CUT ON "C" INLET LOCATED ON THE NORTHEASTERLY SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±40' NORTHEAST OF THE NORTHEAST CORNER OF THE MOST NORTHEASTERLY PORTABLE BUILDING.
ELEVATION = 125.58'

TBM "C" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED AT THE NORTH CORNER OF THE PARKING LOT FOR THE ATHLETIC FIELDS.
ELEVATION = 128.78'

TBM "C2" – BOX CUT ON CONCRETE BASE OF LIGHT STANDARD LOCATED ±20' SOUTHEAST OF THE SOUTHEAST CORNER OF THE PLAYGROUND.
ELEVATION = 129.27'

TBM "D" – BOX CUT ON "C" INLET LOCATED ON THE EAST SIDE OF THE MOST EASTERLY DRIVEWAY TO THE CAMPUS ±280' NORTH OF GOLDEN WAVE DRIVE.
ELEVATION = 123.35'

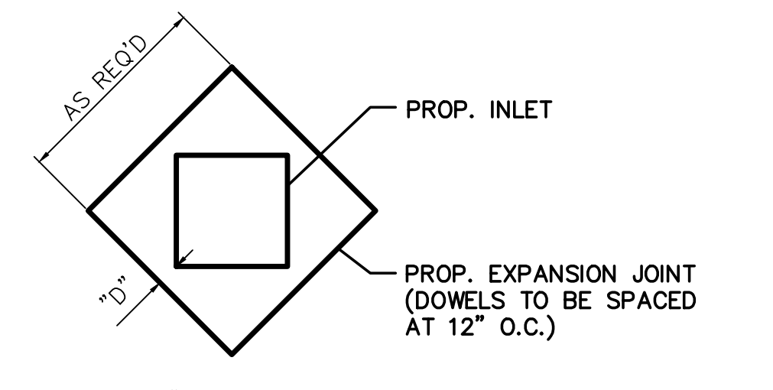
TBM "E" – BOX CUT ON CONCRETE LOCATED ±6.5' WEST OF THE NORTHEAST CORNER OF THE TENNIS COURTS.
ELEVATION = 127.95'

LEGEND:

— —	SAWED JOINT
━━	EXPANSION JOINT
▨	7" REINFORCED CONCRETE PAVEMENT
▨	6" REINFORCED CONCRETE PAVEMENT
▨	PROP. 4 ½ CONCRETE SIDEWALK

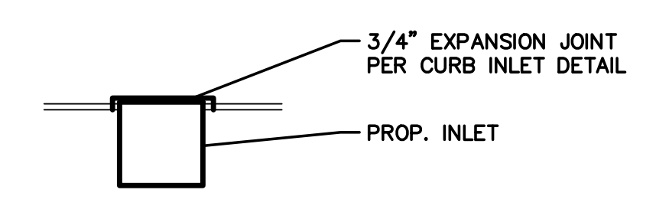
NOTES:

1. LOCATE EXPANSION JOINTS AS SHOWN. SAWED JOINTS SHALL BE SPACED EVENLY BETWEEN PAVEMENT EXPANSION JOINTS AT 15' MAXIMUM SPACING.
2. ALL CURBS TO BE 6" UNLESS OTHERWISE NOTED.
3. LINE UP JOINTS IN SIDEWALK W/ JOINTS IN PARKING LOT.
4. INSTALL EXPANSION JOINTS IN ALL DRIVEWAYS AT ROW LINE.



D = 24" FOR MANHOLES & GRATE INLETS
D = 12" FOR AREA INLETS & AREA DRAINS

STORM SEWER INLET W/ EXPANSION JOINT
N.T.S.



CURB INLET W/ EXPANSION JOINT
N.T.S.

KEY NOTES:

① IF SUITABLE CURB INLET TOP CANNOT BE OBTAINED CONTRACTOR TO REPLACE ENTIRE CURB INLET AND REPLACE ALL ADJACENT CURBING AND BLOCK OUT. CONTRACTOR TO HYDRO–MULCH ALL DISTURBED AREAS DISTURBED DURING CONSTRUCTION. CONTRACTOR TO ESTABLISHED 85% OF STANDING GRASS BEFORE FINAL ACCEPTANCE.

② CONTRACTOR TO DRILL 9" INTO EXISTING CONCRETE AND EMBED 18" LONG #5 REBAR (MAX.18" SPACING) (EPOXY IN PLACE) LEAVING 9" OF #5 REBAR TO FACILITATE CONNECTION TO PROPOSED PAVEMENT.

③ CONTRACTOR TO PROVIDE 2' REINFORCED CONCRETE SIDEWALK TURNDOWN EXPOSING 12" TO 3" OF EXPOSED CONCRETE TO MAKE UP ELEVATION DIFFERENCE BETWEEN PROPOSED SIDEWALK AND PROPOSED CONCRETE CURB.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F–880
FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

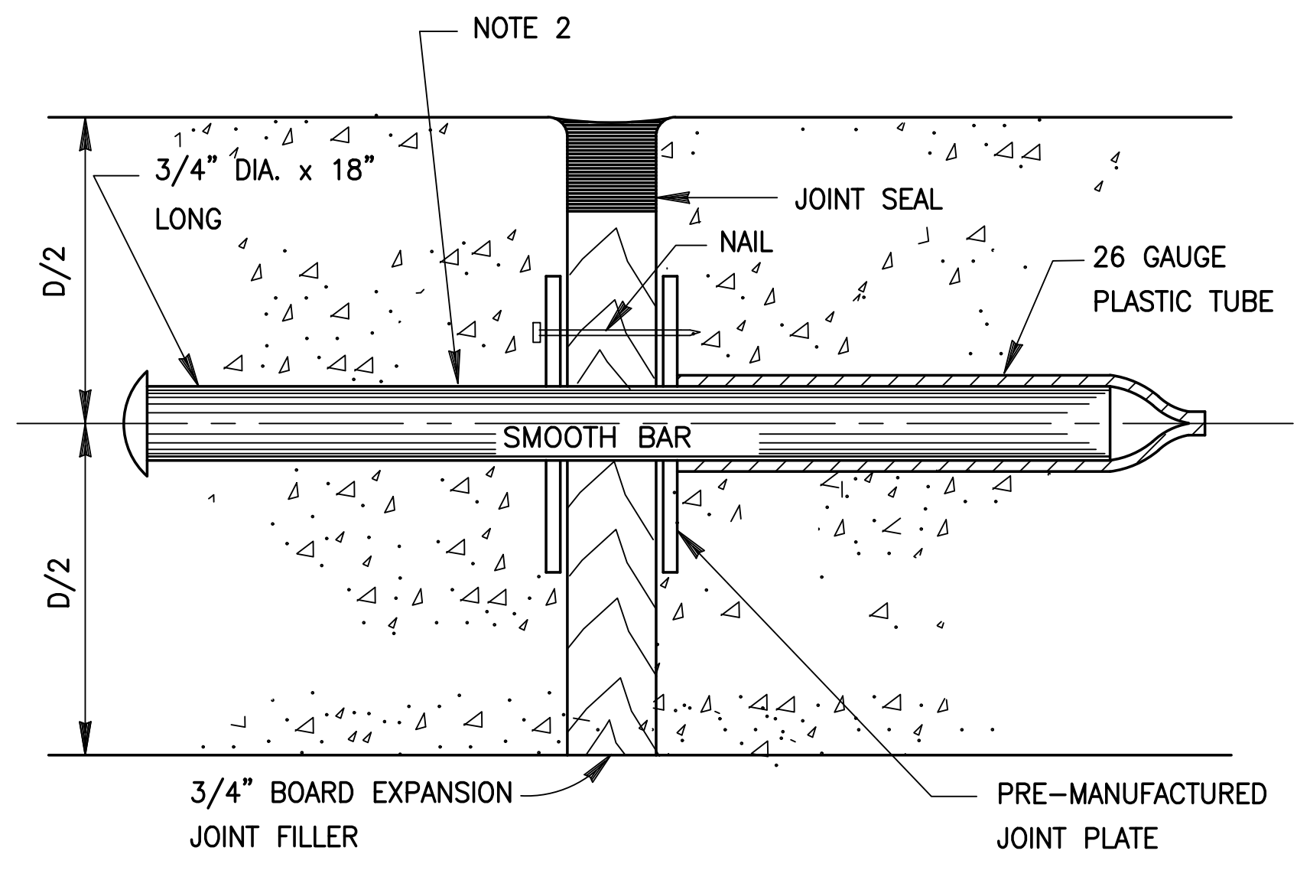
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

PAVING AND JOINT PLAN (SHEET 2 OF 2)

C5.02

13 Nov 2024 11:24AM GregL
F:\project\BROOK_SP\NATEX\628–0025 Cy–Lakes HS Reno\Civil\C5.02 628–0025 JT 2.dwg
Includes Xref(s): X–GR.dwg; X–UT.dwg; X–TOPO.dwg; X–Site.dwg; X–TB.dwg; X–Seal.dwg; EM082224.dwg

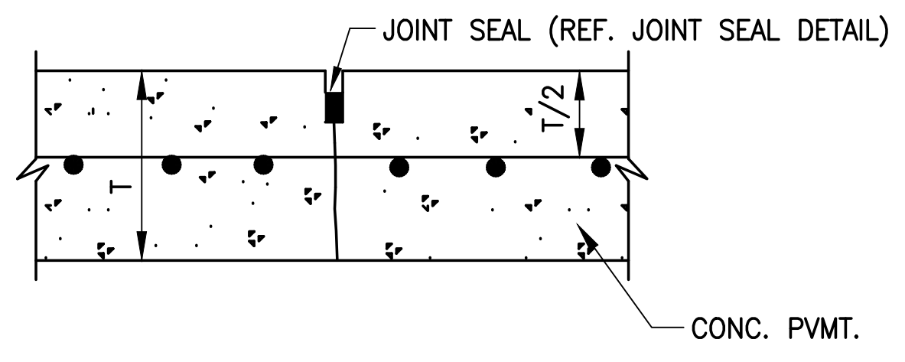


NOTES:

1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. UNITS TO BE SPACED ON 12" CENTERS
2. CENTER DOWEL HORIZONTALLY ON JOINT
3. CENTER DOWEL VERTICALLY IN CONCRETE BASE.

DOWEL TYPE EXPANSION JOINT

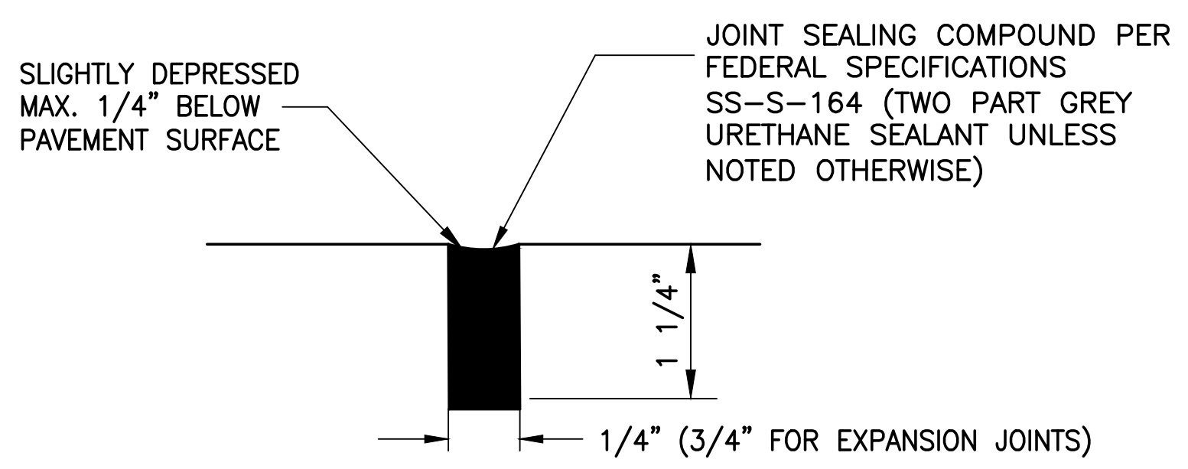
N.T.S.



SAWED JOINTS 1/8" WIDE OR LESS SHALL NOT BE SEALED.

SAWED JOINT

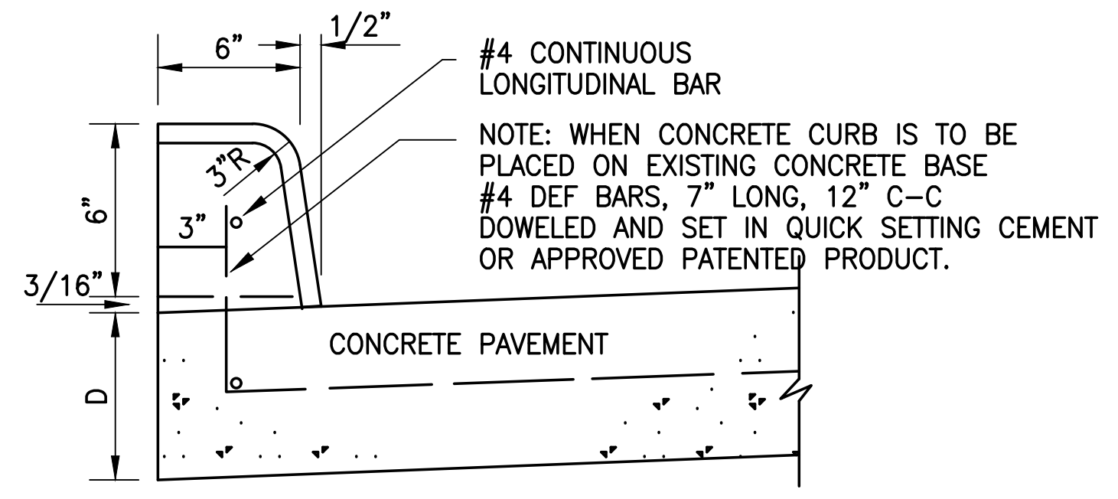
N.T.S.



JOINT SEAL

N.T.S.

NOTE:
WHERE THE DEPTH DOES NOT PERMIT THE USE OF BACKER ROD, A BOND BREAKER (POLYETHYLENE STRIP) MUST BE USED TO PREVENT THREE-POINT BONDING



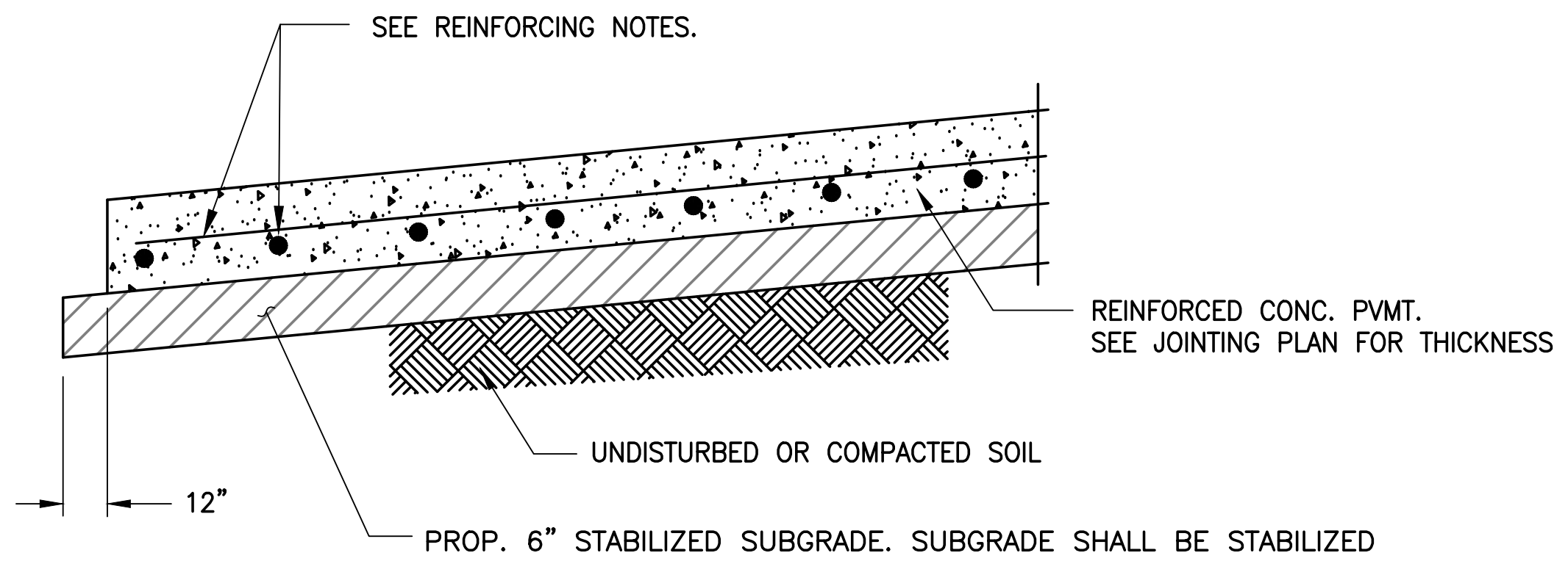
NOTE: WHEN CONCRETE CURB IS TO BE PLACED ON EXISTING CONCRETE BASE #4 DEF BARS, 7" LONG, 12" C-C DOWELED AND SET IN QUICK SETTING CEMENT OR APPROVED PATENTED PRODUCT.

NOTES:

1. MORTAR FINISH NOT REQUIRED WHEN CURB IS POURED BY A MACHINE, BUT CURB SHALL HAVE THE SAME OUTSIDE DIMENSIONS.
2. PROP. VERTICAL JOINT IN CURB TO BE SEALED WITH VERTICAL SEALANT MATCHING COLOR OF JOINT SEALANT IN PAVEMENT.

CONCRETE CURB

N.T.S.



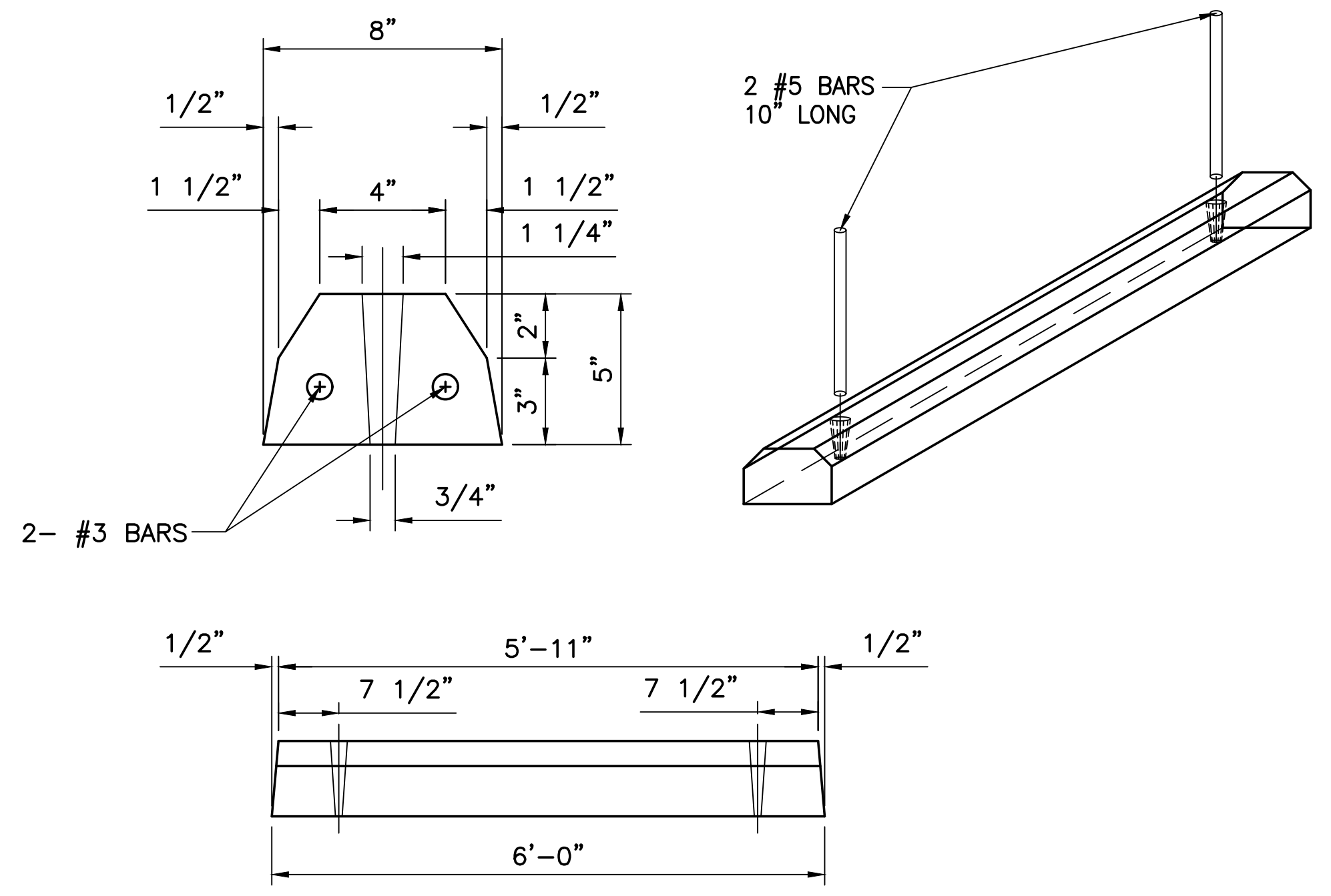
REINFORCING NOTES:

1. FOR 6" PAVEMENT PROVIDE #4 BARS @ 18" O.C.E.W.
2. FOR 7" PAVEMENT PROVIDE #5 BARS @ 18" O.C.E.W.

PROP. 6" STABILIZED SUBGRADE. SUBGRADE SHALL BE STABILIZED WITH 5-7% LIME AND COMPACTED TO A MINIMUM OF 95% OF THE STANDARD MOISTURE DENSITY RELATION (ASTM D 698) AT A MOISTURE CONTENT FROM ABOUT OPTIMUM TO 4% PERCENTAGE OF WET OF THE OPTIMUM MOISTURE CONTENT. ACTUAL LIME CONTENT SHALL BE DETERMINED IN FIELD PRIOR TO CONSTRUCTION. LIME PLACEMENT AND MIXING SHALL BE IN ACCORDANCE WITH TxDOT ITEM 260. SEE SOILS REPORT FOR DETAILS.

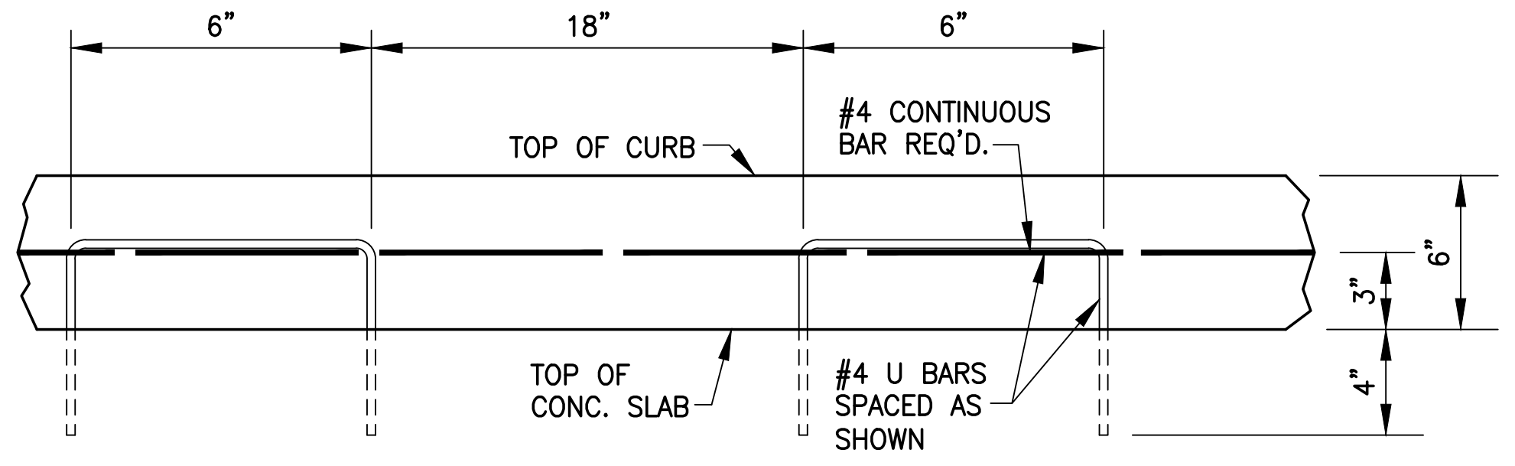
TYPICAL CONCRETE PAVEMENT WITHOUT CURB AND GUTTER

N.T.S.



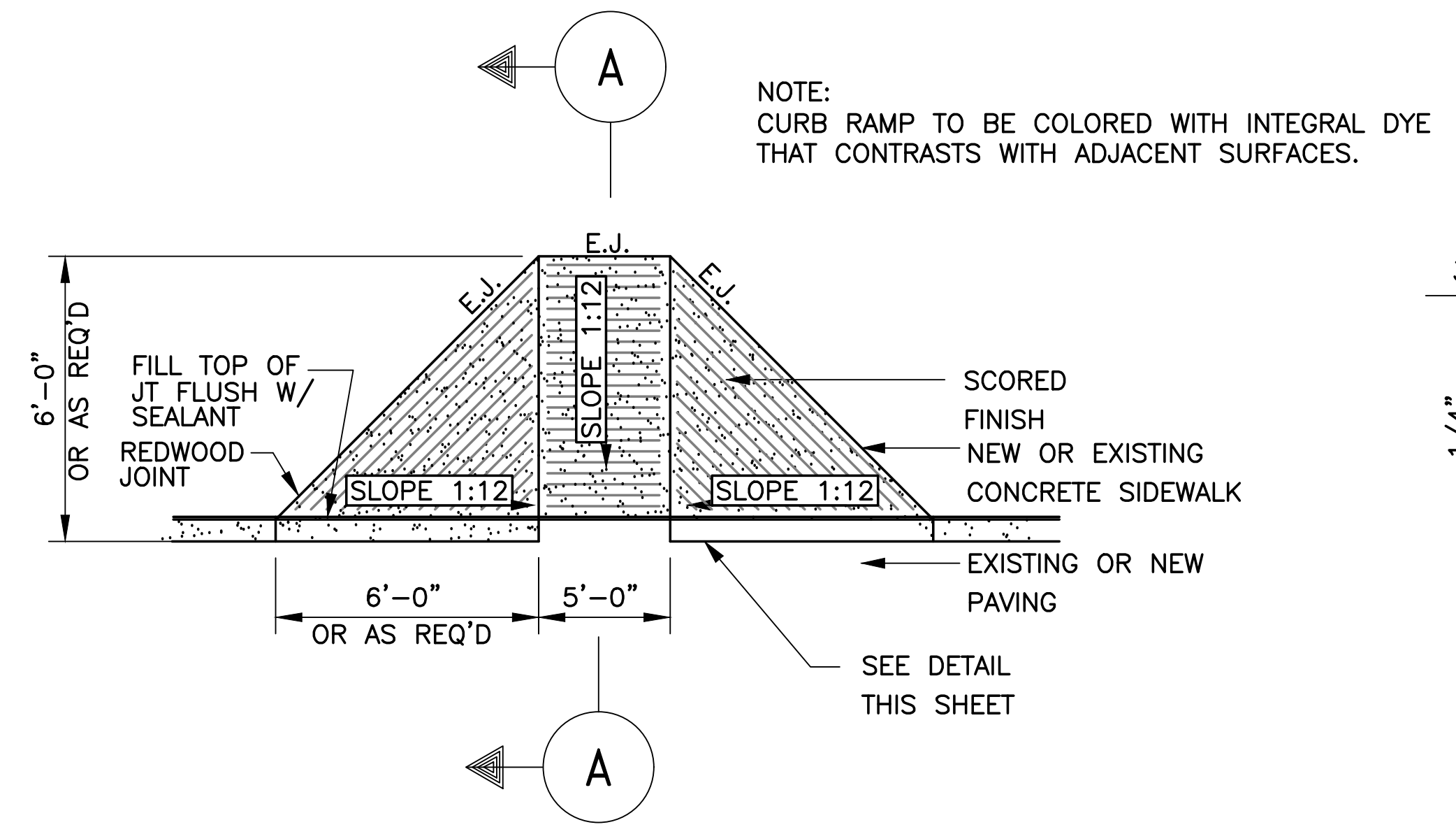
PRECAST CONCRETE WHEEL STOP

NTS



TYPICAL CONCRETE CURB REINFORCING

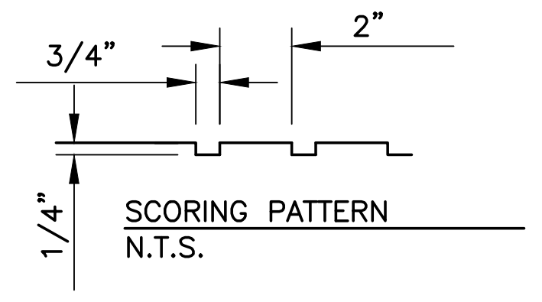
N.T.S.



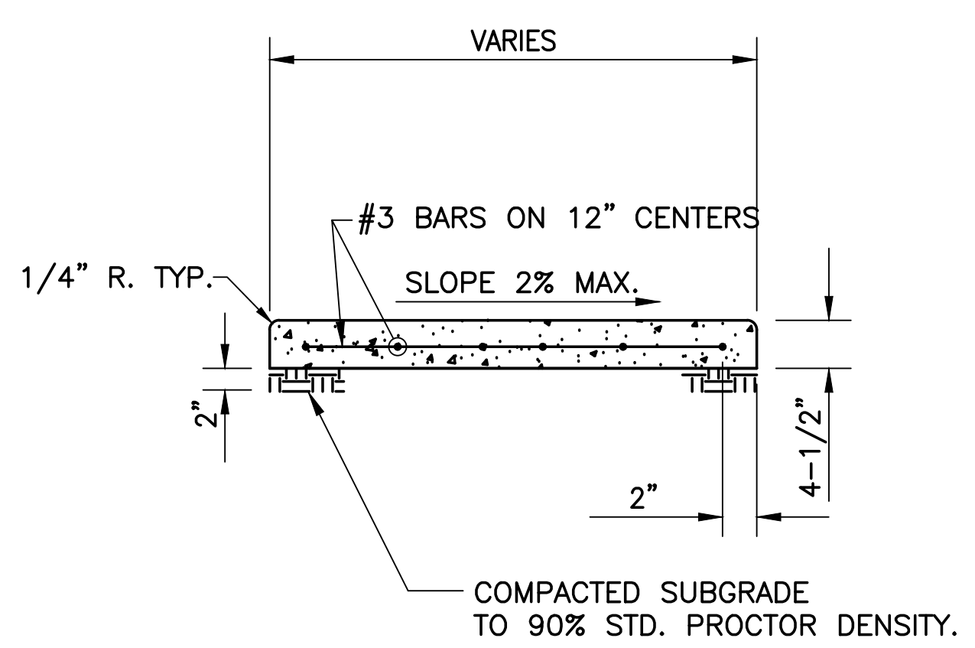
NOTE:
CURB RAMP TO BE COLORED WITH INTEGRAL DYE THAT CONTRASTS WITH ADJACENT SURFACES.

WHEEL CHAIR RAMP

NTS



SCORING PATTERN
N.T.S.

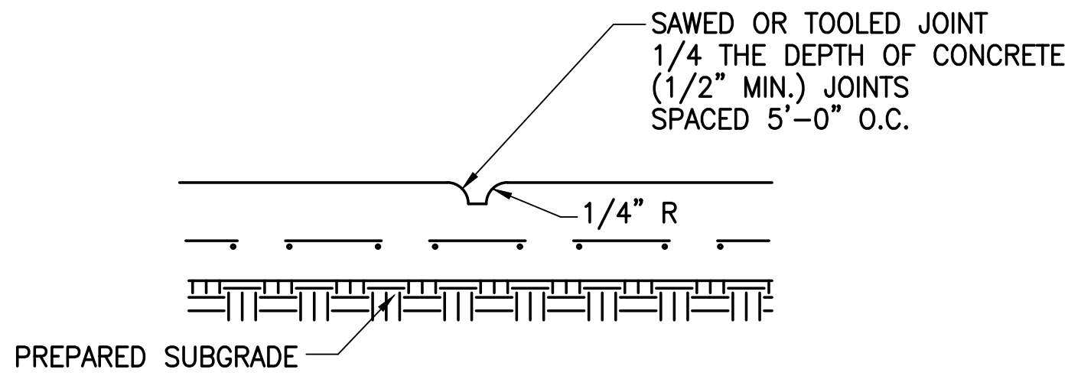


NOTES:

1. 1/2" FIBERBOARD EXPANSION MATERIAL REQUIRED WHERE SIDEWALK ABUTS BUILDING. 3/4" REDWOOD MATERIAL REQUIRED WHERE SIDEWALK ABUTS CURBS, DRIVEWAYS OR EXISTING SIDEWALKS.
2. WHERE NEW SIDEWALK IS PLACED AGAINST EXISTING SIDEWALK, SAWCUT EXISTING SIDEWALK TO AN EVEN STRAIGHT LINE PRIOR TO INSTALLATION OF THE NEW SIDEWALK AND INSTALL EXPANSION JOINT.
3. 1" MAX AGGREGATE.
4. CONTRACTOR SHALL INSTALL SIDEWALK EXPANSION JOINTS AT 20' MAX. INTERVALS AND CONSTRUCTION (SAWED JOINTS) ON 5' CENTERS FOR 5' WIDE SIDEWALKS AND 10' FOR ALL OTHER SIDEWALKS WIDER THAN 5'.
5. LINE UP JOINTS IN SIDEWALK W/ PAVING JOINTS.

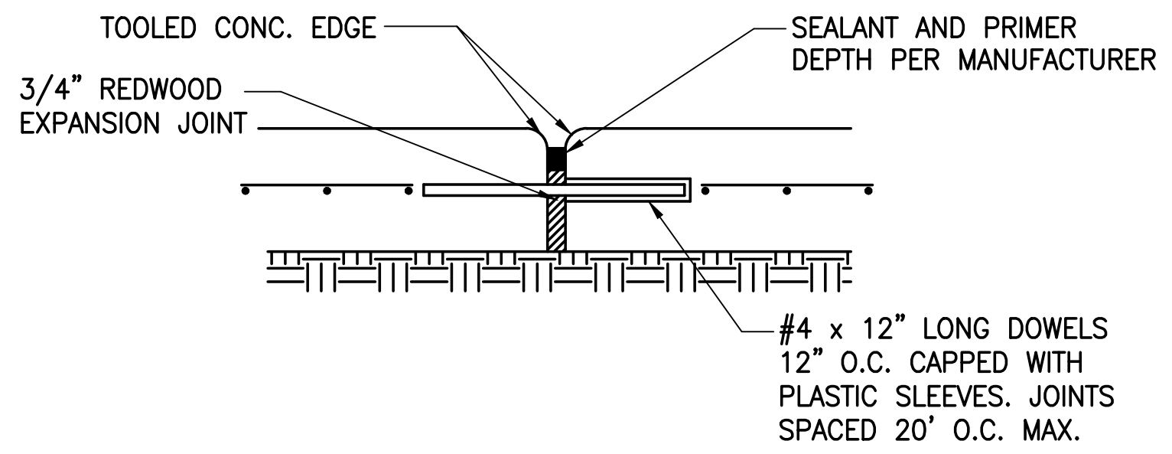
TYPICAL CONCRETE SIDEWALK

N.T.S.



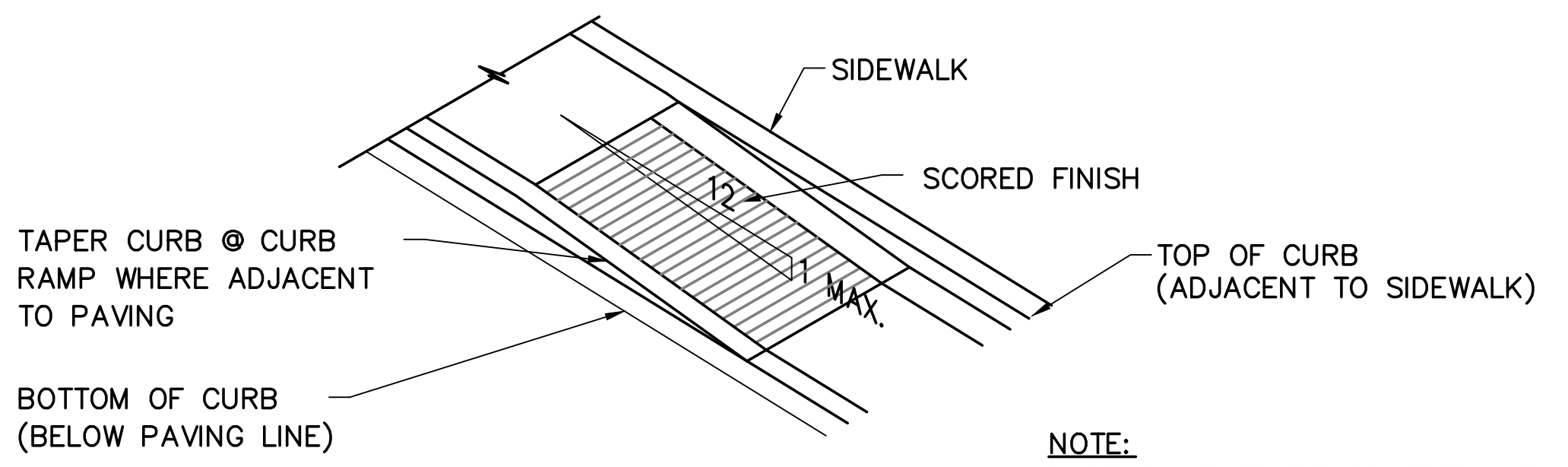
CONCRETE SIDEWALK CONTROL JOINT

N.T.S.



CONCRETE SIDEWALK EXPANSION JOINT

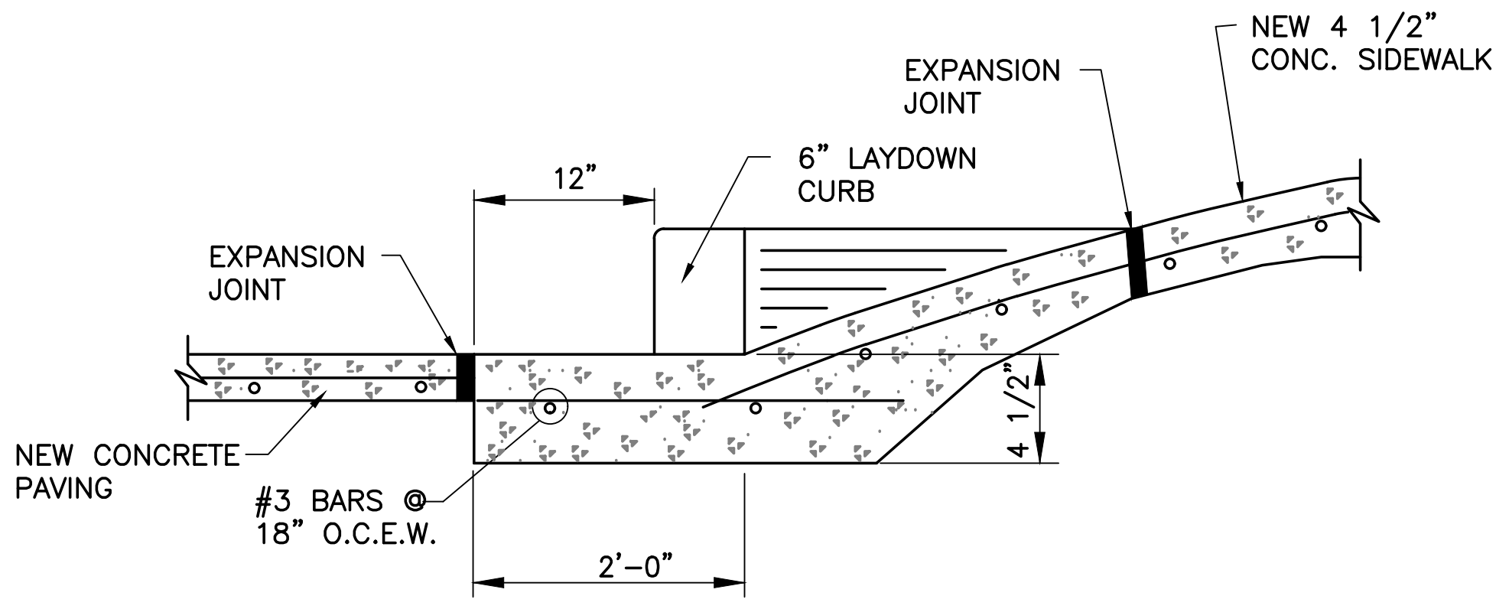
N.T.S.



NOTE:
CURB RAMP TO BE COLORED WITH INTEGRAL DYE THAT CONTRASTS WITH ADJACENT SURFACES. CONTRACTOR TO COORDINATE COLOR WITH ARCHITECT/OWNER.

DIRECTIONAL CURB RAMP

N.T.S.



WHEEL CHAIR RAMP CROSS-SECTION "A-A"

N.T.S.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT
BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

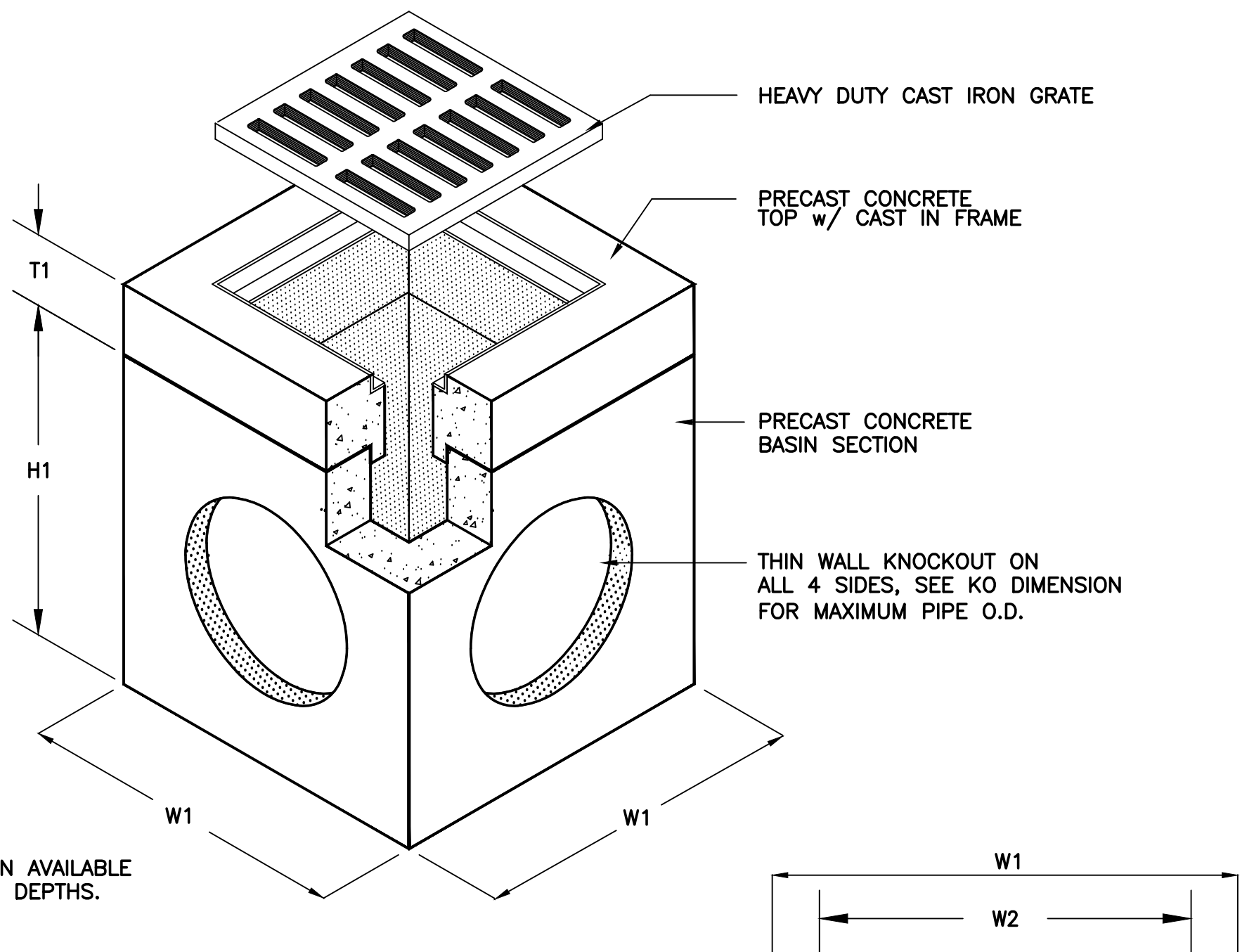
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	

PAVING
DETAILS

C7.01

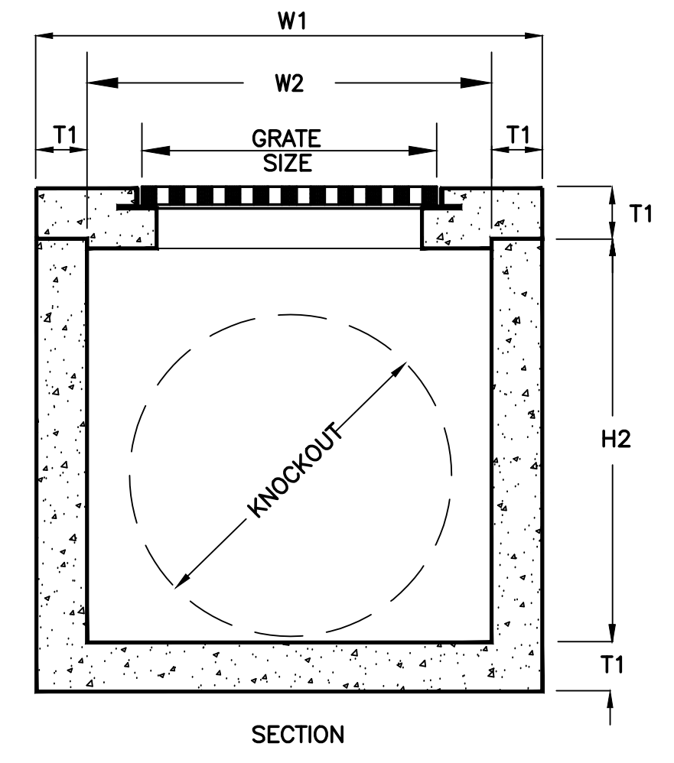
13 Nov 2024 11:24AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C7.01 628-0025-DT-PAV.dwg
Includes Xref(s): X-TB.dwg; X-Seal.dwg



NOTE:
RISER SECTION AVAILABLE IN 6" TO 18" DEPTHS.

DIMENSIONS						
W1	W2	H1	H2	T1	KO	GRATE SIZE[1]
24"	16"	34"	30"	4"	15"	18"x18"x1-½"
26"	18"	34"	30"	4"	17"	20"x20"x1-½"
32"	22"	41"	36"	5"	22"	24"x24"x2"
37"	25"	42"	36"	6"	24"	27"x27"x2"
42"	30"	42"	36"	6"	30"	32"x32"x2"
48"	36"	42"	36"	6"	32"	38"x38"x2"
60"	48"	54"	48"	6"	48"	38"x38"x2"
72"	60"	66"	60"	6"	60"	38"x38"x2"
84"	72"	78"	72"	6"	72"	38"x38"x2"
96"	83"	78"	72"	6"	84"	38"x38"x2"

1. LARGER GRATES SIZES ARE AVAILABLE.



SECTION

SPECIFICATIONS

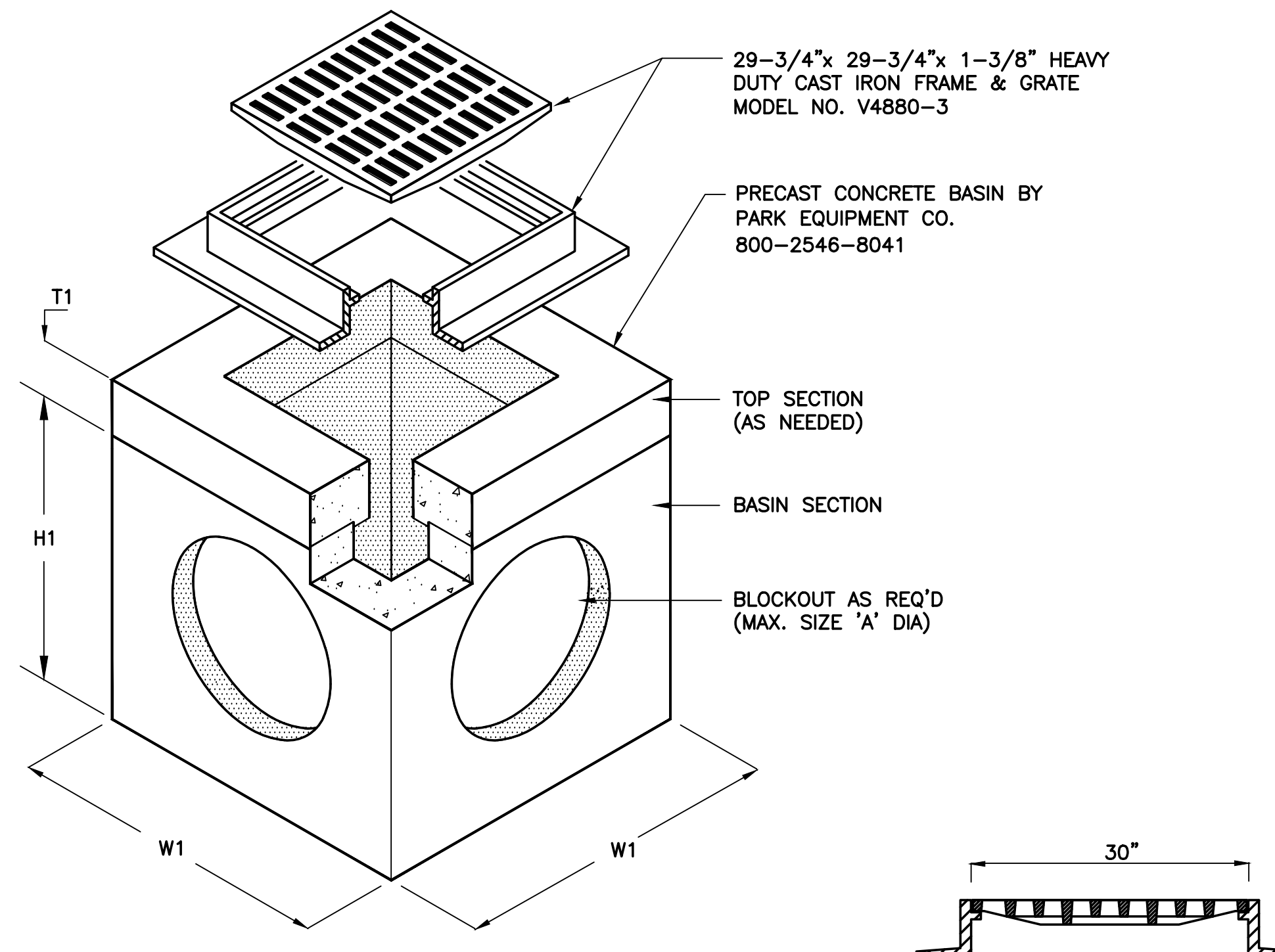
CONCRETE : Class 1 concrete with design strength of 4,500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

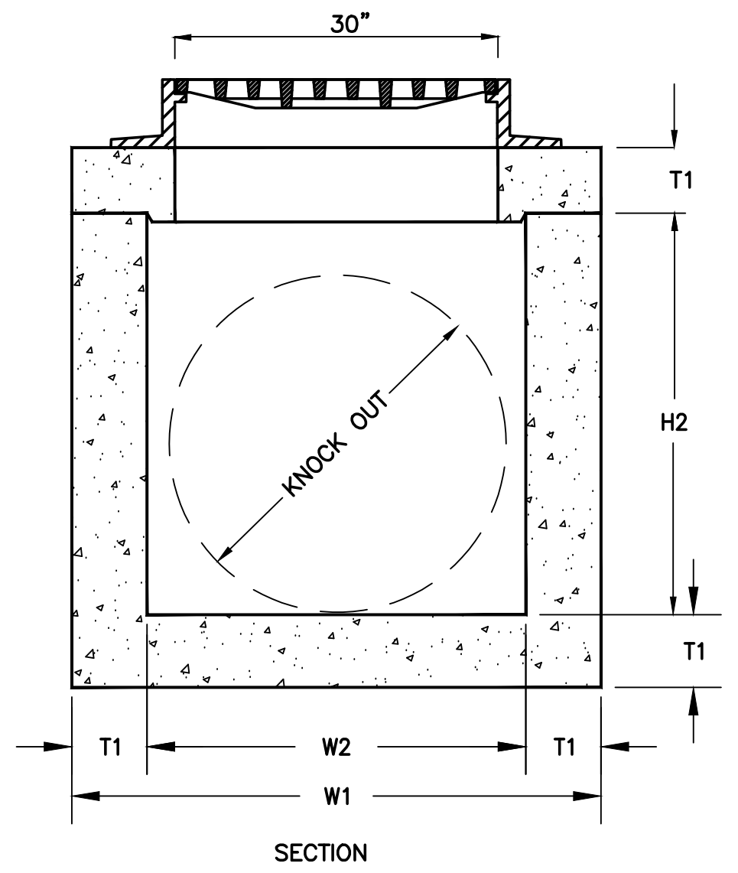
GRATE INLET IN GRASS/LANDSCAPED AREAS

N.T.S.



ISOMETRIC

DIMENSIONS						
W1	W2	H1	H2	T1	K.O.	GRATE SIZE
42"	30"	36"	30"	6"	30"	30"X30"
48"	36"	42"	36"	6"	36"	30"X30"
60"	48"	54"	48"	6"	48"	30"X30"
72"	60"	66"	60"	6"	60"	30"X30"
84"	72"	78"	72"	6"	72"	30"X30"
96"	83"	78"	72"	6"	84"	30"X30"



SECTION

SPECIFICATIONS

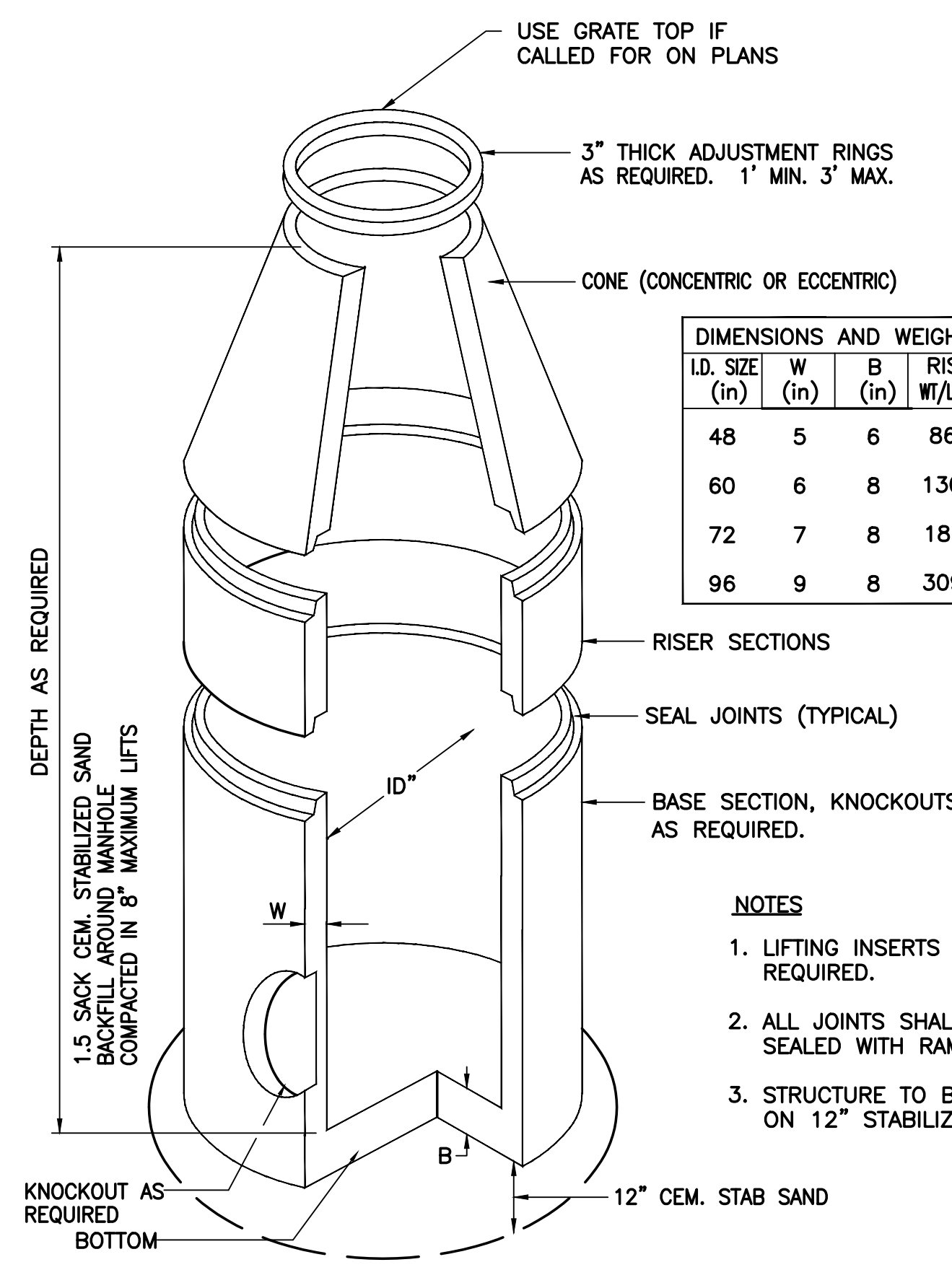
CONCRETE : Class II concrete with design strength of 4,500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

REINFORCEMENT: Grade 60 reinforced with steel rebar to conform to ASTM A615 on required centers or equal.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

GRATE INLET IN PAVEMENT

N.T.S.



DIMENSIONS AND WEIGHTS			
I.D. SIZE (in)	W (in)	B (in)	RISER WT/LF (lb)
48	5	6	868
60	6	8	1300
72	7	8	1811
96	9	8	3090

NOTES

1. LIFTING INSERTS AS REQUIRED.
2. ALL JOINTS SHALL BE SEALED WITH RAM-NECK.
3. STRUCTURE TO BE PLACED ON 12" STABILIZED BASE.

SPECIFICATIONS:

CONCRETE: CLASS 1 CONCRETE WITH A DESIGN STRENGTH OF 4,500 PSI AT 28 DAYS. RATED FOR H-20 LOADING.

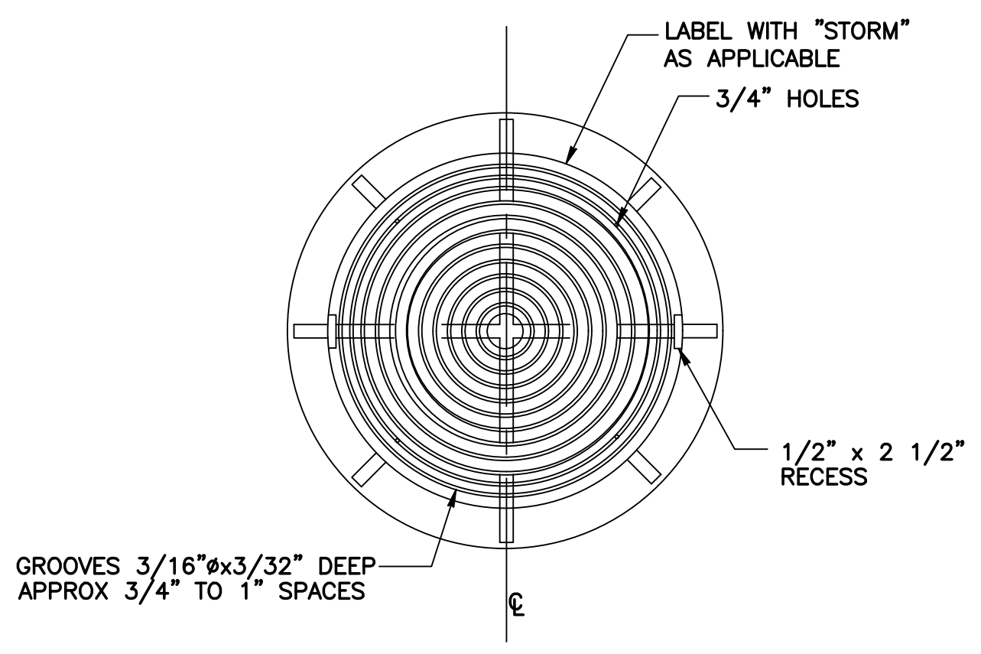
REINFORCEMENT: STRUCTURAL REINFORCEMENT CONFORMING TO ASTM-C-478.

C.I. CASTINGS: CAST IRON FRAMES AND GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 35.

PRECAST CONCRETE STORM SEWER MANHOLE

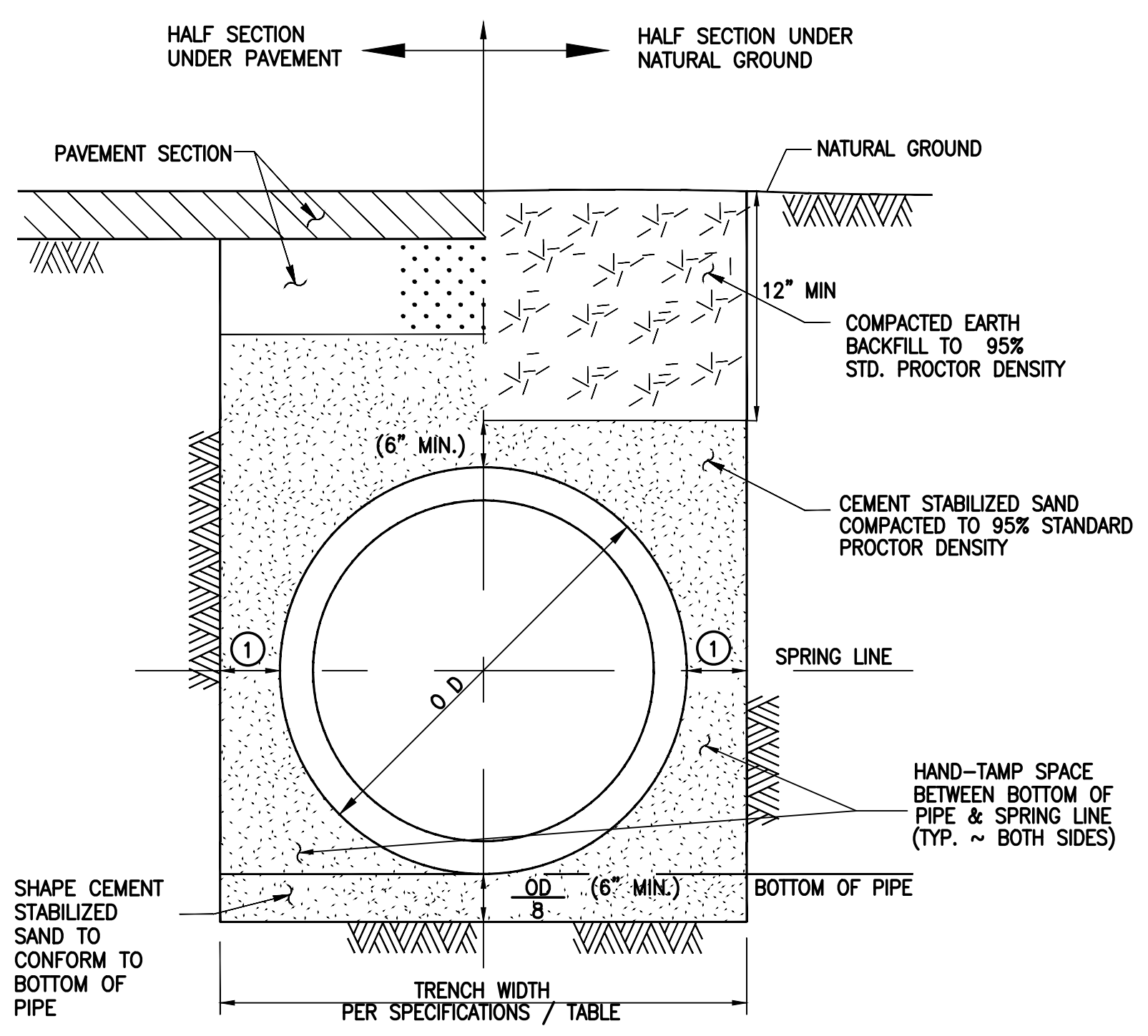
N.T.S.

ALL LETTERS SHALL BE 2" HIGH AND SHALL BE RAISED 1/8" LINE WIDTH FOR LETTERS SHALL BE 1/4" WIDE



STORM SEWER MANHOLE COVER

N.T.S.



RECOMMENDED MINIMUM TRENCH WIDTHS

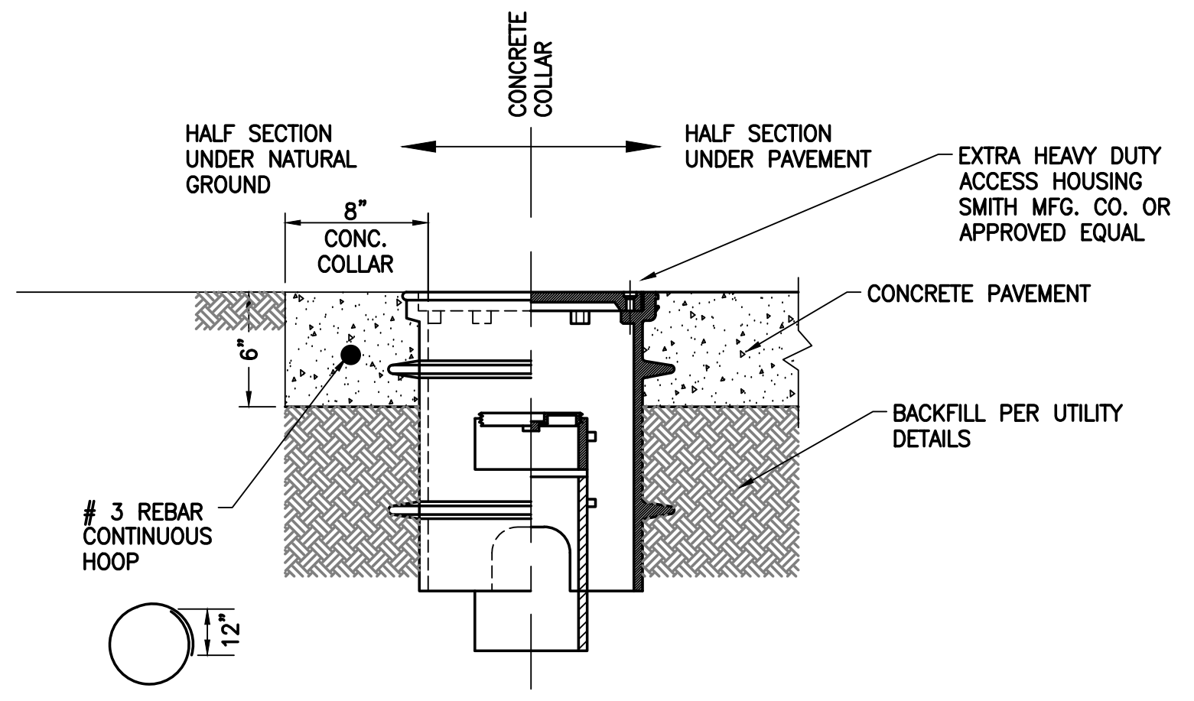
① 4" THRU 24" PIPE DIA. = 12" MIN. WIDTH.
30" AND GREATER PIPE DIA. = 18" MIN. WIDTH.

NOTES:

1. WHERE SOIL CONDITIONS REQUIRE, THE ENGINEER MAY ORDER USE OF GRANULAR MATERIAL IN LIEU OF CEMENT STABILIZED SAND BEDDING.
2. WHERE WET SAND IS ENCOUNTERED, REINFORCED CONCRETE PIPE SEWERS SHALL BE CONSTRUCTED USING APPROVED SPECIAL DESIGN AS SHOWN ON DRAWINGS.
3. MAX TRENCH WIDTH SHALL NOT BE GREATER THAN MIN. TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.
4. CEMENT-SAND BACKFILL SHALL CONSIST OF NOT LESS THAN 1.5 SACKS OF CEMENT PER TON OF SAND WITH SUFFICIENT WATER TO HYDRATE THE CEMENT. THE MATERIAL SHALL BE PLACED IN LIFTS 8 INCHES THICK MAXIMUM AND COMPACTED TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE TO THE BOTTOM OF THE PAVEMENT SUBGRADE.
5. ALL BEDDING AND BACKFILL SHALL BE INCLUDED IN THE COST OF THE PIPE.

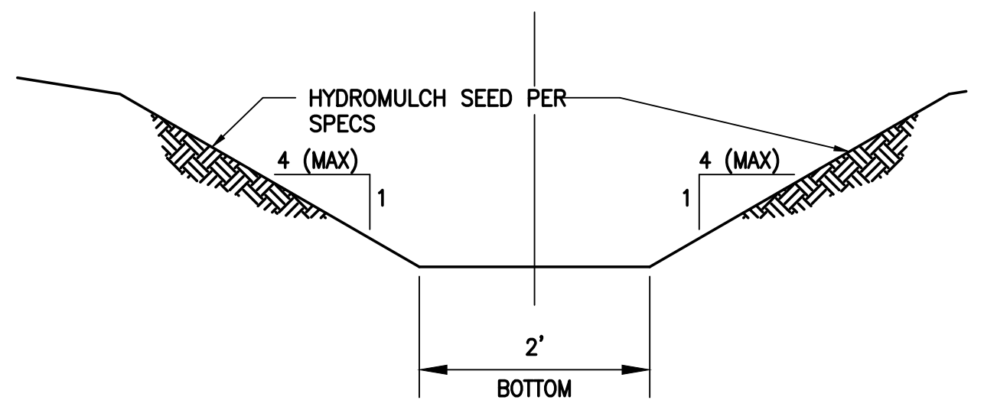
BEDDING FOR STORM SEWER

N.T.S.



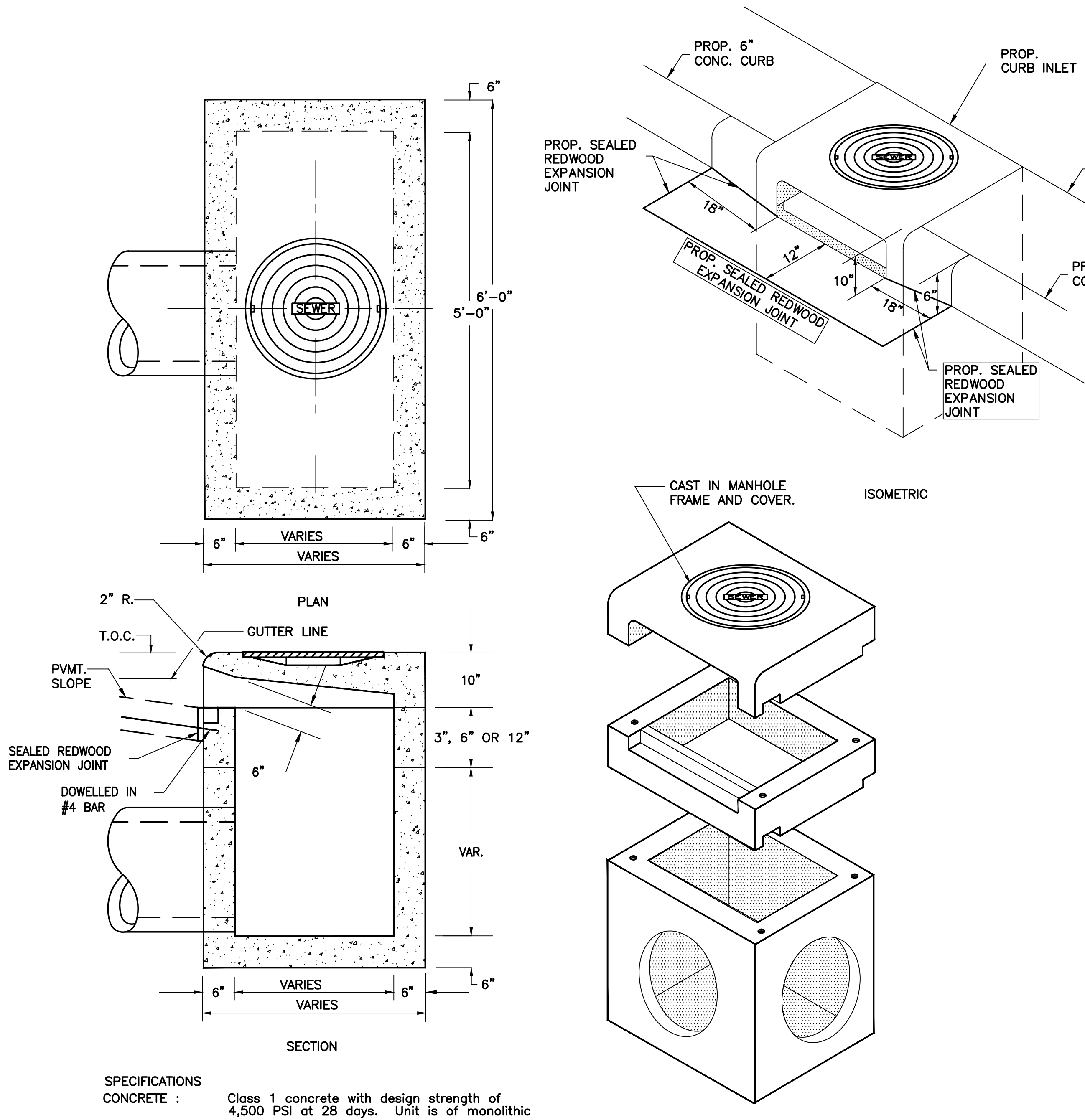
STORM SEWER CLEANOUT

N.T.S.



TYPICAL SWALE

N.T.S.



SPECIFICATIONS

CONCRETE : Class 1 concrete with design strength of 4,500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

REINFORCEMENT: Grade 60 reinforced. No. 4 steel rebar to conform to ASTM A615 on required centers or equal.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

NOTE: ADJUST BASE SIZE AS REQUIRED

CURB INLET DETAIL

N.T.S.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

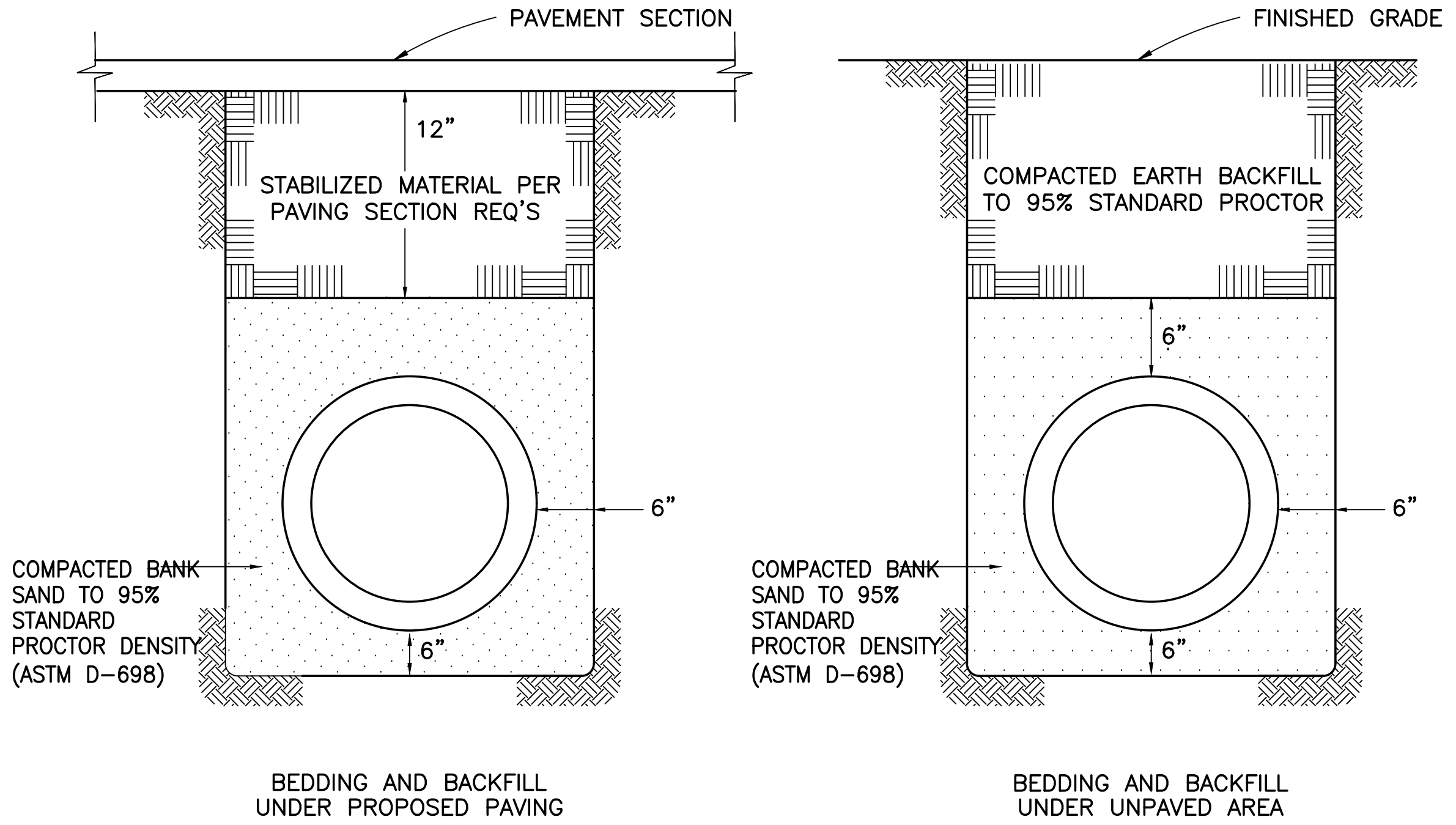
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

STORM SEWER DETAILS

C7.02

13 Nov 2024 11:24AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C7.02 628-0025 DT-STM.dwg
Includes Xref(s): X-TB.dwg; X-Seal.dwg

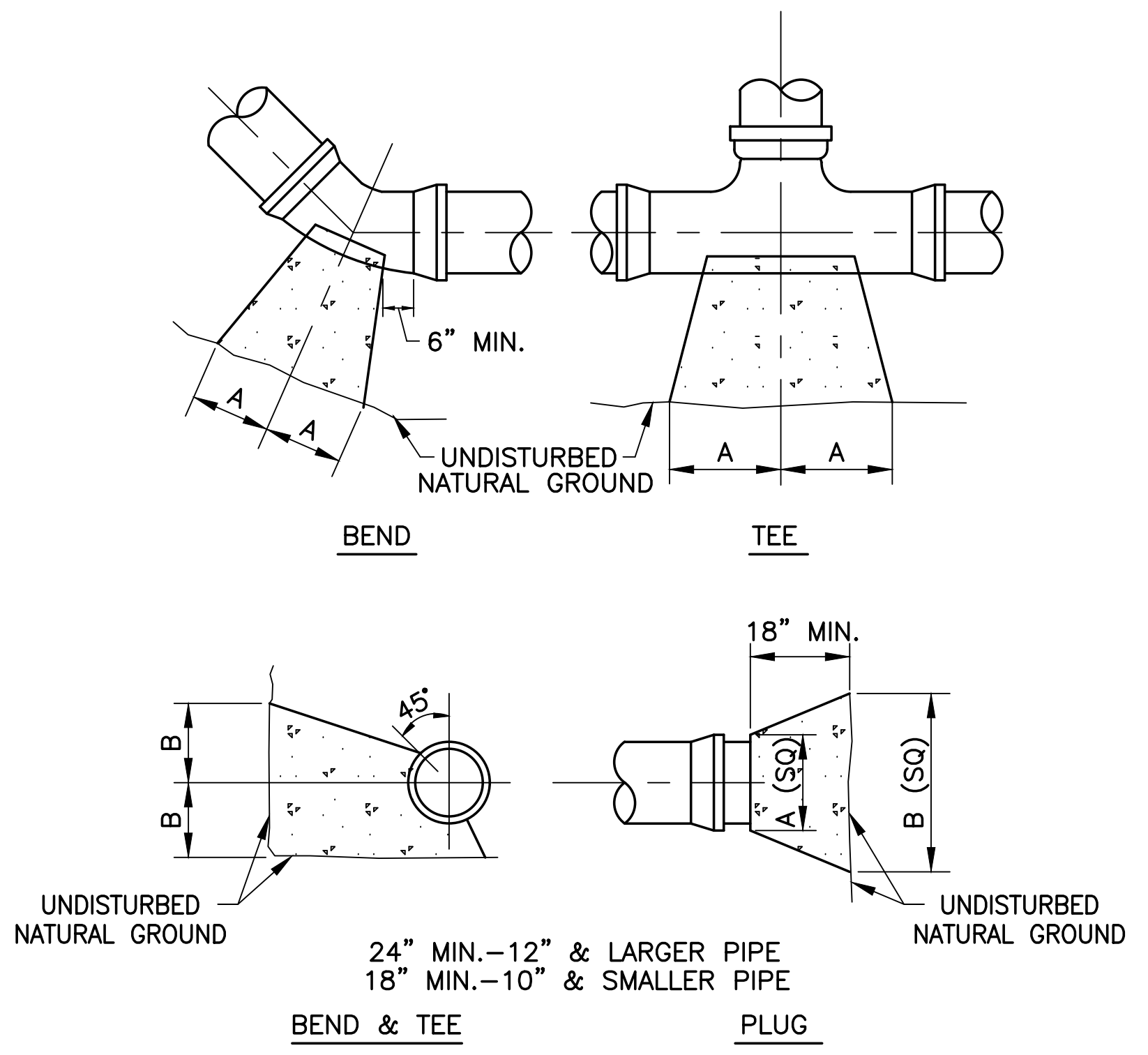


BEDDING AND BACKFILL UNDER PROPOSED PAVING

BEDDING AND BACKFILL UNDER UNPAVED AREA

WATER LINE TRENCH

N.T.S.

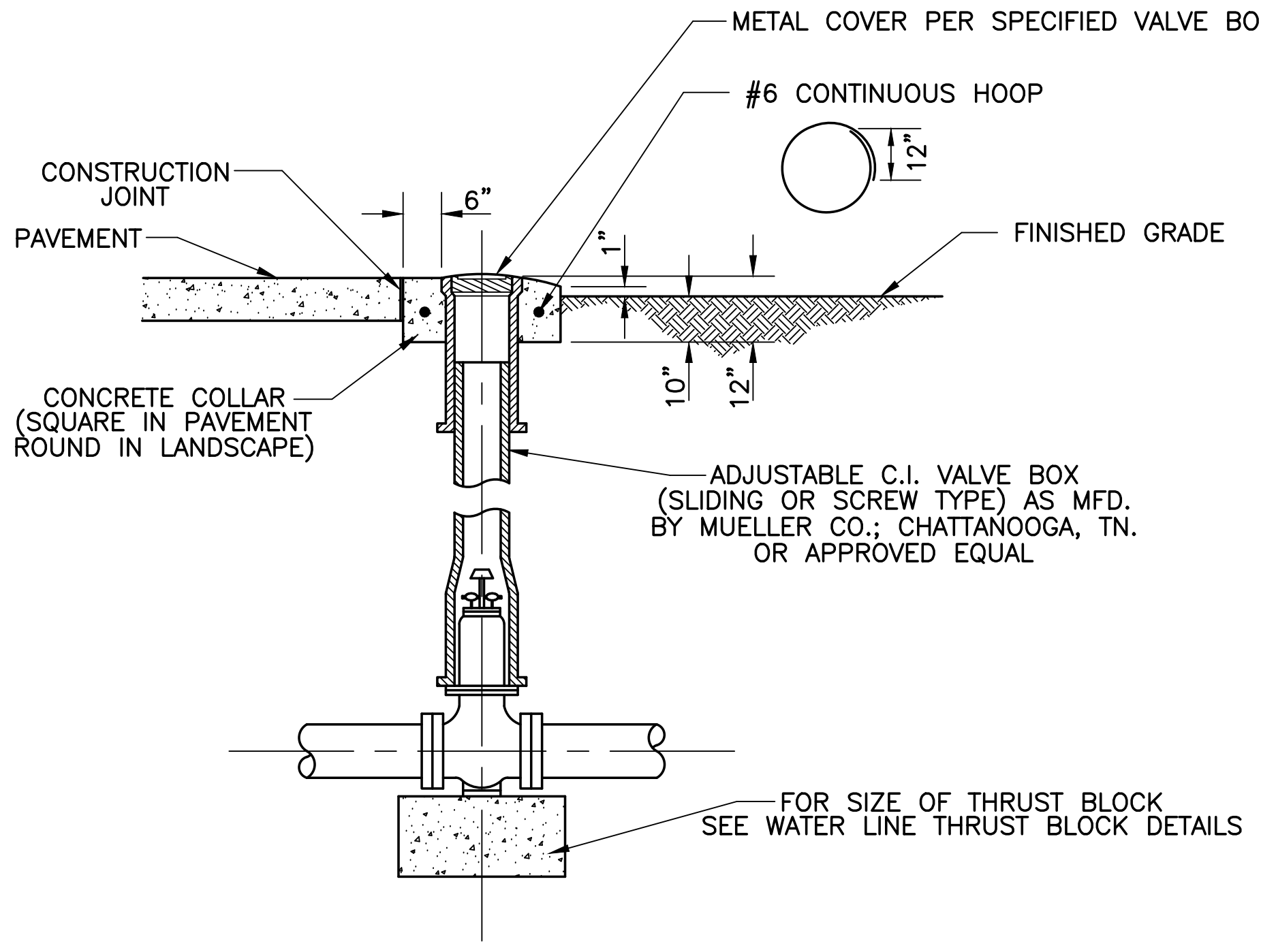


SIZE	90° BEND		45° BEND		22 1/2° BEND		TEES		PLUGS	
	A	B	A	B	A	B	A	B	A	B
2 1/2"	12"	7"	6"	7"	6"	6"	7"	8"	8"	14"
6"	16"	10"	9"	10"	6"	12"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"

ALL CONCRETE SHALL BE MIN. 5SK, 3,000 P.S.I.

WATER LINE THRUST BLOCK

N.T.S.



VALVE BOX

N.T.S.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT
BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

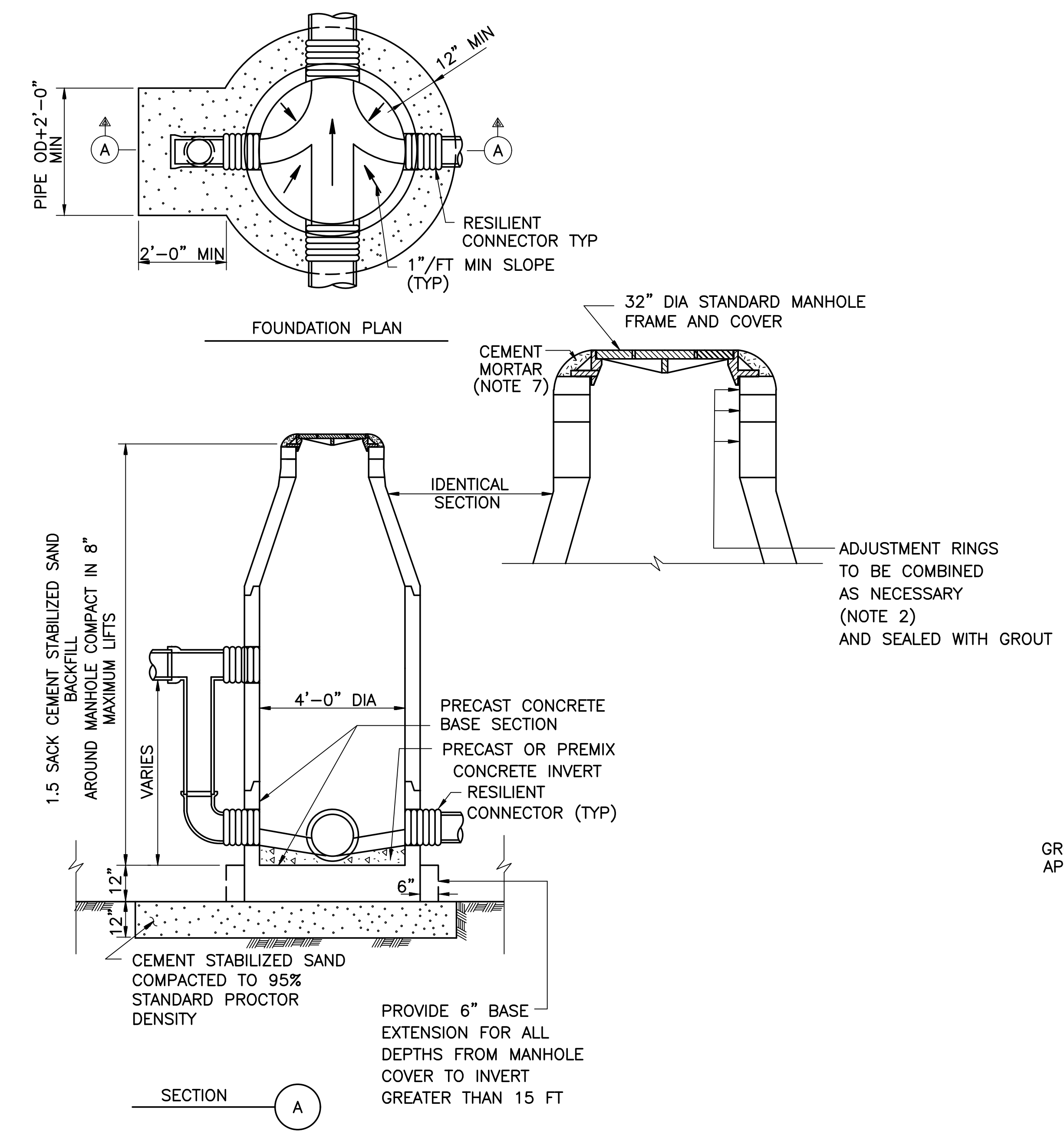
WATER LINE DETAILS

C7.03

13 Nov 2024 11:25AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C7.03 628-0025 DT-WTR.dwg
Includes Xref(s): X-TB.dwg; X-Seal.dwg

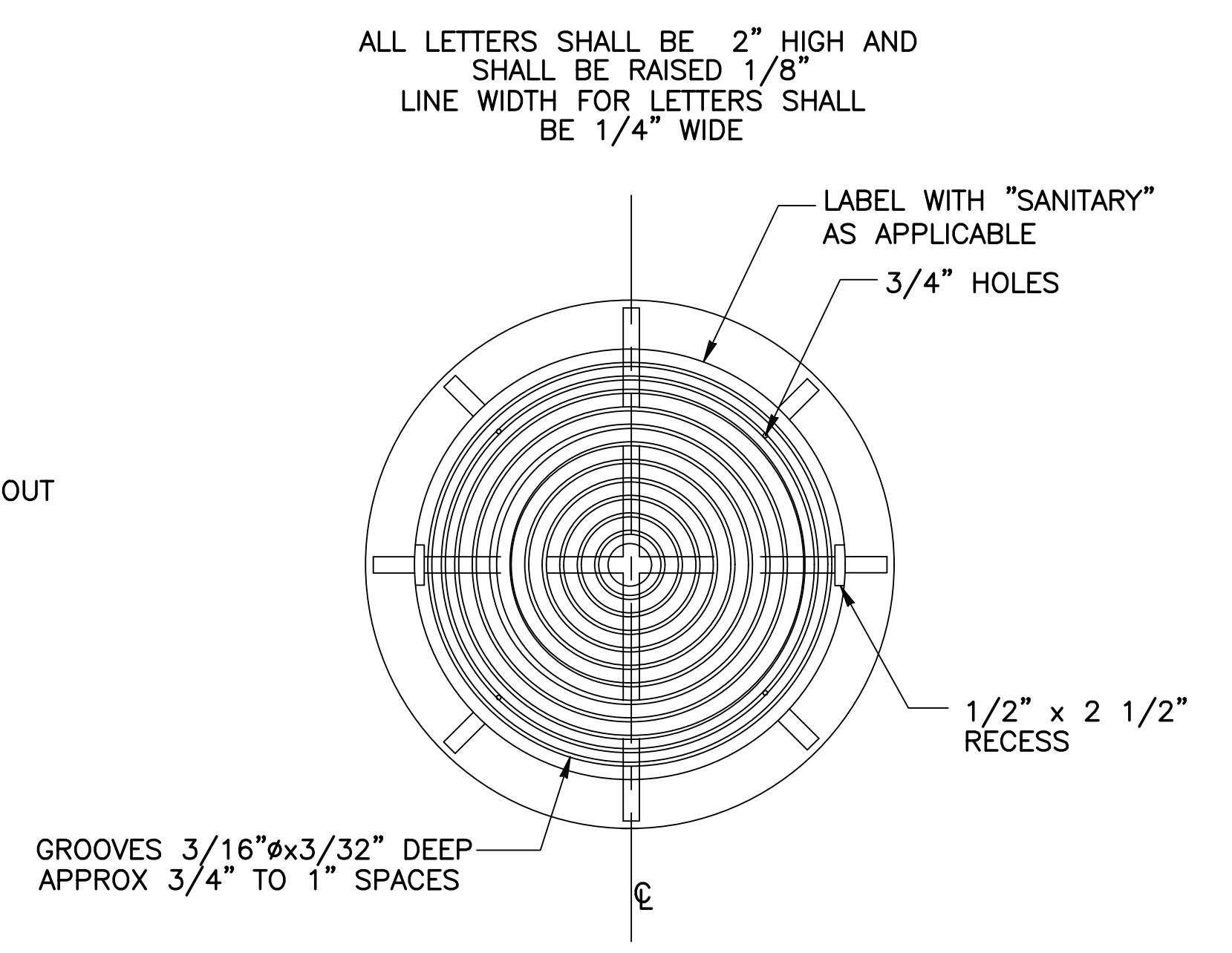
NOTES:

1. DEPTH OF MANHOLE DETERMINES SECTIONS REQUIRED.
2. PRECAST CONCRETE RINGS SHALL BE PROVIDED FOR A COMBINED ADJUSTMENT HEIGHT OF AT LEAST 12". THE TOTAL HEIGHT OF THE ADJUSTMENT RINGS SHALL NOT EXCEED 1'–6".
3. MANHOLE WALL THICKNESS FOR DEPTH EXCEEDING 12'–0" SHALL BE DETERMINED TO MEET LOADING CONDITIONS. MIN THICKNESS 5".
4. MANHOLE DROP AND INTERSECTING PIPES SHALL BE INSTALLED ONLY WHEN CALLED FOR ON DRAWINGS OR WHEN DIFFERENCE IN FLOW LINE ELEVATIONS OF MANHOLE EXCEEDS 24".
5. SEAT MANHOLE FRAME IN SEALANT.
6. ECCENTRIC PRECAST CONCRETE MANHOLE MAY BE USED.
7. OMIT CEMENT MORTAR WHEN MANHOLE IS LOCATED IN PAVED AREAS.
8. MIN REINFORCING IN THE PRECAST CONCRETE BASE SHALL BE # 5 @ 8" EW.
9. INTERIOR SURFACE OF MANHOLE SHALL BE SEALED WITH THANE COAT FE–100 OR APPROVED EQUAL AS PER MANUFACTURERS SPECIFICATIONS.



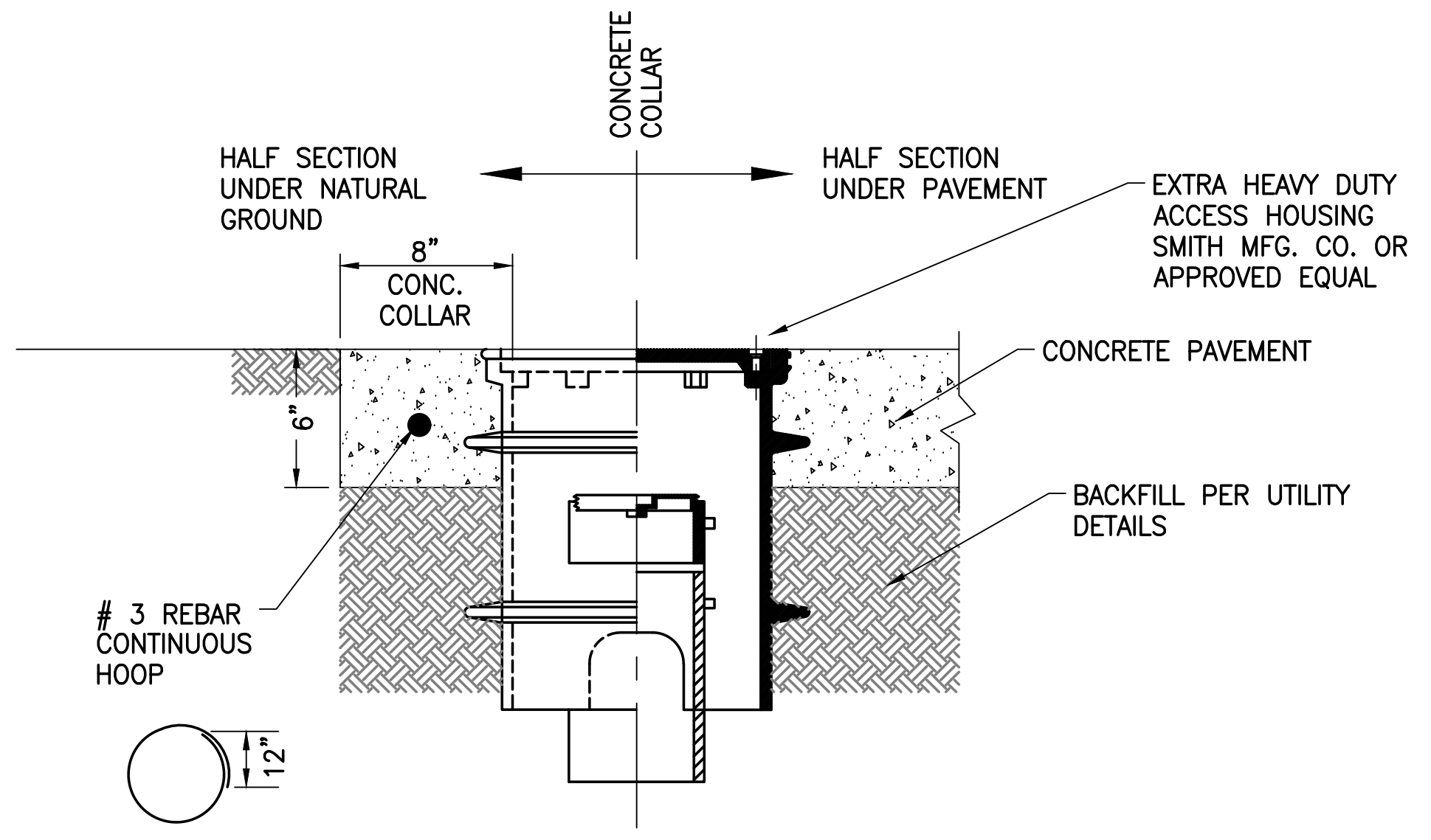
SANITARY SEWER MANHOLE 4'–0" DIA

N.T.S.



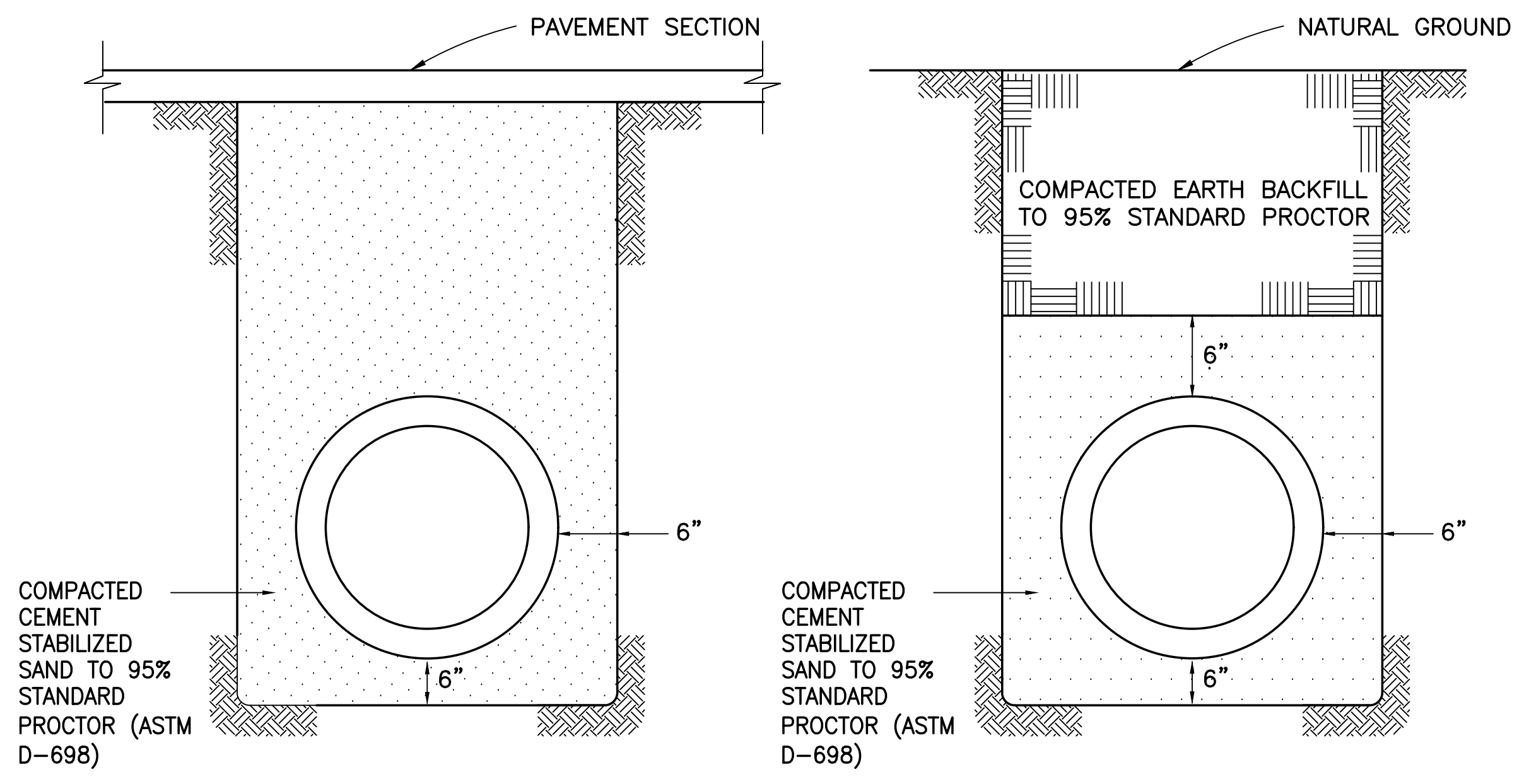
SANITARY SEWER MANHOLE COVER

N.T.S.



SANITARY SEWER CLEANOUT

N.T.S.

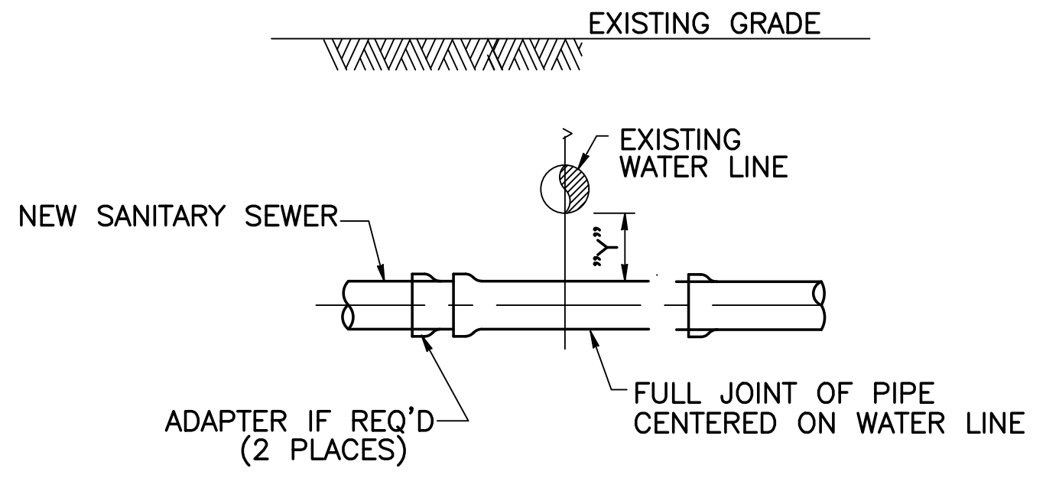


BEDDING AND BACKFILL UNDER PROPOSED PAVING

BEDDING AND BACKFILL UNDER UNPAVED AREA

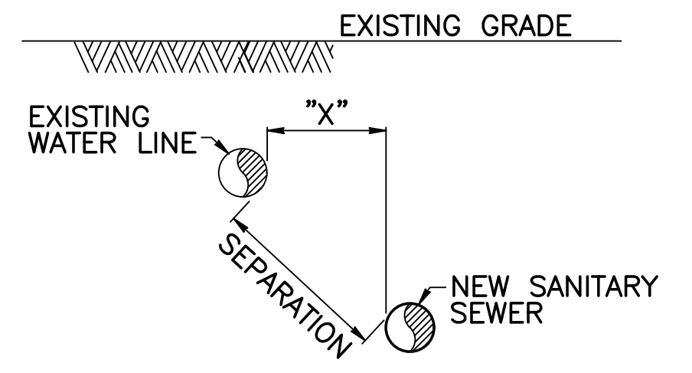
SANITARY SEWER TRENCH

N.T.S.



INSTALLATION REQUIREMENTS
1. IF "Y" IS GREATER THAN 6" AND "Y" IS LESS THAN 2', USE MINIMUM 18 FT JOINT OF PRESSURE–RATED PIPE PER TABLE 02730–04. 2. IF "Y" IS GREATER THAN 2' AND "Y" IS LESS THAN 9', USE GRAVITY SEWER PIPE IN CEMENT–STABILIZED SAND EMBEDMENT. 3. IF "Y" IS GREATER THAN 9', USE STANDARD EMBEDMENT AND NORMAL JOINT SPACING.

NEW SANITARY SEWER CROSSING EXISTING WATER LINE



INSTALLATION REQUIREMENTS
1. IF "X" IS LESS THAN 9' AND SEPARATION IS LESS THAN 9', USE PRESSURE–RATED PIPE MH TO MH. "X" MUST BE AT LEAST 4 FT. 2. IF "X" IS GREATER THAN OR EQUAL TO 4' AND SEPARATION IS 9' OR GREATER, USE STANDARD PIPE AND EMBEDMENT.

NEW SANITARY SEWER PARALLEL TO EXISTING WATER LINE

NOTES:

1. SANITARY SEWER MUST BE BELOW WATER LINE WHEREVER POSSIBLE. WHEN WATERLINE IS BELOW THE SANITARY SEWER PROVIDE MINIMUM 2 FT SEPARATION AND INSTALL PIPE SAME AS FOR SEWER BELOW WATER.
2. WHEN PRESSURE–RATED PIPE IS REQUIRED, PROVIDE PIPE WITH MINIMUM 150 psi PRESSURE RATING.
3. ADAPTERS MUST BE FACTORY MOLDED OR FABRICATED, WITH RING STIFFNESS AT LEAST EQUAL TO THE ADJOINING SANITARY SEWER PIPE, AND USING RESILIENT GASKET OR SEAL MATERIAL. FLEXIBLE RUBBER "BOOT" TYPE ADAPTERS WILL NOT BE ACCEPTED.
4. INSTALL FORCE MAINS SAME AS FOR GRAVITY SEWER, USING SPECIFIED PRESSURE PIPE.
5. "Y" MUST ALWAYS BE GREATER THAN OR EQUAL 6".
6. "X" MUST BE GREATER THAN OR EQUAL TO 4 FT.
7. ALTERNATIVES MAY BE SHOWN ON THE DRAWINGS OR DESCRIBED IN THE SPECIFICATIONS.
8. SEPARATION REQUIREMENTS SHOWN HERE DO NOT APPLY TO SERVICE CONNECTIONS – REFER TO PLUMBING CODE FOR APPLICABLE REQUIREMENTS.
9. CEMENT–STABILIZED SAND SHALL BE $1\frac{1}{2}$ SACKS OF CEMENT PER CUBIC YARD OF SAND.

TABLE 02730–04
SEWER LINE CROSSING BELOW WATER LINE WITHIN 2 FT SEPARATION

GRAVITY SANITARY SEWER PIPE SIZE	PRESSURE–RATED PIPE SIZE & TYPE (NOTE 2)	ADAPTERS REQUIRED
6" TO 12" (ASTM D–3034)	SAME SIZE ASTM D–2241, SDR 26	ASTM D–3034 TO D–2665 (SEWER TO D.W.V.) ADAPTER COUPLING
15" (ASTM D–3034)	14" LINED DUCTILE IRON OR AWWA C–905, DR–25	NONE REQUIRED
18" AND 24"	SAME SIZE AWWA C–905, PRESSURE–RATED FRP, OR LINED DUCTILE IRON, MANHOLE TO MANHOLE	NONE REQUIRED
21" AND 27"	PRESSURE PIPE NOT AVAILABLE. SEE CASING ALTERNATIVE	NOT APPLICABLE
30" AND LARGER	SAME SIZE PRESSURE–RATED FRP OR LINED DUCTILE IRON, MANHOLE TO MANHOLE	NOT APPLICABLE
CASING ALTERNATIVE: ANY SIZE AND TYPE	INSTALL AS CASING PIPE MIN 18 FT JOINT OF PRESSURE PIPE AT LEAST 2 NOMINAL SIZES LARGER THAN SAN. SEWER CARRIER PIPE. GROUT ANNULAR SPACE WITH TUNNEL GROUT	NOT APPLICABLE

INSTALLATION OF SANITARY SEWER LINES CROSSING OR PARALLEL TO WATER LINES

N.T.S.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F–880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

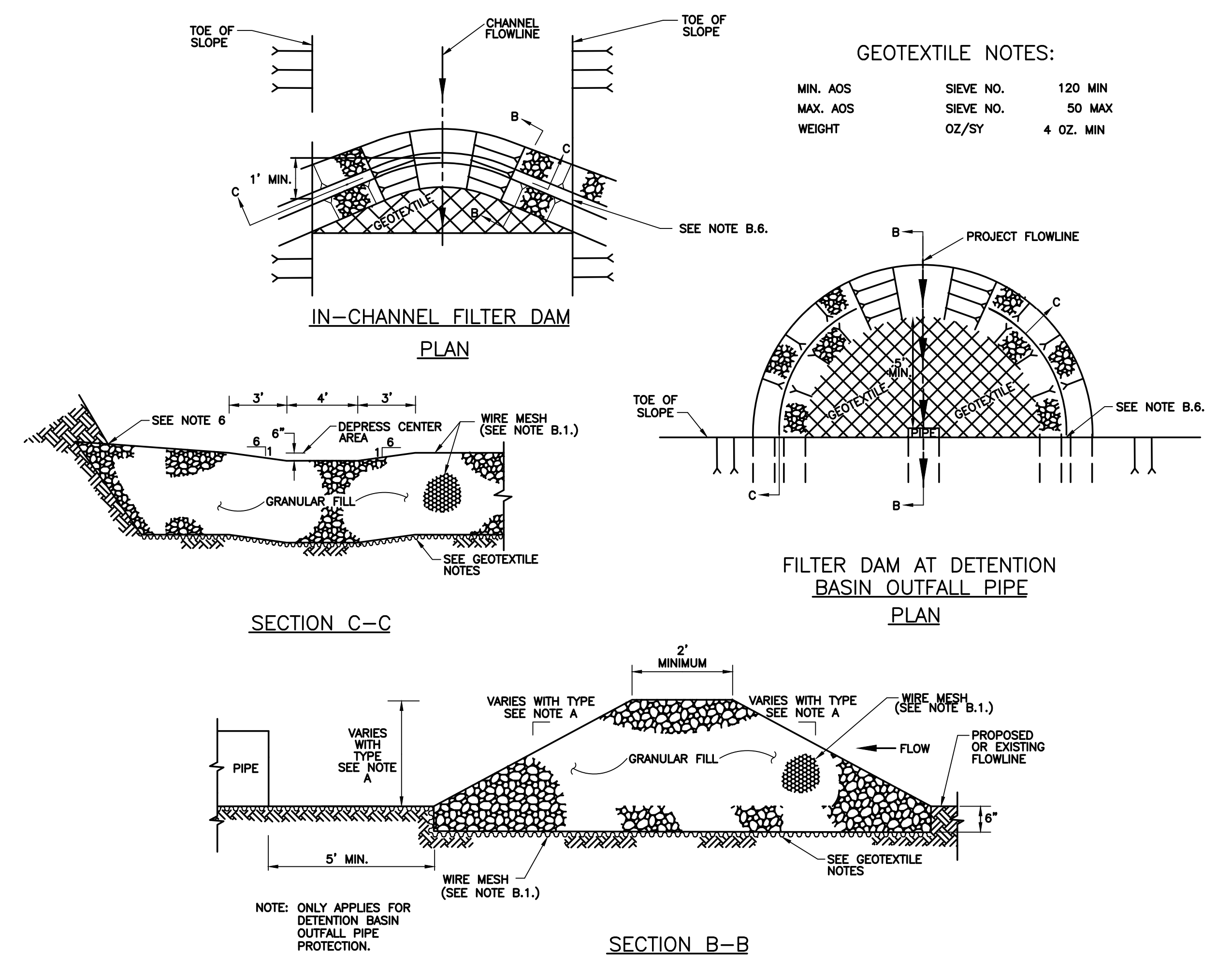
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by:

SANITARY
SEWER
DETAILS

C7.04

13 Nov 2024 11:25AM GregL
F:\project\BROOK_SP\NATEX\628–0025 Cy–Lakes HS Reno\Civil\C7.04 628–0025 DT–SAN.dwg
Includes Xref(s): X–TB.dwg; X–Seal.dwg



IN-CHANNEL FILTER DAM
PLAN

GEOTEXTILE NOTES:

MIN. AOS	SIEVE NO.	120 MIN
MAX. AOS	SIEVE NO.	50 MAX
WEIGHT	OZ/SY	4 OZ. MIN

SECTION C–C

FILTER DAM AT DETENTION BASIN OUTFALL PIPE
PLAN

NOTE: ONLY APPLIES FOR DETENTION BASIN OUTFALL PIPE PROTECTION.

SECTION B–B

FILTER DAM NOTES:

A. TYPES OF FILTER DAMS

1. TYPE 1 (NON-REINFORCED)
   a. HEIGHT – 18-24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM)
   c. SLOPES – 2:1 (MAXIMUM).
2. TYPE 2 (REINFORCED).
   a. HEIGHT – 18-36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM).
   c. SLOPES – 2:1 (MAXIMUM).
3. TYPE 3 (REINFORCED)
   a. HEIGHT – 36-48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM).
   c. SLOPES – 3:1 (MAXIMUM).
4. TYPE 4 (GABION)
   a. HEIGHT – 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM).
5. TYPE 5. AS SHOWN ON THE PLANS.

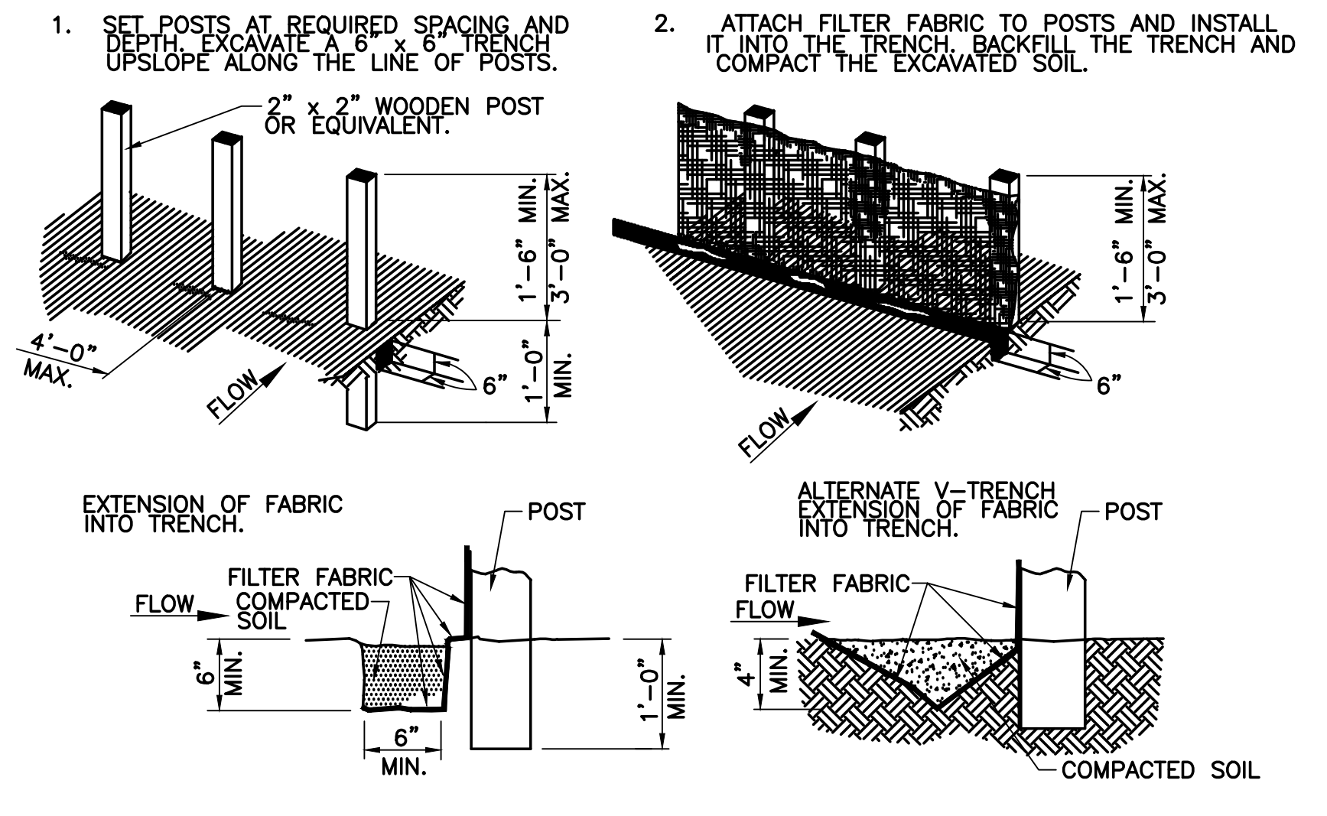
B. CONSTRUCT FILTER DAMS ACCORDING TO THE FOLLOWING CRITERIA UNLESS SHOWN OTHERWISE ON THE PLANS.

1. TYPE 2 AND 3 FILTER DAMS: SECURE WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1 INCH DIAMETER HEXAGONAL OPENINGS.
2. GRANULAR FILL:
   a PLACE ON MESH TO HEIGHT AND SLOPES SHOWN ON PLANS OR AS SPECIFIED BY THE ENGINEER.
   b 3-5 INCHES FOR ROCK FILTER DAM TYPES 1,2, AND 4 AND 4-8 INCHES FOR ROCK FILTER DAM TYPE 3. REFER TO GRANULAR FILL IN SPECIFICATION SECTION NO. 02378-RIPRAP AND GRANULAR FILL.
3. WIRE MESH: FOLD AT UPSTREAM SIDE OVER GRANULAR FILL AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS.
4. IN STREAMS: SECURE OR STAKE MESH TO STREAM BED PRIOR TO AGGREGATE PLACEMENT.
5. SEE SPECIFICATION SECTION NO. 02364-FILTER DAMS. EMBED ONE FOOT MINIMUM INTO SLOPE AND RAISE ONE FOOT HIGHER THAN CENTER OF DEPRESSED AREA AT SLOPE.

FILTER DAM

1. SET POSTS AT REQUIRED SPACING AND DEPTH. EXCAVATE A 6" x 6" TRENCH UPSLOPE ALONG THE LINE OF POSTS.

2. ATTACH FILTER FABRIC TO POSTS AND INSTALL IT INTO THE TRENCH. BACKFILL THE TRENCH AND COMPACT THE EXCAVATED SOIL.



GENERAL NOTES:

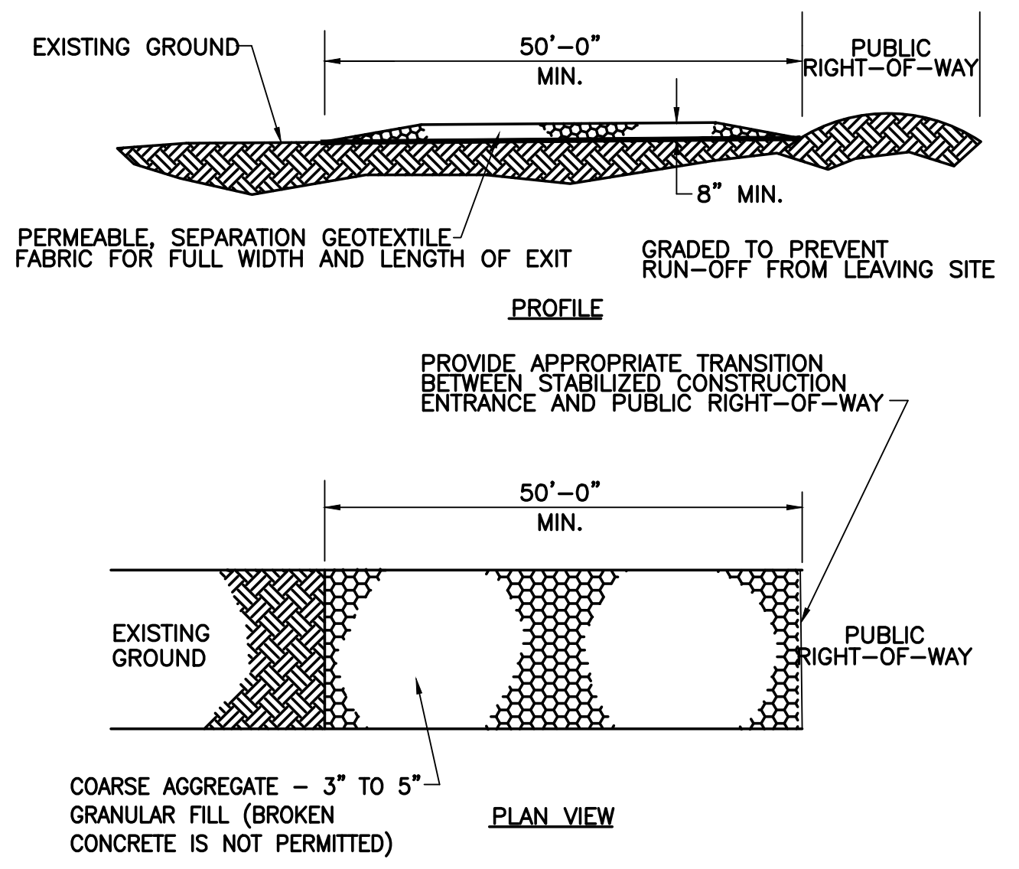
1. SET POSTS AT 4-FEET MAXIMUM SPACING. IF FACTORY PREASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAXIMUM.

2. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT THE POST, FOLD TOGETHER, AND ATTACH TO THE POSTS.

3. REMOVE SEDIMENT DEPOSITS WHEN SILT DEPTH REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE.

FILTER FABRIC FENCE

×— FF —×
SYMBOL



PROFILE

PLAN VIEW

GENERAL NOTES:

1. MINIMUM LENGTH IS AS SHOWN ON CONSTRUCTION DRAWINGS OR 50 FEET, WHICHEVER IS MORE.

2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.

3. UNLESS SHOWN ON THE CONSTRUCTION DRAWINGS, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.

4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO ACCOMMODATE A TRUCK WASHING AREA. PROVIDE OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING AREA.

5. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL COARSE AGGREGATE TO MAINTAIN THE REQUIRED DEPTH OR WHEN SURFACE BECOMES PACKED WITH MUD.

6. PERIODICALLY TURN AGGREGATE TO EXPOSE A CLEAN DRIVING SURFACE.

7. ALTERNATIVE METHODS OF CONSTRUCTION INCLUDE
   -CEMENT STABILIZED SOIL: COMPACTED CEMENT STABILIZED SOIL, LIMESTONE AGGREGATE, OR OTHER FILL MATERIAL IN AN APPLICATION OF THICKNESS OF 8 INCHES.
   -WOOD MATS: OAK OR OTHER HARDWOOD TIMBERS PLACED EDGE TO EDGE AND ACROSS SUPPORT WOODEN BEAMS WHICH ARE PLACED ON TOP OF EXISTING SOIL IN AN APPLICATION THICKNESS OF 6 INCHES.
   -STEEL MATS: PERFORATED MATS PLACED ACROSS PERPENDICULAR SUPPORT MEMBERS.

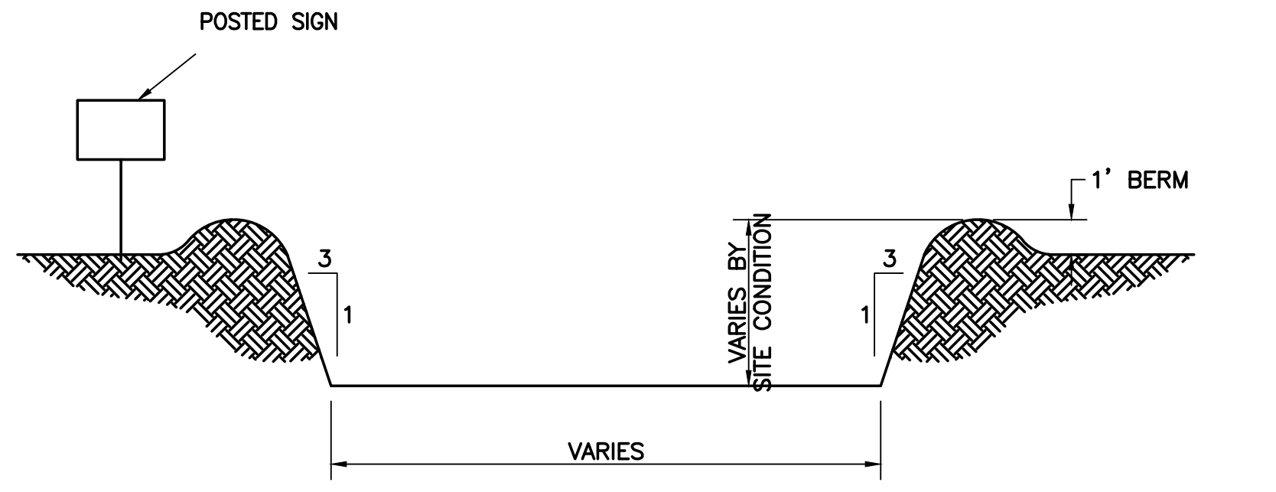
STABILIZED CONSTRUCTION ACCESS

SC

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETION AND SUBMISSION OF ALL APPLICABLE STATE AND FEDERAL FORMS REQUIRED FOR STORM WATER POLLUTION PREVENTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION, IMPLEMENTATION, MAINTENANCE, AND INSPECTION OF STORM WATER POLLUTION PREVENTION CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, EROSION AND SEDIMENT CONTROLS, STORM WATER MANAGEMENT PLANS, WASTE COLLECTION AND DISPOSAL, OFF-SITE VEHICLE TRACKING, AND OTHER PRACTICES.

2. CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL ADDITIONAL STORM WATER POLLUTION PREVENTION AND STORM WATER CONTROL MEASURES AND SUBMITTALS TO ALL GOVERNING AGENCIES INCLUDING THE EPA REQUIRED DURING CONSTRUCTION TO MEET THE GUIDELINES SET FORTH IN THE STORM WATER MANAGEMENT HANDBOOK FOR CONSTRUCTION ACTIVITIES PREPARED BY THE CITY OF HOUSTON, HARRIS COUNTY AND HARRIS COUNTY FLOOD CONTROL DISTRICT, LATEST EDITION.



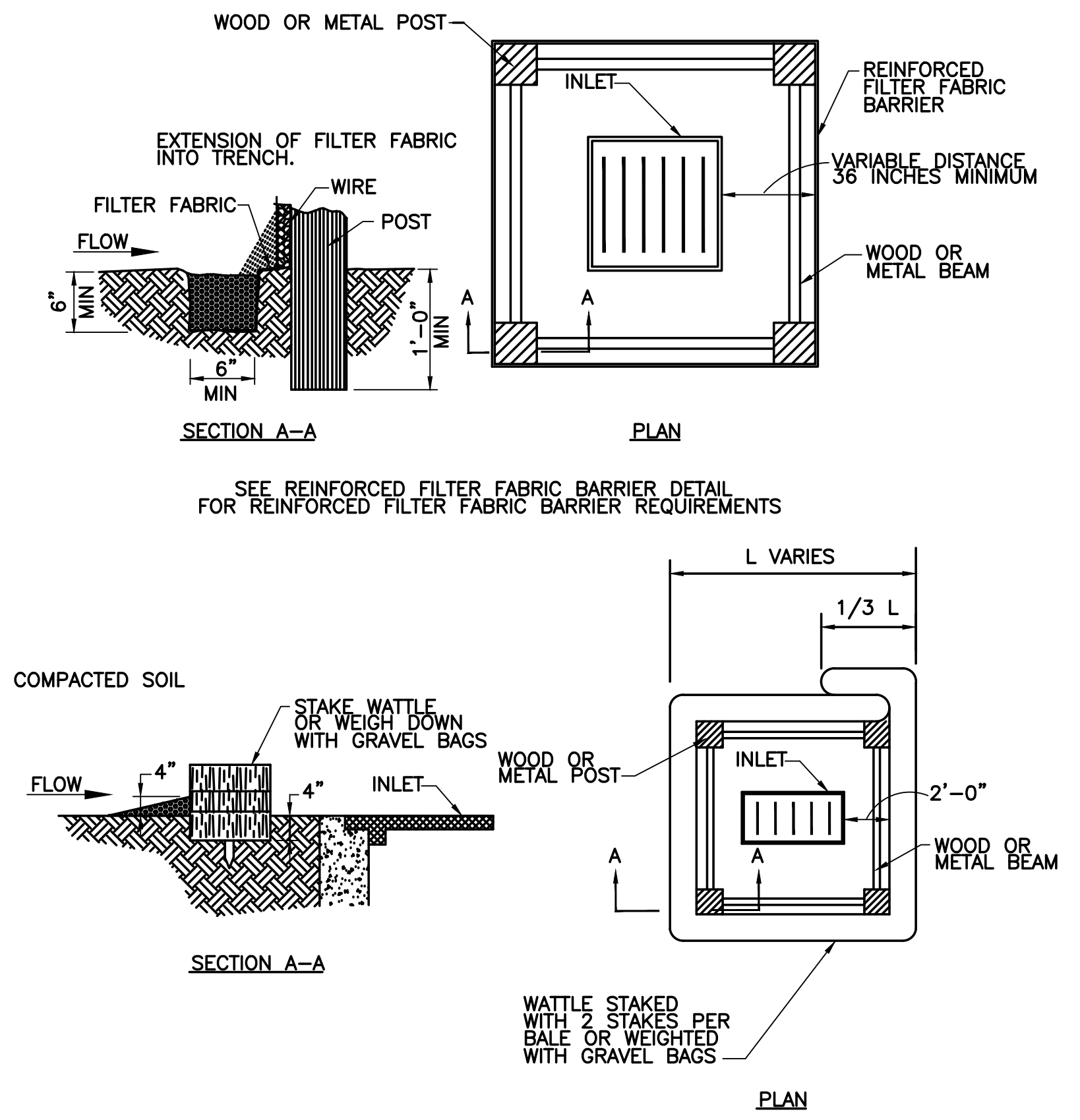
SECTION A–A
N.T.S.

GENERAL NOTES:

1. POST A SIGN READING "CONCRETE WASH OUT PIT" NEXT TO THE PIT.
2. VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASH OUT THEIR TRUCKS IN THE PIT AND NOWHERE ELSE.
3. UPON THE CONCRETE SETTING UP (CURING, DRYING OUT), THE CONCRETE WASTE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR. AFTER REMOVAL OF THE CONCRETE WASTE, THE WASH OUT PIT SHALL BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
4. CONCRETE WASH OUT PITS SHALL NOT BE LOCATED DIRECTLY ADJACENT TO, NOR AT ANY TIME DRAIN INTO THE STORM SEWER SYSTEM OR ANY OTHER SWALE, DITCH, OR WATERWAY.
5. CONSTRUCT ENTRY ROAD AND BOTTOM OF WASH OUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCKS AND EQUIPMENT.

CONCRETE TRUCK WASH OUT AREA

CTW
SYMBOL



SECTION A–A

PLAN

SEE REINFORCED FILTER FABRIC BARRIER DETAIL FOR REINFORCED FILTER FABRIC BARRIER REQUIREMENTS

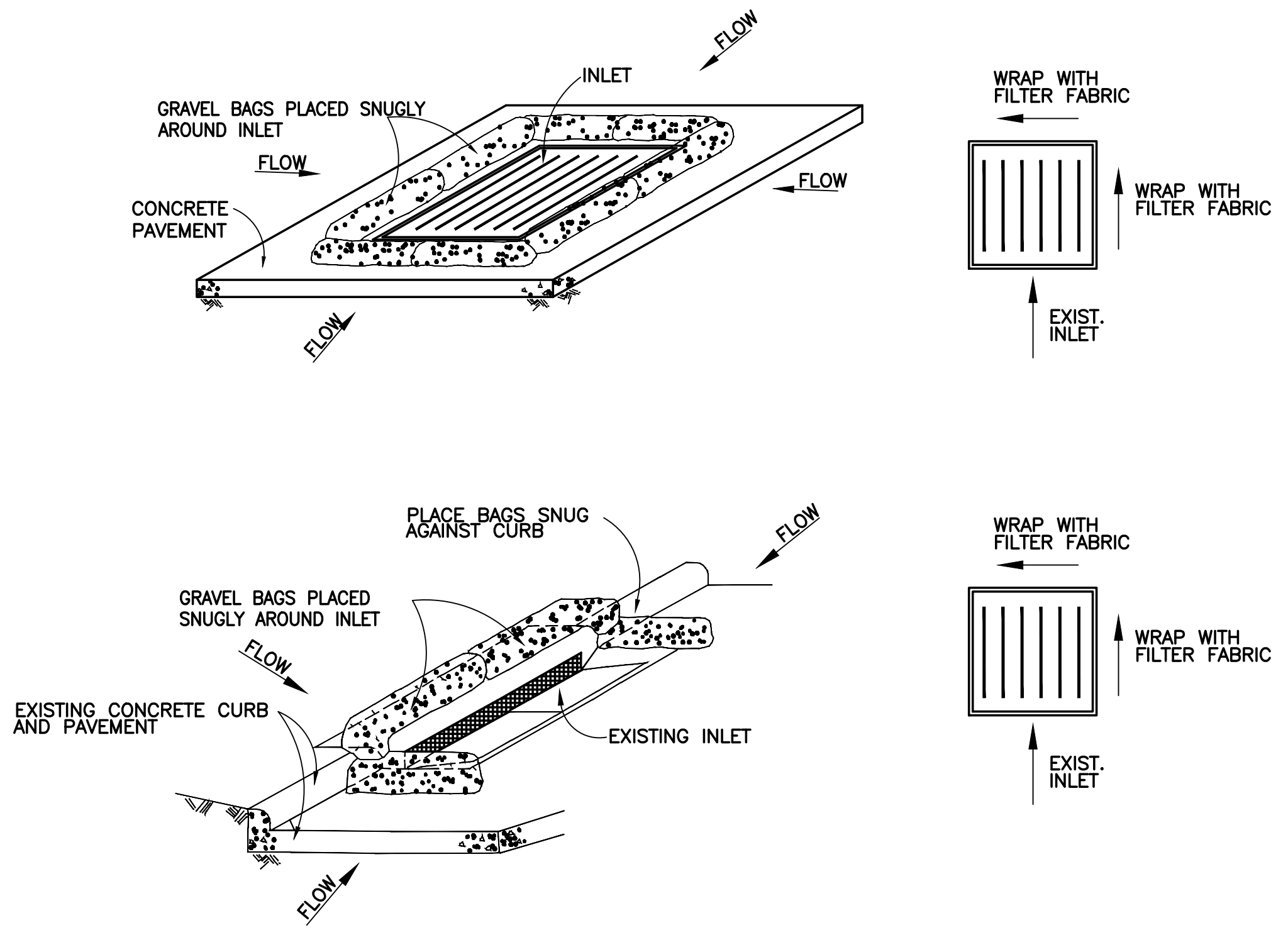
SECTION A–A

PLAN

NOTE:
TYPICALLY STRAW BALES ARE NOT RECOMMENDED FOR INLET PROTECTION BARRIERS.

INLET PROTECTION BARRIERS FOR STAGE I INLETS

IPB
SYMBOL

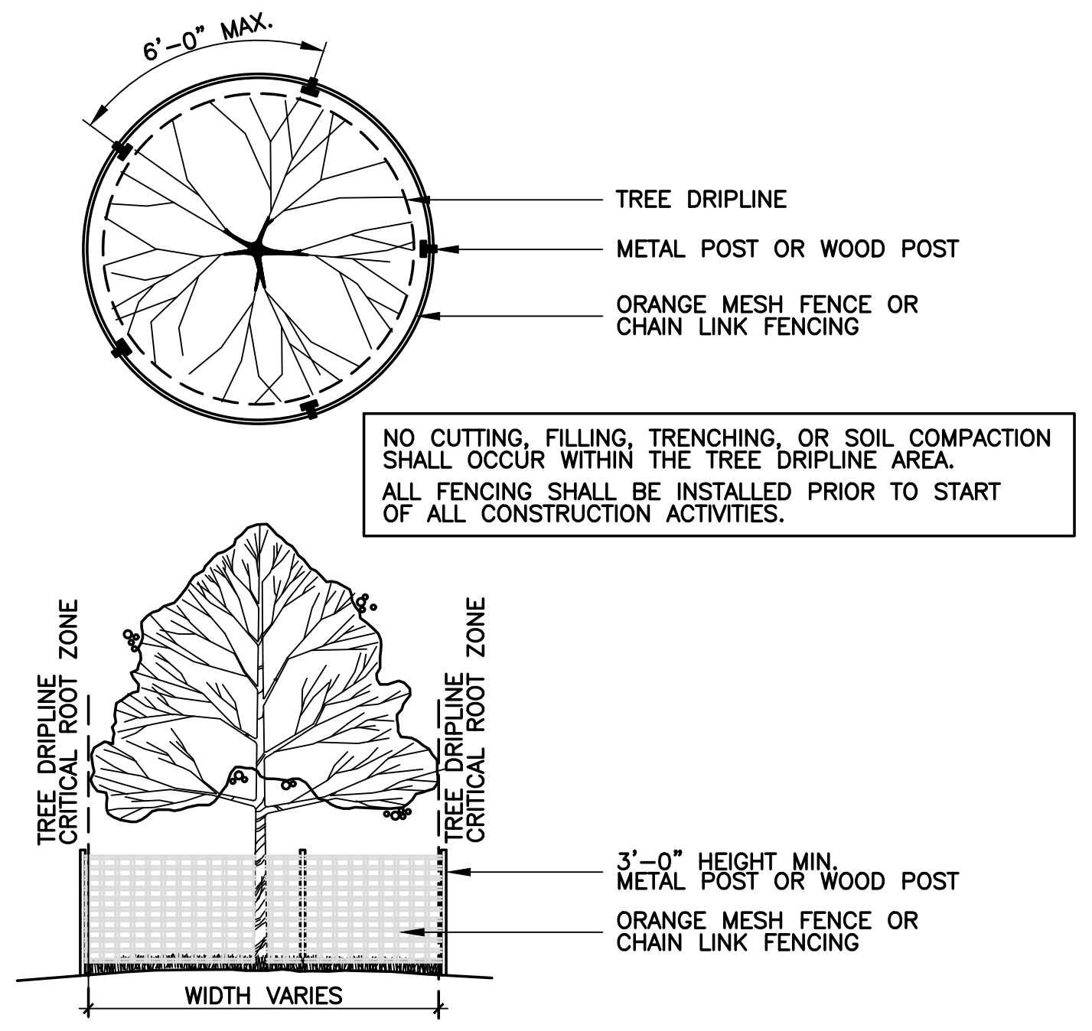


GENERAL NOTES:

1. BAGS OR WATTLES CAN BE USED FOR THIS APPLICATION.
2. PROVIDE WOVEN OR UNWOVEN GEOTEXTILE FILTER FABRIC FOR BAGS.
3. PROVIDE GRAVEL AGGREGATE MIX FOR FILL MATERIAL FOR BAGS. USE ONLY PARTICLES CONSISTING OF CLEAN, HARD, DURABLE MATERIALS FREE FROM ADHERENT COATINGS, SALT, ALKALI, DIRT, CLAY, LOAM, SHALE, SOFT OR FLAKY MATERIALS, OR ORGANIC AND INJURIOUS MATTER.
4. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE BARRIER.

INLET PROTECTION BARRIERS FOR STAGE II INLETS

IPB
STAGE II
SYMBOL



NO CUTTING, FILLING, TRENCHING, OR SOIL COMPACTION SHALL OCCUR WITHIN THE TREE DRIPLINE AREA.

ALL FENCING SHALL BE INSTALLED PRIOR TO START OF ALL CONSTRUCTION ACTIVITIES.

TREE PROTECTION DETAIL

12

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

3701 Kirby Drive, Suite 830
Houston ,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

BROOKS & SPARKS, INC.
F-880

FRANK E. BROOKS
49225
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

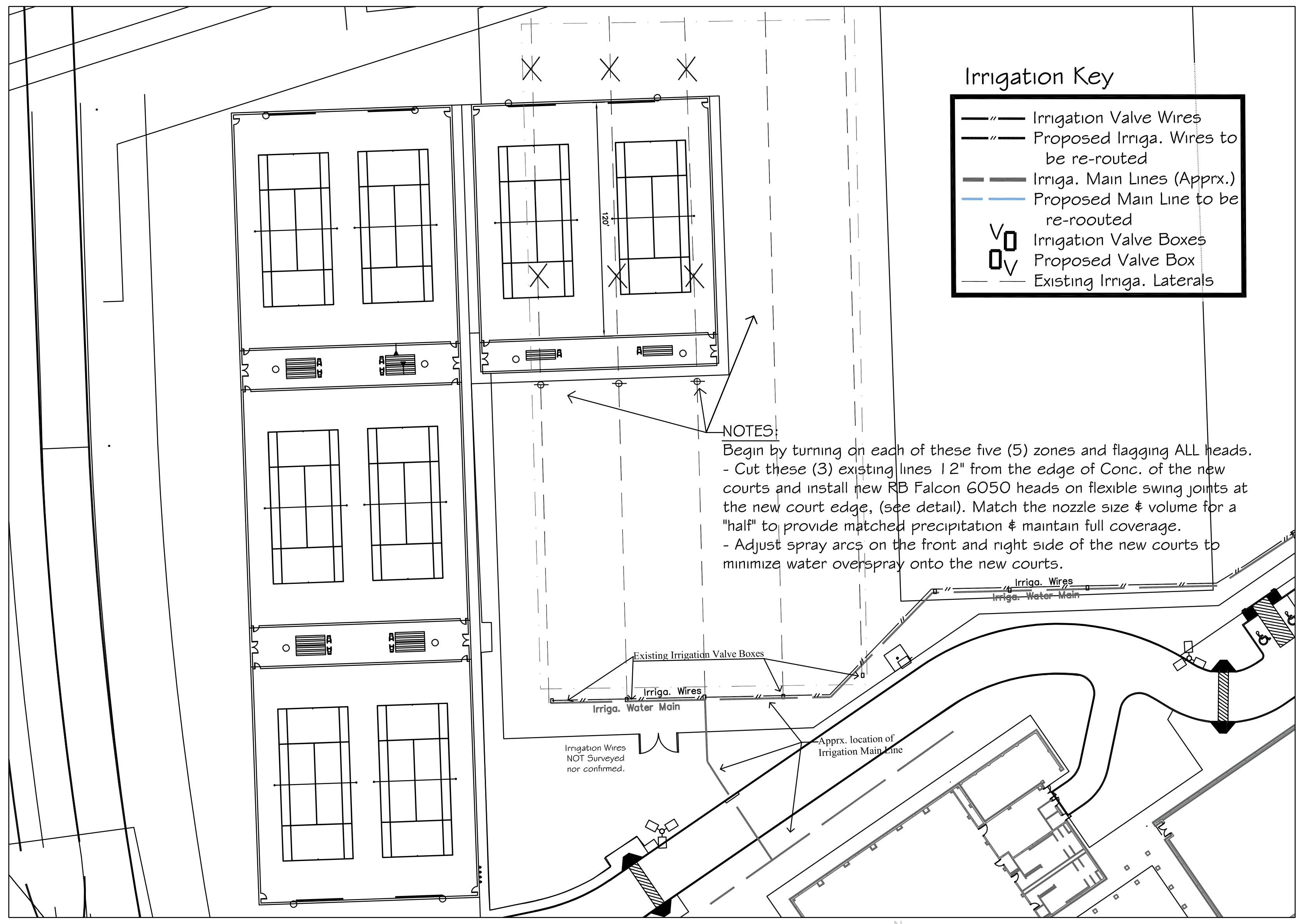
Project Number: 23071
Date: 11-17-2024
Drawn by:

STORM WATER
POLLUTION
PREVENTION
DETAILS

C7.05

13 Nov 2024 11:25AM GregL
F:\project\BROOK_SP\NATEX\628-0025 Cy-Lakes HS Reno\Civil\C7.05 628-0025 DT- SWPPP.dwg
Includes Xref(s): X-TB.dwg; X-Seal.dwg

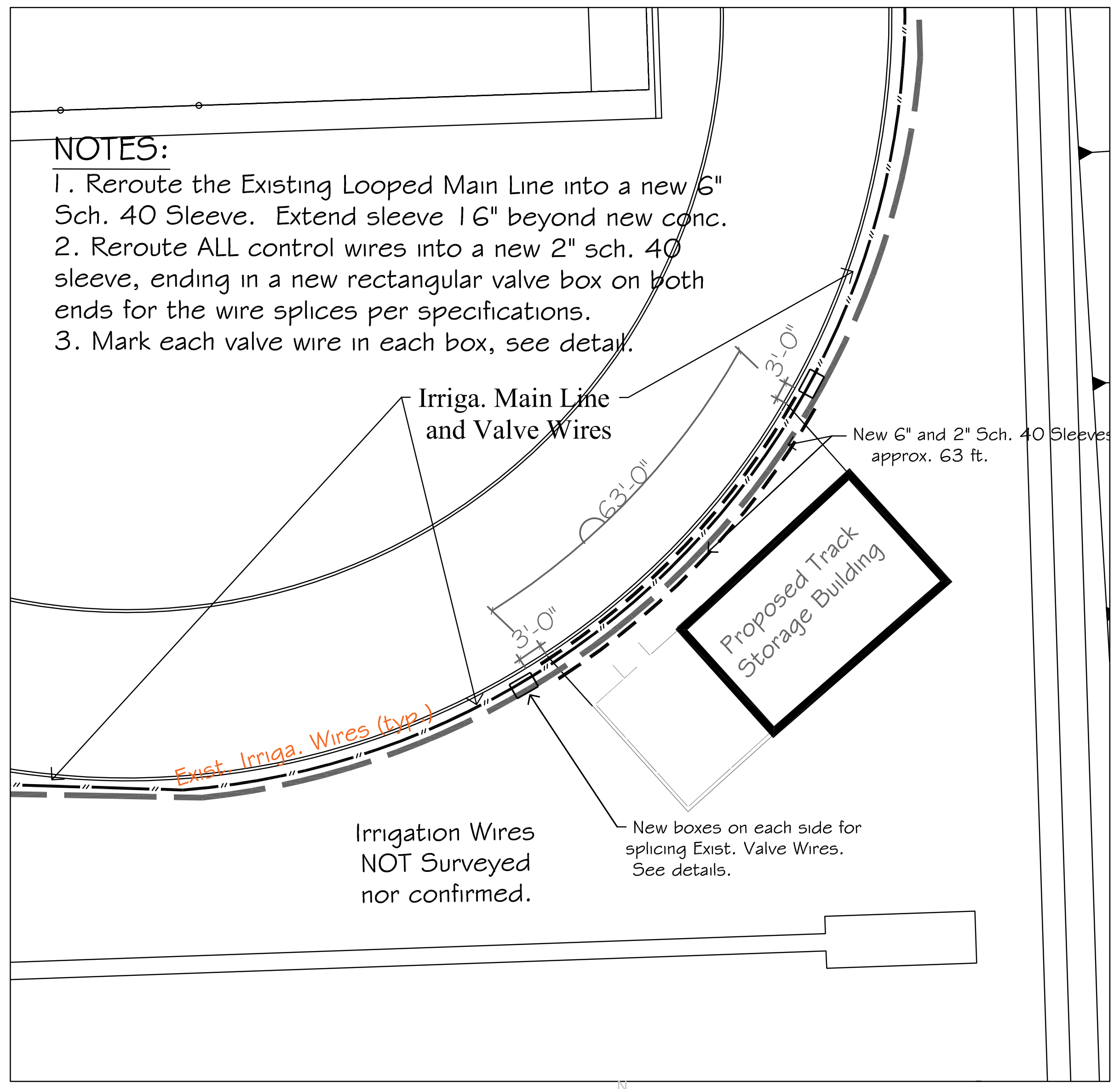
11/14/2024 2:24:21 PM



Irrigation Key
- Irrigation Valve Wires
- Proposed Irriga. Wires to be re-routed
- Irriga. Main Lines (Apprx.)
- Proposed Main Line to be re-roouted
- Irrigation Valve Boxes
- Proposed Valve Box
- Existing Irriga. Laterals

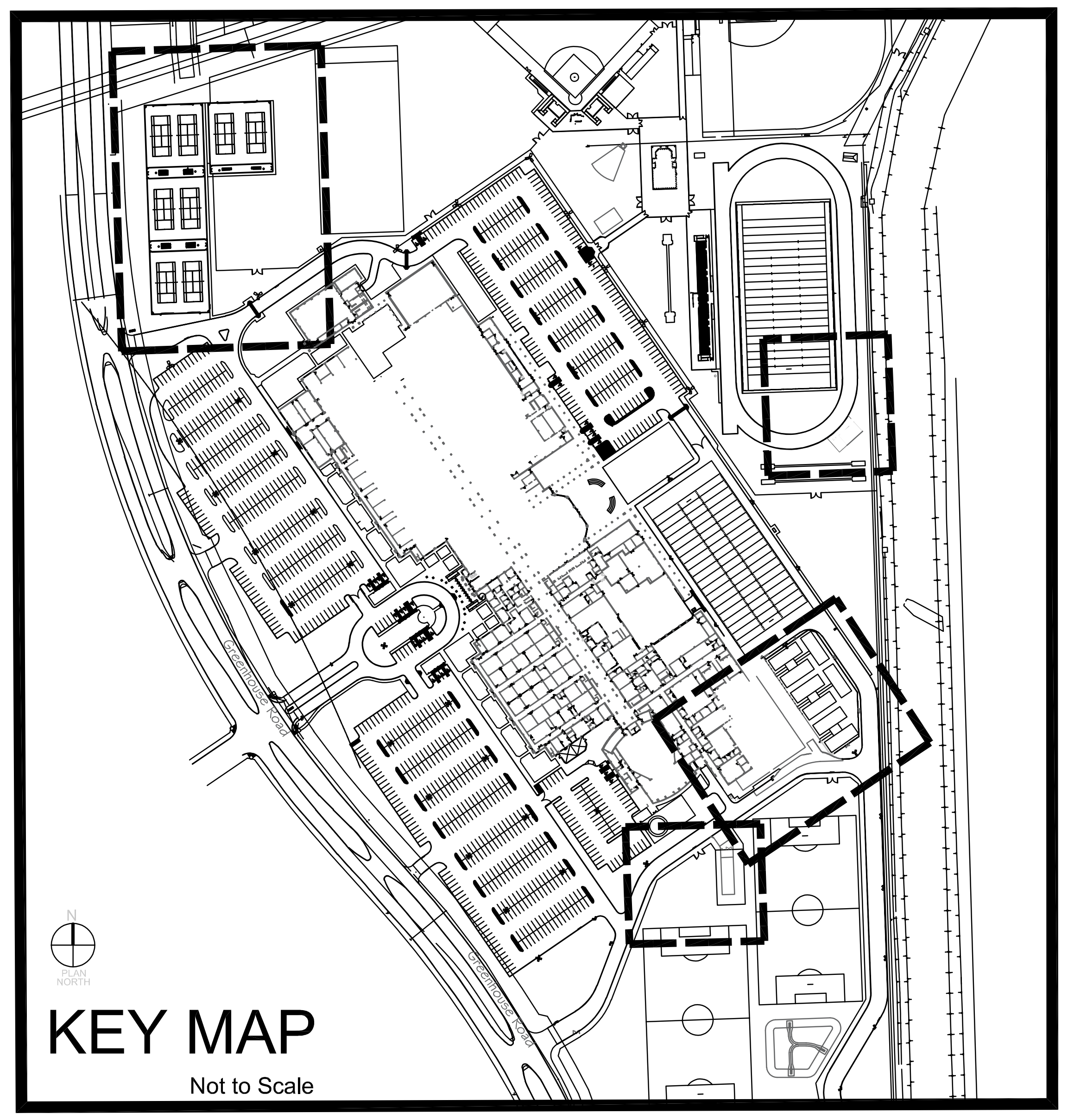
NOTES:
Begin by turning on each of these five (5) zones and flagging ALL heads.
- Cut these (3) existing lines 12" from the edge of Conc. of the new courts and install new RB Falcon 6050 heads on flexible swing joints at the new court edge, (see detail). Match the nozzle size & volume for a "half" to provide matched precipitation & maintain full coverage.
- Adjust spray arcs on the front and right side of the new courts to minimize water overspray onto the new courts.

NEW TENNIS COURTS



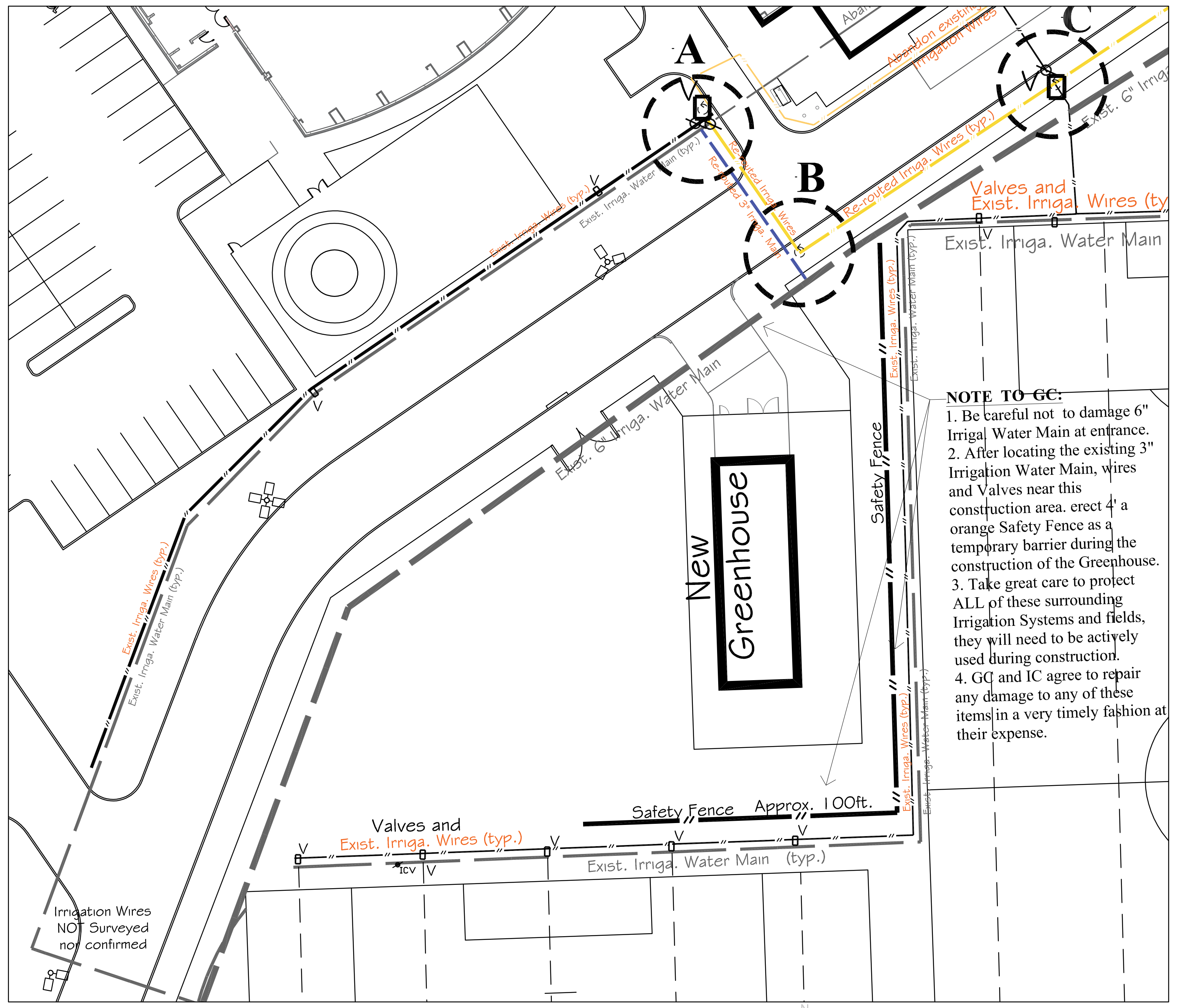
NOTES:
1. Reroute the Existing Looped Main Line into a new 6" Sch. 40 Sleeve. Extend sleeve 16" beyond new conc.
2. Reroute ALL control wires into a new 2" sch. 40 sleeve, ending in a new rectangular valve box on both ends for the wire splices per specifications.
3. Mark each valve wire in each box, see detail.

NEW TRACK STORAGE



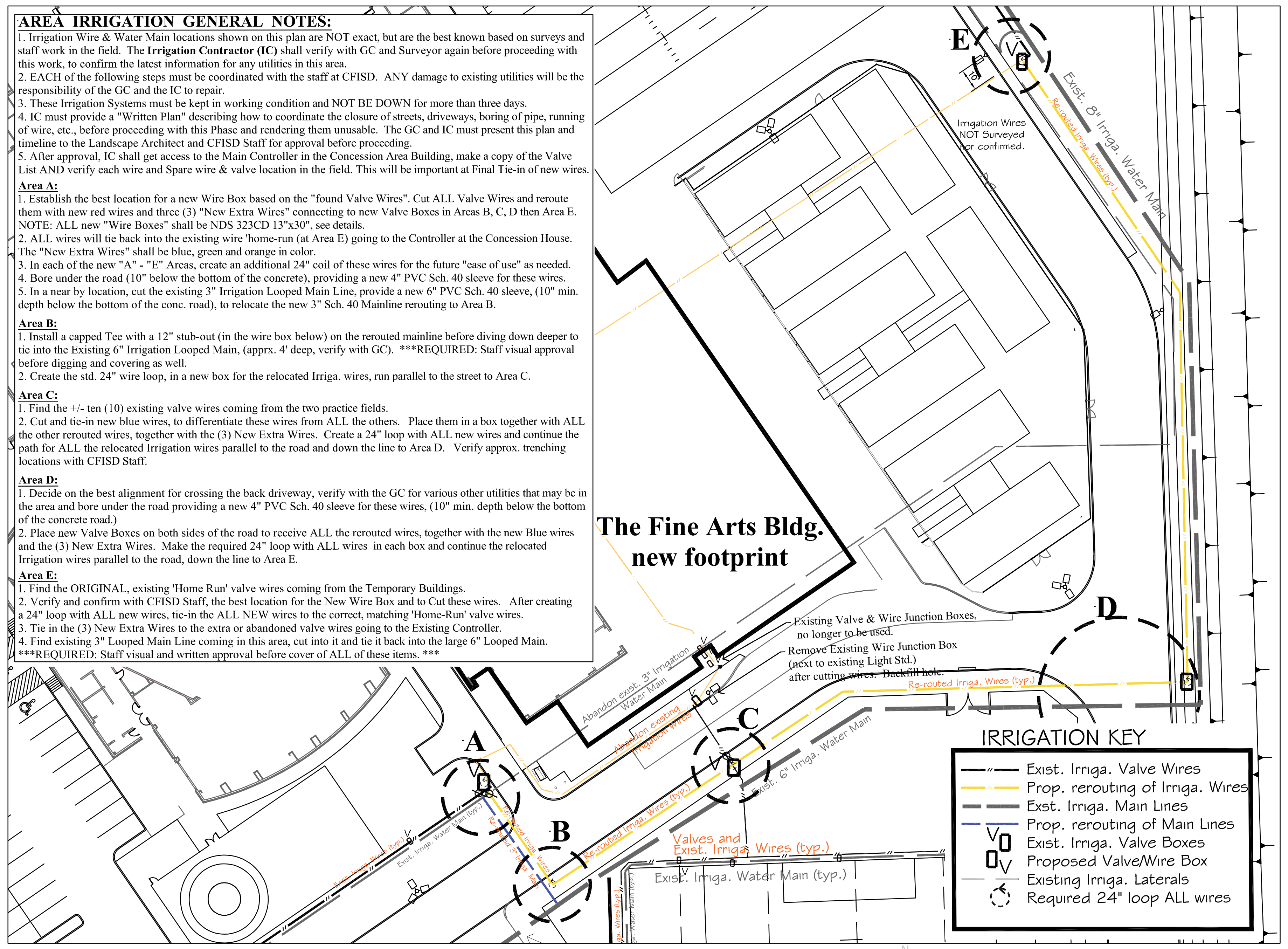
KEY MAP

Not to Scale



NOTE TO GC:
1. Be careful not to damage 6" Irriga. Water Main at entrance.
2. After locating the existing 3" Irrigation Water Main, wires and Valves near this construction area. erect 4' a orange Safety Fence as a temporary barrier during the construction of the Greenhouse.
3. Take great care to protect ALL of these surrounding Irrigation Systems and fields, they will need to be actively used during construction.
4. GC and IC agree to repair any damage to any of these items in a very timely fashion at their expense.

NEW GREENHOUSE



AREA IRRIGATION GENERAL NOTES:
1. Irrigation Wire & Water Main locations shown on this plan are NOT exact, but are the best known based on surveys and staff work in the field. The **Irrigation Contractor (IC)** shall verify with GC and Surveyor again before proceeding with this work, to confirm the latest information for any utilities in this area.
2. EACH of the following steps must be coordinated with the staff at CFISD. ANY damage to existing utilities will be the responsibility of the GC and the IC to repair.
3. These Irrigation Systems must be kept in working condition and NOT BE DOWN for more than three days.
4. IC must provide a "Written Plan" describing how to coordinate the closure of streets, driveways, boring of pipe, running of wire, etc., before proceeding with this Phase and rendering them unusable. The GC and IC must present this plan and timeline to the Landscape Architect and CFISD Staff for approval before proceeding.
5. After approval, IC shall get access to the Main Controller in the Concession Area Building, make a copy of the Valve List AND verify each wire and Spare wire & valve location in the field. This will be important at Final Tie-in of new wires.

Area A:
1. Establish the best location for a new Wire Box based on the "found Valve Wires". Cut ALL Valve Wires and reroute them with new red wires and three (3) "New Extra Wires" connecting to new Valve Boxes in Areas B, C, D then Area E. NOTE: ALL new "Wire Boxes" shall be NDS 323CD 13"x30", see details.
2. ALL wires will tie back into the existing wire 'home-run (at Area E) going to the Controller at the Concession House. The "New Extra Wires" shall be blue, green and orange in color.
3. In each of the new "A" - "E" Areas, create an additional 24" coil of these wires for the future "ease of use" as needed.
4. Bore under the road (10" below the bottom of the concrete), providing a new 4" PVC Sch. 40 sleeve for these wires.
5. In a near by location, cut the existing 3" Irrigation Looped Main Line, provide a new 6" PVC Sch. 40 sleeve, (10" min. depth below the bottom of the conc. road), to relocate the new 3" Sch. 40 Mainline rerouting to Area B.

Area B:
1. Install a capped Tee with a 12" stub-out (in the wire box below) on the rerouted mainline before diving down deeper to tie into the Existing 6" Irrigation Looped Main, (apprx. 4' deep, verify with GC). ***REQUIRED: Staff visual approval before digging and covering as well.
2. Create the std. 24" wire loop, in a new box for the relocated Irriga. wires, run parallel to the street to Area C.

Area C:
1. Find the +/- ten (10) existing valve wires coming from the two practice fields.
2. Cut and tie-in new blue wires, to differentiate these wires from ALL the others. Place them in a box together with ALL the other rerouted wires, together with the (3) New Extra Wires. Create a 24" loop with ALL new wires and continue the path for ALL the relocated Irrigation wires parallel to the road and down the line to Area D. Verify approx. trenching locations with CFISD Staff.

Area D:
1. Decide on the best alignment for crossing the back driveway, verify with the GC for various other utilities that may be in the area and bore under the road providing a new 4" PVC Sch. 40 sleeve for these wires, (10" min. depth below the bottom of the concrete road.)
2. Place new Valve Boxes on both sides of the road to receive ALL the rerouted wires, together with the new Blue wires and the (3) New Extra Wires. Make the required 24" loop with ALL wires in each box and continue the relocated Irrigation wires parallel to the road, down the line to Area E.

Area E:
1. Find the ORIGINAL, existing 'Home Run' valve wires coming from the Temporary Buildings.
2. Verify and confirm with CFISD Staff, the best location for the New Wire Box and to Cut these wires. After creating a 24" loop with ALL new wires, tie-in the ALL NEW wires to the correct, matching 'Home-Run' valve wires.
3. Tie in the (3) New Extra Wires to the extra or abandoned valve wires going to the Existing Controller.
4. Find existing 3" Looped Main Line coming in this area, cut into it and tie it back into the large 6" Looped Main.
***REQUIRED: Staff visual and written approval before cover of ALL of these items. ***

IRRIGATION KEY
- Exist. Irriga. Valve Wires
- Prop. rerouting of Irriga. Wires
- Exst. Irriga. Main Lines
- Prop. rerouting of Main Lines
- Exist. Irriga. Valve Boxes
- Proposed Valve/Wire Box
- Existing Irriga. Laterals
- Required 24" loop ALL wires

FINE ARTS EXPANSION

IRRIGATION NOTES:

Provide upgrades and repairs to the existing, operable underground irrigation system, These repairs are due to site construction projects, in designated areas as shown above and in these enlarged areas.

1. All Mainline piping as well as Lateral Line piping shall be schedule 40 pipe.
2. These irrigation systems will tie back into existing CFISD Irrigation main lines, already having a backflow devices. Irrigation Contractor (IC), shall confirm the exact connection points with the GC and CFISD Staff.
3. All pipe joints shall be solvent welded with Christy's Purple Primer / Christy's Red Hot Blue Glue for 4" and smaller.
4. All fittings for the main line shall be schedule 80, all fittings on lateral lines shall be Schedule 40.
5. All Irrigation, low voltage Valve Wires shall be 14 gauge or larger, manufactured for this direct-burial purposes.
6. All valve wire extension splices must use 3M DBR-6 Splices AND ALL splices must be done in a Valve box of it's own or with other wire splices, NOT just buried within the trenches. ALL splice boxes shall be located near or with other valve boxes, NO exceptions, (valve boxes off by themselves tend to get lost in lawn, etc.).
7. All Rotors shall be RainBird Falcon 6050 heads, with stainless steel, and shall be mounted at final grade of lawn. See plan for Details and for specific nozzle numbers to be used.
8. All Swing joints for heads shall be attached with IPS PVC flexible hose 24 inches minimum, and solvent welded to the corresponding Sch. 40 fitting on the lateral.
9. All Valve Boxes shall be NDS rectangular 14x19-in boxes with an overlapping green cover model 314c. All valves shall be within these boxes as noted above and located no closer than 24 in to the main line. Only one valve per valve box and depth should be as per detail.
10. Isolation / gate valves shall be made of brass and the same size as the pipe shown and also in a 14"x19" valve box as described above, see Plans.
11. Contractor shall confirm that all meetings and inspections include Cy-Fair ISD representative.
12. The controller and weather sensor shall be located as shown, confirm exact location with GC and owner's representative to confirm exact location.
13. As-built Plans shall be made of these revisions made in the field, see specs.

Autodesk Docs://23072_CFSID_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

JOHN O. WILLIAMS
11/17/2024

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

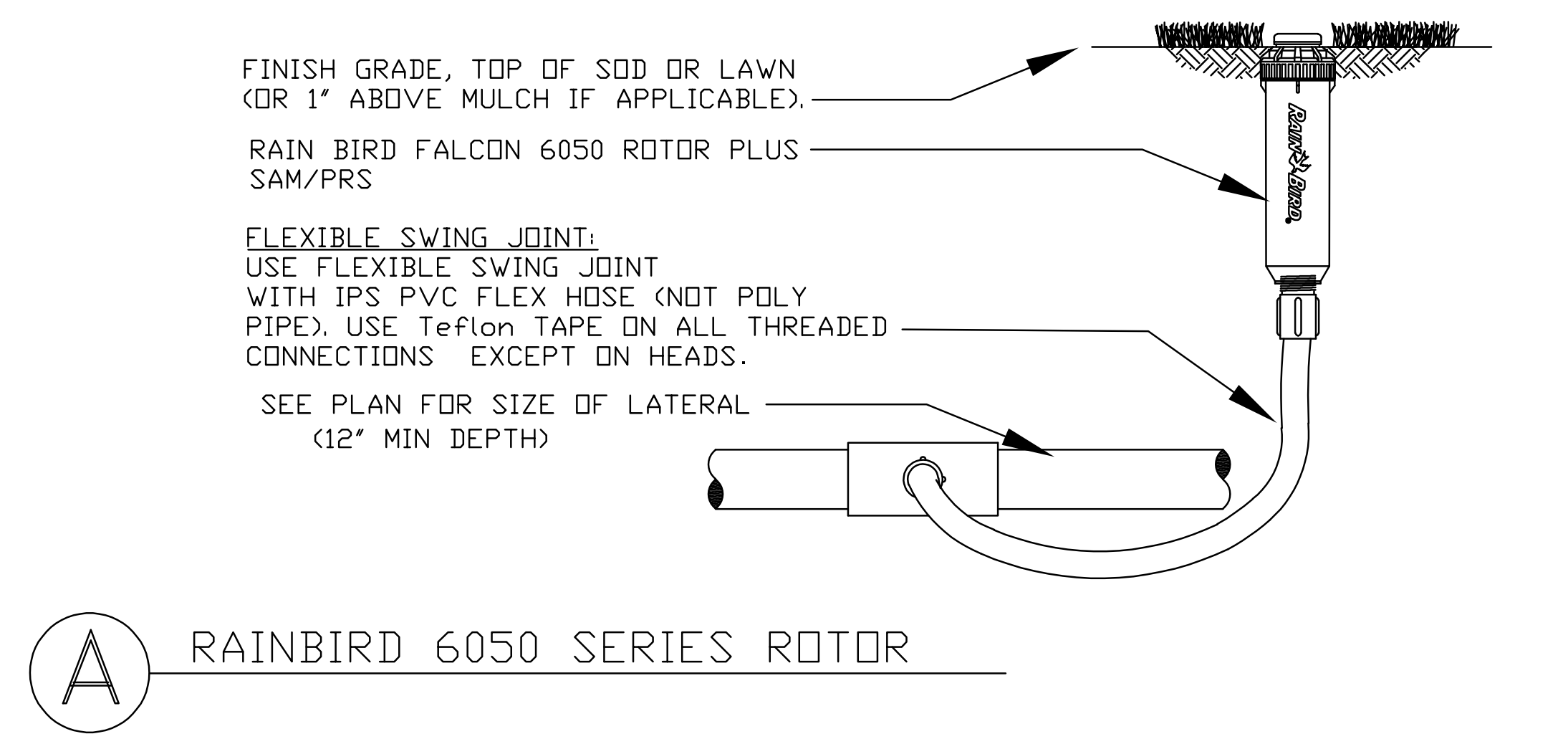
Project Number: 23071
Date: 11-17-2024
Drawn by: JOW / KRR

LANDSCAPE IRRIGATION
MODDIFICATIONS
TO SITE

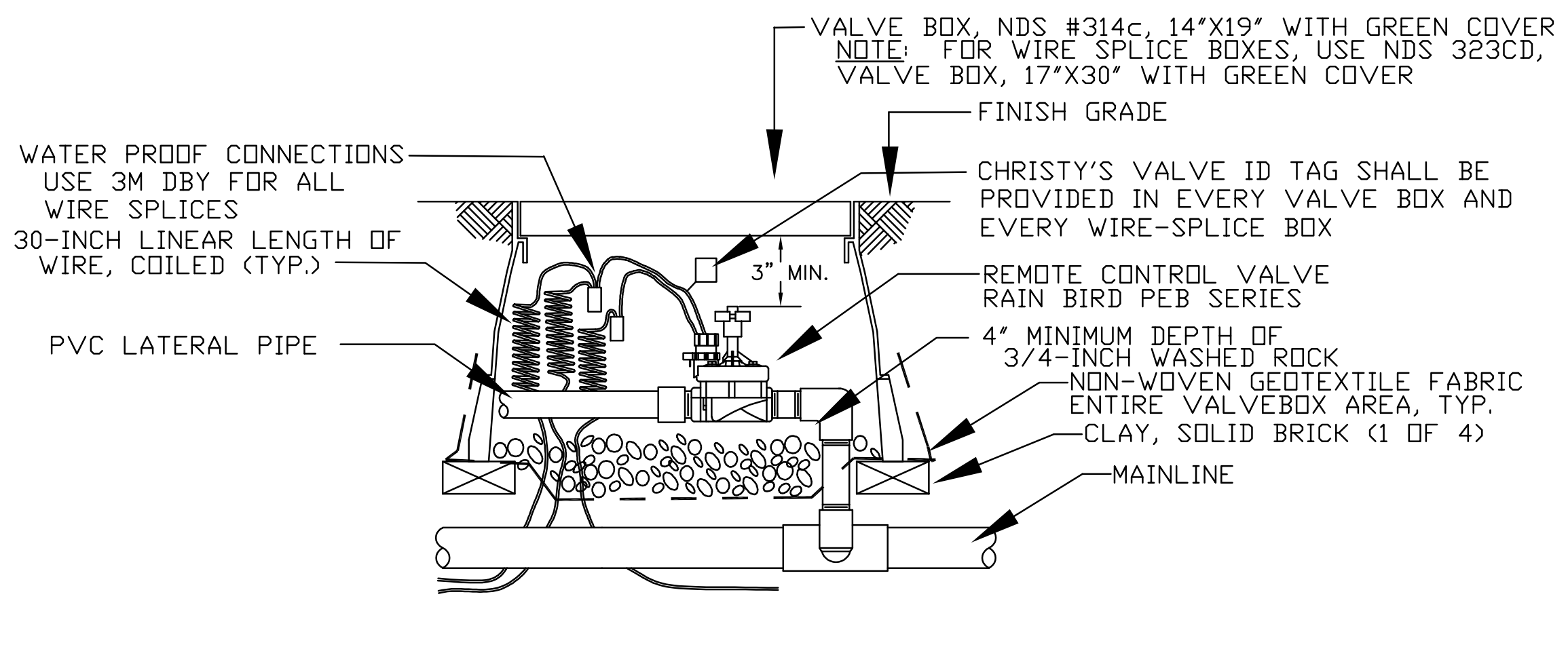
L1.00

____ of ____

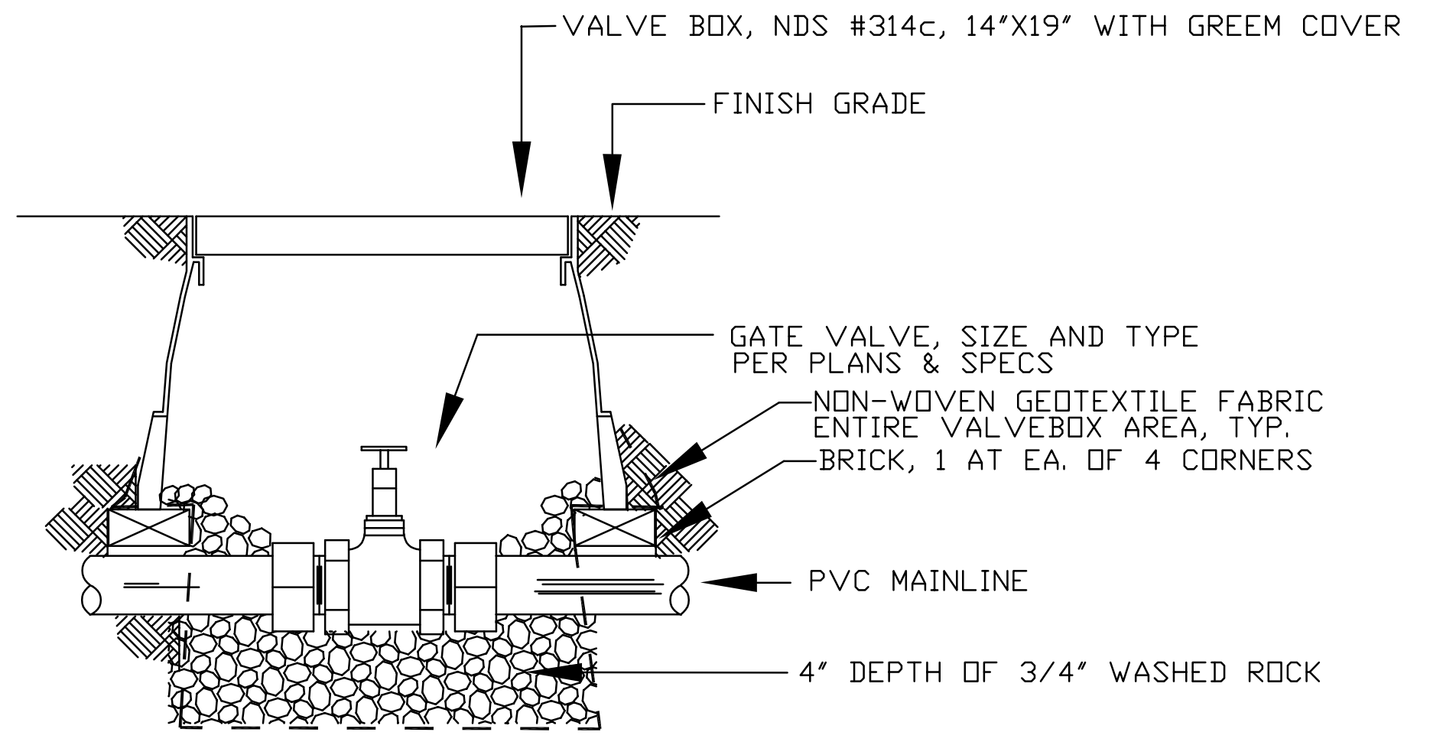
Irrigation Details:



A RAINBIRD 6050 SERIES ROTOR

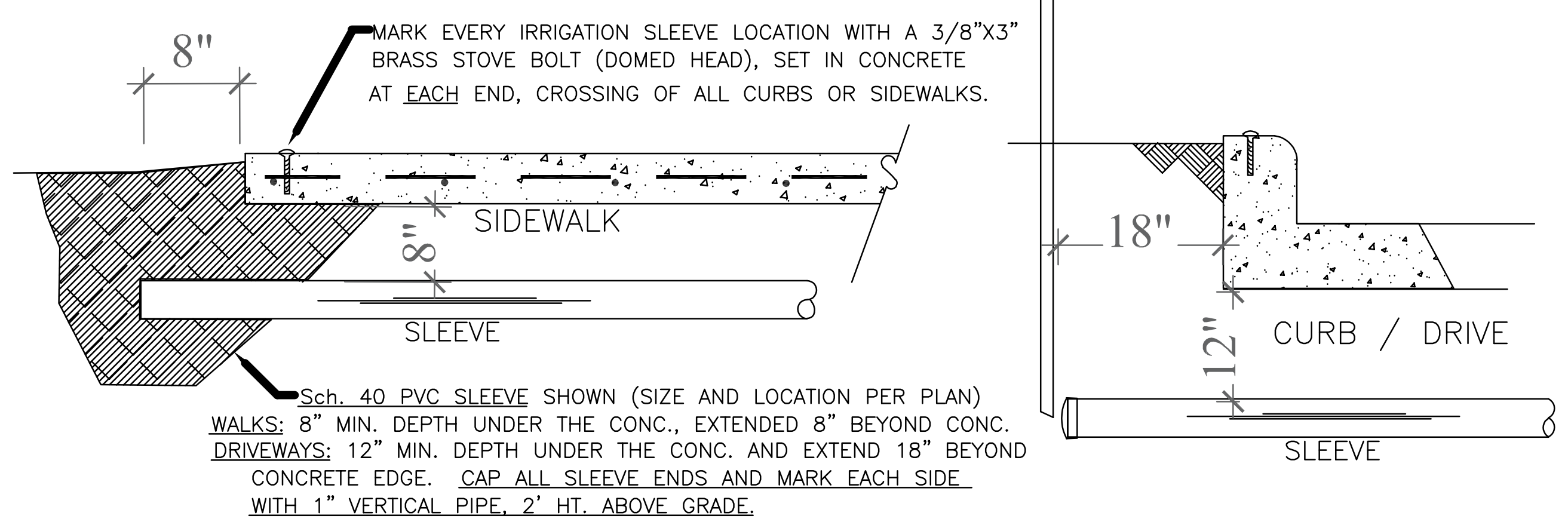


B RAIN BIRD PEB SERIES VALVE



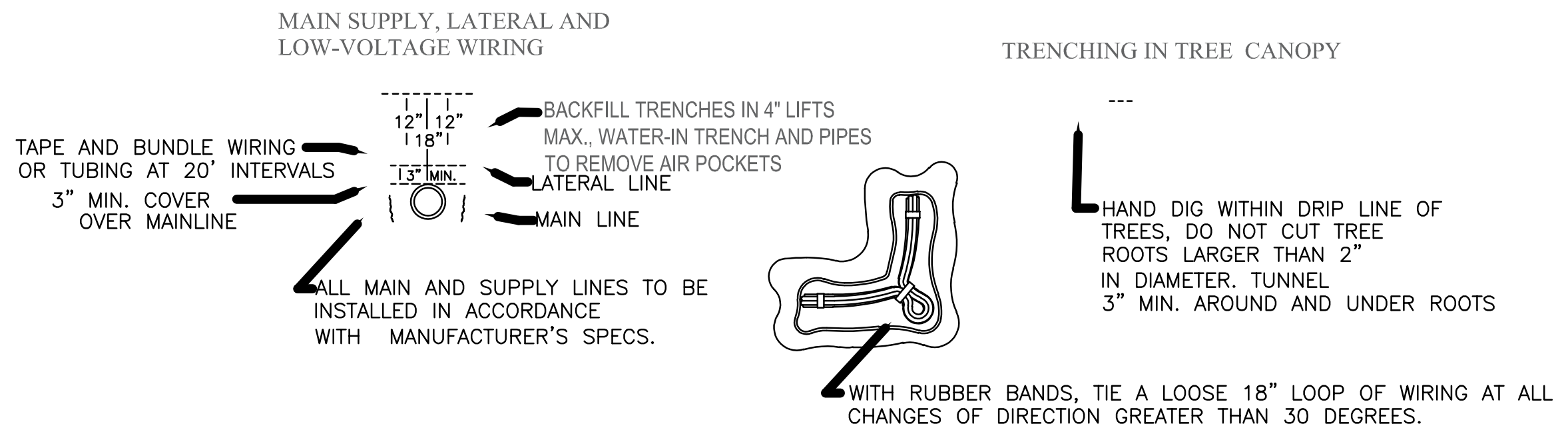
C BRASS GATE VALVE (SIZE PER PLAN)

COORDINATE ALL SLEEVE INSTALLATION
WITH GENERAL CONTRACTOR AND CFISD REP.



D IRRIGATION SLEEVE REQUIREMENTS

1. CONTRACTOR TO COMPLY WITH ALL LOCAL CODES AND ORDINANCES IN REFERENCE TO LOW VOLTAGE WIRING AND THE INSTALLATION OF PVC PIPE.
2. ANY 120 VOLT WIRE SHALL BE INSTALLED PER LOCAL CODES. MINIMALLY, IT MUST BE INSTALLED IN DIRECT BURIAL WIRE, IN A SEPARATE TRENCH, IN GRAY SCH. 40 PIPE/ CONDUIT MIN., AT A MIN. DEPTH OF 24".



G TRENCH REQUIREMENTS

Irrigation Specifications:

GENERAL

1. DESCRIPTION OF WORK
   A. Work Included: Perform all work with approved materials, labor, equipment, transportation, and services required and necessary for the construction of the project as indicated. Such work includes, but is not limited to, the following:
      1. Furnishing and installing irrigation system complete.
      2. Trenching and backfill.
      3. Furnishing and installing irrigation main, laterals, and fittings.
      4. Furnishing and installing electric controllers, backflow devises, manual gate valves and metal security boxes if required.
      5. Furnishing and installing all irrigation heads and nozzles.
      6. Furnishing and installing all electric valves and wiring (sizes on plan).
      7. Boring under paved areas if required.

   B. By Others: The following items of work will be performed by others in this contract:
      1. Electrical stubouts for irrigation controllers.
      2. Water stubouts for irrigation system.
      3. Installation of water meters.
      4. Sleeves for irrigation piping and remote control valve wiring under pavements.

2. INSPECTION OF CONDITIONS:
   Examine related work and surfaces before starting work of this Section. Report to Owner's Representative or Landscape Architect in writing, conditions which will prevent the proper provision of this work. Beginning the work of this Section without reporting unsuitable conditions to the Owner's Representative or Landscape Architect constitutes acceptance of conditions by the Contractor. Any required removal, repair, or replacement of this work caused by unsuitable conditions to be done at no additional cost to the owner.

3. LOCAL REQUIREMENTS:
   It is the responsibility of the irrigation contractor to obtain information concerning local codes and requiements for the installation of irrigation.

4. DRAWINGS:
   The drawings showing the work covered by this Section are diagrammatic. Exact locations of irrigation mains, laterals, heads and related items shall be staked in the field prior to the excecution of the work.

5. SUBSTITUTIONS:
   A. Specific reference to manufacturer's names and products specified in this Section are used as standards; this implies no right to substitute other material or methods without written approval of the Owner's Representative or the Landscape Architect.
   B. Installation of any approved substitution is contractor's responsibility. Any changes required for installation of any approved substitution must be made to the satisfaction of the Owner's Representative or the Landscape Architect and without additional cost to the Owner.

6. PROTECTION OF EXISTING CONDITIONS:
   A. Contractor shall aquaint himself with site conditions, should Contractor notice anything that could cause any any problems he should make it known to Owner's Representative or Landscape Architect as soon as possible
   B. Contractor shall take necessary precautions to protect existing site conditions and plants to remain. Should damage be incurred, the Contractor shall repair damage or restore to its original condition or furnish and install equal replacement at his expense.

7. COORDINATION:
   Coordinate and cooperate with other Contractors to enable the work to proceed as rapidly and efficiently as possible.

8. PRODUCT HANDLING:
   Protect work and materials under this Section from damage during construction and storage. Protect polyvinyl chloride (PVC) pipe and fittings from direct sunlight. Beds on which pipe is stored must be full length of pipe. Do not use any pipe or fitting which has been damaged or dented.

9. SAMPLES:
   Owner's Representative or Landscape Architect reserves the right to take and analyze samples of materials for conformity to the specifications at any time. Contractor shall furnish samples upon request by Owner's Representative or Landscape Architect. Rejected materials shall be immediately removed from the site and replaced at Contractor's expense. Cost of testing of materials not meeting specifications shall be paid by Contractor.

10. INSPECTIONS AND TESTS
   A. Submit written requests for inspections to Owner's Representative or Landscape Architect at least 48 hours prior to anticipated inspection.
   B. Inspection of completed installation will be made by Owner's Representative or Landscape Architect prior to backfilling of trenches and will be made during hydrostatic testing.

11. AS-BUILT DRAWINGS:
   Contractor shall furnish Record Drawings of the complete irrigation system in accordance with the General and Special Conditions. Procure from the Owner's Representative or Landscape Architect, full-sized reproducibles of Contract Drawings. Construction drawings shall be on the construction site at all times while the irrigation system is being installed, contractor shall keep a daily record of all work installed during each day. Actual location of valves and all irrigation and drainage piping shall be shown on the prints with dimensions from easily identified permanent features, such as buildings, curbs, fences, walks, or property lines. Drawings shall show approved substitutions, if any, of material including manufacturer's name and catalog number. The drawings shall be to scale and all indications shall be neat. All information noted on the print shall be transferred to the sepia by Contractor and all indications shall be recorded in a neat, orderly way. The record sepia shall be turned over to the Owner's Representative or Landscape Architect at or before the Final Acceptance of the project, for distribution to the Owner.

12. CLEAN UP:
   Keep all areas of work clean, neat and orderly at all times. Keep paved areas clean during installation. Clean up and remove all debris from the entire work area prior to Final Acceptance to satisfaction of Owner's representative or Landscape Architect.

13. FINAL ACCEPTANCE:
   Work under this Section will be accepted by Owner's Representative or Landscape Architect upon satisfactory completion of all work. Upon Final Acceptance, Owner will assume responsibility for maintenance of the work. Said assumption does not relieve Contractor of obligations under Warranty.

14. WARRANTY:
   In addition to manufacturer's guarantees or warranties, all work shall be warranted for one year from the date of Final Acceptance against defects in material, equipment, and workmanship by Contractor. Warranty shall also cover repair of damage to any part of the premises resulting from leaks or other defects in materials, equipment and workmanship to the satisfaction of the Owner.

MATERIALS:

15. MATERIALS, GENERAL:
   Materials throughout the system shall be new and in perfect condition.

16. BACKFLOW DEVICE:
   Backflow device as required by local authorities. Located on plan and identified on detail sheet.

17. PIPING:
   A. ALL pipe used on this project shall be Sch. 40.
   B. ~~Piping on non-pressure side of irrigation control valves (laterals) Class 200 PVC, except 1/2" diameter pipe which is Class 315 PVC.~~

18. FITTINGS:
   Fittings for Solvent-Welded Pipe shall be Sch. 40 for laterals and Sch. 80 for Main Lines, polyvinyl chloride, standard weight, as manufactured by Slone, Lasco or approved equal, to meet ASTM D-2466-73 and D-2467-73.
   Threaded PVC nipples - Schedule 80 PVC, for swing joints.

19. GATE VALVES:
   Up to 3" in size: 125-pound bronze construction, non-rising stem type, sized to line. Crane#438, Nibco #T113, Kennedy #527; or equal.

20. ~~IRRIGATION CONTROLLER:
   As noted on plan and identified on detail sheet.~~

21. IRRIGATION CONTROL VALVES:
   A. Remote Control Valves:
      RAIN BIRD PEB Series Valve or approved equal locations and size shown on plan (See Detail Sheet).
   B. Remote Control Valves for Drip use
      Rain Bird Af100-200 filter kit.

22. CONTROL WIRE:
   A. Wire: Solid copper wire, U.L. approved for direct burial in ground. Minimum guage: #14 UF. Common ground wire shall be white in color.
   B. Wire Splicing shall be accomplished with the 3M, DBY-6 system.

23. VALVE BOXES:
   A. The Valve Boxes for Remote Control Valves, Gate Valves and "Wire-Splice Boxes", shall be rectangular, NDS #314c, 14"X19" and approximately 15" deep, the lid to be green in color.
   B. See other notes on the detail to the left.

24. QUICK COUPLER VALVES: N/A

25. SPRINKLER HEADS:
   Sprinkler heads to be replaced or relocated with the exact same head and nozzle, as was on the previous system.

WORK PROCEDURE:

26. LAYOUT:
   A. Layout work as accurately as possible to drawings. Drawings are diagrammatic to the extent that swing joints, offsets, and all fittings are not shown.
   B. Full and complete coverage is required. Contractor shall make any necessary minor adjustments to layout required to achieve full coverage of irrigated areas at no additional cost to Owner.
   C. Where connections to existing stubouts are required, make necessary adjustments in layout to connect should stubs not be located exactly as shown. Adjust layout as necessary to install around existing work.
   D. Where piping is shown to be under paved areas but running parallel and adjacent to planted area, the intent is to install piping in planted areas. Do not install directly over another line in the same trench.

27. EXCAVATING AND TRENCHING:
   A. Perform all excavations as required for installation of work included under this Section, including shoring of earth banks, if necessary. Restore all surfaces, existing underground installations, etc., damaged or cut as a result of the excavations, to their original condition.
   B. Should utilities not shown on the plans be found during excavations, Contractor shall promptly notify Owner's Representative or Landscape Architect for instructions as to further action. Failure to do so will make Contractor liable for any and all damage thereto arising from his operations subsequent to discovery of such utilities.
   C. Dig trenches wide enough to allow a minimum of four (4") inches between parallel pipe lines. Trenches shall be of sufficient depth to provide minimum cover from finish grade as follows:
      1. Over PVC pipe on pressure side (mains) of irrigation control valve, control wires and quick coupling valves: 18 Inches.
      2. Over pipe on non-pressure side (laterals) of irrigation control valve: 12 inches.
      3. All PVC pipe under paving shall be bedded with minimum of four (4") inches of sand backfill on all sides and have twenty-four (24") inch cover.

28. CONDUITS AND SLEEVES:
   Coordinate conduit and sleeve installation with other trades as required.

29. PIPE LINE ASSEMBLY:
   A. Install pipe in accordance with manufacturer's latest printed instructions.
   B. All PVC pipe and fittings shall be solvent welded with Christy's Purple Primer and Christy's Red Hot Blue Glue for all 4? pipe and smaller except where screw connections are required. Clean pipe and fittings of dirt and moisture before assembly. PVC pipe may be assembled on ground surface beside trench. "Snake" pipe from side to side about every 40 ft. of trench bottom to allow for expansion and contraction. Make all connections between PVC pipe and metal valves or pipe with threaded fittings using PVC male adaptors.
   C. Use pipe joint compound on galvanized steel fittings: use Teflon tape on treaded PVC fittings.

30. IRRIGATION CONTROL VALVES:
   Install control valves in valve boxes where shown and group together where practical. Place no closer than twelve (12) inches to walk edges, buildings and walls. Valve boxes shall be flush with finished grade.

31. SPRINKLER HEADS:
   Install all spray, rotor, bubbler heads plus drip irrigation as per details.

32. QUICK COUPLING VALVES:
   Quick coupling valves shall be installed on a swing joint assembly as shown on detail sheet.

33. AUTOMATIC CONTROLLER:
   A. Install per local code and manufacturer's latest printed instructions.
   B. Connect remote control valves to controller in sequence to correspond with station setting beginning with stations 1, 2, 3, etc.

34. CONTROL WIRING:
   A. Install control wires with sprinkler mains and laterals in common trenches wherever possible. Lay to the side of pipe line. Provide looped slack at valves and snake wires in trench to allow for contraction of wires. Tie wires in bundles at ten (10') foot intervals.
   B. Control wire splices at remote control valves to be crimped and sealed with specified splicing materials. Line splices will be allowed only on runs of more than 500 feet. Line splices to be Marconitype taped and sealed with Scotchkote sealer.
   C. Contractor shall run (2) two extra wires of a fugitive color to farthest valve from controller, in every direction. (Not applicable for two wire system)

35. DRIP IRRIGATION: N/A

36. CLOSING OF PIPE AND FLUSHING OF LINES:
   A. Cap or plug all openings as soon as lines have been installed to prevent entrance of materials that would obstruct the pipe. Leave in place until removal is necessary for completion of installation.
   B. Thoroughly flush out all water lines before installing heads, valves and other hydrants.
   C. Test as specified.
   D. Upon completion of testing, complete assembly and adjust sprinkler heads for proper distribution.

37. TESTING:
   A. Make hydrostatic tests with risers capped when welded PVC joints have cured at least 24 hours. Center load piping with backfill to prevent pipe from moving under pressure. All couplings and fittings shall be exposed. Apply continuous static water pressure of 100 psi as follows:
      1. All piping on the pressure side (main) of control valves shall be tested for four (4) hours.
      2. All piping on the non-pressure side (laterals) of control valves shall be tested for two (2) hours.
   B. Leaks resulting from tests shall be repaired and tests repeated until system passes tests.

38. BACKFILL AND COMPACTING:
   A. After system is operating and required tests and inspections have been made, backfill excavations and trenches with clean soil, free of debris.
   B. Backfill for all trenches, regardless of the type of pipe covered, shall be compacted to a minimum 95% density under pavements, 85% under planted areas.
   C. Compact trenches in areas to be planted by thoroughly flooding the backfill. Jetting process may be used in those areas.
   D. Dress off all areas to finish grades.

END OF IRRIGATION SPECIFICATIONS

IRRIGATION DETAILS AND NOTES

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

REGISTERED LANDSCAPE ARCHITECT
JOHN O. WILLIAMS
STATE OF TEXAS
1441
11/17/2024

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JOW / KRR

LANDSCAPE IRRIGATION
MODDIFICATIONS
TO SITE

L1.10
of

11/13/2024 4:13:25 PM

SHEET LIST	
Sheet Number	Sheet Name
S001	3D VIEW AND SHEET LIST
S101	GENERAL STRUCTURAL CRITERIA
S102	GENERAL STRUCTURAL CRITERIA
S201	FOUNDATION PLAN - OVERALL
S201F	FOUNDATION PLAN - AREA F
S201G	FOUNDATION PLAN - AREA G
S201H	FOUNDATION PLAN - GREENHOUSE
S201P	FOUNDATION PLAN - PEMB
S201T	TENNIS COURT PLAN AND DETAILS
S202	LOW ROOF FRAMING PLAN - OVERALL
S202F	LOW ROOF FRAMING PLAN - AREA F
S202G	LOW ROOF FRAMING PLAN - AREA G
S203	HIGH ROOF FRAMING PLAN - OVERALL
S203G	HIGH ROOF FRAMING PLAN - AREA G
S301	SCHEDULES
S302	COLUMN AND BASEPLATE SCHEDULE
S401	TYPICAL SLAB ON GRADE DETAILS
S402	TYPICAL GB AND CF DETAILS
S403	SOG @ GB
S404	SOG @ PEMB
S405	SITE DETAILS
S501	TYPICAL STEEL DETAILS
S502	TYPICAL COLD FORMED METAL FRAMING DETAILS
S503	TYPICAL CMU WALL DETAILS
S601	TYPICAL STEEL ROOF DETAILS
S602	STEEL ROOF (OVERFLOW & EJ)

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

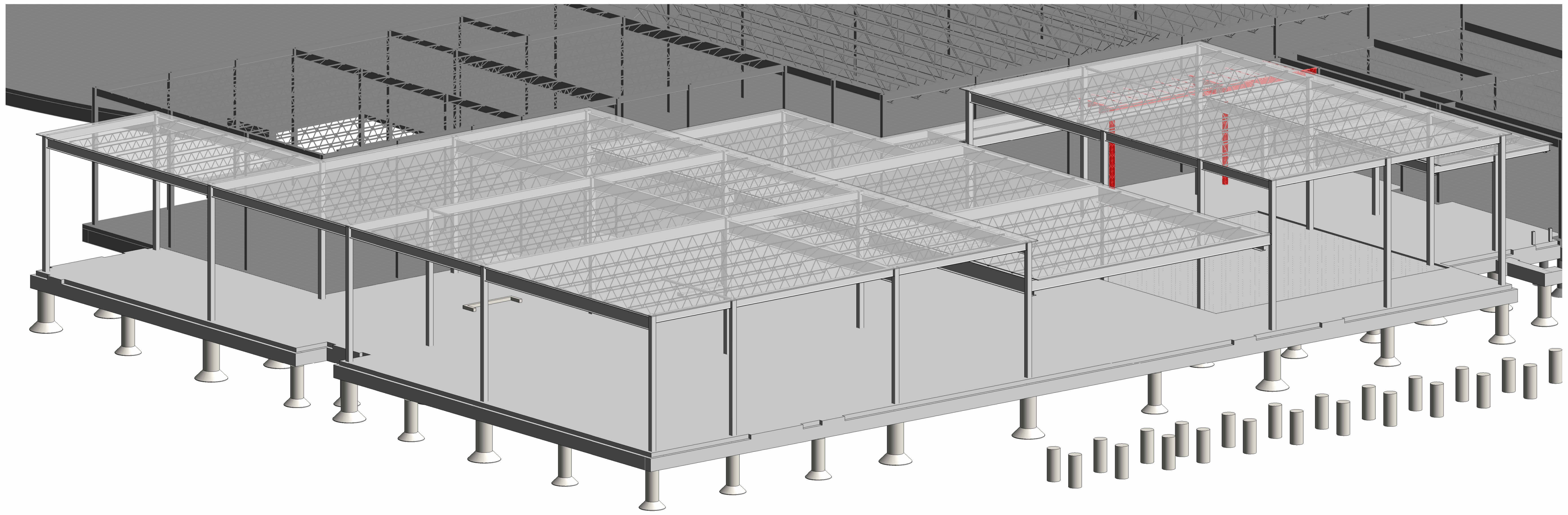
CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

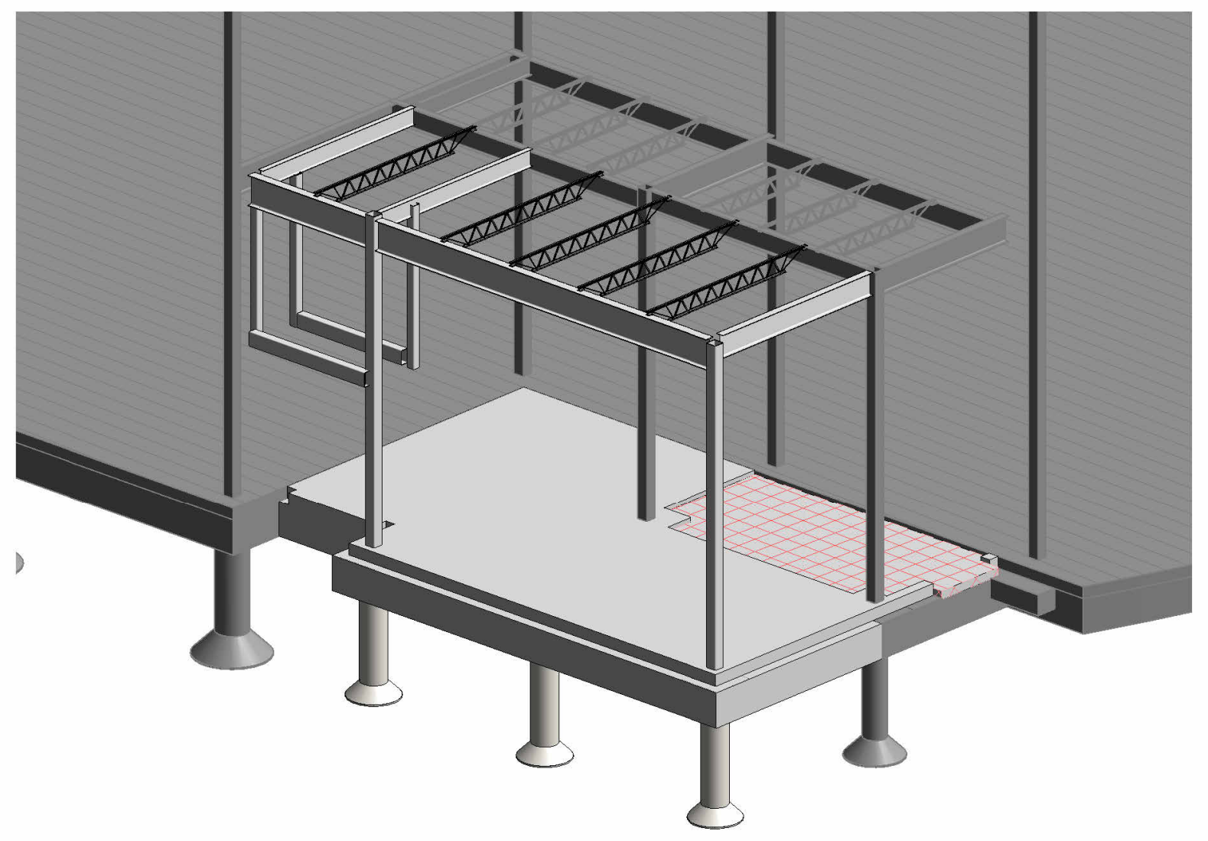
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040



① PRESENTATION 3D VIEW- AREA G



② PRESENTATION 3D VIEW- AREA F

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

3D VIEW AND SHEET LIST

S001
of

Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

STRUCTURAL CONCEPT, STANDARDS AND LOADS

A. DESIGN CONCEPT:

THE STRUCTURE AS SHOWN HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS AND DESIGN STANDARDS TO SUPPORT THE FINAL BUILDING SERVICE LOADS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL SUPPORTS FOR THE STRUCTURE IF NECESSITATED BY THE CONSTRUCTION SEQUENCE OR METHODS OF FABRICATION, HANDLING, ERECTION, AND OTHER CONSTRUCTION OPERATIONS.

B. BUILDING CODES AND DESIGN STANDARDS:

1. INTERNATIONAL BUILDING CODE, **2021** EDITION WITH CITY OF HOUSTON, TX AMENDMENTS.

2. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE); MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-22, AS AMENDED.

3. AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, AS AMENDED.

4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, 16TH EDITION (ASD) 2017, AS AMENDED.

5. AMERICAN WELDING SOCIETY (AWS).

6. STEEL JOIST INSTITUTE (SJI), STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS AND JOIST GIRDERS.

7. STEEL DECK INSTITUTE (SDI), DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, ROOF DECKS, AND CELLULAR METAL FLOOR DECK WITH ELECTRICAL DISTRIBUTION.

8. AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.

C. GRAVITY LOADS:

SUPERIMPOSED LOADS ARE GIVEN IN POUNDS PER SQUARE FOOT (PSF).

BUILDING AREA	DEAD LOAD (PSF)	LIVE LOAD (PSF)
1. SLAB ON GRADE	0	100
2. ROOF	20	20
3. MECHANICAL AREAS	10	150(**)

*INCLUDES AN ALLOWANCE OF 15 PSF FOR PARTITION WEIGHT
**EQUIPMENT WEIGHT IF LARGER

D. LATERAL DESIGN LOADS:

1. WIND LOADS FOR AN BASIC DESIGN WIND SPEED OF **134** MPH (ASD WIND SPEED OF **104** MPH), 3-SECOND GUST, WITH EXPOSURE **C** AND A RISK CATEGORY **III** (ASCE 7-22 METHOD)

2. COMPONENTS AND CLADDING PRESSURES (PSF) FOR "CLOSED" BUILDINGS:

		ZONE 1		ZONE 1'		ZONE 2		ZONE 3	
ROOF	10 FT^2	+18	-70	+18	-40	+18	-91	+18	-124
	100 FT^2	+16	-54	+16	-40	+16	-71	+16	-85

		ZONE 4		ZONE 5	
WALLS	10 FT^2	+40	-43	+40	-53
	100 FT^2	+34	-37	+34	-41

a. RE: IBC **2021** FOR ADDITIONAL DESCRIPTION OF PRESSURE ZONES.

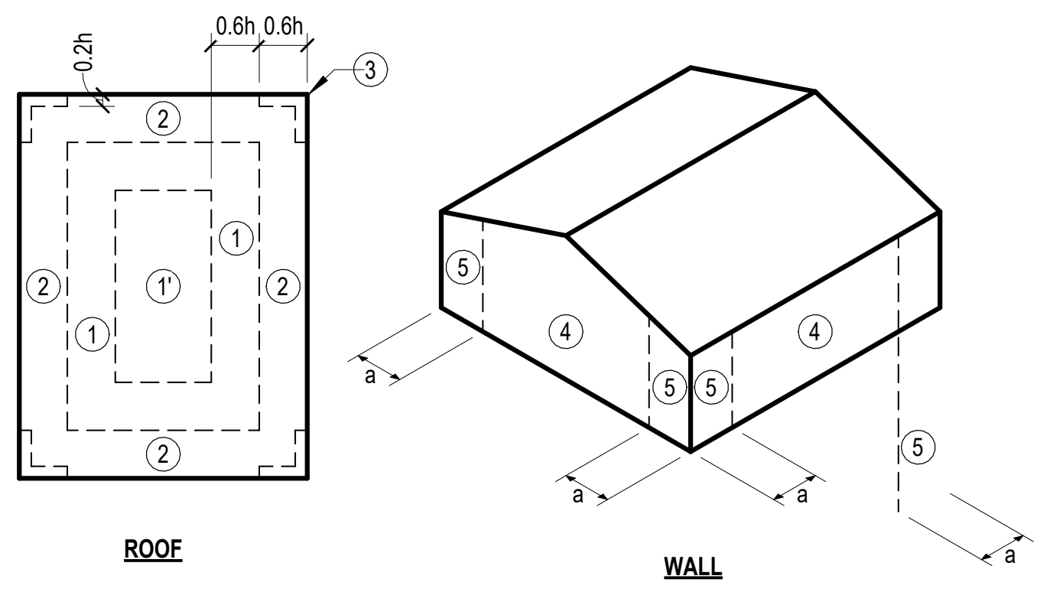
b. POSITIVE PRESSURES ARE PRESSURES ACTING TOWARD THE BUILDING.

c. NEGATIVE PRESSURES ARE PRESSURES ACTING AWAY FROM THE BUILDING.

d. VALUES ABOVE ARE FOR BASIC DESIGN WIND PRESSURES. THE ASD FACTOR 0.6.

e. ZONE WIDTH DIMENSIONS:

a (walls) = **3'-0"**
0.2h = **4'-8"**
0.6h = **14'-4"**



E. SEISMIC CRITERIA:

1. IMPORTANCE FACTOR: 1.25
2. RISK CATEGORY: III
3. MAPPED SPECTRAL RESPONSE ACCELERATIONS:
    a. Ss: 0.079
    b. S1: 0.043
4. SITE CLASS: .... D
5. SPECTRAL RESPONSE COEFFICIENTS:
    a. SDS: 0.073
    b. SD1: 0.065
6. SEISMIC DESIGN CATEGORY: .... A

F. GROUND SNOW LOADS : 5 PSF

G: SPECIAL LOADS:

1. STAIR TREADS, RAILING AND GUARDRAILS:

ITEM	REQUIRED CAPACITY
TREADS	300 POUNDS AT CENTER
TOP RAILS	50 PLF HORIZONTALLY
OTHER RAILS, FILLERS & CONNECTIONS	50 PSF HORIZONTALLY
HAND RAILS	200 POUNDS ANY DIRECTION

2. PIPE LOADS WITH WATER:

SIZE	WEIGHT MAX.	SPACING OF HANGERS
4" DIA.	17 PLF	10'-0"
6" DIA.	32 PLF	10'-0"
8" DIA.	50 PLF	10'-0"
10" DIA.	75 PLF	5'-0"
12" DIA.	102 PLF	5'-0"

VALUES ASSUME SCHEDULE 40 STEEL PIPE

H. ROOF RAIN LOAD DATA: RAIN INTENSITY, i = **X.X** IN/HR

GENERAL NOTES FOR CONSTRUCTION

A. CONSTRUCTION METHODS, PROCEDURES AND SEQUENCES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND THE CONTRACTOR SHALL TAKE ALL THE NECESSARY MEANS TO MAINTAIN AND PROTECT THE STRUCTURAL INTEGRITY OF ALL CONSTRUCTION AT ALL STAGES.

B. THESE NOTES APPLY TO STRUCTURAL DOCUMENTS SEALED BY THE STRUCTURAL ENGINEER AND ARE INTENDED TO BE COMPLEMENTARY TO AND USED IN CONJUNCTION WITH THE PLANS AND SPECIFICATIONS, INCLUDING THOSE PREPARED BY OTHER DISCIPLINES. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT/STRUCTURAL ENGINEER IMMEDIATELY. ANY SUCH DISCREPANCIES SHALL BE RESOLVED TO THE MORE STRINGENT REQUIREMENTS, UNLESS OTHERWISE AUTHORIZED BY THE STRUCTURAL ENGINEER.

C. ANY DISCREPANCIES ON THE STRUCTURAL DOCUMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT/STRUCTURAL ENGINEER PRIOR TO SUBMISSION OF BIDS OR PROPOSALS, OR IF NOT REASONABLE DISCERNABLE DURING PREPARATION OF BIDS AND PROPOSALS, BEFORE COMMENCING THE WORK IN QUESTIONS. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT AND/OR STRUCTURAL ENGINEER. NO CHANGE ORDER CONSIDERATION WILL BE GIVEN TO CHANGES FOR WHICH THE ARCHITECT AND/OR ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.

D. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONSTRUCTION, INCLUDING EXISTING WORK, PRIOR TO COMMENCING WORK. ANY DISCREPANCIES SHALL BE REPORT IMMEDIATELY TO THE ARCHITECT/STRUCTURAL ENGINEER.

E. ALL PROPOSED SUBSTITUTIONS MUST BE EQUAL OR BETTER AND SHALL BE REVIEWED BY THE ARCHITECT/ENGINEER PRIOR TO ANY PERTINENT WORK AND PRIOR TO THE AWARD OF THE CONTRACT.

F. NOT ALL OPENINGS AND OTHER COMPONENTS THAT ARE REQUIRED HAVE BEEN SHOWN IN THE STRUCTURAL DRAWINGS. COORDINATE WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS AND VERIFY THE LOCATIONS AND SIZES OF ALL CHASES, INSERTS, OPENINGS, SLEEVES, FINISHES, DEPRESSIONS, PADS AND OTHER PROJECT REQUIREMENTS. FLOOR PLAN WILL BE FURNISHED FOR THAT PURPOSE.

G. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE MECHANICAL, ELECTRICAL, PLUMBING AND ARCHITECTURAL DRAWINGS TO DETERMINE WHERE OPENINGS ARE REQUIRED IN REINFORCED CONCRETE BEAMS, SLABS AND WALLS.

H. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, DETAILING ALL THE OPENINGS, INCLUDING ADDED REINFORCEMENT AS SHOWN ON THE TYPICAL WALL, SLAB AND BEAM OPENING DETAILS FOR REVIEW.

I. ADDITIONAL REINFORCEMENT ABOVE THAT SHOWN IN THE TYPICAL SLAB AND BEAM OPENING DETAILS MAY BE REQUIRED AND WILL BE REVIEWED ON THE SHOP DRAWINGS.

J. USE THE MANUFACTURER'S CERTIFIED DRAWINGS AND SPECIFICATIONS FOR THE EQUIPMENT ANCHORAGE AND DETAILS.

K. ALL CONSTRUCTION JOINTS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE INCORPORATED INTO THE STRUCTURE. ADDITIONAL CONSTRUCTION JOINTS TO FACILITATE CONSTRUCTION SHALL BE LOCATED AND DETAILED ON THE SHOP DRAWINGS FOR REVIEW.

L. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN BEAMS UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

M. ALL CONSTRUCTION AND CONTROL JOINTS FOR BEAMS WHICH ARE EXPOSED TO VIEW ARE TO BE LOCATED TO COINCIDE WITH THE ARCHITECTURAL RUSTICATION JOINTS AS SHOWN ON THE BUILDING ELEVATION SHEETS OR AS REVIEWED IN WRITING.

N. SHOP DRAWINGS

1. THE TERM "SHOP DRAWINGS" INCLUDES FABRICATION, MANUFACTURING, ERECTION AND SETTING DRAWINGS, BROCHURES, CERTIFICATES, AND PRODUCT DATA DESCRIBING MATERIALS AND EQUIPMENT. SHOP DRAWINGS SHALL INCLUDE ALL PERTINENT INFORMATION REQUIRED FOR THE ENGINEER TO FULLY EVALUATE THE MATERIALS BEING REPRESENTED BY THE SUBMITTAL INCLUDING THE PHYSICAL PROPERTIES, DIMENSIONS, LOCATIONS AND METHOD OF INSTALLATION.

2. SHOP DRAWINGS WILL BEAR THE REVIEW STAMP OF THE CONTRACTOR INDICATING THAT HE HAS REVIEWED THE DRAWINGS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS; COORDINATED ITEMS INCLUDED IN THE SUBMITTAL WITH RELATED ITEMS; AND VERIFIED AND COORDINATED DIMENSIONS.

3. REPRODUCTIONS OF THE ENGINEERING DRAWINGS WILL NOT BE ACCEPTABLE AS SHOP DRAWINGS.

4. ANY SHOP DRAWING NOT CONFORMING TO THESE REQUIREMENTS WILL BE CAUSE FOR REJECTION AND WILL BE RETURNED WITHOUT ANY FURTHER ACTION.

5. STRUCTURAL SUBMITTALS REQUIRED FOR APPROVAL INCLUDE, BUT ARE NOT LIMITED TO:

CONCRETE ACCESSORIES (MANUFACTURERS PRODUCT DATA)
STEEL REINFORCING
CONCRETE MIX DESIGN
CONTROL JOINT LAYOUT
CONCRETE MATERIAL CERTIFICATES
STRUCTURAL STEEL FRAMING
STRUCTURAL STEEL CONNECTION CALCULATIONS
STEEL ROOF DECK
COLD FORMED METAL FRAMING
COLD FORMED METAL FRAMING CALCULATIONS
MISC. STEEL FABRICATIONS

6. DELEGATED STRUCTURAL DESIGN OF COMPONENTS:

A. SEE APPLICABLE SECTIONS OF GENERAL NOTES FOR THE APPROPRIATE DESIGN RESPONSIBILITIES OF THE SUPPLIER AND IT'S LICENSED ENGINEER

P. GENERAL FRAMING NOTES:

1. FOR ALL MISCELLANEOUS STEEL SHOWN ON ARCHITECTURAL AND NOT SHOWN ON STRUCTURAL DRAWINGS, ASSUME THE FOLLOWING AS A MINIMUM AND CONFIRM FINAL ASSUMPTIONS WITH STRUCTURAL ENGINEER:

EQUAL LEG ANGLES = L4X4X5/16
LLV ANGLES = L6X4X5/16
CHANNELS = C6X8.2
SQUARE TUBE = HSS6X6X3/8
LSV TUBE = HSS12X8X1/2
ROUND TUBE = 6" STD PIPE
WIDE FLANGE = W14X22
STEEL PLATE = 3/8" THICK

2. FOR ALL MECHANICAL OPENINGS SHOWN ON ARCHITECTURAL OR MEP DRAWINGS AND NOT SHOWN ON STRUCTURAL DRAWINGS, PROVIDE W14X22 PERIMETER BEAMS AS REQUIRED TO FRAME REQUIRED OPENING WHERE OPENING DIMENSIONS EXCEED 5'-0" IN ANY DIRECTION.

3. FOR ALL WINDOWS, STOREFRONTS AND CURTAINWALLS EXCEEDING 10'-0" IN LENGTH WHERE HANGING STEEL TO SUPPORT THE HEADER IS NOT SHOWN ON STRUCTURAL DRAWINGS, PROVIDE C6X8.2 VERTICAL HANGERS WITH L4X4X1/4 KICKERS AT 4'-0" OC AND CONTINUOUS L6X4X5/16 ANGLE ALONG THE BOTTOM. PROVIDE CONTINUOUS HSS6X2X1/4 (LSH) IN LIEU OF L6X4 BOTTOM ANGLE AND GALVANIZE 3/8" BENT LEDGER PLATE WHERE MASONRY WILL BE SUPPORTED.

4. FOR ALL FOLDING PARTITIONS WHERE HANGING STEEL TO SUPPORT HEADER TRACK IS NOT SHOWN ON STRUCTURAL DRAWINGS PROVIDE C6x8.2 VERTICAL HANGERS WITH L4x4x1/4 KICKERS AT 4'-0" AND CONTINUOUS WT6X20 ALONG THE BOTTOM. HANGERS SHALL BE SPACED AT 2'-0" ON CENTER AT STACKED ENDS OF PARTITION.

5. FOR ALL COILING OVERHEAD DOORS AND ROLLING GRILLS EXCEEDING 10'-0" IN WIDTH WHERE TUBE STEEL TO SUPPORT THE DOOR/HOUSING IS NOT SHOWN ON STRUCTURAL DRAWINGS, PROVIDE HSS12X8X3/8 (LSV) INTERMEDIATE STEEL TUBE.

6. ALL STAIR MEMBERS INCLUDING, BUT NOT LIMITED TO, STRINGERS, LANDINGS AND HANDRAILS SHALL BE DESIGNED BY THE STAIR ENGINEER AND STEEL FABRICATOR.

Q. GENERAL FOUNDATION NOTES:

1. FOR ALL SLAB ON GRADE SHOWN ON ARCHITECTURAL AND NOT SHOWN ON STRUCTURAL DRAWINGS, ASSUME 5" THICK CONCRETE SLAB WITH #4 REINFORCING BARS AT 14" OC IN EACH DIRECTION.

2. MECHANICAL EQUIPMENT AND LOCKERS SHALL RECEIVE A HOUSEKEEPING PAD AS INDICATED IN MEP OR ARCHITECTURAL DRAWINGS AND PER MANUFACTURER'S RECOMMENDATIONS.

3. THE MAXIMUM GRADE BEAM SPAN IS 20'-0". PROVIDE ADDITIONAL 24/48 PIER AT MID SPAN WHERE PIERS ARE NOT SHOWN ON PLAN AND ALLOWABLE SPAN IS EXCEEDED.

4. ASSUME GRADE BEAM TYPE "GB1" FOR ALL LOCATIONS WHERE CMU WALLS EXCEED 16'-0" IN HEIGHT ARE SHOWN ON PLANS. SUPPLY 24/48 PIER AT 20'-0" OC MAXIMUM UNDER GRADE BEAM.

5. FOR ALL DUMPSTER ENCLOSURES, SCREEN WALLS, AND OTHER MASONRY FENCES NOT SHOWN ON STRUCTURAL DRAWINGS ASSUME 8'-0" TALL MASONRY WALL WITH VENEER ON ONE SIDE SUPPORTED BY CONTINUOUS 'TYPE GB1' GRADE BEAM ON 24/48 DRILLED PIERS SPACED AT 15'-0" MAXIMUM. STRUCTURAL MASONRY WALL SHALL BE 8" CMU WITH #6 VERTICAL BARS SPACED AT 24" ON CENTER IN FULLY GROUTED CELLS.

6. FOR ALL SPORTS FIELDS WHERE THE BACKSTOP WALL IS NOT SHOWN ON STRUCTURAL DRAWINGS ASSUME 4'-0" TALL MASONRY WALL WITH VENEER ON ONE SIDE SUPPORTED BY CONTINUOUS CONCRETE FOOTING. FOOTING SHALL BE 1'-0" THICK x 3'-0" WIDE BEARING 3'-0" BELOW FINISHED GRADE. STRUCTURAL MASONRY WALL SHALL BE 8" CMU WITH #5 VERTICAL BARS SPACED AT 32" ON CENTER SUPPORTED BY CONCRETE STEM WALL EXTENDING FROM CONTINUOUS FOOTING. REINFORCE FOOTING WITH LONGITUDINAL (4) #4 BARS AND TRANSVERSE #4 BARS AT 12" ON CENTER. AT STEM WALL PROVIDE #4 DOWELS AT 12" ON CENTER AND (3) #4 CONTINUOUS BARS AT EACH FACE.

CONCRETE

A. CONCRETE SCHEDULE:

BUILDING COMPONENT	28 DAY CYLINDER COMPRESSIVE STRENGTH POUNDS PER SQUARE INCH(PSI)					
	NORMAL WEIGHT			MAX AGGREGATE SIZE (IN)	SLUMP (IN)	W/C RATIO
	3000	3500	4000			
1. DRILLED PIERS	●			1 1/2"	5-7	0.55
2. SLAB-ON-GRADE		●		1"	4-6	0.50
3. SLAB-ON-DECK		●		1"	4-6	0.50
4. GRADE BEAMS AND PLINTHS		●		1"	4-6	0.50
5. ALL OTHER CONCRETE	●			1"	4-6	0.52

B. PROVIDE DEFORMED NEW BILLET STEEL BARS CONFORMING TO ASTM A615, GRADE 60. ALL REINFORCING STEEL SHALL BE SECURELY HELD IN PLACE; PROVIDE ADDITIONAL BARS OR STIRRUPS FOR SUPPORT AS REQUIRED.

C. WELDED WIRE FABRIC SHALL CONSIST OF FLAT SHEETS AND SHALL CONFORM TO ASTM A185, WITH A MINIMUM YIELD STRENGTH OF 65.0 KSI

D. PROVIDE FULL EMBEDMENT WITH STANDARD 90 DEGREE HOOKS FOR ALL DOWELS. IF NOT OTHERWISE SPECIFIED, THE DOWEL SIZE AND SPACING SHALL BE THE SAME AS THE MAIN REINFORCING.

E. WHEN REINFORCING STEEL IN GRADE BEAMS, WALLS, SLABS AND BEAMS, IS NOTED AS CONTINUOUS, SPLICE REINFORCING STEEL ONLY WHEN UNAVOIDABLE DUE TO STOCK LENGTHS. STAGGER ALL SPLICES A MINIMUM OF 4'-0". ADJACENT BAR SPLICES ARE NOT ACCEPTABLE.
LOCATE THE TOP BAR SPLICES WITHIN THE MIDDLE HALF OF THE SPAN AND LOCATE THE BOTTOM BAR SPLICES AT SUPPORTS OR BETWEEN SUPPORTS AND 1/3 SPAN POINT, UNLESS NOTED OTHERWISE ON PLANS, DETAILS OR SCHEDULES.

F. PROVIDE INTERIOR AND EXTERIOR HORIZONTAL LAPPED CORNER BARS AT ALL CORNERS TO MATCH THE SIZE, TYPE AND SPACING OF THE WALL AND GRADE BEAM HORIZONTAL REINFORCING.

G. UNLESS SPECIFICALLY NOTED, SCHEDULED OR DETAILED OTHERWISE, PROVIDE DEVELOPMENT LENGTH FOR REINFORCING IN CONCRETE COMPONENTS IN ACCORDANCE WITH THE SCHEDULE IN NOTE H. BELOW. THIS SCHEDULE SHALL APPLY TO ALL DEVELOPMENT LENGTHS NOT OTHERWISE NOTED, DETAILED OR SCHEDULED IN THE DRAWINGS OR SPECIFICATIONS.

H. REINFORCING BAR DEVELOPMENT LENGTHS (Ld) IN INCHES FOR VARIOUS CONCRETE STRENGTHS IN POUNDS PER SQUARE INCH (PSI). TOP BARS ARE DEFINED AS HORIZONTAL REINFORCING SO PLACED IN A MEMBER THAT MORE THAN 12 INCHES OF CONCRETE IS CAST BELOW THE BAR. ALL OTHER CONDITIONS ARE CONSIDERED BOTTOM BARS FOR DEVELOPMENT AND SPLICE LENGTH PURPOSES.

BAR SIZE GRADE 60	Ld FOR TOP BARS				Ld FOR BOTTOM BARS			
	28 DAY CYLINDER CONCRETE STRENGTH (PSI)				28 DAY CYLINDER CONCRETE STRENGTH (PSI)			
	3000/3500	4000	5000	6000	3000/3500	4000	5000	6000
#3	22	19	17	16	17	15	13	12
#4	29	25	23	21	22	19	17	16
#5	36	31	28	26	28	24	22	20
#6	43	37	34	31	33	29	26	24
#7	63	54	49	45	48	42	38	34
#8	72	62	56	51	55	48	43	39
#9	81	70	62	57	62	54	48	44
#10	89	78	69	63	69	60	53	49
#11	98	85	76	70	76	66	59	54

1. WHEN TWO BARS OF DIFFERENT SIZES ARE LAPPED, THE SMALLER SIZE SHALL GOVERN THE LAP LENGTH UNLESS SPECIFICALLY NOTED.

2. WELDED OR MECHANICAL SPLICES CAPABLE OF DEVELOPING 125% OF THE BAR YIELD STRENGTH MAY BE USED IN LIEU OF THE LAPS. SUCH SPLICES MAY BE EITHER FULL BUTT WELDS OR SERIES "C CADWELDS OR EQUAL."

J. AT LAP SPLICES, PROVIDE LAP SPLICE LENGTHS FOR REINFORCING BARS 1.3 TIMES THE Ld SHOWN IN TABLE IN NOTE H ABOVE.

K. THE GENERAL NOTES, LAP LENGTHS OR DETAILS PERTAINING TO REINFORCING STEEL AS SHOWN ON THE DETAIL SHEETS OR OTHER SCHEDULES SHALL SUPERSEDE THE NOTES SHOWN ON THIS SHEET.

L. PROVIDE THE FOLLOWING COVER FOR CAST-IN-PLACE CONCRETE REINFORCING.

1. UNFORMED SURFACES IN CONTACT WITH EARTH: 3 INCHES

2. UNFORMED SURFACES OVER MOISTURE BARRIER: 2 INCHES

3. FORMED SURFACES EXPOSED TO EARTH OR WEATHER

a. #6 AND LARGER: 2 INCHES
b. #5 AND SMALLER: 1 1/2" INCHES

4. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER
a. SLABS AND WALLS: 3/4 INCHES
b. BEAMS AND COLUMNS 1 1/2 INCHES

EXCAVATION, BACKFILLING & FOUNDATIONS

A. A GEOTECHNICAL EXPLORATION OF SUBSURFACE CONDITIONS, CONTAINING TEST BORINGS, LABORATORY TEST, ENGINEERING ANALYSIS AND FOUNDATION RECOMMENDATIONS, PERFORMED BY **TERRACON** DATED **09/27/2024** REPORT NO. **92245368** IS AVAILABLE FOR REVIEW.

B. MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION SO THAT PONDING OF WATER DOES NOT OCCUR IN THE BUILDING AREA.

C. SUB-GRADE PREPARATION .

1. PERFORM DEMOLITION OF EXISTING STRUCTURES AS REQUIRED BY THE GEOTECHNICAL REPORT. THE ENTIRE VOLUME OF THE EXCAVATIONS CREATED BY DEMOLITION AND REMOVAL OF EXISTING STRUCTURES SHOULD BE BACKFILLED WITH ENGINEERED (SELECT) FILL THAT IS PROPERLY PLACED AND COMPACTED.

2. EXCAVATE EXISTING SOILS AS REQUIRED TO REMOVE ALL EXISTING VEGETATION, ROOTS AND DELETERIOUS MATERIALS FROM THE PROPOSED BUILDING AREA, AND AS REQUIRED BY GEOTECHNICAL REPORT. THE CLEARING SHOULD EXTEND BEYOND THE BUILDING EDGES. ONCE ROUGH GRADE IS ESTABLISHED, THE EXPOSED SURFACE SHOULD BE PROOF-ROLLED. ANY SOFT POCKETS OF SOFT OR WEAK SOILS ENCOUNTERED SHOULD BE REMOVED. BUILD BUILDING PAD AS REQUIRED BY GEOTECHNICAL REPORT.

3. BUILDING PAD UNDER SLAB ON GRADE SHALL BE PREPARED TO PROVIDE AN OWNER APPROVED PVR OF 1" OR LESS BASED ON RECOMMENDATIONS IN THE PROJECT GEOTECHNICAL REPORT.

D. FOUNDATIONS HAVE BEEN DESIGNED FOR ALLOWABLE PRESSURE OF **DRILLED PIERS SCHEDULE SHEET**.

E. REFER TO THE GEOTECHNICAL EXPLORATION FOR ADDITIONAL INFORMATION.

STRUCTURAL STEEL

A. ROLLED SHAPES:

1. ALL STRUCTURAL STEEL FOR ALL THE HORIZONTAL FRAMING MEMBER SHALL CONFORM TO ASTM A992, GRADE 50, UNLESS OTHERWISE NOTED

2. ALL STRUCTURAL STEEL FOR HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO ASTM A500, GRADE B WITH A MINIMUM YIELD OF 46 KSI, UNLESS OTHERWISE NOTED.

3. ALL STRUCTURAL STEEL FOR PIPE SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B, UNLESS OTHERWISE NOTED.

4. ALL STRUCTURAL STEEL FOR ANGLES, PLATES AND MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36, UNLESS OTHERWISE NOTED.

5. ALL EXPOSED STEEL TO BE HOT DIPPED GALVANIZED.

B. CONNECTIONS

1. THE DESIGN OF STRUCTURAL STEEL CONNECTIONS IS THE RESPONSIBILITY OF THE CONTRACTOR AND THE STEEL FABRICATOR. THE DESIGN OF THE CONNECTION SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY THE STEEL FABRICATOR. THE DETAILS AND CALCULATIONS SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

A. ALL WELD SIZES AND LENGTHS
B. ALL BOLT SIZES, LOCATIONS, QUANTITIES AND GRADES
C. ALL PLATE AND ANGLE SIZES, THICKNESS AND DIMENSIONS
D. ALL WORK POINT LOCATIONS AND RELATED INFORMATION

2. PROVIDE STANDARD BOLTED CONNECTIONS CONFORMING TO AISC BOLTED CONNECTIONS, USING ASTM A325 OR A490 BOLTS, FOR THE BEAM END SHEARS INDICATED IN THE DOCUMENTS. PROVIDE MINIMUM OF TWO BOLTS FOR ALL CONNECTIONS.

3. ALL WELDED CONNECTIONS SHALL CONFORM TO AWS UNLESS OTHERWISE NOTED.

4. SURVEY ALL PLANS, DETAILS, SECTIONS, SCHEDULES AND SPECIFICATIONS FOR SPECIAL CONNECTIONS.

5. UNLESS OTHERWISE NOTED AND/OR SPECIFIED, ALL BEAM CONNECTIONS SHALL BE DESIGNED TO SUPPORT 1/2 THE TOTAL UNIFORM LOAD FOR THE APPLICABLE MEMBER SIZE AND SPAN AS DETERMINED BY THE TABLES FOR ALLOWABLE UNIFORM LOADS ON BEAM IN THE **16TH** EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION (ASD)

6. WHERE BEAMS ARE TO RECEIVE HEADED SHEAR CONNECTORS, DESIGN THOSE BEAM CONNECTIONS FOR THE REACTION SHOWN. IF REACTIONS ARE NOT SHOWN, DESIGN THE CONNECTIONS TO SUPPORT 40 PERCENT OF THE MAXIMUM WEB SHEAR, V, FOR THE APPLICABLE MEMBER SIZE AS DETERMINED BY THE TABLES FOR ALLOWABLE UNIFORM LOADS ON BEAMS IN THE **16TH** EDITION OF THE AISC MANUAL

7. MOMENT CONNECTIONS SHOWN SHALL BE DESIGNED TO FULLY DEVELOP THE SECTION IN FLEXURE AND TO SUPPORT 1/2 THE TOTAL UNIFORM LOAD FOR SHEAR AS DESCRIBED IN NOTE 5 ABOVE.

8. WHERE FILLET WELD IS NOT SHOWN ON DETAIL, ITS SIZE SHALL BE ASSUMED TO BE THE PLATE THICKNESS OF THE THINNEST PIECE MINUS 1/16"

C. WELDS

1. CONFORM TO "CODE FOR WELDING IN BUILDING CONSTRUCTION" BY THE AMERICAN WELDING SOCIETY, LATEST EDITION.

2. WELDS ON INDICATED ON DRAWINGS ARE TO BE FILLET ALL AROUND AS PRESCRIBED BY AISC SPECIFICATION, PROVIDE WELDING OF CONTINUOUS MEMBERS OF 2 INCHES OF 3/16" INCH FILLET STITCH WELDS AT 12 INCHES OC, STAGGERED EACH SIDE, UNLESS OTHERWISE NOTED.

3. FIELD PAINT ALL WELDS W/ "GALVILITE" BY Z.R.C. OR APPROVED EQUAL ARC WELDING ELECTRODES.

4. METAL DECK - E60XX
STRUCTURAL STUDS - E6022 OR E6011, 3/32" RODS.
ALL OTHER - E70XX LOW HYDROGEN, 250 DEGREE MIN. OVEN TEMP.

5. SIZE - ALL FILLETS ARE 1/16" LESS THAN MINIMUM THICKNESS TO BE WELDED

6. PROVIDE ULTRASONIC INSPECTION BY THE TESTING LABORATORY FOR ALL WELDS INDICATED AS PENETRATION WELDS.

D. HEADED SHEAR CONNECTORS

1. ALL HEADED SHEAR CONNECTORS SHALL BE 3/4 IN. DIAMETER STUDS x 4 1/2 IN. LONG AFTER WELDING AND SHALL CONFORM TO ASTM A108 UNLESS OTHERWISE NOTED.

2. PLACE MAXIMUM NUMBER OF STUDS IN A SINGLE ROW PATTERN AND THE BALANCE IN A DOUBLE ROW PATTERN AS NECESSARY TO SATISFY THE AISC SPACING REQUIREMENT.

E. OPEN WEB STEEL JOISTS:

1. AS APPLICABLE FOR THE OPEN WEB STEEL JOIST TYPE INDICATED ON THE DRAWINGS, CONFORMING TO SJI OR AISC, WHICHEVER IS MORE STRINGENT.

2. PROVIDE JOIST BRIDGING IN ACCORDANCE WITH SJI.

3. DESIGN ROOF JOISTS USING GOVERNING LOAD COMBINATIONS WITH UPLIFT PRESSURES INDICATED ON COMPONENT AND CLADDING PRESSURES TABLE.

F. STEEL DECK:

TYPE 1

1. PROVIDE STEEL ROOF DECK 1 1/2" DEEP TYPE B 20 GAUGE STEEL SHEETS AND CONFORMING TO ASTM A653, STRUCTURAL STEEL (SS), GRADE 33, GALVANIZED COATING DESIGNATION G60.

2. PROVIDE STEEL ROOF DECK WITH THE FOLLOWING MINIMUM SECTION PROPERTIES:

a. MOMENT OF INERTIA: I =0.201 INCHES^4 /FOOT WIDTH
b. SECTION MODULUS: Sp =0.234 INCHES^3 /FOOT WIDTH
c. SECTION MODULUS: Sn =0.247 INCHES^3 /FOOT WIDTH

3. ATTACH STEEL ROOF DECK TO STEEL SUPPORTS AND AT SIDE LAPS AS FOLLOWS:

a. POWDER-ACTUATED FASTENERS:

SUPPORTS: "HILTI" X-HSN24 AND "HILTI" X-ENP-19L15, 36/7 PATTERN
SIDELAP: #10 "TEK" @ 16" O.C. MAXIMUM

b. SCREWS:

SUPPORTS: #12 "TEK" SCREWS, 36/7 PATTERN
SIDELAP: #10 "TEK" @ 16" O.C. MAXIMUM

TYPE 2

1. PROVIDE 1" VENTED METAL DECK, 20 GAUGE STEEL SHEETS AND CONFORMING TO ASTM A653, STRUCTURAL STEEL (SS), GRADE 60, GALVANIZED COATING DESIGNATION G90. PROVIDE LIGHT WEIGHT CONCRETE TOPPING (48-60 PCF), FILLING FLUTES ONLY.REFER TO ARCHITECTURAL DRAWINGS FOR INSULATION REQUIREMENTS.

2. PROVIDE STEEL ROOF DECK WITH THE FOLLOWING MINIMUM SECTION PROPERTIES:

a. MOMENT OF INERTIA: I =0.088 INCHES^4 /FOOT WIDTH
b. SECTION MODULUS: Sp =0.167 INCHES^3 /FOOT WIDTH
c. SECTION MODULUS: Sn =0.165 INCHES^3 /FOOT WIDTH

3. ATTACH STEEL ROOF DECK TO STEEL SUPPORTS AND AT SIDE LAPS AS FOLLOWS:

a. POWDER-ACTUATED FASTENERS:

SUPPORTS: "HILTI" X-HSN-24 AND "HILTI" X-ENP-19L15, 30/5 PATTERN
SIDELAPS: #12 "TEK" @ 8" O.C. MAXIMUM

b. WELDS:

SUPPORTS: 5/8" PUDDLE WELD, 30/5 PATTERN
SIDELAPS: #14 TEK SCREWS @ 8" O.C. MAX

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

GENERAL STRUCTURAL CRITERIA

S101
of

11/13/2024 4:13:28 PM
Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

INDEPENDENT TESTING LABORATORY & SPECIAL INSPECTIONS

A. A GEOTECHNICAL EXPLORATION OF SUBSURFACE CONDITIONS, CONTAINING TEST BORINGS, LABORATORY TEST, ENGINEERING ANALYSIS AND FOUNDATION RECOMMENDATIONS, PERFORMED BY **TERRACON** DATED **09/27/2024** REPORT NO. **92245368** IS AVAILABLE FOR REVIEW.

B. EMPLOYMENT OF A TESTING LABORATORY IN NO WAY RELIEVES THE CONTRACTOR OF ANY OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

C. CONTRACTOR RESPONSIBILITIES:

1. DELIVER TO LABORATORY AT DESIGNATED LOCATION ADEQUATE SAMPLES OF MATERIALS PROPOSED TO BE USED WHICH REQUIRE TESTING, TOGETHER WITH PROPOSED MIX DESIGNS.

2. COOPERATE WITH LABORATORY PERSONNEL AND PROVIDE ACCESS TO WORK AND TO MANUFACTURER'S FACILITIES.

3. PROVIDE INCIDENTAL LABOR AND FACILITIES TO PROVIDE ACCESS TO WORK TO BE TESTED, TO OBTAIN AND HANDLE SAMPLES AT THE SITE OR AT SOURCE OF PRODUCTS TO BE TESTED, TO FACILITATE TEST AND INSPECTIONS AND FOR STORAGE AND CURING OF TEST SAMPLES.

4. NOTIFY LABORATORY OF MATERIAL SOURCES AND FURNISH NECESSARY QUANTITIES OF REPRESENTATIVE SAMPLES OF MATERIALS PROPOSED FOR USE WHICH ARE REQUIRED TO BE TESTED.

5. NOTIFY ARCHITECT AND LABORATORY 24 HOURS PRIOR TO EXPECTED TIME FOR OPERATIONS REQUIRING INSPECTION AND TESTING SERVICES.

6. ADVISE LABORATORY IN A TIMELY FASHION TO COMPLETE REQUIRED INSPECTION AND TESTING PRIOR TO SUBSEQUENT WORK BEING PERFORMED.

7. PAY FOR ALL SUBSEQUENT RE-TESTING OF PRODUCTS OR SYSTEMS FOUND TO BE DEFECTIVE OR OTHERWISE NOT IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS. REMOVE REJECTED PRODUCTS AND REPLACE WITH PRODUCTS OF SPECIFIED QUALITY.

D. SPECIAL INSTRUCTIONS:

1. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTOR(S) TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF CONSTRUCTION LISTED IN THIS SECTIONS. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO THE INSPECTIONS BEING PERFORMED TO THE SATISFACTION OF THE ENGINEER OF RECORD AND THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL HAVE EXPERIENCE WITH AT LEAST FIVE OTHER PROJECTS SIMILAR IN NATURE.

2. THE PURPOSE OF THE INSPECTIONS SHALL BE TO ENFORCE COMPLIANCE WITH THE CONSTRUCTION DRAWINGS, SPECIFICATIONS, GEOTECHNICAL REPORT AND THE **2021** INTERNATIONAL BUILDING CODE, SECTION 1704.

3. THE FOLLOWING ITEMS REQUIRE INSPECTION BY THE SPECIAL INSPECTOR:

REFERENCED STANDARD	FREQUENCY
STRUCTURAL / REINFORCING STEEL:	
HIGH STRENGTH BOLTING	
BEARING TYPE CONNECTIONS	PERIODIC
SLIP CRITICAL CONNECTIONS	CONTINUOUS
WELDING OF STRUCTURAL STEEL	
FULL PENETRATION GROOVE WELDS	CONTINUOUS
MULTI-PASS FILLET WELDS	CONTINUOUS
SINGLE-PASS FILLET WELDS > 5/16"	CONTINUOUS
SINGLE-PASS FILLET WELDS <=5/16"	PERIODIC
FLOOR AND DECK WELDS	PERIODIC
WELDING OF REINFORCING STEEL	
WELDABILITY OF STEEL, OTHER THE ASTM A706	PERIODIC
SHEAR REINFORCEMENT	CONTINUOUS
OTHER REINFORCEMENT	PERIODIC
INSPECTION OF STEEL FRAME AND JOISTS	
DETAILS SUCH AS BRACING AND STIFFENING	PERIODIC
MEMBERS SIZES AND LOCATION	PERIODIC
APPLICATION OF CONNECTION DETAIL	PERIODIC
CONCRETE CONSTRUCTION	
REINFORCING STEEL	PERIODIC RANDOMLY @ 20%
CONCRETE MIX DESIGN	PERIODIC EACH CONCRETE POUR
SAMPLING OF FRESH CONCRETE	CONTINUOUS (SEE NOTE 1)
MAINTENANCE OF SPECIFIED CURING TEMPS AND TECHNIQUES	PERIODIC EACH POUR
INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	CONTINUOUS
INSPECTION OF MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	PERIODIC
DRILLED & EPOXIED ANCHORS	EACH APPLICATION (SEE NOTE 2)
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS	PERIODIC
SOILS (SLAB-ON-GRADE):	
VISUAL OBSERVATIONS	PERIODIC
PROOF ROLLING OBSERVATION	CONTINUOUS
MOISTURE CONDITIONING & RECOMPACTION	CONTINUOUS OR PERIODIC, 1 DENSITY TEST FOR EACH 2,000 SF
DURING FILL PLACEMENT	CONTINUOUS OR PERIODIC
EVALUATION OF IN PLACE DENSITY FILL	CONTINUOUS OR PERIODIC
PIERS:	
OBSERVE DRILLING OPERATIONS AND COMPLETE RECORD OF DRILLING	CONTINUOUS
VERIFY PLACEMENTS LOCATIONS AND PLUMBNESS, LENGTH, EMBEDMENT AND ADEQUATE BEARING STRENGTH CAPACITY CONFIRM PIER DIAMETER, REINFORCING STEEL - RE CONCRETE ABOVE	CONTINUOUS

NOTES:

1. PROVIDE A SET OF 4 FOR EVERY 75 CY OF BUT NOT LESS THAN 1 / 5,000 SF OF SLAB OR WALL SURFACE AREA. MONITOR SLUMP AND AIR CONTENT OF CONC. AND NOTIFY DELIVERY DRIVER IF SLUMP DEVIATES MORE THAN 1" FROM SPEC'D VALUE.

2. ALL DRILLED AND EPOXIED ANCHORS (REBAR, BOLTS, THREADED RODS ETC.) SHALL BE PULL TESTED TO 110% FOR NO LESS THAN 3 MIN.

3. ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.

4. CORRECT DEFICIENCIES IN WORK THAT TEST REPORTS AND INSPECTIONS INDICATE DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.

5. PROVIDE THE ENGINEER OF RECORD (EOR) COPIES OF ALL SPECIAL INSPECTIONS SO A SPECIAL INSPECTIONS REPORT CAN BE PREPARED FOR OBTAINING A CERTIFICATE OF OCCUPANCY.

MASONRY

A. CONSTRUCT REINFORCED MASONRY IN ACCORDANCE WITH "SPECIFICATION FOR MASONRY STRUCTURES", ACI 530.1/ASCE 6. MASONRY ALLOWABLE DESIGN STRESSES ARE BASED UPON REQUIRING NO SPECIAL INSPECTION.

B. ALL CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE 1 MINIMUM FACE THICKNESS SHALL BE 1.25". ALL WALLS ARE LIGHT WEIGHT BLOCKS (105 PCF OR LESS).

C. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. ALL BOLTS USED FOR ANCHORAGE SHALL BE ASTM A307 HEADED BOLTS.

D. MASONRY STRENGTH (F'M) AT 28 DAYS SHALL BE A MINIMUM OF 2,000 PSI. USE TYPE M OR S MORTAR. MASONRY UNITS SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2800 PSI. GROUT SHALL CONFORM TO ASTM C476. GROUT STRENGTH SHALL BE AT LEAST 2800 PSI.

E. PROVIDE MORTAR BED OR WEB BETWEEN GROUTED BED AND HOLLOW CELL. USE FULL HEAD AND BED JOINTS.

F. UNLESS SHOWN ON DETAILS, PROVIDE #9 LADDER OR TRUSS HORIZONTAL JOINT REINFORCEMENT AT 16" O.C. PROVIDE 2-#5 AT ALL JAMBS AND ENDS OF WALLS.

G. GROUT SOLID THE FIRST CELL ON EITHER SIDE OF DOOR OPENINGS, UNLESS OTHERWISE NOTED. PROVIDE 8" U-BLOCK CMU LINTEL WITH 8" BEARING EACH END; REINFORCE WITH (2) #4 BOTTOM.

H. EMBED ALL BOLTS IN FULL GROUTED CELL. PLACE BOLTS IN SAME VERTICAL CELL AS REINFORCING IF POSSIBLE. MINIMUM EMBEDDED LENGTH IS ONE-HALF WIDTH OF CELL.

I. UNLESS SHOWN ON DETAILS, PROVIDE (2) #5 HORIZONTAL REINFORCEMENT IN FULLY GROUTED CELL AT 8'-0" OC VERTICALLY.

J. GROUT SOLID THE FIRST CELL ON EACH LEVEL & ROOF. REINFORCE WITH HORIZONTAL AS PER NOTE I.

REINFORCEMENT TABLE: NON-LOAD BEARING CMU WALL (CMU 2.0-60, 105 PCF)

INTERIOR WALLS = 10 PSF

UNBRACED HEIGHT, FT	6" CMU	8" CMU	10" CMU	12" CMU
10'-0"	#4 @ 48" OC	#4 @ 48" OC	#4 @ 48" OC	
12'-0"	#4 @ 48" OC	#4 @ 48" OC	#4 @ 48" OC	
14'-0"	#4 @ 48" OC	#4 @ 48" OC	#4 @ 48" OC	
16'-0"	#4 @ 40" OC	#4 @ 48" OC	#4 @ 48" OC	
18'-0"	#4 @ 32" OC	#4 @ 48" OC	#4 @ 48" OC	
20'-0"	#4 @ 24" OC	#4 @ 40" OC	#4 @ 48" OC	
22'-0"	#4 @ 16" OC	#5 @ 32" OC	#4 @ 48" OC	
24'-0"		#5 @ 32" OC	#4 @ 40" OC	
26'-0"		#5 @ 24" OC	#4 @ 32" OC	
28'-0"		#6 @ 32" OC	#5 @ 40" OC	
30'-0"		#6 @ 24" OC	#5 @ 32" OC	
32'-0"		#6 @ 24" OC	#6 @ 32" OC	
34'-0"			#6 @ 24" OC	
36'-0"			#7 @ 32" OC	
38'-0"			#7 @ 32" OC	#7 @ 32" OC
40'-0"				#7 @ 32" OC

EXTERIOR WALLS = 30 PSF

UNBRACED HEIGHT, FT	6" CMU	8" CMU	10" CMU	
10'-0"	#4 @ 32" OC	#4 @ 48" OC	#4 @ 48" OC	
12'-0"	#4 @ 24" OC	#4 @ 32" OC	#4 @ 48" OC	
14'-0"	#4 @ 16" OC	#5 @ 32" OC	#4 @ 32" OC	
16'-0"	#6 @ 16" OC	#5 @ 24" OC	#5 @ 40" OC	
18'-0"		#5 @ 16" OC	#5 @ 24" OC	
20'-0"		#6 @ 16" OC	#5 @ 24" OC	
22'-0"		#6 @ 8" OC	#5 @ 16" OC	
24'-0"			#6 @ 16" OC	
26'-0"			#7 @ 16" OC	
28'-0"			#7 @ 8" OC	
30'-0"			#8 @ 8" OC	

NOTES:

1. DEFINITIONS:
"H" CLEAR WALL HEIGHT, FEET, BETWEEN CONNECTIONS TO STRUCTURE.
"U.R." UNREINFORCED WALL (NO VERTICAL REINFORCEMENT IS REQUIRED, EXCEPT AS DETAILED ON DRAWINGS AT OPENINGS, ETC.).
"N.A." NOT APPLICABLE, THICKER WALL REQUIRED FOR SPAN.

2. IF THE UNBRACED WALL HEIGHT FALLS BETWEEN ANY TWO LIMITS LISTED IN THE TABLE, REINFORCEMENT FOR THE GREATER HEIGHT SHALL BE PROVIDED. EXAMPLE: IF UNBRACED HEIGHT = 15'-0" (FALLING BETWEEN 14'-0" AND 16'-0"), REINFORCEMENT FOR 16'-0" UNBRACED HEIGHT SHALL BE PROVIDED.

3. SPECIFIED REINFORCING STEEL SHALL BE PLACED IN CENTER OF WALL. (Fy=60 ksi)

4. SEE GENERAL NOTES AND SPECIFICATIONS FOR HORIZONTAL REINFORCING REQUIREMENTS.

5. THIS TABLE SHALL ONLY BE USED FOR VERTICALLY SPANNING C.M.U. WALLS.

6. SEE TYPICAL DETAILS FOR BRACING REQUIREMENTS AT THE TOP/ENDS OF THE WALL AND DOWELS TO THE STRUCTURE. REINFORCING STEEL SHALL BE CENTERED IN THE C.M.U. WALL BY USING BAR POSITIONERS AT 8'-0" O.C. VERTICALLY.

7. SPLICING OF VERTICAL STEEL: PROVIDE MINIMUM SPLICE LAP LENGTH OF 36" OR 48 BAR DIAMETERS.

8. FOR USE WITH PORTLAND CEMENT/LIME MORTAR.

CONCRETE MASONRY UNIT (CMU) LINTEL SCHEDULE

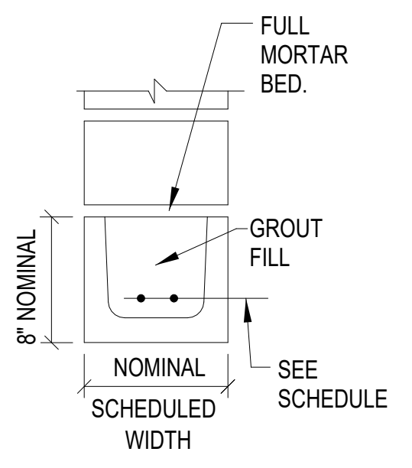
MASONRY OPENING	U-BLOCK	REINFORCING
LESS THAN 4'-8"	8" x 8"	(2) #4
4'-8" BUT LESS THAN 5'-8"	8" x 8"	(2) #5
5'-8" BUT LESS THAN 6'-8"	8" x 8"	(2) #6
GREATER THAN 6'-8"	-	RE: PLAN FOR DETAILS

A. PROVIDE 8" MINIMUM BEARING EACH END FOR CMU LINTELS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.

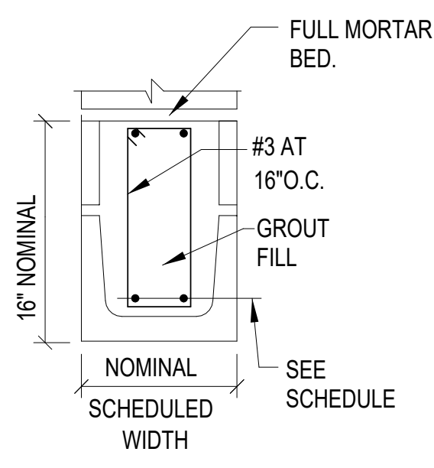
B. CURVE CMU LINTEL AND REINFORCING FOR THE RADIUS OF THE WALL WHERE OCCURRING AND PROVIDE 1'-4" MINIMUM BEARING EACH END.

SPAN	4x8	6x8	6x16	8x8	8x16	10x8	10x16	12x8	12x16
3-4	1-#3	1-#3	—	1-#3	—	2-#3	—	2-#3	—
4-0	1-#3	1-#4	—	2-#3	—	2-#3	—	2-#4	—
4-8	1-#4	1-#4	—	2-#4	—	2-#4	—	2-#4	—
5-4	1-#4	2-#4	—	2-#4	—	2-#4	2-#3	2-#5	—
6-0	1-#5	2-#4	1-#4	2-#4	2-#3	2-#5	2-#4	2-#5	2-#4
6-8	N/A	N/A	1-#5	N/A	2-#4	N/A	2-#4	2-#6	2-#4
7-4			1-#5		2-#4		2-#4	N/A	2-#5
8-0			1-#6		2-#4		2-#5		2-#5
8-8			1-#6		2-#5		2-#5		2-#6
9-4	N/A	N/A	1-#7	N/A	2-#5	N/A	2-#6	N/A	2-#6

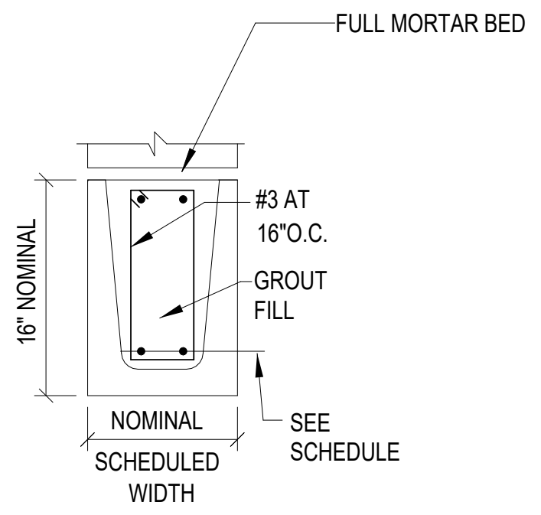
NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.
2. PROVIDE 1" OF BEARING AT EACH JAMB FOR EACH FOOT OF CLEAR SPAN BUT NOT LESS THAN 7 5/8". REINFORCEMENT SHALL PROJECT A MINIMUM OF 6" ONTO THE BEARING.
3. MINIMUM MASONRY COMPRESSIVE STRENGTH OF GROUTED PRISM f'm=1500 psi.
4. LINTELS SCHEDULED AS 16" HIGH MAY BE EITHER TYPE "B" OR TYPE "C" AS DETAILED BELOW.
5. PRECAST CONCRETE LINTELS AS SHOWN MAY BE USED WITH ARCHITECT'S APPROVAL. MINIMUM f'c = 3000 psi.



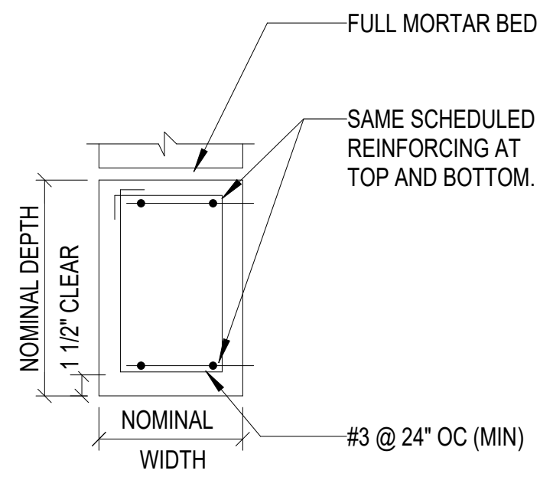
TYPE A



TYPE B



TYPE C



PRECAST

COLD-FORMED METAL FRAMING:

A. PROVIDE COLD-FORMED METAL FRAMING, INCLUDING TRUSSES, STUDS, JOIST, TRACK, RUNNERS, LINTELS, CLIP ANGLES, REINFORCEMENTS, SHOES, BLOCKING, AND BRIDGING, COMPLETE WITH ALL FASTENERS, AND ACCESSORIES NEEDED FOR A COMPLETE AND FINISHED INSTALLATION.

B. THE STRUCTURAL DRAWINGS INDICATE THE GENERAL CONFIGURATION OF FRAMING FOR TYPICAL CONDITIONS ONLY. FINAL CONFIGURATION OF DETAILS AS WELL AS ALL SUPPLEMENTARY FRAMING TO OBTAIN THE ROOF PROFILES SHOWN ON THE PLANS SHALL BE AS DETERMINED BY DESIGN.

C. COLD-FORMED METAL FRAMING SHALL BE DESIGNED IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) PUBLICATION: "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION. PROVIDE STEEL FOR RAFTERS. JOISTS, STUDS AND ACCESSORIES CONFORMING TO ASTM A1003, GRADE 50, STRUCTURAL QUALITY STEEL SHEET FORMED TO 'C' SHAPES, UNPUNCHED WITH STIFFENED FLANGES.

D. ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A446, GRADE C, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR STUDS AND JOISTS AND GRADE A, 33KSI, FOR RUNNERS. ALL STRUCTURAL MEMBERS SHALL BE ZINC COATED MEETING ASTM A525, G-60, OR EQUIVALENT. TYPICAL.

E. FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING SCREWS OR BY WELDING. SCREWS AND WELDS SHALL BE OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. ALL WELDS SHALL BE TOUCHED-UP WITH A ZINC-RICH PAINT.

F. SUBMIT SHOP DRAWINGS FOR ALL FRAMING PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER, AND CALCULATIONS, SIGNED AND SEALED BY SAID ENGINEER, FOR REVIEW PRIOR TO ERECTION OF ANY COLD-FORMED METAL FRAMING.

SHOP DRAWINGS SUBMITTED FOR REVIEW SHALL CONTAIN THE FOLLOWING FOR EACH :

A. COMPLETE ERECTION DRAWINGS SHOWING LOCATION AND SPACING OF ALL FRAMING MEMBERS.
B. SIZE AND GAGE OF ALL FRAMING MEMBERS.
C. DETAIL DRAWINGS OF ALL PREFABRICATED ASSEMBLIES.
D. LOADING CONDITIONS USED IN DESIGN.
E. CALCULATED FORCES FOR ALL MEMBERS.
F. ANCHORAGE DETAILS, CONNECTION DETAILS, SLICE DETAILS, TEMPORARY AND PERMANENT BRACING.

G. TEMPORARY BRACING, WHERE REQUIRED, SHALL BE PROVIDED UNTIL ERECTION IS COMPLETE.

H. THE INFORMATION PROVIDED SHALL TAKE INTO ACCOUNT AND SHOW ALL SPECIAL DESIGN, FRAMING AND CONNECTION REQUIREMENTS SUCH AS AT CONCENTRATED LOADS, UNBALANCED OR UNSYMMETRICAL LOAD CONDITIONS, AND OTHER NON-TYPICAL FRAMING DETAILS.

I. SPLICES IN FRAMING COMPONENTS, OTHER THAN RUNNER TRACK, SHALL NOT BE PERMITTED.

J. BLOCKING SHALL BE PROVIDED AT SUPPORTS WHERE JOISTS ARE NOT OTHERWISE RESTRAINED FROM ROTATION.

K. ABUTTING LENGTHS OF RUNNER TRACK SHALL BE BUTT-WELDED, SPLICED OR EACH LENGTH SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT. RUNNER TRACK SHALL BE SECURELY ANCHORED TO THE SUPPORTING STRUCTURE.

L. PROVIDE MEMBERS WITH THE FOLLOWING MINIMUM SECTION PROPERTIES:

SECTION	MINIMUM THICKNESS	Ix (MOMENT OF INERTIA	Sx (SECTION MODULUS)	FY (YIELD STRENGTH)
6" TYPICAL JOISTS, RAFTERS	0.056 INCHES	2.83 INCHES ^{4}	0.95 INCHES^3	50 KSI
6" EXTERIOR STUDS	0.056 INCHES	2.31 INCHES ^{4}	0.95 INCHES^3	50 KSI
3 5/8" INTERIOR STUDS	0.045 INCHES	0.71 INCHES ^{4}	0.39 INCHES^3	33 KSI
RUNNER TRACK	0.045 INCHES	2.49 INCHES ^{4}	0.81 INCHES^3	33 KSI

M. MEMBER PERFORMANCE:

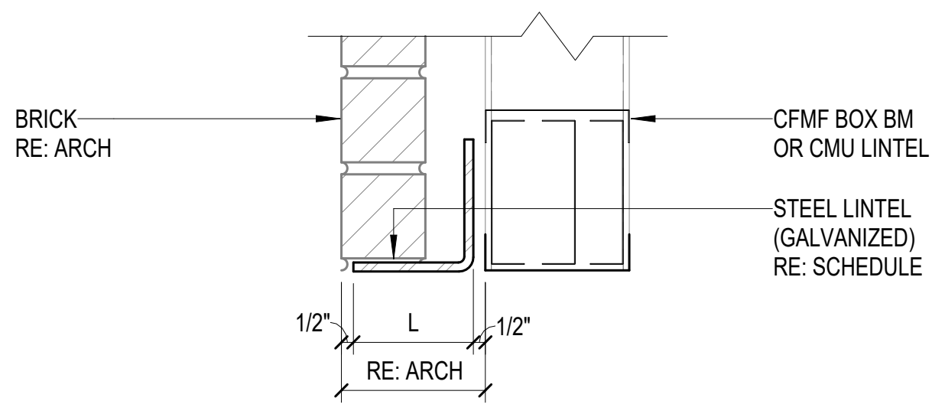
1. RAFTERS AND HEADERS: VERTICAL DEFLECTION IS LIMITED TO 1/240 OF THE SPAN.

2. STUDS: HORIZONTAL DEFLECTION IS LIMITED TO 1/240 OF THE SPAN (TYPICAL); FOR BRICK VENEER 1/600 OF THE SPAN.

LOOSE VENEER LINTEL SCHEDULE

MASONRY OPENING	SIZE	DETAIL
LESS THAN 4'-0"	"L" X 4" X 1/4" BENT PL (LLH)	┘
4'-0" BUT LESS THAN 5'-0"	"L" X 4" X 1/4" BENT PL (LLH)	┘
5'-0" BUT LESS THAN 6'-0"	"L" X 5" X 1/4" BENT PL (LLH)	┘
6'-0" BUT LESS THAN 8'-6"	"L" X 7" X 5/16" BENT PL (LLH)	┘
8'-6" BUT LESS THAN 10'-0"	"L" X 7" X 3/8" BENT PL (LLH)	┘

NOTES:
1. SEE DETAIL BELOW FOR TYPICAL LOOSE LINTEL WIDTH. ALL DIMENSIONS PROVIDE MUST BE VERIFIED WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
2. PROVIDE 8" MINIMUM BEARING AT EACH OF LOOSE LINTELS. ONE ANGLE SHALL BE PROVIDED FOR EACH WYTHE OF BRICK. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
3. ONE ANGLE SHALL BE PROVIDED FOR EACH WYTHE OF BRICK.
4. G.C. TO COORDINATE LOCATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
5. ALL STEEL LINTELS TO BE HOT DIP GALVANIZED AFTER FABRICATION, TYPICAL.



DEMOLITION

A. CONDUCT DEMOLITION OPERATIONS IN EXTREMELY CAREFUL MANNER IN ORDER TO PREVENT ANY DAMAGES TO ALL EXISTING CONSTRUCTION AND TO MINIMIZE INTERFERENCE WITH ADJACENT **STRUCTURES**

B. PREVENT THE MOVEMENT, SETTLEMENT, DAMAGE OR INJURY TO ADJACENT STRUCTURES, PROVIDE & PLACE BRACING OR SHORING & BE RESPONSIBLE FOR THE SAFETY AND SUPPORT OF THE ADJACENT STRUCTURES, ASSUME FULL LIABILITY FOR SUCH MOVEMENT, SETTLEMENT, DAMAGE, OR INJURY.

C. CEASE OPERATIONS & NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IF SAFETY ADJACENT STRUCTURES APPEARS TO BE ENDANGERED. TAKE PRECAUTIONS TO SUPPORT EXISTING STRUCTURES PROPERLY. DO NOT RESUME OPERATIONS UNTIL THE FULL SAFETY IS RESTORED.

D. PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF ADJACENT SERVICES, SIDEWALKS, DRIVEWAYS & TREES. ASSUME FULL LIABILITY FOR SUCH MOVEMENT, SETTLEMENT OR COLLAPSE. REPAIR DAMAGE PROMPTLY AT NO COST TO THE OWNER.

E. DEMOLISH INDICATED STRUCTURES & APPURTENANCE IN AN ORDERLY AND CAREFUL MANNER.

F. PERFORM DEMOLITION IN ACCORDANCE WITH THE APPLICABLE AUTHORITIES HAVING JURISDICTION.

G. REMOVE FOUNDATION WALLS & FOOTINGS AS INDICATED ON DEMOLITION DRAWINGS TO A MINIMUM 3' FEET BELOW FINISH GRADE.

H. REPAIR ANY DEMOLITION PERFORMED IN EXCESS OF THAT INDICATED, AT NO COST TO THE OWNER OR THE ARCHITECT/ENGINEER.

I. REPAIR DAMAGE TO ADJACENT STRUCTURES CAUSED AS THE RESULT OF THIS WORK AT NO COST TO THE OWNER OF THE ARCHITECT/ENGINEER.

SHORING REQUIREMENTS

A. DESIGN, CONSTRUCT AND MAINTAIN TEMPORARY SHORING AND BRACING TO SAFELY SUPPORT THE EXISTING WALLS, FLOOR SLABS AND ROOF WHERE NEW OPENINGS ARE TO BE CUT INTO THE EXISTING WHERE LOAD-BEARING ELEMENTS ARE TO BE REMOVED.

B. SUBMIT CALCULATIONS, SHORING PROCEDURES AND DETAILS PREPARED, AND SEALED, BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF TEXAS, TO THE ARCHITECT FOR REVIEW PRIOR TO PRECEDING WITH THIS WORK.

C. SHORING AND BRACING WORK SHALL BE PERFORMED BY A SHORING CONTRACTOR WITH A MINIMUM OF FIVE YEARS EXPERIENCE IN SIMILAR TYPE OF WORK.

D. PRIOR TO START OF WORK, ESTABLISH AND DOCUMENT ELEVATIONS OF THE EXITING CONSTRUCTION AT INTERVALS ALONG THE WALLS TO BE REMOVED. CONTINUOUSLY MONITOR THE ELEVATION DURING DEMOLITION AND CONSTRUCTION OPERATIONS. METHOD OF SHORING SHOULD HAVE PROVISIONS FOR VERTICAL ADJUSTMENT TO MAINTAIN ELEVATIONS OF EXISTING CONSTRUCTION.

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

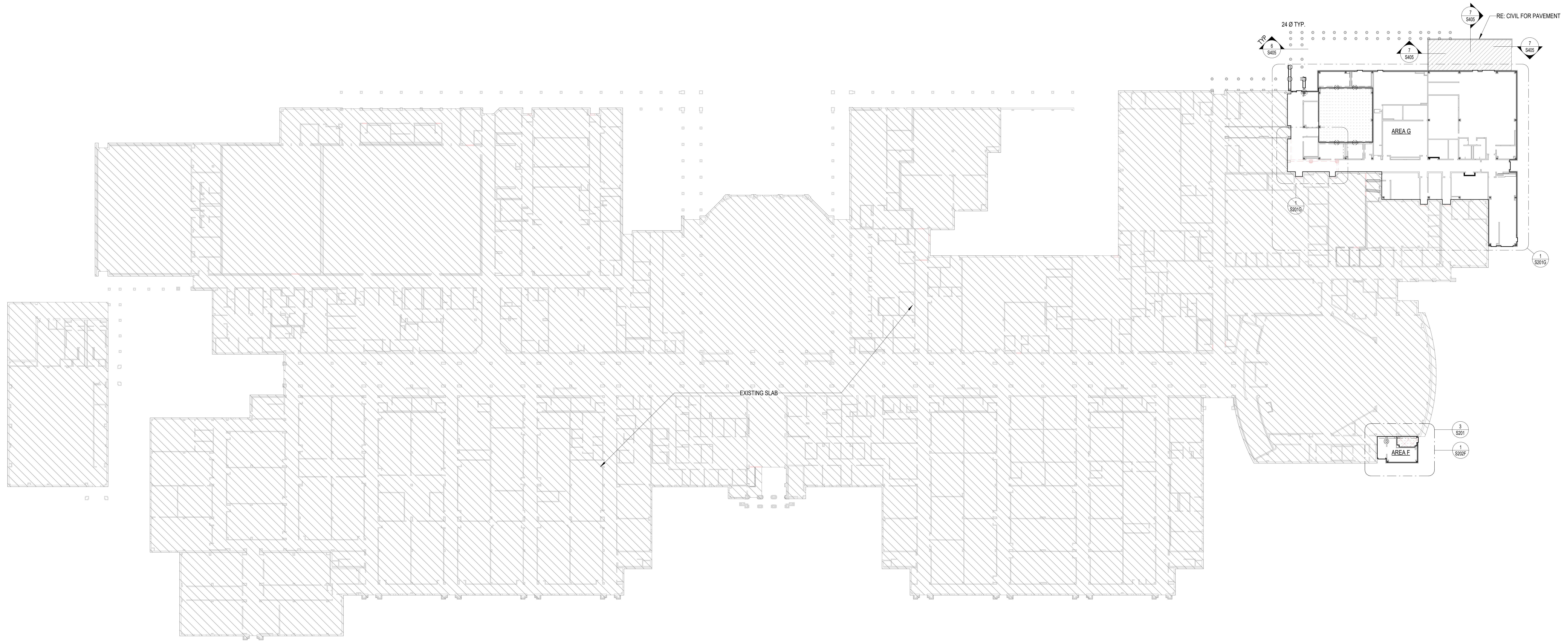
GENERAL STRUCTURAL CRITERIA

S102

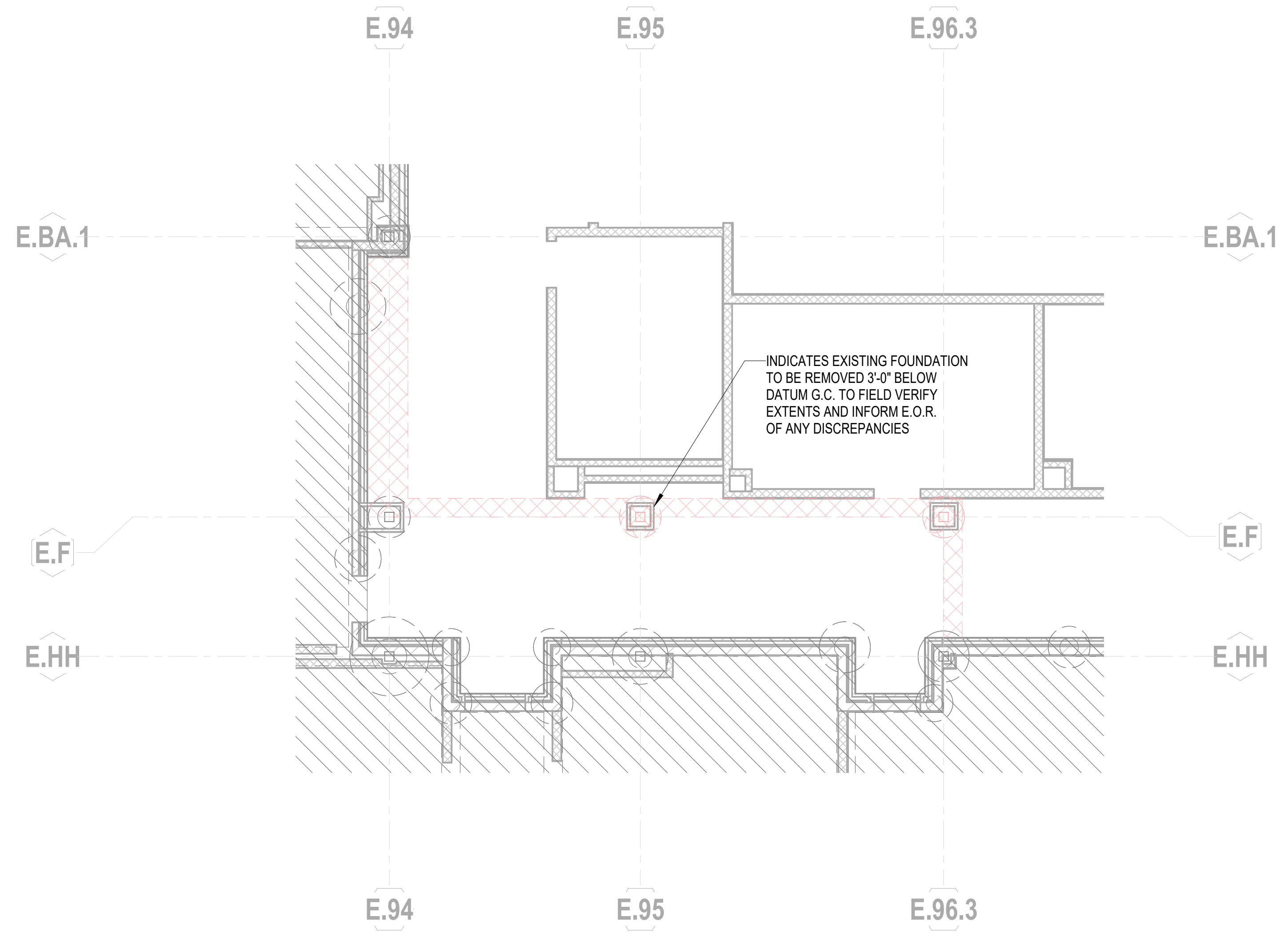
of

11/13/2024 4:13:32 PM

Autodesk Docs://23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

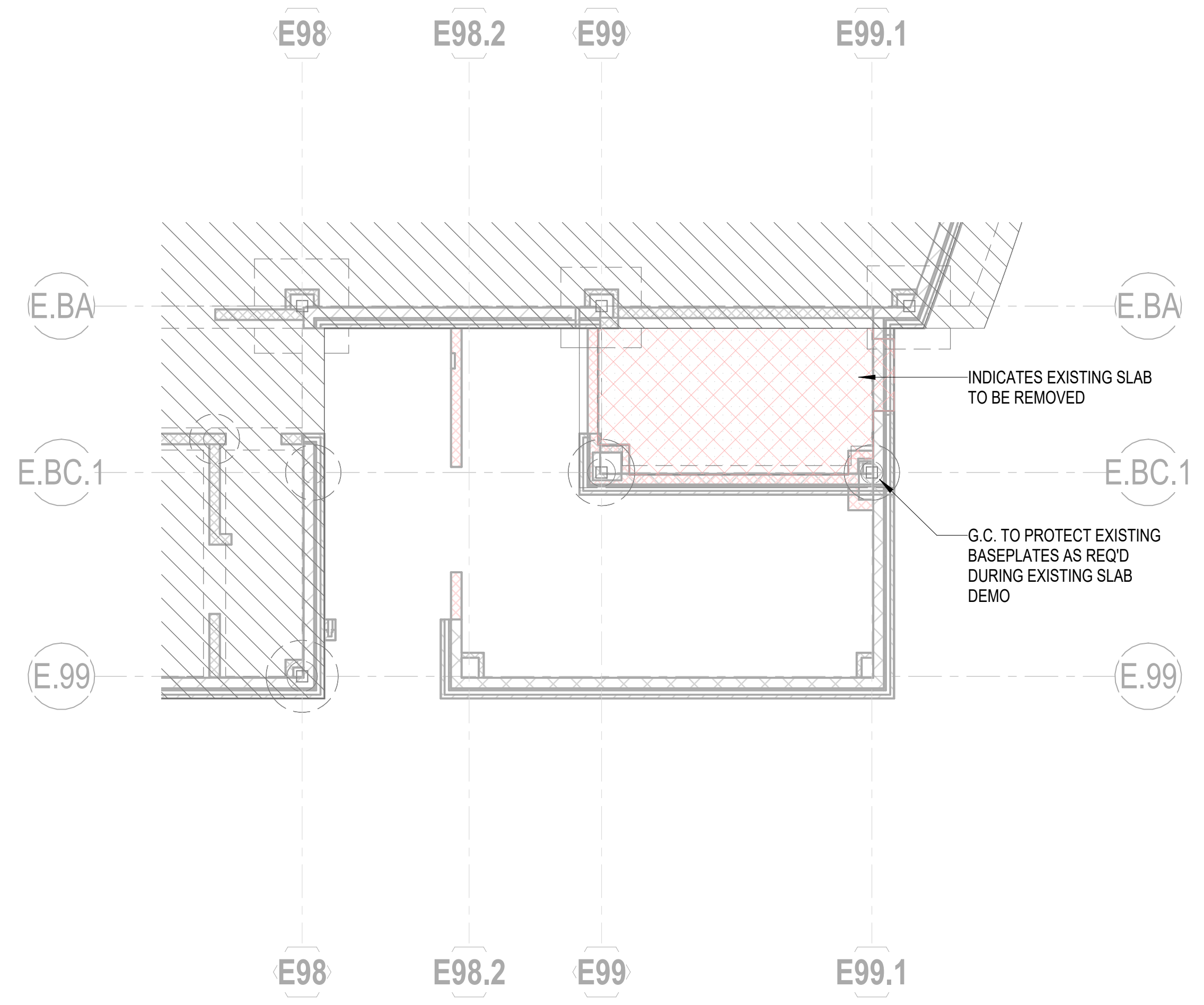


① FOUNDATION PLAN - OVERALL
1" = 40'-0"



INDICATES EXISTING FOUNDATION TO BE REMOVED 3'-0" BELOW DATUM G.C. TO FIELD VERIFY EXTENTS AND INFORM E.O.R. OF ANY DISCREPANCIES

② ENLARGE DEMO FOUNDATION PLAN - AREA G
1/8" = 1'-0"

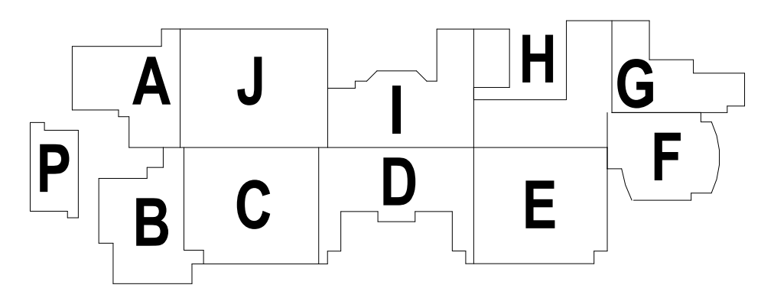


INDICATES EXISTING SLAB TO BE REMOVED

G.C. TO PROTECT EXISTING BASEPLATES AS REQ'D DURING EXISTING SLAB DEMO

③ ENLARGE DEMO FOUNDATION PLAN - AREA F
1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

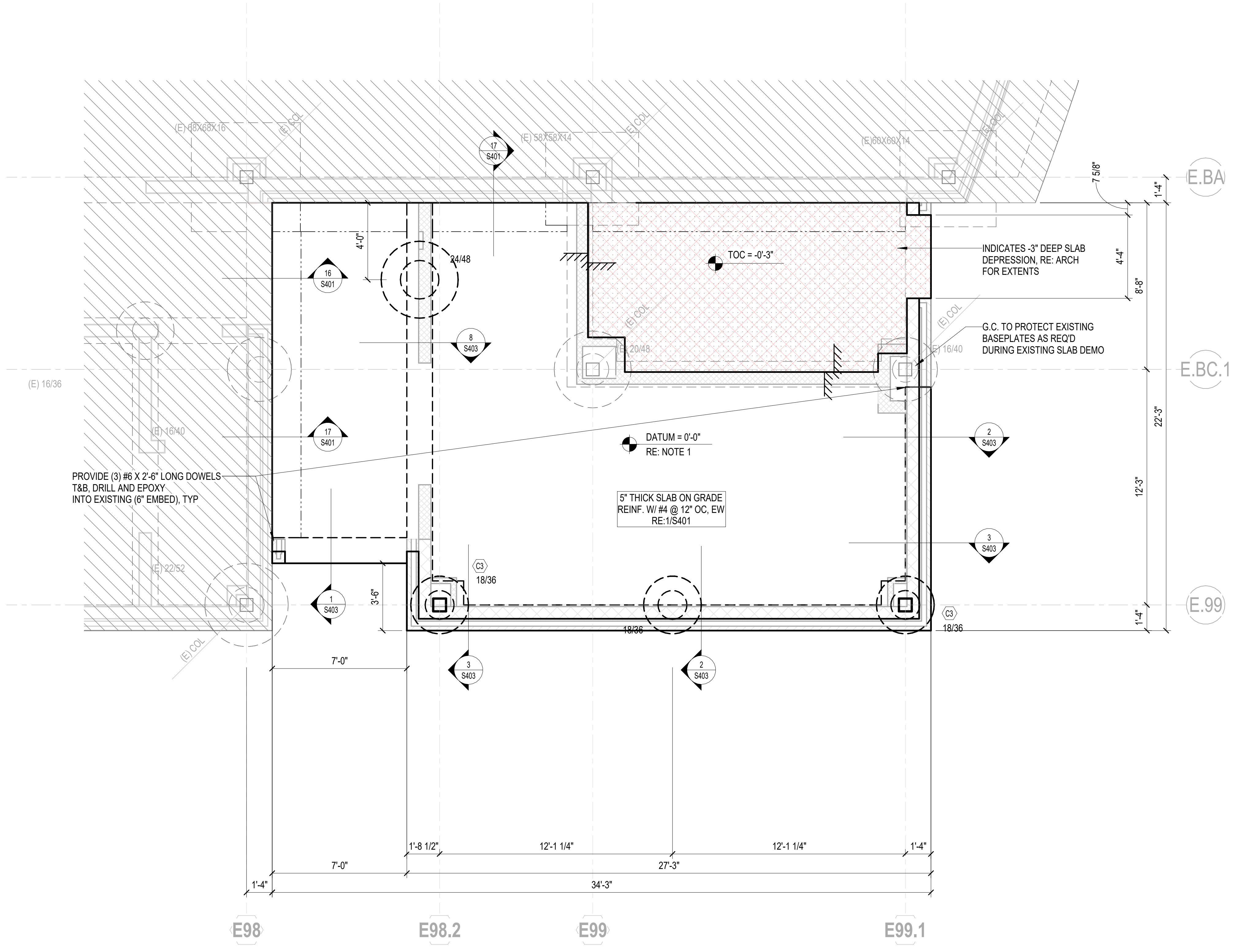
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

FOUNDATION PLAN - OVERALL

S201
of



① FOUNDATION PLAN - AREA F
1/4" = 1'-0"

FOUNDATION NOTES:

1. DATUM ELEVATION <0'-0"> CORRESPONDS TO TRUE ELEVATION = RE: CIVIL.
ALL ELEVATIONS ARE RELATIVE TO DATUM ELEVATION <0' - 0">.

2. "18/36" (EXAMPLE) INDICATES DRILLED PIER SHAFT AND BELL SIZE
ALL INTERIOR DRILLED PIERS ARE AT ELEVATION <-2'-8"> TYP, UON.
ALL EXTERIOR DRILLED PIERS ARE AT ELEVATION <-2'-8"> TYP, UON.
ALL INTERMEDIATE PIERS ARE CENTERED BETWEEN GRIDS ON THE GRADE BEAM, TYP UON.
FOR DRILLED PIER SCHEDULE & DETAILS RE: S301.

3. "P1" (EXAMPLE) INDICATES PLINTH TYPE
ALL INTERIOR PLINTHS ARE TYPE "P1" UON
ALL PERIMETER PLINTHS ARE TYPE "P2" UON
ALL CORNER PLINTHS ARE TYPE "P3" UON
T.O. PLINTHS ARE AT < - 0'-8"> TYP, UON.
FOR PLINTH SCHEDULE & DETAILS RE: S301.

4. "GB1" (EXAMPLE) INDICATES GRADE BEAM TYPE
ALL GRADE BEAMS ARE AT ELEVATION <-0'-8"> TYP, UON.
PROVIDE TYPICAL CORNER BARS AT ALL GRADE BEAM INTERSECTIONS PER 4/S401.
FOR GRADE BEAM SCHEDULE & DETAILS RE: S301.

5. " ⟨C1⟩ " (EXAMPLE) INDICATES COLUMN SIZE

"[BP1]" (EXAMPLE) INDICATES BASE PLATE TYPE
FOR COLUMN, BASE PLATE & ANCHOR BOLT SCHEDULE RE: S302
PROVIDE TYPICAL BLOCKOUTS AT EACH COLUMN PER DETAILS 6, 7, 8 & 9/S401, TYP UON.

6. PROVIDE CONTROL JOINTS AT EVERY COLUMN LINE AND AT A MAXIMUM SPACING
OF 36 TIMES THE SLAB THICKNESS (NOT TO EXCEED 15'-0"), TYPICAL UON.
FOR ADDITIONAL INFORMATION RE: 3/S401.

7. PROVIDE ADDITIONAL REINFORCING AT ALL RE-ENTRANT CORNERS PER 5/S401.

8. TYPICAL LIGHT POLE FOUNDATION DETAIL RE: 1/S405.

9. VERIFY ALL SLOPES, DEPRESSIONS, ELEVATIONS WITH ARCH. PRIOR TO CONSTRUCTION

10. CONCRETE CURBS NOT SHOWN FOR CLARITY.
G.C TO PROVIDE CONCRETE CURB AS DESIGNATED IN ARCHITECTURAL DRAWINGS.
FOR TYPICAL CONCRETE CURB DETAIL RE: 17/S401.

11. ALL CMU WALL LOCATIONS ARE FOR REFERENCE ONLY.
G.C. TO COORDINATE FINAL CMU WALL LOCATIONS WITH ARCHITECTURAL DRAWINGS
FOR SLAB THICKENINGS AND GRADE BEAM DETAILS AT CMU WALLS RE: 8, 9, 10, & 11/S403.

12. G.C. TO PROVIDE A HOUSEKEEPING PAD UNDER ALL MECHANICAL UNITS.
FOR TYPCIAL HOUSEKEEPING PAD DETAIL RE: 12/S401.

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

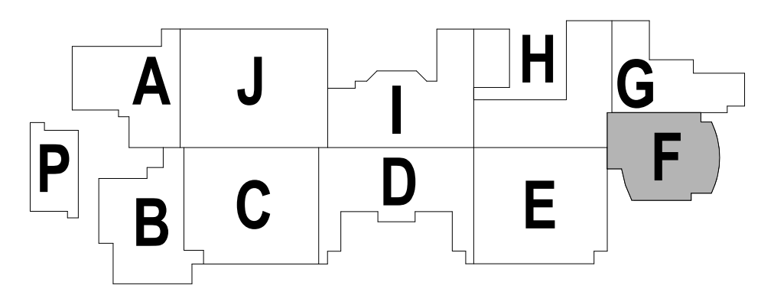
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



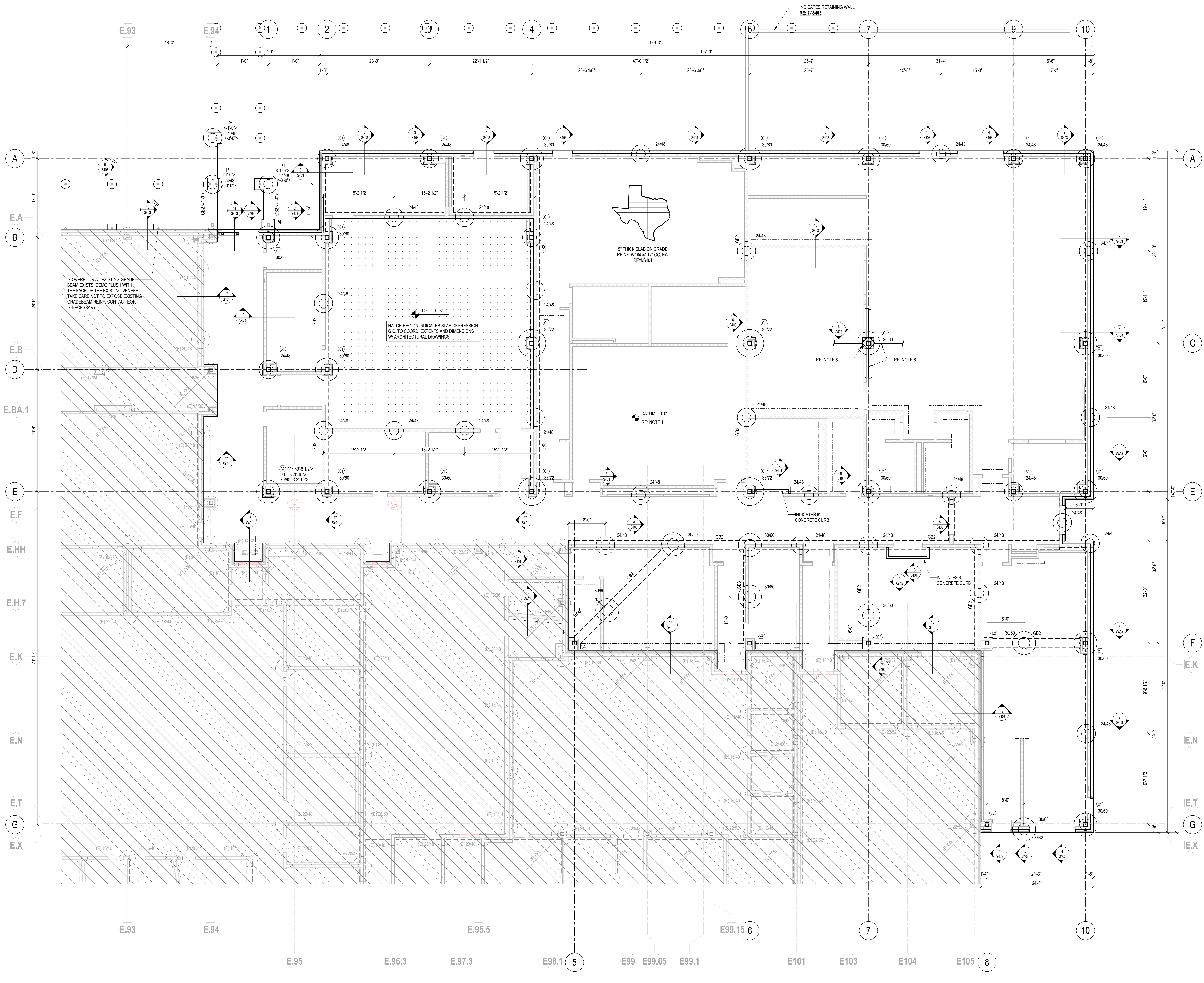
Project Number: 23071
Date: 11-17-2024
Drawn by: JT

FOUNDATION PLAN - AREA F

S201F

of

11/13/2024 4:13:49 PM
Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



① FOUNDATION PLAN - AREA G
1/8" = 1'-0"

FOUNDATION NOTES:

1. DATUM ELEVATION <0'-0"> CORRESPONDS TO TRUE ELEVATION = RE: CIVIL.
ALL ELEVATIONS ARE RELATIVE TO DATUM ELEVATION <0' - 0">.

2. "18/36" (EXAMPLE) INDICATES DRILLED PIER SHAFT AND BELL SIZE
ALL INTERIOR DRILLED PIERS ARE AT ELEVATION <-2'-8"> TYP, UON.
ALL EXTERIOR DRILLED PIERS ARE AT ELEVATION <-2'-8"> TYP, UON.
ALL INTERMEDIATE PIERS ARE CENTERED BETWEEN GRIDS ON THE GRADE BEAM, TYP UON.
FOR DRILLED PIER SCHEDULE & DETAILS RE: S301.

3. "P1" (EXAMPLE) INDICATES PLINTH TYPE
ALL INTERIOR PLINTHS ARE TYPE "P1" UON
ALL PERIMETER PLINTHS ARE TYPE "P2" UON
ALL CORNER PLINTHS ARE TYPE "P3" UON
T.O. PLINTHS ARE AT < - 0'-8"> TYP, UON.
FOR PLINTH SCHEDULE & DETAILS RE: S301.

4. "GB1" (EXAMPLE) INDICATES GRADE BEAM TYPE
ALL GRADE BEAMS ARE AT ELEVATION <-0'-8"> TYP, UON.
PROVIDE TYPICAL CORNER BARS AT ALL GRADE BEAM INTERSECTIONS PER 4/S401.
FOR GRADE BEAM SCHEDULE & DETAILS RE: S301.

5. " ⟨C1⟩ " (EXAMPLE) INDICATES COLUMN SIZE

"[BP1]" (EXAMPLE) INDICATES BASE PLATE TYPE
FOR COLUMN, BASE PLATE & ANCHOR BOLT SCHEDULE RE: S302
PROVIDE TYPICAL BLOCKOUTS AT EACH COLUMN PER DETAILS 6, 7, 8 & 9/S401, TYP UON.

6. PROVIDE CONTROL JOINTS AT EVERY COLUMN LINE AND AT A MAXIMUM SPACING
OF 36 TIMES THE SLAB THICKNESS (NOT TO EXCEED 15'-0"), TYPICAL UON.
FOR ADDITIONAL INFORMATION RE: 3/S401.

7. PROVIDE ADDITIONAL REINFORCING AT ALL RE-ENTRANT CORNERS PER 5/S401.

8. TYPICAL LIGHT POLE FOUNDATION DETAIL RE: 1/S405.

9. VERIFY ALL SLOPES, DEPRESSIONS, ELEVATIONS WITH ARCH. PRIOR TO CONSTRUCTION

10. CONCRETE CURBS NOT SHOWN FOR CLARITY.
G.C TO PROVIDE CONCRETE CURB AS DESIGNATED IN ARCHITECTURAL DRAWINGS.
FOR TYPICAL CONCRETE CURB DETAIL RE: 17/S401.

11. ALL CMU WALL LOCATIONS ARE FOR REFERENCE ONLY.
G.C. TO COORDINATE FINAL CMU WALL LOCATIONS WITH ARCHITECTURAL DRAWINGS
FOR SLAB THICKENINGS AND GRADE BEAM DETAILS AT CMU WALLS RE: 8, 9, 10, & 11/S403.

12. G.C. TO PROVIDE A HOUSEKEEPING PAD UNDER ALL MECHANICAL UNITS.
FOR TYPCIAL HOUSEKEEPING PAD DETAIL RE: 12/S401.

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

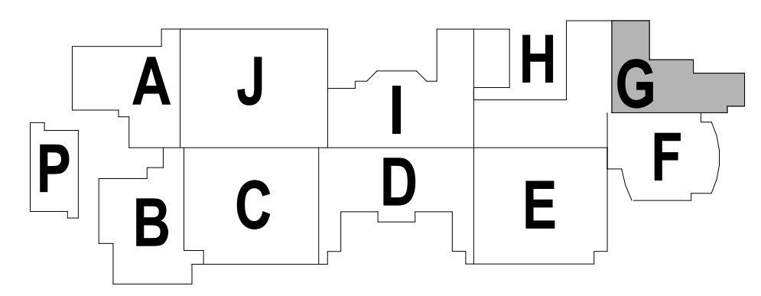
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



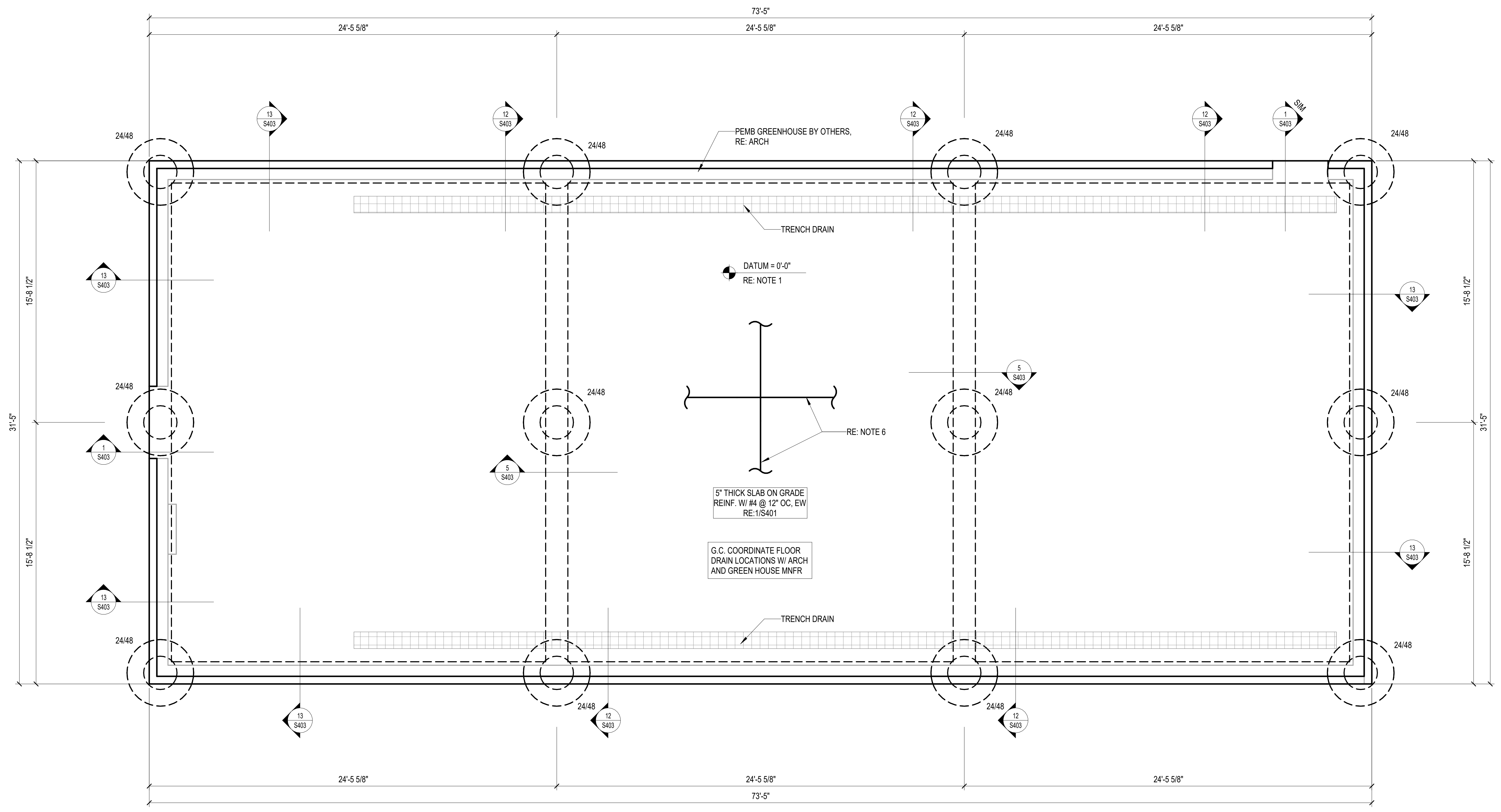
Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

FOUNDATION PLAN -
AREA G

S201G

of

11/13/2024 4:13:51 PM



1 FOUNDATION PLAN - GREENHOUSE

1/4" = 1'-0"

FOUNDATION NOTES:

1. DATUM ELEVATION <0'-0"> CORRESPONDS TO TRUE ELEVATION = RE: CIVIL.
ALL ELEVATIONS ARE RELATIVE TO DATUM ELEVATION <0' - 0">.

2. "18/36" (EXAMPLE) INDICATES DRILLED PIER SHAFT AND BELL SIZE
ALL INTERIOR DRILLED PIERS ARE AT ELEVATION <-2'-8"> TYP, UON.
ALL EXTERIOR DRILLED PIERS ARE AT ELEVATION <-2'-8"> TYP, UON.
ALL INTERMEDIATE PIERS ARE CENTERED BETWEEN GRIDS ON THE GRADE BEAM, TYP UON.
FOR DRILLED PIER SCHEDULE & DETAILS RE: S301.

3. "P1" (EXAMPLE) INDICATES PLINTH TYPE
ALL INTERIOR PLINTHS ARE TYPE "P1" UON
ALL PERIMETER PLINTHS ARE TYPE "P2" UON
ALL CORNER PLINTHS ARE TYPE "P3" UON
T.O. PLINTHS ARE AT < - 0'-8"> TYP, UON.
FOR PLINTH SCHEDULE & DETAILS RE: S301.

4. "GB1" (EXAMPLE) INDICATES GRADE BEAM TYPE
ALL GRADE BEAMS ARE AT ELEVATION <-0'-8"> TYP, UON.
PROVIDE TYPICAL CORNER BARS AT ALL GRADE BEAM INTERSECTIONS PER 4/S401.
FOR GRADE BEAM SCHEDULE & DETAILS RE: S301.

5. " ⟨C1⟩ " (EXAMPLE) INDICATES COLUMN SIZE

"[BP1]" (EXAMPLE) INDICATES BASE PLATE TYPE
FOR COLUMN, BASE PLATE & ANCHOR BOLT SCHEDULE RE: S302
PROVIDE TYPICAL BLOCKOUTS AT EACH COLUMN PER DETAILS 6, 7, 8 & 9/S401, TYP UON.

6. PROVIDE CONTROL JOINTS AT EVERY COLUMN LINE AND AT A MAXIMUM SPACING
OF 36 TIMES THE SLAB THICKNESS (NOT TO EXCEED 15'-0"), TYPICAL UON.
FOR ADDITIONAL INFORMATION RE: 3/S401.

7. PROVIDE ADDITIONAL REINFORCING AT ALL RE-ENTRANT CORNERS PER 5/S401.

8. TYPICAL LIGHT POLE FOUNDATION DETAIL RE: 1/S405.

9. VERIFY ALL SLOPES, DEPRESSIONS, ELEVATIONS WITH ARCH. PRIOR TO CONSTRUCTION

10. CONCRETE CURBS NOT SHOWN FOR CLARITY.
G.C TO PROVIDE CONCRETE CURB AS DESIGNATED IN ARCHITECTURAL DRAWINGS.
FOR TYPICAL CONCRETE CURB DETAIL RE: 17/S401.

11. ALL CMU WALL LOCATIONS ARE FOR REFERENCE ONLY.
G.C. TO COORDINATE FINAL CMU WALL LOCATIONS WITH ARCHITECTURAL DRAWINGS
FOR SLAB THICKENINGS AND GRADE BEAM DETAILS AT CMU WALLS RE: 8, 9, 10, & 11/S403.

12. G.C. TO PROVIDE A HOUSEKEEPING PAD UNDER ALL MECHANICAL UNITS.
FOR TYPCIAL HOUSEKEEPING PAD DETAIL RE: 12/S401.

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

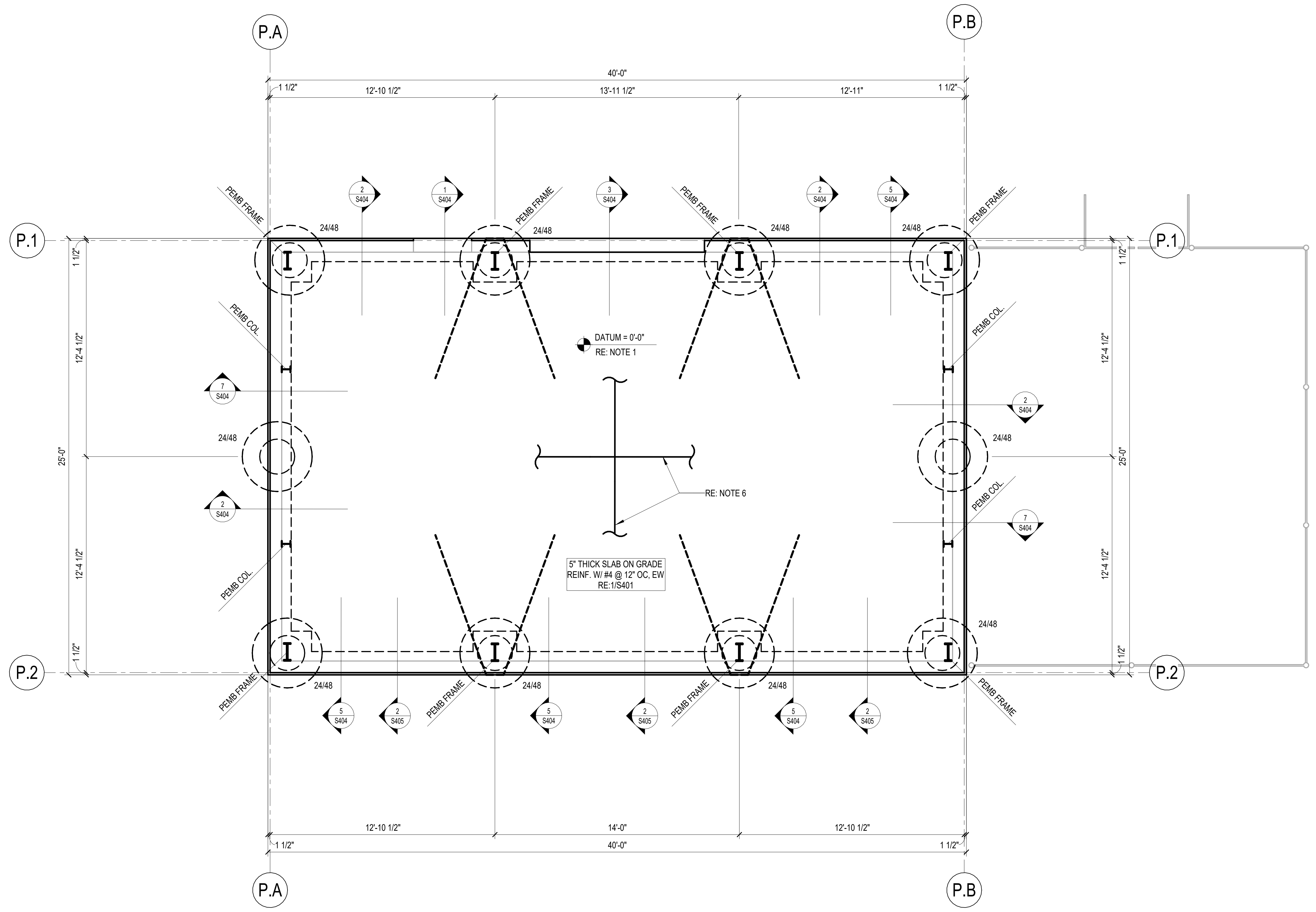
Project Number: 23071
Date: 11-17-2024
Drawn by: JT

FOUNDATION PLAN - GREENHOUSE

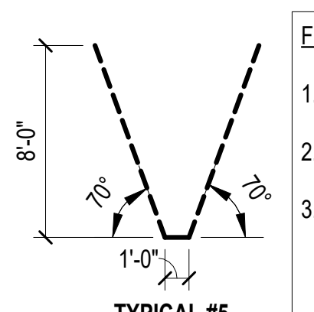
S201H

of

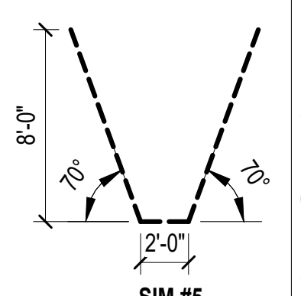
Autodesk Docs://23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



① FOUNDATION PLAN - PEMB
1/4" = 1'-0"



TYPICAL #5 HAIRPIN



SIM #5 HAIRPIN

FOUNDATION NOTES:

1. DATUM ELEVATION 0'-0" CORRESPONDS TO TRUE ELEVATION = RE: CIVIL
2. ALL ELEVATIONS ARE RELATIVE TO DATUM ELEVATION TYP, U.N.O.
3. TOP OF ALL PIERS AT PERIMETER GRADE BEAMS IS <-2'-8"> BELOW F.F.E. TYP, U.N.O.
   TOP OF ALL INTERIOR PIERS IS <-2'-8"> BELOW F.F.E. TYP, U.N.O.
   FOR DRILLED PIER SCHEDULE AND DETAILS RE: S301
4. TOP OF ALL EXTERIOR PLINTHS ARE AT <0'-8"> TYP, U.N.O.
   TOP OF ALL INTERIOR PLINTHS ARE AT <0'-8"> TYP, U.N.O.
   ALL CORNER PLINTHS ARE TYPE P1, U.N.O.
   ALL EXTERIOR PLINTHS ARE TYPE P2, U.N.O.
   FOR PLINTH SCHEDULE AND DETAILS RE: S301
5. VERIFY ALL SLOPES, DEPRESSIONS, ELEVATIONS WITH ARCH. PRIOR TO CONSTRUCTION.
6. PROVIDE CONTROL JOINTS AT EVERY COLUMN LINE AND AT A MAXIMUM SPACING OF 36 TIMES THE SLAB THICKNESS (NOT TO EXCEED 15 FEET), U.N.O.
7. FD - INDICATES FLOOR DRAIN, COORDINATE LOCATION WITH ARCH/ MEP.
8. FOLLOW PEMB ANCHOR BOLT LAYOUT DRAWINGS FOR ANCHOR BOLTS.
   DO NOT USE THESE DRAWINGS TO PLACE ANCHOR BOLT LOCATIONS.
9. FOUNDATION CONSTRUCTION CANNOT BEGIN UNTIL FINAL PEMB DRAWINGS HAVE BEEN RECEIVED AND REVIEWED BY EOR.

Dally
\+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

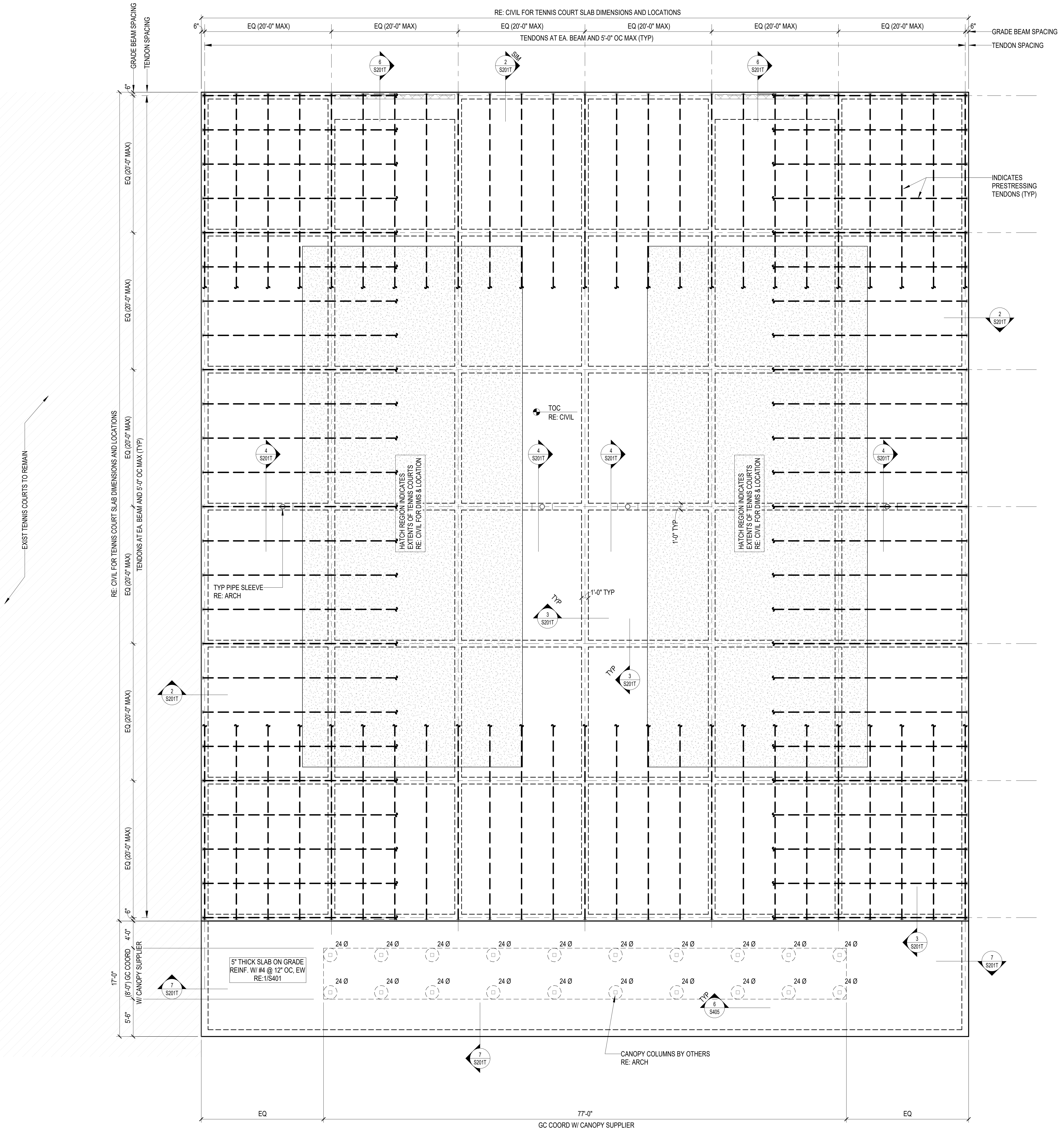
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

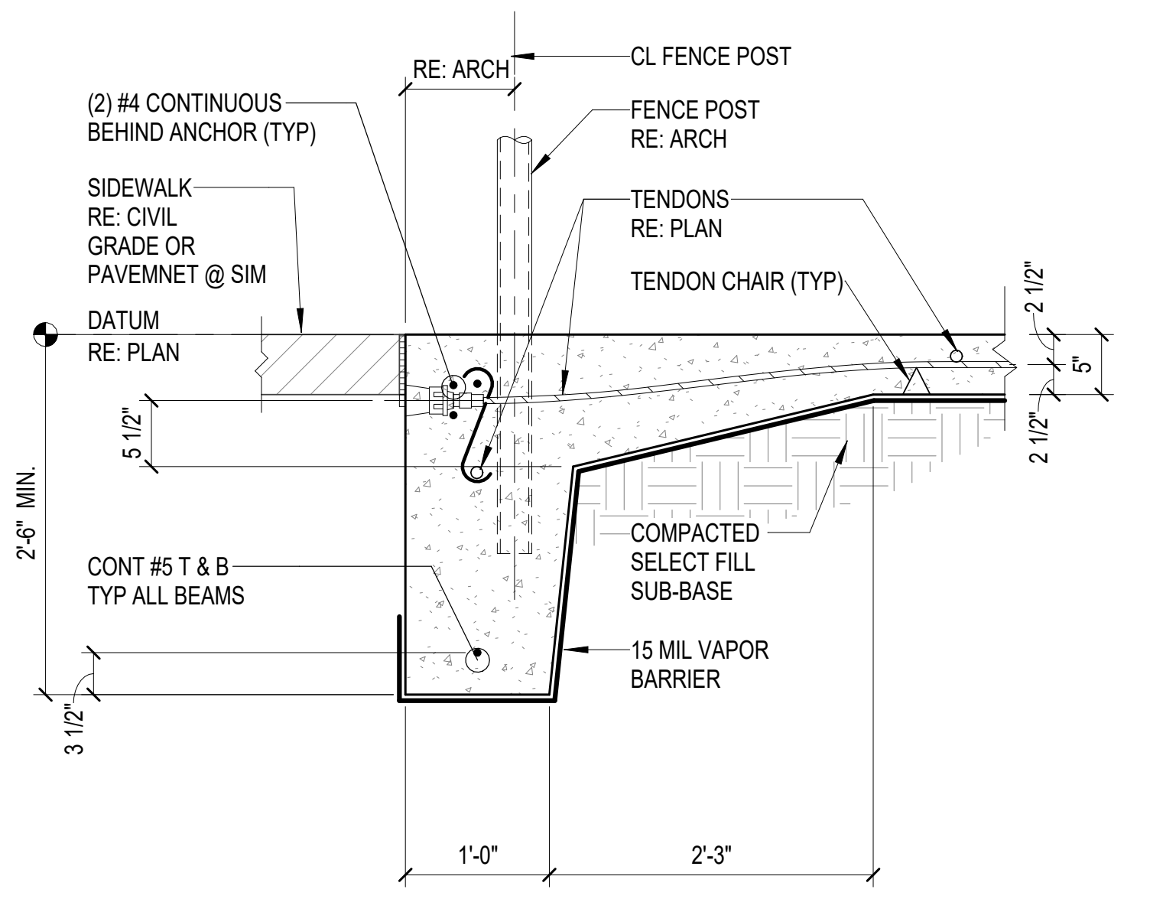
Project Number: 23071
Date: 11-17-2024
Drawn by: JT

FOUNDATION PLAN - PEMB

S201P
of

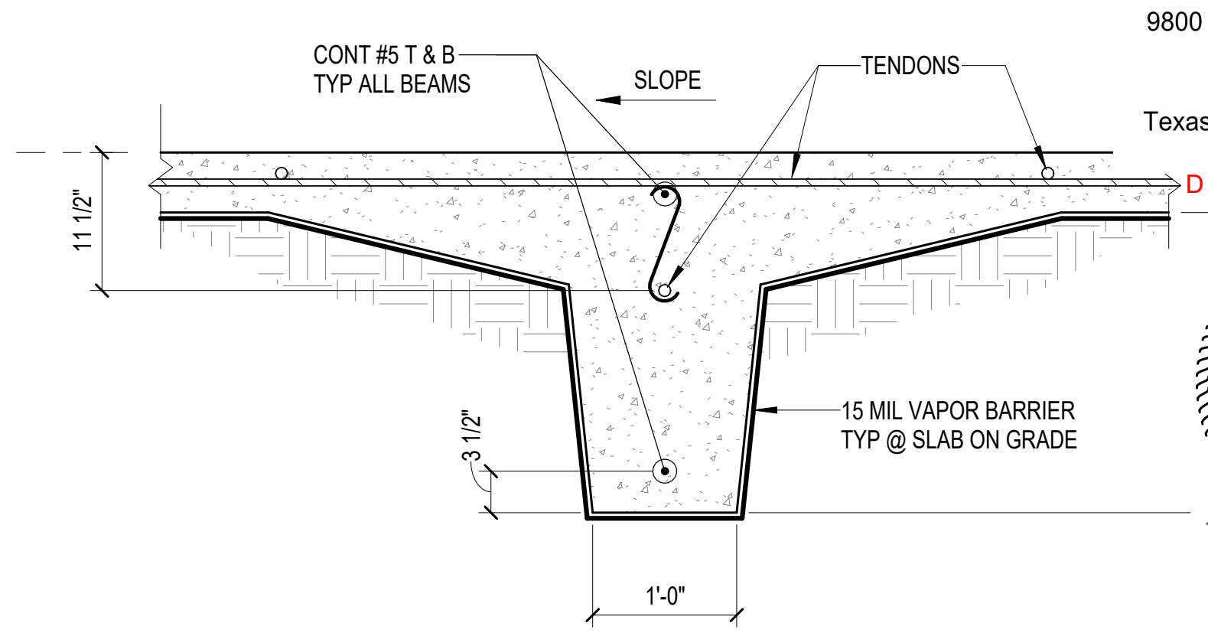


1 TENNIS COURT FOUNDATION PLAN
1/8" = 1'-0"



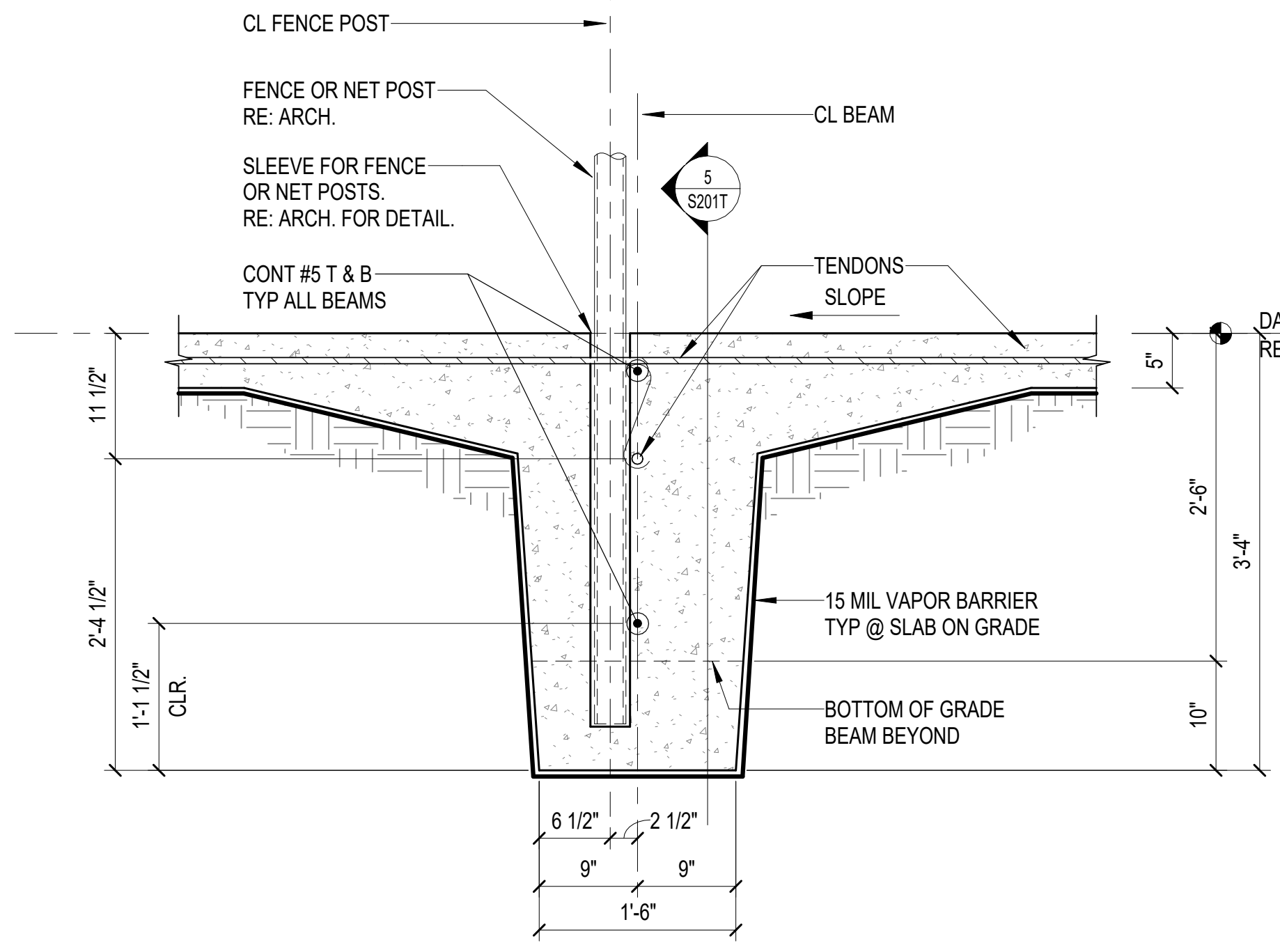
2 TYP. TENNIS COURT EXTERIOR GRADE BEAM
3/4" = 1'-0"

NOTE:
1. RE: DETAIL 1 FOR INFORMATION NOT SHOWN
2. RE: ARCH FOR TOC EL. & SLOPE.

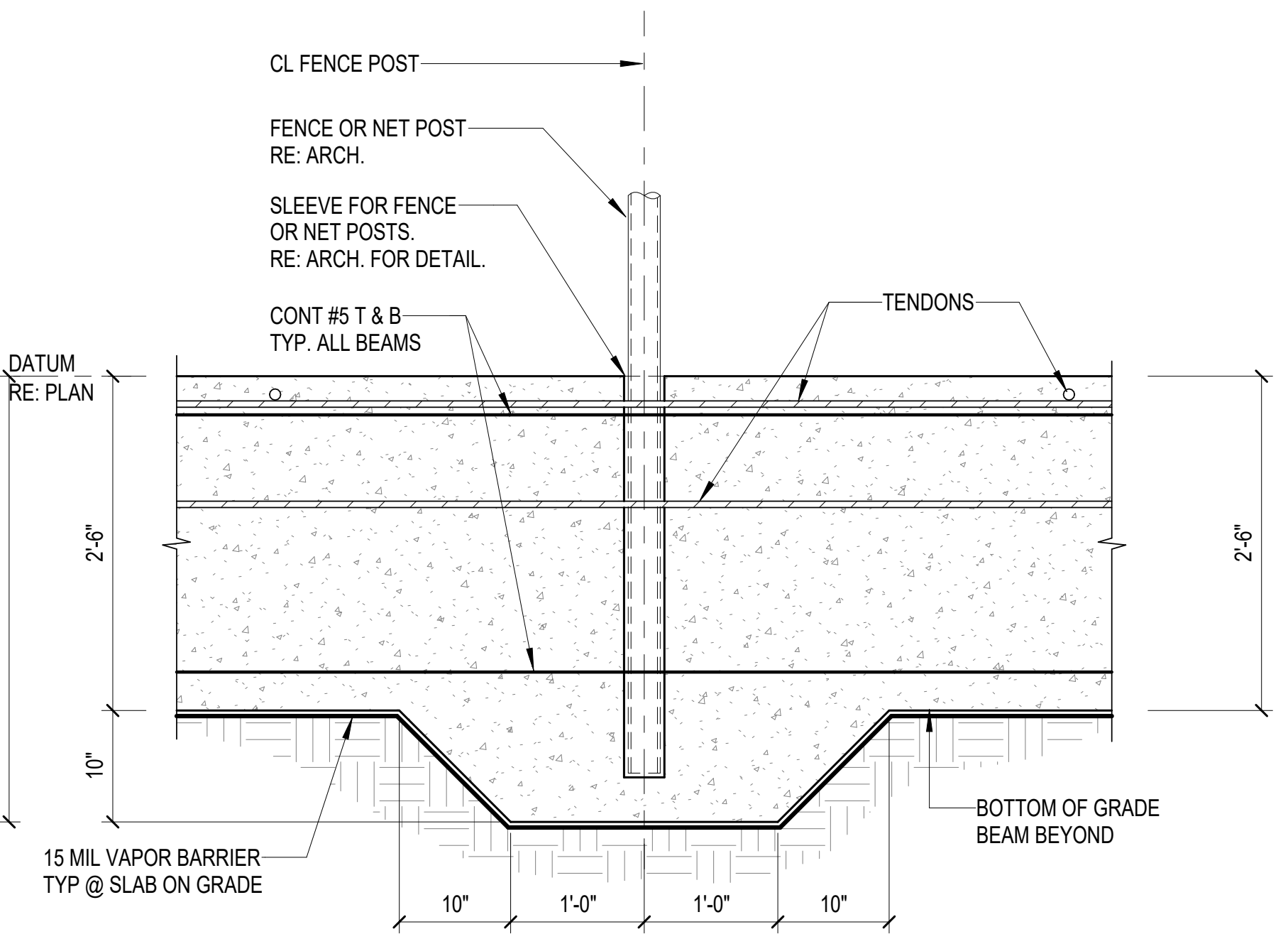


3 TYP. TENNIS COURT INTERIOR GRADE BEAM
3/4" = 1'-0"

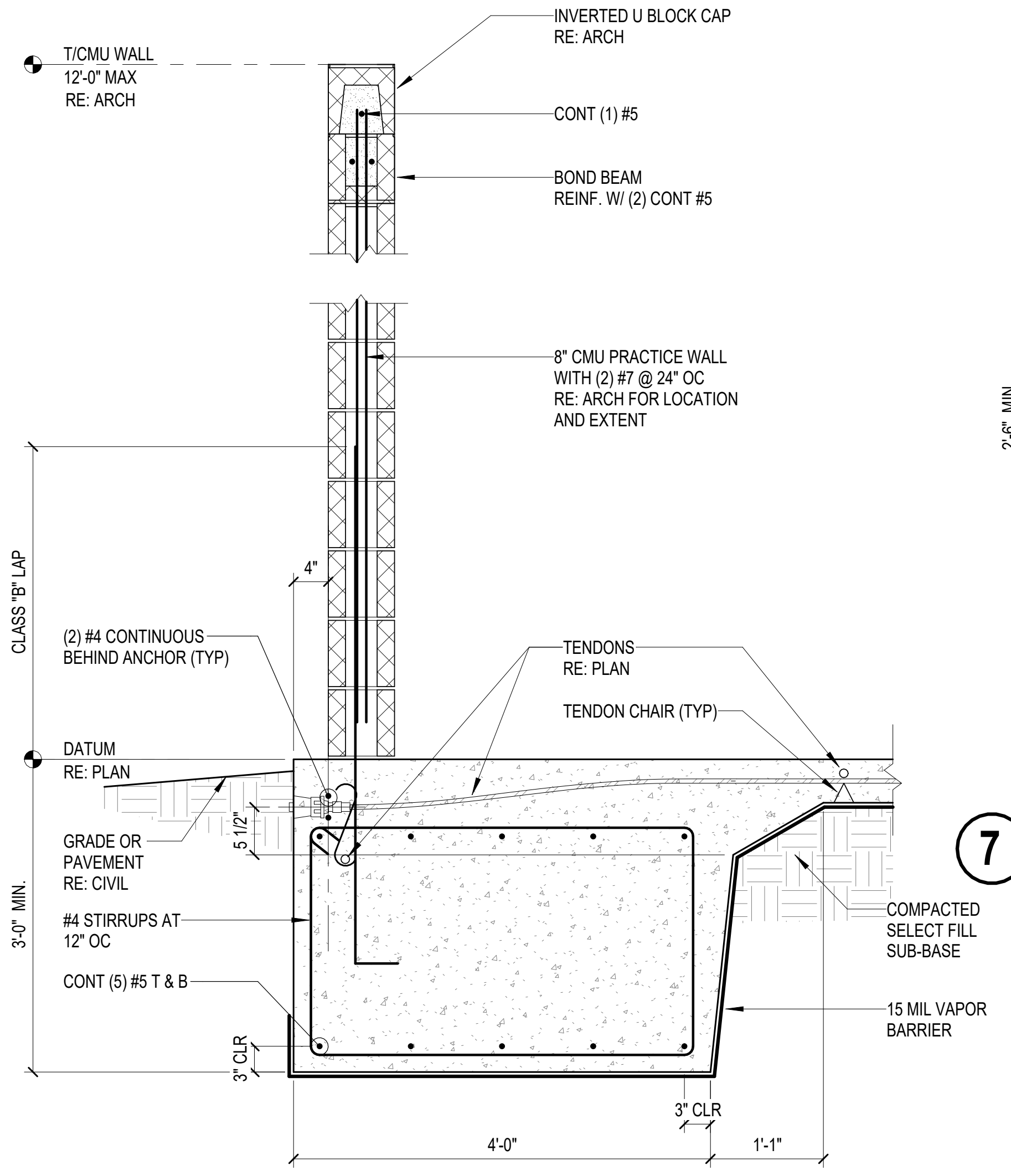
NOTE:
1. RE: DETAIL 1 FOR INFORMATION NOT SHOWN.
2. RE: ARCH FOR TOC EL. & SLOPE.



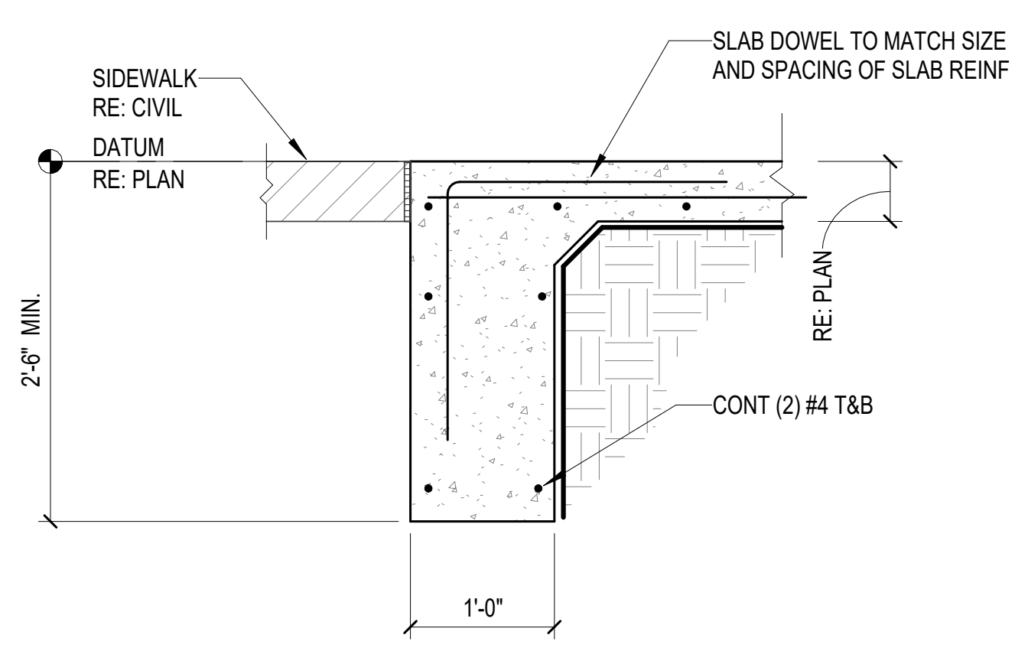
4 TYP. TENNIS COURT SECTION
3/4" = 1'-0"



5 TYP. TENNIS COURT FENCE POST ELEVATION
3/4" = 1'-0"



6 TENNIS COURT BEAT WALL
3/4" = 1'-0"



7 TYP. TENNIS COURT EXTERIOR GRADE BEAM
3/4" = 1'-0"

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

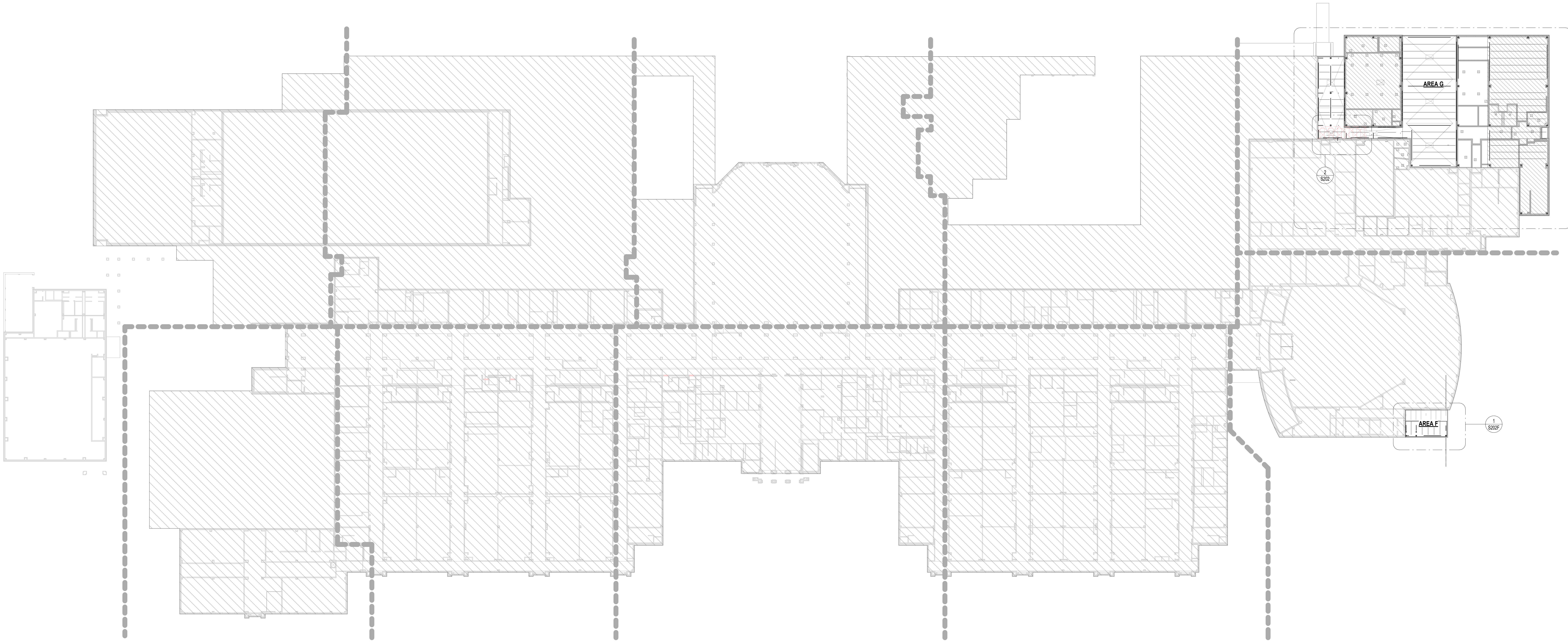
Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

TENNIS COURT PLAN
AND DETAILS

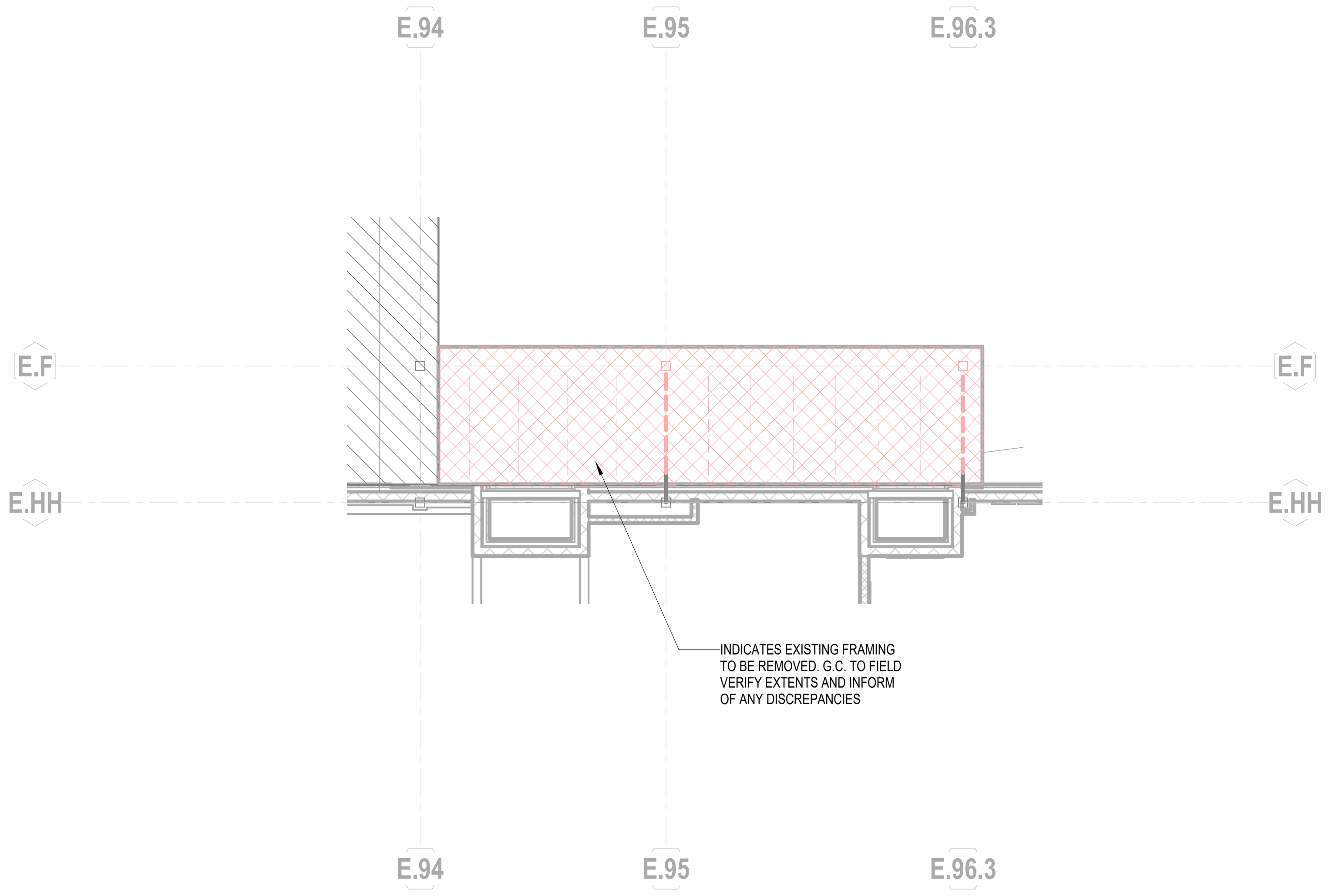
S201T

of

11/13/2024 4:13:59 PM



1 LOW ROOF FRAMING PLAN - OVERALL
1" = 40'-0"



INDICATES EXISTING FRAMING TO BE REMOVED. G.C. TO FIELD VERIFY EXTENTS AND INFORM OF ANY DISCREPANCIES

2 ENLARGE DEMO PLAN - AREA G
1/8" = 1'-0"

Autodesk Docs://23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

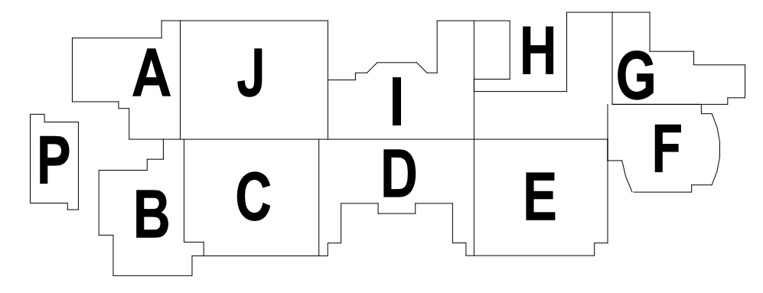
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

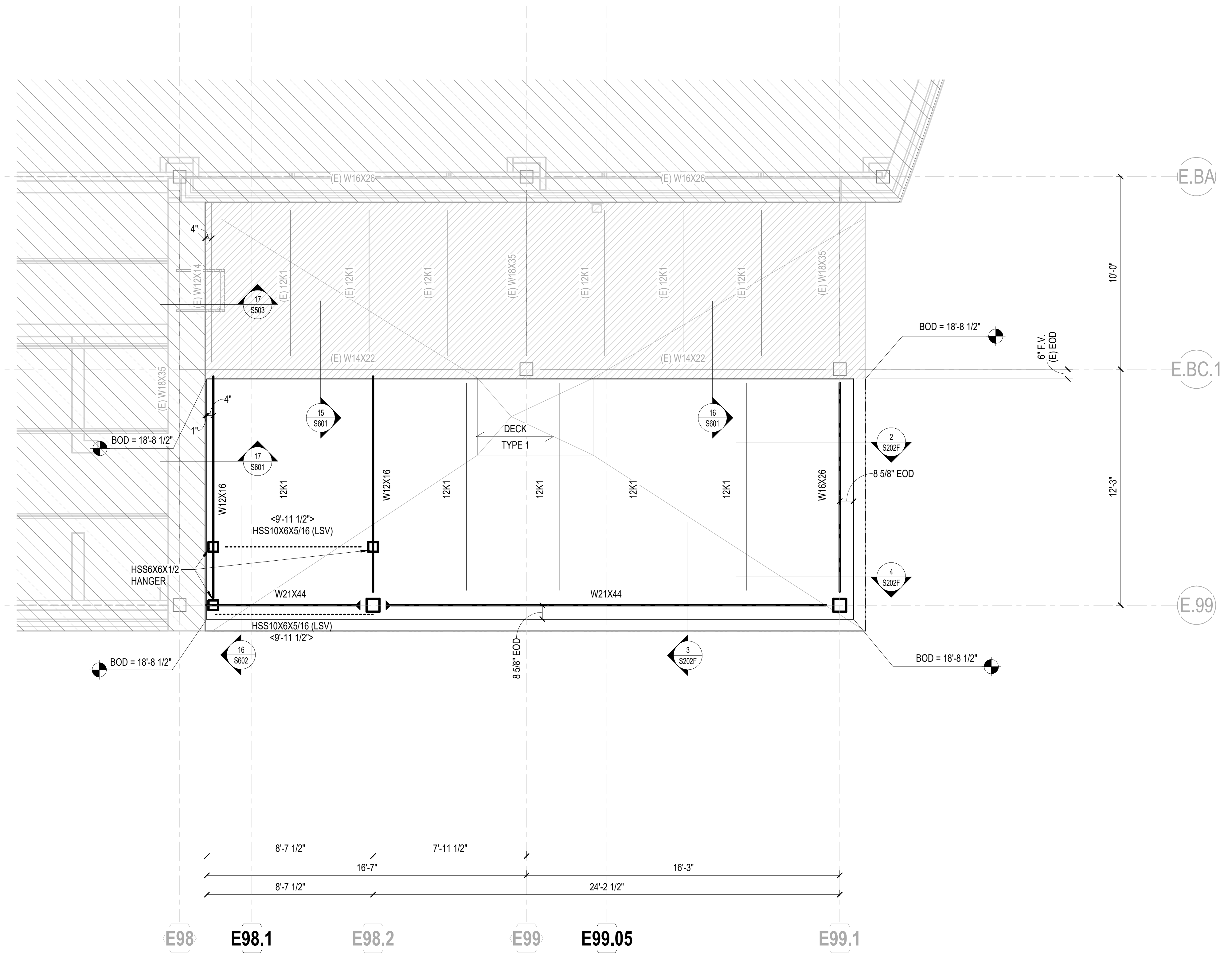
LOW ROOF FRAMING PLAN - OVERALL

S202

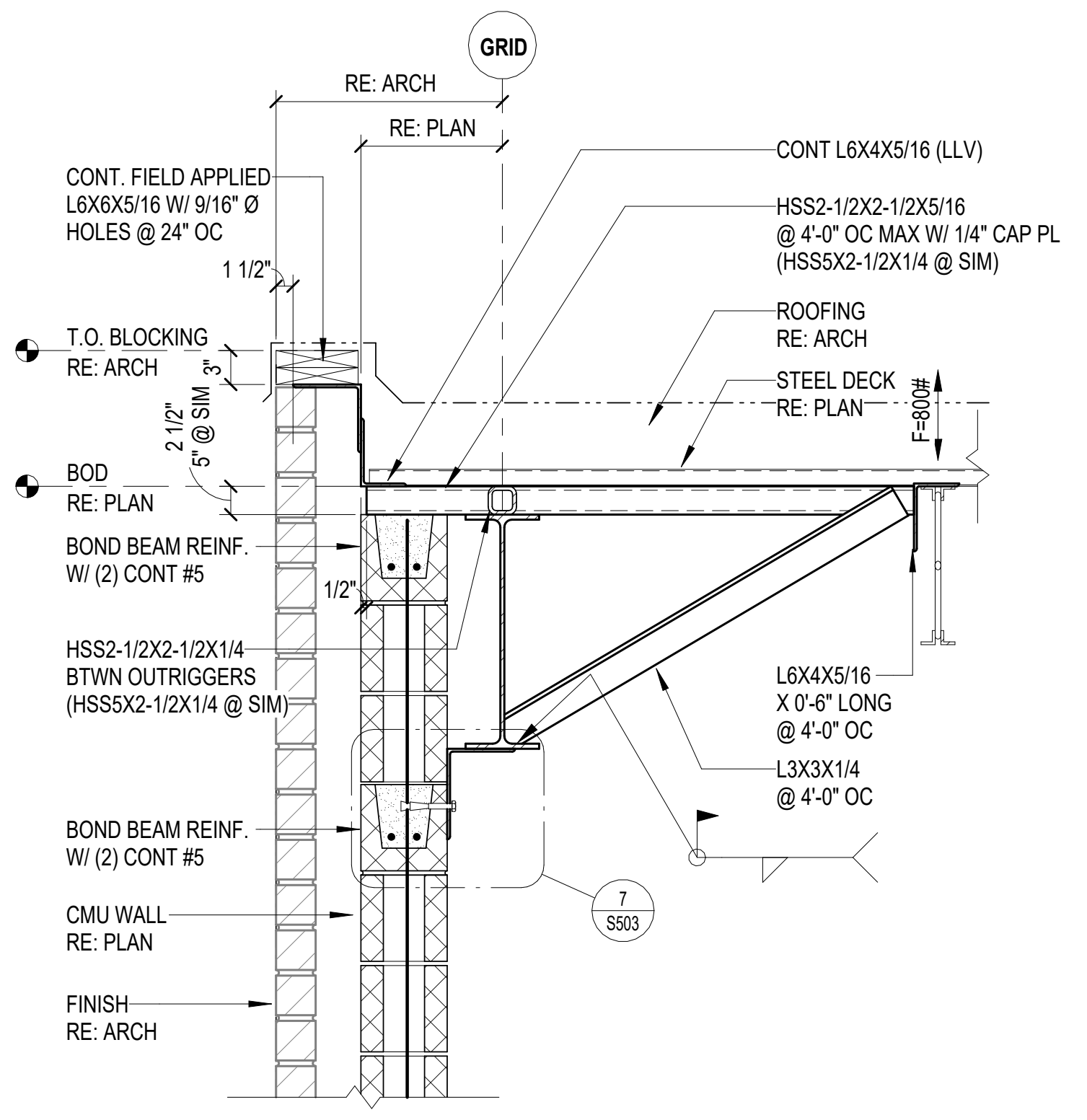
of

11/13/2024 4:14:01 PM

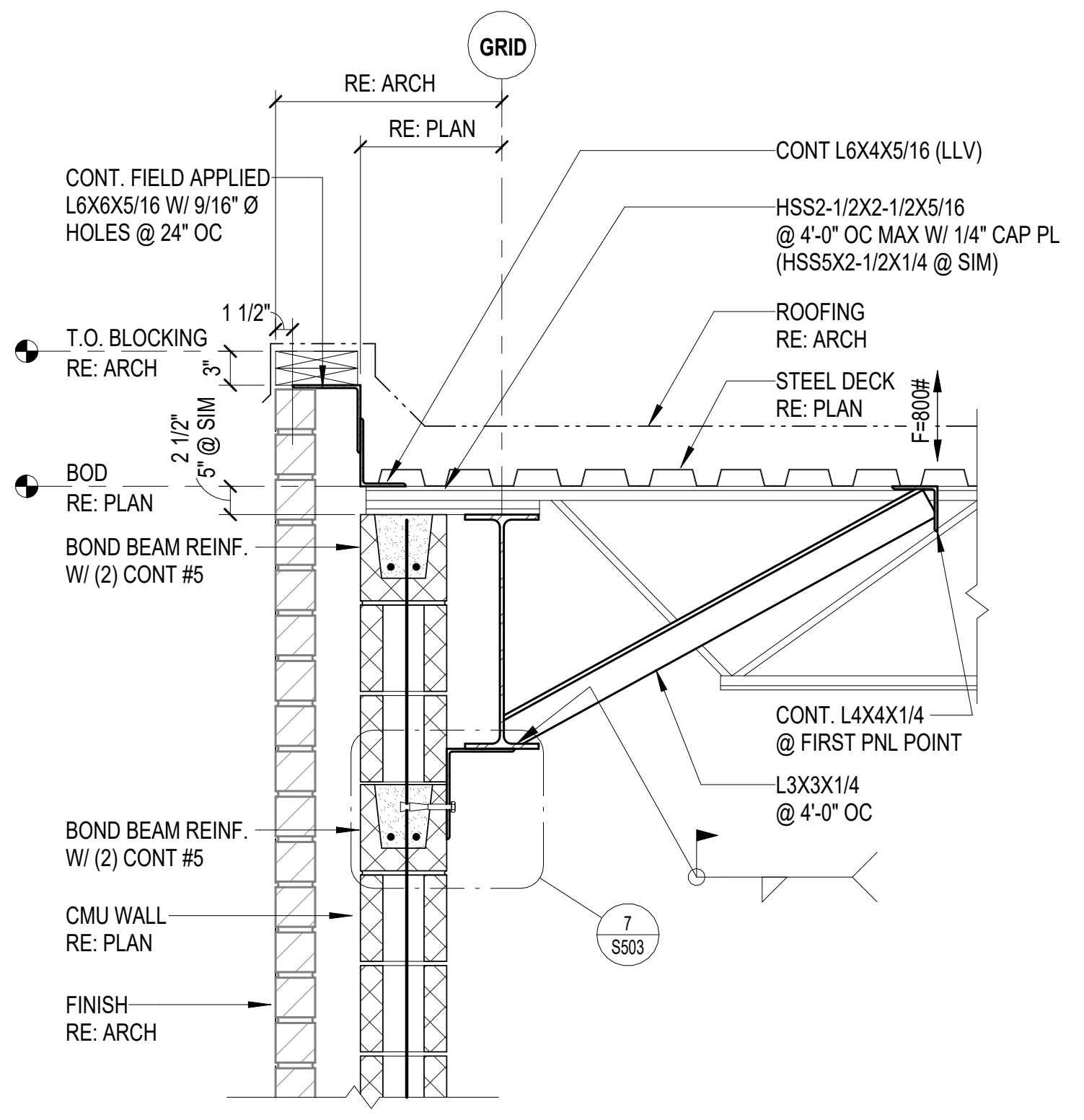
Autodesk Docs://23072_CFISD Cy Lakes Addn (Phase 6)/23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



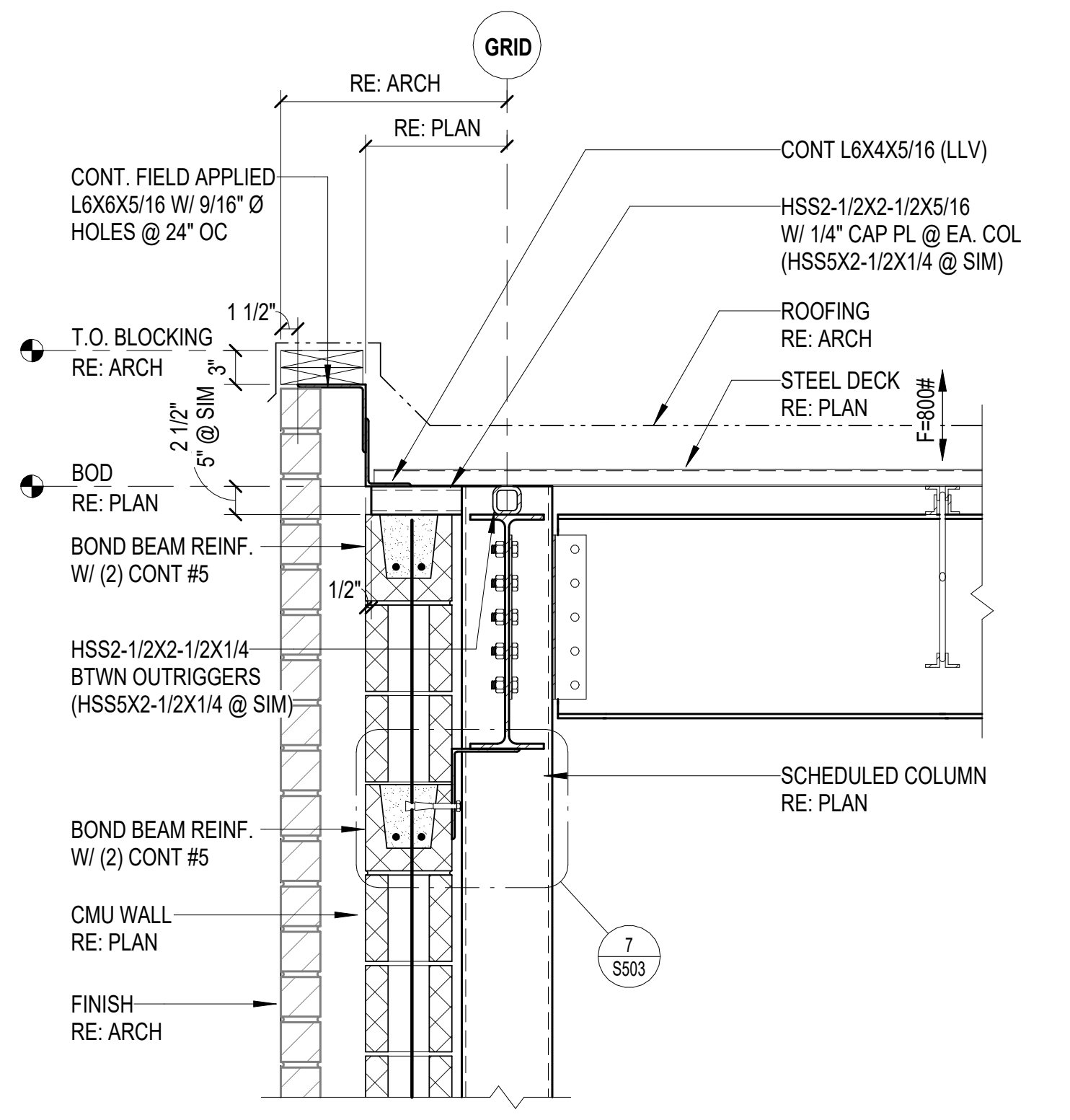
1 LOW ROOF FRAMING PLAN- AREA F
1/4" = 1'-0"



2 SECTION
3/4" = 1'-0"



3 SECTION
3/4" = 1'-0"



4 SECTION
3/4" = 1'-0"

STEEL ROOF FRAMING NOTES:

1. ALL ELEVATIONS ARE RELATIVE TO DATUM ELEVATION.

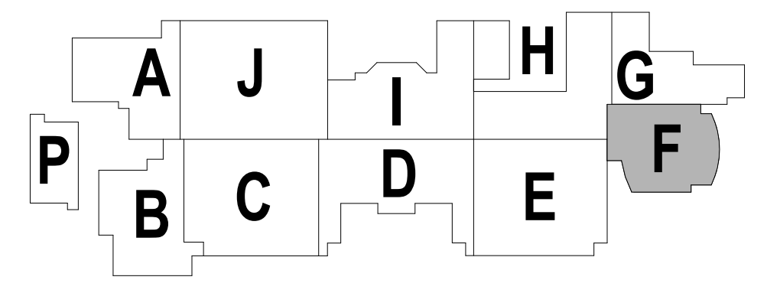
2. " DECK / TYPE 1 " (EXAMPLE) INDICATES ROOF DECK SPAN DIRECTION AND DECK TYPE 1.
TOS ELEVATION AT ROOF DECKS ARE AT BOD, TYP, UON.
FOR DECK TYPE INFORMATION **RE: 7 / S101**

3. COORDINATE LOCATIONS AND SIZES OF ALL CHASES AND PENETRATIONS WITH MEP.
COORDINATE EXACT LOCATION OF ALL MEP UNITS WITH MEP.
FOR FRAMING AROUND ROOF OPENINGS RE

4. " 350# — — 350# " (EXAMPLE) INDICATES A 350 PLF PIPE RUN BELOW TO BE SUPPORT BY THE STRUCTURE ABOVE.
G.C. TO COORDINATE FINAL PIPE RUN LOCATIONS WITH MEP DRAWINGS
ALL PIPE RUNS INDICATED IN THE STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY.
FOR ADDITIONAL INFORMATION **RE: 9/S501** & **RE: 10/S501**

5. ALL BEAMS SUBJECTED TO MOMENT CONNECTION TO BE BRACED AT EVERY 12'-0" OC

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

STATE OF TEXAS
FRED DALLY
90904
LICENSED
PROFESSIONAL ENGINEER
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

LOW ROOF FRAMING
PLAN - AREA F

S202F

of

11/13/2024 4:14:04 PM

Autodesk Docs://23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

1 LOW ROOF FRAMING PLAN
1/8" = 1'-0"

STEEL ROOF FRAMING NOTES:

1. ALL ELEVATIONS ARE RELATIVE TO DATUM ELEVATION.

2. " DECK / TYPE 1 " (EXAMPLE) INDICATES ROOF DECK SPAN DIRECTION AND DECK TYPE 1.
TOS ELEVATION AT ROOF DECKS ARE AT BOD, TYP, UON.
FOR DECK TYPE INFORMATION **RE: 7 / S101**

3. COORDINATE LOCATIONS AND SIZES OF ALL CHASES AND PENETRATIONS WITH MEP.
COORDINATE EXACT LOCATION OF ALL MEP UNITS WITH MEP.
FOR FRAMING AROUND ROOF OPENINGS RE

4. " 350# — — 350# " (EXAMPLE) INDICATES A 350 PLF PIPE RUN BELOW TO BE SUPPORT BY THE STRUCTURE ABOVE.
G.C. TO COORDINATE FINAL PIPE RUN LOCATIONS WITH MEP DRAWINGS
ALL PIPE RUNS INDICATED IN THE STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY.
FOR ADDITIONAL INFORMATION **RE: 9/S501** & **RE: 10/S501**

5. ALL BEAMS SUBJECTED TO MOMENT CONNECTION TO BE BRACED AT EVERY 12'-0" OC

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

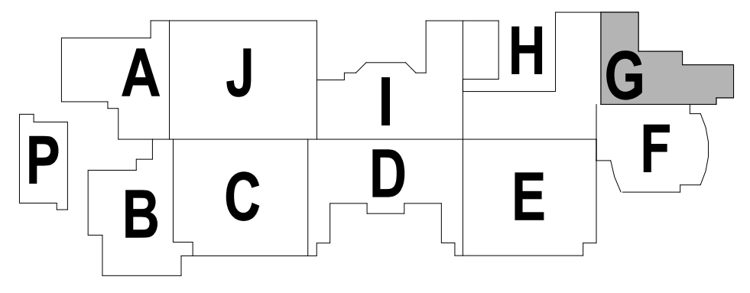
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

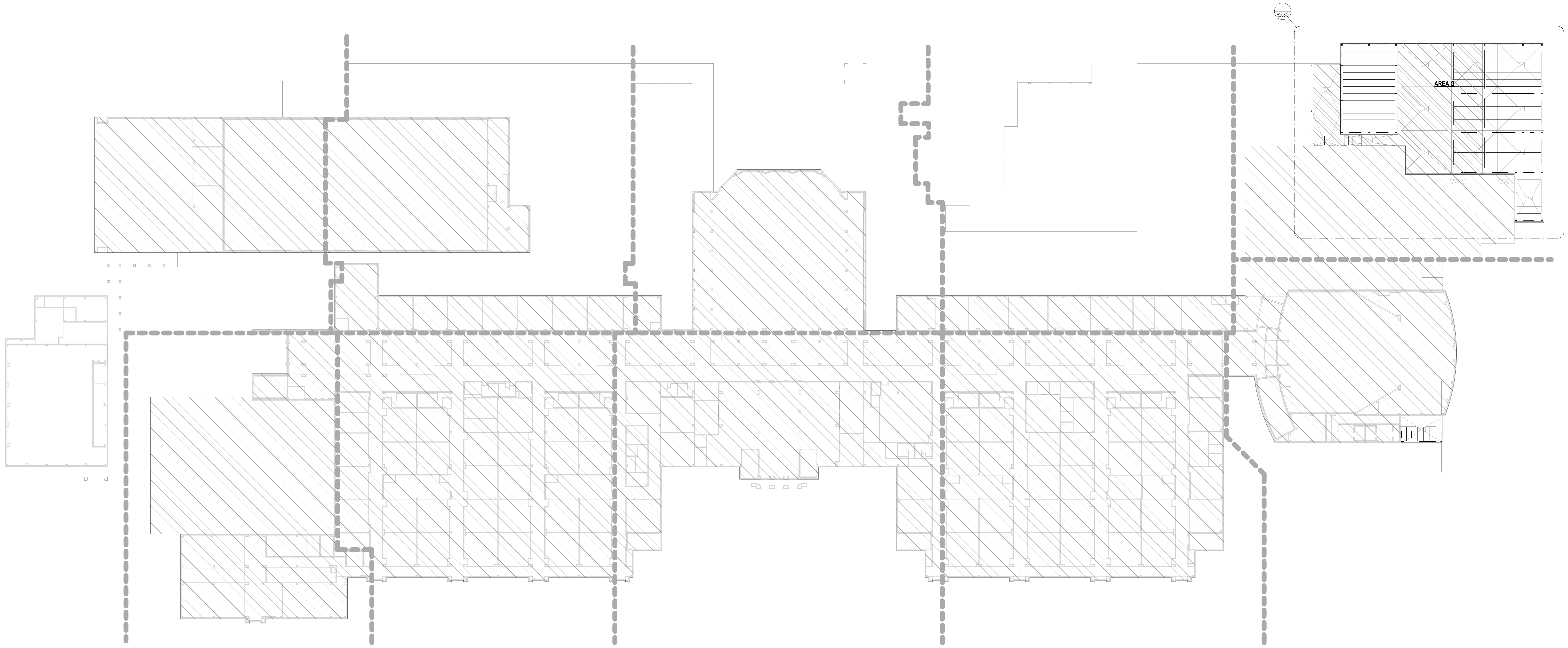
LOW ROOF FRAMING PLAN - AREA G

S202G

of

11/13/2024 4:14:07 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



1 HIGH ROOF FRAMING PLAN - OVERALL
1" = 40'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

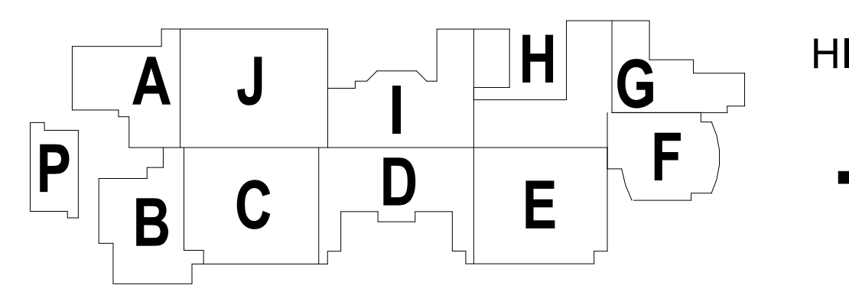
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 11-17-2024
Drawn by: JT

HIGH ROOF FRAMING PLAN - OVERALL

S203
of

1 HIGH ROOF FRAMING PLAN
1/8" = 1'-0"

STEEL ROOF FRAMING NOTES:

1. ALL ELEVATIONS ARE RELATIVE TO DATUM ELEVATION.

2. " DECK / TYPE 1 " (EXAMPLE) INDICATES ROOF DECK SPAN DIRECTION AND DECK TYPE 1.
TOS ELEVATION AT ROOF DECKS ARE AT BOD, TYP, UON.
FOR DECK TYPE INFORMATION **RE: 7 / S101**

3. COORDINATE LOCATIONS AND SIZES OF ALL CHASES AND PENETRATIONS WITH MEP.
COORDINATE EXACT LOCATION OF ALL MEP UNITS WITH MEP.
FOR FRAMING AROUND ROOF OPENINGS RE

4. " 350# — — 350# " (EXAMPLE) INDICATES A 350 PLF PIPE RUN BELOW TO BE SUPPORT BY THE STRUCTURE ABOVE.
G.C. TO COORDINATE FINAL PIPE RUN LOCATIONS WITH MEP DRAWINGS
ALL PIPE RUNS INDICATED IN THE STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY.
FOR ADDITIONAL INFORMATION **RE: 9/S501** & **RE: 10/S501**

5. ALL BEAMS SUBJECTED TO MOMENT CONNECTION TO BE BRACED AT EVERY 12'-0" OC

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

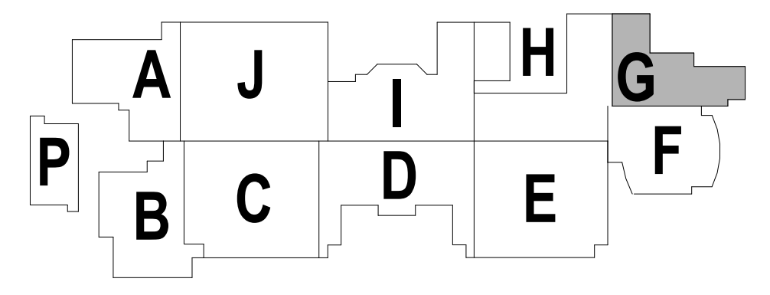
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

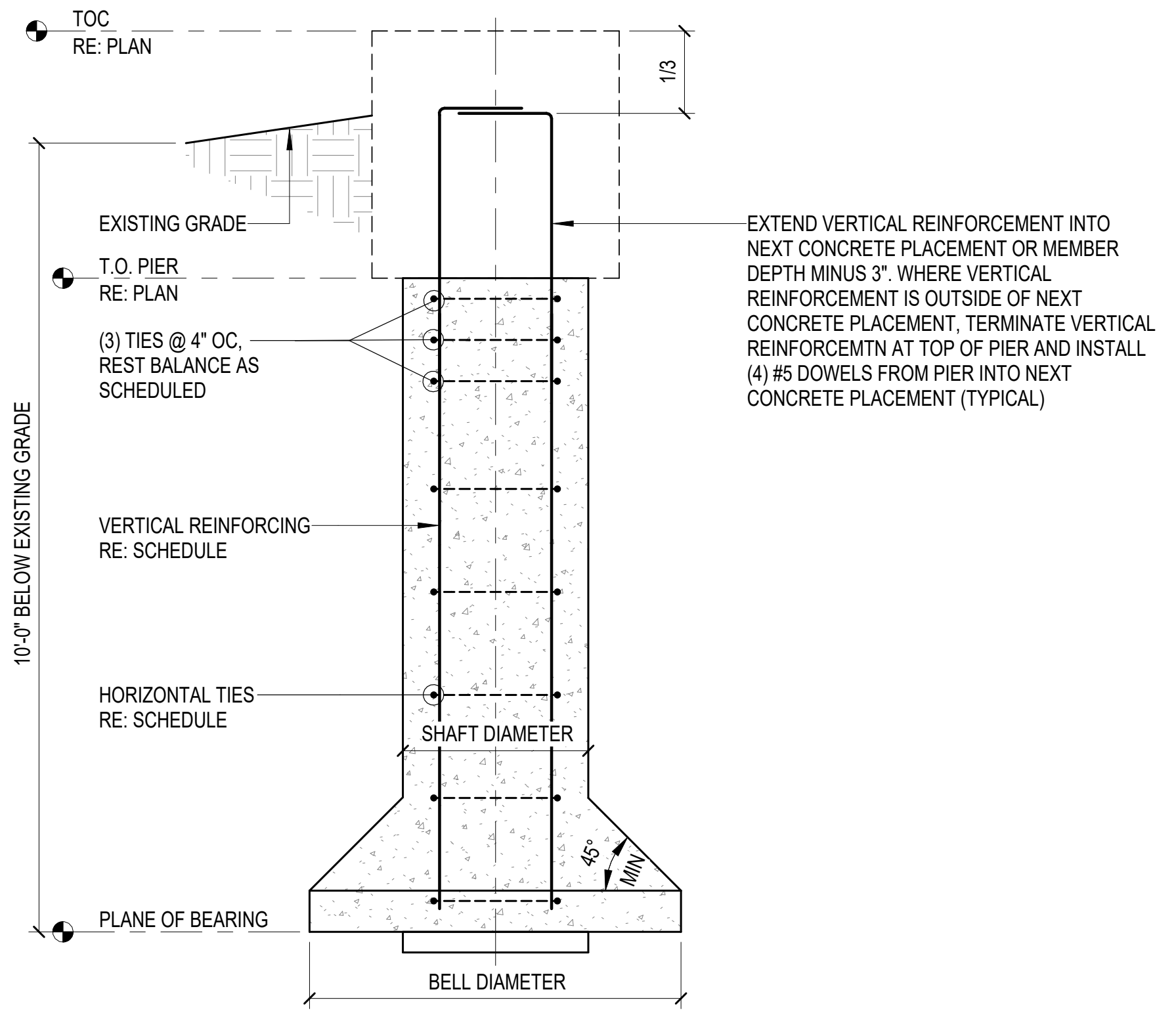
HIGH ROOF FRAMING PLAN - AREA G

S203G

of

11/13/2024 4:14:13 PM

DRILLED PIER SCHEDULE					
SHAFT DIAMETER	VERTICAL REINFORCING		TIES		
	NUMBER	SIZE	SIZE	SPACING (IN)	
24	6	#6	#4	12	
30	6	#8	#4	12	
36	8	#8	#4	12	



1. A GEOTECHNICAL REPORT IS AVAILABLE FOR REVIEW
2. THE INDEPENDENT TESTING LABORATORY SHALL CONFIRM THE ALLOWABLE SOIL BEARING CAPACITY IN THE FIELD AT THE ELEVATION DESIGNATED AS THE PLANE OF BEARING FOR THE DRILLED PIER.
   A. ALLOWABLE BEARING PRESSURE OF **6000** PSF
3. ALLOTHE INDEPENDENT TESTING LABORATORY SHALL INSPECT THE BOTTOM AND SIDES OF THE DRILLED PIER PRIOR TO PLACING REINFORCING AND CONCRETE.
4. CENTER ALL DRILLED PIERS UNDER THEIR COLUMNS, UON.
5. MAINTAIN CLOSE AND ACCURATE DRILLING PRACTICES TO ACHIEVE CLOSE TOLERANCES WITH THE REINFORCING STEEL AND THE ANCHOR ROD TEMPLATE.
6. ALL REINFORCING STEEL FOR DRILLED PIERS SHALL BE DEFORMED NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
7. ALL SCHEDULED REINFORCEMENT SHALL BE UNIFORMLY DISTRIBUTED.
8. DEPOSIT CONCRETE TO ITS FINAL POSITION BY THE USE OF A TREMIE.
9. CONSOLIDATE CONCRETE IN ITS FINAL POSITION BY VIBRATING.
10. **CASING NOTE:** DUE TO SAND BEING MENTIONED IN THE GEOTECHNICAL REPORT, THERE IS A POSSIBILITY OF EXCAVATION COLLAPSE. THE CONTRACTOR SHALL BE PREPARED TO UTILIZE CASING AND STRAIGHT SHAFT PIERS MATCHING THE BELL DIAMETER FOR FULL DEPTH WITH ORIGINAL PIER REINFORCING NOTED IN SCHEDULE. UNIT PRICE AND ASSUMPTION IN BASE BID SHALL BE INCLUDED FOR THIS CONDITION. REFER TO BIDDING FORMS FOR ADDITIONAL INFORMATION. FOR BIDDING PURPOSES, PROVIDE COST FOR 5% OF ALL BELL SIZES SHOWN IN PROJECT FORMED AS STRAIGHT SHAFT PIERS BEARING AT THE ELEVATION SHOWN IN THE PIER DETAIL. COST SHALL INCLUDE, BUT NOT BE LIMITED TO, MATERIAL, LABOR, MOBILZATION AND ANY IMPACT TO THE PROJECT SCHEDULE.

1 DRILLED PIER SCHEDULE
3/4" = 1'-0"

PLINTH SCHEDULE			
MARK	REINFORCING		REMARKS
	VERTICAL	TIES	
P1	(12) #7	#4 @ 10" OC	
P2	(12) #7	#4 @ 10" OC	
P3	(12) #7	#4 @ 10" OC	
P4	(21) #7	#4 @ 10" OC	

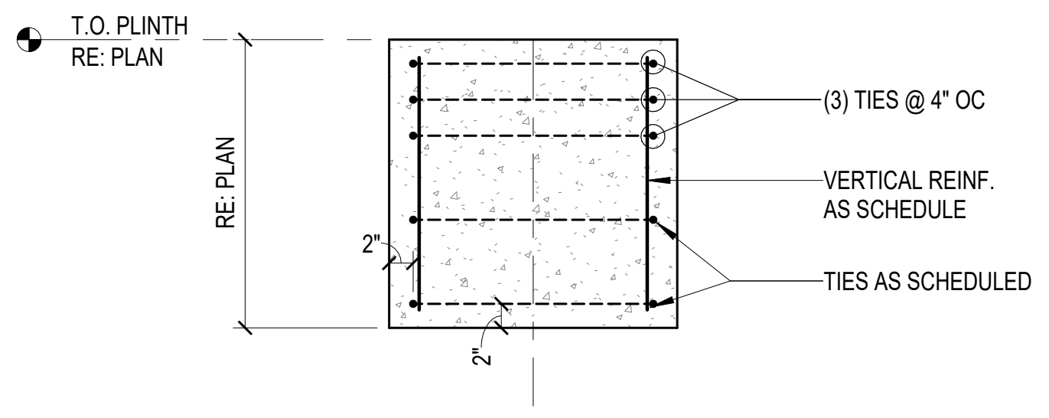
PLINTH GENERAL NOTES:

1. PROVIDE (3) TIES TO MATCH SCHEDULED TIE REINFORCING, TYPICAL AT ALL PLINTHS.

2. FOR PLINTH TYPE, ORIENTATE AND LOCATIONS RE: PLAN.

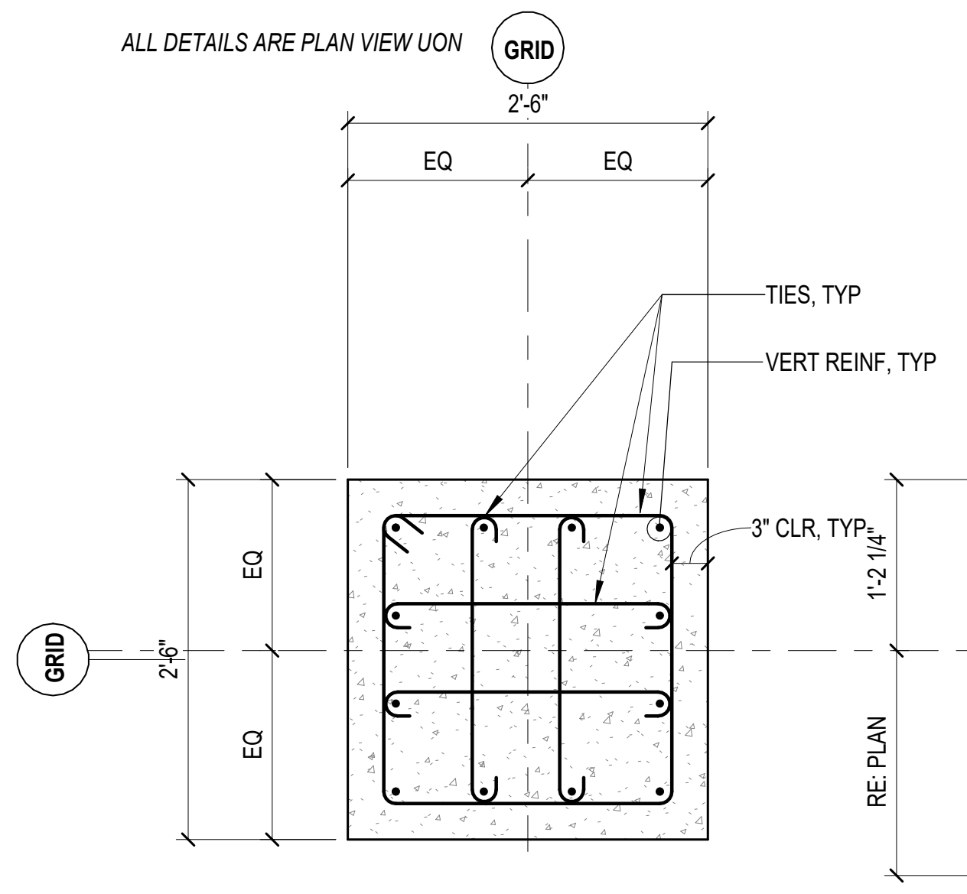
3. WHERE A PLINTH ARE INTEGRAL WITH A GRADE BEAMS OR STEM WALLS, EXTEND THE HORIZONTAL REINFORCING THROUGH THE PLINTH, TYPICAL.

4. THE DIMENSIONS SHOWN ARE MINIMUMS, GC TO COORDINATE W/ METAL BUILDING MANUFACTURER AND INCREASE PLINTH DIMENSIONS AS NECESSARY TO SATISFY BASE PLATE & ANCHOR BOLT REQUIREMENTS.

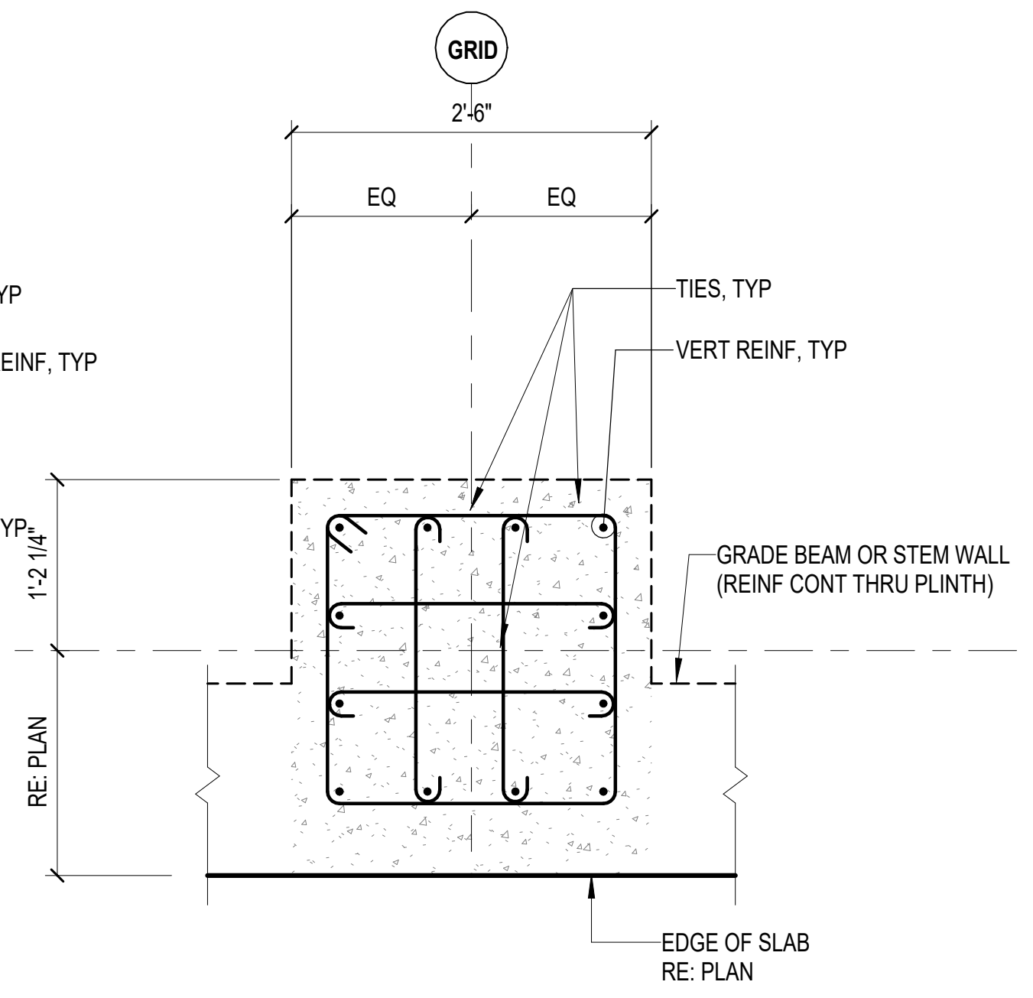


2 PLINTH SCHEDULE
3/4" = 1'-0"

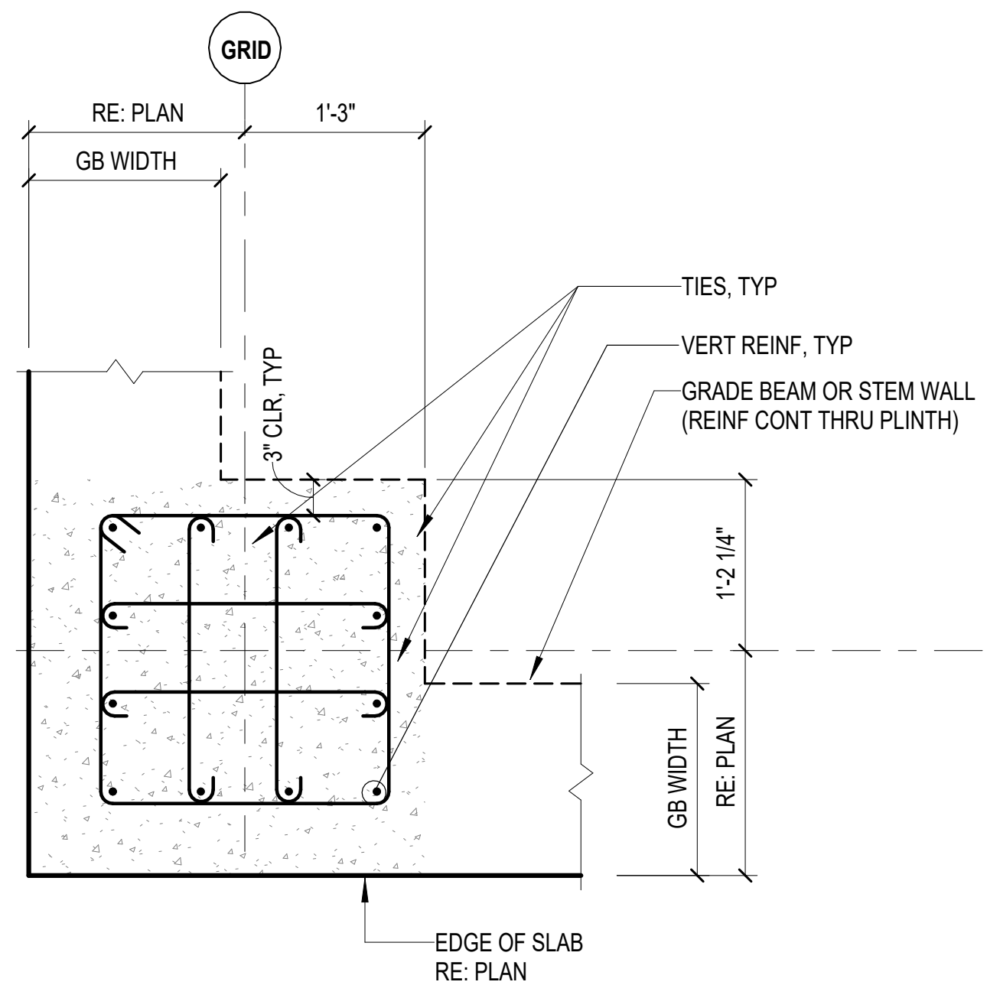
ALL DETAILS ARE PLAN VIEW UON



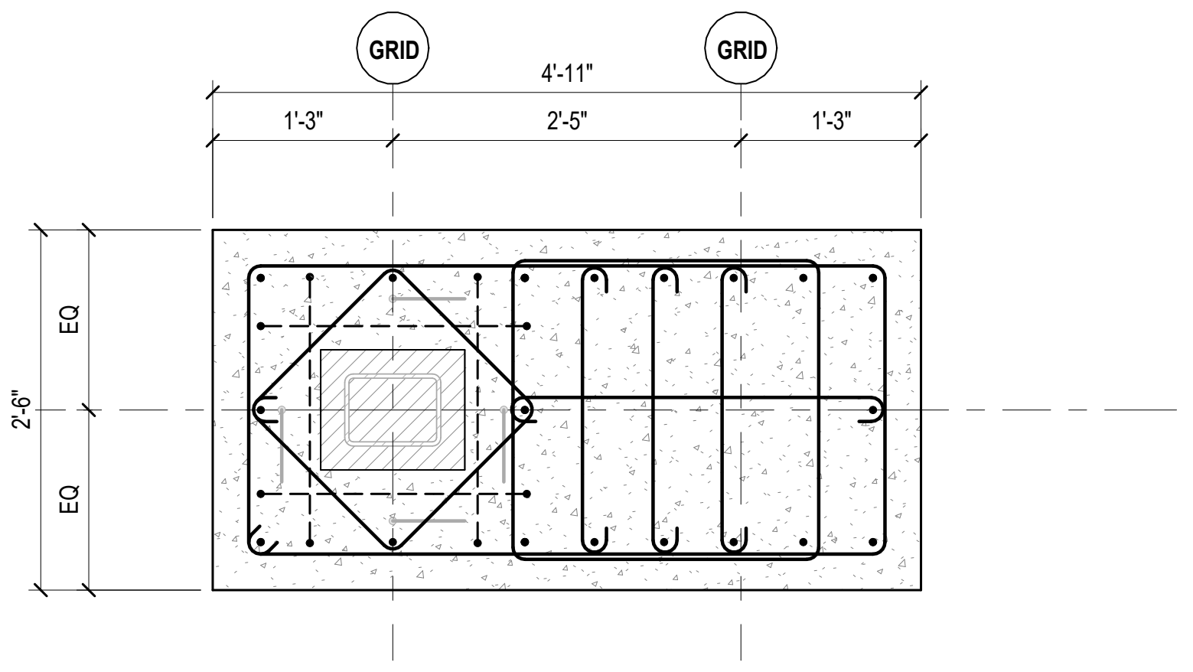
TYPE P1



TYPE P2



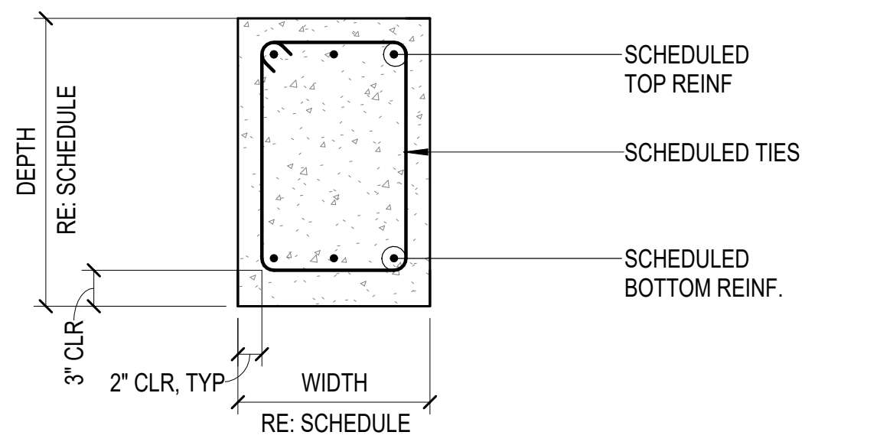
TYPE P3



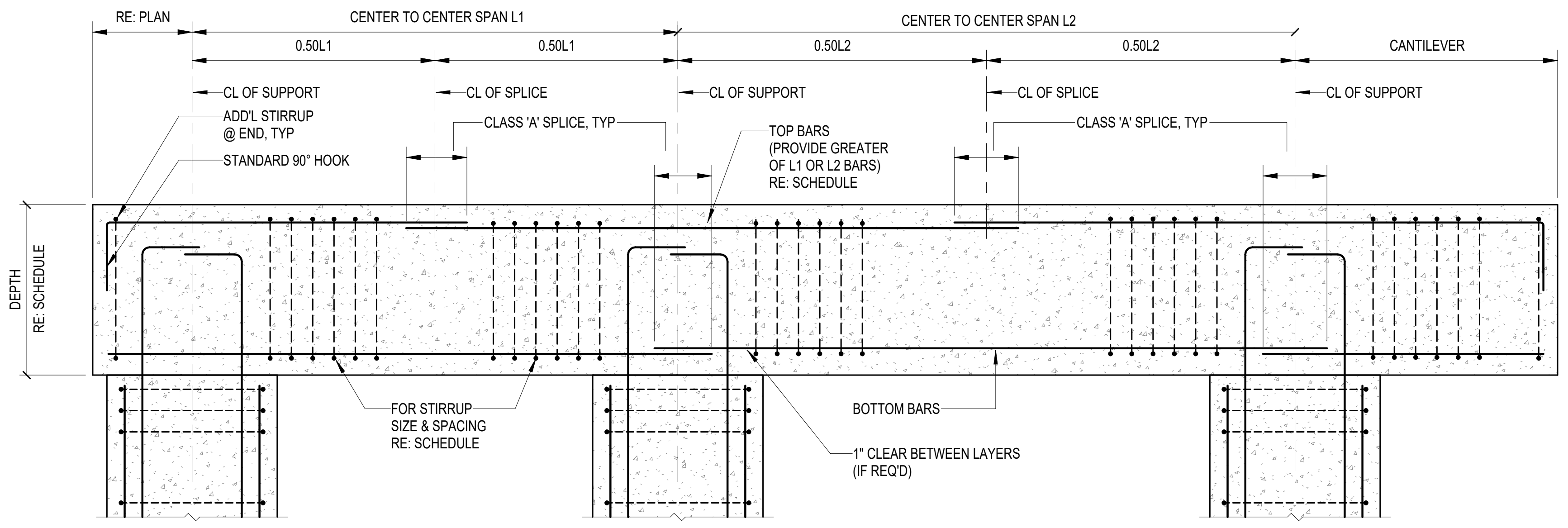
TYPE P4

3 PLINTH DETAILS
3/4" = 1'-0"

GRADE BEAM SCHEDULE						
MARK	WIDTH	DEPTH	TOP REINF.	MIDDLE REINF.	BOTTOM REINF.	TIES (OC, TYP)
GB1	1'-4"	2'-0"	(3) #7	-	(3) #7	#4 @ 10"
GB2	2'-0"	2'-0"	(4) #8	(2)#5	(4) #8	#4 @ 10"
GB3	2'-8"	2'-0"	(6) #9	(2)#5	(6) #9	#4 @ 10"



TYPICAL SECTION



TYPICAL ELEVATION

4 GRADE BEAM SCHEDULE
3/4" = 1'-0"

Autodesk Docs://23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

SCHEDULES

S301
of

11/13/2024 4:14:14 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

STRUCTURAL STEEL COLUMN SCHEDULE

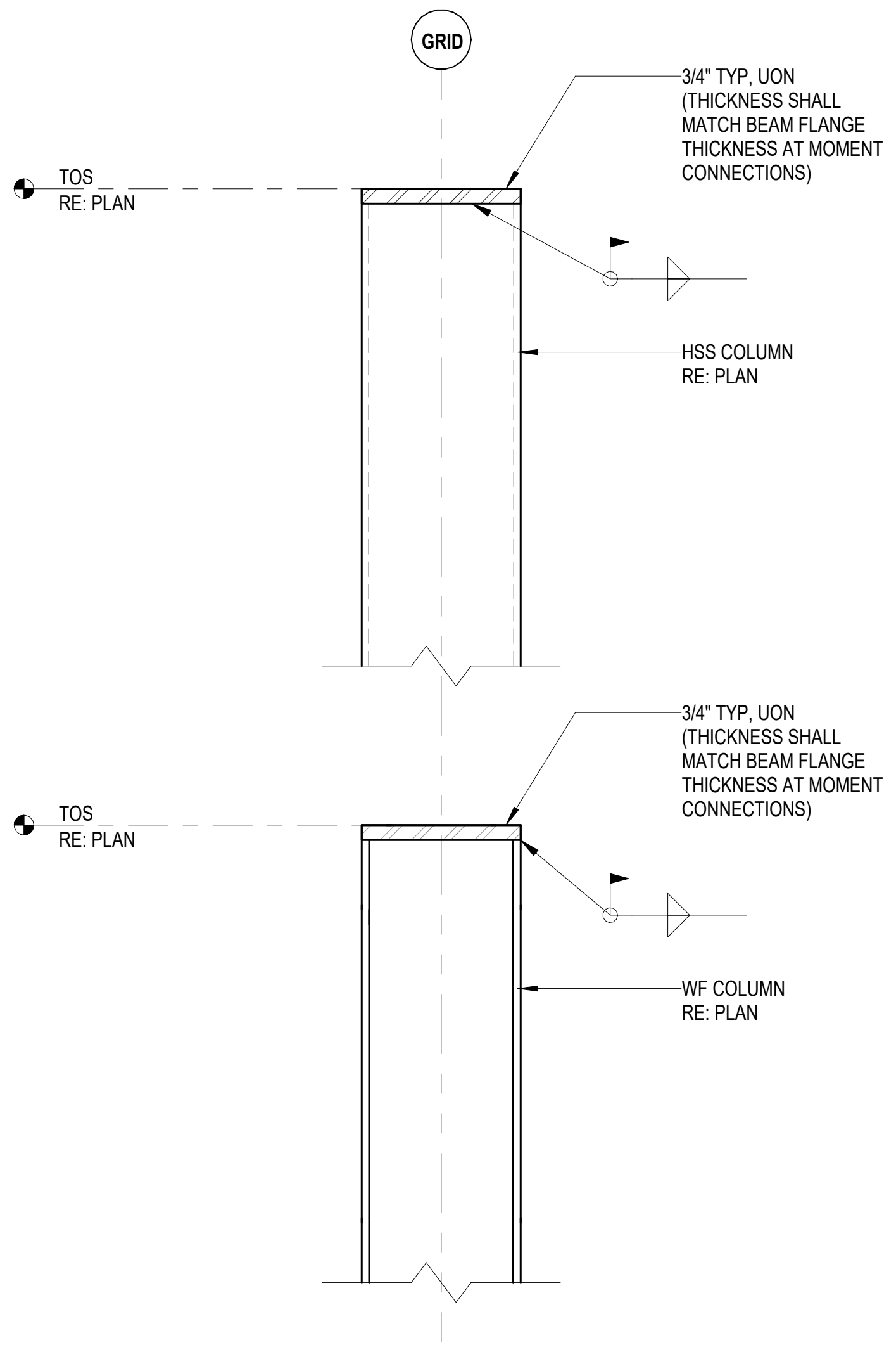
MARK	COLUMN TYPE	BASEPLATE TYPE	BASEPLATE ELEVATION	
C1	HSS10X10X1/2	BP1	- 0'-6 1/2"	
C2	HSS10X10X5/8	BP4, BP2	- 0'-6 1/2"	BASEPLATE ELEVATION U.O.N
C3	HSS8X8X1/2	BP3	- 0'-6 1/2"	

STRUCTURAL STEEL COLUMN GENERAL NOTES:

1. PROVIDE STRUCTURAL STEEL W SHAPES CONFORMING TO ASTM 992, GRADE 50.
2. PROVIDE STRUCTURAL STEEL FOR HSS COLUMNS CONFORMING TO ASTM A500, GRADE B.
3. PROVIDE STEEL FOR STIFFNER PLATES, CONNECTION PLATES AND ANGLES CONFORMING TO ASTM A36.
4. SAW OR MILL SURFACES NOTED FIN. (FINISHED) FOR TRUE AND FULL CONTACT.
5. USE E70XX WELDING ELECTRODES FOR ALL WELDS, UNLESS OTHERWISE NOTED.
6. PROVIDE WEB DOUBLER PLATES IF REQUIRED TO SATISFY CONNECTION DESIGN AND DEMANDS

① COLUMN SCHEDULE LIST

3/4" = 1'-0"



② COLUMN CAP PLATE

1 1/2" = 1'-0"

BASEPLATE SCHEDULE

MARK	TYPE	DIMENSIONS					ANCHOR RODS				WELD
		B (IN)	N (IN)	tp (IN)	X (IN)	Z (IN)	#	Ø (IN)	P (IN)	L (IN)	W (IN)
BP1	A	20	20	1 1/2			4	1 1/4	6	24	5/16
BP2	A	20	20	1 1/2			4	1 1/2	8	24	7/16
BP3	A	16	16	1 1/4			4	1	6	24	5/16
BP4	A	20	20	1 1/4			4	1	6	24	5/16

BASE PLATE GENERAL NOTES:

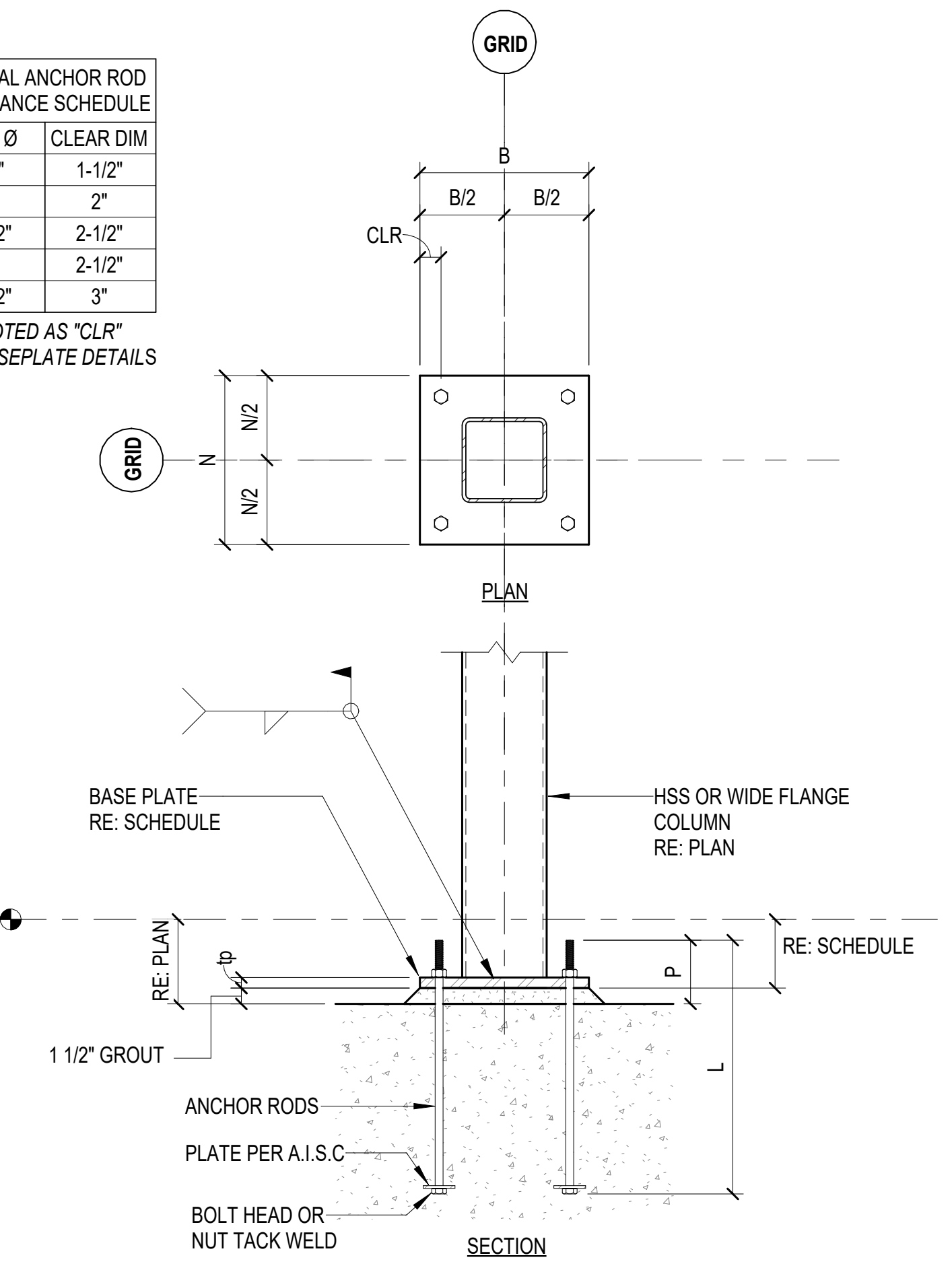
1. PROVIDE STEEL FOR BASE PLATES CONFORMING TO ASTM A36.
2. PROVIDE HOLES IN BASE PLATES IN ACCORDANCE WITH AISC 14TH EDITION.
3. PROVIDE ANCHOR RODS CONFORMING TO ASTM F1554, GRADE 55 WELDABLE.
4.

③ BASEPLATE SCHEDULE

3/4" = 1'-0"

TYPICAL ANCHOR ROD CLEARANCE SCHEDULE	
ROD Ø	CLEAR DIM
3/4"	1-1/2"
1"	2"
1 1/2"	2-1/2"
2"	2-1/2"
2 1/2"	3"

NOTED AS "CLR" ON BASEPLATE DETAILS



TYPE A

④ BASEPLATE DETAILS

3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

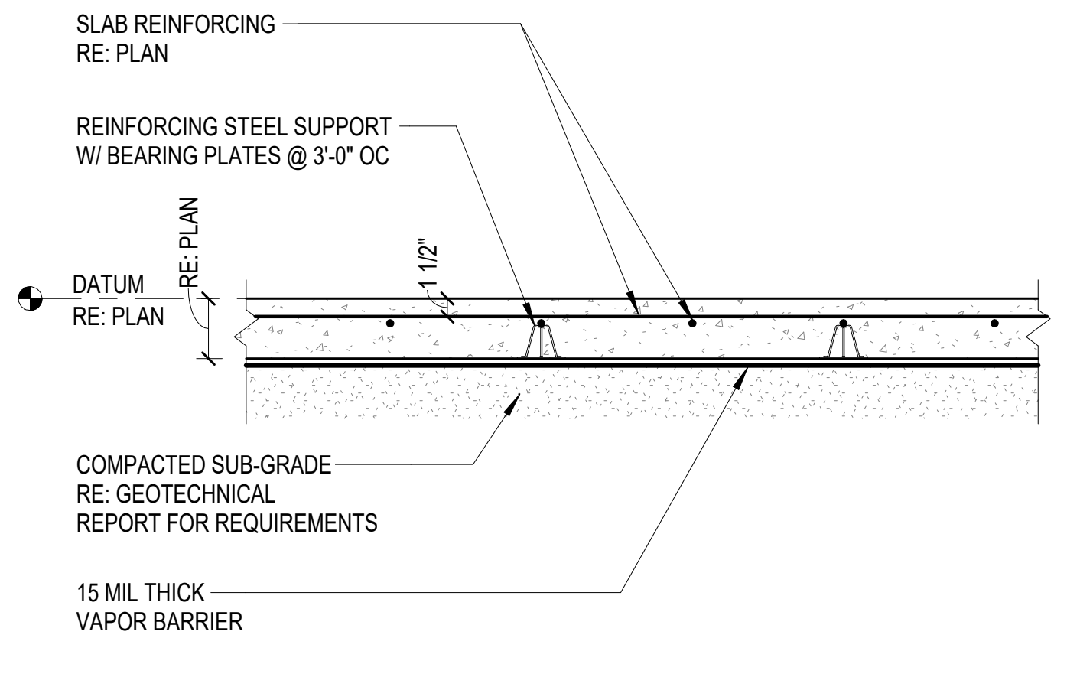
COLUMN AND BASEPLATE SCHEDULE

S302

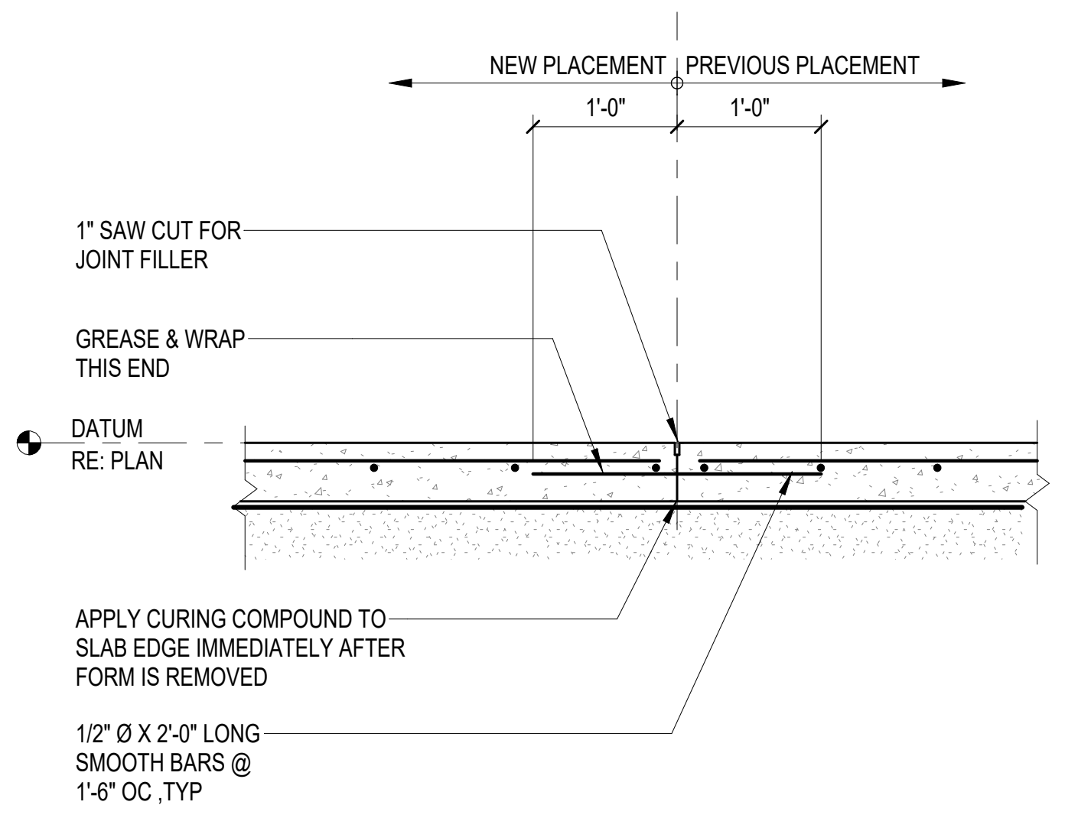
of

11/13/2024 4:14:18 PM

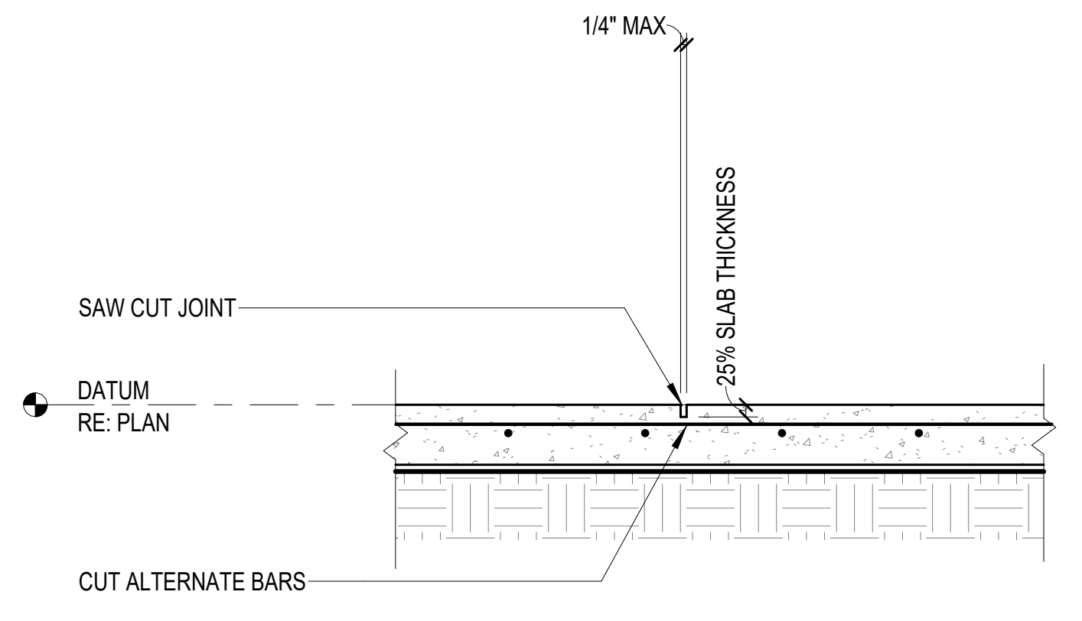
Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



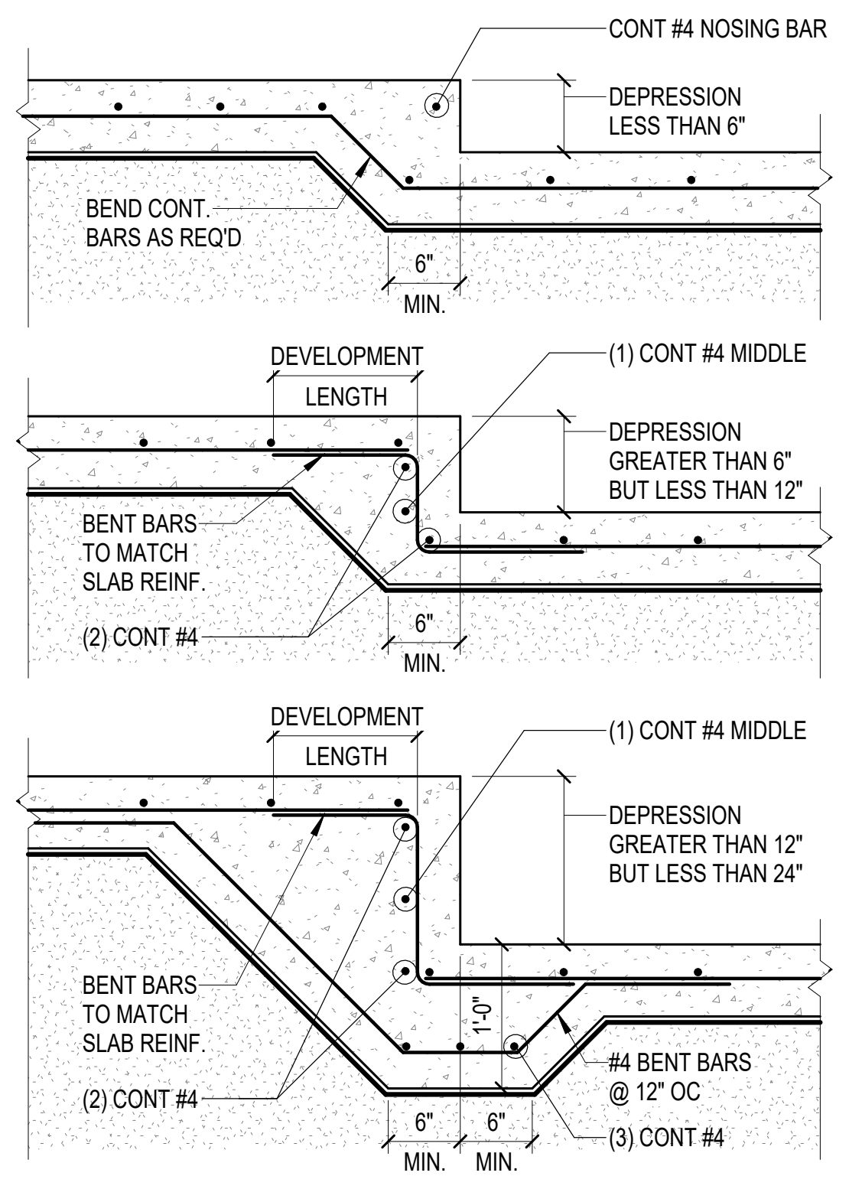
1 TYPICAL SLAB SECTION
3/4" = 1'-0"



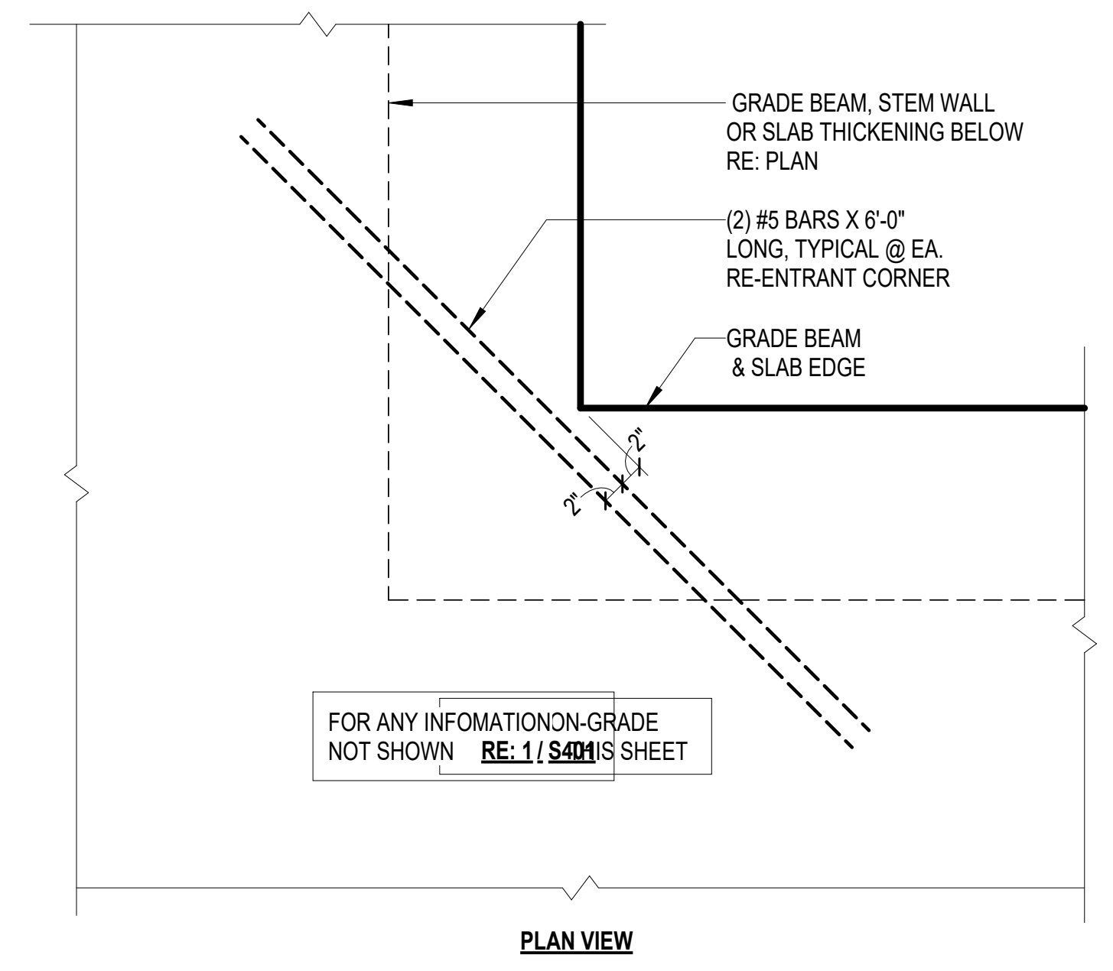
2 TYPICAL SECTION - CONSTRUCTION JOINT
3/4" = 1'-0"



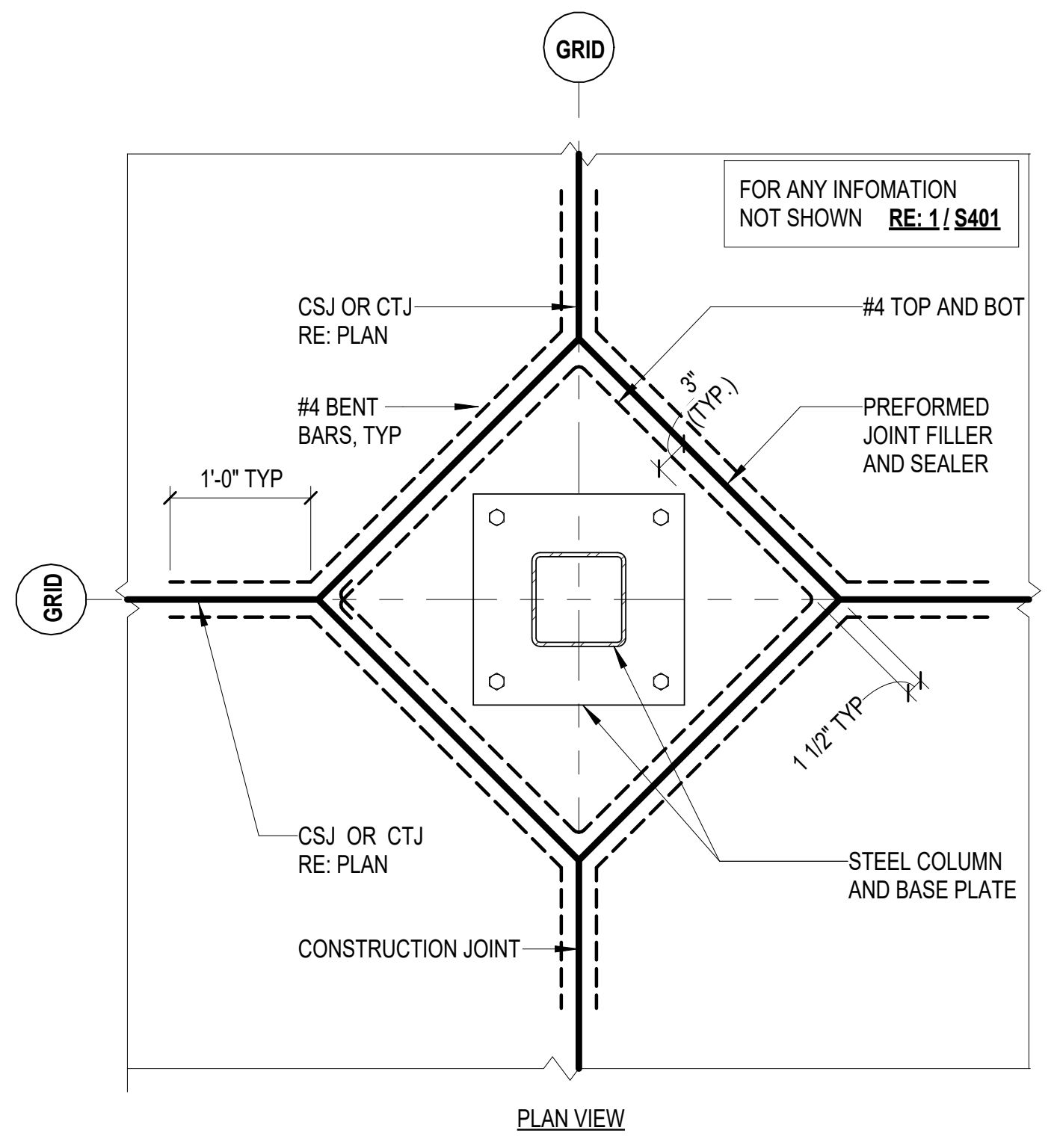
3 TYPICAL SECTION - CONTROL JOINT
3/4" = 1'-0"



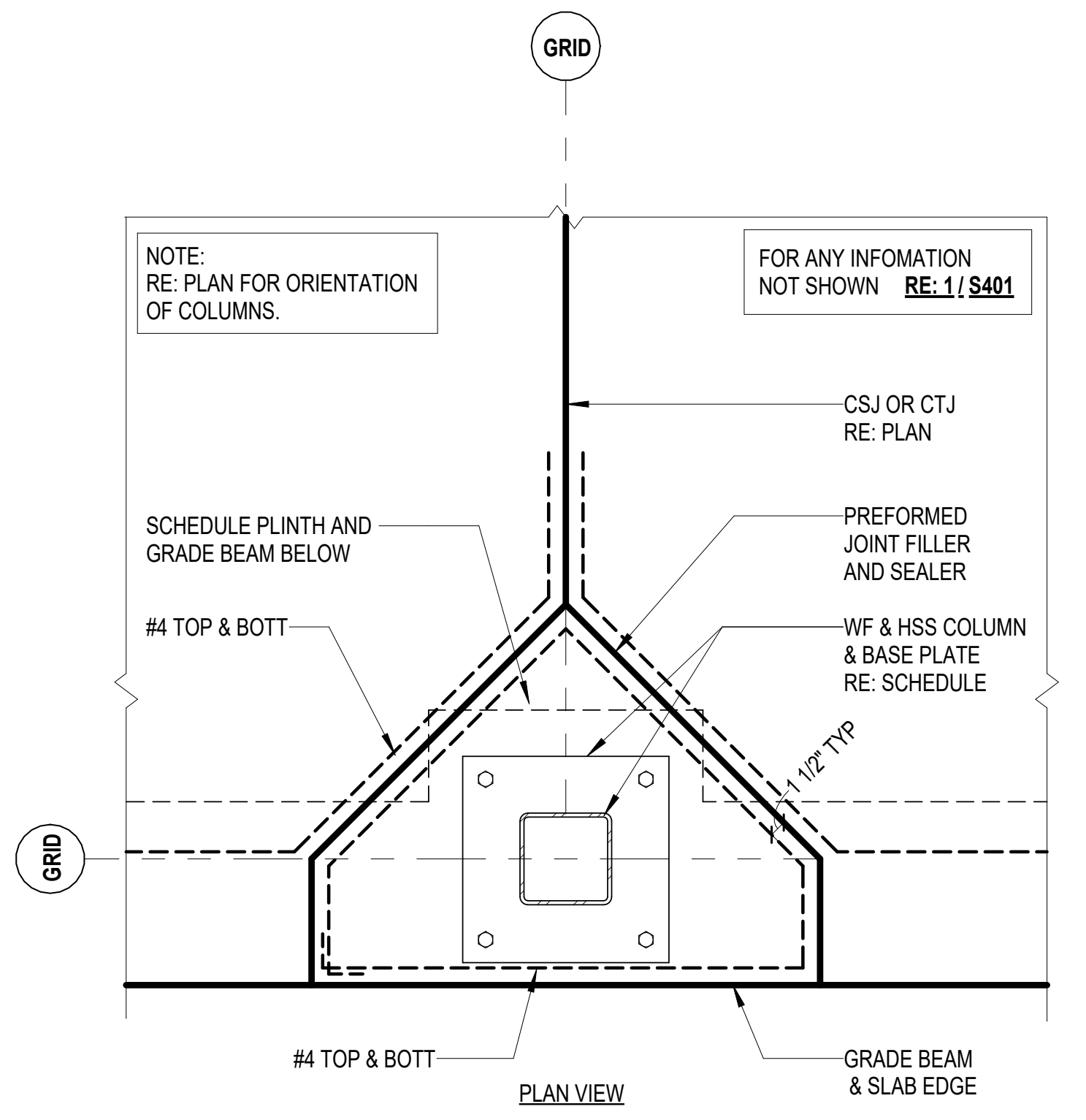
4 TYPICAL SLAB DEPRESSION DETAILS
3/4" = 1'-0"



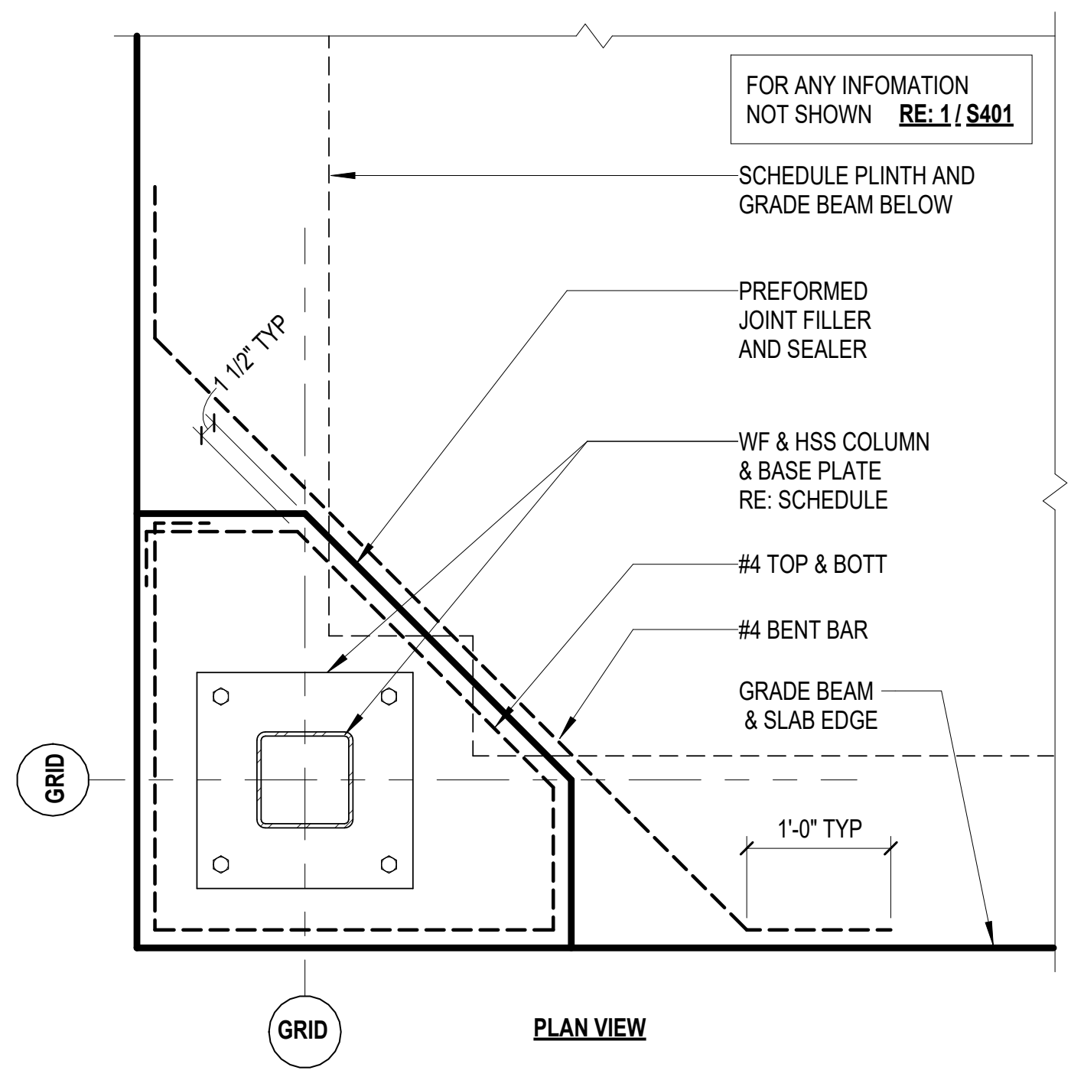
5 TYPICAL RE-ENTRANT CORNER REINF.
3/4" = 1'-0"



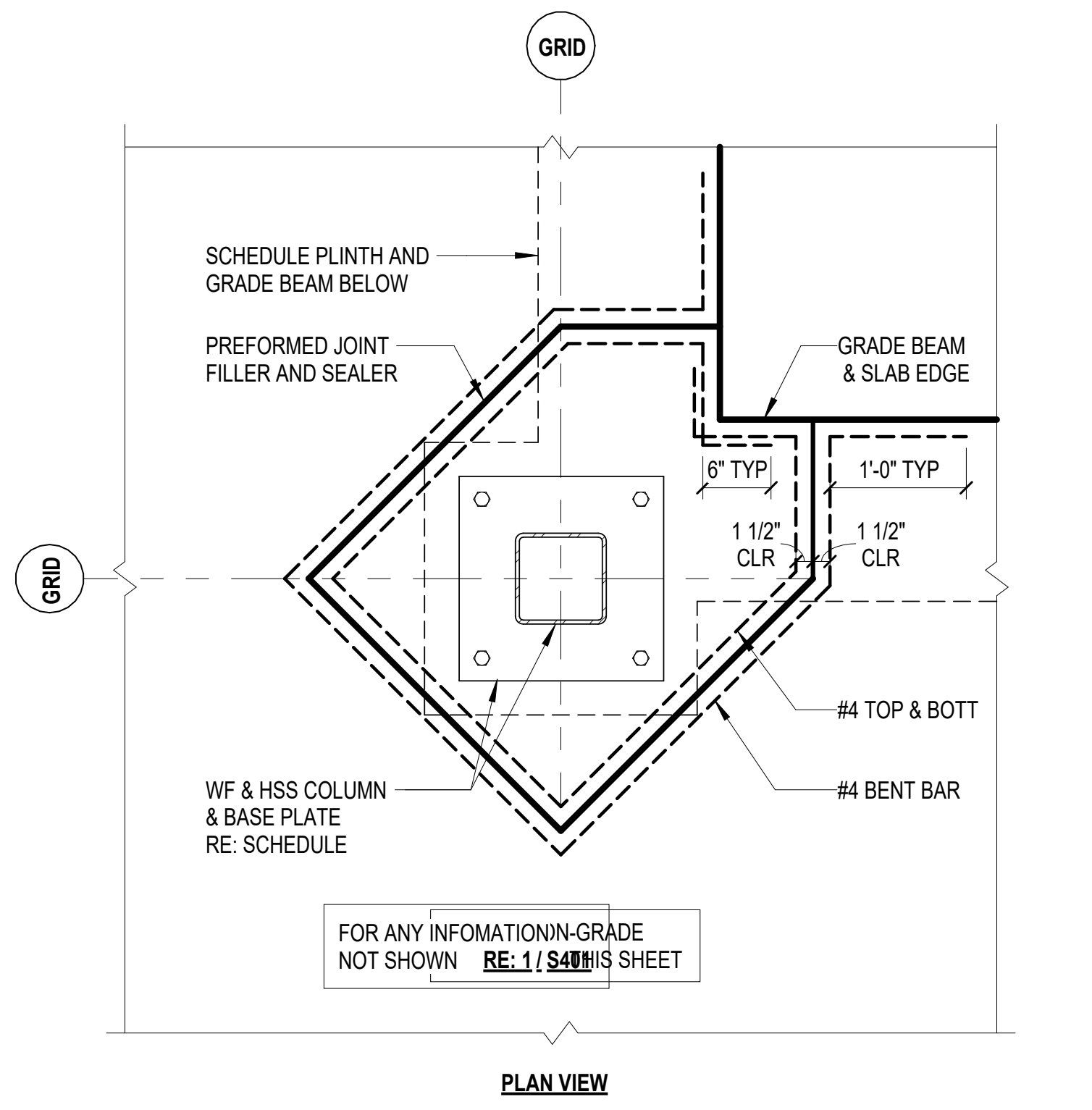
6 TYPICAL INTERIOR COLUMN BLOCKOUT
3/4" = 1'-0"



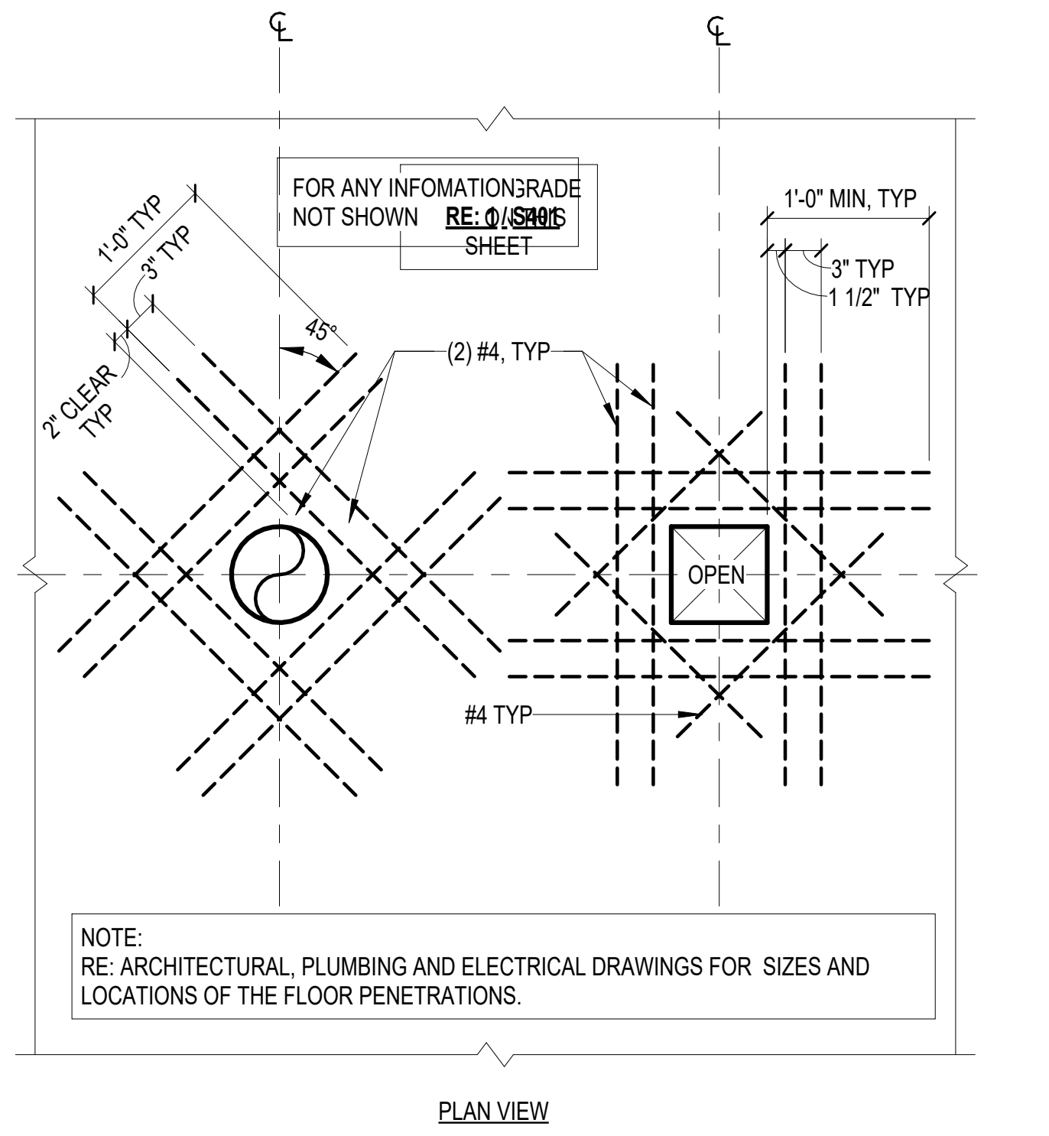
7 EXTERIOR COLUMN BLOCKOUT
3/4" = 1'-0"



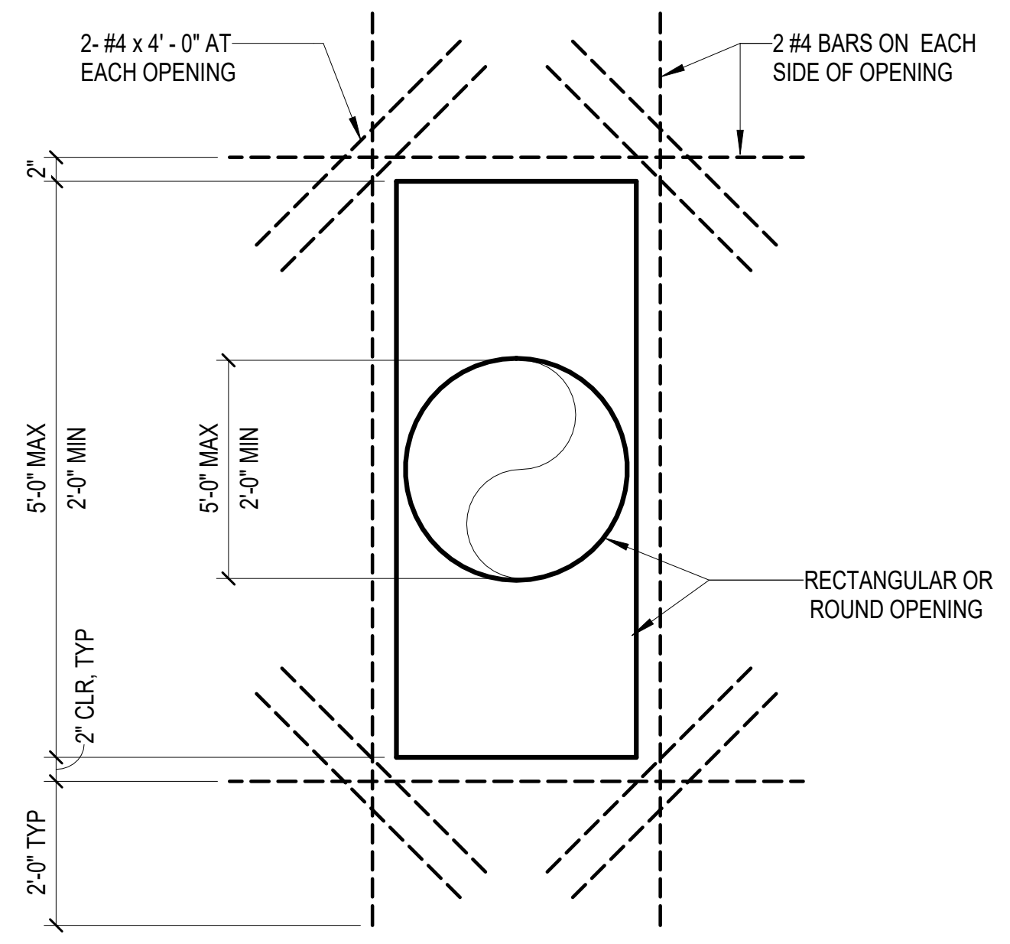
8 CORNER COLUMN BLOCKOUT
3/4" = 1'-0"



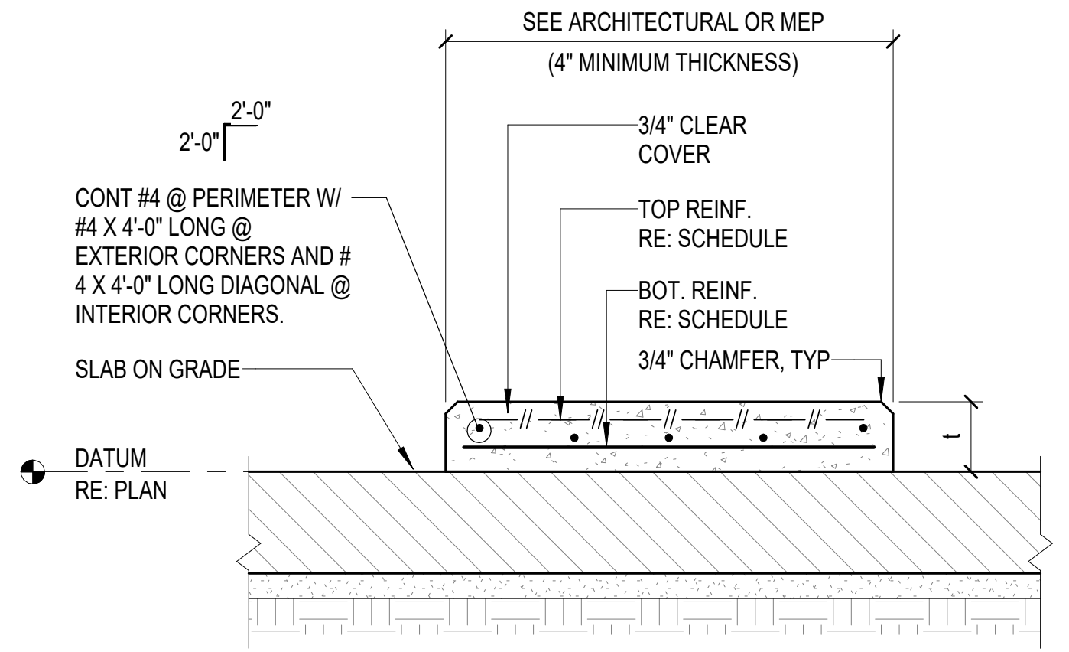
9 RE-CORNER COLUMN BLOCKOUT
3/4" = 1'-0"



10 SLAB REINF. AT OPENING 2'-0" OR LESS
3/4" = 1'-0"



11 SLAB REINF. AT OPENING 5'-0" OR LESS
3/4" = 1'-0"

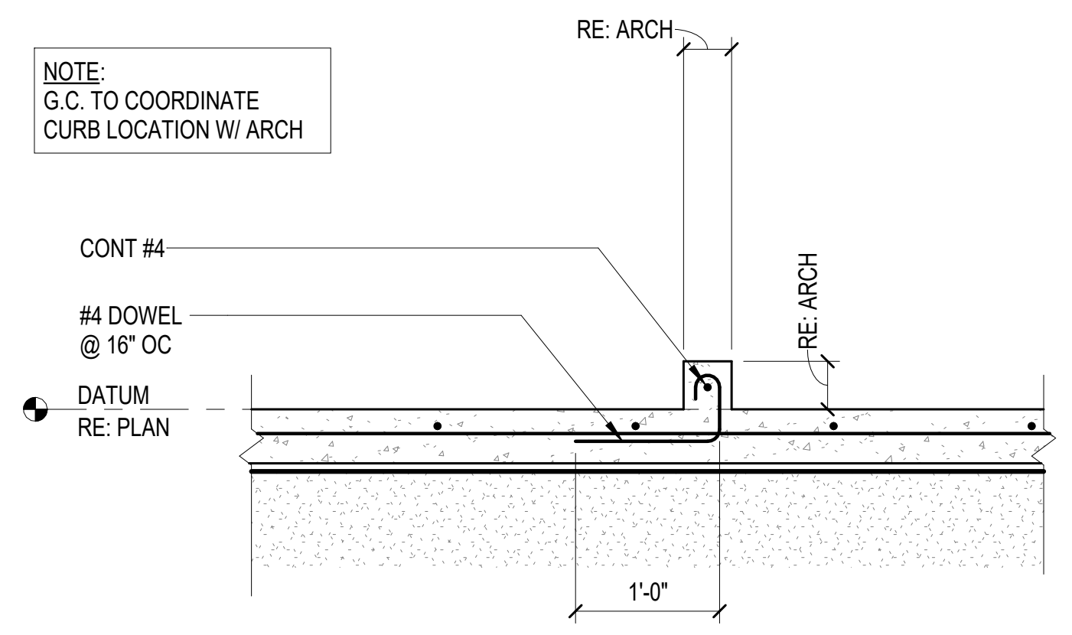


NOTE:
GENERAL CONTRACTOR TO COORDINATE WITH MECHANICAL DRAWINGS AND SPECIFICATIONS TO DETERMINE REQUIREMENTS FOR HOUSEKEEPING PADS OVER SLAB ON GRADE AND PROVIDE WHERE REQUIRED WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT. COORDINATE DIMENSIONS AND OTHER SPECIAL REQUIREMENTS WITH EQUIPMENT MANUFACTURERS AS REQUIRED.

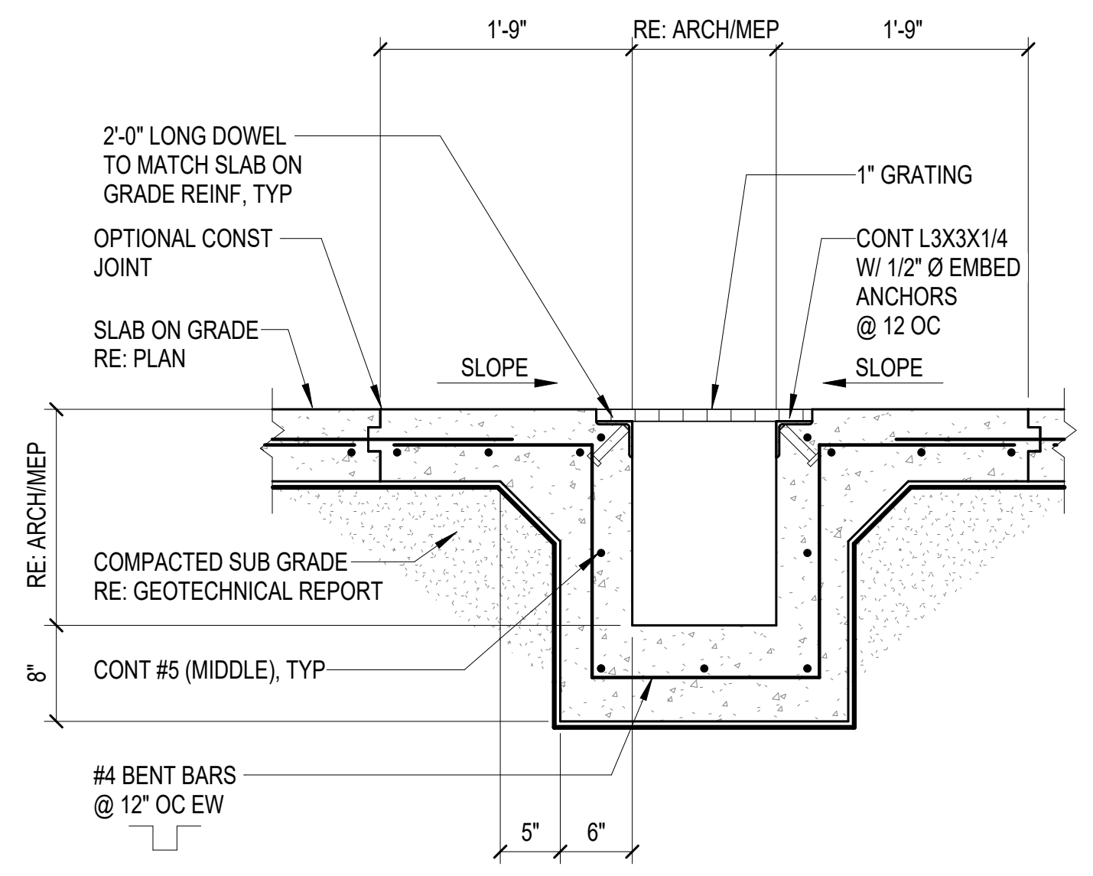
HOUSEKEEPING PAD REINFORCING SCHEDULE

PAD THICKNESS	TOP REINF.	BOT. REINF.
t <= 4"	6"x 6",W2.9 x W2.9	NONE
4" < t <= 6"	4"x 4",W4.0 x W4.0	NONE
6" < t <= 8"	4"x 4",W5.5 x W5.5	NONE
8" < t <= 12"	#4 @ 12"EW	#3 @1 8"EW
12" < t <= 16"	#4 @ 12"EW	#4 @ 12"EW

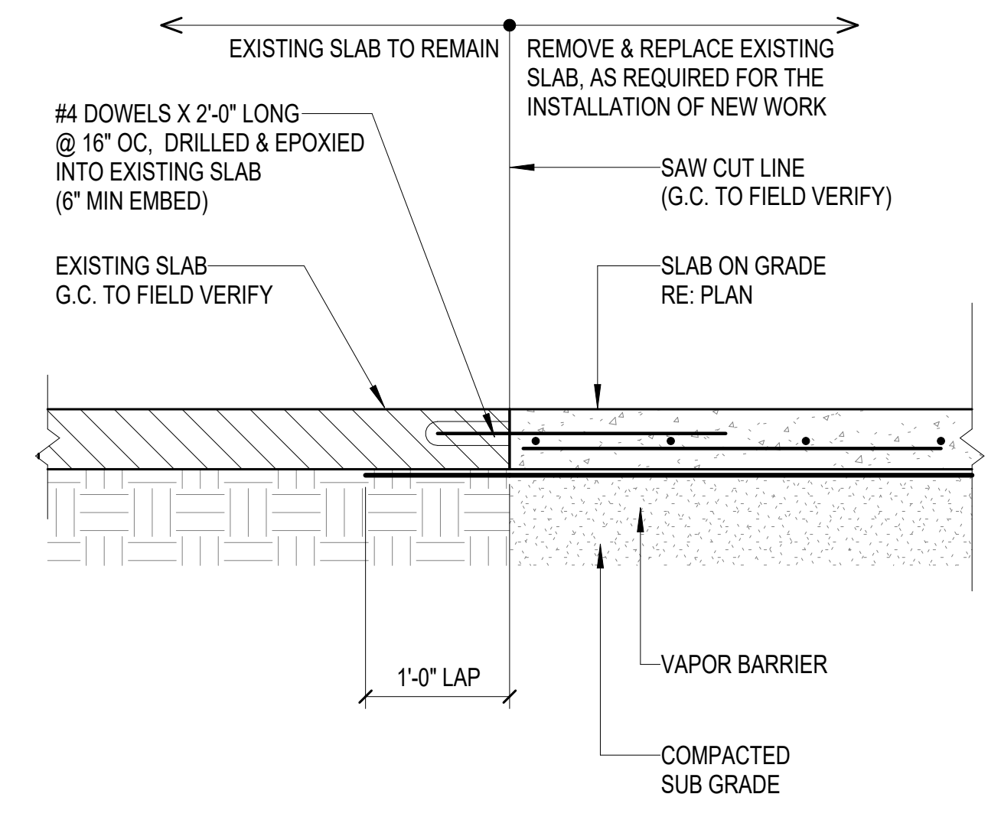
12 TYPICAL HOUSEKEEPING PAD DETAIL
3/4" = 1'-0"



13 TYPICAL CURB DETAIL
3/4" = 1'-0"

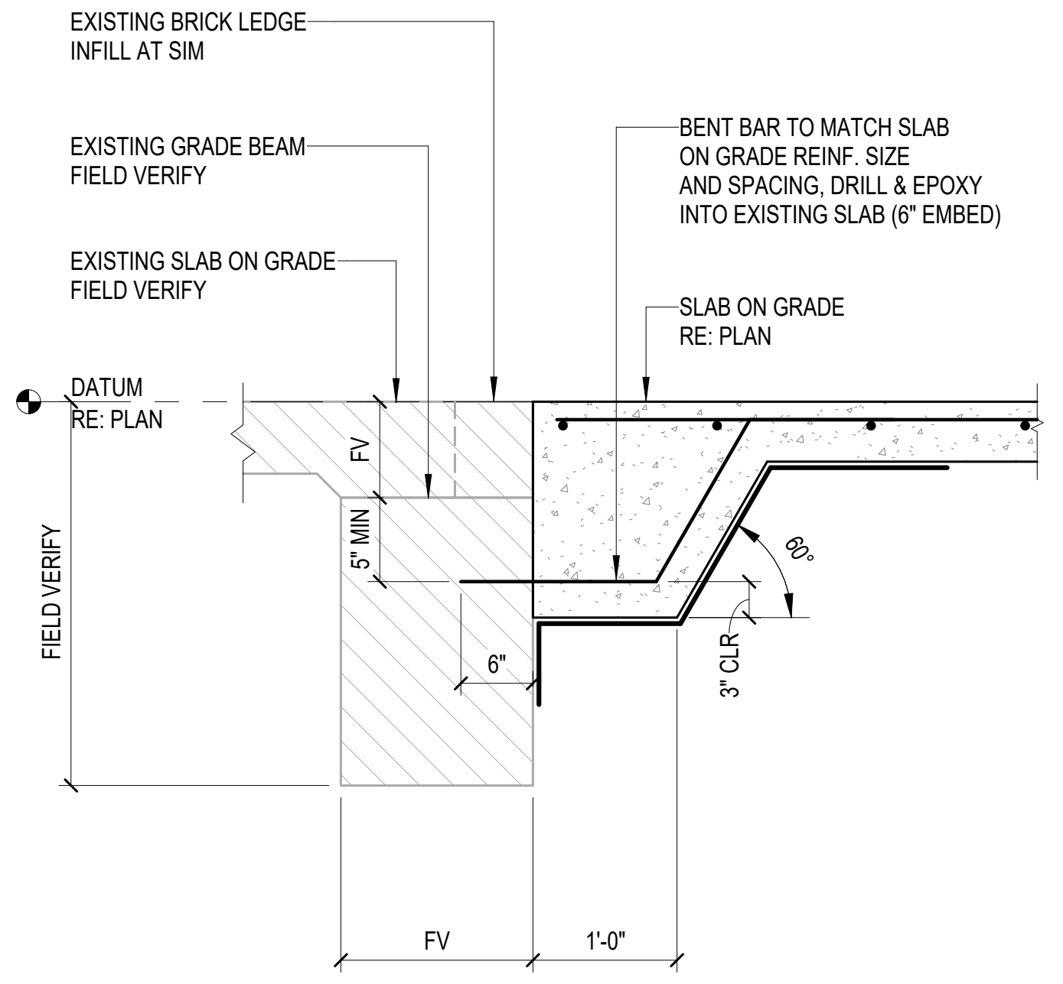


14 SOG @ TRENCH DRAIN
3/4" = 1'-0"

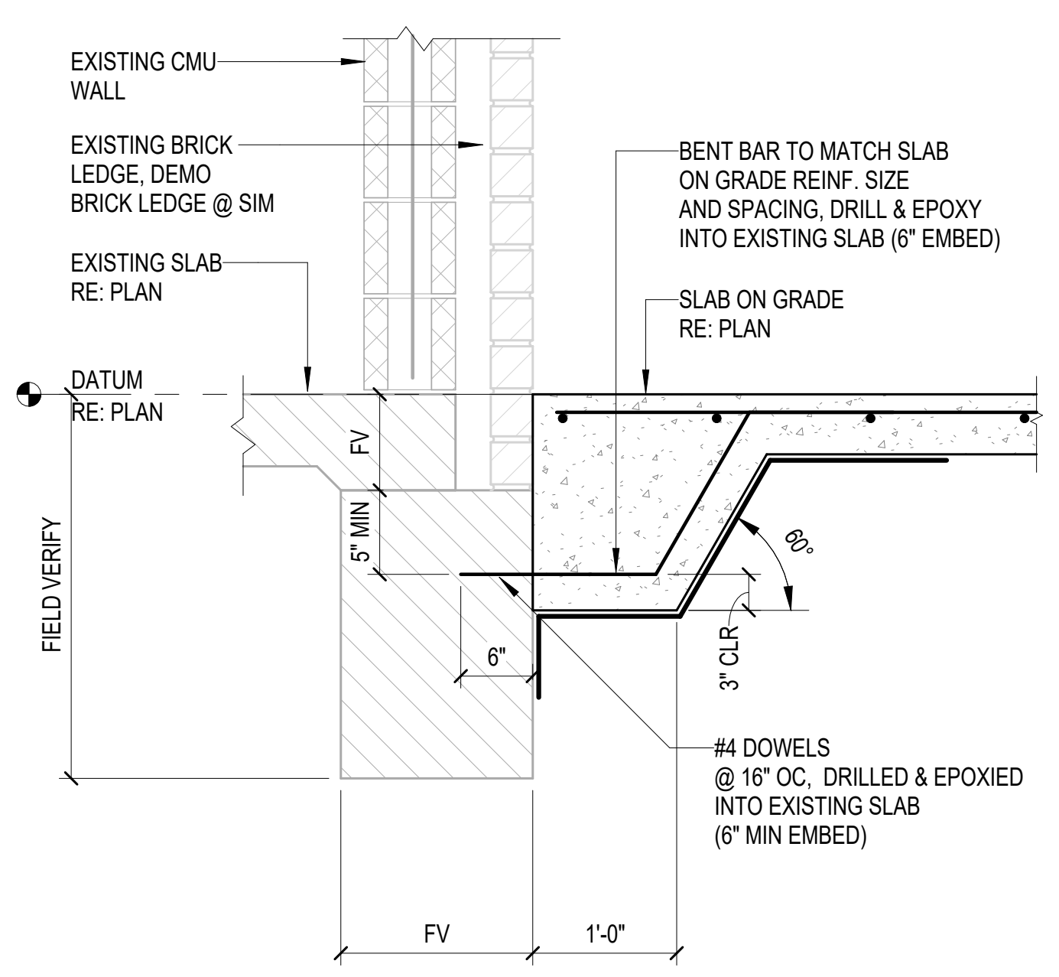


NOTE:
FOR LOCATIONS OF SAW CUTS IN EXISTING SLAB RE: ARCH DRAWINGS

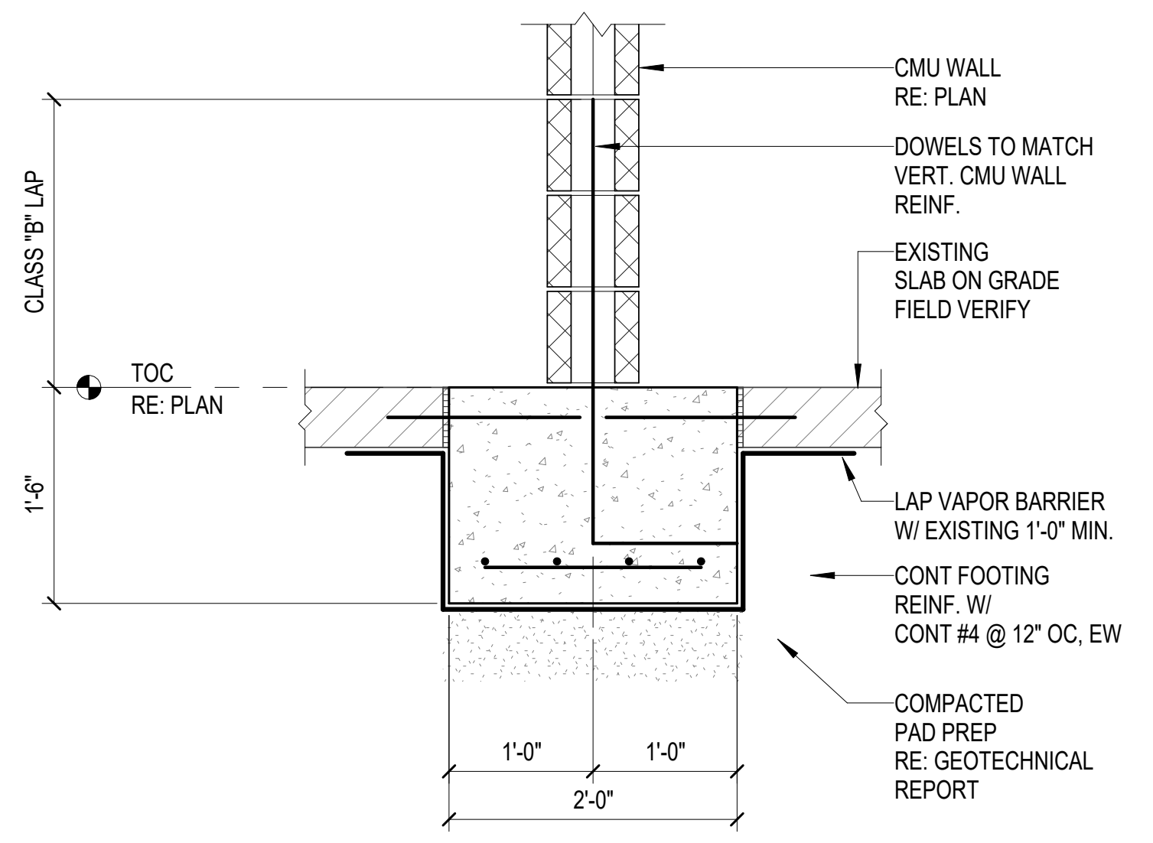
15 EXISTING SLAB SAWCUT
3/4" = 1'-0"



16 SOG @ EXISTING TURNDOWN
3/4" = 1'-0"



17 SOG @ EXISTING TURNDOWN
3/4" = 1'-0"



18 EXISTING SOG @ CMU (15'-0" MAX)
3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

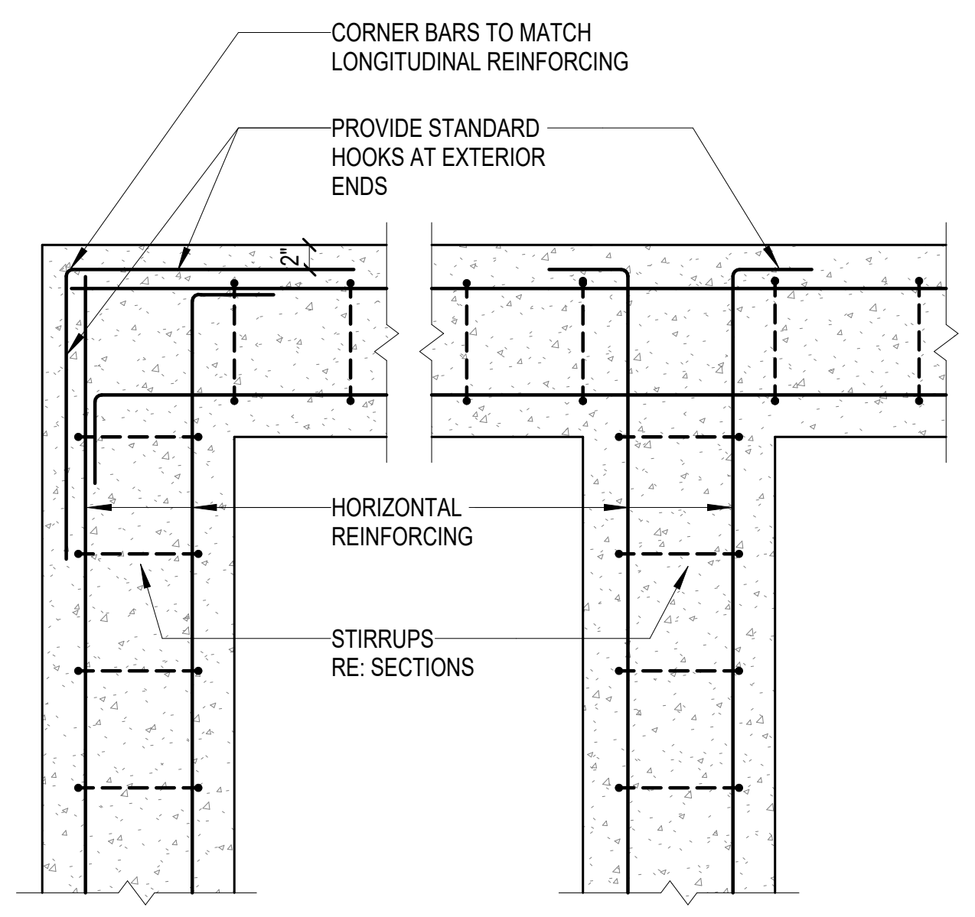
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

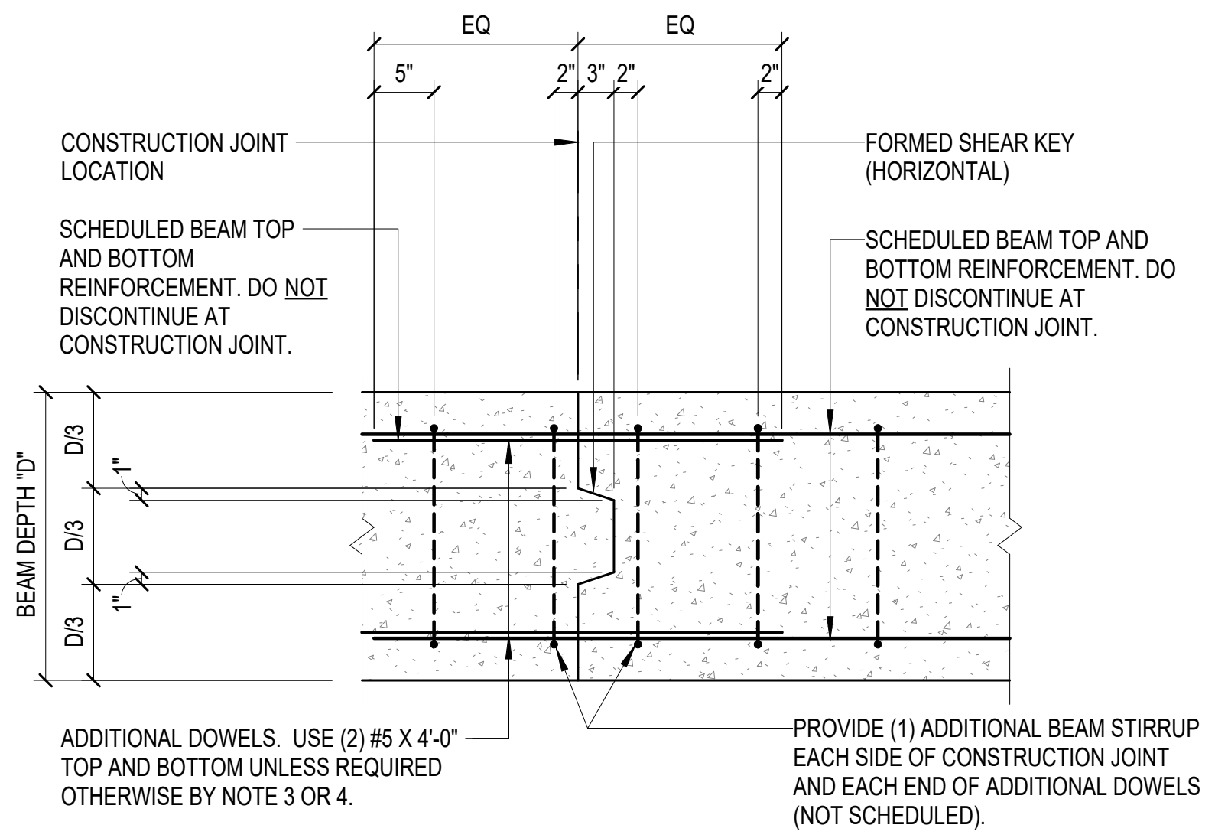
TYPICAL SLAB ON GRADE DETAILS

S401

of

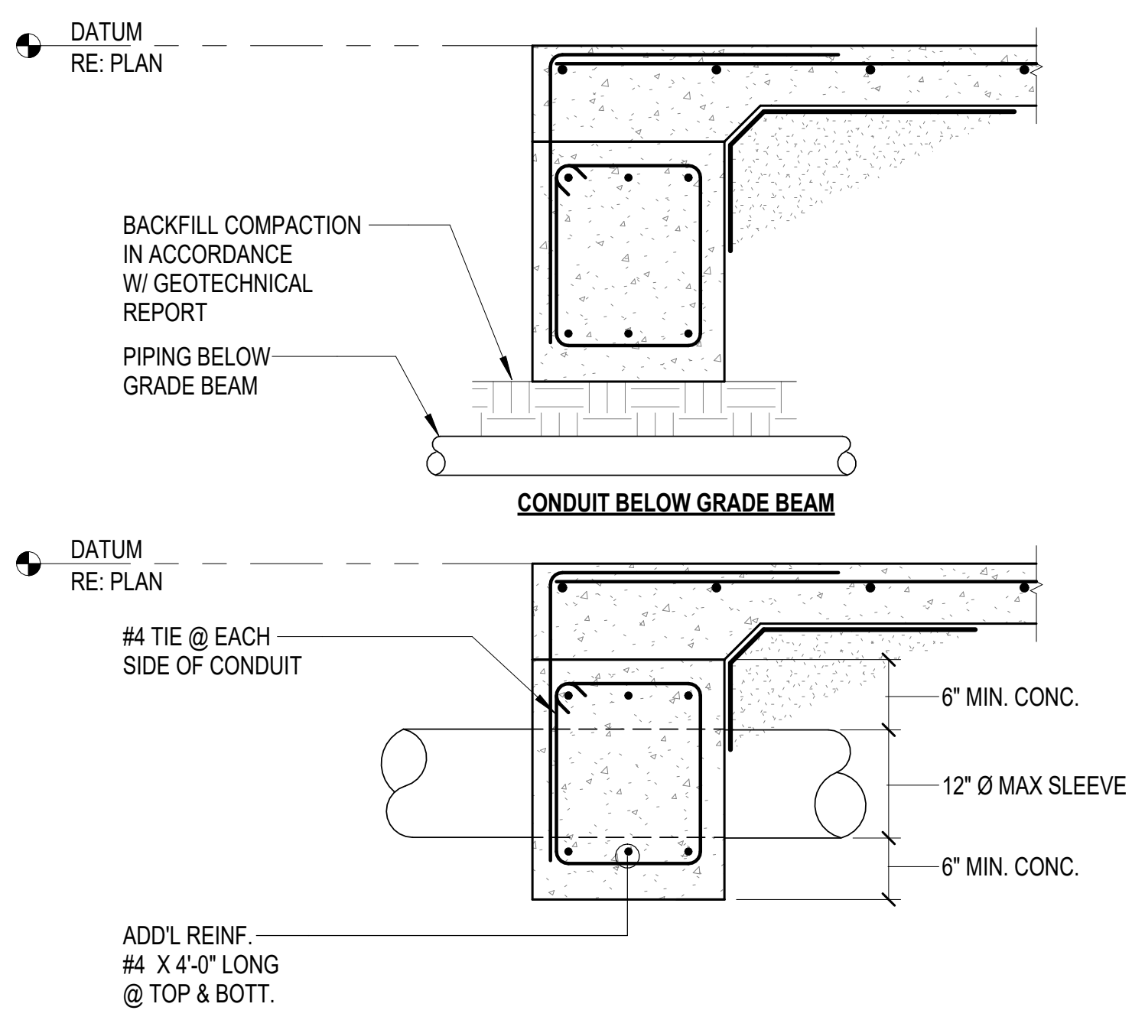


① TYPICAL GRADE BEAM REINF. AT INTERSECTION
3/4" = 1'-0"

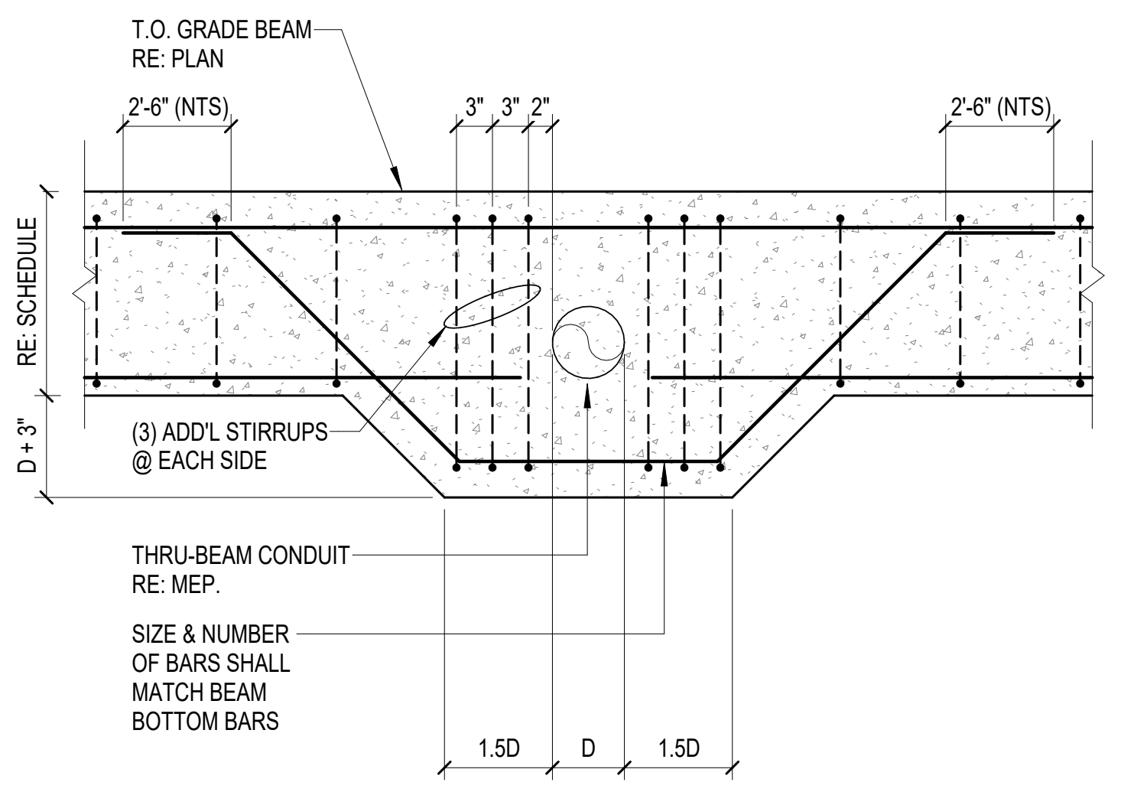


NOTES:
1. GENERAL CONTRACTOR SHALL SUBMIT DESIRED CONSTRUCTION JOINT LAYOUT AS A SHOP DRAWING FOR APPROVAL A MINIMUM OF TWO WEEK PRIOR TO POUR.
2. CONSTRUCTION JOINT LOCATIONS SHALL BE COORDINATED WITH REINFORCING STEEL SUPPLIER AND ERECTOR.
3. ACCEPTABLE JOINT LOCATIONS ARE AS FOLLOWS:
   a. FOR BEAMS NOT SUPPORTING INTERSECTING BEAMS: PLACE JOINT MIDDLE THIRD OF SPAN.
   b. FOR BEAMS SUPPORTING INTERSECTING BEAMS, CHECK WITH STRUCTURAL ENGINEER.
4. FOR JOINT LOCATIONS OTHER THAN WITHIN MIDDLE THIRD OF SPAN, CONTRACTOR SHALL COORDINATE REQUIRED ADDITIONAL REINFORCEMENT WITH THE ENGINEER ON THE SHOP DRAWINGS.

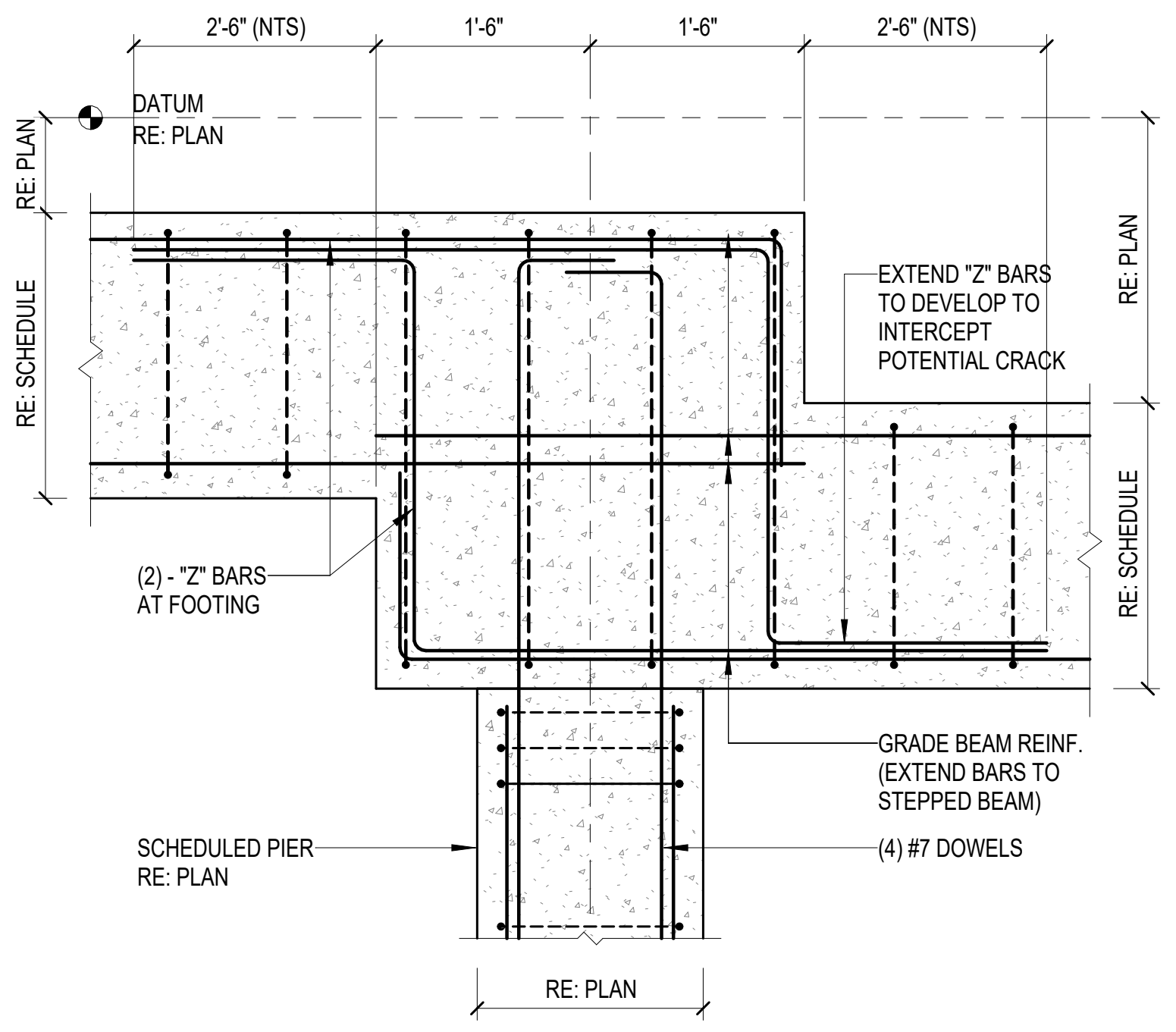
② TYPICAL GRADE BEAM CONSTRUCTION JOINT
3/4" = 1'-0"



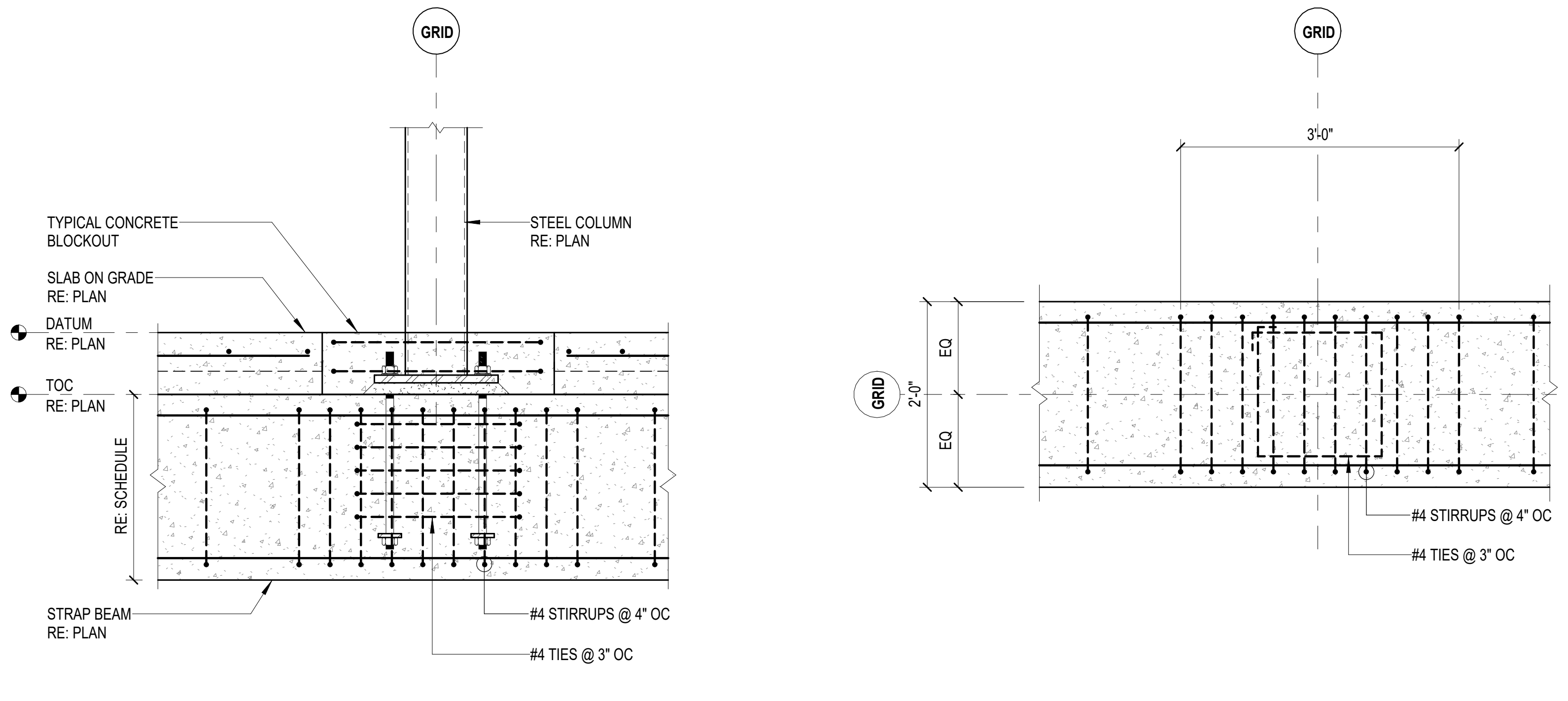
③ TYPICAL CONDITION AT CONDUIT
3/4" = 1'-0"



④ TYPICAL THRU. BEAM CONDUIT
3/4" = 1'-0"



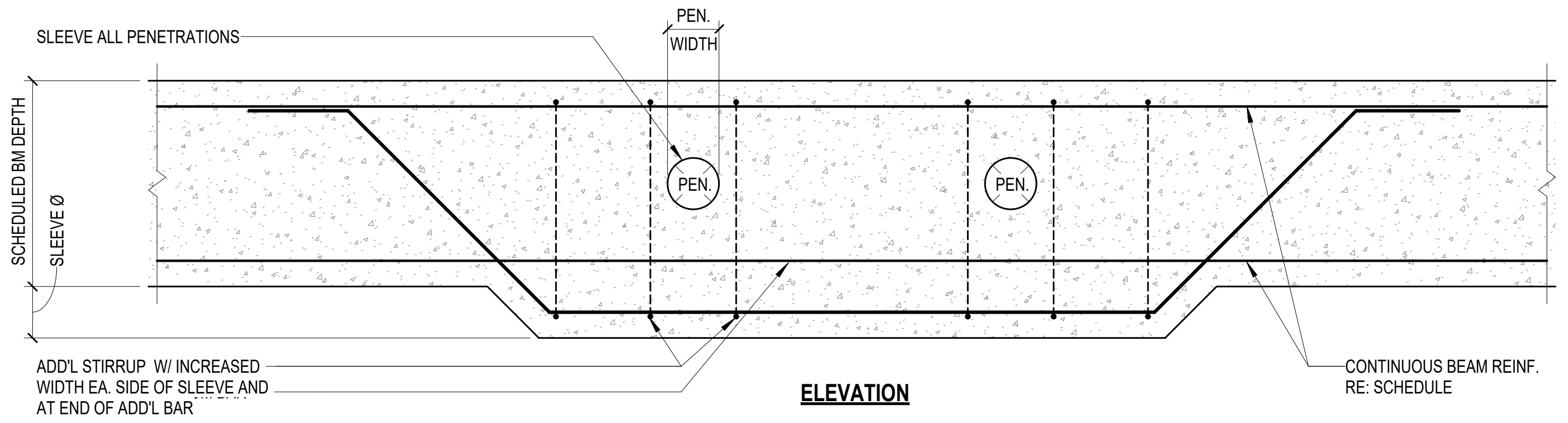
⑤ TYPICAL GRADE BEAM STEP
3/4" = 1'-0"



ELEVATION

PLAN

⑥ TYPICAL STRAP BEAM REINF. AT COLUMN
3/4" = 1'-0"

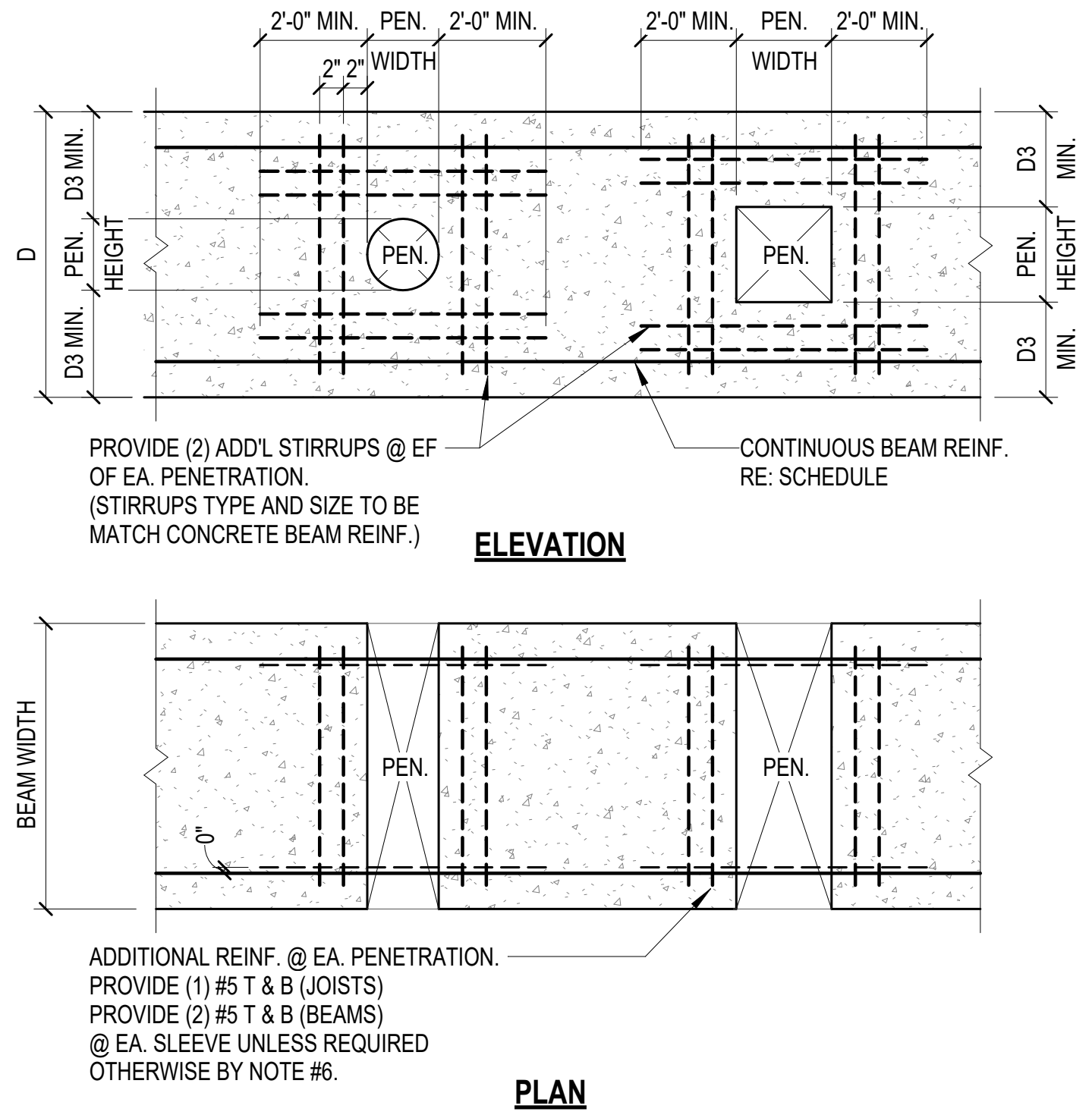


ELEVATION

NOTES:

1. REQUIRED BEAM SLEEVES ARE TO BE COORDINATED WITH M.E.P. CONTRACTORS. REQUIRED SLEEVES MAY BE OR MAY NOT BE SHOWN ON THE STRUCTURAL DRAWINGS. GENERAL CONTRACTOR SHALL SUBMIT PLAN SHOWING LAYOUT OF ALL SLEEVES WITH FORMWORK SHOP DRAWING SUBMITTAL.
2. CONTINUOUS BEAM REINFORCING MAY BE SLIGHTLY DISPLACED (3" MAXIMUM) OR ADJACENT BARS BUNDLED (2 BAR BUNDLES MAXIMUM TO FACILITATE SLEEVE INSTALLATION. DO NOT CUT, OR OFFSET, OR BEND REINFORCING.
3. THE OUTSIDE DIAMETER OF A SLEEVE MAY NOT EXCEED 2". IF OUTSIDE DIAMETER OF IS GREATER THAN 2", THE WIDTH OF THE BEAM SHALL BE INCREASED BY THE PENETRATION DIMENSION (6" MAX). THE INCREASED WIDTH HALL EXTEND 1'-6" ON EACH SIDE OF THE PENETRATION. ADD (1) ADDITIONAL TOP AND BOTTOM BAR AND ADD'L STIRRUPS AT THICKENED PORTION. NO REBAR SHALL BE CUT TO ALLOW FOR THE PENETRATION
4. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD FOR DIRECTIONS WHEN A SLEEVE SIZE OR LOCATION DOES NOT MEET THE CONDITIONS ESTABLISHED ABOVE.

⑦ VERTICAL PENETRATION THROUGH CONCRETE BEAM
3/4" = 1'-0"



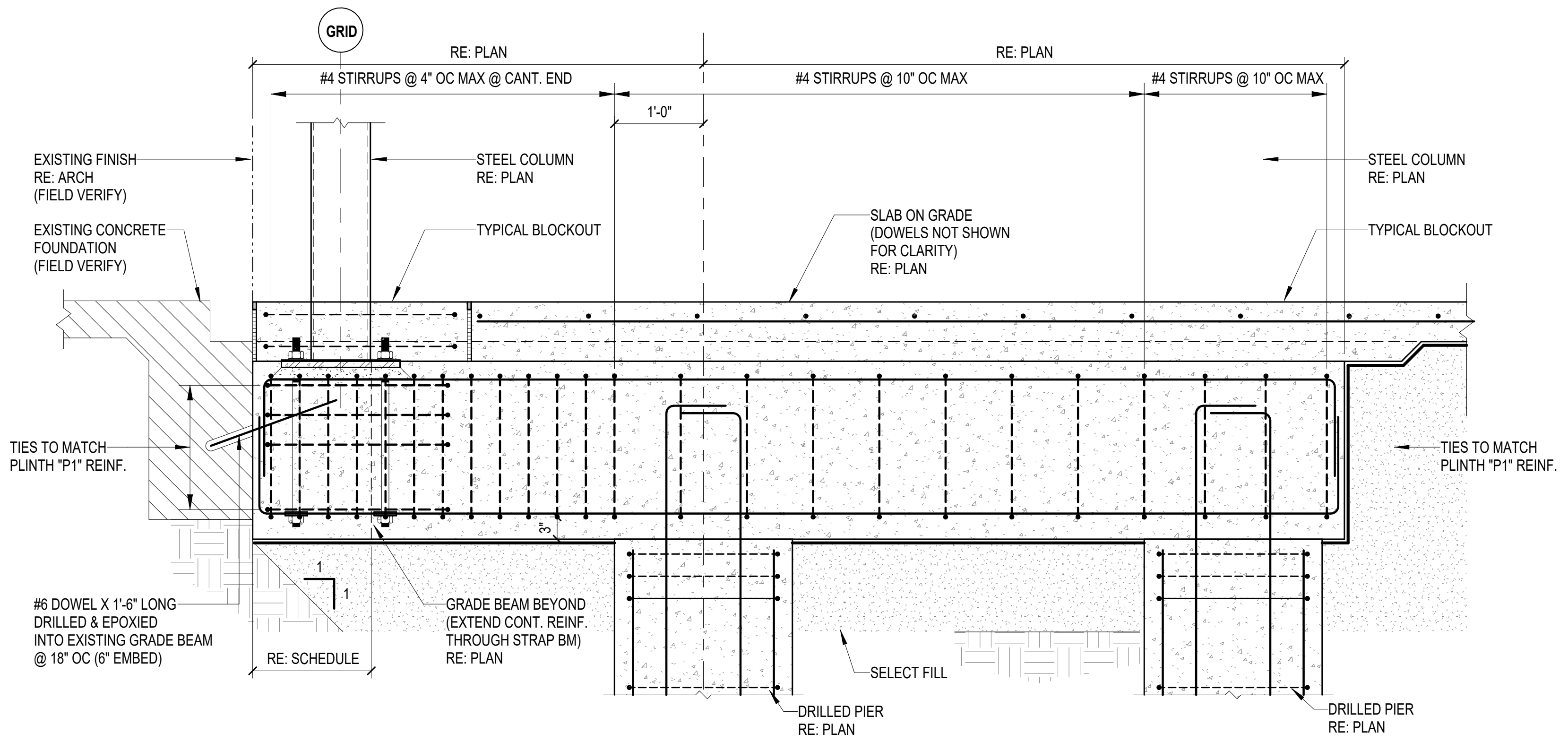
ELEVATION

PLAN

NOTES:

1. GENERAL CONTRACTOR TO COORDINATE LOCATION, SIZE AND ELEVATION AND INCLUDE IN THEIR CONTRACT PRICE ALL REQUIRED HORIZONTAL PENETRATIONS THROUGH CONCRETE BEAMS AND JOISTS WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT.
2. WHERE BEAM PENETRATIONS ARE REQUIRED BUT ARE NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS, SUBMIT DRAWINGS, SHOWING DIMENSIONS AND LOCATIONS OF ALL REQUIRED PENETRATIONS, FOR REVIEW AND APPROVAL.
3. "D" DENOTES THE DEPTH OF BEAM OR JOIST.
4. CLEAR SPACING BETWEEN PENETRATIONS SHALL BE 24" MINIMUM UNLESS DESIGNED OTHERWISE BY THE ENGINEER.
5. PENETRATIONS SHALL BE LOCATED ACCORDING TO THE FOLLOWING CRITERIA:
   A. FOR BEAMS (AND JOIST) NOT SUPPORTING INTERSECTING BEAMS (OR JOISTS): LOCATE PENETRATIONS WITHIN TWO FEET EITHER SIDE OF BEAM MIDSPAN.
   B. FOR BEAMS (OR JOISTS) SUPPORTING INTERSECTING BEAMS (OR JOISTS): CHECK WITH STRUCTURAL ENGINEER.
   C. FOR LOCATIONS AND /OR SIZES OF PENETRATIONS NOT CONFORMING TO THE ABOVE CRITERIA AND NOT OTHERWISE DETAILED ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL BE COORDINATE REQUIRED ADDITIONAL REINFORCEMENT WITH THE ENGINEER ON THE SHOP DRAWINGS.

⑧ HORIZONTAL PENETRATION THROUGH CONCRETE BEAM
3/4" = 1'-0"



⑨ STRAPBEAM SECTION
3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

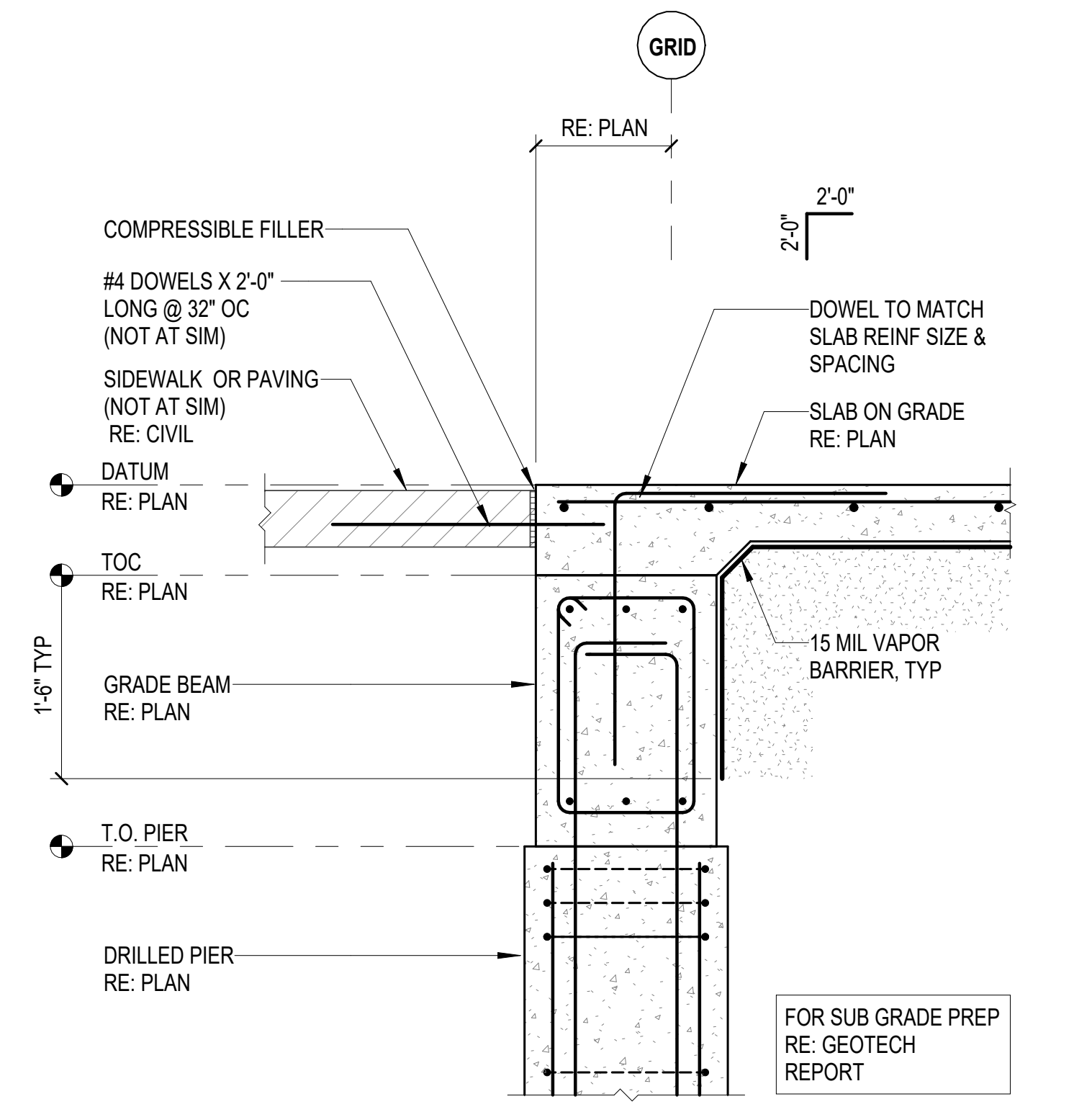
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

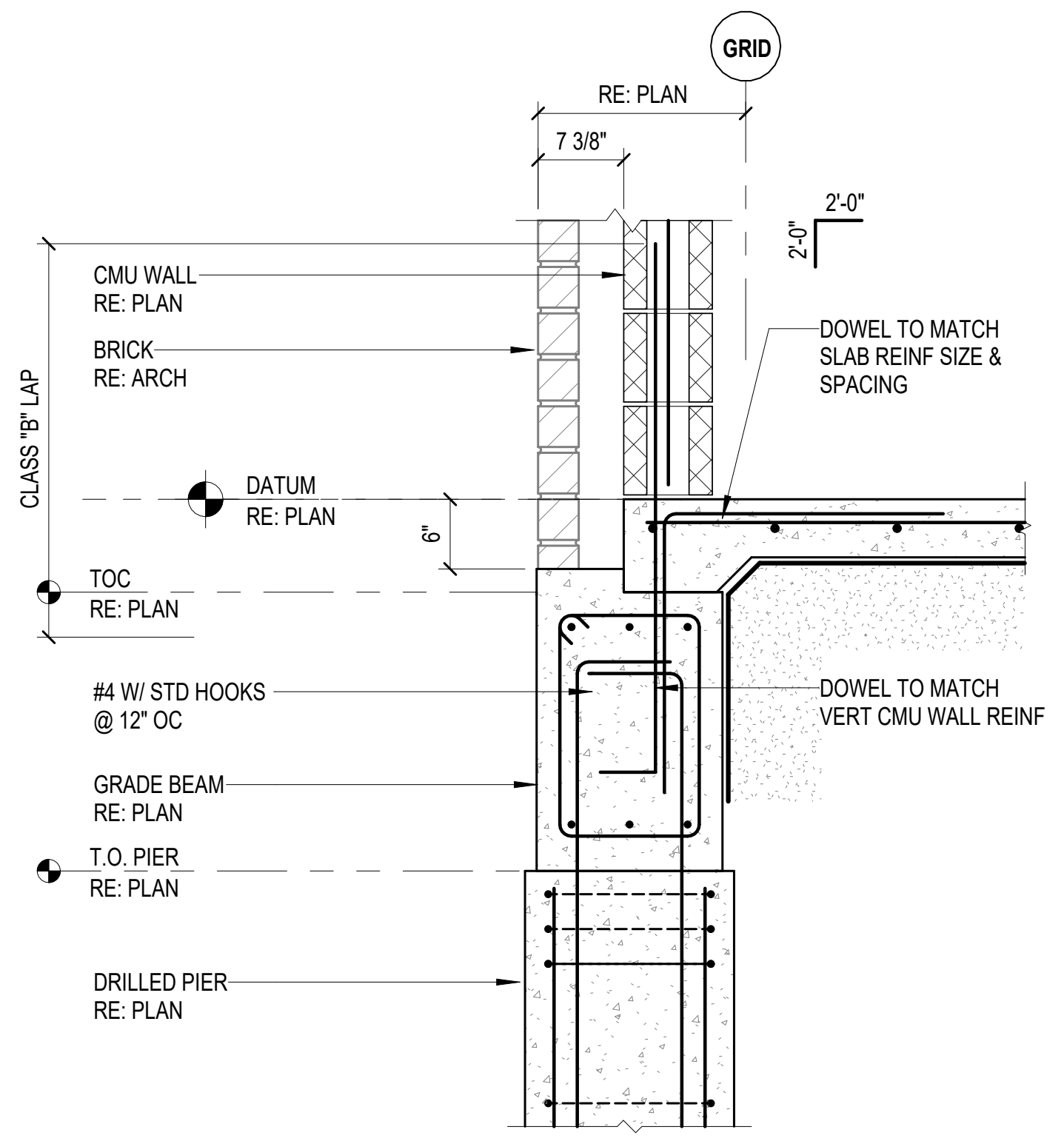
TYPICAL GB AND CF DETAILS

S402
of

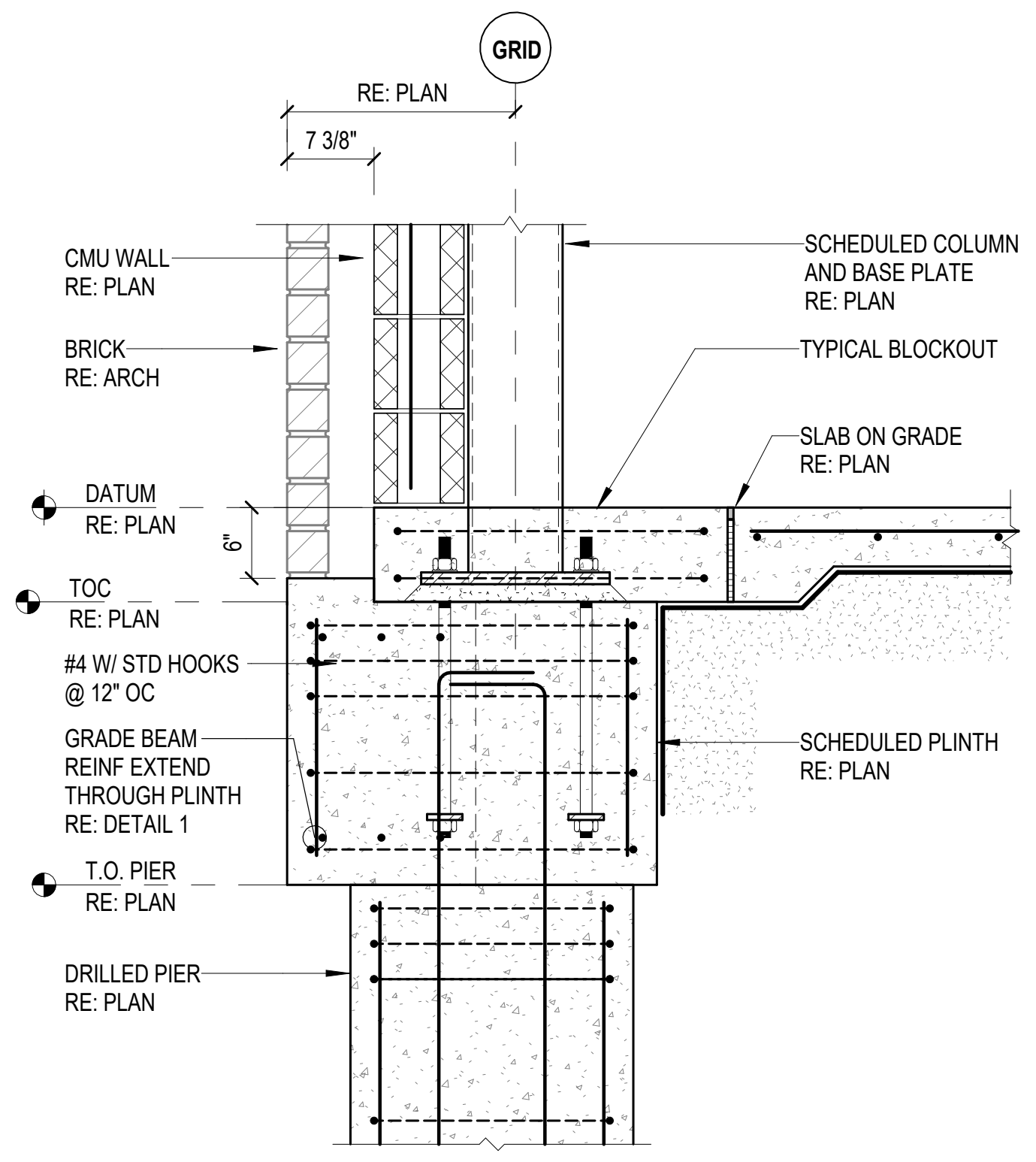
11/13/2024 4:14:24 PM



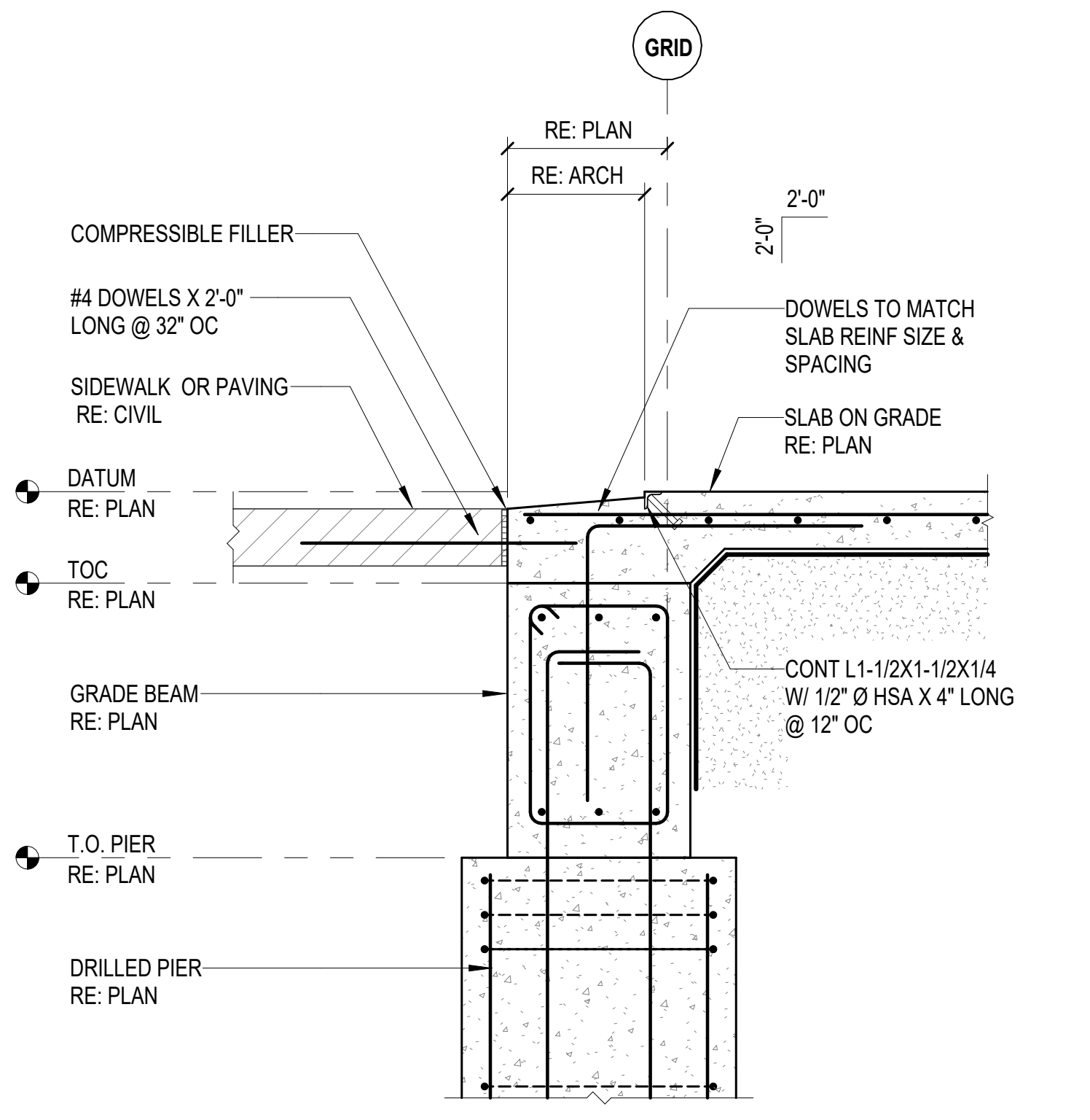
① SECTION
3/4" = 1'-0"



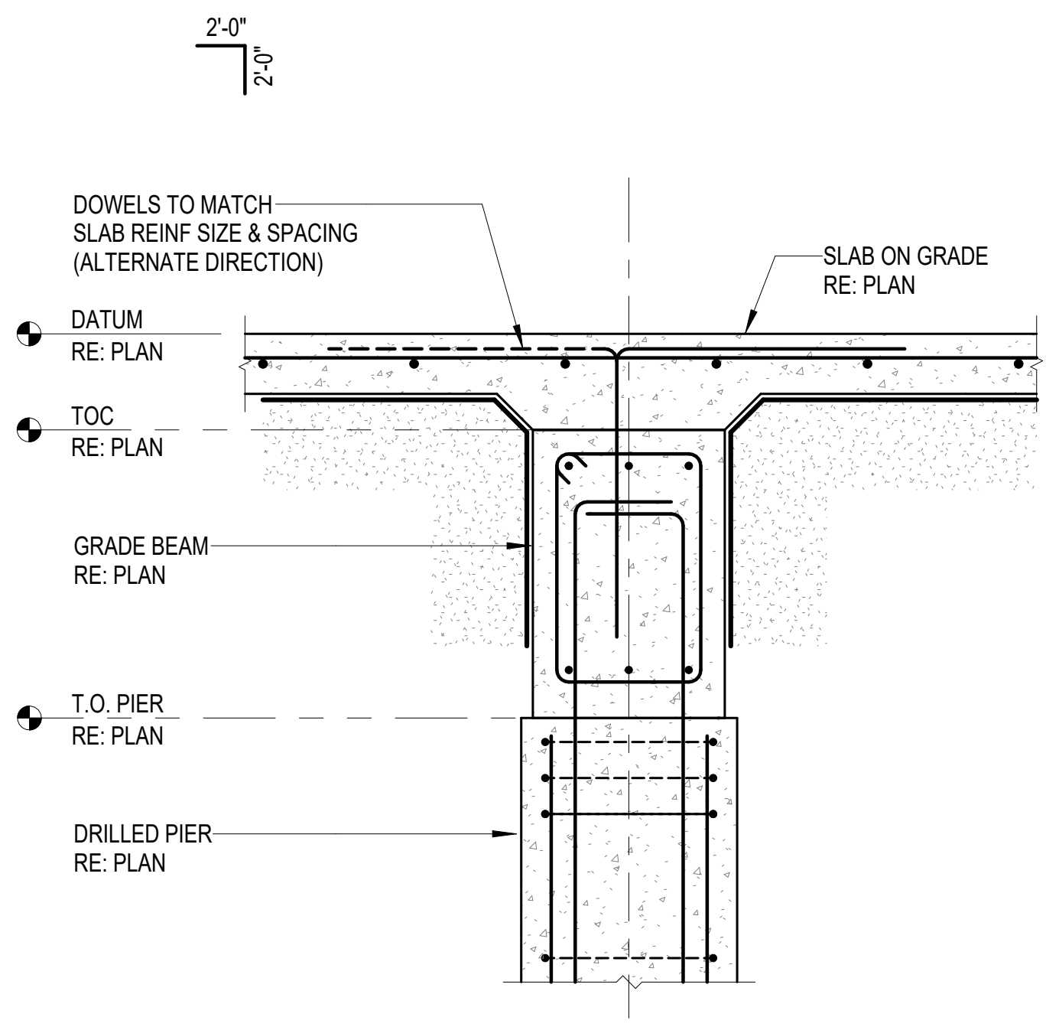
② SECTION
3/4" = 1'-0"



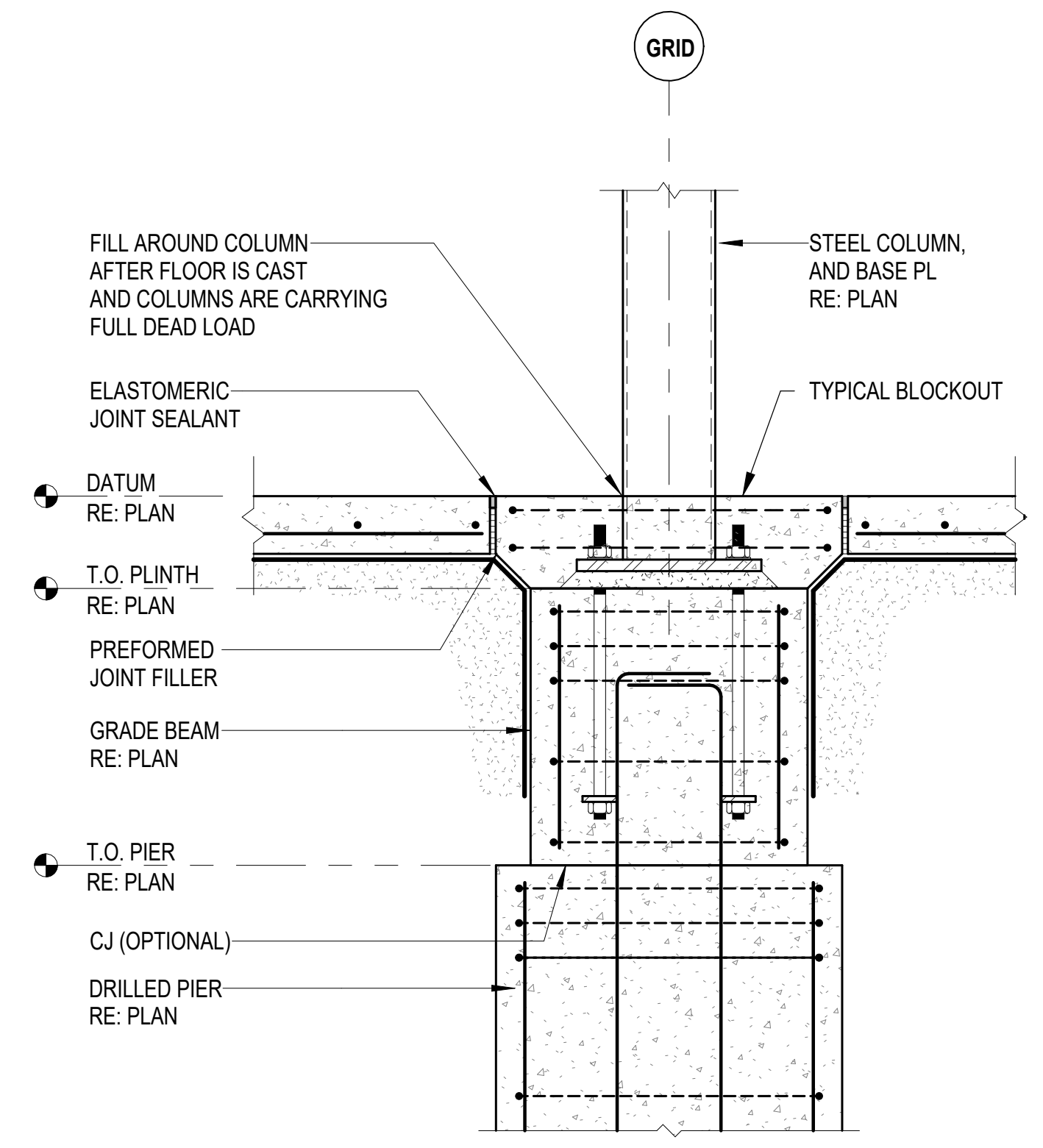
③ SECTION
3/4" = 1'-0"



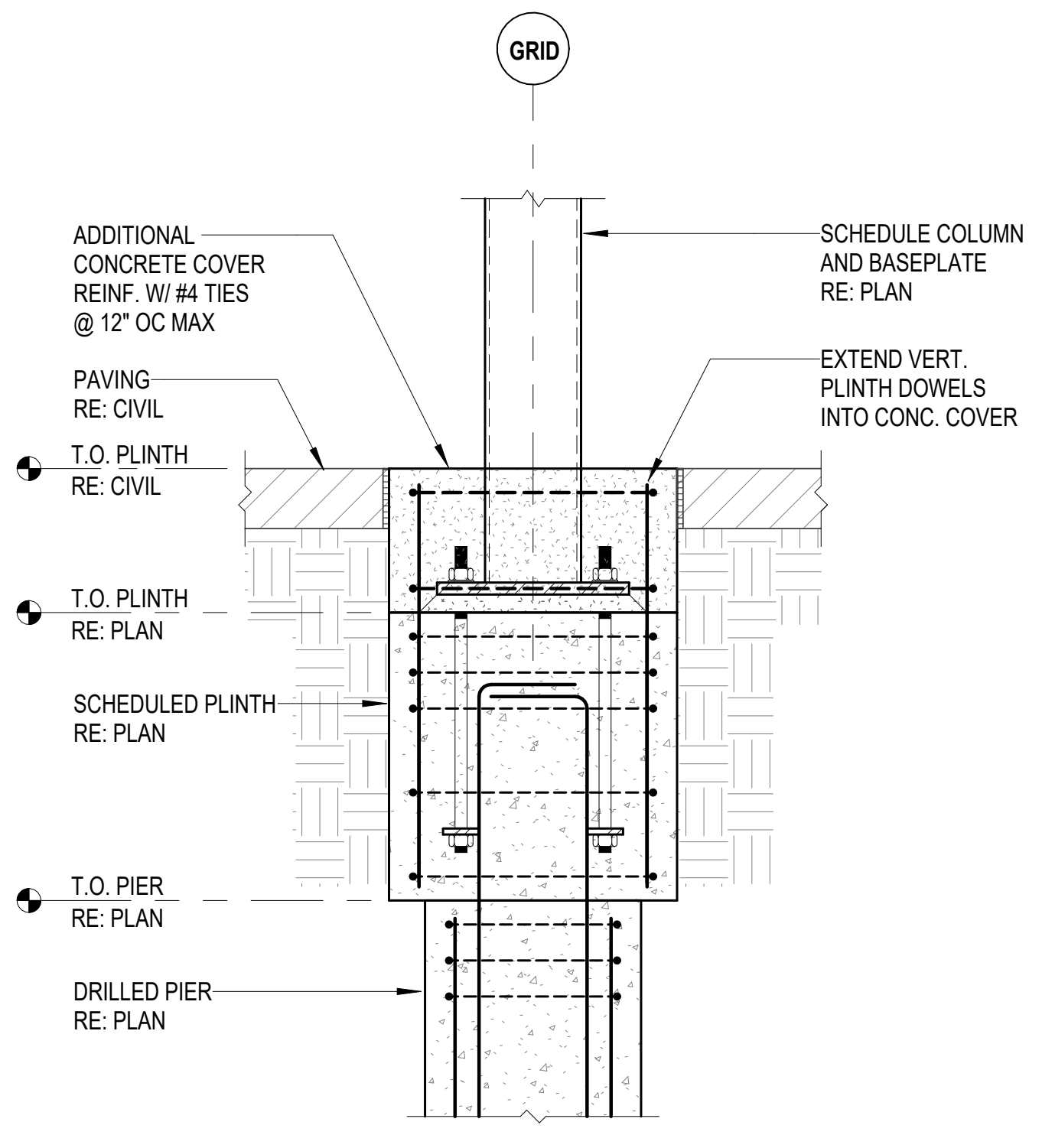
④ SECTION
3/4" = 1'-0"



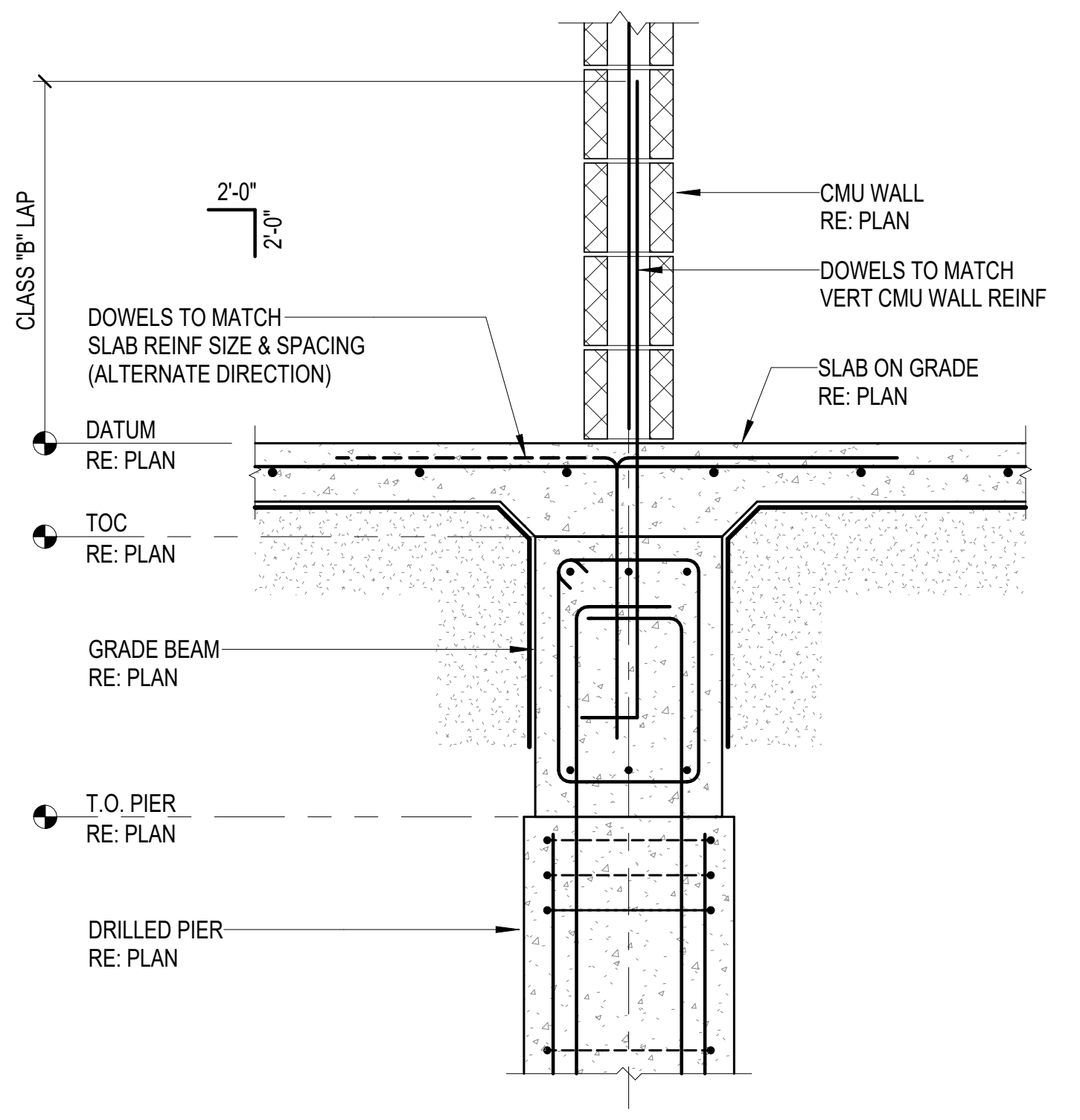
⑤ SECTION
3/4" = 1'-0"



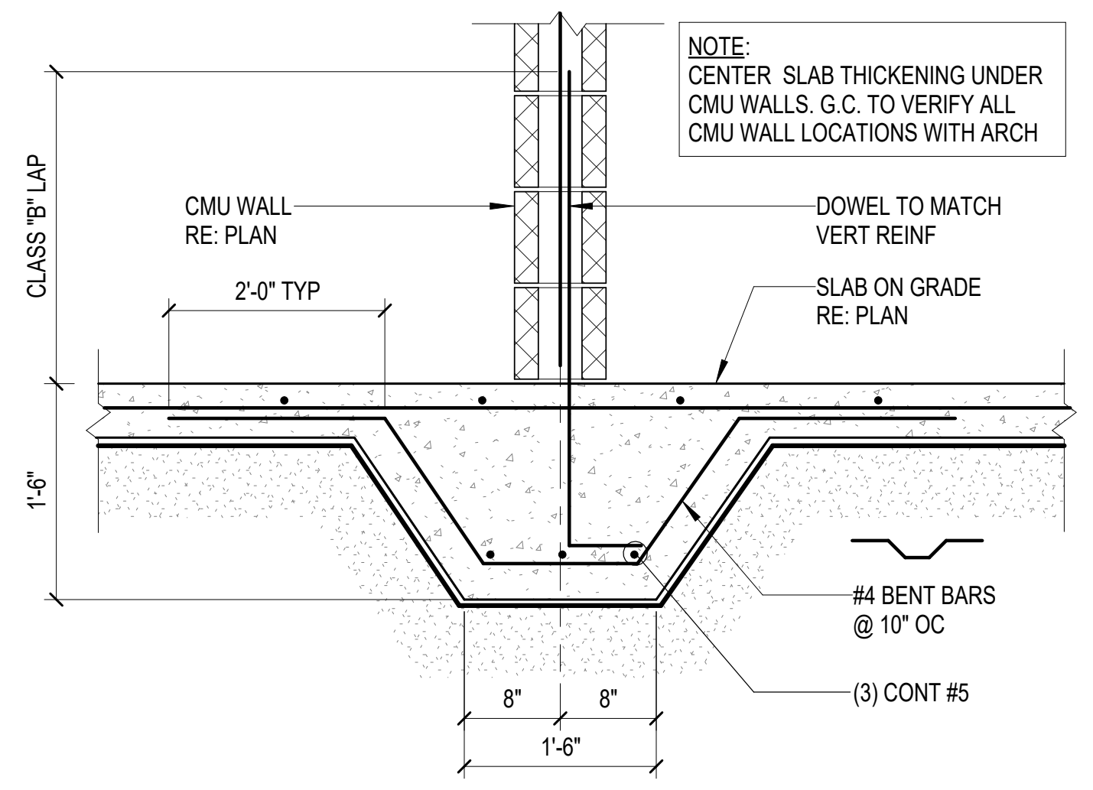
⑥ SECTION
3/4" = 1'-0"



⑦ SECTION
3/4" = 1'-0"

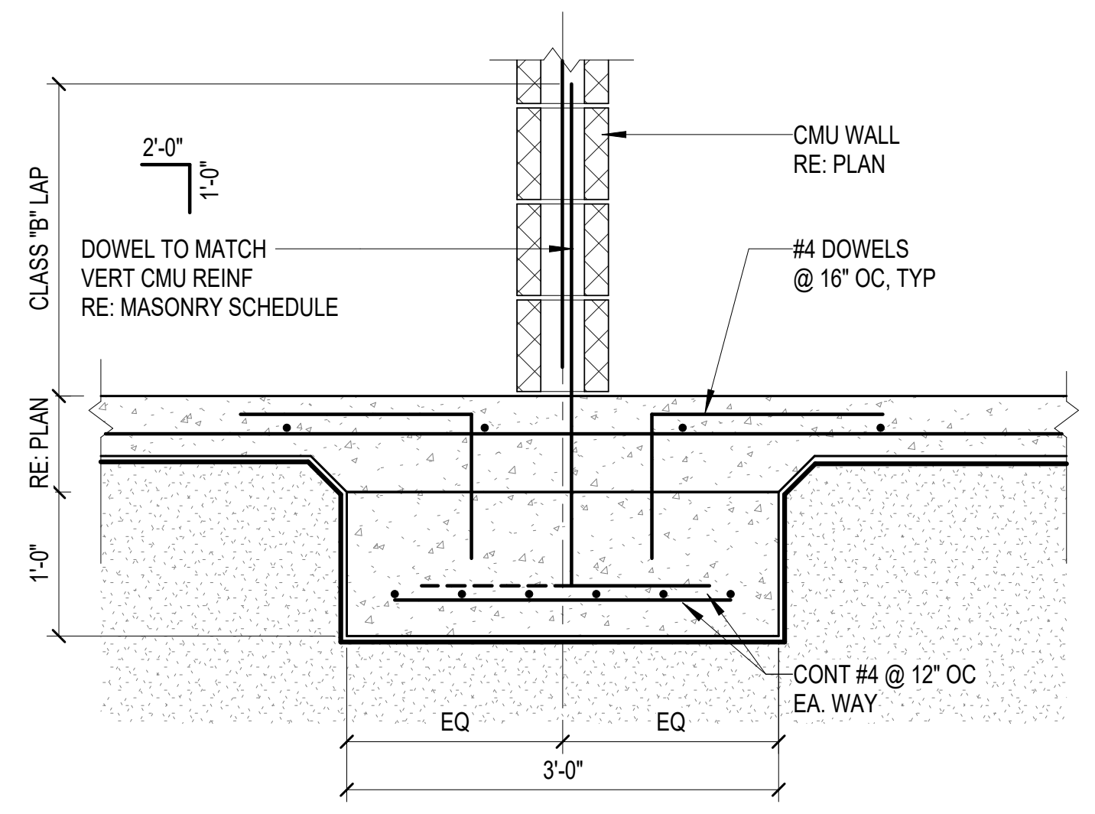


⑧ SECTION
3/4" = 1'-0"

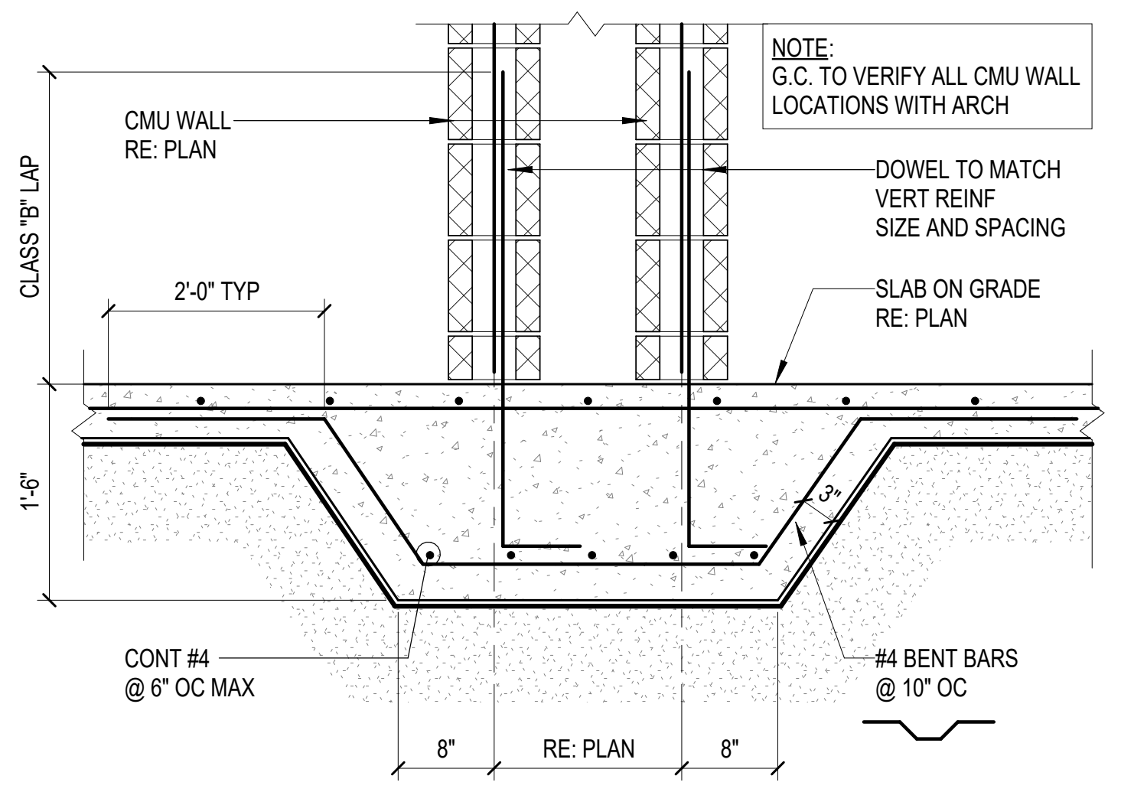


NOTE:
CENTER SLAB THICKENING UNDER CMU WALLS. G.C. TO VERIFY ALL CMU WALL LOCATIONS WITH ARCH

⑨ TYPICAL SLAB THICKENING AT CMU (11'-0" OR LESS)
3/4" = 1'-0"

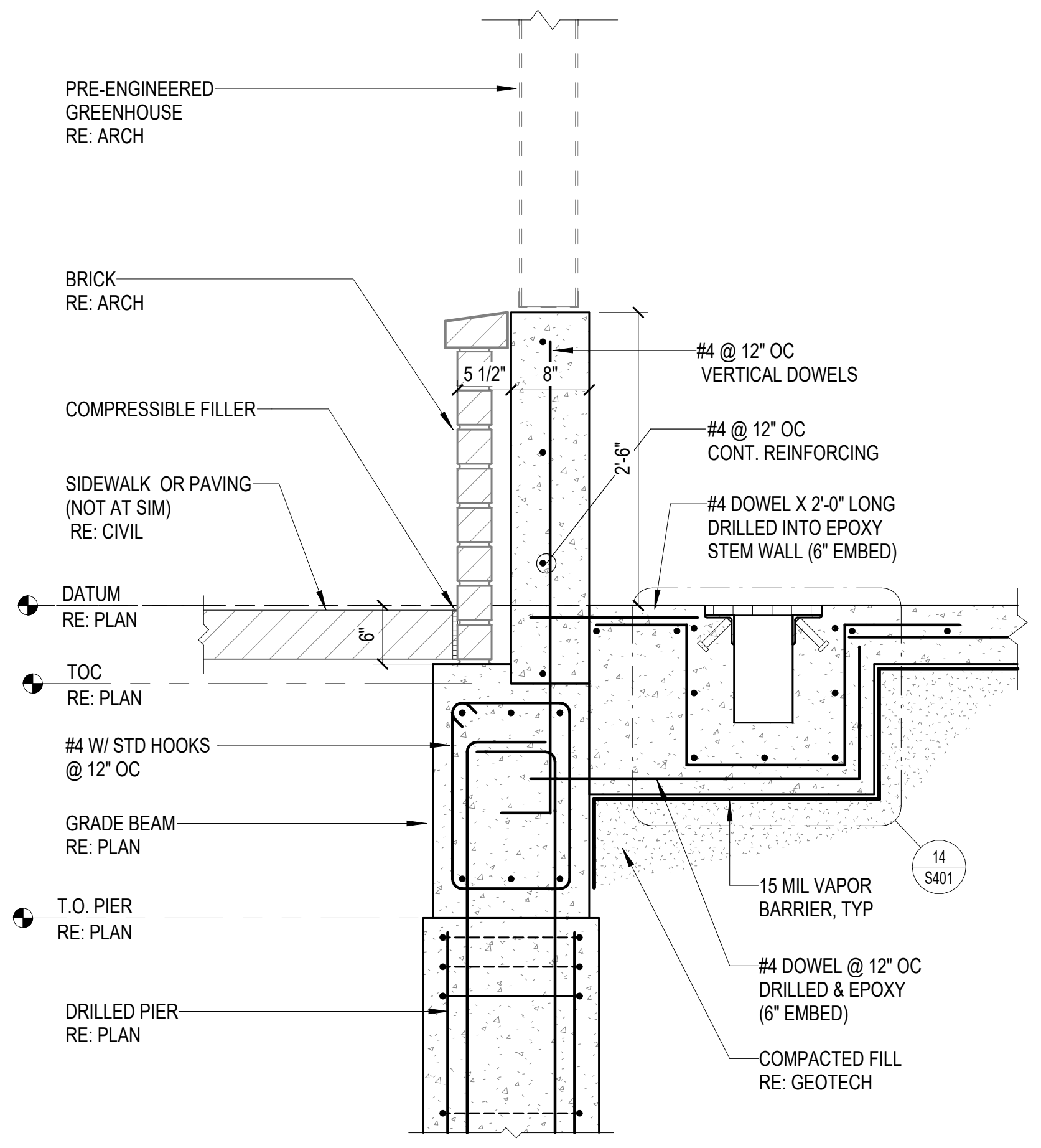


⑩ TYPICAL SLAB THICKENING AT CMU (20'-0" OR LESS)
3/4" = 1'-0"

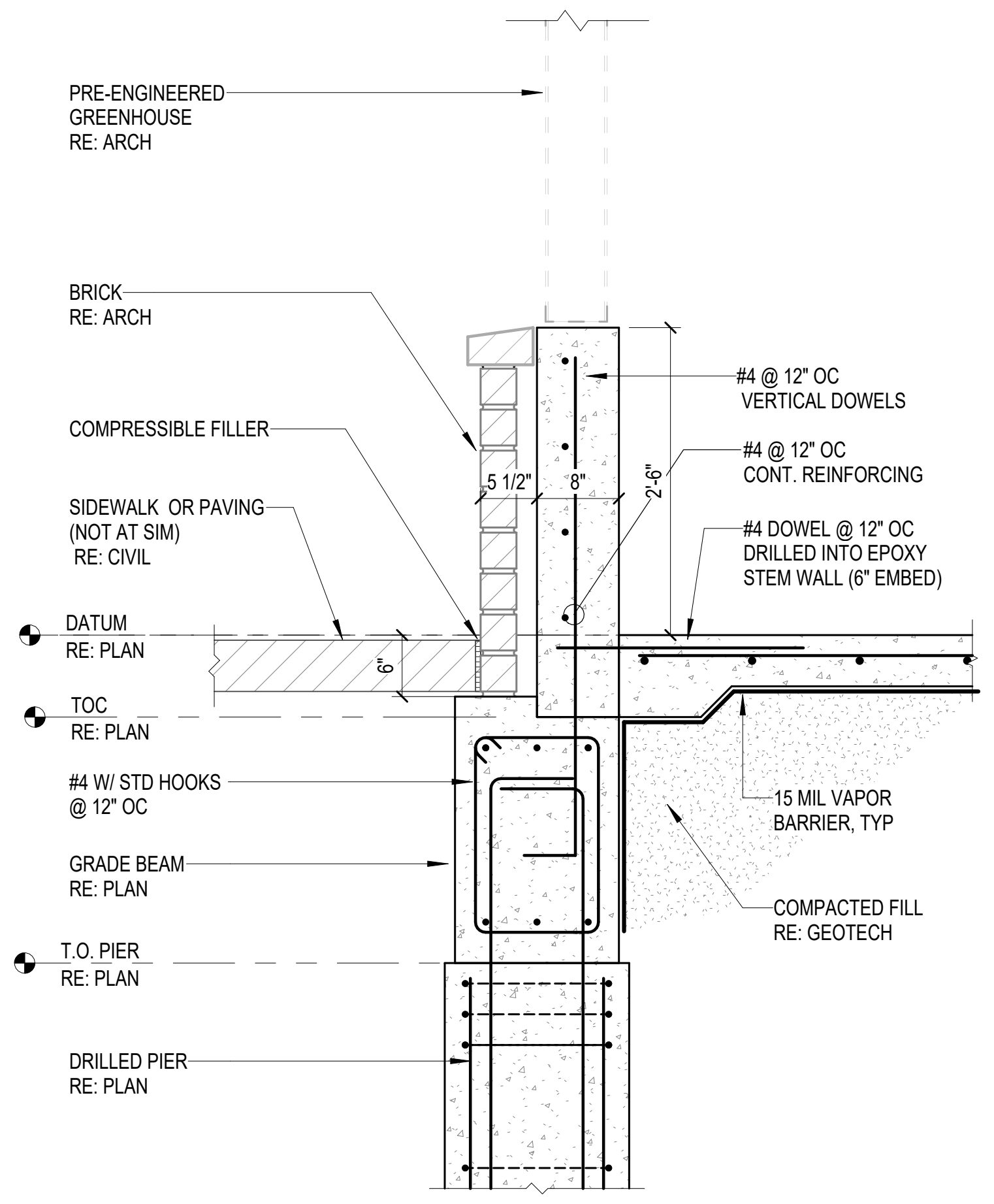


NOTE:
G.C. TO VERIFY ALL CMU WALL LOCATIONS WITH ARCH

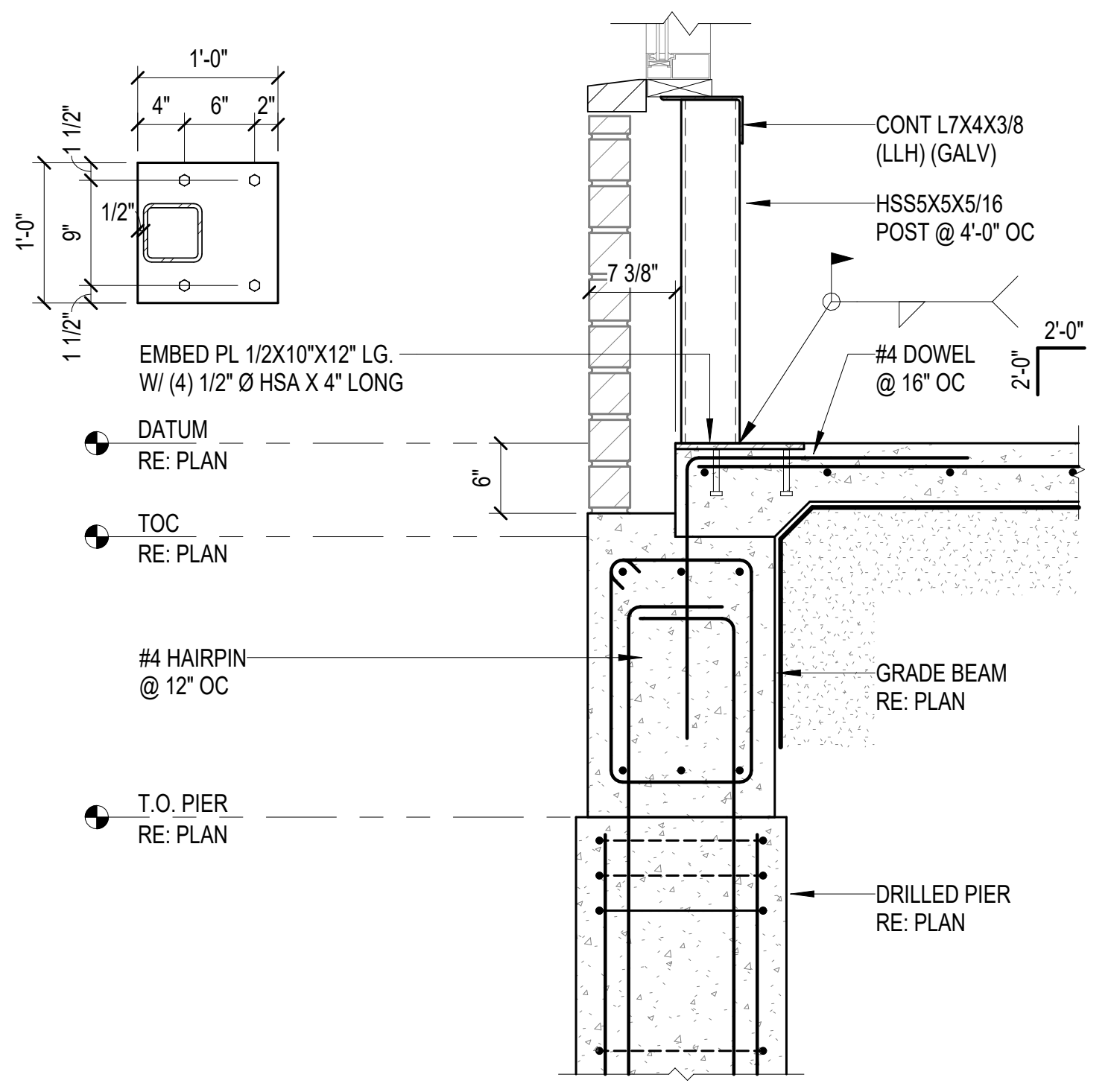
⑪ TYPICAL SLAB THICKEING AT CMU CHASE
3/4" = 1'-0"



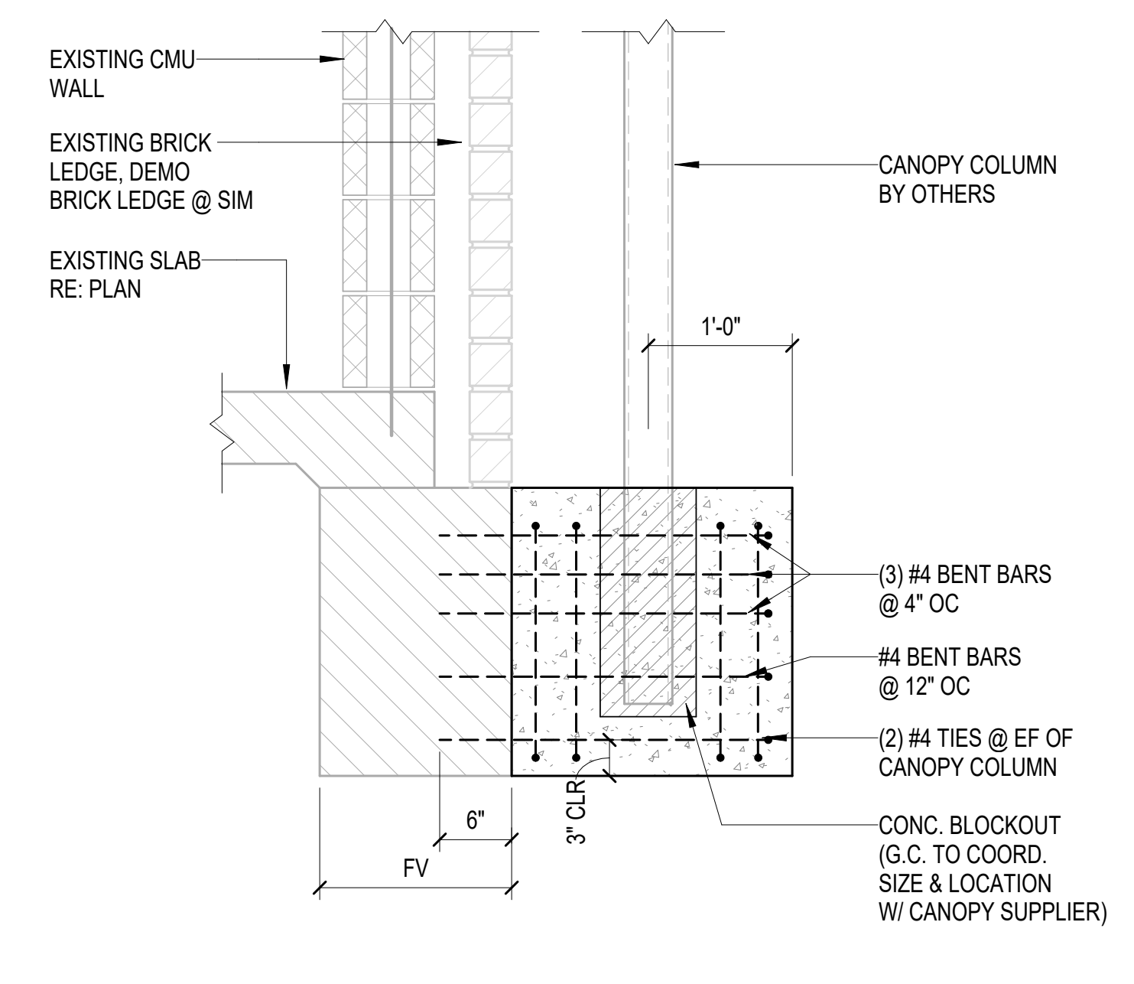
⑫ SECTION
3/4" = 1'-0"



⑬ SECTION
3/4" = 1'-0"



⑭ SECTION
3/4" = 1'-0"



⑮ SECTION
3/4" = 1'-0"

Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

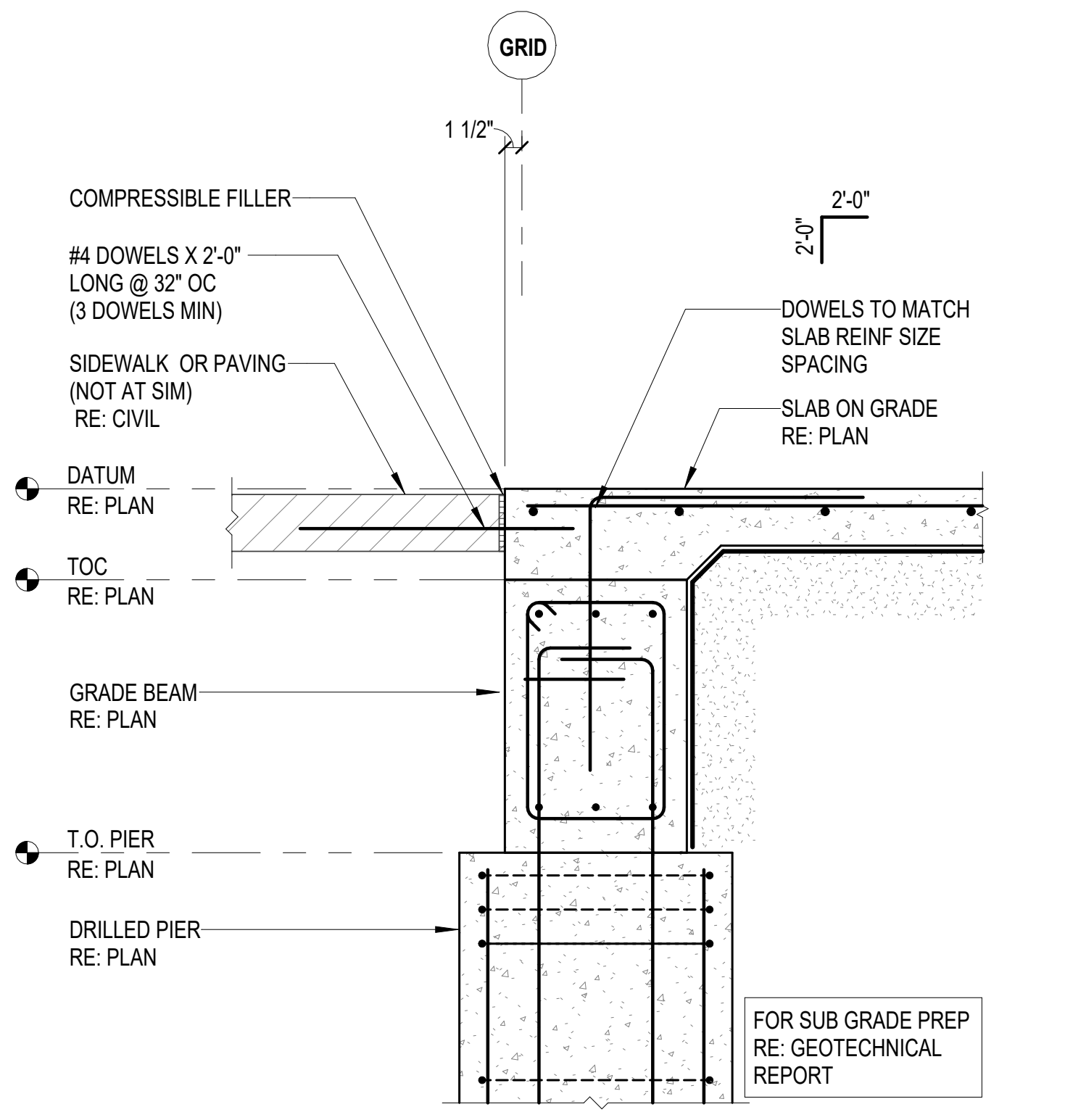
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

SOG @ GB

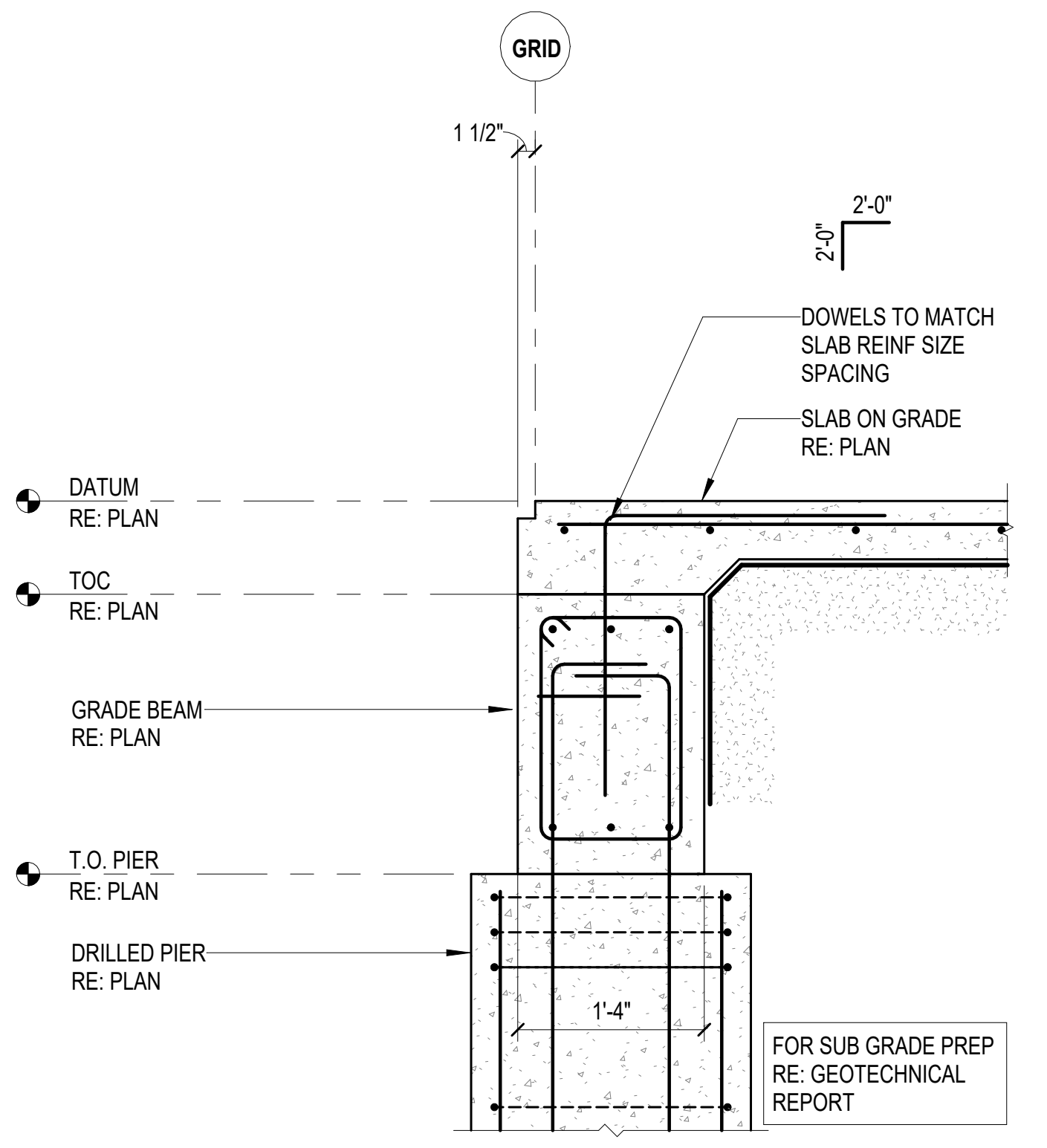
S403
of

Autodesk Docs://23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



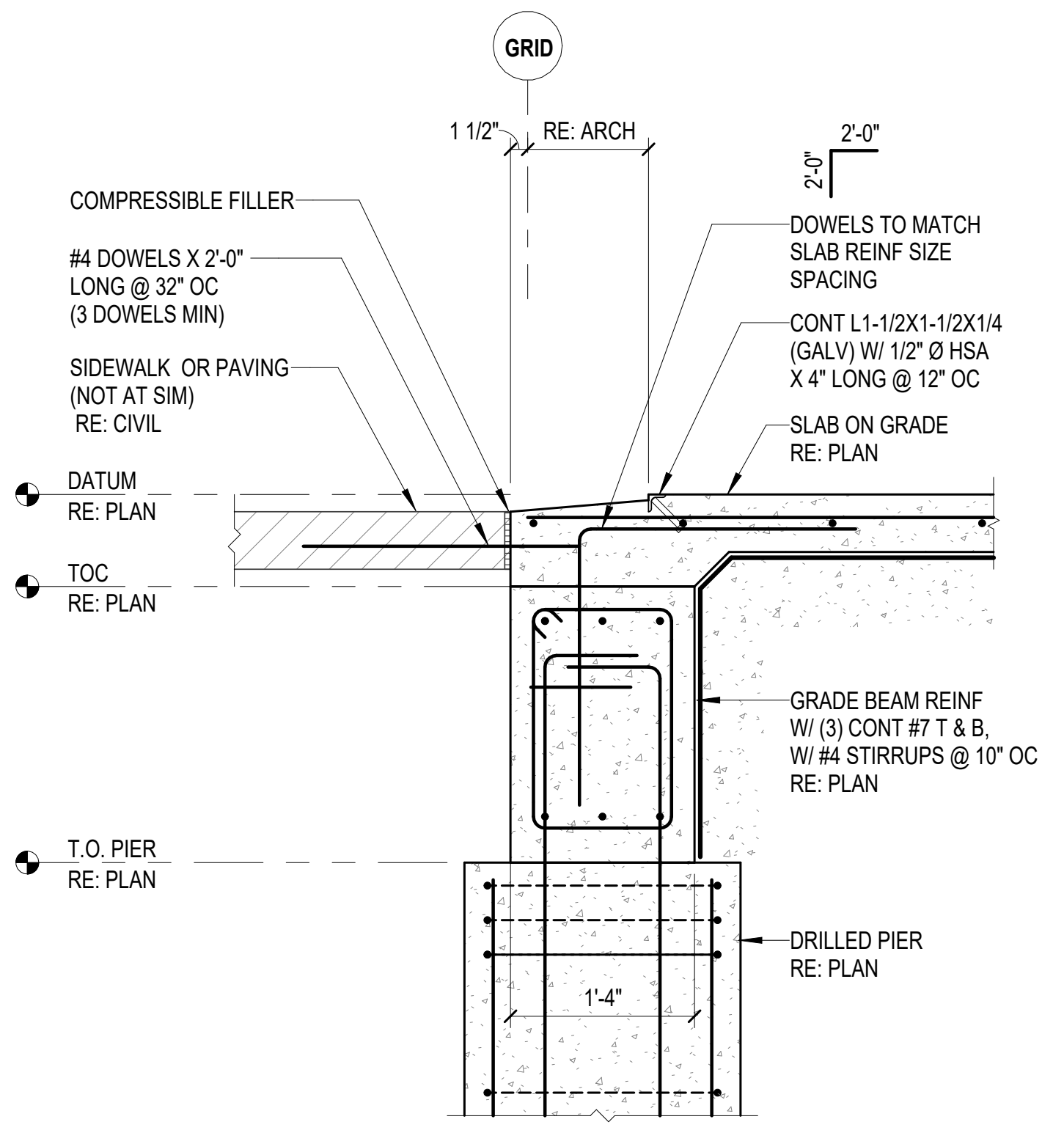
FOR SUB GRADE PREP
RE: GEOTECHNICAL
REPORT

1 SECTION
3/4" = 1'-0"

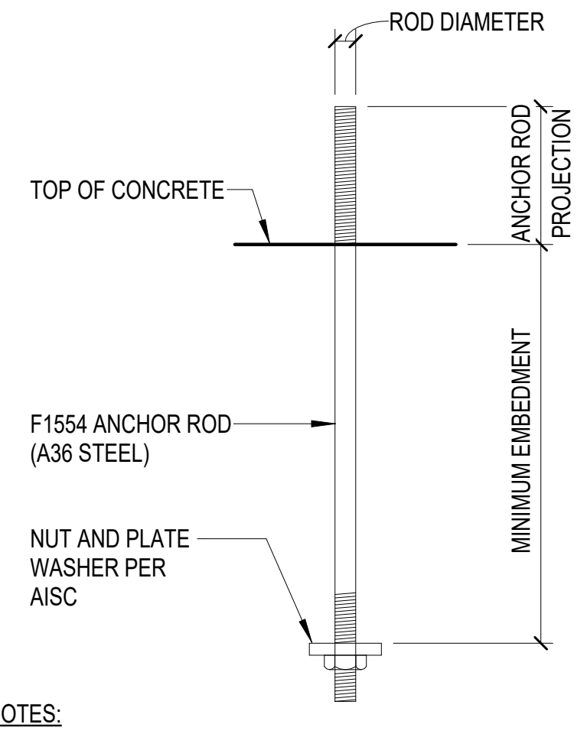


FOR SUB GRADE PREP
RE: GEOTECHNICAL
REPORT

2 SECTION
3/4" = 1'-0"



3 SECTION
3/4" = 1'-0"



ANCHOR ROD EMBEDMENT	
ROD DIAMETER	MINIMUM EMBEDMENT
1/2" & 5/8"	13"
3/4"	16"
7/8"	18"
1"	21"
1 1/4"	25"
1 1/2"	32"

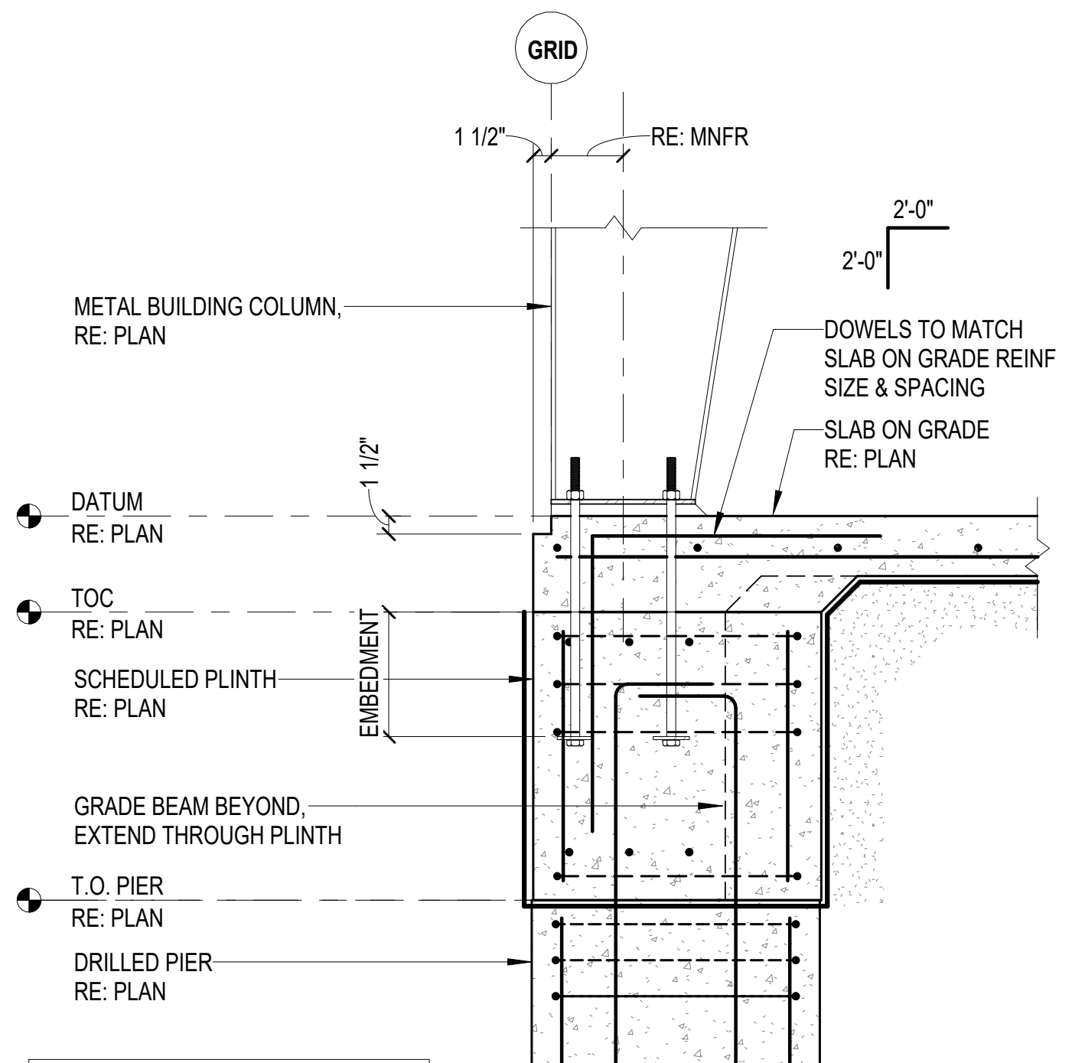
NOTES:

1. PROVIDE STEEL FOR BASE PLATES CONFORMING TO ASTM A36.
2. PROVIDE HOLES IN BASE PLATES 5/16" LARGER THAN THE SCHEDULED ANCHOR ROD DIAMETER
3. PROVIDE HOLES IN SETTING PLATES 1/16" LARGER THAN THE SCHEDULED ANCHOR ROD DIAMETER
4. PROVIDE ANCHOR RODS CONFORMING TO ASTM F1554, GRADE 36.
5. PROVIDE ANCHOR RODS WITH STANDARD WASHERS AND DOUBLE HEX NUTS.
6. USE E70XX WELDING ELECTRODES FOR ALL WELDS, UNLESS OTHERWISE NOTED.
7. MILL SURFACES NOTED FIN. (FINISHED) FOR TRUE AND FULL CONTACT.

NOTE:

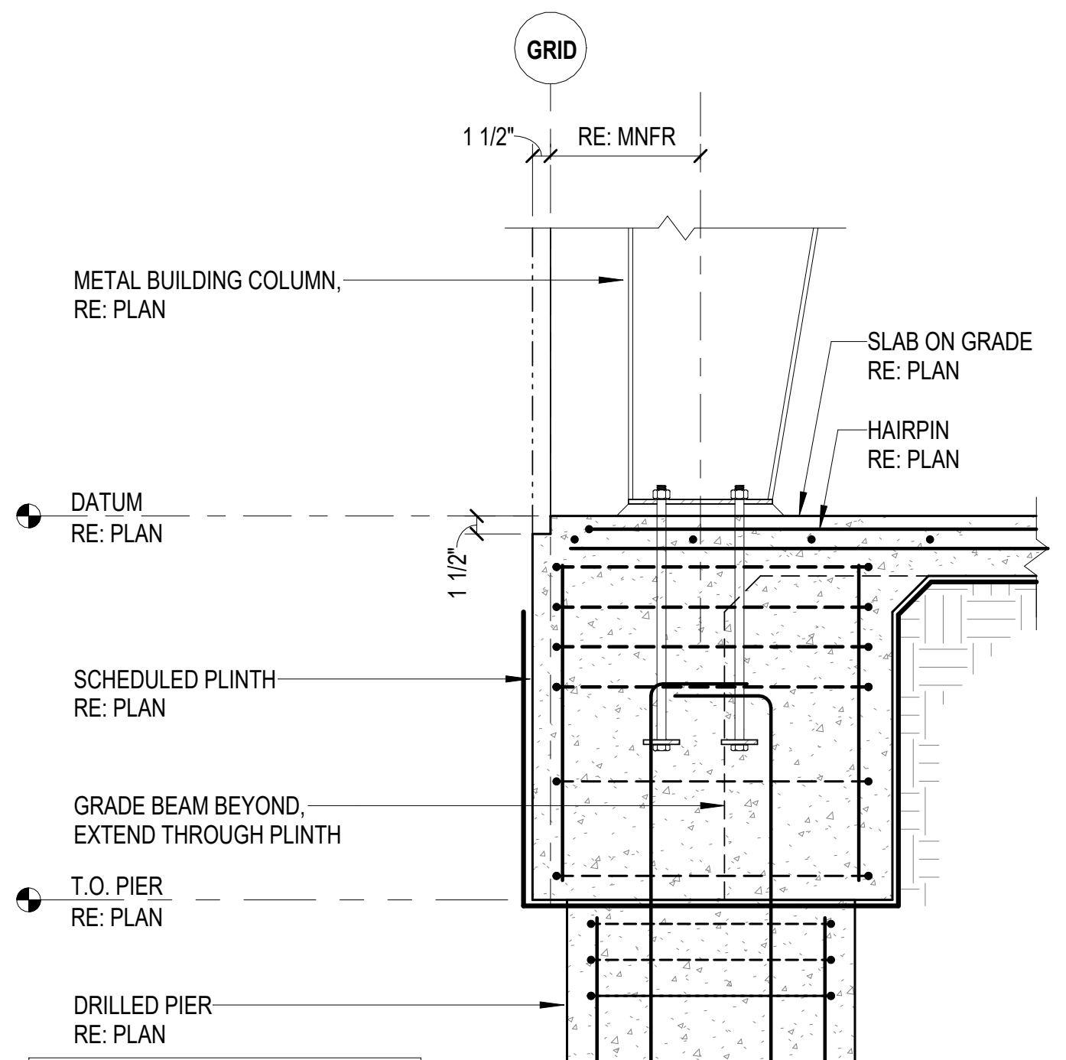
THESE ARE MINIMUM EMBEDMENTS AND ARE BASED ON A36 STEEL.
LONGER EMBEDMENT LENGTHS WILL BE REQUIRED IF HIGHER STRENGTH
STEEL IS SPECIFIED BY METAL BUILDING MANUFACTURER.

4 TYPICAL PEMB COLUMN ANCHOR BOLT
3/4" = 1'-0"



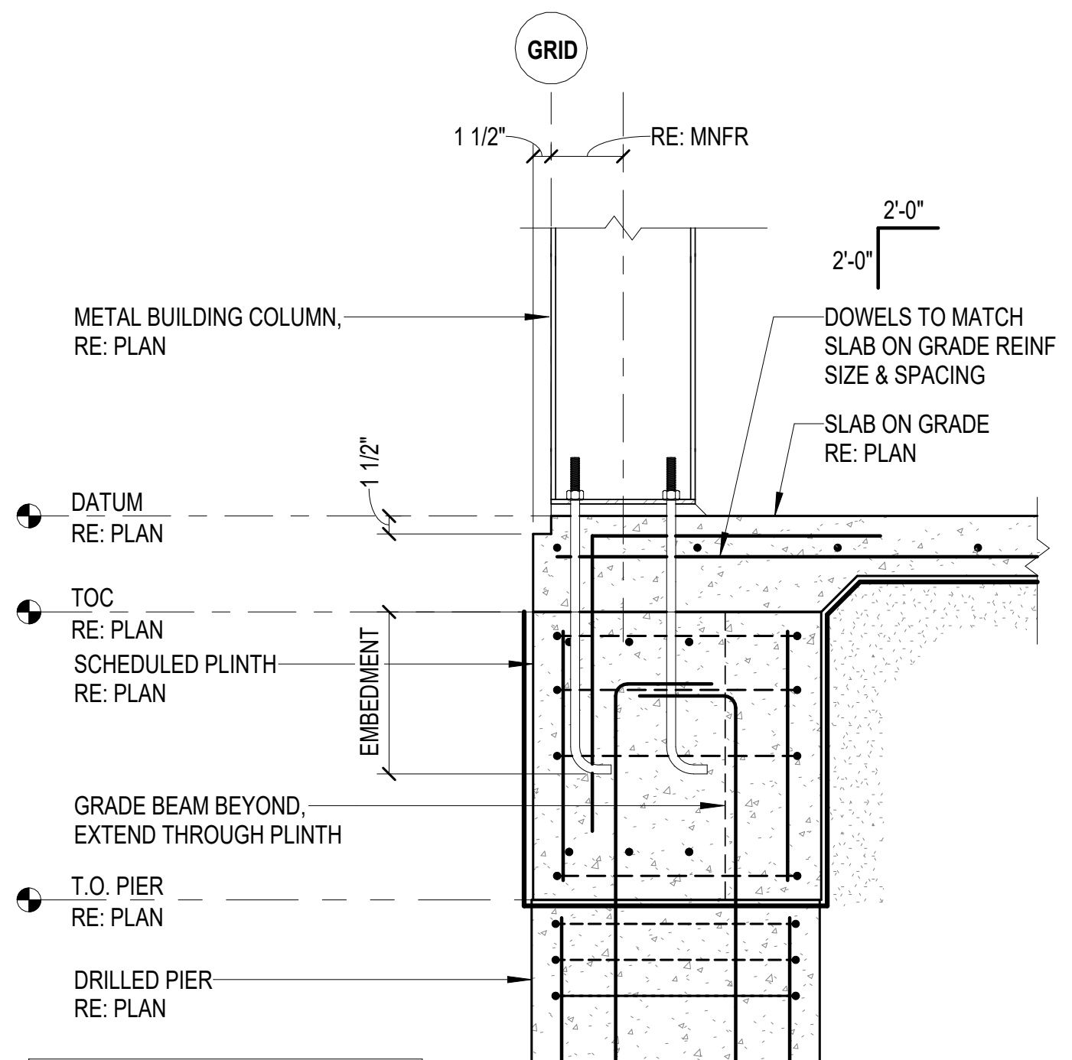
NOTE:
FOR ANY INFORMATION NOT SHOWN
RE: DETAIL 1 ON THIS SHEET

5 SECTION
3/4" = 1'-0"



NOTE:
FOR ANY INFORMATION NOT SHOWN
RE: DETAIL 1 ON THIS SHEET

6 SECTION
3/4" = 1'-0"



NOTE:
FOR ANY INFORMATION NOT SHOWN
RE: DETAIL 1 ON THIS SHEET

7 SECTION
3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

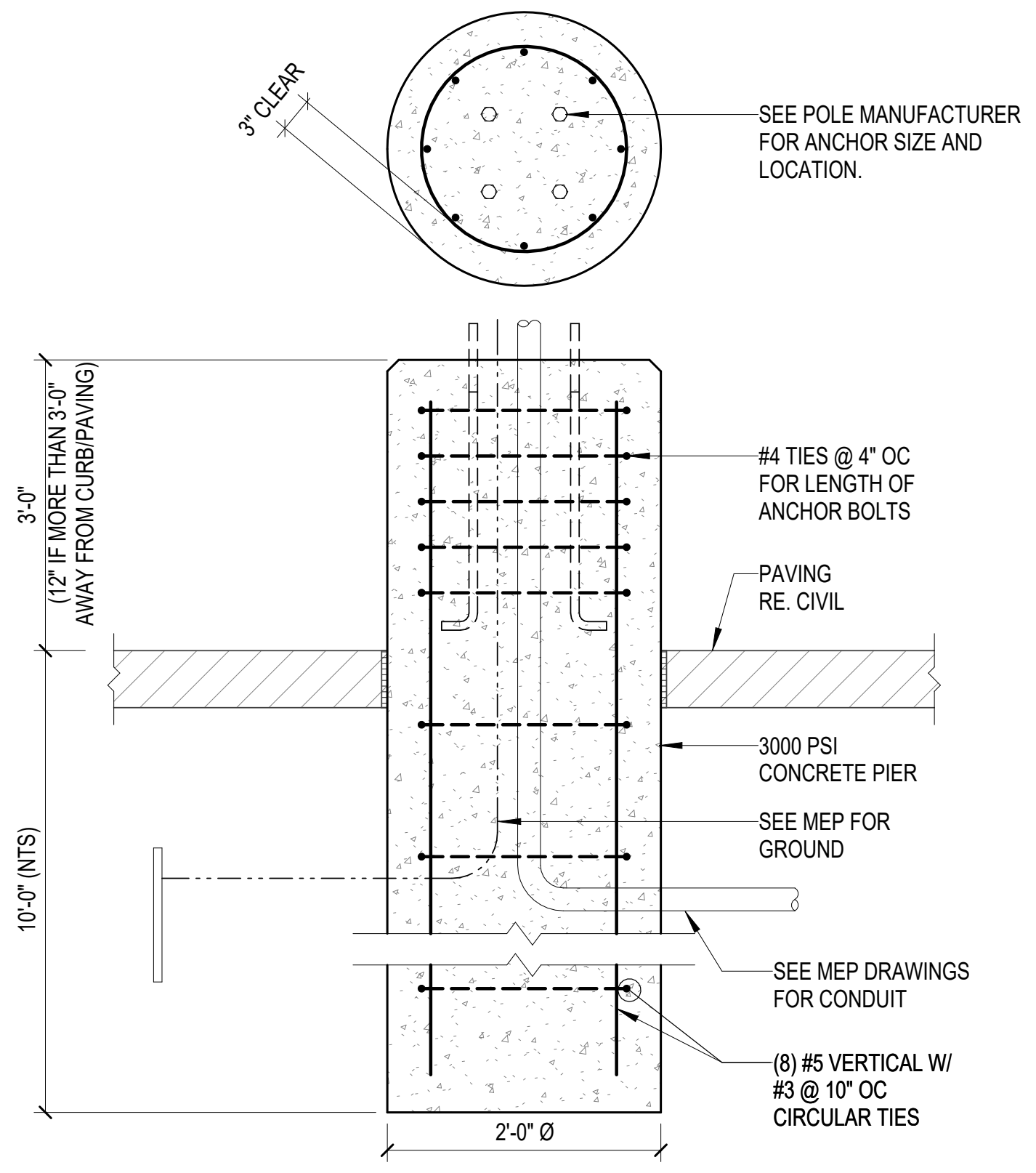
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

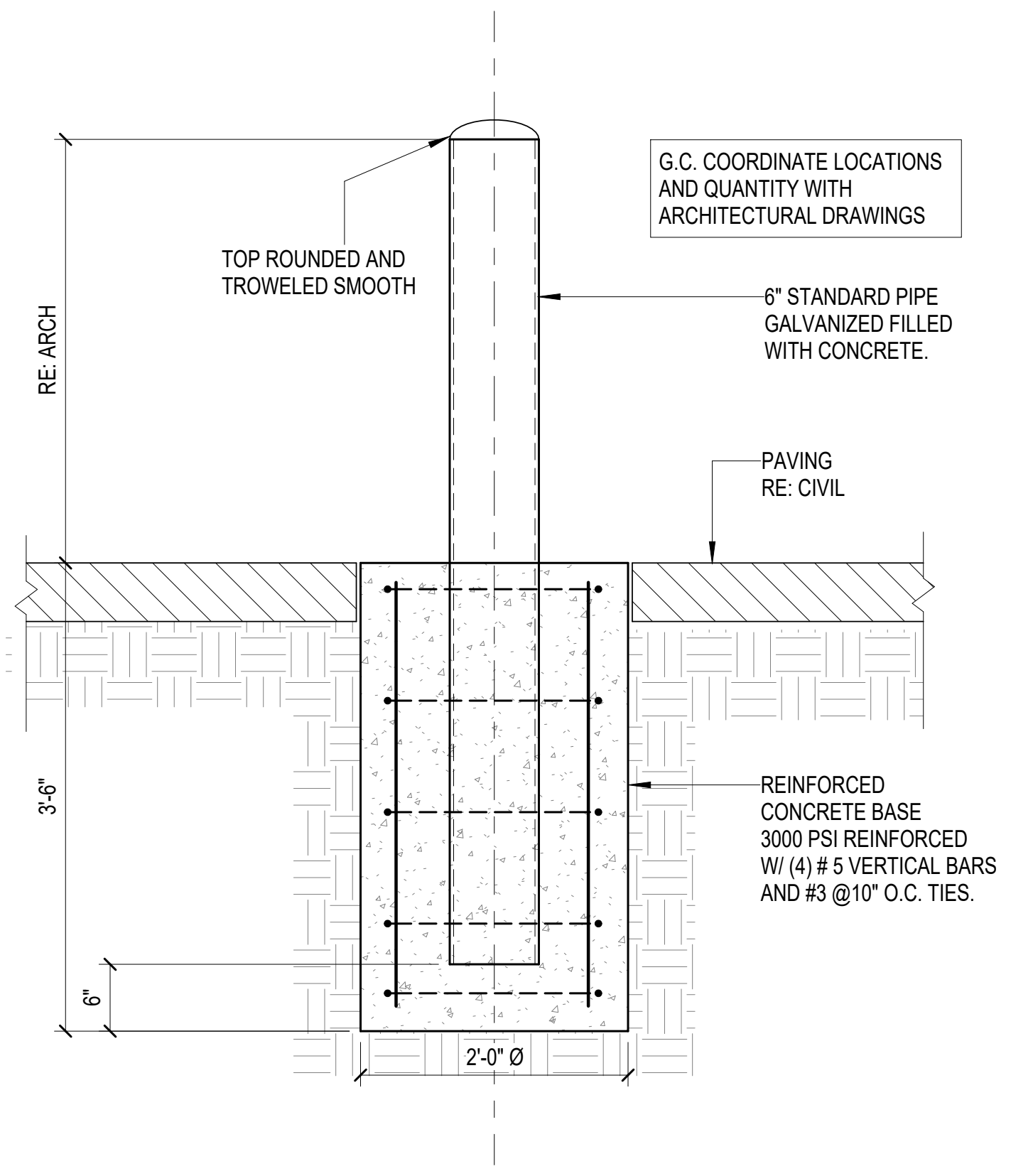
SOG @ PEMB

S404
of

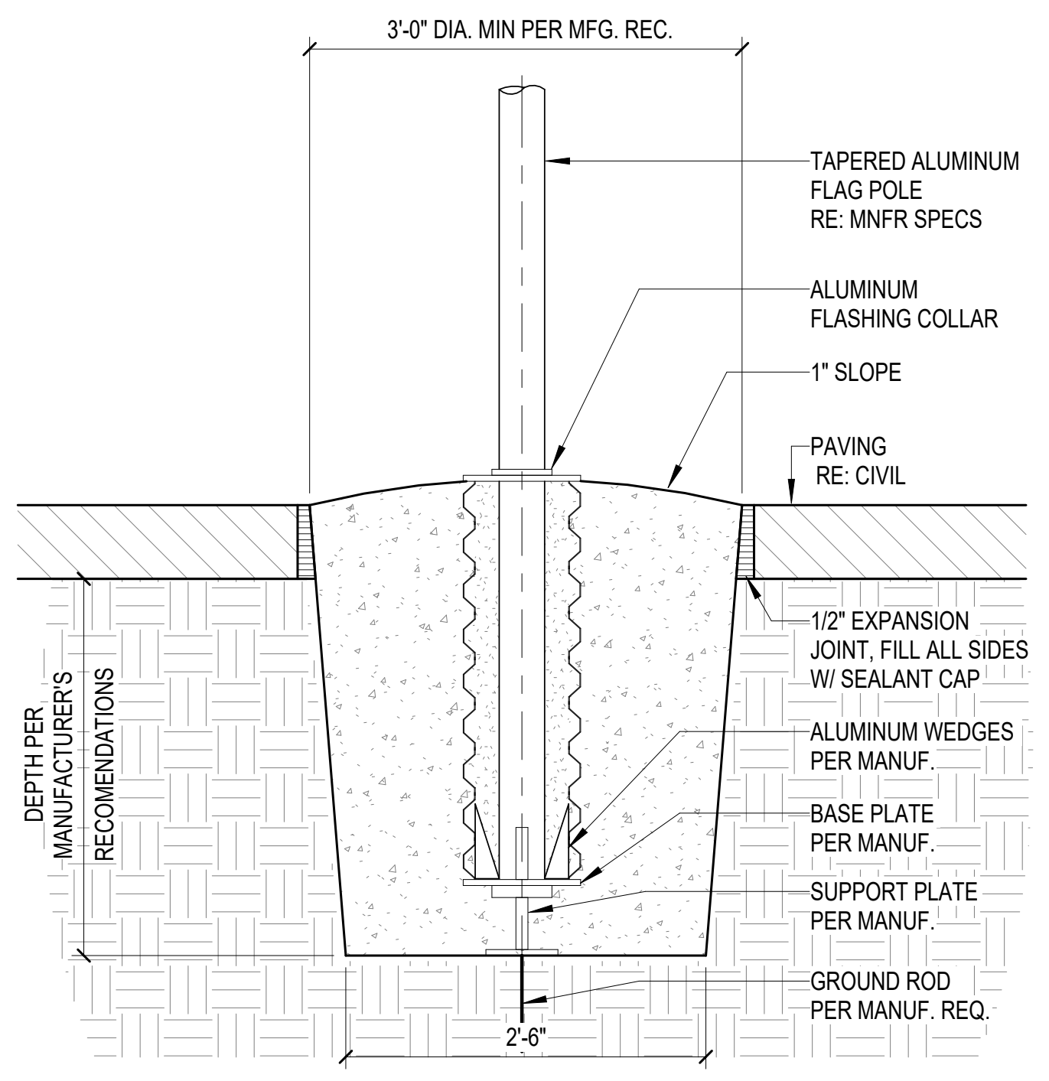
11/13/2024 4:14:28 PM



1 TYPICAL LIGHT POLE DETAIL (30'-0" TALL MAX)
3/4" = 1'-0"



2 TYPICAL BOLLARD
3/4" = 1'-0"

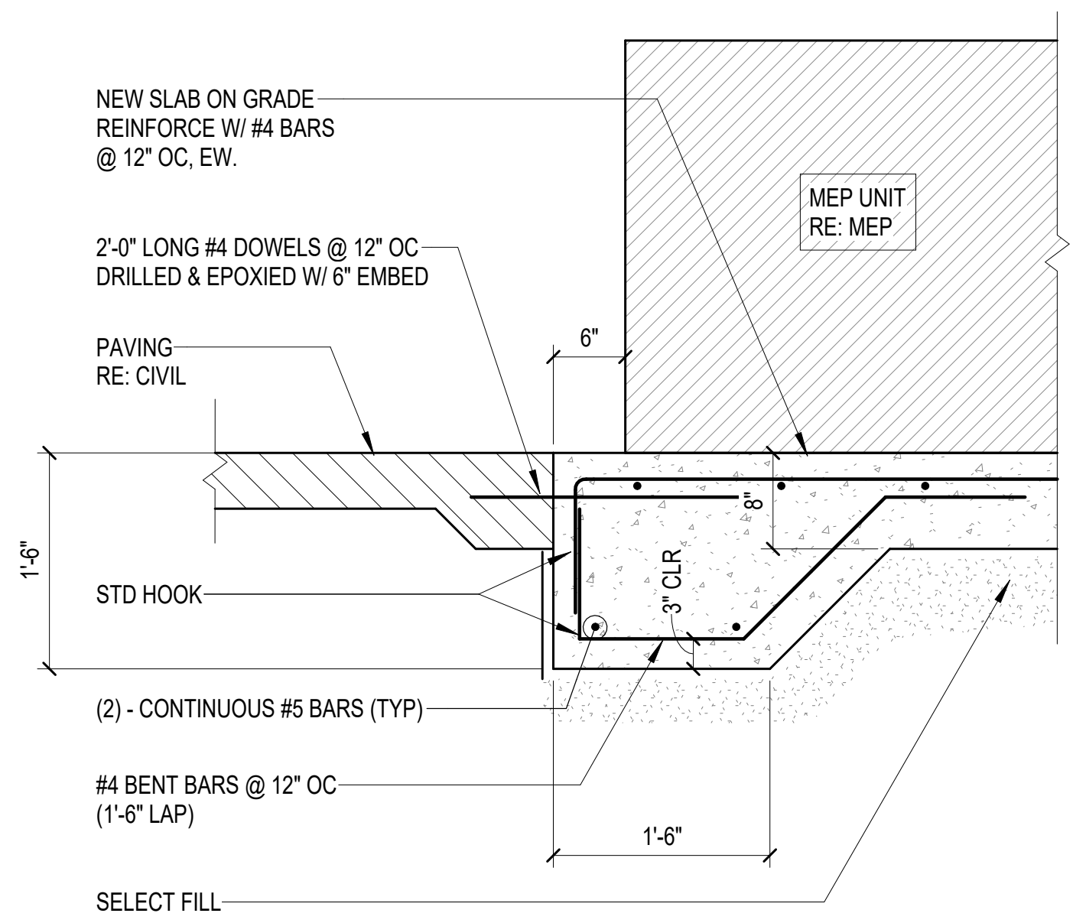


3 TYPICAL FLAG POLE
3/4" = 1'-0"

NOTE:

1. SEE ARCHITECTURAL SITE PLAN FOR PAD LOCATION AND OVERALL DIMENSIONS.

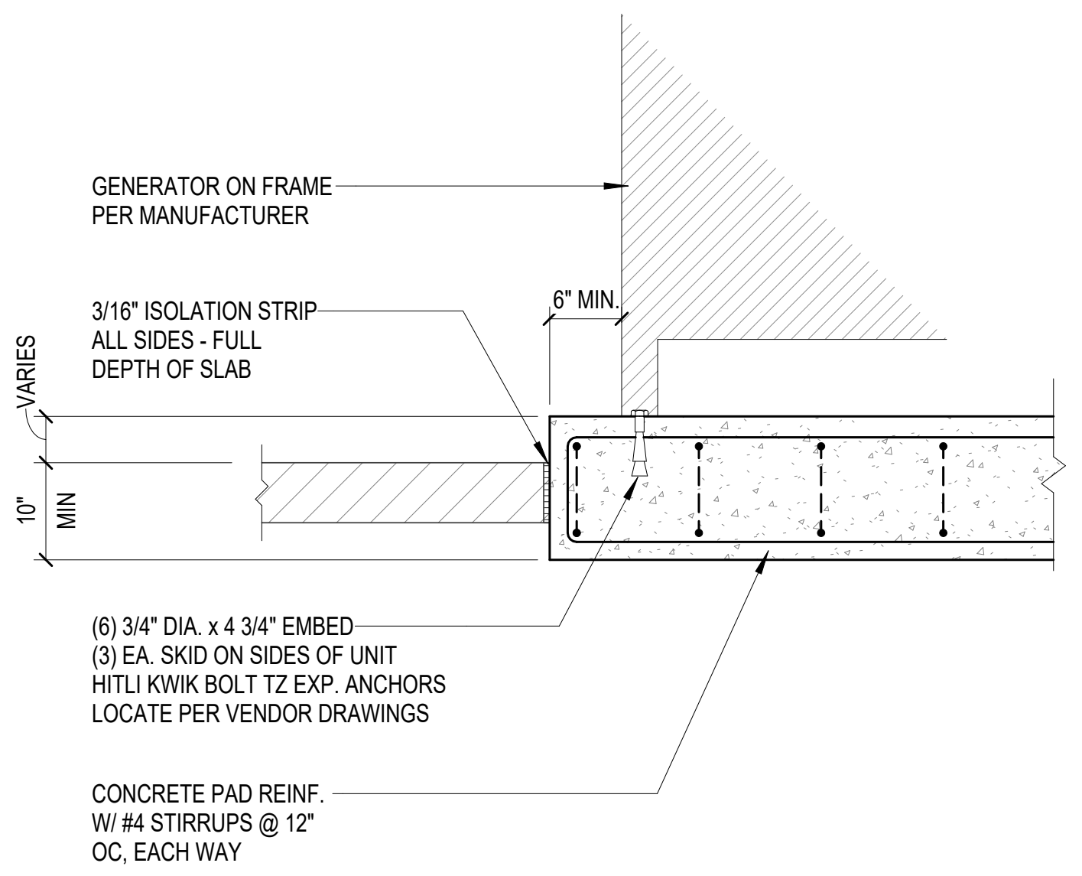
2. G.C. TO VERIFY ALL PAD DIMENSIONS W/ MEP DRAWINGS PRIOR TO CONSTRUCTION.



4 TYPICAL MEP UNIT PAD
3/4" = 1'-0"

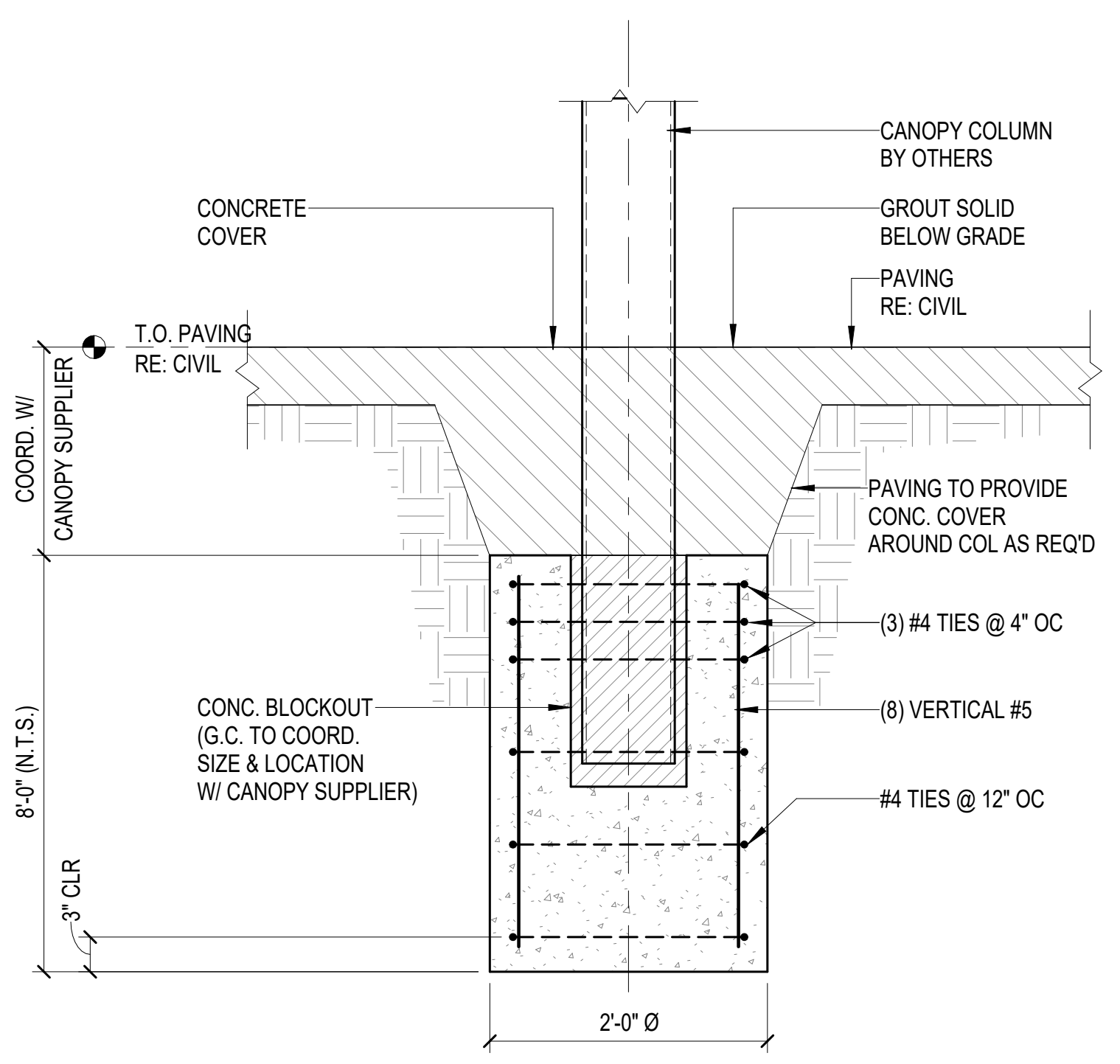
1. GENERAL CONTRACTOR TO COORDINATE WITH THE MECHANICAL DRAWINGS AND SPECIFICATIONS TO DETERMINE LOCATIONS OF HOUSEKEEPING PADS, AND TO PROVIDE WHERE REQUIRED, IF NON ARE SHOWN ON THE STRUCTURAL DRAWINGS.

2. COORDINATE ALL PAD DIMENSIONS, AND VERIFY ADEQUACY WITH THE MECHANICAL ENGINEER AND THE EQUIPMENT REQUIREMENTS.

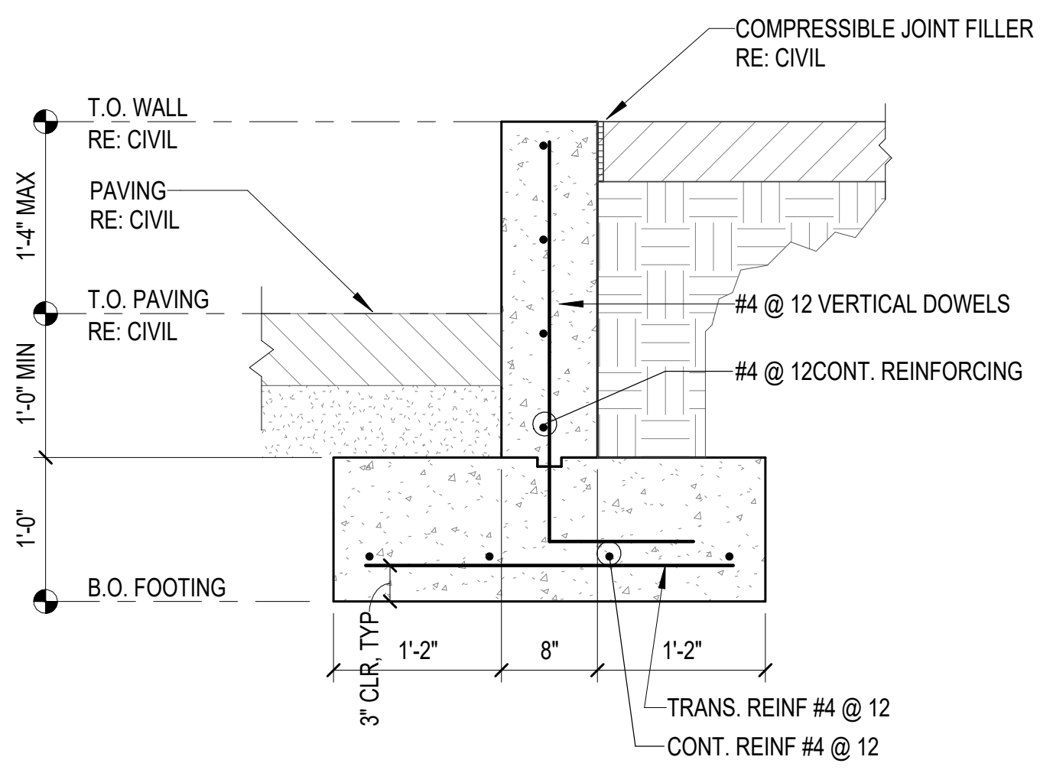


5 TYPICAL GENERATOR PAD
3/4" = 1'-0"

NOTE: THIS CONDITION IS SHOWN FOR PRICING PURPOSES ONLY. G.C. TO COORDINATE FOUNDATION W/ CANOPY SUPPLIER



6 TYPICAL AVADEK CANOPY FOUNDATION
3/4" = 1'-0"



7 TYPICAL RETAINING WALL
3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

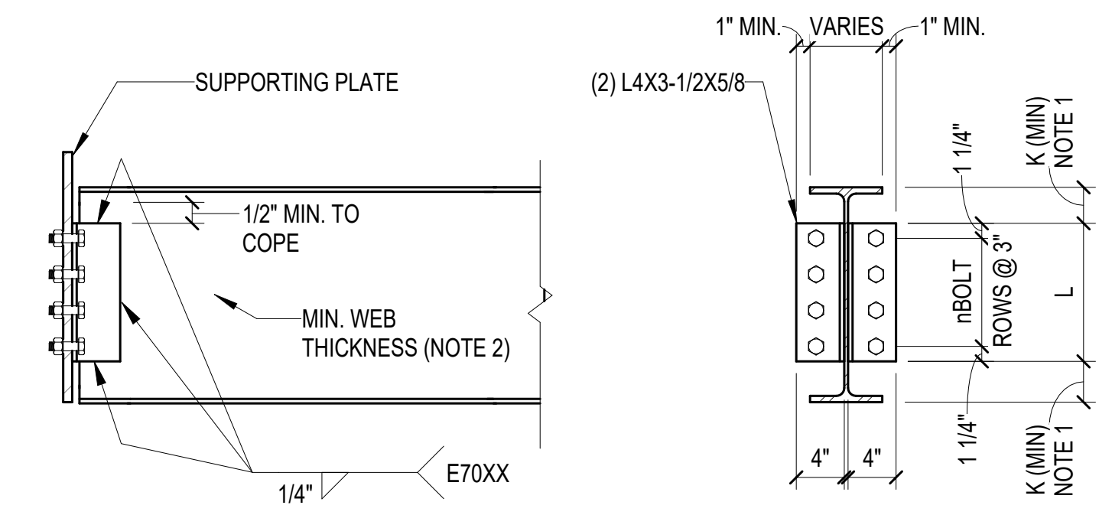
SITE DETAILS

S405
of

Autodesk Docs://23072_CFISD_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt

11/13/2024 4:14:31 PM

Autodesk Docs://23072_CFISD_Phase 6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



"n"	L (INCHES)	ALLOWABLE BOLT CAPACITY (KIPS)	ALLOWABLE WELD CAPACITY (KIPS)
2	5 1/2"	37	48
3	8 1/2"	56	77
4	11 1/2"	74	100
5	14 1/2"	93	122
6	17 1/2"	111	143
7	20 1/2"	130	160
8	23 1/2"	148	180
9	26 1/2"	167	198
10	29 1/2"	186	215

NOTES:

1. REFER TO AISC - MANUAL OF STEEL CONSTRUCTION (SECTION 1).

2. ALLOWABLE WELD CAPACITY IS BASED UPON A BEAM WEB THICKNESS OF 1/2" FOR A36 MATERIAL AND 3/8" FOR ASTM A572, GRADE 50 MATERIAL. REDUCE THIS CAPACITY PROPORTIONALLY FOR A LESSER WEB THICKNESS.

3. THE SUPPORTING PLATE CAPACITY SHALL BE BASED UPON AN ALLOWABLE LOAD PER BOLT OF 65 KIPS PER INCH OF PLATE THICKNESS FOR A36 MATERIAL OR 73 KIPS PER INCH OF PLATE THICKNESS FOR ASTM A572, GRADE 50 MATERIAL. FOR BEAM CONNECTIONS ON TWO SIDES, THE SUM OF THE LOADS PER BOLT SHALL BE CONSIDERED.

4. FOR COPED BEAM CONNECTIONS, THE CAPACITY OF THE NET SHEAR AREA OF THE WEB SHALL BE VERIFIED.

5. THE CAPACITY OF THE CONNECTION SHALL BE THE LESSER VALUE OF THE ALLOWABLE BOLT CAPACITY, ALLOWABLE WELD CAPACITY, SUPPORTING PLATE CAPACITY OR THE WEB NET SHEAR AREA CAPACITY.

6. THE MINIMUM NUMBER OF ROWS OF BOLTS SHALL BE AS FOLLOWS:

W10 & W12	2 ROWS
W14 & W16	3 ROWS
W18, W21, & W24	4 ROWS
W27 & W30	5 ROWS
W33 & W36	6 ROWS

3/4" Ø A325 BOLTS - BEARING CONN. - STANDARD HOLES

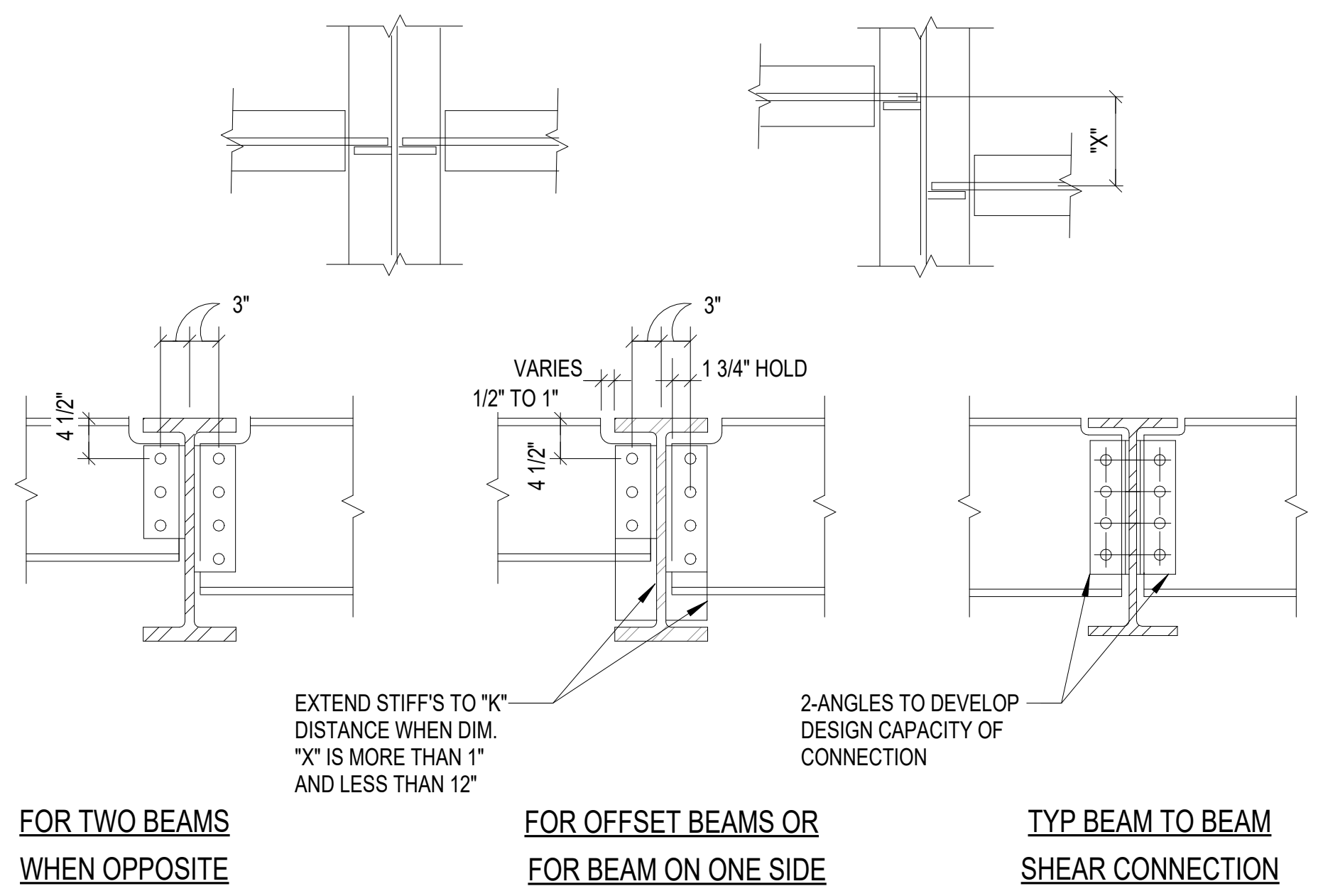
1 TYPICAL AISC SHEAR CONNECTORS

3/4" = 1'-0"

NOTES:-

1. BOTH THE WELDS & THE BOLTS TO BE DESIGNED FOR MOMENT CAUSED BY ECCENTRICITY BETWEEN WELD GROUP & BOLT CENTERLINE.

2. END REACTION TO BE DETERMINED PER GENERAL NOTES SHEET OR AS SHOWN ON PLANS.



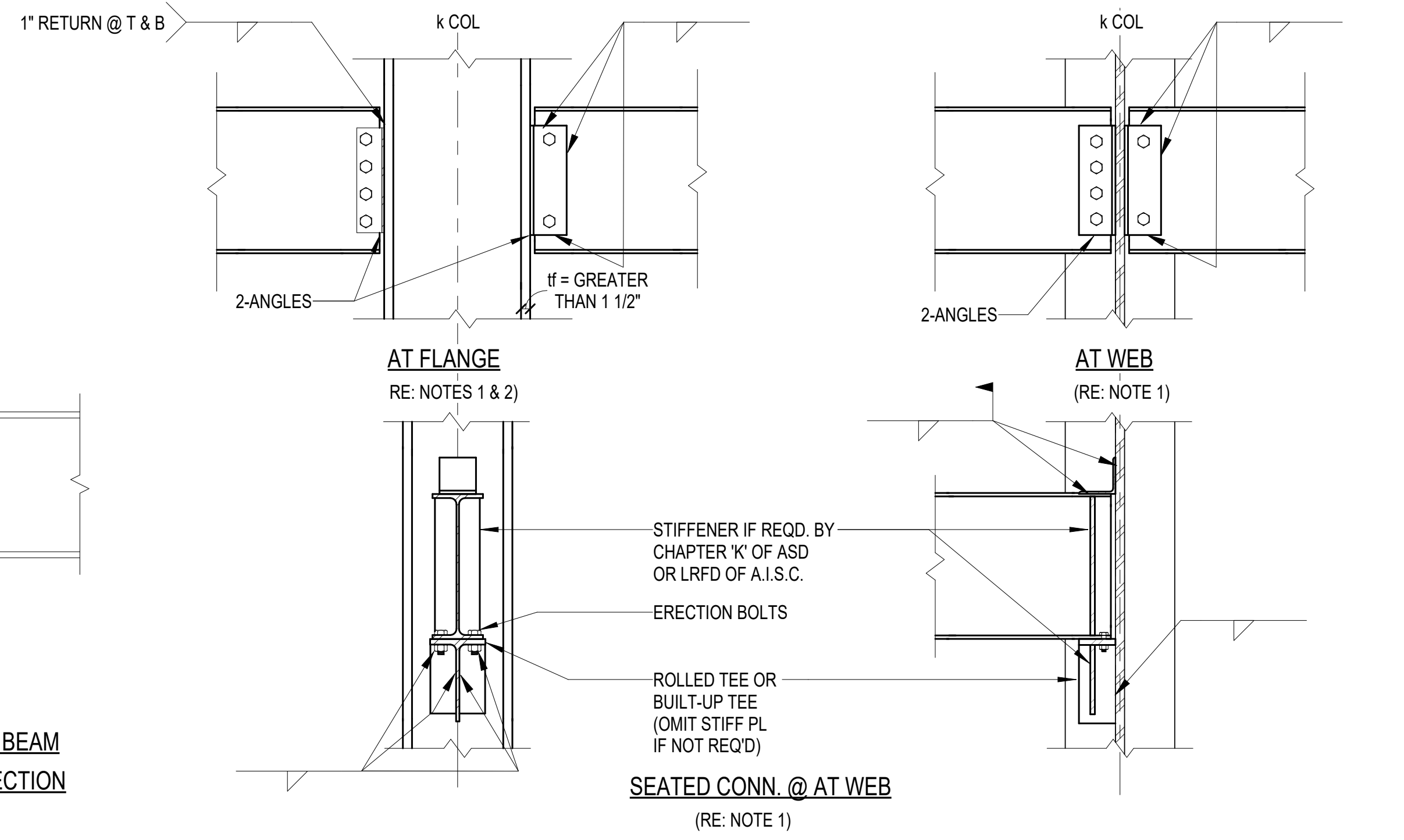
FOR TWO BEAMS WHEN OPPOSITE

FOR OFFSET BEAMS OR FOR BEAM ON ONE SIDE

TYP BEAM TO BEAM SHEAR CONNECTION

2 TYPICAL WF BEAM TO WF BEAM CONNECTION

3/4" = 1'-0"



AT FLANGE
(RE: NOTES 1 & 2)

AT WEB
(RE: NOTE 1)

SEATED CONN. @ AT WEB
(RE: NOTE 1)

NOTES:

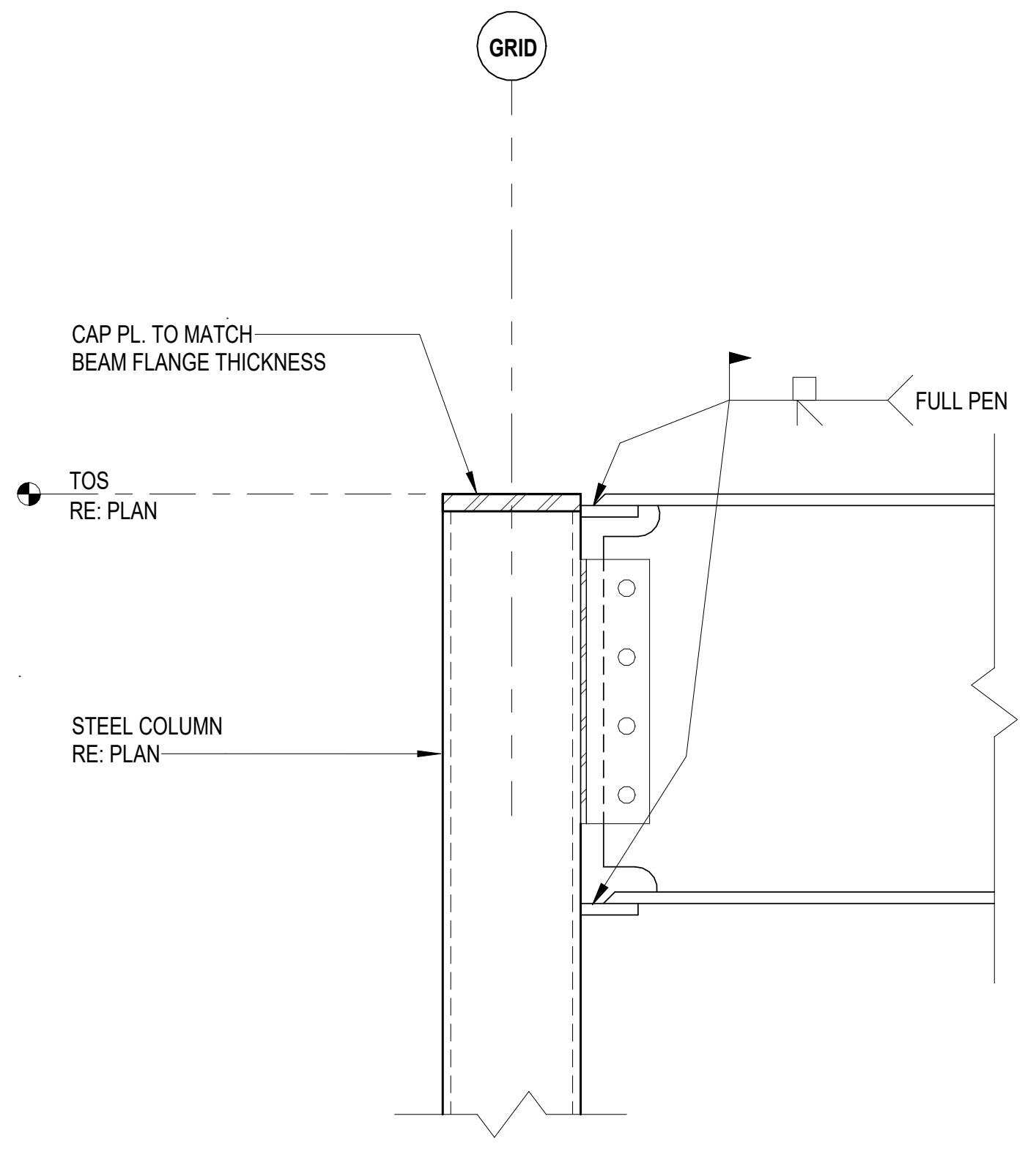
1. CONN. TO BE ADEQUATE FOR AXIAL BRACING FORCE = 1% OF WORKING COLUMN LOAD IN ADDITION TO END REACTION DETERMINED PER STEEL GENERAL NOTES SHEET (U.N.O. ON DWG.) ALLOWABLE STRESS CAN BE INCREASED 1/3 FOR THIS CONDITION. COLUMN LOAD WILL BE FURNISHED OR CAN BE DETERMINED FROM AISC MANUAL FOR FLOOR TO FLOOR HEIGHT.

2. SINGLE PLATE CONNECTION IS ALLOWED ONLY WHEN AXIAL FORCE BRACING THE COLUMN IS LESS THAN 20 KIPS. THE DESIGN OF SINGLE PLATE CONNECTION WITH AXIAL FORCE LESS THAN 20 KIPS. SHOULD BE SUBSTANTIATED BY CALCULATION AND IS SUBJECT TO ENGINEER'S APPROVAL.

3/4" Ø A325 BOLTS - BEARING CONN. - STANDARD HOLES

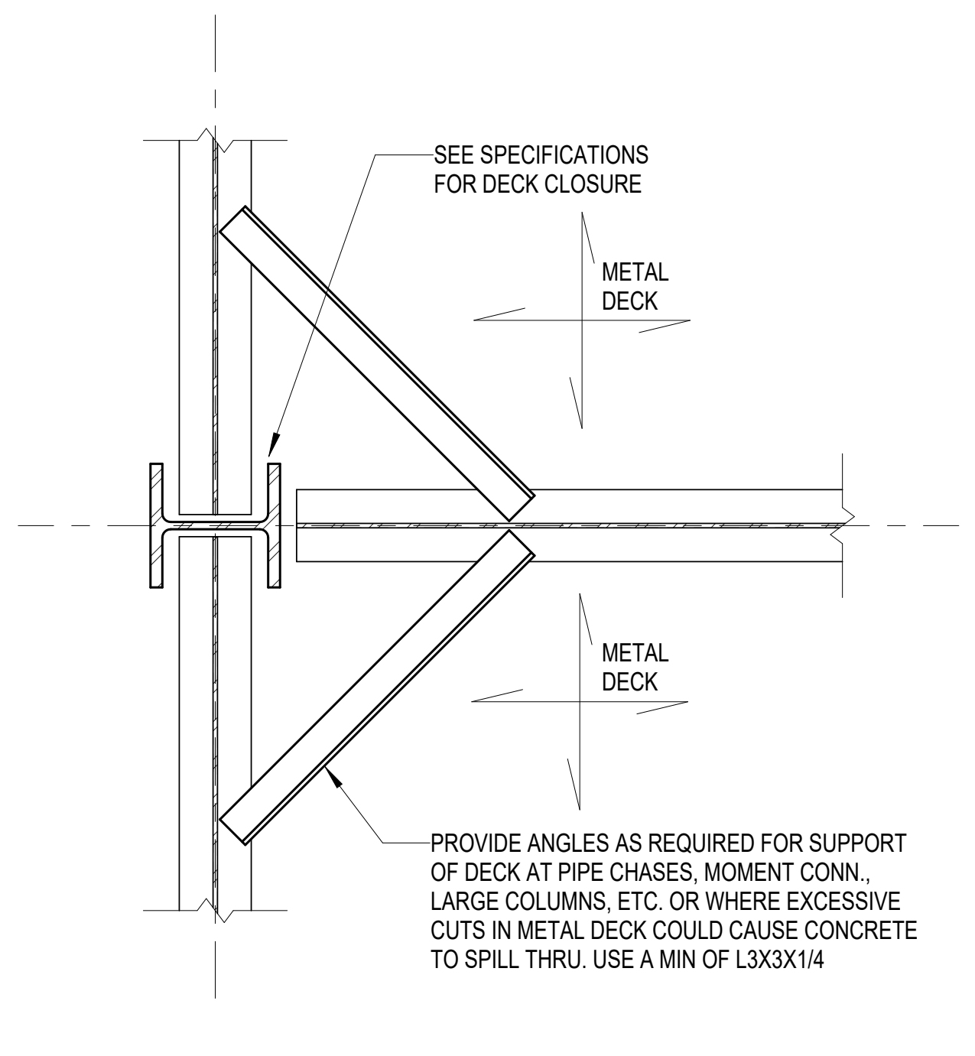
3 TYPICAL WF BEAM TO COL

N.T.S.



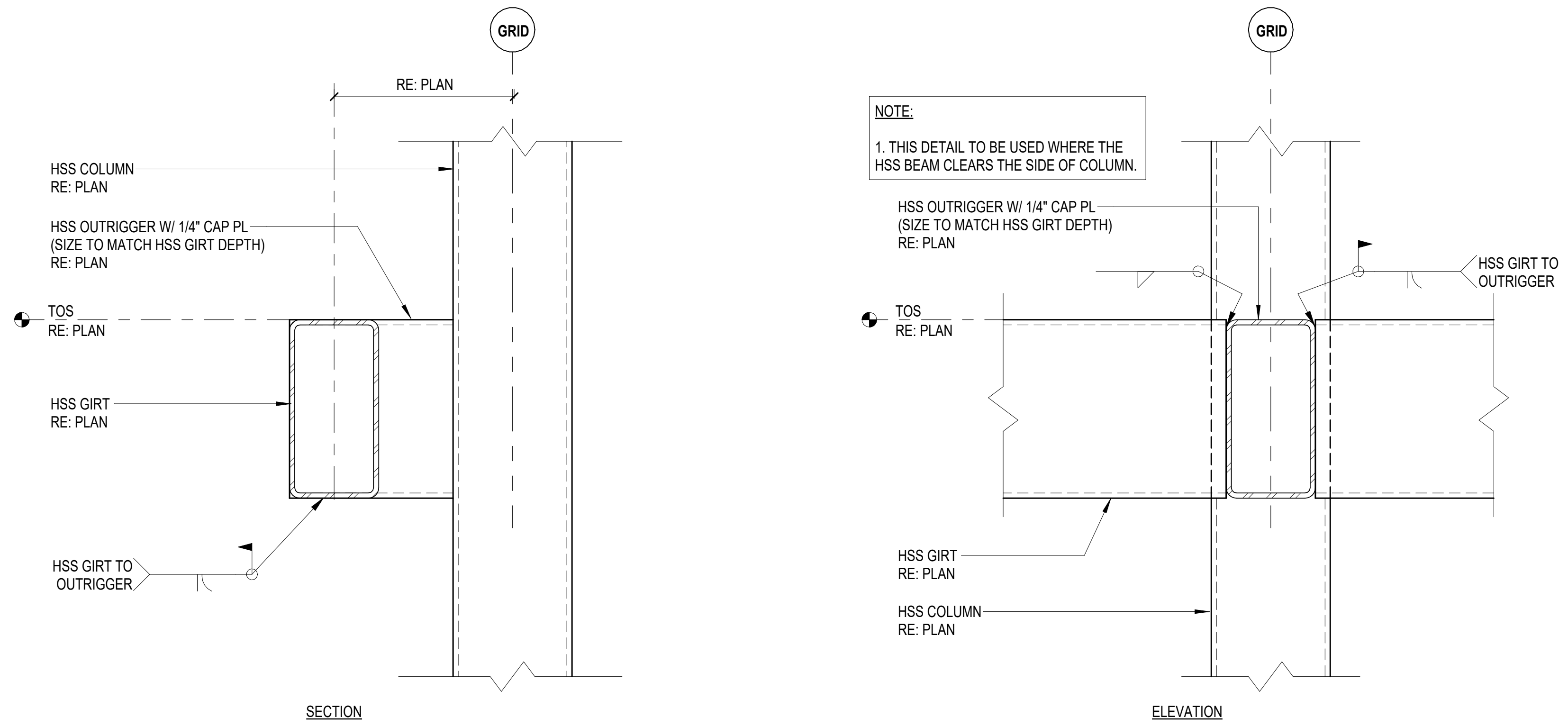
4 TYPICAL MOMENT CONNECTION (DIRECT WELDED)

1 1/2" = 1'-0"



5 TYPICAL METAL DECK SUPPORT @ COL

3/4" = 1'-0"



NOTE:

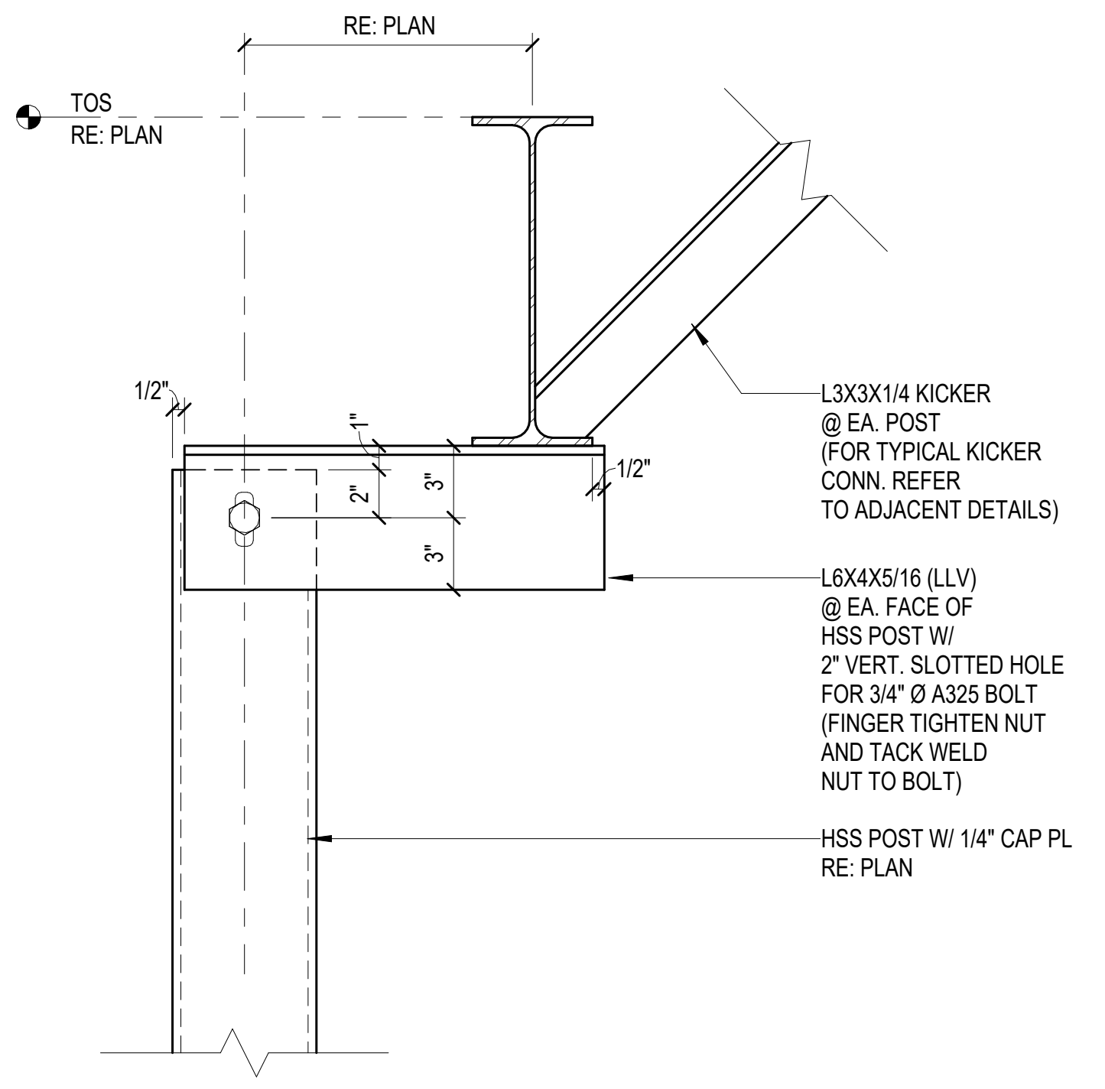
1. THIS DETAIL TO BE USED WHERE THE HSS BEAM CLEARS THE SIDE OF COLUMN.

SECTION

ELEVATION

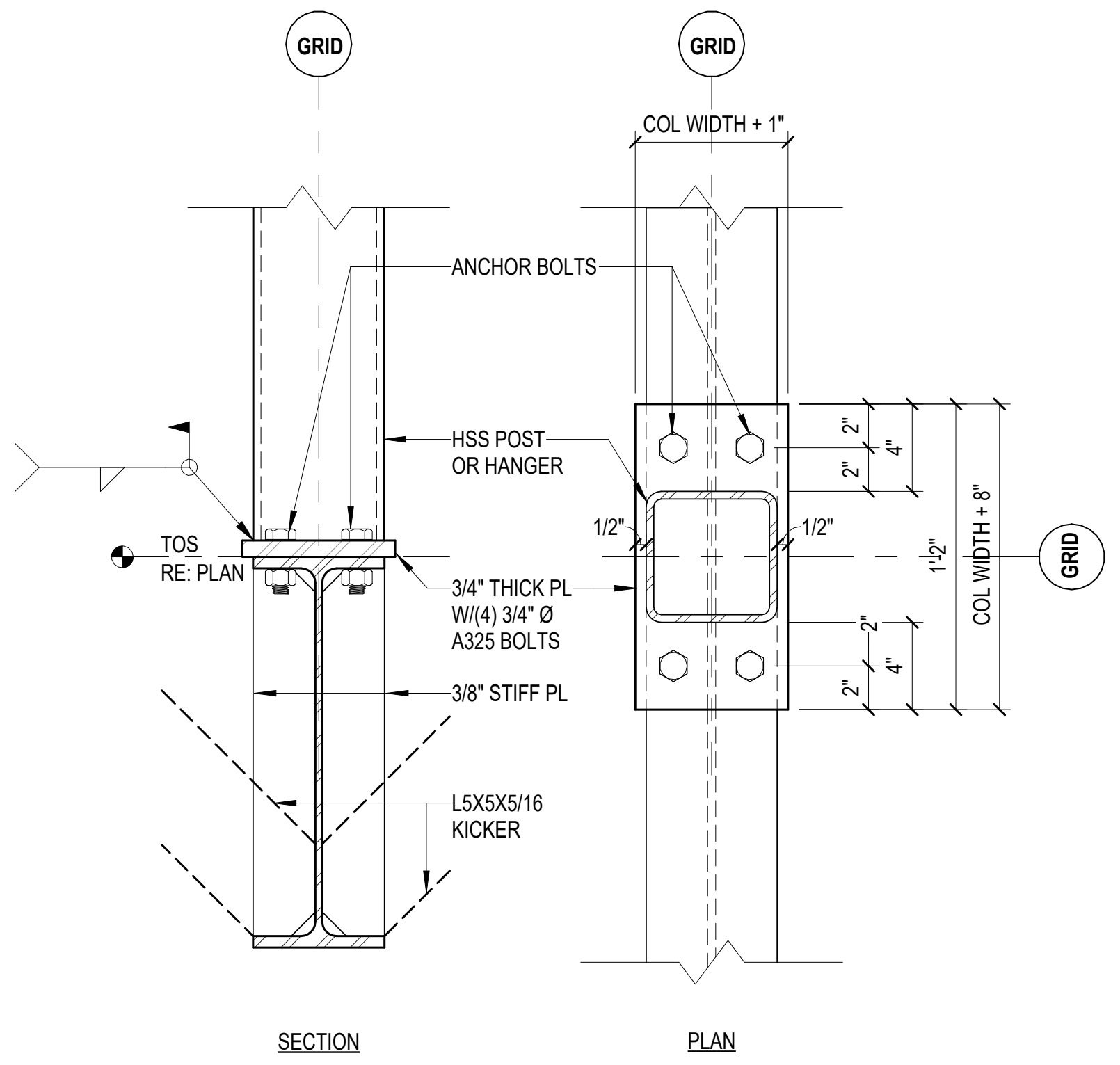
6 TYPICAL OFFSET HSS CONNECTION

1 1/2" = 1'-0"



7 TYPICAL HSS POST SLIP CONNECTION

1 1/2" = 1'-0"



SECTION

PLAN

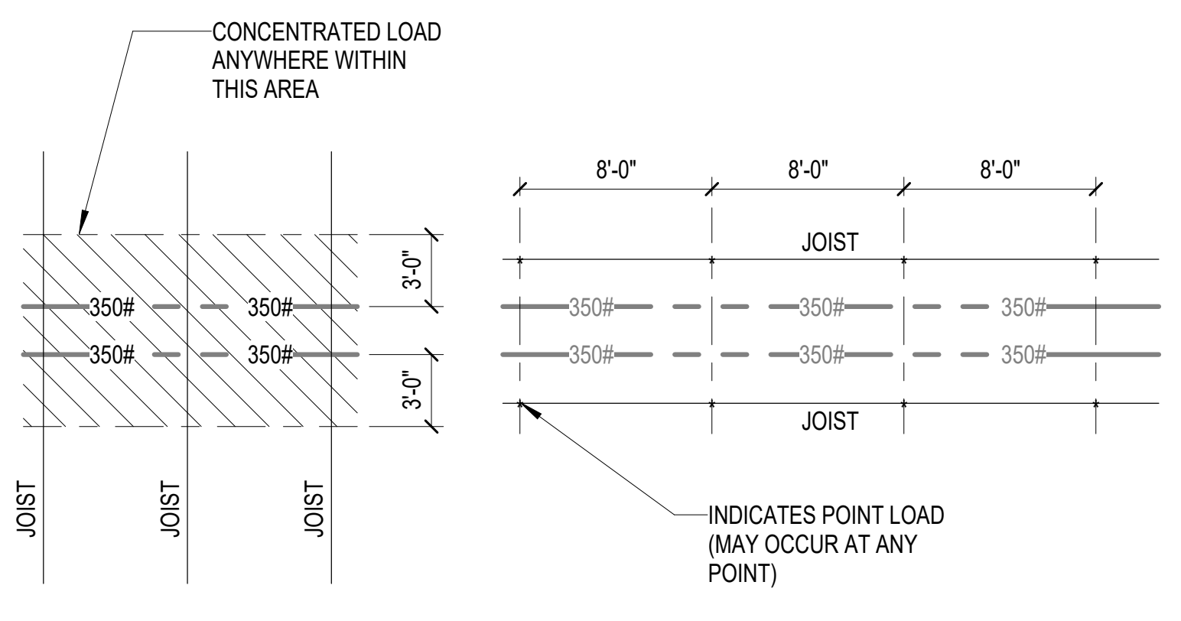
8 TYPICAL HSS POST OR HANGER CONNECTION

1 1/2" = 1'-0"

NOTES:

1. PIPE SUPPORTS TO BE PLACED AT 10'-0" MAX O.C WHERE PIPES RUN PARALLEL TO JOISTS. JOIST MANUF. TO DESIGN FOR POINT LOADS (PIPE RUN PLF x 10') ALONG JOIST SPAN @10' MAX O.C FOR WORST LOAD CONDITION.

2. WHERE PIPES RUN PERPENDICULAR TO JOISTS, PIPE SUPPORTS TO PLACED AT ALTERNATE JOIST MAX. JOIST MANUFACTURER TO DESIGN FOR A POINT LOAD WITH 12' TRIB (PIPE RUN PLF x 12') ALONG THE PIPE RUNS.

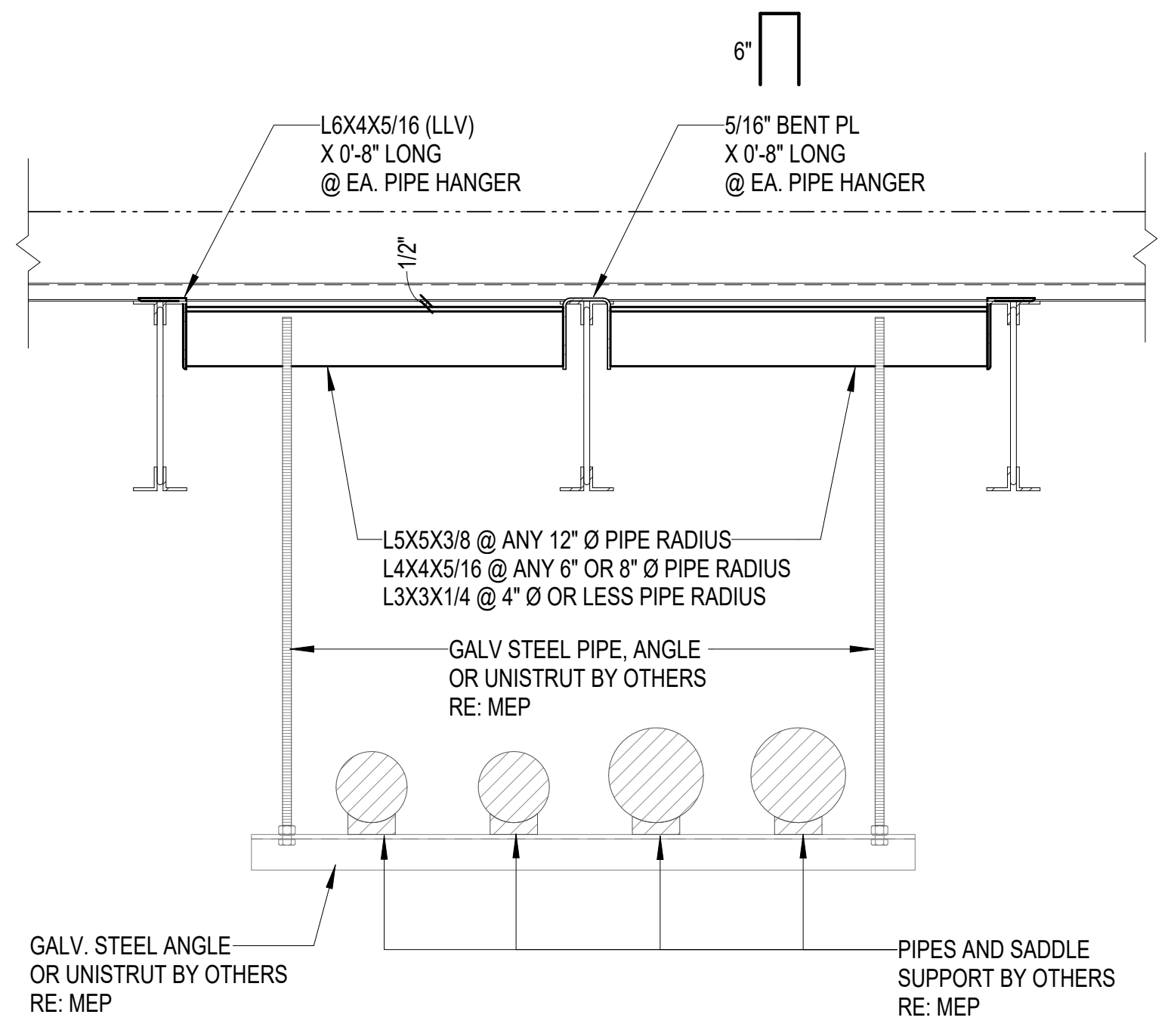


WHERE JOISTS ARE PERINDICULAR, DESIGN FOR CONCENTRATED LOAD INDICATED TO BE ANYWHERE WITHIN 3'-0" FROM THE EDGE OF PIPES.

WHERE JOISTS ARE PARALLEL, DESIGN FOR ADDITIONAL CONCENTRATED LOADS AS INDICATED @ 8'-0" OC MAX ALONG JOIST FOR THE WORST CASE LOADING CONDITION. IF LOAD IS OFFSET FROM PANEL POINT

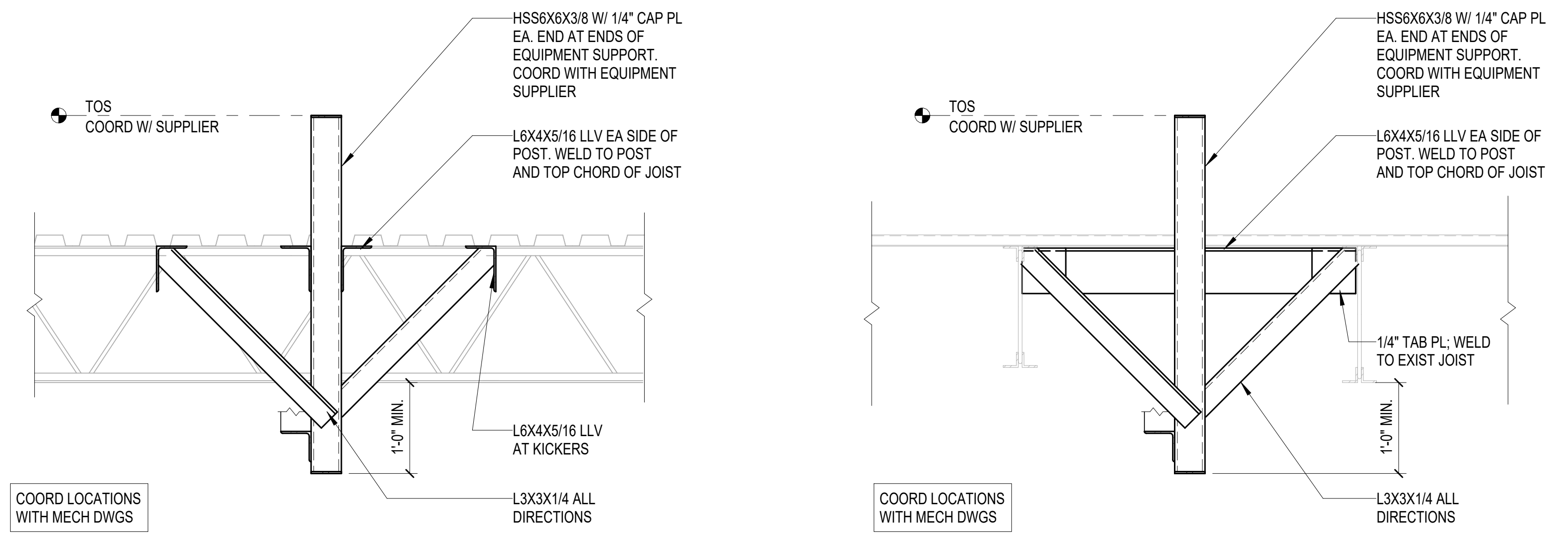
9 TYPICAL PIPE LOADING DIAGRAM

1/8" = 1'-0"



10 TYPICAL PIPE HANGER DETAIL

3/4" = 1'-0"



COORD LOCATIONS WITH MECH DWGS

EXPOSED STEEL TO BE STAINLESS STEEL (TYP)

COORD LOCATIONS WITH MECH DWGS

EXPOSED STEEL TO BE STAINLESS STEEL (TYP)

11 TYPICAL MINI SPLIT JOIST SUPPORT

3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

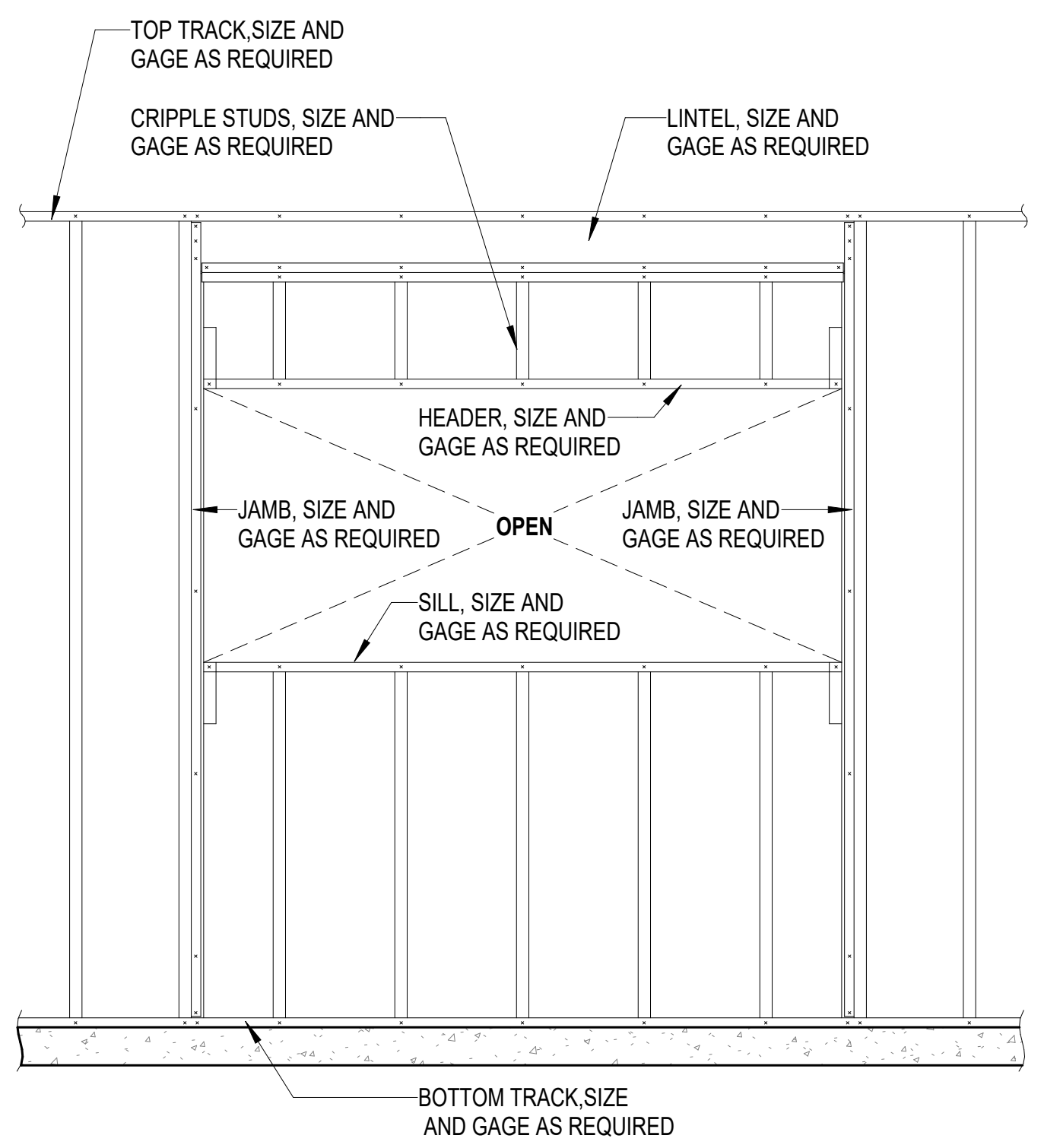
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

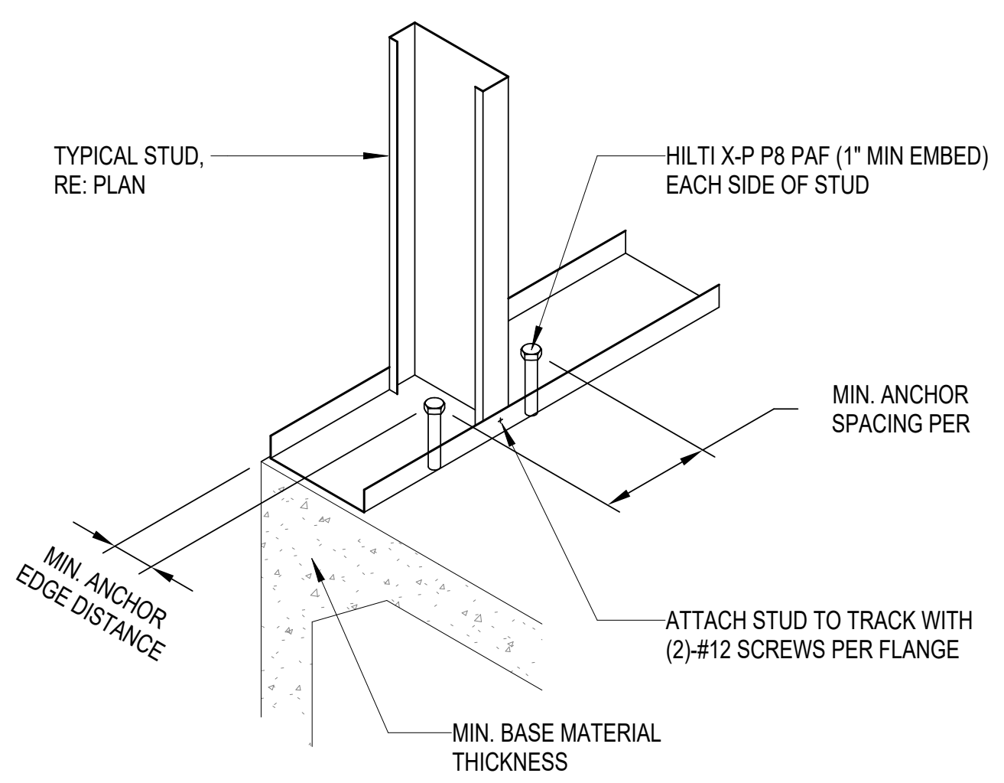
TYPICAL STEEL DETAILS

S501

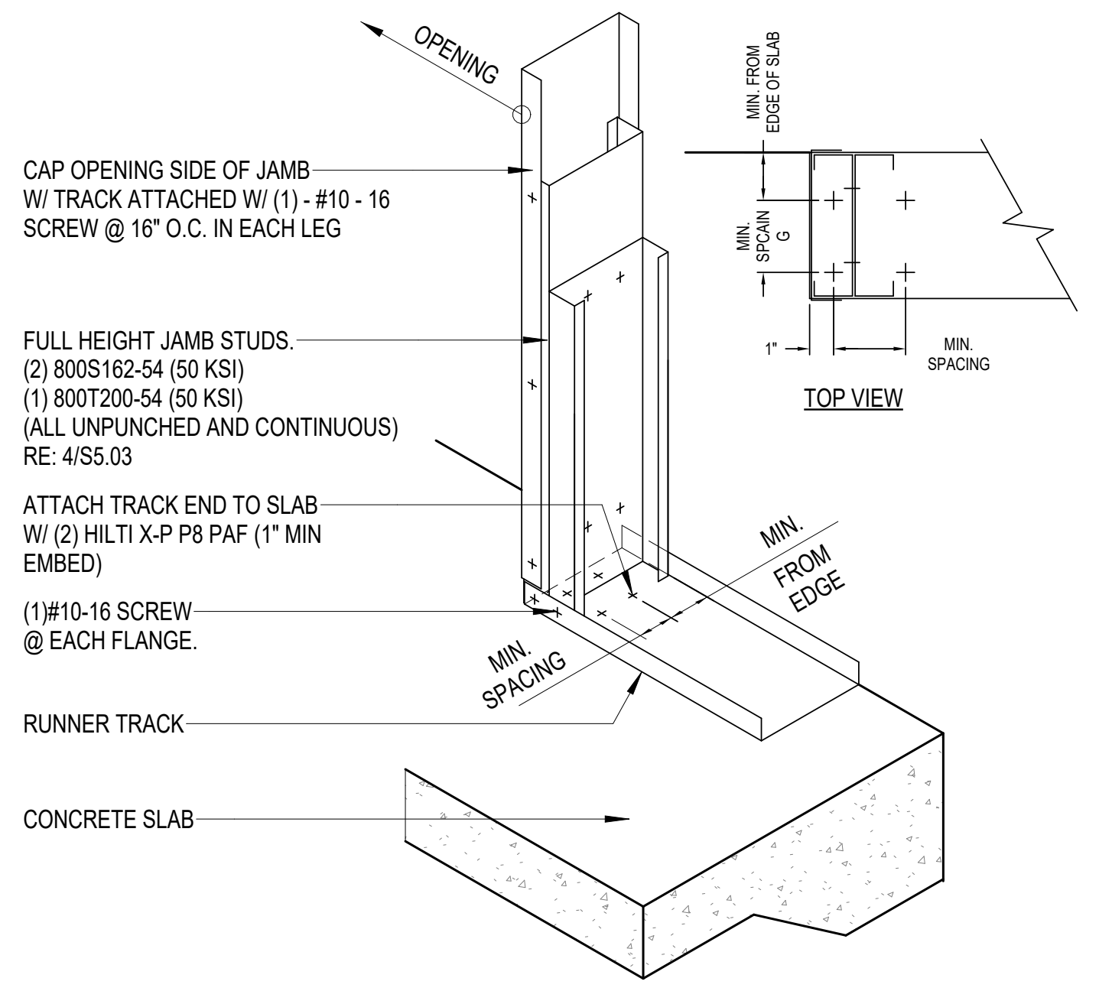
of



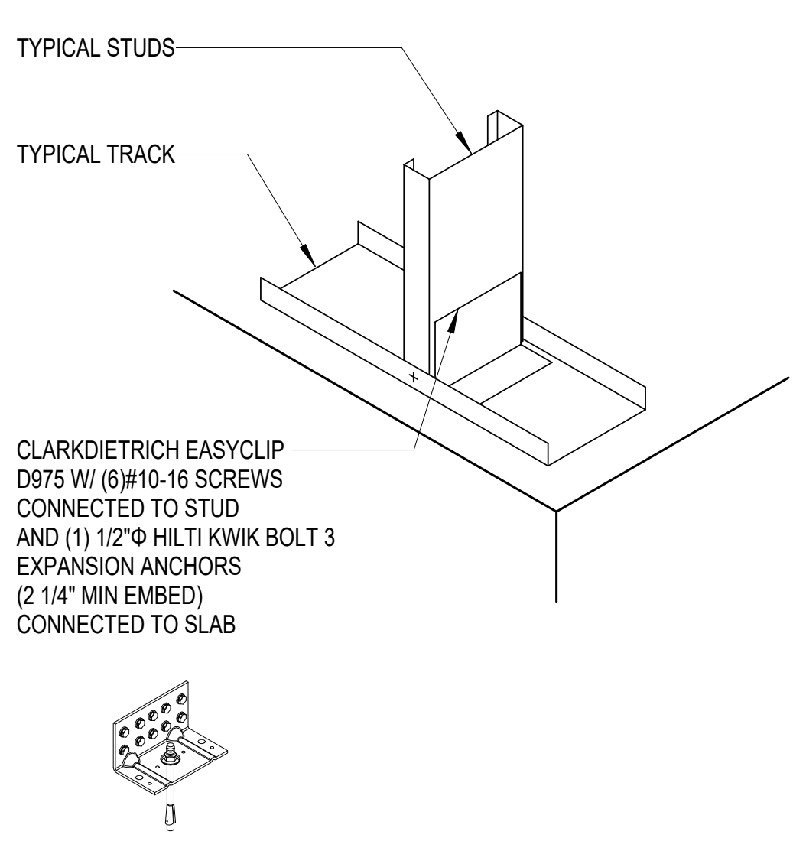
1 TYPICAL CFMF WALL FRAMING ELEVATION
3/4" = 1'-0"



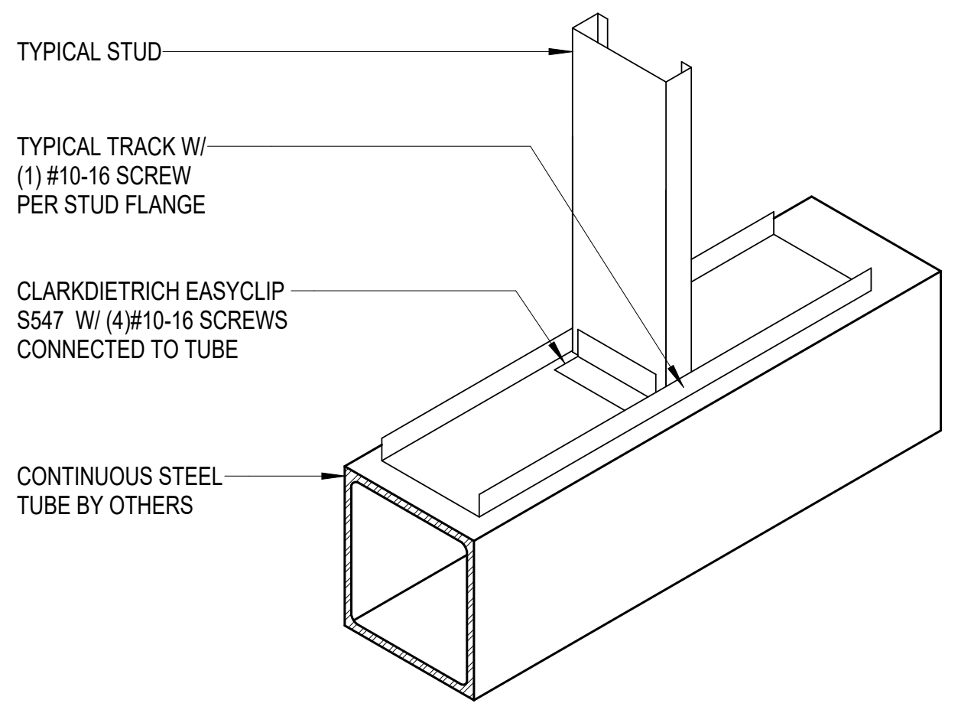
2 TYPICAL CFMF STUD TRACK CONNECTION @ SOG
3/4" = 1'-0"



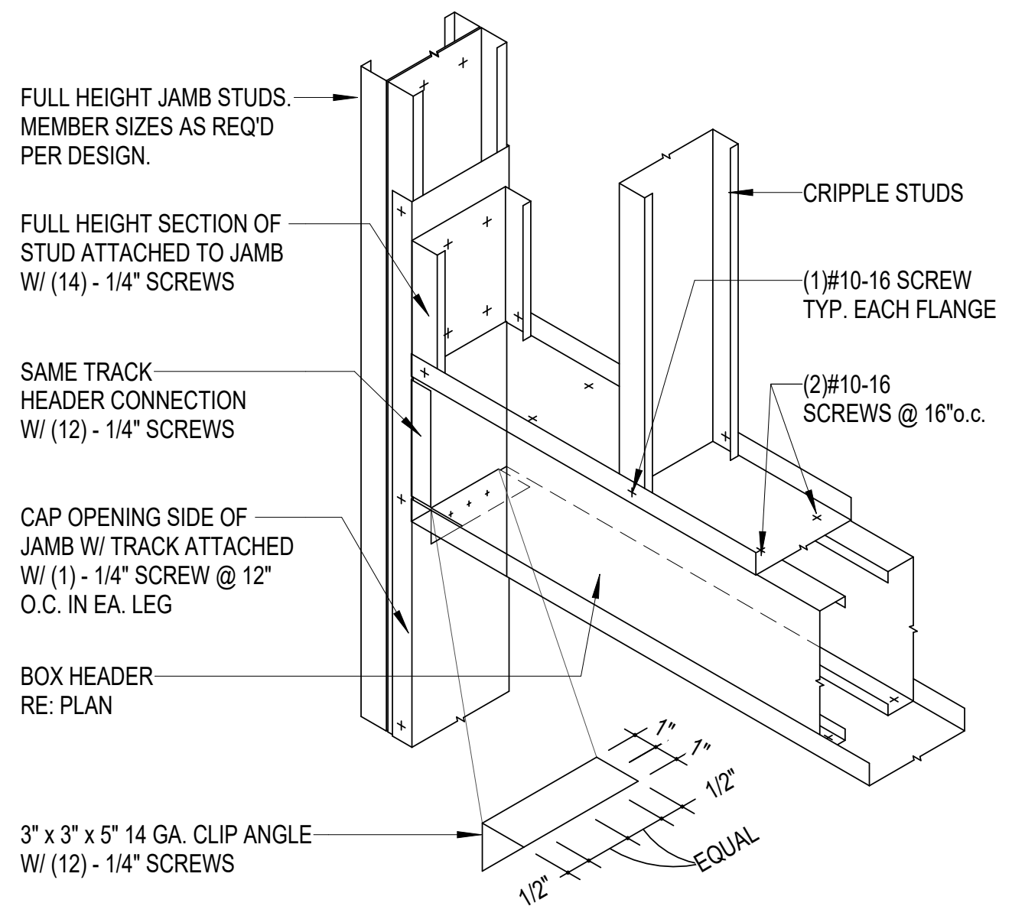
3 TYPICAL KING POST ANCHORAGE
3/4" = 1'-0"



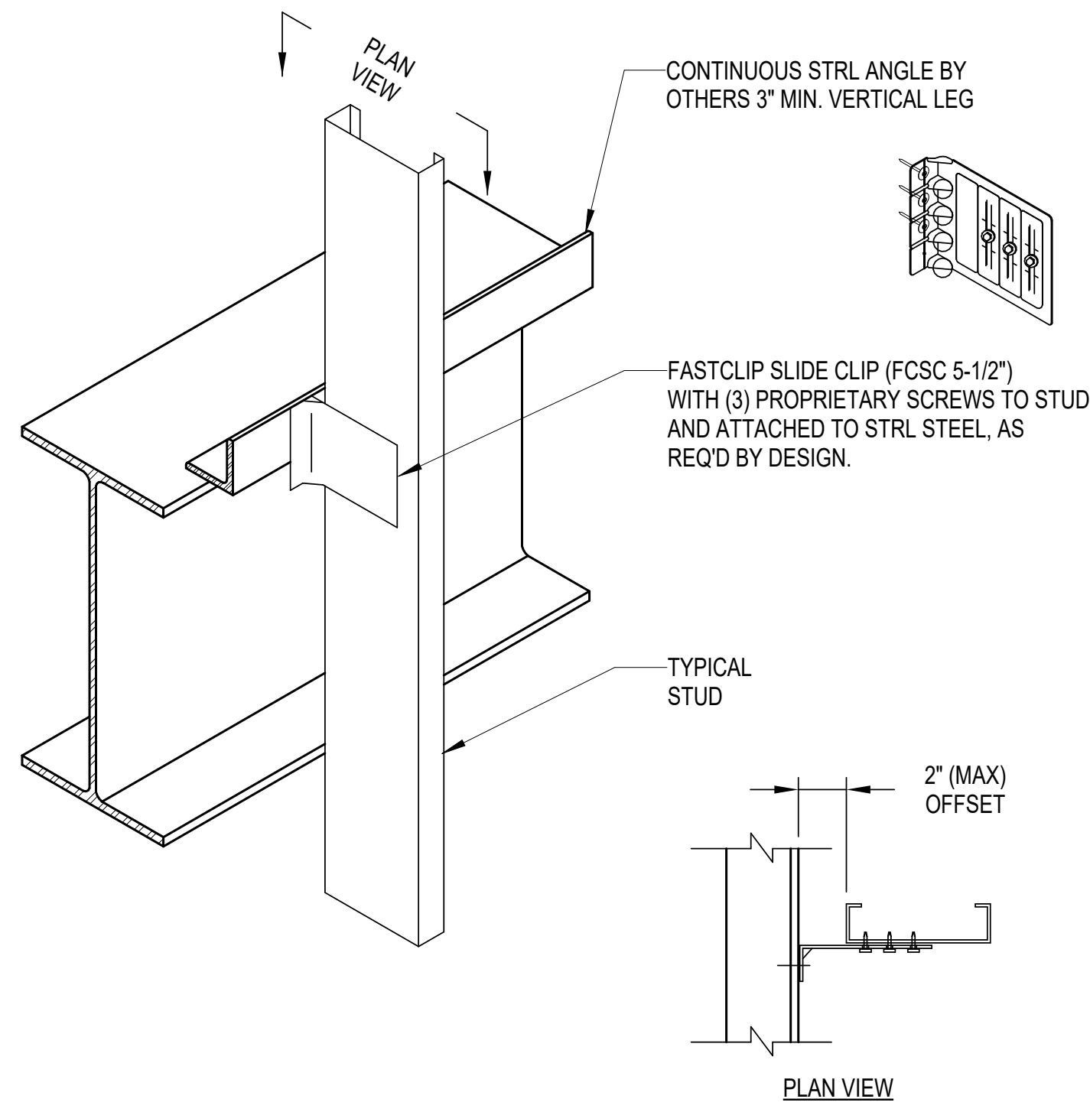
4 TYPICAL KING POST ANCHORAGE
3/4" = 1'-0"



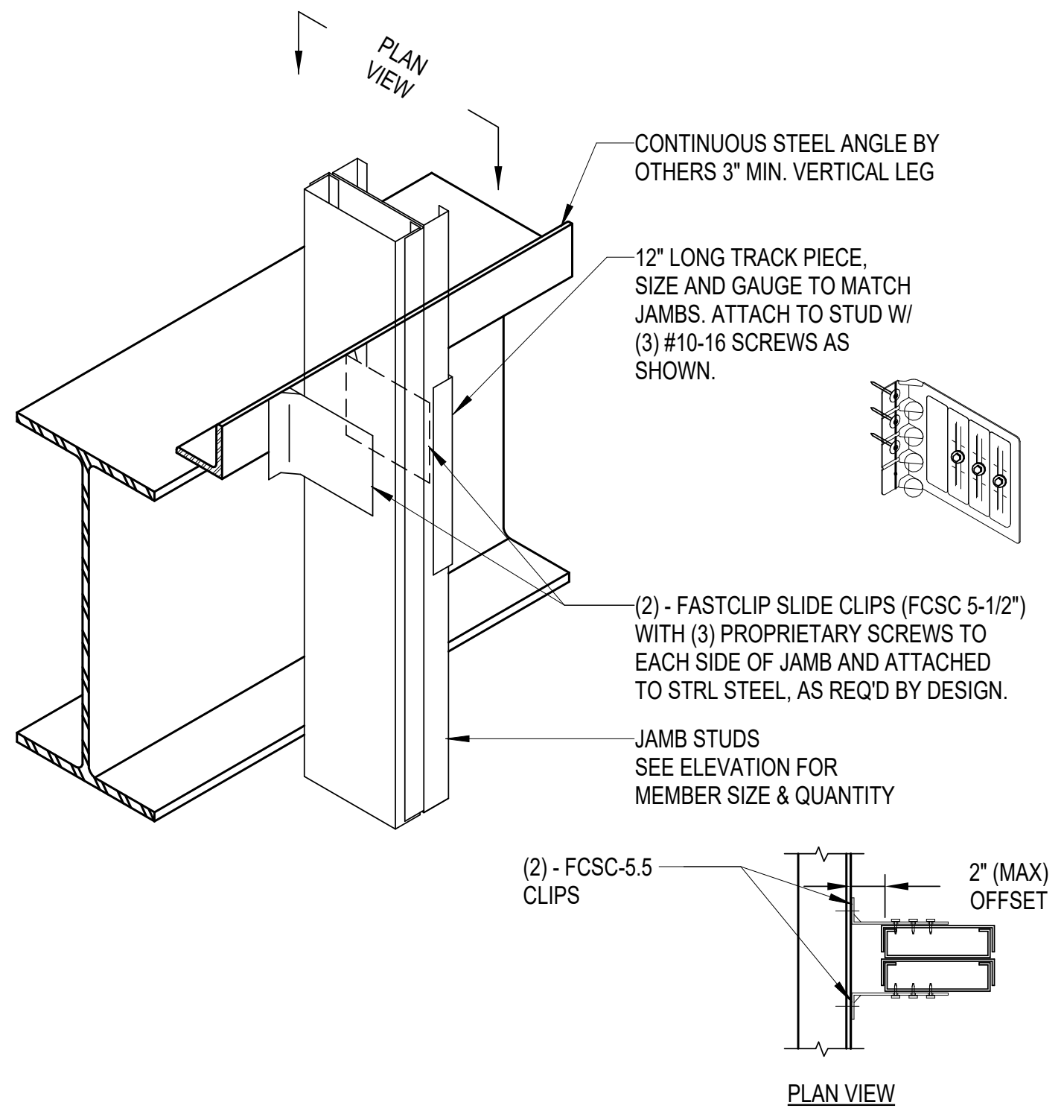
5 TYPICAL CFMF TRACK CONNECTION @ HSS
3/4" = 1'-0"



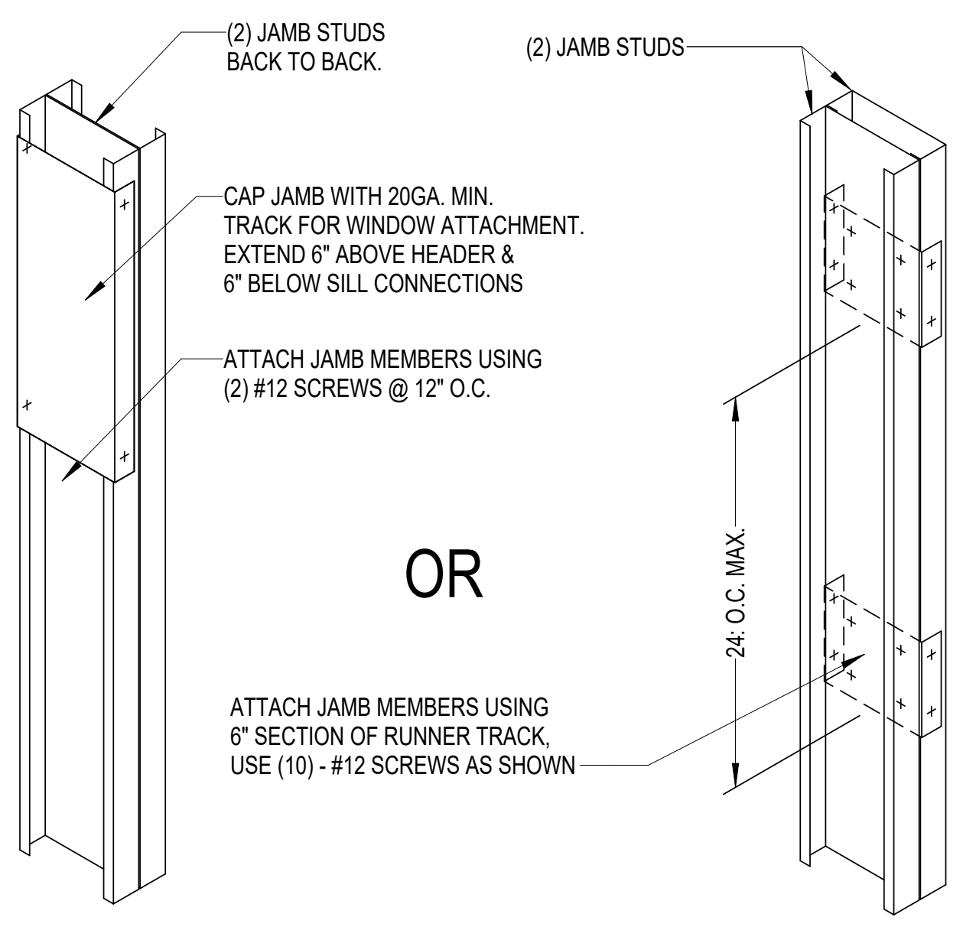
6 TYPICAL CFMF BOX BEAM CONNECTION
3/4" = 1'-0"



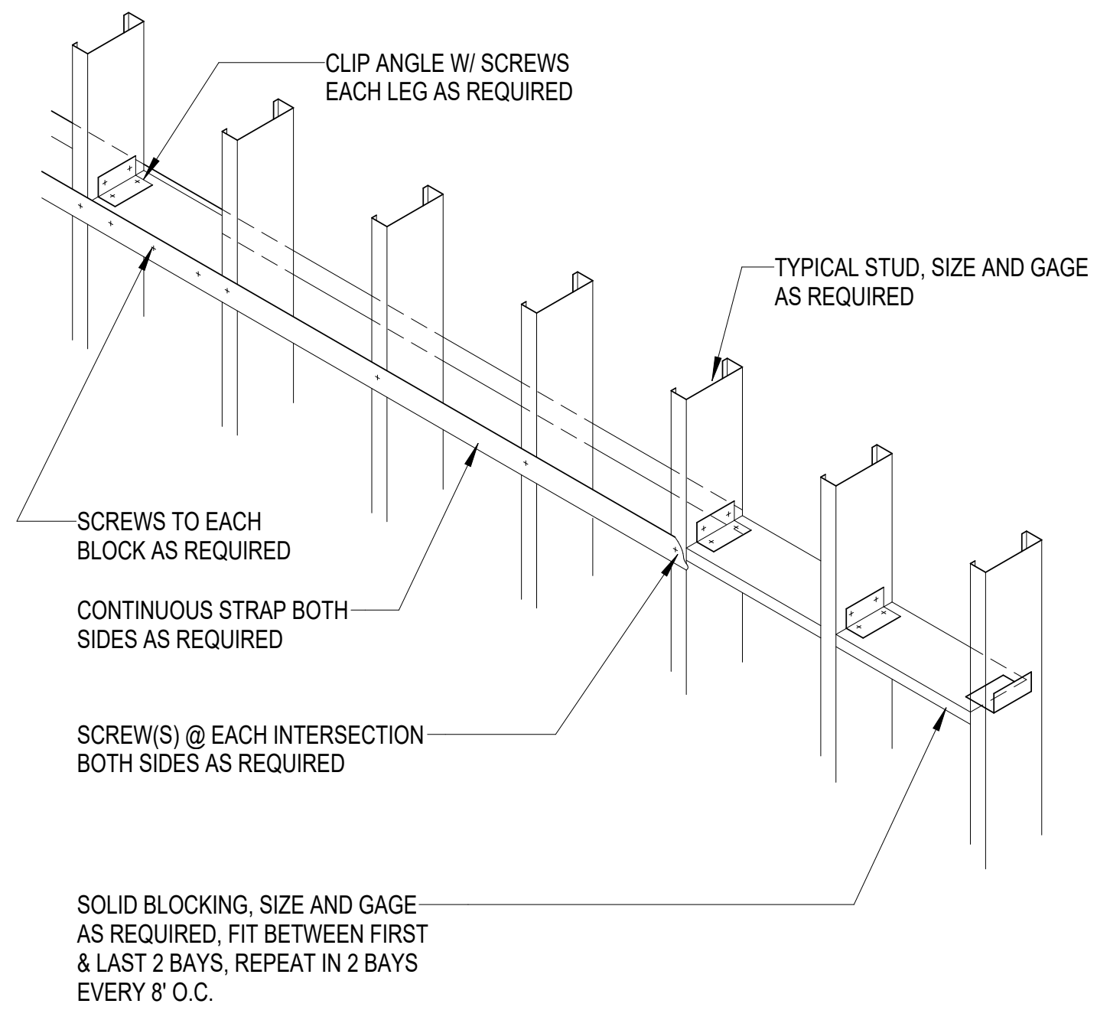
7 TYPICAL CFMF STUD CONNECTION W/ FCSC CLIP
3/4" = 1'-0"



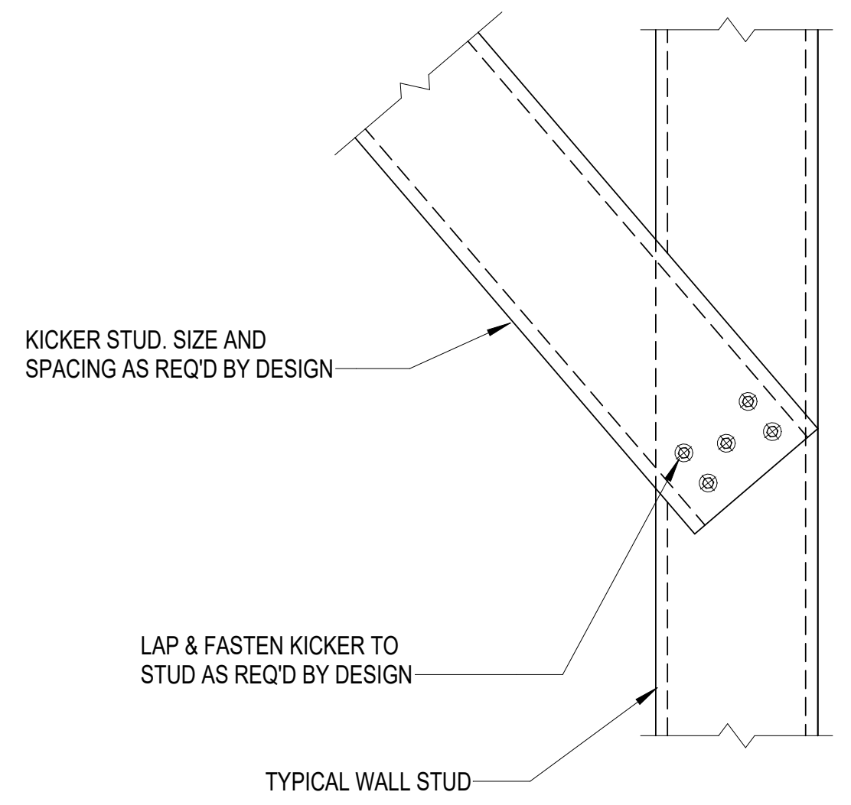
8 TYPICAL KING POST CONNECTION W/ FCSC CLIP
3/4" = 1'-0"



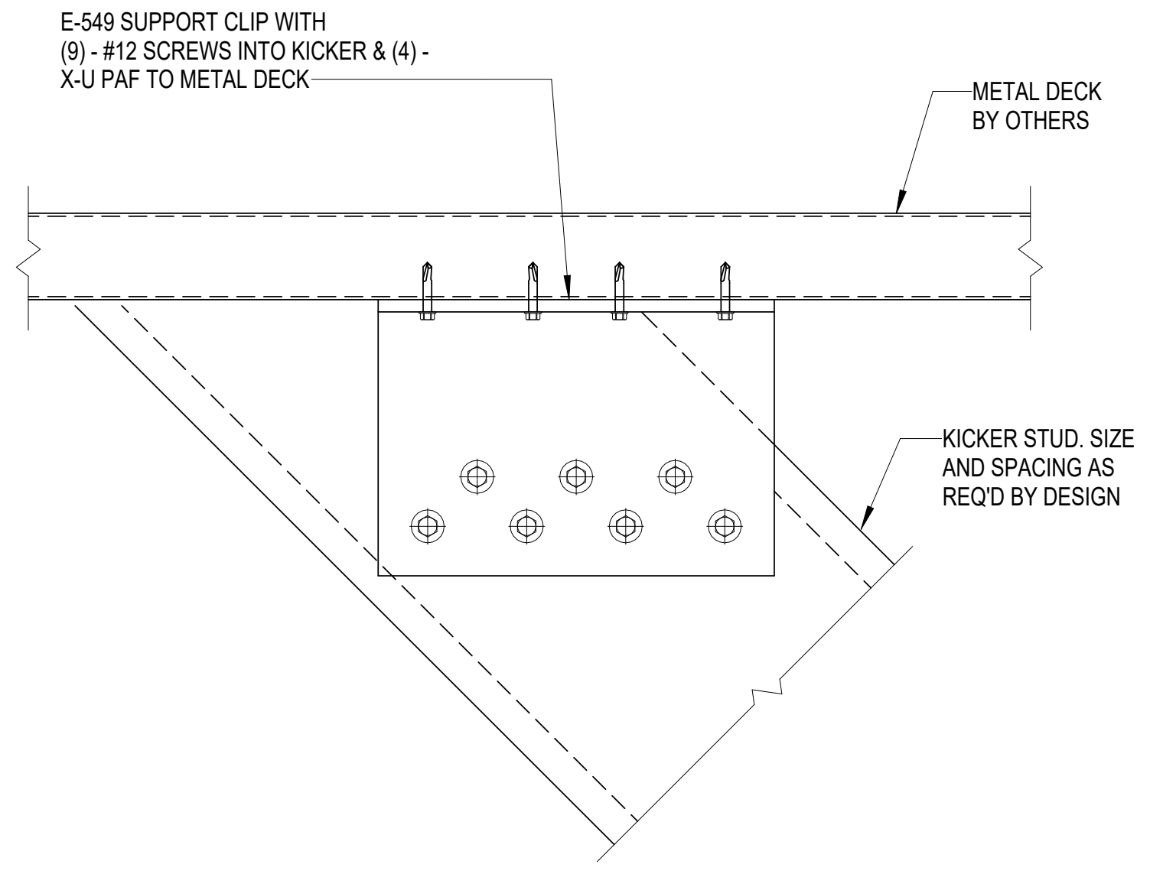
9 TYPICAL CFMF TIED JAMB STUDS
3/4" = 1'-0"



10 TYPICAL CFMF UNPUNCHED STUD BRACING
3/4" = 1'-0"



11 TYPICAL CFMF KICKER
3/4" = 1'-0"



12 TYPICAL CFMF KICKER CONNECTION @ METAL DECK
3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

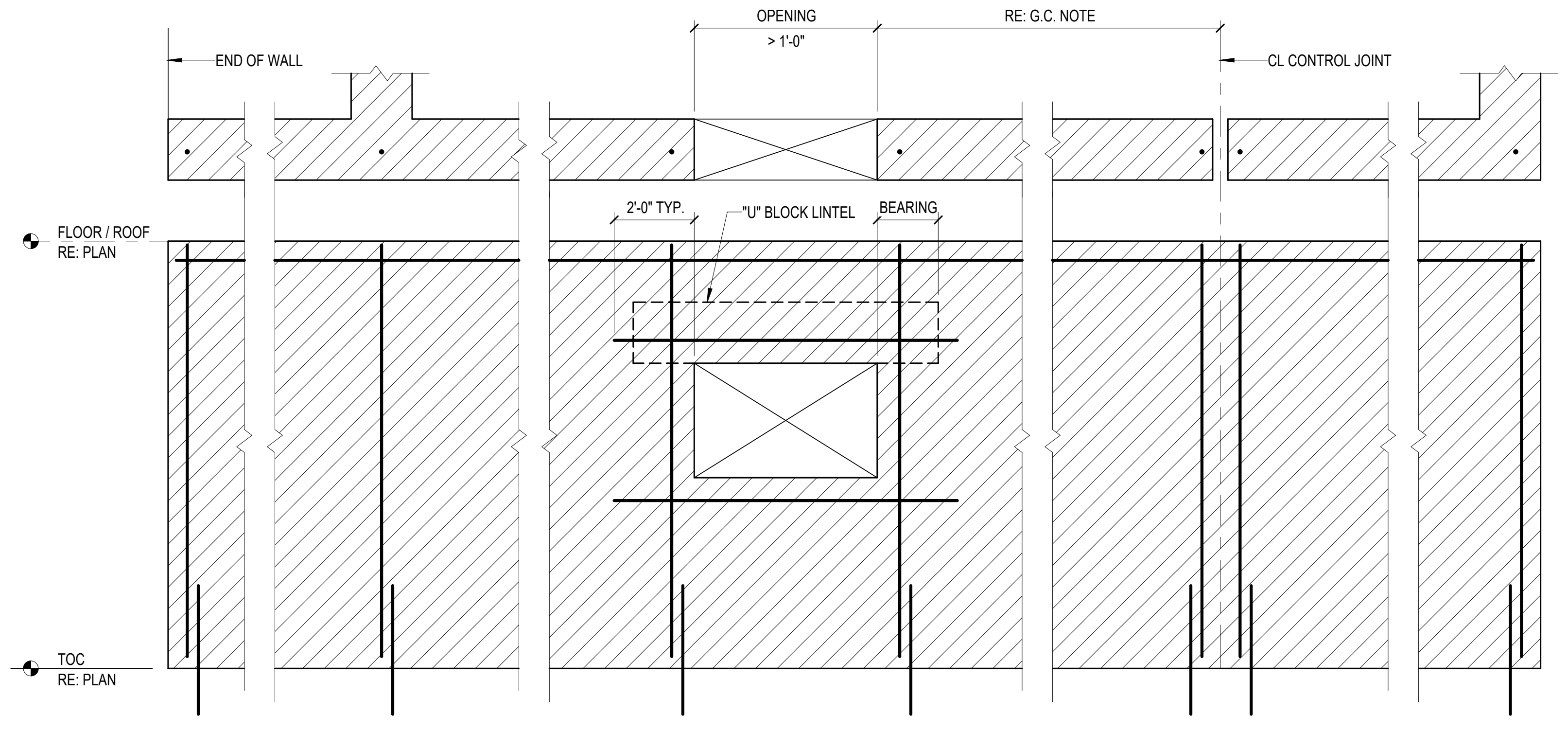
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: JT

TYPICAL COLD FORMED METAL FRAMING DETAILS

S502
of



1 TYPICAL CMU WALL ELEVATION
3/4" = 1'-0"

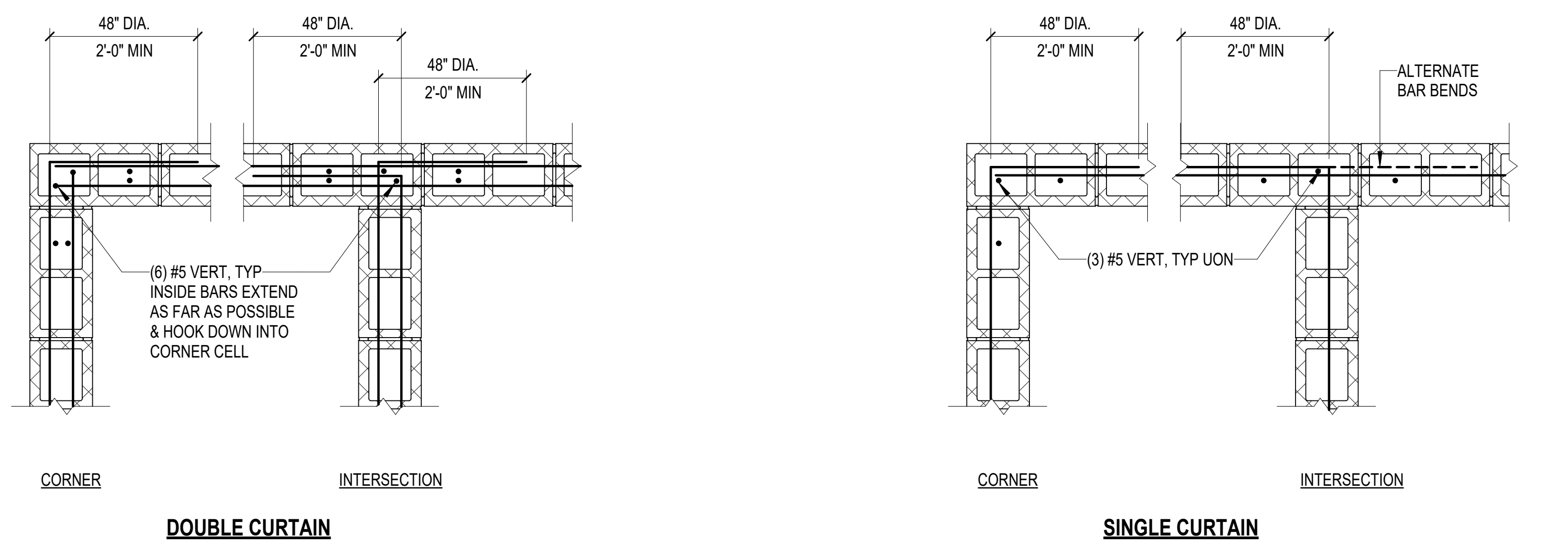
TYPICAL REINFORCED MASONRY NOTES

TYPICAL HORIZONTAL AND VERTICAL REINFORCING BARS SHALL BE AS NOTED ON THE PLAN SHEET. ADDITIONAL REINFORCING SHALL BE AS FOLLOWS

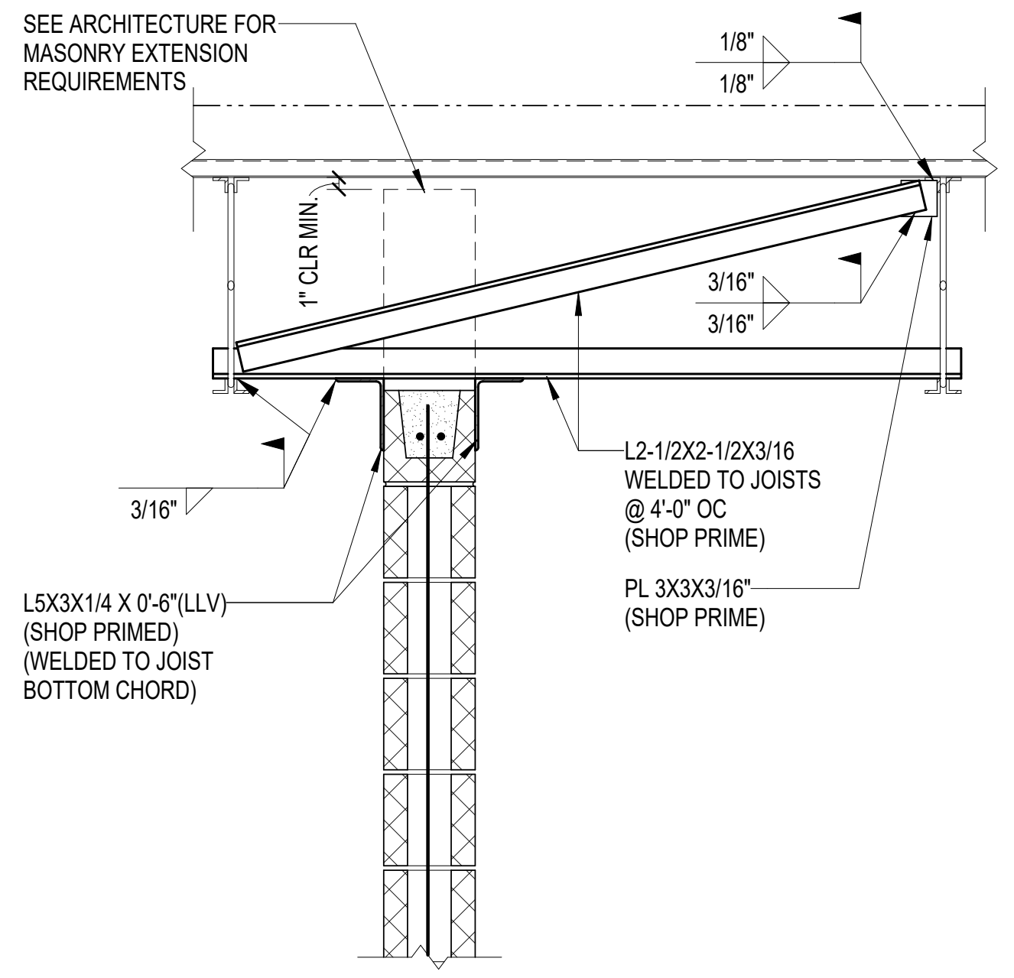
1. (2) #5 VERTICAL REINFORCING BARS SHALL BE PROVIDED, CONTINUOUSLY FROM SUPPORT TO SUPPORT (FINISHED FLOOR TO ROOF) AT:
   - A. WITHIN 8" OF EACH END OF WALL
   - B. EACH WALL INTERSECTION
   - C. WITHIN 16" OF EACH SIDE OF A MASONRY OPENING .
   - D. WITHIN 8" OF EACH SIDE OF A MASONRY MOVEMENT JOINTS
   - E. EACH CORNER OF THE BUILDING
   - F. AT 32" OC, FULL HEIGHT
2. (2) #5 HORIZONTAL REINFORCING BARS SHALL BE PROVIDED AT:
   - A. TOP AND BOTTOM OF MASONRY OPENINGS
   - B. FLOOR AND ROOF LEVELS, CONTINUOUS
   - C. WITHIN 16" OF THE TOP OF MASONRY WALLS, CONTINUOUS.
   - D. 8'-0" OC

GC NOTE:
DO NOT LOCATE CONTROL JOINTS WITHIN HALF THE LENGTH OF THE LINTEL (2'-0" MIN) ADJACENT TO THE ROUGH OPENING.

ALL HORIZONTAL REINFORCING WILL BE CONTINUOUS ACROSS CONTROL JOINTS



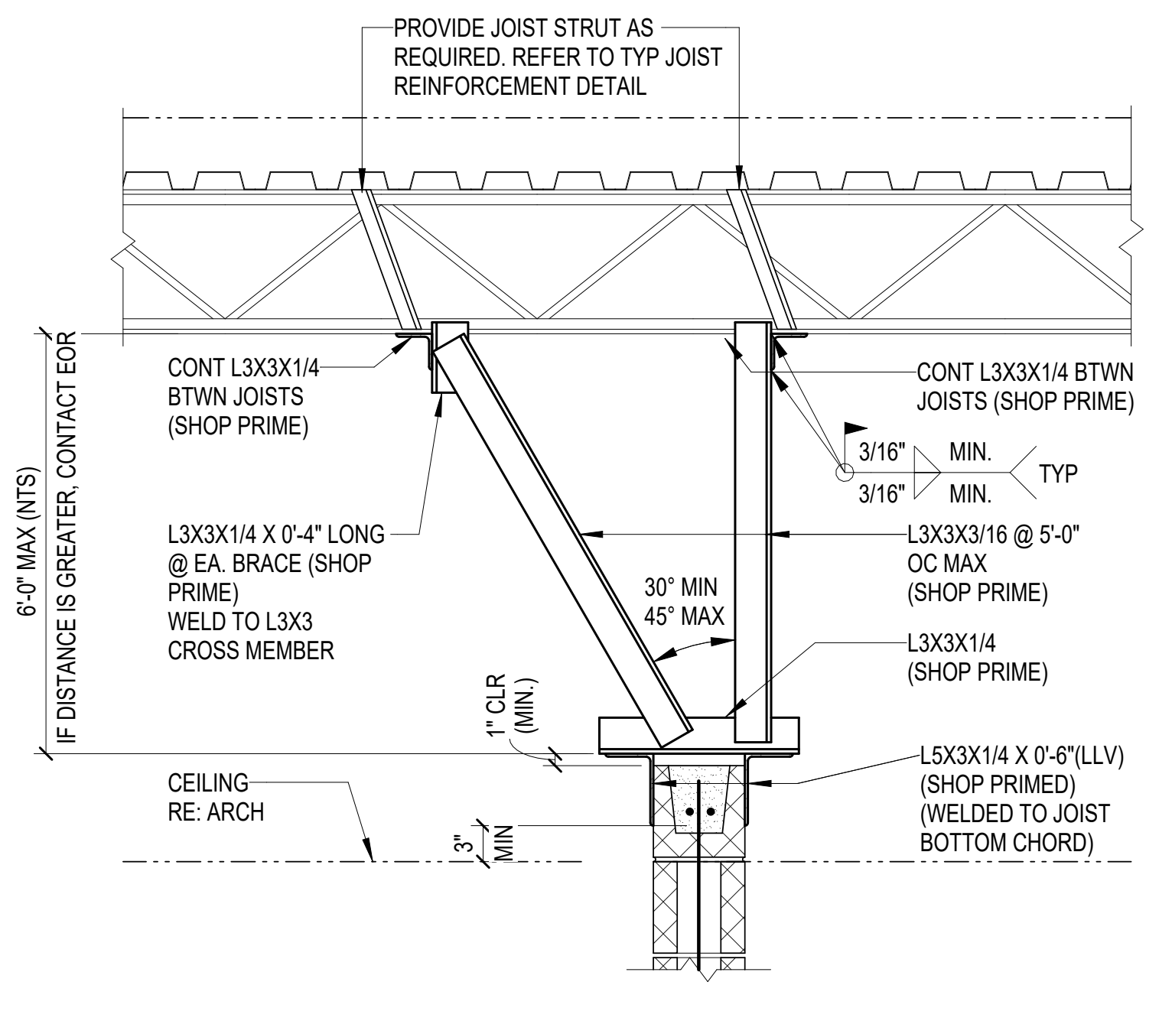
2 TYPICAL CMU WALL INTERSECTION
3/4" = 1'-0"



NOTE:

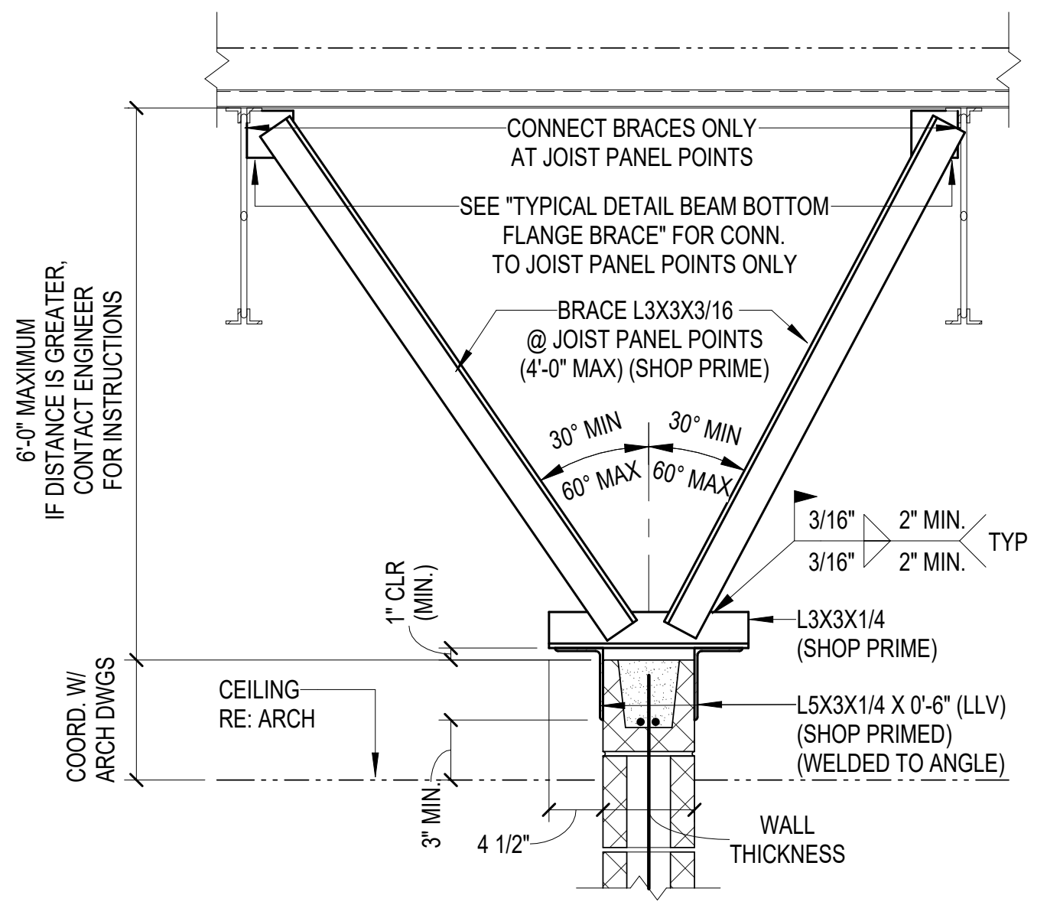
1. THIS DETAIL IS TO BE USED ONLY IF INTEGRAL INTERSECTING SUPPORT WALLS AT EACH END EXCEED A SPACING OF 36 TIMES THE NOMINAL WALL THICKNESS.

3 TYPICAL NON-LOAD BEARING CMU BRACING
3/4" = 1'-0"



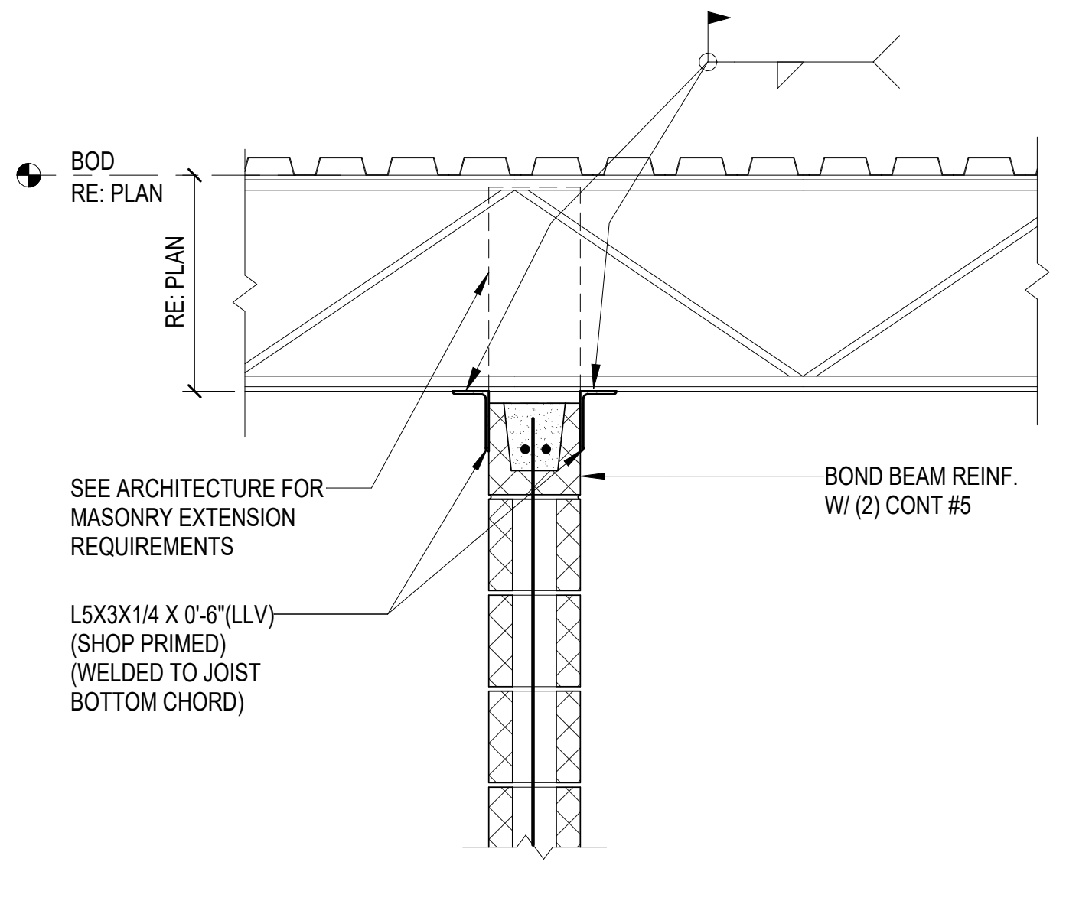
NOTE:
THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 36 TIMES THE NOMINAL WALL THICKNESS.

4 TYPICAL NON-LOAD BEARING CMU BRACING
3/4" = 1'-0"



NOTE:
THIS DETAIL IS TO BE USED ONLY IF INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 36 TIMES THE NOMINAL WALL THICKNESS.

5 TYPICAL NON-LOAD BEARING CMU BRACING
3/4" = 1'-0"

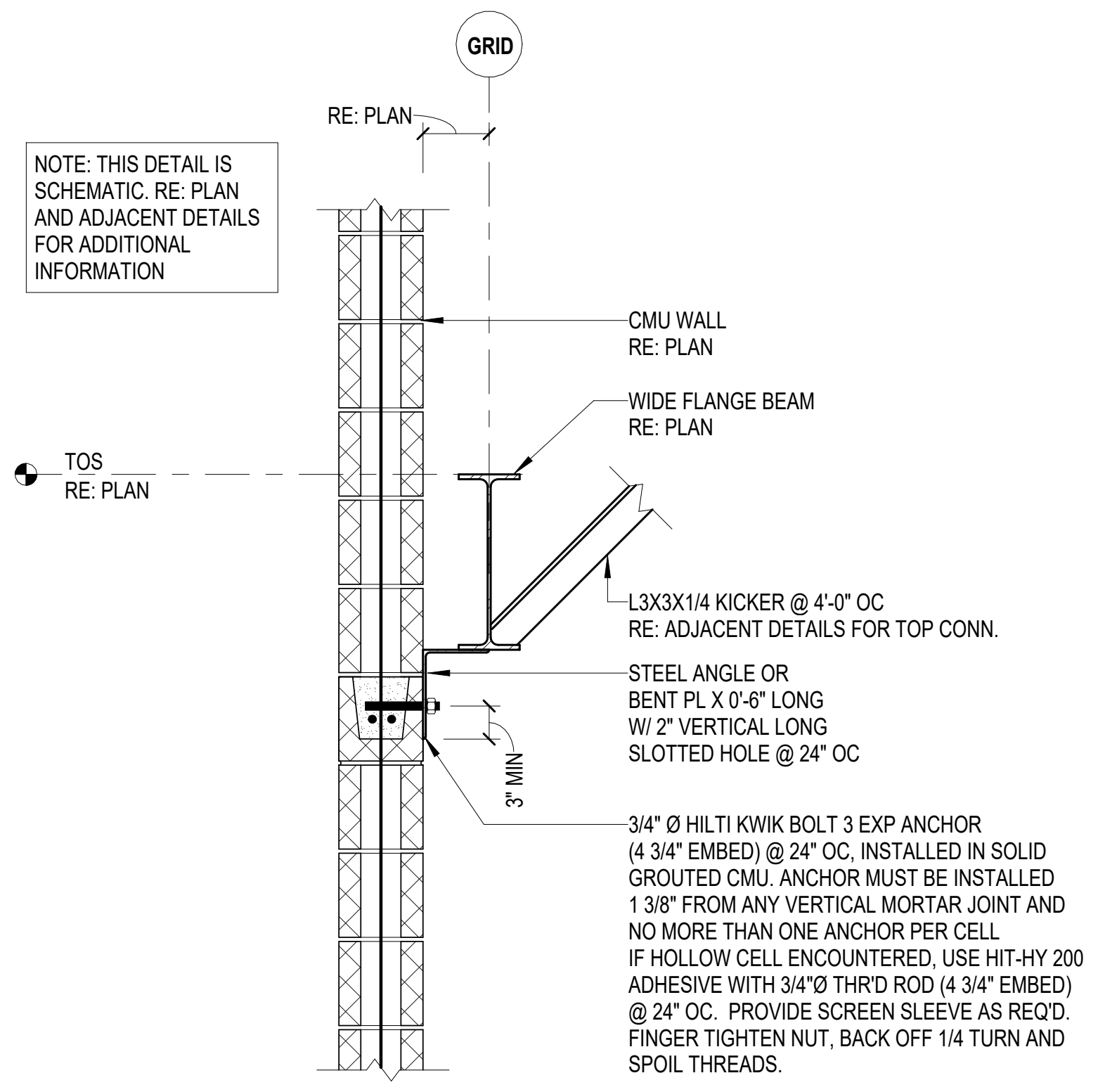


NOTE:

1. THIS DETAIL IS TO BE USED ONLY IF INTEGRAL INTERSECTING SUPPORT WALLS AT EACH END EXCEED A SPACING OF 36 TIMES THE NOMINAL WALL THICKNESS.

6 TYPICAL NON-LOAD BEARING CMU BRACING
3/4" = 1'-0"

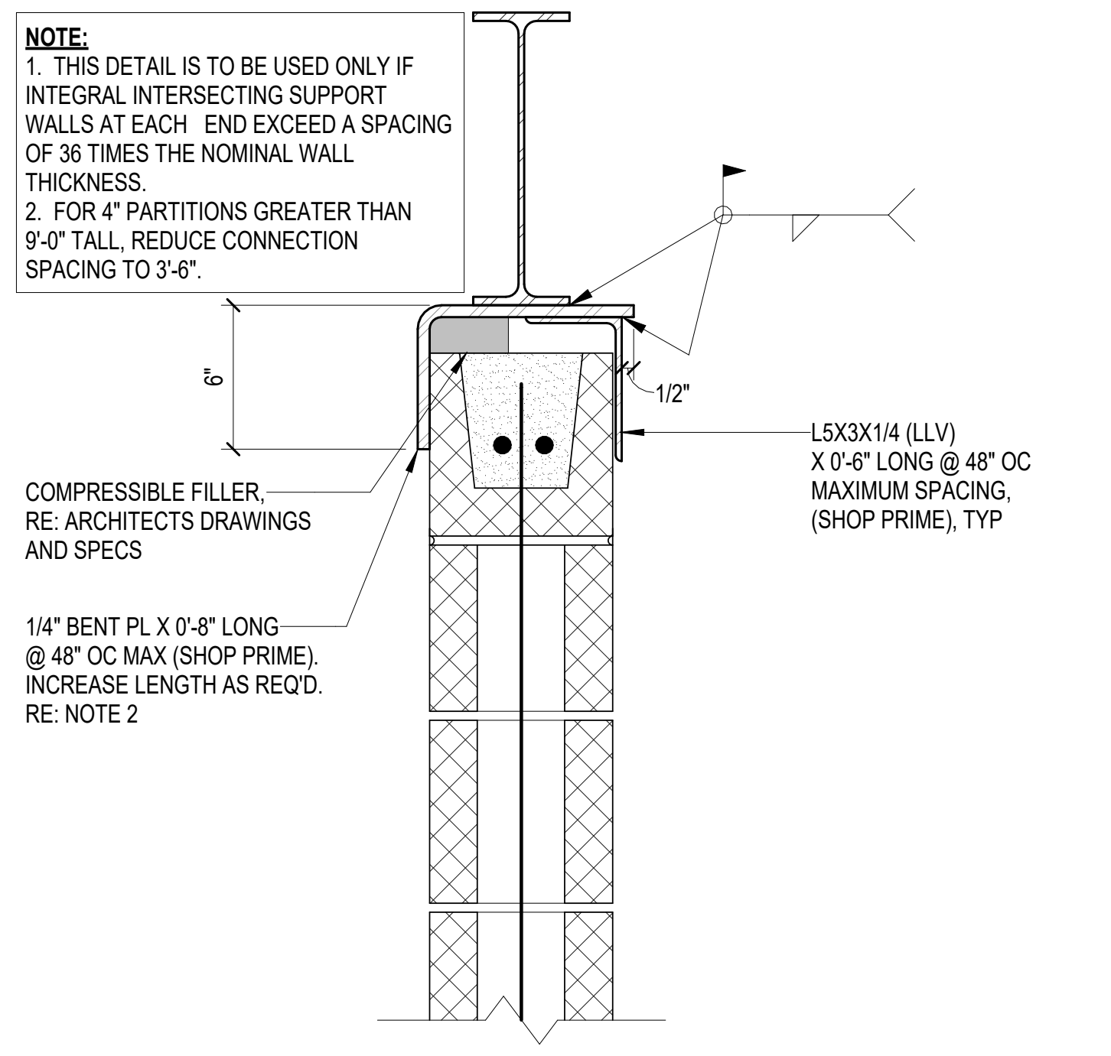
NOTE: THIS DETAIL IS SCHEMATIC. RE: PLAN AND ADJACENT DETAILS FOR ADDITIONAL INFORMATION



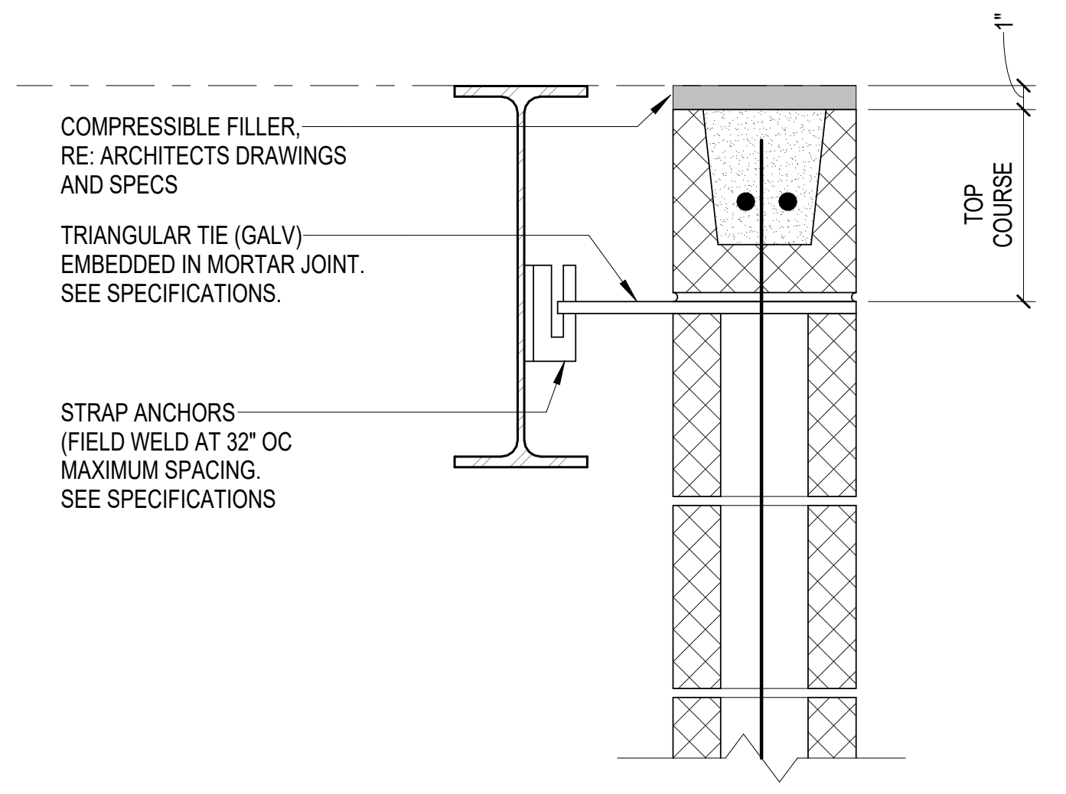
3/4" Ø HILTI KWIK BOLT 3 EXP ANCHOR (4 3/4" EMBED) @ 24" OC, INSTALLED IN SOLID GROUTED CMU. ANCHOR MUST BE INSTALLED 1 3/8" FROM ANY VERTICAL MORTAR JOINT AND NO MORE THAN ONE ANCHOR PER CELL
IF HOLLOW CELL ENCOUNTERED, USE HIT-HY 200 ADHESIVE WITH 3/4"Ø THR'D ROD (4 3/4" EMBED) @ 24" OC. PROVIDE SCREEN SLEEVE AS REQ'D. FINGER TIGHTEN NUT, BACK OFF 1/4 TURN AND SPOIL THREADS.

7 TYPICAL CMU CLIP @ WF BEAM
3/4" = 1'-0"

NOTE:
1. THIS DETAIL IS TO BE USED ONLY IF INTEGRAL INTERSECTING SUPPORT WALLS AT EACH END EXCEED A SPACING OF 36 TIMES THE NOMINAL WALL THICKNESS.
2. FOR 4" PARTITIONS GREATER THAN 9'-0" TALL, REDUCE CONNECTION SPACING TO 3'-6".



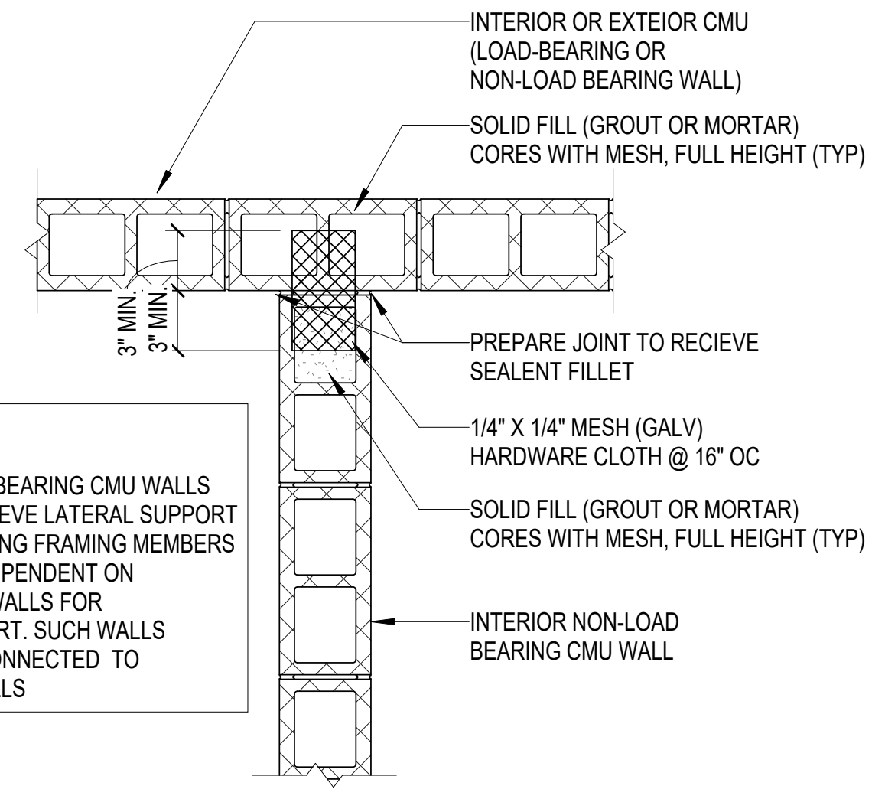
8 TYPICAL NON-LOAD BEARING CMU BRACING
1 1/2" = 1'-0"



NOTE:

1. THIS DETAIL IS TO BE USED ONLY IF INTEGRAL INTERSECTING SUPPORT WALLS AT EACH END EXCEED A SPACING OF 36 TIMES THE NOMINAL WALL THICKNESS.

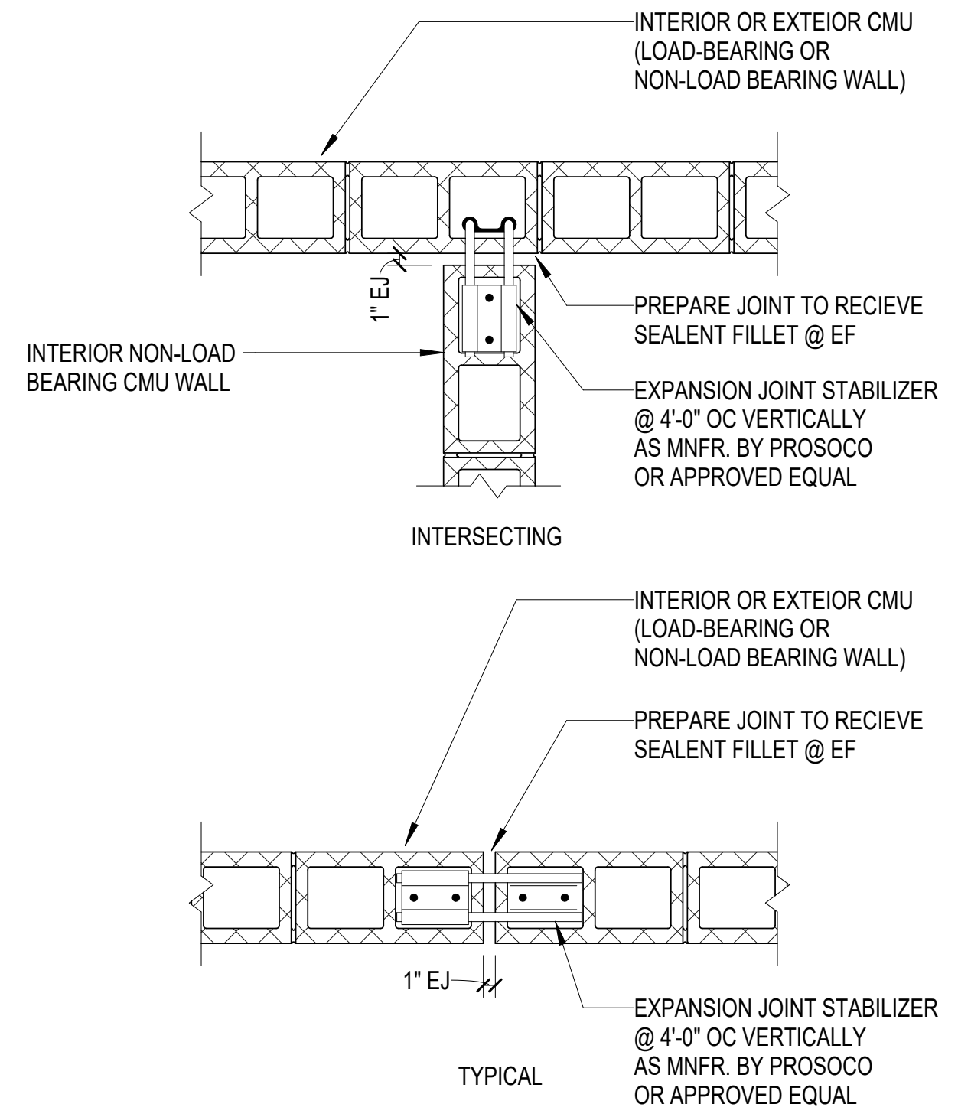
9 TYPICAL NON-LOAD BEARING CMU BRACING
1 1/2" = 1'-0"



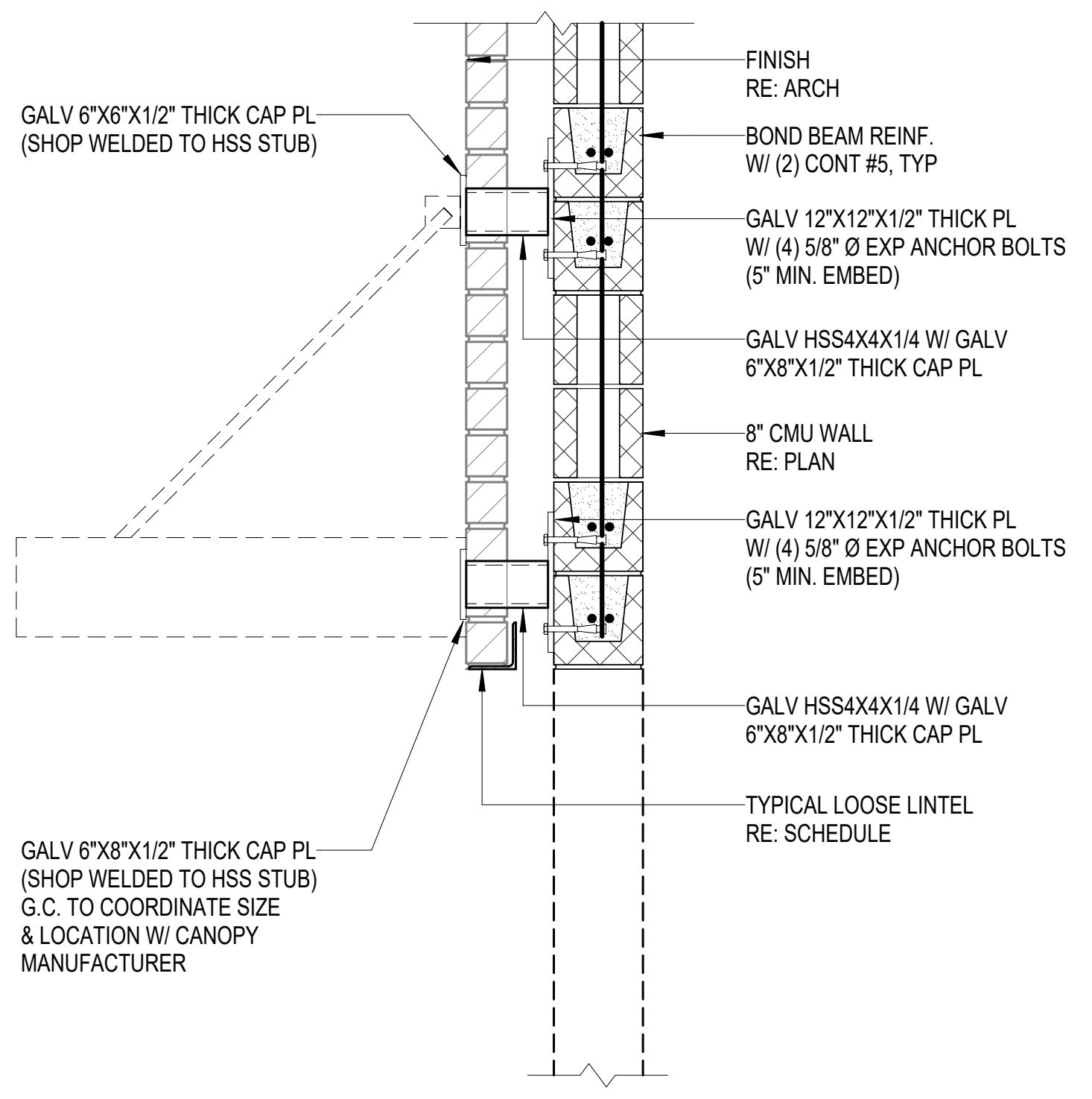
NOTES:

INTERIOR LOAD-BEARING CMU WALLS TYPICALLY ACHIEVE LATERAL SUPPORT FROM SUPPORTING FRAMING MEMBERS AND ARE NOT DEPENDENT ON INTERSECTION WALLS FOR LATERAL SUPPORT. SUCH WALLS NEED NOT BE CONNECTED TO OTHER CMU WALLS

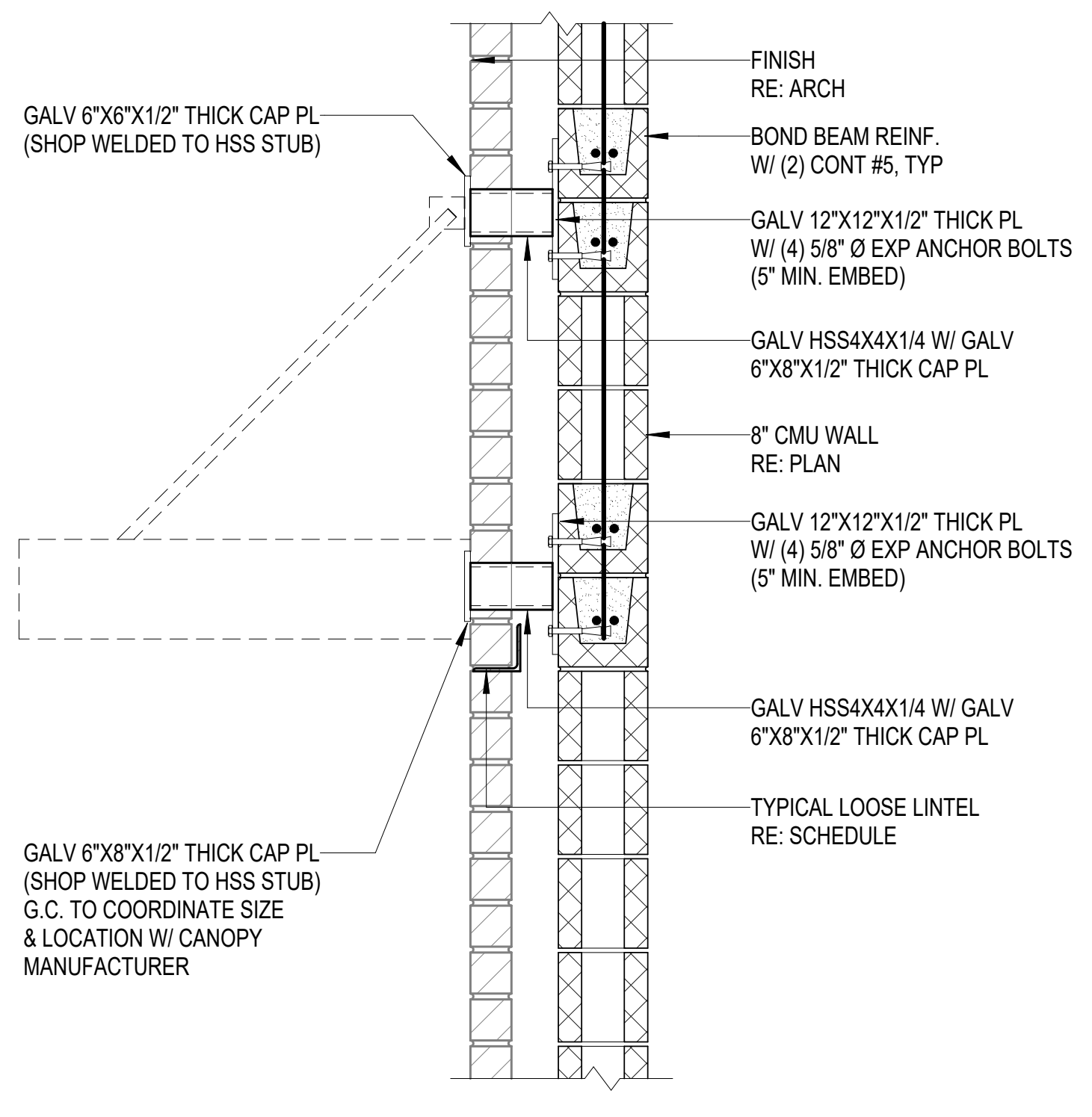
10 TYPICAL CMU EXPANSION JOINT
3/4" = 1'-0"



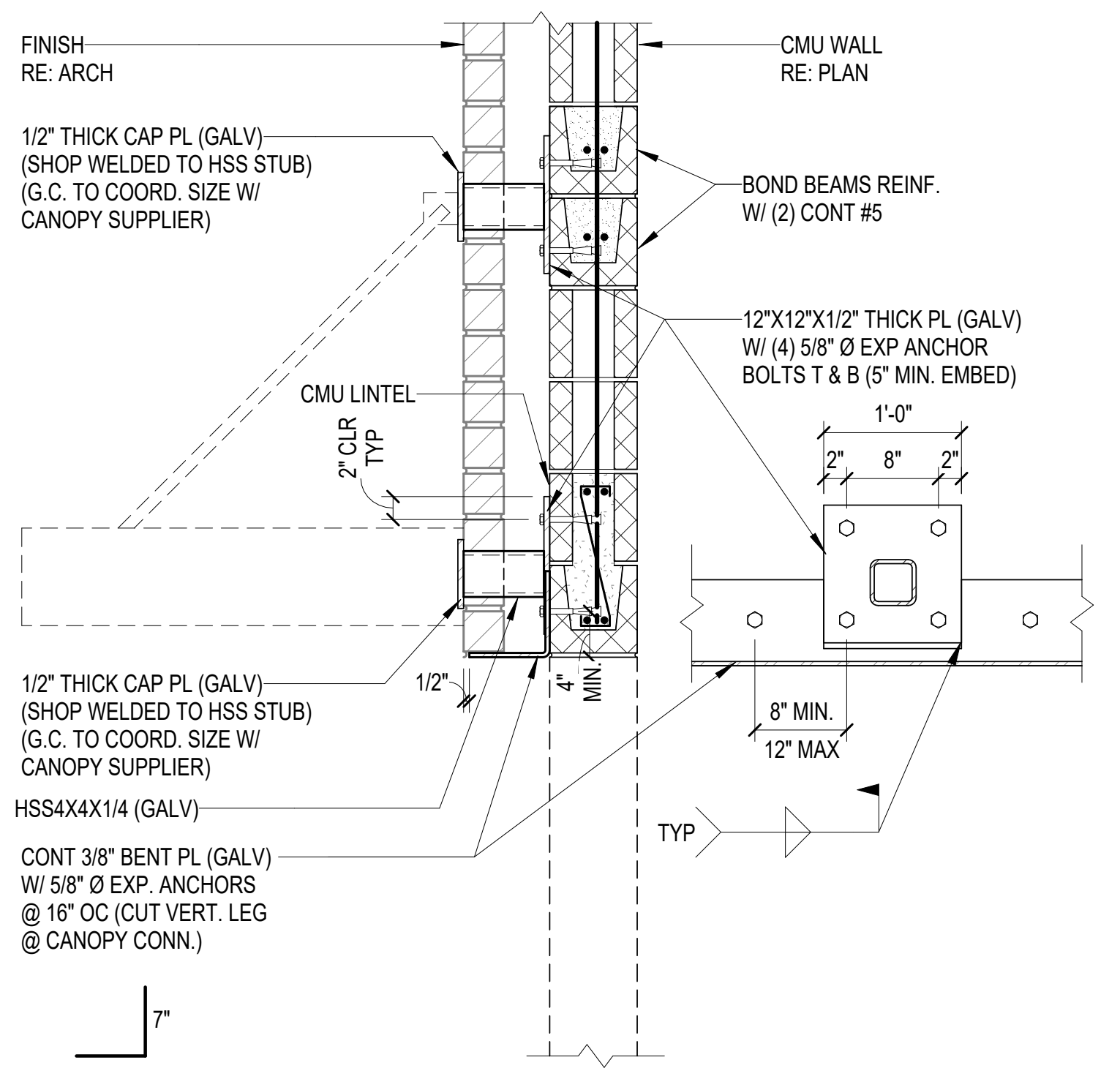
11 TYPICAL CMU EXPANSION JOINT
3/4" = 1'-0"



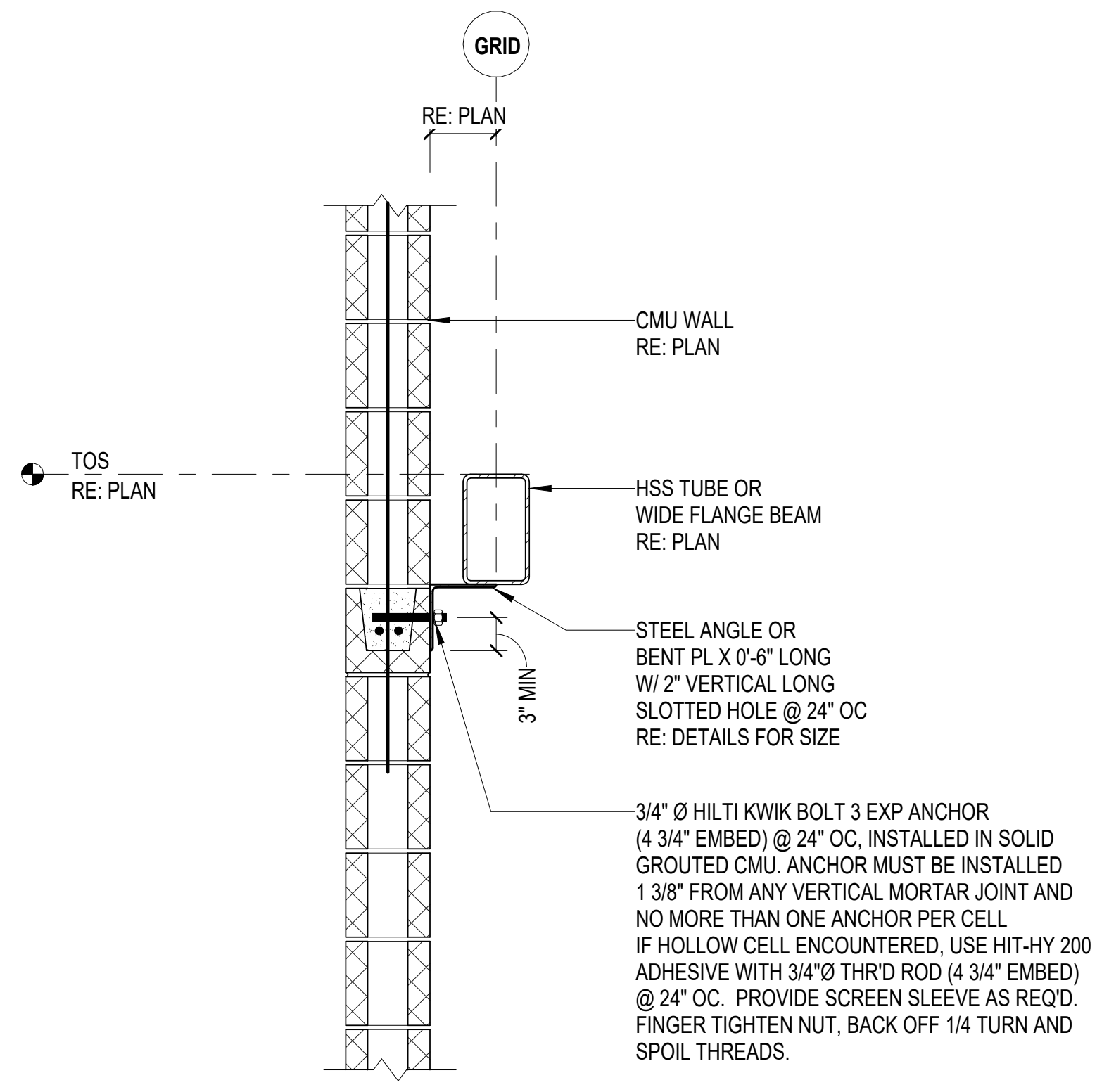
12 TYPICAL CMU @ CANOPY (BRICK)
3/4" = 1'-0"



13 TYPICAL CMU @ CANOPY (BRICK)
3/4" = 1'-0"



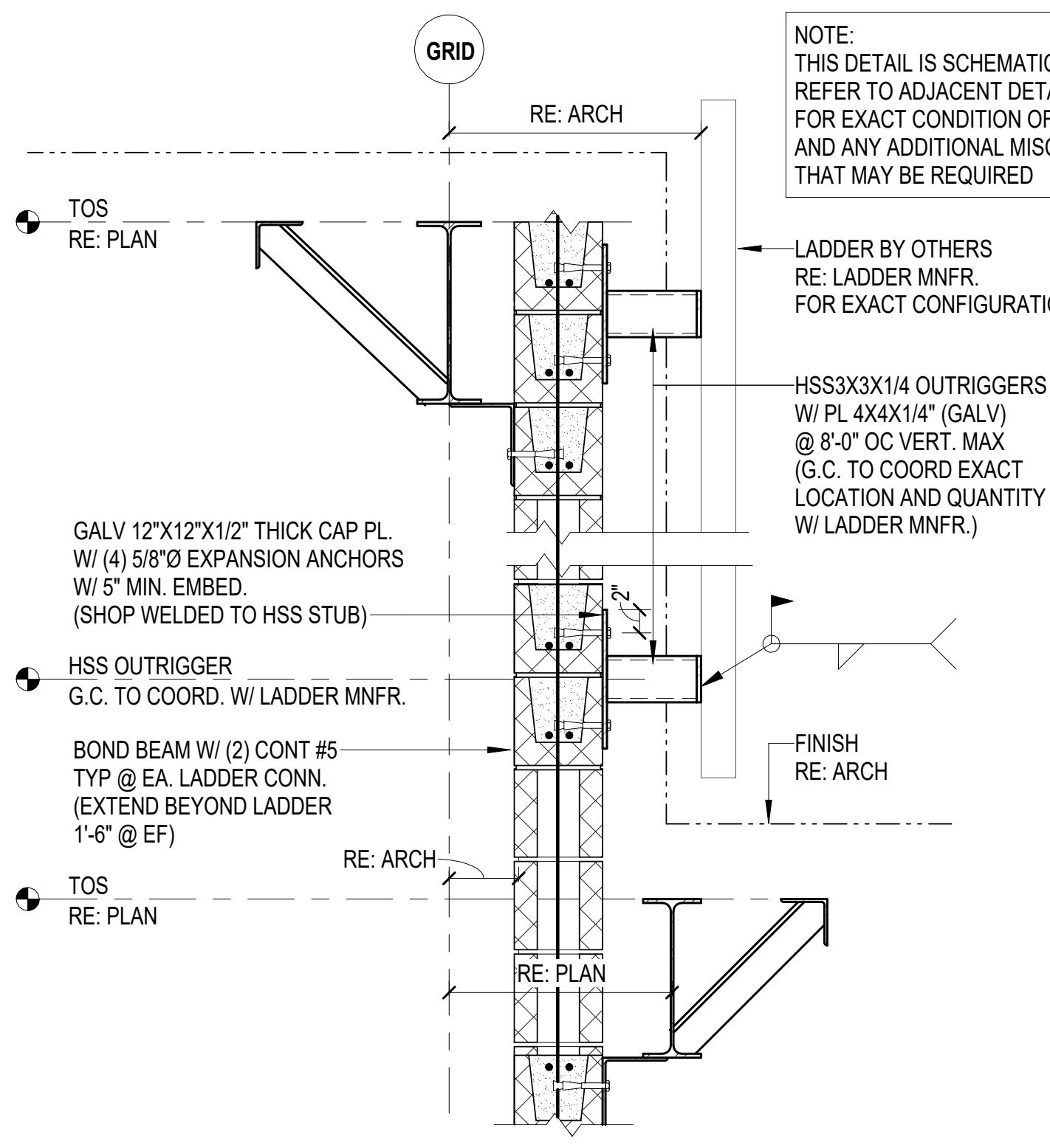
14 TYPICAL CMU @ CANOPY (BRICK)
3/4" = 1'-0"



3/4" Ø HILTI KWIK BOLT 3 EXP ANCHOR (4 3/4" EMBED) @ 24" OC, INSTALLED IN SOLID GROUTED CMU. ANCHOR MUST BE INSTALLED 1 3/8" FROM ANY VERTICAL MORTAR JOINT AND NO MORE THAN ONE ANCHOR PER CELL
IF HOLLOW CELL ENCOUNTERED, USE HIT-HY 200 ADHESIVE WITH 3/4"Ø THR'D ROD (4 3/4" EMBED) @ 24" OC. PROVIDE SCREEN SLEEVE AS REQ'D. FINGER TIGHTEN NUT, BACK OFF 1/4 TURN AND SPOIL THREADS.

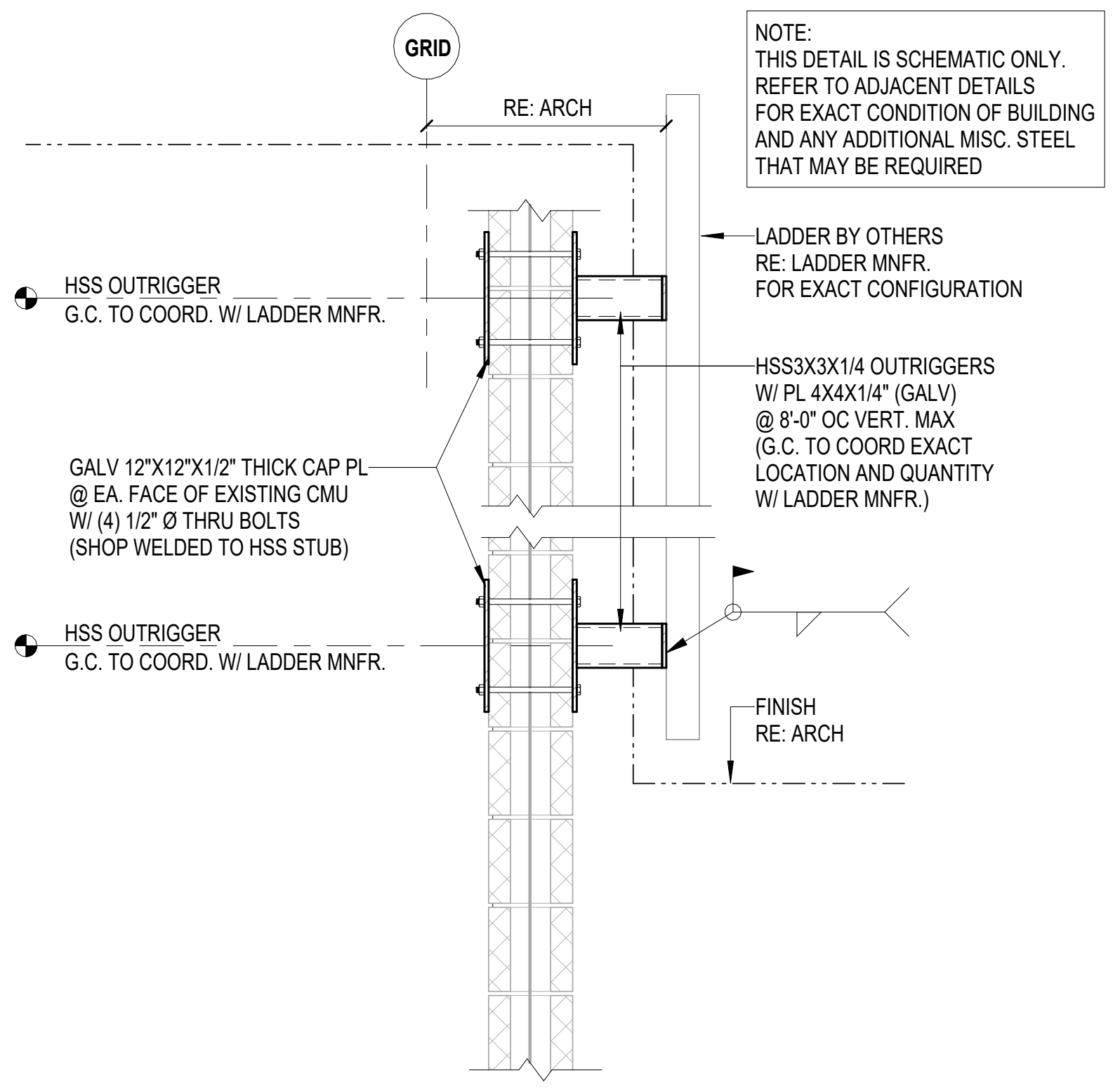
15 TYPICAL CMU CLIP @ HSS
3/4" = 1'-0"

NOTE:
THIS DETAIL IS SCHEMATIC ONLY. REFER TO ADJACENT DETAILS FOR EXACT CONDITION OF BUILDING AND ANY ADDITIONAL MISC. STEEL THAT MAY BE REQUIRED



16 TYPICAL LADDER (CMU)
3/4" = 1'-0"

NOTE:
THIS DETAIL IS SCHEMATIC ONLY. REFER TO ADJACENT DETAILS FOR EXACT CONDITION OF BUILDING AND ANY ADDITIONAL MISC. STEEL THAT MAY BE REQUIRED



17 TYPICAL LADDER (EXISTING CMU)
3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

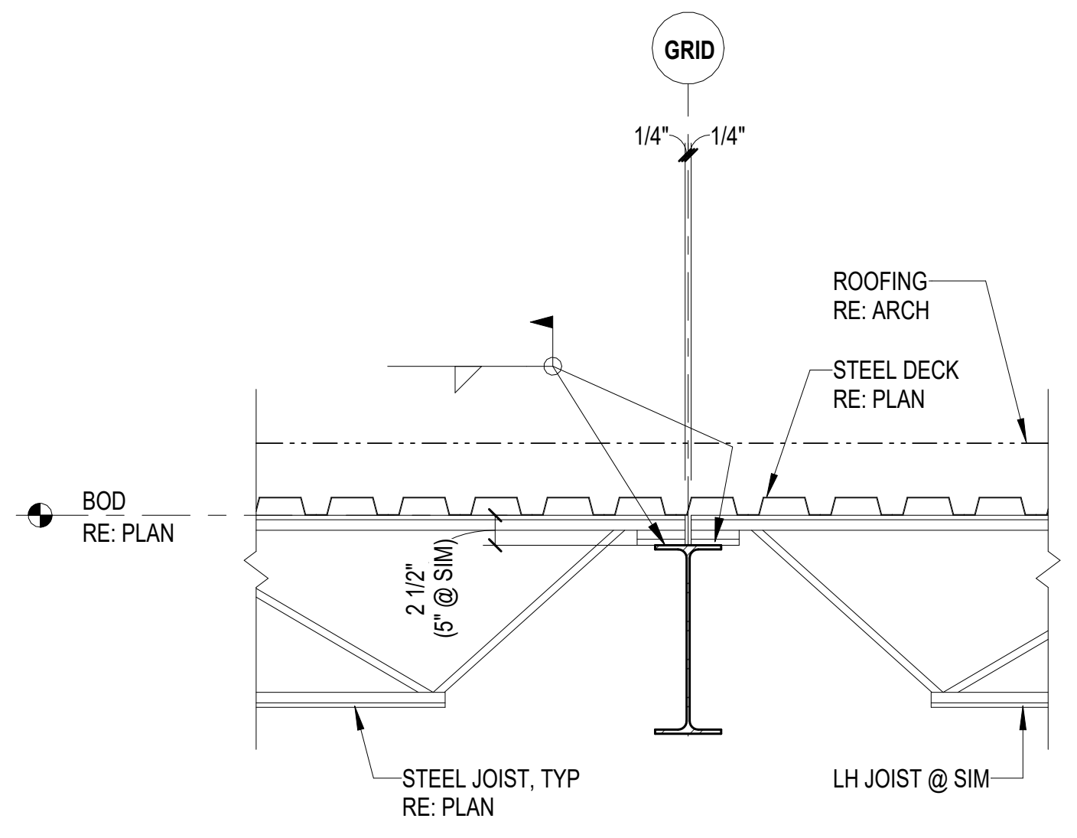
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

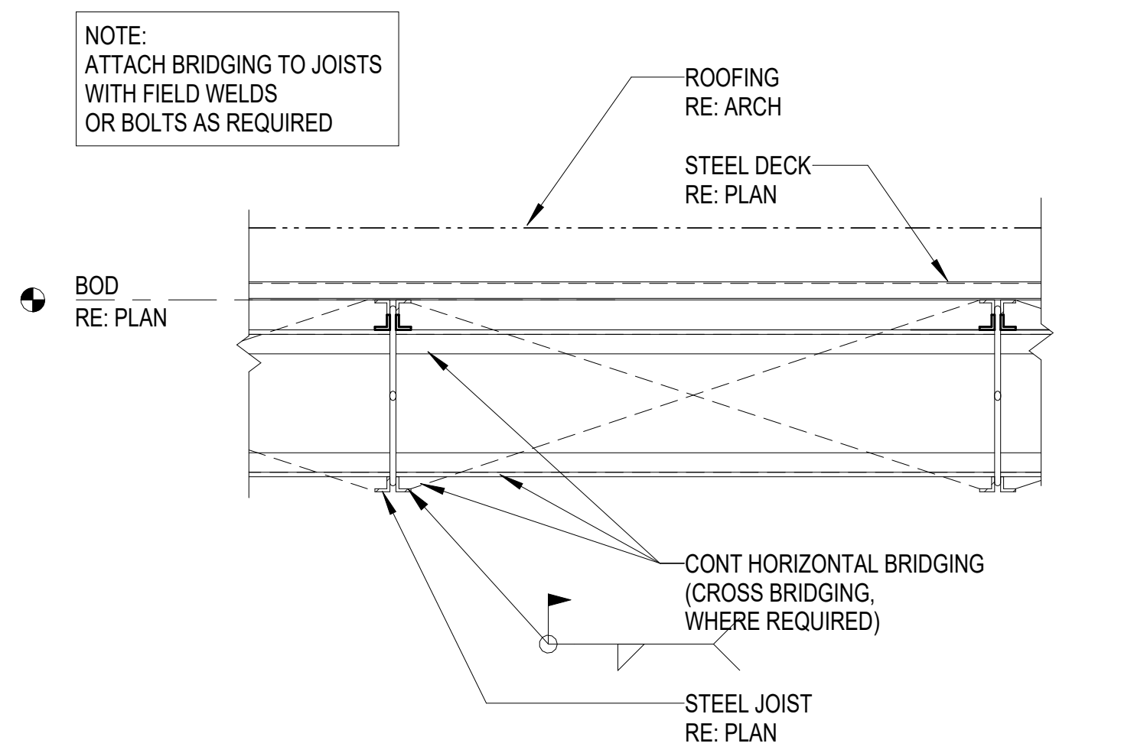
TYPICAL CMU WALL DETAILS

S503
of

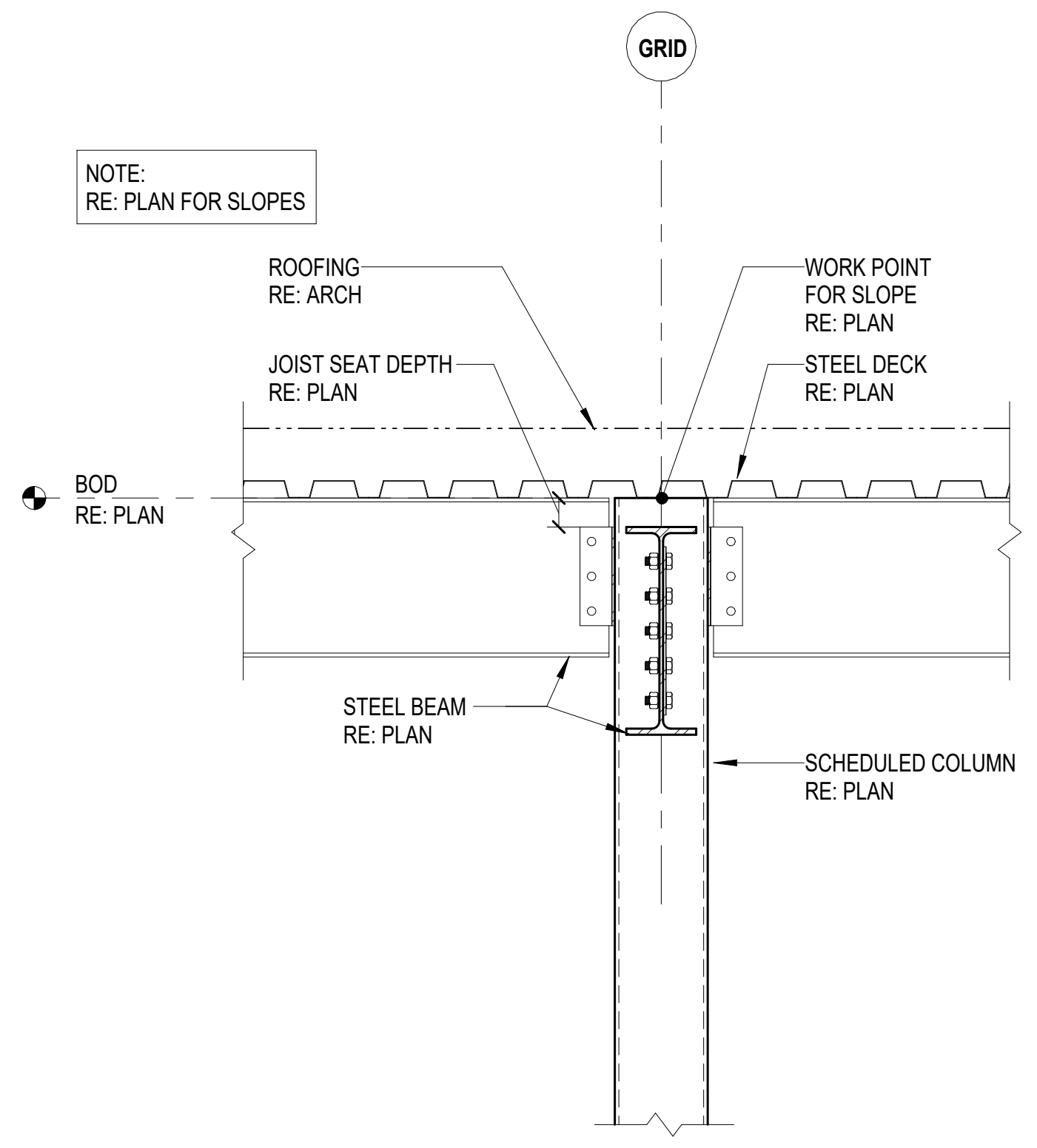
11/13/2024 4:14:42 PM



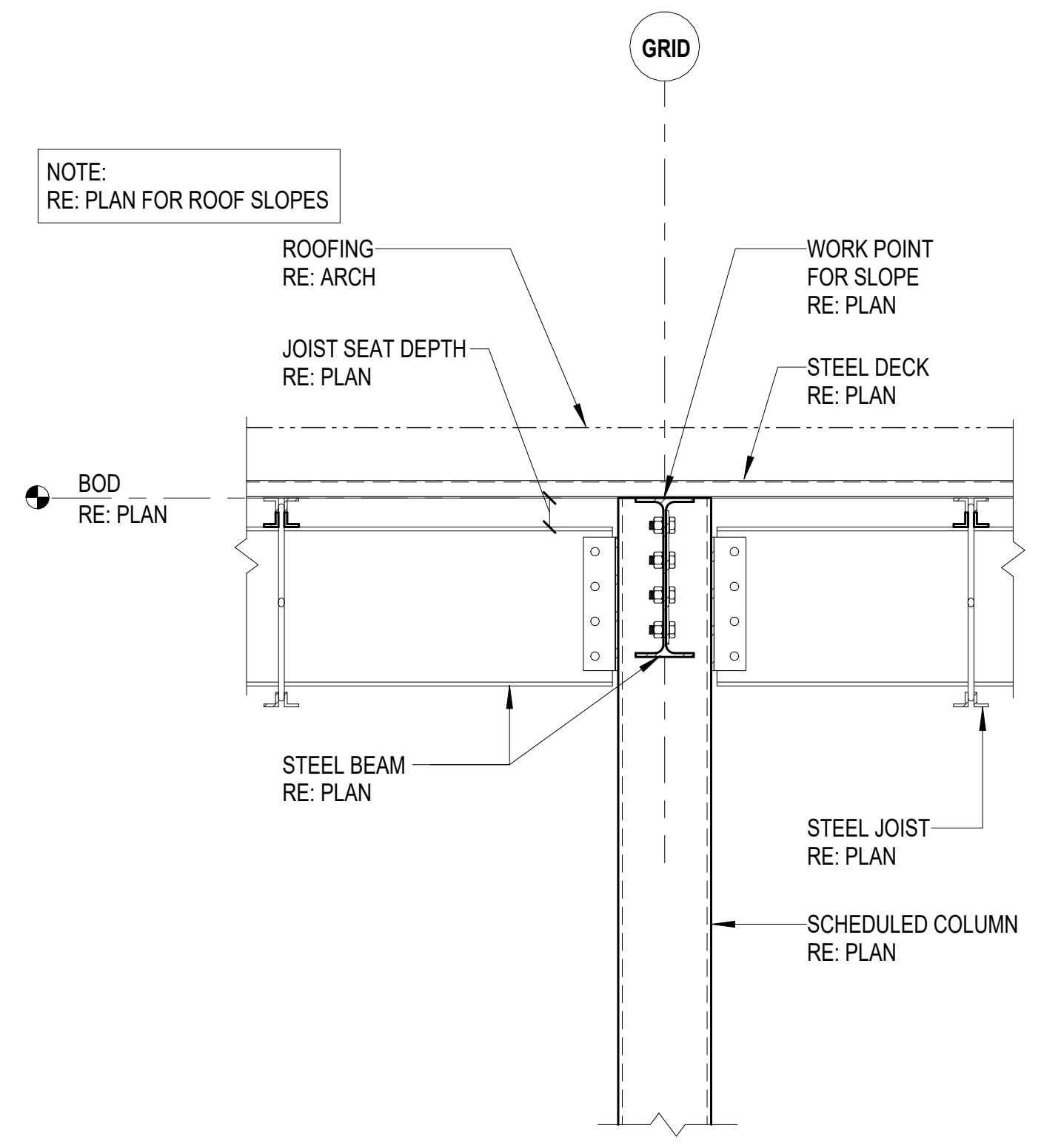
1 TYPICAL INTERIOR GIRDER
3/4" = 1'-0"



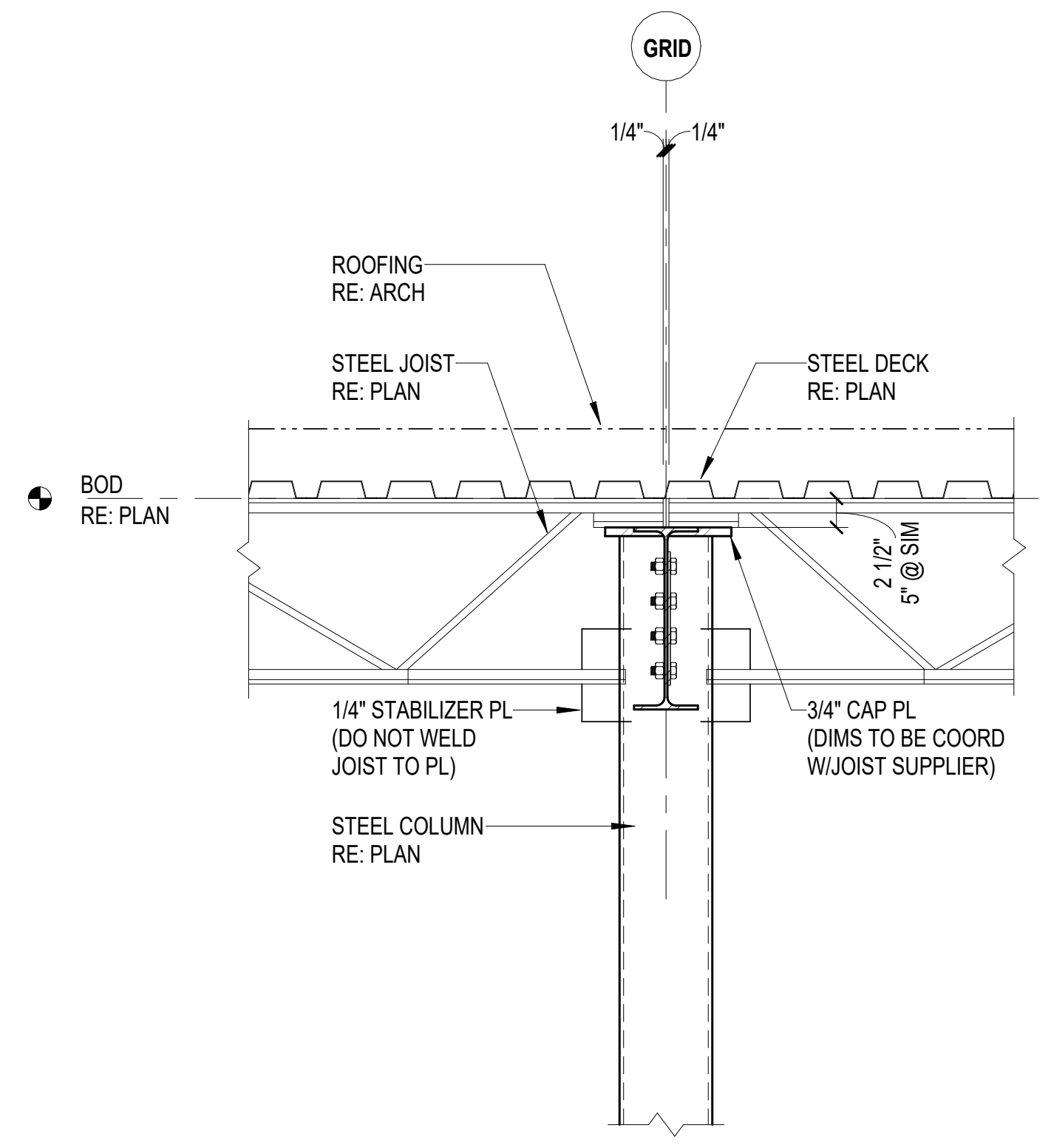
2 TYPICAL JOIST BRIDGING
3/4" = 1'-0"



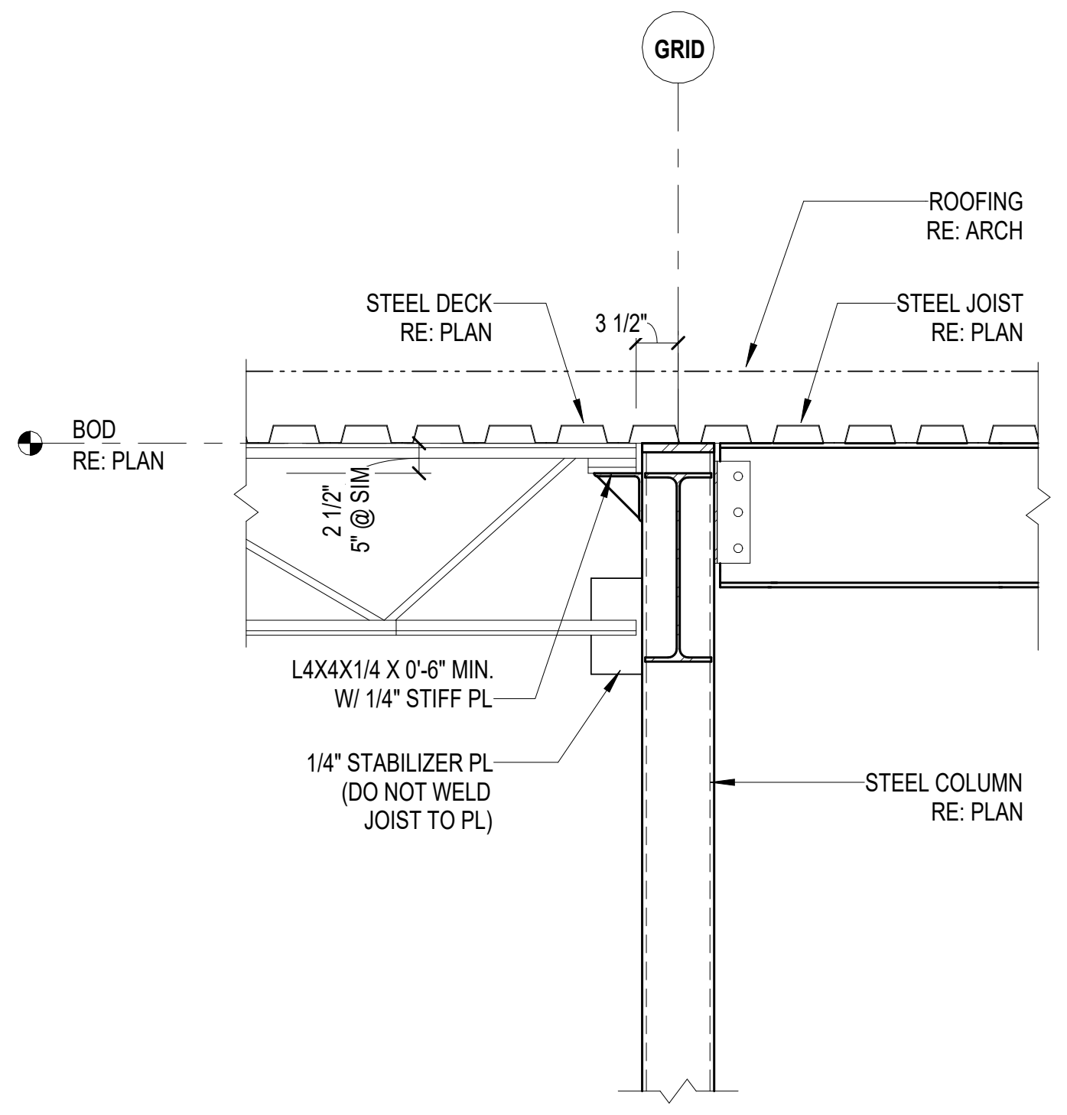
3 TYPICAL INTERIOR COLUMN
3/4" = 1'-0"



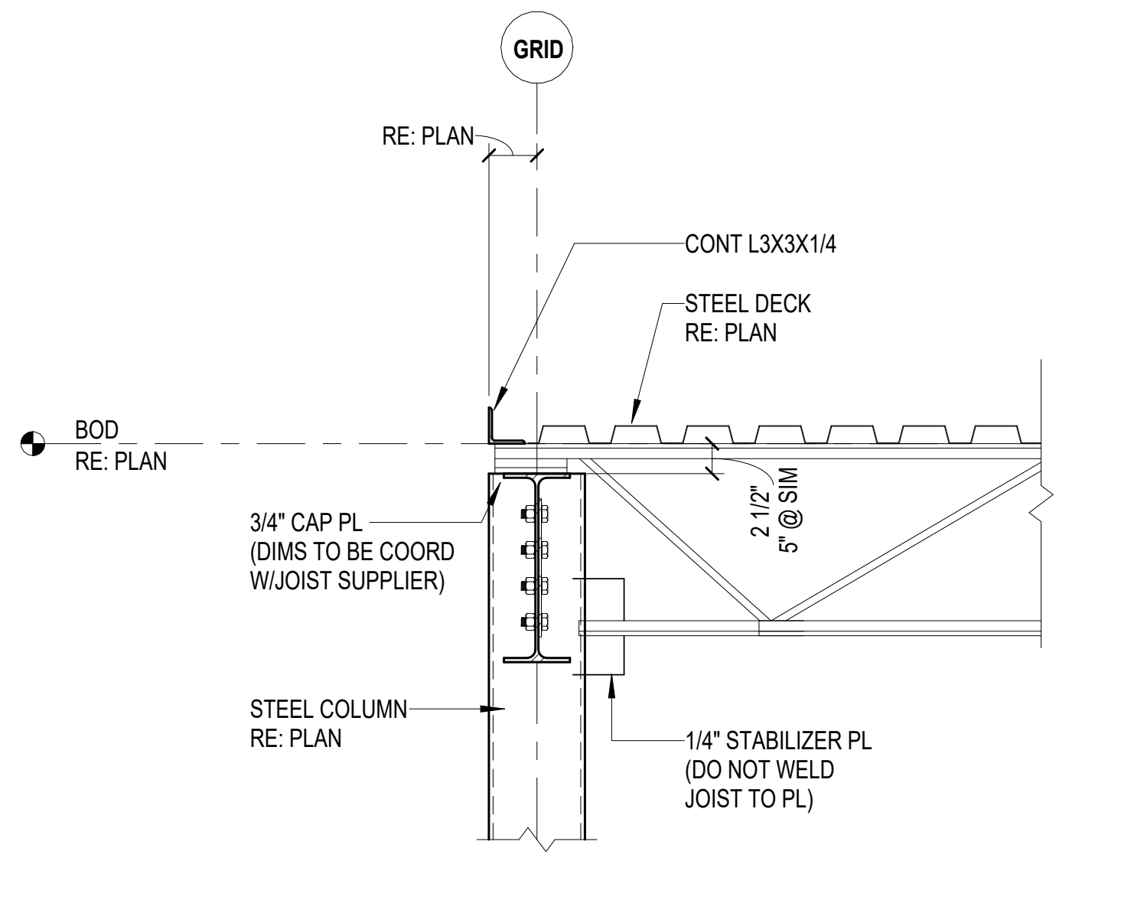
4 TYPICAL INTERIOR COLUMN
3/4" = 1'-0"



5 TYPICAL INTERIOR COLUMN
3/4" = 1'-0"



6 TYPICAL INTERIOR COLUMN
3/4" = 1'-0"



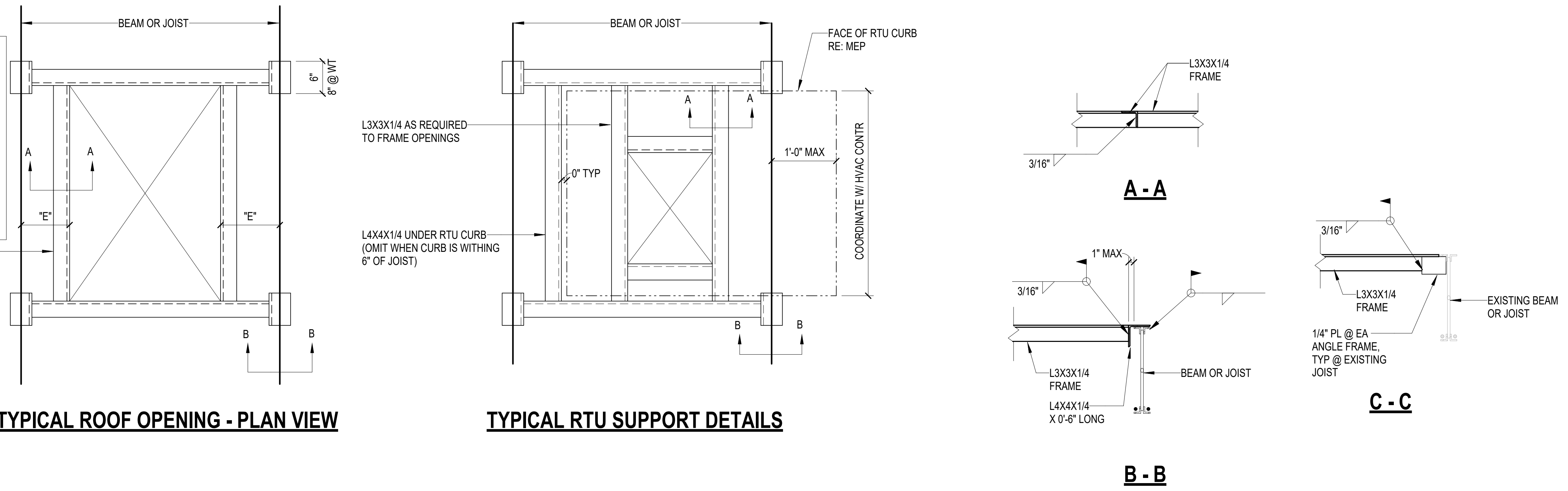
7 TYPICAL JOIST BEARING @ COL
3/4" = 1'-0"

NOTE:
TYPICAL ROOF OPENING DETAIL SHOWN APPLIES TO ALL ROOF OPENINGS WHERE LEAST DIMENSION IS 13" OR LARGER. REINFORCE ROOF OPENINGS LESS THAN 13" BY WELDING 16 GAGE SHEET METAL 1'-0" WIDER THAN OPENING TO METAL ROOF DECK.

WHERE DIMENSION "E" IS LESS THAN 6", ANGLE MAY BE OMITTED.

AT EXISTING CONDITIONS REFER TO DETAIL C-C FOR ANGLE CONNECTION

PROVIDE L3X3X1/4 ANGLES AS REQUIRED TO FRAME OPENING, TYP.
PROVIDE JOIST STRUT AS REQUIRED. REFER TO TYP JOIST REINFORCEMENT DETAIL (**7/S602**)



TYPICAL ROOF OPENING - PLAN VIEW

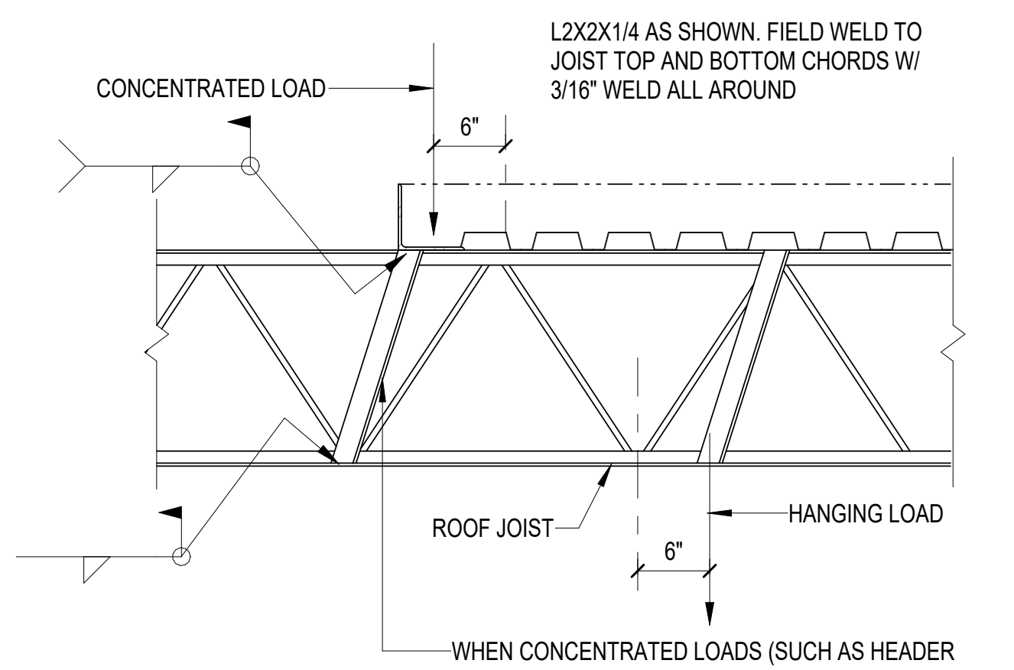
TYPICAL RTU SUPPORT DETAILS

A - A

B - B

C - C

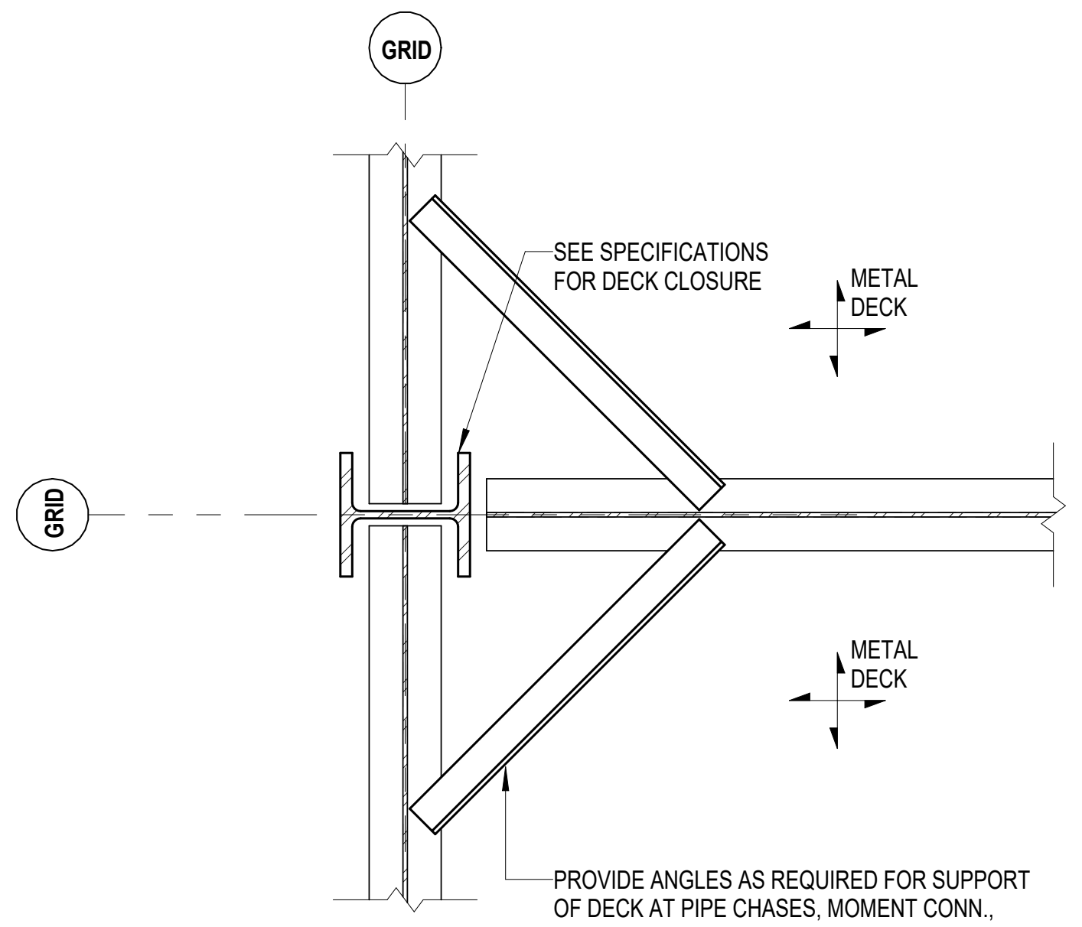
8 TYPICAL RTU CURB OPENING
3/4" = 1'-0"



WHEN CONCENTRATED LOADS (SUCH AS HEADER SUPPORTS FOR THE ROOF TOP MEP UNITS) FRAME TO JOIST TOP CHORD AND ARE NOT LOCATED DIRECTY ABOVE A TOP CHORD PANEL POINT. INSTALL AN ADDITIONAL WEB MEMBER ANGLE AS SHOWN ABOVE. CONTACT STRUCTURAL ENGINEER FOR ALL LOADS EXCEEDING 500 POUNDS.

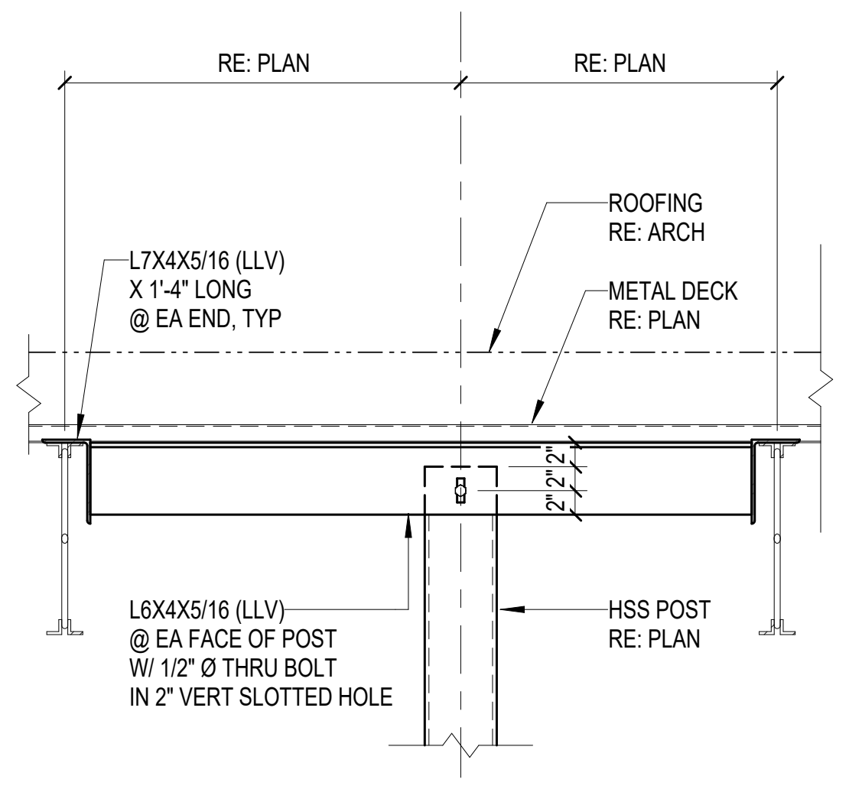
3/4" Ø A325 BOLTS - BEARING CONN. - STANDARD HOLES

9 TYPICAL OFFSET LOAD JOIST SUPPORT
3/4" = 1'-0"

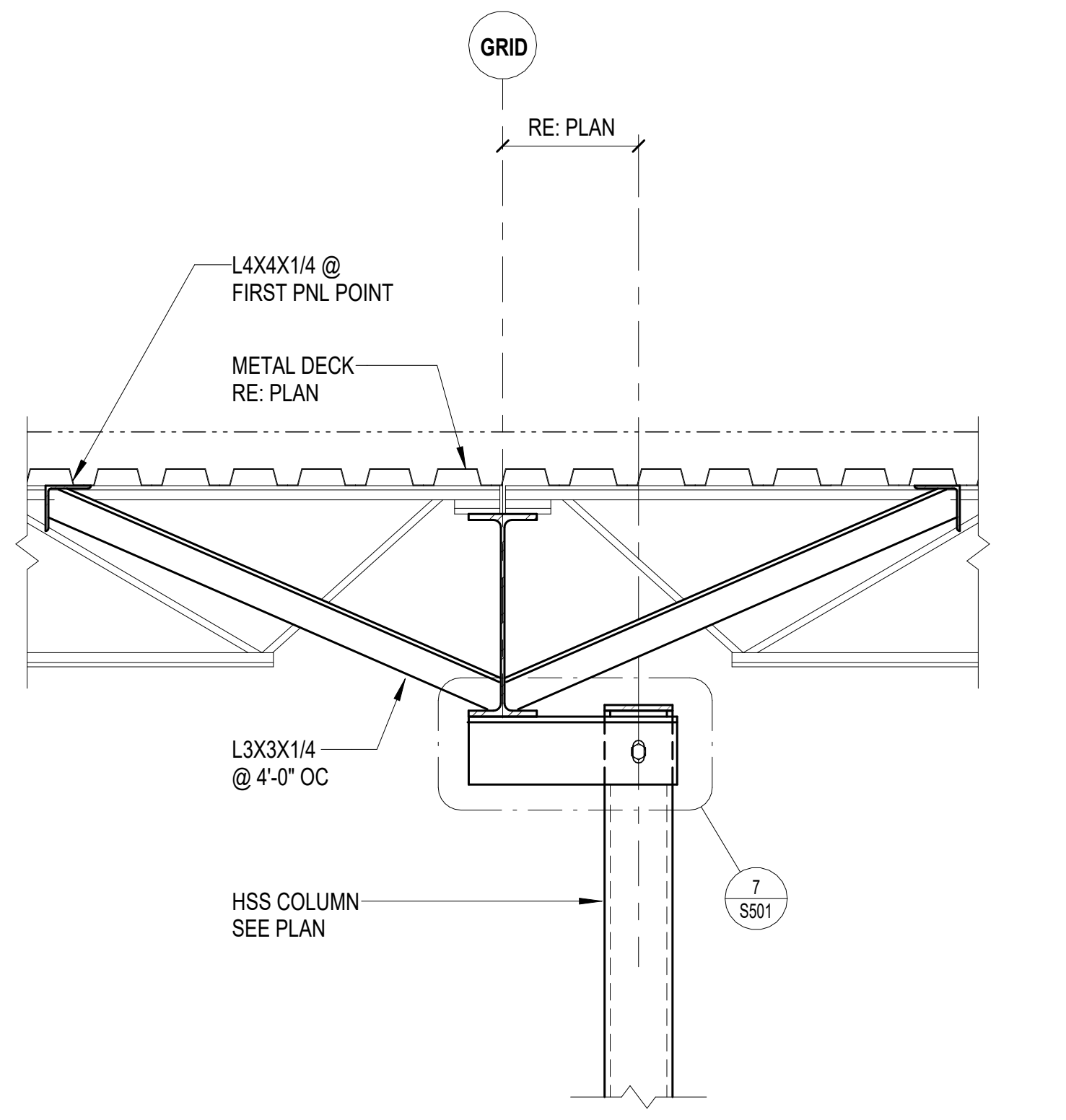


PROVIDE ANGLES AS REQUIRED FOR SUPPORT OF DECK AT PIPE CHASES, MOMENT CONN., LARGE COLUMNS, ETC. OR WHERE EXCESSIVE CUTS IN METAL DECK COULD CAUSE CONCRETE TO SPILL THRU. USE A MIN OF L3X3X1/4

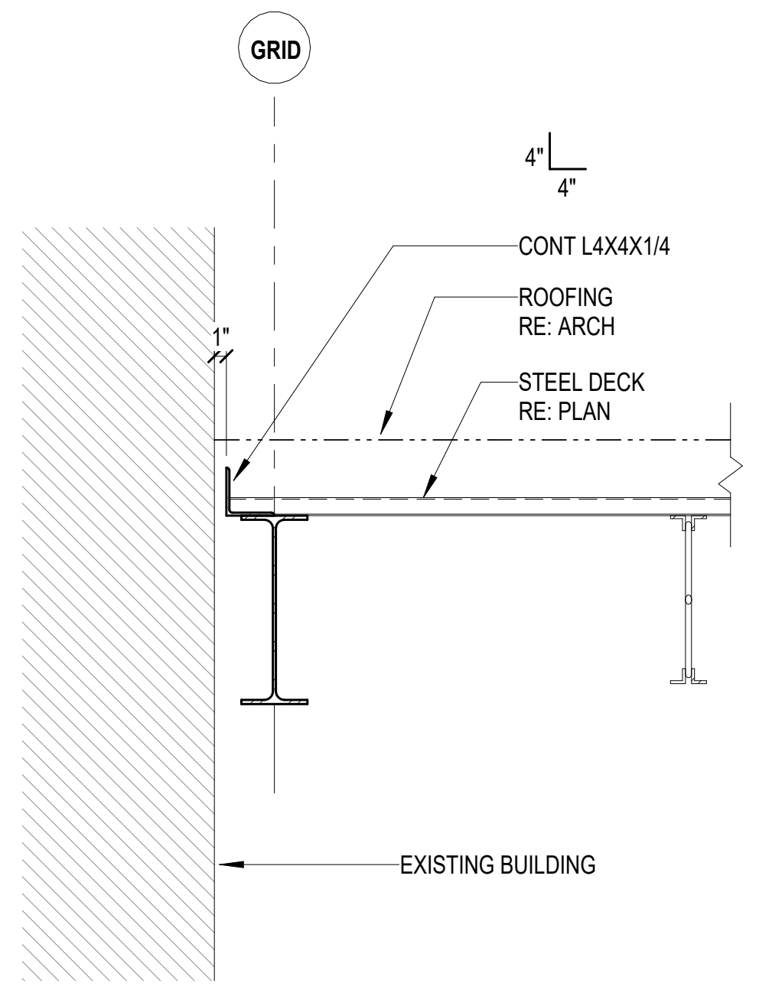
10 TYPICAL DECK SUPPORT
3/4" = 1'-0"



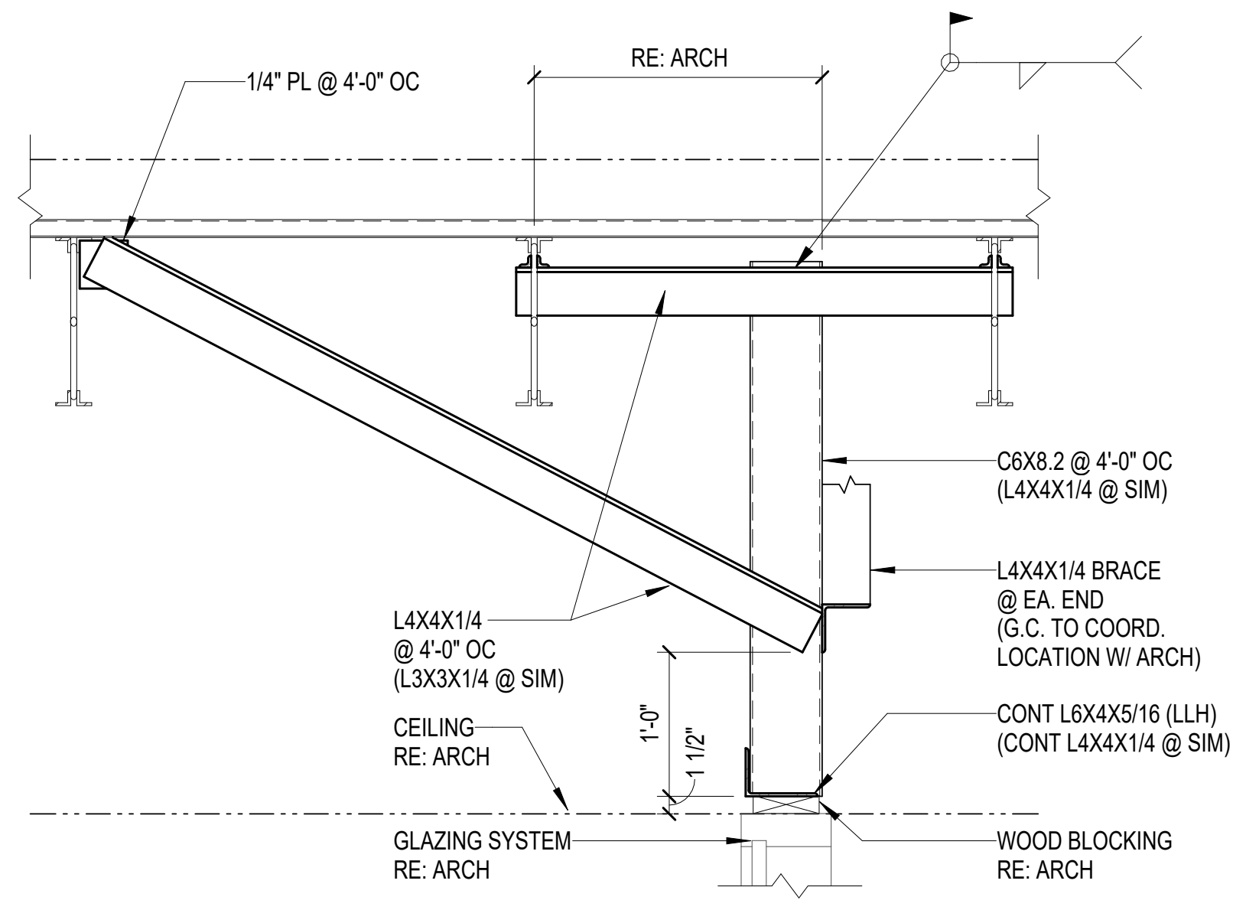
11 TYPICAL HSS POST SLIP CONNECTION
3/4" = 1'-0"



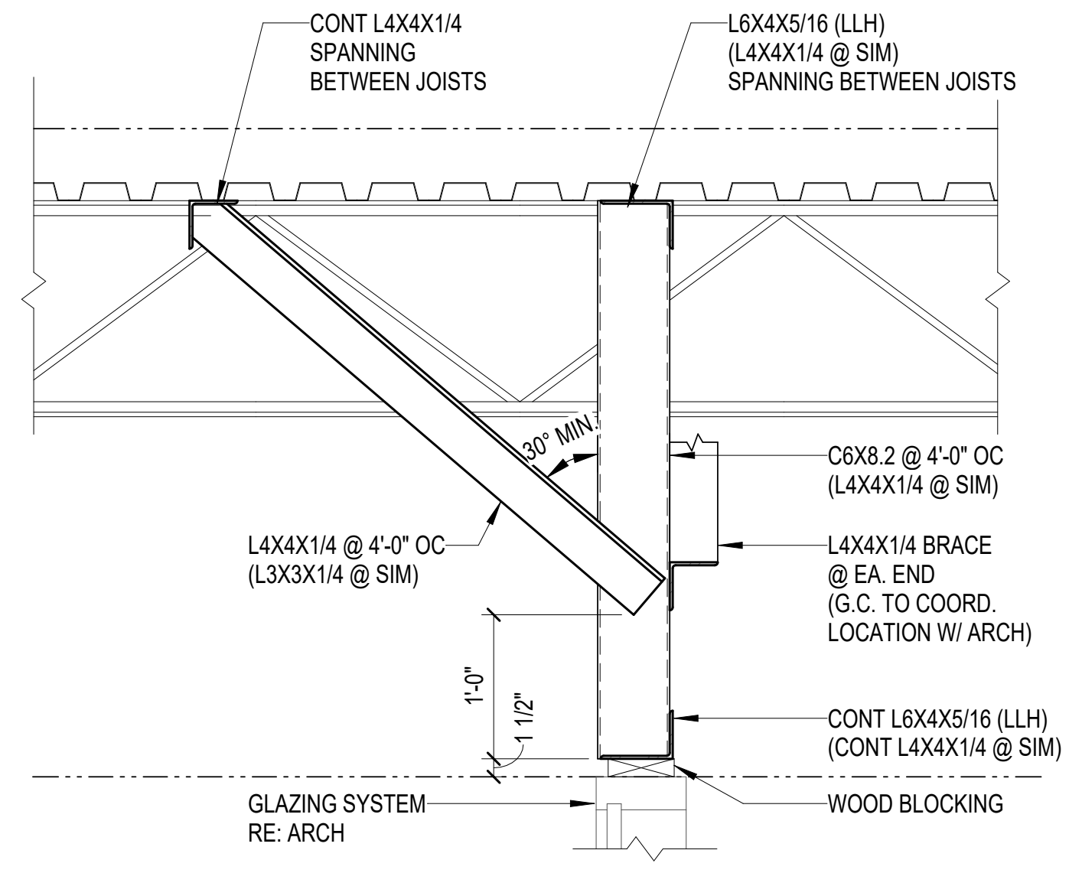
12 TYPICAL HSS POST SLIP CONNECTION
3/4" = 1'-0"



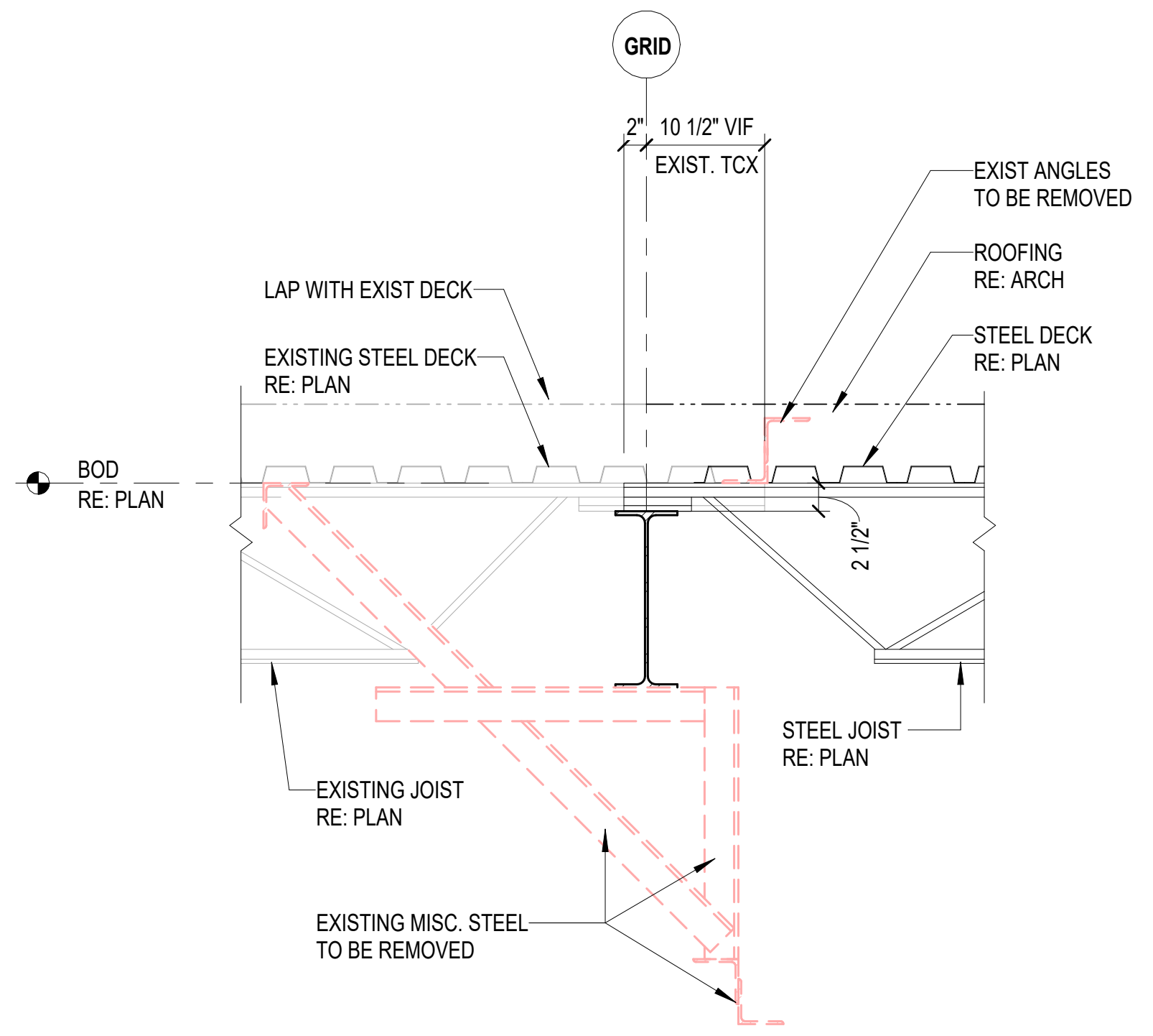
17 ROOF SECTION
3/4" = 1'-0"



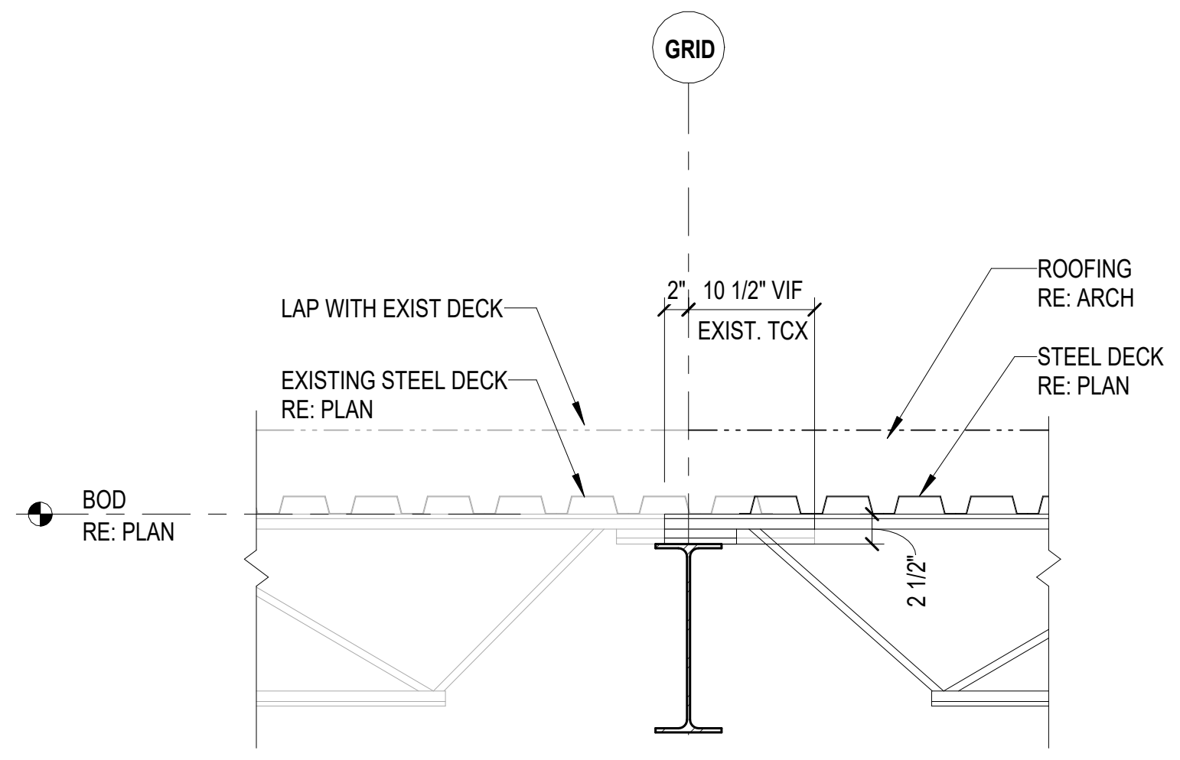
13 MISC. STEEL @ GLAZING
3/4" = 1'-0"



14 MISC. STEEL @ GLAZING
3/4" = 1'-0"



15 ROOF SECTION
3/4" = 1'-0"



16 ROOF SECTION
3/4" = 1'-0"

Dally + ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

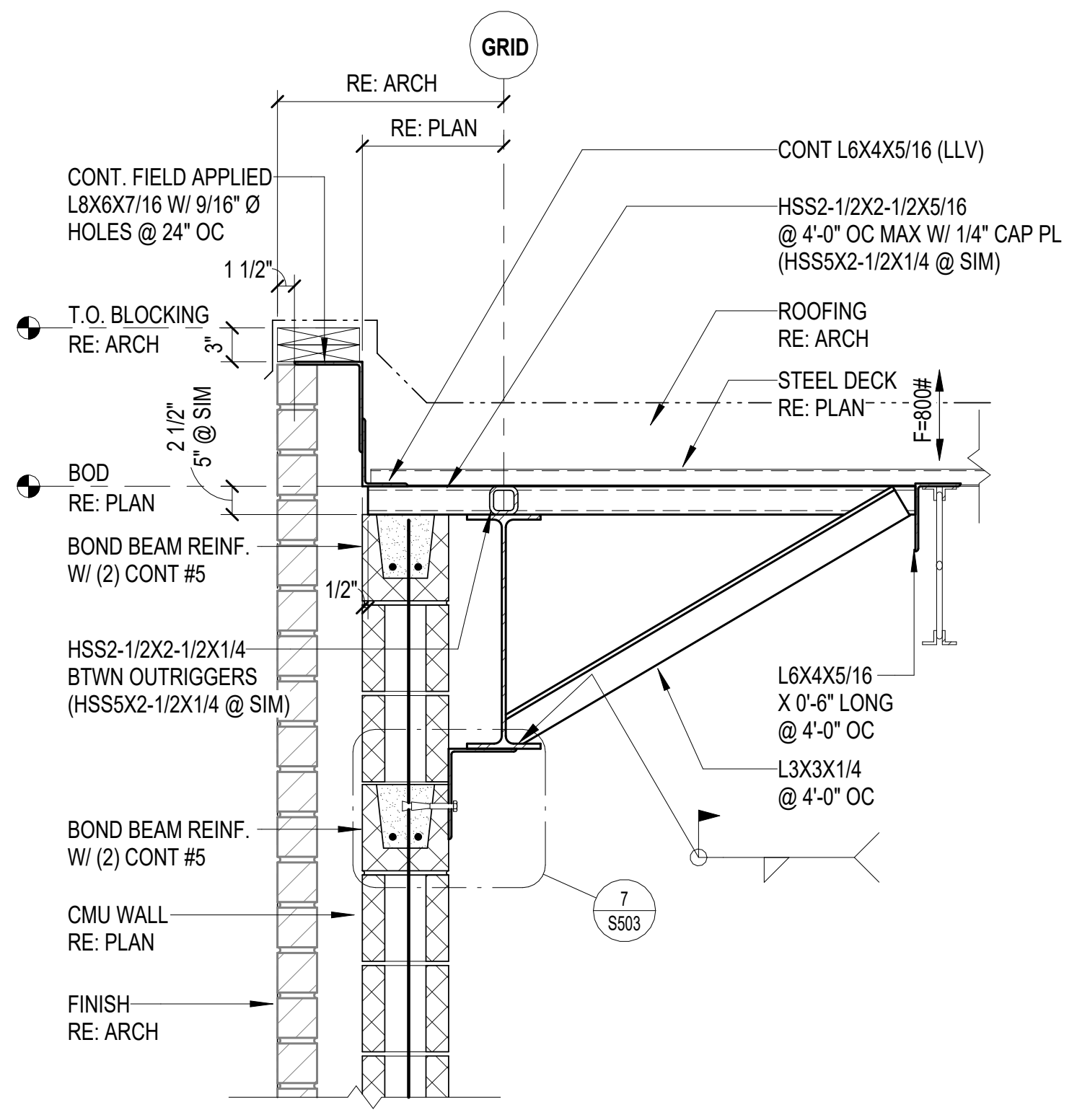
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	JT

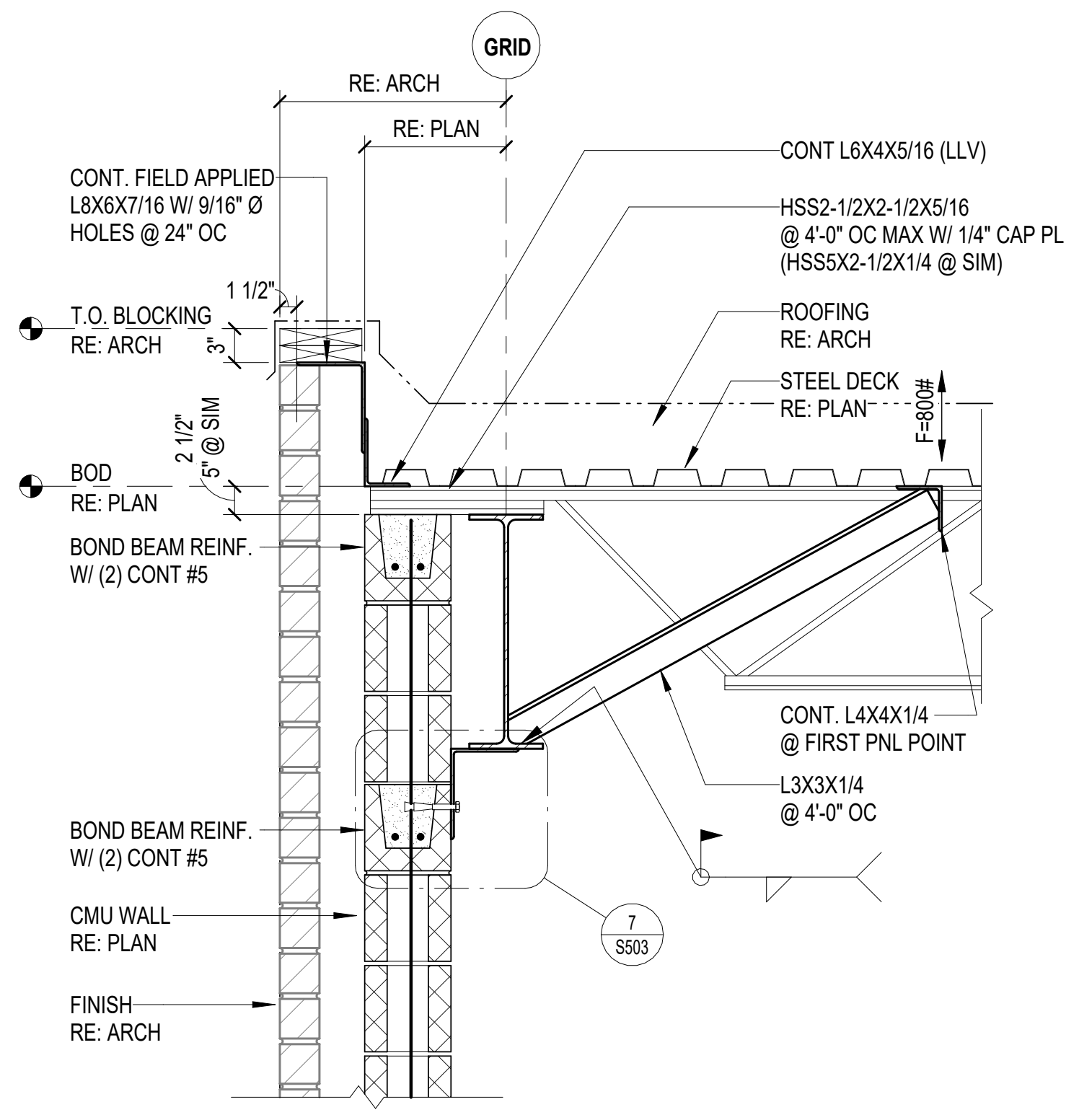
TYPICAL STEEL ROOF DETAILS

S601
of

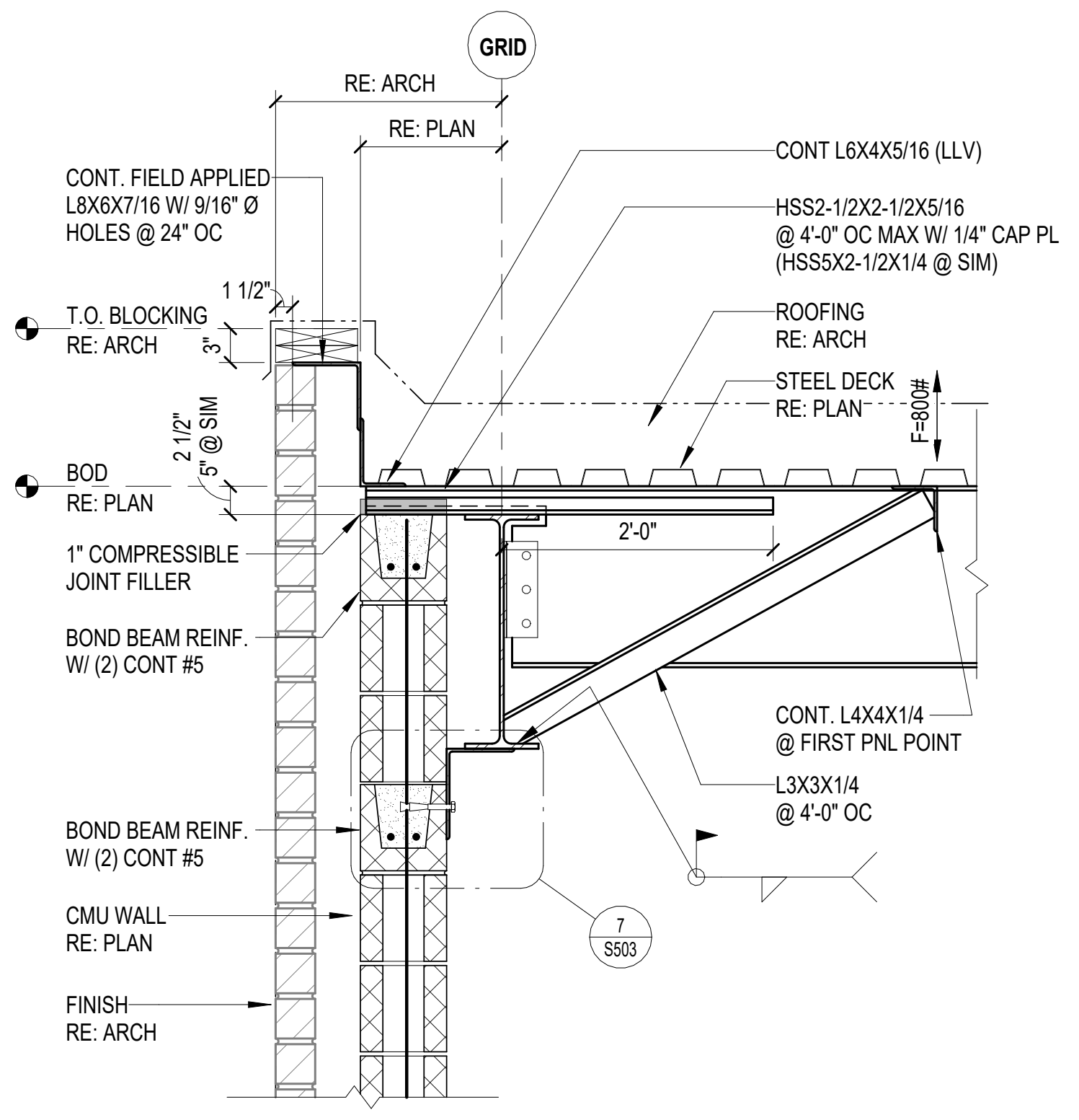
Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



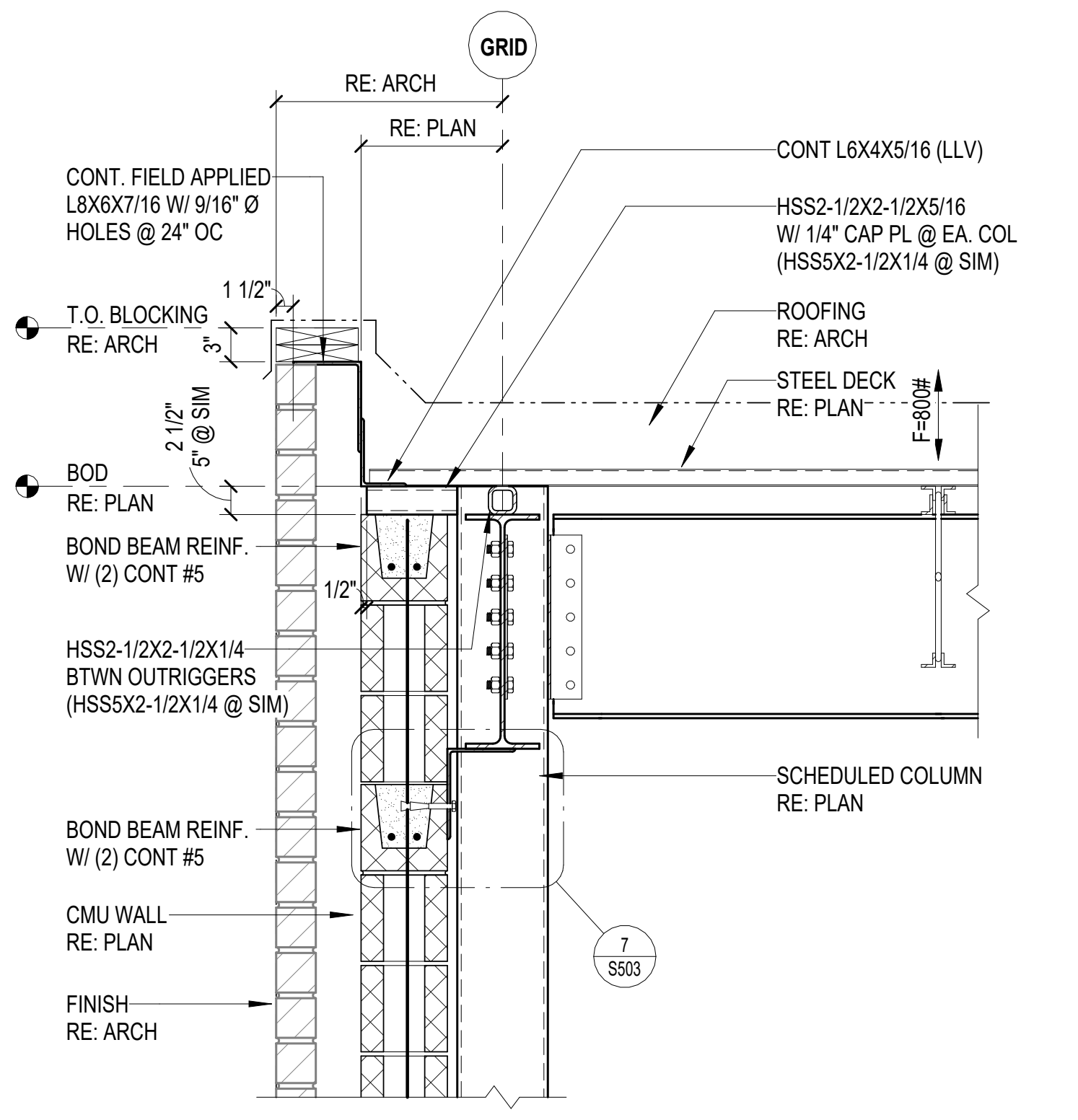
1 ROOF SECTION
3/4" = 1'-0"



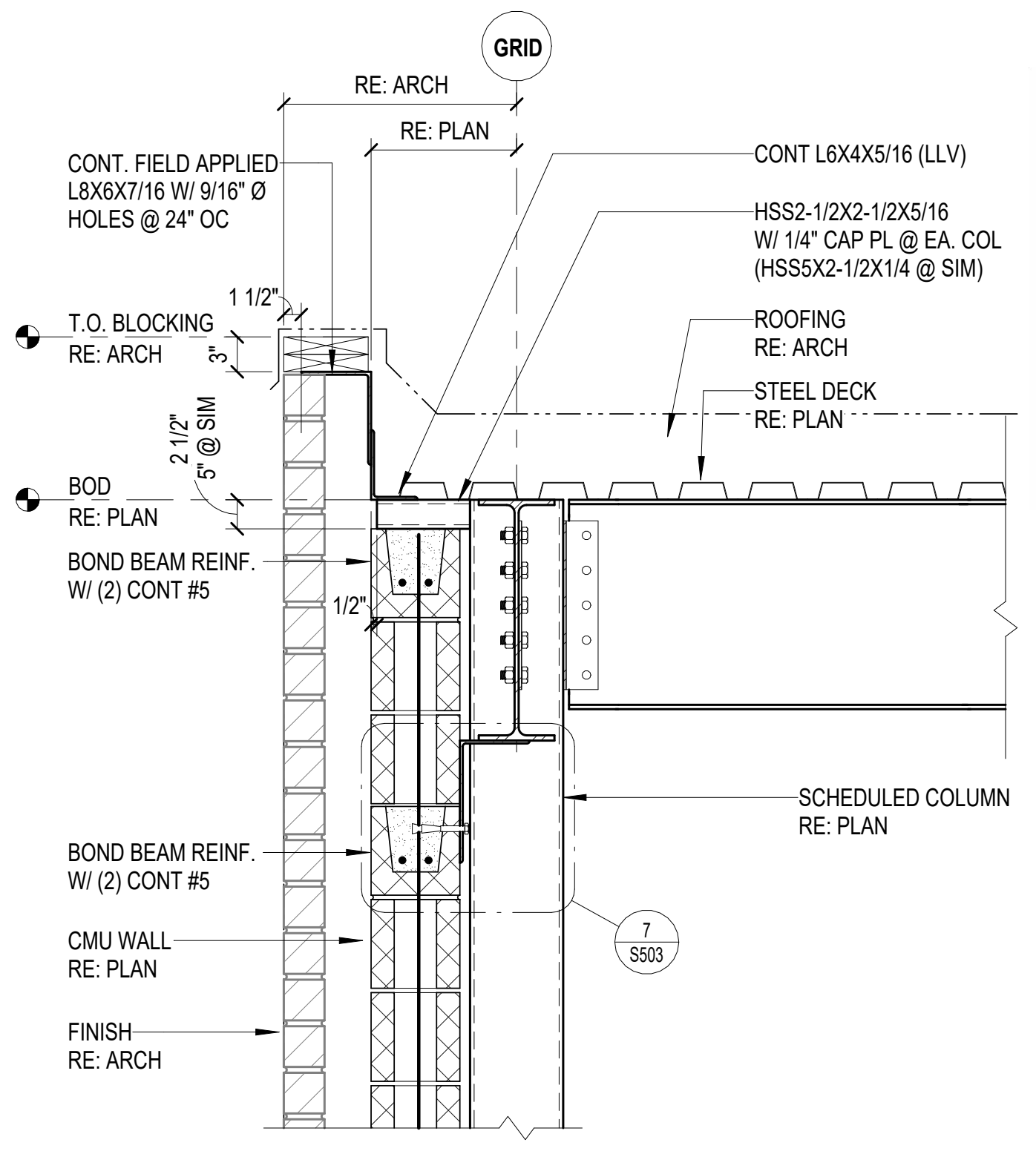
2 ROOF SECTION
3/4" = 1'-0"



3 ROOF SECTION
3/4" = 1'-0"



4 ROOF SECTION
3/4" = 1'-0"



5 ROOF SECTION
3/4" = 1'-0"

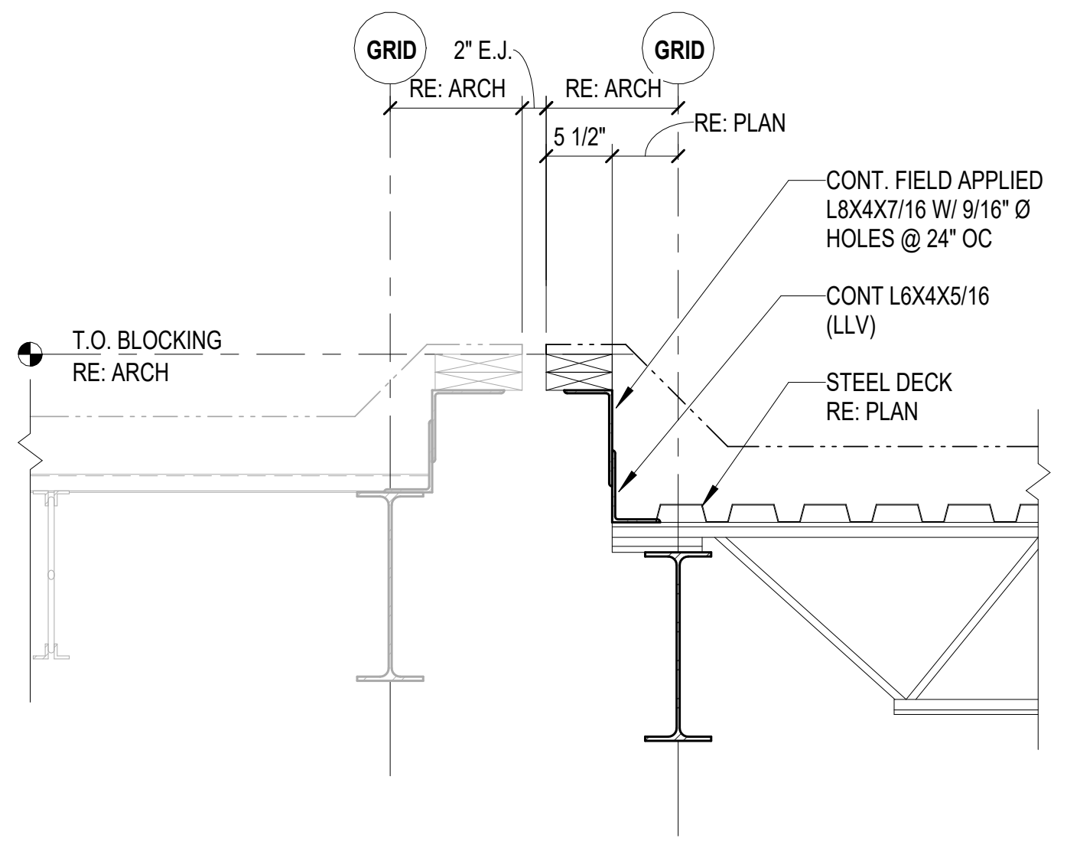
Dally
+ ASSOCIATES
STRUCTURAL | CIVIL
9800 Richmond Avenue, Suite 460
Houston, Texas 77042
t 713 337 8881
Texas Registered Engineering Firm
F-003426
D + A PROJECT 24-074-00

FRED DALLY
90904
11/17/2024

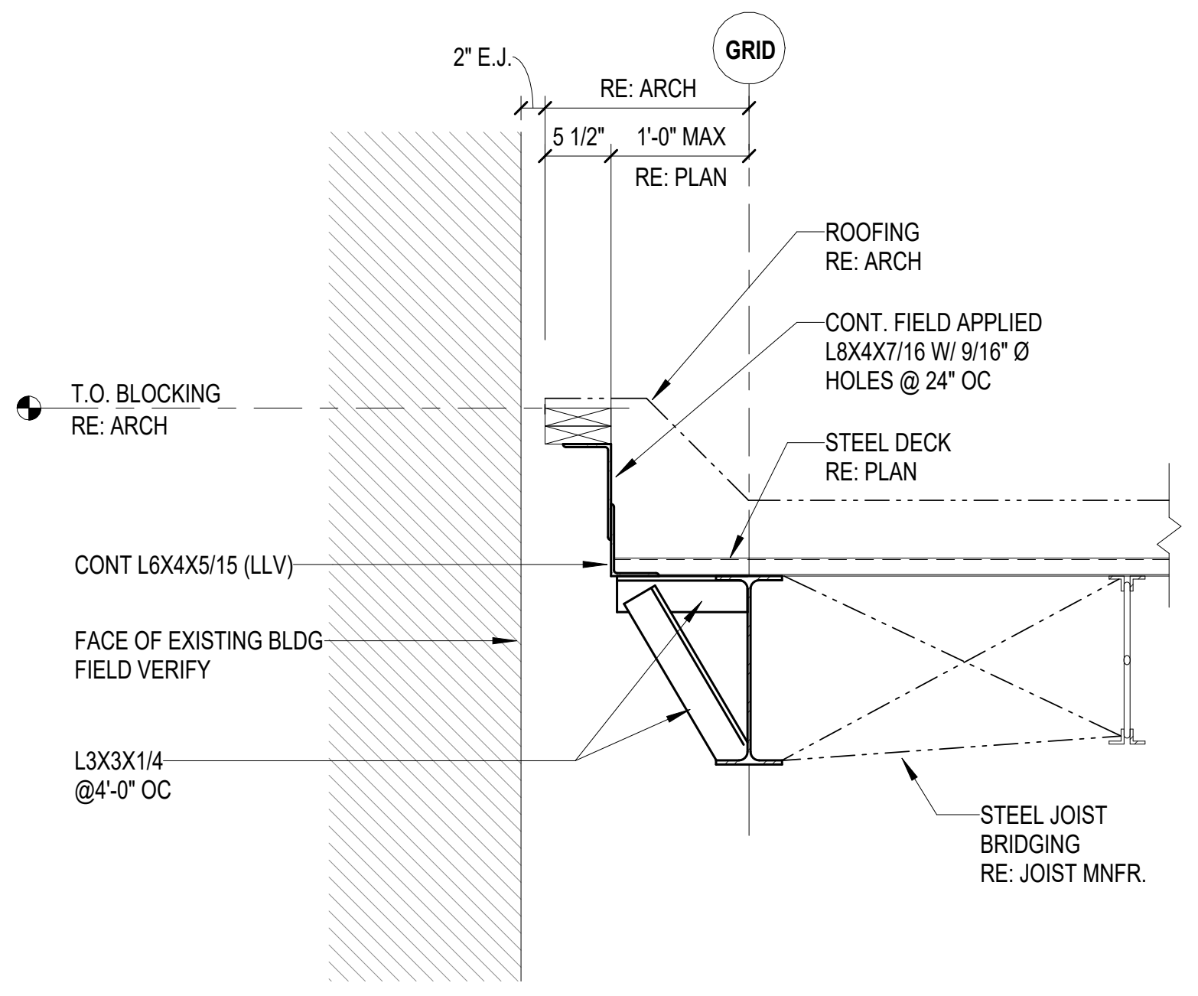
NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

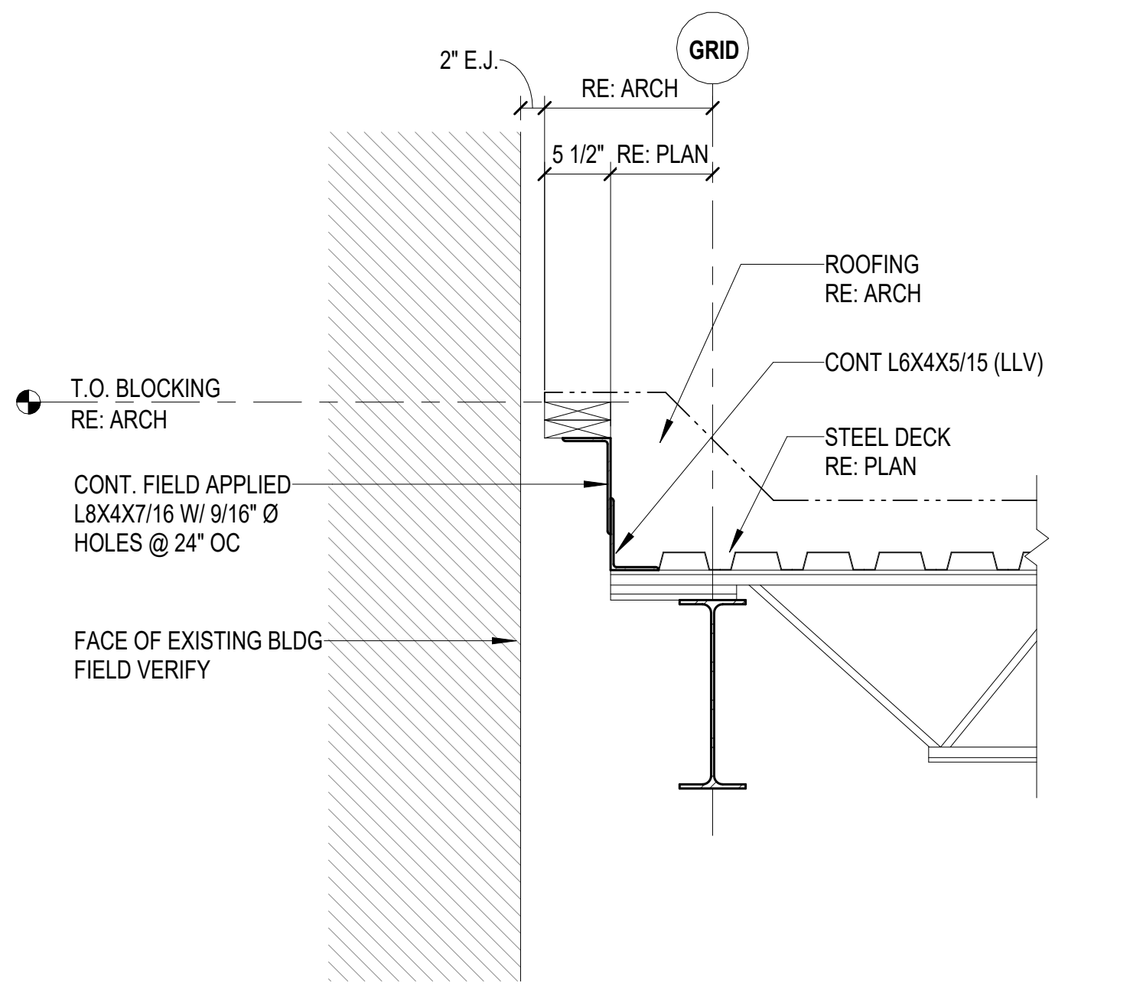
CONSTRUCTION DOCUMENT



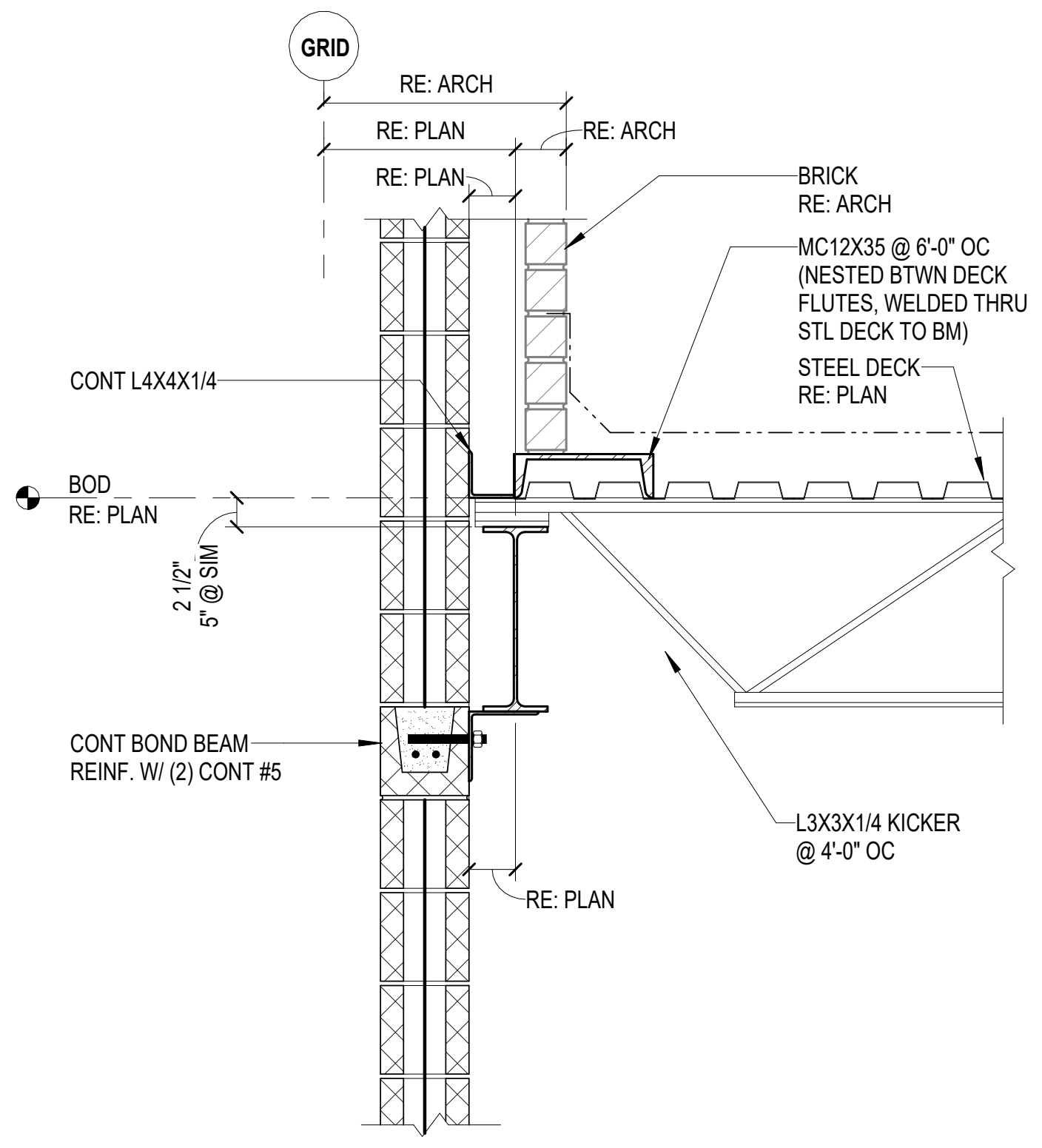
6 ROOF SECTION
3/4" = 1'-0"



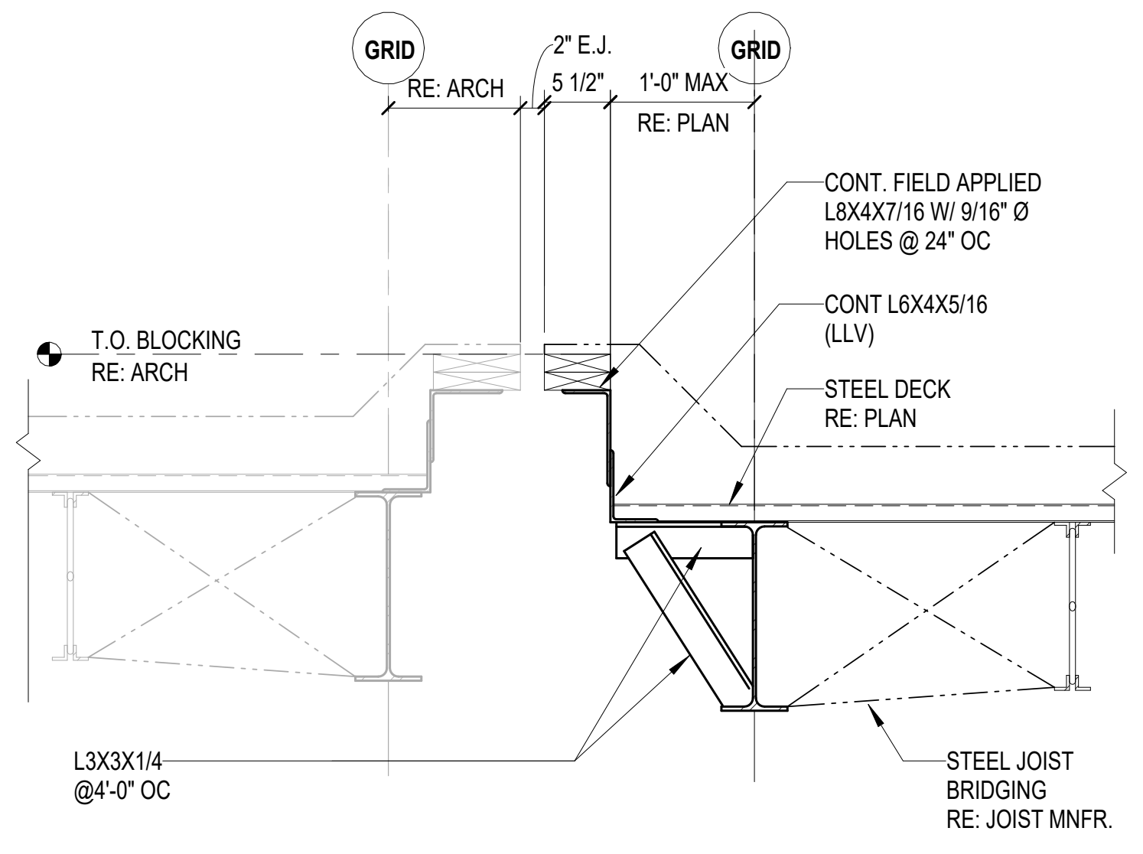
7 ROOF SECTION
3/4" = 1'-0"



8 ROOF SECTION
3/4" = 1'-0"



9 LOW ROOF SECTION
3/4" = 1'-0"



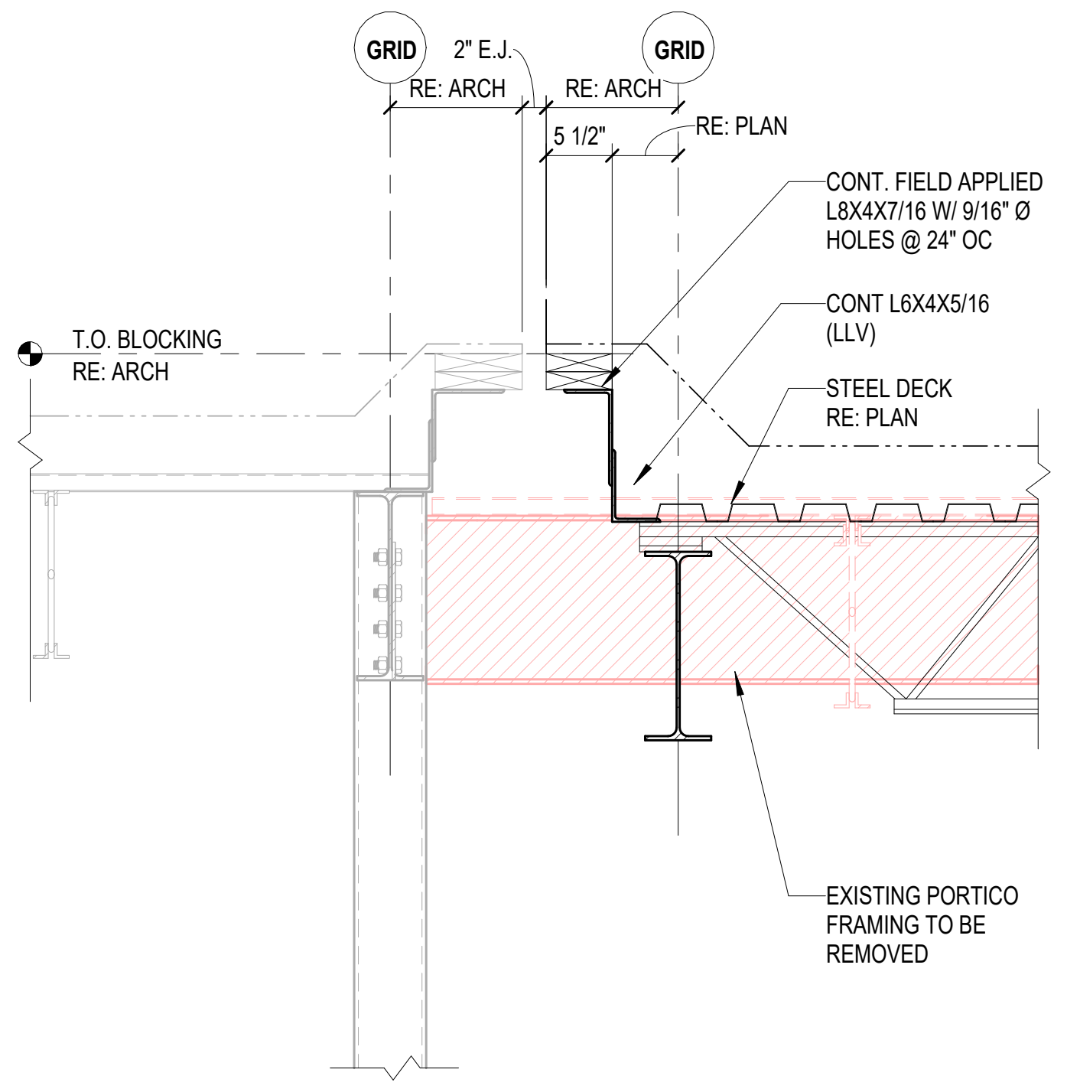
10 ROOF SECTION
3/4" = 1'-0"

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

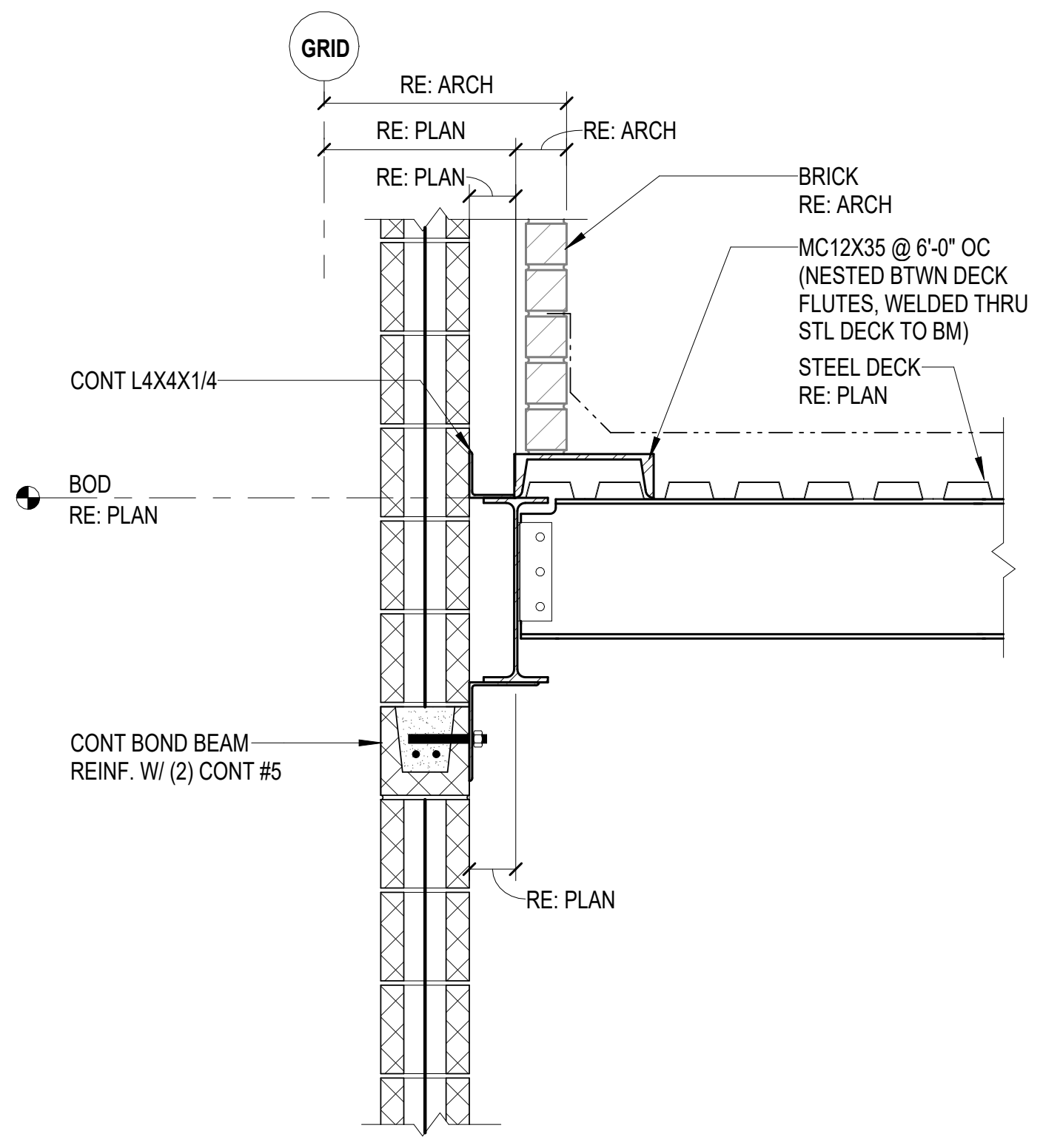
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

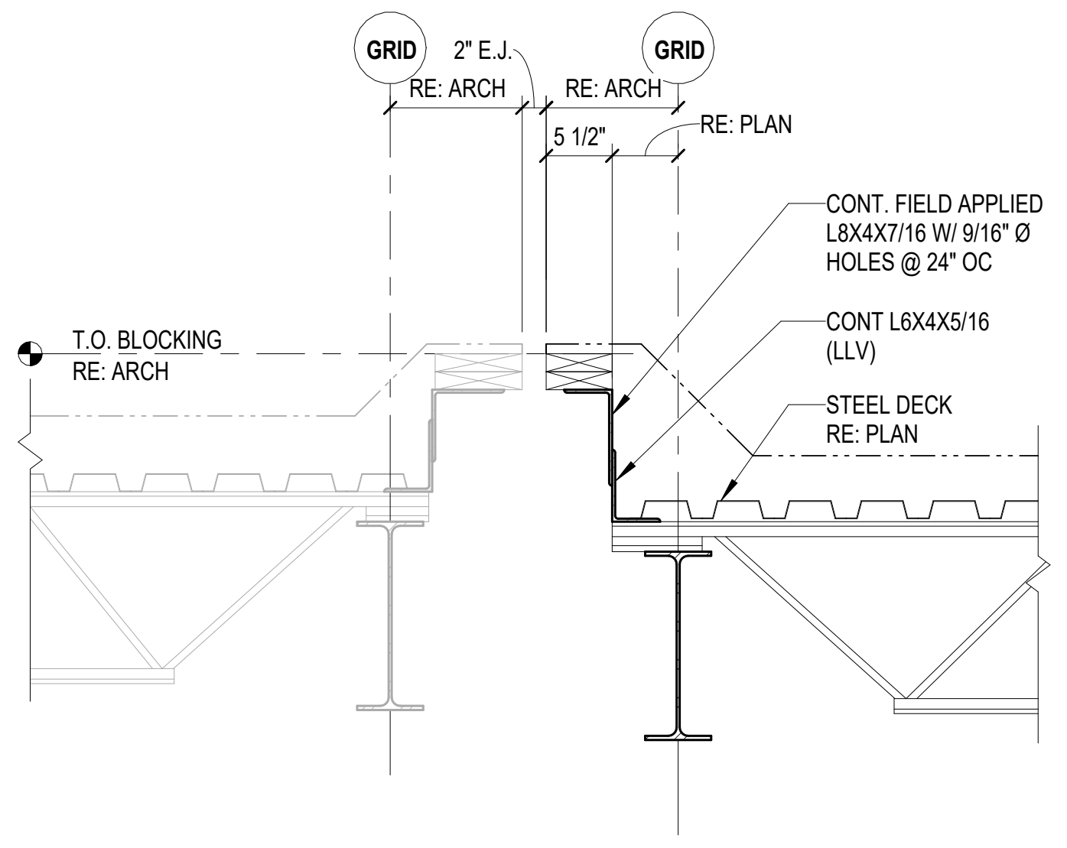
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040



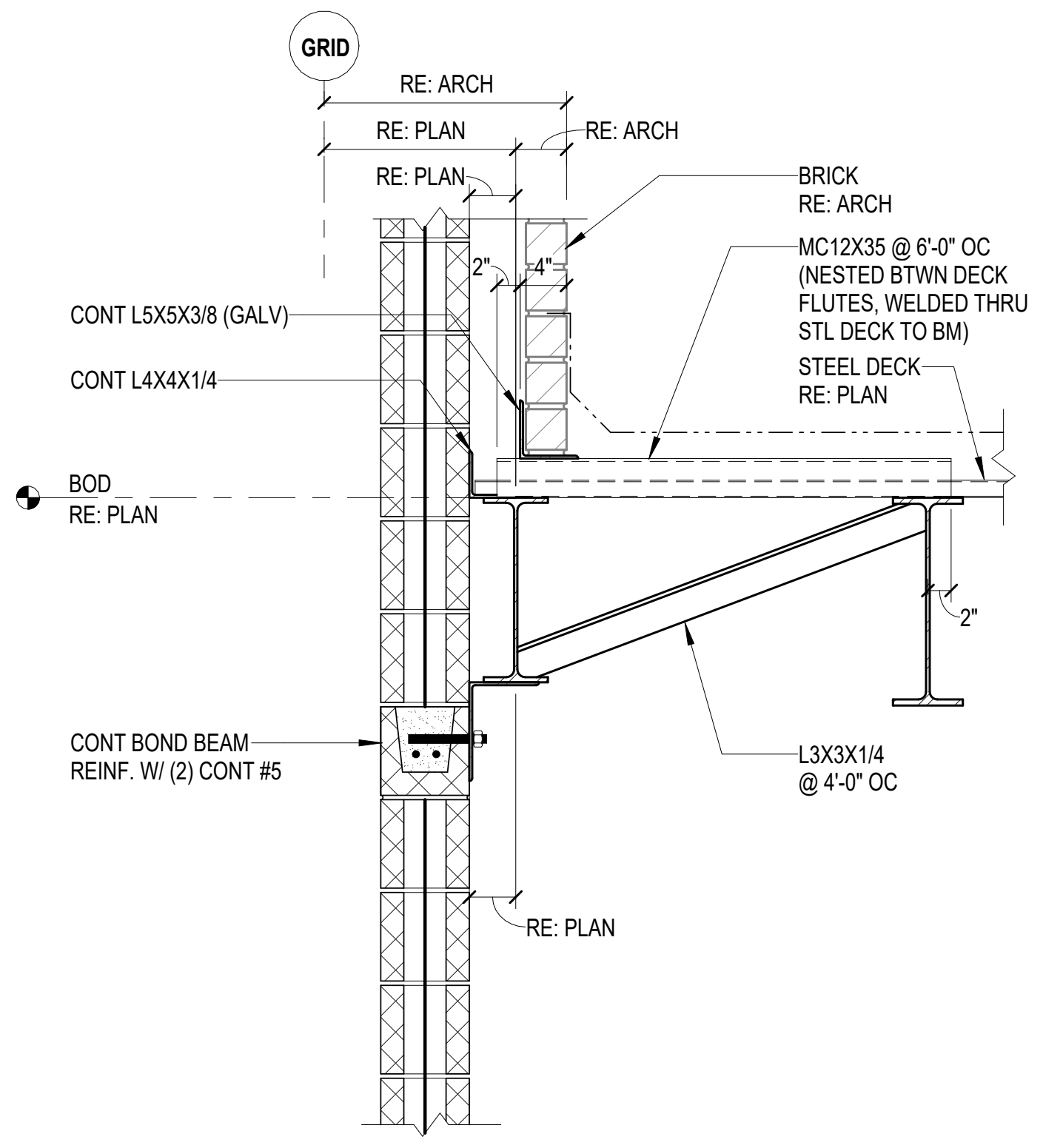
11 ROOF SECTION
3/4" = 1'-0"



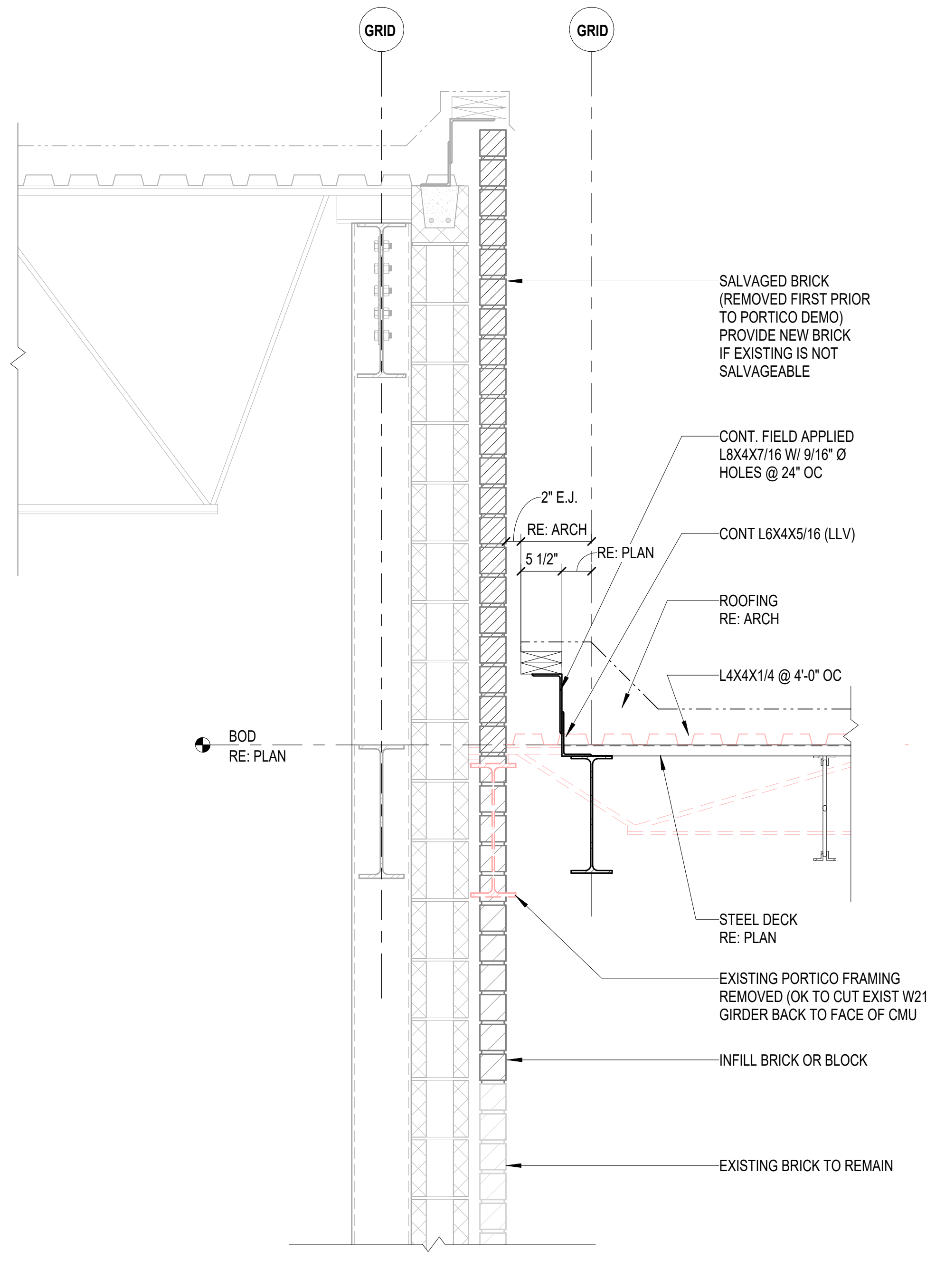
13 LOW ROOF SECTION
3/4" = 1'-0"



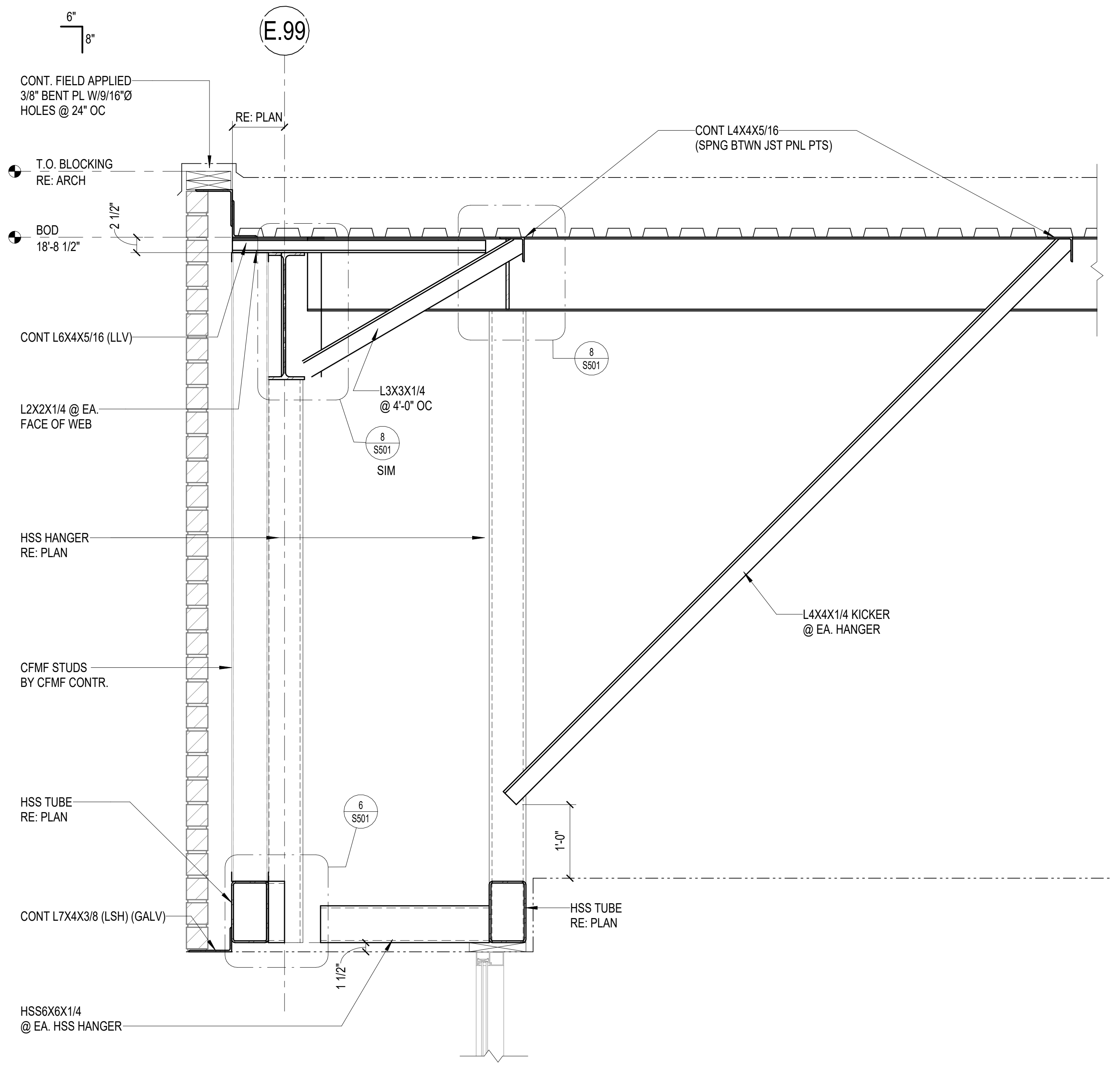
12 ROOF SECTION
3/4" = 1'-0"



14 LOW ROOF SECTION
3/4" = 1'-0"



15 ROOF SECTION
3/4" = 1'-0"



16 ROOF SECTION
3/4" = 1'-0"

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

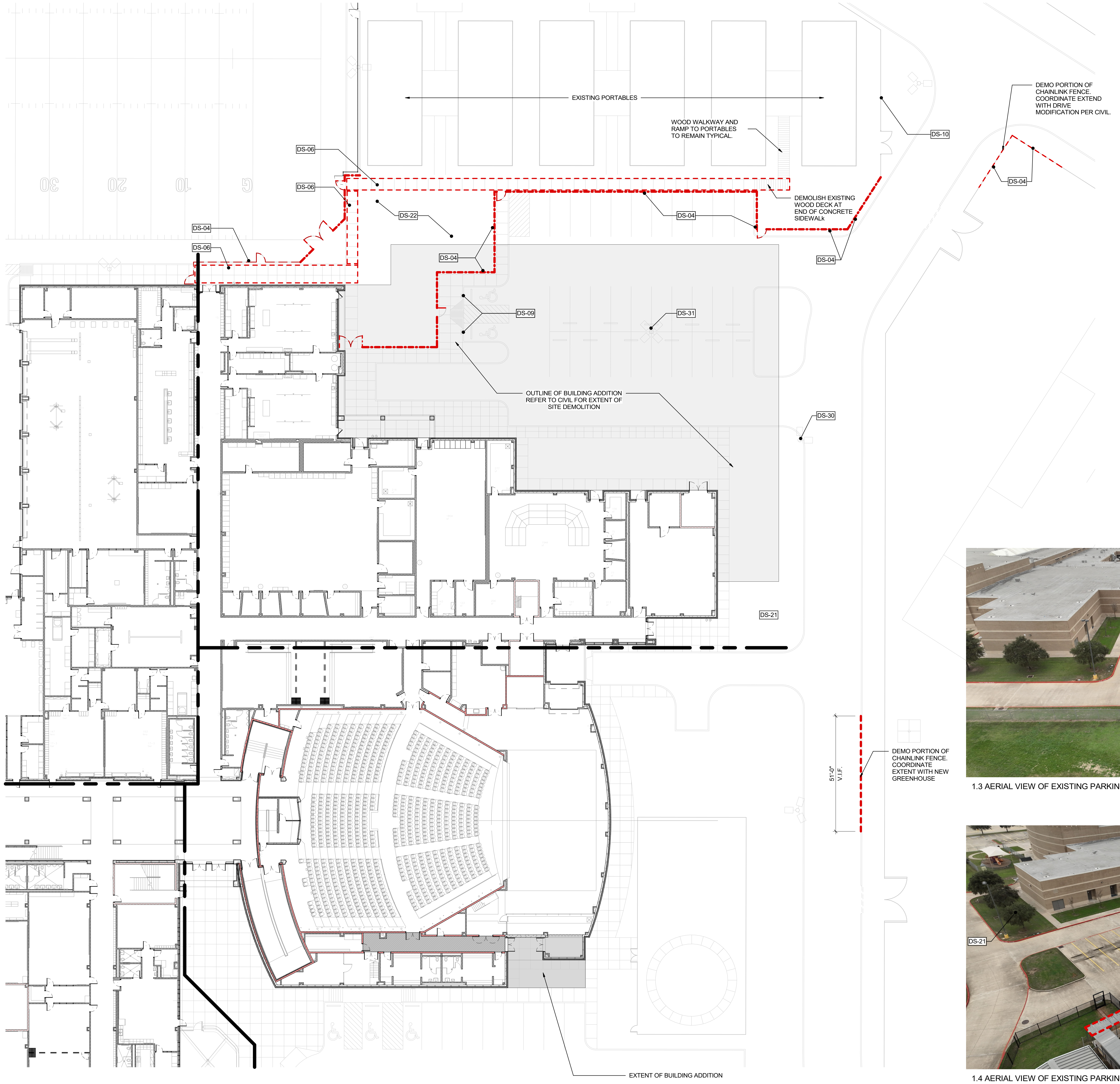
Project Number: 23071
Date: 11-17-2024
Drawn by: JT

STEEL ROOF
(OVERFLOW & EJ)

S602
of

11/13/2024 4:14:46 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/24-074-00 CFISD Cy Lakes Addn (Phase 6)-STRUCT- R22.rvt



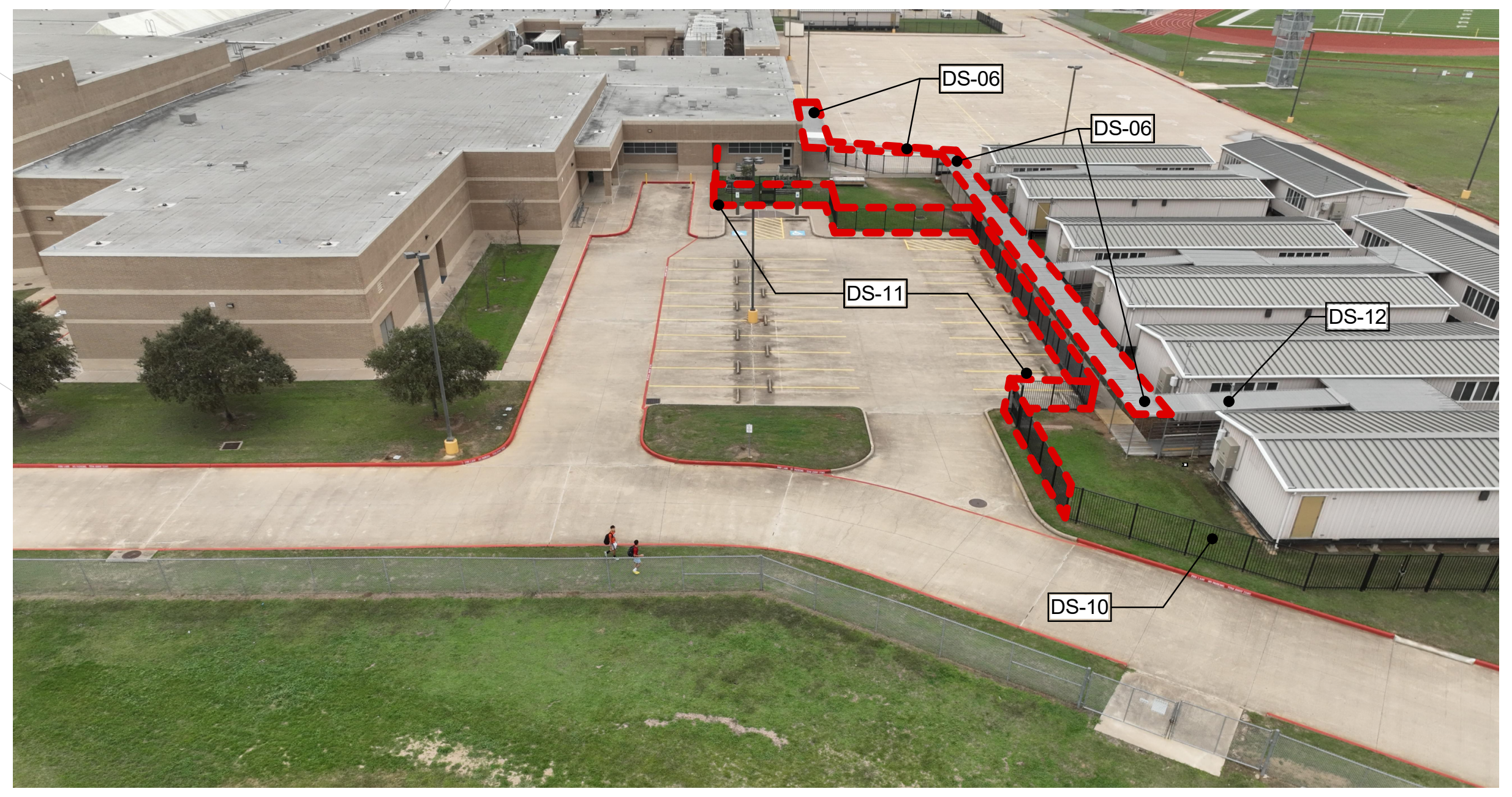
TRUE PLAN

1 SITE PLAN - DEMO @ FINE ARTS / CTE

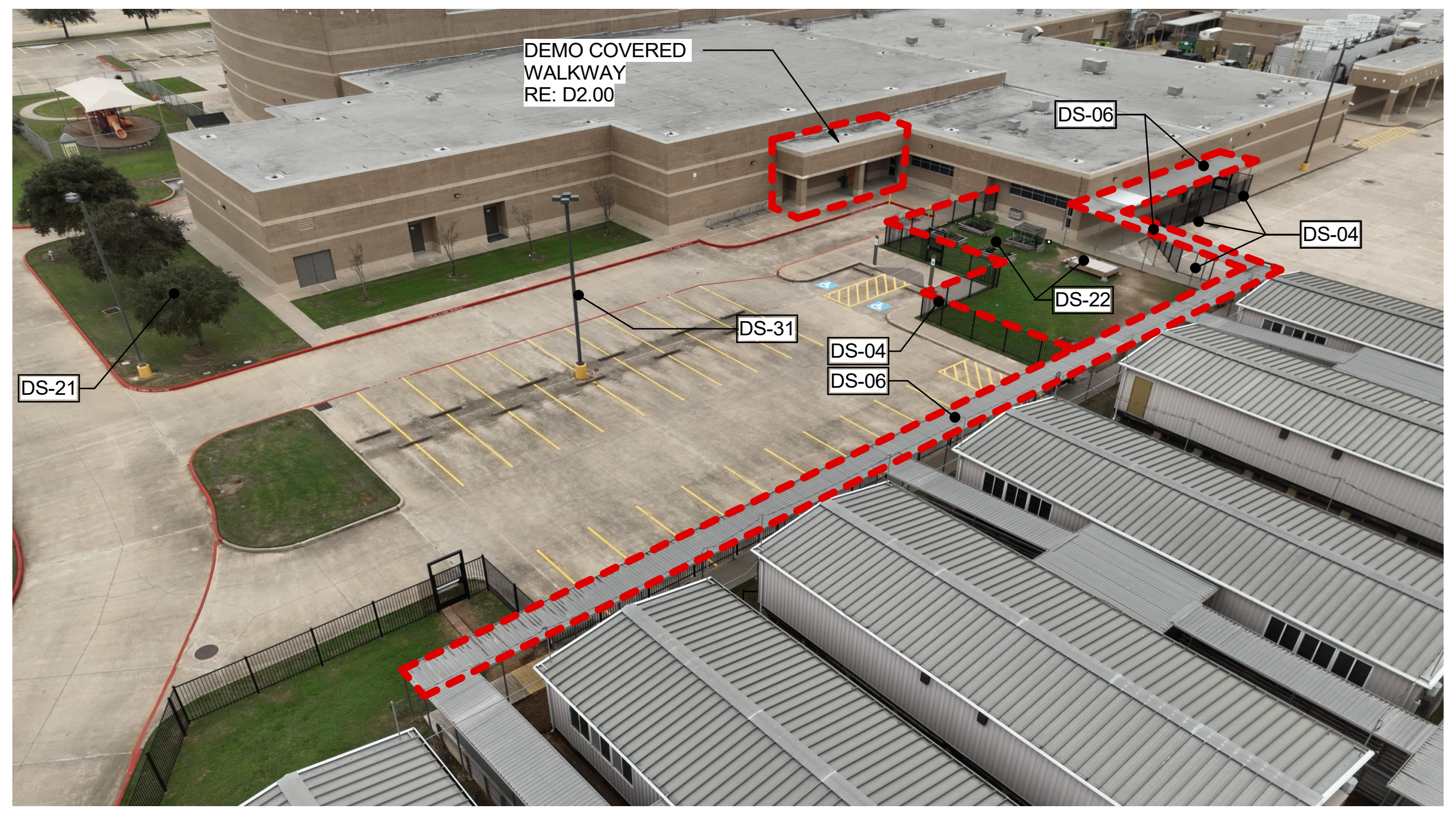
1" = 20'-0"

1.1 AERIAL VIEW OF EXISTING PARKING AT FINE ARTS / CTE ADDITION

1.2 AERIAL VIEW OF EXISTING PARKING AT FINE ARTS / CTE ADDITION



1.3 AERIAL VIEW OF EXISTING PARKING AT FINE ARTS / CTE ADDITION



1.4 AERIAL VIEW OF EXISTING PARKING AT FINE ARTS / CTE ADDITION

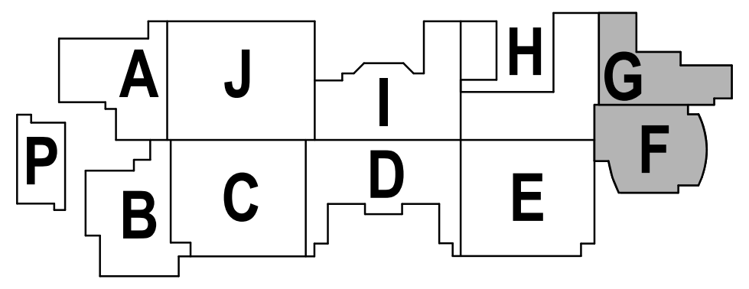
SITE DEMOLITION GENERAL NOTES

1. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR EXTENT OF SITE DEMO. I.E. DRIVEWAYS, SIDEWALKS, PARKING LOTS & SERVICE DRIVES
2. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF ANY DEMOLITION.
3. REMOVE ALL EXISTING TREES, VEGETATION AND DEBRIS IN THE BUILDING PAVING OR GRADING AREAS UNLESS NOTED OTHERWISE. VERIFY EXACT LOCATION ON SITE.
4. CANOPIES AND FENCING SCHEDULED TO BE REMOVED. REMOVE ALL COMPONENTS DOWN TO FOUNDATION. PATCH, FILL AND FINISH EXISTING CONCRETE WHERE POSTS WERE REMOVED AND ANY DAMAGED AREA DUE TO DEMOLITION.
5. ORNAMENTAL FENCE AND GATE SCHEDULED TO BE REMOVED - SALVAGED COMPONENTS CAN BE RE-USED AS PART OF NEW REQUIRED FENCING NOTED IN A1 SERIE DRAWINGS ONLY IF IT CAN BE INCORPORATED SEAMLESSLY. RETURN ANY EXTRA UNUSED FENCING TO THE DISTRICT.

KEYNOTES

DS-04	REMOVE FENCING AND GATES
DS-05	CAREFULLY REMOVE AND STORE EXISTING CANOPIES IN FRONT OF PORTABLE CLASSROOM BUILDINGS. RE-INSTALL ON NEW SIDEWALK IN SAME LOCATION. REPLACE DAMAGED COMPONENTS AS REQUIRED FOR COMPLETE RE-INSTALLATION.
DS-06	DEMOLISH CANOPIES, CANOPY POSTS & FOOTINGS IN THEIR ENTIRETY.
DS-09	REMOVE EXISTING ADA PARKING SIGNS.
DS-10	EXISTING ORNAMENTAL FENCE AND GATES TO REMAIN.
DS-11	EXISTING WALKWAY CANOPY TO REMAIN.
DS-12	EXISTING CANOPY OVER PORTABLE BUILDING RAMPS TO REMAIN TYPICAL.
DS-21	REMOVE TREES AND PLANTING WHERE IMPACTED BY BUILDING ADDITIONS AND PAVING.
DS-22	REMOVE ALL PLANTERS, WOOD PLATFORM AND FOUNDATION COMPLETE IN THIS AREA.
DS-30	LIGHT POLE TO REMAIN.
DS-31	REMOVE EXISTING POLE LIGHTS COMPLETE INCLUDING FOUNDATION. RE: ELEC.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

SITE DEMO

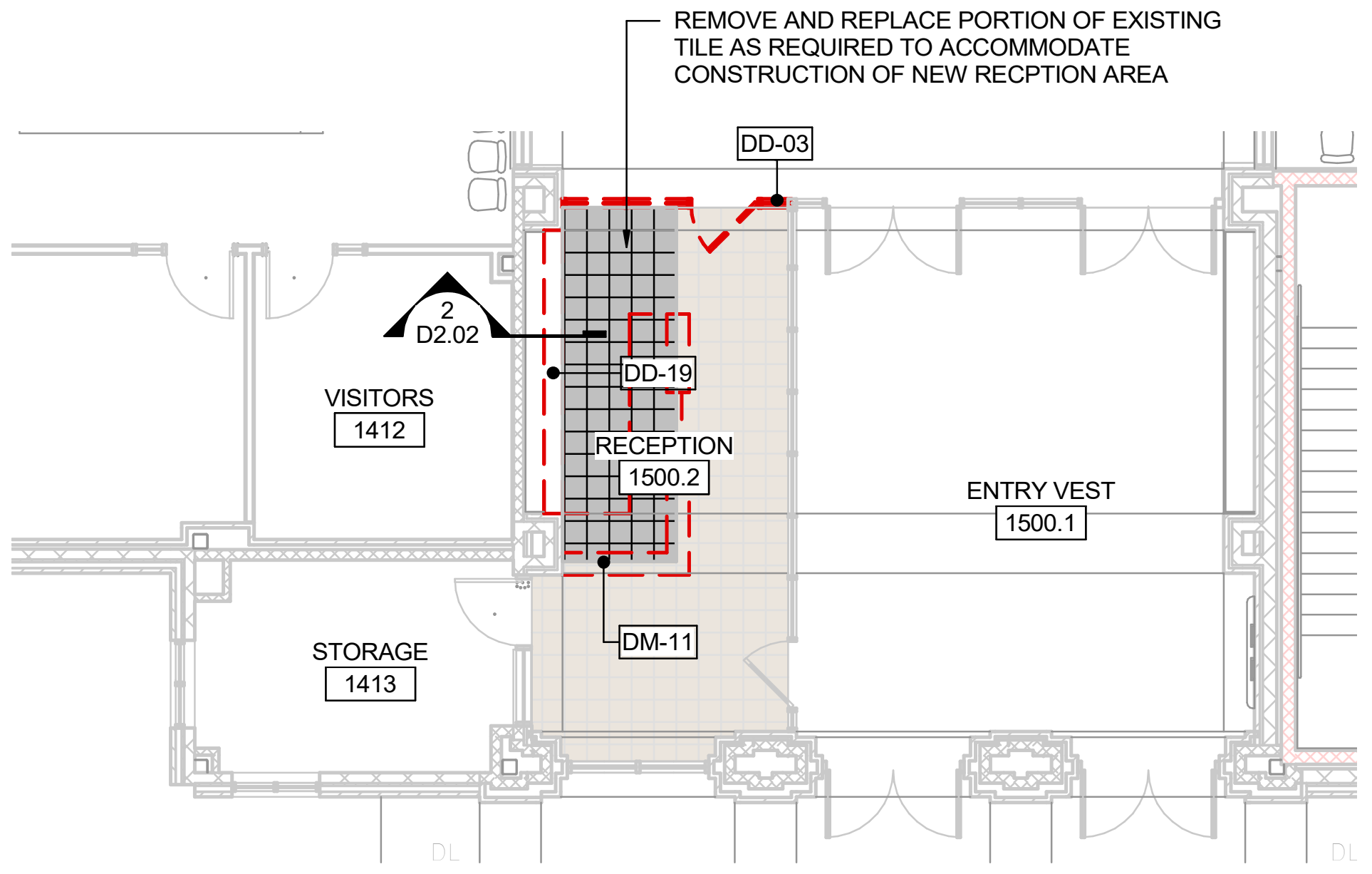
D1.00

___ of ___

MAIN LOBBY INTO RECEPTION

1047 WEIGHT ROOM

1047 WEIGHT ROOM



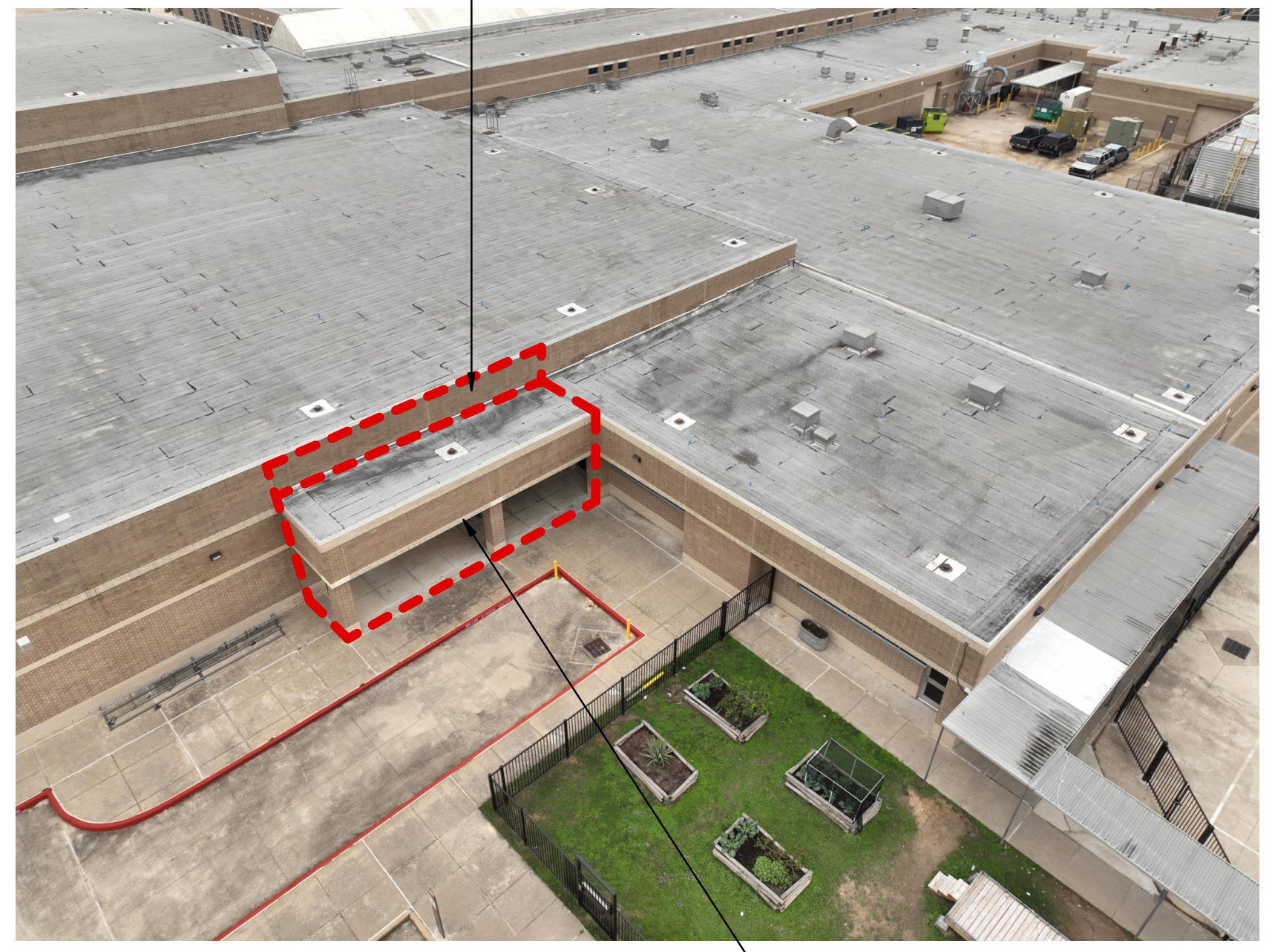
2 1ST FLOOR DEMOLITION PLAN - RECEPTION

1/8" = 1'-0"

1500.1 ENTRY VESTIBULE INTO RECEPTION

1500.2 RECEPTION

REMOVE BRICKS ABOVE COVERED WALKWAY
RE: D2.02



EXTERIOR ADDITION DEMO

CAREFULLY DEMOLISH ENTIRE LOW ROOF COVERED WALKWAY INCLUDING BUT NOT LIMITED TO MASONRY WALLS, DOOR, CEILING, SOFFIT, ROOF, PAVING AND ASSOCIATED MEPT ITEMS. REMOVE STRUCTURAL COLUMNS, FRAMING, FOUNDATION AND ETC PER STRUCTURAL DRAWINGS

1 1ST FLOOR DEMOLITION PLAN

1" = 40'-0"

SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"

DEMOLITION PLAN LEGEND

SYMBOL	DESCRIPTION
D20 ─●	DEMO KEYNOTE - REFER TO KEYNOTE LEGEND
D20	DEMO KEYNOTE - APPLIES TO ENTIRE ROOM
═	EXIST. CONSTRUCTION TO REMAIN
╍	EXIST. CONSTRUCTION TO BE DEMOLISHED IN THEIR ENTIRETY
▨	EXIST. CMU WALL TO REMAIN
🟥	EXIST. CARPET AND BASE TO BE DEMOLISHED
▧	EXIST. VCT FLOORING AND BASE TO BE DEMOLISHED
▦	EXIST. TILE FLOORING TO BE DEMOLISHED
░	EXIST. CONCRETE COATING TO BE REMOVED
☐	EXIST. FLOOR - NO WORK

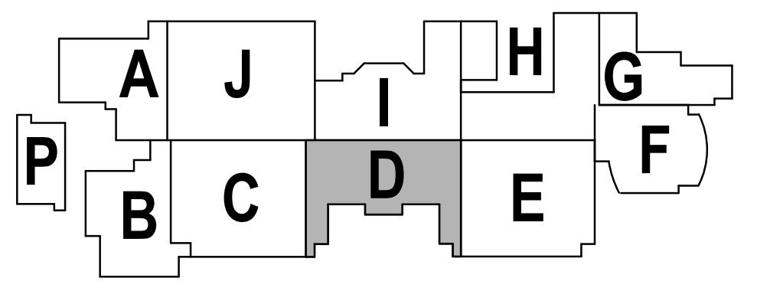
DEMOLITION GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL DEMOLITION & SALVAGE OF EXISTING MATERIALS TO PERFORM WORK DESCRIBED IN ENTIRE CONTRACT DOCUMENT WHETHER SPECIFICALLY STATED IN DEMOLITION DRAWINGS. ALL MATERIALS & FFE SALVAGED SHALL BE STORED AS DIRECTED BY THE OWNER & SECURED FOR REUSE WHERE APPLICABLE.
2. PROVIDE ONE SECURED 8' W X 40'L X 8' H STORAGE CONTAINER ON SITE FOR OWNER'S USE FOR DURATION OF CONSTRUCTION. COORDINATE CONTAINER LOCATION WITH OWNER AND REMOVE AFTER PROJECT COMPLETETION.
3. ALL MATERIAL TO BE DEMOLISHED & REMOVED SHALL BE DISPOSED OF AS APPROVED BY LOCAL ORDINANCE AND CODES. THE PREMISES IN WHICH WORK IS BEING PERFORMED SHALL BE KEPT CLEAN AT ALL TIMES.
4. CONTRACTOR SHALL VISIT THE BUILDING & SITE TO COMPARE THE EXISTING CONDITIONS TO THE INTENDED WORK AS DESCRIBED OR IMPLIED BY THE DEMOLITION PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXTENT OF DEMOLITION REQUIRED TO COMPLETE THE WORK. IT SHALL BE ASSUMED THAT THE CONTRACTOR HAS A THOROUGH KNOWLEGE OF EXISTING CONDITIONS & DEMOLITION OR PATCHING REQUIRED AT THE TIME BIDS ARE EVALUATED. ADDITIONAL MONEY FOR DEMOLITION OR PATCH WORK REQUIRED WILL NOT BE APPROVE IF EXISTING CONDITION WAS APPARENT AND SUCH WORK IS NECESSARY TO COMPLETE THE INTENDED NEW CONSTRUCTION.
5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING THIS WORK. IN CASE OF ANY DISCREPANCIES, NOTIFY ARCHITECT IMMEDIATELY. WORK SHALL NOT COMMENCE WITHOUT APPROVAL FROM THE ARCHITECT.
6. CONTRACTOR SHALL SECURE & PROTECT THE EXISTING AREAS, & THEIR CONTENTS, THAT REMAIN. ALL DAMAGE RESULTING FROM WORK IN THIS CONTRACT SHALL BE RETURNED TO ITS ORIGINAL STATE. NOTIFY ARCHITECT PRIOR TO ANY DEMOLITION WORK THAT MAY DAMAGE THE INTEGRITY OF ANY MATERIAL TO REMAIN AS EXISTING.
7. IF PARTS OF THIS BUILDING ARE ACTIVE DURING DEMOLITION, CONTRACTOR SHALL COORDINATE ALL SYSTEM SHUT DOWNS WITH THE FACILITY MANAGER. CONTRACTOR SHALL INFORM THE FACILITY MANAGER OF SCHEDULE, DURATION AND AREAS AFFECTED AND SHALL RECEIVE OWNERS APPROVAL PRIOR TO SHUT DOWN COMMENCEMENT.
8. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE. IDENTIFY AND PROTECT AGAINST DAMAGE DURING DEMOLITION. CONTRACTOR IS TO REFERENCE THE CIVIL DOCUMENTS AND TO NOTIFY THE OWNER, ARCHITECT AND CIVIL ENGINEER IF ANY UTILITIES ARE UNCOVERED DURING THE DEMOLITION PHASE THAT ARE NOT IDENTIFIED IN THE DOCUMENT PROVIDED.
9. PROVIDE TEMPORARY WEATHER PROTECTION DURING INTERVAL BETWEEN INSTALLATION OF NEW CONSTRUCTION SO AS TO ENSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO THE STRUCTURE OR INTERIOR AREAS OF THE EXISTING BUILDING. REMOVE TEMPORARY PROTECTION AT COMPLETION OF WORK.
10. PROTECT EXISTING FIRE PROOFING OR FIRE ASSEMBLIES TO REMAIN, DAMAGE DURING DEMOLITION SHALL BE REPAIRED TO CONFORM TO ORIGINAL PROTECTION REQUIREMENTS.
11. MAINTAIN REQUIRED EMERGENCY EXITS AT ALL TIME. COODINATE LOCATION WITH ARCHITECT. PROVIDE TEMPORARY EXITS AND PROTECTED EGRESS AS REQUIRED. CONSTRUCT PROTECTED WALKWAY AND CANOPY FOR TEMPERARY EXIT PATH. EXTENT OF WALKWAY TO BE DETERMINED IN ACCORDANCE WITH PROPOSED PHASING AND SCHEDULE.
12. PROTECT ALL EXISTING MATERIALS AND SURFACES TO REMAIN FROM SURROUNDING RENOVATION WORK. REPLACE, REINSTALL AND RESTORE AS REQUIRED TO ORIGINAL CONDITION.
13. CAREFULLY REMOVE ITEMS ATTACHED TO EXISTING SURFACES TO REMAIN. PATCH, REPAIR AND FINISH ANY EXPOSED AREA TO MATCH SURROUNDING SURFACES. PREP TO RECEIVE SCHEDULED FINISHES. ITEMS INCLUDE BUT NOT LIMITED TO WALLS, FLOOR, CEILING, CASEWORK, MARKER & TACK BOARDS, EQUIPMENT AND MEPT ITEMS.
14. WHERE FLOORING IS SCHEDULED TO BE REMOVED, REMOVE DOWN TO SUBSTRATE; PATCH & REPAIR SUBSTRATE AND APPLY LEVELING COMPOUND AS REQUIRED TO RECEIVE NEW SCHEDULED FINISHES.
15. PIPING, CONDUIT, DEVICES AND WIRING THAT IS REMOVED AND NOT SCHEDULED FOR REUSE SHALL BE REMOVED COMPLETELY AND CAPPED TO BEHIND NEW FINISHED SURFACES.
16. CONTRACTOR SHALL REMOVE OR RELOCATE M.E.P. DEVICES, LINES, CONDUITS, HANGERS, EQUIPMENT, ETC. AS DIRECTED BY ENGINEER'S DRAWINGS. SEE MEPT DRAWINGS FOR DEMOLITION OF EACH TRADE.

KEYNOTES

DD-03	CAREFULLY REMOVE, STORE AND REINSTALL OR PROTECT DOOR AND STOREFRONT SYSTEM AS REQUIRED TO ACCOMMODATE DEMOLITION OF ADJACENT WINDOW SYSTEM AND INTERIOR WALL. REPLACE HARDWARE PER DOOR SCHEDULE.
DD-13	REMOVE & DISPOSE OF DOOR & HARDWARE ONLY; FRAME TO REMAIN FOR REUSE. REPAIR & REFINISH EXISTING FRAME TO RECEIVE NEW DOOR AND HARDWARE AS SCHEDULED
DD-19	CAREFULLY REMOVE DOOR AND FRAME. DEMO PORTION OF ADJACENT WALL FOR NEW DOOR AND SIDELITE FRAME. COORDINATE EXTENT OF DEMO WORK WITH NEW SCHEDULED FRAME AND STRUCTURAL REQUIREMENT.
DD-22	CAREFULLY REMOVE WINDOW SYSTEM AND ASSOCIATED WALL BELOW IN ITS ENTIRETY. PROTECT ADJACENT STOREFRONT SYSTEM SCHEDULE TO REMAIN.
DM-11	REMOVE & DISPOSE CIRCULATION DESK COMPLETE. REFER TO ELECTRICAL AND TECHNOLOGY DRAWINGS FOR ADDITIONAL INSTRUCTION.
DM-22	REMOVE & DISPOSE FOLDING PANEL PARTITIONS. PATCH AND REPAIR AREAS OF DEMOLITION TO MATCH EXISTING SURROUNDING FINISHES. IF EXISTING STRUCTURAL SUPPORT IS NOT COMPATIBLE OR USABLE WITH NEW FOLDING PARTITION, REMOVE COMPLETE.
DW-19	CAREFULLY REMOVE DISPLAY CASE IN ITS ENTIRETY AND MASONRY WALL BELOW.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

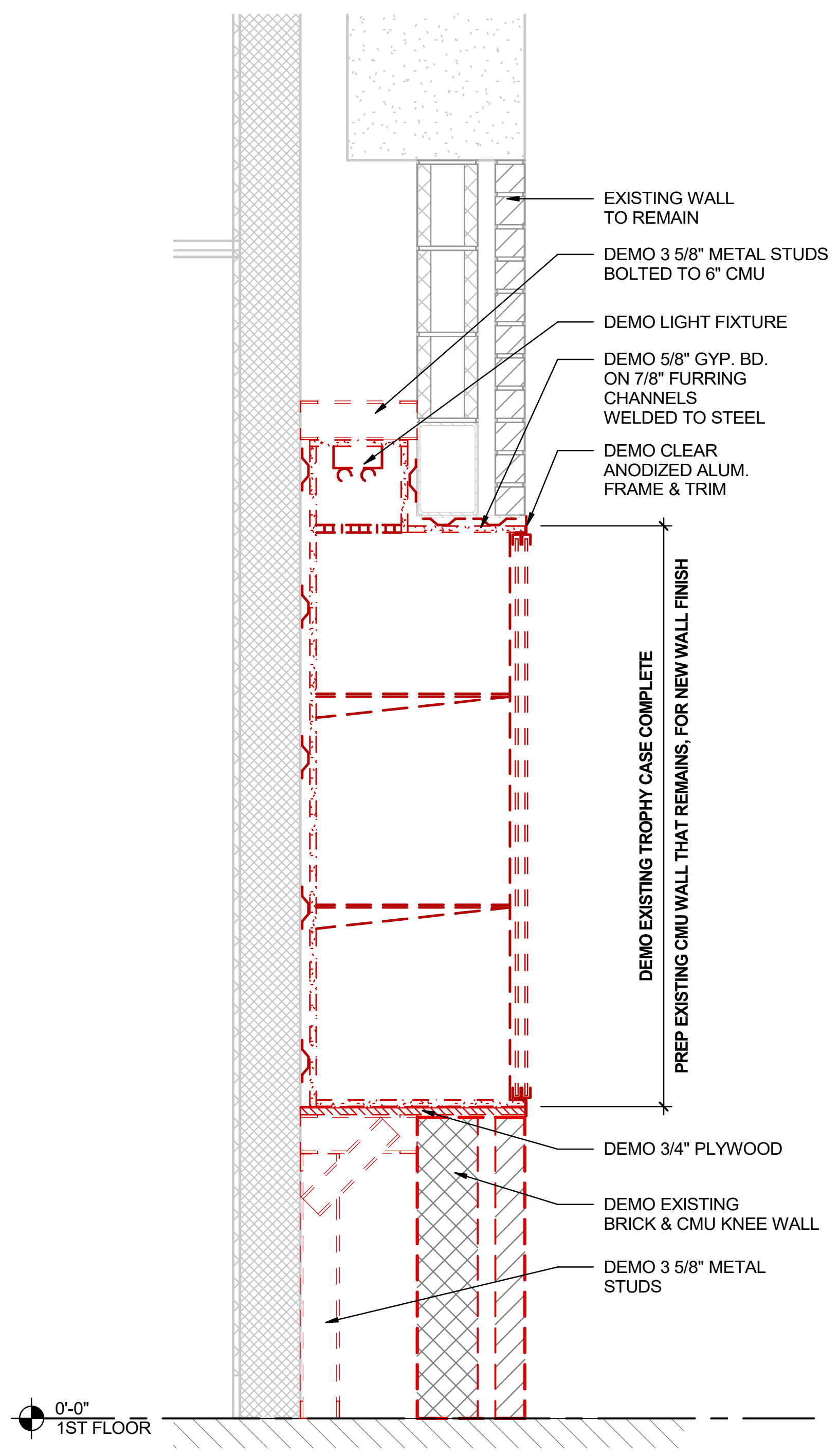
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

1ST FLOOR
DEMOLITION PLAN

D2.01

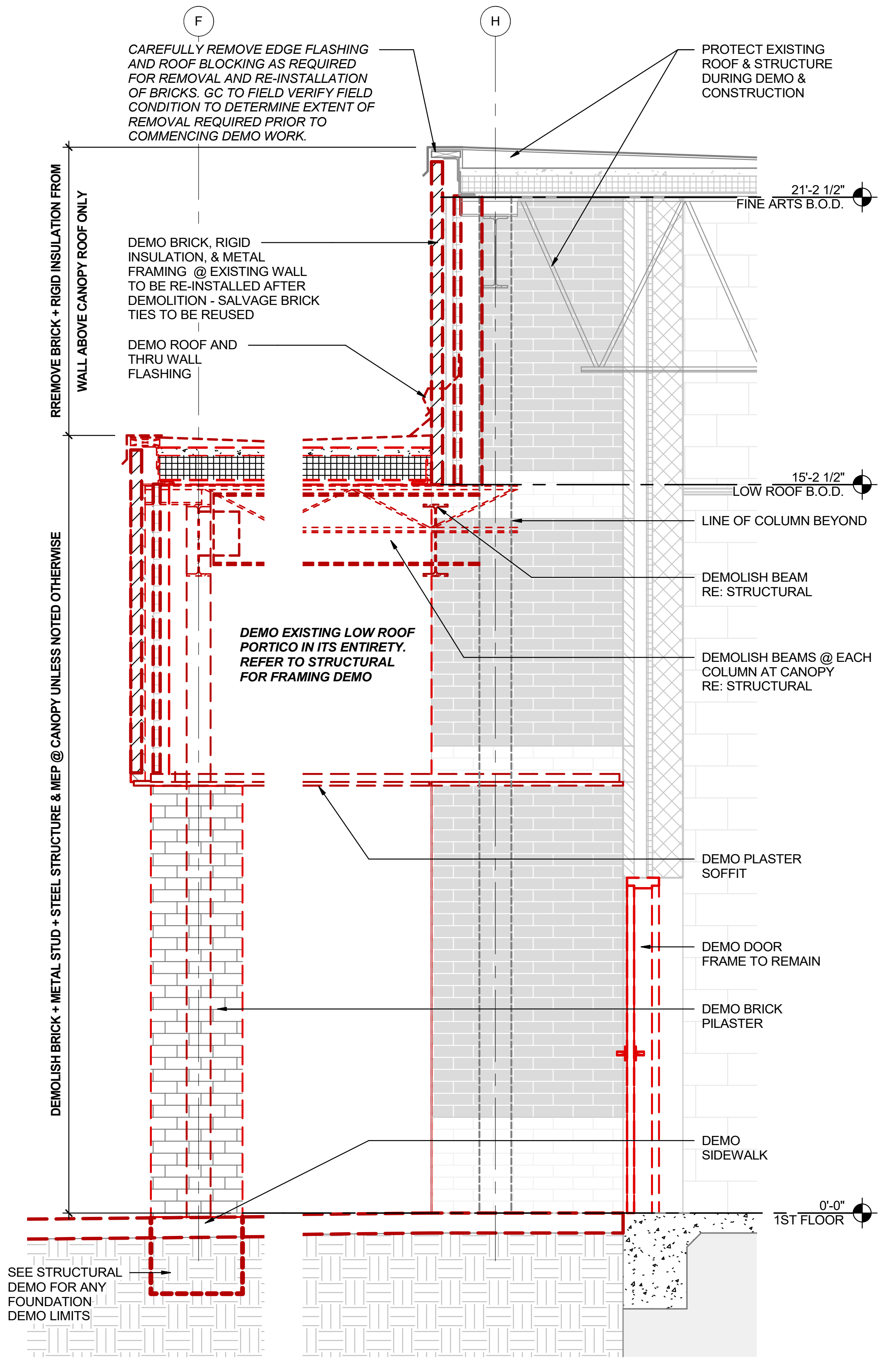
of

11/14/2024 2:05:29 PM



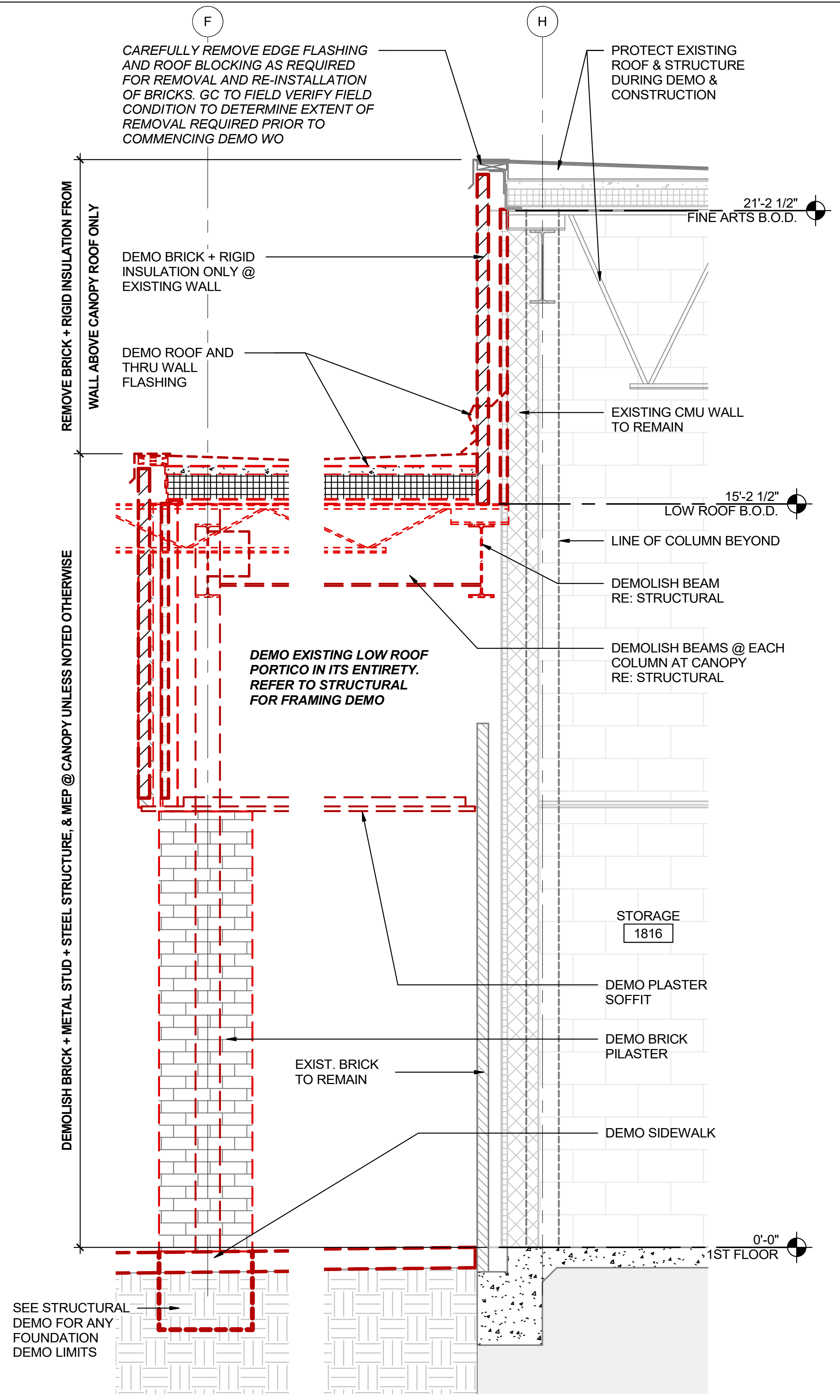
2 DISPLAY CASE DEMO

1" = 1'-0"



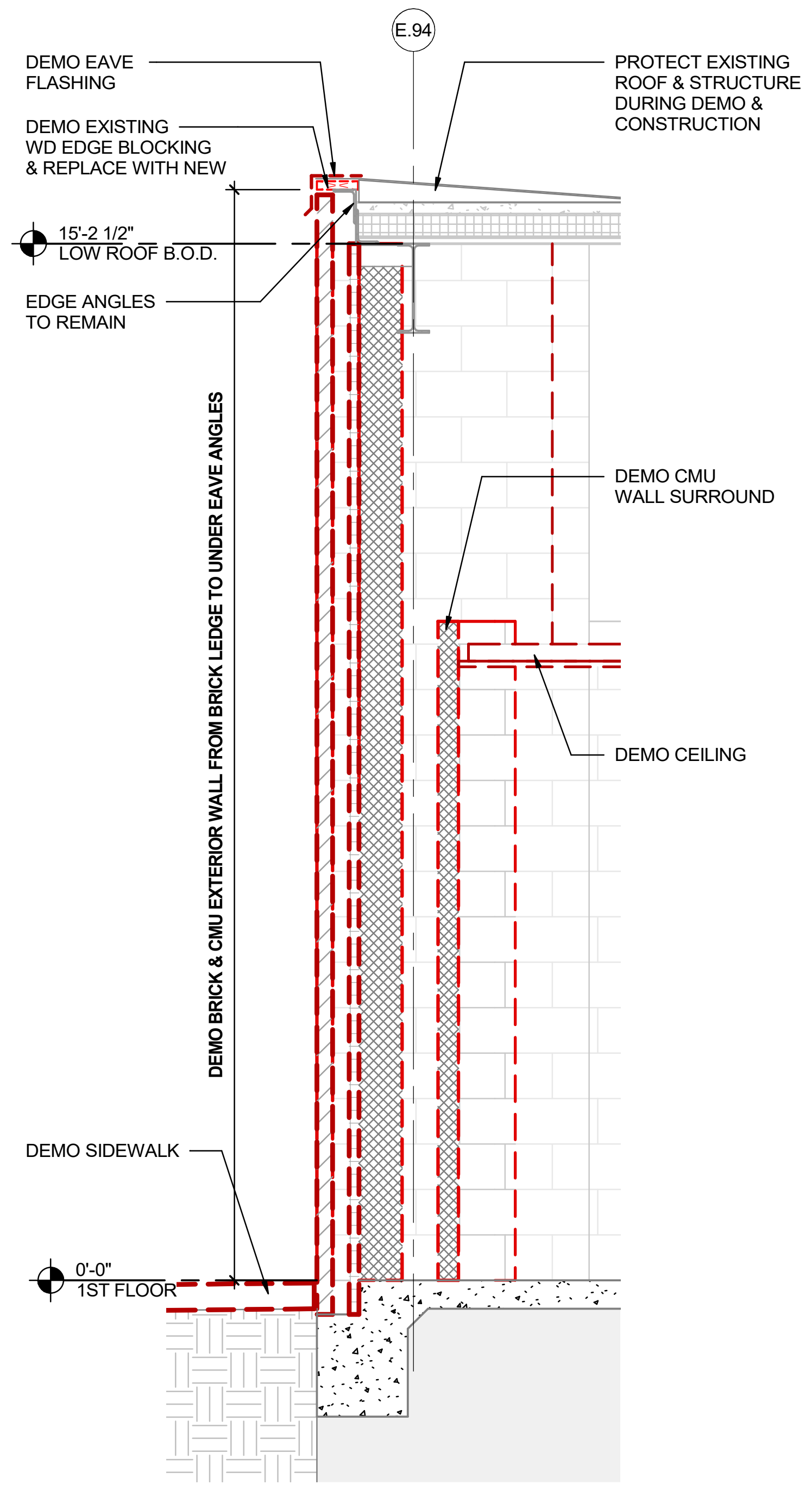
3 DEMO WALL SECTION - COVERED WALKWAY

1/2" = 1'-0"



4 DEMO WALL SECT. - COVERED WALKWAY

1/2" = 1'-0"



5 DEMO WALL SECT. - ART ROOM

1/2" = 1'-0"

1 2ND FLOOR DEMOLITION PLAN

1" = 40'-0"

SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"

DEMOLITION PLAN LEGEND

SYMBOL	DESCRIPTION
D20 →	DEMO KEYNOTE - REFER TO KEYNOTE LEGEND
D20	DEMO KEYNOTE - APPLIES TO ENTIRE ROOM
═	EXIST. CONSTRUCTION TO REMAIN
╍	EXIST. CONSTRUCTION TO BE DEMOLISHED IN THEIR ENTIRETY
▨	EXIST. CMU WALL TO REMAIN
🟥	EXIST. CARPET AND BASE TO BE DEMOLISHED
▧	EXIST. VCT FLOORING AND BASE TO BE DEMOLISHED
▦	EXIST. TILE FLOORING TO BE DEMOLISHED
░	EXIST. CONCRETE COATING TO BE REMOVED
☐	EXIST. FLOOR - NO WORK

DEMOLITION GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL DEMOLITION & SALVAGE OF EXISTING MATERIALS TO PERFORM WORK DESCRIBED IN ENTIRE CONTRACT DOCUMENT WHETHER SPECIFICALLY STATED IN DEMOLITION DRAWINGS. ALL MATERIALS & FFE SALVAGED SHALL BE STORED AS DIRECTED BY THE OWNER & SECURED FOR REUSE WHERE APPLICABLE.
2. PROVIDE ONE SECURED 8' W X 40'L X 8' H STORAGE CONTAINER ON SITE FOR OWNER'S USE FOR DURATION OF CONSTRUCTION. COORDINATE CONTAINER LOCATION WITH OWNER AND REMOVE AFTER PROJECT COMPLETETION.
3. ALL MATERIAL TO BE DEMOLISHED & REMOVED SHALL BE DISPOSED OF AS APPROVED BY LOCAL ORDINANCE AND CODES. THE PREMISES IN WHICH WORK IS BEING PERFORMED SHALL BE KEPT CLEAN AT ALL TIMES.
4. CONTRACTOR SHALL VISIT THE BUILDING & SITE TO COMPARE THE EXISTING CONDITIONS TO THE INTENDED WORK AS DESCRIBED OR IMPLIED BY THE DEMOLITION PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXTENT OF DEMOLITION REQUIRED TO COMPLETE THE WORK. IT SHALL BE ASSUMED THAT THE CONTRACTOR HAS A THOROUGH KNOWLEGE OF EXISTING CONDITIONS & DEMOLITION OR PATCHING REQUIRED AT THE TIME BIDS ARE EVALUATED. ADDITIONAL MONEY FOR DEMOLITION OR PATCH WORK REQUIRED WILL NOT BE APPROVE IF EXISTING CONDITION WAS APPARENT AND SUCH WORK IS NECESSARY TO COMPLETE THE INTENDED NEW CONSTRUCTION.
5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING THIS WORK. IN CASE OF ANY DISCREPANCIES, NOTIFY ARCHITECT IMMEDIATELY. WORK SHALL NOT COMMENCE WITHOUT APPROVAL FROM THE ARCHITECT.
6. CONTRACTOR SHALL SECURE & PROTECT THE EXISTING AREAS, & THEIR CONTENTS, THAT REMAIN. ALL DAMAGE RESULTING FROM WORK IN THIS CONTRACT SHALL BE RETURNED TO ITS ORIGINAL STATE. NOTIFY ARCHITECT PRIOR TO ANY DEMOLITION WORK THAT MAY DAMAGE THE INTEGRITY OF ANY MATERIAL TO REMAIN AS EXISTING.
7. IF PARTS OF THIS BUILDING ARE ACTIVE DURING DEMOLITION, CONTRACTOR SHALL COORDINATE ALL SYSTEM SHUT DOWNS WITH THE FACILITY MANAGER. CONTRACTOR SHALL INFORM THE FACILITY MANAGER OF SCHEDULE, DURATION AND AREAS AFFECTED AND SHALL RECEIVE OWNERS APPROVAL PRIOR TO SHUT DOWN COMMENCEMENT.
8. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE. IDENTIFY AND PROTECT AGAINST DAMAGE DURING DEMOLITION. CONTRACTOR IS TO REFERENCE THE CIVIL DOCUMENTS AND TO NOTIFY THE OWNER, ARCHITECT AND CIVIL ENGINEER IF ANY UTILITIES ARE UNCOVERED DURING THE DEMOLITION PHASE THAT ARE NOT IDENTIFIED IN THE DOCUMENT PROVIDED.
9. PROVIDE TEMPORARY WEATHER PROTECTION DURING INTERVAL BETWEEN INSTALLATION OF NEW CONSTRUCTION SO AS TO ENSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO THE STRUCTURE OR INTERIOR AREAS OF THE EXISTING BUILDING. REMOVE TEMPORARY PROTECTION AT COMPLETION OF WORK.
10. PROTECT EXISTING FIRE PROOFING OR FIRE ASSEMBLIES TO REMAIN, DAMAGE DURING DEMOLITION SHALL BE REPAIRED TO CONFORM TO ORIGINAL PROTECTION REQUIREMENTS.
11. MAINTAIN REQUIRED EMERGENCY EXITS AT ALL TIME. COODINATE LOCATION WITH ARCHITECT. PROVIDE TEMPORARY EXITS AND PROTECTED EGRESS AS REQUIRED. CONSTRUCT PROTECTED WALKWAY AND CANOPY FOR TEMPERARY EXIT PATH. EXTENT OF WALKWAY TO BE DETERMINED IN ACCORDANCE WITH PROPOSED PHASING AND SCHEDULE.
12. PROTECT ALL EXISTING MATERIALS AND SURFACES TO REMAIN FROM SURROUNDING RENOVATION WORK. REPLACE, REINSTALL AND RESTORE AS REQUIRED TO ORIGINAL CONDITION.
13. CAREFULLY REMOVE ITEMS ATTACHED TO EXISTING SURFACES TO REMAIN. PATCH, REPAIR AND FINISH ANY EXPOSED AREA TO MATCH SURROUNDING SURFACES. PREP TO RECEIVE SCHEDULED FINISHES. ITEMS INCLUDE BUT NOT LIMITED TO WALLS, FLOOR, CEILING, CASEWORK, MARKER & TACK BOARDS, EQUIPMENT AND MEPT ITEMS.
14. WHERE FLOORING IS SCHEDULED TO BE REMOVED, REMOVE DOWN TO SUBSTRATE; PATCH & REPAIR SUBSTRATE AND APPLY LEVELING COMPOUND AS REQUIRED TO RECEIVE NEW SCHEDULED FINISHES.
15. PIPING, CONDUIT, DEVICES AND WIRING THAT IS REMOVED AND NOT SCHEDULED FOR REUSE SHALL BE REMOVED COMPLETELY AND CAPPED TO BEHIND NEW FINISHED SURFACES.
16. CONTRACTOR SHALL REMOVE OR RELOCATE M.E.P. DEVICES, LINES, CONDUITS, HANGERS, EQUIPMENT, ETC. AS DIRECTED BY ENGINEER'S DRAWINGS. SEE MEPT DRAWINGS FOR DEMOLITION OF EACH TRADE.

DEMOLITION KEYNOTES

DD-13	REMOVE & DISPOSE OF DOOR & HARDWARE ONLY; FRAME TO REMAIN FOR REUSE. REPAIR & REFINISH EXISTING FRAME TO RECEIVE NEW DOOR AND HARDWARE AS SCHEDULED

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

2ND FLOOR
DEMOLITION PLAN

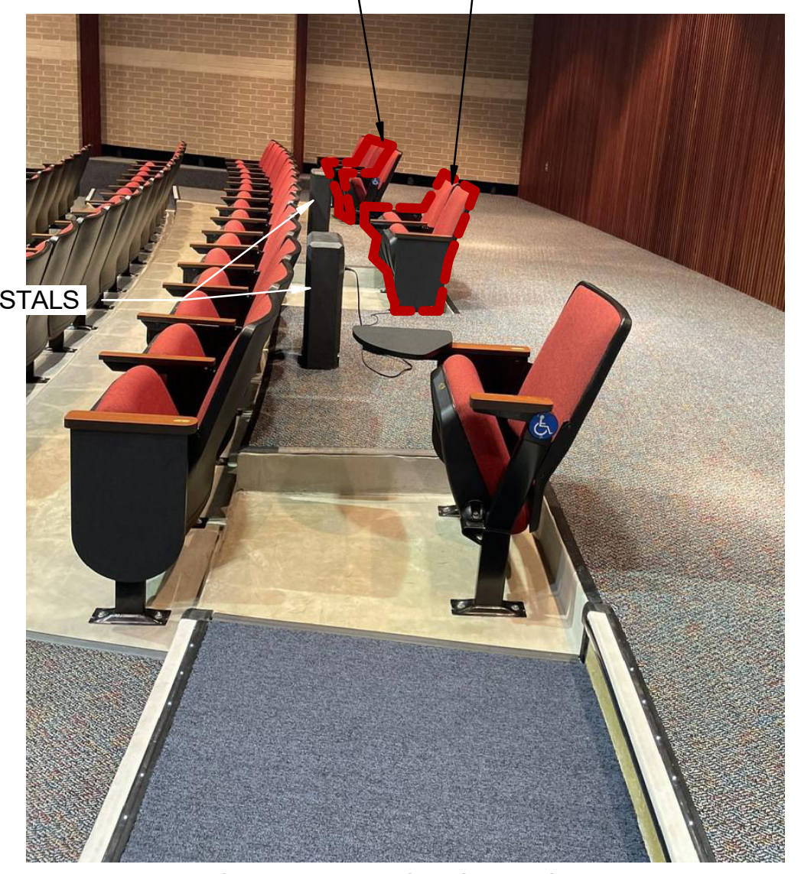
D2.02
____ of ____

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

REMOVE 2 CENTER SEATS AS SHOWN IN PLAN

REMOVE 2 SEATS AS SHOWN IN PLAN

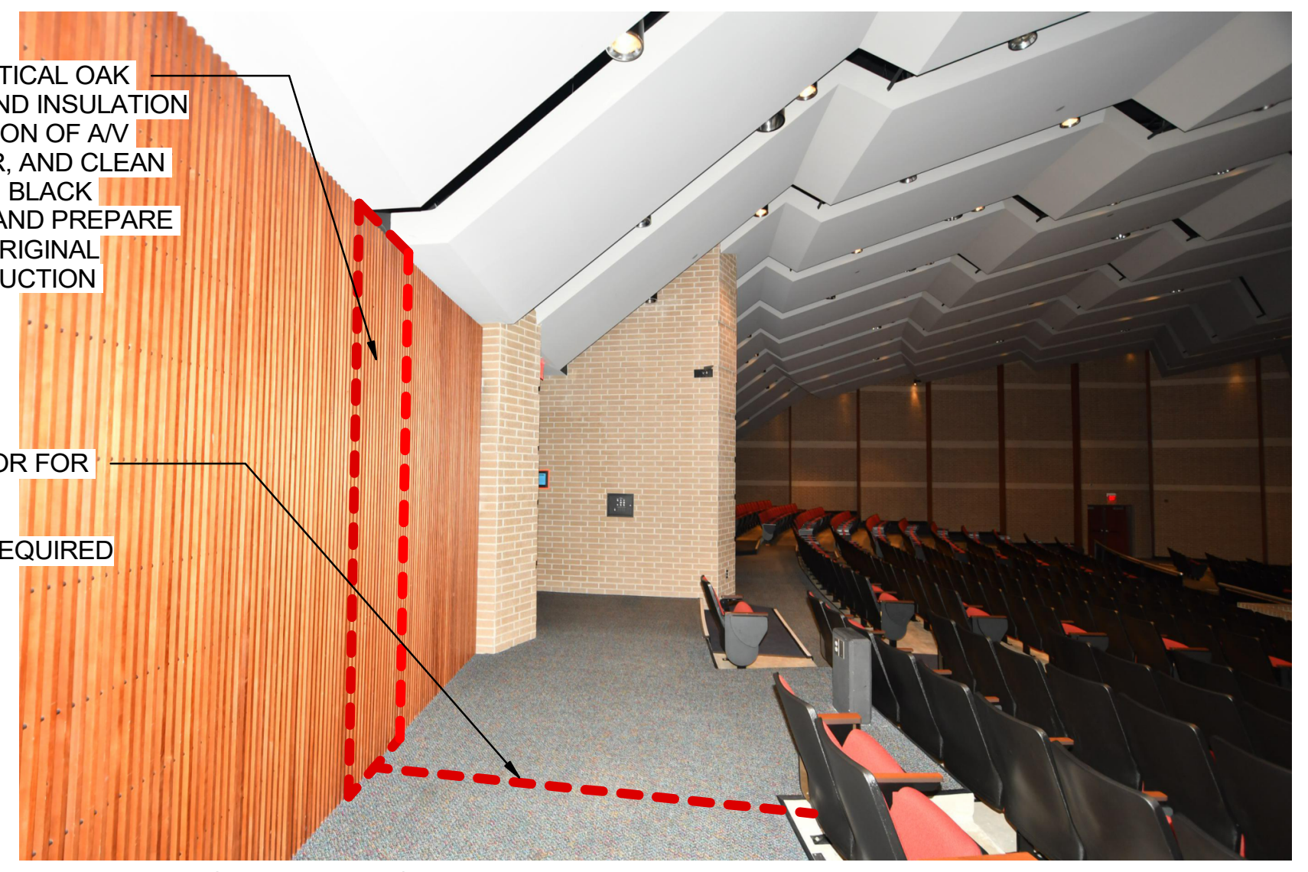
ELEC PEDESTALS TO REMAIN



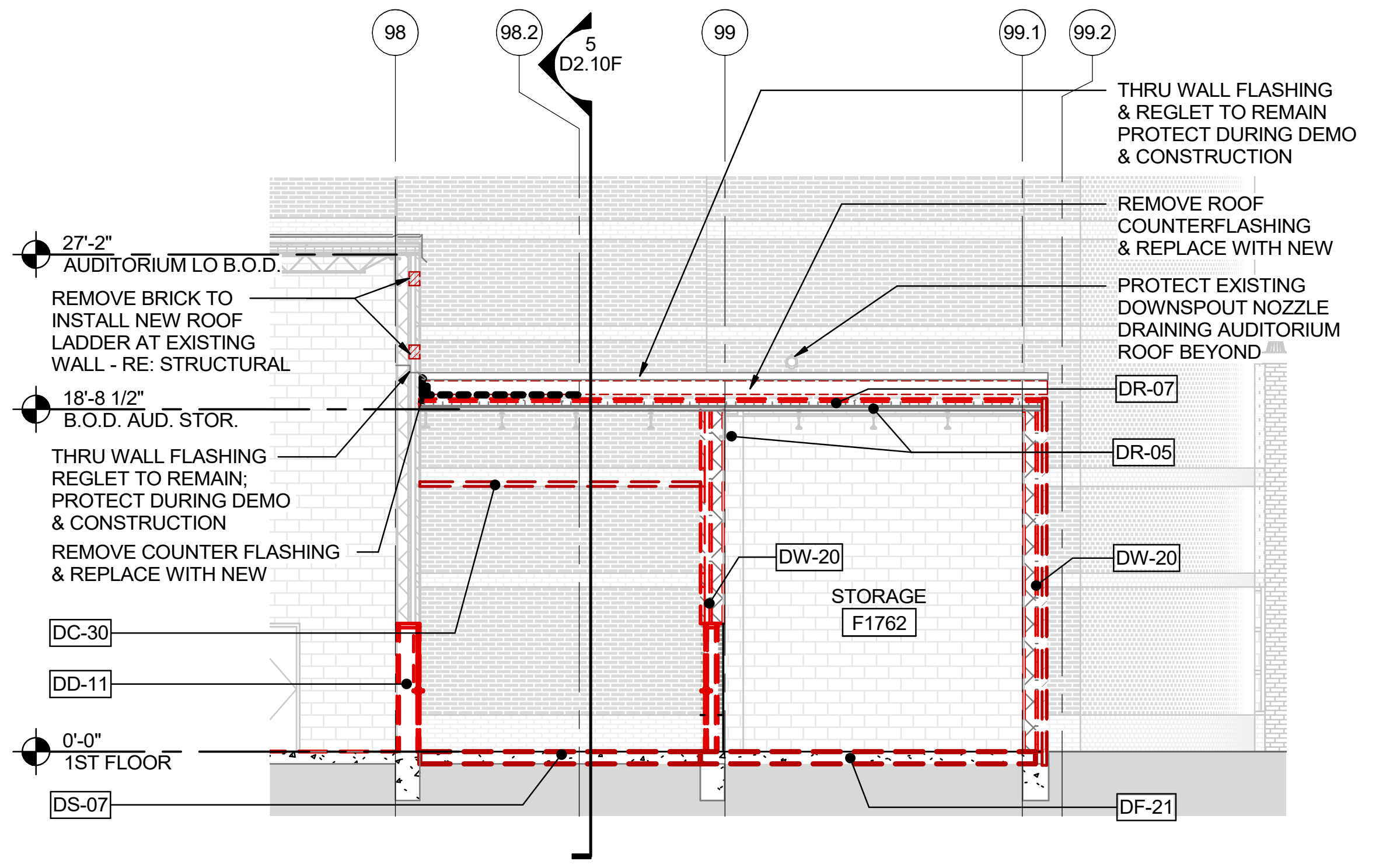
1750 AUDITORIUM - BACK SEATS

REMOVE EXISTING ACOUSTICAL OAK PANELS, BLACK FABRIC, AND INSULATION AS REQ'D. FOR INSTALLATION OF A/V CONDUITS. PATCH, REPAIR, AND CLEAN ACOUSTICAL OAK PANELS, BLACK FABRIC, AND INSULATION AND PREPARE FOR REINSTALLATION IN ORIGINAL LOCATION AFTER CONSTRUCTION

SAW CUT CONCRETE FLOOR FOR ELEC. INSTALLATION RE: ELEC. & AV. FILL, PATCH, & LEVEL AS REQUIRED



1750 AUDITORIUM - BACK WALL



REMOVE BRICK TO INSTALL NEW ROOF LADDER AT EXISTING WALL - RE: STRUCTURAL

THRU WALL FLASHING REGLET TO REMAIN; PROTECT DURING DEMO & CONSTRUCTION

REMOVE COUNTER FLASHING & REPLACE WITH NEW

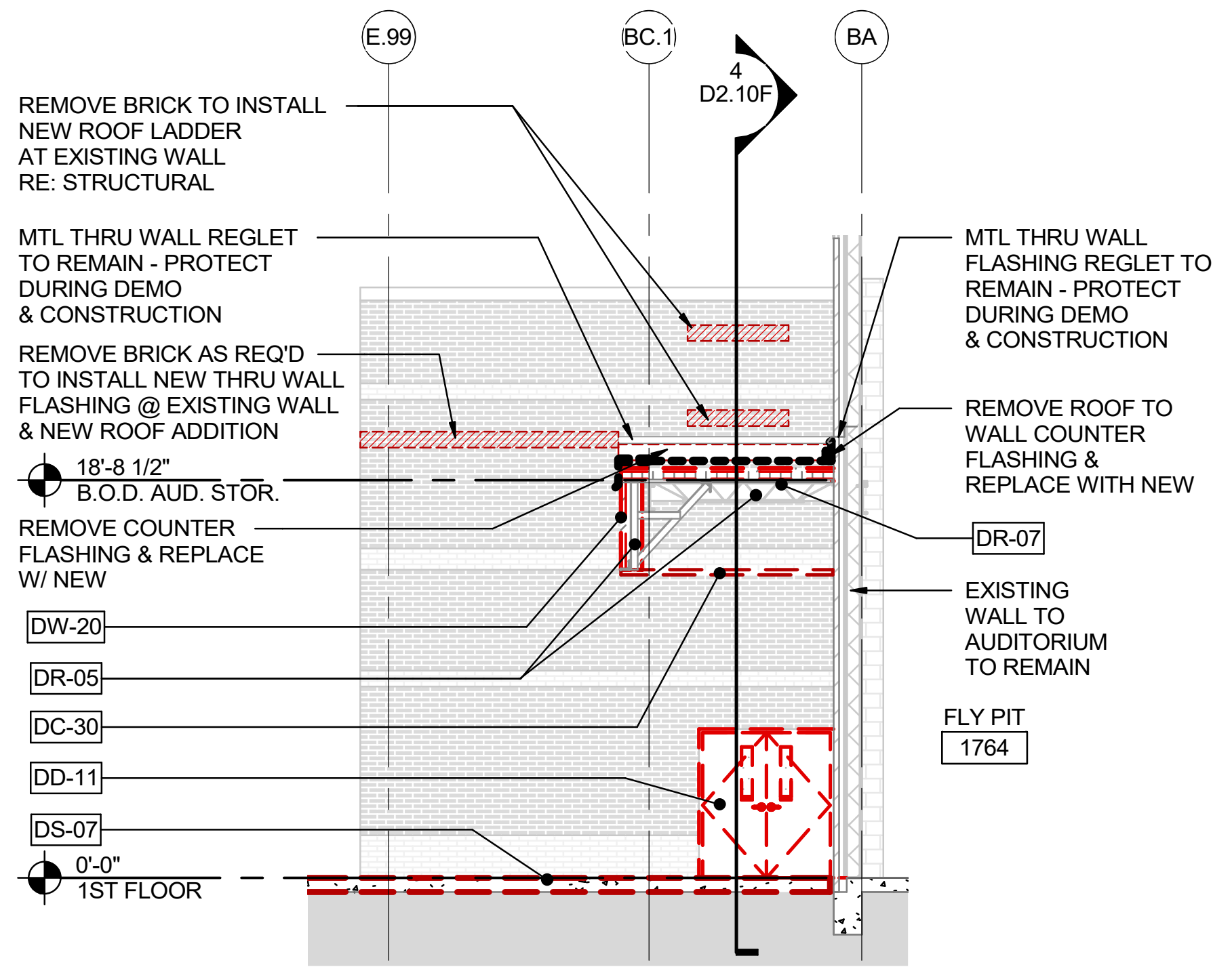
THRU WALL FLASHING & REGLET TO REMAIN PROTECT DURING DEMO & CONSTRUCTION

REMOVE ROOF COUNTERFLASHING & REPLACE WITH NEW

PROTECT EXISTING DOWNSPOUT NOZZLE DRAINING AUDITORIUM ROOF BEYOND

4 DEMO BLDG SECTION - AUDITORIUM STORAGE

1/8" = 1'-0"



REMOVE BRICK TO INSTALL NEW ROOF LADDER AT EXISTING WALL RE: STRUCTURAL

MTL THRU WALL REGLET TO REMAIN - PROTECT DURING DEMO & CONSTRUCTION

REMOVE BRICK AS REQ'D TO INSTALL NEW THRU WALL FLASHING @ EXISTING WALL & NEW ROOF ADDITION

REMOVE COUNTER FLASHING & REPLACE W/ NEW

MTL THRU WALL FLASHING REGLET TO REMAIN - PROTECT DURING DEMO & CONSTRUCTION

REMOVE ROOF TO WALL COUNTER FLASHING & REPLACE WITH NEW

EXISTING WALL TO AUDITORIUM TO REMAIN

5 DEMO BLDG SECTION

1/8" = 1'-0"

DEMOLITION PLAN LEGEND

SYMBOL	DESCRIPTION
D20 ─●	DEMO KEYNOTE - REFER TO KEYNOTE LEGEND
D20	DEMO KEYNOTE - APPLIES TO ENTIRE ROOM
═	EXIST. CONSTRUCTION TO REMAIN
╌	EXIST. CONSTRUCTION TO BE DEMOLISHED IN THEIR ENTIRETY
▨	EXIST. CMU WALL TO REMAIN
🟥	EXIST. CARPET AND BASE TO BE DEMOLISHED
▧	EXIST. VCT FLOORING AND BASE TO BE DEMOLISHED
▦	EXIST. TILE FLOORING TO BE DEMOLISHED
▩	EXIST. CONCRETE COATING TO BE REMOVED
☐	EXIST. FLOOR - NO WORK

KEYNOTES

DC-30	REMOVE PLASTER SOFFIT, LIGHTS, WALL ABOVE, LINTEL, ETC. AT EXTERIOR EXIT DOOR RECESS, NEXT TO NEW BUILDING ADDITION TYPICAL
DD-11	CAREFULLY REMOVE DOOR, FRAME, & HARDWARE; PATCH, REPAIR, & CLEAN EXISTING OPENING AS REQUIRED FOR NEW DOOR AND FRAME INSTALL.
DD-13	REMOVE & DISPOSE OF DOOR & HARDWARE ONLY; FRAME TO REMAIN FOR REUSE. REPAIR & REFINISH EXISTING FRAME TO RECEIVE NEW DOOR AND HARDWARE AS SCHEDULED
DE-04	REMOVE , STORE AND REINSTALL CAMERAS TYP. RE: TECHNOLOGY DRAWINGS.
DE-05	REMOVE LIGHT FIXTURE. INSTALL COVER PLATE AS REQUIRED. RE: ELEC.
DF-11	REMOVE & DISPOSE OF VCT FLOORING & BASE DOWN TO SUBSTRATE; PATCH & REPAIR SUBSTRATE & APPLY LEVELING COMPOUND AS REQ'D TO RECEIVE NEW SCHEDULED FINISH
DF-21	SAWCUT & REMOVE EXISTING SLAB AS REQ'D @ NEW BUILDING ADDITION &/OR BUILDING RENOVATION - RE: STRUCTURAL FOR SLAB DEMOLITION EXTENTS
DP-04	EXISTING ROOF DRAIN NOZZLE TO REMAIN. PROTECT AND KEEP FREE FLOWING DURING AND AFTER CONSTRUCTION.
DP-17	REMOVE ROOF DRAIN COMPLETE. RE: PLUMBING
DR-05	EXISTING STRUCTURE TO REMAIN. RE: STRUCTURAL
DR-07	REMOVE ROOF SYSTEM (MEMBRANE, LWIC, ETC. DOWN TO STRUCTURAL METAL DECK. PREP METAL DECK TO RECEIVE NEW ROOFING SYSTEM.
DS-01	DEMOLISH SIDEWALK AROUND BUILDING; RE: CIVIL
DS-02	DEMOLISH PAVING / DRIVE; RE: CIVIL
DS-07	DEMOLISH SIDEWALK OR PAVING AT EXTERIOR COVERED AREAS AT EXIT DOOR RECESS RE: ARCH DEMO PLANS, STRUCTURAL, & CIVIL
DW-20	REMOVE EXTERIOR WALL IN ITS ENTIRETY WHERE INDICATED CONTRACTOR SHALL SHORE UP ROOF WHERE EXTERIOR WALL IS SCHEDULED TO BE DEMOLISHED. CONTRACTOR SHALL VERIFY STRUCTURAL, ELECTRICAL, MECHANICAL, & PLUMBING IN EXISTING WALLS AND COORDINATE ANY WORK REQUIRED PRIOR TO DEMOLITION. PROTECT EXISTING FIRE PROOFED STEEL BEAMS & FIRE PROOFED COLUMNS DURING DEMOLITION & CONSTRUCTION - PATCH, REPAIR, & CLEAN ALL ADJACENT WALLS TO RECEIVE NEW WORK AS SHOWN ON DRAWINGS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

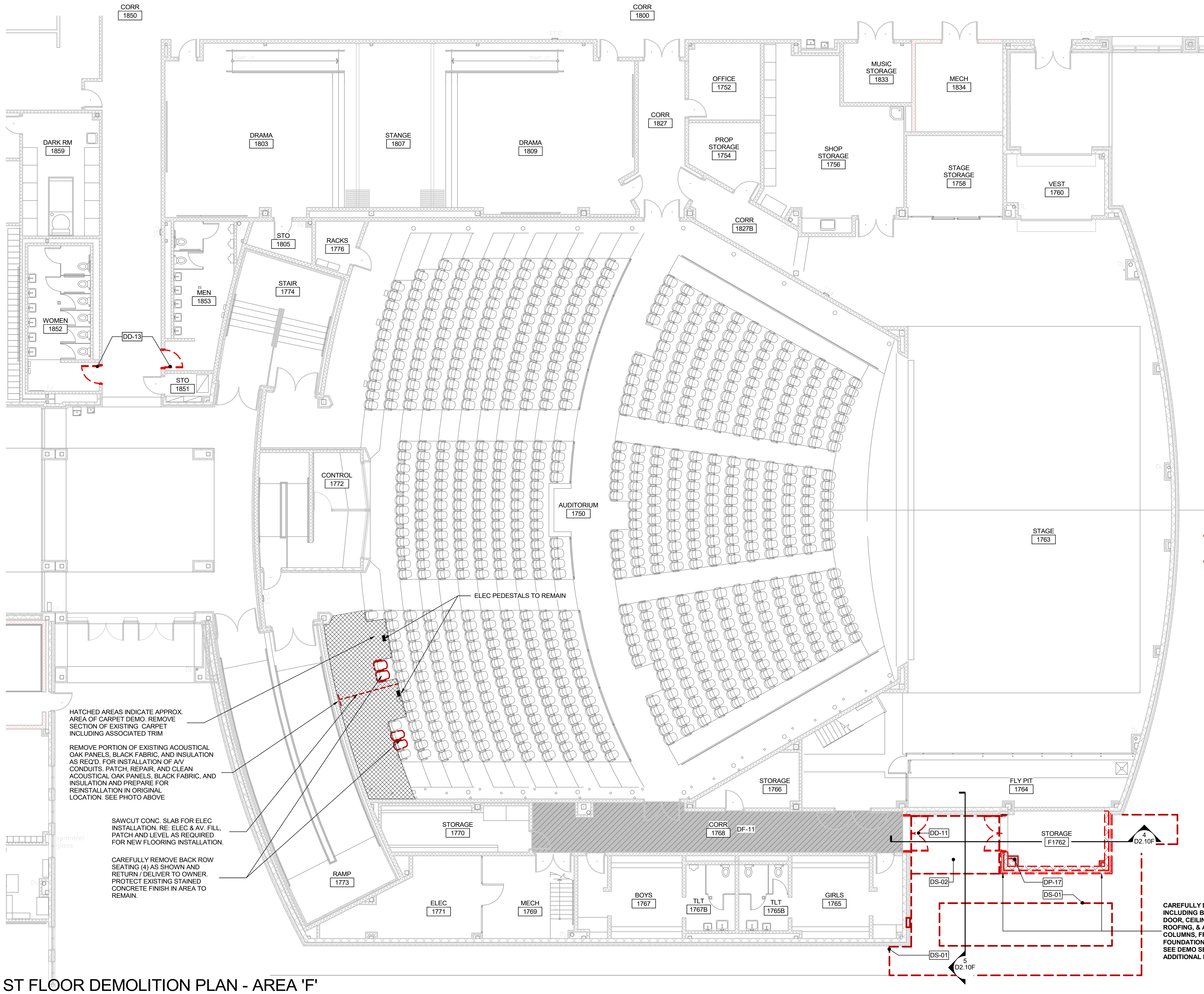
REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040



HATCHED AREAS INDICATE APPROX. AREA OF CARPET DEMO. REMOVE SECTION OF EXISTING CARPET INCLUDING ASSOCIATED TRIM

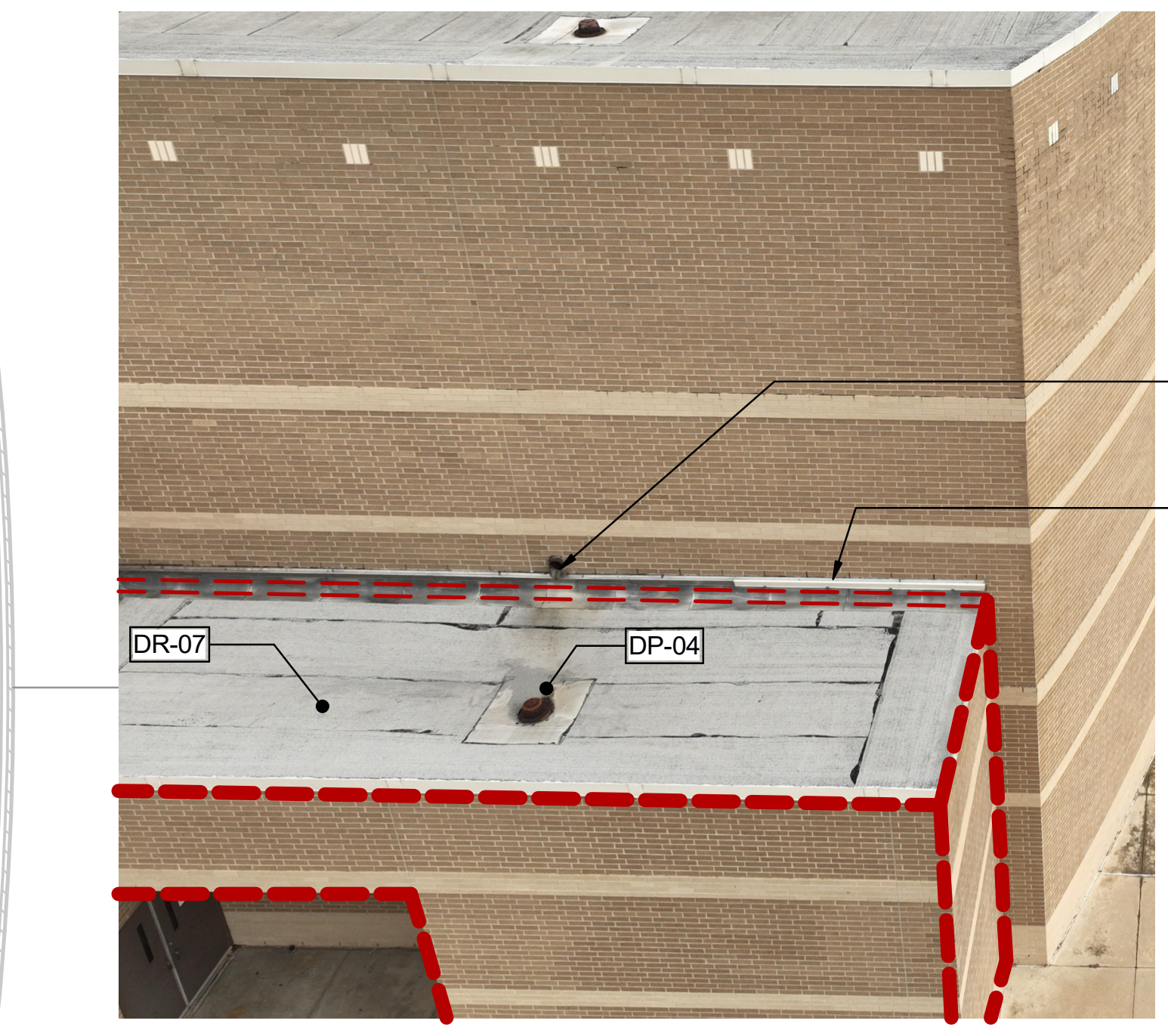
REMOVE PORTION OF EXISTING ACOUSTICAL OAK PANELS, BLACK FABRIC, AND INSULATION AS REQ'D. FOR INSTALLATION OF A/V CONDUITS. PATCH, REPAIR, AND CLEAN ACOUSTICAL OAK PANELS, BLACK FABRIC, AND INSULATION AND PREPARE FOR REINSTALLATION IN ORIGINAL LOCATION. SEE PHOTO ABOVE

SAWCUT CONC. SLAB FOR ELEC INSTALLATION. RE: ELEC & AV. FILL, PATCH AND LEVEL AS REQUIRED FOR NEW FLOORING INSTALLATION.

CAREFULLY REMOVE BACK ROW SEATING (4) AS SHOWN AND RETURN / DELIVER TO OWNER. PROTECT EXISTING STAINED CONCRETE FINISH IN AREA TO REMAIN.

1 1ST FLOOR DEMOLITION PLAN - AREA 'F'

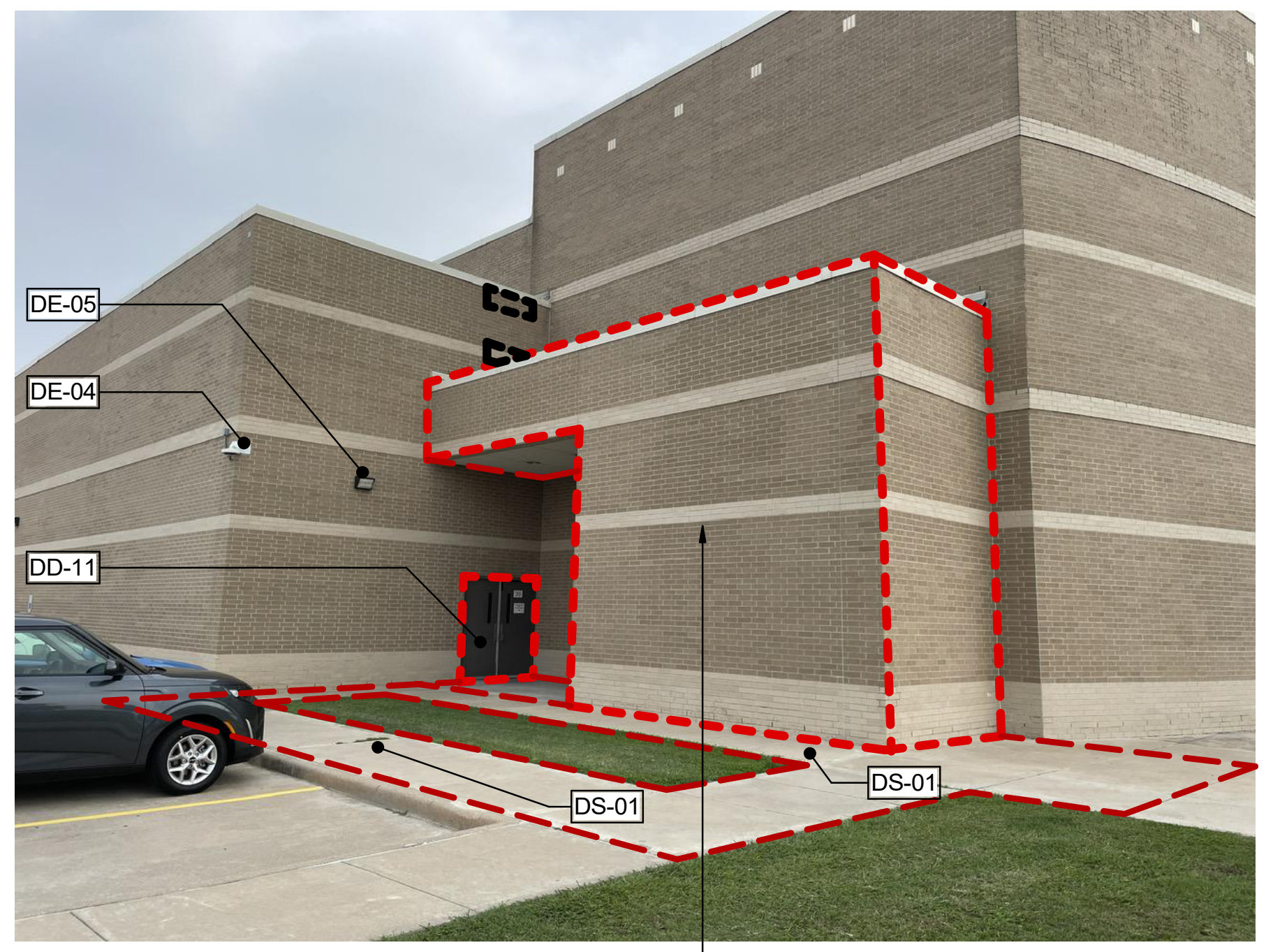
1/8" = 1'-0"



EXTERIOR STORAGE ROOF

EXISTING AUDITORIUM ROOF OVERFLOW DRAIN NOZZLE TO REMAIN - PROTECT DURING DEMOLITION & CONSTRUCTION

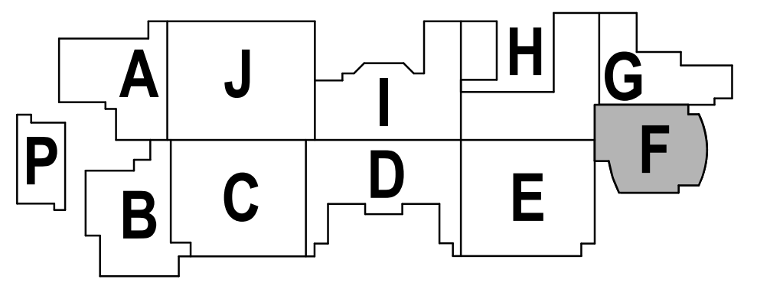
REMOVE MEMBRANE ROOFING, WOOD BLOCKING, MEMBRANE FLASHING, & METAL COUNTER FLASHING UP TO EXISTING METAL THRU-WALL FLASHING REGLET. REPLACE EVERY COMPONENT OF EXISTING ROOF UP TO THRU-WALL FLASHING. REUSE EXISTING THRU-WALL METAL FLASHING REGLET. PROTECT DURING DEMOLITION & CONSTRUCTION.



EXTERIOR STORAGE

CAREFULLY DEMOLISH ENTIRE LOW ROOF BUILDING INCLUDING BUT NOT LIMITED TO MASONRY WALLS, DOOR, CEILINGS, SOFFIT, FLOOR SLAB, SIDEWALK ROOFING, & ASSOCIATED MEPT ITEMS. STRUCTURAL COLUMNS, FRAMING, METAL ROOF DECK, BLDG FOUNDATION (FOOTINGS, PILINGS, ETC.) TO REMAIN. SEE DEMO SECTIONS & STRUCTURAL DEMO FOR ADDITIONAL INFORMATION

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

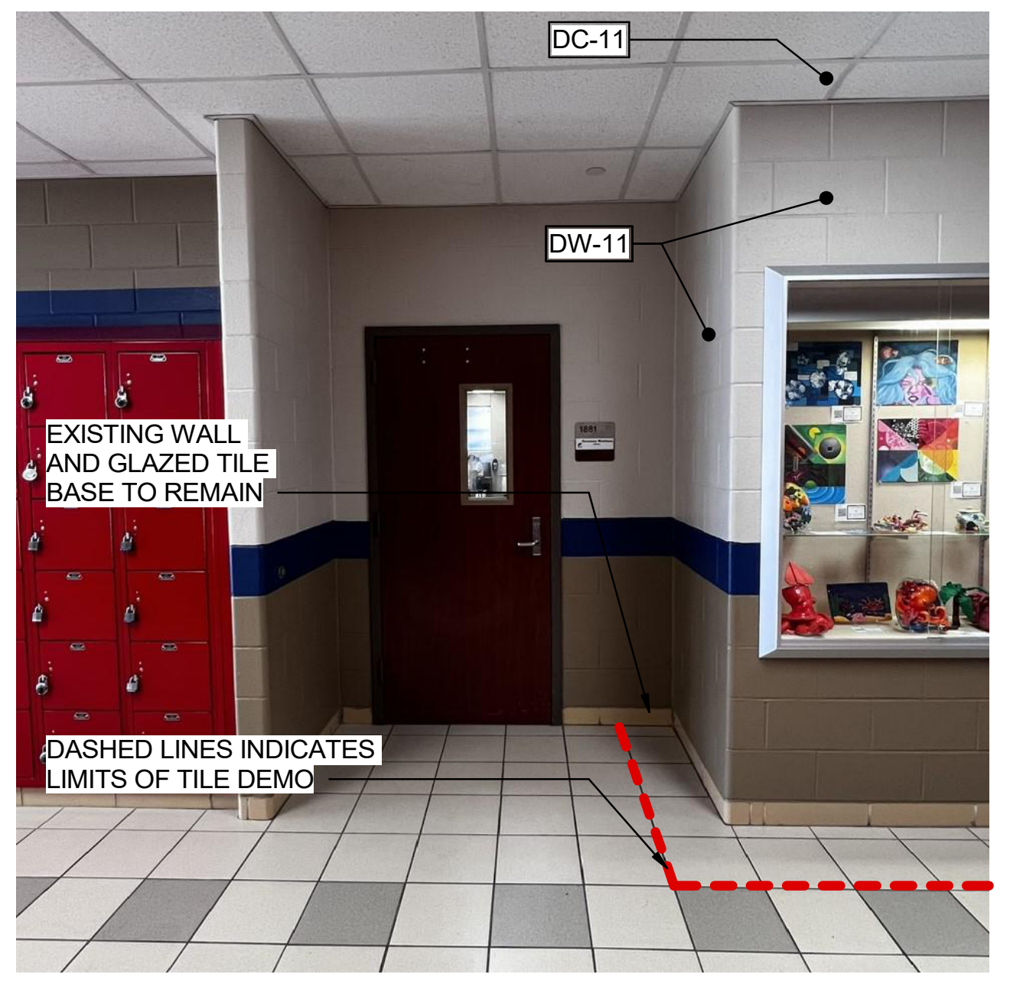
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR DEMOLITION PLAN - AREA 'F'

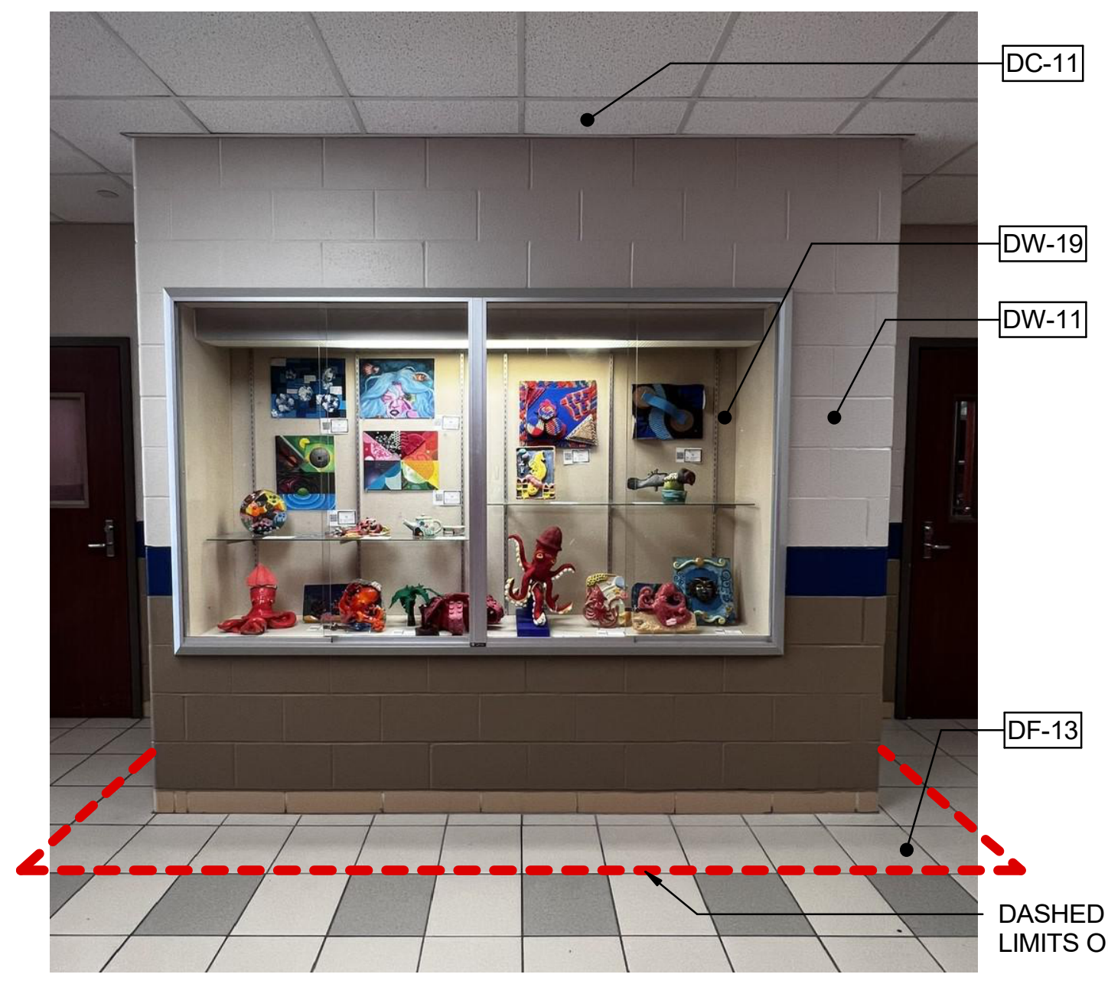
D2.10F

___ of ___

11/14/2024 1:39:27 PM



1850 CORRIDOR - EAST WALL @ DISPLAY CASE



DASHED LINES INDICATES LIMITS OF TILE DEMO

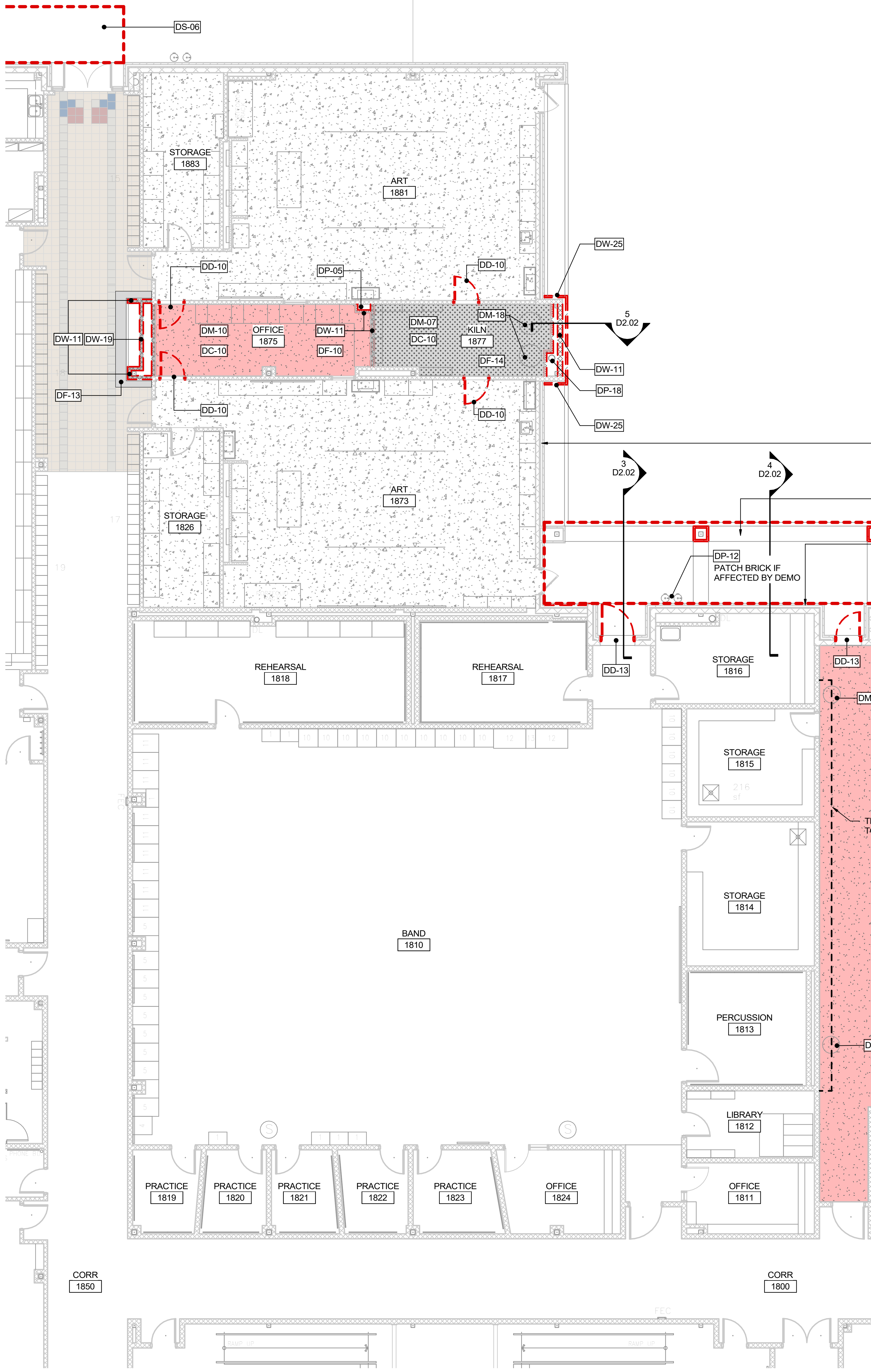
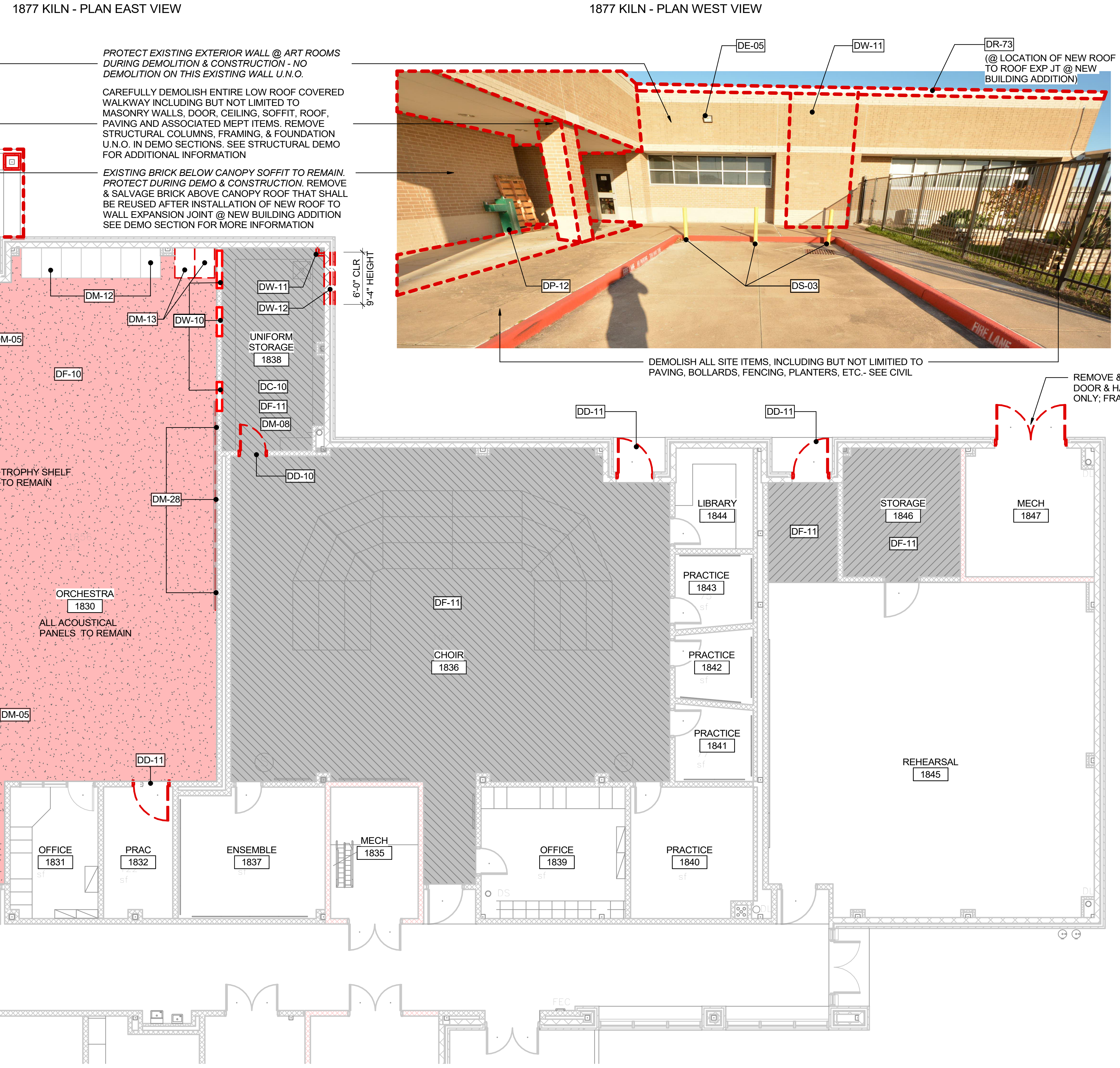
1850 CORRIDOR - EAST WALL @ DISPLAY CASE

1875 OFFICE - PLAN EAST VIEW

1875 OFFICE - PLAN WEST VIEW

1877 KILN - PLAN EAST VIEW

1877 KILN - PLAN WEST VIEW

PROTECT EXISTING EXTERIOR WALL @ ART ROOMS DURING DEMOLITION & CONSTRUCTION - NO DEMOLITION ON THIS EXISTING WALL U.N.O.

CAREFULLY DEMOLISH ENTIRE LOW ROOF COVERED WALKWAY INCLUDING BUT NOT LIMITED TO MASONRY WALLS, DOOR, CEILING, SOFFIT, ROOF, PAVING AND ASSOCIATED MEPT ITEMS. REMOVE STRUCTURAL COLUMNS, FRAMING, & FOUNDATION U.N.O. IN DEMO SECTIONS. SEE STRUCTURAL DEMO FOR ADDITIONAL INFORMATION

EXISTING BRICK BELOW CANOPY SOFFIT TO REMAIN. PROTECT DURING DEMO & CONSTRUCTION. REMOVE & SALVAGE BRICK ABOVE CANOPY ROOF THAT SHALL BE REUSED AFTER INSTALLATION OF NEW ROOF TO WALL EXPANSION JOINT @ NEW BUILDING ADDITION SEE DEMO SECTION FOR MORE INFORMATION

DEMOLISH ALL SITE ITEMS, INCLUDING BUT NOT LIMITIED TO PAVING, BOLLARDS, FENCING, PLANTERS, ETC.- SEE CIVIL

REMOVE & DISPOSE OF DOOR & HARDWARE ONLY; FRAME TO REMAIN

TRUE PLAN

1 1ST FLOOR DEMOLITION PLAN - AREA 'G'

1/8" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

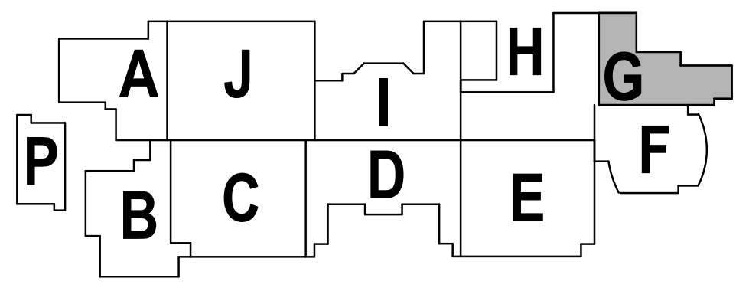
DEMOLITION PLAN LEGEND

SYMBOL	DESCRIPTION
D20 —●	DEMO KEYNOTE - REFER TO KEYNOTE LEGEND
D20	DEMO KEYNOTE - APPLIES TO ENTIRE ROOM
═	EXIST. CONSTRUCTION TO REMAIN
┅	EXIST. CONSTRUCTION TO BE DEMOLISHED IN THEIR ENTIRETY
▩	EXIST. CMU WALL TO REMAIN
🟥	EXIST. CARPET AND BASE TO BE DEMOLISHED
▨	EXIST. VCT FLOORING AND BASE TO BE DEMOLISHED
▦	EXIST. TILE FLOORING TO BE DEMOLISHED
░	EXIST. CONCRETE COATING TO BE REMOVED
☐	EXIST. FLOOR - NO WORK

KEYNOTES

DC-10	DEMOLISH ACOUSTICAL CEILING TILE AND SUSPENSION SYSTEM COMPLETE. REFER TO MEPT DRAWINGS FOR ADDITIONAL DEMO INSTRUCTION.
DC-11	REMOVE SECTION OF CEILING GRID, CEILING TILE, & HANGERS AS REQUIRED TO CONSTRUCT NEW PARTITIONS THAT EXTEND ABOVE CEILING - PROTECT EXISTING CEILING TO REMAIN.
DD-10	CAREFULLY REMOVE DOOR AND FRAME. INFILL OPENING TO MATCH ADJACENT WALL.
DD-11	CAREFULLY REMOVE DOOR, FRAME, & HARDWARE; PATCH, REPAIR, & CLEAN EXISTING OPENING AS REQUIRED FOR NEW DOOR AND FRAME INSTALL.
DD-13	REMOVE & DISPOSE OF DOOR & HARDWARE ONLY; FRAME TO REMAIN FOR REUSE. REPAIR & REFINISH EXISTING FRAME TO RECEIVE NEW DOOR AND HARDWARE AS SCHEDULED
DE-05	REMOVE LIGHT FIXTURE. INSTALL COVER PLATE AS REQUIRED. RE: ELEC.
DF-10	REMOVE & DISPOSE CARPET FLOORING & BASE DOWN TO SUBSTRATE; PATCH & REPAIR SUBSTRATE & APPLY LEVELING COMPOUND AS REQ'D TO RECEIVE NEW SCHEDULED FINISH
DF-11	REMOVE & DISPOSE OF VCT FLOORING & BASE DOWN TO SUBSTRATE; PATCH & REPAIR SUBSTRATE & APPLY LEVELING COMPOUND AS REQ'D TO RECEIVE NEW SCHEDULED FINISH
DF-13	REMOVE EXISTING TILE FLOORING & BASE DOWN TO SUBSTRATE ALONG A GROUT LINE AS NOT TO DAMAGE EXIST. TILE TO REMAIN. REVIEW AND CONFIRM EXACT EXTENT AND LOCATION OF TILE DEMOLITION WITH ARCHITECT.
DF-14	REMOVE & DISPOSE OF GYM FLOORING & BASE DOWN TO SUBSTRATE. PATCH & REPAIR SUBSTRATE & APPLY LEVELING COMPOUND AS REQ'D FOR NEW SCHEDULED FINISH
DM-05	EXISTING SOUND SYSTEM TO REMAIN. REMOVE AND REINSTALL IN SAME LOCATION ONLY IF REQUIRED TO ACCOMMODATE ADJACENT RENOVATION WORK. CONTRACTOR TO ENSURE SPEAKERS ARE FUNCTIONING AFTER RE-CONNECTION. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INSTRUCTION.
DM-07	REMOVE AND STORE EXISTING METAL SHELVING UNITS TYPICAL FOR RE-USE. KEEP RECORDS OF NUMBER AND LOCATION OF THE SHELVING UNITS FOR RE-INSTALLATION.
DM-08	REMOVE & DISPOSE CASEWORK AND SHELVING IN ITS ENTIRETY. REPAIR EXISTING WALL TO REMAIN AFTER DEMOLITION. PREP SURFACES AS REQUIRED TO RECEIVE NEW FINISHES.
DM-10	CAREFULLY REMOVE & DISPOSE CASEWORK AND COUNTERTOPS IN THEIR ENTIRETY. REPAIR AND CLEAN EXISTING & WALL, FLOOR, & CEILING EXPOSED AFTER DEMOLITION TO MATCH ADJACENT SURFACES. PREP SURFACES AS REQUIRED TO RECEIVE NEW FINISHES AND CASEWORK.
DM-12	EXISTING INSTRUMENT CABINETS TO REMAIN. REMOVE AND RE-INSTALL ONLY IF REQUIRED TO ACCOMMODATE SURROUNDING RENOVATION WORK.
DM-13	CAREFULLY REMOVE AND STORE EXISTING INSTRUMENT CABINETS FOR RE-USE. INSTALL IN NEW LOCATION AS SHOWN IN A2 DRAWINGS.
DM-18	CONTRACTOR SHALL NOT REMOVE KILN. GC TO COORDINATE WITH OWNER'S APPROVED VENDOR FOR REMOVAL AND RE-INSTALLATION OF KILNS. CERAMIC STORE OF HOUSTON. 1002 W. 11TH ST. HOUSTON, TX 77008. 713-864-6442
DM-28	CAREFULLY REMOVE AND DISPOSE MARKER / TACK BOARDS. PATCH, REPAIR, & CLEAN WALL TO RECEIVE NEW FINISHES AS SCHEDULED.
DP-05	PLUMBING TO EXISTING SINK TO REMAIN. PROTECT DURING DEMOLITION OF CHASE WALLS.
DP-12	REMOVE DRINKING FOUNTAINS. RE: PLUMBING
DP-18	REMOVE ROOF DRAIN LEADER UP TO ABOVE CEILING OR TO ROOF AND RE-ROUTED PER PLUMBING. RE: PLUMBING
DR-73	REMOVE EXISTING GRAVEL STOP AND FASCIA.
DS-03	REMOVE BOLLARDS
DS-06	DEMOLISH CANOPIES, CANOPY POSTS & FOOTINGS IN THEIR ENTIRETY.
DW-10	REMOVE PORTION OF EXISTING CMU WALL TO CREATE NEW DOOR / WINDOW OPENING. REFER TO NEW SCHEDULED DOOR / WINDOW FOR EXTENT OF DEMOLITION REQUIRED. SHORE & BRACE AS REQUIRED PER STRUCTURAL.
DW-11	REMOVE CMU WALL IN ITS ENTIRETY; PROTECT SURROUNDING AREA FROM DAMAGE
DW-12	REMOVE PORTION OF MASONRY WALL AS REQUIRED TO CREATE NEW FINISHED OPENING. SHORE & BRACE AS REQ'D PER STRUCTURAL. PREPARE FOR NEW CONSTRUCTION AS SHOWN.
DW-19	CAREFULLY REMOVE DISPLAY CASE IN ITS ENTIRETY AND MASONRY WALL BELOW.
DW-25	CAREFULLY REMOVE FACE BRICK, INSULATION, TIES AND ACCESSORIES DOWN TO FACE OF CMU WALL.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

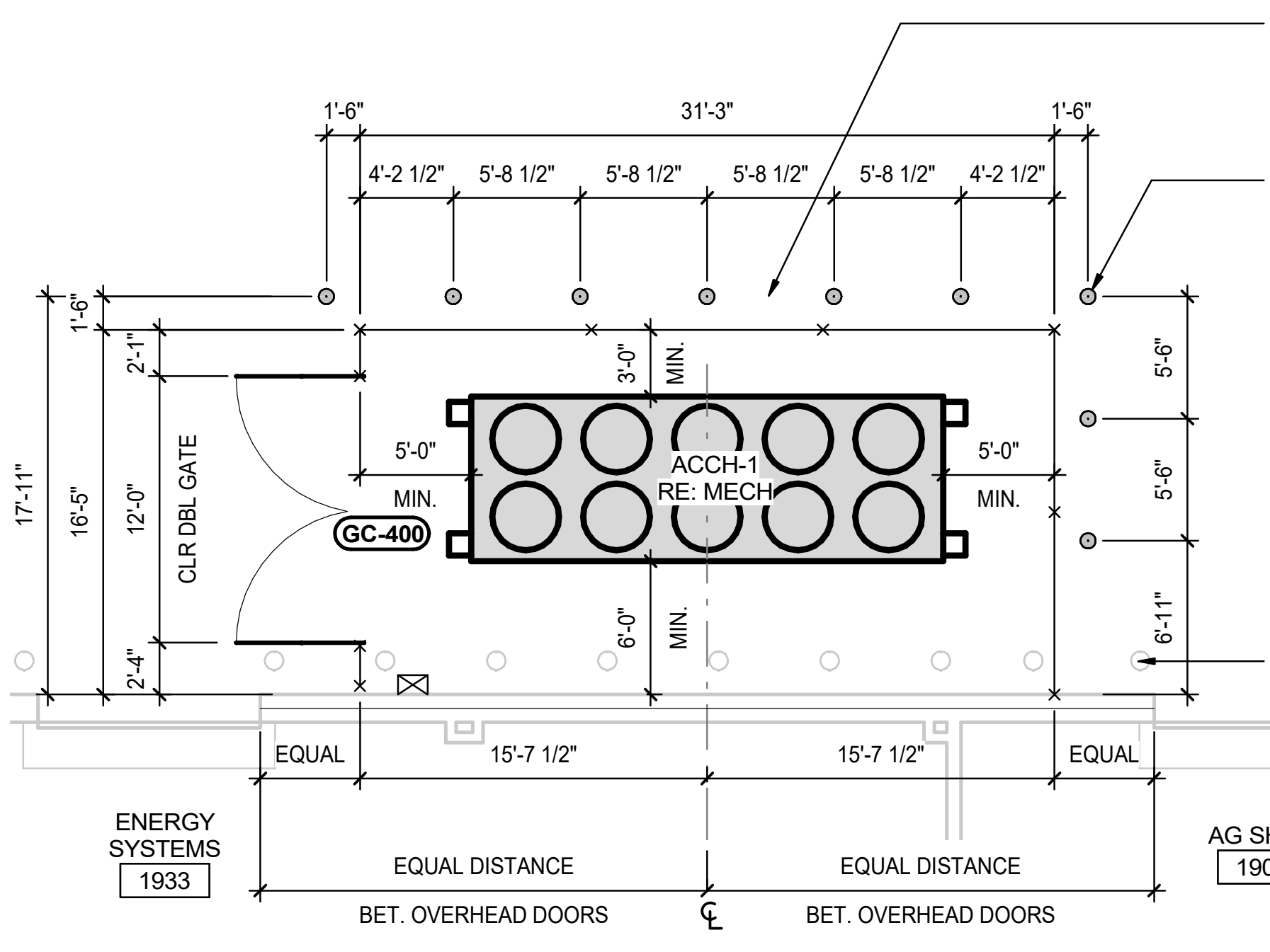
1ST FLOOR
DEMOLITION PLAN -
AREA 'G'

D2.10G

of

11/14/2024 1:32:48 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



NEW 8'-0" HIGH CHAINLINK FENCE AROUND CHILLER **RE: 3A1.10 FOR DETAIL**

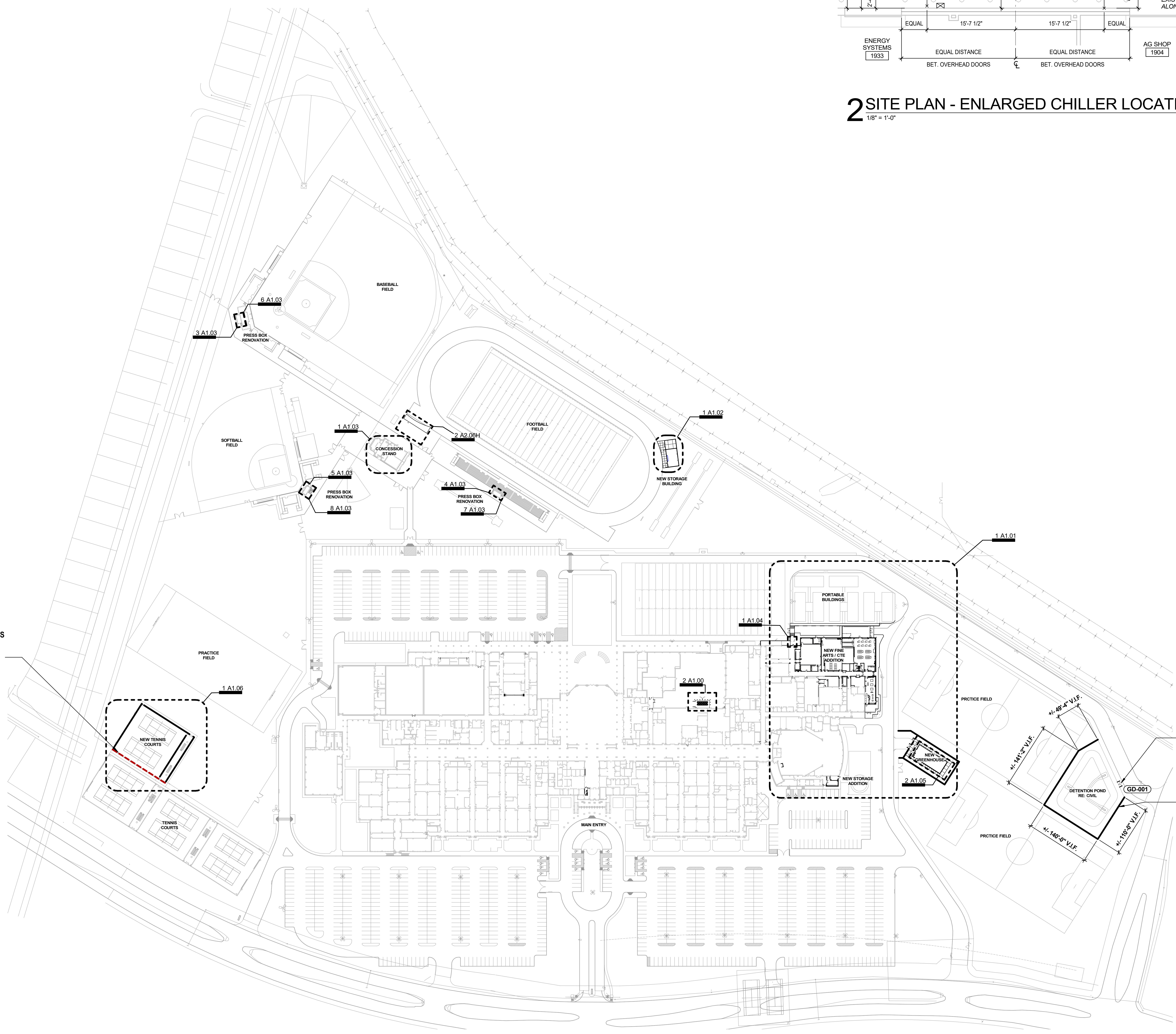
NEW BOLLARDS AROUND NEW CHILLER - **RE: 2A1.01 & STRUCTURAL FOR BOLLARD DETAILS**

EXISTING BOLLARDS ALONG WALL

2 SITE PLAN - ENLARGED CHILLER LOCATION

1/8" = 1'-0"

DASHED RED LINE REPRESENTS THE REMOVAL OF EXISTING SECTIONS OF CHAIN LINK FENCING, POSTS, & FOOTINGS @ PRACTICE FIELD SIDE OF EXISTING TENNIS COURTS



REMOVE PORTION OF EXISTING CHAINLINK FENCE AND INSTALL NEW 12' WIDE CHAINLINK DOUBLE GATE. HEIGHT TO MATCH EXIST. RE: 4A1.10 FOR DETAILS

SOLID BLACK LINE REPRESENTS NEW 6'-0" HIGH CHAINLINK FENCE AROUND DETENTION POND. RE: CIVIL FOR EXTENT OF FENCE & 3A1.10 FOR ELEVATION & DETAILS

TRUE PLAN

1 SITE PLAN - ARCHITECTURAL OVERALL

1" = 100'-0"

SCALE: 0'-1" = 100'-0"
0' 50'-0" 100'-0" 200'-0"

SITE GENERAL NOTES

1. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR EXTENT OF SITEWORK.
2. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
3. REFER TO "**D**" SERIES SHEETS FOR SITE DEMOLITION WORK.
4. CANOPIES AND FENCING SCHEDULED TO BE REMOVED. REMOVE ALL COMPONENTS DOWN TO FOUNDATION. PATCH, FILL AND FINISH EXISTING CONCRETE WHERE POSTS WERE REMOVED AND ANY DAMAGED AREA DUE TO DEMOLITION.

SITE PLAN SYMBOLS

GT-104	SITE GATE SCHEDULE SYMBOL SEE SHEET A1.01
---x---	NEW 12'-0" HIGH CHAIN LINK FENCE @ NEW TENNIS COURTS TO MATCH EXISTING - SEE SPECIFICATIONS
●—●—	NEW 6'-0" HIGH CHAIN LINK FENCE & GATES AROUND TENNIS COURT SIDEWALK & GREENHOUSE - SEE SPECIFICATIONS & SHEET A1.10
——	NEW 6'-0" HIGH ORNAMENTAL FENCE & GATES @ NEW BLDG ADDITION - SEE SPECIFICATIONS & SHEET A1.10
EJ	PAVING EXPANSION JOINT - RE: CIVIL
CJ	PAVING CONSTRUCTION JOINT / CONTRACTION JOINT - RE: CIVIL
J	NEW GATE SIGN - RE: SHEET A12.00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

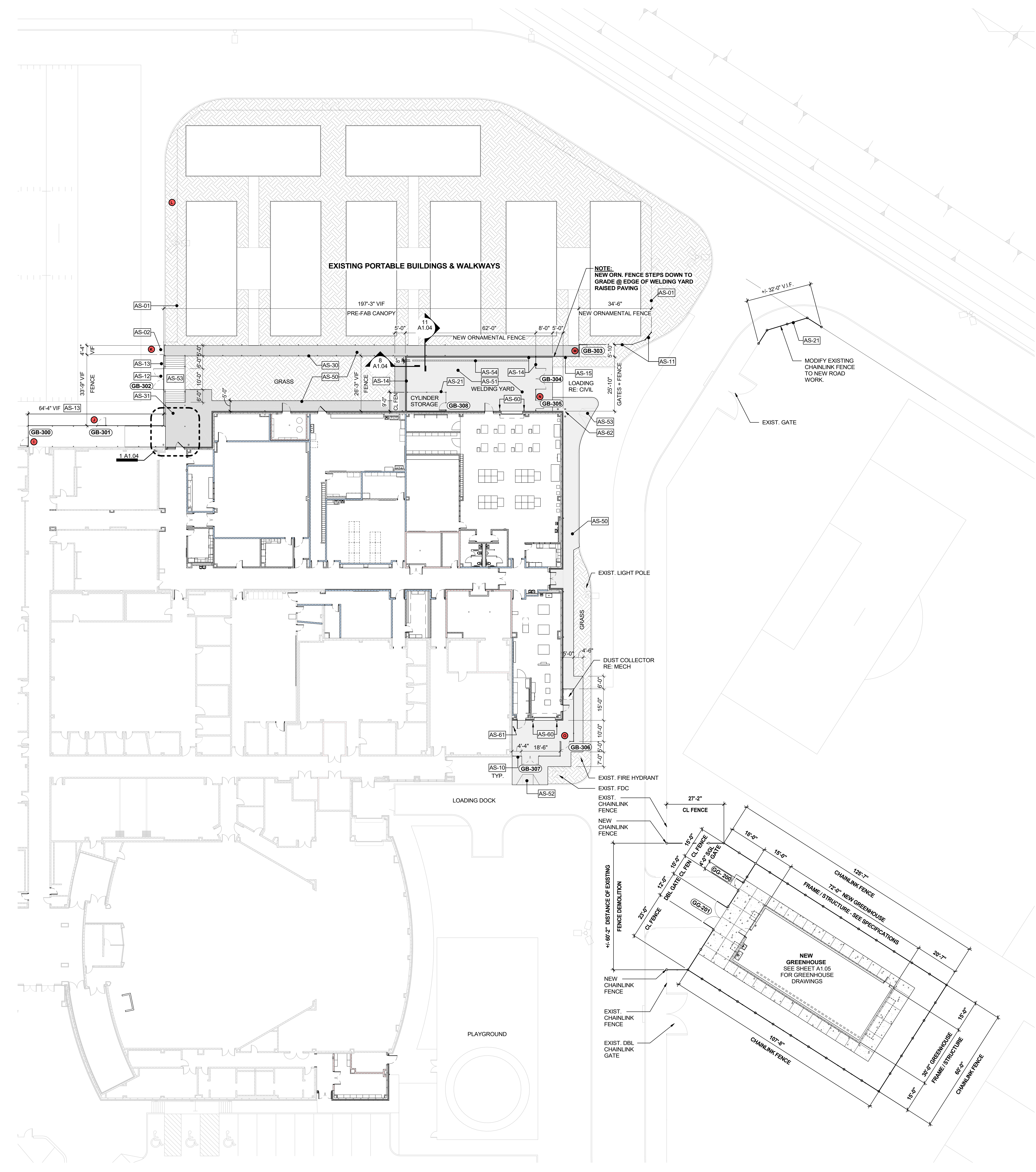
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

ARCHITECTURAL SITE PLAN

A1.00

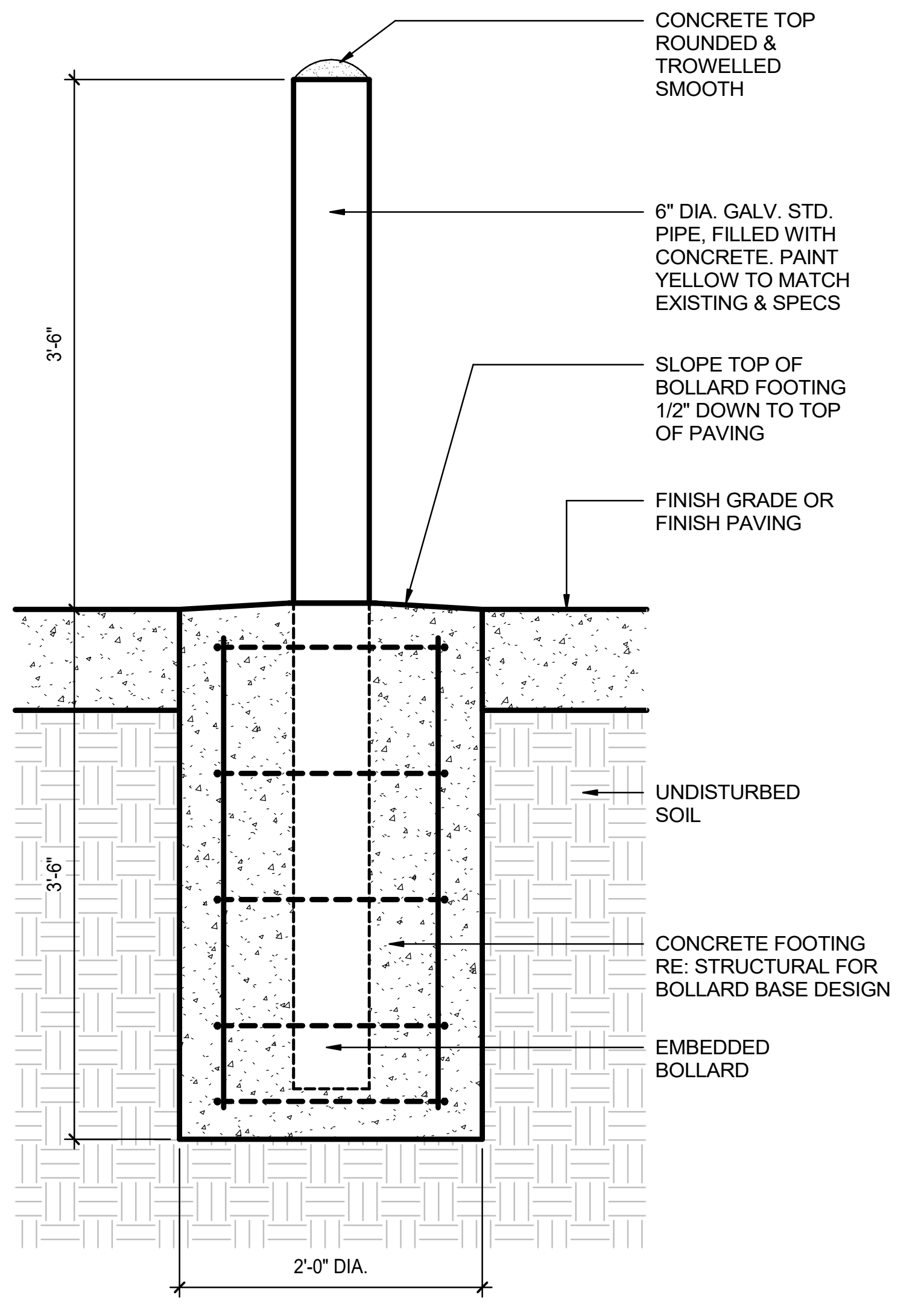
___ of ___

11/14/2024 1:32:51 PM



1 SITE PLAN - FINE ARTS / CTE

1" = 20'-0"



2 SITE DETAIL - BOLLARD

1" = 1'-0"

SITE PLAN SYMBOLS

GT-104	SITE GATE SCHEDULE SYMBOL SEE SHEET A1.01
---x---	NEW 12'-0" HIGH CHAIN LINK FENCE @ NEW TENNIS COURTS TO MATCH EXISTING - SEE SPECIFICATIONS
●—●	NEW 6'-0" HIGH CHAIN LINK FENCE & GATES AROUND TENNIS COURT SIDEWALK & GREENHOUSE - SEE SPECIFICATIONS & SHEET A1.10
——	NEW 6'-0" HIGH ORNAMENTAL FENCE & GATES @ NEW BLDG ADDITION - SEE SPECIFICATIONS & SHEET A1.10
EJ	PAVING EXPANSION JOINT - RE: CIVIL
CJ	PAVING CONSTRUCTION JOINT / CONTRACTION JOINT - RE: CIVIL
J	NEW GATE SIGN - RE: SHEET A12.00

KEYNOTES

AS-01	EXISTING ORNAMENTAL FENCING.
AS-02	EXISTING ORNAMENTAL GATE.
AS-10	6' H MIN. ORNAMENTAL FENCE. HEIGHT AND STYLE TO MATCH EXISTING FENCE. ALIGN AND ATTACHED TO ADJACENT EXISTING FENCE / GATE.
AS-11	6' H MIN. ORNAMENTAL FENCE. HEIGHT AND STYLE TO MATCH EXISTING FENCE.
AS-12	ORNAMENTAL GATE. RE: SCHEDULE
AS-13	6' H MIN. ORNAMENTAL FENCE. HEIGHT AND STYLE TO MATCH EXISTING FENCE. INSTALL ON PARKING LOT SIDE OF CONCRETE CURB. ALIGN AND ATTACHED TO ADJACENT EXISTING FENCE / GATE.
AS-14	6' H MIN. ORNAMENTAL FENCE. HEIGHT AND STYLE TO MATCH EXISTING FENCE. INSTALL ON WELDING YARD CONCRETE PAD.
AS-15	6' H MIN. ORNAMENTAL FENCE. HEIGHT AND STYLE TO MATCH EXISTING FENCE. INSTALL ON GRADE / GRASS AREA. CONNECT TO ADJACENT HIGHER FENCING ON WELDING YARD.
AS-21	6' H MIN. CHAINLINK FENCE. HEIGHT AND STYLE TO MATCH EXISTING FENCE.
AS-30	PRE-FABRICATED WALKWAY CANOPY. HEIGHT AND STYLE TO MATCH ADJACENT CANOPY. RE: SPEC. INSTALL OVER ENTIRE LENGTH OF SIDEWALK IN FRONT OF PORTABLES. CONNECT NEW CANOPY TO EXISTING CANOPIES OVER WALKWAY RAMPS TO PORTABLE BUILDINGS.
AS-31	PRE-FABRICATED WALKWAY CANOPY. HEIGHT AND STYLE TO MATCH EXISTING. RE: SPEC. PROVIDE AND INSTALL CANOPY FROM EXTRUDED ALUMINUM WALKWAY CANOPY AT BUILDING ENTRANCE TO PORTABLE BUILDING SIDEWALK.
AS-50	SIDEWALK. RE: CIVIL
AS-51	CONCRETE PAVING ON RETAINING WALLS. RE: CIVIL AND STRUCTURAL.
AS-52	LOADING RAMP. RE: CIVIL
AS-53	ADA RAMP. RE: CIVIL
AS-54	TRENCH DRAIN. RE: CIVIL
AS-60	BOLLARDS TYP. PROVIDE AND INSTALL ON BOTH SIDES OF ROLL-UP DOOR. (X4) RE: STRUCTURAL & DETAIL 2A1.01
AS-61	PROVIDE AND INSTALL RUBBER DOOR/GATE BUMPER ON BOLLARD. COORDINATE LOCATION WITH DOOR / GATE.
AS-62	PROVIDE AND INSTALL (3) BOLLARDS ON CORNER OF BUILDING. RE: STRUCTURAL & DETAIL 2A1.01

GATE SCHEDULE

MARK	MATERIAL	WIDTH	HEIGHT	PUSH SIDE	PULL SIDE	COMMENTS
DETENTION POND (EXISTING) - CHAIN LINK FENCE & GATES						
GD-001	CHAIN LINK DBL GATE	PR 6'-0" (12'-0" CLR OPG)	6'-0"	4A1.10	4A1.10	SEE 3A1.10 FOR FENCE ELEVATION & 5A1.10 FOR SS CHAIN & PADLOCK DETAIL
TENNIS COURTS - CHAIN LINK FENCE & GATES						
GT-100	CHAIN LINK SGL GATE	3'-0"	7'-0"	ELEVATION 5A1.06	ELEVATION 5A1.06	SEE TENNIS COURT FENCE SPECIFICATIONS & MATCH EXISTING ADJACENT TENNIS COURTS
GT-101	CHAIN LINK DBL GATE	PR 3'-0" (6'-0" CLR OPG)	7'-0"	ELEVATION 3A1.06	ELEVATION 3A1.06	SEE TENNIS COURT FENCE SPECIFICATIONS & MATCH EXISTING ADJACENT TENNIS COURTS
GT-102	CHAIN LINK SGL GATE	3'-0"	7'-0"	ELEVATION 5A1.06	ELEVATION 5A1.06	SEE TENNIS COURT FENCE SPECIFICATIONS & MATCH EXISTING ADJACENT TENNIS COURTS
GT-103	CHAIN LINK SGL GATE	3'-0"	7'-0"	ELEVATION 5A1.06	ELEVATION 5A1.06	SEE TENNIS COURT FENCE SPECIFICATIONS & MATCH EXISTING ADJACENT TENNIS COURTS
GT-104	CHAIN LINK DBL GATE	PR 3'-0" (6'-0" CLR OPG)	7'-0"	ELEVATION 3A1.06	ELEVATION 3A1.06	SEE TENNIS COURT FENCE SPECIFICATIONS & MATCH EXISTING ADJACENT TENNIS COURTS
GT-105	CHAIN LINK SGL GATE	3'-0"	7'-0"	ELEVATION 5A1.06	ELEVATION 5A1.06	SEE TENNIS COURT FENCE SPECIFICATIONS & MATCH EXISTING ADJACENT TENNIS COURTS
GT-106	CHAIN LINK SGL GATE	3'-0"	6'-0"	ELEVATION 8A1.06	ELEVATION 8A1.06	SEE TENNIS COURT FENCE SPECIFICATIONS & ADD NEW SGL CHAINLINK GATE IN EXISTING FENCE
GREENHOUSE ENCLOSURE - CHAIN LINK FENCE & GATES						
GG-200	CHAIN LINK SGL GATE	4'-0"	6'-0"	7A1.10	7A1.10	PROVIDE PANIC HARDWARE ON PUSH SIDE EXIT GATE HARDWARE NO. 1
GG-201	CHAIN LINK DBL GATE	PR 6'-0" (12'-0" CLR OPG)	6'-0"	4A1.10	4A1.10	SEE 3A1.10 FOR FENCE ELEVATION & 5A1.10 FOR SS CHAIN & PADLOCK DETAIL
BUILDING ADDITION & EXISTING PORTABLES - ORNAMENTAL FENCE & GATES						
GB-300	ORNAMENTAL SGL GATE	4'-0"	6'-0"	6A1.10	6A1.10	PROVIDE PANIC HARDWARE ON PUSH SIDE EXIT GATE HARDWARE NO. 2
GB-301	ORNAMENTAL SGL GATE	4'-0"	6'-0"	6A1.10	6A1.10	PROVIDE PANIC HARDWARE ON PUSH SIDE EXIT GATE HARDWARE NO. 2
GB-302	ORNAMENTAL DBL GATE	PR 6'-0" (12'-0" CLR OPG)	6'-0"	2A1.10	2A1.10	SEE 1A1.10 FOR FENCE ELEVATION & 5A1.10 FOR SS CHAIN & PADLOCK DETAIL
GB-303	ORNAMENTAL SGL GATE	4'-0"	6'-0"	6A1.10	6A1.10	PROVIDE PANIC HARDWARE ON PUSH SIDE EXIT GATE HARDWARE NO. 2
GB-304	ORNAMENTAL DBL GATE	PR 6'-0" (12'-0" CLR OPG)	6'-0"	2A1.10	2A1.10	SEE 1A1.10 FOR FENCE ELEVATION & 5A1.10 FOR SS CHAIN & PADLOCK DETAIL
GB-305	ORNAMENTAL SGL GATE	4'-0"	6'-0"	6A1.10	6A1.10	PROVIDE PANIC HARDWARE ON PUSH SIDE EXIT GATE HARDWARE NO. 2 WITH CARD READER
GB-306	ORNAMENTAL SGL GATE	4'-0"	6'-0"	6A1.10	6A1.10	PROVIDE PANIC HARDWARE ON PUSH SIDE EXIT GATE HARDWARE NO. 2
GB-307	ORNAMENTAL DBL GATE	PR 6'-0" (12'-0" CLR OPG)	6'-0"	2A1.10	2A1.10	SEE 1A1.10 FOR FENCE ELEVATION & 5A1.10 FOR SS CHAIN & PADLOCK DETAIL
GB-308	CHAIN LINK SGL GATE	3'-0"	6'-0"		PHOTO 2.2A1.00 SIM	NEW CYLINDER STORAGE GATE SIMILAR TO NEW TENNIS COURT GATE W/ 5A1.10, CHAIN & PADLOCK
NEW CHILLER YARD - CHAIN LINK FENCE & GATES						
GC-400	CHAIN LINK DBL GATE	PR 6'-0" (12'-0" CLR OPG)	8'-0"	4A1.10	4A1.10	DOUBLE GATE IS 8'-0" HIGH TYPICAL AT MECHANICAL YARDS

GATE HARDWARE SET NO. 1:
(CHAIN LINK EXIT GATE HARDWARE)

1 HINGES	MAMMOTH 180 BY DOOR MANUF		
1 EXIT DEVICE - SPAR#04971	CCSD 19 TB 43 70 8804	US32D	SA
1 VANDAL RESISTANT TRIM	826 (HAND TRIM)	US32D	SA
1 INTERCHANGEABLE CORE	I/CK-7	626	BE
1 CONST. CORE	7190224	GREEN	BE
1 BALANCE HARDWARE BY DOOR MANUFACTURER			OT
1 GATE STOP W/ RUBBER BUMPER - LOCINOX GATESTOP			

**ADD CARD READER TO STRIKE SIDE OF GATE, IF REQ'D
NOTE: TRIM IS ORDERED AS RH OR LH

GATE HARDWARE SET NO. 2:
(ORNAMENTAL EXIT GATE HARDWARE)

1 HINGES	MAMMOTH 180 BY DOOR MANUF		
1 EXIT DEVICE - SPAR#04971	CCSD 19 TB 43 70 8804	US32D	SA
1 VANDAL RESISTANT TRIM	826 (HAND TRIM)	US32D	SA
1 INTERCHANGEABLE CORE	I/CK-7	626	BE
1 CONST. CORE	7190224	GREEN	BE
1 BALANCE HARDWARE BY DOOR MANUFACTURER			OT
1 GATE STOP W/ RUBBER BUMPER - LOCINOX GATESTOP			

** ADD CARD READER TO STRIKE SIDE OF GATE, IF REQ'D
NOTE: TRIM IS ORDERED AS RH OR LH

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

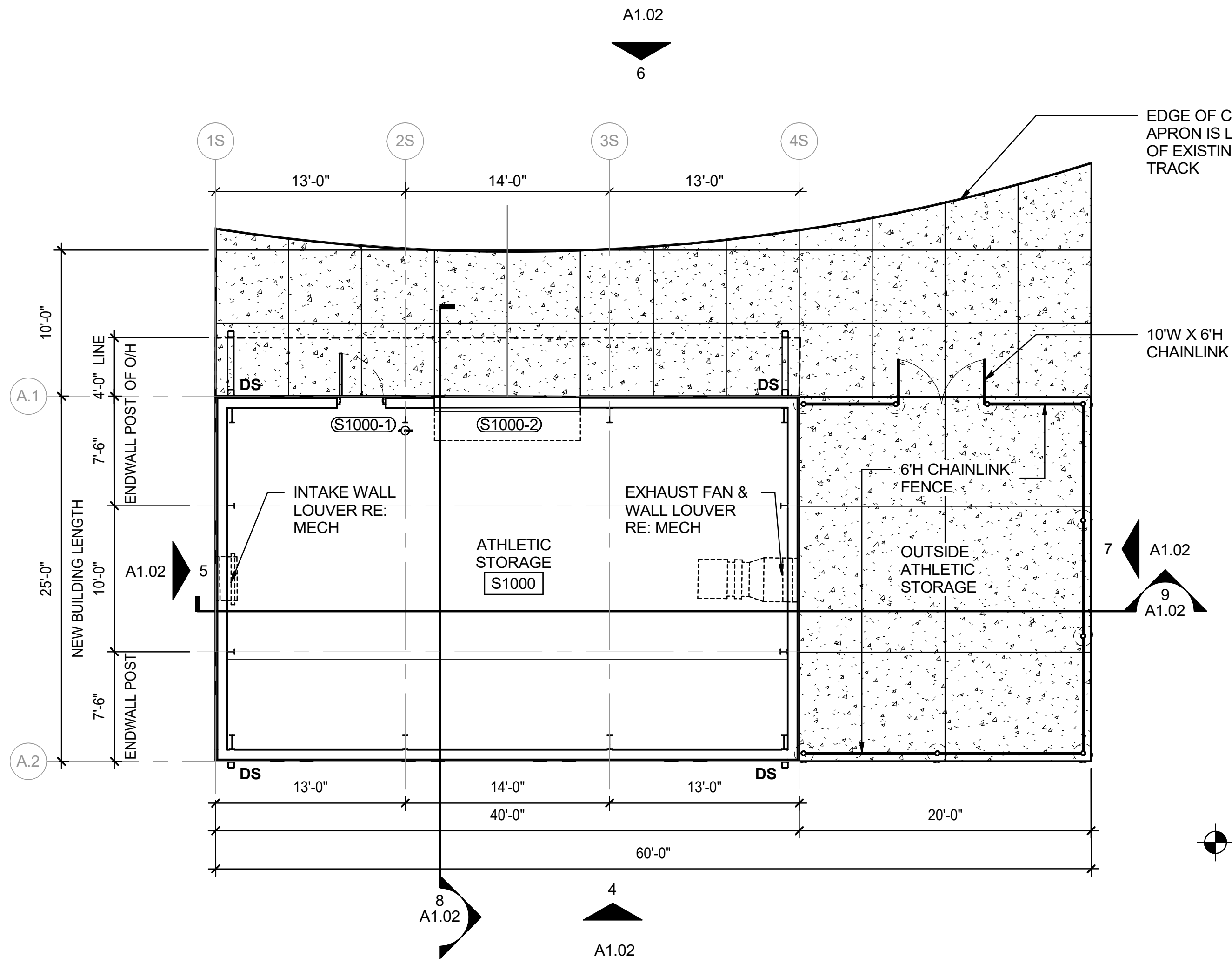
ENLARGED SITE PLAN

A1.01

of

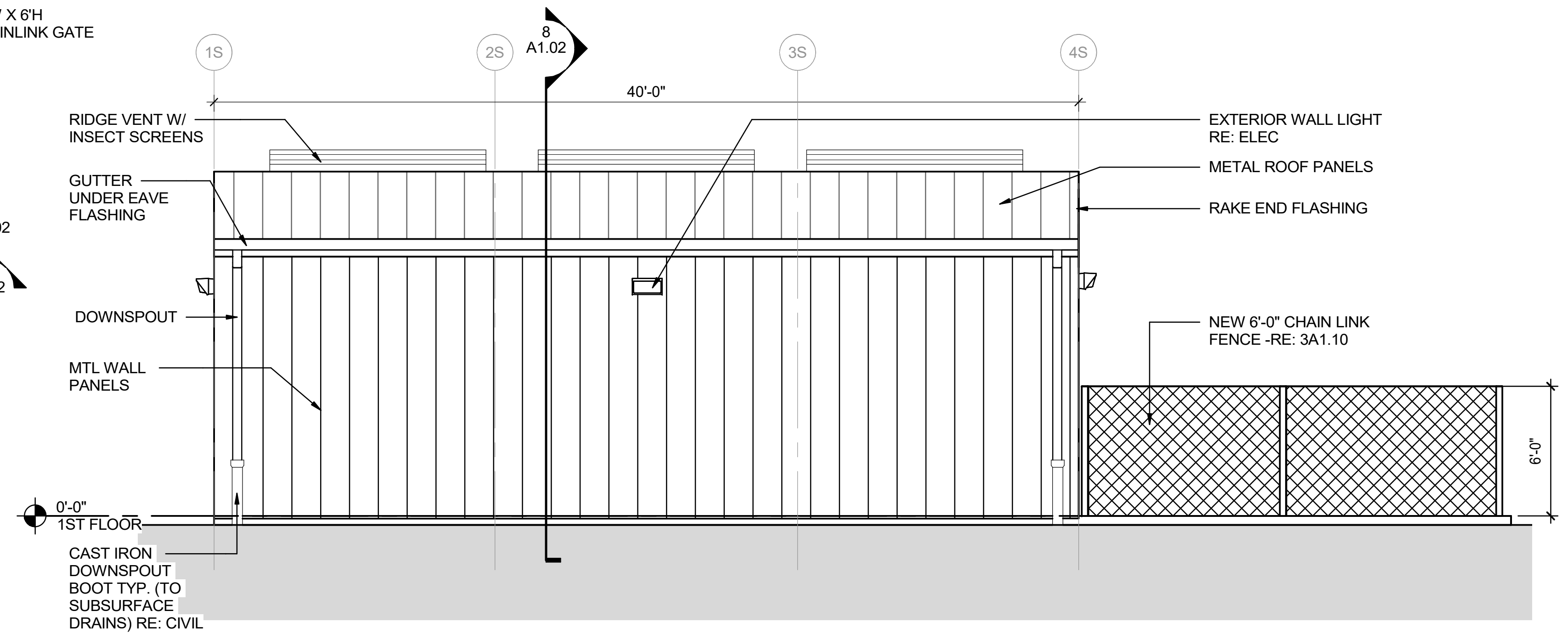
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:32:59 PM

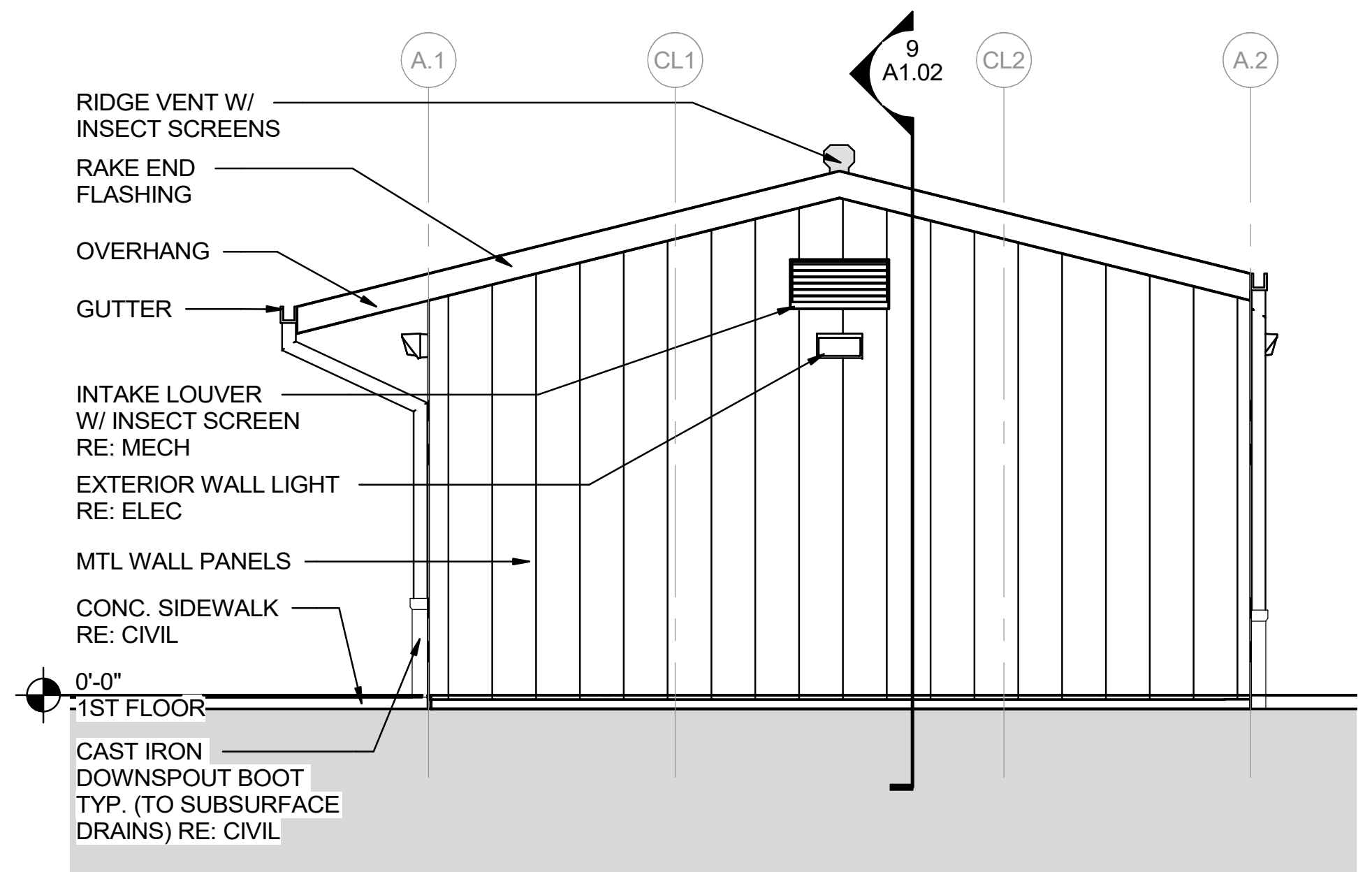


TRUE PLAN

1 ENLG FLOOR PLAN - STORAGE BLDG
1/8" = 1'-0"



4 STOR BLDG - BACK ELEVATION
3/16" = 1'-0"



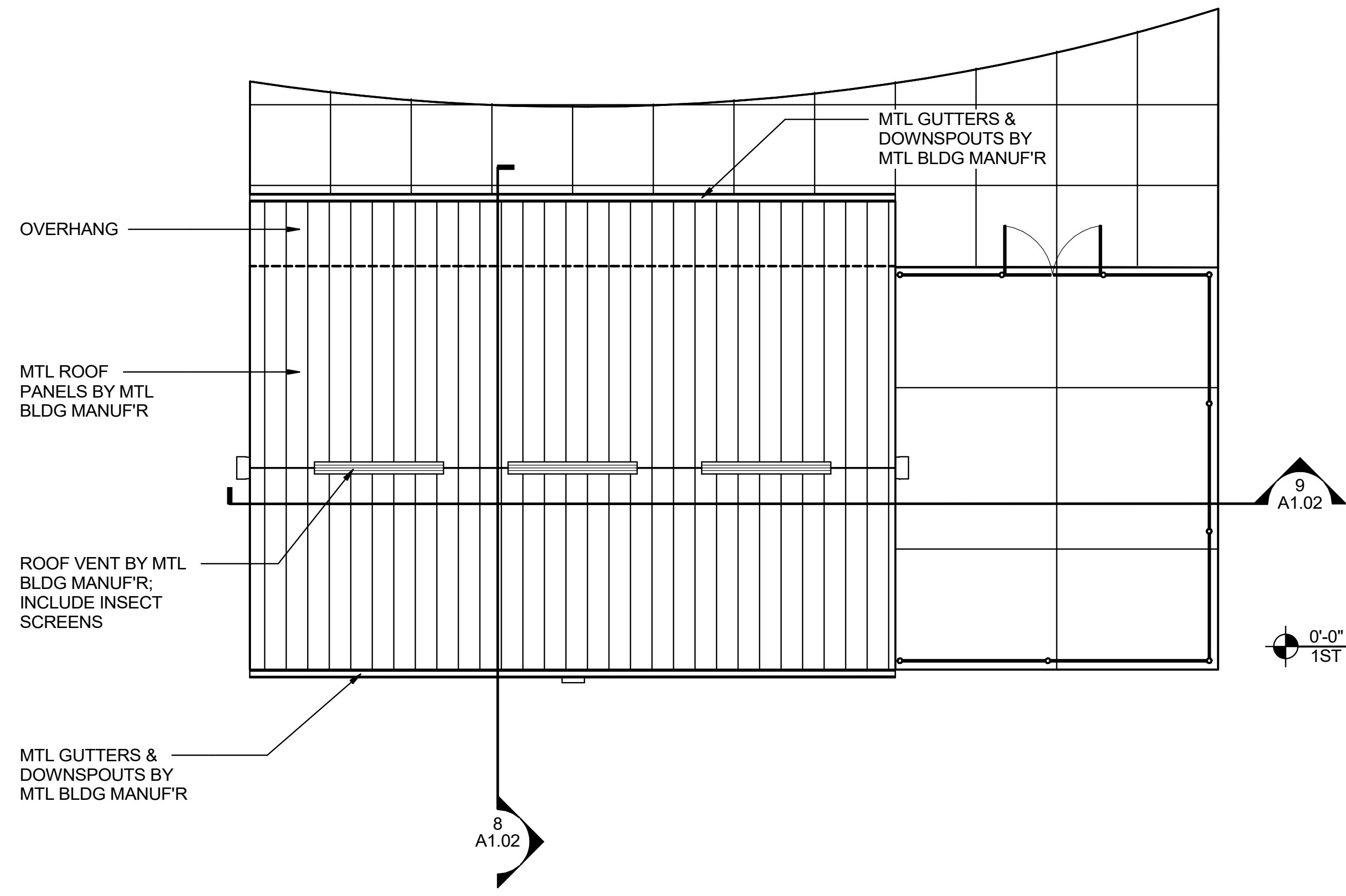
5 STOR BLDG - SIDE ELEVATION W
3/16" = 1'-0"

STORAGE BUILDING NOTES

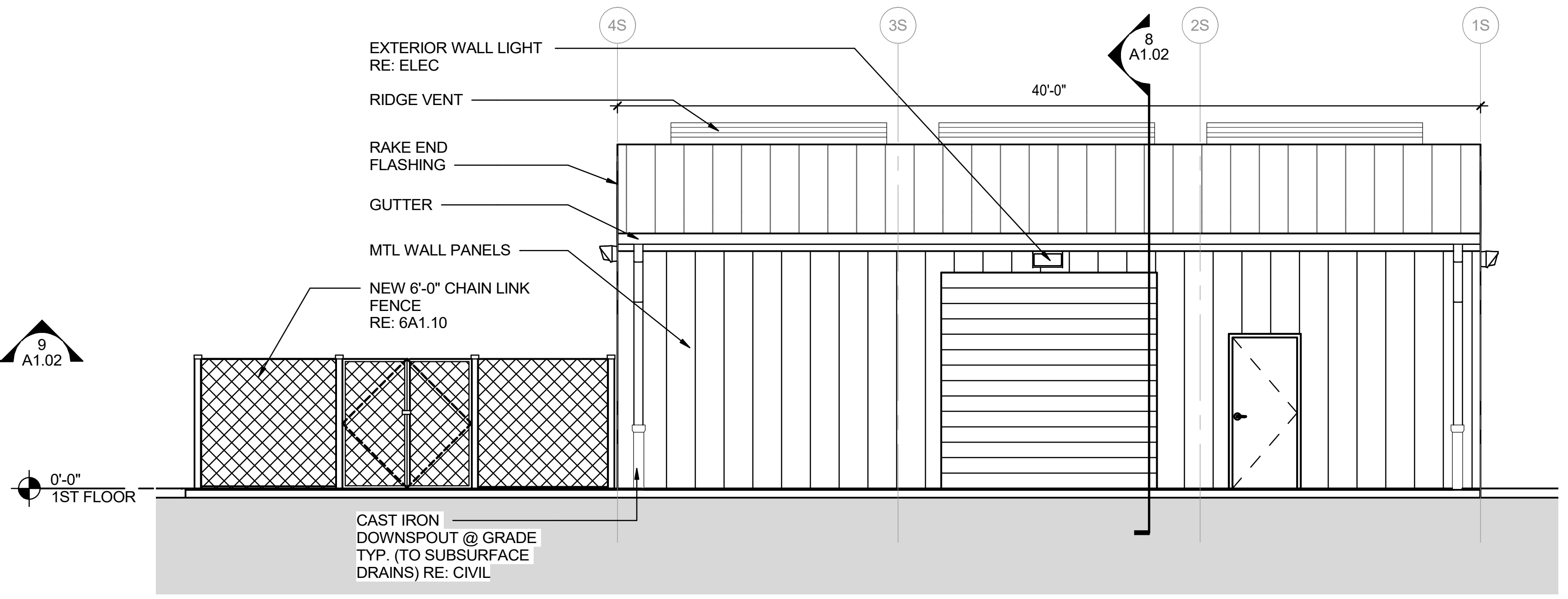
1. REFER TO SPECIFICATION SECTION 13 34 19 PRE-ENGINEERED BUILDING.
2. GC TO PROVIDE AND COORDINATE INSTALLATION OF ALL COMPONENTS SPECIFIED AND SHOWN ON DRAWINGS.
3. REFER TO MEPT, STRUCTURAL, CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS FOR ALL WORK REQUIRED.
4. CONCRETE FLOOR FINISH: SEALED CONCRETE PER SPECIFICATION.

KEYNOTES LEGEND

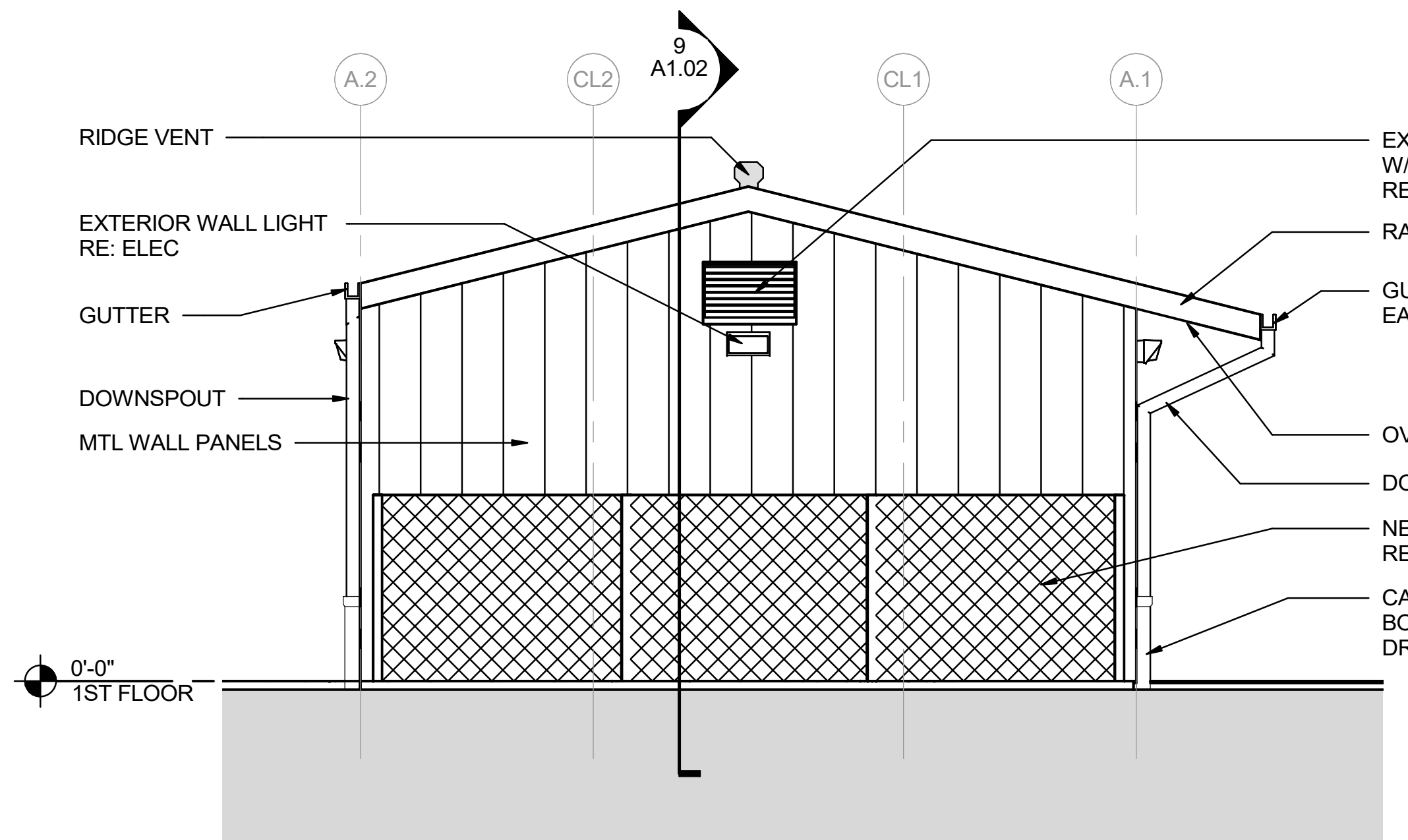
104400 - B1	MULTI-PURPOSE TYPE FIRE EXTINGUISHER ON WALL MOUNTING BRACKET
133419 - A1	PRE-ENGINEERED METAL BUILDING WALL PANELS W/ PRE-FINISHED CLOSURE ANGLE TOP & BOTTOM - WALL PANELS EXTEND PAST FFE 1-1/2" MIN AND CLOSED WITH J-TRIM BASE FLASHING
133419 - A2	PRE-ENGINEERED METAL BUILDING ROOF PANELS
133419 - A3	PRE-ENGINEERED METAL BUILDING ROOF RIDGE VENT / RIDGE CAP WITH INSECT SCREEN; RE: SPECIFICATIONS
133419 - A4	PRE-FINISHED METAL EAVE FLASHING
133419 - A5	PRE-FINISHED METAL RAKE FLASHING
133419 - A6	PRE-FINISHED METAL SOFFIT PANELS
133419 - A7	PRE-FINISHED METAL LINER PANELS
133419 - B1	8" MAX. STEEL WALL GIRTS SPANNING PRE-ENGINEERED FRAME @ 4'-0" MAX. SPACING
133419 - B2	8" MAX. STEEL ROOF PURLINS SPANNING PRE-ENGINEERED FRAME @ 5'-0" MAX. SPACING
133419 - B3	8" MAX. STEEL OPENING FRAMING CHANNEL (HEADER, JAMB, SILL)
133419 - B4	8" MAX. STEEL EAVE STRUT
133419 - B5	2" X 2" MIN. STEEL BASE ANGLE
133419 - B7	PRE-ENGINEERED STEEL RIGID FRAME RAFTER
133419 - B8	PRE-ENGINEERED STEEL RIGID FRAME END-WALL POST
133419 - C1	PRE-FINISHED METAL GUTTER
133419 - C2	PRE-FINISHED METAL DOWNSPOUT
133419 - C4	ROOF INSULATION - R-25 VINYL FACED BATT INSULATION DRAPED BETWEEN PURLINS
133419 - C5	WALL INSULATION - R-19 VINYL FACED BATT INSULATION BETWEEN GIRTS
NOTE 01 - 01	CONCRETE SLAB - RE: STRUCTURAL
NOTE 01 - 02	FOUNDATION - RE: STRUCTURAL
NOTE 04 - 01	DOOR RE: DOOR SCHEDULE
NOTE 04 - 04	OVERHEAD COILING DOOR RE: DOOR SCHEDULE
NOTE 23 - 20	LOUVER RE: MECHANICAL
NOTE 26 - 01	LIGHT FIXTURE RE: ELECTRICAL



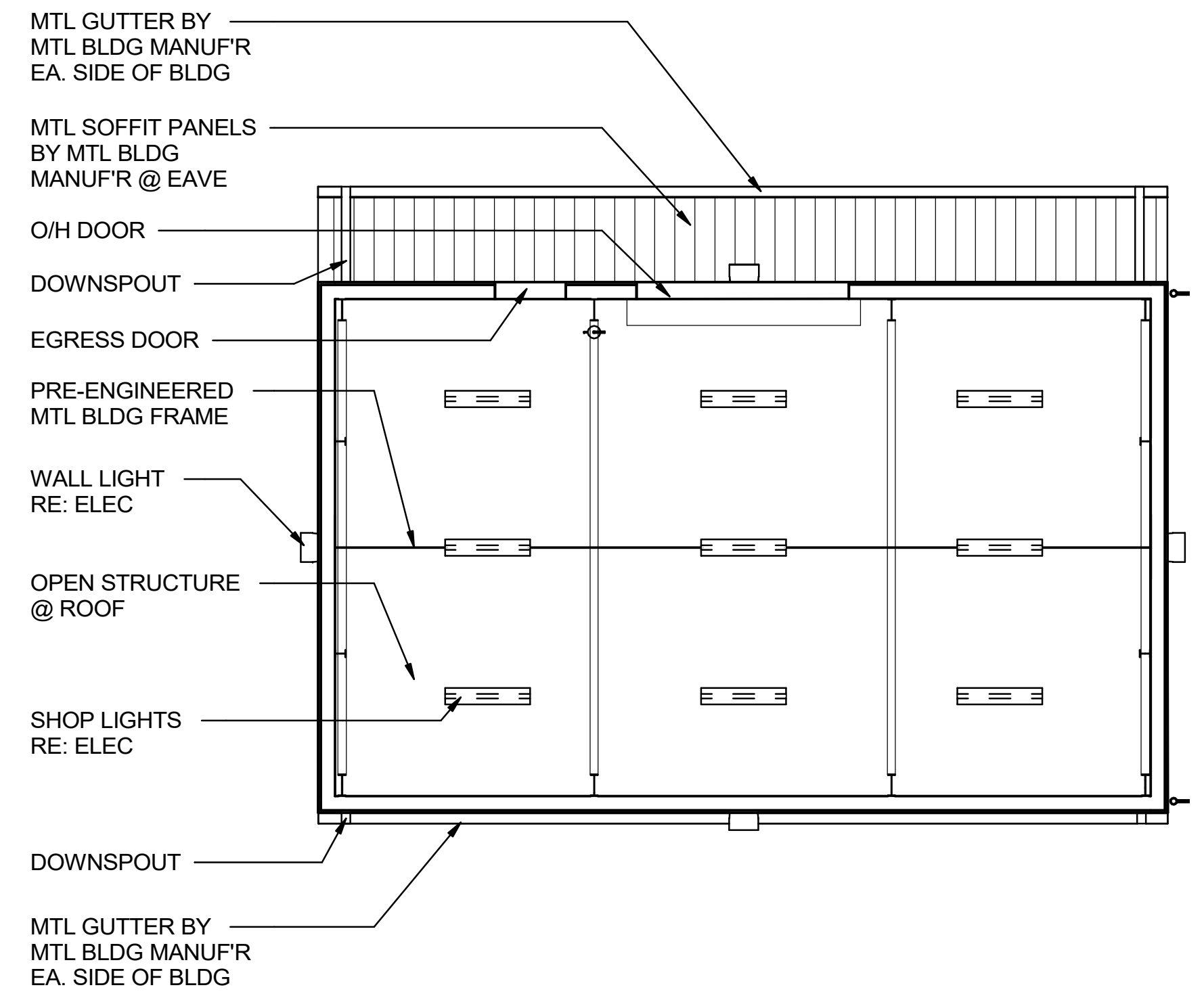
2 ENLG ROOF PLAN - STORAGE BLDG
1/8" = 1'-0"



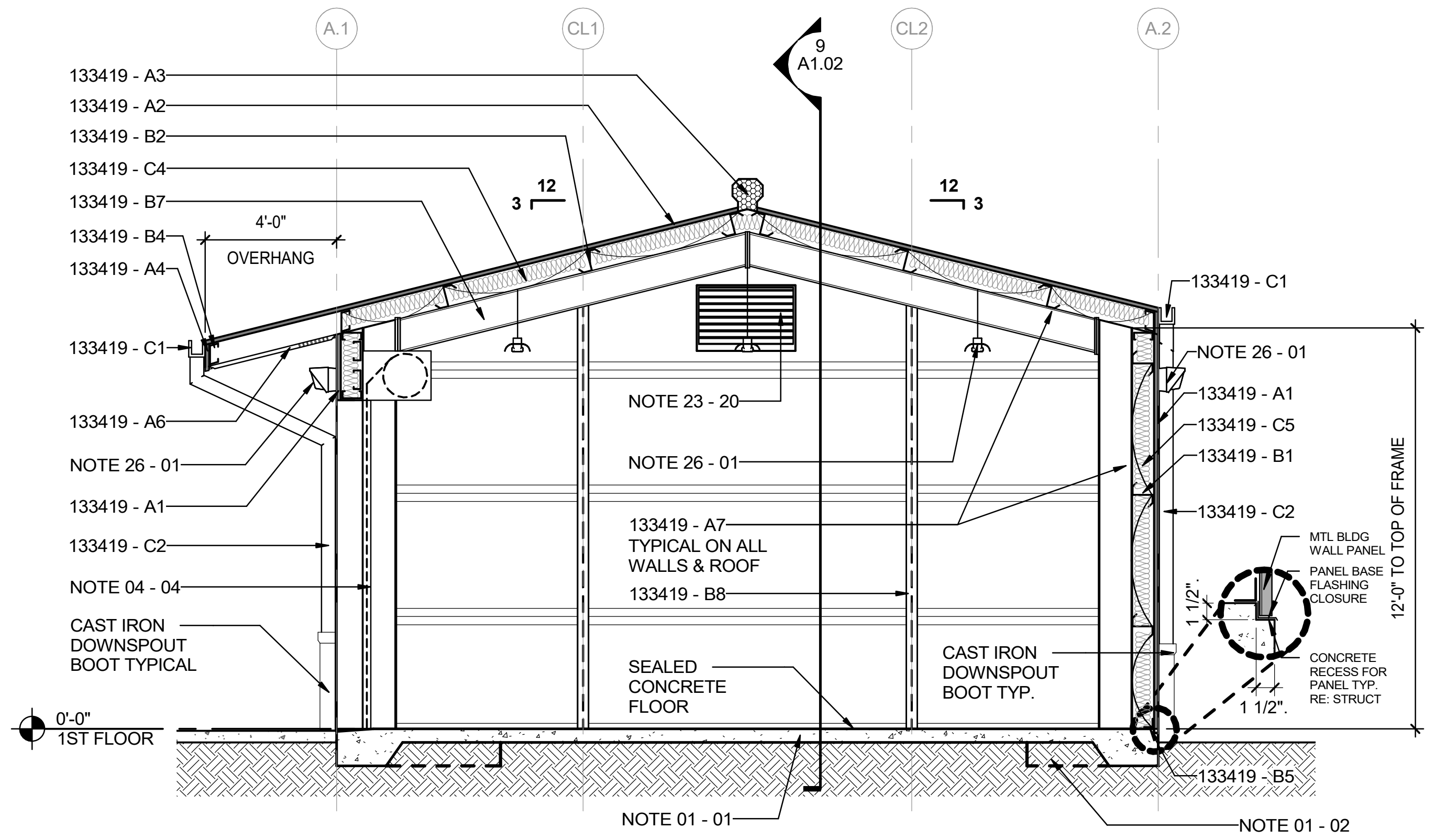
6 STOR BLDG - FRONT ELEVATION
3/16" = 1'-0"



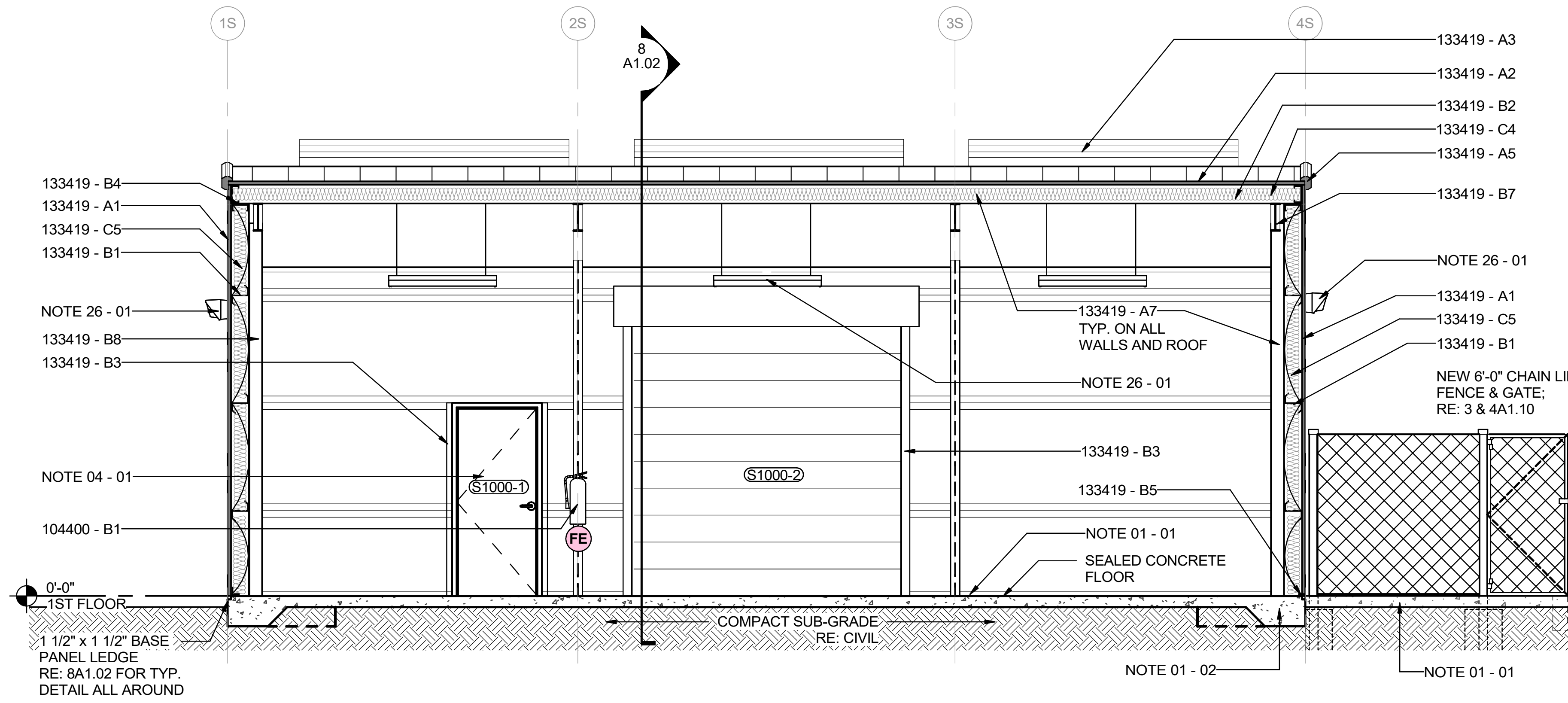
7 STOR BLDG - SIDE ELEVATION E
3/16" = 1'-0"



3 ENLG CEILING PLAN - STOR BLDG
1/8" = 1'-0"



8 STORAGE BUILDING CROSS SECTION
1/4" = 1'-0"



9 STORAGE BUILDING SECTION
1/4" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

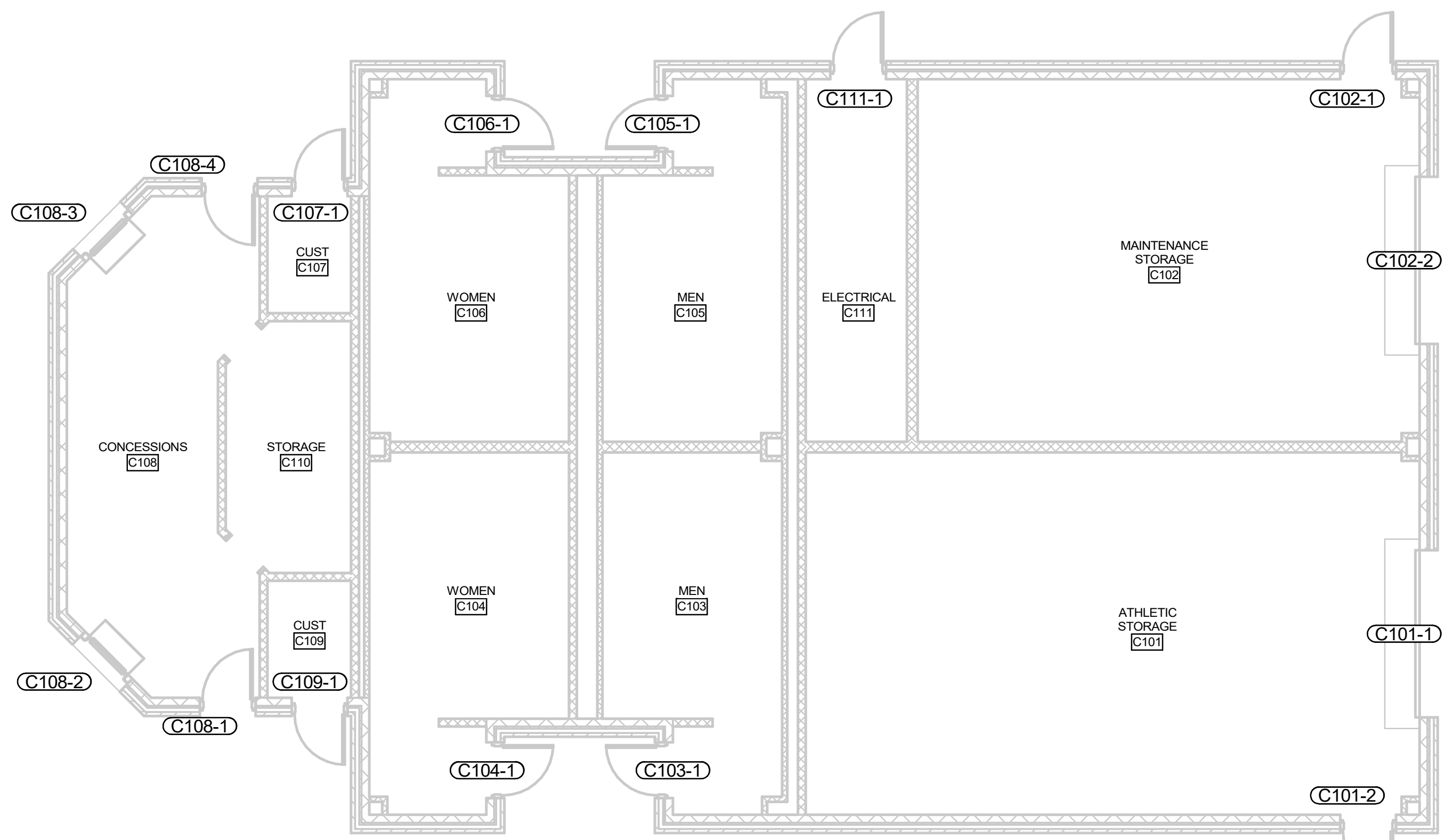
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

ATHLETIC STORAGE
BLDG PLANS &
DETAILS

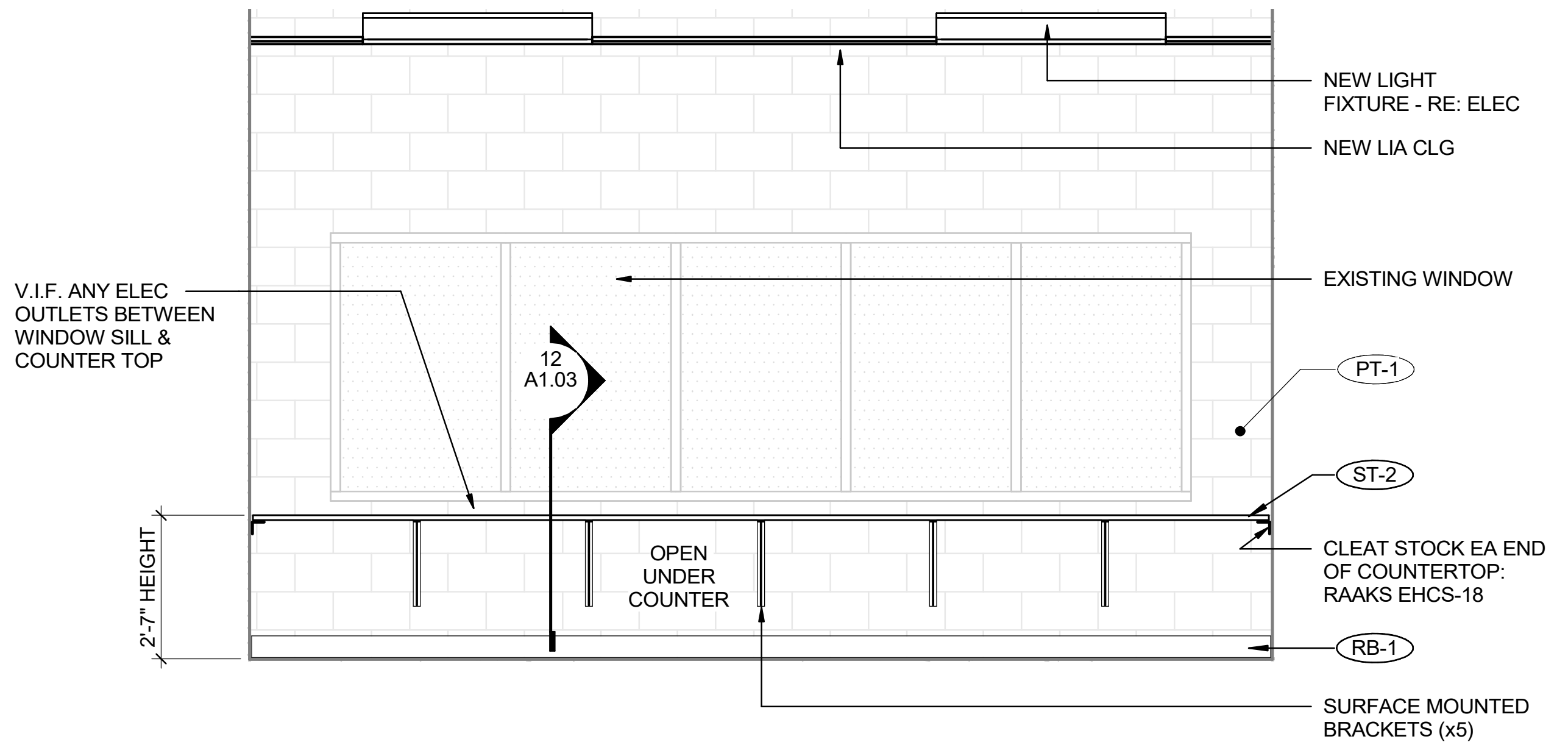
A1.02

_____ of _____

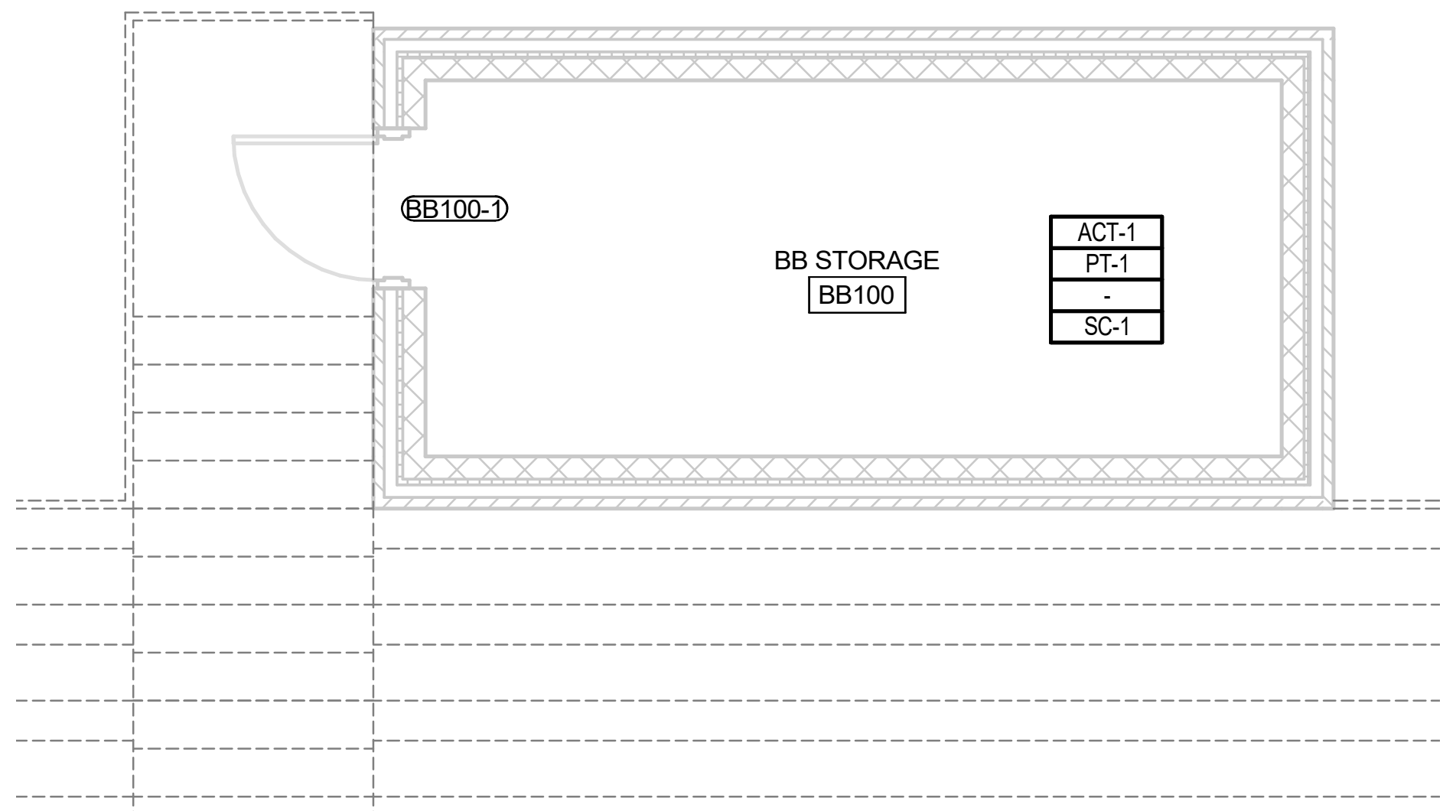
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



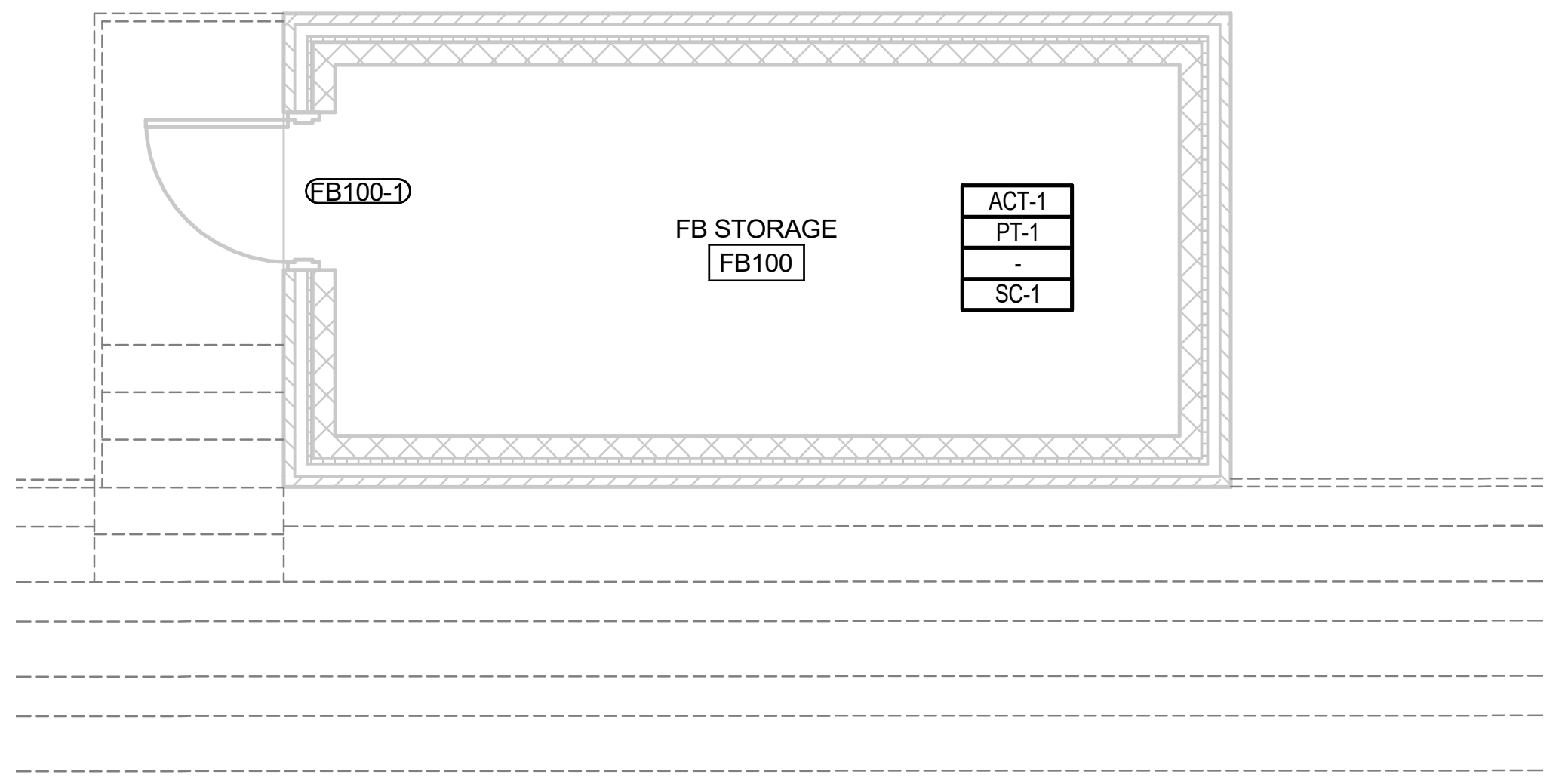
1 ENLG SITE PLAN - CONCESSIONS BLDG PLAN
1/8" = 1'-0"



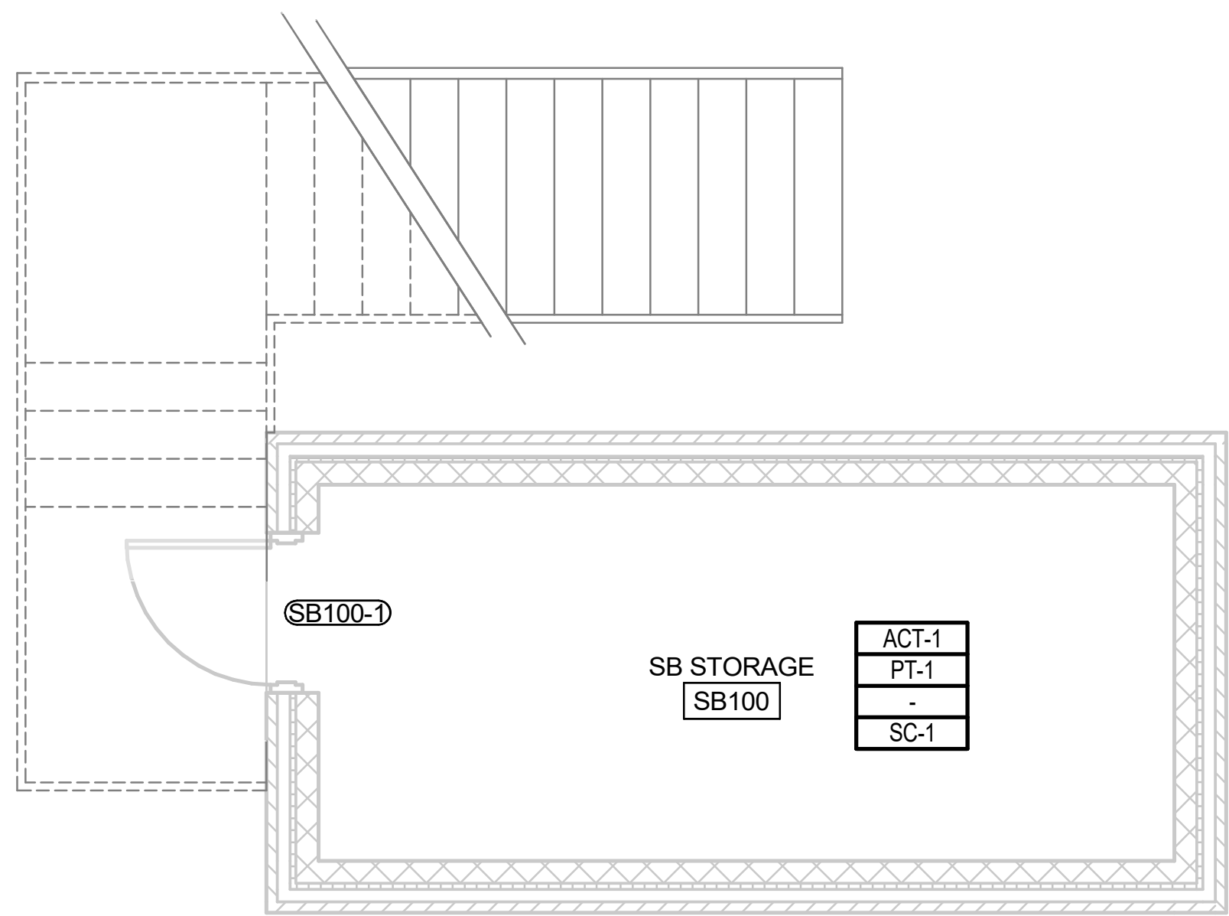
2 TYPICAL PRESS BOX ELEVATION
3/8" = 1'-0"



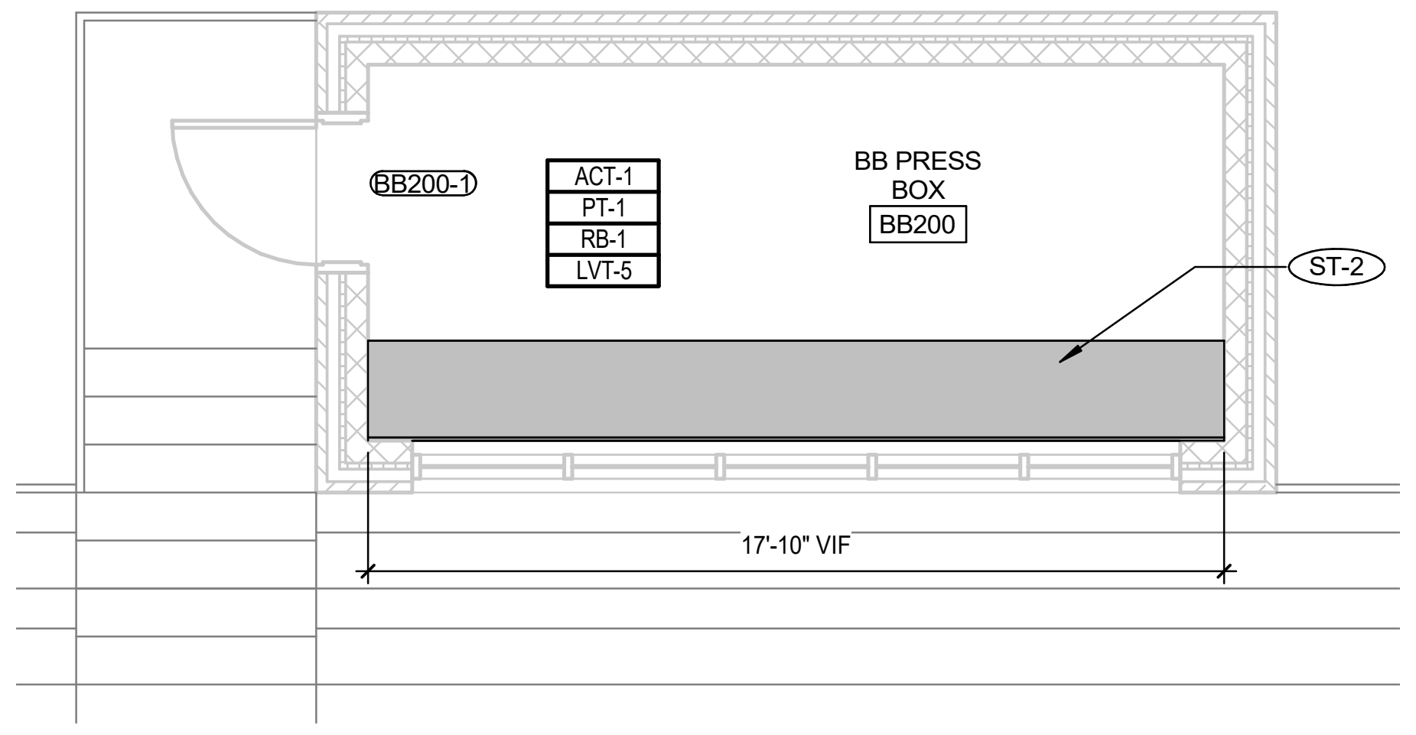
3 1ST FLR BB STORAGE
1/4" = 1'-0"



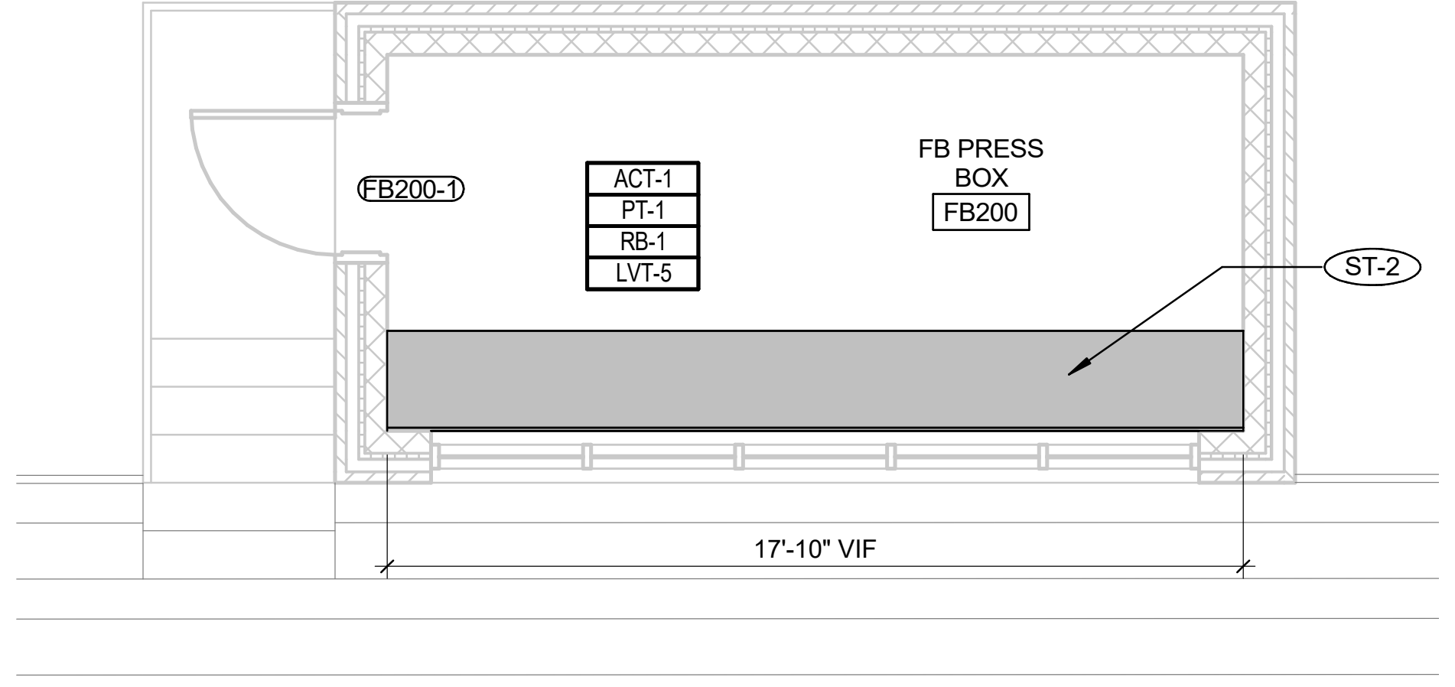
4 1ST FLR FB STORAGE
1/4" = 1'-0"



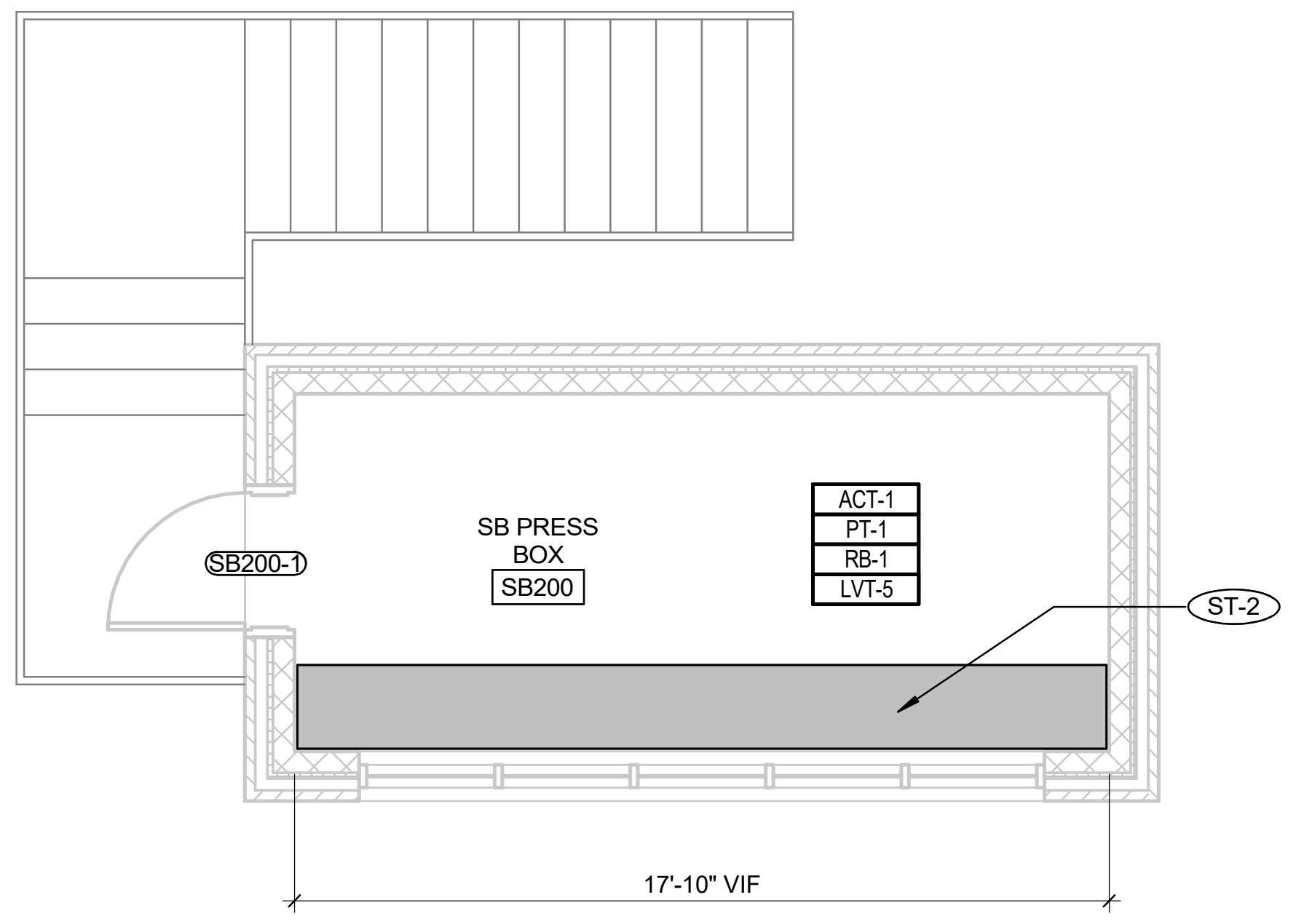
5 1ST FLR SB STORAGE
1/4" = 1'-0"



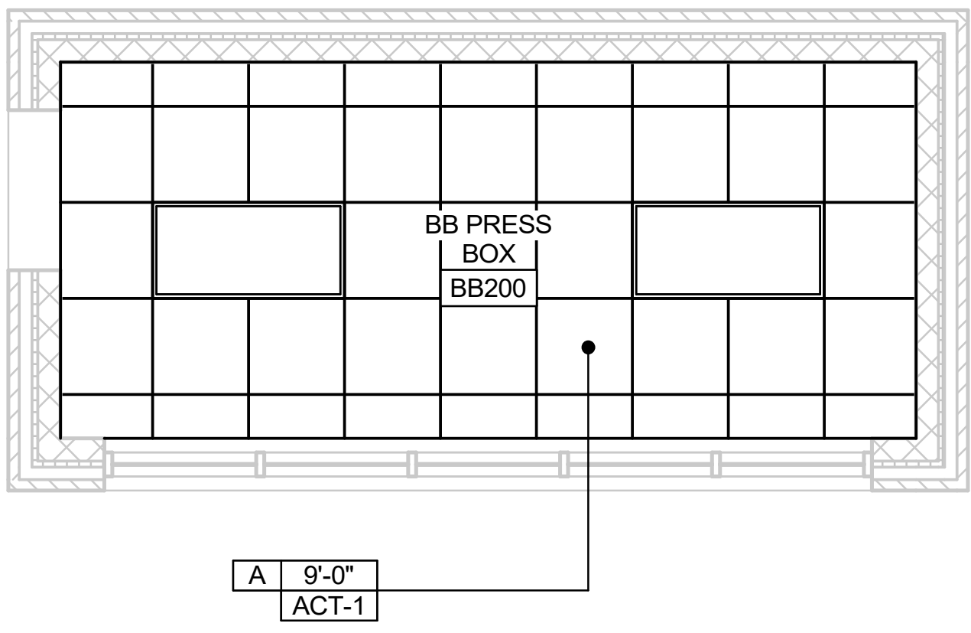
6 2ND FLR BB - PRESS BOX
1/4" = 1'-0"



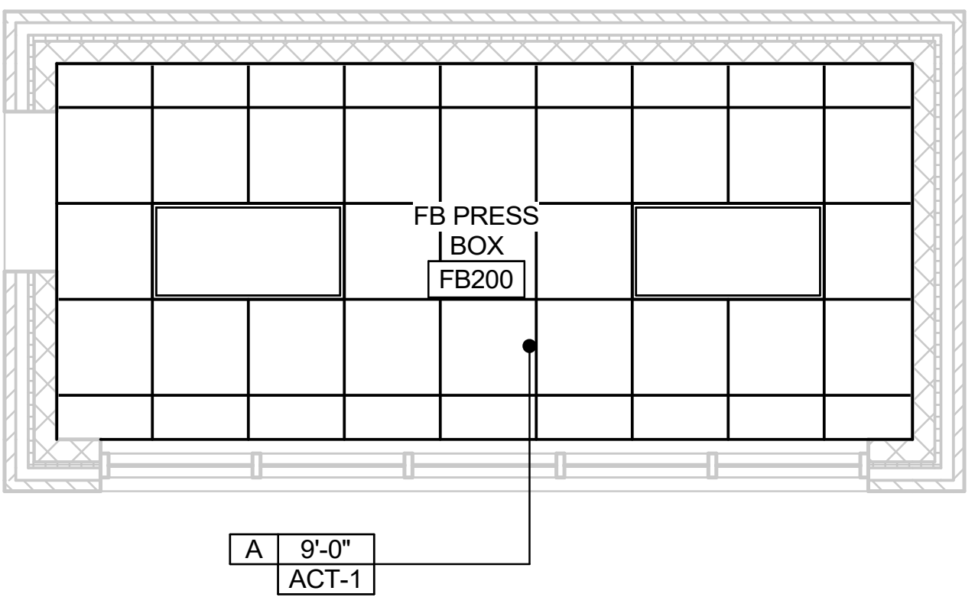
7 2ND FLR FB - PRESS BOX
1/4" = 1'-0"



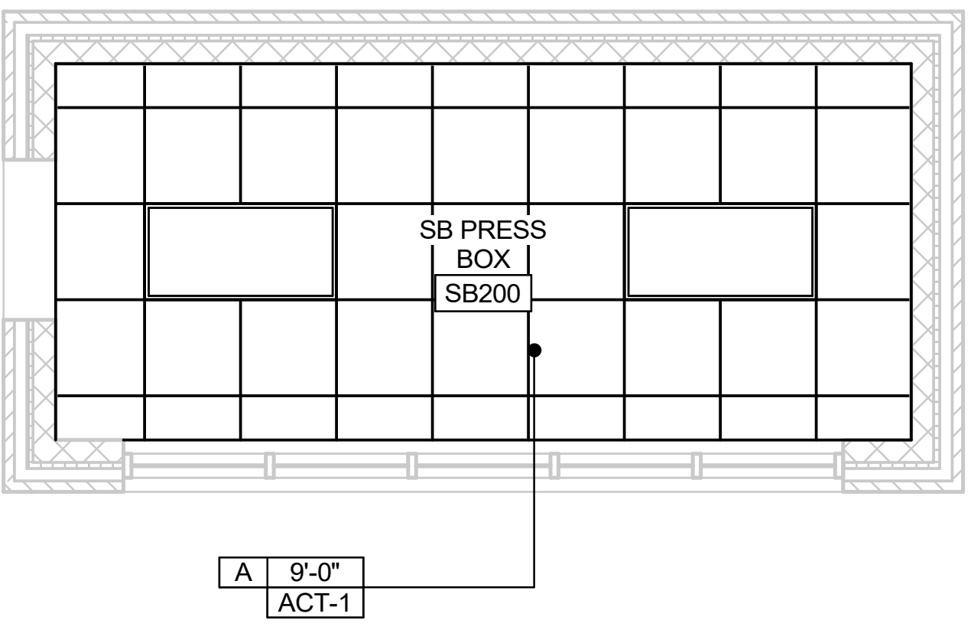
8 2ND FLR SB PRESS BOX
1/4" = 1'-0"



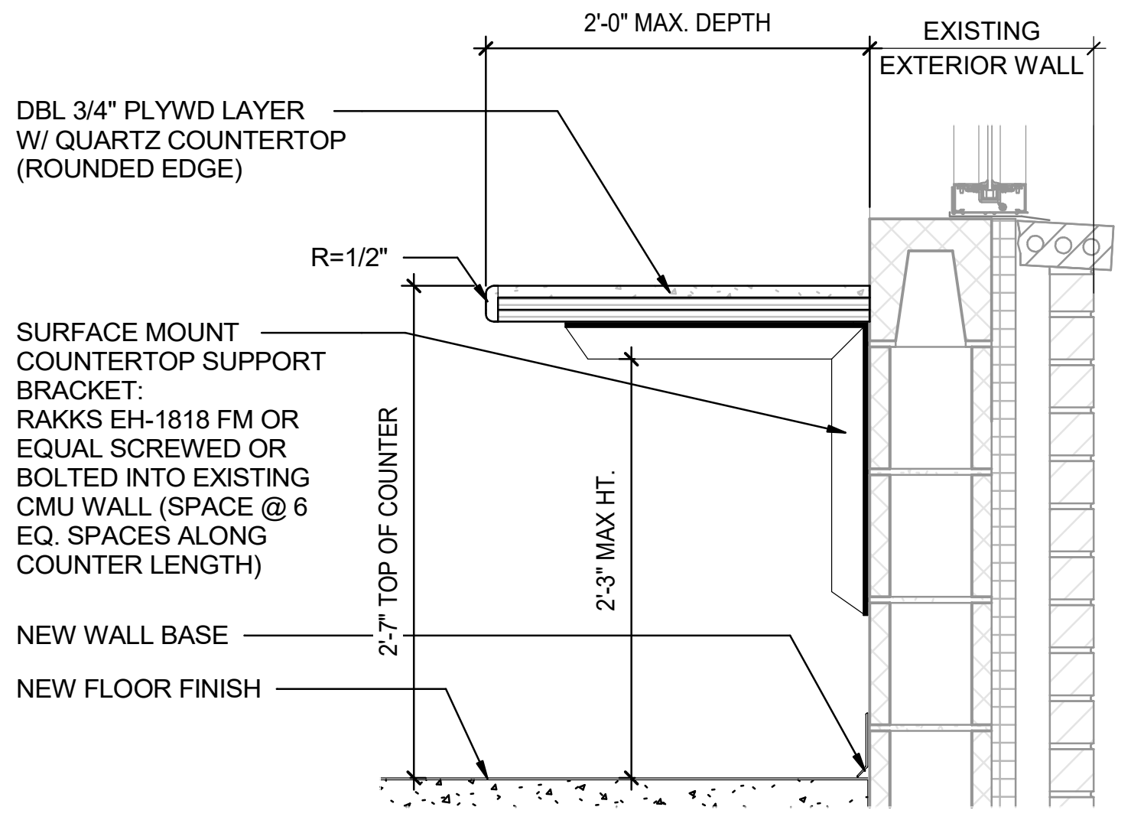
9 BB PRESS BOX - CEILING
1/4" = 1'-0"



10 FB PRESS BOX - CEILING
1/4" = 1'-0"



11 SB PRESS BOX - CEILING
1/4" = 1'-0"



12 PRESSBOX COUNTERTOP SECTION
1" = 1'-0"

ATHLETIC OUT BUILDING WORK NOTES

1. CONCESSION BUILDING - JOINT REPLACEMENT ONLY
2. ALL PRESS BOX / STORAGE BUILDINGS SHALL HAVE NEW FINISHES AS SCHEDULED & DOOR HARDWARE CHANGED OUT WITH NEW.
3. ALL OUT BUILDINGS SHALL HAVE ALL WALL JOINTS REMOVED, JOINTS CLEANED, & JOINTS REPLACED. SEE BUILDING ELEVATIONS ON **SHEET A6.10** FOR SCOPE OF WORK FOR CONCESSION BUILDING & ALL PRESS BOX / STORAGE BUILDINGS AT SPORTS FIELDS.

FINISH PLAN LEGEND

XX-# → CEILING
XX-# → WALL FINISH
XX-# → WALL BASE FINISH
XX-# → FLOOR FINISH

ROOM TAG CALLING OUT ROOM FINISHES

PT-# LIMITS OF ACCENT PAINT ← MATERIAL TAG MARKING EXTENTS OF ACCENT WALL

NOTE: ROOM FINISH TAGS ARE SCHEDULED ON SHEET A12.00

CEILING PLAN LEGEND

SYMBOL	DESCRIPTION
1' - 0" Finish	CEILING HEIGHT ABOVE FINISH FLOOR CEILING FINISH RE: A12.00
▭	2' X 4' LAY-IN LIGHT FIXTURE
⊘	RECESSED DOWN LIGHTS
⊠	SUPPLY DIFFUSER GRILLE RE: MEP DRAWINGS
⧅	RETURN DIFFUSER GRILLE RE: MEP DRAWINGS
⊠	EXHAUST GRILLE RE: MEP DRAWINGS
⊗	EMERGENCY EXIT SIGN - RE: ELEC. LIGHTING PLAN & LIFE SAFETY SHEET G1.01
▦	EXISTING LAY-IN CEILING TO REMAIN
▦	2' X 2' LAY-IN CEILING
▩	GYPSUM BOARD CEILING
▒	EXISTING GYPSUM BOARD CEILING
▭	EXPOSED STRUCTURE
▨	EXISTING EXTERIOR PLASTER
🟦	APPROX. AREA OF CEILING BELOW HVAC PIPE INSULATION REPLACEMENT WORK

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
15620
11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

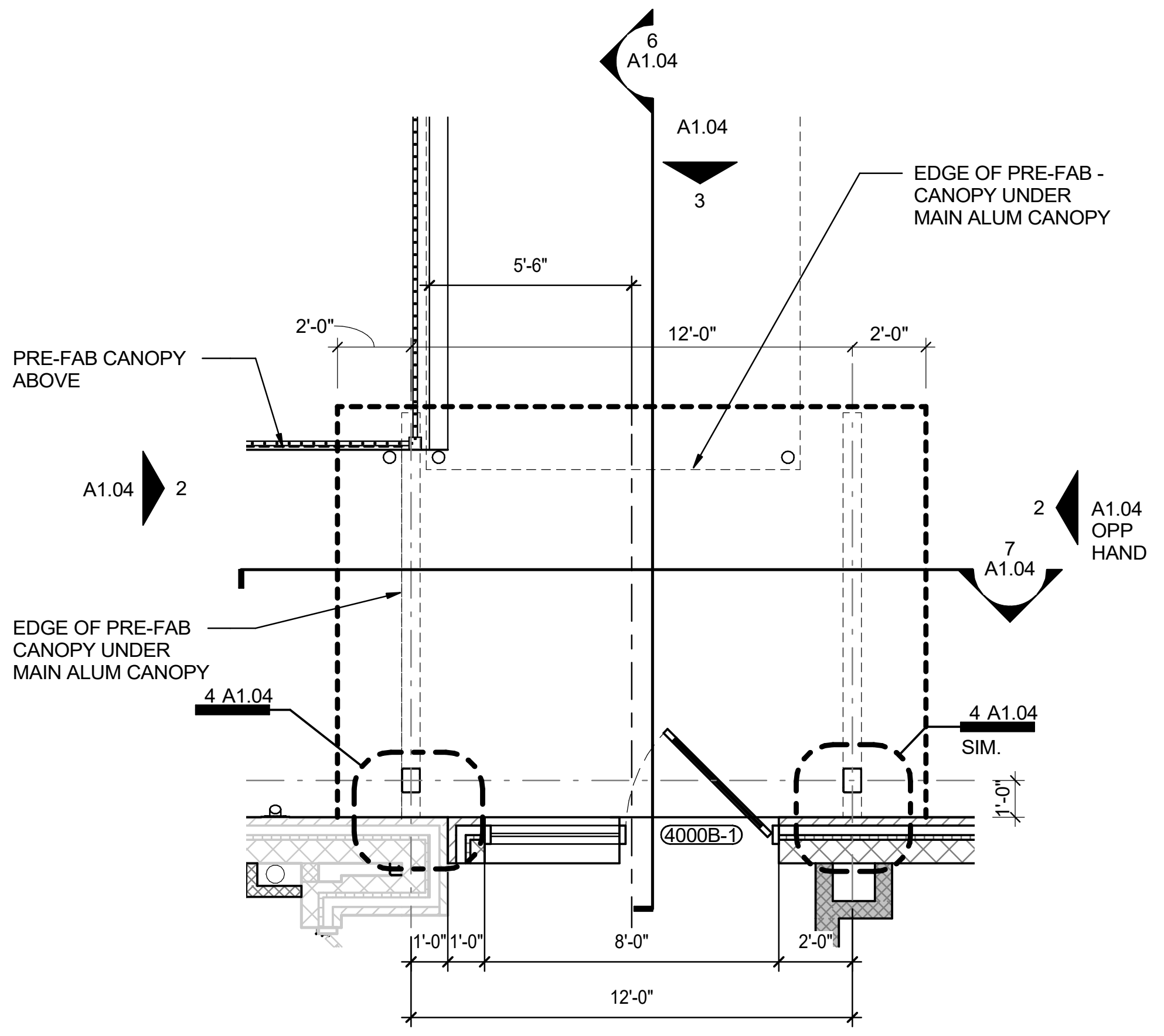
ATHLETIC OUT
BUILDINGS PLANS &
DETAILS

A1.03
of

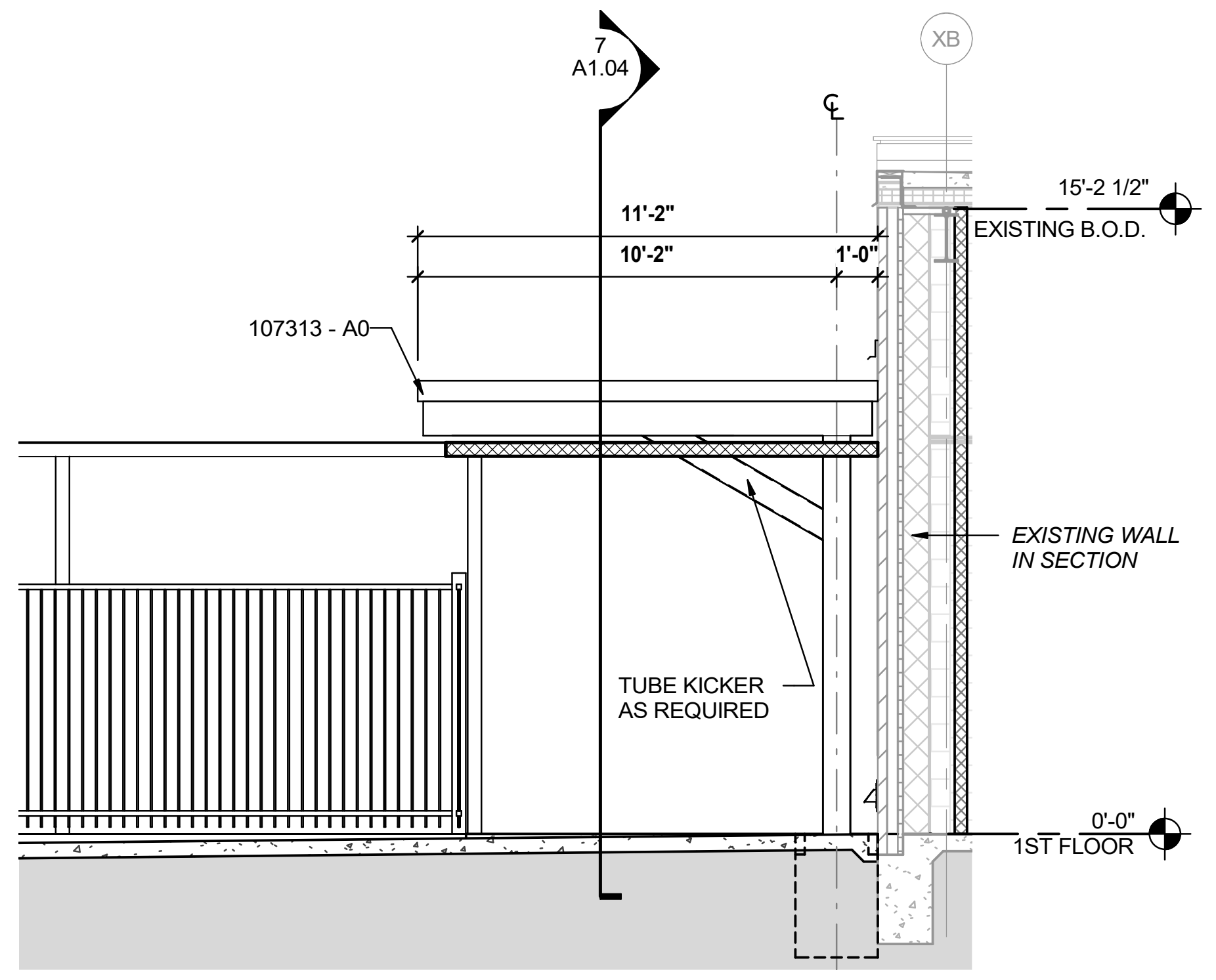
11/14/2024 1:33:06 PM

Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

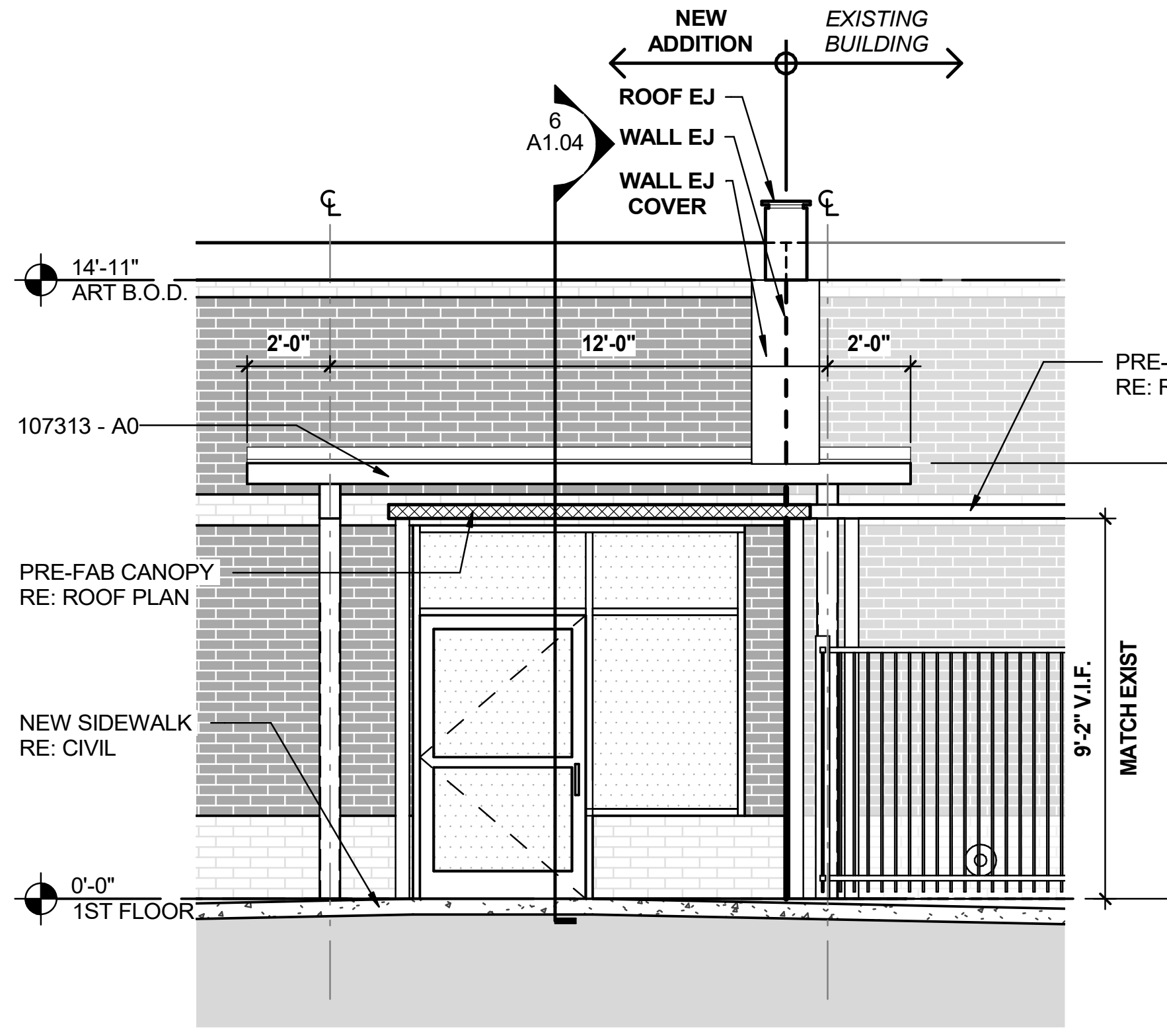
11/14/2024 1:33:15 PM



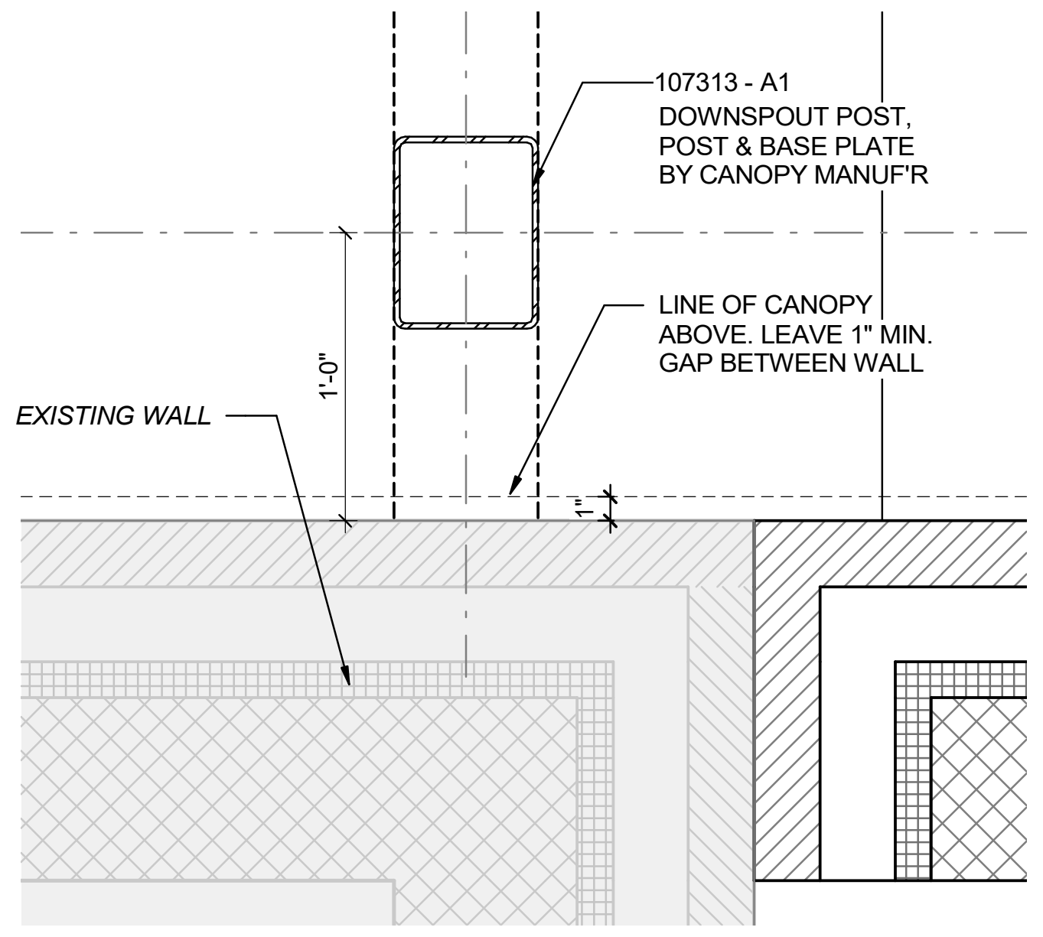
1 ENLG FLOOR PLAN - CANOPY
1/4" = 1'-0"



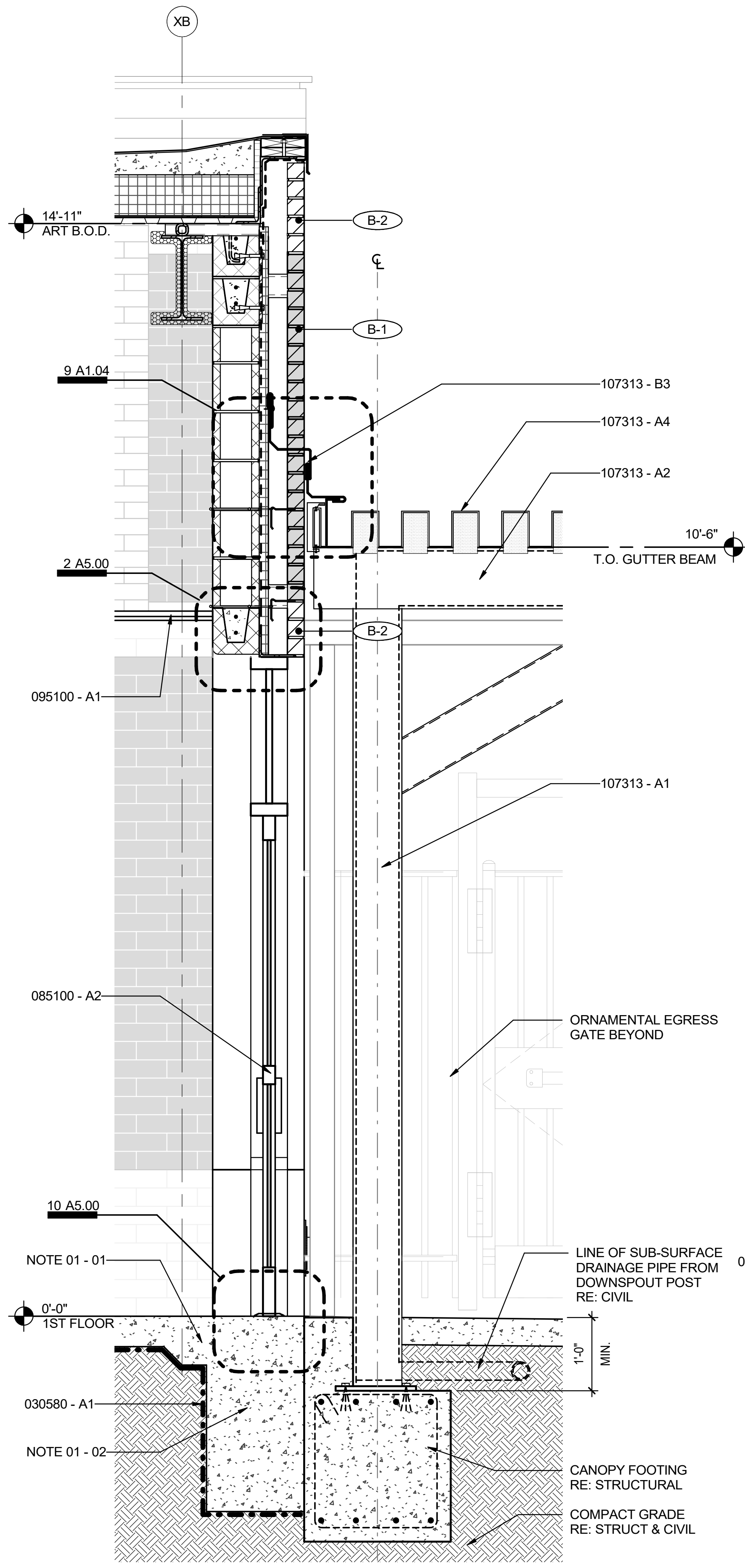
2 CANOPY - WEST ELEVATION
1/4" = 1'-0"



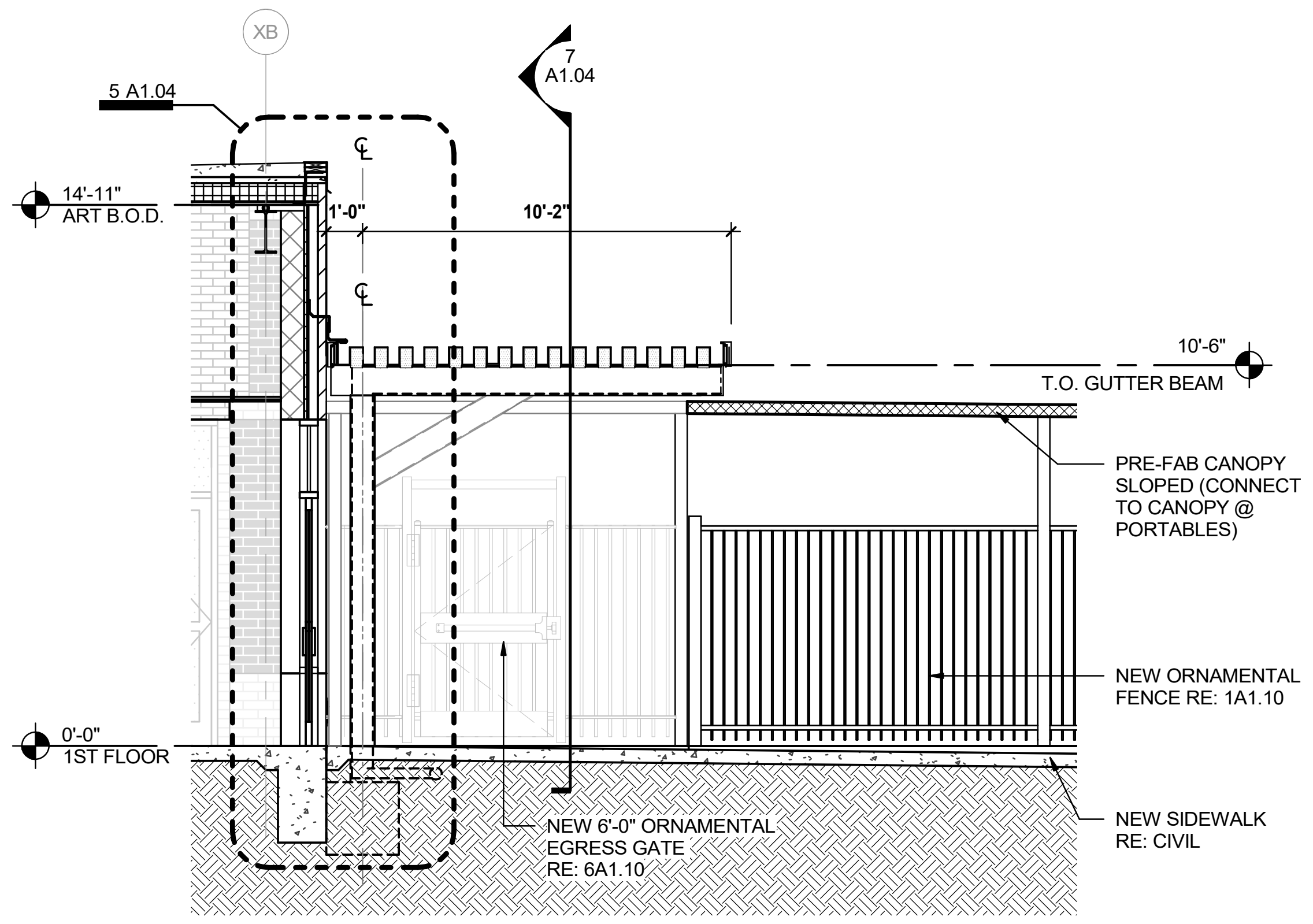
3 CANOPY - NORTH ELEVATION
1/4" = 1'-0"



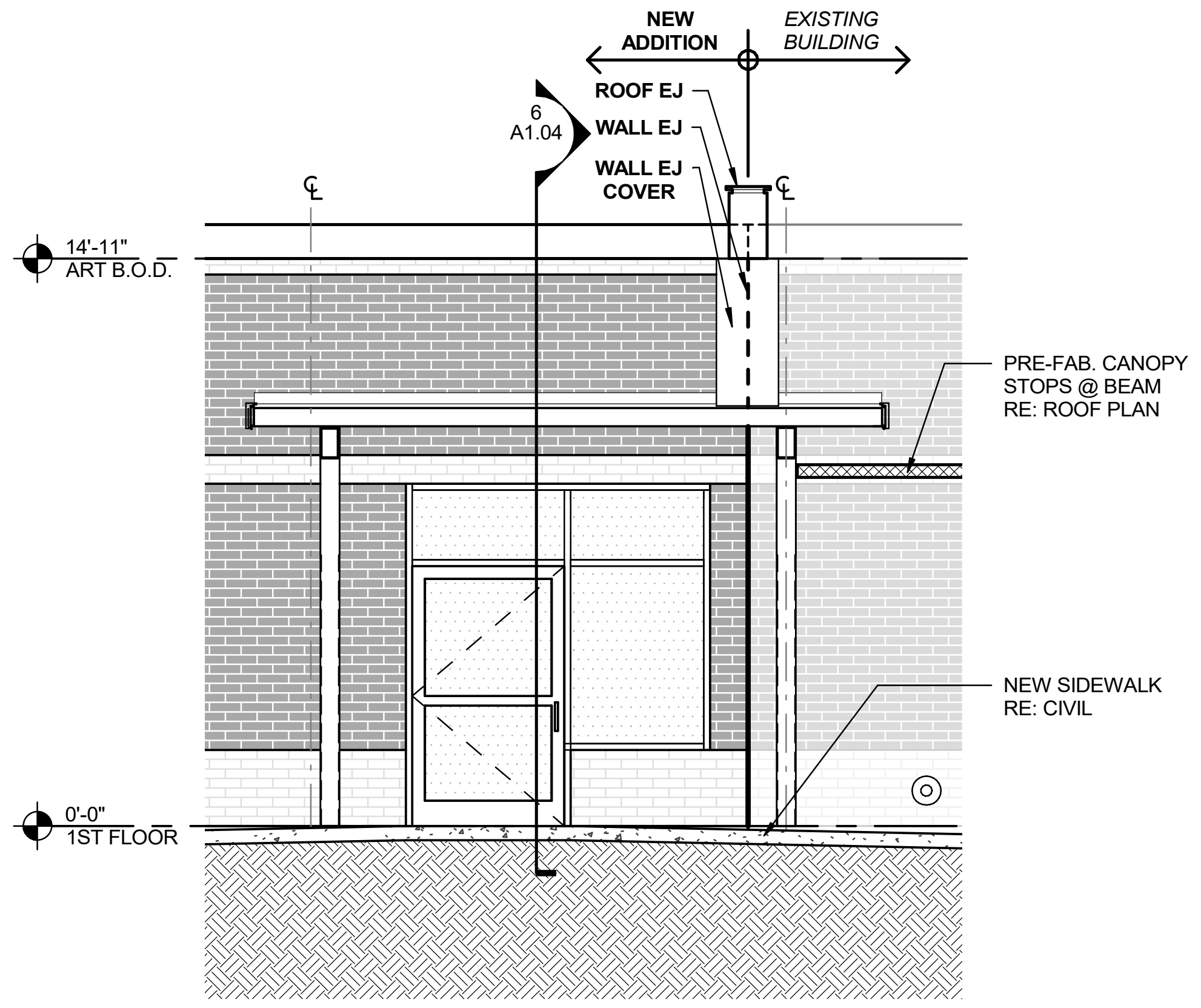
4 PLAN DETAIL - CANOPY
1 1/2" = 1'-0"



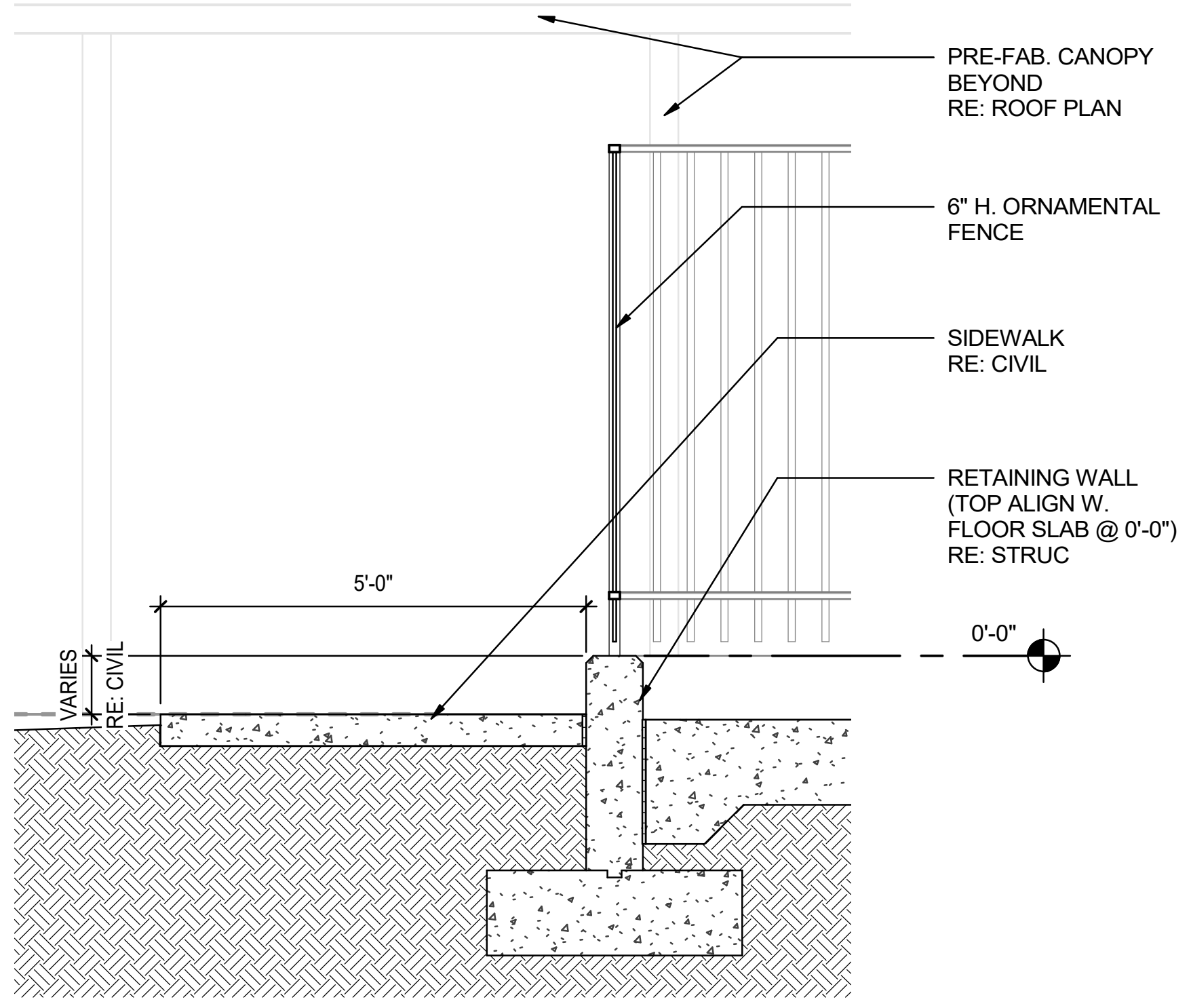
5 CANOPY WALL SECTION @ BLDG
3/4" = 1'-0"



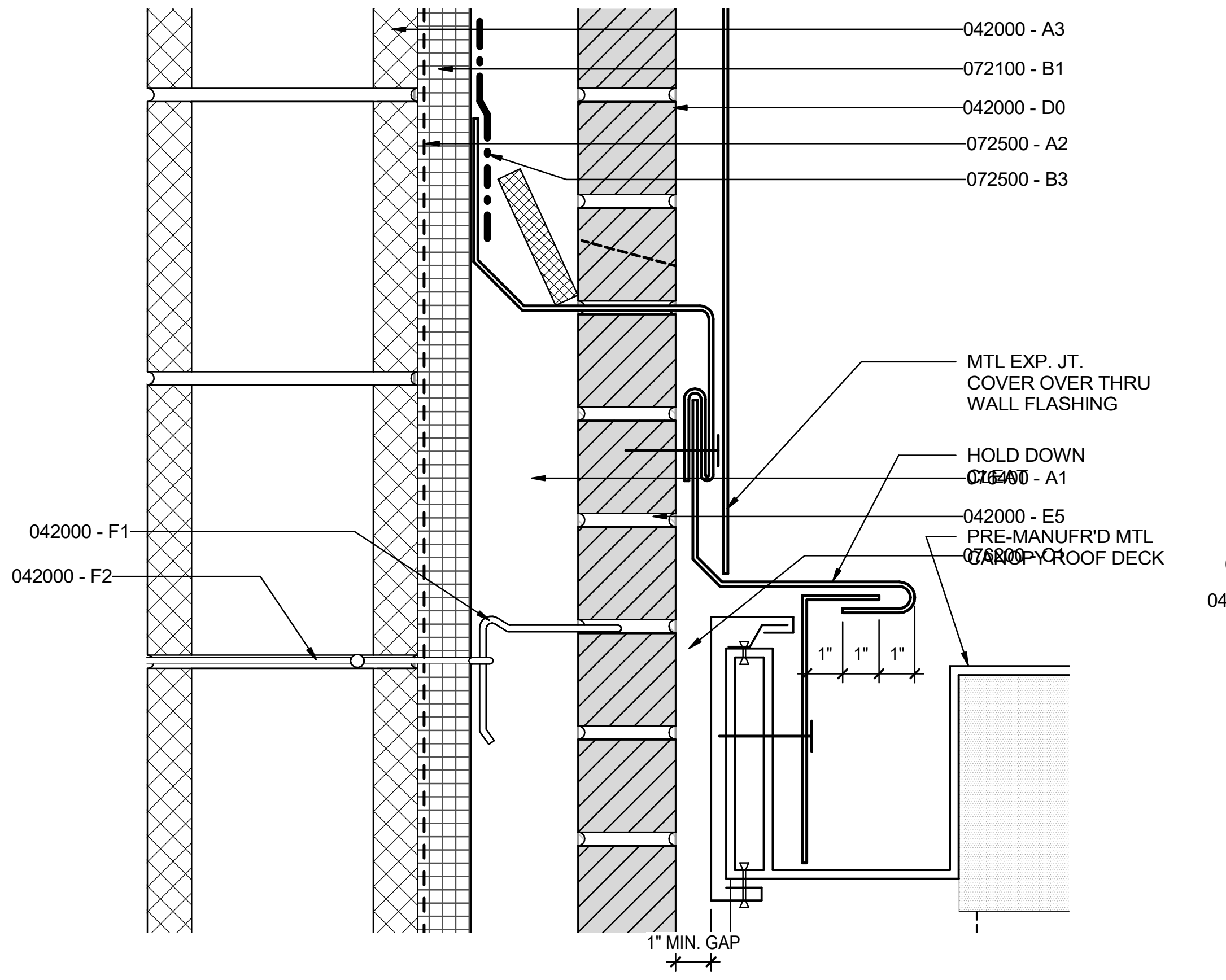
6 CANOPY SECTION
1/4" = 1'-0"



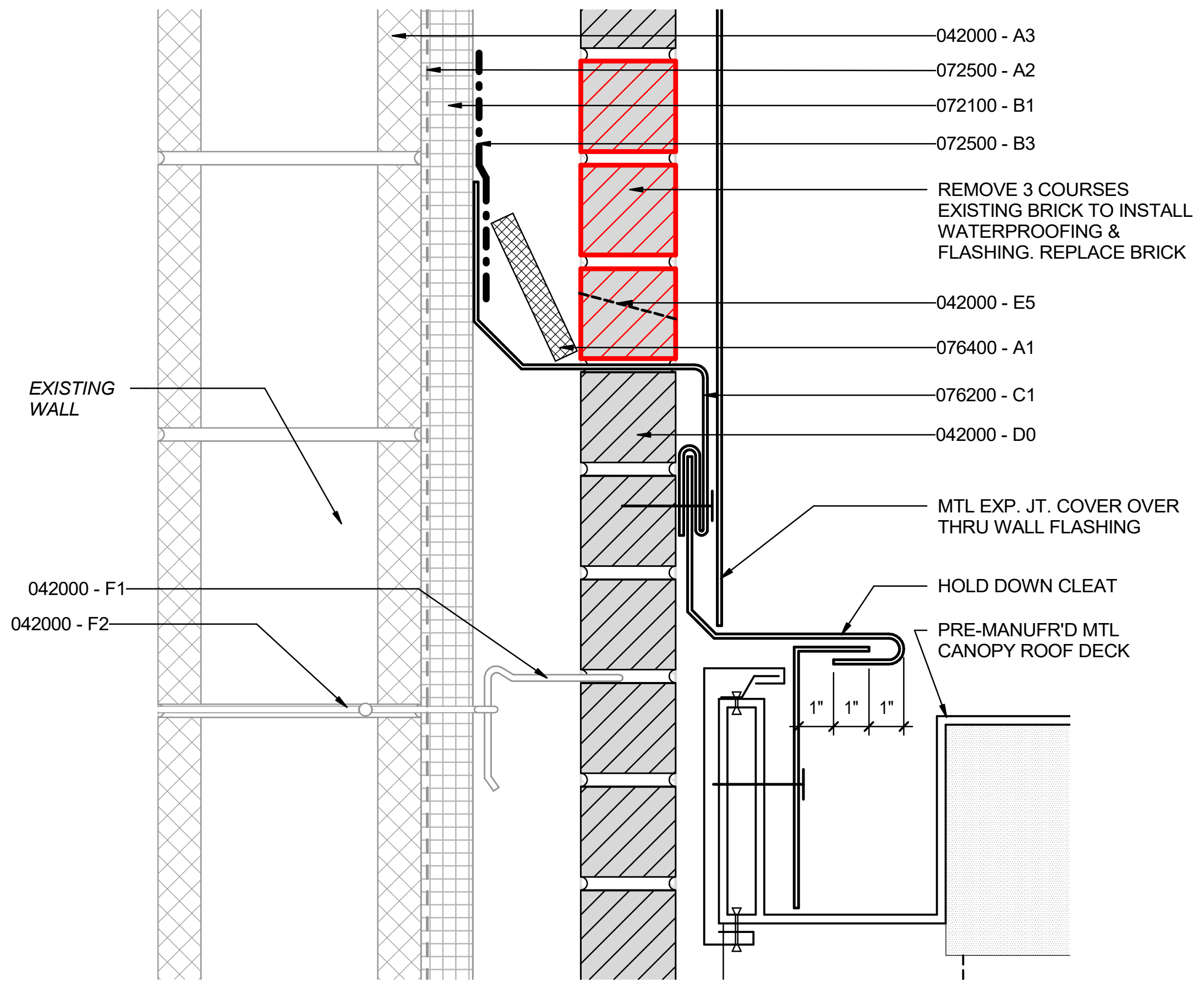
7 CANOPY CROSS-SECTION
1/4" = 1'-0"



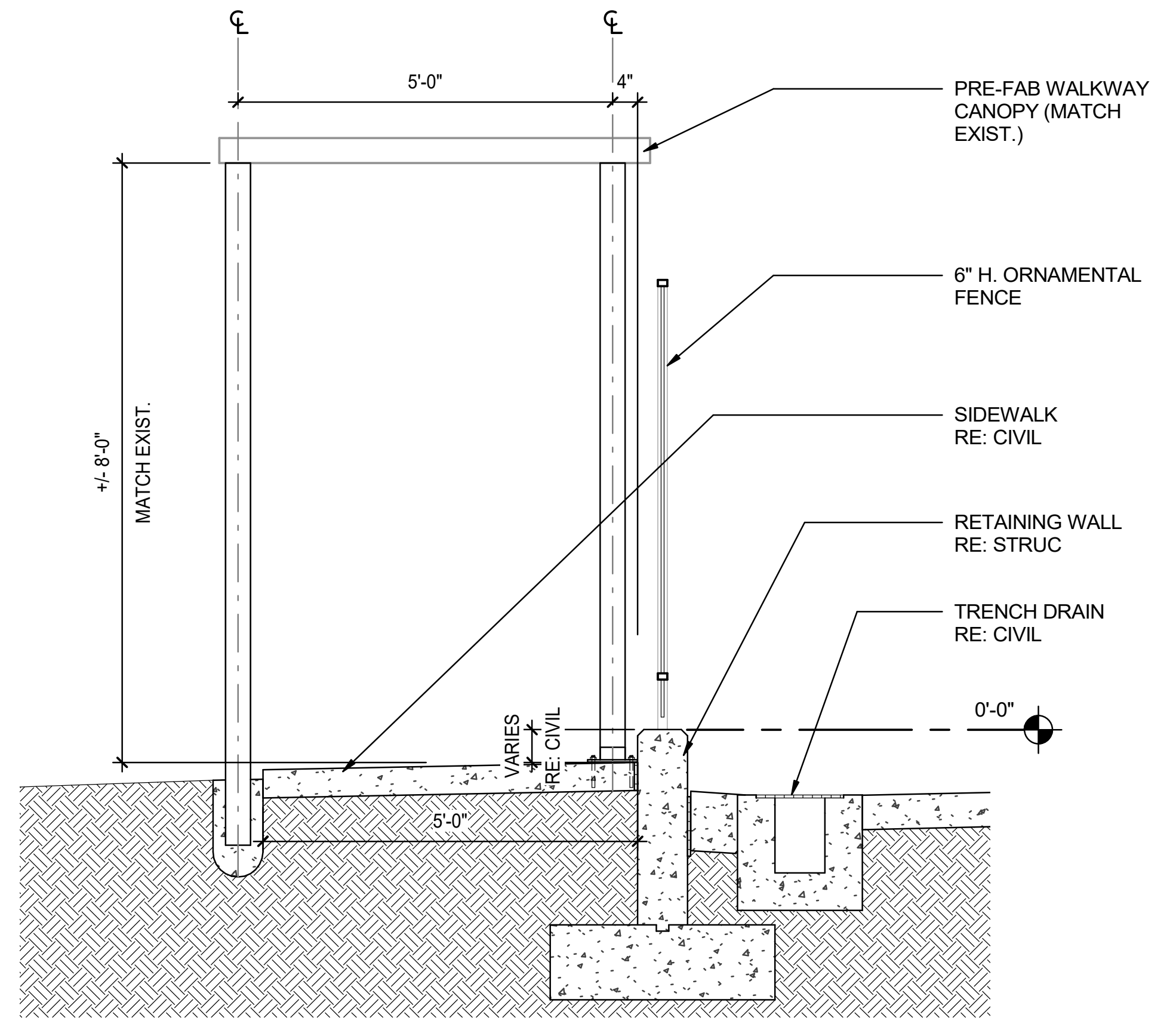
8 WALL SECTION - WELDING YARD
1/2" = 1'-0"



9 CANOPY THRU WALL FLASH - NEW ADDITION
3" = 1'-0"



10 CANOPY THRU WALL FLASH - EXISTING BLDG
3" = 1'-0"



11 WALL SECTION - WELDING YARD @ CANOPY
1/2" = 1'-0"

MATERIAL KEYNOTES

030580 - A1	UNDER-SLAB VAPOR RETARDER / BARRIER; RE: SPECIFICATIONS
042000 - A3	8X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - D0	MODULAR VENEER FACE BRICK - STRETCHER COURSES (RUNNING BOND) - SEE ELEVATIONS FOR BANDING & COLOR
042000 - E5	WEEP HOLES @ 24" OC - FILLED WITH MOLDED PVC GRILLE, INSECT RESISTANT
042000 - F1	ADJUSTABLE MASONRY VENEER WALL TIES AT 15" O.C. VERTICALLY MAX (16" O.C. STD BRICK) AND 16" O.C. HORIZONTALLY MAX - FOR UNEVEN WYTHES OF BRICK & CMU
042000 - F2	ADJUSTABLE HORIZONTAL TRUSS REINFORCEMENT WITH EYE-WIRE FOR ADJUSTABLE TIES. @ 16" OC VERTICALLY MAX @ CMU - FOR WYTHES OF KING SIZED BRICK & STANDARD CMU
072100 - B1	RIGID WALL INSULATION - 1-1/2" THICK IN WALL CAVITY - RE: SPECS
072500 - A2	FLUID APPLIED AIR BARRIER OVER EXTERIOR CMU
072500 - B3	SELF-ADHERING TRANSITION MEMBRANE @ WALL CONNECTIONS
076200 - C1	METAL THRU-WALL FLASHING
076400 - A1	COMBINATION FLEXIBLE SHEET FLASHING (076500), MORTAR DEFLECTION, & WEEP AS COMPLETE ONE-STEP SYSTEM RE: SPECS
085100 - A2	ALUMINUM STOREFRONT ENTRANCE DOORS AND FRAME - 2" X 6" FRAME PROFILE (EXTERIOR)
095100 - A1	ACOUSTICAL PANEL CEILING & GRID. RE: FINISH SCHEDULE
107313 - A0	PREFINISHED ALUMINUM WALKWAY COVER
107313 - A1	PREFINISHED ALUMINUM DOWNSPOUT POST (6"X6") - OPENING IN BOTTOM OF EACH POST TO DRAIN WATER TO SURFACE
107313 - A2	PREFINISHED ALUMINUM BEAM (4"X6" OR 6"X8")
107313 - A4	PREFINISHED ALUMINUM SELF - FLASHING DECK
107313 - B3	PREFINISHED WALL TO ROOF DECK METAL THRU-WALL FLASHING & COUNTER FLASHING TYPICAL @ ALL NEW AWNINGS
NOTE 01 - 01	CONCRETE SLAB - RE: STRUCTURAL
NOTE 01 - 02	FOUNDATION - RE: STRUCTURAL

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

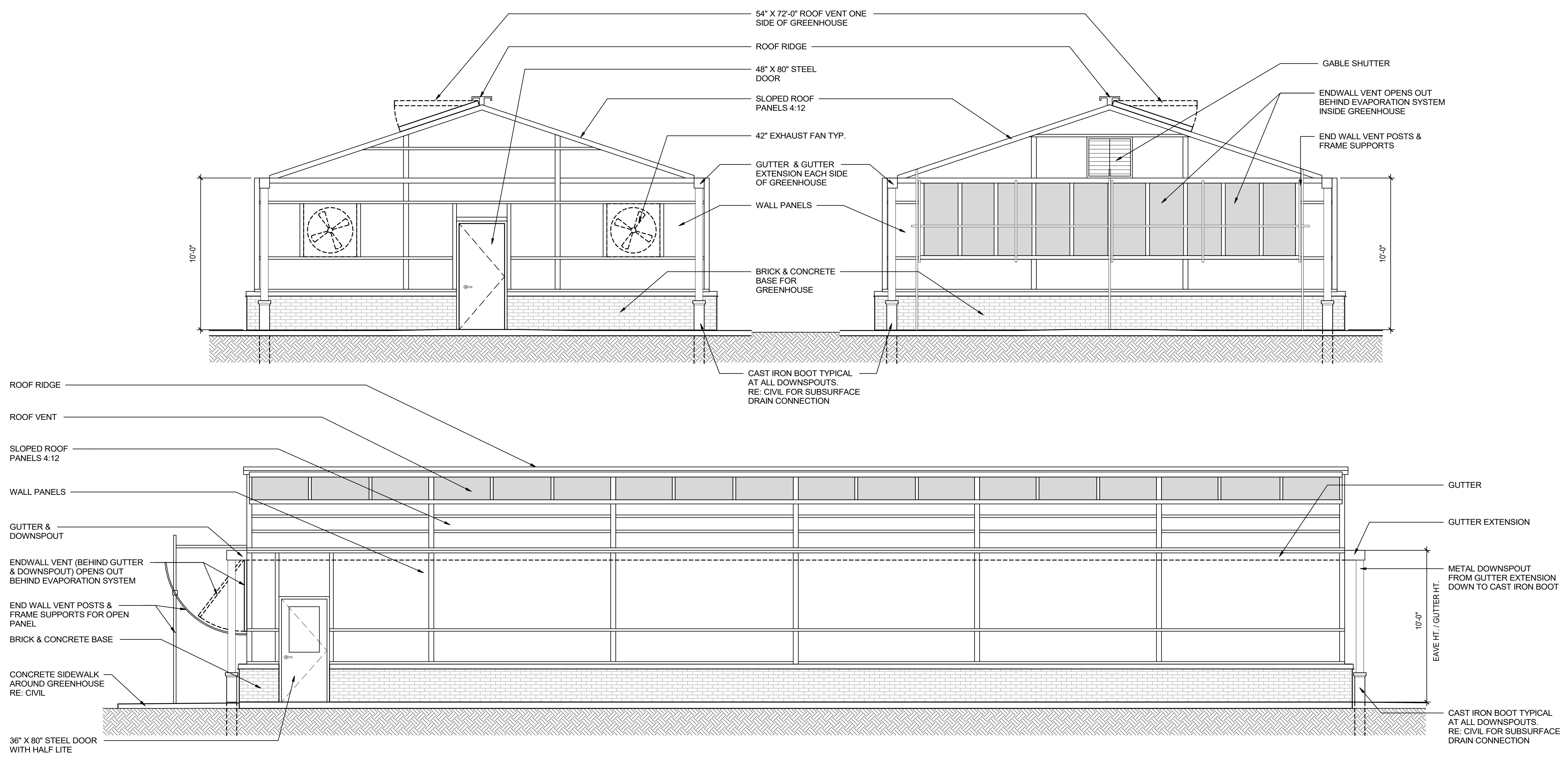
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

ENLARGED CANOPY
PLANS & DETAILS

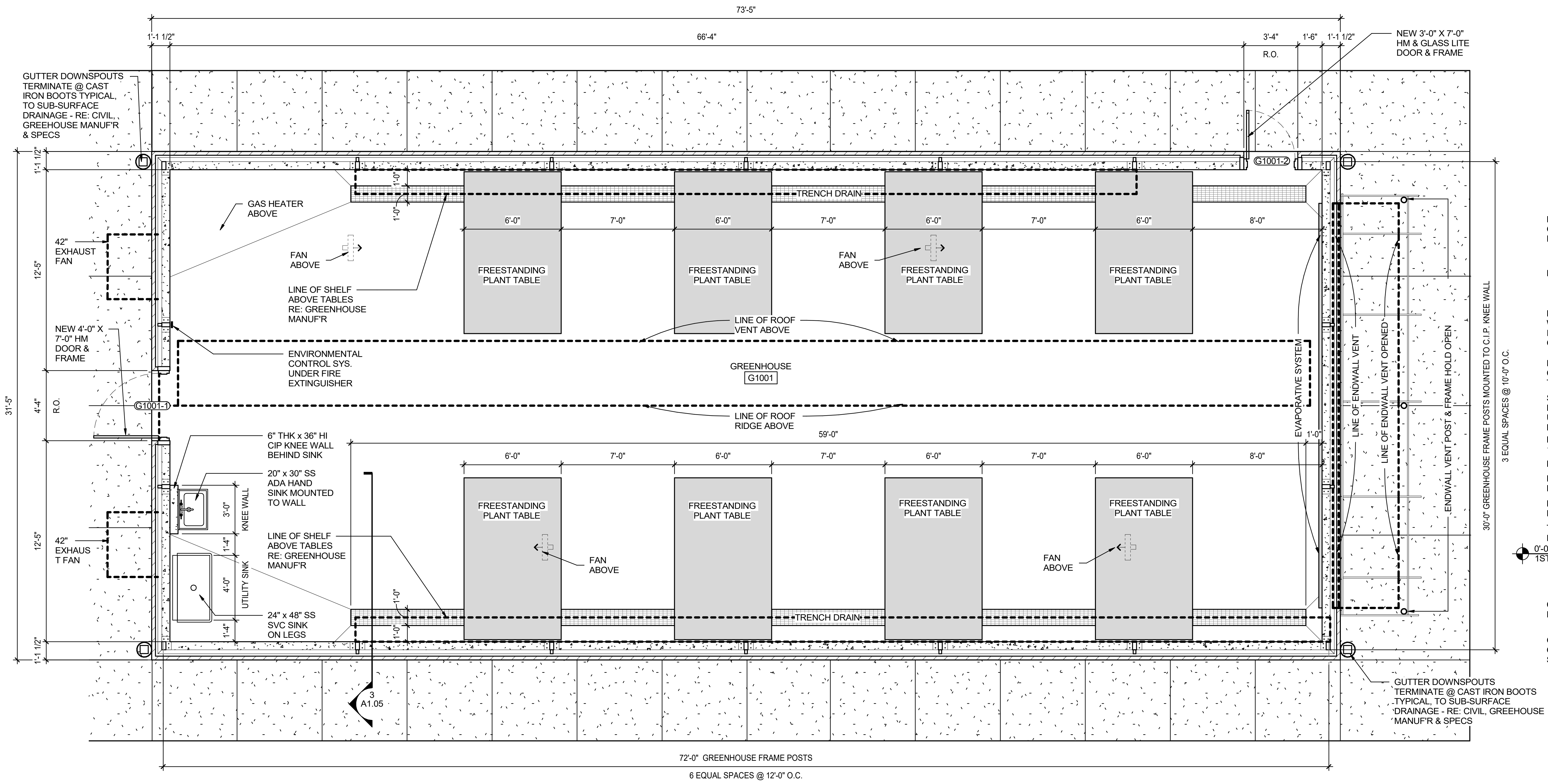
A1.04
of

Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

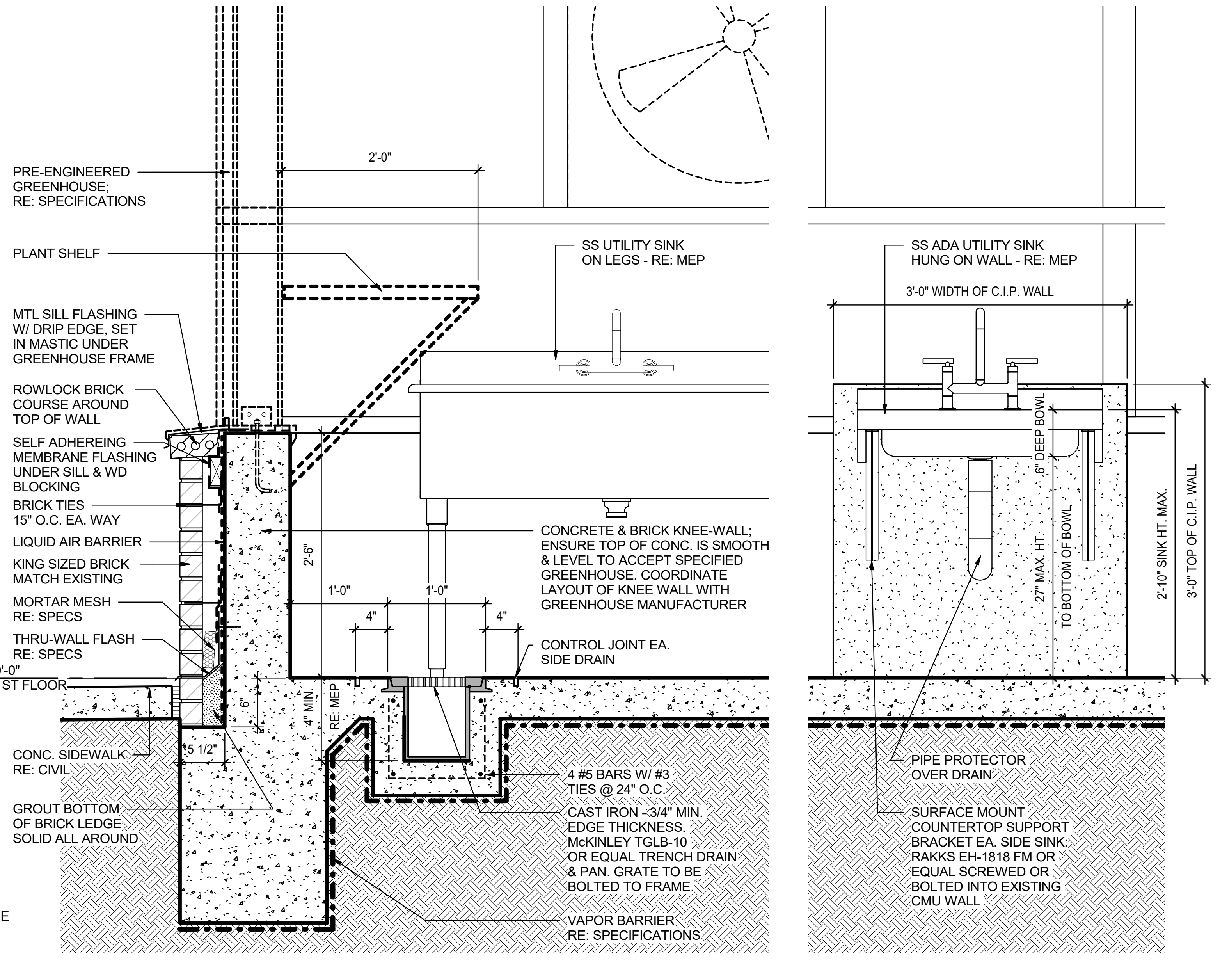
11/14/2024 1:33:19 PM



1 GREENHOUSE ELEVATIONS
1/4" = 1'-0"



2 SITE PLAN - ENLARGED GREENHOUSE PLAN
1/4" = 1'-0"



3 WALL SECTION - GREENHOUSE
1" = 1'-0"

Autodesk Docs://23072_CFISD_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt

GREENHOUSE NOTES

1. REFER TO SPECIFICATION SECTION 13 34 13 GREENHOUSE.
2. GC TO PROVIDE AND COORDINATE INSTALLATION OF ALL COMPONENTS SPECIFIED AND SHOWN ON DRAWINGS.
3. REFER TO MEPT, STRUCTURAL, CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS FOR ALL WORK REQUIRED.
4. CONCRETE FLOOR FINISH: SEALED CONCRETE PER SPECIFICATION.
5. FREESTANDING TABLES SHOWN ON PLAN: STAINLESS STEEL 6' X 10' TYPICAL.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

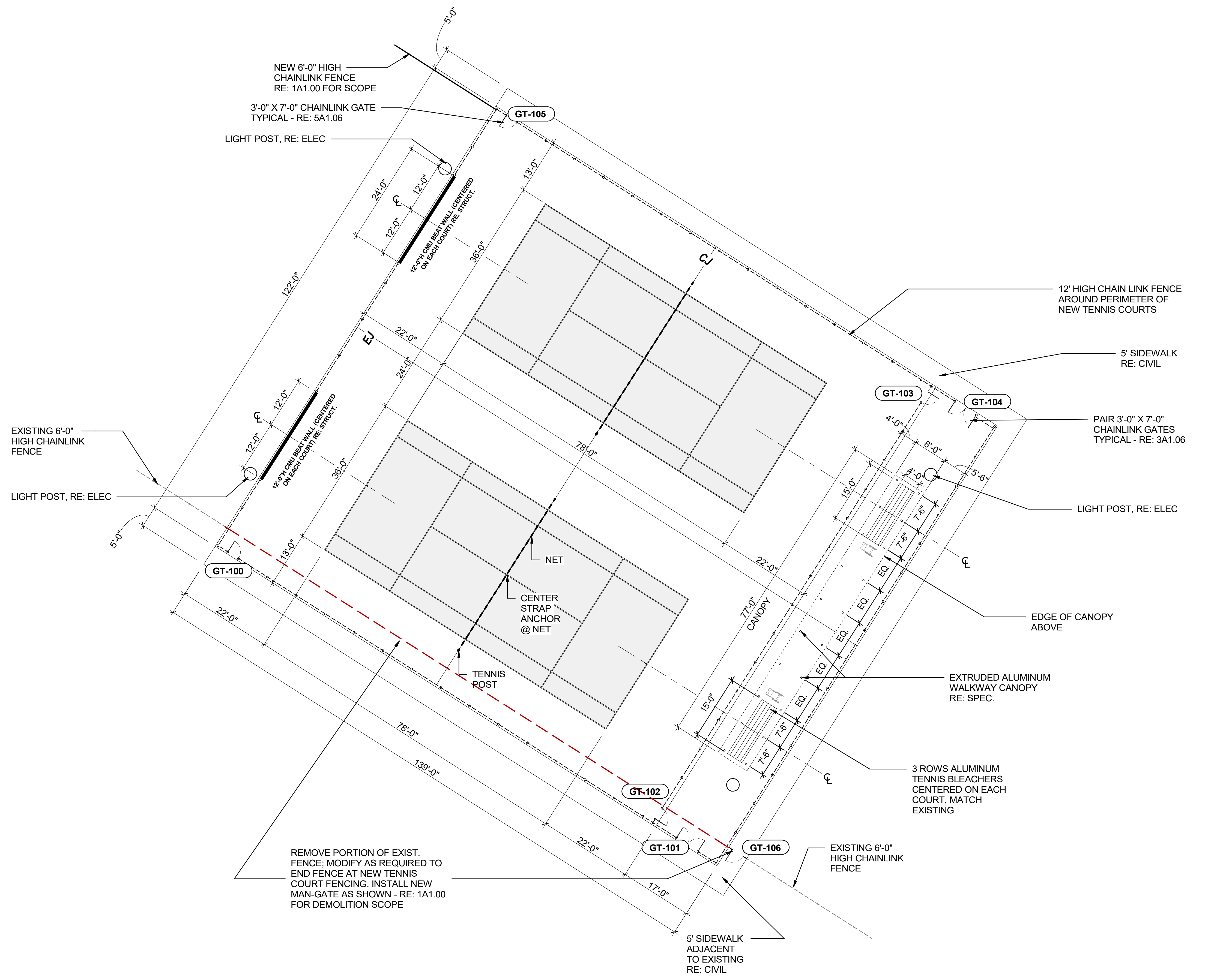
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

GREENHOUSE PLAN & DETAILS

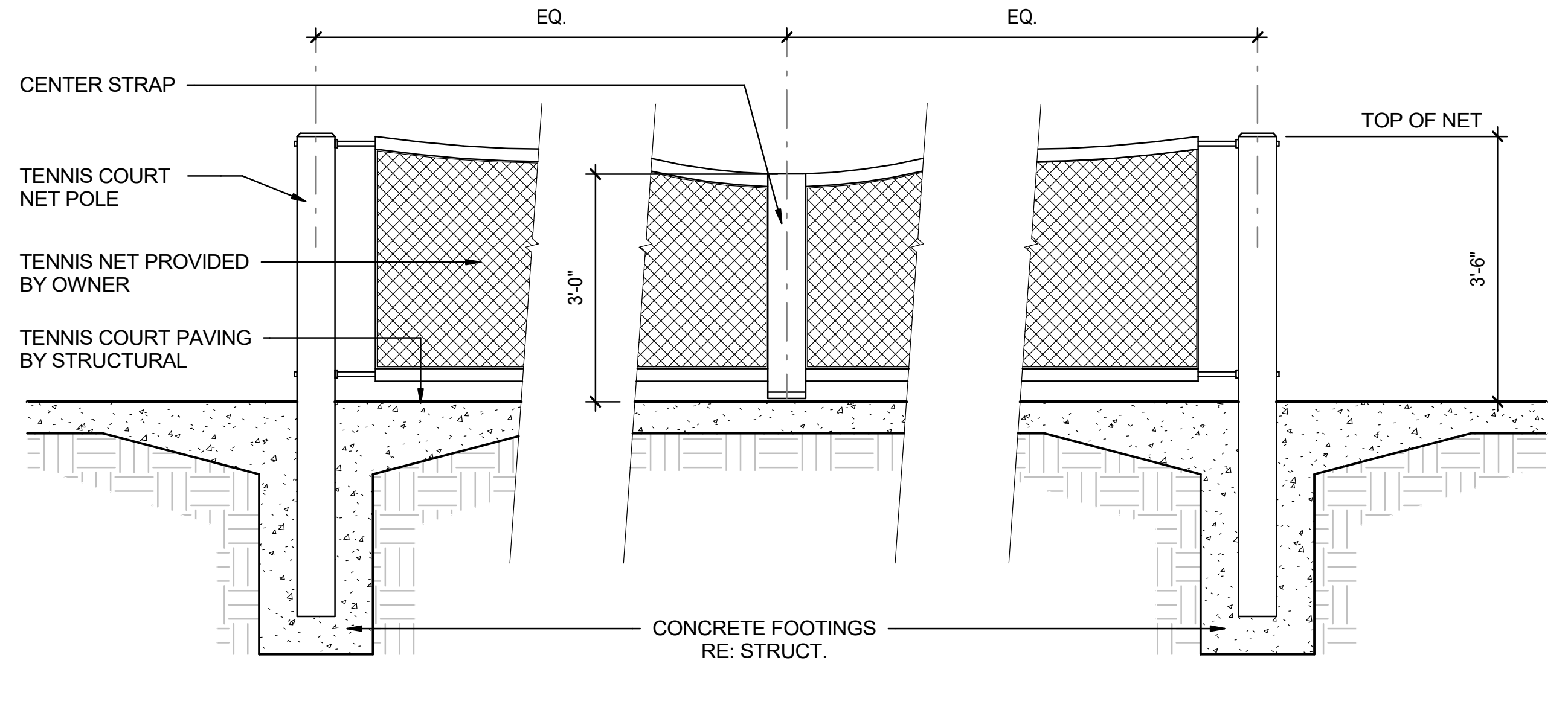
A1.05
of

11/14/2024 1:33:22 PM



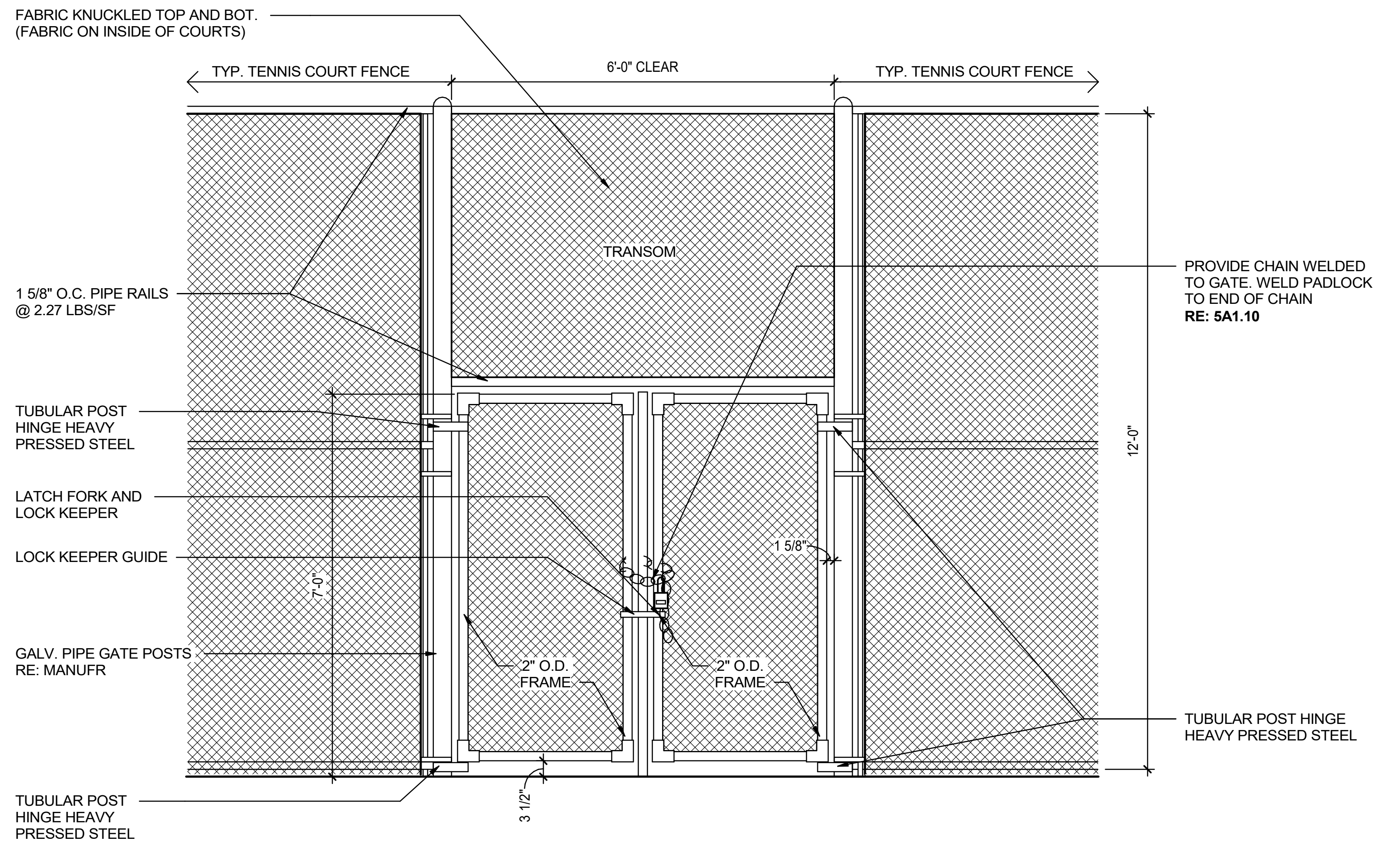
1 SITE PLAN - TENNIS COURTS

1/16" = 1'-0"



2 TENNIS COURT NET AND POST DETAIL

1/2" = 1'-0"

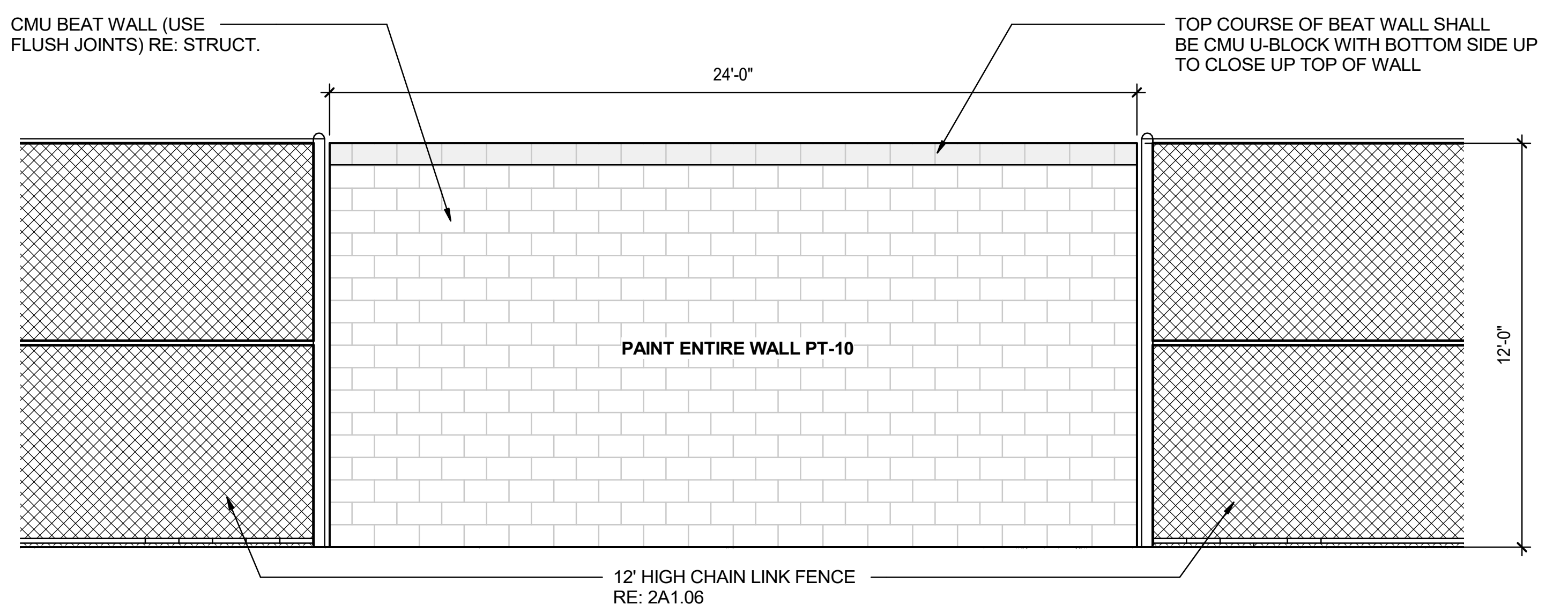


3 TENNIS COURT FENCE DOUBLE GATE DETAIL

1/2" = 1'-0"

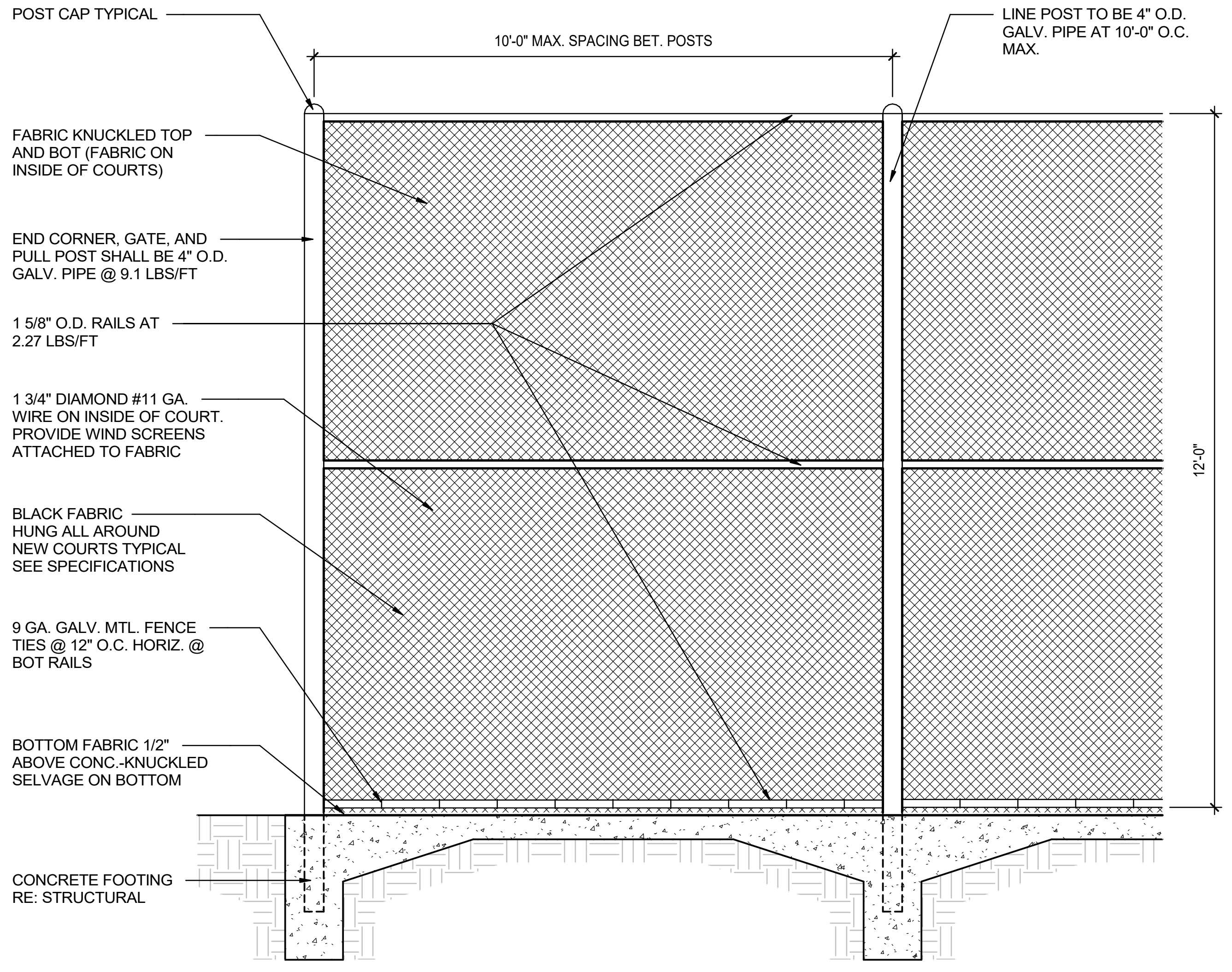
TENNIS COURT NOTES

1. REFER TO SPECIFICATION SECTION 32 18 28 TENNIS COURTS.
2. REFER TO STRUCTURAL FOR CMU BEAT WALL CONSTRUCTION. PAINT WALL AS SCHEDULED.
3. REFER TO CIVIL, STRUCTURAL AND MEPT FOR ADDITIONAL TENNIS COURT WORK.
4. PROVIDE AND INSTALL TENNIS COURT ACCESSORIES, BLEACHERS AND CANOPIES AS SHOWN IN PLAN AND SPECIFICATIONS.



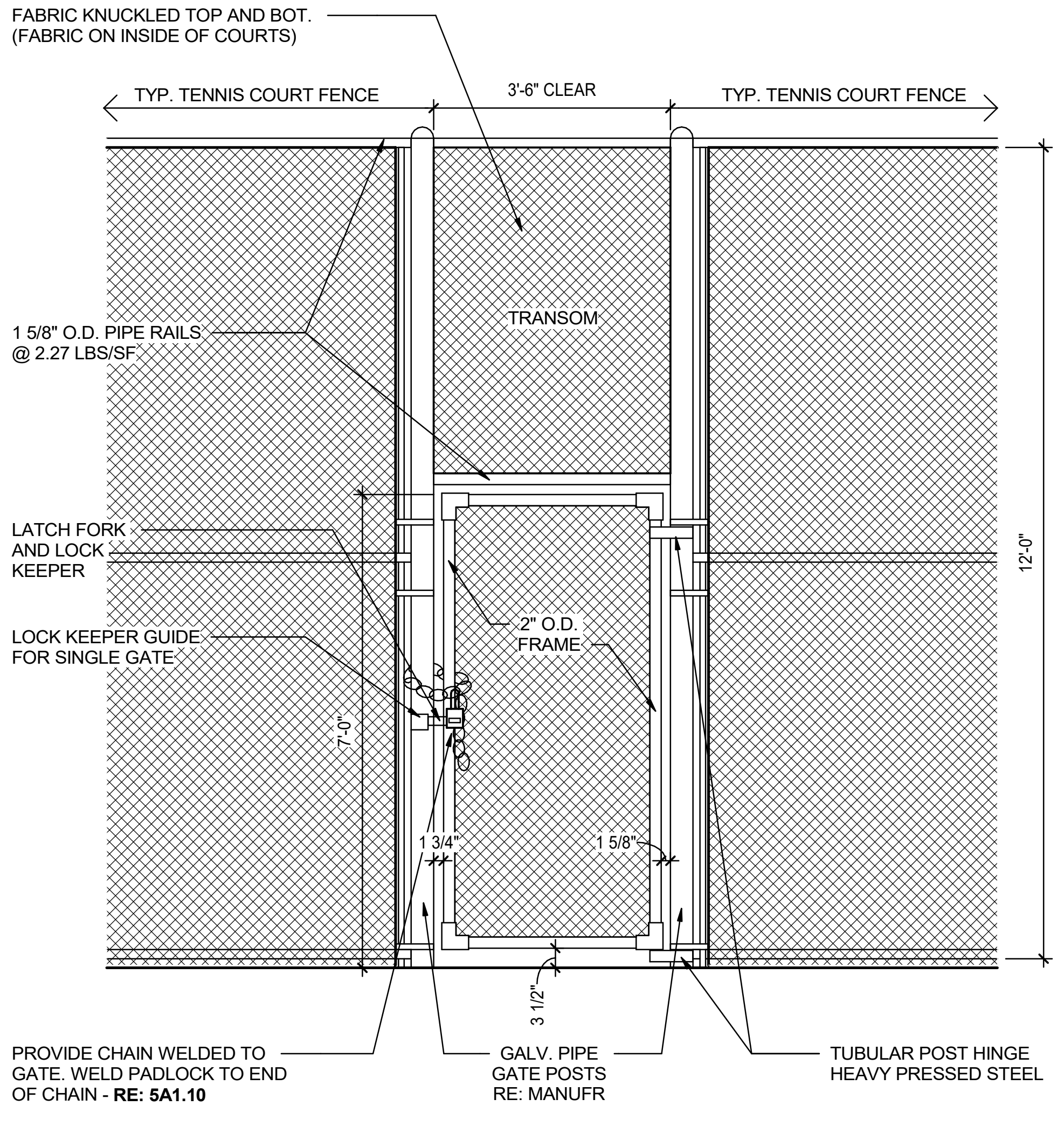
6 BEAT WALL DETAIL

1/4" = 1'-0"



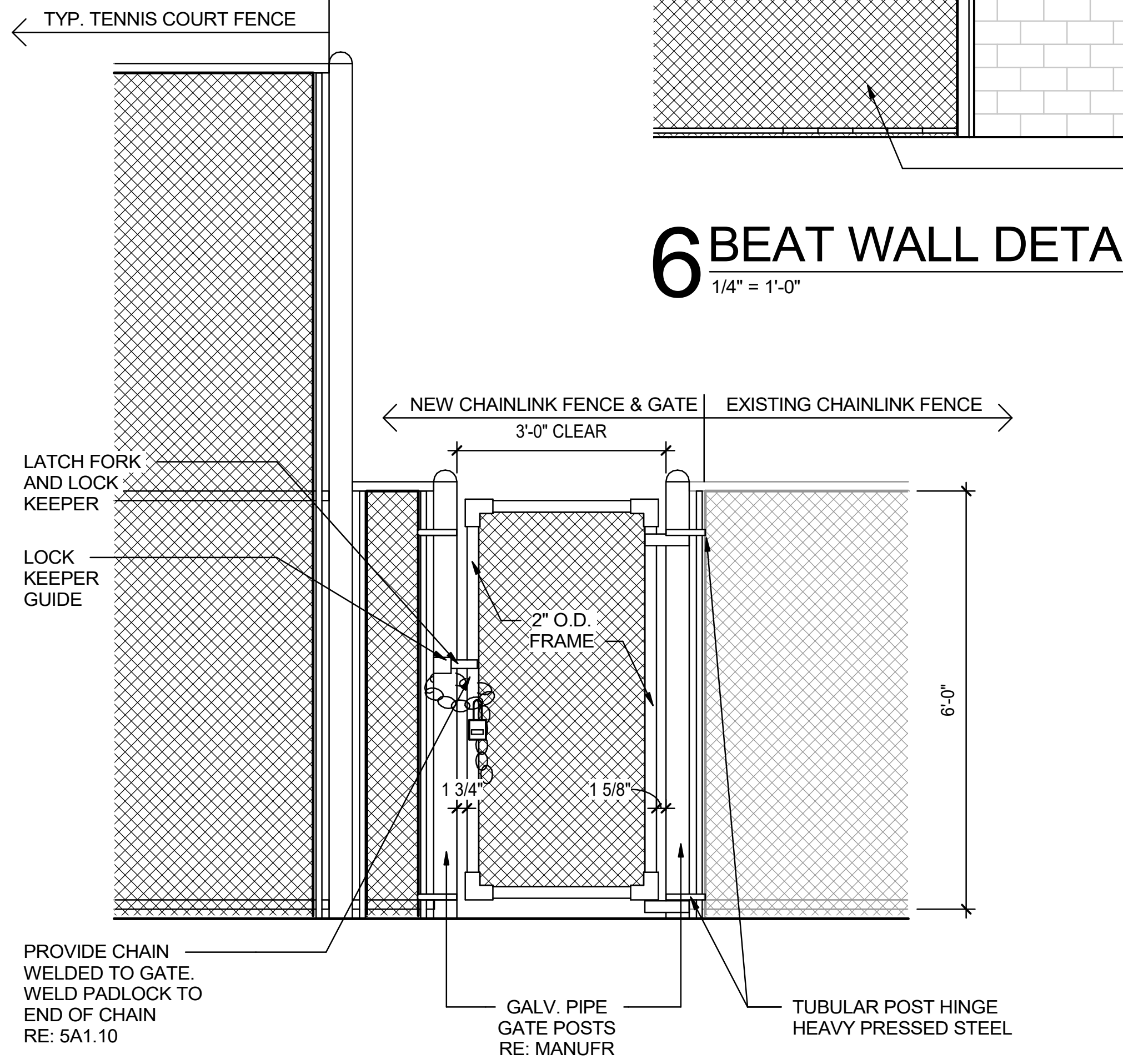
4 TENNIS COURT FENCE ELEVATION

1/2" = 1'-0"



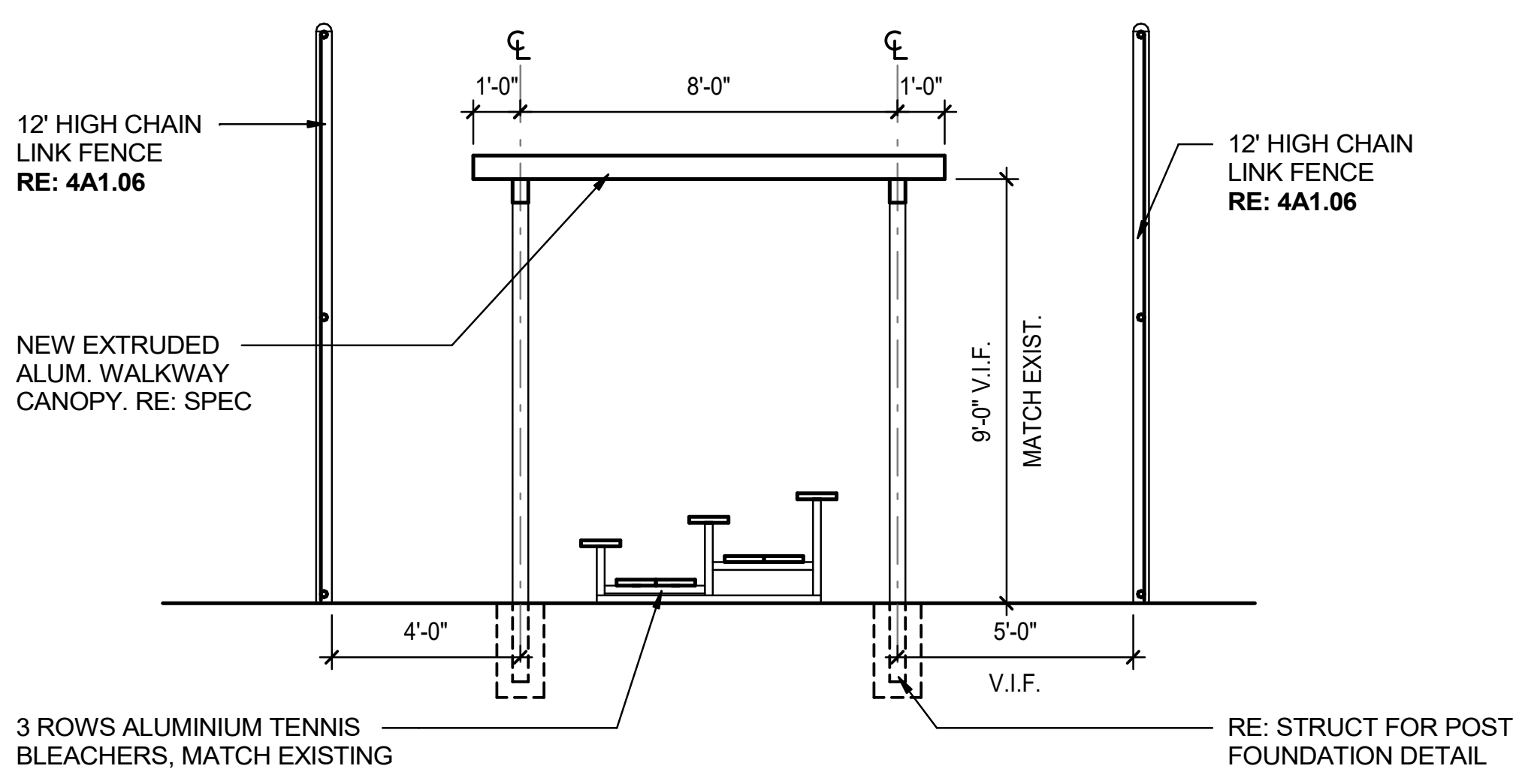
5 TENNIS COURT SINGLE GATE DETAIL

1/2" = 1'-0"



8 TENNIS COURT FENCE 6' SINGLE GATE DETAIL

1/2" = 1'-0"



7 TENNIS COURT CANOPY DETAIL

1/4" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

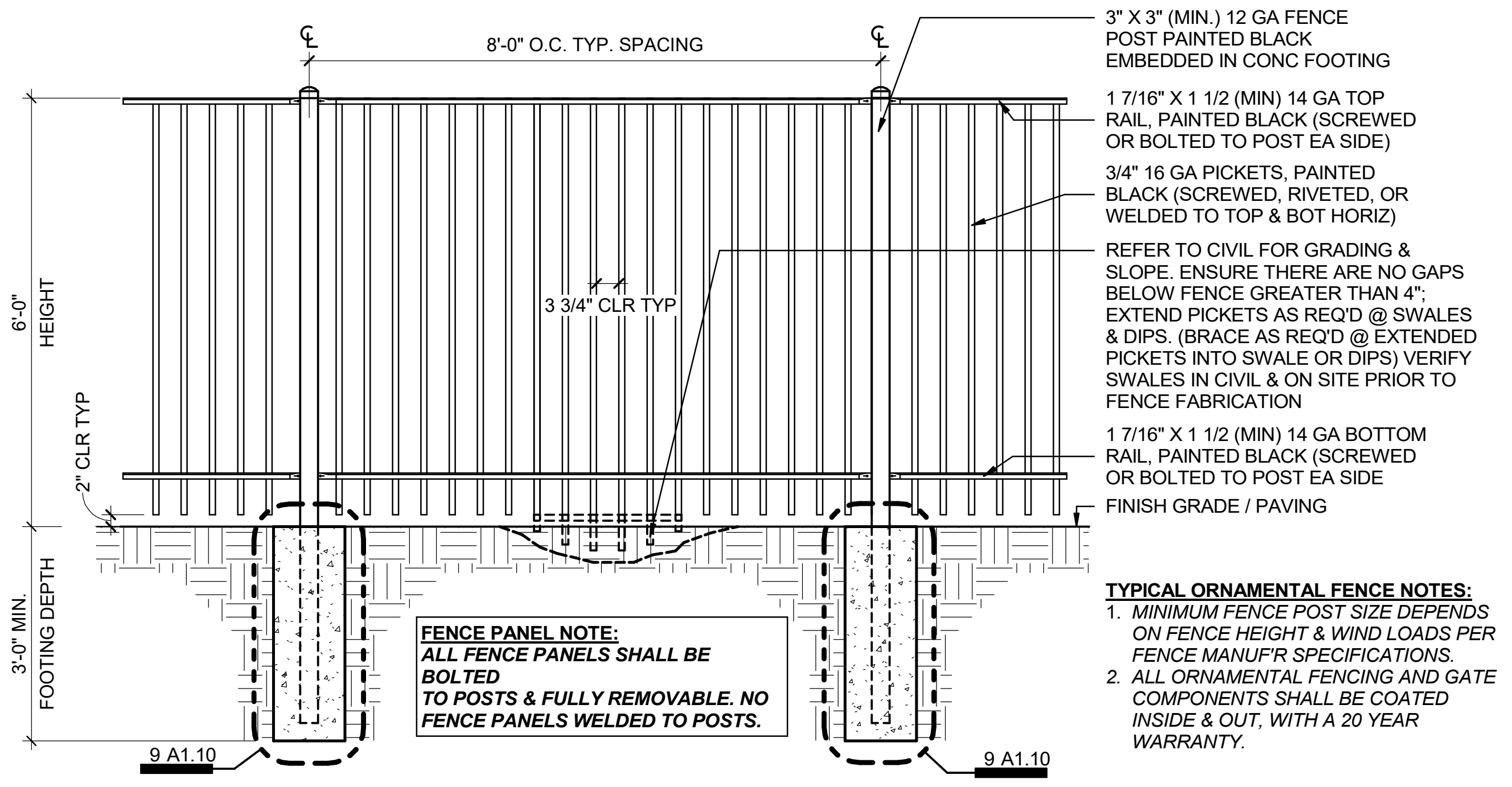
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

TENNIS COURT PLANS & DETAILS

A1.06

of

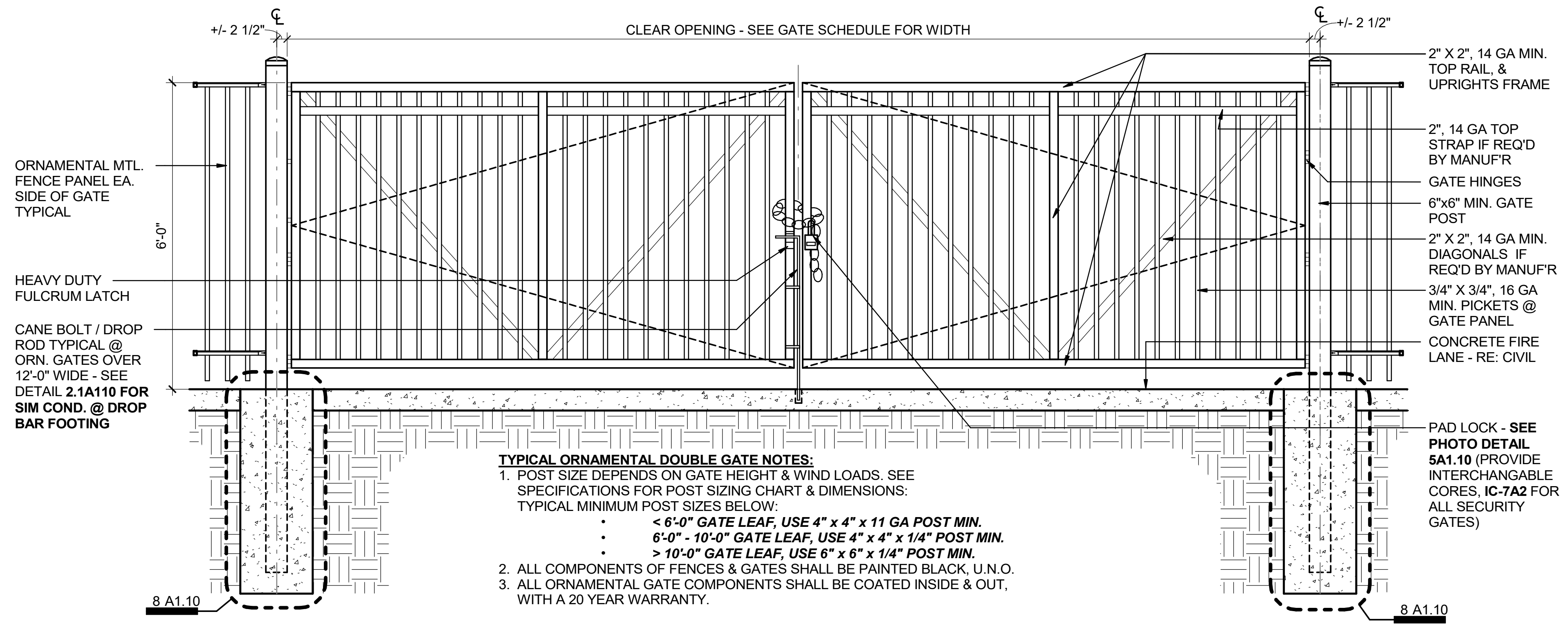
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



FENCE PANEL NOTE:
ALL FENCE PANELS SHALL BE BOLTED TO POSTS & FULLY REMOVABLE. NO FENCE PANELS WELDED TO POSTS.

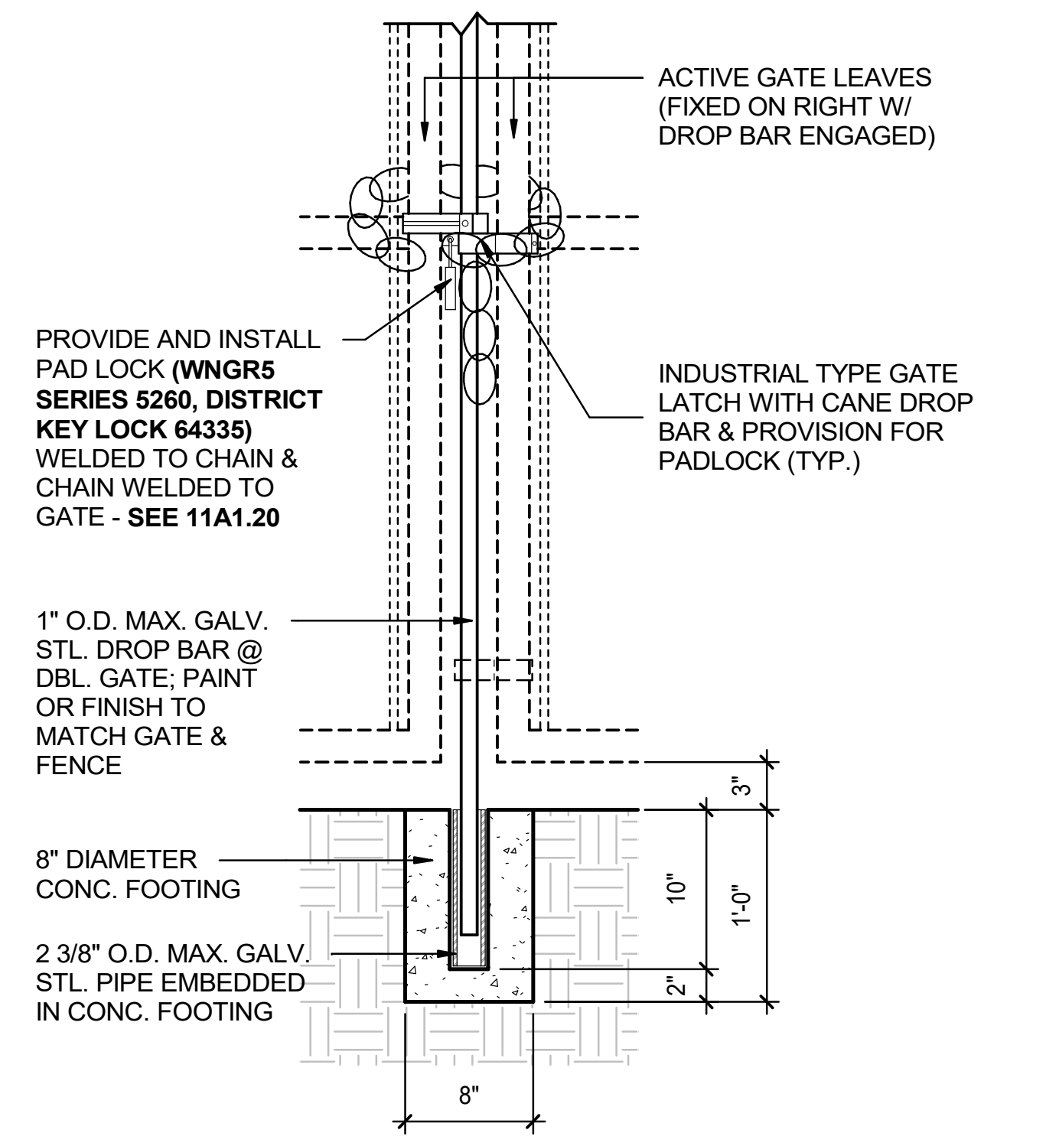
TYPICAL ORNAMENTAL FENCE NOTES:
1. *MINIMUM FENCE POST SIZE DEPENDS ON FENCE HEIGHT & WIND LOADS PER FENCE MANUF'R SPECIFICATIONS.*
2. *ALL ORNAMENTAL FENCING AND GATE COMPONENTS SHALL BE COATED INSIDE & OUT, WITH A 20 YEAR WARRANTY.*

1 ORNAMENTAL FENCE - TYPICAL PANEL ELEVATION
1/2" = 1'-0"

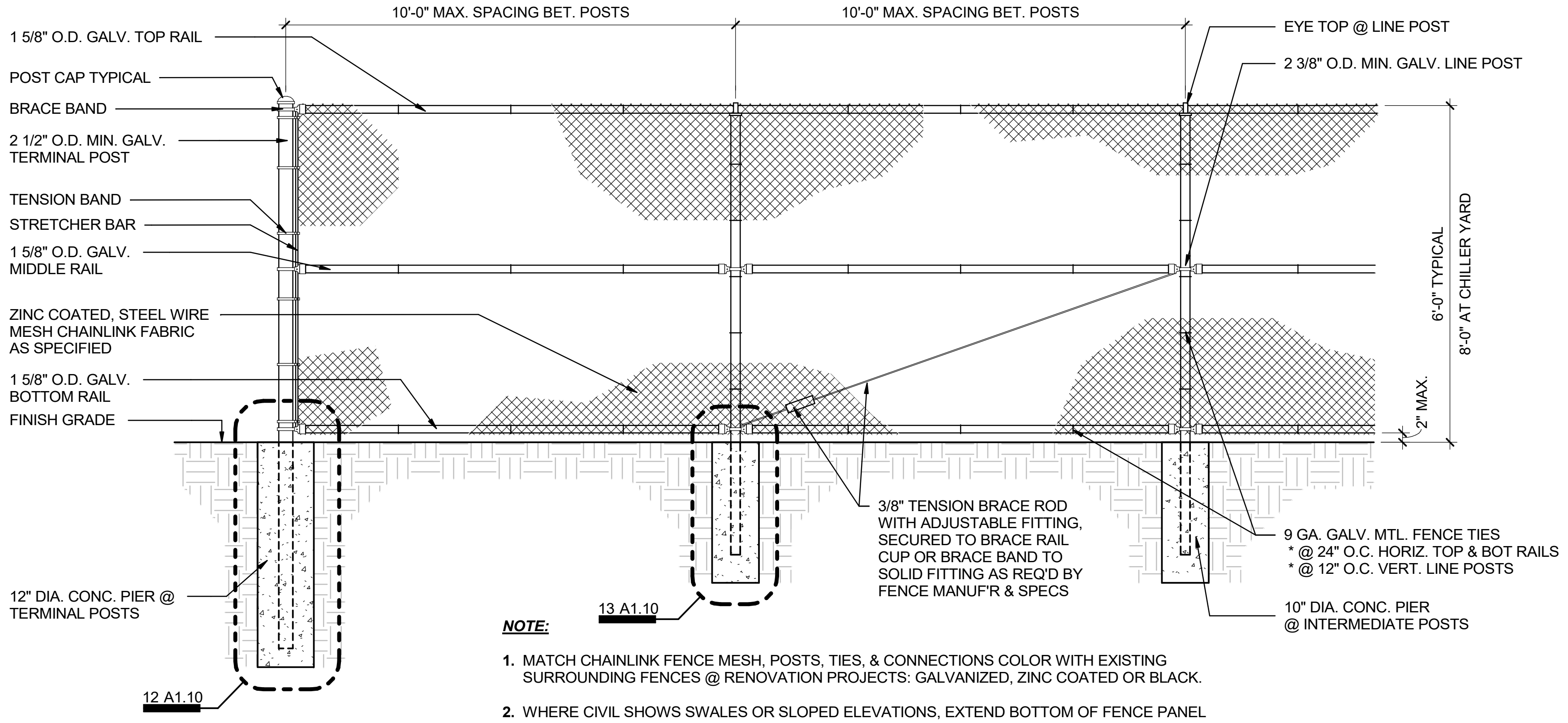


TYPICAL ORNAMENTAL DOUBLE GATE NOTES:
1. POST SIZE DEPENDS ON GATE HEIGHT & WIND LOADS. SEE SPECIFICATIONS FOR POST SIZING CHART & DIMENSIONS: TYPICAL MINIMUM POST SIZES BELOW:
    - ***< 6'-0" GATE LEAF, USE 4" x 4" x 11 GA POST MIN.***
    - ***6'-0" - 10'-0" GATE LEAF, USE 4" x 4" x 1/4" POST MIN.***
    - ***> 10'-0" GATE LEAF, USE 6" x 6" x 1/4" POST MIN.***
2. ALL COMPONENTS OF FENCES & GATES SHALL BE PAINTED BLACK, U.N.O.
3. ALL ORNAMENTAL GATE COMPONENTS SHALL BE COATED INSIDE & OUT, WITH A 20 YEAR WARRANTY.

2 ORNAMENTAL DOUBLE GATE
1/2" = 1'-0"



2.1 DBL GATE DROP BAR FOOTING
1" = 1'-0"

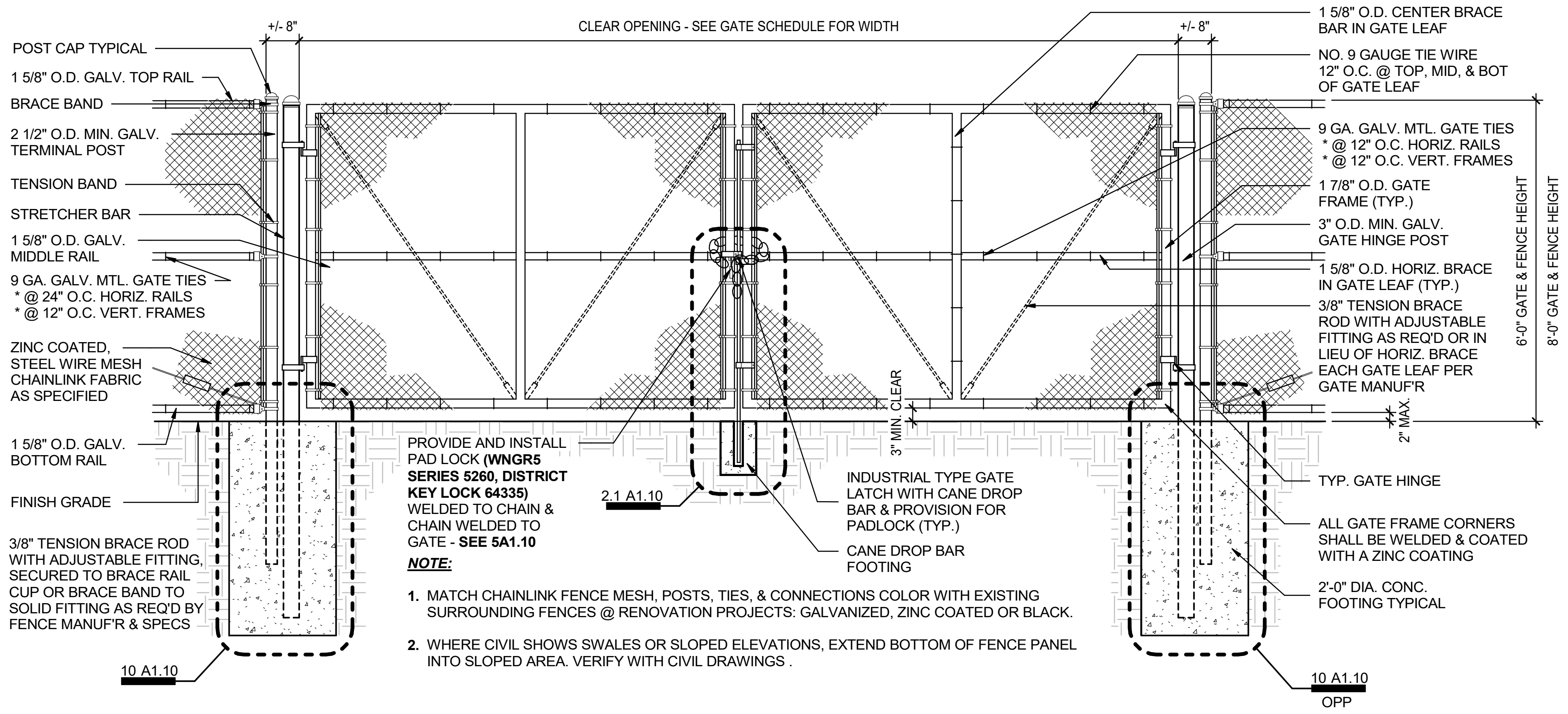


NOTE:

1. MATCH CHAINLINK FENCE MESH, POSTS, TIES, & CONNECTIONS COLOR WITH EXISTING SURROUNDING FENCES @ RENOVATION PROJECTS: GALVANIZED, ZINC COATED OR BLACK.

2. WHERE CIVIL SHOWS SWALES OR SLOPED ELEVATIONS, EXTEND BOTTOM OF FENCE PANEL INTO SLOPED AREA. VERIFY WITH CIVIL DRAWINGS .

3 CHAINLINK FENCE - ELEVATION 6' TO 8'
1/2" = 1'-0"



NOTE:

1. MATCH CHAINLINK FENCE MESH, POSTS, TIES, & CONNECTIONS COLOR WITH EXISTING SURROUNDING FENCES @ RENOVATION PROJECTS: GALVANIZED, ZINC COATED OR BLACK.

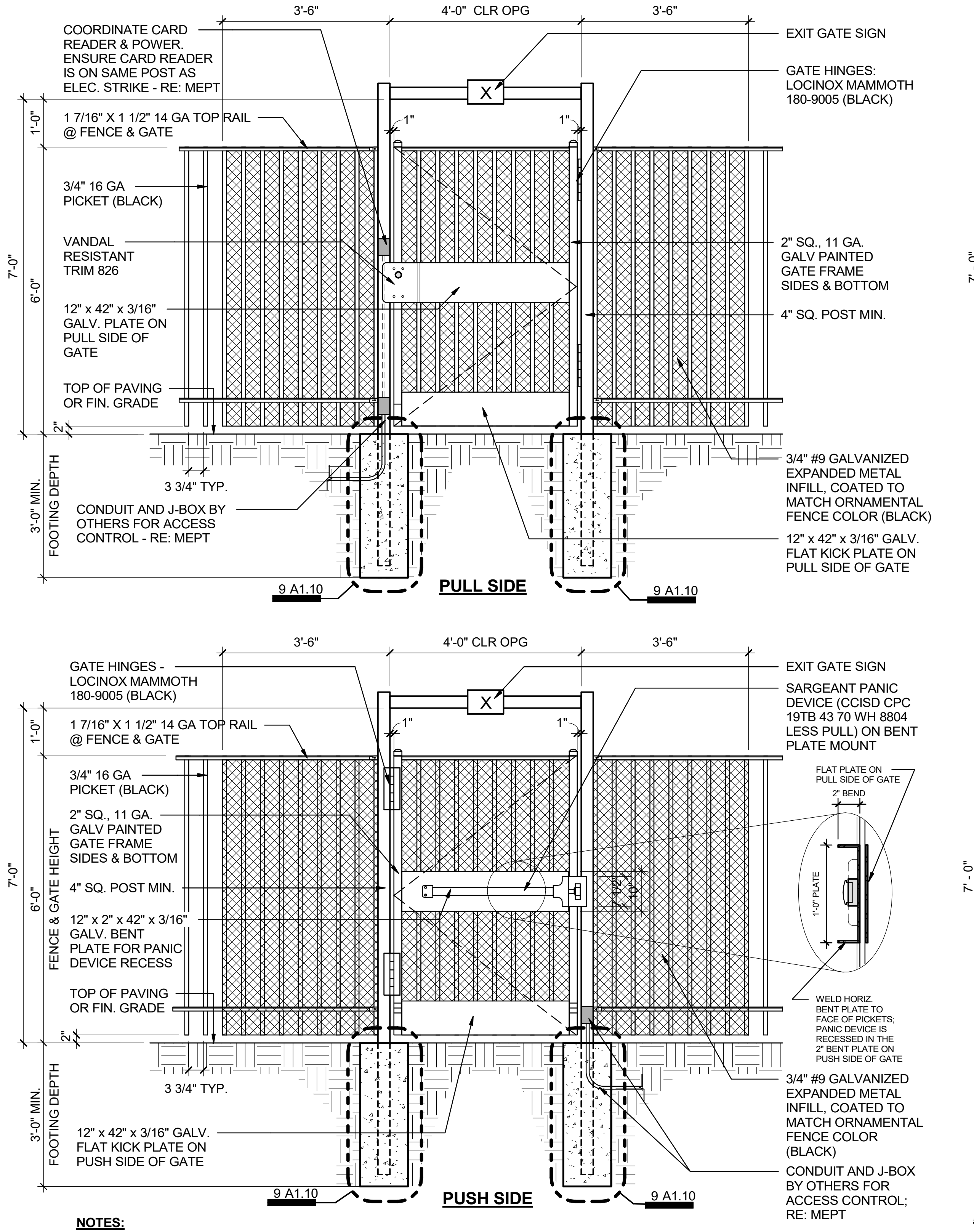
2. WHERE CIVIL SHOWS SWALES OR SLOPED ELEVATIONS, EXTEND BOTTOM OF FENCE PANEL INTO SLOPED AREA. VERIFY WITH CIVIL DRAWINGS .

4 CHAINLINK DOUBLE GATE
1/2" = 1'-0"

PROVIDE AND INSTALL LOCK **(WNGR5 SERIES 5260, DISTRICT KEY LOCK 64335)** & SS CHAIN AT DOUBLE GATE @ CHAINLINK FENCE NEAR NEW STORAGE BUILDING @ FOOTBALL FIELD: ***WELD LOCK TO CHAIN. CHAIN TO BE WELDED TO GATE***

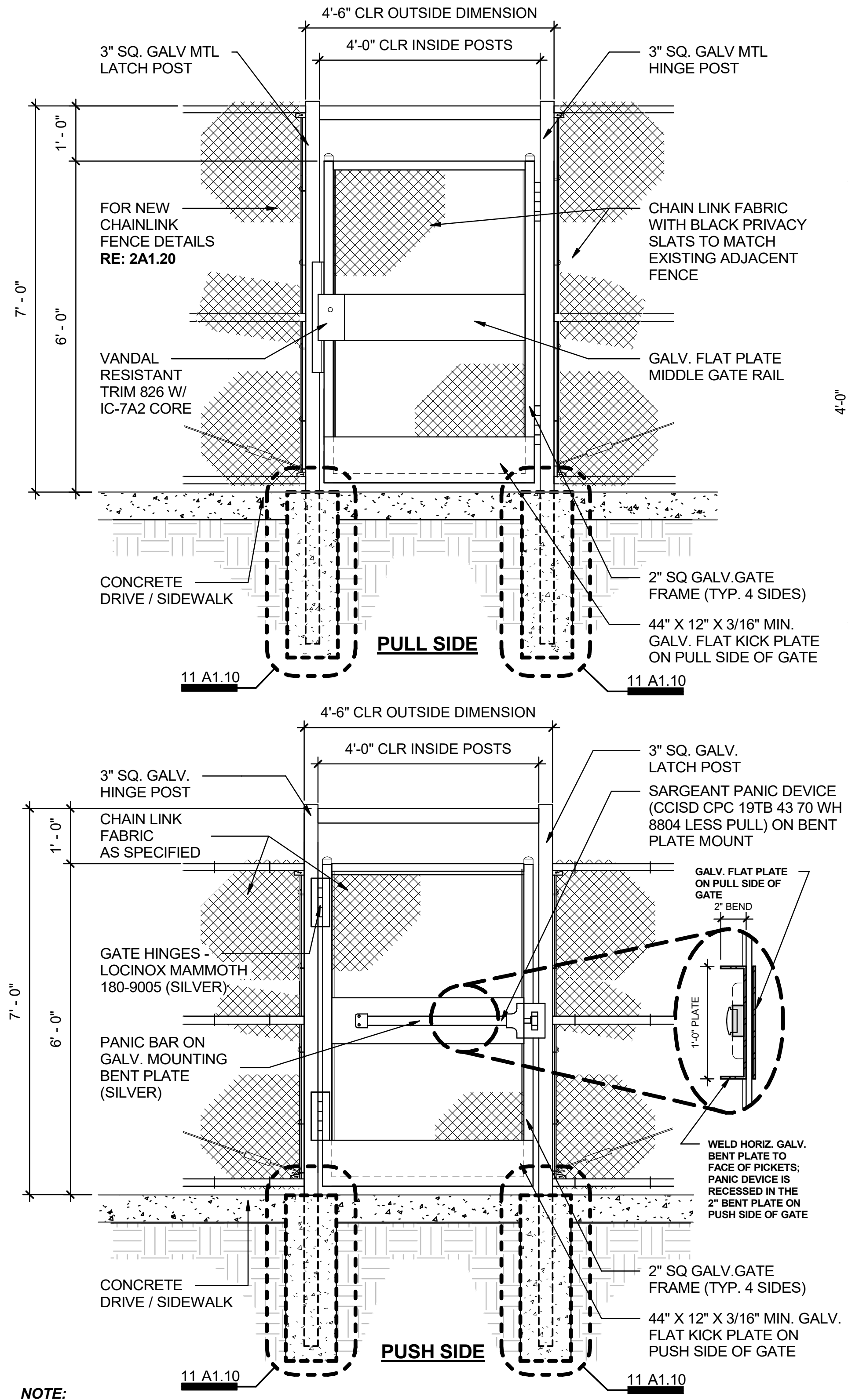
NOTE: TRIM CHAIN SO IT DOES NOT DRAG THE GROUND WHEN GATE IS IN OPERATION OR OPEN

5 GATE LOCK
1/2" = 1'-0"



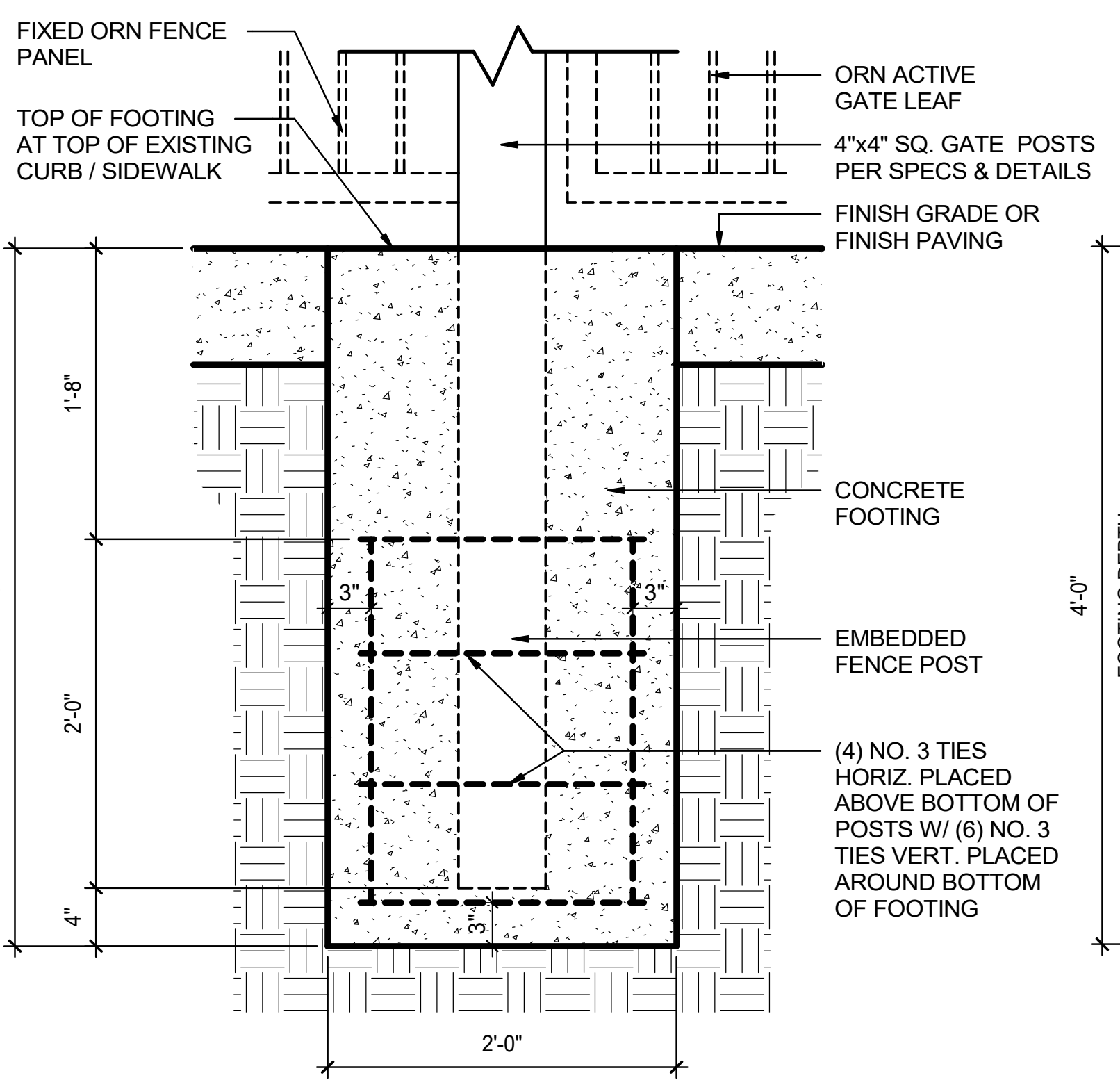
NOTES:
1. ALL ORNAMENTAL METAL FENCING & GATE MATERIAL SHALL BE PRE-FINISHED, COATED INSIDE & OUT WITH A 20 YEAR WARRANTY.
2. POST SIZE DEPENDS ON FENCE HEIGHT & WIND LOADS. SEE SPECIFICATIONS FOR POST SIZING CHART & DIMENSIONS.
   **** TYPICAL GATE POSTS FOR < 6'-0" LEAF IS 4" x 4" , 11 GA MIN.***
3. ALL COMPONENTS OF FENCES & GATES SHALL BE PAINTED BLACK, U.N.O.
4. INCLUDE INTERCHANGEABLE CORES, IC-7A2 FOR ALL SECURITY EXIT GATES.

6 ORNAMENTAL FENCE - EXIT GATE ELEVATIONS
1/2" = 1'-0"

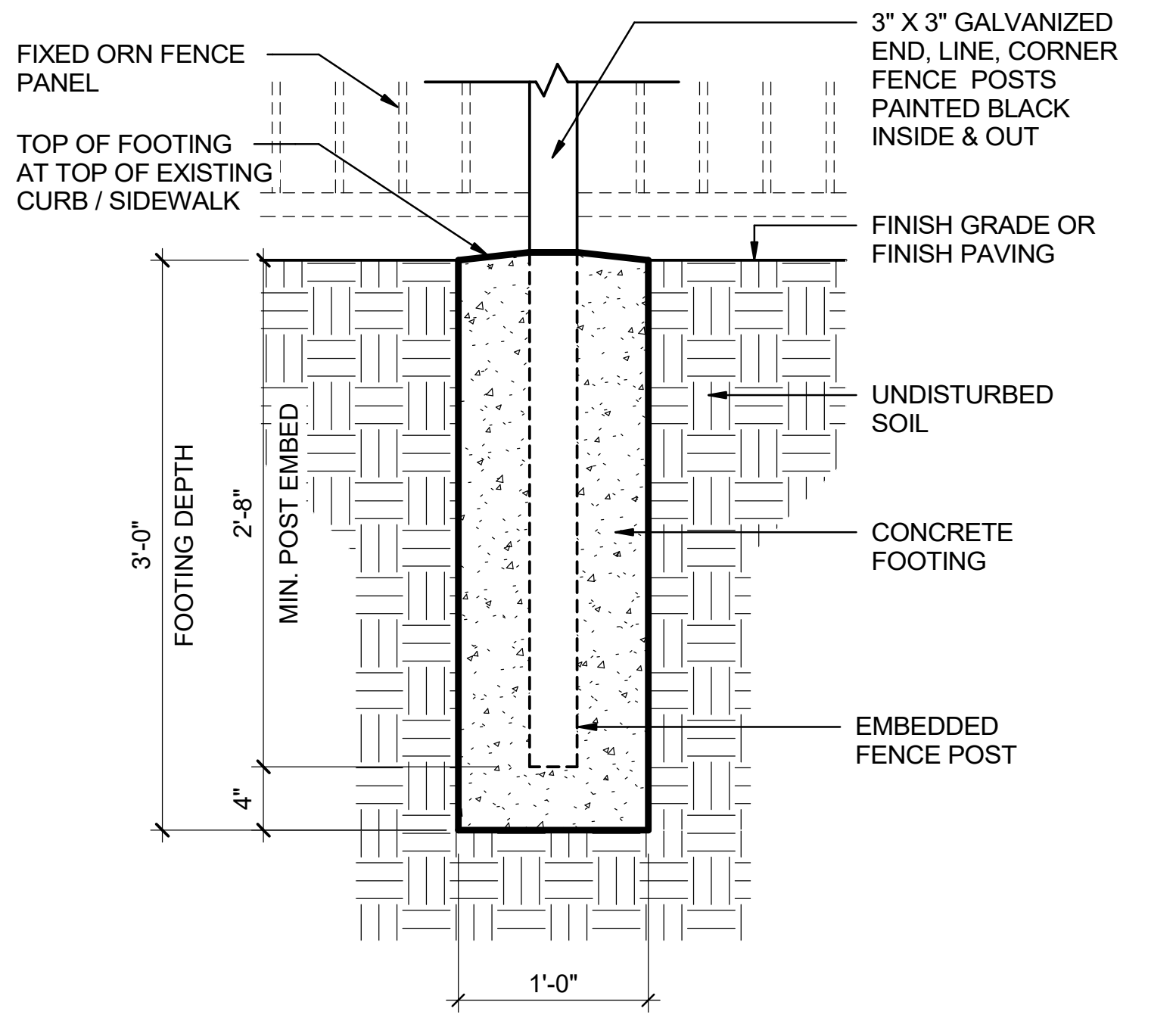


NOTE:
1. MATCH CHAINLINK FENCE MESH, TIES, & CONNECTIONS WITH EXISTING SURROUNDING CHAINLINK FENCE @ RENOVATION PROJECTS: GALVANIZED, ZINC COATED OR BLACK IN COLOR.
2. ALL GATE POSTS AND GATE FRAME SHALL HAVE A SQUARE TUBE PROFILE, TO ATTACH HARDWARE, HINGES, AND PLATES.
3. INCLUDE INTERCHANGEABLE CORES, IC-7A2 FOR ALL SECURITY EXIT GATES.

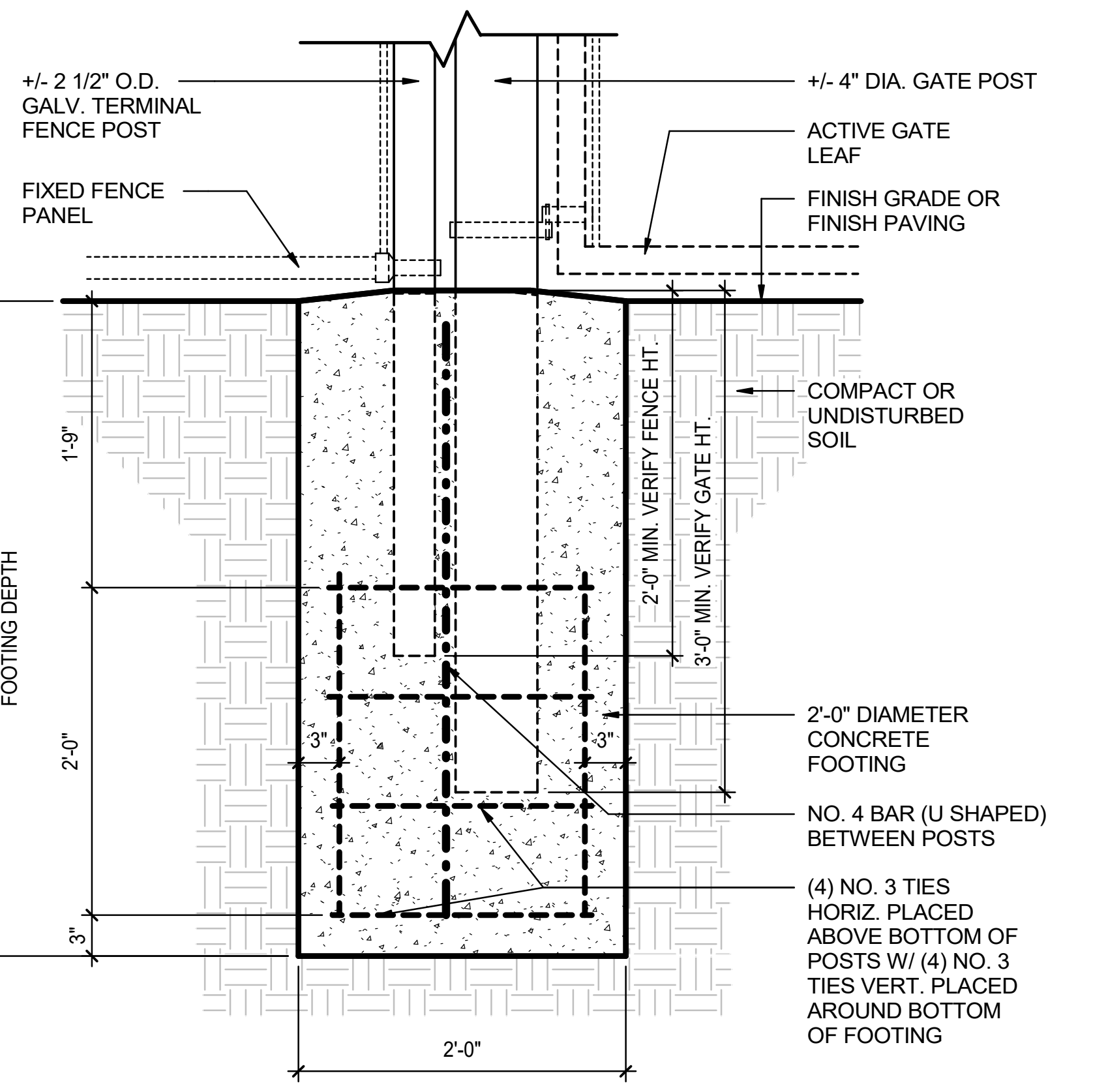
7 CHAINLINK FENCE - EXIT GATE ELEVATIONS
1/2" = 1'-0"



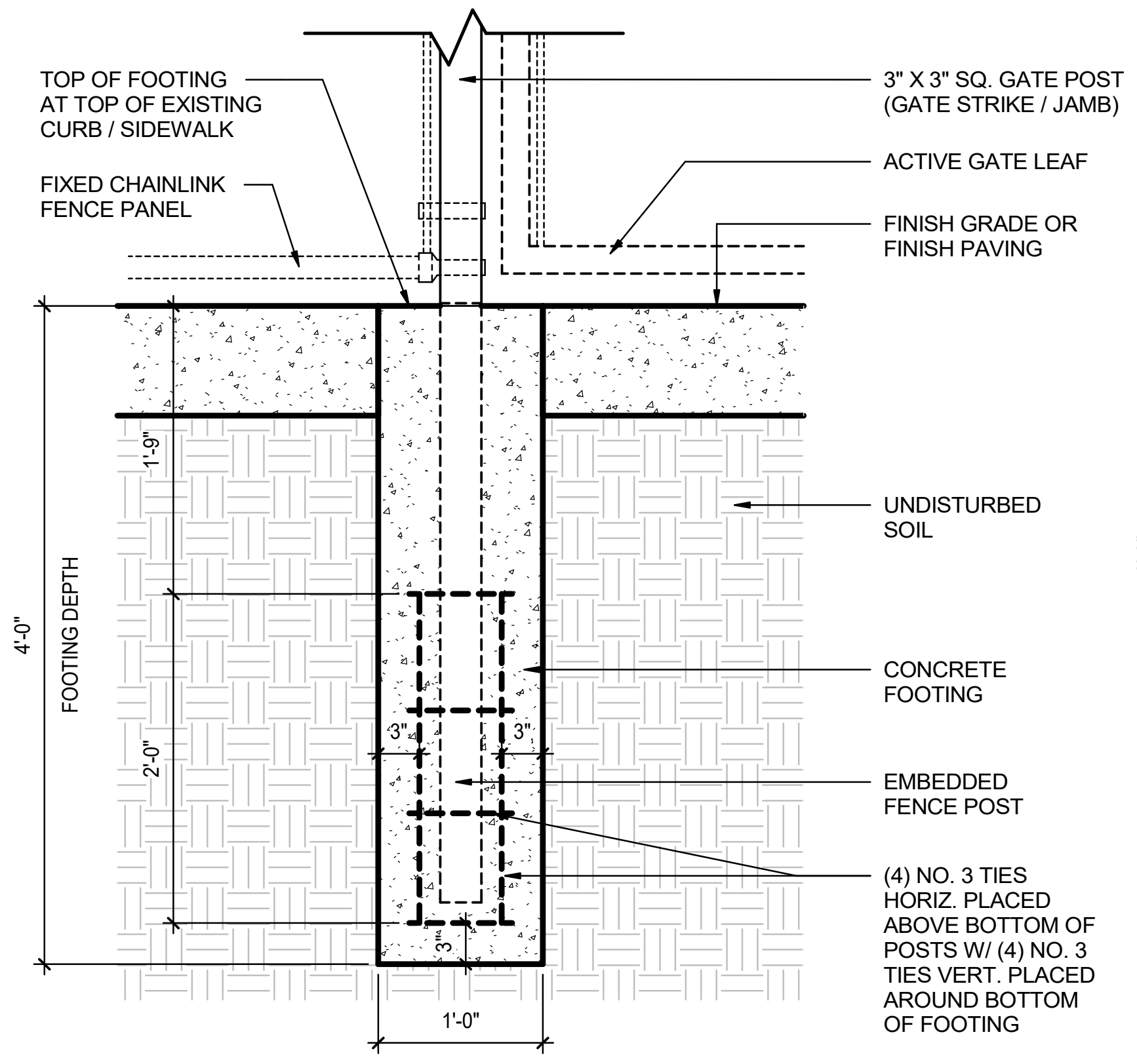
8 ORN GATE POST FOOTING
1" = 1'-0"



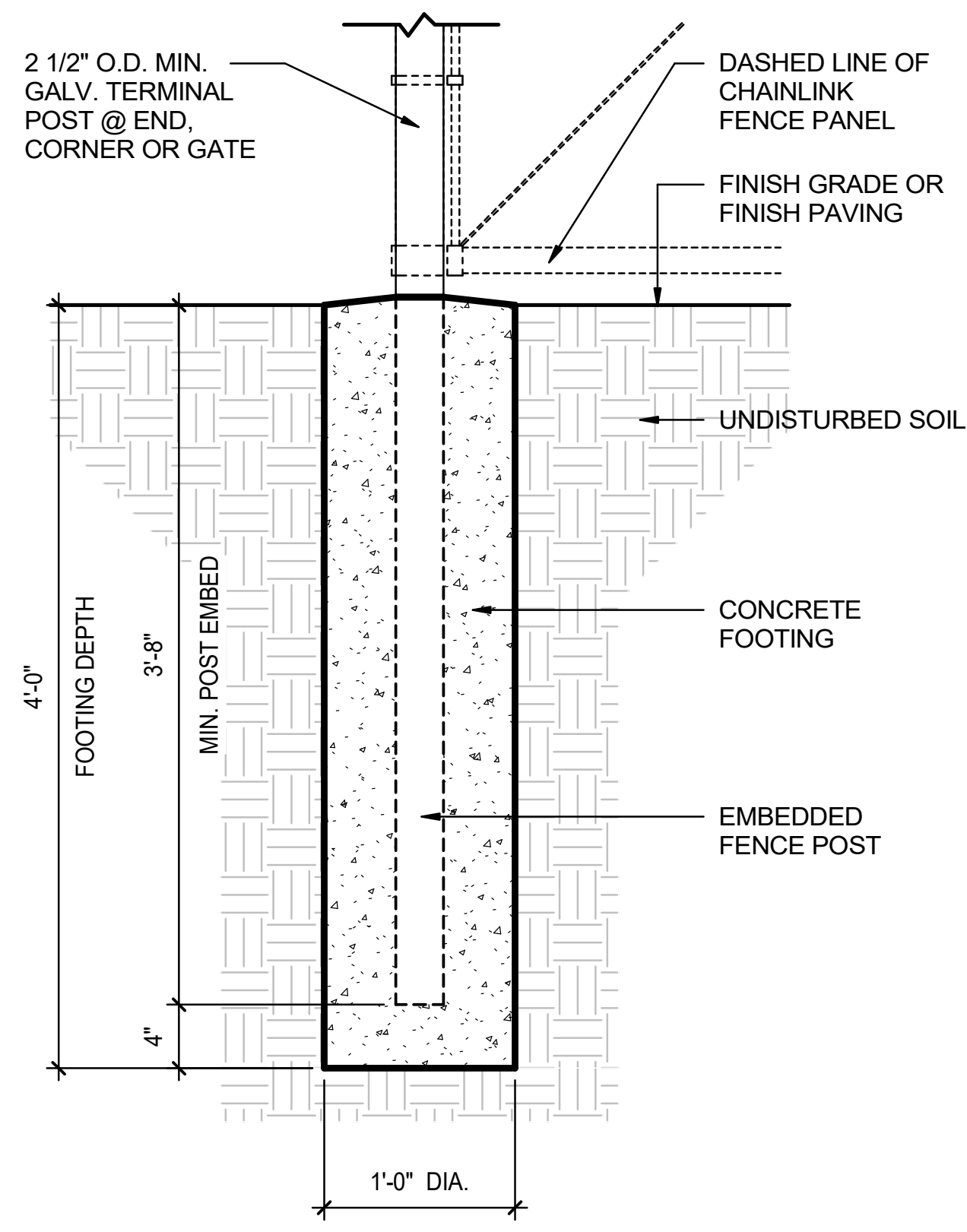
9 ORN FENCE POST FOOTING
1" = 1'-0"



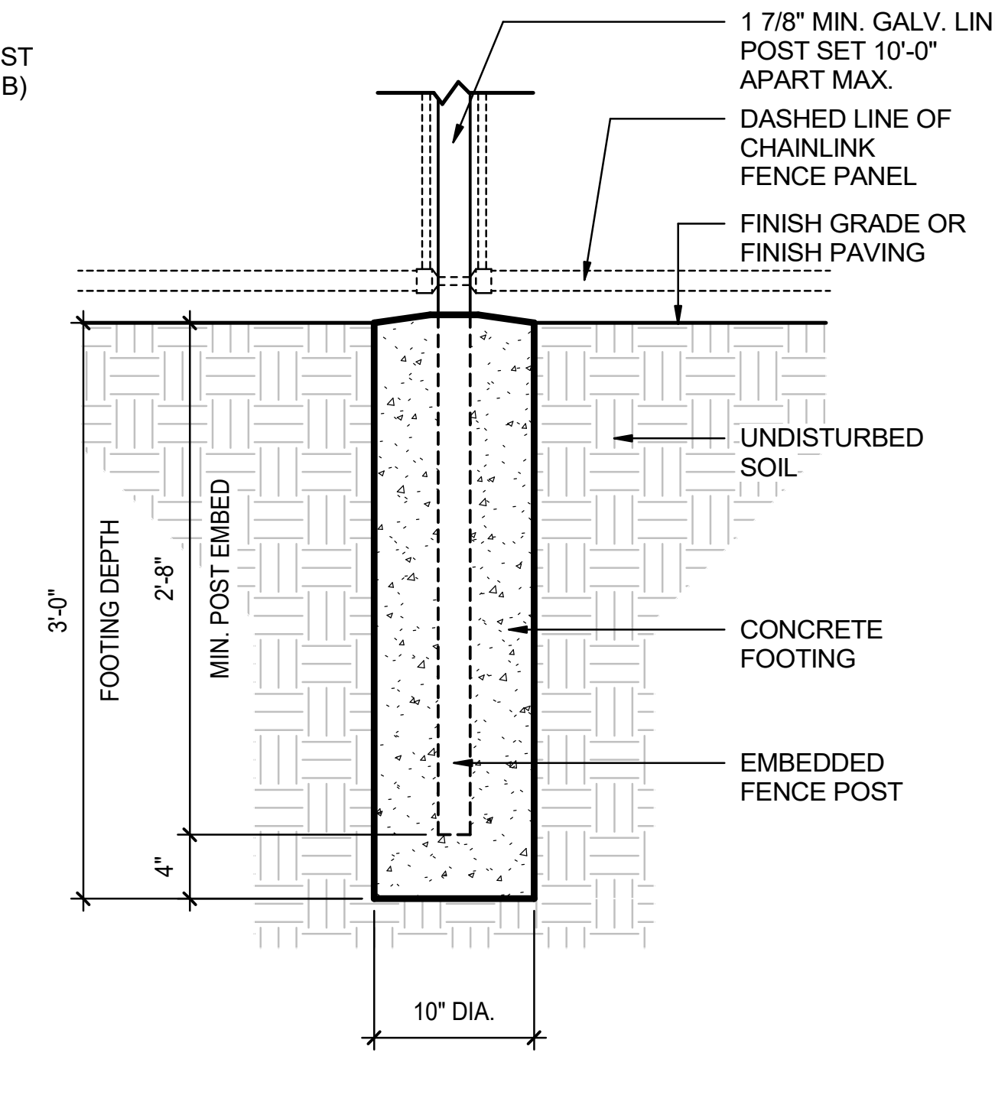
10 CHAINLINK DBL GATE POST FTG
1" = 1'-0"



11 CHAINLINK SGL GATE POST FTG
1" = 1'-0"



12 CL TERMINAL POST FTG
1" = 1'-0"



13 CL LINE POST FTG
1" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

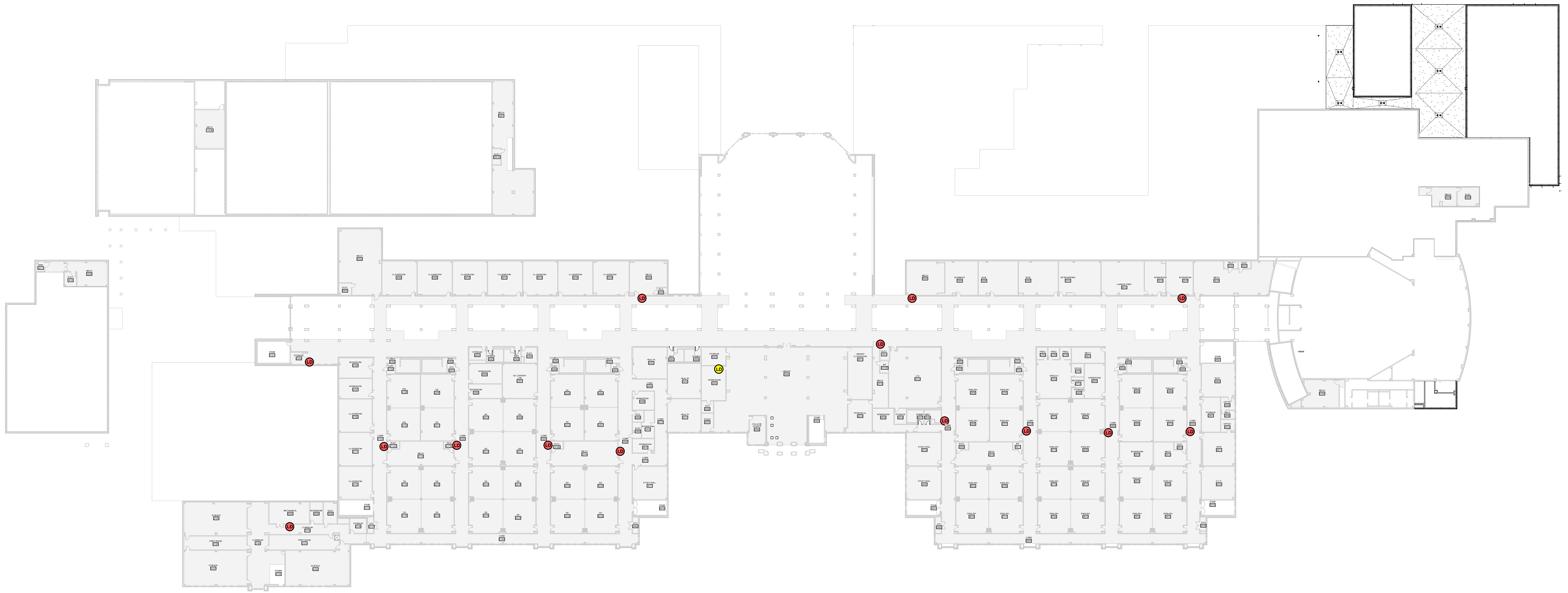
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

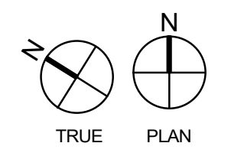
SITE DETAILS

A1.10
____ of ____

11/14/2024 1:33:24 PM
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:33:47 PM

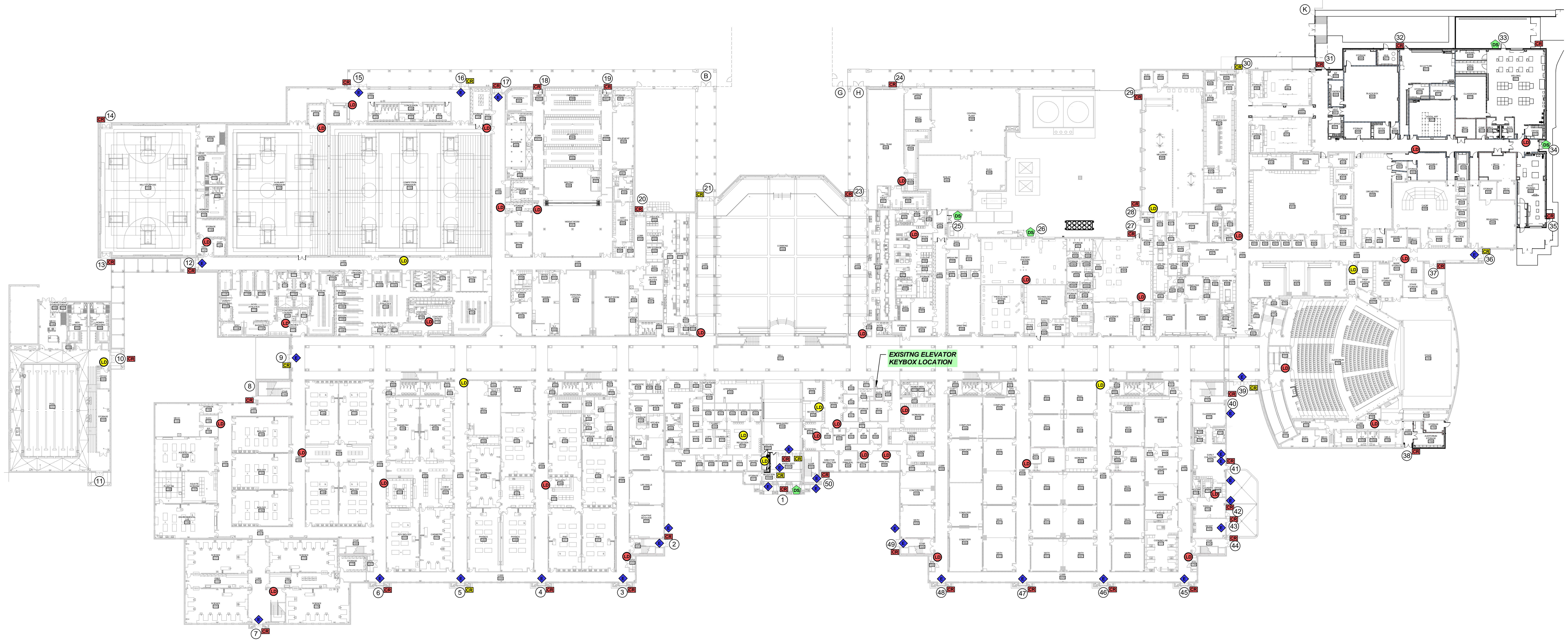


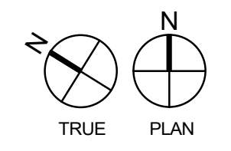


2 2ND FLOOR PLAN OVERALL

1" = 40'-0"

SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"





1 1ST FLOOR PLAN OVERALL

1" = 40'-0"

SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"

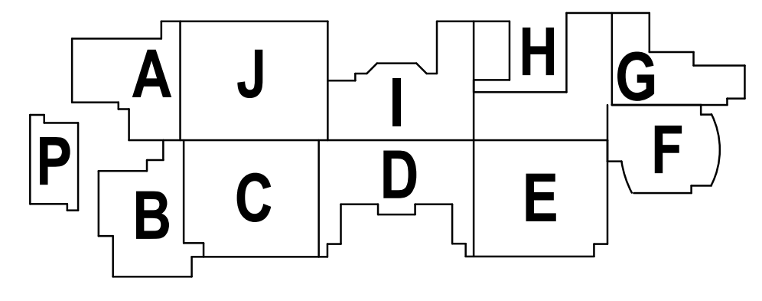
GENERAL NOTES - PLAN

1. CONTRACTOR SHALL VERIFY ALL EXISTING SITE AND BUILDING CONDITIONS IN THE FIELD PRIOR TO BIDDING. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR THE SOLE PURPOSE OF BIDDING. NOTIFY ARCHITECT ANY DISCREPANCIES IN WRITING PRIOR TO COMMENCING WORK.
2. ALL PLAN DIMENSIONS ARE TAKEN TO FACE OF METAL STUD, FACE OF MASONRY AND TO CENTERLINE OF COLUMNS UNLESS NOTED OTHERWISE.
3. DIMENSIONS SHOWN FOR EXTERIOR WINDOWS AND DOORS ARE MASONRY / ROUGH OPENINGS.
4. PROVIDE METAL STUD OR WOOD STUD BLOCKING / BRACING AND /OR STRAPPING FOR ALL WALL HUNG ARCHITECTURAL AND MEPT ITEMS. ITEMS INCLUDING, BUT NOT LIMITED TO MONITORS, MILLWORKS, VANITIES, COUNTERTOPS, TOILET PARTITIONS, TOILET ACCESSORIES AND ETC.
5. DIMENSIONS SHOWN WITH VIF (VERIFY IN FIELD) ARE APPROXIMATE. CONTRACTOR SHALL NOTIFY ARCHITECT IF ACTUAL DIMENSION IS OFF BY 6" OR MORE.
6. ALL UNMARKED PARTITION AND SHOWN IN HALF TONE / GRAY LINES ARE EXISTING TO REMAIN.
7. PATCH, REPAIR AND FINISH EXISTING WALL TO MATCH SURROUND SURFACES WHERE WALL MOUNTED ITEMS AND DEVICES ARE REMOVED.
8. INSTALL 3/4" FIRE-TREATED PLYWOOD ON ALL WALLS INSIDE IDF AND MDF ROOMS.
9. ALL SPACES WITH FLOOR DRAINS SHALL HAVE FINISHED FLOOR SLOPE TO DRAIN. VERIFY WITH ARCHITECT IN FIELD.
10. REMOVE AND STORE ALL EXISTING STORAGE SHELVING UNITS IN AREA OF RENOVATION IF REQUIRED TO ACCOMMODATE SURROUNDING RENOVATION WORK. REINSTALL AND SECURILY FASTENED TO WALL AFTER COMPLETION.
11. INSPECT ENTIRE FLOOR SLAB AFTER DEMOLITION. APPLY LEVELING COMPOUND AS REQUIRED TO ENSURE FLOOR IS LEVEL WITH NO NOTICEABLE IRREGULARITIES.
12. ALL EQUIPMENT HOUSE KEEPING PADS SHALL BE CONCRETE REINFORCED WITH #3 BARS @15" O.C. EACH WAY. COORDINATE WITH MECHANICAL CONTRACTOR FOR SIZE, THICKNESS AND LOCATIONS.
13. REFER TO ENLARGED FLOOR PLANS FOR SPECIFIC RENOVATION NOTES.
14. REFER TO CIVIL, STRUCTURAL AND MEPT DRAWINGS FOR COMPLETE SCOPE OF WORK.

PLAN LEGEND

LD	EXISTING LOCK DOWN BUTTON
LD	LOCK DOWN BUTTON - NEW
CR	EXISTING CARD READER
CR	REPLACE EXIST. CARD READER WITH NEW. RETURN EXIST. CR TO OWNER
CR	CARD READER - NEW
DS	NEW VIDEO INTERCOM DOOR STATION
E	EXISTING IR GLASS
IR1	IR GLAZING GLOBAL - CHILDGARD 9/16", NON-INSULATED, GLASS

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

OVERALL FLOOR PLANS

A2.00

____ of ____

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:33:52 PM

EXISTING BLEACHERS TO REMAIN. CLEAN THOROUGHLY AFTER REFINISHING FLOOR TO REMOVE ALL DUST. THERE SHOULD BE NO FLOORING DUST REMAINING IN GYM AFTER COMPLETION

REFER TO FINISHES PLANS & SPECS FOR EPOXY FLOORING REPLACEMENT ON LOCKER ROOM AREAS

REFINISH ATHLETIC WOOD FLOOR RE: SPEC

REFER TO FINISHES PLANS & SPECS FOR EPOXY FLOORING REPLACEMENT ON LOCKER ROOM AREAS

TRUE NORTH PROJECT NORTH

1 1ST FLOOR PLAN - AREA 'A'

1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

1120 AUXILIARY GYM - NORTH WALL

1120 PERFORMANCE GYM - NORTH WALL

PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20 →	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEYNOTES

AD-10	INSTALL NEW DOOR IN EXISTING FRAME. RE: DOOR SCHEDULE

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

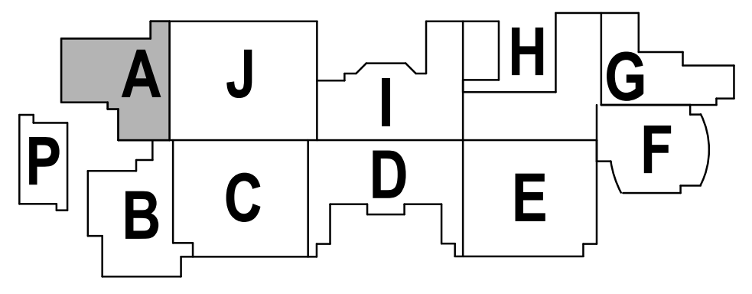
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

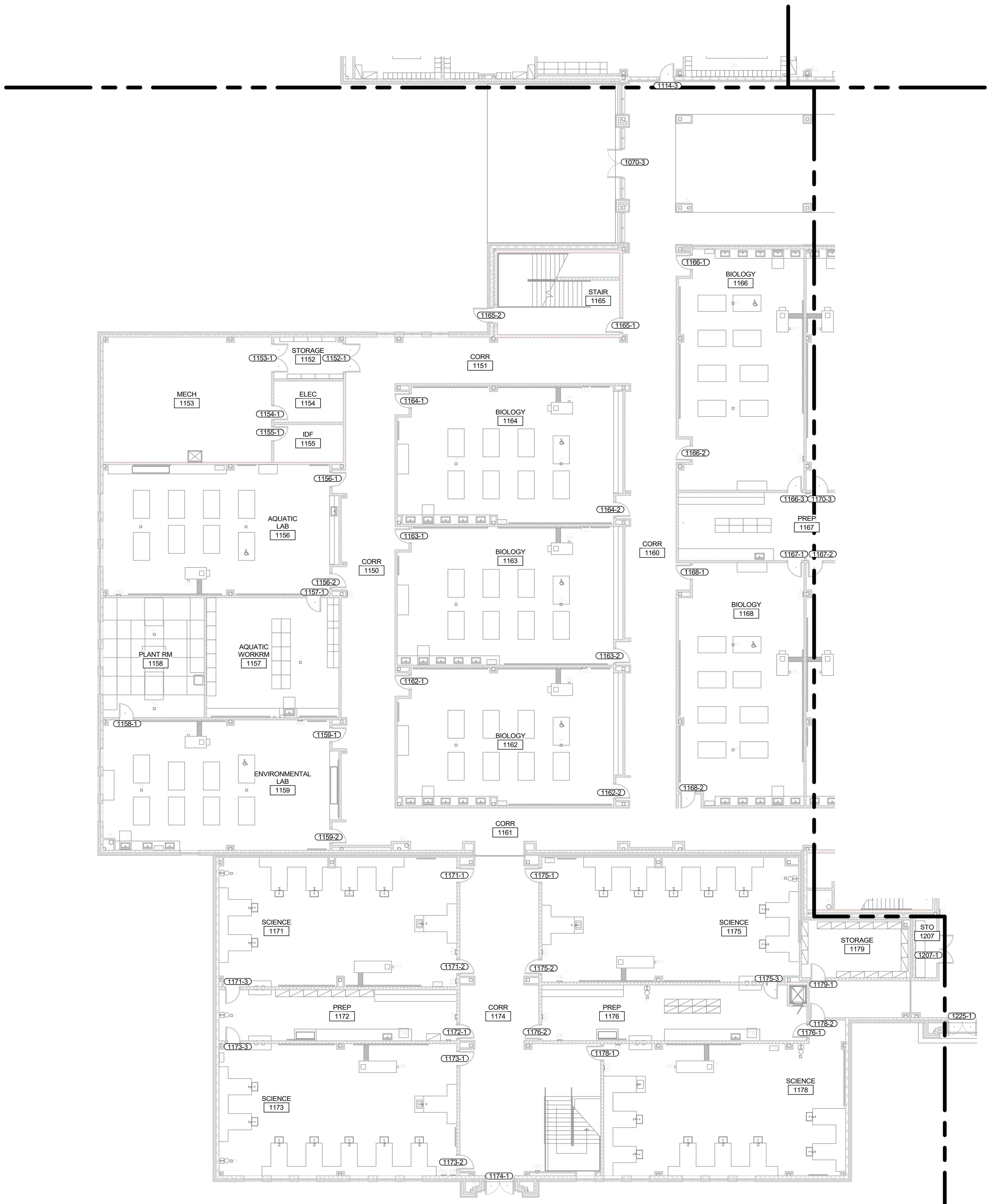
1ST FLOOR PLAN - AREA 'A'

A2.10A

of

11/14/2024 1:33:58 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

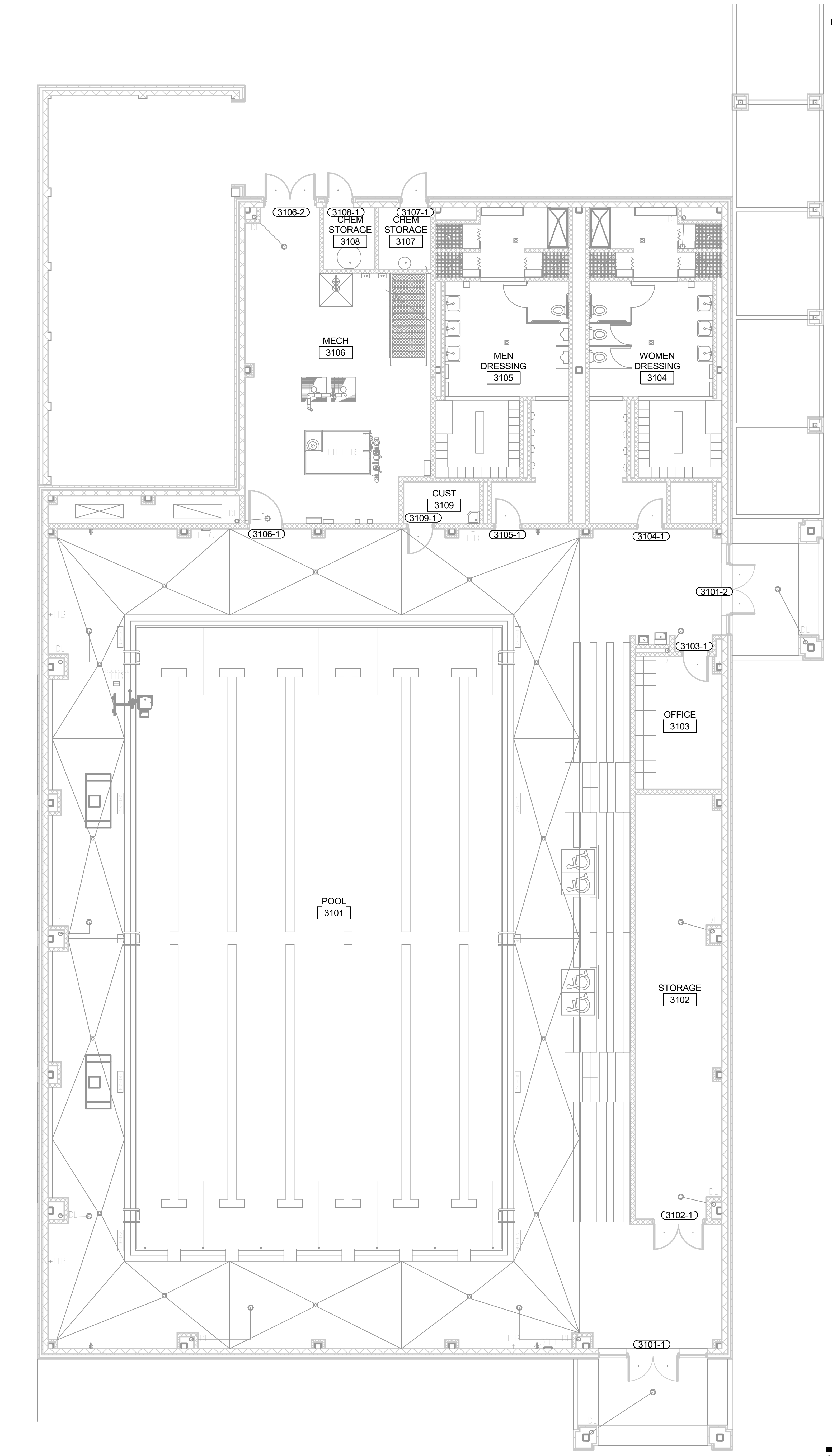


TRUE NORTH PROJECT NORTH

1 1ST FLOOR PLAN - AREA 'B'

3/32" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"
0' 8'-0" 16'-0" 32'-0"



TRUE NORTH PROJECT NORTH

2 1ST FLOOR PLAN - AREA 'P'

1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"
0' 4'-0" 8'-0" 16'-0"

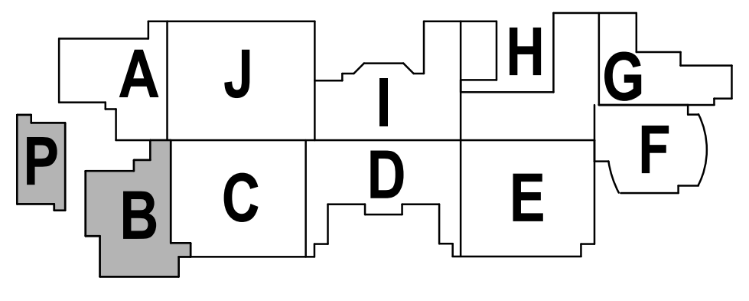
PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN - AREA 'B'

A2.10B

____ of ____

1 1ST FLOOR PLAN - AREA 'C'

1/8" = 1'-0"

TRUE NORTH

PROJECT NORTH

SCALE: 0'-0 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"

PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

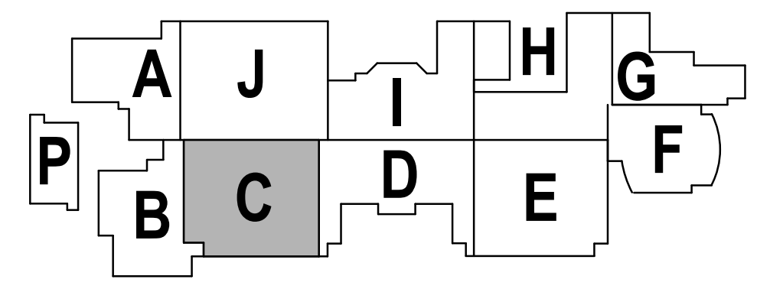
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



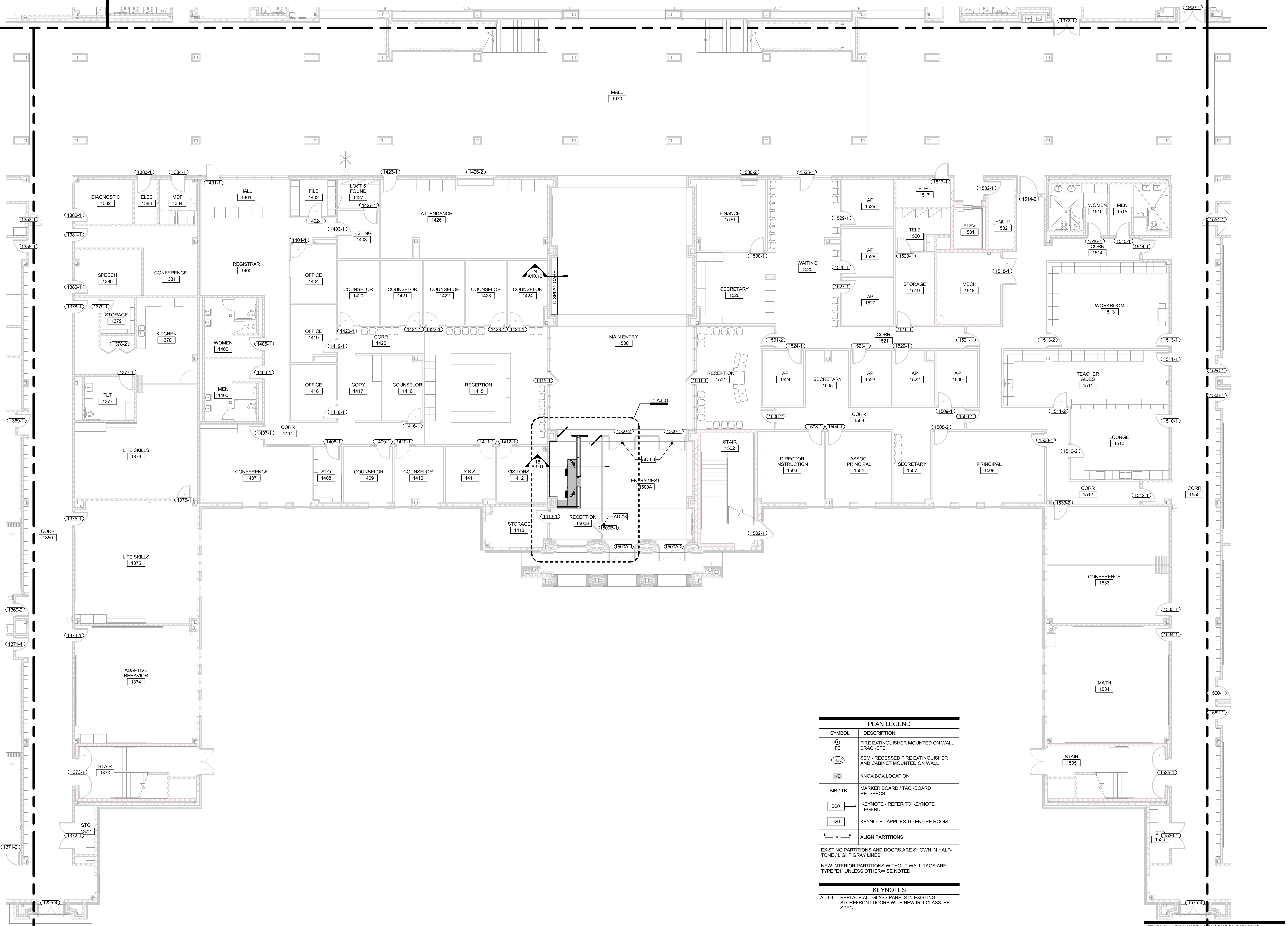
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN -
AREA 'C'

A2.10C

____ of ____

11/14/2024 1:34:09 PM



PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20 —●	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
⌊ A ⌋	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEYNOTES

AD-03	REPLACE ALL GLASS PANELS IN EXISTING STOREFRONT DOORS WITH NEW IR-1 GLASS. RE: SPEC.

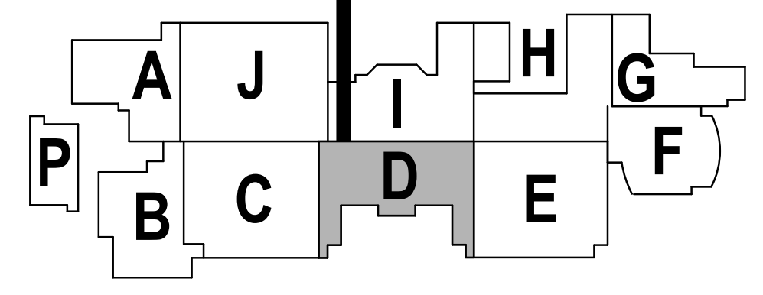
TRUE NORTH PROJECT NORTH

1 1ST FLOOR PLAN - AREA 'D'

1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"
0' 4'-0" 8'-0" 16'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN - AREA 'D'

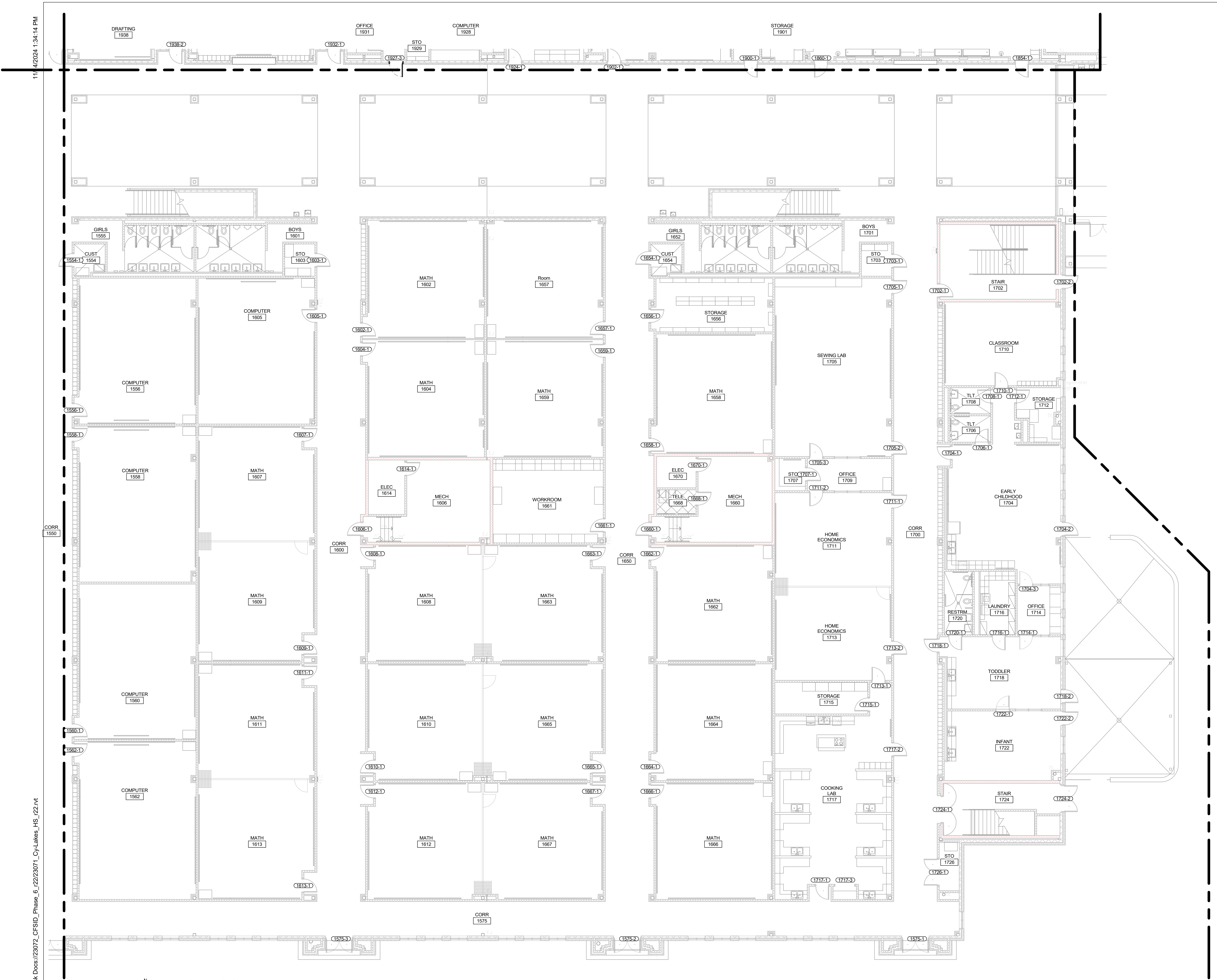
A2.10D

____ of ____

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:34:14 PM

Autodesk Docs://23072_CFSID_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt



TRUE NORTH PROJECT NORTH

1 1ST FLOOR PLAN - AREA 'E'

1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20 —●	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

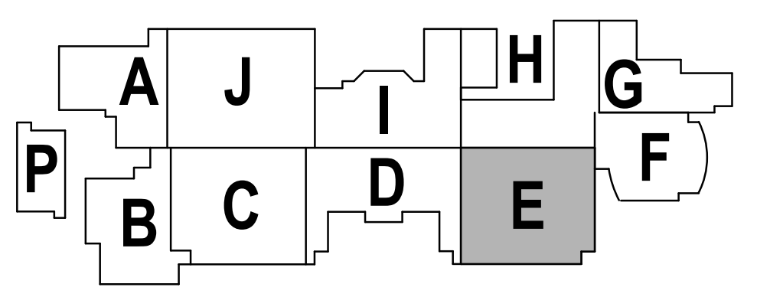
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

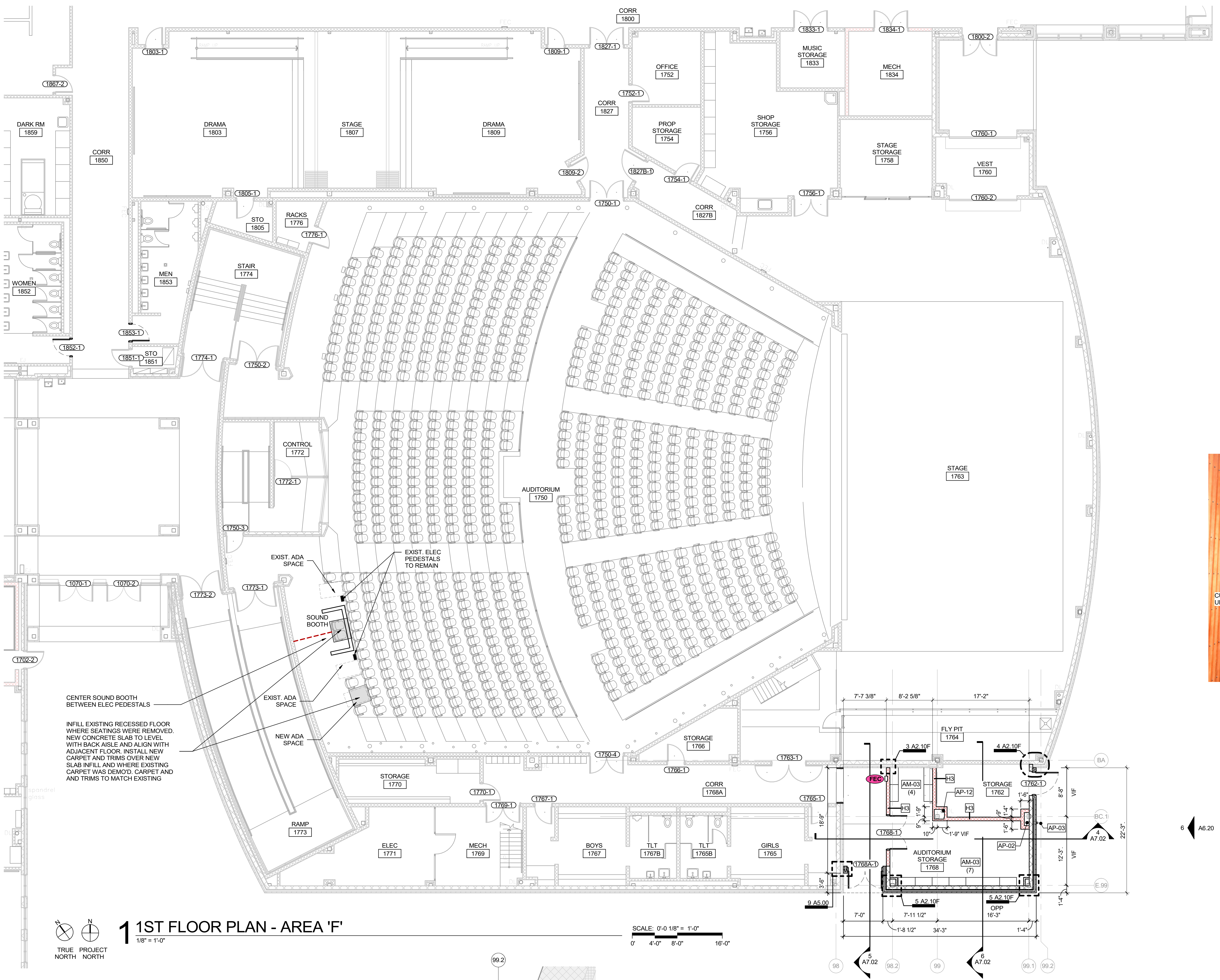


Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN - AREA 'E'

A2.10E

____ of ____

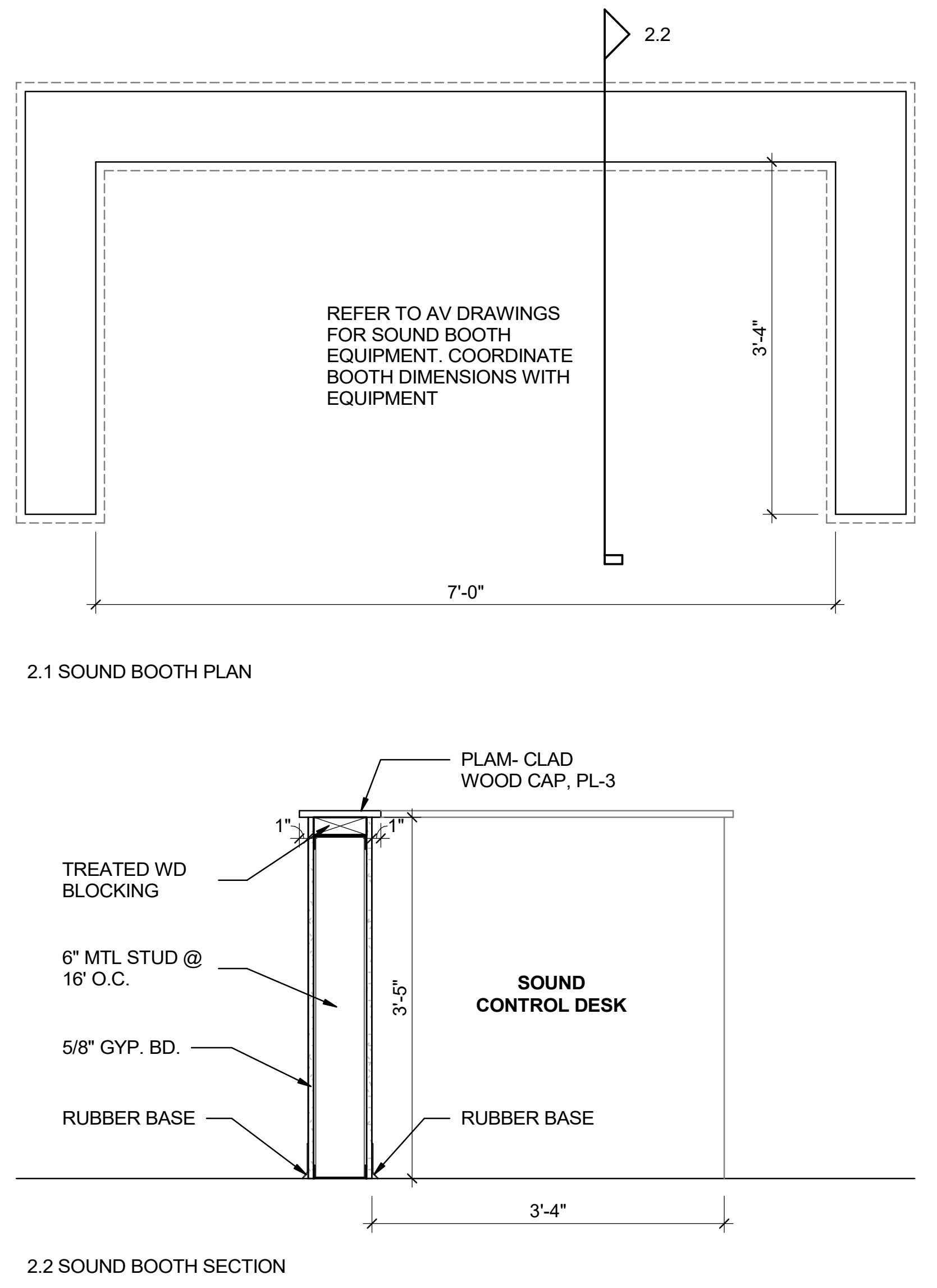


1 1ST FLOOR PLAN - AREA 'F'

1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"
0' 4'-0" 8'-0" 16'-0"


CUT SLAB TO RUN ELEC UP BEHIND THE PANEL



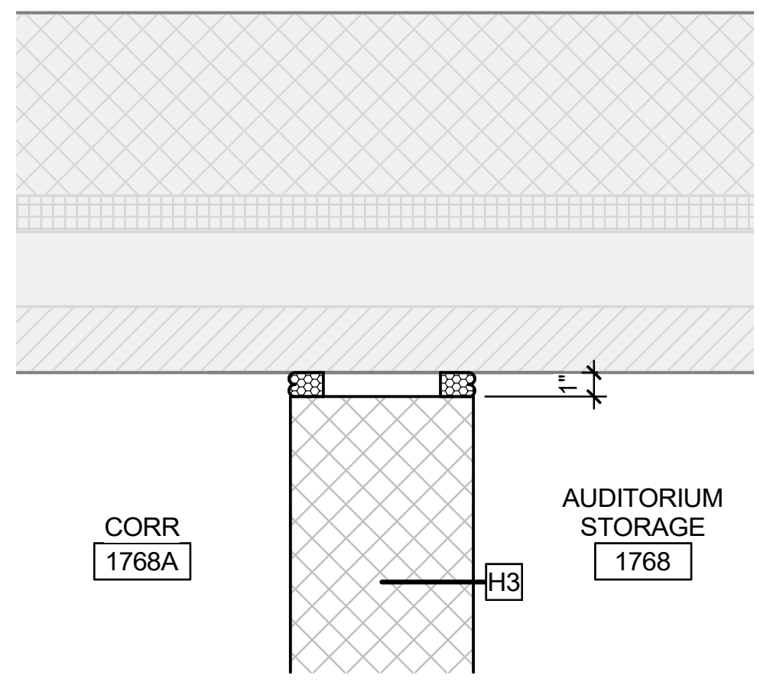
REFER TO AV DRAWINGS FOR SOUND BOOTH EQUIPMENT. COORDINATE BOOTH DIMENSIONS WITH EQUIPMENT

2.1 SOUND BOOTH PLAN

2.2 SOUND BOOTH SECTION

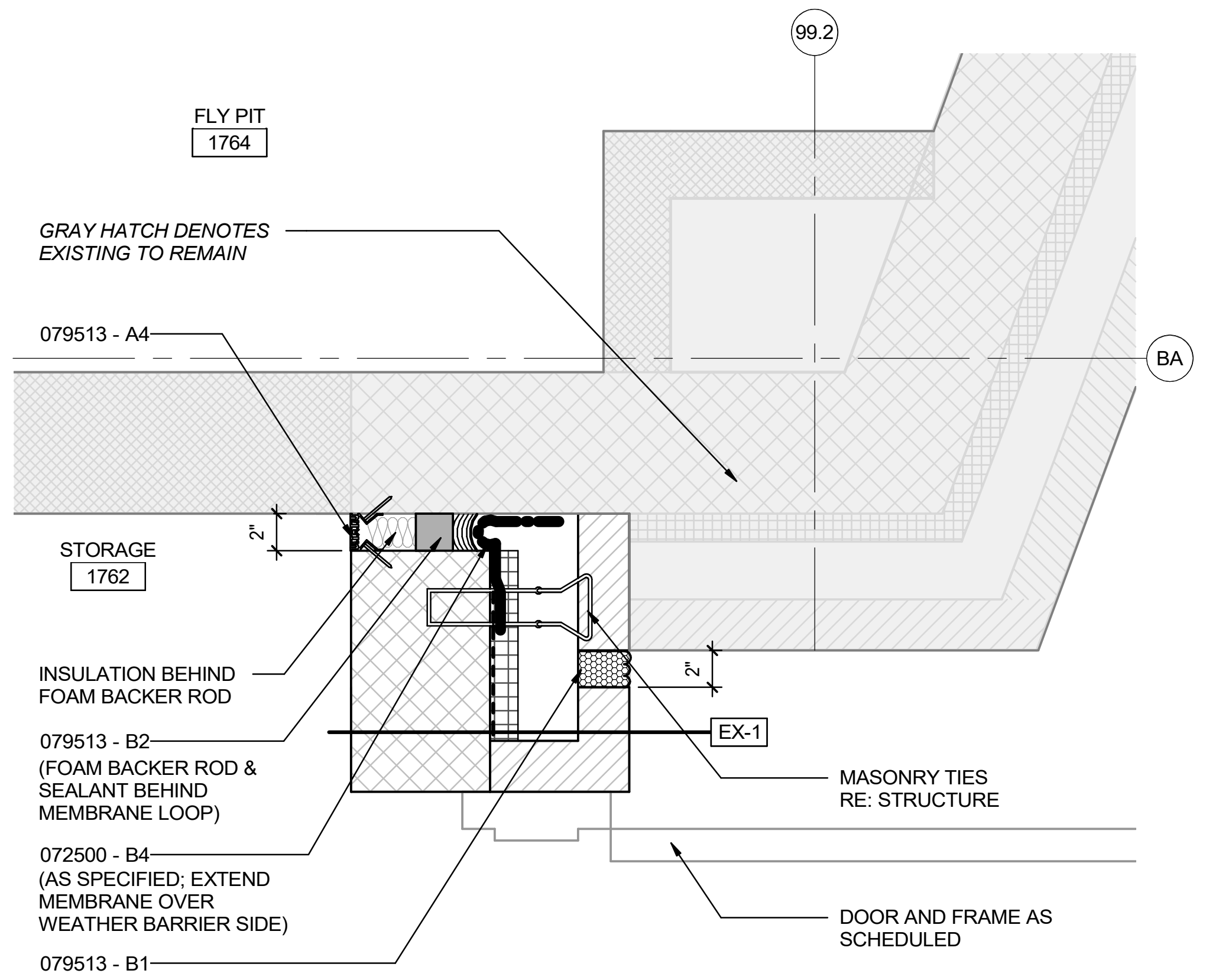
2 SOUND BOOTH DETAIL

3/4" = 1'-0"



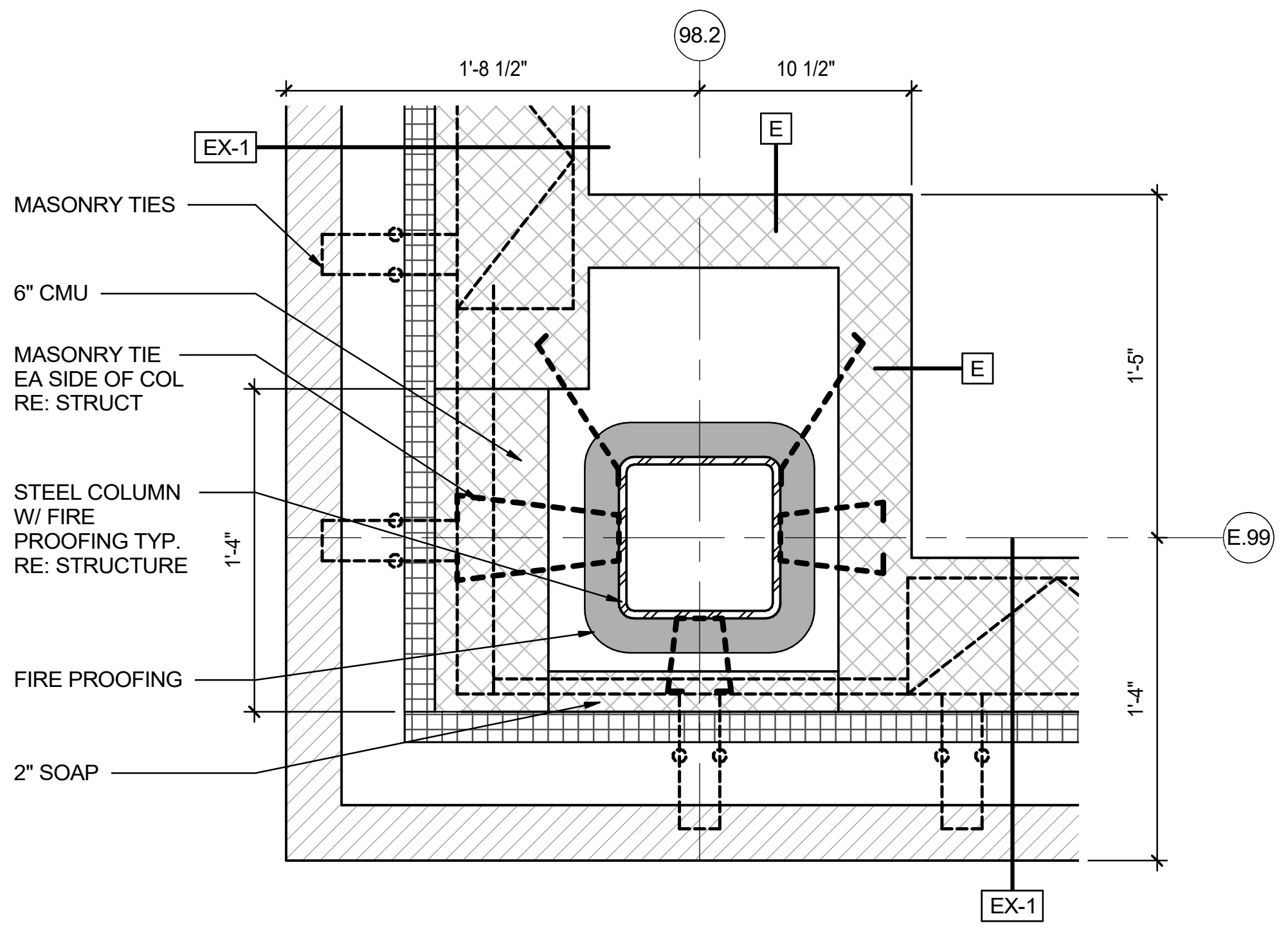
3 PLAN DETAIL - INT. TYP.

1 1/2" = 1'-0"



4 PLAN DETAIL - AUDITORIUM STORAGE

1 1/2" = 1'-0"



5 PLAN DETAIL - E98.2 + E.99

1 1/2" = 1'-0"

PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

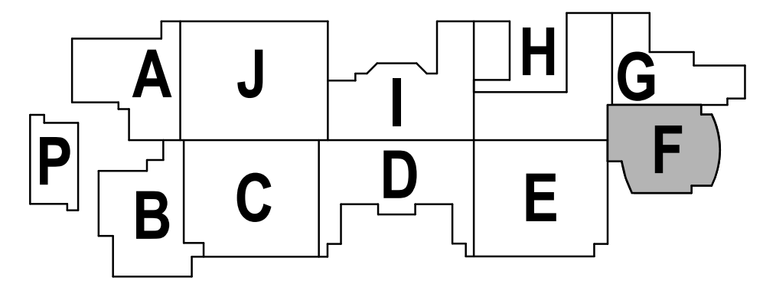
EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEYNOTES

072500 - B4	SELF-ADHERING TRANSITION MEMBRANE LOOPED INTO EXPANSION JOINT @ NEW & EXISTING WALL CONNECTION
079513 - A4	WALL CORNER EXPANSION JOINT COVER ASSEMBLY - SINGLE GASKET EXPANSION JOINT COVER; RE: SPECIFICATIONS - A09 WALL TO CORNER COVER
079513 - B1	EXPANDABLE WALL EXPANSION JOINT; HIGH DENSITY, OPEN MICRO-CELL IMPREGNATED POLYURETHANE FOAM WITH A FACTORY-APPLIED SILICONE - SEAL COLOR TBD BY ARCHITECT; RE: SPECIFICATIONS - EMSEAL SEISMIC COLORSEAL OR EMSHIELD SECURITY SEAL SSW2
079513 - B2	BACKER & SEALANT; SEALANT OVER A PRE-COMPRESSED FOAM SELF EXPANDING BACKER SEAL BEHIND FIELD APPLIED LIQUID SEALANT @ WALL CONTROL / EXPANSION JOINTS - EMSEAL BACKER SEAL & CAULK - SEE SPECIFICATIONS
AM-03	18"D X 36"W X 84"H PRE-FAB METAL SHELVING UNITS. RE: SPEC
AP-02	OVERFLOW ROOF DRAIN RE: PLUMBING
AP-03	DOWNSPOUT NOZZLE RE: PLUMBING
AP-12	EXISTING ROOF DRAINS AND OVERFLOW DRAINS TO REMAIN. PROTECT DURING RENOVATION.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

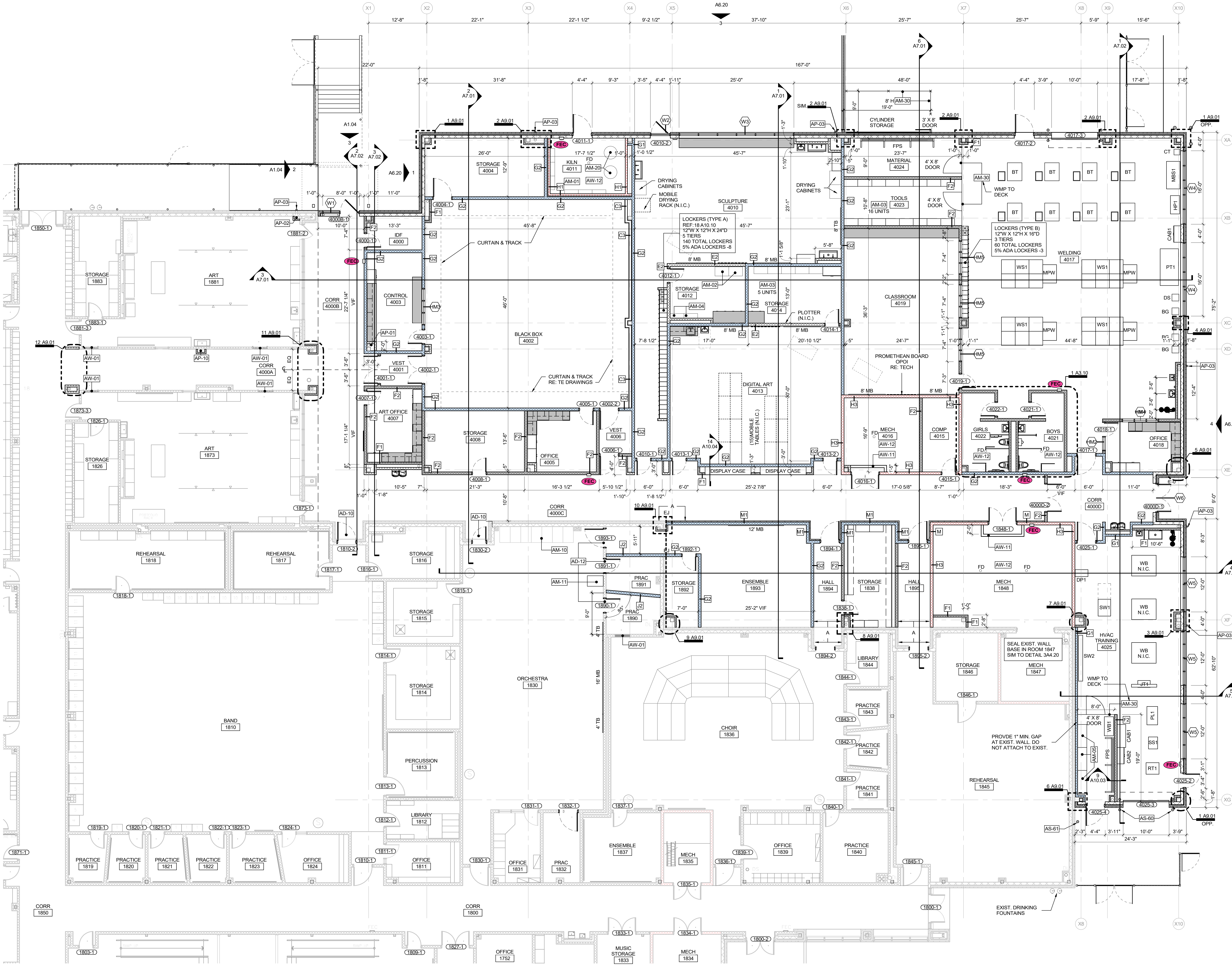
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

1ST FLOOR PLAN - AREA 'F'

A2.10F

of



TRUE NORTH PROJECT NORTH

1 1ST FLOOR PLAN - AREA 'G'

1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"

PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEYNOTES

AD-10	INSTALL NEW DOOR IN EXISTING FRAME. RE: DOOR SCHEDULE
AD-12	INSTALL NEW DOOR AND FRAME IN NEW WALL OPENING IN EXISTING CMU WALL. RE: DOOR SCHEDULE
AM-01	RE-INSTALL EXIST. METAL SHELVING UNITS SALVAGED DURING DEMO
AM-02	24"D X 36"W X 84"H PRE-FAB METAL SHELVING UNITS. RE: SPEC
AM-03	18"D X 36"W X 84"H PRE-FAB METAL SHELVING UNITS. RE: SPEC
AM-04	12"D X 36"W X 84"H PRE-FAB METAL SHELVING UNITS. RE: SPEC
AM-05	24"D X 60"W X 84"H PRE-FAB METAL SHELVING UNITS. RE: SPEC
AM-10	EXISTING INSTRUMENT STORAGE CABINETS TO REMAIN.
AM-11	RELOCATE EXISTING INSTRUMENT STORAGE CABINETS TO LOCATION SHOWN. PROVIDE AND INSTALL END PANELS TO MATCH EXISTING.
AM-20	INSTALL EXISTING KILNS IN NEW KILN ROOM BY OWNER APPROVED VENDOR. GC TO COORDINATE WITH OWNER'S APPROVED VENDOR FOR REMOVAL AND RE-INSTALLATION OF KILNS. CERAMIC STORE OF HOUSTON. 1002 W. 11TH ST. HOUSTON, TX 77008. 713-864-6442
AM-30	WIRE MESH PARTITIONS AND DOOR. RE: SPEC
AP-01	ROOF DRAIN RE: PLUMBING
AP-02	OVERFLOW ROOF DRAIN RE: PLUMBING
AP-03	DOWNSPOUT NOZZLE RE: PLUMBING
AP-10	PLUMBING TO EXISTING SINK TO REMAIN. CONSTRUCT PARTITION TYPE "E" ENCLOSURE IN SAME LOCATION AS EXISTING CHASE WALL.
AS-60	BOLLARDS TYP. PROVIDE AND INSTALL ON BOTH SIDES OF ROLL-UP DOOR. (X4) RE: STRUCTURAL & DETAIL 2A1.01
AS-61	PROVIDE AND INSTALL RUBBER DOOR/GATE BUMPER ON BOLLARD. COORDINATE LOCATION WITH DOOR / GATE.
AW-01	INFILL CMU WALL OPENING AS REQUIRED TO MATCH AND BLEND IN WITH ADJACENT SURFACES IN SIZE AND LAYOUT. PREP WALL TO RECEIVE NEW SCHEDULED FINISHES.
AW-11	4" H X 6" W CONCRETE CURB IN FRONT OF MECH ROOM DOOR.
AW-12	INSTALL CONCRETE CURB UNDER NEW PARTITIONS SURROUNDING RESTROOMS, CUSTODIAL, TOILET ROOMS, MECHANICAL, KILN AND AS INDICATED. REFER TO DETAIL ON SHEET A4.20.

WELDING EQUIPMENT

BG	BENCH GRINDER
BT	BRAZING TABLE WITH VISES
CT1	CUTTING TRACK
DS	DISC SANDER
FPS	FOUR POST SHELVING (RE:9/A10.03)
CAB1	FLAMMABLE STORAGE CABINET
HP1	HYDRAULIC PRESS
MBS1	MITER BAND SAW
MPW	MULTI PROCESS WELDER
PT1	PLASMA TABLE
WS1	WELDING STATION
WMP	WIRE MESH PARTITION (UP TO DECK)

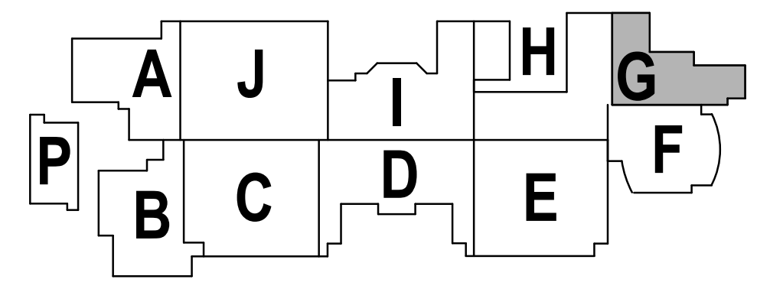
REFER TO SPECIFICATION 11 57 00 SHOP EQUIPMENT

HVAC TRAINING EQUIPMENT

DP1	DRILL PRESS
JT1	JOINER
PL1	PLANER
RT1	ROUTER
SS1	BELT AND DISC SANDER
SW1	TABLE SAW
SW2	PANEL SAW
WB	WORK BENCH (N.I.C.)
WB1	WHEEL BARROW MIXER
CAB1	TOOL CABINET
CAB2	FLAMMABLE STORAGE CABINET

REFER TO SPECIFICATION 11 57 00 SHOP EQUIPMENT

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

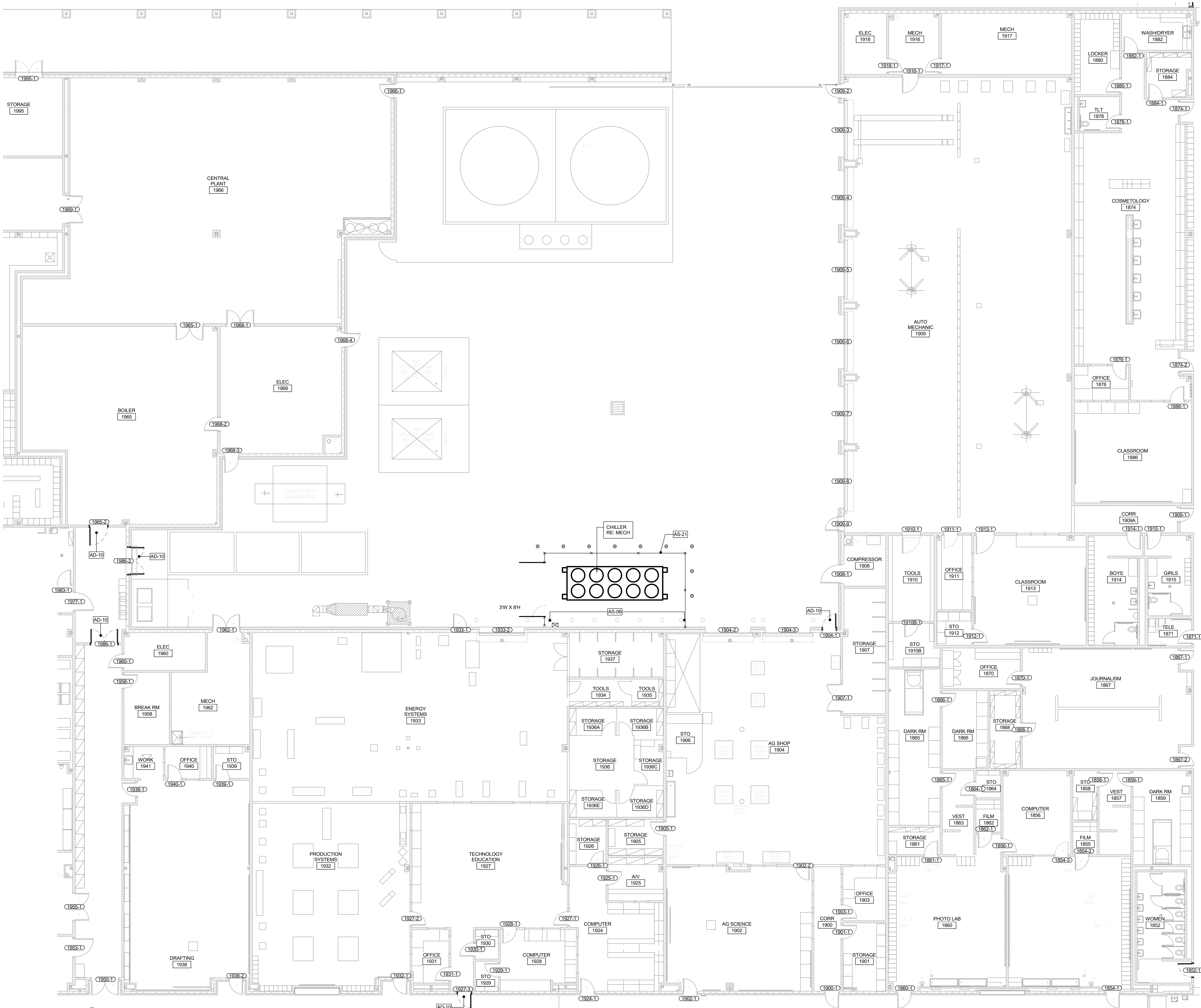
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN - AREA 'G'

A2.10G

____ of ____



1 1ST FLOOR PLAN - AREA 'H'
1/8" = 1'-0"

PLAN LEGEND

SYMBOL	DESCRIPTION
FE FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20 —●	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
↑— A —↑	ALIGN PARTITIONS

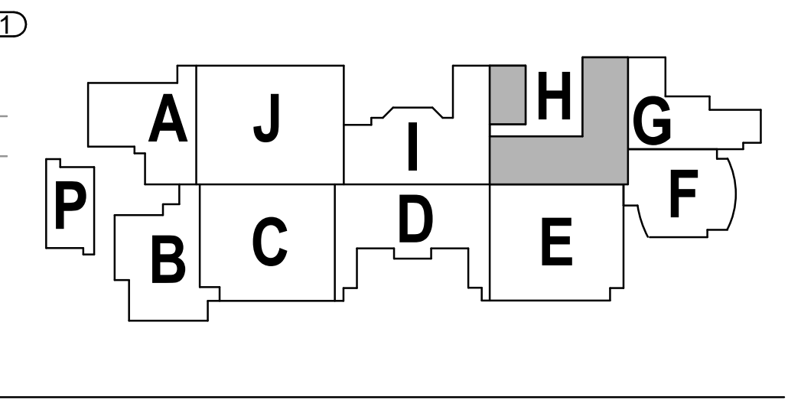
EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEYNOTES

AD-10	INSTALL NEW DOOR IN EXISTING FRAME. RE: DOOR SCHEDULE
AS-06	EXISTING BOLLARD TYP. BEHIND NEW CHILLER
AS-21	6' H MIN. CHAINLINK FENCE. HEIGHT AND STYLE TO MATCH EXISTING FENCE.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

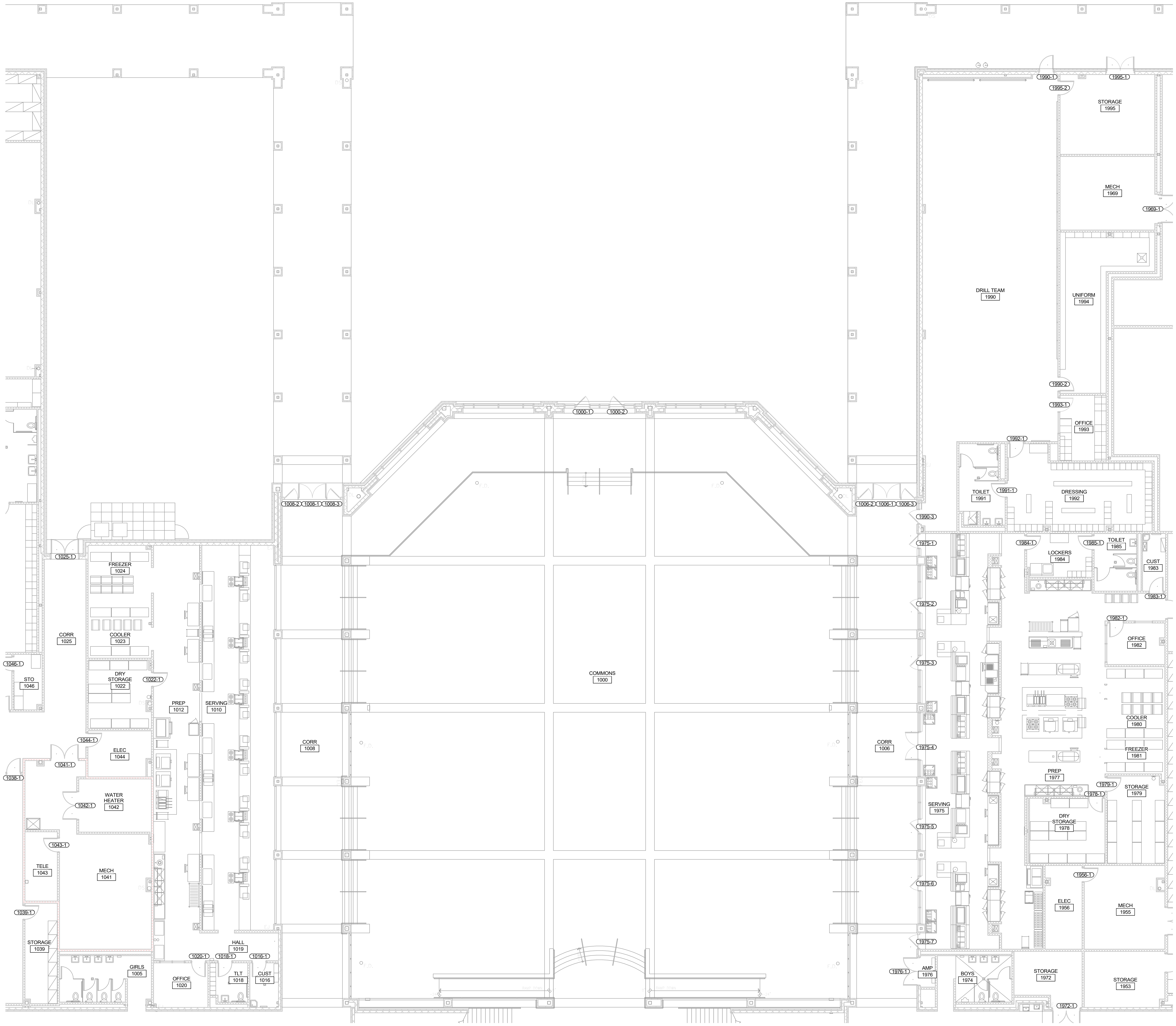
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN - AREA 'H'

A2.10H

of

11/14/2024 1:34:40 PM



1 1ST FLOOR PLAN - AREA 'I'

1/8" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20 ─●	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
└─ A ─┘	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

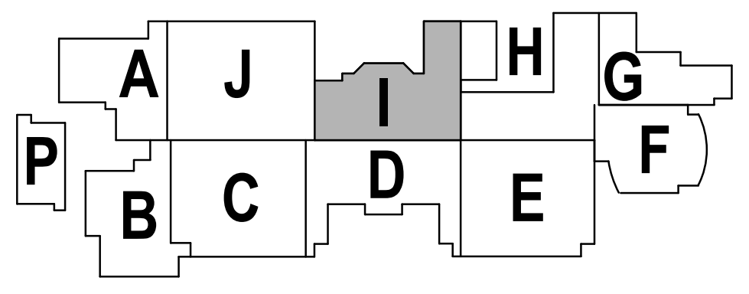
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



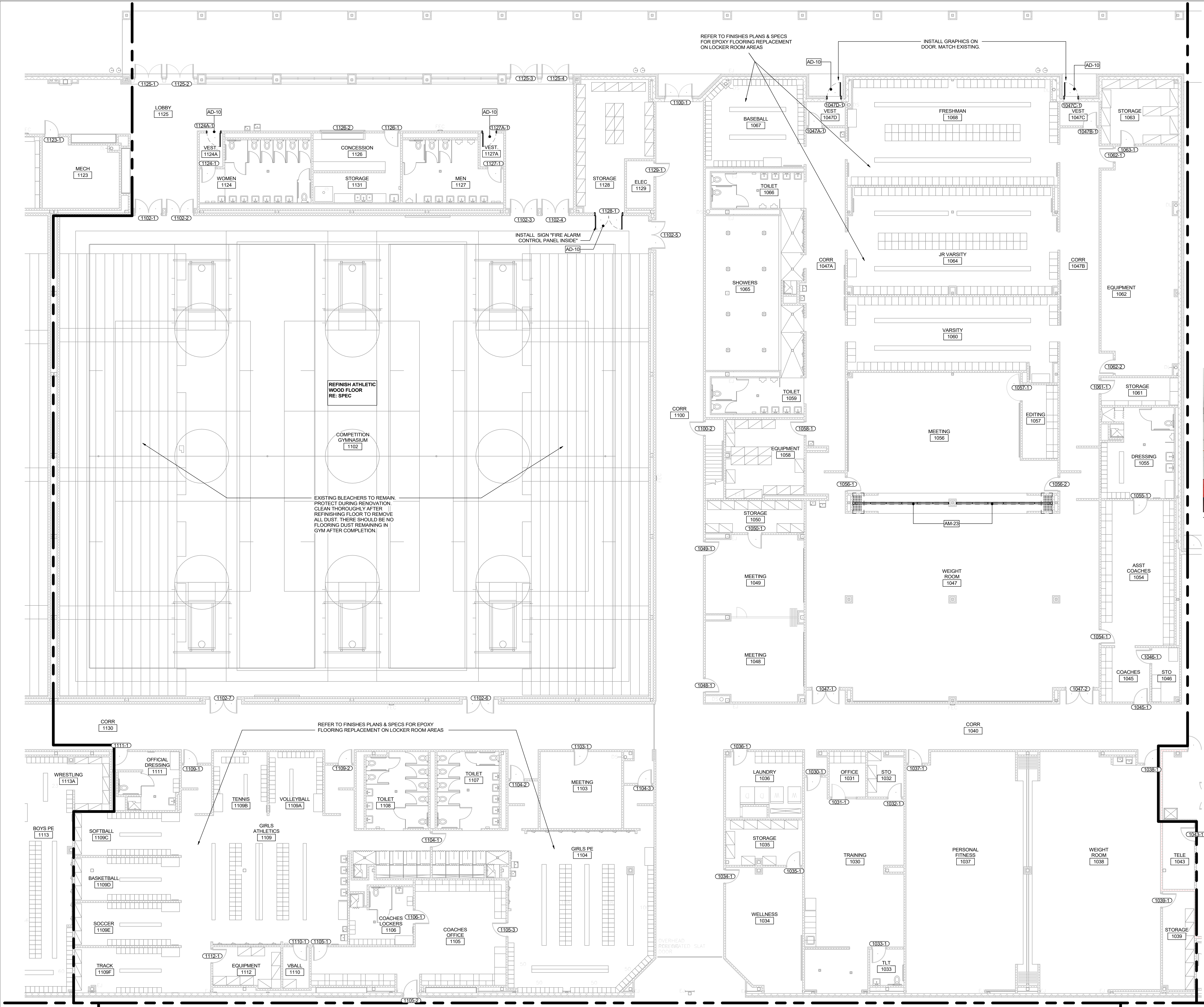
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN - AREA 'I'

A2.10I

____ of ____

11/14/2024 1:34:46 PM



REFER TO FINISHES PLANS & SPECS FOR EPOXY FLOORING REPLACEMENT ON LOCKER ROOM AREAS

INSTALL GRAPHICS ON DOOR. MATCH EXISTING.

INSTALL SIGN "FIRE ALARM CONTROL PANEL INSIDE"

EXISTING BLEACHERS TO REMAIN. PROTECT DURING RENOVATION. CLEAN THOROUGHLY AFTER REFINISHING FLOOR TO REMOVE ALL DUST. THERE SHOULD BE NO FLOORING DUST REMAINING IN GYM AFTER COMPLETION.

REFER TO FINISHES PLANS & SPECS FOR EPOXY FLOORING REPLACEMENT ON LOCKER ROOM AREAS

1 1ST FLOOR PLAN - AREA 'J'

1/8" = 1'-0"

TRUE NORTH

PROJECT NORTH

SCALE: 0'-0 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"

PLAN LEGEND

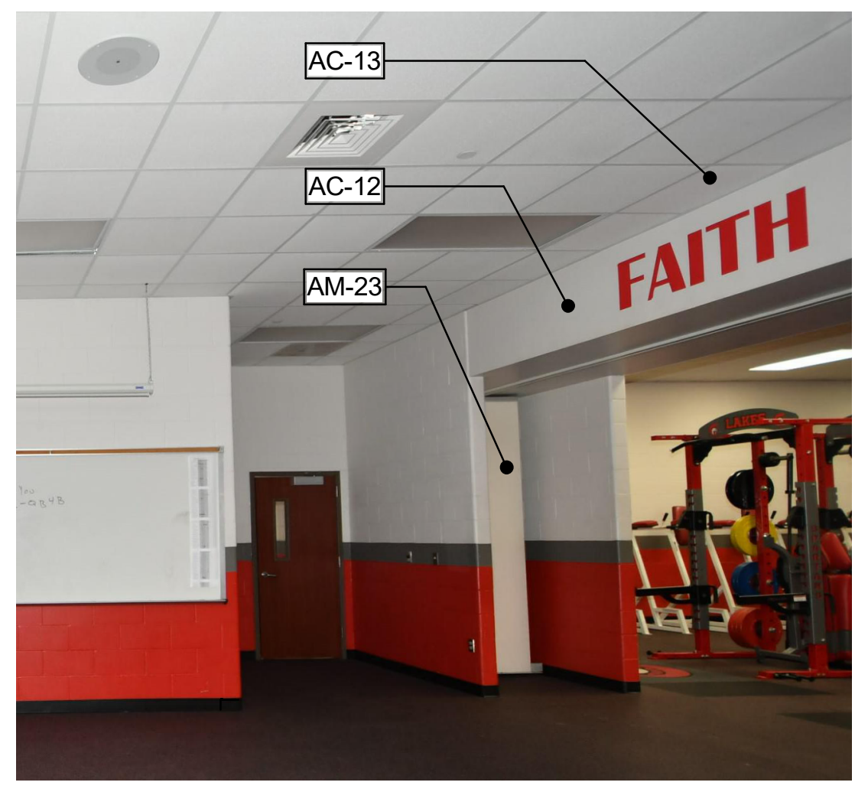
SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

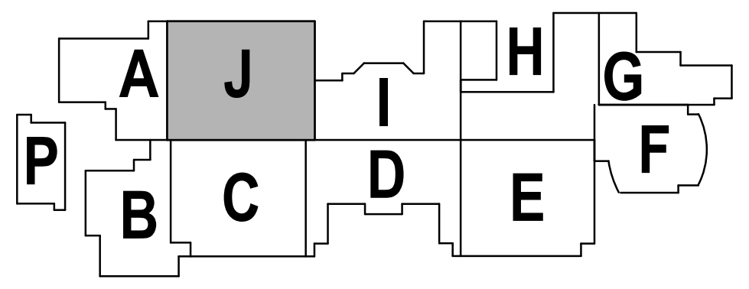
KEYNOTES

AC-12	REMOVE AND RECONSTRUCT EXISTING FURR-DN AS REQUIRED FOR REPLACEMENT OF EXISTING FOLDING PARTITION WITH NEW. REFINISH AND PAINT TO MATCH EXISTING. REPLACE GRAPHICS IF DAMAGED DURING RENOVATION.
AC-13	REMOVE AND REPLACE EXISTING ACT AND SUSPENSION SYSTEM AS REQUIRED FOR REPLACEMENT OF EXISTING FOLDING PARTITION WITH NEW.
AD-10	INSTALL NEW DOOR IN EXISTING FRAME. RE: DOOR SCHEDULE
AM-23	REPLACE EXISTING FOLDING PANEL PARTITIONS WITH NEW (FULL HEIGHT MARKER BOARD FINISH). REPLACE EXISTING STRUCTURAL SUPPORT AS REQUIRED. REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS.



1047 WEIGHT ROOM - EAST WALL

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

1ST FLOOR PLAN - AREA 'J'

A2.10J

____ of ____

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:34:52 PM

Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

KEYNOTES

AD-10	INSTALL NEW DOOR IN EXISTING FRAME. RE: DOOR SCHEDULE

TRUE NORTH PROJECT NORTH

1 2ND FLOOR PLAN - AREA 'EAST'

1" = 20'-0"

SCALE: 0'-1" = 20'-0"
0' 10'-0" 20'-0" 40'-0"

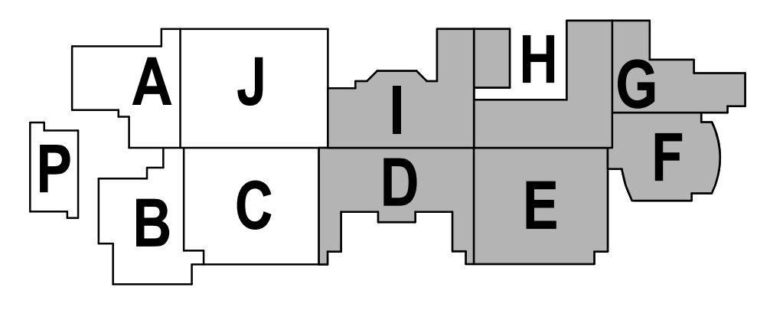
PLAN LEGEND

SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

2ND FLOOR PLAN - AREA EAST

A2.20E

____ of ____

PLAN LEGEND

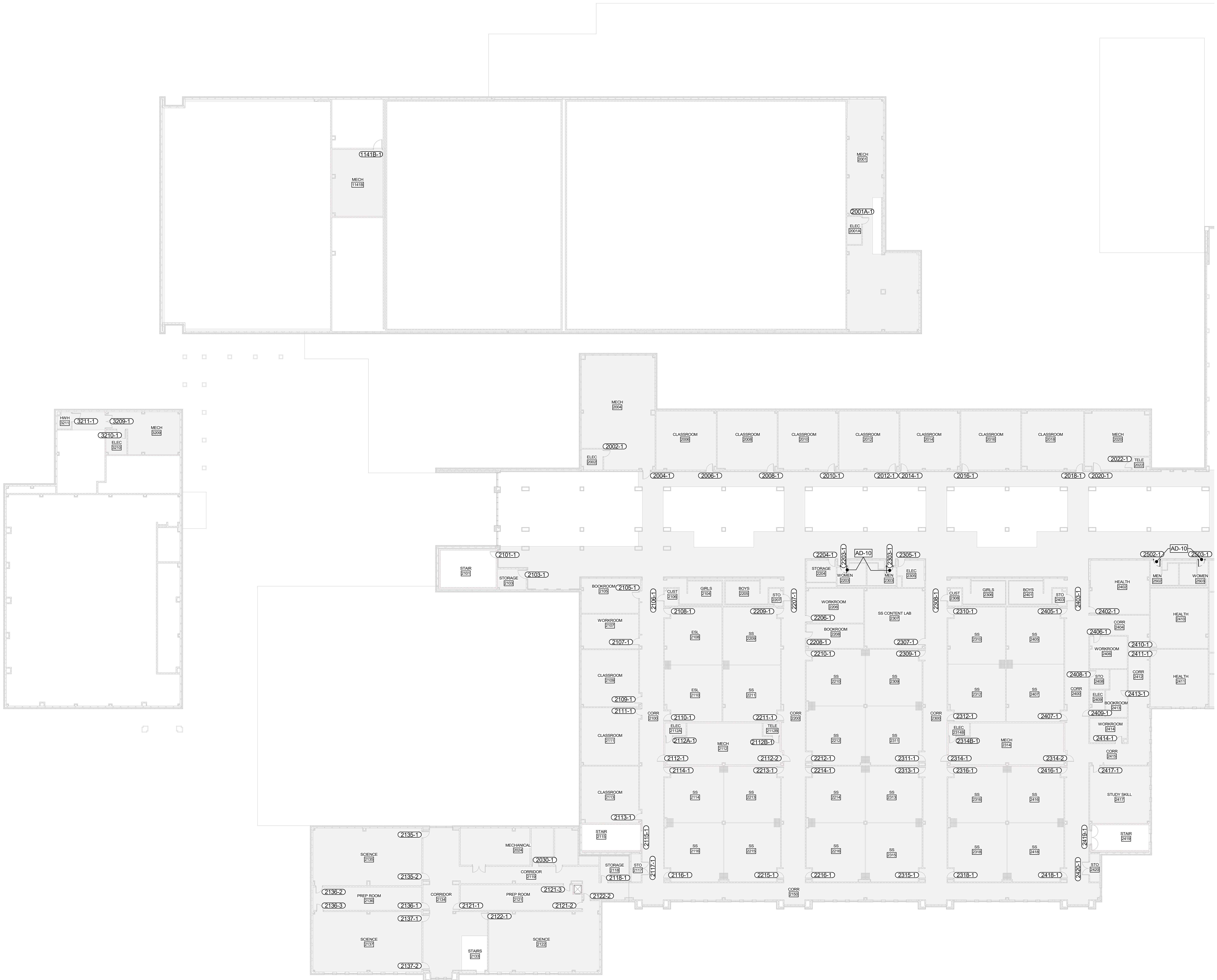
SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER MOUNTED ON WALL BRACKETS
FEC	SEMI- RECESSED FIRE EXTINGUISHER AND CABINET MOUNTED ON WALL
KB	KNOX BOX LOCATION
MB / TB	MARKER BOARD / TACKBOARD RE: SPECS
D20	KEYNOTE - REFER TO KEYNOTE LEGEND
D20	KEYNOTE - APPLIES TO ENTIRE ROOM
A	ALIGN PARTITIONS

EXISTING PARTITIONS AND DOORS ARE SHOWN IN HALF-TONE / LIGHT GRAY LINES

NEW INTERIOR PARTITIONS WITHOUT WALL TAGS ARE TYPE "E1" UNLESS OTHERWISE NOTED.

KEYNOTES

AD-10	INSTALL NEW DOOR IN EXISTING FRAME. RE: DOOR SCHEDULE



TRUE NORTH PROJECT NORTH

1 2ND FLOOR PLAN - AREA 'WEST'

1" = 20'-0"

SCALE: 0'-1" = 20'-0"

0' 10'-0" 20'-0" 40'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

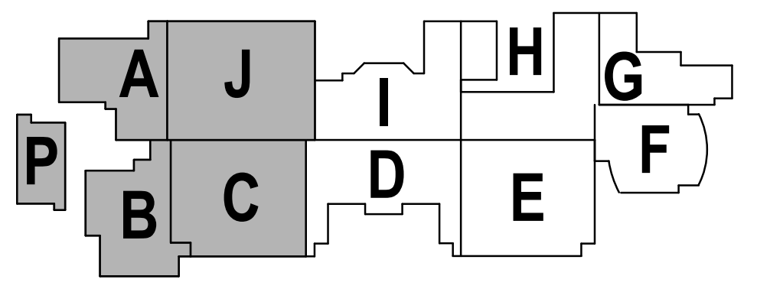
2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



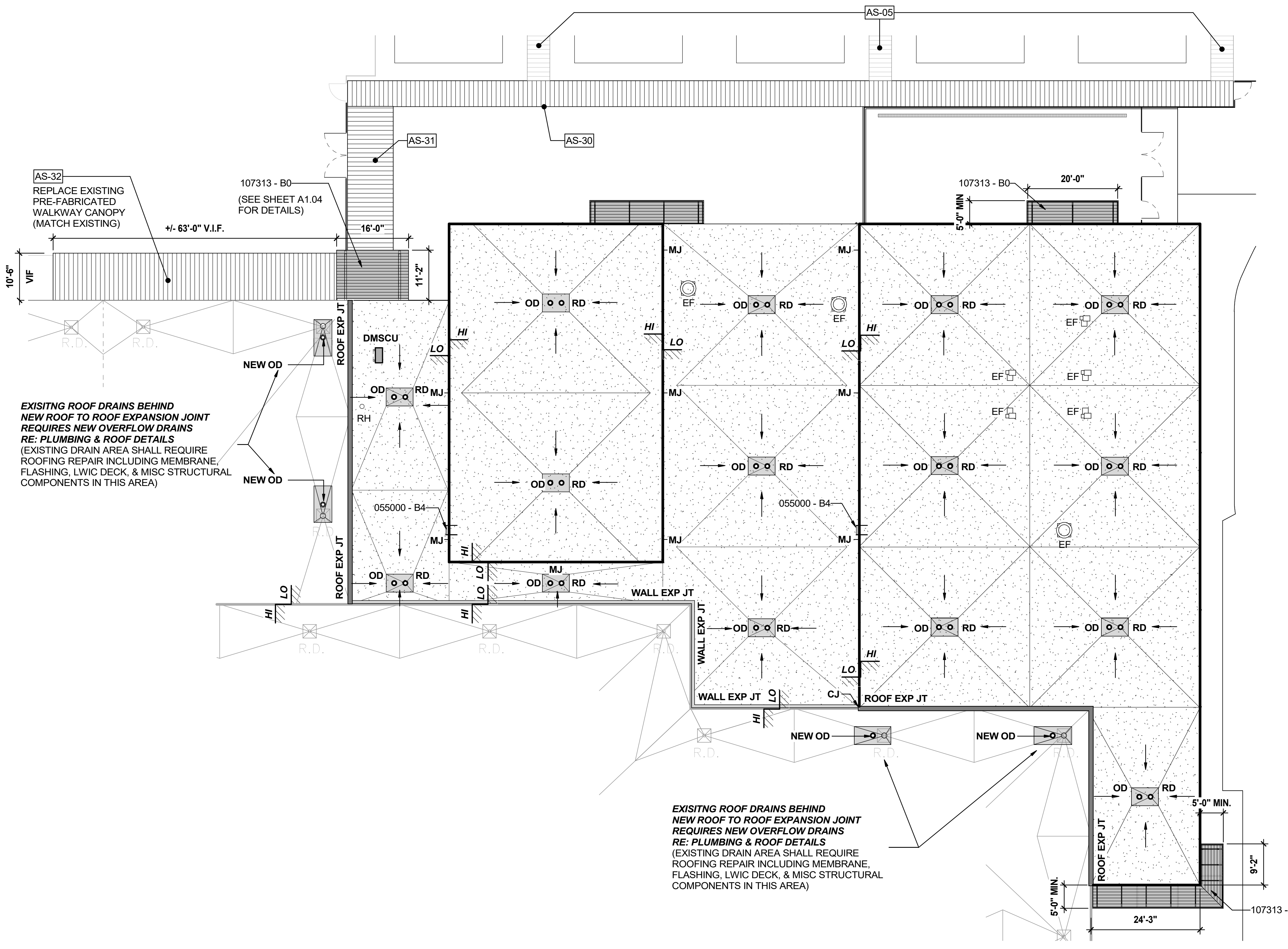
2ND FLOOR PLAN - AREA WEST

A2.20W

____ of ____

11/14/2024 1:35:07 PM

Autodesk Docs://23072_CFSID_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt

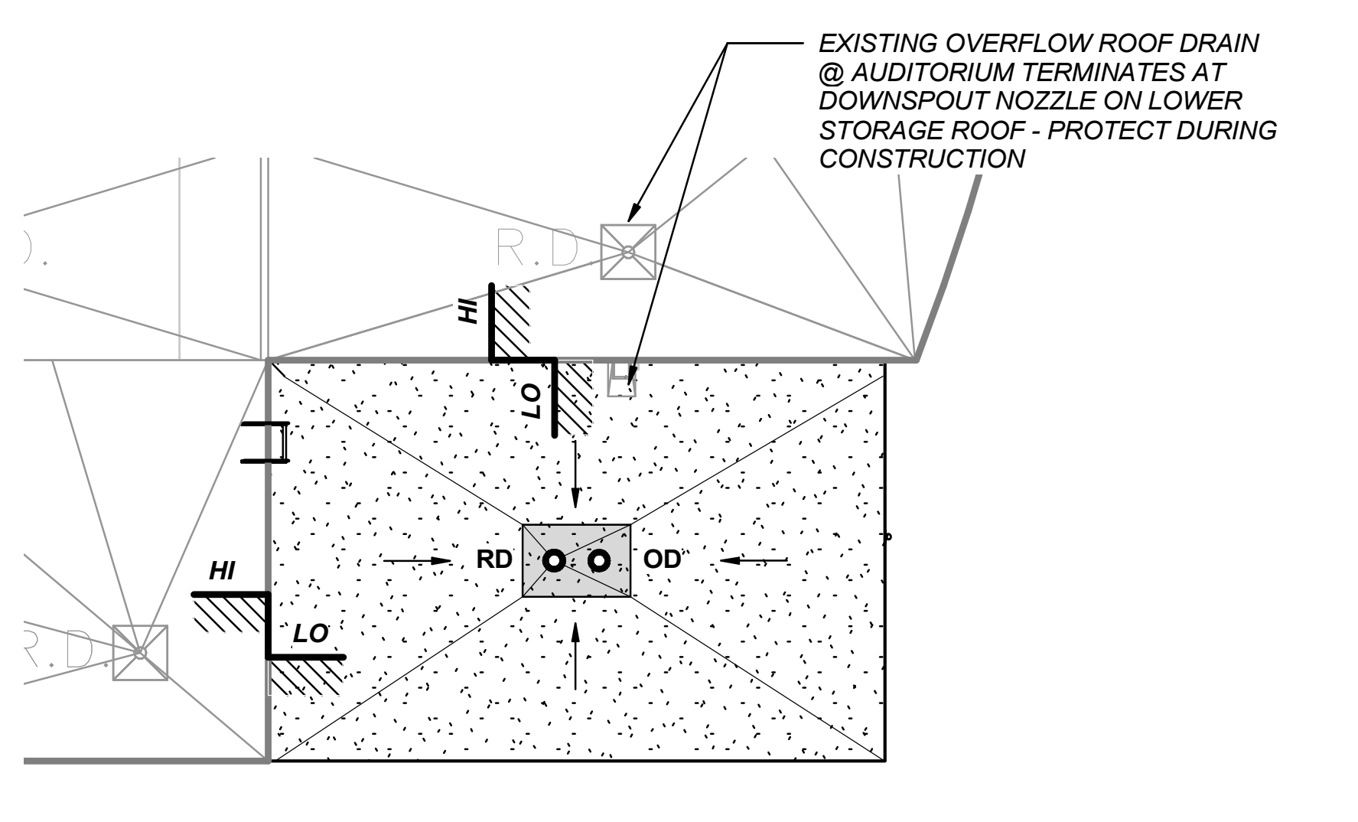


EXISITNG ROOF DRAINS BEHIND NEW ROOF TO ROOF EXPANSION JOINT REQUIRES NEW OVERFLOW DRAINS RE: PLUMBING & ROOF DETAILS (EXISTING DRAIN AREA SHALL REQUIRE ROOFING REPAIR INCLUDING MEMBRANE, FLASHING, LWIC DECK, & MISC STRUCTURAL COMPONENTS IN THIS AREA)

EXISITNG ROOF DRAINS BEHIND NEW ROOF TO ROOF EXPANSION JOINT REQUIRES NEW OVERFLOW DRAINS RE: PLUMBING & ROOF DETAILS (EXISTING DRAIN AREA SHALL REQUIRE ROOFING REPAIR INCLUDING MEMBRANE, FLASHING, LWIC DECK, & MISC STRUCTURAL COMPONENTS IN THIS AREA)

2 ENLARGED ROOF PLAN - FINE ARTS & CTE ADDITION

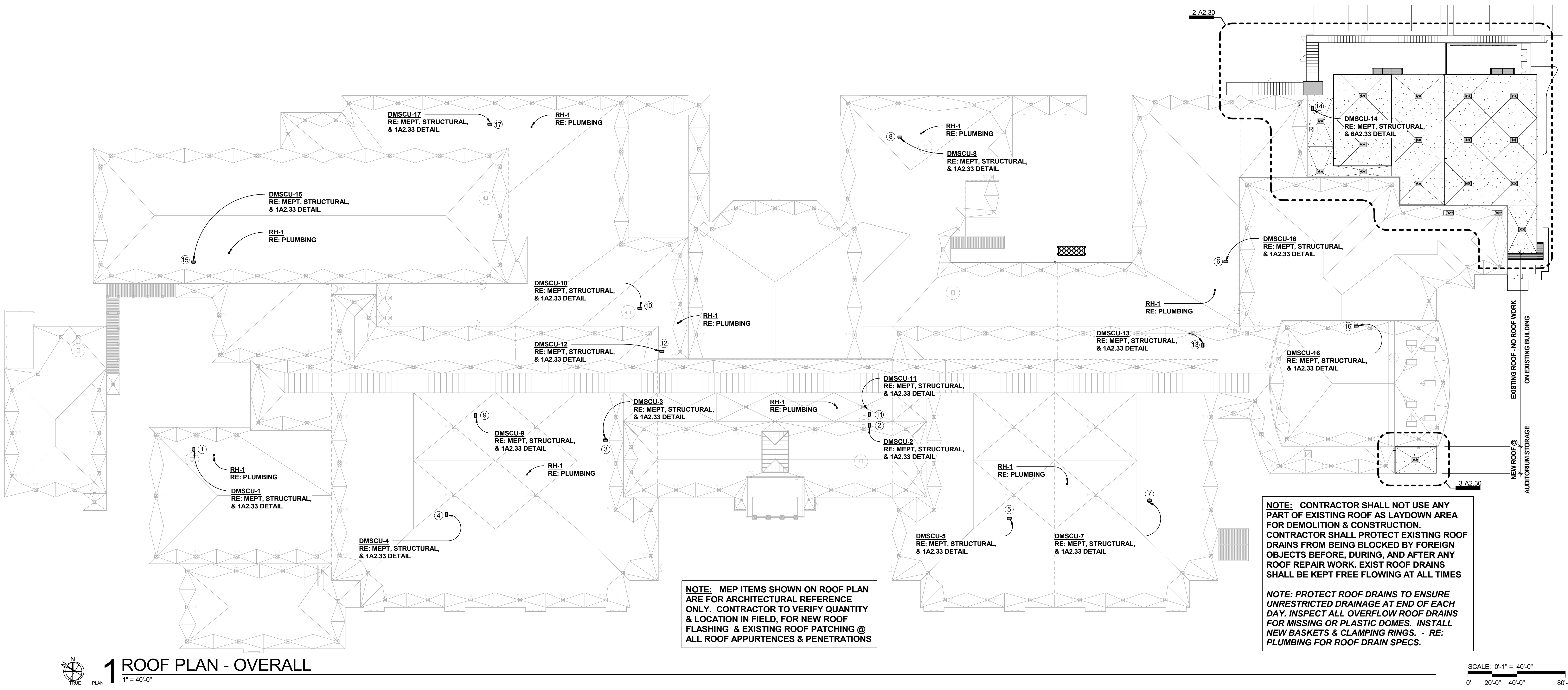
1/16" = 1'-0"



EXISTING OVERFLOW ROOF DRAIN @ AUDITORIUM TERMINATES AT DOWNSPOUT NOZZLE ON LOWER STORAGE ROOF - PROTECT DURING CONSTRUCTION

3 ENLG ROOF PLAN - AUDITORIUM STORAGE

3/32" = 1'-0"



NOTE: MEP ITEMS SHOWN ON ROOF PLAN ARE FOR ARCHITECTURAL REFERENCE ONLY. CONTRACTOR TO VERIFY QUANTITY & LOCATION IN FIELD, FOR NEW ROOF FLASHING & EXISTING ROOF PATCHING @ ALL ROOF APPURTENCES & PENETRATIONS

NOTE: CONTRACTOR SHALL NOT USE ANY PART OF EXISTING ROOF AS LAYDOWN AREA FOR DEMOLITION & CONSTRUCTION. CONTRACTOR SHALL PROTECT EXISTING ROOF DRAINS FROM BEING BLOCKED BY FOREIGN OBJECTS BEFORE, DURING, AND AFTER ANY ROOF REPAIR WORK. EXIST ROOF DRAINS SHALL BE KEPT FREE FLOWING AT ALL TIMES

NOTE: PROTECT ROOF DRAINS TO ENSURE UNRESTRICTED DRAINAGE AT END OF EACH DAY. INSPECT ALL OVERFLOW ROOF DRAINS FOR MISSING OR PLASTIC DOMES. INSTALL NEW BASKETS & CLAMPING RINGS. - RE: PLUMBING FOR ROOF DRAIN SPECS.

1 ROOF PLAN - OVERALL

1" = 40'-0"

GENERAL ROOF DESCRIPTION

Project Type:	***SBS ROOF MEMBRANE WITH MECHANICALLY FASTENED BASE SHEET OVER LWIC DECK SYSTEM***
Slope:	1/4" per ft (MINIMUM ALL NEW ROOF SLOPES)
Deck Type:	Slotted Galvanized Metal
Substrate:	Lightweight Insulating Concrete (LWIC)
Base Sheet:	Parabase Plus, mechanically attached.
Roof System:	Paradiene 20 TG, torch applied Paradiene 30 FR TG BW, torch applied
Flashing System:	Veral Aluminum, metal foil surfaced flashing sheet Paradiene 20 SA, flashing reinforcing & cant backer Parapro 123 Flashing, liquid flashing system

NOTE: See roofing specifications for complete description of roof type & materials used on Cy-Lakes High School Roof

MATERIAL KEYNOTES

055000 - B4	METAL ROOF LADDER
107313 - B0	PREFINISHED ALUMINUM AWNING
AS-05	EXISTING PRE-FAB WALKWAY CANOPY AT PORTABLE CLASSROOM BUILDINGS TO REMAIN.
AS-30	PRE-FABRICATED WALKWAY CANOPY. HEIGHT AND STYLE TO MATCH ADJACENT CANOPY. RE: SPEC. INSTALL OVER ENTIRE LENGTH OF SIDEWALK IN FRONT OF PORTABLES. CONNECT NEW CANOPY TO EXISTING CANOPIES OVER WALKWAY RAMPS TO PORTABLE BUILDINGS.
AS-31	PRE-FABRICATED WALKWAY CANOPY. HEIGHT AND STYLE TO MATCH EXISTING. RE: SPEC. PROVIDE AND INSTALL CANOPY FROM EXTRUDED ALUMINUM WALKWAY CANOPY AT BUILDING ENTRANCE TO PORTABLE BUILDING SIDEWALK.
AS-32	REPLACE EXISTING PRE-FABRICATED WALKWAY CANOPY. HEIGHT AND STYLE TO MATCH EXISTING, WITH NEW. RE: SPEC. PROVIDE AND INSTALL CANOPY FROM EXISTING EXIT TO NEW EXIT @ ADDITION

ROOF PLAN LEGEND

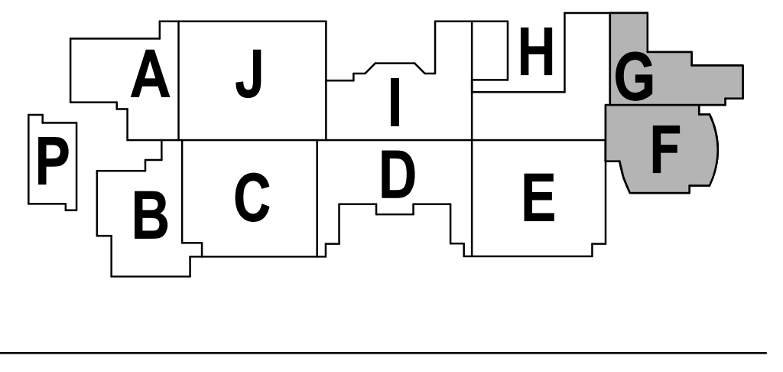
← 1/4" : 1'-0" MINIMUM	ROOF SLOPE TO DRAIN
RD	ROOF DRAIN
OD	OVERFLOW DRAIN
DS	DOWN SPOUT
OS	OVERFLOW SCUPPER
EXP JT	EXPANSION JOINT
MJ	WALL MASONRY JOINTS
CJ	WALL CONTROL JOINTS AT NEW TO EXISTING WALL CONNECTION
EF	EXHAUST FAN
SF	SUPPLY FAN
PP	PIPE PENETRATION

PATTERN	DESCRIPTION
▨	NEW SBS ROOF OVER LWIC DECK
■	NEW ROOF DRAIN SUMP AREA & ROOF PATCHING AT INSTALLATION OF NEW OVERFLOW DRAINS IN EXISTING ROOF
└	NEW WALL TO ROOF EXPANSION JOINT @ EXISTING WALL & NEW ROOF AT ADDITION - RE: A2.33
┐	NEW ROOF TO ROOF EXPANSION JOINT BETWEEN EXISTING ROOF & NEW ROOF AT ADDITION - RE: A2.33
8 A2.33 SIM	BUILDING & DETAIL SECTION OF ROOF EDGES & CONNECTIONS

GENERAL ROOF NOTES & DESCRIPTION

1. NEW & EXISTING ROOF IS MODIFIED BITUMEN ROOFING SYSTEM ON LIGHTWEIGHT INSULATING CONCRETE ON GALV STEEL OR SLOTTED STEEL DECK UNLESS OTHERWISE NOTED.
2. ROOF OVERFLOW SHALL BE LOCATED AT ALL EXISTING ROOF DRAINS WHERE INDICATED OR WHERE REQUIRED IN NEW CONSTRUCTION AND PER CODE. SEE ROOF DETAILS.
3. REFER TO SHEET A2.32 FOR TYPICAL ROOF LADDER & ROOF ACCESSORY DETAILS (CURBS, SPLASH PANS, HOUSINGS, ETC).
4. MEP ITEMS SHOWN ON EXISTING ROOF PLAN ARE FOR ARCHITECTURAL REFERENCE ONLY.
5. PROVIDE WALKWAY PROTECTION PADS UNDER ALL NEW LADDERS (TOP & BOT), HVAC EQUIPMENT, AND ROOF HATCHES.
6. EQUIPMENT AND ROOF COMPONENTS IN DRAWING ARE FOR REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL ROOF DRAIN, EXHAUST, SUPPLY FAN & ALL EQUIPMENT TO BE REPLACED.
7. PROVIDE NEW CURBS, FLASHING, & ROOFING WHERE NEW ROOF EQUIPMENT WILL BE INSTALLED OVER EXISTING ROOF. PATCH & REPAIR ROOF PER MANUF'R INSTRUCTIONS & STANDARDS. COORDINATE STRUCTURAL COMPONENTS PRIOR TO REPAIR IF NECESSARY.
8. INSTALL NEW ROOF LADDERS AS SHOWN ON ENLARGED NEW ROOF PLANS. GC TO COORDINATE WITH STRUCTURAL ENGINEER FOR ANY DEMO OF EXTERIOR BRICK ON EXISTING EXTERIOR WALL, TO INSTALL NEW STRUCTURAL STEEL HANGERS, MOUNTS & BRACKETS IN ORDER TO HANG NEW LADDER. NEW ROOF LADDERS ON NEW WALLS SHALL BE COORDINATED WITH STRUCTURAL ENGINEER FOR HANGERS, MOUNTS, AND BRACKETS TO SECURE NEW ROOF LADDER TO NEW WALL. GC TO COORDINATE PROPER DEPTH OF WALL MOUNT ANGLES, TO BYPASS ROOF LEVEL EXPANSION JOINTS, DOWNSPOUT NOZZLES, ETC. RE: BUILDING SECTIONS & ROOF PLANS
9. ALL ROOF SLOPES, INCLUDING CRICKETS & TAPERED LWIC, SHALL BE INSTALLED WITH A MINIMUM OF 1/4" PER FT. SLOPE TO ROOF DRAINS, TYPICAL. CRICKET THE UP SLOPE SIDE OF ALL CURBS & SQUARE PROJECTIONS.
10. REPLACE ALL SURFACE MOUNTED STAINLESS STEEL FLASHING, PRE-FINISHED FLASHINGS AND ASSOCIATED ROOF ACCESSORIES AT ROOF LEVEL AT INTERSECTION OF EXISTING BUILDING AND NEW BUILDING WORK. ALL THRU-WALL FLASHINGS SHALL REMAIN INTACT AT ROOF LEVEL FOR NEW WORK UNLESS OTHERWISE NOTED IN DEMOLITION & ROOF PLAN.
11. WHERE EXISTING MECHANICAL EQUIPMENT IS NOTED TO BE REMOVED PATCH AND INFILL EXISTING ROOF WITH SPECIFIED ROOFING SYSTEM. CONTRACTOR SHALL REMOVE ALL EXISTING COMPONENTS COMPLETE AND INFILL ROOF OPENINGS. CONTRACTOR TO VERIFY NEW STRUCTURAL COMPONENTS ARE REQ'D PRIOR TO INFILL OF ROOF DECK.
12. CONTRACTOR SHALL FIELD VERIFY TOP OF STEEL, THICKNESS OF EXISTING ROOF SYSTEM AND ROOF SLOPE OF EXISTING ROOF WHERE NEW ROOF WILL ABUTT. NEW BUILDING ADDITION ROOF SHALL ALIGN WITH ADJACENT EXISTING ROOF.
13. DEPTH OF ROOF METAL EDGE TRIM AND FINISH SHALL MATCH ADJACENT EXISTING.
14. FOR INFORMATION REGARDING ANY MEP ITEMS SHOWN FOR REFERENCE ON ROOF PLAN, SEE MEP DRAWINGS AND SPECIFICATIONS.
15. REFER TO MANUFACTURER'S PRINTED INSTALLATION DETAILS AND NRC STANDARD DETAILS FOR CONDITIONS NOT FULLY DOCUMENTED ON DRAWINGS AND SPECIFICATIONS.
16. ALL WOOD BLOCKING ON ROOF WORK, SHALL BE TREATED AS SPECIFIED.
17. REFER TO SHEET A2.31 & A2.32 FOR TYPICAL NEW SPILAST ROOF MEMBRANE DETAILS - ROOF MEMBRANE + LWIC ONLY .
18. REFER TO SHEETS A2.33 FOR NEW ROOF FLASHING DETAILS AT BUILDING ADDITIONS.
19. REFER TO SHEET A8.01 & A8.02 FOR ALL NEW WALL SECTIONS.
20. ALL ROOF DRAINS SHALL BE CLEAR & FREE FLOWING UPON COMPLETION OF DEMOLITION & CONSTRUCTION
21. EXISTING EDGE BLOCKING AT NEW ROOF WORK ON EXISTING ROOF EDGES, SHALL BE REMOVED & REPLACED AT NEW EDGE FLASHING & NEW EXPANSION JOINTS ABUTTING NEW BUILDING ADDITIONS. ROOF OVERLAY PROJECTS SHALL HAVE ALL ROOF EDGE WOOD BLOCKING REMOVED & REPLACED AT ALL EDGES OF ROOF AFFECTED BY NEW ROOF OVERLAY (CAP SHEET REPLACEMENT).

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT MARIA CAROLINA WEITZMAN 15620 STATE OF TEXAS 11/17/2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

OVERALL & ENLARGED ROOF PLAN

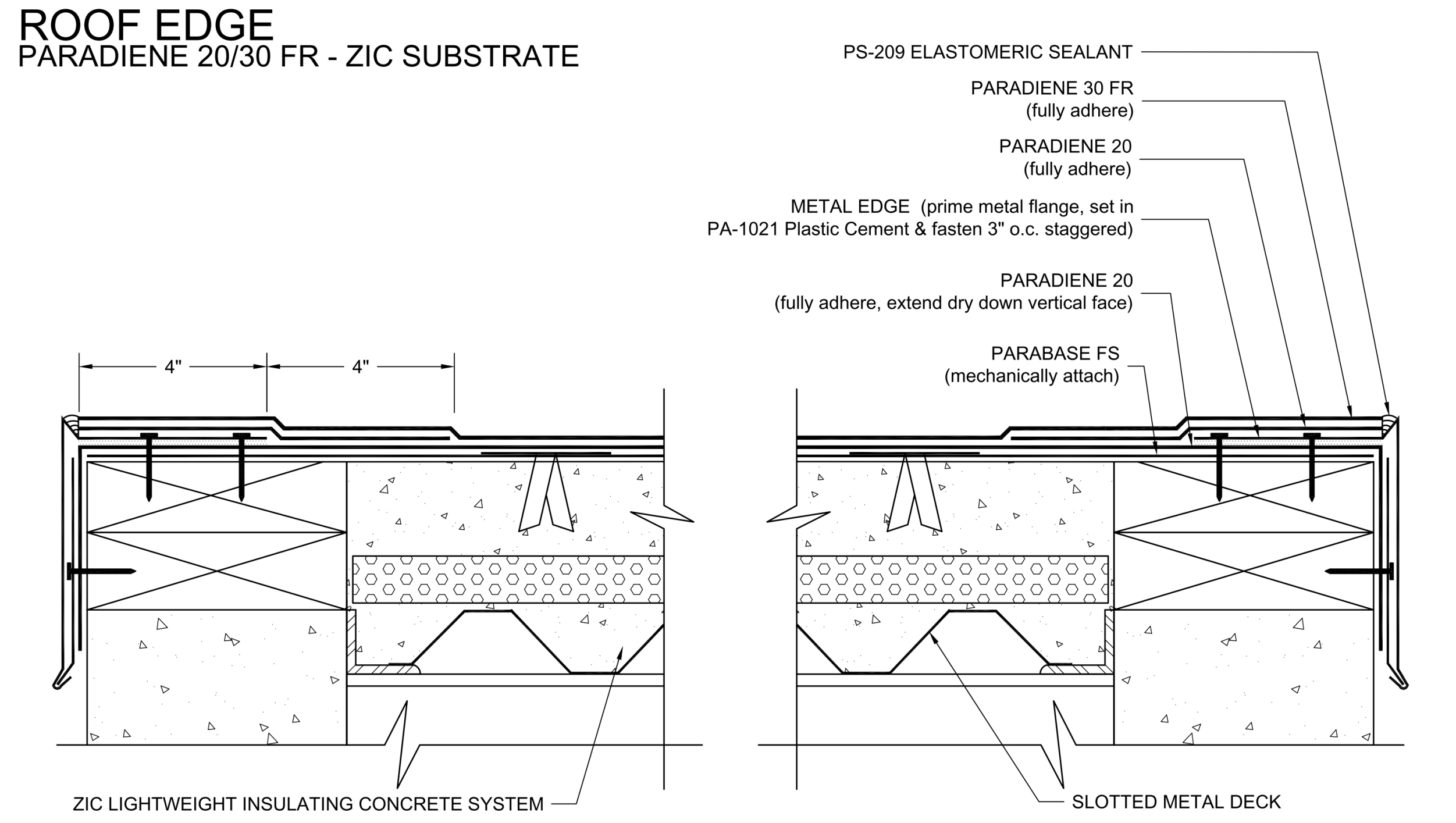
A2.30

of

11/14/2024 2:34:48 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

ROOF EDGE
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, USE PA-1125 OR PA-917 LS PRIMER. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
2. THE CARPENTRY AND METAL WORK SHOWN DEPICTS SHOP FABRICATION AND JOB-SITE ASSEMBLY. THESE COMPONENTS SHOULD BE DESIGNED/FABRICATED/INSTALLED ACCORDING TO GENERALLY ACCEPTED INDUSTRY PRACTICES, STANDARDS, AND APPROVALS.
3. DISSIMILAR METAL TYPES SUBJECT TO ELECTROLYTIC REACTION SHOULD BE PHYSICALLY SEPARATED.
4. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

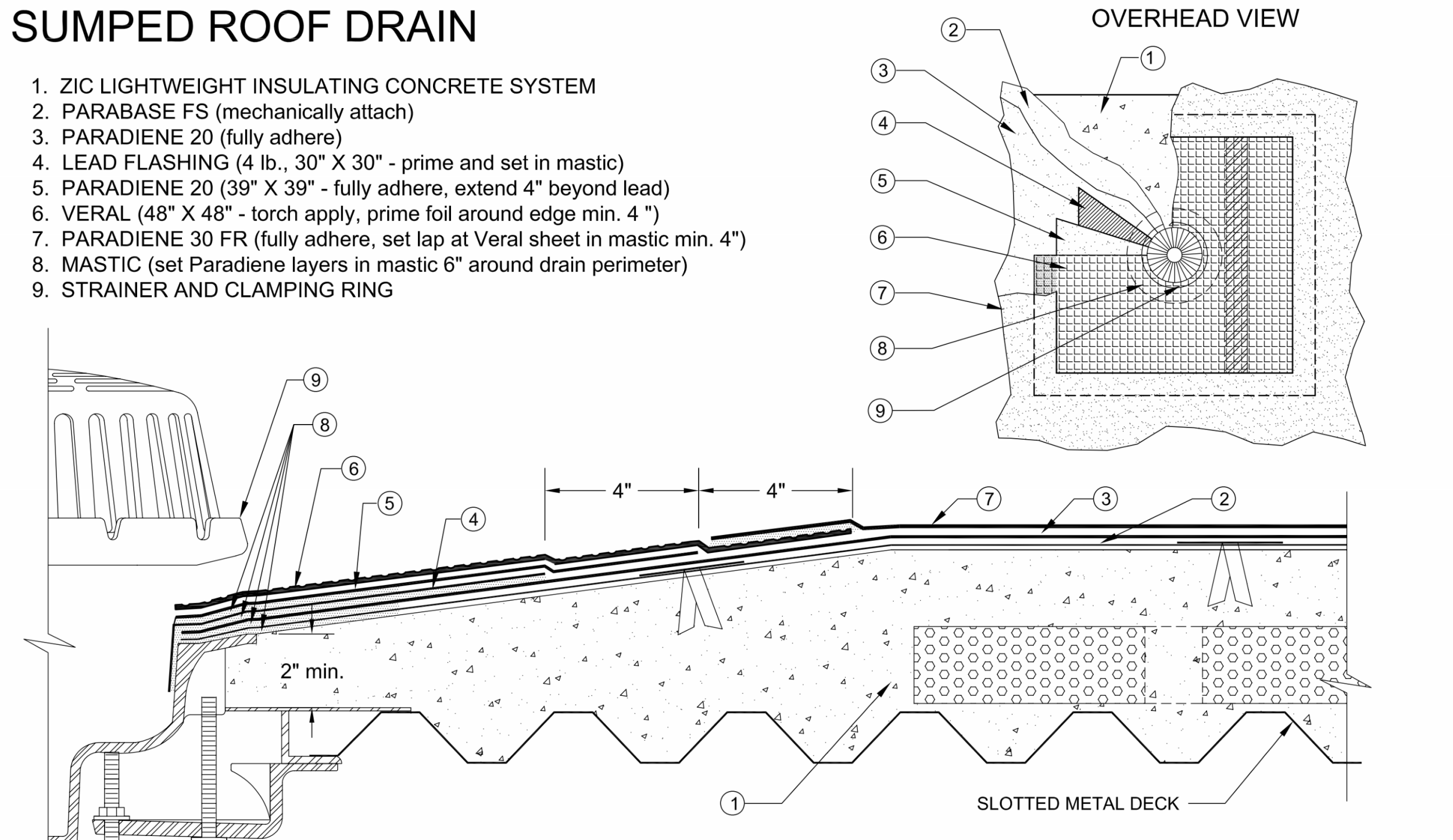
N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Roof Edge - 2030 - ZIC | Rev: 12.14.17

1 TYPICAL ROOF EDGE @ MEMBRANE + LWIC
NTS

SUMPED ROOF DRAIN

1. ZIC LIGHTWEIGHT INSULATING CONCRETE SYSTEM
2. PARABASE FS (mechanically attach)
3. PARADIENE 20 (fully adhere)
4. LEAD FLASHING (4 lb., 30" X 30" - prime and set in mastic)
5. PARADIENE 20 (39" X 39" - fully adhere, extend 4" beyond lead)
6. VERAL (48" X 48" - torch apply, prime foil around edge min. 4 ")
7. PARADIENE 30 FR (fully adhere, set lap at Veral sheet in mastic min. 4")
8. MASTIC (set Paradiene layers in mastic 6" around drain perimeter)
9. STRAINER AND CLAMPING RING



NOTES:
1. PA-1021 PLASTIC CEMENT AND PA-1125 OR PA-917 LS PRIMER ARE REQUIRED WHERE MASTIC AND PRIMER ARE INDICATED.
2. ROOF DRAIN COMPONENTS AND INSTALLATION GUIDELINES ARE SUPPLIED BY THE DRAIN MANUFACTURER.
3. VERAL ALUMINUM OR STAINLESS STEEL MUST BE USED IN DRAIN SUMP APPLICATIONS. LAP VERAL OUTSIDE OF DRAIN BOWL AREA.
4. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN SIPLAST MEMBRANE & SRIS SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

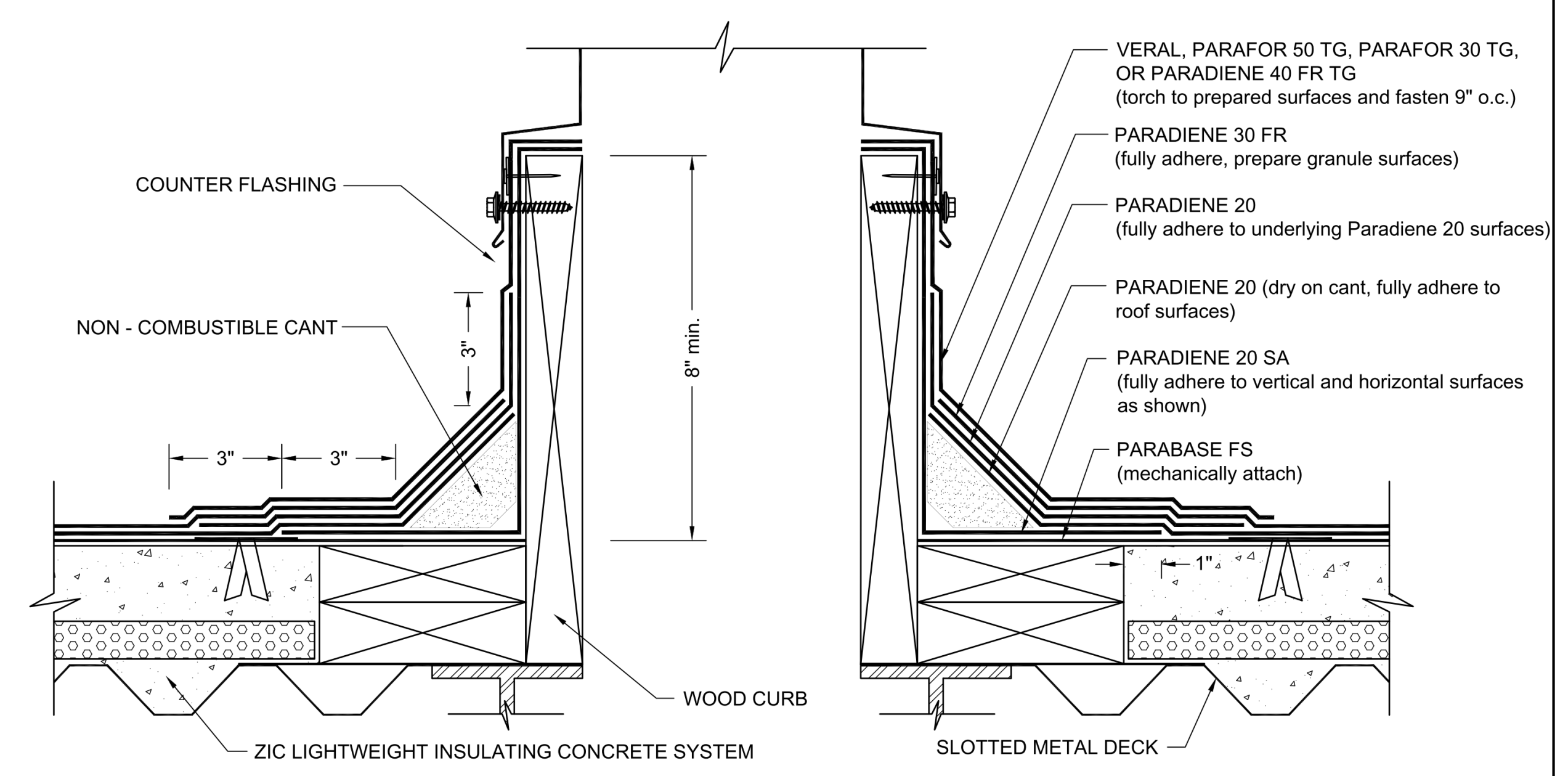
CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S.

siplast
Siplast - 1000 East Rochelle Boulevard - Irving, Texas - 75062-3940
(800) 922-8800 FAX: (469) 995-2206 www.siplast.com
Ref. #: 2031zbD2
Date: 10.30.08

2 TYPICAL ROOF DRAIN @ MEMBRANE + LWIC
NTS

CURB with TORCH-APPLIED FLASHING
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. PREPARE GRANULE SURFACES UNDER FLASHING BY TORCH PREPARATION.
2. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, TA-119 PRIMER IS REQUIRED FOR ALL PARADIENE 20 SA FLASHING REINFORCING AND STRIPPING PLY APPLICATIONS. USE PA-1125 OR PA-917 LS PRIMER FOR ALL OTHER PARADIENE 20 SERIES PRODUCTS THAT ARE NOT SELF-ADHESIVE SHEETS. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
3. THE CARPENTRY AND METAL WORK SHOWN DEPICTS SHOP FABRICATION AND JOB-SITE ASSEMBLY. THESE COMPONENTS SHOULD BE DESIGNED/FABRICATED/INSTALLED ACCORDING TO GENERALLY ACCEPTED INDUSTRY PRACTICES, STANDARDS, AND APPROVALS.
4. DISSIMILAR METAL TYPES SUBJECT TO ELECTROLYTIC REACTION SHOULD BE PHYSICALLY SEPARATED.
5. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

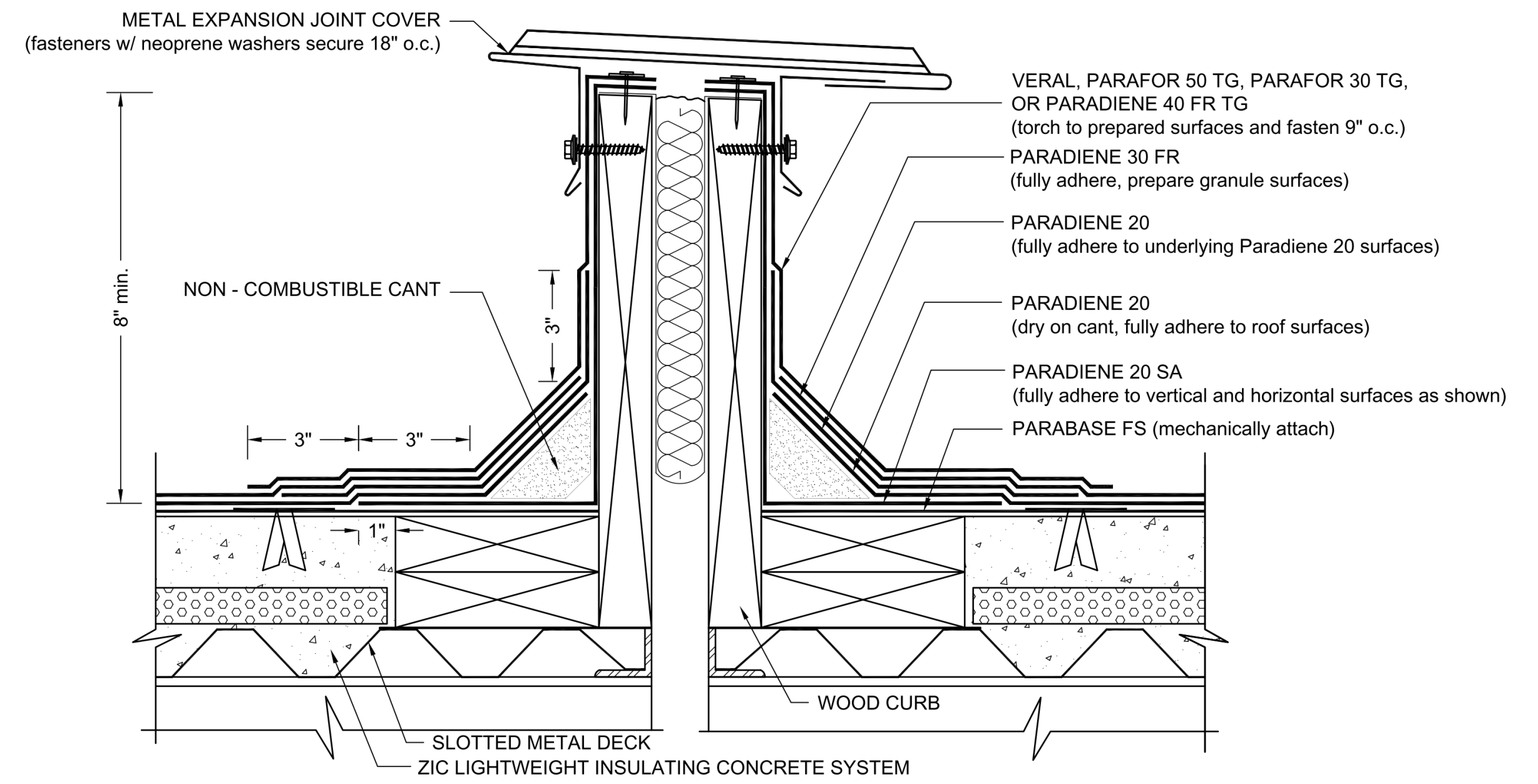
CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Curb - 2030 - ZIC | Rev: 12.14.17

3 TYPICAL ROOF CURB @ MEMBRANE + LWIC
NTS

EXPANSION JOINT (Roof to Roof) with TORCH-APPLIED FLASHING
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. PREPARE GRANULE SURFACES UNDER FLASHING BY TORCH PREPARATION.
2. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, TA-119 PRIMER IS REQUIRED FOR ALL PARADIENE 20 SA APPLICATIONS. USE PA-1125 OR PA-917 LS PRIMER FOR ALL OTHER PARADIENE 20 SERIES PRODUCTS THAT ARE NOT SELF-ADHESIVE SHEETS. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
3. THE CARPENTRY AND METAL WORK SHOWN DEPICTS SHOP FABRICATION AND JOB-SITE ASSEMBLY. THESE COMPONENTS SHOULD BE DESIGNED/FABRICATED/INSTALLED ACCORDING TO GENERALLY ACCEPTED INDUSTRY PRACTICES, STANDARDS, AND APPROVALS.
4. DISSIMILAR METAL TYPES SUBJECT TO ELECTROLYTIC REACTION SHOULD BE PHYSICALLY SEPARATED.
5. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

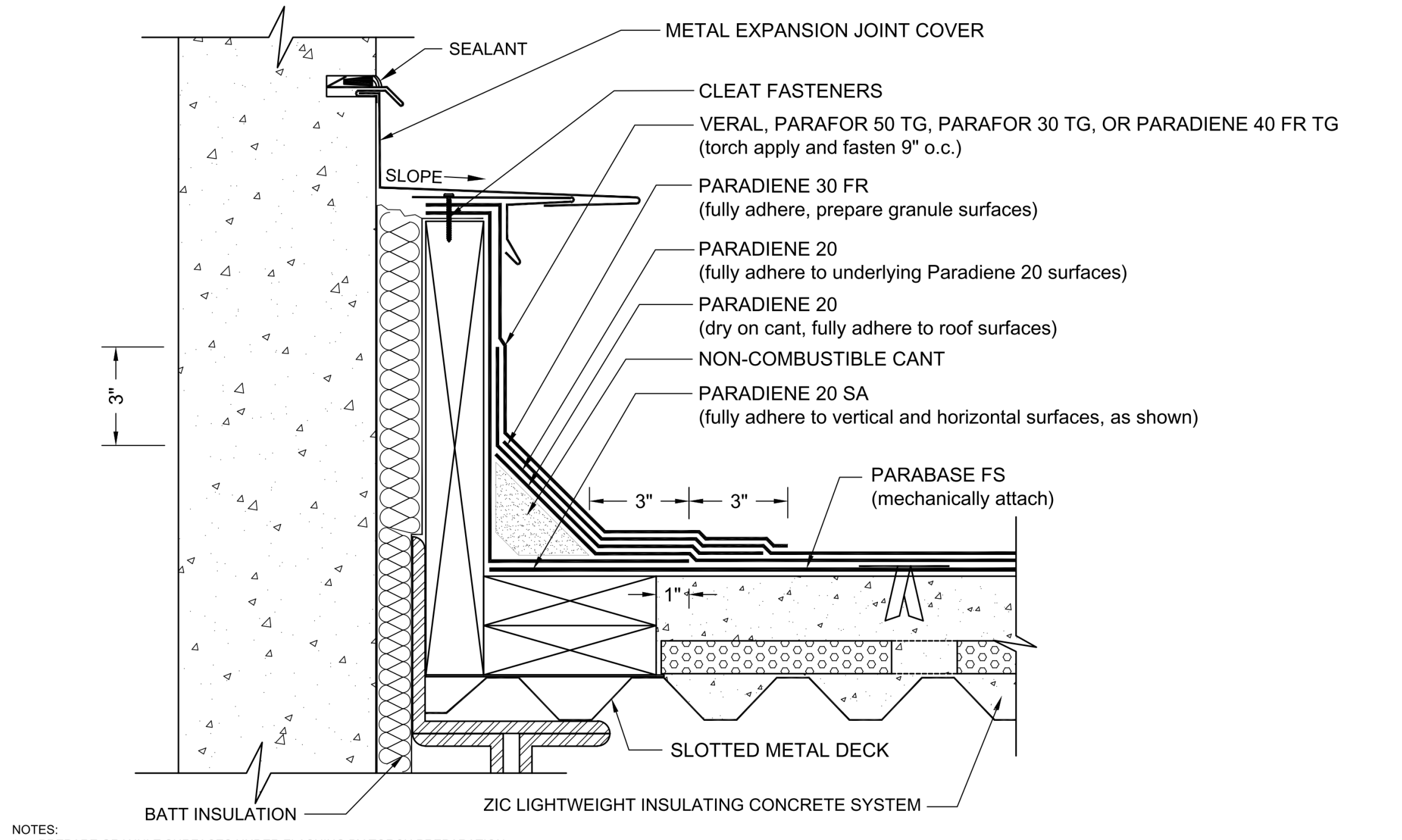
CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Exp Jt Roof to Roof - 2030 - ZIC | Rev: 12.9.16

4 TYPICAL ROOF TO ROOF EXP JT @ MEMBRANE + LWIC
NTS

EXPANSION JOINT (Roof to Wall) with TORCH-APPLIED FLASHING
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. PREPARE GRANULE SURFACES UNDER FLASHING BY TORCH PREPARATION.
2. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, TA-119 PRIMER IS REQUIRED FOR ALL PARADIENE 20 SA FLASHING REINFORCING AND STRIPPING PLY APPLICATIONS. USE PA-1125 OR PA-917 LS PRIMER FOR ALL OTHER PARADIENE 20 SERIES PRODUCTS THAT ARE NOT SELF-ADHESIVE SHEETS. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
3. THE CARPENTRY AND METAL WORK SHOWN DEPICT SHOP FABRICATION AND JOB-SITE ASSEMBLY. THESE COMPONENTS SHOULD BE DESIGNED/FABRICATED/INSTALLED ACCORDING TO GENERALLY ACCEPTED INDUSTRY PRACTICES, STANDARDS, AND APPROVALS.
4. A NAILER OR TREATED WOOD CANT MAY BE REQUIRED FOR COMPLIANCE WITH SPECIFIC BUILDING CODE OR APPROVALS.
5. DISSIMILAR METAL TYPES SUBJECT TO ELECTROLYTIC REACTION SHOULD BE PHYSICALLY SEPARATED.
6. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

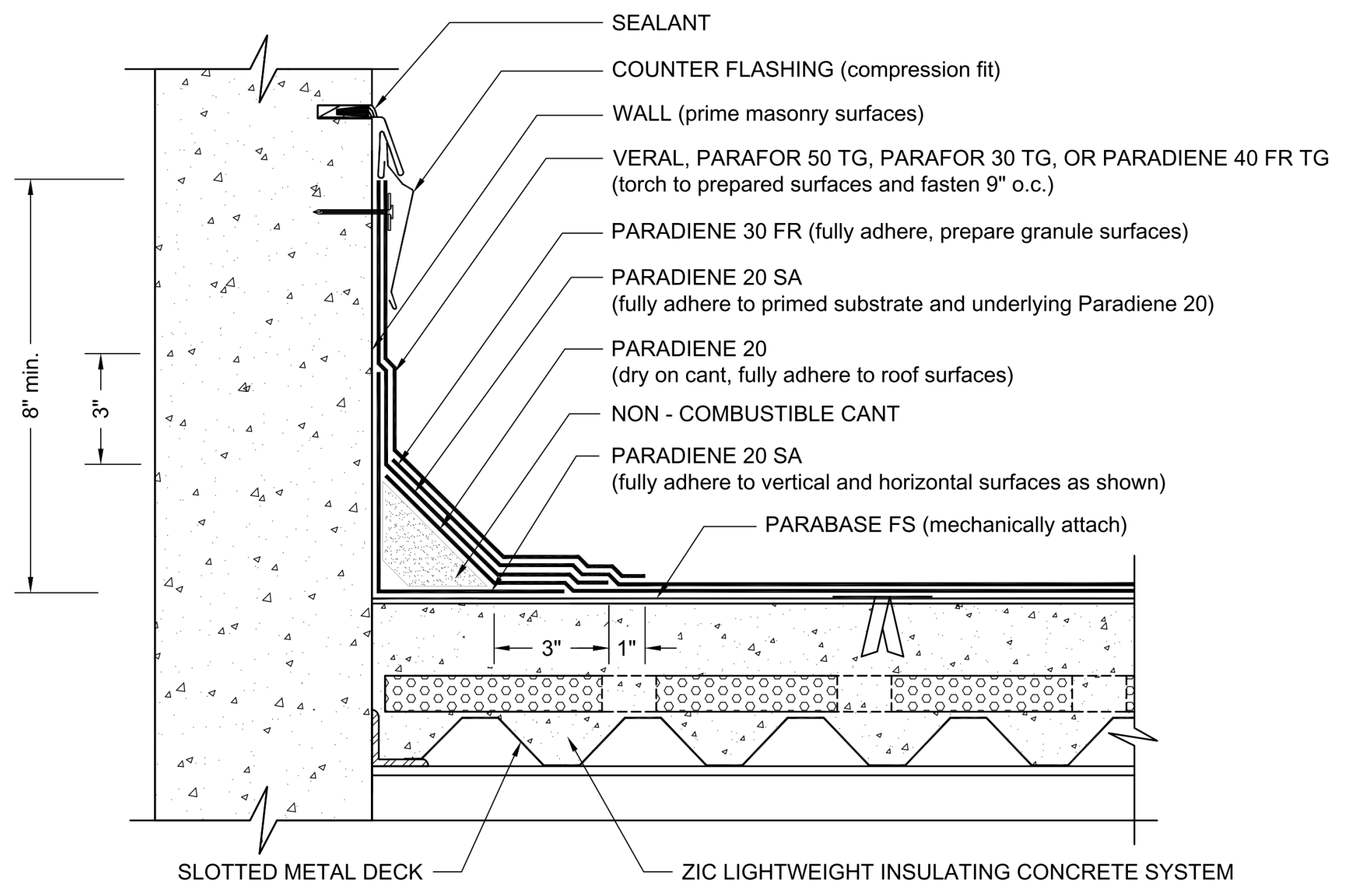
CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Exp Jt Roof to Wall - 2030 - ZIC | Rev: 12.9.16

5 TYPICAL ROOF TO WALL EXP JT @ MEMBRANE + LWIC
NTS

PARAPET - WALL SUPPORTED DECK with TORCH-APPLIED FLASHING
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. PREPARE GRANULE SURFACES UNDER FLASHING BY TORCH PREPARATION.
2. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, TA-119 PRIMER IS REQUIRED FOR ALL PARADIENE 20 SA FLASHING REINFORCING AND STRIPPING PLY APPLICATIONS. USE PA-1125 OR PA-917 LS PRIMER FOR ALL OTHER PARADIENE 20 SERIES PRODUCTS THAT ARE NOT SELF-ADHESIVE SHEETS. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
3. THE METAL WORK SHOWN DEPICTS SHOP FABRICATION AND JOB-SITE ASSEMBLY. THESE COMPONENTS SHOULD BE DESIGNED/FABRICATED/INSTALLED ACCORDING TO GENERALLY ACCEPTED INDUSTRY PRACTICES, STANDARDS, AND APPROVALS.
4. A NAILER AND TREATED WOOD CANT MAY BE REQUIRED FOR COMPLIANCE WITH SPECIFIC BUILDING CODES OR APPROVALS.
5. DISSIMILAR METAL TYPES SUBJECT TO ELECTROLYTIC REACTION SHOULD BE PHYSICALLY SEPARATED.
6. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

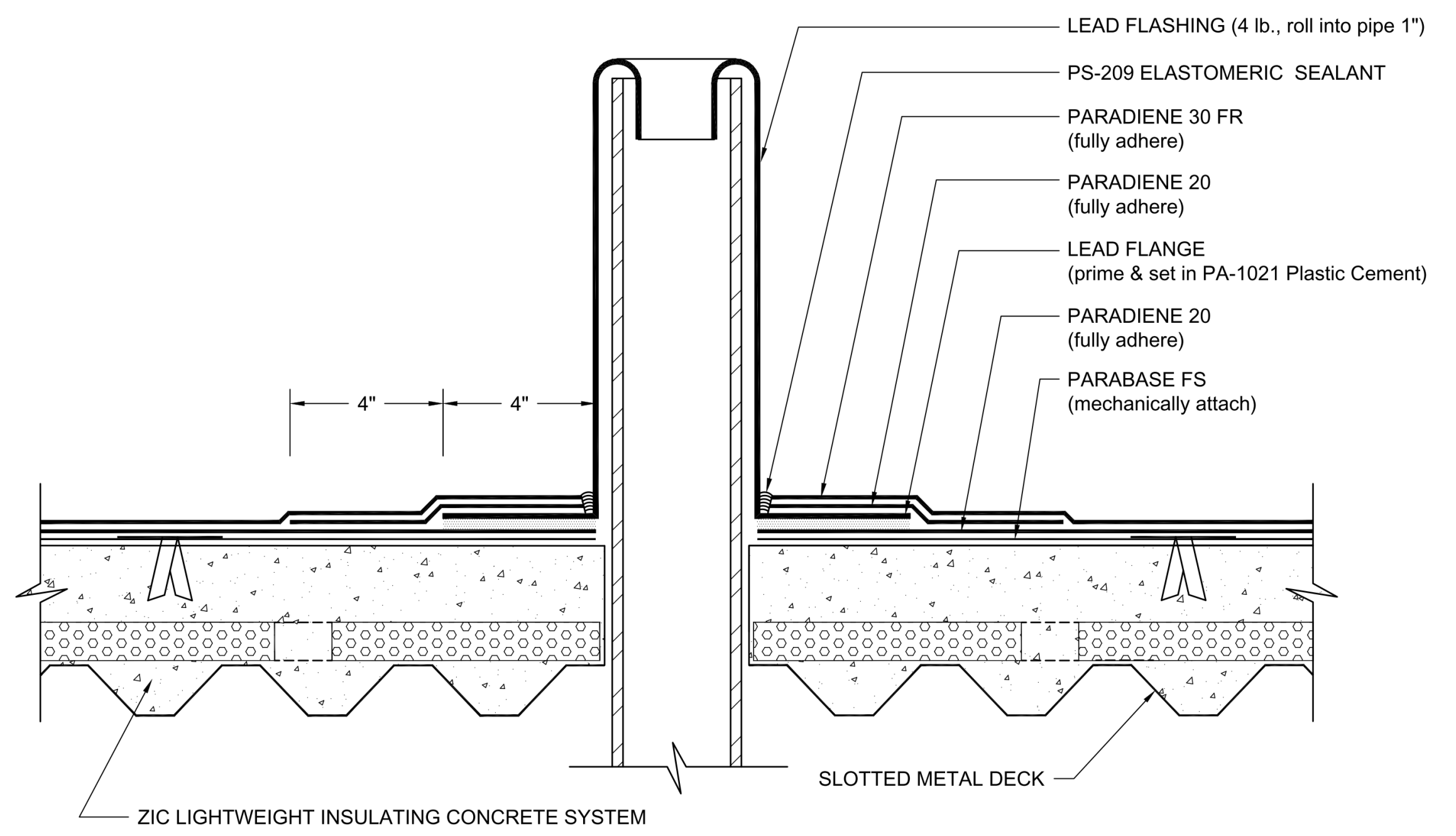
CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Parapet - 2030 - ZIC | Rev: 12.8.16

6 TYPICAL WALL BASE @ ROOF MEMBRANE + LWIC
NTS

WASTE STACK
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, USE PA-1125 OR PA-917 LS PRIMER. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
2. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

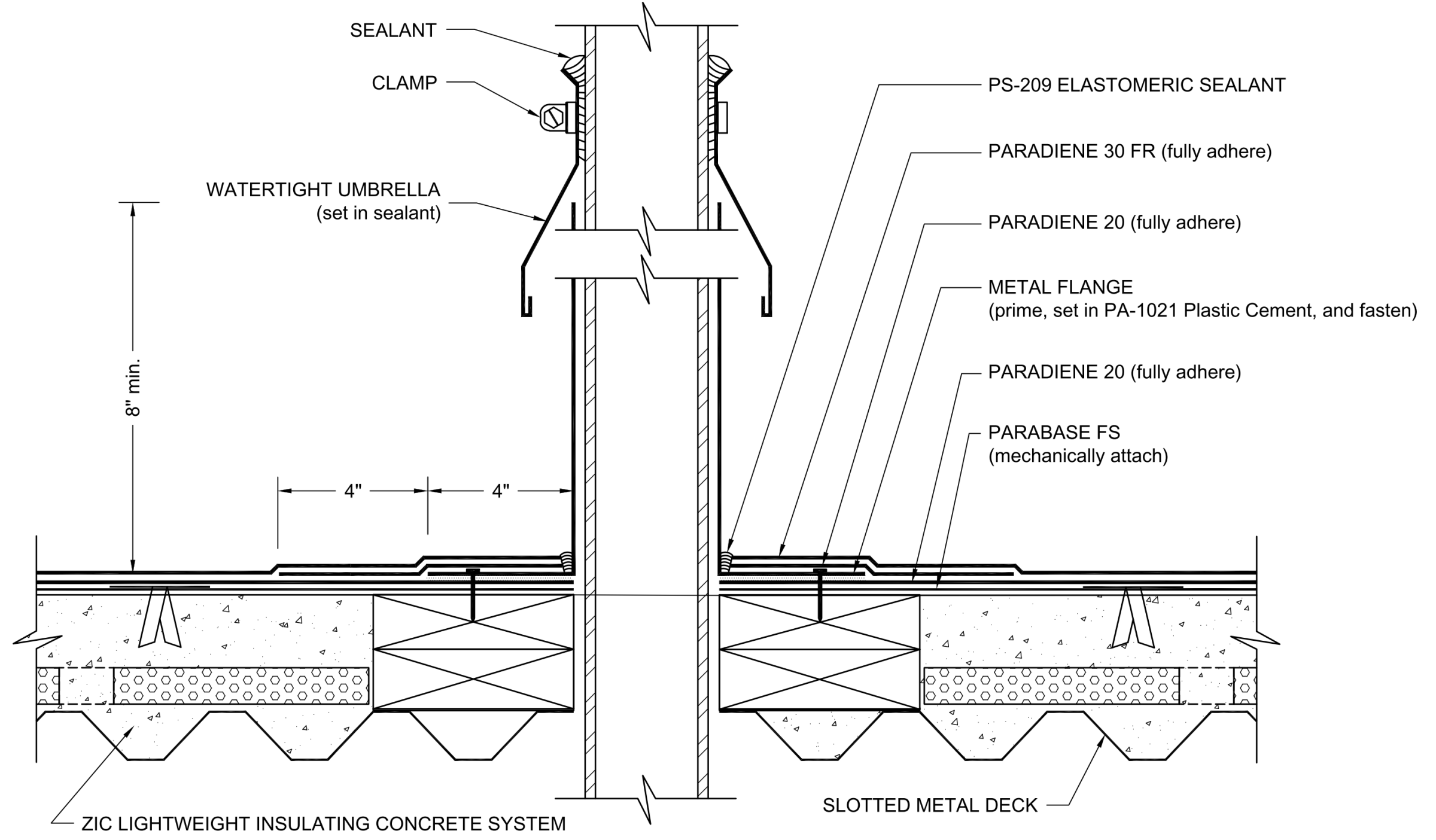
CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Waste Stack - 2030 - ZIC | Rev: 12.9.16

7 TYPICAL WASTE STACK @ ROOF MEMBRANE + LWIC
NTS

EQUIPMENT FRAME
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, USE PA-1125 OR PA-917 LS PRIMER. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
2. THE CARPENTRY AND METAL WORK SHOWN DEPICT SHOP FABRICATION AND JOB-SITE ASSEMBLY. THESE COMPONENTS SHOULD BE DESIGNED/FABRICATED/INSTALLED ACCORDING TO GENERALLY ACCEPTED INDUSTRY PRACTICES, STANDARDS, AND APPROVALS.
3. DISSIMILAR METAL TYPES SUBJECT TO ELECTROLYTIC REACTION SHOULD BE PHYSICALLY SEPARATED.
4. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

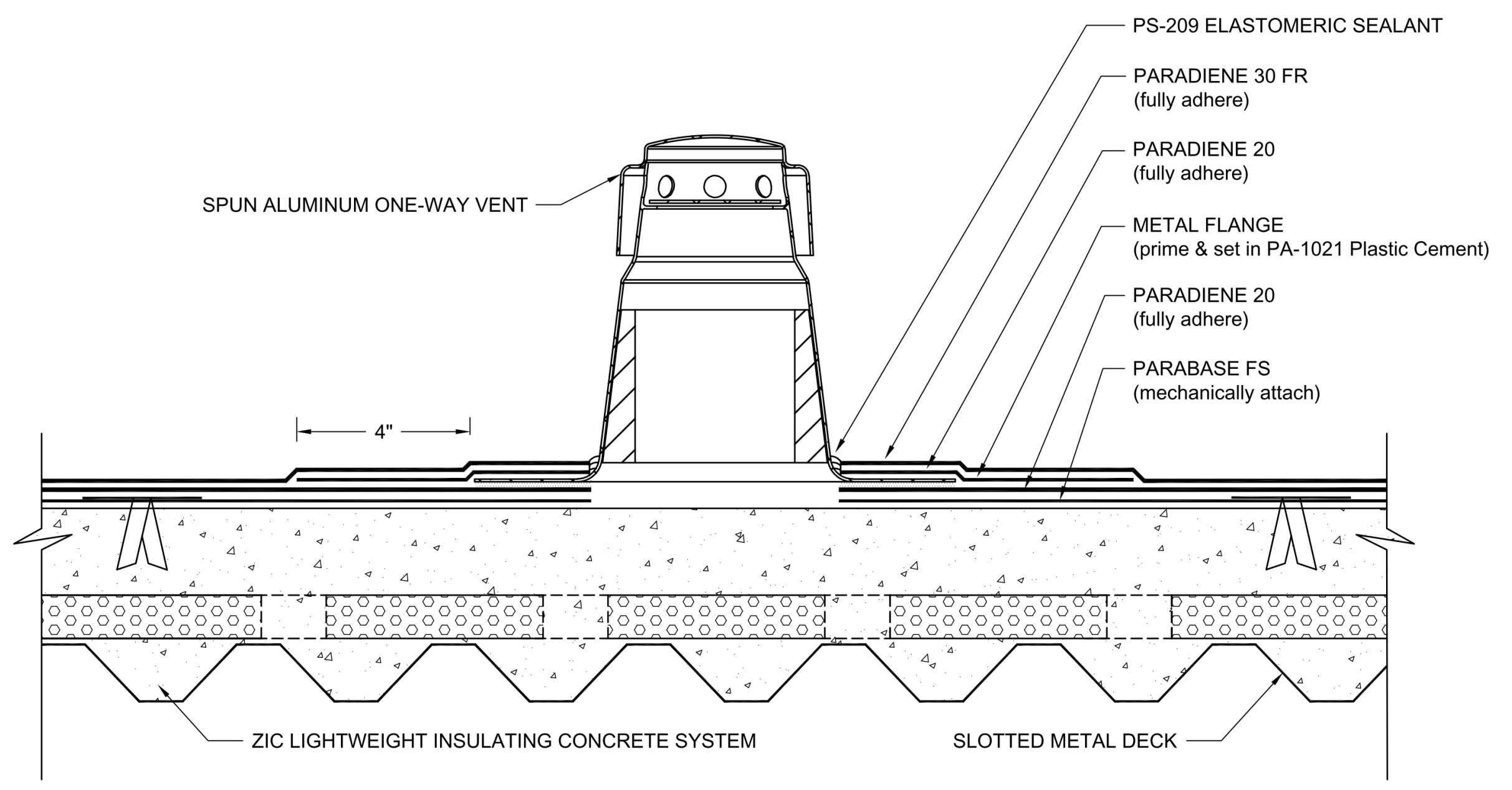
CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Equipment Frame - 2030 - ZIC | Rev: 12.8.16

8 TYPICAL EQUIPMENT FRAME @ ROOF MEMBRANE + LWIC
NTS

ROOF VENT
PARADIENE 20/30 FR - ZIC SUBSTRATE



NOTES:
1. ONE WAY VENTS SHOULD BE PREFABRICATED FROM SPUN ALUMINUM. PLASTIC VENTS ARE NOT ACCEPTABLE.
2. VENTS SHOULD BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE TECHNICAL BULLETIN FOR VENTING SIPLAST ROOF MEMBRANE AND ROOF INSULATION SYSTEMS.
3. WHERE PRIMER IS INDICATED TO MAINTAIN PROPER ADHESION, USE PA-1125 OR PA-917 LS PRIMER. CONTACT SIPLAST FOR SPECIFIC REQUIREMENTS.
4. REQUIREMENTS AND RECOMMENDATIONS DETAILED IN CURRENT SIPLAST SPECIFICATIONS SHALL APPLY IN ADDITION TO THE ABOVE DRAWING.

CAUTION: SIPLAST RECOMMENDS THAT ALL PRACTICES PERTAINING TO NRCA CERTA GUIDELINES BE FOLLOWED WHEN TORCHING METHODS ARE EMPLOYED. THIS INCLUDES PERFORMING A FIRE WATCH FOLLOWING ANY TORCH APPLICATIONS. ALWAYS HAVE APPROVED FIRE-EXTINGUISHING EQUIPMENT NEARBY.

N.T.S

siplast 1000 Rochelle Boulevard - Irving, Texas - 75062 (800) 922-8800 www.siplast.com | Ref: Roof Vent - 2030 - ZIC | Rev: 12.8.16

9 TYPICAL ROOF VENT @ ROOF MEMBRANE + LWIC
NTS

TYPICAL SIPLAST FLASHING DETAIL NOTES

1. SIPLAST FLASHING DETAILS ARE TYPICAL APPLICATIONS AT SBS MODIFIED BITUMOUS MEMBRANE OVER A MECHANICALLY ATTACHED BASE SHEET AT NEW CONSTRUCTION.
2. THE LWIC DECK SHOWN IN SPILAST DETAILS MAY VARY BETWEEN Z.I.C. AND INSULCEL. SEE SPECIFICATIONS FOR THE LWIC DECK CONSTRUCTION, MATERIALS, MEANS & METHODS.
3. ALL SIPLAST DETAILS ON THIS SHEET FOCUS ON THE PROPRIETARY MEMBRANE FLASHING STANDARDS ASSOCIATED WITH APPLICATION OF METAL ROOF ACCESSORIES LIKE ROOF EDGES, VENTS, EXPANSION JOINTS, ROOF PENETRATIONS, ETC.
4. AT NEW ROOF ADDITIONS, SEE NEW ROOF DETAILS ON SHEET A2.32 FOR CONDITIONS THAT MAY DIFFER FROM THESE TYPICAL DETAILS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

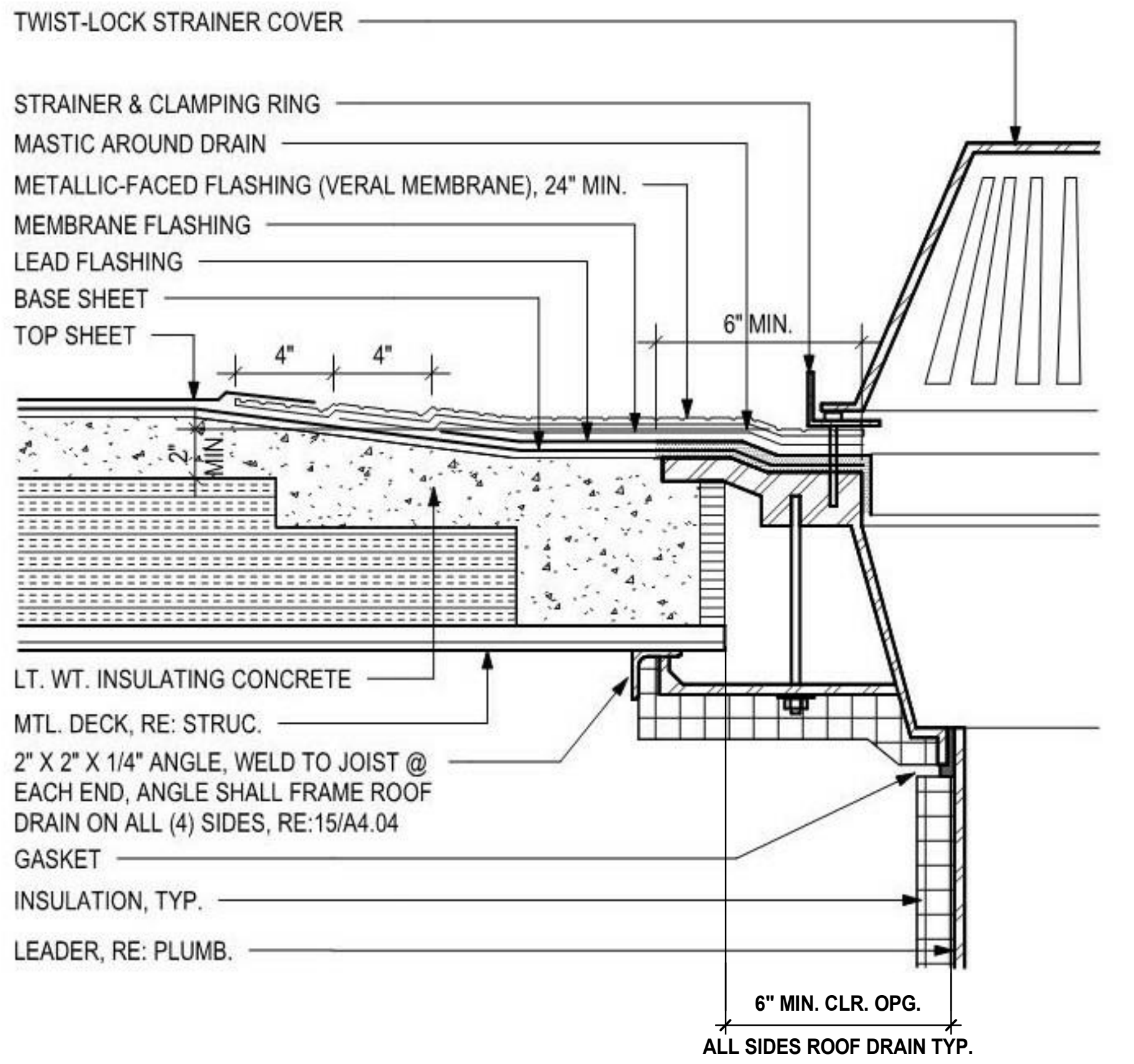
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

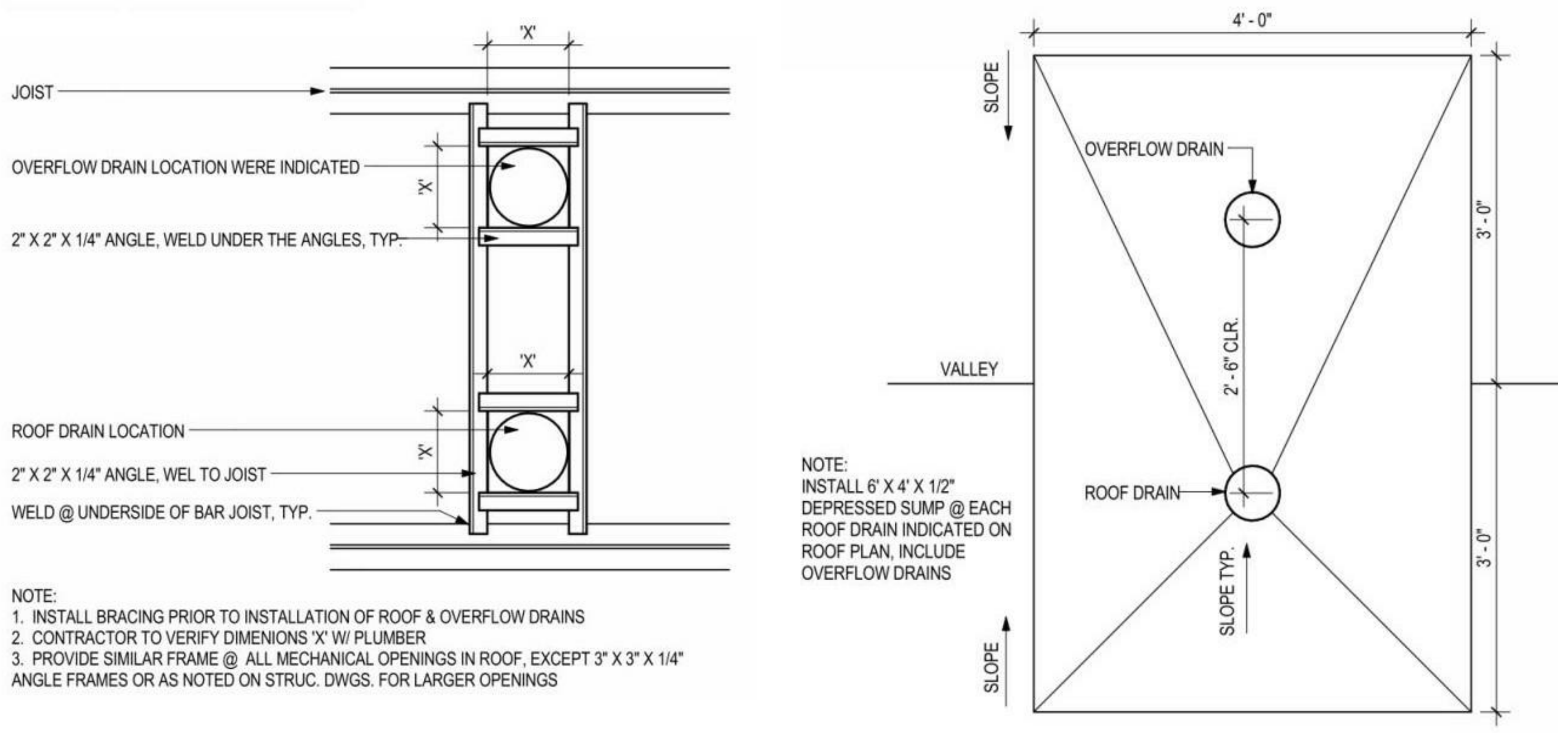
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

SIPLAST TYPICAL
LWIC MEMBRANE
ROOF DETAILS

A2.31
of



1 TYPICAL ROOF DRAIN INSTALL



NOTE:
1. INSTALL BRACING PRIOR TO INSTALLATION OF ROOF & OVERFLOW DRAINS
2. CONTRACTOR TO VERIFY DIMENIONS 'X' W/ PLUMBER
3. PROVIDE SIMILAR FRAME @ ALL MECHANICAL OPENINGS IN ROOF, EXCEPT 3" X 3" X 1/4" ANGLE FRAMES OR AS NOTED ON STRUC. DWGS. FOR LARGER OPENINGS

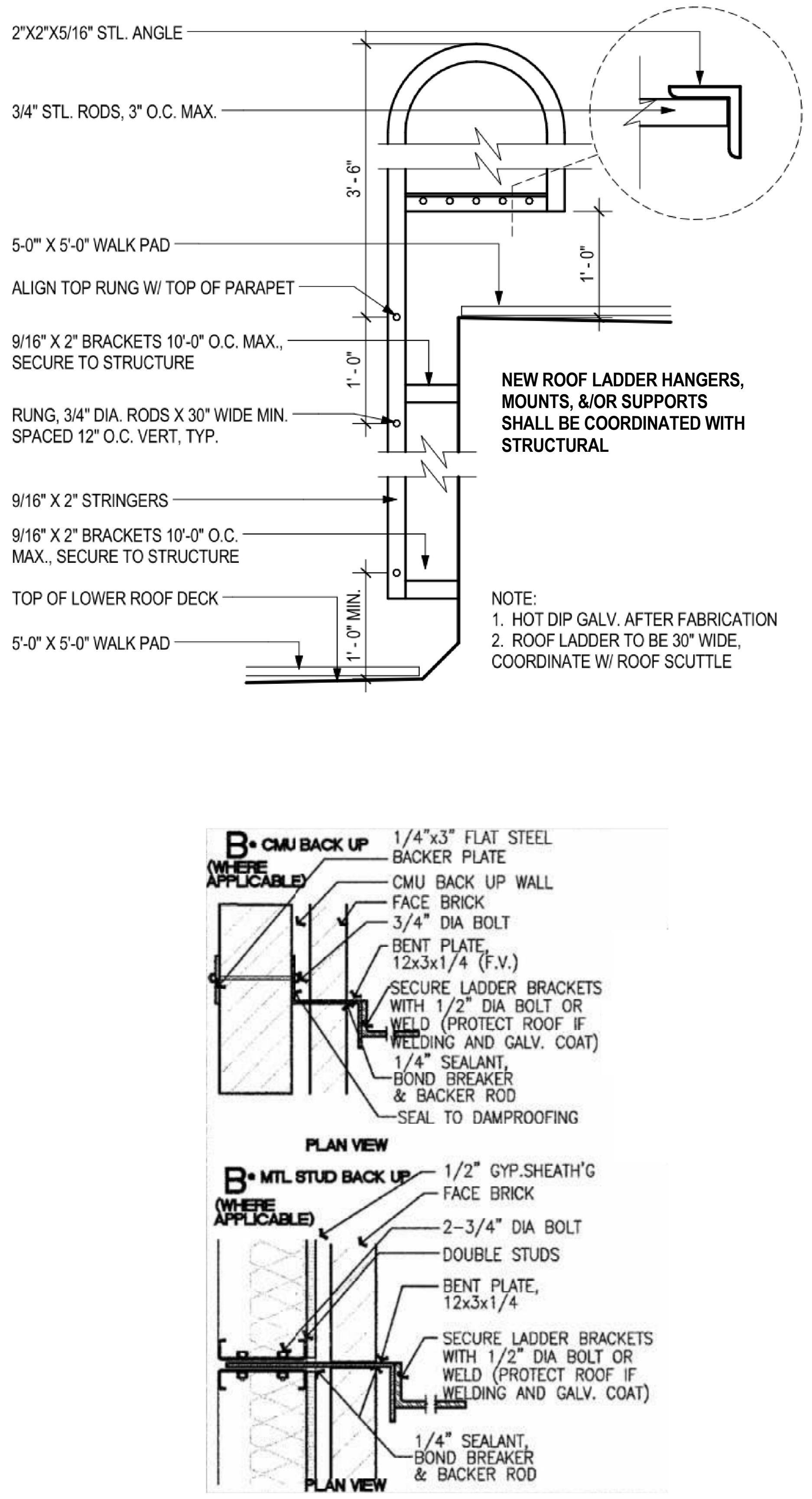
NOTE:
INSTALL 6' X 4' X 1/2" DEPRESSED SUMP @ EACH ROOF DRAIN INDICATED ON ROOF PLAN, INCLUDE OVERFLOW DRAINS

TYPICAL ROOF DRAIN FRAMING DETAIL

TYPICAL ROOF DRAIN SUMP DETAIL

2 TYPICAL ROOF LADDER INSTALL

3" = 1'-0"

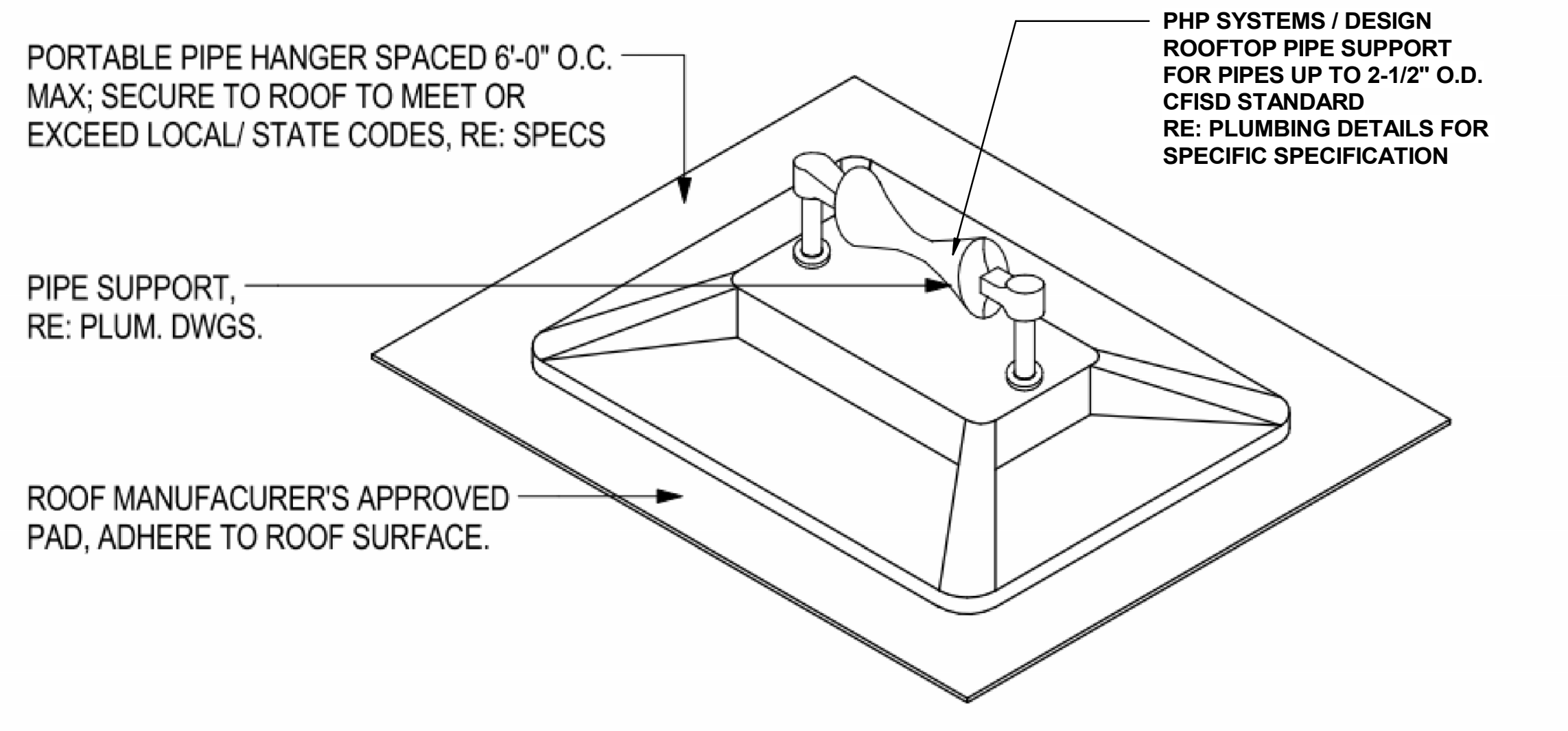


NEW ROOF LADDER HANGERS, MOUNTS, &/OR SUPPORTS SHALL BE COORDINATED WITH STRUCTURAL

NOTE:
1. HOT DIP GALV. AFTER FABRICATION
2. ROOF LADDER TO BE 30" WIDE, COORDINATE W/ ROOF SCUTTLE

3 TYPICAL ROOF LADDER INSTALL

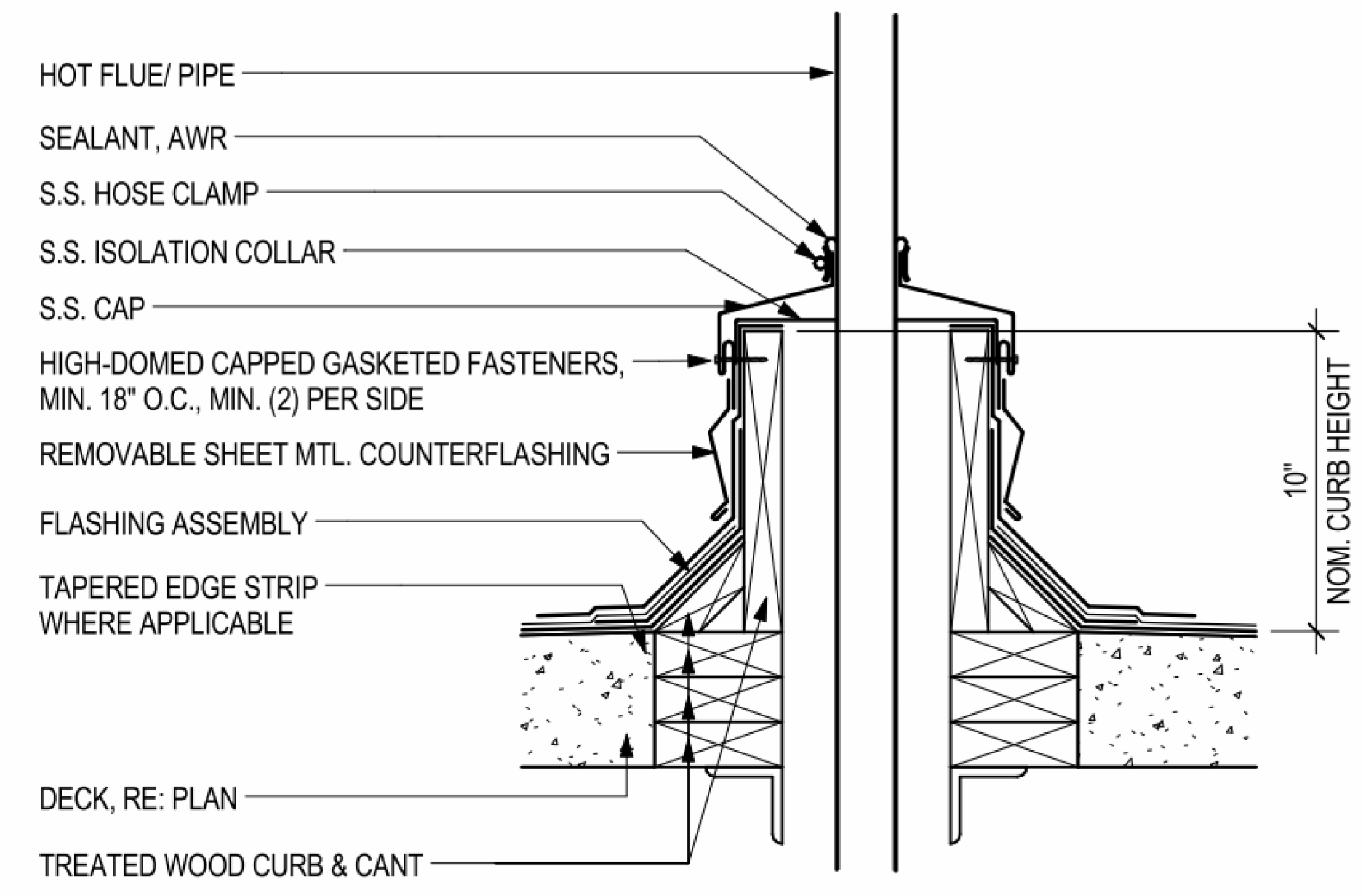
3" = 1'-0"



NOTES:
1. GAS PIPING SUPPORT SHOWN IS FOR PIPE SMALLER THAN 2-1/2" IN DIA. THIS DETAIL IS FOR REFERENCE ONLY. REFER TO PLUMBING DWGS. FOR ADDITIONAL INFORMATION
2. FIELD LOCATE ROOF STRUCTURAL SUPPORTS AND PLACE CONCRETE BASE OF PIPE SUPPORT OVER ROOF SUPPORTS ONLY. PROVIDE BASE OF ADEQUATE LENGTH TO SPAN ROOF JOIST TO PREVENT SUPPORTS SETTING ON ROOF DECK ONLY.
3. INSTALL EVERY 6'-0" O.C. AT ALL ROOF PIPING AND CONDUIT. PROVIDE AN EXTRA SUPPORT EACH SIDE OF CORNERS WHERE PIPE CHANGES DIRECTION.
4. PROVIDE 12"X12" WALK PAD UNDER WALK PAD SUPPORT.

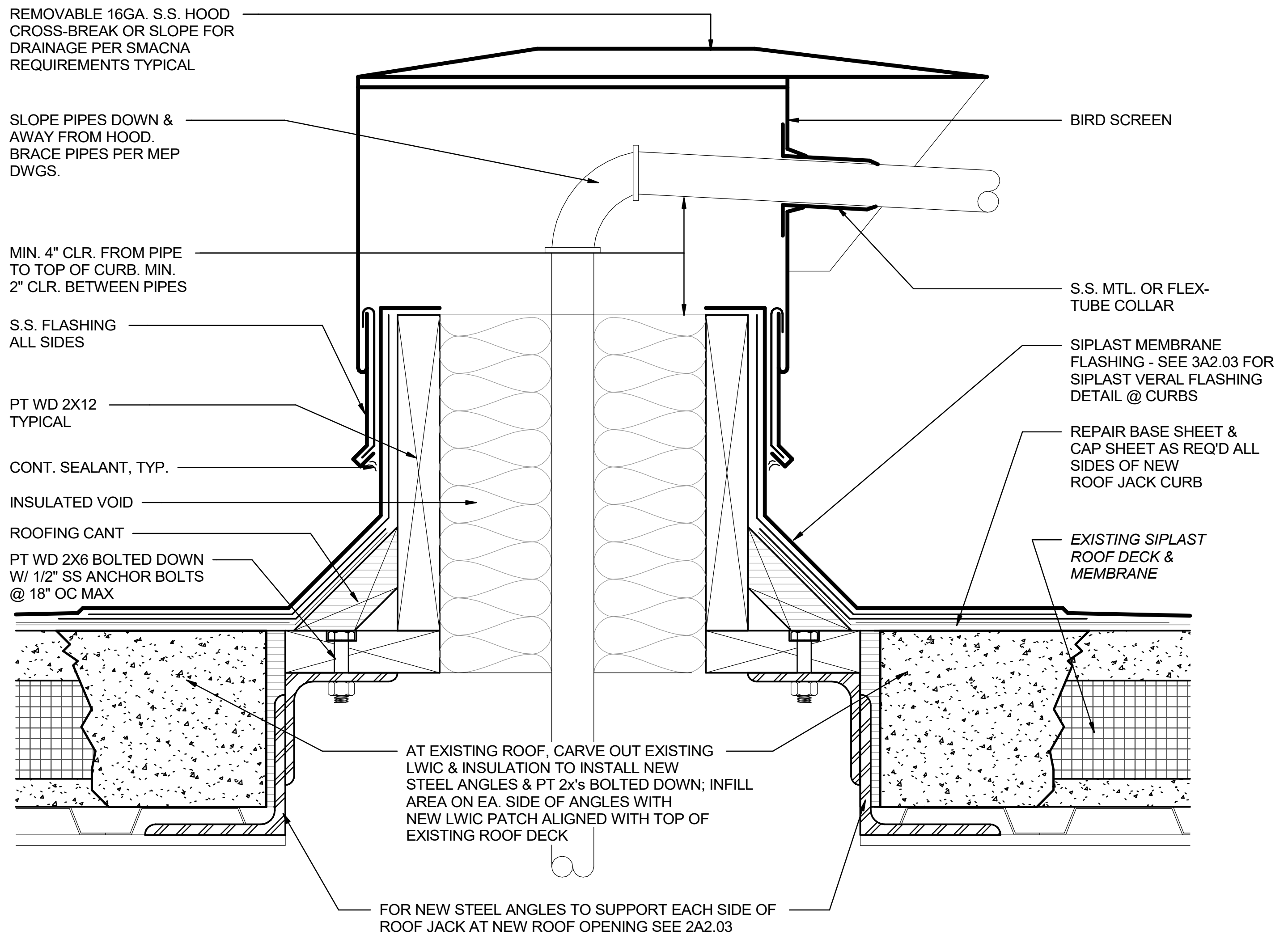
7 TYPICAL ROOF PIPE STAND

3" = 1'-0"



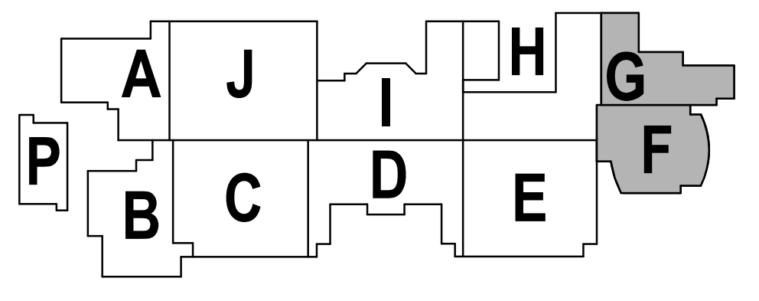
6 TYPICAL FLUE VENT DETAIL

3" = 1'-0"



5 TYPICAL ROOF JACK @ REFRIDGERANT PIPING

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

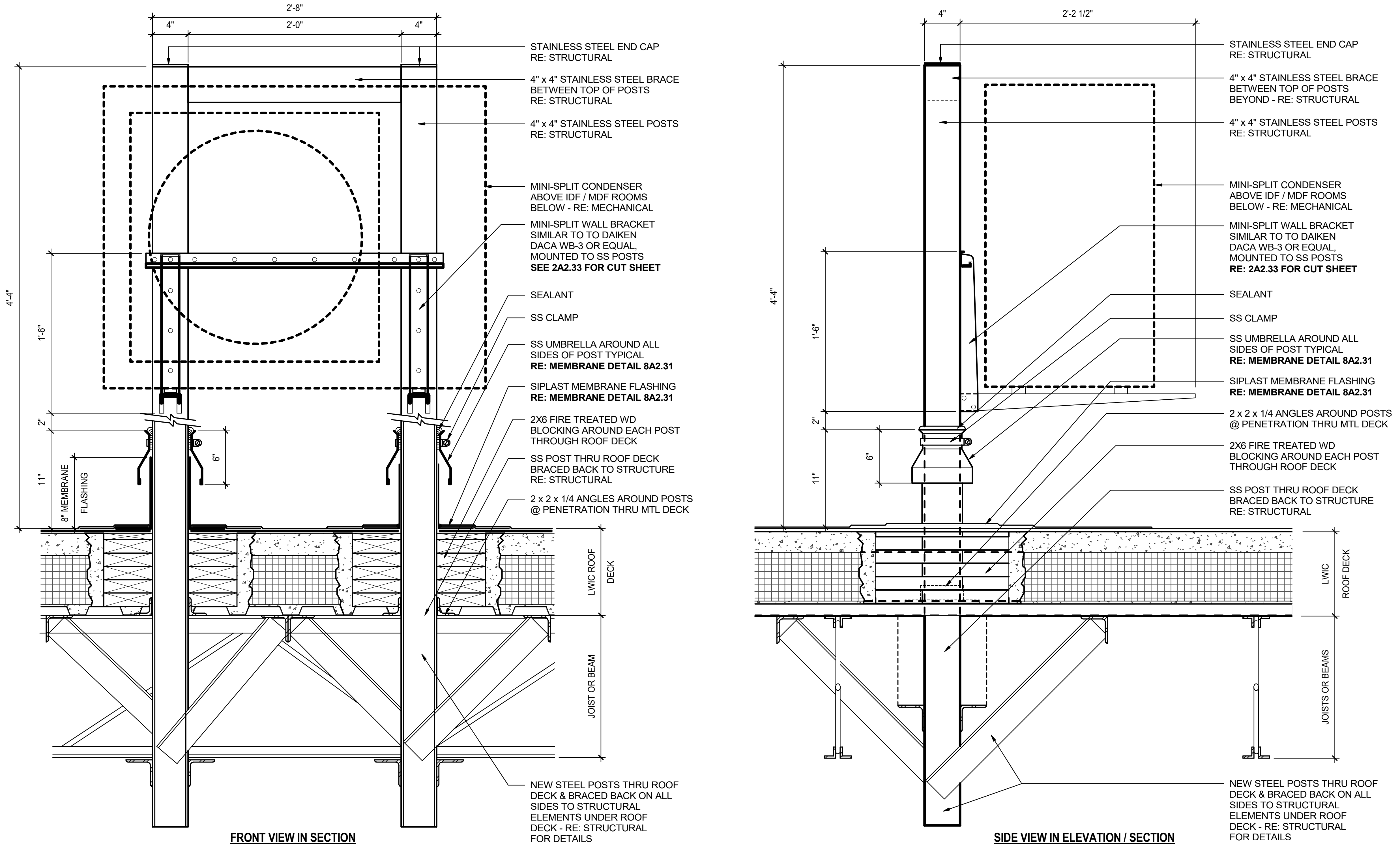
TYPICAL ROOF
ACCESSORY DETAILS

A2.32

____ of ____

11/14/2024 1:35:16 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

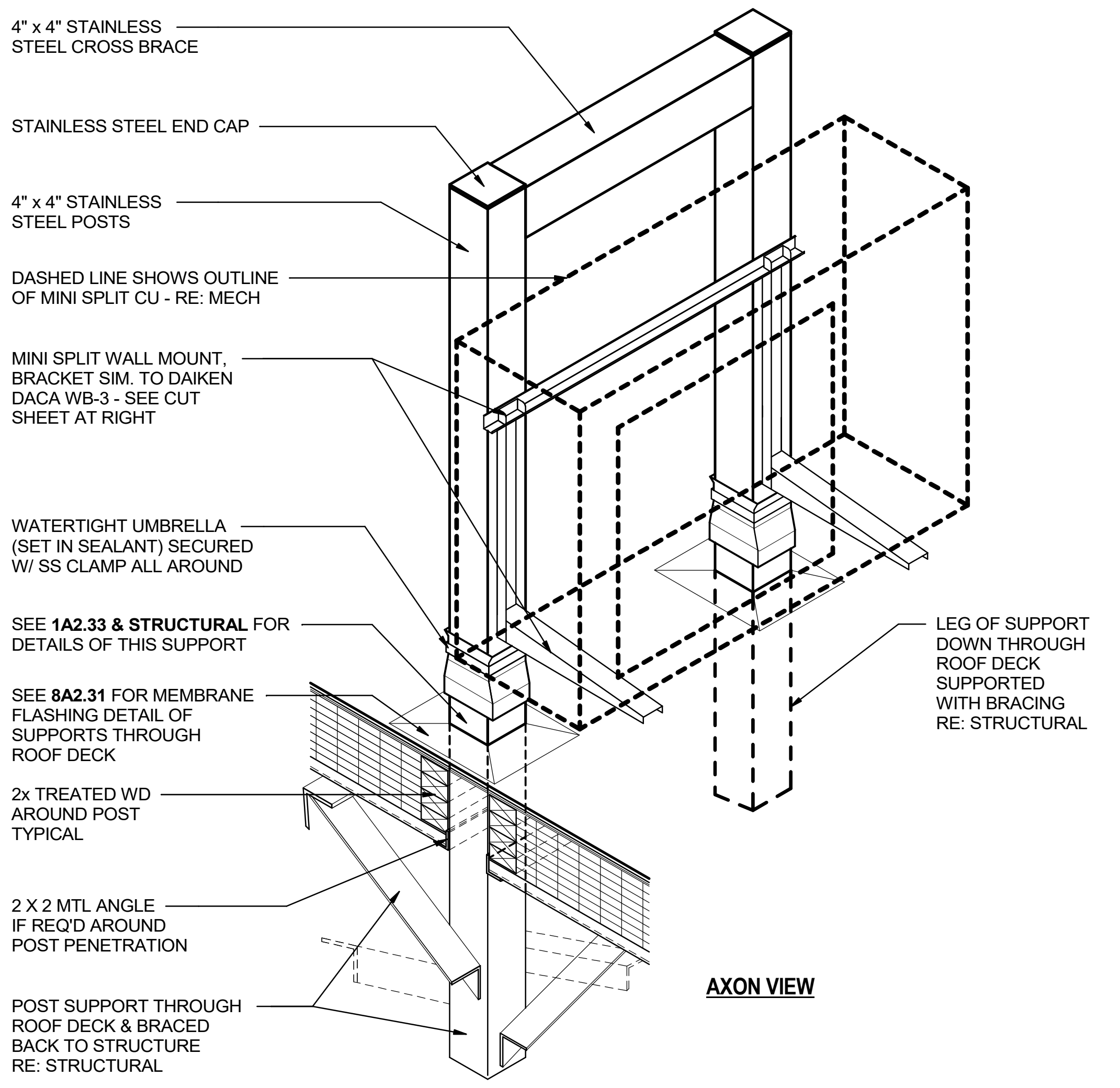


FRONT VIEW IN SECTION

SIDE VIEW IN ELEVATION / SECTION

1 TYPICAL MINI-SPLIT CONDENSER MOUNT @ ROOF

1 1/2" = 1'-0"



AXON VIEW

WALL BRACKET

MODEL	DESCRIPTION	WT LBS.
DACA-WB-3	WALL BRACKET	14

Sliding cross bar gives this bracket an exceptional equipment width range. Includes level for convenience.

Finish: Powdercoat
Min/Max mounting width: 3" - 31"
Min/Max mounting depth: 10 3/8" - 19 ½"
Max load capacity: 500lbs

R50542-1120

BRACKET CUT SHEET

2 TYPICAL AXON OF THRU-ROOF PENETRATION

1" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

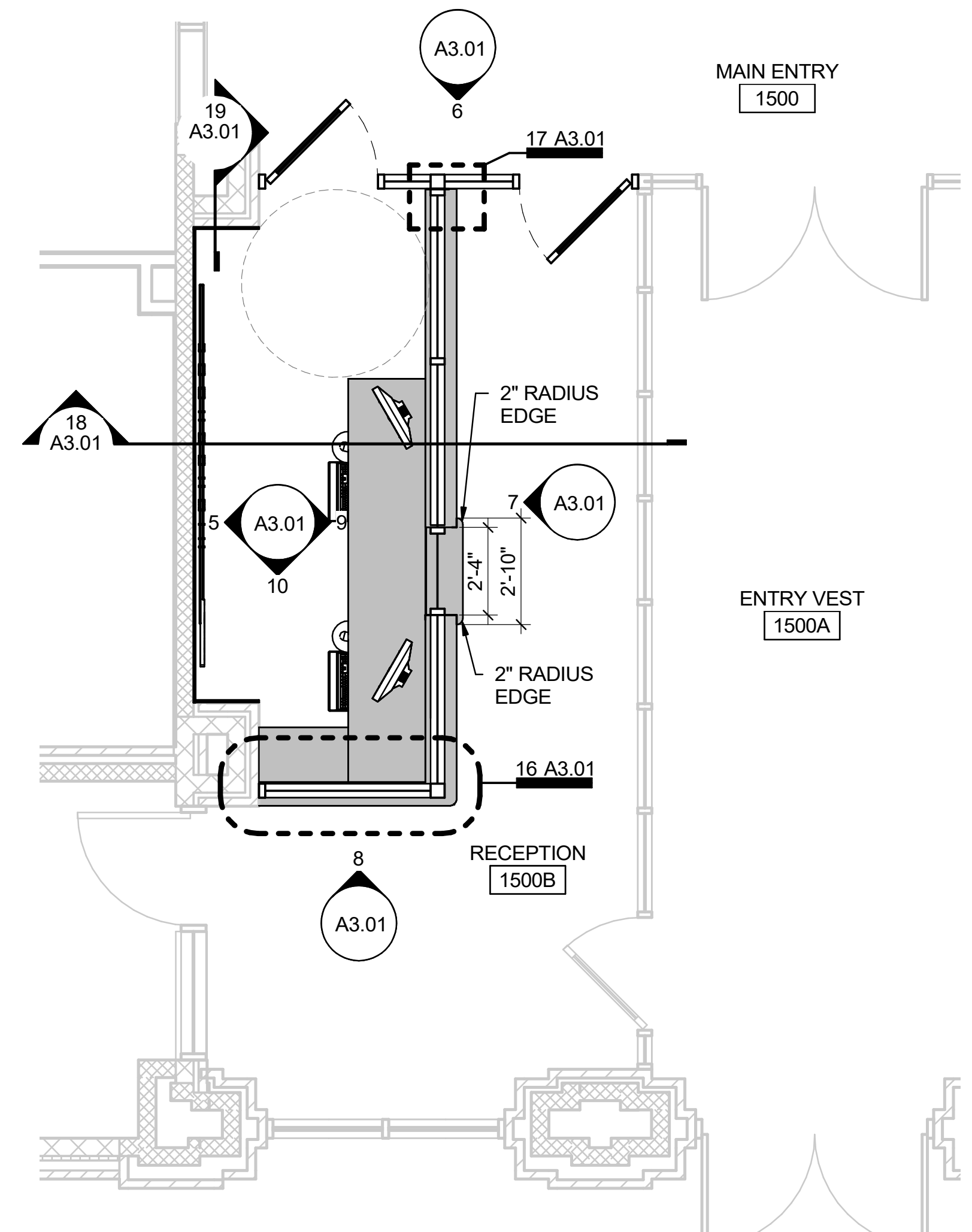
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

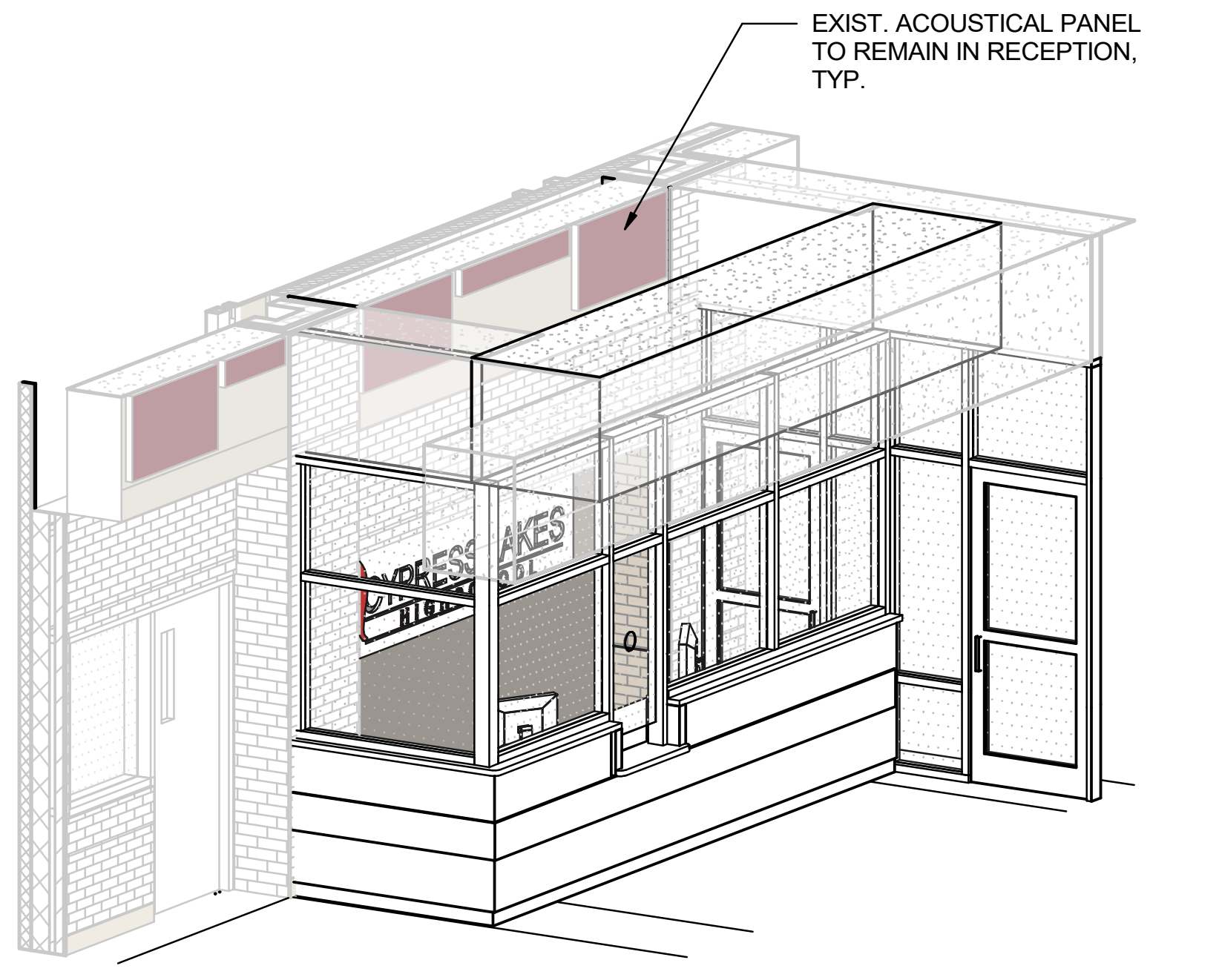
TYPICAL ROOF
ACCESSORY DETAILS

A2.33

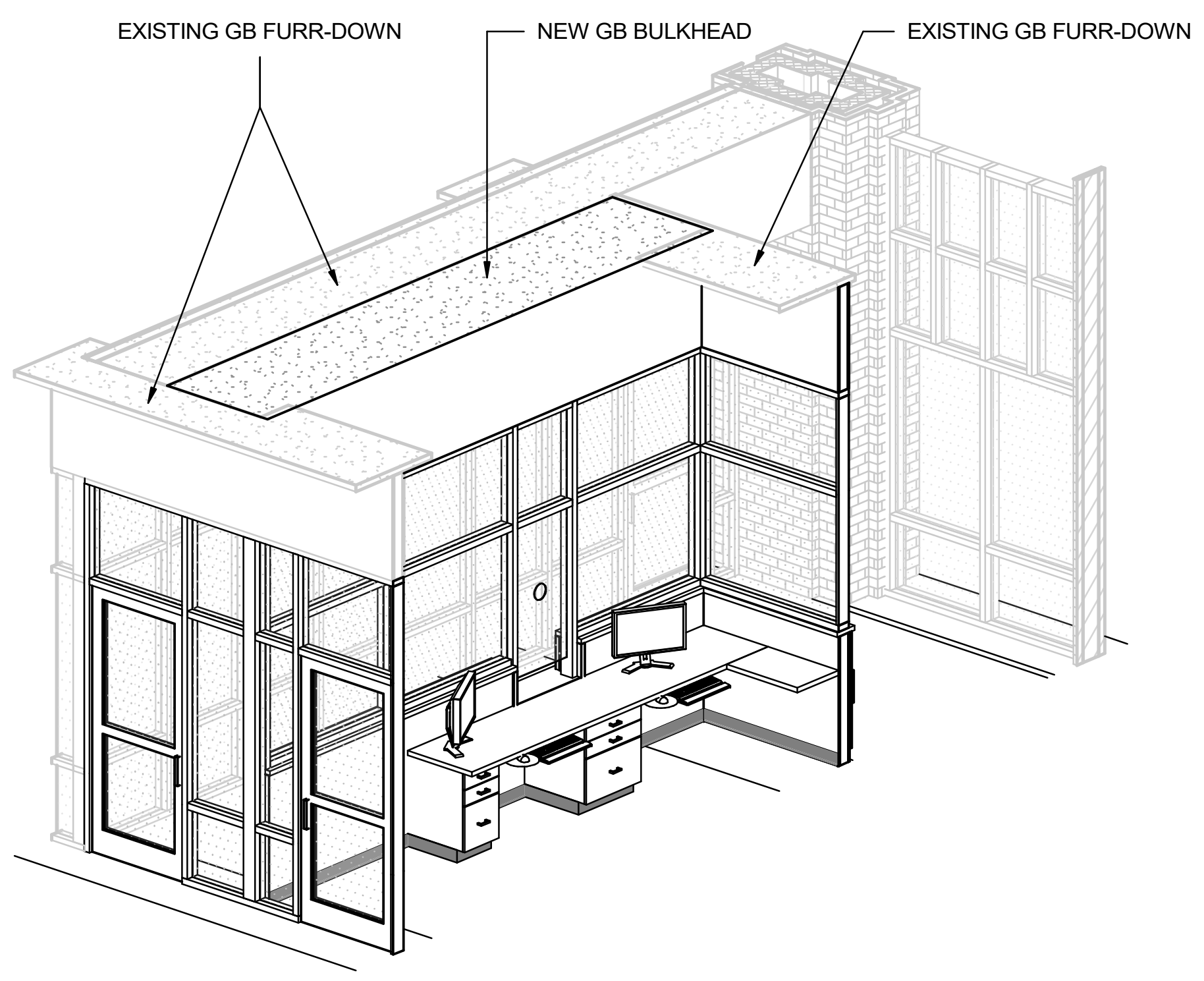
of



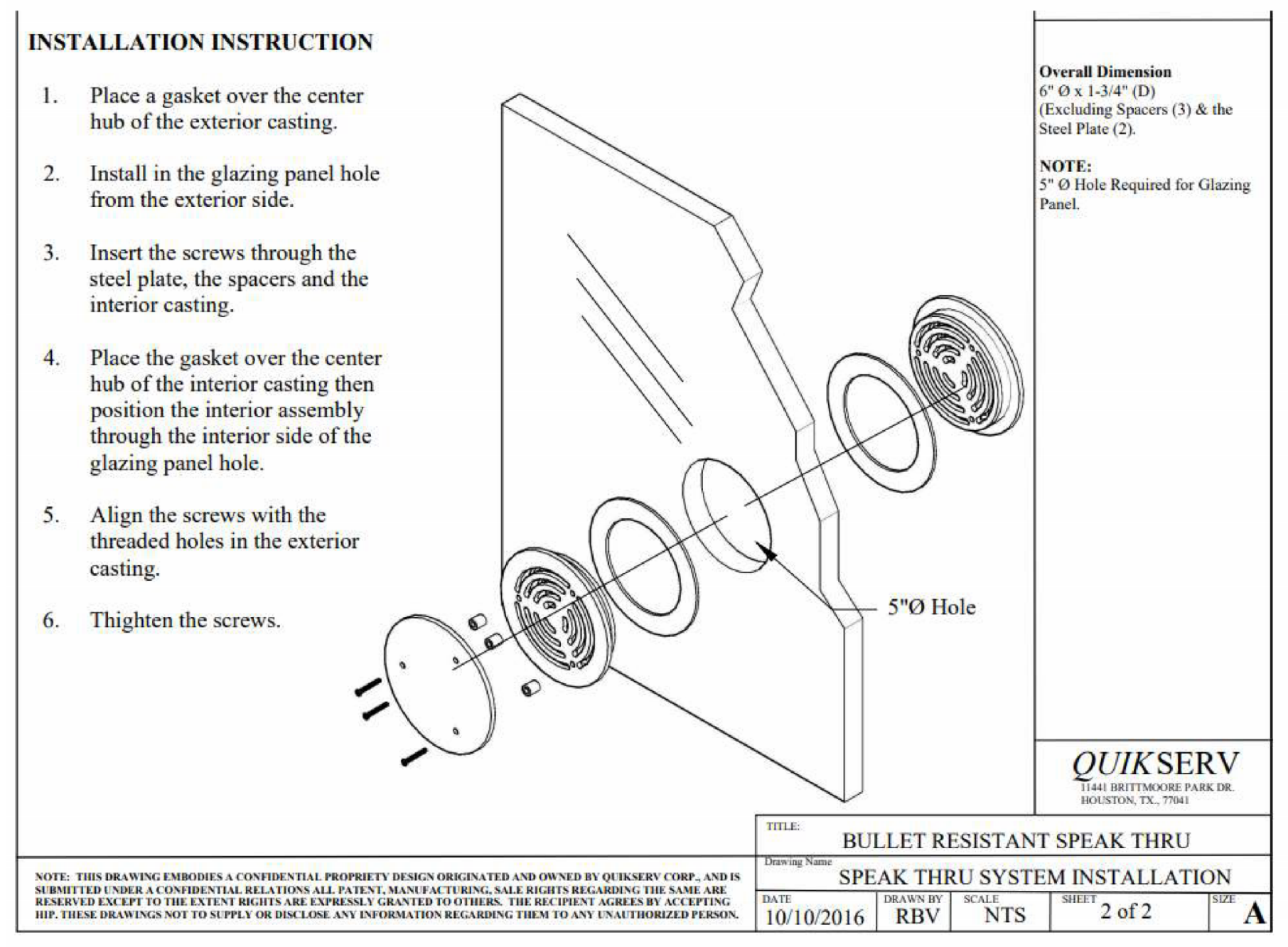
1 RECEPTION & WELCOME RENOVATION
1/4" = 1'-0"



2 RECEPTION - 3D VIEW



3 RECEPTION - CASEWORK



INSTALLATION INSTRUCTION

1. Place a gasket over the center hub of the exterior casting.
2. Install in the glazing panel hole from the exterior side.
3. Insert the screws through the steel plate, the spacers and the interior casting.
4. Place the gasket over the center hub of the interior casting then position the interior assembly through the interior side of the glazing panel hole.
5. Align the screws with the threaded holes in the exterior casting.
6. Thighten the screws.

Overall Dimension
6" Ø x 1-3/4" (D)
(Excluding Spacers (3) & the Steel Plate (2).

NOTE:
5" Ø Hole Required for Glazing Panel.

*QUIK*SERV
11441 BRITTMOORE PARK DR.
HOUSTON, TX., 77041

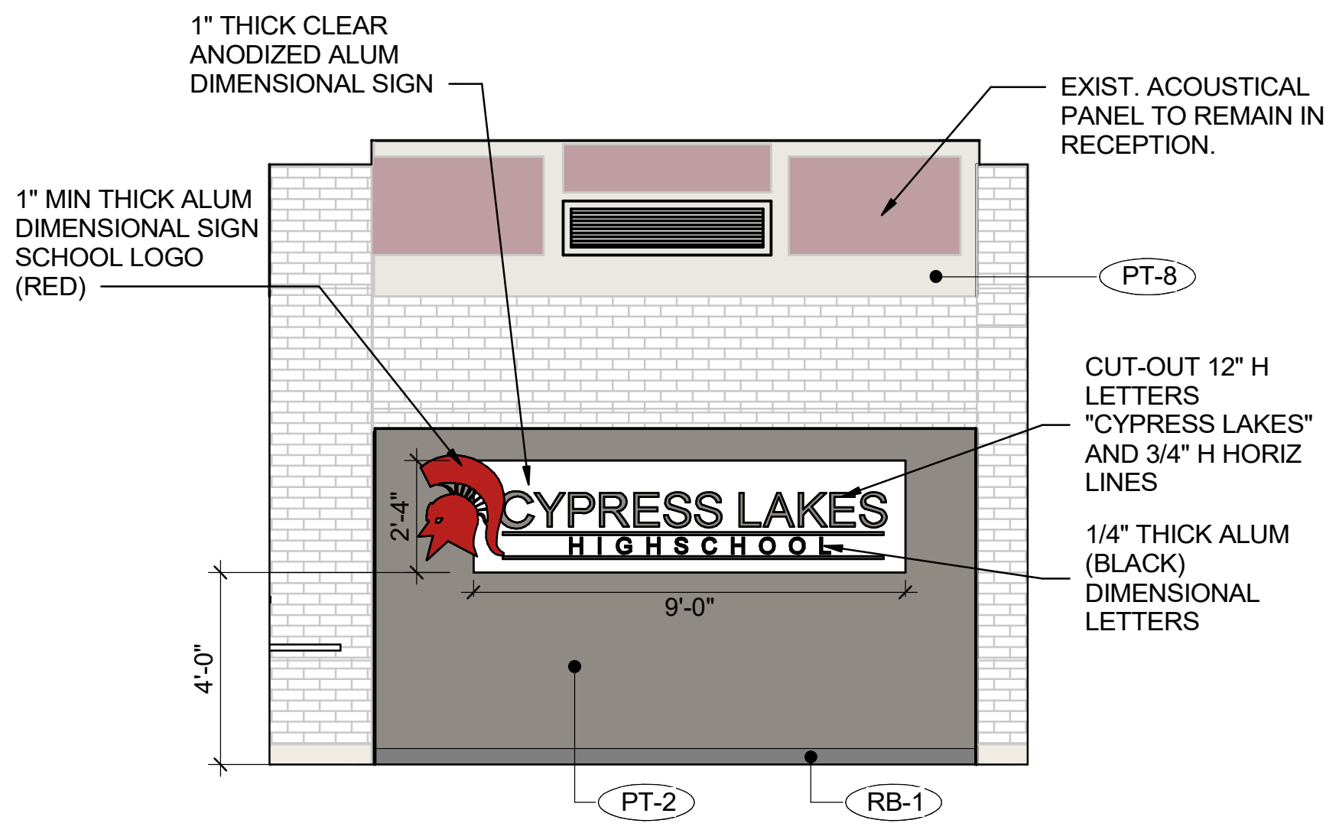
NOTE: THIS DRAWING EMBODIES A CONFIDENTIAL PROPRIETY DESIGN ORIGINATED AND OWNED BY QUIKSERV CORP., AND IS SUBMITTED UNDER A CONFIDENTIAL RELATIONS ALL PATENT, MANUFACTURING, SALE RIGHTS REGARDING THE SAME ARE RESERVED EXCEPT TO THE EXTENT RIGHTS ARE EXPRESSLY GRANTED TO OTHERS. THE RECIPIENT AGREES BY ACCEPTING HIP. THESE DRAWINGS NOT TO SUPPLY OR DISCLOSE ANY INFORMATION REGARDING THEM TO ANY UNAUTHORIZED PERSON.

TITLE: BULLET RESISTANT SPEAK THRU
Drawing Name: SPEAK THRU SYSTEM INSTALLATION

DATE	DRAWN BY	SCALE	SHEET	SIZE
10/10/2016	RBV	NTS	2 of 2	A

PROVIDE AND INSTALL QUICK SERV SPEAK THRU SYSTEM AT BOTH PASS-THRU WINDOWS. VERIFY HOLE SIZE IS ACCEPTABLE WITH IR-1 GLASS SYSTEM. ARMOTEX (SHERTZ, TX) IS AN ACCEPTABLE MANUFACTURER,

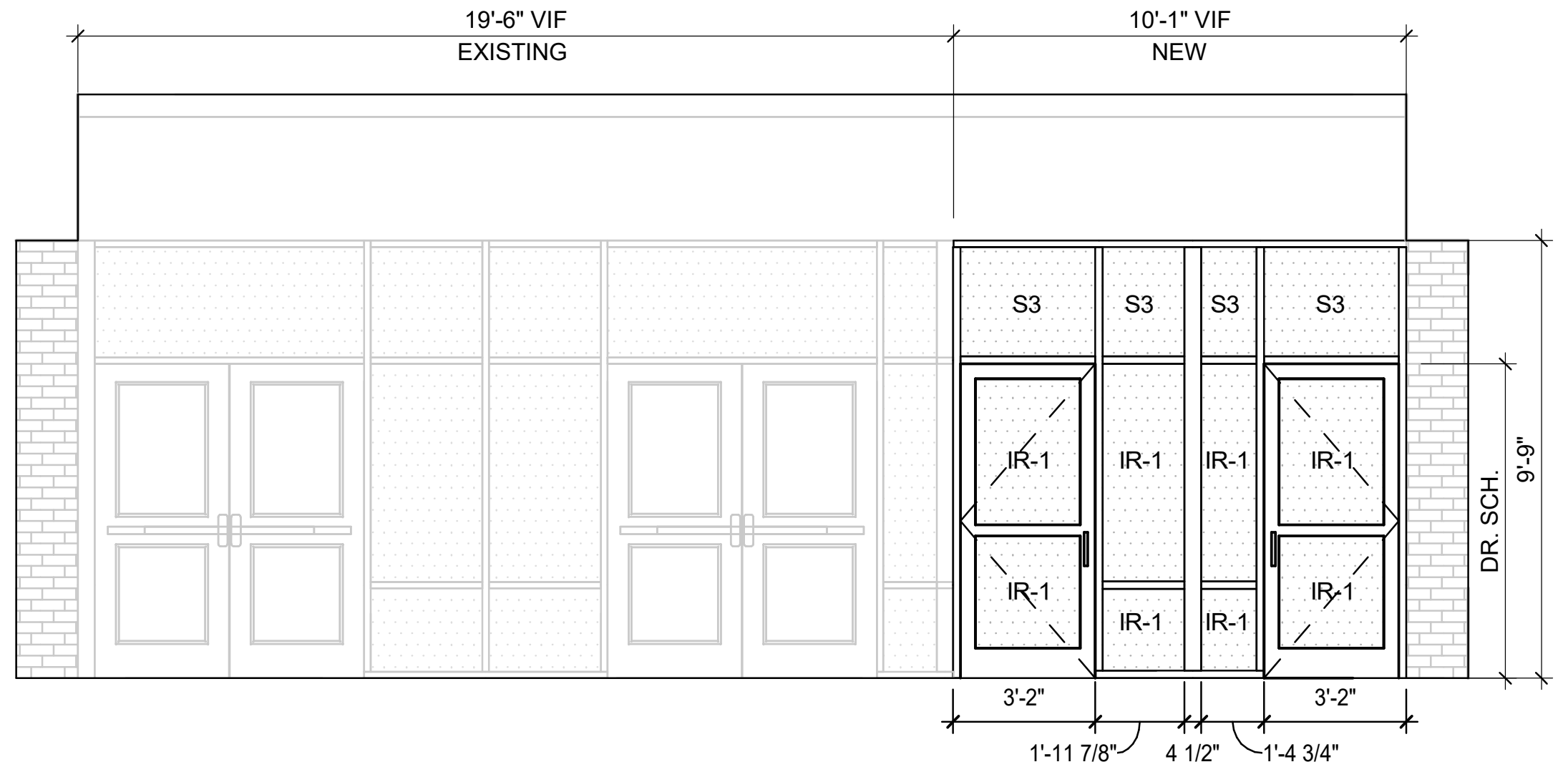
4 SPEAK THRU DETAIL
3" = 1'-0"



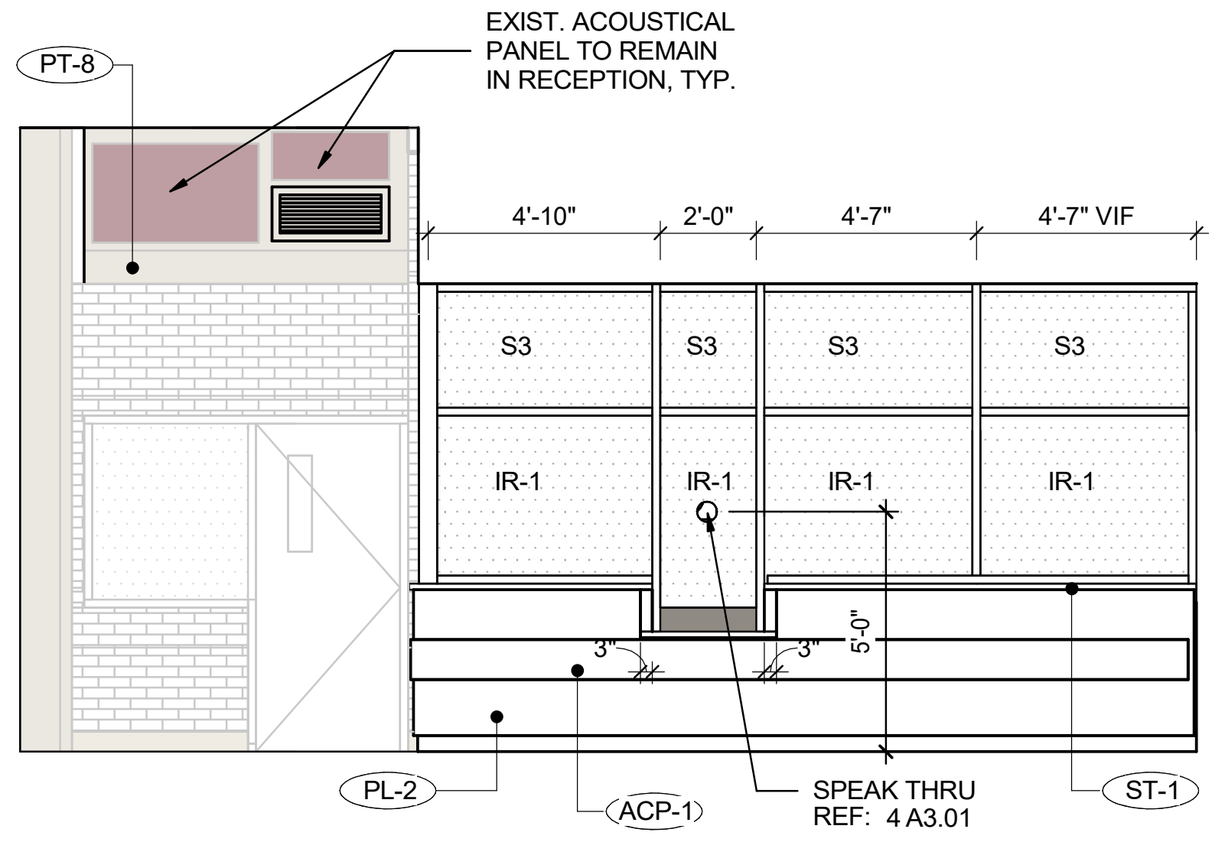
5 1500B- RECEPTION - W2
1/4" = 1'-0"

CASEWORK GENERAL NOTES

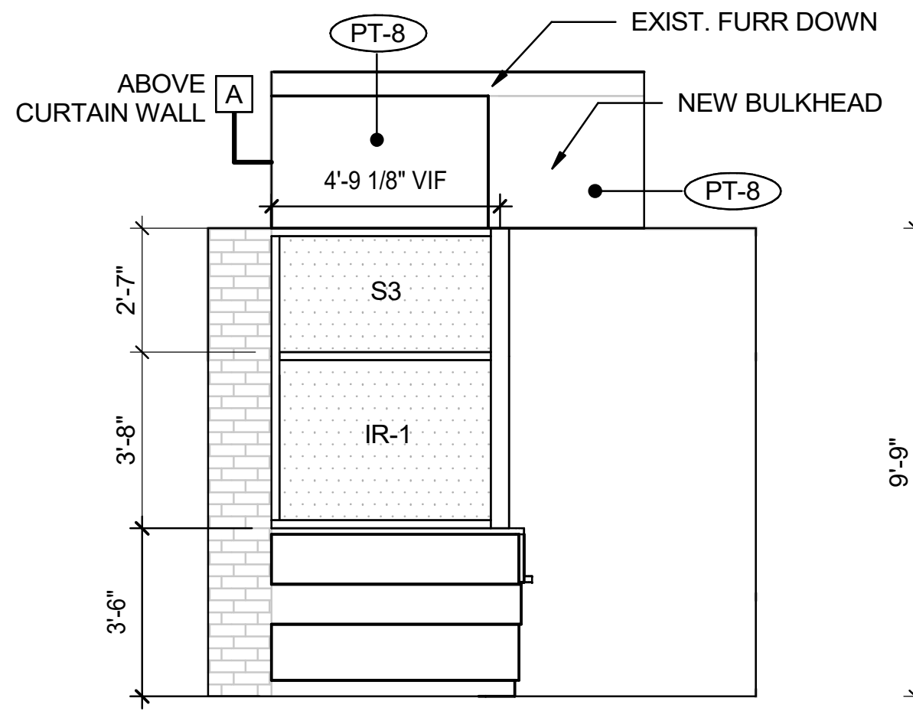
1. PROVIDE GROMMET AT COUNTERTOP ABOVE ALL WORKSTATION KNEE SPACE. CENTER GROMMET WITH KNEE SPACE AND AS CLOSE TO BACK WALL AS POSSIBLE.
2. PROVIDE LOCKS AT ALL CABINETS AND DRAWERS. RE: SPECIFICATIONS.
3. PROVIDE ACCESSORIES PER SPECIFICATION FOR ALL FILE DRAWERS.
4. ALL SHELVINGS SHOULD BE ADJUSTIBLE.
5. PROVIDE AND INSTALL PLAM CLAD PLYWD INFILL PANELS BETWEEN CABINETS AND WALLS TO COVER ALL GAPS.
6. ALL EXPOSED PANELS SHALL HAVE PLAM FINISH
7. ALL ACCESSORIES SHALL BE INSTALLED PER ADA / TAS GUIDELINES.



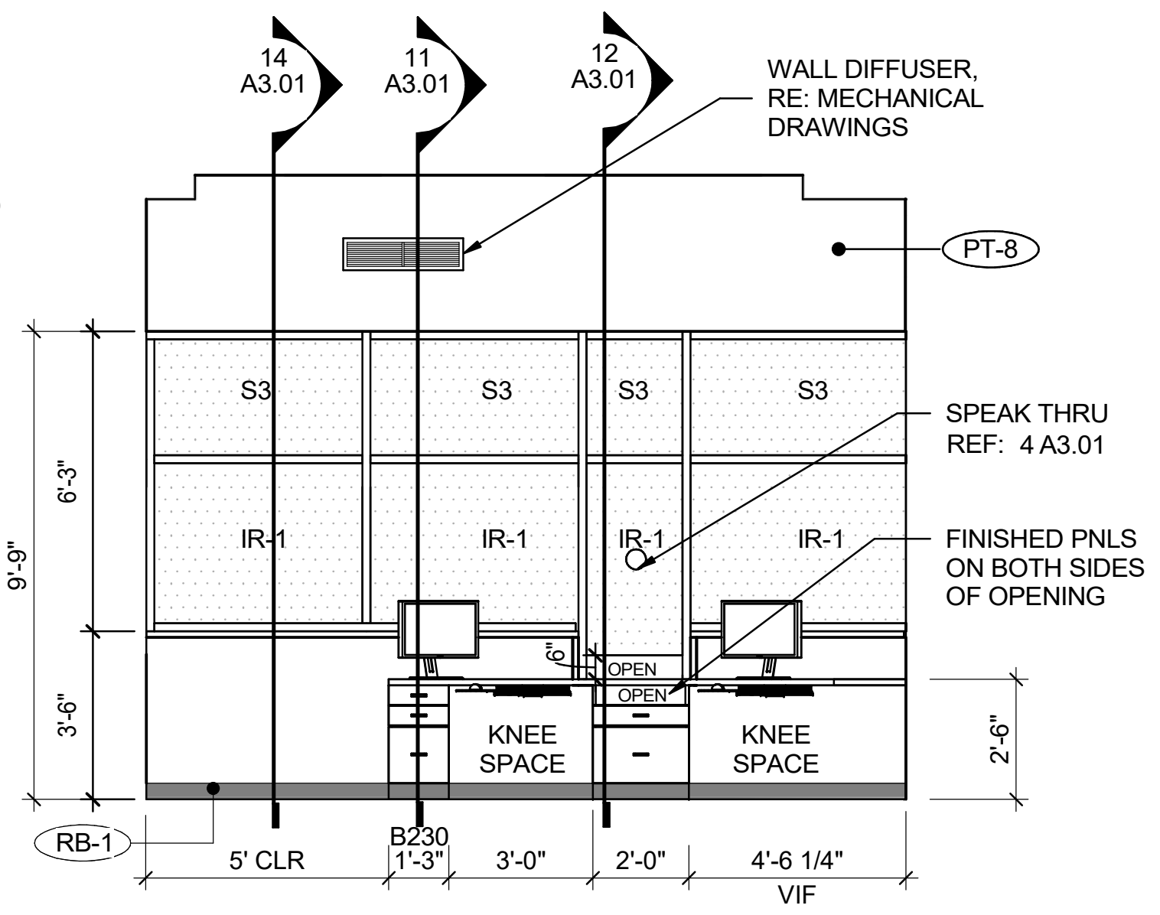
6 1500 - MAIN ENTRY - S
1/4" = 1'-0"



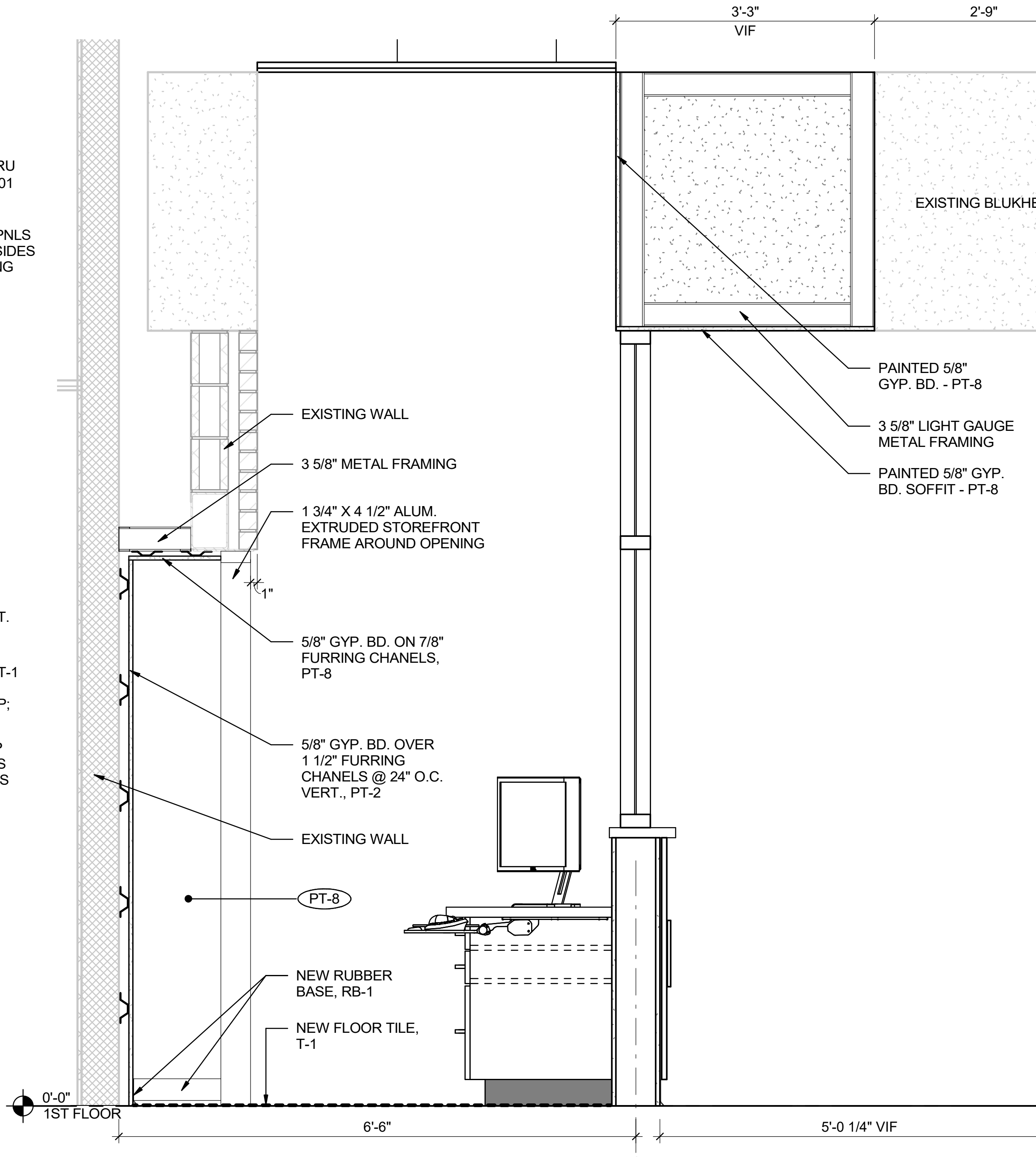
7 1500B- RECEPTION - W
1/4" = 1'-0"



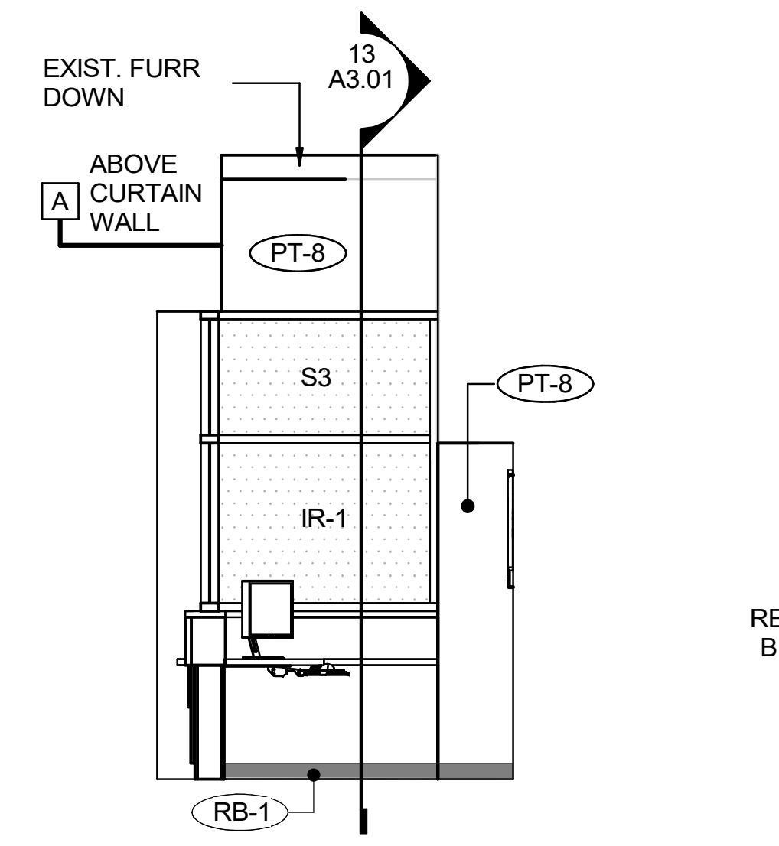
8 1500B- RECEPTION - N
1/4" = 1'-0"



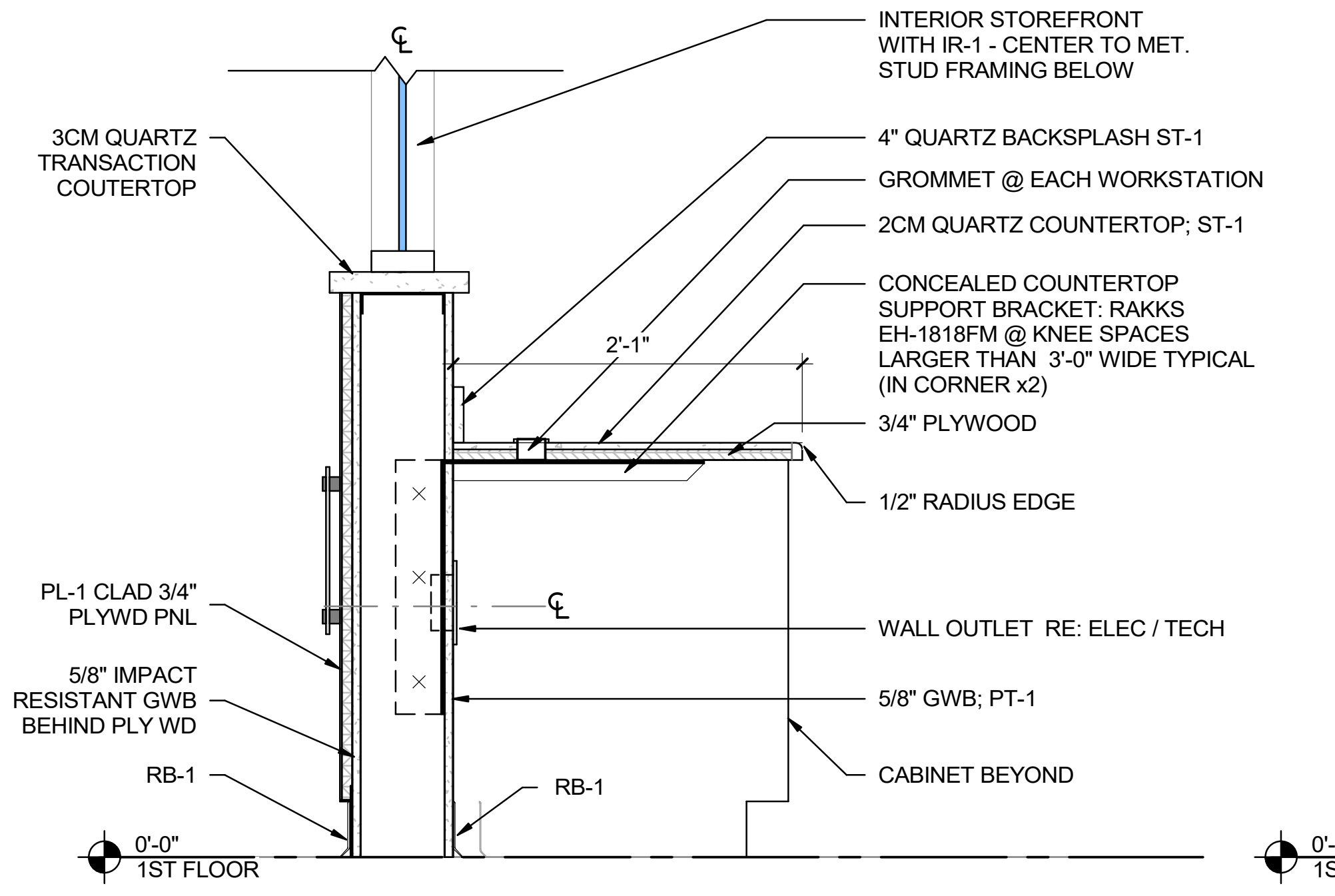
9 1500B- RECEPTION - E
1/4" = 1'-0"



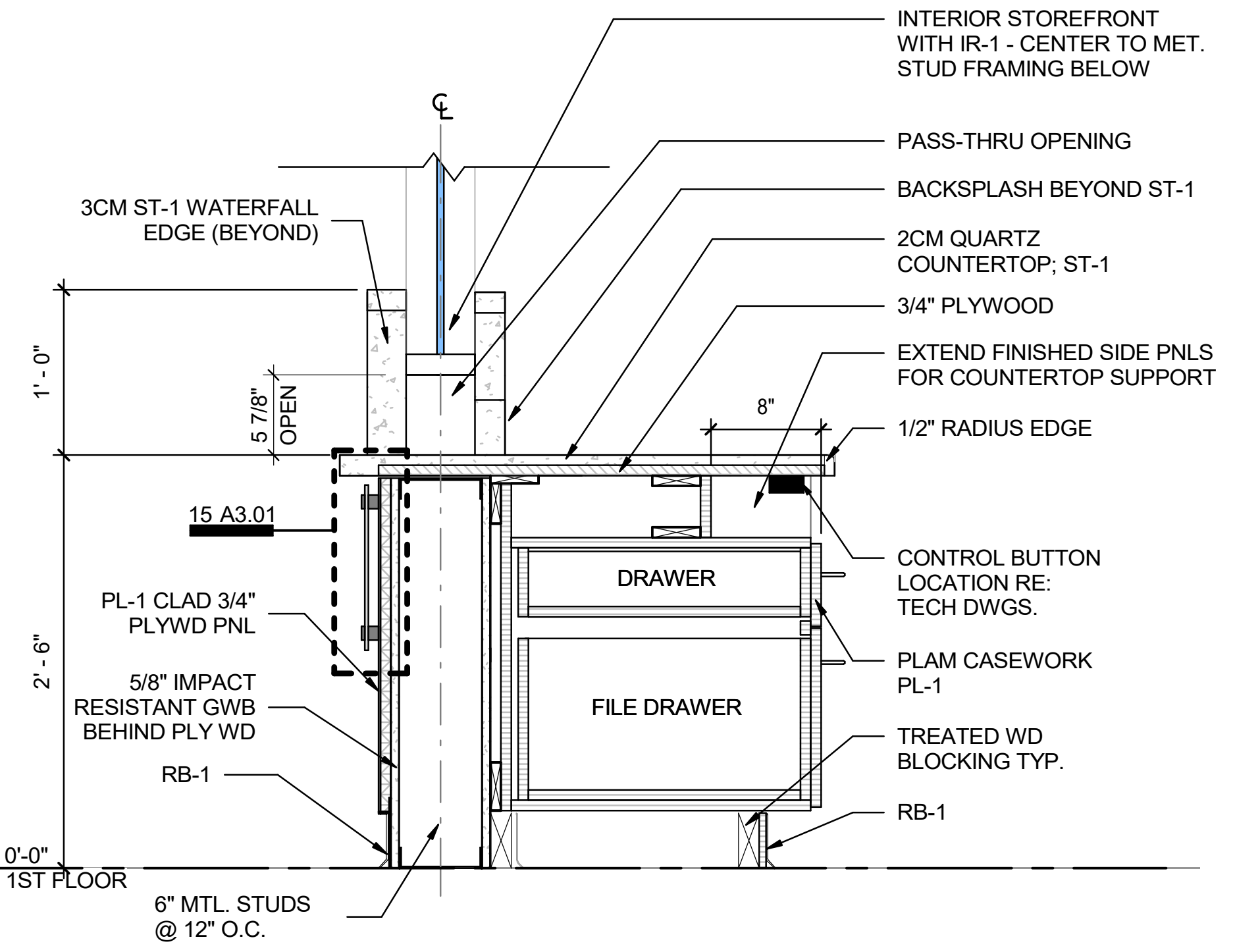
18 RECEPTION SECTION
3/4" = 1'-0"



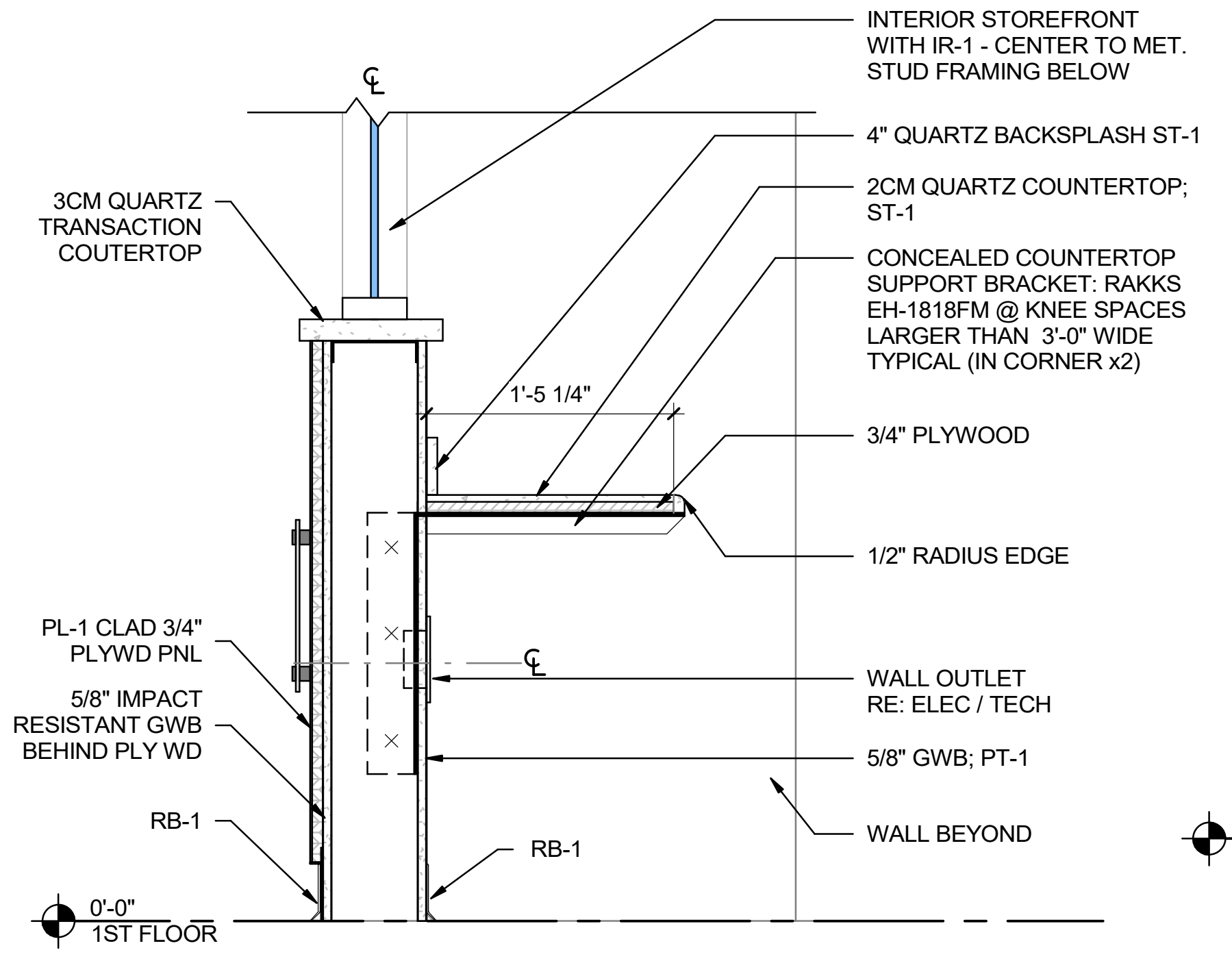
10 1500B- RECEPTION - S
1/4" = 1'-0"



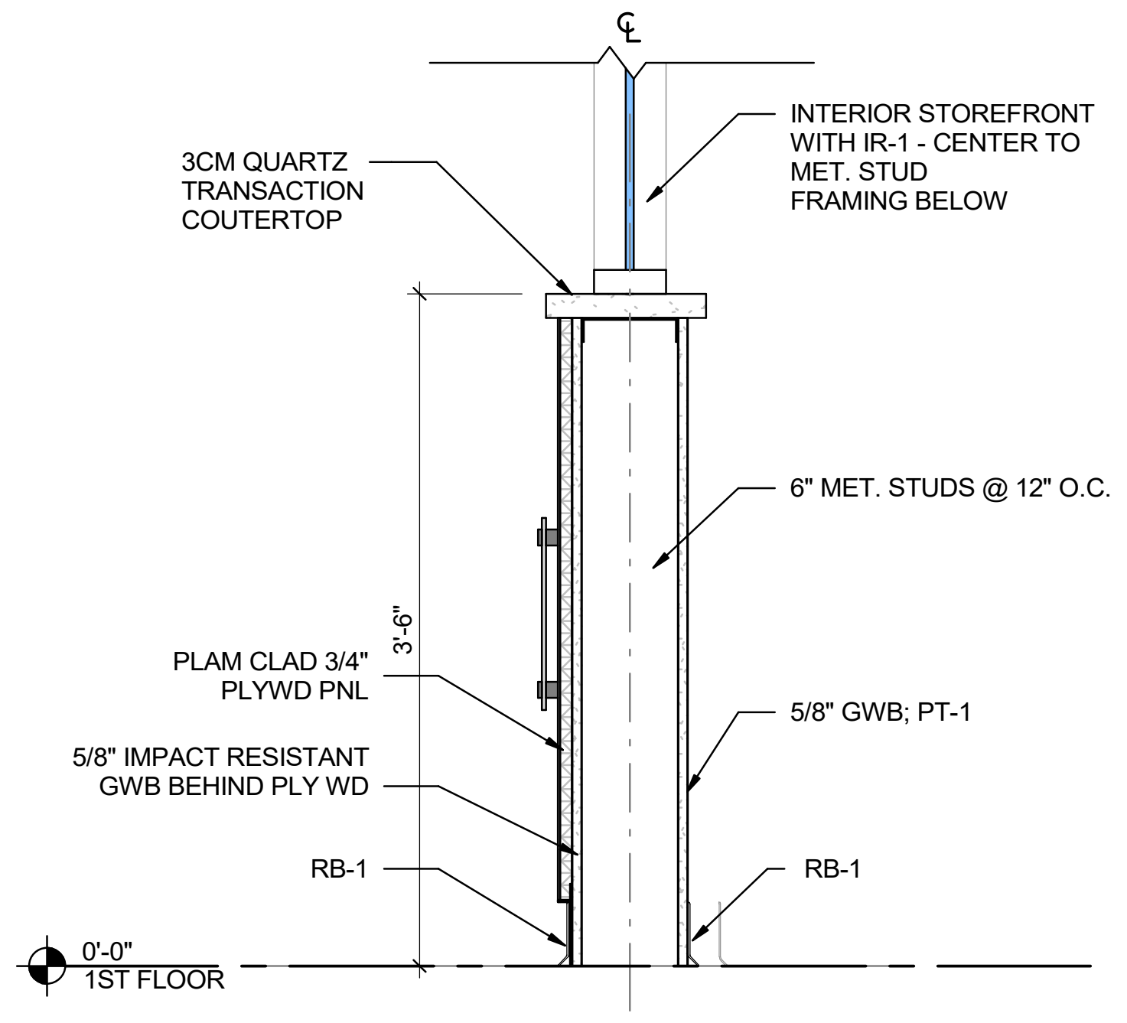
11 RECEPTION - KNEE SPACE
1" = 1'-0"



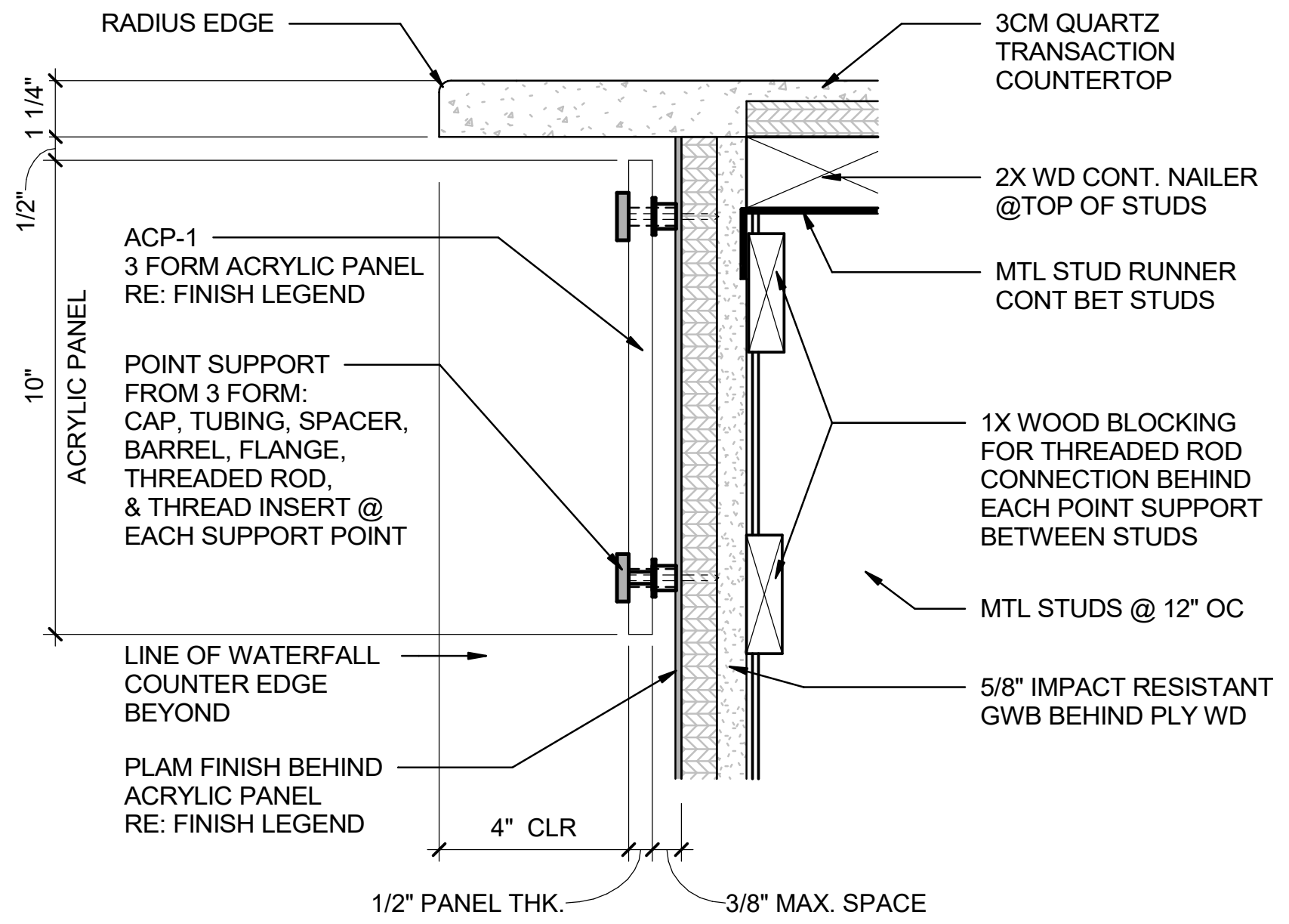
12 RECEPTION - ADA TRANSACTION
1" = 1'-0"



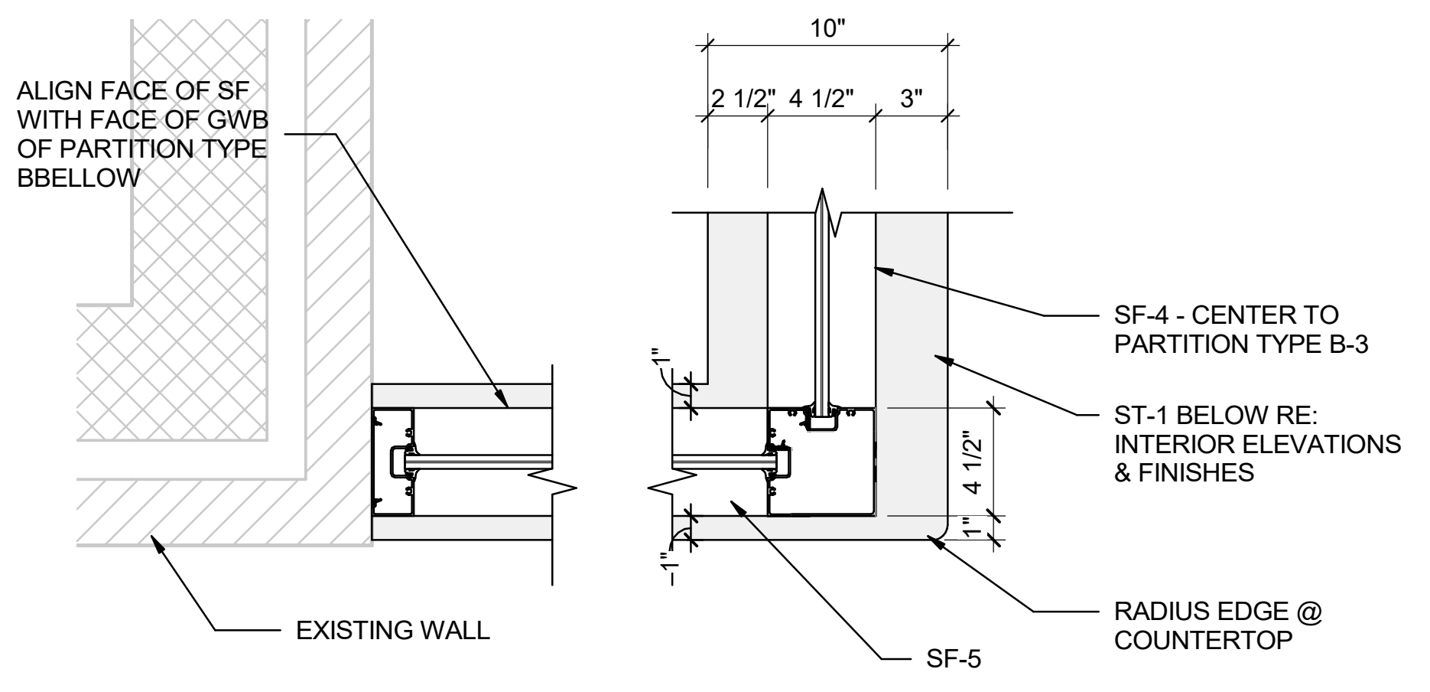
13 RECEPTION - 18" COUNTER
1" = 1'-0"



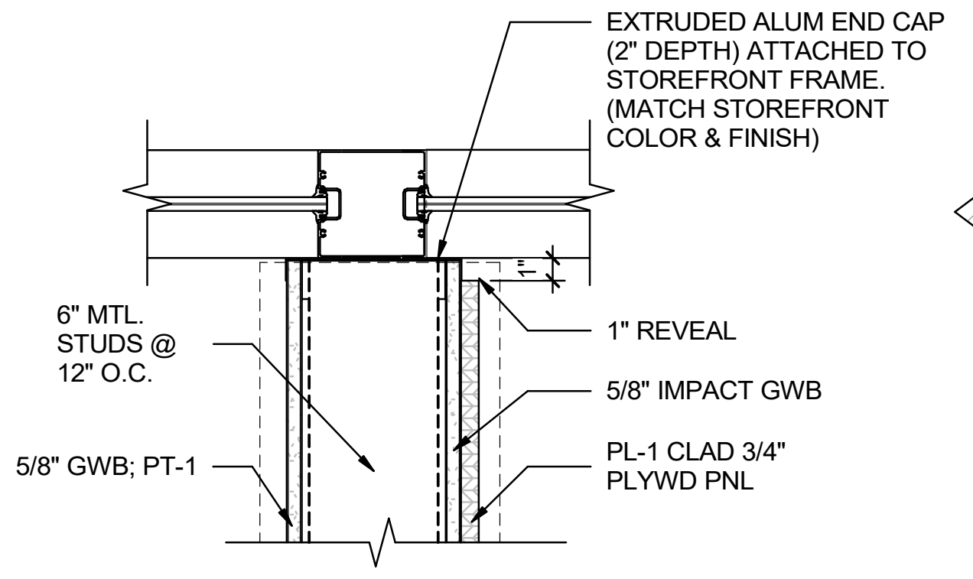
14 RECEPTION - HALF WALL
1" = 1'-0"



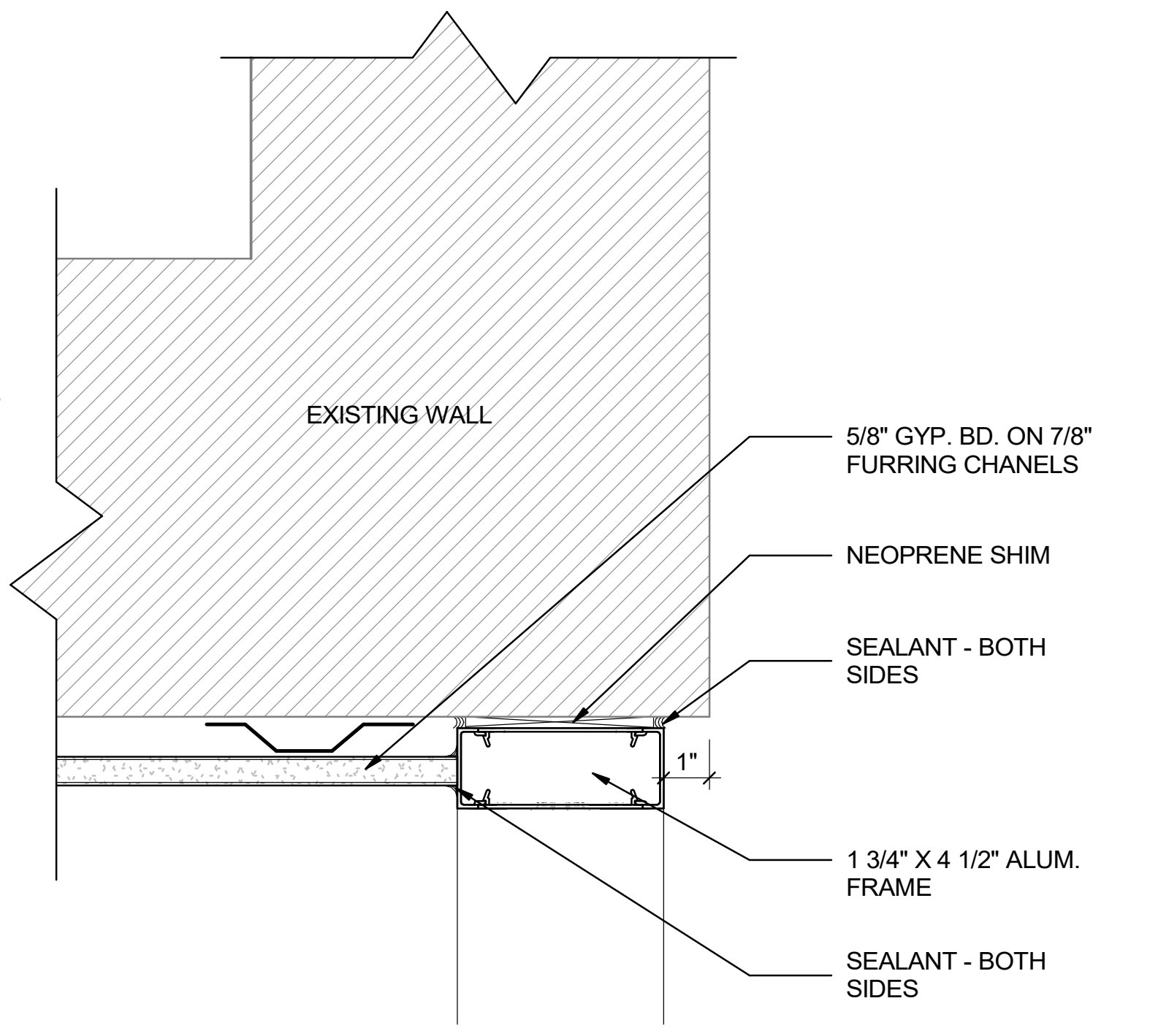
15 DETAIL - ACRYLIC PANEL
3" = 1'-0"



16 RECEPTION DESK WALL
1 1/2" = 1'-0"

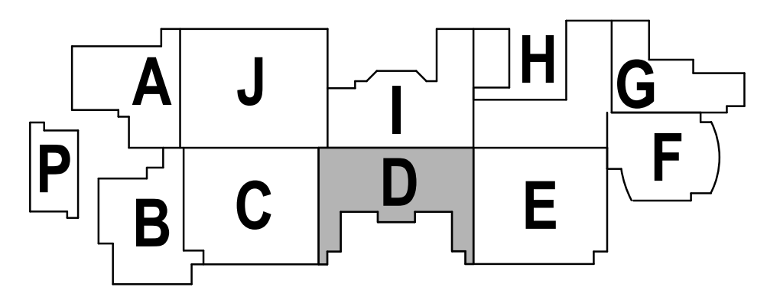


17 PLAN DETAIL
1 1/2" = 1'-0"



19 JAMB - ALUM. FRAME
3" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

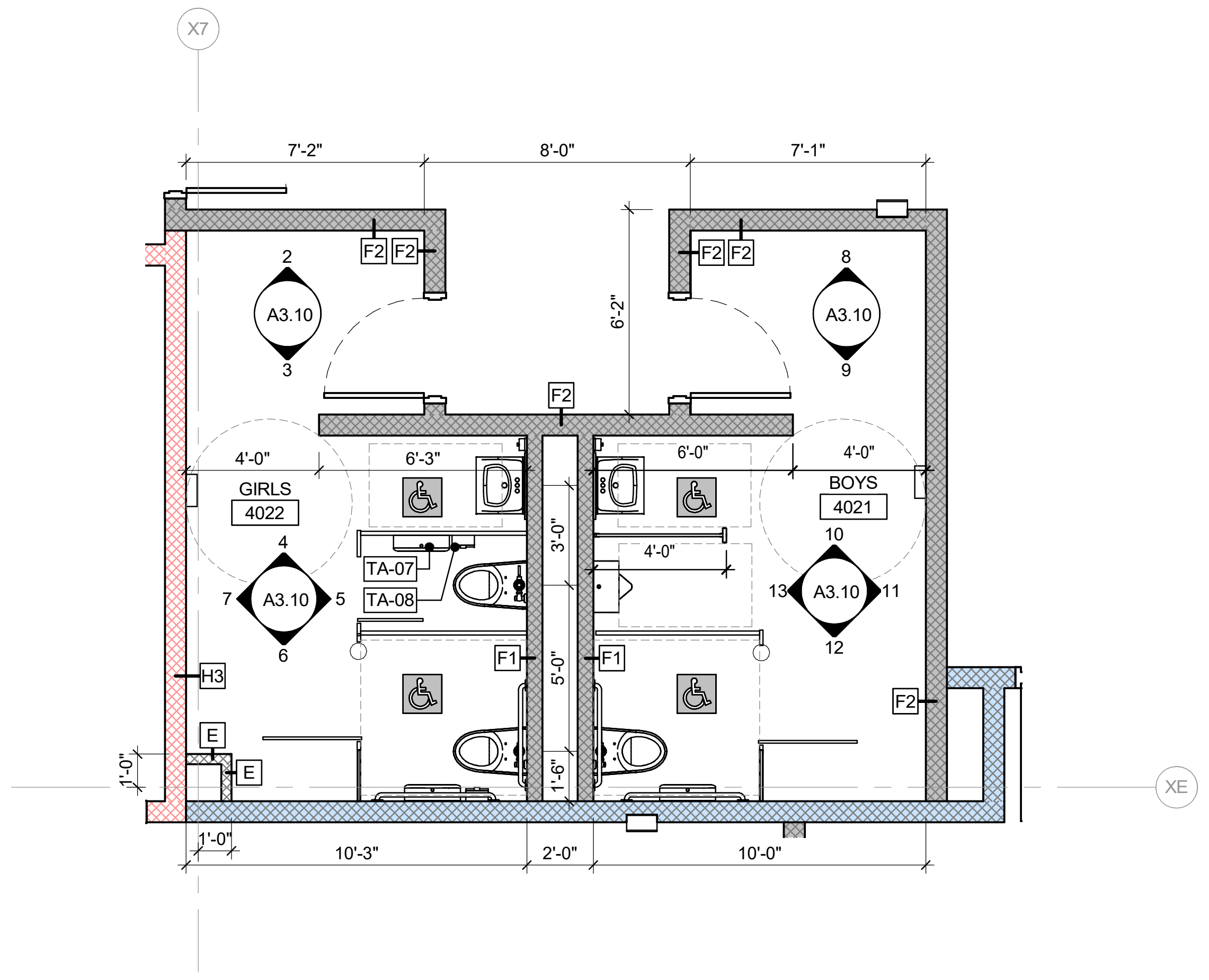
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

RECEPTION PLANS & DETAILS

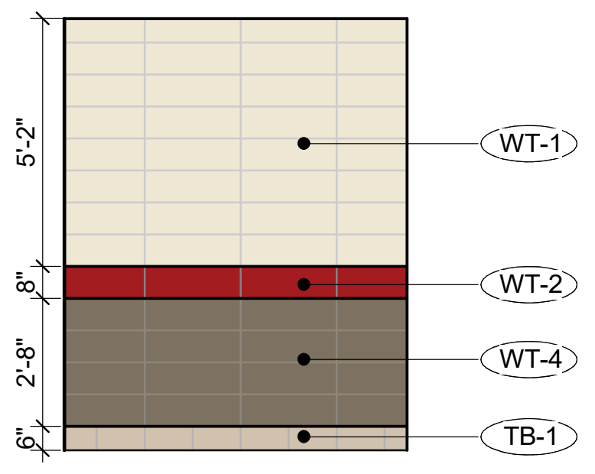
A3.01
___ of ___

11/14/2024 1:35:29 PM
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

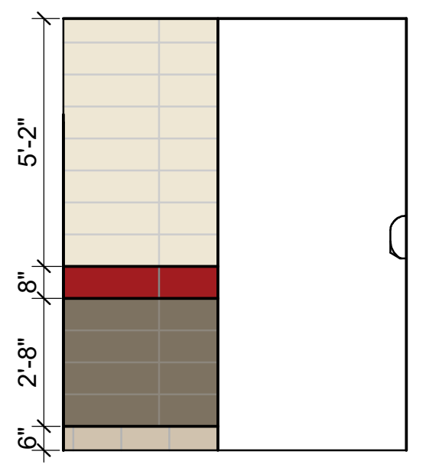
11/14/2024 1:35:35 PM



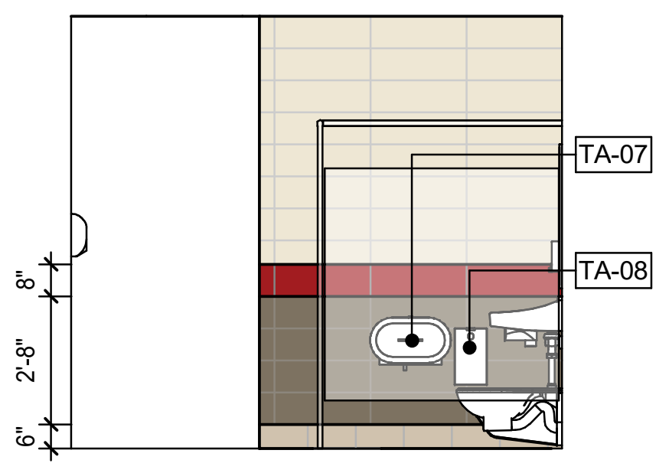
1 FLOOR PLAN - 4022 GIRLS, 4021 BOYS
1/4" = 1'-0"



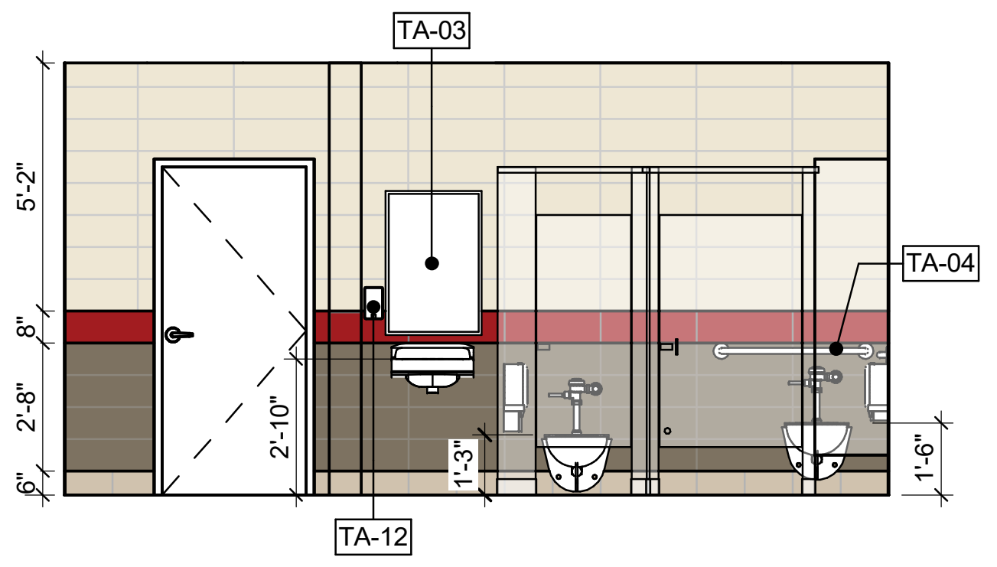
2 4022 - GIRLS - N2
1/4" = 1'-0"



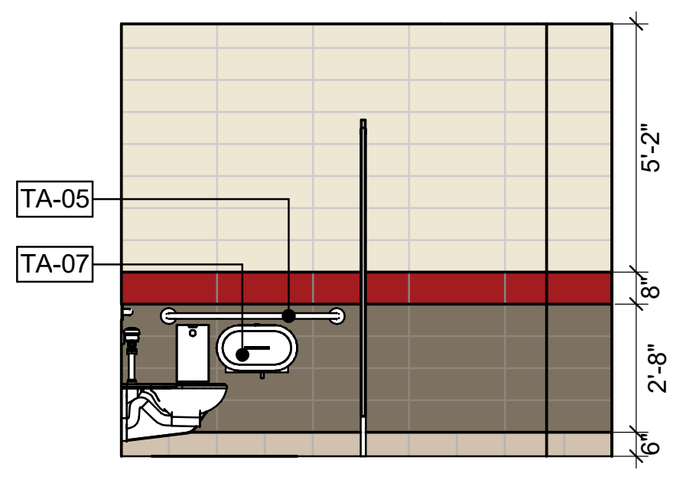
3 4022 - GIRLS - S2
1/4" = 1'-0"



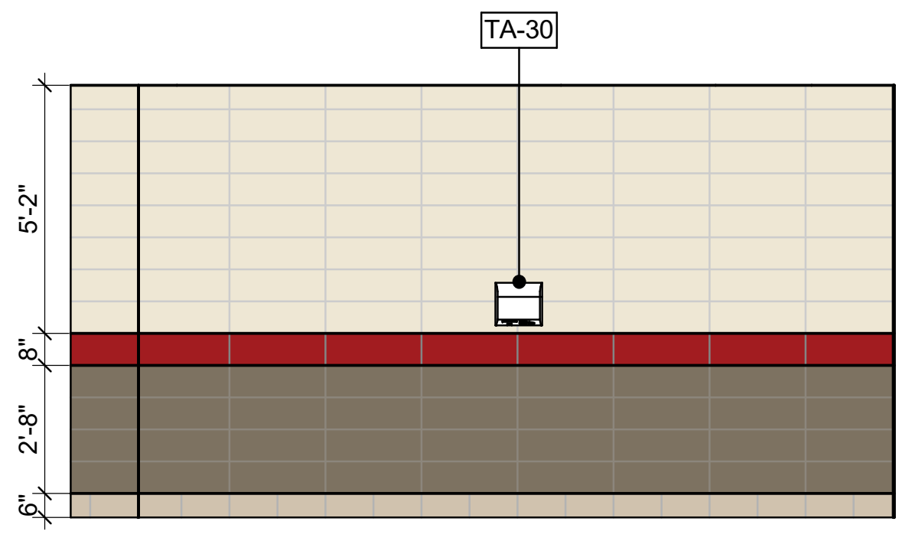
4 4022 - GIRLS - N
1/4" = 1'-0"



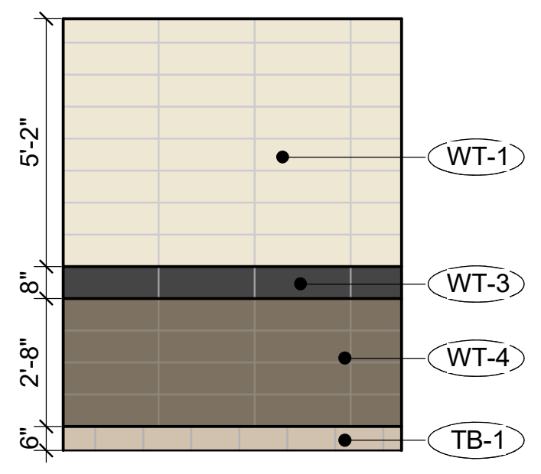
5 4022 - GIRLS - E
1/4" = 1'-0"



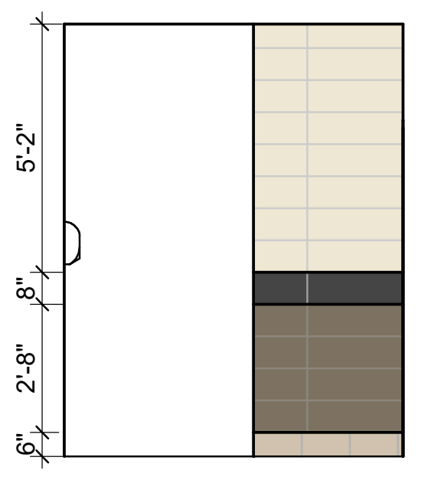
6 4022 - GIRLS - S
1/4" = 1'-0"



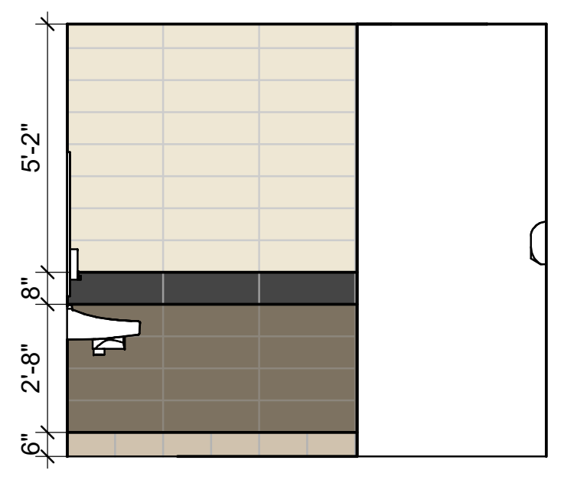
7 4022 - GIRLS - W
1/4" = 1'-0"



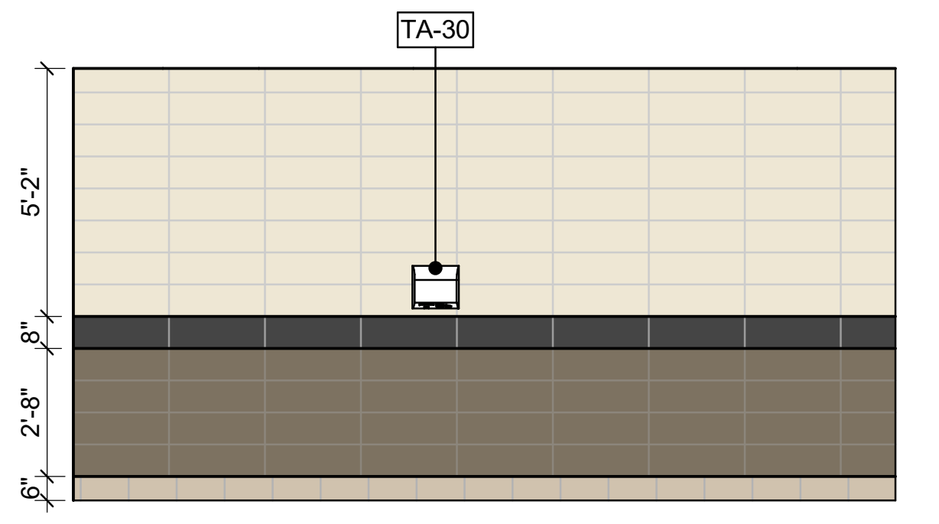
8 4021 - BOYS - N2
1/4" = 1'-0"



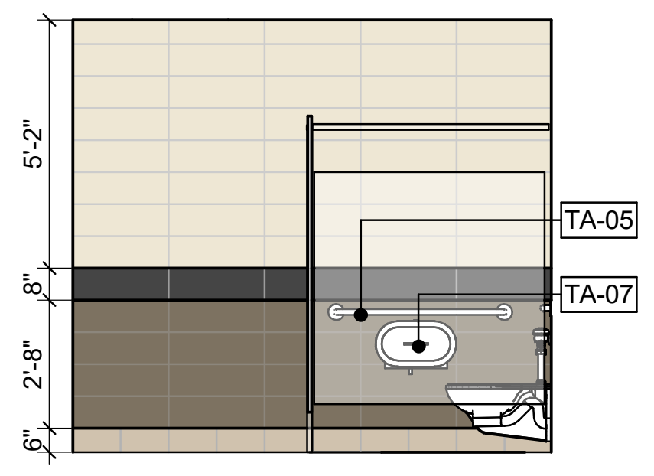
9 4021 - BOYS - S2
1/4" = 1'-0"



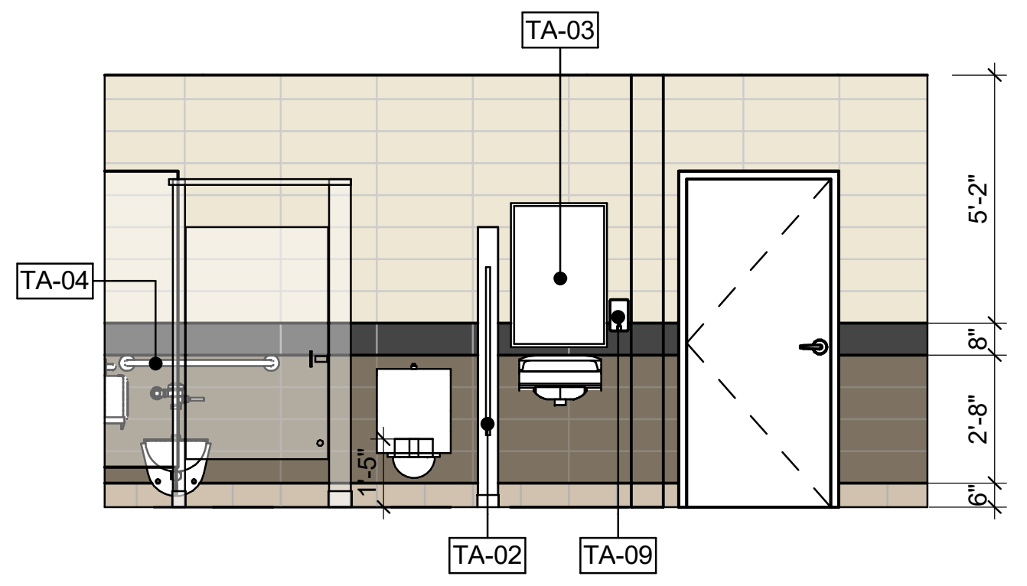
10 4021 - BOYS - N
1/4" = 1'-0"



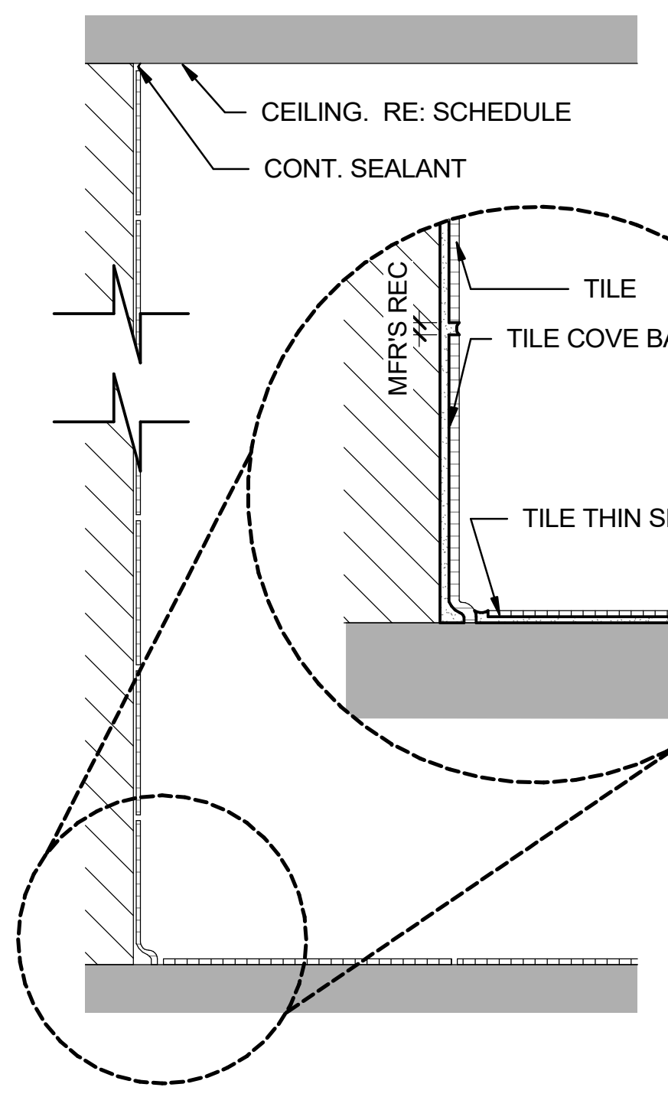
11 4021 - BOYS - E
1/4" = 1'-0"



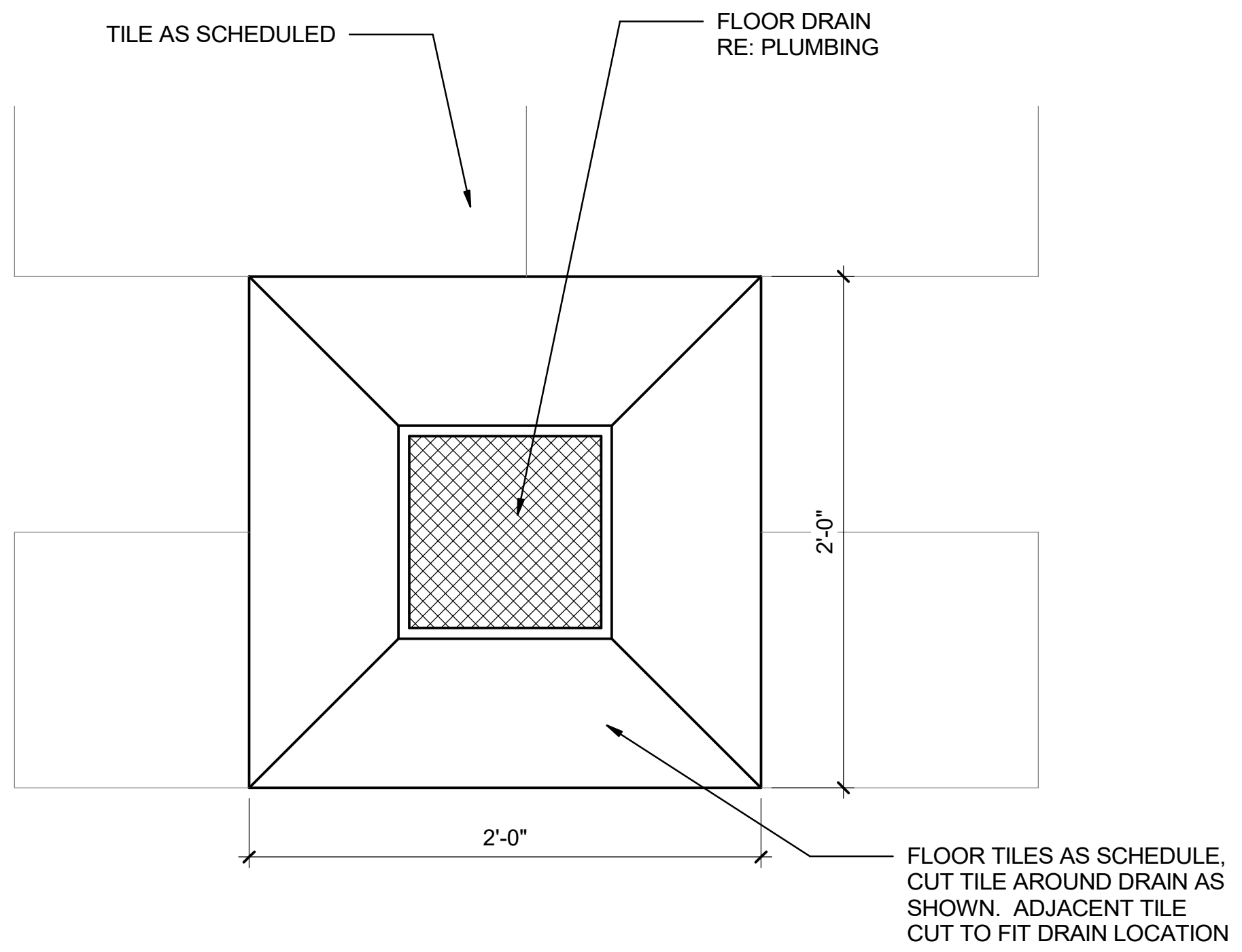
12 4021 - BOYS - S
1/4" = 1'-0"



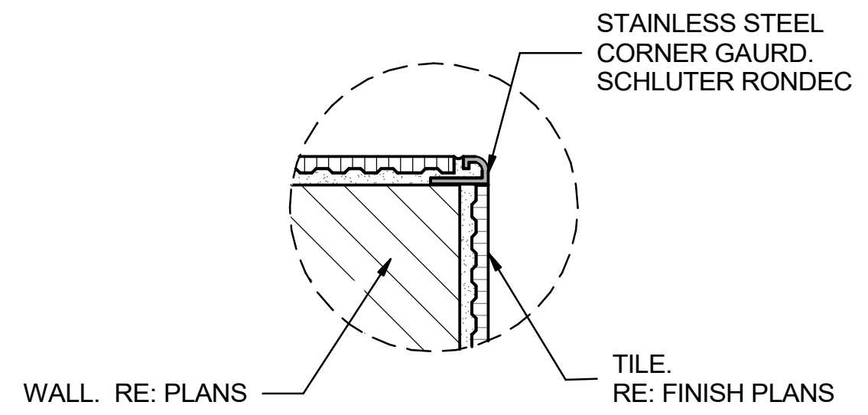
13 4021 - BOYS - W
1/4" = 1'-0"



TILE WALL TRANSITION



TILE DETAIL AT FLOOR DRAIN



RESTROOM TILE CORNER

14 TYPICAL TRANSITION DETAILS
NTS

RESTROOM NOTES

1. CONSTRUCT CONCRETE CURB BELOW ALL NEW RESTROOM PARTITIONS. REFER TO A4.20 FOR DETAILS.
2. INSTALL WALL TILES IN SAME PATTERN ON ALL RESTROOM WALLS WHETHER SPECIFICALLY SHOWN OR NOT. REFER TO ELEVATIONS, FINISH PLANS AND FINISH LEGEND.
3. COORDINATE FLOOR DRAIN WITH RESTROOM LAYOUT AND FLOOR TILE PATTERN. CONFIRM LOCATION WITH ARCHITECT PRIOR TO INSTALL.
4. PROVIDE AND INSTALL THE FOLLOWING IN RESTROOMS:
   - TOILET PARTITIONS AS SHOWN. RE: SPEC
   - 42" H PILASTER-MOUNTED URINAL SCREEN WHERE INDICATED (FLOOR MOUNTED TYPE)
   - COAT HOOK AT EACH TOILET PARTITION DOORS.
   - COAT HOOK BEHIND TOILET ROOM DOORS.
   - TOILET ACCESSORIES AS SHOWN AND LISTED. RE: SPEC
5. WHERE ACCESSIBLE SYMBOL IS SHOWN, PROVIDE AND INSTALL PLUMBING FIXTURES AND TOILET ACCESSORIES AS REQUIRED PER ADA / TAS. REFER TO G SERIES DRAWINGS.
6. REFER TO MEPT DRAWINGS
7. REFER TO SHEET G2.01 FOR ADA AND ACCESSORIES MOUNTING HEIGHTS REQUIREMENT.

TILE INSTALLATION NOTES

1. INSTALL TILES PER MANUFACTURER'S STANDARDS AND RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO GROUT JOINT WIDTHS AND REQUIRED CONTROL JOINTS.
2. REFER TO A3.10 FOR INSTALLATION DETAILS.
3. ALIGN TILE BASE GROUT LINES WITH FLOOR TILE GROUT LINES. ALIGN WALL TILE GROUT LINES WITH TILE BASE GROUT LINES.
4. REFER TO FINISH PLANS FOR FLOOR TILE LAYOUT. SLOPE FLOOR TO DRAIN. COORDINATE FLOOR TILE LAYOUT AT AND AROUND FLOOR DRAIN.
5. REFER TO SPECIFICATION SECTION 093000

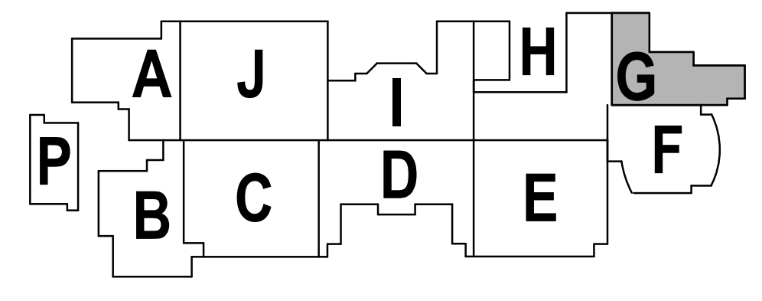
TOILET ACCESSORIES

ACCESSORIES	RESPONSIBILITY MATRIX	BASIS OF DESIGN
MIRRORS	CFCI	BOBRICK B-290 2436
TOILET PARTITIONS	CFCI	ASI - BLACK CONFETTI
URINAL SCREEN	CFCI	ASI - BLACK CONFETTI
HAND DRYERS	CFCI	SANIFLOW M06AF-UL OR BRADLEY 2902-280000 120V
GRAB BARS	CFCI	BOBRICK B-6806 x 42 IN B-6806 x 36IN
SANITARY NAPKIN VENDOR	CFCI	BOBRICK B-2706 B3706
PLUMBING CHASE ACCESS DOOR	CFCI	@ ALL CHASE RE: PLUMBING
SOAP DISPENSER	OFCI	SYMMETRY 9902001
TOILET PAPER DISPENSER	OFCI	KIMBERLY CLARK 09507
SANITARY NAPKIN DISPOSALS	OFCI	CONTINENTAL 250C
PAPER TOWEL DISPENSERS	OFCI	BAYWEST 86500
COAT HOOK W/ BUMPER @ ALL TOILET PARTITION DOORS	CFCI	BRADLEY

TOILET ACCESSORIES

TA-02	24" D X 42" H PANEL FLOOR MOUNTED URINAL SCREEN
TA-03	24" W X 36" H MIRROR
TA-04	36" GRAB BAR (TYPICAL AT ALL ADA TOILETS)
TA-05	42" GRAB BAR (TYPICAL AT ALL ADA TOILETS)
TA-07	TOILET PAPER DISPENSER
TA-08	SANITARY NAPKIN DISPOSAL
TA-09	SOAP DISPENSER
TA-12	SANITARY NAPKIN VENDOR - SEMI-RECESSED
TA-30	HAND DRYER

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

RESTROOM PLAN & ELEVATIONS

A3.10
___ of ___

Autodesk Docs://23072_CFISD_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt

1ST FLOOR DOOR SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR MATERIAL	DOOR FINISH	GLAZING TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS	PHASE
1000-1	EXIST SF	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1000-2	EXIST SF	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1006-1	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1006-2	EXIST SF	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1006-3	EXIST SF	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1008-1	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1008-2	EXIST SF	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1008-3	EXIST SF	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1016-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1018-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1020-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1022-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1025-1	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH	EXISTING
1030-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	GR	EXISTING
1031-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	GR	EXISTING
1032-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	GR	EXISTING
1033-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1034-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1035-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1036-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1037-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1038-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1039-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1041-1	EXIST FM2	6'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1042-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1043-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1044-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1045-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	GR	EXISTING
1046-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1047-1	EXIST NL2	6'-0"	6'-10"		SC WD / GLASS	-	-	EXIST HM	HM	-	PH, GR	EXISTING
1047-2	EXIST NL2	6'-0"	6'-10"		SC WD / GLASS	-	-	EXIST HM	HM	-	PH, GR	EXISTING
1047A-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1047B-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1047C-1	FM	3'-0"	6'-10"	0	HM	PAINT		EXIST HM	HM	PAINT	PH, GR	NEW CONSTRUCTION
1047D-1	FM	3'-0"	6'-10"	0	HM	PAINT		EXIST HM	HM	PAINT	PH, GR	NEW CONSTRUCTION
1048-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1049-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1050-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1054-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	GR	EXISTING
1055-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1056-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1056-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1057-1	EXIST F	3'-0"	6'-10"	0	SC WOOD			EXIST HM	HM	-		EXISTING
1058-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1061-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1062-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1062-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1063-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1070-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1070-2	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1070-3	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM			EXIST SF	ALUM		PH	EXISTING
1100-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST AL	ALUM	-	PH	EXISTING
1100-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1102-1	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1102-2	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1102-3	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1102-4	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1102-5	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-		EXISTING
1102-6	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1102-7	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1103-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	GR	EXISTING
1104-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1104-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1104-3	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1105-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1105-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1105-3	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1106-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1109-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1109-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1110-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1111-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1112-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1113-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1114-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1114-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1114-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1115-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1117-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1118A-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1118A-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1119-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1119-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1120-1	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1120-2	EXIST NLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-	PH, GR	EXISTING
1120-3	NLM2	6'-0"	6'-10"		GLASS/HM	PAINT	S3	EXIST HM	HM	PAINT	PH, GR	NEW CONSTRUCTION
1121-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1122-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1123-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1124-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1124A-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1125-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1125-2	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1125-3	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1125-4	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1126-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1126-2	EXIST R	10'-0"	4'-0"									EXISTING
1127-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1127A-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1128-1	FM2	6'-0"	6'-10"	0	HM	PAINT		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1129-1	EXIST FM	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1130-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1140-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1140-2	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1141-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1141B-1	EXIST FM	4'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1142-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1145-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1146-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1147-1	EXIST NL2	6'-0"	6'-10"		SC WD / GLASS	-	-	EXIST HM	HM	-	PH	EXISTING
1148-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING

1ST FLOOR DOOR SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR MATERIAL	DOOR FINISH	GLAZING TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS	PHASE
1152-1	EXIST F2	6'-0"	6'-10"	45	SC WOOD	-		EXIST HM	HM	-		EXISTING
1153-1	EXIST F2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1154-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1155-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1156-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1156-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1157-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1158-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1159-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1159-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1162-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1162-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1163-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1163-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1164-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1164-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1165-1	EXIST FM	3'-0"	6'-10"	60	HM	-		EXIST HM	HM	-	PH	EXISTING
1165-2	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-	PH	EXISTING
1166-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1166-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1166-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1167-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1167-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1168-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1168-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1169-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1169-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1170-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1170-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1170-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1171-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1171-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1171-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1172-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1173-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1173-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1173-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1174-1	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1175-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1175-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1175-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1176-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1176-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1178-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1178-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1179-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1204-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1206-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1206-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1206-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1207-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1208-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1208-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1208-3	EXIST NL	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1210-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1212-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1212-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1212-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1214-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1214-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1214-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1225-1	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1225-2	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1225-3	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1225-4	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1252-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1253-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1254-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1255-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1255-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1255-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1256-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1257-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1258-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1260-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1260-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1260-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1264-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1264-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1264-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1301-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1303-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1304-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1305-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1305-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1305-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1306-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1306-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1306-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1307-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1308-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1309-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1309-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1309-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1310-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1311-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1311-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1311-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1353-1	EXIST DD	3'-0"	6'-10"	0	SC WOOD			EXIST HM	HM			EXISTING
1355-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1357-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1359-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1361-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1363-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1365-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1367-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1369-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1369-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1369-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1371-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING

GLASS TYPE LEGEND

IG-1	INSULATED GLASS (EXTERIOR)
IR-1	9/16" THICK IMPACT RESISTANT GLASS (INTERIOR)
IR-2	3/8" THICK IMPACT RESISTANT GLASS (INTERIOR)
FR-1	FIRE-RATED GLASS
AC-1	ACOUSTICAL RATED GLASS
L-1	1/2" LAMINATED GLASS
S-3	1/4" TEMPERED GLASS
E	EXISTING IR GLAZING
IRF	IMPACT RESISTANT FILM (RE: SPEC)

INSTALLATION OF IMPACT RESISTANT GLASS (IR) TYPES SHALL COMPLY WITH GLASS MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. DOW CORNING 995 SILICON STRUCTURAL SEALANT IS REQUIRED.

REFER TO SPECIFICATION SECTION 08 80 00

DOOR ABBREVIATIONS

F	FLUSH PANEL SINGLE
M	METAL
V	SQUARE VISION LITE
HL	HALF LITE
NL	NARROW LITE
NLS	SOUND CONTROL DOOR
R	ROLL-UP DOOR
DD	DUTCH DOOR
SF	ALUMINUM STOREFRONT
PH	PANIC HARDWARE
CR	CARD READER
AL	ALUMINUM
HM	HOLLOW METAL
PEEP	PEEP HOLE
2	PAIR DOORS

DOOR GENERAL NOTES

1. EXISTING DOOR INFORMATION PROVIDED ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME TYPES, SIZE, AND FINISHES.
2. EXISTING DOOR, FRAME AND HARWARE SCHEDULED TO REMAIN. CONTRACTOR SHALL EXAMINE DOOR AND PERFORM MINOR REPAIR OR ADJUSTMENTS AS NEEDED TO RESTORE TO FULL FUNCTION.
3. EXISTING DOOR, FRAME AND HARDWARE SCHEDULED TO BE REPLACED AND INSTALLED IN EXISTING FRAME OR OPENING: CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME SIZE TO ENSURE PROPER INSTALL OF NEW DOOR. PREP AND REPAIR EXISTING FRAME AND OPENING AS REQUIRED.
4. REFER TO OVERALL FLOOR PLAN AND MEPT DRAWINGS FOR CARD READER LOCATIONS.
5. PAINT EXISTING HOLLOW METAL DOOR AND FRAMES SCHEDULED TO REMAIN. CLEAN ALL ALUMINUM FRAMES SCHEDULED TO REMAIN.
6. NEW DOOR WITH LITE KITS: LITE KIT SHALL MATCH EXISTING IN STYLE, SIZE, COLOR AND DETAILS.
7. EXISTING DOORS SCHEDULED TO REMAIN: REPLACE LOCKSET AND HARDWARE PER SPECIFICATION.
8. RETURN ALL EXISTING LOCKSETS TO OWNER.
9. PROVIDE ALUMINUM THRESHOLDS SET IN FULL BED OF SEALANT AT ALL EXTERIOR DOORS.RE: HARDWARE SPECIFICATIONS.
10. DOORS WITH EXISTING GRAPHICS: CAREFULLY REMOVE EXISTING HARDWARE. INSTALL NEW HARDWARE WITHOUT DAMAGING GRAPHICS.
11. DOORS SCHEDULED TO RECEIVE GRAPHICS. COORDINATE INSTALLATION OF GRAPHICS WITH OWNERS PREFERRED VENDOR "SIGN CHAMP". PROVIDE AND INSTALL GRAPHICS AS PART OF SPECIFIED ALLOWANCE.
    SIGN CHAMP, INC
    27351 BLUEBERRY HILL DR. STE#42
    CONROE, TX 77385

HARDWARE SETS:
REFER TO HARDWARE SPECIFICATIONS

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

DOOR SCHEDULES

A4.01
of

11/14/2024 1:35:39 PM
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

1ST FLOOR DOOR SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR MATERIAL	DOOR FINISH	GLAZING TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS	PHASE
1371-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1371-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1372-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1373-1	EXIST NL2	6'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1373-2	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1374-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1375-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1376-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1377-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1378-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1378-2	EXIST BF	7'-8"	6'-10"		SC WOOD	-		EXIST HM	-	-	BI-FOLD	EXISTING
1379-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1380-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1381-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1382-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1383-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1384-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1401-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1402-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1403-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1404-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1405-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1406-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1407-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1408-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1409-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1410-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1411-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1412-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1413-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1415-1	EXIST SFR	3'-0"	6'-10"	-	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1416-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1418-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1419-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1420-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1421-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1422-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1423-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1424-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1426-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1426-2	EXIST R	9'-0"	4'-0"		-			-	-			EXISTING
1427-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1500-1	EXIST SF2	6'-0"	7'-0"		GLASS/ALUM		IR-1	EXIST SF	ALUM		PH, REPLACE GLASS PNL	EXISTING
1500-2	EXIST SF2	6'-0"	7'-0"		GLASS/ALUM	-	IR-1	EXIST SF	ALUM	-	PH, REPLACE GLASS PNL	EXISTING
1500A-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1500A-2	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1500B-1	EXIST SFR	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1500B-2	EXIST K7	3'-0"	7'-0"	-	GLASS/ALUM	RE: SPEC	IR1	SF1	ALUM	RE: SPEC		NEW CONSTRUCTION
1500C-1	EXIST K7	3'-0"	7'-0"	-	GLASS/ALUM	RE: SPEC	IR1	SF1	ALUM	RE: SPEC		NEW CONSTRUCTION
1501-1	EXIST SFR	3'-0"	6'-10"	-	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1501-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1502-1	EXIST SF	4'-0"	6'-10"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1503-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1504-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1506-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1506-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1508-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1508-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1509-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1510-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1510-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1511-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1511-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1512-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1513-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1513-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1514-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1514-2	EXIST NL	4'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1515-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1516-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1517-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1518-1	EXIST FM2	6'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1519-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1520-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1521-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1522-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1523-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1524-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1525-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1527-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1528-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1529-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1530-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1530-2	EXIST R	4'-0"	4'-0"		-			-	-			EXISTING
1532-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1533-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1533-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST AL	ALUM	-		EXISTING
1534-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1535-1	EXIST NL2	6'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1535-2	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1536-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1554-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1556-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1558-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1560-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1562-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1575-1	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1575-2	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING

1ST FLOOR DOOR SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR MATERIAL	DOOR FINISH	GLAZING TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS	PHASE
1575-3	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1575-4	EXIST SFE2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1602-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1603-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1604-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1605-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1606-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1607-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1608-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1609-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1610-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1611-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1612-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1613-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1614-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1654-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1656-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1657-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1658-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1659-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1660-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1661-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1662-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1663-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1664-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1665-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1666-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1667-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1668-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1670-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1702-1	EXIST NL	3'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1702-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1703-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1704-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1704-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1704-3	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1705-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1705-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1705-3	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1706-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1707-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1708-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1710-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1711-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1711-2	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1712-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1713-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1713-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1714-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1715-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1716-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1717-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1717-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1718-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1718-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1720-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1722-1	EXIST DD	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1722-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1724-1	EXIST NL2	6'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1724-2	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1726-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1750-1	EXIST F2	6'-0"	6'-10"	90	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1750-2	EXIST FM2	7'-0"	6'-10"	90	HM	-		EXIST HM	HM	-	PH	EXISTING
1750-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1750-4	EXIST F2	6'-0"	6'-10"	90	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1752-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1754-1	EXIST F	3'-0"	6'-10"	90	SC WOOD	-		EXIST HM	HM	-		EXISTING
1756-1	EXIST FM2	6'-0"	6'-10"	90	HM	-		EXIST HM	HM	-		EXISTING
1760-1	EXIST R	12'-0"	14'-6"	0	-	-		-	-	-		EXISTING
1760-2	EXIST R	12'-0"	14'-6"	0	-	-		-	-	-		EXISTING
1762-1	FM	4'-0"	6'-10"	0	HM	PAINT		HM1	HM	PAINT		NEW CONSTRUCTION
1763-1	EXIST FM2	6'-0"	6'-10"	90	HM	-		EXIST HM	HM	-	PH	EXISTING
1765-1	EXIST F	3'-0"	6'-10"	90	SC WOOD	-		EXIST HM	HM	-		EXISTING
1766-1	EXIST F	3'-0"	6'-10"	90	SC WOOD	-		EXIST HM	HM	-		EXISTING
1767-1	EXIST F	3'-0"	6'-10"	90	SC WOOD	-		EXIST HM	HM	-		EXISTING
1768-1	F2	6'-0"	6'-10"	60	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
1768A-1	FM2	6'-0"	6'-10"	0	HM	PAINT		HM1	HM	PAINT		NEW CONSTRUCTION
1769-1	EXIST FM2	6'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1770-1	EXIST F	3'-0"	6'-10"	90	SC WOOD	-		EXIST HM	HM	-		EXISTING
1772-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST AL	ALUM	-		EXISTING
1773-1	EXIST FM2	7'-0"	6'-10"	90	HM	-		EXIST HM	HM	-	PH	EXISTING
1773-2	EXIST FM2	7'-0"	6'-10"	90	HM	-		EXIST HM	HM	-	PH	EXISTING
1774-1	EXIST FM2	7'-0"	6'-10"	90	HM	-		EXIST HM	HM	-	PH	EXISTING
1776-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1800-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1800-2	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1803-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1805-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
1809-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1809-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1810-1	EXIST NL	4'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1810-2	NLS	4'-0"	6'-10"	0	RE: SPEC	RE: SPEC	AC-1	EXIST HM	HM	PAINT	PH, STC	NEW CONSTRUCTION
1811-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1812-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1813-1	NLM	4'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1814-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1815-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1816-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1817-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1818-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1819-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1820-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1821-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1822-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1823-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1824-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1826-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1827-1	EXIST NL2	6'-0"	6'-10"		SC WD / GLASS	-	-	EXIST HM	HM	-	PH	EXISTING

GLASS TYPE LEGEND

IG-1	INSULATED GLASS (EXTERIOR)
IR-1	9/16" THICK IMPACT RESISTANT GLASS (INTERIOR)
IR-2	3/8" THICK IMPACT RESISTANT GLASS (INTERIOR)
FR-1	FIRE-RATED GLASS
AC-1	ACOUSTICAL RATED GLASS
L-1	1/2" LAMINATED GLASS
S-3	1/4" TEMPERED GLASS
E	EXISTING IR GLAZING
IRF	IMPACT RESISTANT FILM (RE: SPEC)

INSTALLATION OF IMPACT RESISTANT GLASS (IR) TYPES SHALL COMPLY WITH GLASS MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. DOW CORNING 995 SILICON STRUCTURAL SEALANT IS REQUIRED.

REFER TO SPECIFICATION SECTION 08 80 00

DOOR ABBREVIATIONS

F	FLUSH PANEL SINGLE
M	METAL
V	SQUARE VISION LITE
HL	HALF LITE
NL	NARROW LITE
NLS	SOUND CONTROL DOOR
R	ROLL-UP DOOR
DD	DUTCH DOOR
SF	ALUMINUM STOREFRONT
PH	PANIC HARDWARE
CR	CARD READER
AL	ALUMINUM
HM	HOLLOW METAL
PEEP	PEEP HOLE
2	PAIR DOORS

DOOR GENERAL NOTES

1. EXISTING DOOR INFORMATION PROVIDED ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME TYPES, SIZE, AND FINISHES.
2. EXISTING DOOR, FRAME AND HARWARE SCHEDULED TO REMAIN. CONTRACTOR SHALL EXAMINE DOOR AND PERFORM MINOR REPAIR OR ADJUSTMENTS AS NEEDED TO RESTORE TO FULL FUNCTION.
3. EXISTING DOOR, FRAME AND HARDWARE SCHEDULED TO BE REPLACED AND INSTALLED IN EXISTING FRAME OR OPENING: CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME SIZE TO ENSURE PROPER INSTALL OF NEW DOOR. PREP AND REPAIR EXISTING FRAME AND OPENING AS REQUIRED.
4. REFER TO OVERALL FLOOR PLAN AND MEPT DRAWINGS FOR CARD READER LOCATIONS.
5. PAINT EXISTING HOLLOW METAL DOOR AND FRAMES SCHEDULED TO REMAIN. CLEAN ALL ALUMINUM FRAMES SCHEDULED TO REMAIN.
6. NEW DOOR WITH LITE KITS: LITE KIT SHALL MATCH EXISTING IN STYLE, SIZE, COLOR AND DETAILS.
7. EXISTING DOORS SCHEDULED TO REMAIN: REPLACE LOCKSET AND HARDWARE PER SPECIFICATION.
8. RETURN ALL EXISTING LOCKSETS TO OWNER.
9. PROVIDE ALUMINUM THRESHOLDS SET IN FULL BED OF SEALANT AT ALL EXTERIOR DOORS.RE: HARDWARE SPECIFICATIONS.
10. DOORS WITH EXISTING GRAPHICS: CAREFULLY REMOVE EXISTING HARDWARE. INSTALL NEW HARDWARE WITHOUT DAMAGING GRAPHICS.
11. DOORS SCHEDULED TO RECEIVE GRAPHICS. COORDINATE INSTALLATION OF GRAPHICS WITH OWNERS PREFERRED VENDOR "SIGN CHAMP". PROVIDE AND INSTALL GRAPHICS AS PART OF SPECIFIED ALLOWANCE.
    SIGN CHAMP, INC
    27351 BLUEBERRY HILL DR. STE#42
    CONROE, TX 77385

HARDWARE SETS:
REFER TO HARDWARE SPECIFICATIONS

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

DOOR SCHEDULES

1ST FLOOR DOOR SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR MATERIAL	DOOR FINISH	GLAZING TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS	PHASE
1827B-1	EXIST NLM	4'-0"	6'-10"	90	GLASS/HM	-		EXIST HM	HM	-	PH	EXISTING
1830-1	EXIST NL	4'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1830-2	NLS	3'-0"	6'-10"	0	RE: SPEC	RE: SPEC	AC-1	EXIST HM	HM	PAINT	PH, STC	NEW CONSTRUCTION
1831-1	NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1832-1	NLS	4'-0"	6'-10"	0	SC WD / GLASS	RE: SPEC	AC-1	HM1	HM	PAINT	STC	NEW CONSTRUCTION
1833-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1834-1	EXIST FM2	6'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1835-1	EXIST F2	6'-0"	6'-10"	45	SC WOOD	-		EXIST HM	HM	-		EXISTING
1836-1	EXIST NL	4'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1837-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1838-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
1839-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1840-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1841-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1842-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1843-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
1844-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1845-1	EXIST NL	4'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1846-1	EXIST F	4'-0"	6'-10"		SC WOOD	-		EXIST HM	HM	-		EXISTING
1848-1	F2	6'-0"	6'-10"	45	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
1850-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1851-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1852-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1853-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1854-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1854-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1854-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1856-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1858-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1859-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1860-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1861-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1862-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1864-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1865-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1866-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1867-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1867-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1868-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1870-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1871-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1873-1	EXIST SF	3'-0"	6'-10"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1873-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1874-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1874-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1876-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1878-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1880-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1881-2	EXIST SF	3'-0"	6'-10"	-	GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
1881-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1882-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1883-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1884-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1886-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1890-1	NLS	3'-0"	6'-10"	0	SC WD / GLASS	RE: SPEC	AC-1	HM1	HM	PAINT	STC	NEW CONSTRUCTION
1891-1	NLS	3'-0"	6'-10"	0	SC WD / GLASS	RE: SPEC	AC-1	HM1	HM	PAINT	STC	NEW CONSTRUCTION
1892-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
1893-1	NLS	4'-0"	6'-10"	0	RE: SPEC	RE: SPEC	AC-1	HM1	HM	PAINT	STC	NEW CONSTRUCTION
1894-1	NLS	4'-0"	6'-10"	0	RE: SPEC	RE: SPEC	AC-1	HM1	HM	PAINT	PH, STC	NEW CONSTRUCTION
1894-2	HCO	4'-0"	6'-10"	0	-	-		HM1	HM	PAINT	CASED OP'G	NEW CONSTRUCTION
1895-1	NLS	4'-0"	6'-10"	0	RE: SPEC	RE: SPEC	AC-1	HM1	HM	PAINT	PH, STC	NEW CONSTRUCTION
1895-2	HCO	4'-0"	6'-10"	0	-	-		HM1	HM	PAINT	CASED OP'G	NEW CONSTRUCTION
1895-3	HCO	6'-0"	6'-10"	0	-	-		HM1	HM	PAINT	CASED OP'G	NEW CONSTRUCTION
1900-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1901-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1902-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1902-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1903-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1904-1	FM	3'-0"	6'-10"	0	HM	PAINT		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1904-2	EXIST R	10'-0"	11'-6"	0								EXISTING
1904-3	EXIST R	10'-0"	11'-6"	0								EXISTING
1905-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1907-1	EXIST F2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1908-1	EXIST FM	4'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1909-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1909-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1909-3	EXIST R	12'-0"	11'-6"	0	-	-		-	-	-		EXISTING
1909-4	EXIST R	12'-0"	11'-6"	0	-	-		-	-	-		EXISTING
1909-5	EXIST R	12'-0"	11'-6"	0	-	-		-	-	-		EXISTING
1909-6	EXIST R	12'-0"	11'-6"	0	-	-		-	-	-		EXISTING
1909-7	EXIST R	12'-0"	11'-6"	0	-	-		-	-	-		EXISTING
1909-8	EXIST R	12'-0"	11'-6"	0	-	-		-	-	-		EXISTING
1909-9	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1910-1	EXIST DD	4'-0"	7'-0"	0	HM	-		EXIST HM	HM	-		EXISTING
1910B-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1911-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1912-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1913-1	EXIST NL	4'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1914-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1915-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1916-1	EXIST FM	3'-6"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1917-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1918-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1924-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1925-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1926-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1927-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1927-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1927-3	NL	3'-0"	6'-10"	0	SC WD / GLASS	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1928-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1929-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1930-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1931-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1932-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1933-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1933-2	EXIST R	10'-0"	11'-6"	0								EXISTING
1938-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
1938-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1939-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1940-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1950-1	EXIST NL2	6'-0"	6'-10"		SC WD / GLASS	-	-	EXIST HM	HM	-		EXISTING
1953-1	EXIST FM	4'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING

1ST FLOOR DOOR SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR MATERIAL	DOOR FINISH	GLAZING TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS	PHASE
1955-1	EXIST FM2	6'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
1956-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1958-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1960-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1962-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1965-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1965-2	FM	4'-0"	6'-10"	0	HM	PAINT		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1966-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1968-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1968-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1968-3	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1968-4	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1969-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1972-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1975-1	EXIST SF	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1975-2	EXIST SFR	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1975-3	EXIST SFR	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1975-4	EXIST SF2	6'-0"	7'-0"		GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1975-5	EXIST SFR	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1975-6	EXIST SFR	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1975-7	EXIST SFR	3'-0"	7'-0"	-	GLASS/ALUM	-		EXIST SF	ALUM	-		EXISTING
1976-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1977-1	EXIST FM	4'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
1978-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1979-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1982-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1983-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1984-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1985-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1986-1	FM2	6'-0"	6'-10"	0	HM	PAINT		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1986-2	FM2	6'-0"	6'-10"	0	HM	PAINT		EXIST HM	HM	PAINT		NEW CONSTRUCTION
1990-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-	PH	EXISTING
1990-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1990-3	EXIST SF	3'-0"	7'-0"	-	GLASS/HM	-		EXIST HM	HM	-	PH	EXISTING
1991-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1992-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
1993-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
1995-1	EXIST FLM2	6'-0"	6'-10"		GLASS/HM	-		EXIST HM	HM	-		EXISTING
1995-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2001A-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2002-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2004-1	EXIST FM	3'-6"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2006-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2008-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2010-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2012-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2014-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2016-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2018-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2020-1	EXIST FM	3'-6"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2022-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2024-1	EXIST FM2	6'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2029-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2030-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2101-1	EXIST FM	3'-0"	6'-10"	60	HM	-		EXIST HM	HM	-		EXISTING
2103-1	EXIST NL	4'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2105-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2106-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2107-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2108-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2109-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2110-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2111-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2112-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2112-2	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2112A-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2112B-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2113-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2114-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2116-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2117-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2118-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2121-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2121-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2121-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2122-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2122-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-	PH	EXISTING
2135-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2135-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2136-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2136-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2136-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2137-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2137-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2203-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
2204-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2206-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2207-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2208-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2209-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2210-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2211-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2212-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2213-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2214-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2215-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2216-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2303-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
2305-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2307-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2308-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2309-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2310-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2311-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2312-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2313-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2314-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2314-2	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2314B-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2315-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING

GLASS TYPE LEGEND

IG-1	INSULATED GLASS (EXTERIOR)
IR-1	9/16" THICK IMPACT RESISTANT GLASS (INTERIOR)
IR-2	3/8" THICK IMPACT RESISTANT GLASS (INTERIOR)
FR-1	FIRE-RATED GLASS
AC-1	ACOUSTICAL RATED GLASS
L-1	1/2" LAMINATED GLASS
S-3	1/4" TEMPERED GLASS
E	EXISTING IR GLAZING
IRF	IMPACT RESISTANT FILM (RE: SPEC)

INSTALLATION OF IMPACT RESISTANT GLASS (IR) TYPES SHALL COMPLY WITH GLASS MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. DOW CORNING 995 SILICON STRUCTURAL SEALANT IS REQUIRED.

REFER TO SPECIFICATION SECTION 08 80 00

DOOR ABBREVIATIONS

F	FLUSH PANEL SINGLE
M	METAL
V	SQUARE VISION LITE
HL	HALF LITE
NL	NARROW LITE
NLS	SOUND CONTROL DOOR
R	ROLL-UP DOOR
DD	DUTCH DOOR
SF	ALUMINUM STOREFRONT
PH	PANIC HARDWARE
CR	CARD READER
AL	ALUMINUM
HM	HOLLOW METAL
PEEP	PEEP HOLE
2	PAIR DOORS

DOOR GENERAL NOTES

1. EXISTING DOOR INFORMATION PROVIDED ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME TYPES, SIZE, AND FINISHES.

2. EXISTING DOOR, FRAME AND HARWARE SCHEDULED TO REMAIN. CONTRACTOR SHALL EXAMINE DOOR AND PERFORM MINOR REPAIR OR ADJUSTMENTS AS NEEDED TO RESTORE TO FULL FUNCTION.

3. EXISTING DOOR, FRAME AND HARDWARE SCHEDULED TO BE REPLACED AND INSTALLED IN EXISTING FRAME OR OPENING: CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME SIZE TO ENSURE PROPER INSTALL OF NEW DOOR. PREP AND REPAIR EXISTING FRAME AND OPENING AS REQUIRED.

4. REFER TO OVERALL FLOOR PLAN AND MEPT DRAWINGS FOR CARD READER LOCATIONS.

5. PAINT EXISTING HOLLOW METAL DOOR AND FRAMES SCHEDULED TO REMAIN. CLEAN ALL ALUMINUM FRAMES SCHEDULED TO REMAIN.

6. NEW DOOR WITH LITE KITS: LITE KIT SHALL MATCH EXISTING IN STYLE, SIZE, COLOR AND DETAILS.

7. EXISTING DOORS SCHEDULED TO REMAIN: REPLACE LOCKSET AND HARDWARE PER SPECIFICATION.

8. RETURN ALL EXISTING LOCKSETS TO OWNER.

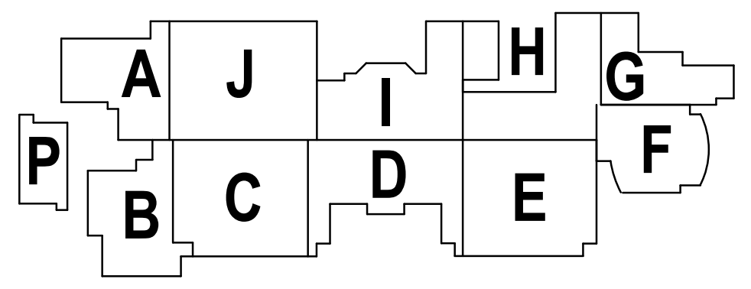
9. PROVIDE ALUMINUM THRESHOLDS SET IN FULL BED OF SEALANT AT ALL EXTERIOR DOORS.RE: HARDWARE SPECIFICATIONS.

10. DOORS WITH EXISTING GRAPHICS: CAREFULLY REMOVE EXISTING HARDWARE. INSTALL NEW HARDWARE WITHOUT DAMAGING GRAPHICS.

11. DOORS SCHEDULED TO RECEIVE GRAPHICS. COORDINATE INSTALLATION OF GRAPHICS WITH OWNERS PREFERRED VENDOR "SIGN CHAMP". PROVIDE AND INSTALL GRAPHICS AS PART OF SPECIFIED ALLOWANCE.
SIGN CHAMP, INC
27351 BLUEBERRY HILL DR. STE#42
CONROE, TX 77385

HARDWARE SETS:
REFER TO HARDWARE SPECIFICATIONS

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

DOOR SCHEDULES

11/14/2024 1:35:50 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

1ST FLOOR DOOR SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR MATERIAL	DOOR FINISH	GLAZING TYPE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	COMMENTS	PHASE
2316-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2318-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2402-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2403-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2405-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2406-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2407-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2408-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2409-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2410-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2411-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2413-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2414-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2416-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2417-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2418-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2419-1	EXIST NL2	6'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2420-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2500-1	EXIST HL2	6'-0"	6'-10"		SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2502-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
2503-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
2504-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2505-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST	HM	-		EXISTING
2506-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2507-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2508-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2509-1	EXIST NL	3'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2510-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2510-2	EXIST F	3'-0"	6'-10"	45	SC WOOD	-		EXIST HM	HM	-		EXISTING
2511-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2511-2	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2512-1	EXIST FM	4'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2512-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2515-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2515-2	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2515-3	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2516-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2517-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
2518-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		EXIST HM	HM	PAINT		NEW CONSTRUCTION
2519-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2520-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2521-1	EXIST NL2	6'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2522-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2604-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2606-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2608-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2609-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2610-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2610-2	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2611-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2612-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2613-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2702-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2703-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2704-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2705-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2706-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2707-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2708-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2709-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2710-1	EXIST HL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2711-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2712-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2714-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2716-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2718-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2720-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2765-1	EXIST FM	4'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2801-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2803-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2804-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2805-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2806-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2807-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2808-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2809-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2810-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2811-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2812-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2813-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2814-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2902-1	EXIST NL	3'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2904-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2905-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2906-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2907-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2908-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2909-1	EXIST F	3'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
2910-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2911-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2912-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2913-1	EXIST FM	3'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
2914-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
2915-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2916-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2917-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-	PH	EXISTING
2918-1	EXIST NL2	6'-0"	6'-10"	60	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
2919-1	EXIST F2	6'-0"	6'-10"	0	SC WOOD	-		EXIST HM	HM	-		EXISTING
3004-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3006-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3008-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3010-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3012-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3012-2	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3014-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3016-1	EXIST NL	3'-0"	6'-10"	0	SC WD / GLASS	-		EXIST HM	HM	-		EXISTING
3018-1	EXIST FM	3'-6"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
3020-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
3022-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
3024-1	EXIST FM	4'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
3026-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
3101-1	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
3101-2	EXIST SFE2	6'-0"	6'-10"		GLASS/ALUM	-		EXIST SF	ALUM	-	PH	EXISTING
3102-1	EXIST FRP2	6'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3103-1	EXIST FRP	3'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3104-1	EXIST FRP	3'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3105-1	EXIST FRP	3'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3106-1	EXIST FRP3	4'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3106-2	EXIST FRP2	6'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3107-1	EXIST FRP	3'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3108-1	EXIST FRP	3'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3109-1	EXIST FRP	3'-0"	6'-10"	0	FRP	-		EXIST AL	ALUM	-		EXISTING
3209-1	EXIST FM2	6'-0"	6'-10"	45	HM	-		EXIST HM	HM	-		EXISTING
3210-1	EXIST FM	4'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
3211-1	EXIST FM	4'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
4000-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4000B-1	SFE	4'-0"	6'-10"	-	GLASS/ALUM	RE: SPEC	IG-1	W1	ALUM	RE: SPEC	PH	NEW CONSTRUCTION
4000D-1	SFE2	6'-0"	7'-0"		GLASS/ALUM	RE: SPEC	IG-1, IRF	W5	ALUM	RE: SPEC	PH	NEW CONSTRUCTION
4000D-2	NL2	6'-0"	6'-10"		SC WD / GLASS	PLAM	S3	HM1	HM	PAINT	PH	NEW CONSTRUCTION
4001-1	NLS2	6'-0"	6'-10"		RE: SPEC	RE: SPEC	AC-1	HM1	HM	PAINT	PH, STC	NEW CONSTRUCTION
4002-1	NLS2	6'-0"	6'-10"		RE: SPEC	PL-5	AC-1	HM1	HM	PT-7	STC	NEW CONSTRUCTION
4002-2	NLS	4'-0"	6'-10"	0	RE: SPEC	PL-5	AC-1	HM1	HM	PT-7	PH	NEW CONSTRUCTION
4003-1	NLS	3'-0"	6'-10"	0	RE: SPEC	PL-5	AC-1	HM1	HM	PT-7		NEW CONSTRUCTION
4004-1	F	4'-0"	6'-10"	0	SC WOOD	PL-5		HM1	HM	PT-7		NEW CONSTRUCTION
4005-1	NLS	3'-0"	6'-10"	0	SC WD / GLASS	PL-5		HM1	HM	PT-7		NEW CONSTRUCTION
4005-16	FM	3'-0"	7'-0"	0	HM	PAINT		HM1	HM	PAINT		NEW CONSTRUCTION
4005-17	RO	10'-0"	10'-0"		RE: SPEC	RE: SPEC		-	-	-	MANUAL ROLL-UP	NEW CONSTRUCTION
4006-1	NLS	4'-0"	6'-10"	0	SC WD / GLASS	PLAM	AC-1	HM1	HM	PAINT	PH, STC	NEW CONSTRUCTION
4007-1	NL	3'-0"	6'-10"	0	SC WD / GLASS	PLAM	S3	HM1	HM	PAINT		NEW CONSTRUCTION
4008-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4010-1	NL	3'-0"	6'-10"	0	SC WD / GLASS	PLAM	S3	HM1	HM	PAINT	PH	NEW CONSTRUCTION
4010-2	SFE	4'-0"	6'-10"	-	GLASS/ALUM	RE: SPEC	IG-1	W2	ALUM	RE: SPEC	PH	NEW CONSTRUCTION
4011-1	FM	4'-0"	6'-10"	0	HM	PAINT		HM1	HM	PAINT		NEW CONSTRUCTION
4012-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4013-1	NL	3'-0"	6'-10"	0	SC WD / GLASS	PLAM	S3	HM1	HM	PAINT	PH	NEW CONSTRUCTION
4013-2	NL	3'-0"	6'-10"	0	SC WD / GLASS	PLAM	S3		HM	PAINT	PH	NEW CONSTRUCTION
4014-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4015-1	F	3'-0"	6'-10"	45	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4016-1	F2	6'-0"	6'-10"	45	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4017-1	NLM	4'-0"	6'-10"	0	GLASS/HM	PAINT	S3		HM	PAINT	PH	NEW CONSTRUCTION
4017-2	FM	4'-0"	6'-10"	0	HM	PAINT		HM1	HM	PAINT	PH	NEW CONSTRUCTION
4017-3	R	10'-0"	10'-0"	0	RE: SPEC	RE: SPEC		-	-	-	MANUAL ROLL-UP	NEW CONSTRUCTION
4018-1	NL	3'-0"	6'-10"	0	SC WD / GLASS	PLAM	S3	HM2	HM	PAINT		NEW CONSTRUCTION
4019-1	NL	3'-0"	6'-10"	0	SC WD / GLASS	PLAM	S3	HM1	HM	PAINT		NEW CONSTRUCTION
4021-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4022-1	F	3'-0"	6'-10"	0	SC WOOD	PLAM		HM1	HM	PAINT		NEW CONSTRUCTION
4025-1	NLM	4'-0"	6'-10"	0	GLASS/HM	PAINT	S3		HM	PAINT	PH	NEW CONSTRUCTION
4025-2	FM	3'-0"	6'-10"	0	HM	PAINT		HM1	HM	PAINT	PH, PEEP	NEW CONSTRUCTION
4025-3	R	10'-0"	10'-0"	0	RE: SPEC	RE: SPEC		-	-	-	MANUAL ROLL-UP	NEW CONSTRUCTION
4025-4	FM	4'-0"	6'-10"	0	HM	PAINT		HM1	HM	PAINT		NEW CONSTRUCTION
BB100-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
BB200-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
C101-1	EXIST R	10'-0"	11'-6"	0				-				EXISTING
C101-2	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C102-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C102-2	EXIST R	10'-0"	11'-6"	0				-				EXISTING
C103-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C104-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C105-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C106-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C107-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C108-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C108-2	EXIST R	4'-0"	4'-0"					-				EXISTING
C108-3	EXIST R	4'-0"	4'-0"					-				EXISTING
C108-4	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C109-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
C111-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
FB100-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
FB200-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING
G1001-1	J	4'-0"	7'-0"	0	STEEL	PAINT			H.M.	PAINT		NEW CONSTRUCTION
G1001-2	M	3'-0"	7'-0"	0	SC WOOD	PAINT			H.M.	PAINT		NEW CONSTRUCTION
SB100-1	EXIST FM	3'-0"	6'-10"	0	HM	-		EXIST HM	HM	-		EXISTING
SB200-1	EXIST NLM	3'-0"	6'-10"	0	GLASS/HM	-		EXIST HM	HM	-		EXISTING

Grand total: 832

GLASS TYPE LEGEND

IG-1	INSULATED GLASS (EXTERIOR)
IR-1	9/16" THICK IMPACT RESISTANT GLASS (INTERIOR)
IR-2	3/8" THICK IMPACT RESISTANT GLASS (INTERIOR)
FR-1	FIRE-RATED GLASS
AC-1	ACOUSTICAL RATED GLASS
L-1	1/2" LAMINATED GLASS
S-3	1/4" TEMPERED GLASS
E	EXISTING IR GLAZING
IRF	IMPACT RESISTANT FILM (RE: SPEC)

INSTALLATION OF IMPACT RESISTANT GLASS (IR) TYPES SHALL COMPLY WITH GLASS MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. DOW CORNING 995 SILICON STRUCTURAL SEALANT IS REQUIRED.

REFER TO SPECIFICATION SECTION 08 80 00

DOOR ABBREVIATIONS

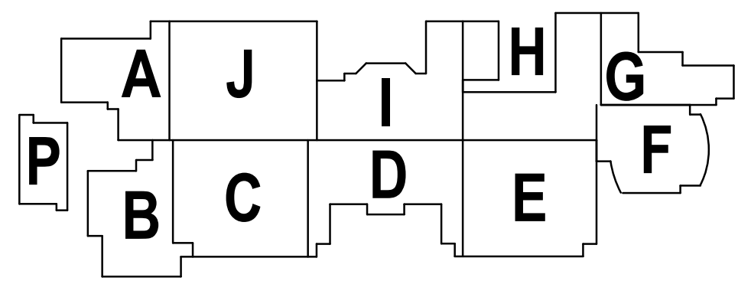
F	FLUSH PANEL SINGLE
M	METAL
V	SQUARE VISION LITE
HL	HALF LITE
NL	NARROW LITE
NLS	SOUND CONTROL DOOR
R	ROLL-UP DOOR
DD	DUTCH DOOR
SF	ALUMINUM STOREFRONT
PH	PANIC HARDWARE
CR	CARD READER
AL	ALUMINUM
HM	HOLLOW METAL
PEEP	PEEP HOLE
2	PAIR DOORS

DOOR GENERAL NOTES

1. EXISTING DOOR INFORMATION PROVIDED ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME TYPES, SIZE, AND FINISHES.
2. EXISTING DOOR, FRAME AND HARWARE SCHEDULED TO REMAIN. CONTRACTOR SHALL EXAMINE DOOR AND PERFORM MINOR REPAIR OR ADJUSTMENTS AS NEEDED TO RESTORE TO FULL FUNCTION.
3. EXISTING DOOR, FRAME AND HARDWARE SCHEDULED TO BE REPLACED AND INSTALLED IN EXISTING FRAME OR OPENING: CONTRACTOR SHALL VERIFY EXISTING DOOR AND FRAME SIZE TO ENSURE PROPER INSTALL OF NEW DOOR. PREP AND REPAIR EXISTING FRAME AND OPENING AS REQUIRED.
4. REFER TO OVERALL FLOOR PLAN AND MEPT DRAWINGS FOR CARD READER LOCATIONS.
5. PAINT EXISTING HOLLOW METAL DOOR AND FRAMES SCHEDULED TO REMAIN. CLEAN ALL ALUMINUM FRAMES SCHEDULED TO REMAIN.
6. NEW DOOR WITH LITE KITS: LITE KIT SHALL MATCH EXISTING IN STYLE, SIZE, COLOR AND DETAILS.
7. EXISTING DOORS SCHEDULED TO REMAIN: REPLACE LOCKSET AND HARDWARE PER SPECIFICATION.
8. RETURN ALL EXISTING LOCKSETS TO OWNER.
9. PROVIDE ALUMINUM THRESHOLDS SET IN FULL BED OF SEALANT AT ALL EXTERIOR DOORS.RE: HARDWARE SPECIFICATIONS.
10. DOORS WITH EXISTING GRAPHICS: CAREFULLY REMOVE EXISTING HARDWARE. INSTALL NEW HARDWARE WITHOUT DAMAGING GRAPHICS.
11. DOORS SCHEDULED TO RECEIVE GRAPHICS. COORDINATE INSTALLATION OF GRAPHICS WITH OWNERS PREFERRED VENDOR "SIGN CHAMP". PROVIDE AND INSTALL GRAPHICS AS PART OF SPECIFIED ALLOWANCE.
   SIGN CHAMP, INC
   27351 BLUEBERRY HILL DR. STE#42
   CONROE, TX 77385

HARDWARE SETS:
REFER TO HARDWARE SPECIFICATIONS

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

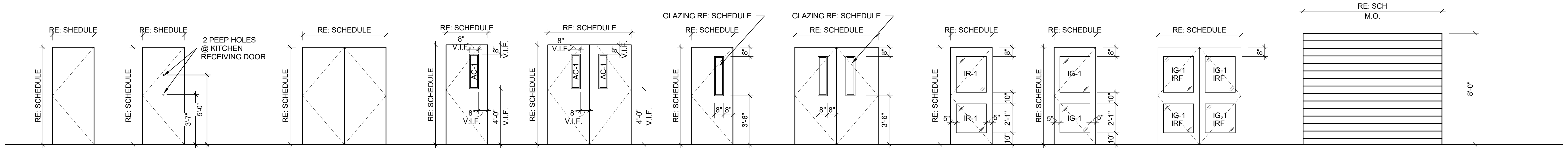
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

DOOR SCHEDULES

A4.04

____ of ____

DOOR TYPES



FLUSH WOOD DOOR
F

FLUSH METAL DOOR
FM

FLUSH WOOD DOUBLE DOOR
F2

ACOUSTICAL DOOR WITH VISION-LITE
NLS

ACOUSTICAL DOOR WITH VISION-LITE
NLS2

DOOR WITH VISION-LITE
NL (FLUSH WOOD)
NLM (FLUSH METAL)

DOUBLE DOOR WITH VISION-LITE
NL2 (FLUSH WOOD)
NLM2 (FLUSH METAL)

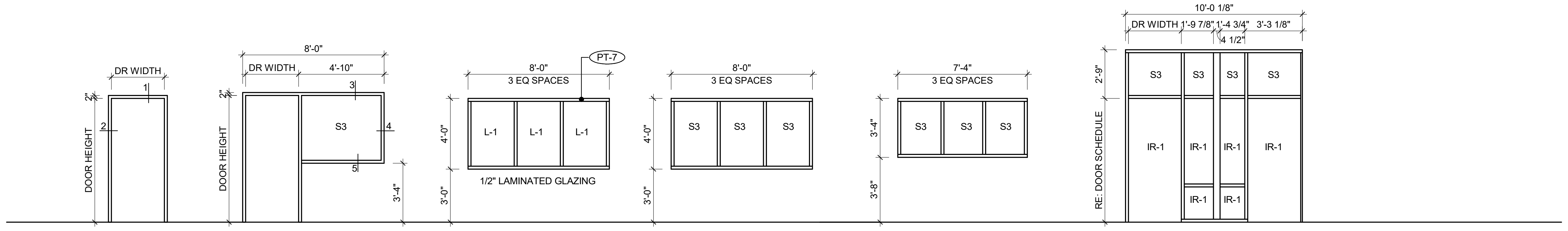
INTERIOR STOREFRONT DOOR
SFR

EXTERIOR STOREFRONT DOOR
SFE

EXTERIOR STOREFRONT DOUBLE DOOR
SFE2

ROLL - UP DOOR
R

INTERIOR DOOR FRAME TYPES



HOLLOW METAL DOOR FRAME PROVIDE KEYED REMOVABLE MULLION AT ALL DBL DOORS
HM1

HOLLOW METAL DOOR FRAME AND SIDELITE
HM2

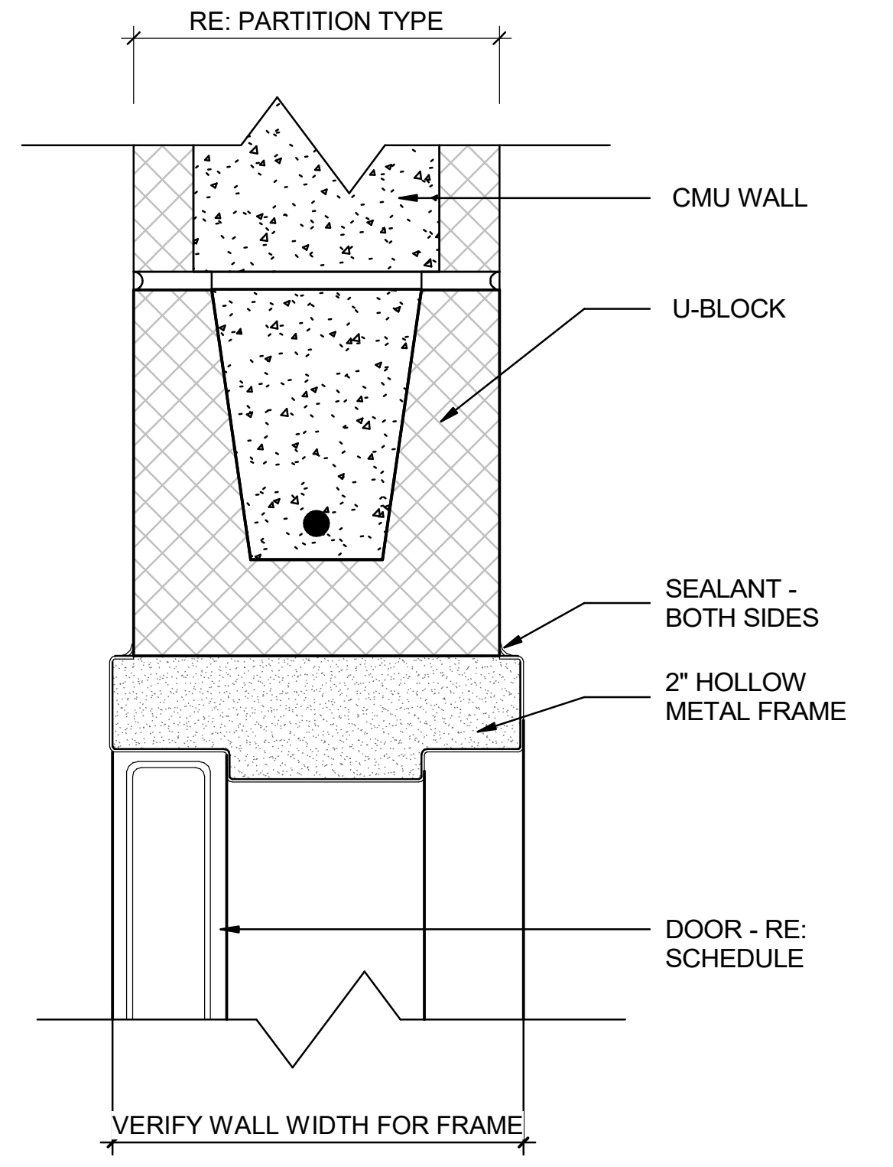
HOLLOW METAL WINDOW FRAME (CONTROL ROOM 4003)
HM3

HOLLOW METAL WINDOW FRAME
HM4

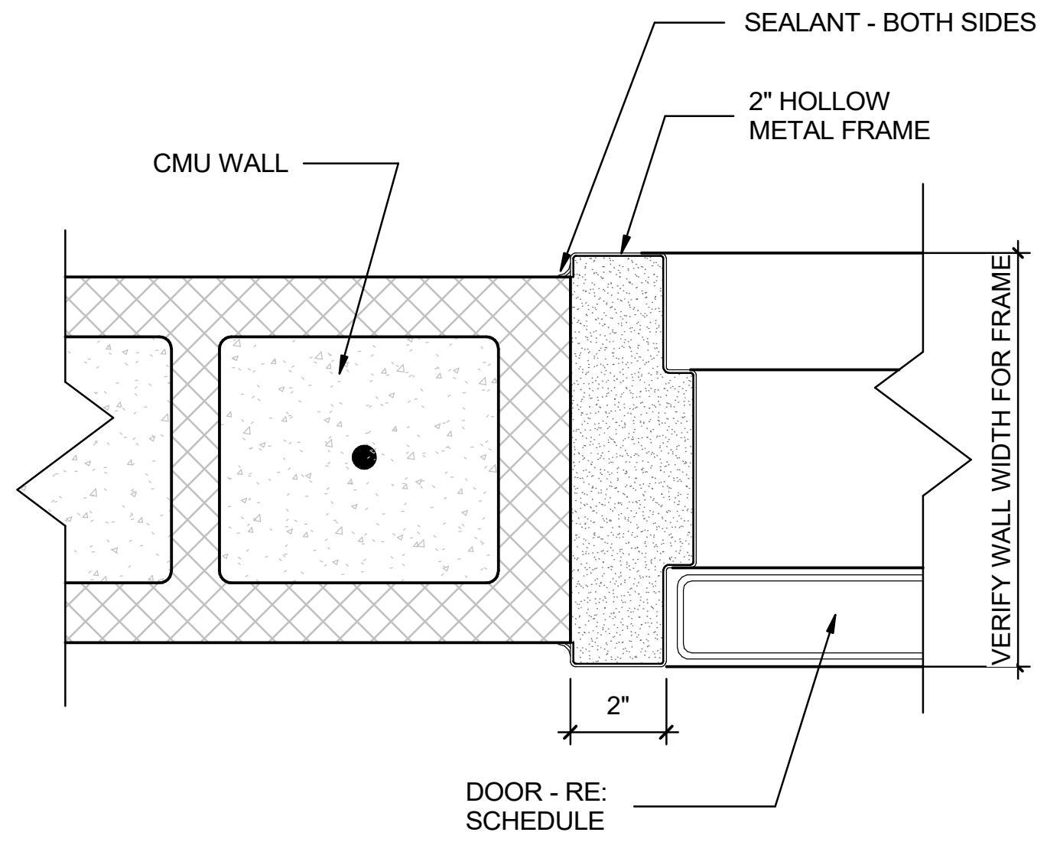
HOLLOW METAL WINDOW FRAME
HM5

INT. STOREFRONT FRAME
SF1

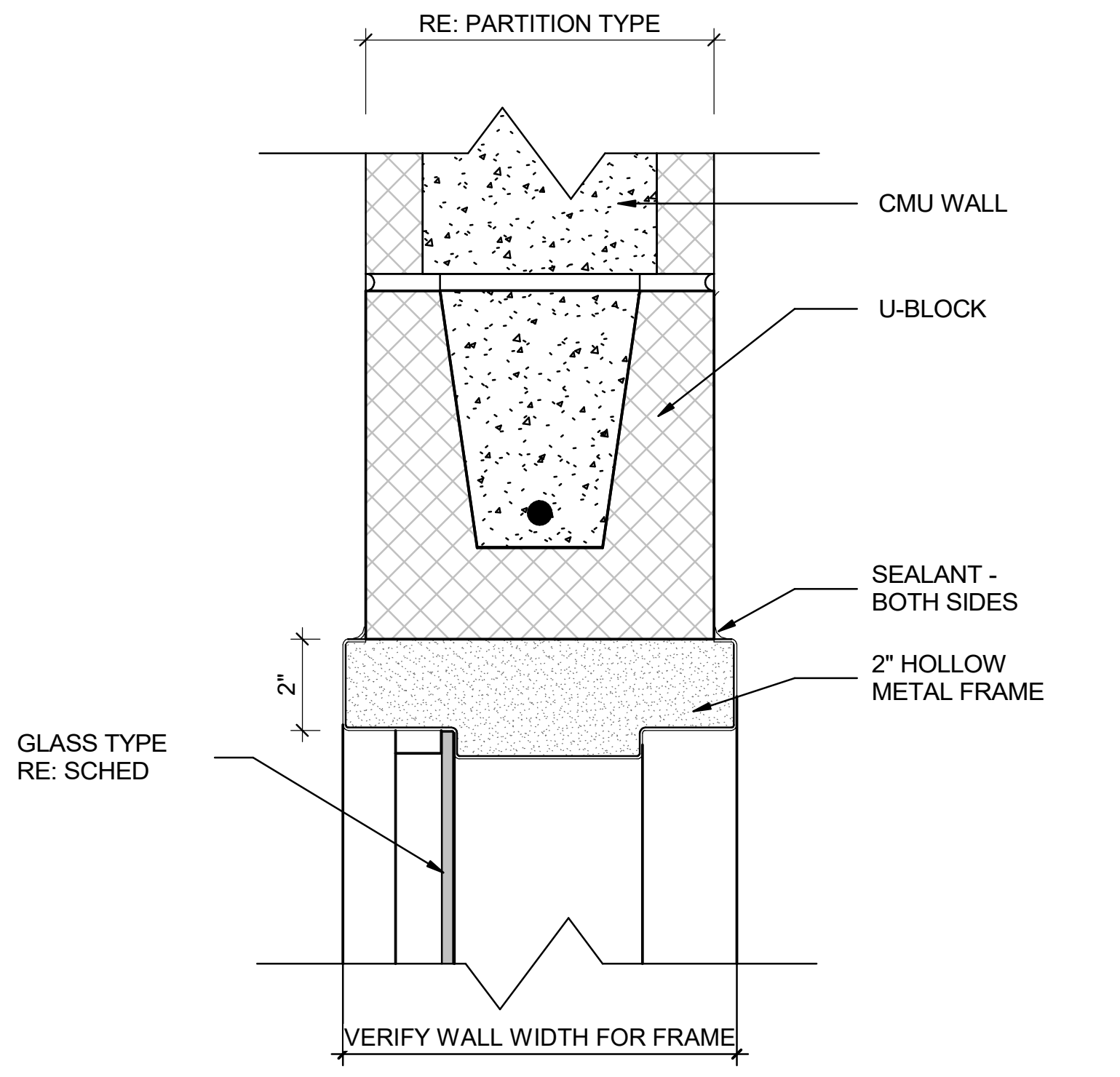
INT.STOREFRONT @ RECEPTION
SF2 / SF3



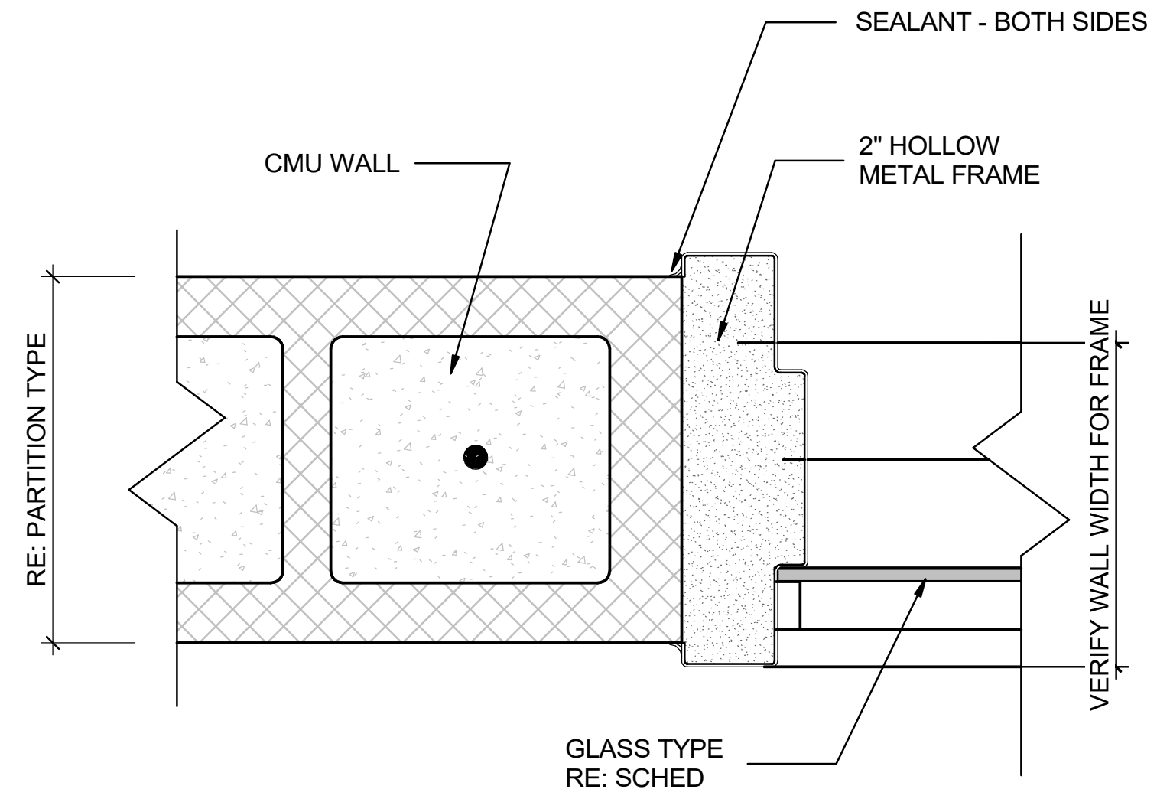
1 INT. HM DOOR FRAME - HEAD
3" = 1'-0"



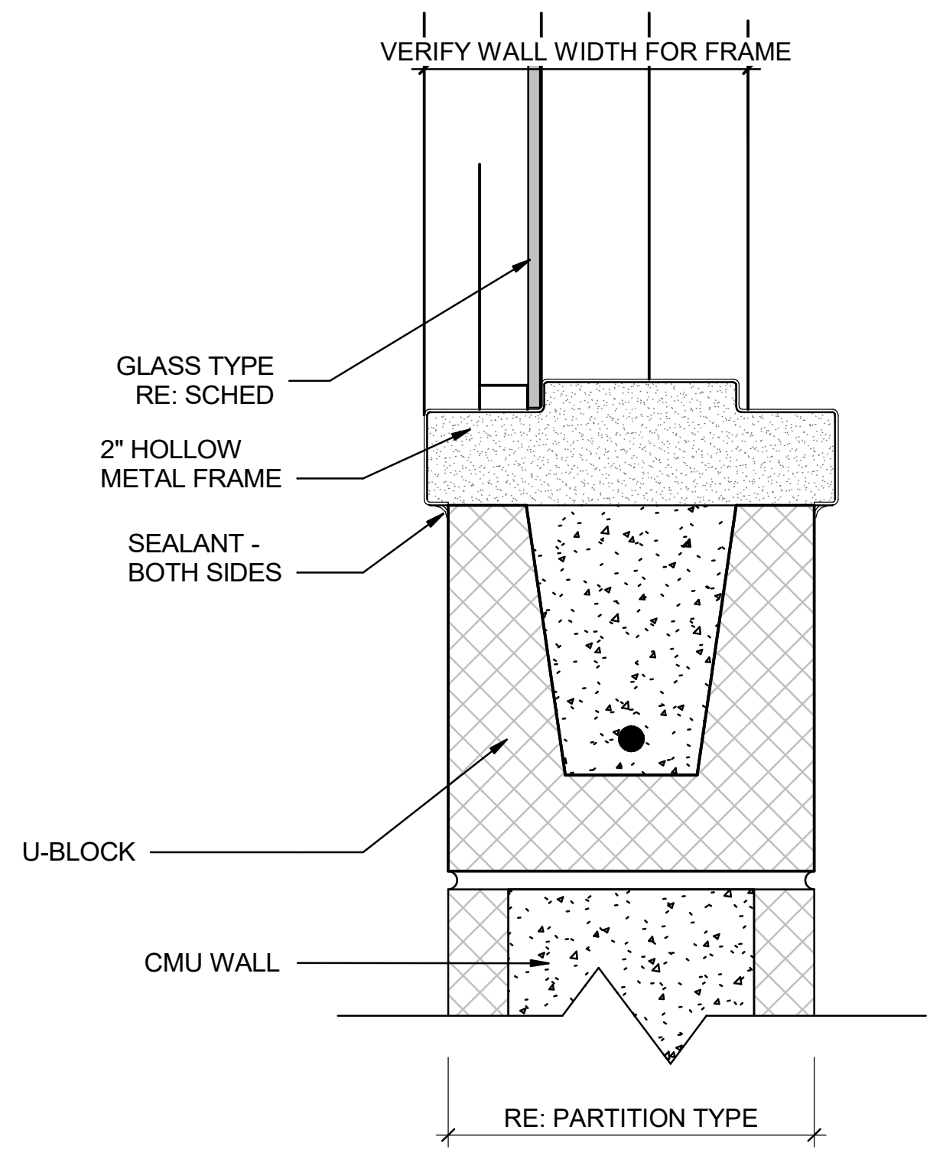
2 INT. HM DOOR FRAME - JAMB
3" = 1'-0"



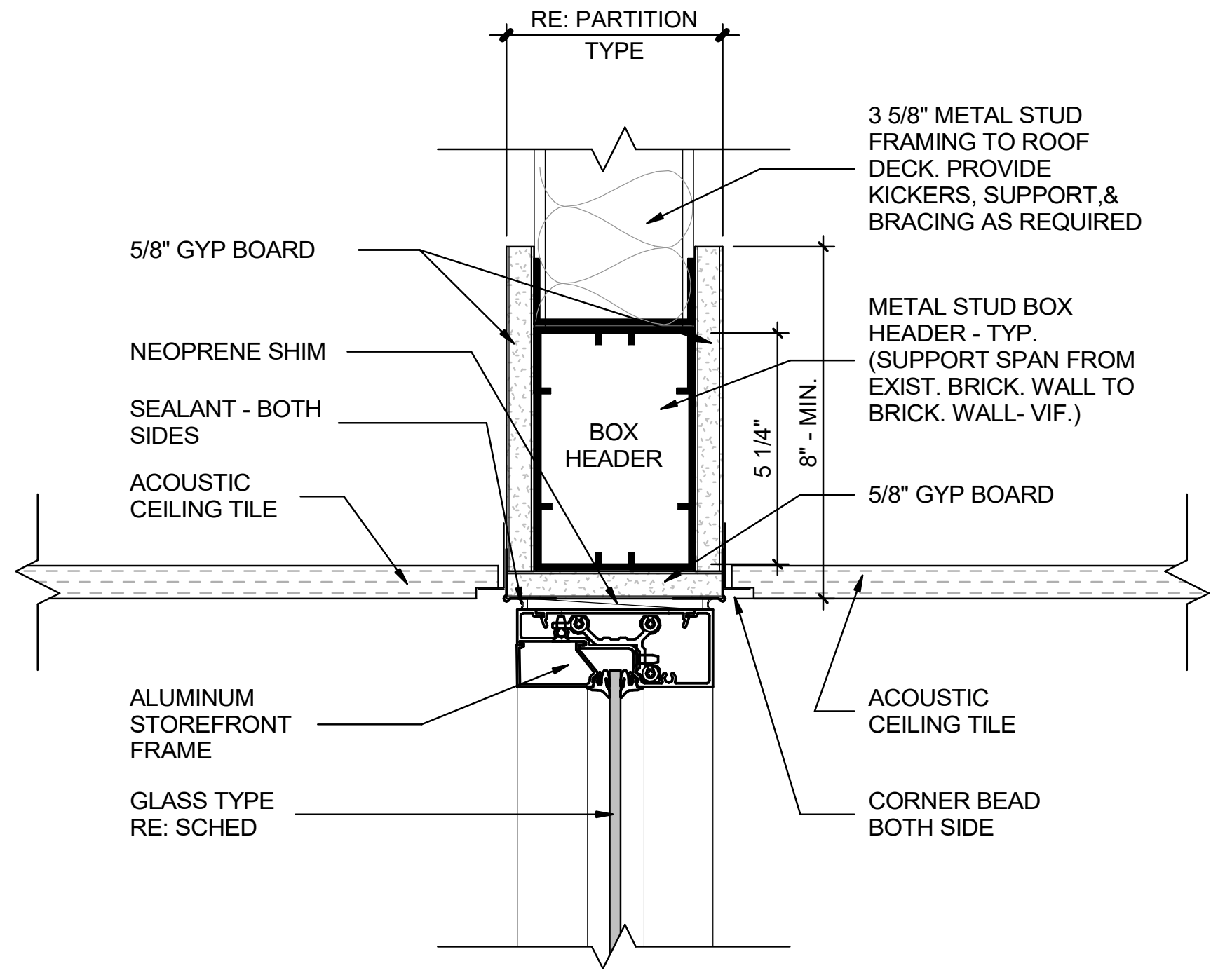
3 INT. HM DOOR FRAME - HEAD @ WINDOW
3" = 1'-0"



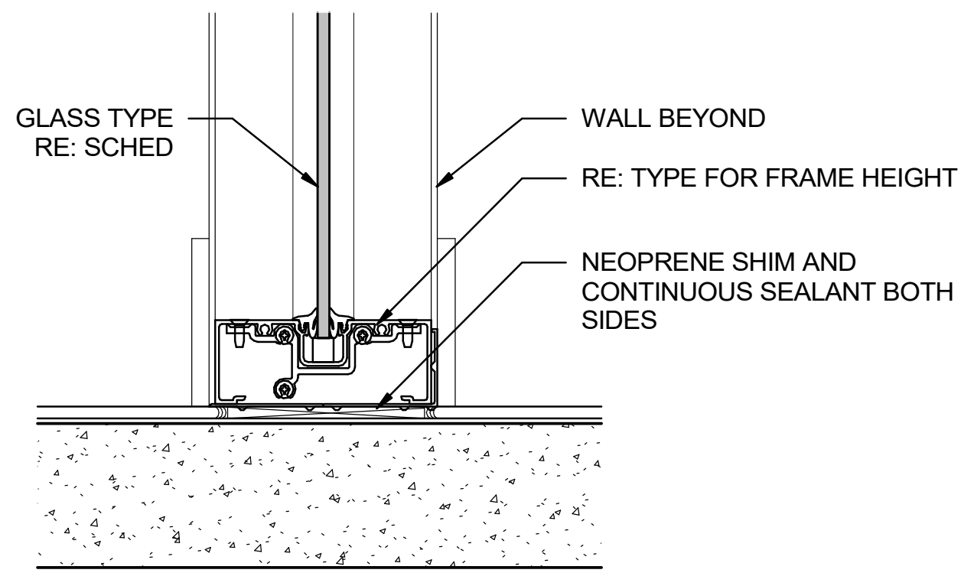
4 INT. HM DOOR FRAME - JAMB @ WINDOW
3" = 1'-0"



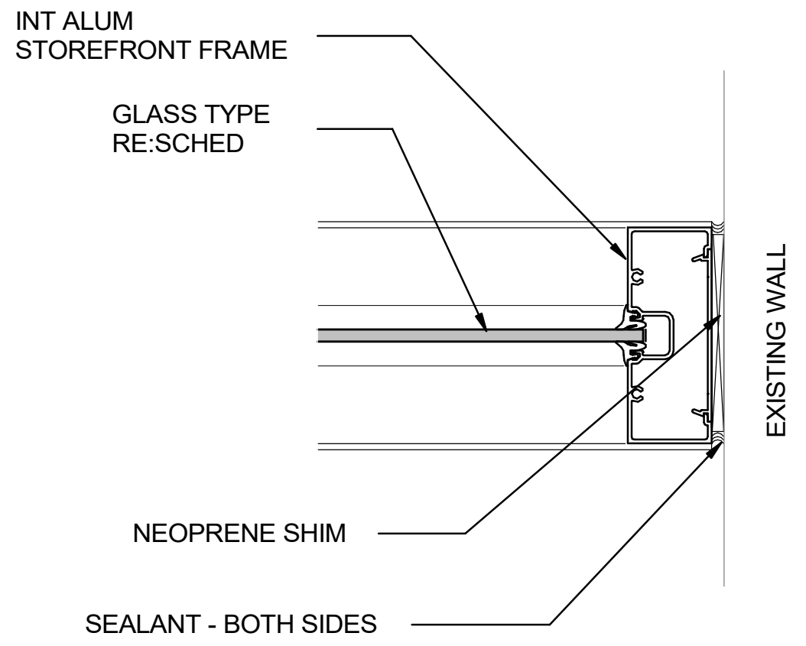
5 INT. HM DOOR FRAME - SILL @ WINDOW
3" = 1'-0"



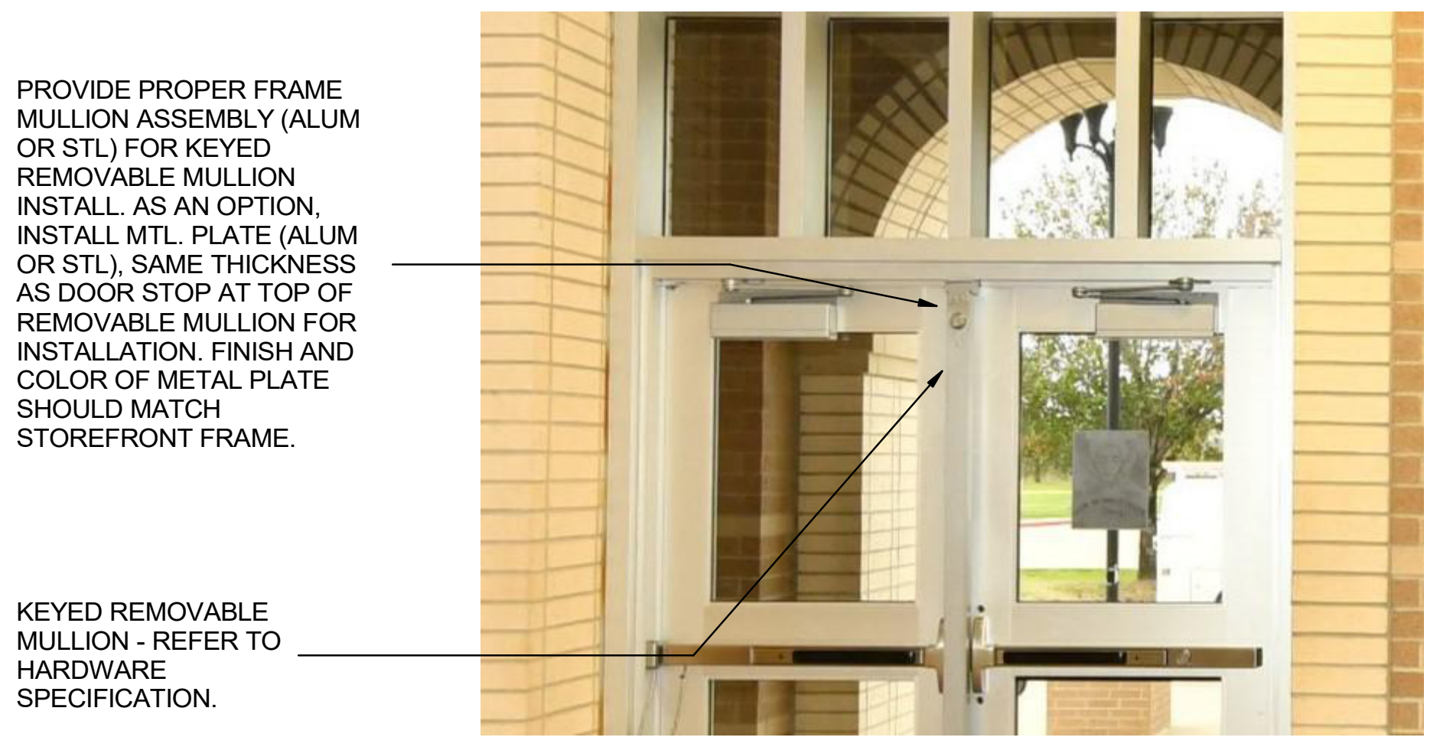
6 INT. STOREFRONT - HEAD / TRANSOM
3" = 1'-0"



7 INT. STOREFRONT - SILL
3" = 1'-0"



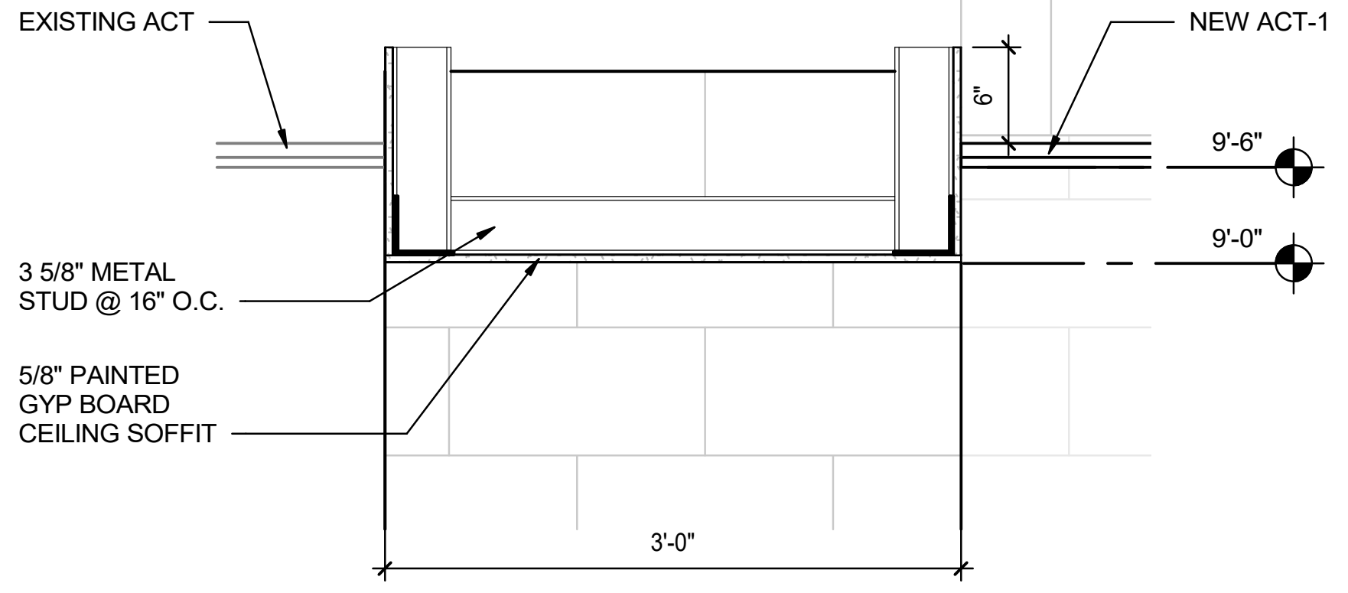
8 INT. STOREFRONT - JAMB
3" = 1'-0"



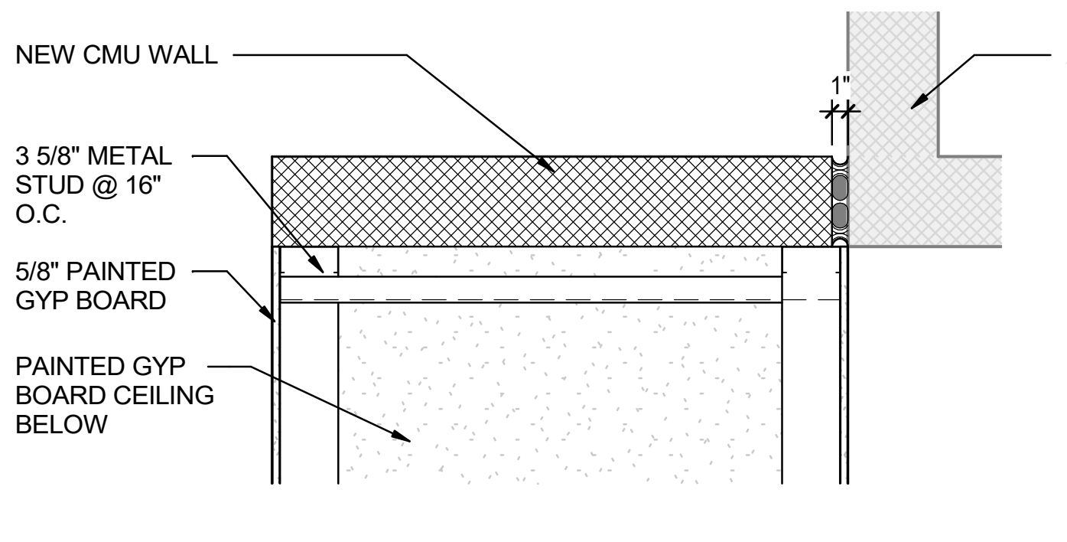
PROVIDE PROPER FRAME MULLION ASSEMBLY (ALUM OR STL) FOR KEYED REMOVABLE MULLION INSTALL. AS AN OPTION, INSTALL MTL. PLATE (ALUM OR STL), SAME THICKNESS AS DOOR STOP AT TOP OF REMOVABLE MULLION FOR INSTALLATION. FINISH AND COLOR OF METAL PLATE SHOULD MATCH STOREFRONT FRAME.

KEYED REMOVABLE MULLION - REFER TO HARDWARE SPECIFICATION.

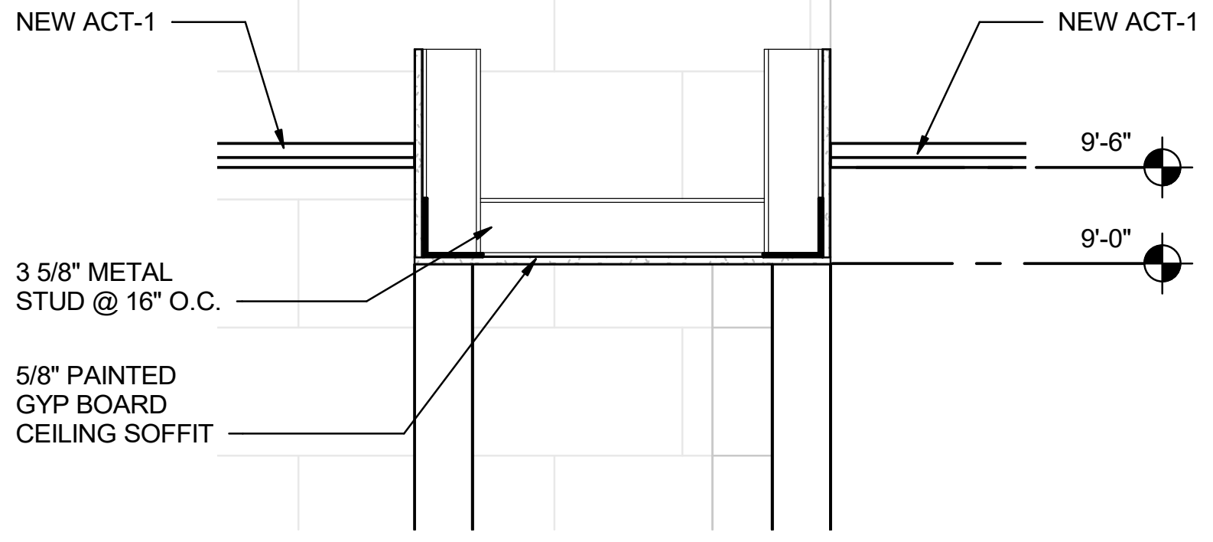
9 KEYED REMOVABLE MULLION @ DOORS TYP.
1 1/2" = 1'-0"



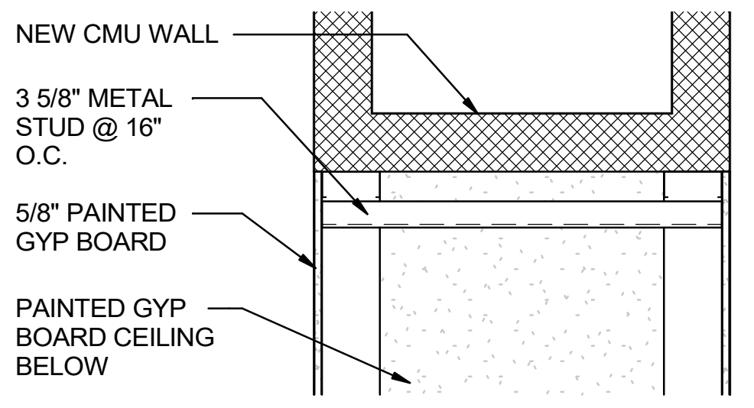
10 CASED OPENING - HEAD
1" = 1'-0"



11 CASED OPENING - JAMB
1" = 1'-0"



12 CASED OPENING - HEAD
1" = 1'-0"



13 CASED OPENING - JAMB
1" = 1'-0"

GLASS TYPE LEGEND

IG-1	INSULATED GLASS (EXTERIOR)
IR-1	9/16" THICK IMPACT RESISTANT GLASS (INTERIOR)
IR-2	3/8" THICK IMPACT RESISTANT GLASS (INTERIOR)
FR-1	FIRE-RATED GLASS
AC-1	ACOUSTICAL RATED GLASS
L-1	1/2" LAMINATED GLASS
S-3	1/4" TEMPERED GLASS
E	EXISTING IR GLAZING
IRF	IMPACT RESISTANT FILM (RE: SPEC)

INSTALLATION OF IMPACT RESISTANT GLASS (IR) TYPES SHALL COMPLY WITH GLASS MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. DOW CORNING 995 SILICON STRUCTURAL SEALANT IS REQUIRED.

REFER TO SPECIFICATION SECTION 08 80 00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

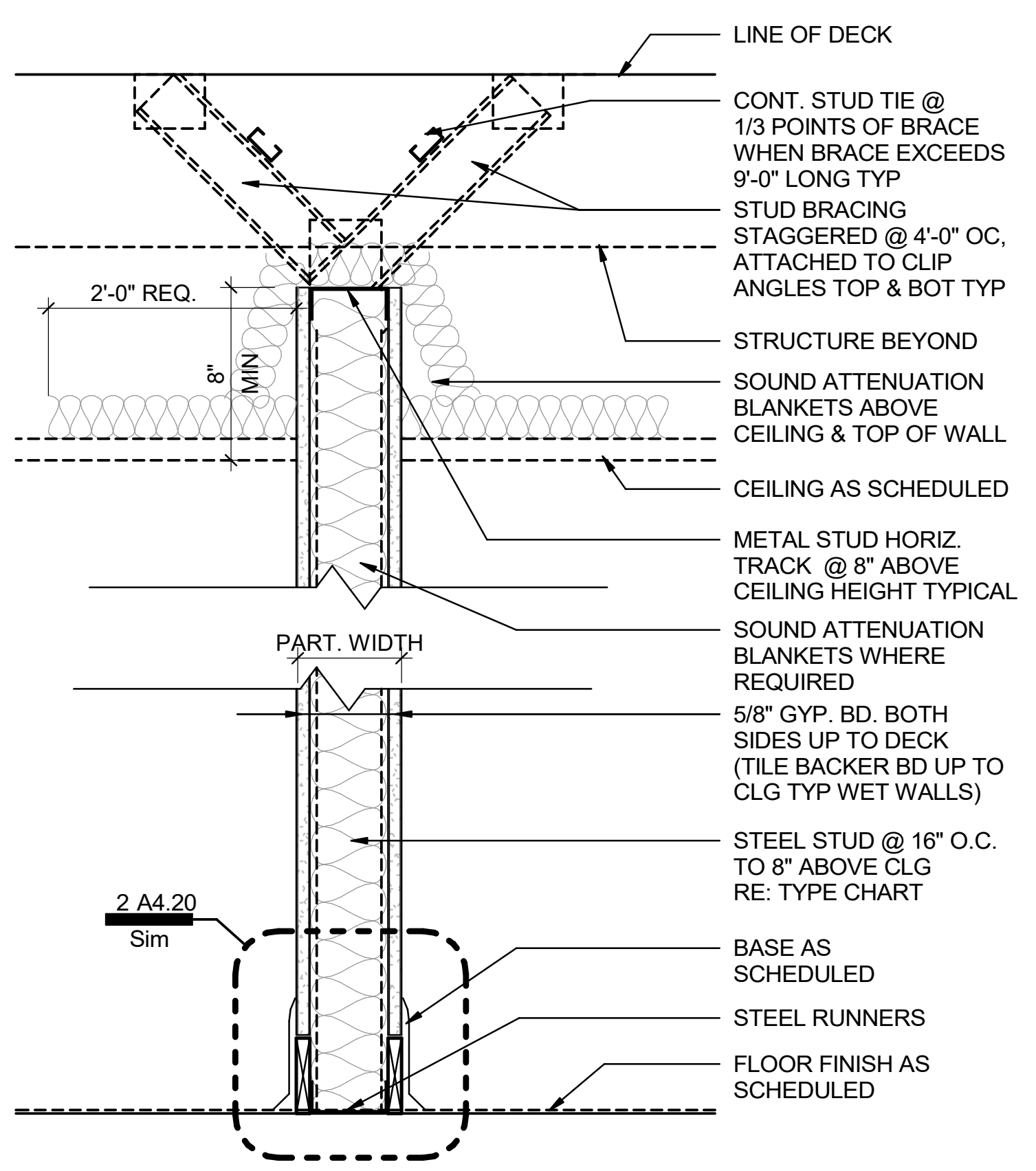
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

INTERIOR OPENING TYPES & DETAILS

A4.10

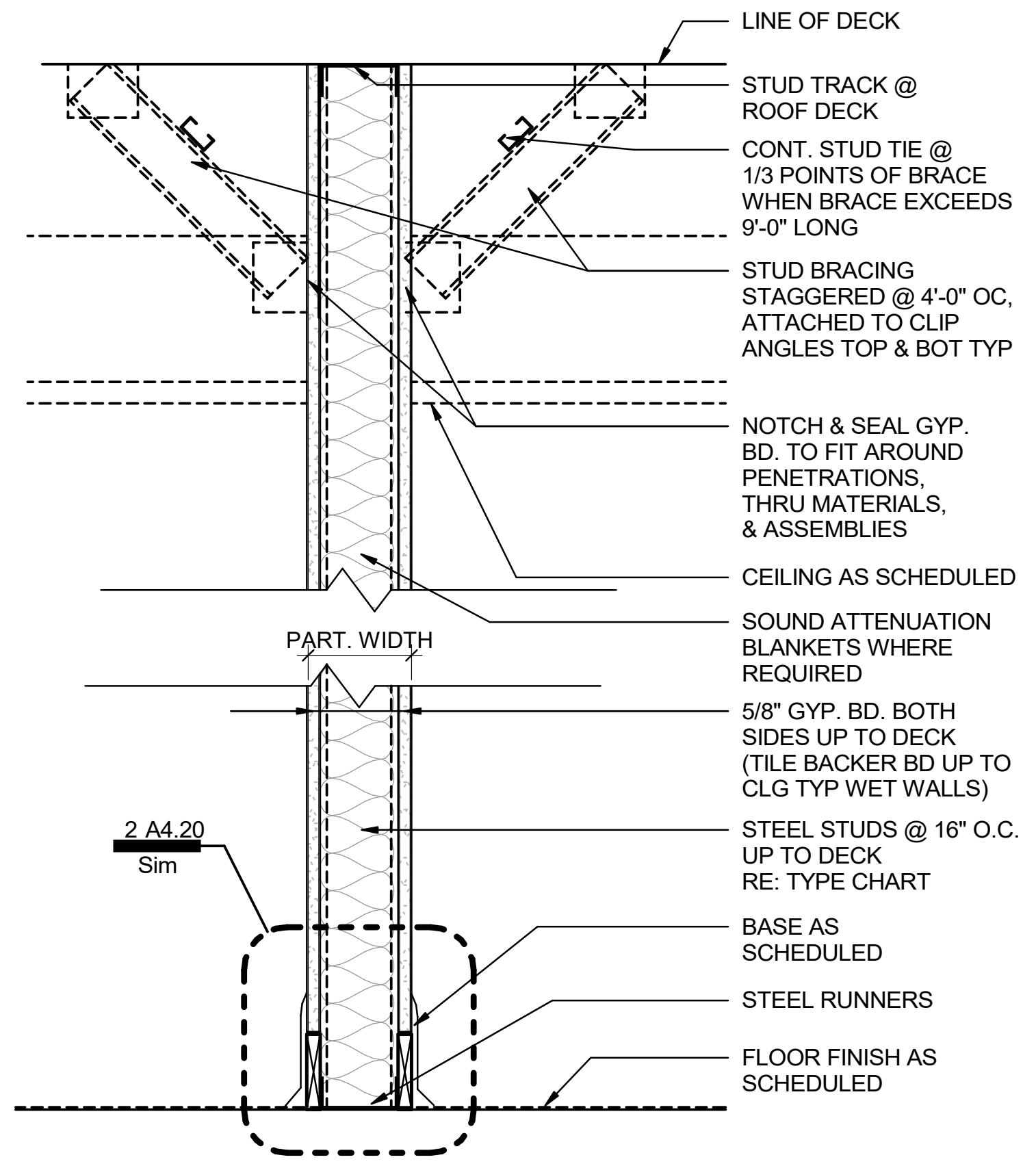
of



A

TYPE	STUD	PART. WIDTH	DESIGN STC		FIRE RATING	DESIGN NUMBER
			MIN STC	INSUL.		
A	3 5/8"	4 7/8"	-	-	-	N/A
A1	3 5/8"	4 7/8"	-	3 1/2"	-	N/A
A2	6"	7 1/4"	-	-	-	N/A

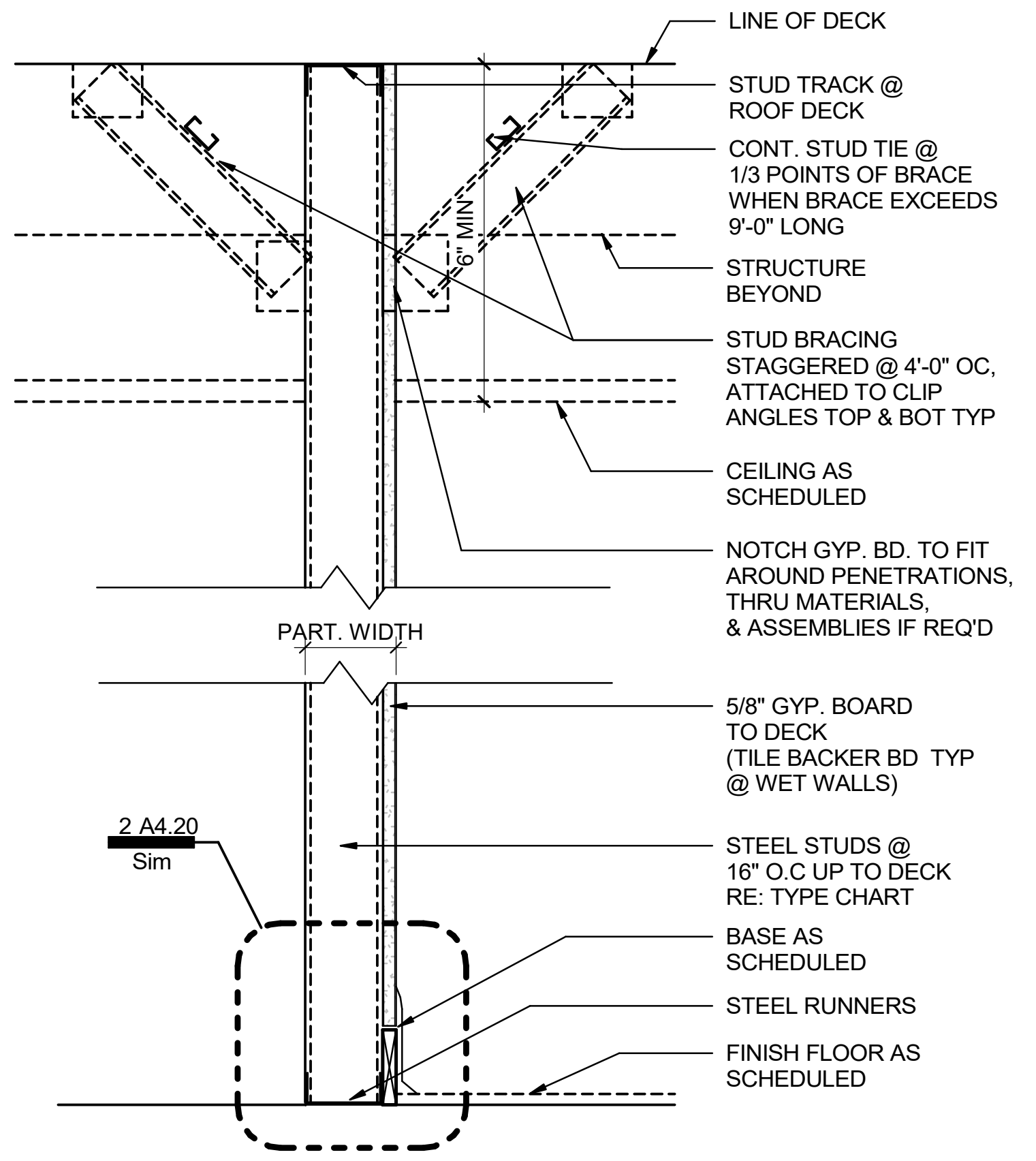
NOTE: ADD CURB AT WALL AROUND NEW MECHANICAL ROOMS & NEW RESTROOMS IN EXISTING BUILDING - SEE DETAIL 2A4.20



B

TYPE	STUD	PART. WIDTH	DESIGN STC		FIRE RATING	DESIGN NUMBER
			MIN STC	INSUL.		
B	3 5/8"	4 7/8"	-	-	-	N/A
B1	3 5/8"	4 7/8"	-	3 1/2"	-	N/A
B2	3 5/8"	4 7/8"	-	3 1/2"	1 HR	UL NO. U419
B3	6"	7 1/4"	-	3 1/2"	-	N/A

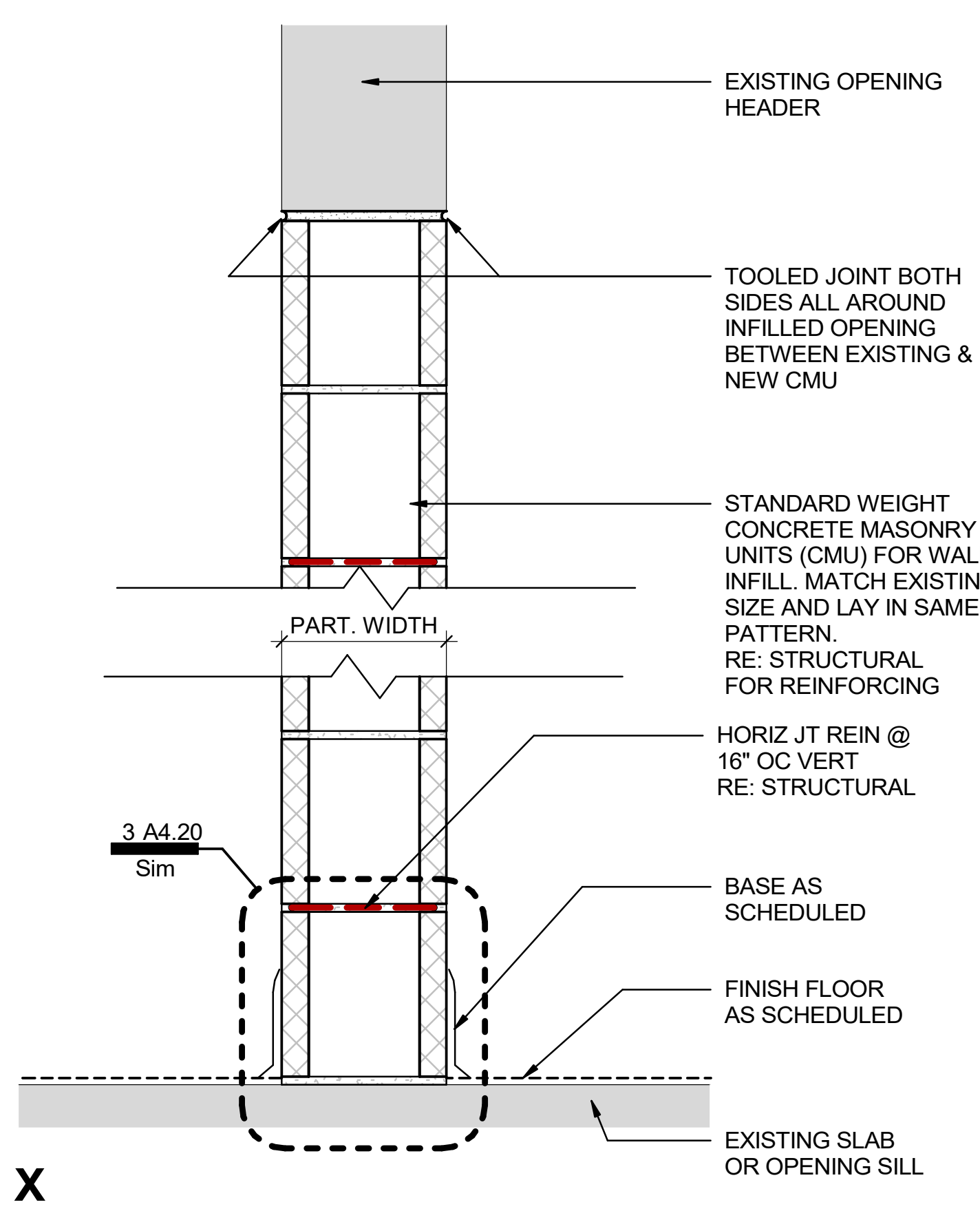
NOTE: ADD CURB AT WALL AROUND NEW MECHANICAL ROOMS & NEW RESTROOMS IN EXISTING BUILDING - SEE DETAIL 2A4.20



C

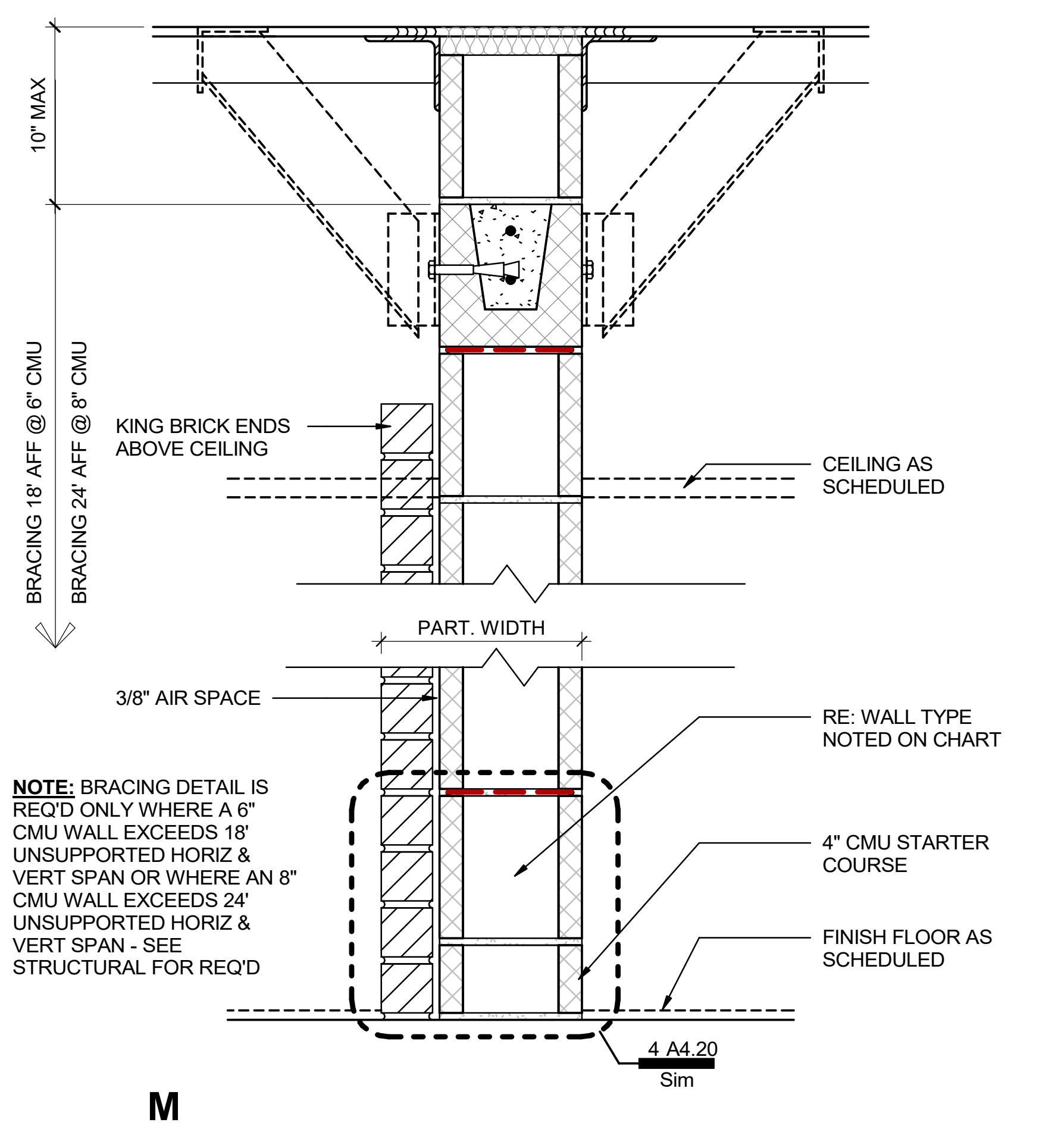
TYPE	STUD	PART. WIDTH	DESIGN STC		FIRE RATING	DESIGN NUMBER
			MIN STC	INSUL.		
C	2 1/2"	3 1/8"	-	-	-	N/A
C1	3 5/8"	4 1/4"	-	-	-	N/A
C2	3 5/8"	4 1/4"	-	3 1/2"	-	N/A
C3	6"	6 5/8"	-	3 1/2"	-	N/A

NOTE: ADD CURB AT WALLS AROUND NEW MECHANICAL ROOMS & NEW RESTROOMS IN EXISTING BUILDING - SEE DETAIL 2A4.20



X

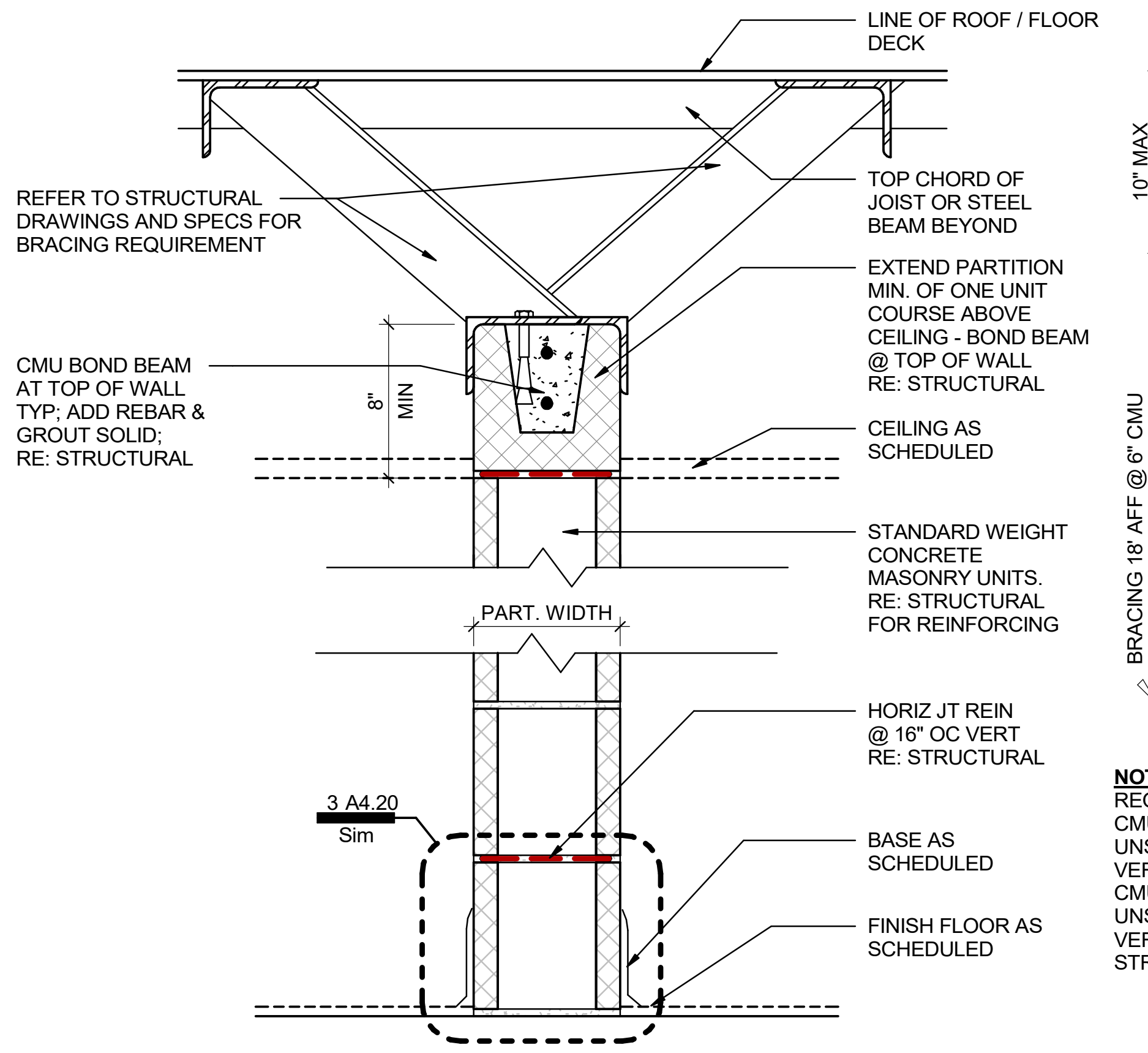
TYPE	CMU	PART. WIDTH	DESIGN STC		FIRE RATING	DESIGN NUMBER
			MIN STC	INSUL.		
X	3 5/8" (4" NOMINAL)	3 5/8"	-	-	-	N/A
X1	5 5/8" (6" NOMINAL)	5 5/8"	-	-	-	N/A
X2	7 5/8" (8" NOMINAL)	7 5/8"	-	-	-	N/A



NOTE: BRACING DETAIL IS REQ'D ONLY WHERE A 6" CMU WALL EXCEEDS 18' UNSUPPORTED HORIZ & VERT SPAN OR WHERE AN 8" CMU WALL EXCEEDS 24' UNSUPPORTED HORIZ & VERT SPAN - SEE STRUCTURAL FOR REQ'D

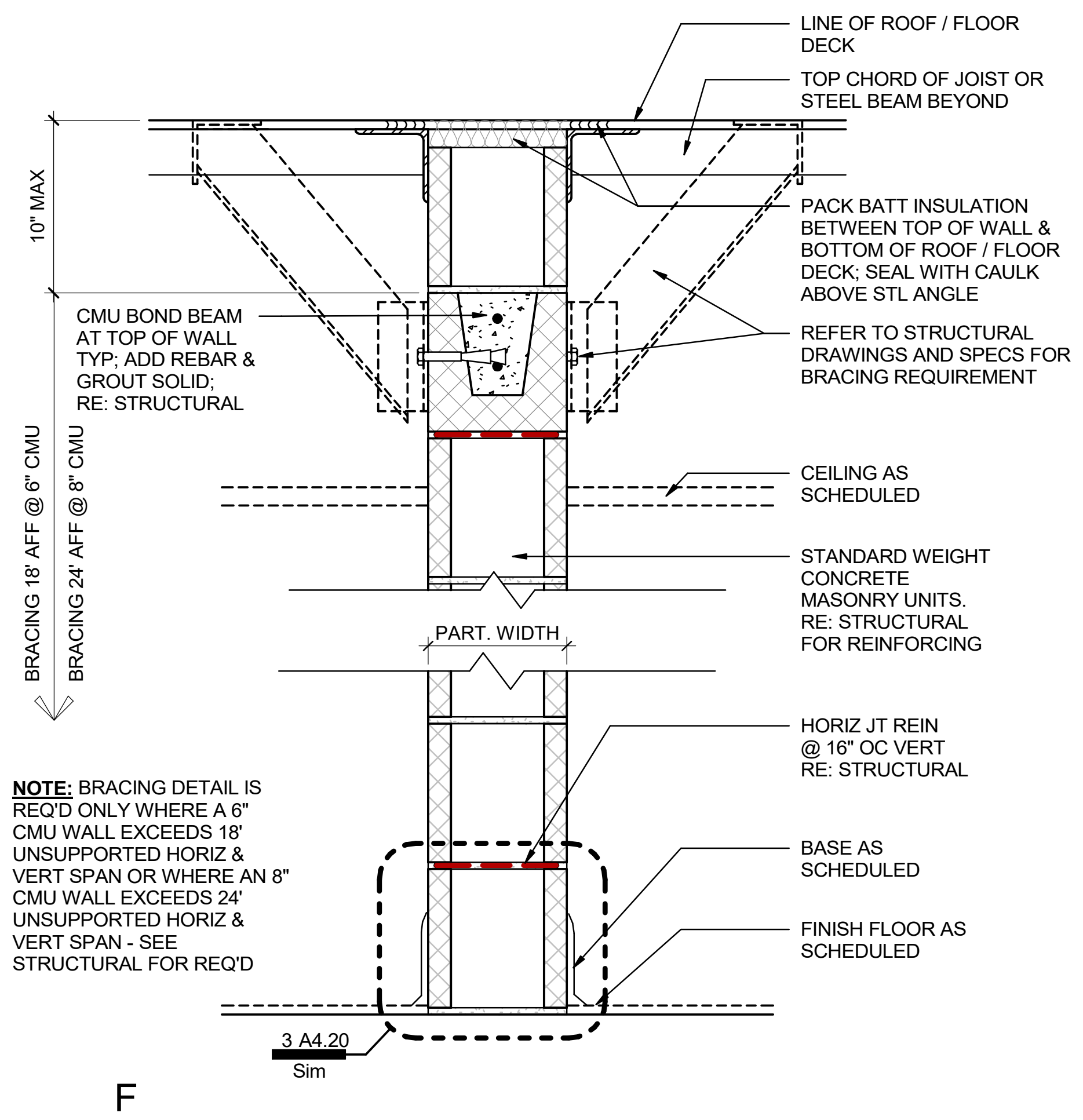
M

TYPE	CMU	PART. WIDTH	DESIGN STC		FIRE RATING	DESIGN NUMBER
			MIN STC	INSUL.		
M	RE: TYPE H2	10 3/4"	-	-	-	N/A
M1	RE: TYPE G2	10 3/4"	-	-	-	N/A



E

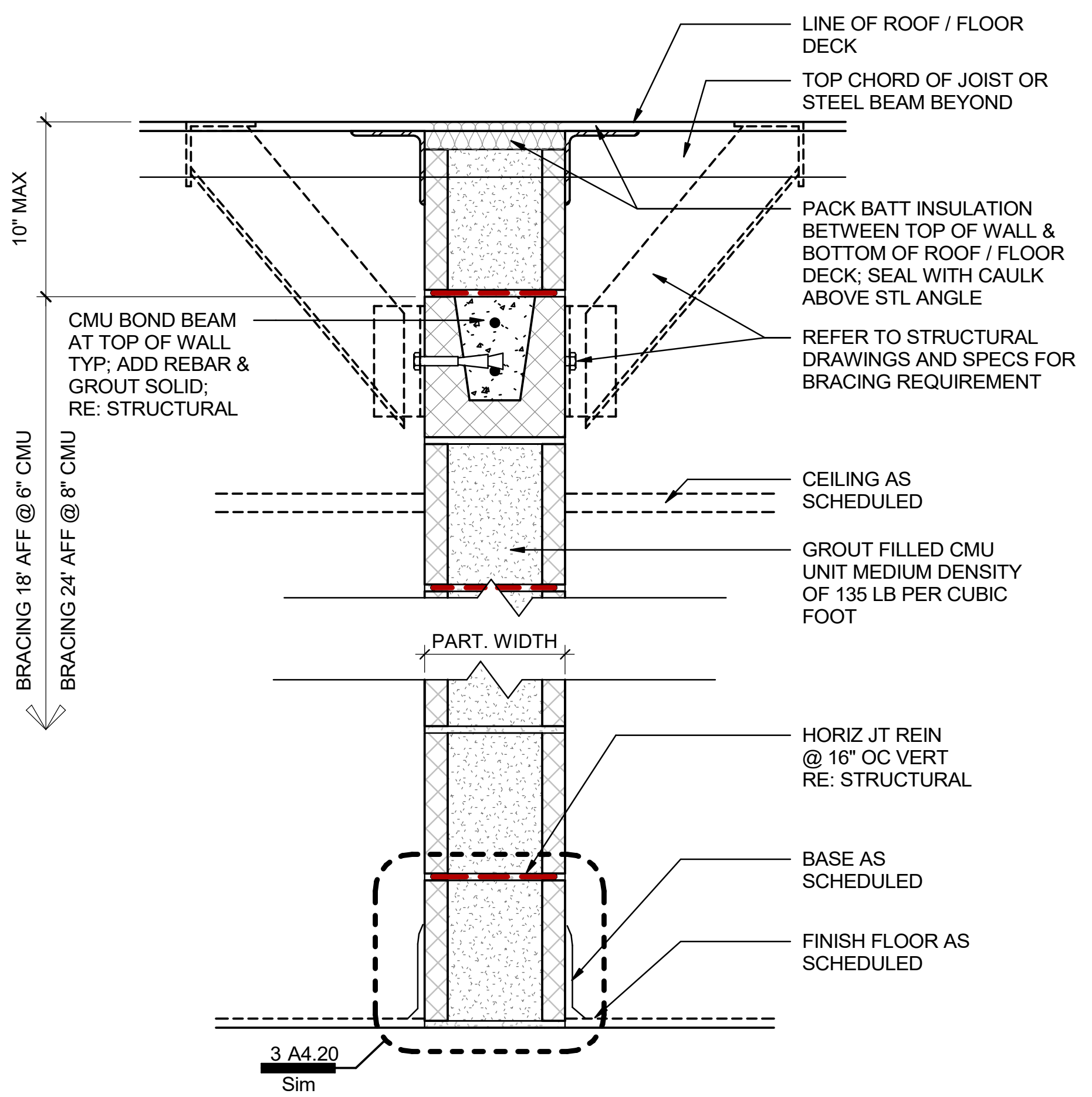
TYPE	CMU	PART. WIDTH	DESIGN STC		FIRE RATING	DESIGN NUMBER
			MIN STC	INSUL.		
E	3 5/8" (4" NOMINAL)	3 5/8"	-	-	-	N/A
E1	5 5/8" (6" NOMINAL)	5 5/8"	-	-	-	N/A
E2	7 5/8" (8" NOMINAL)	7 5/8"	-	-	-	N/A



NOTE: BRACING DETAIL IS REQ'D ONLY WHERE A 6" CMU WALL EXCEEDS 18' UNSUPPORTED HORIZ & VERT SPAN OR WHERE AN 8" CMU WALL EXCEEDS 24' UNSUPPORTED HORIZ & VERT SPAN - SEE STRUCTURAL FOR REQ'D

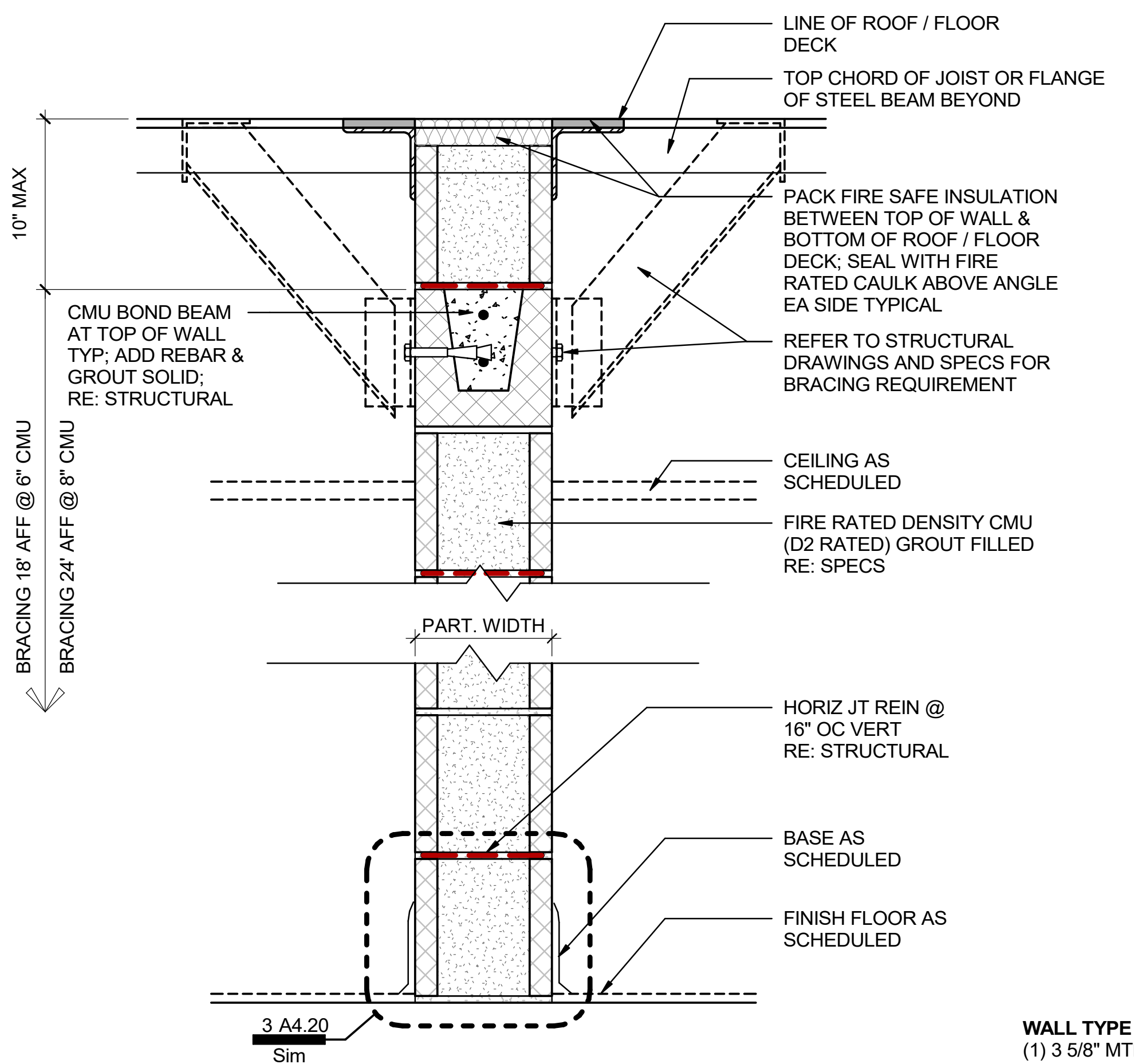
F

TYPE	CMU	PART. WIDTH	DESIGN STC		FIRE RATING	DESIGN NUMBER
			MIN STC	INSUL.		
F	3 5/8" (4" NOMINAL)	3 5/8"	-	-	-	N/A
F1	5 5/8" (6" NOMINAL)	5 5/8"	-	-	-	N/A
F2	7 5/8" (8" NOMINAL)	7 5/8"	-	-	-	N/A



G - CMU SOUND WALL

TYPE	CMU - SOUND WALLS	PART. WIDTH	DESIGN STC	FIRE RATING	DESIGN NUMBER
			GROUT FILLED		
G	3 5/8" (4" NOMINAL)	3 5/8"	46	-	N/A
G1	5 5/8" (6" NOMINAL)	5 5/8"	52	-	N/A
G2	7 5/8" (8" NOMINAL)	7 5/8"	56	-	N/A

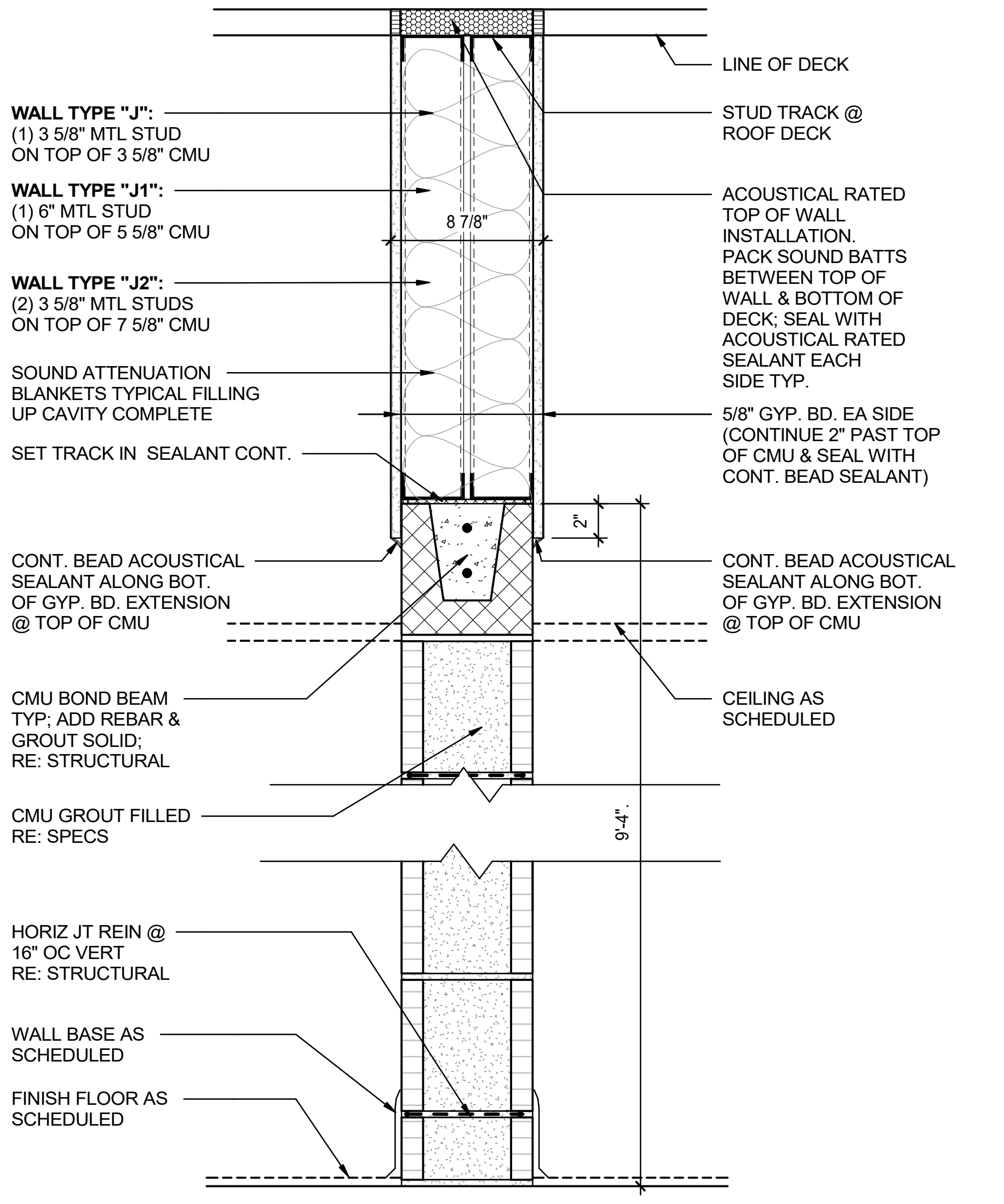


H - FIRE RATED CMU WALL

TYPE	CMU - D2 RATED	PART. WIDTH	DESIGN STC	FIRE RATING	DESIGN NUMBER
			GROUT FILLED		
H	3 5/8" (4" NOMINAL)	3 5/8"	46	1HR	TEK-7
H1	5 5/8" (6" NOMINAL)	5 5/8"	52	1HR	U905
H2	7 5/8" (8" NOMINAL)	7 5/8"	56	2HR	U905

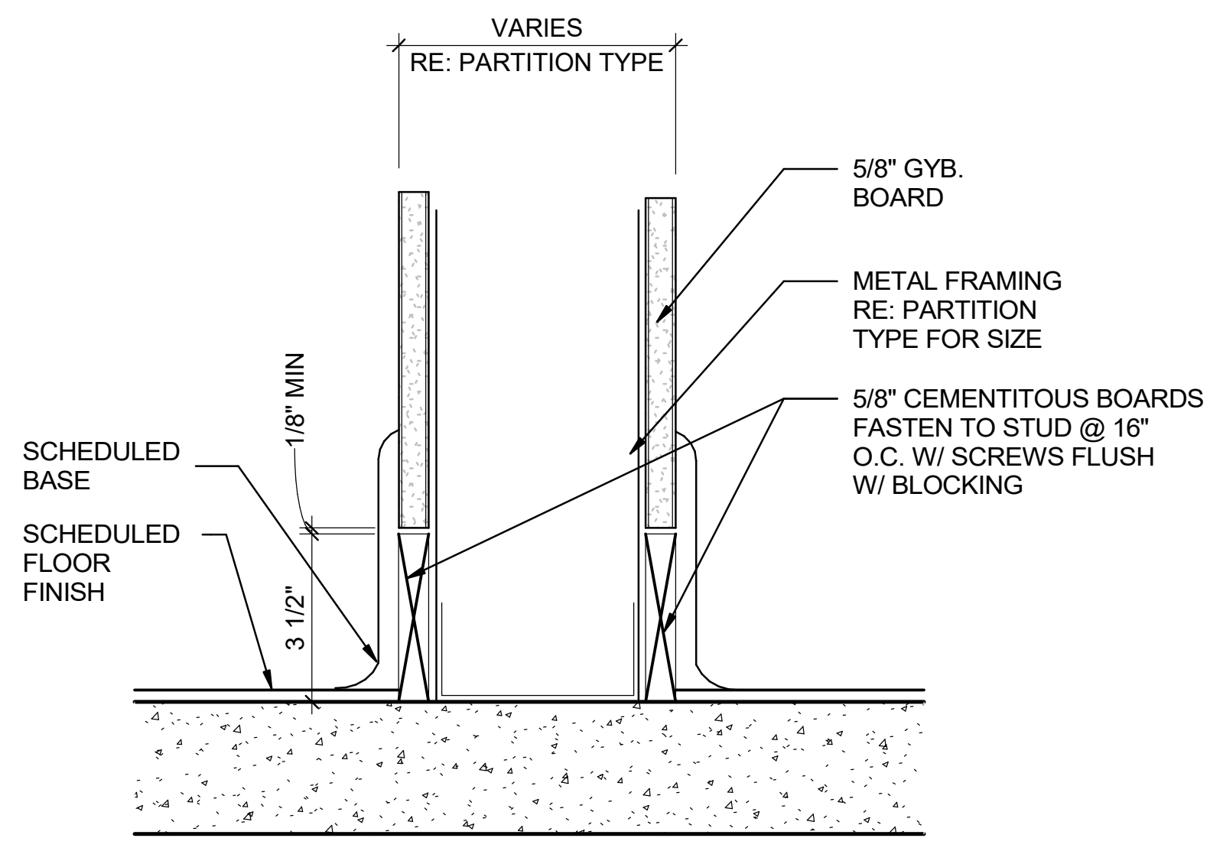
1 PARTITION TYPES

1 1/2" = 1'-0"



J - CMU / STUD SOUND WALL

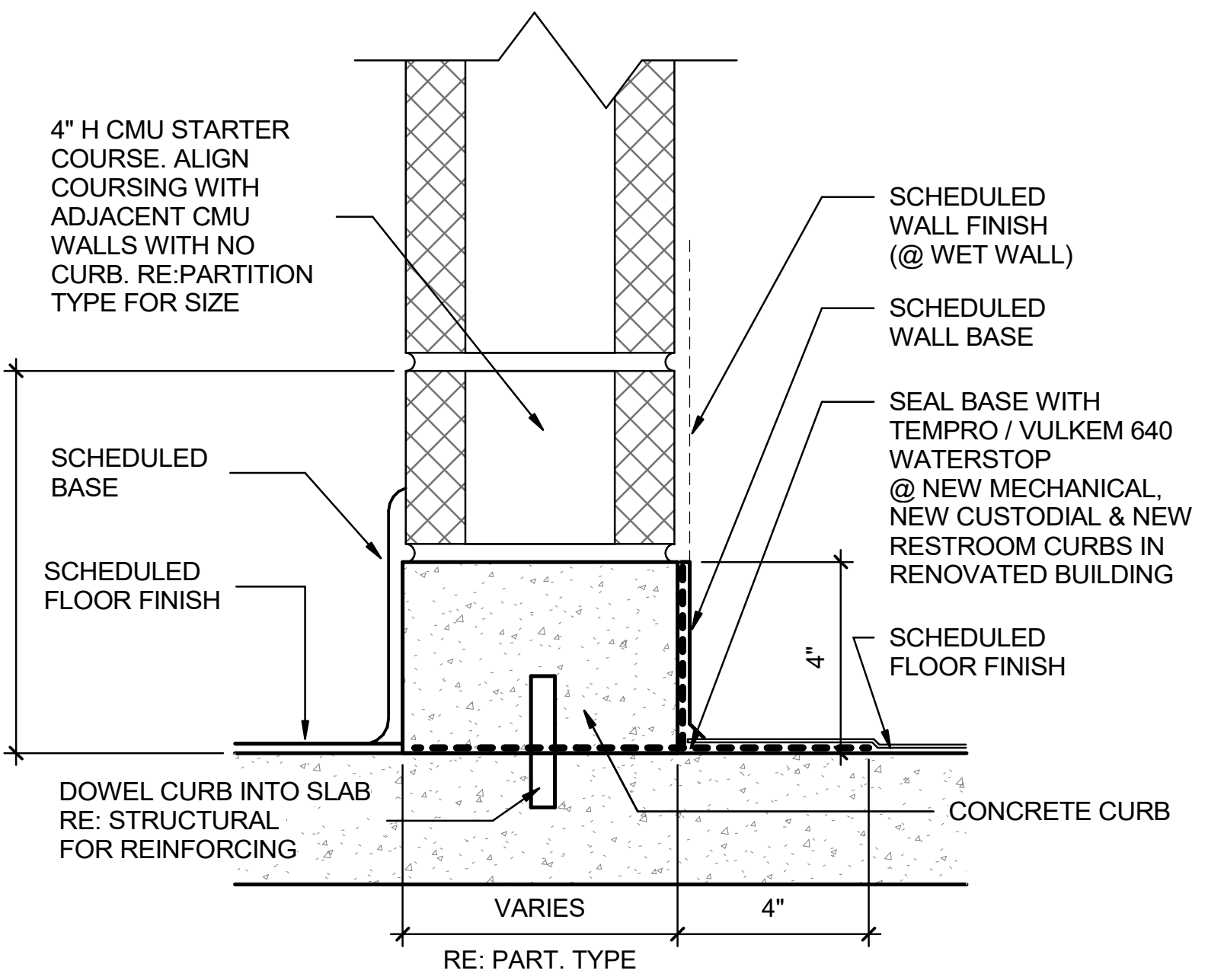
TYPE	CMU - D2 RATED	PART. WIDTH	DESIGN STC	FIRE RATING	DESIGN NUMBER
			GROUT FILLED		
J	TYPE G + B3 STUD - 3 5/8" CMU - 3 5/8"	4 7/8"	46 46	-	-
J1	TYPE G1 + B3 STUD - 6" CMU - 5 5/8"	7 1/4"	52 52	-	-
J2	TYPE G2 + B3 STUD - 3 5/8" (x2) CMU - 7 5/8"	8 7/8"	56 56	-	-



NOTE: DETAIL APPLIES TO ALL **NEW** GYPSUM BOARD AND METAL STUD PARTITIONS - INDICATED ON DRAWINGS OR NOT

2 WALL BASE DETAIL @ GYP BD

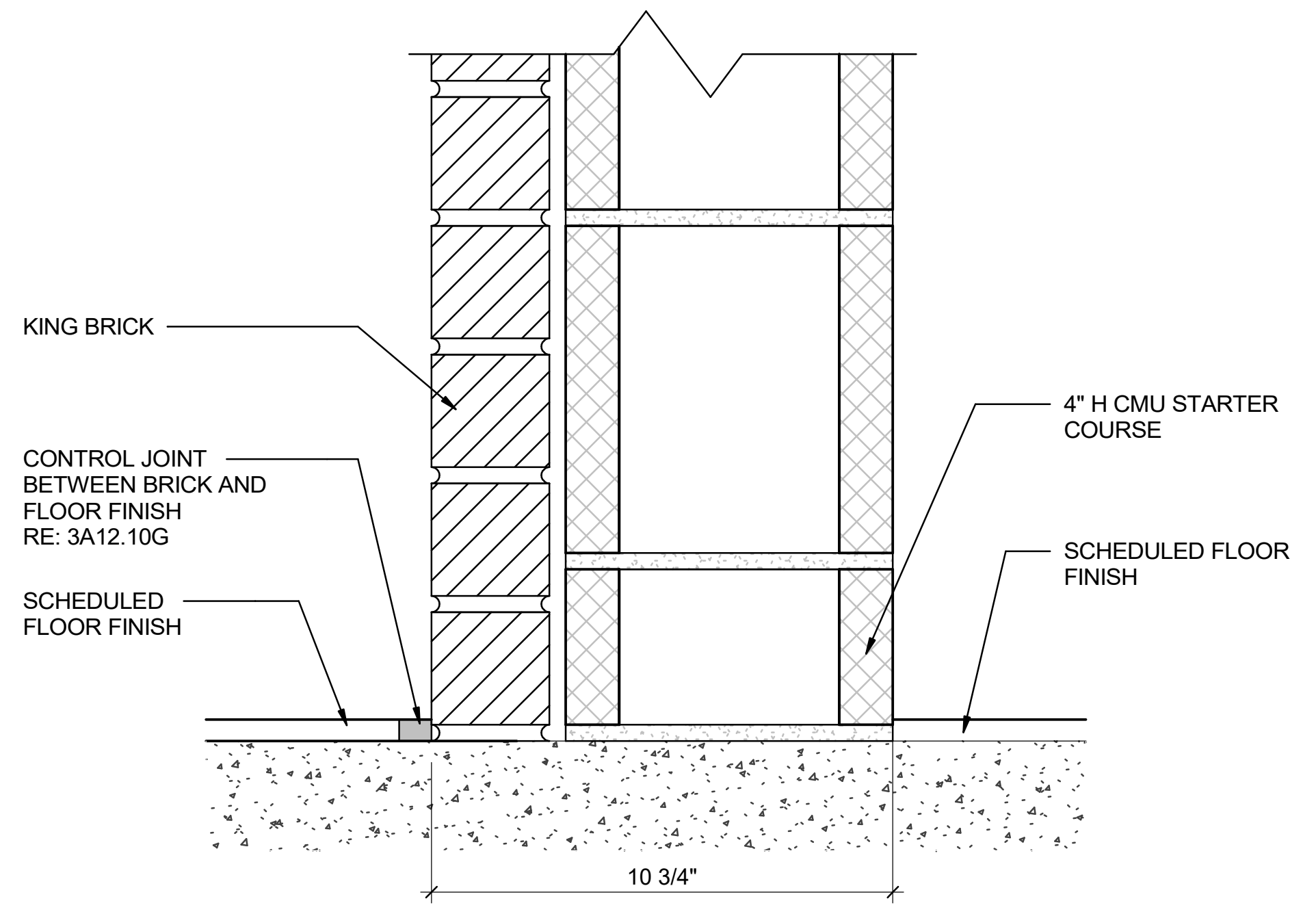
3" = 1'-0"



NOTE: DETAIL APPLIES TO ALL **NEW** INTERIOR PERIMETER WALLS OF RESTROOMS, CUSTODIAL ROOMS, MECHANICAL ROOMS & KILN ROOMS, WHETHER INDICATED ON DRAWINGS OR NOT. WHERE UNABLE TO INSTALL NEW CURB, APPLY WATERSTOP AROUND PERIMETER OF ROOM @ BOTTOM OF WALLS

3 WALL BASE DETAIL @ CURB - CMU

3" = 1'-0"



NOTE: DETAIL APPLIES TO ALL **NEW** INTERIOR WALLS WHERE EXISTING ADJACENT WALLS HAVE BRICK FINISH

4 WALL BASE DETAIL @ BRICK - CMU

3" = 1'-0"

PARTITION GENERAL NOTES

1. REFER TO SPECIFICATION FOR METAL STUD GAUGE AND BRIDGING REQUIREMENTS.
2. SET RUNNERS IN A CONTINUOUS BED OF SEALANT
3. SEAL ALL VOIDS BETWEEN PARTITION AND UNDERSIDE OF DECK W/MINERAL WOOD FIRE SAFING AND FIRE CAULK AT FIRE RATED PARTITIONS.
4. PROVIDE USB 093 CONTROL JOINTS PER ASTM C840 AND GA-216 GUIDELINES AND AS INDICATED IN DRAWINGS. PROVIDE JOINTS AT ALL HORIZONTAL WALL DIMENSIONS EXCEEDING 30'-0" AND AT DOOR JAMBS EXTENDING TO CEILING. COORDINATE IN FIELD W/ARCHITECT FOR EXACT LOCATIONS.
5. SEAL ALL PENETRATIONS THROUGH RATED WALLS. SEAL WITH UL APPROVED ASSEMBLY TO MATCH RATED PARTITIONS CONSTRUCTION.
6. PROVIDE 2" DEEP TOP RUNNER WITH STUDS TO BE FRICTION FIT IN RUNNER. TO ALLOW FOR DEFLECTION, CUT STUDS 3/4" SHORT, FRICTION FIT, AND DO NOT SECURE GYP BOARD TO RUNNER.
7. ACOUSTICAL SEALANT: CONTINUOUS AT PARTITION PERIMETER AND ALL PENETRATIONS. AT ACOUSTICAL CEILINGS, PROVIDE ACOUSTICAL FOAM TAPE AT HEAD IN LIEU OF SEALANT. INSTALL SEALANT AT EDGE OF GYP. BD / CMU. COPE GYP. BD. OR PROVIDE SHEET METAL CLOSURE AT STRUCTURAL DECK VOIDS. FILL VOIDS SOLID WITH ACOUSTICAL INSULATION AT NON-RATED PTNS AND WITH FIRE PROOFING AT THE FIRE RATED TNS (MATCHING SCHEDULED RATING).
8. BRACE ALL PTNS THAT EXCEED MANUFACTURERS RECOMMENDED LIMITING HEIGHTS. BRACE PTNS THAT STOP ABOVE FINISHED CLG. BRACE AND PROVIDE STIFFENERS AT PTNS WHERE STRAIGHT UNINTERRUPTED RUNS EXCEED 20FT. BRACE DOOR JAMBS.
9. REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR BRACING REQUIREMENT AT CMU WALLS.
10. REFER TO PLANS FOR PARTITION TYPES USED. ALL PARTITION TYPES SHOWN MAY NOT BE USED.
11. AT EXPOSED STRUCTURE CEILINGS, INSTALL PARTITIONS TIGHT AND SEAL TO UNDERSIDE OF DECK. SEALANT COLOR TO MATCH PARTITION PAINT COLOR.
12. ALL WOOD USED WILL BE FIRE RETARDANT WOOD.
13. CONTRACTOR SHALL PROVIDE METAL STUD BLOCKING / BRACING AND / OR STRAPPING FOR ALL WALL HUNG OR MOUNTED ITEMS INCLUDING BUT NOT LIMITED TO MILLWORK / CASEWORK, VANITIES, COUNTERTOPS, TOILET PARTITIONS, TOILET ACCESSORIES, MONITORS, OFCI ITEMS AND ETC.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFY THE EXISTING CONDITIONS AND COORDINATE ALL EXISTING CONDITIONS AS REQUIRED TO INSTALL PARTITIONS AND COMPLETE THE EXECUTION OF THE WORK.
15. PARTITION TYPE REFERENCES DO NOT INCLUDE THE APPLIED FINISHES INDICATED BY ROOM FINISH SCHEDULE AND FINISH REFERENCES.
16. REFER TO SPECIFICATION FOR CONCRETE MASONRY UNIT CONSTRUCTION REQUIREMENTS.
17. CMU WALLS - CONSTRUCT WITH RUNNING BOND (MATCH EXISTING) TYPICAL UNLESS OTHERWISE NOTED. INSTALL CMU WITH STACK BOND FOR SINGLE WYTHE PLUMBING WALL.
18. INFILL EXISTING CMU WALL OPENINGS: MATCH EXISTING PATTERN AND ALIGH NEW GROUT JOINTS WITH EXISTING. REFER TO STRUCTURAL FOR ADDITIONAL REQUIREMENTS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

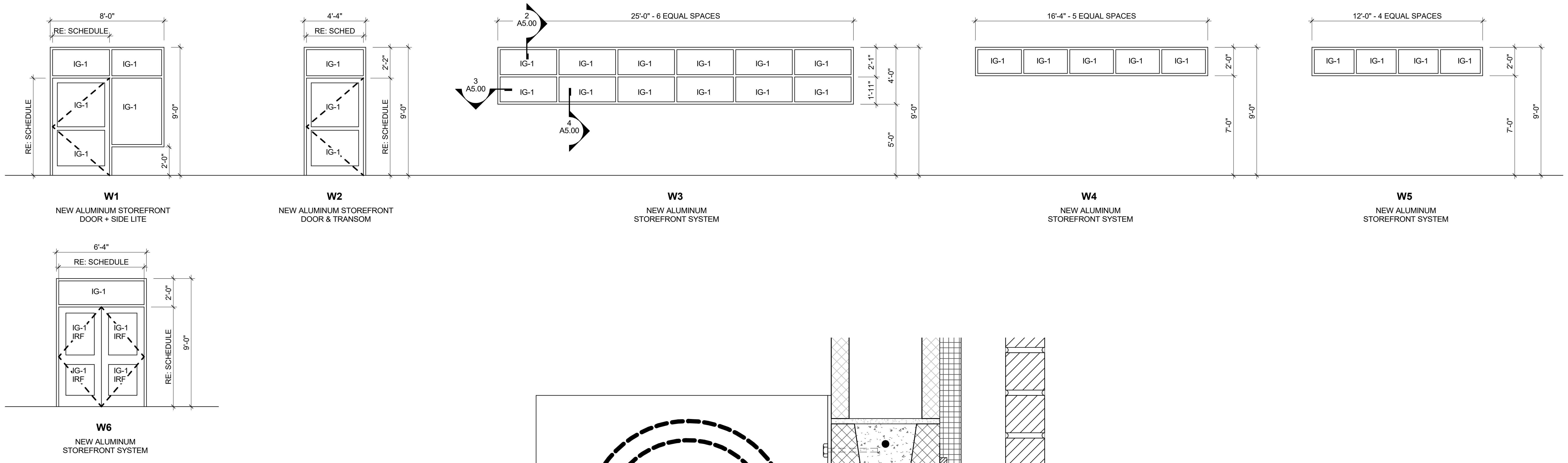
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

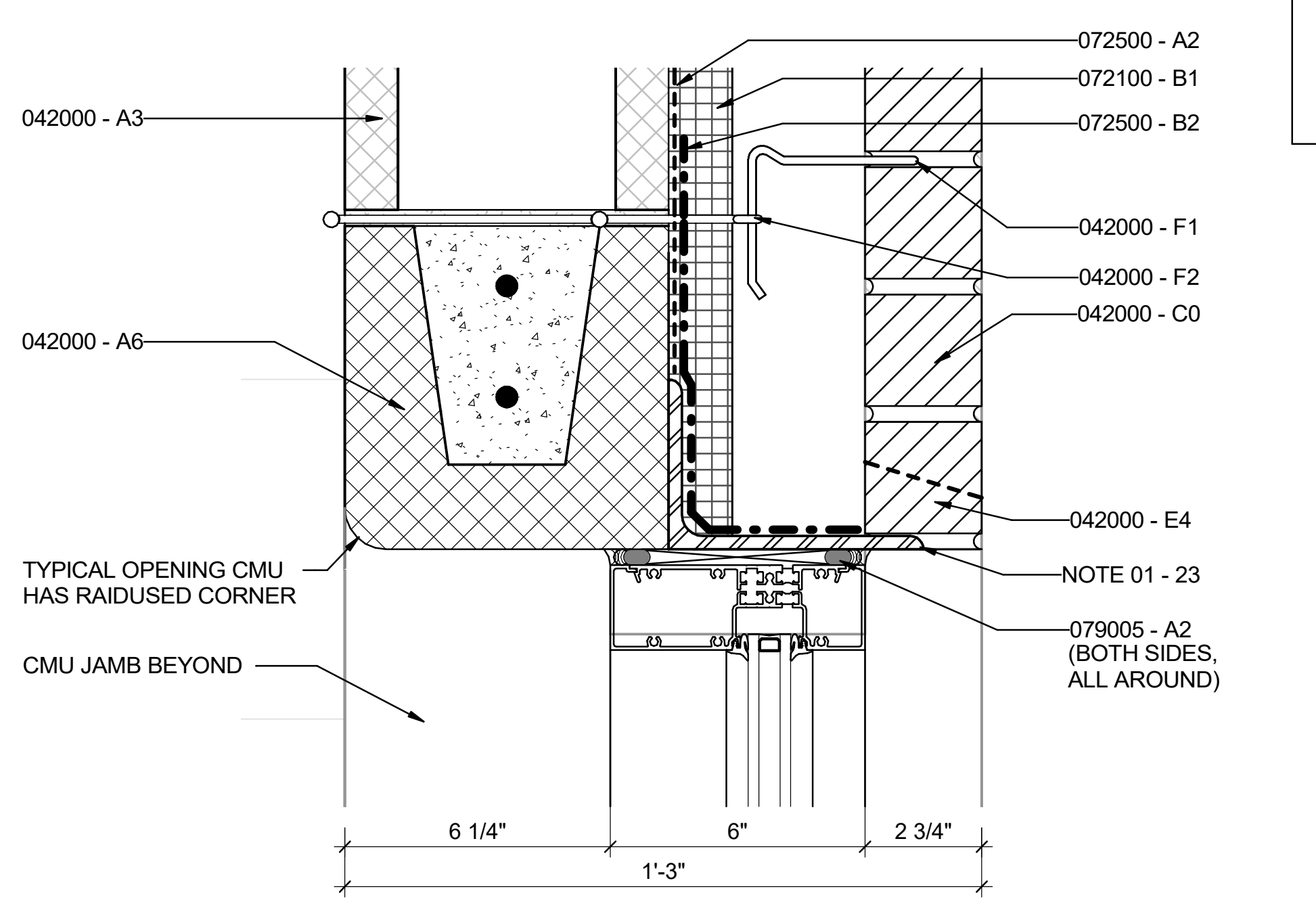
PARTITION TYPES &
WALL DETAILS

A4.20

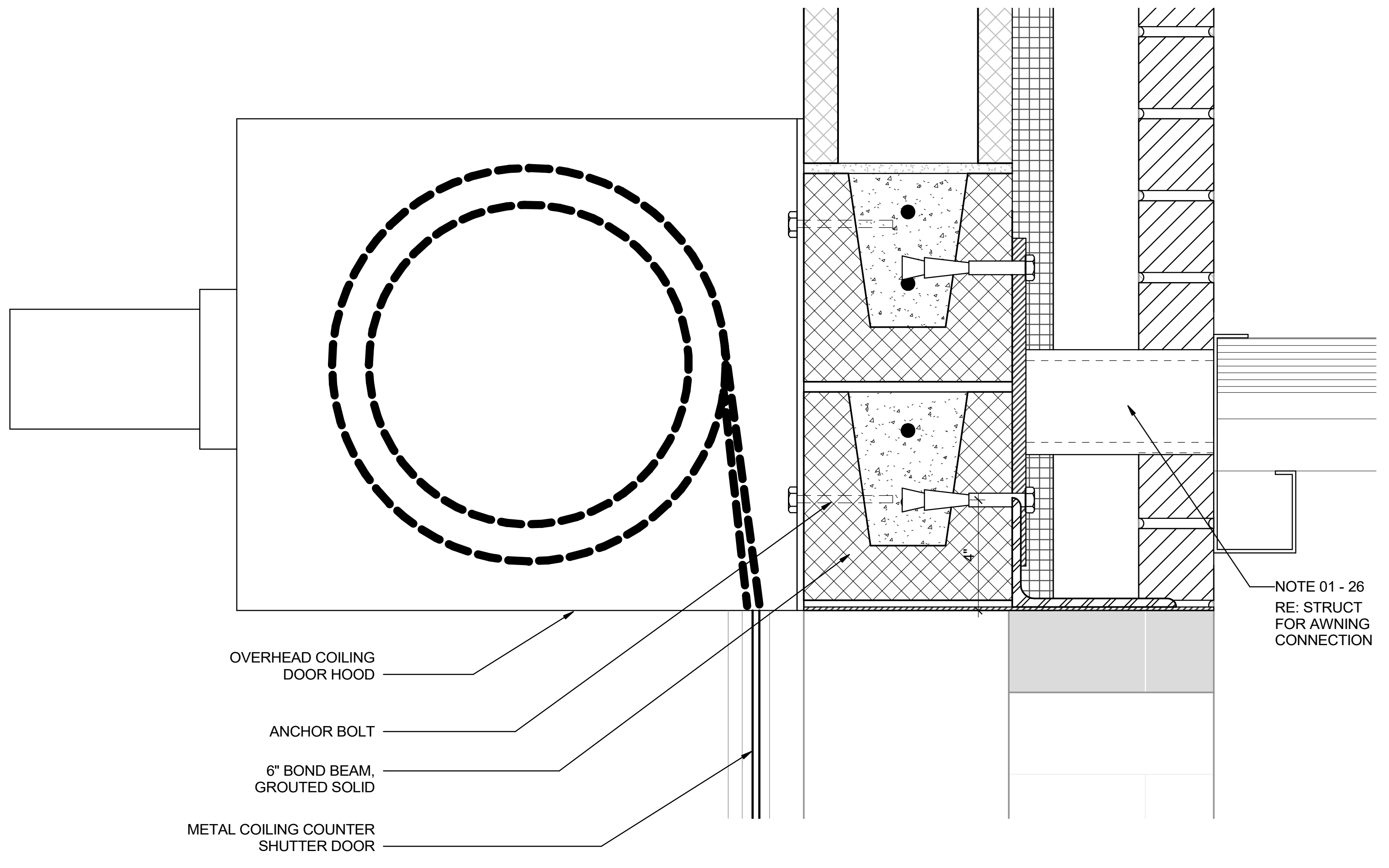
____ of ____



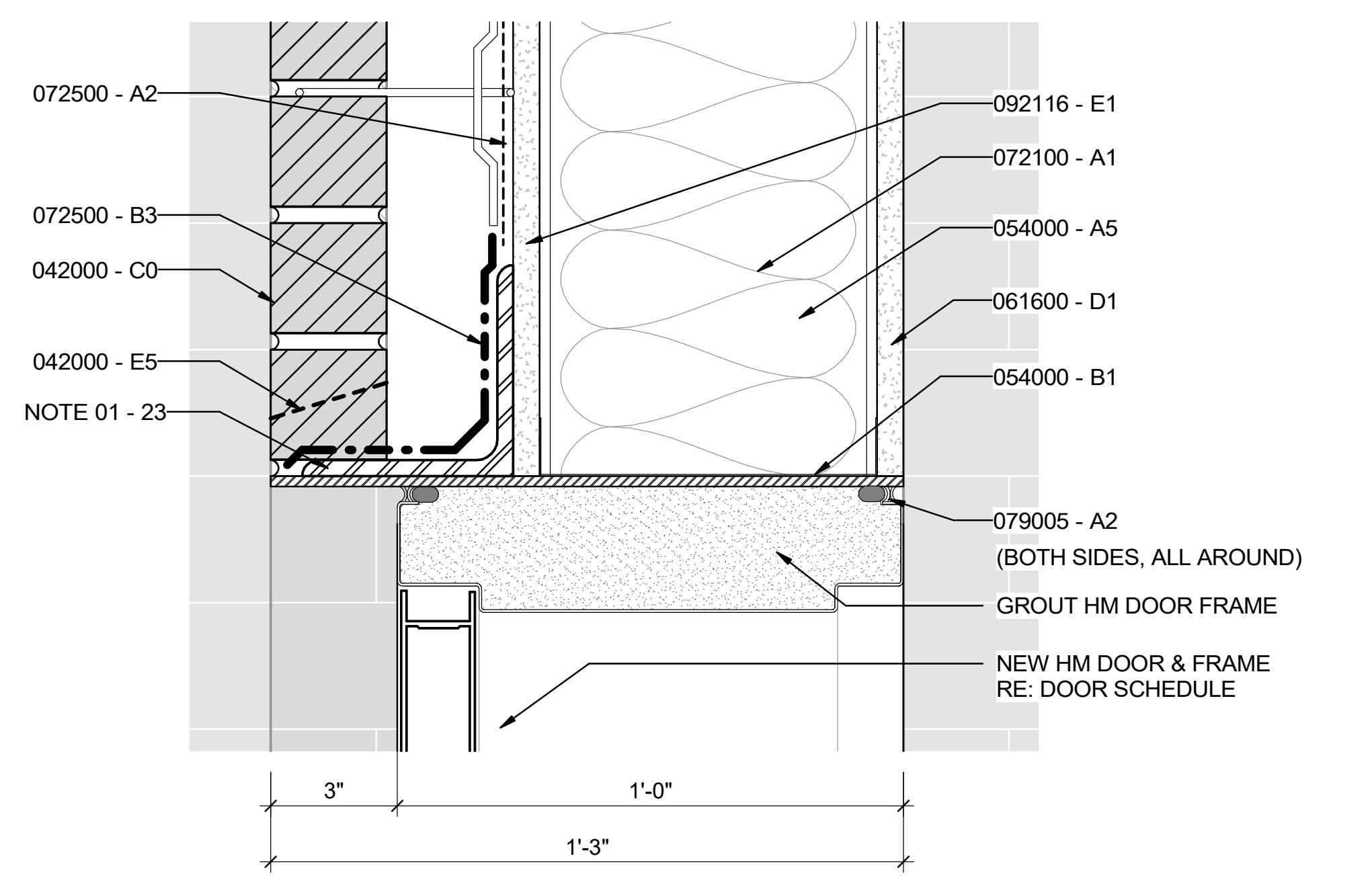
1 EXTERIOR OPENING TYPES
1/4" = 1'-0"



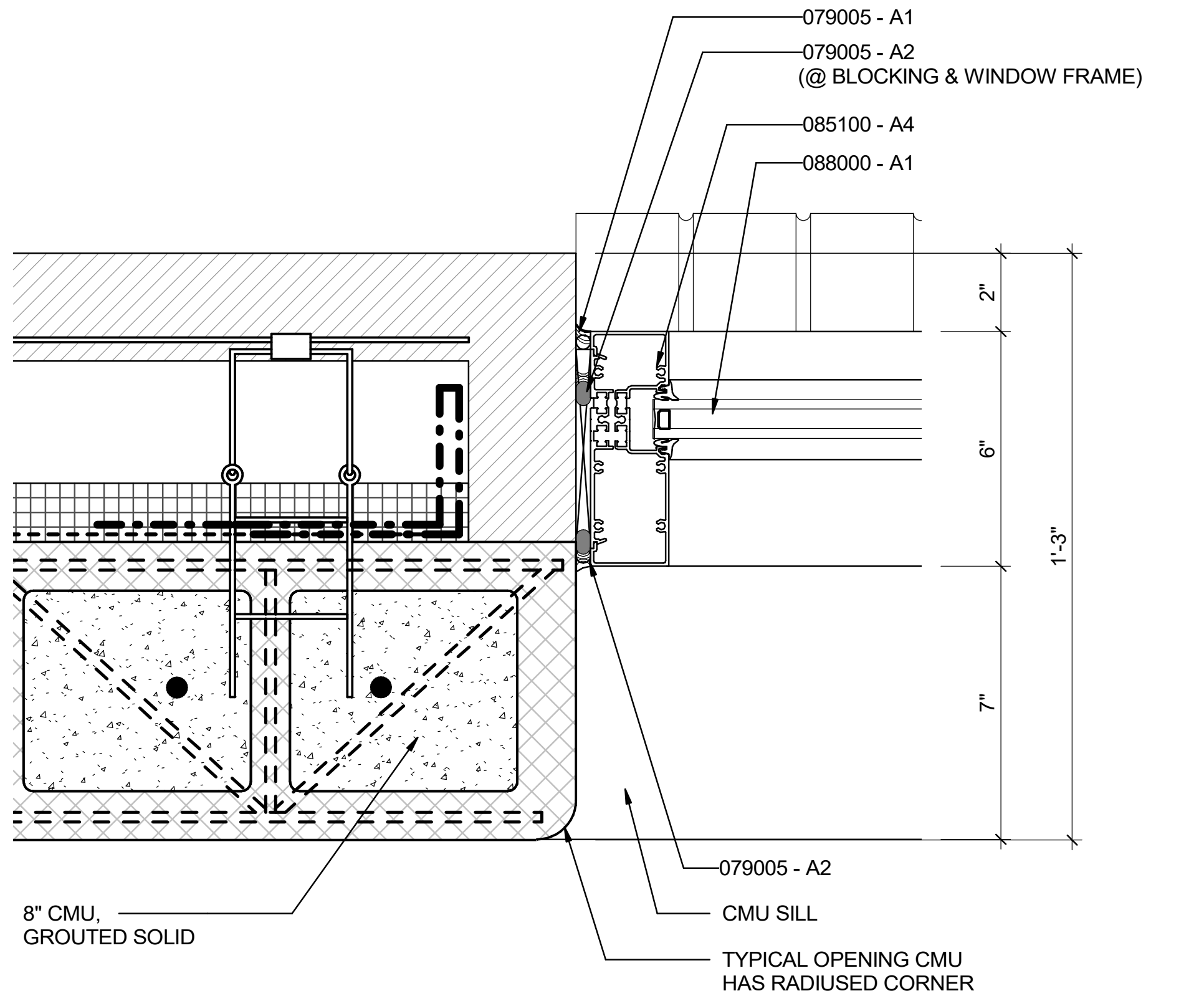
2 HEAD DETAIL - EXT. WINDOW
3" = 1'-0"



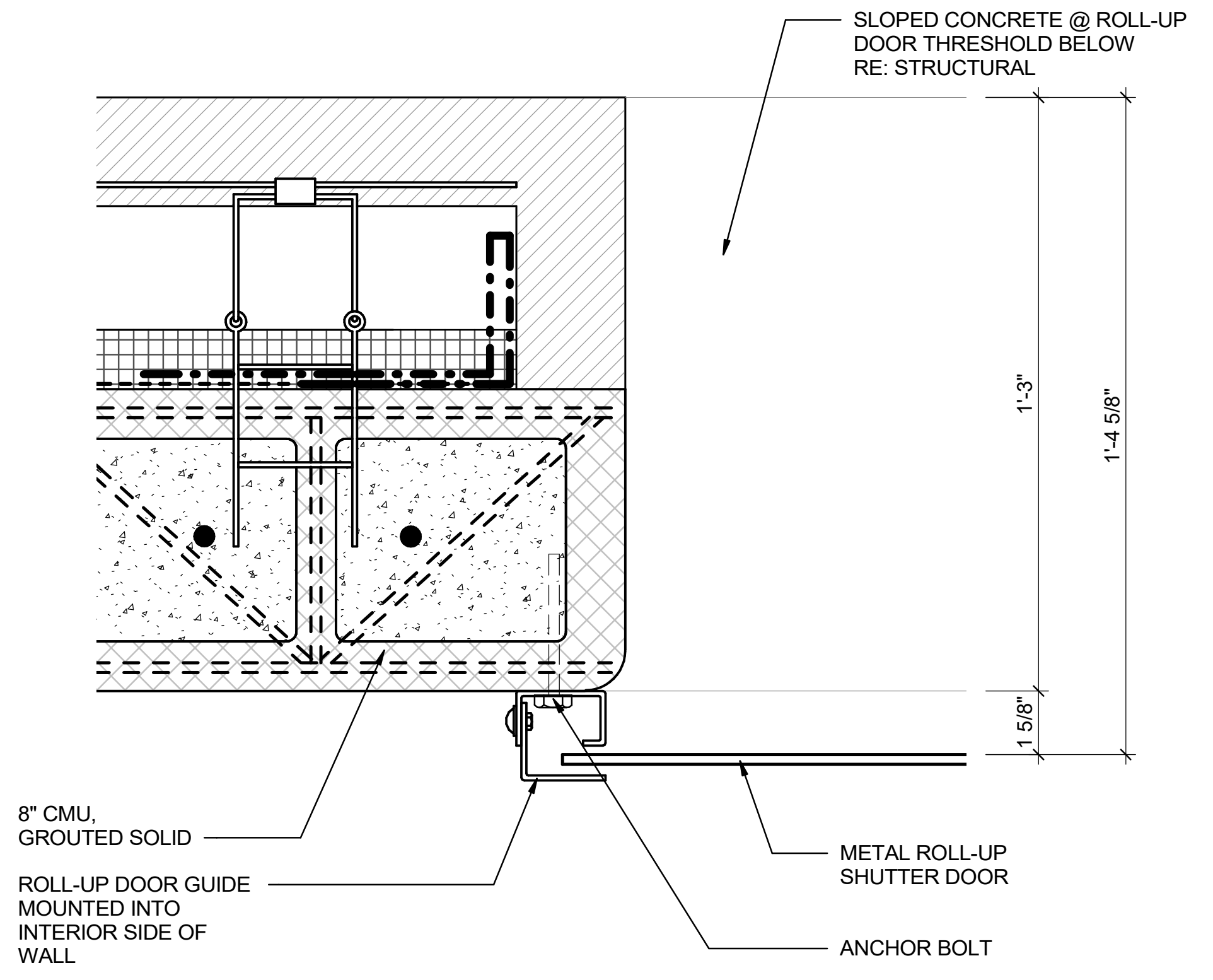
5 HEAD DETAIL - O/H DOOR
3" = 1'-0"



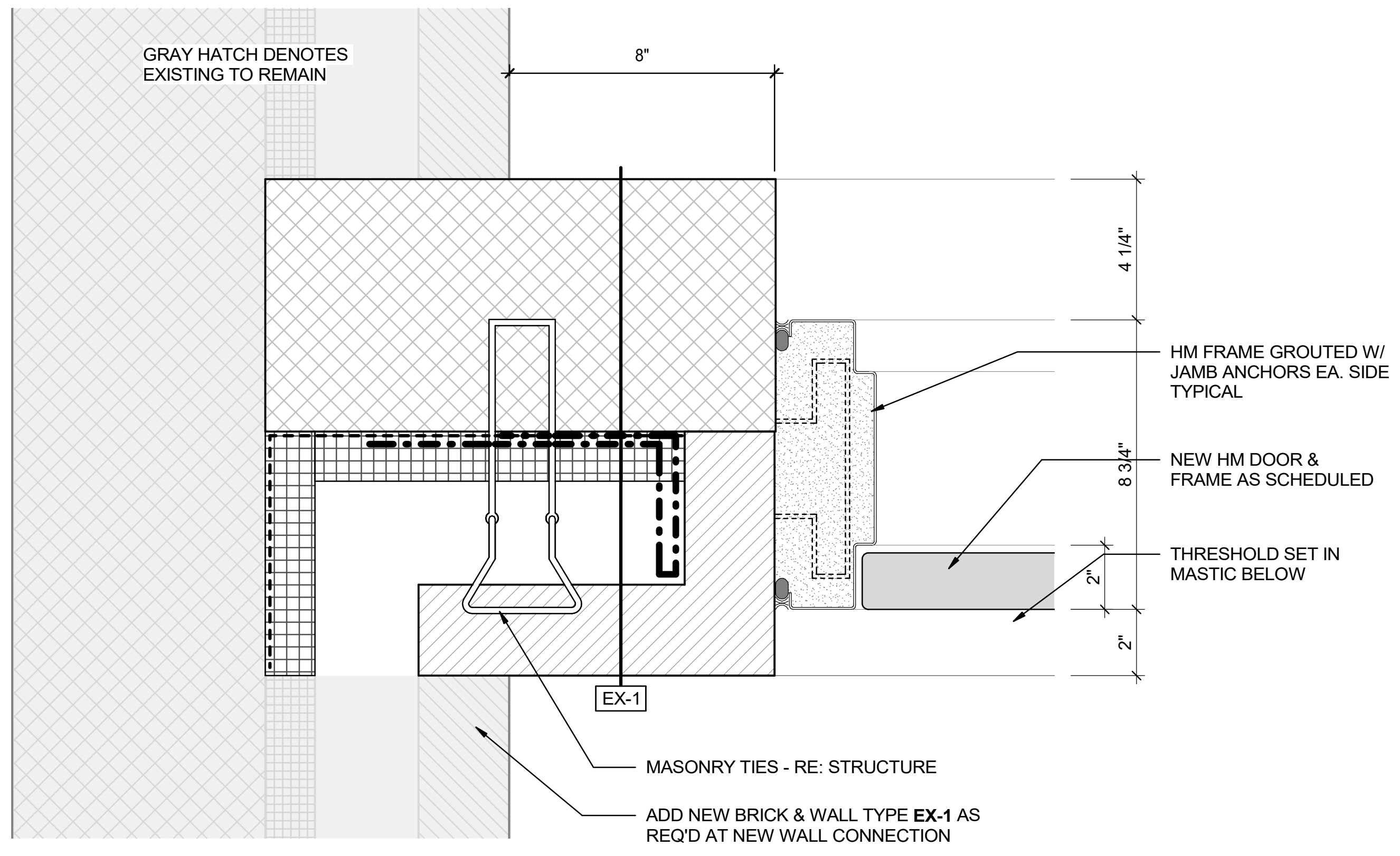
8 HEAD DETAIL - AUDITORIUM STORAGE
3" = 1'-0"



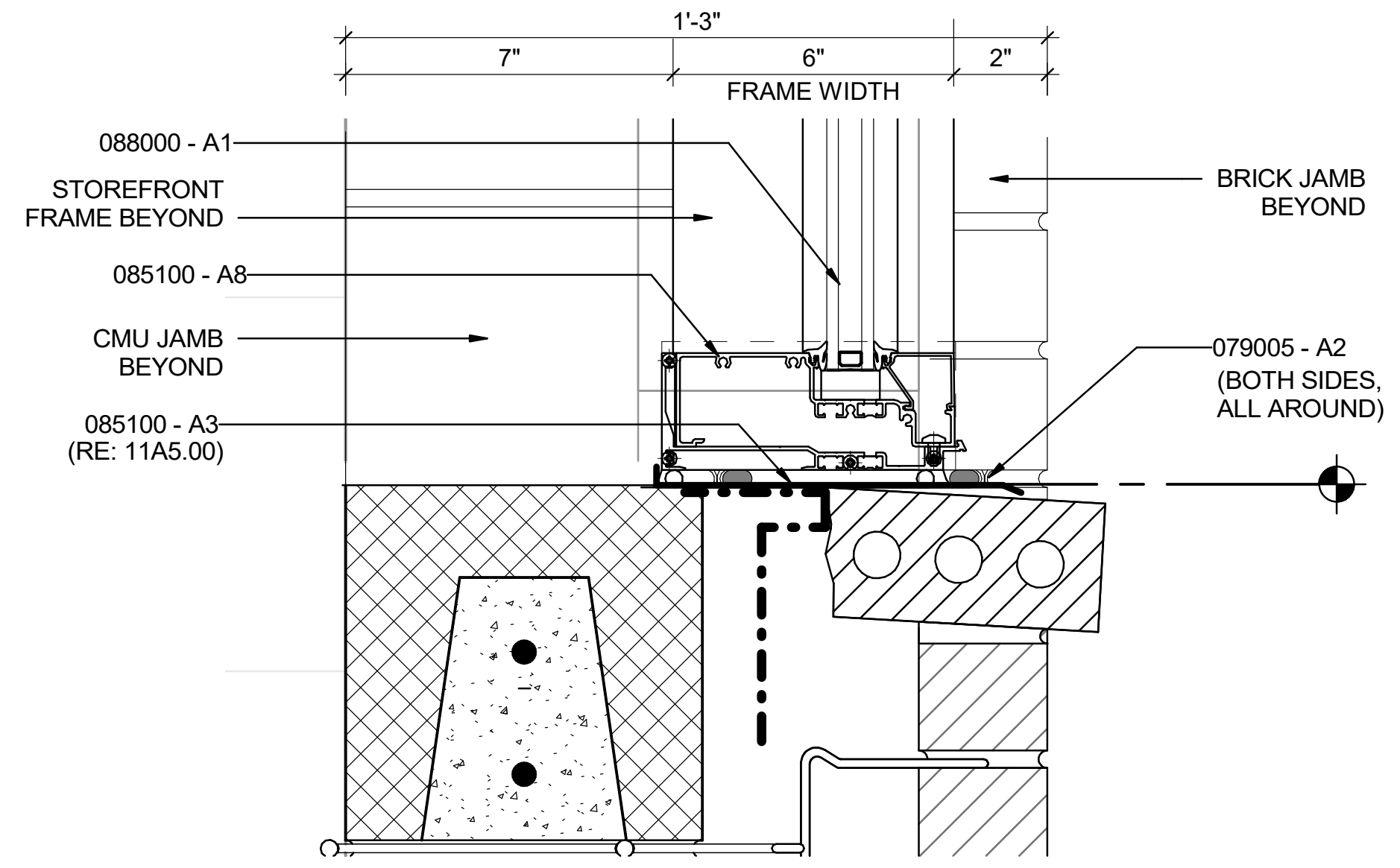
3 JAMB DETAIL - WINDOW
3" = 1'-0"



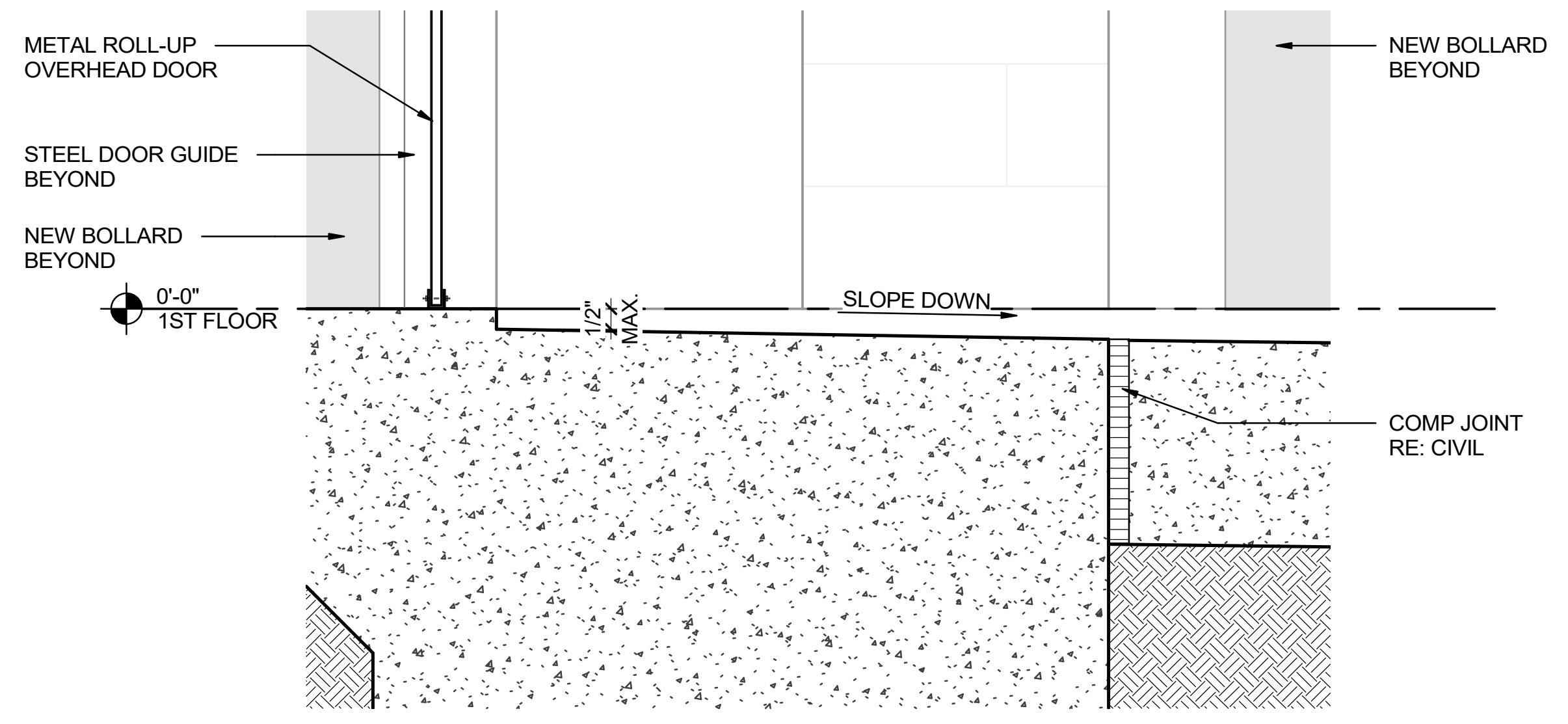
6 JAMB DETAIL - O/H DOOR
3" = 1'-0"



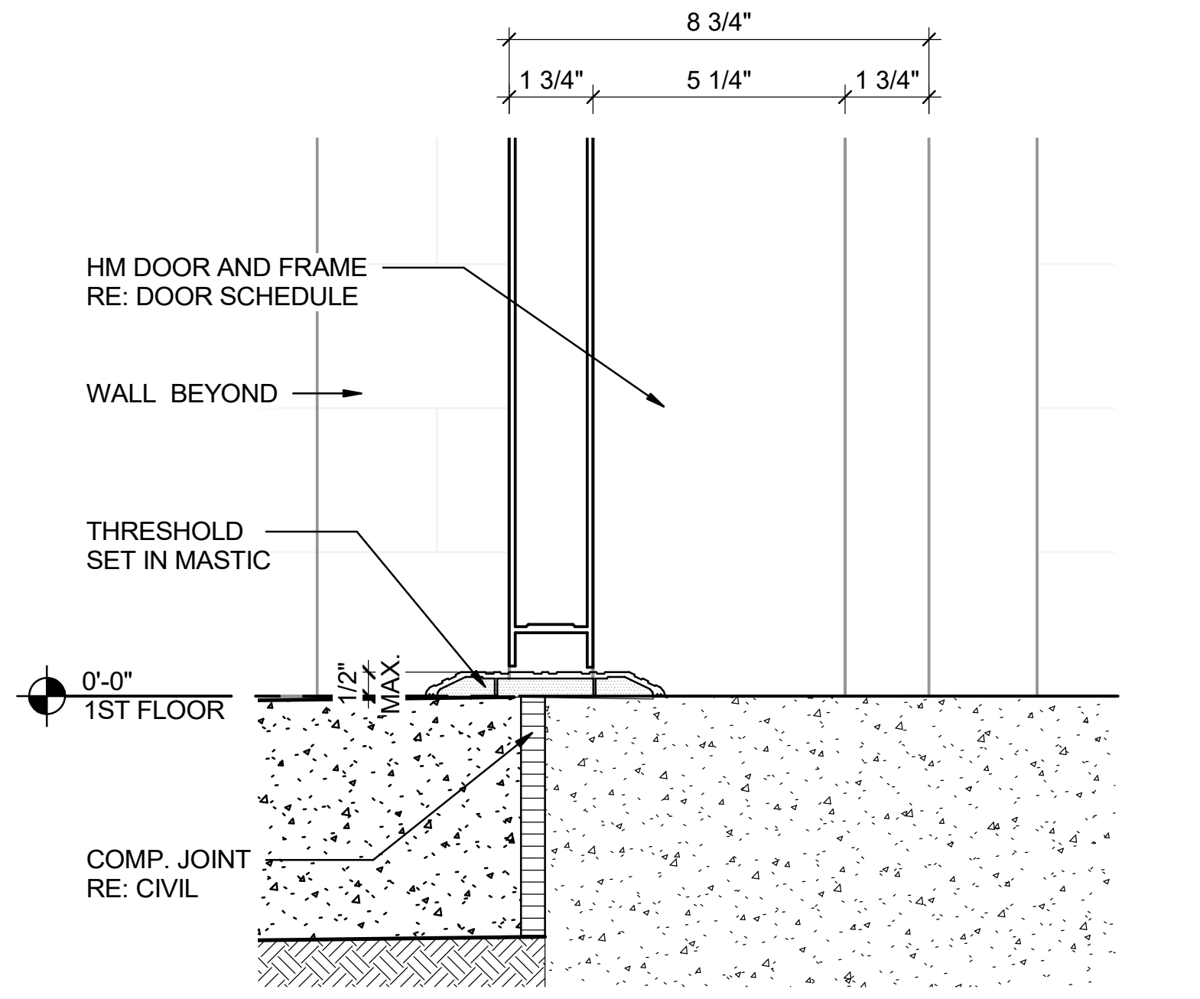
9 JAMB DETAIL - AUDITORIUM STORAGE
3" = 1'-0"



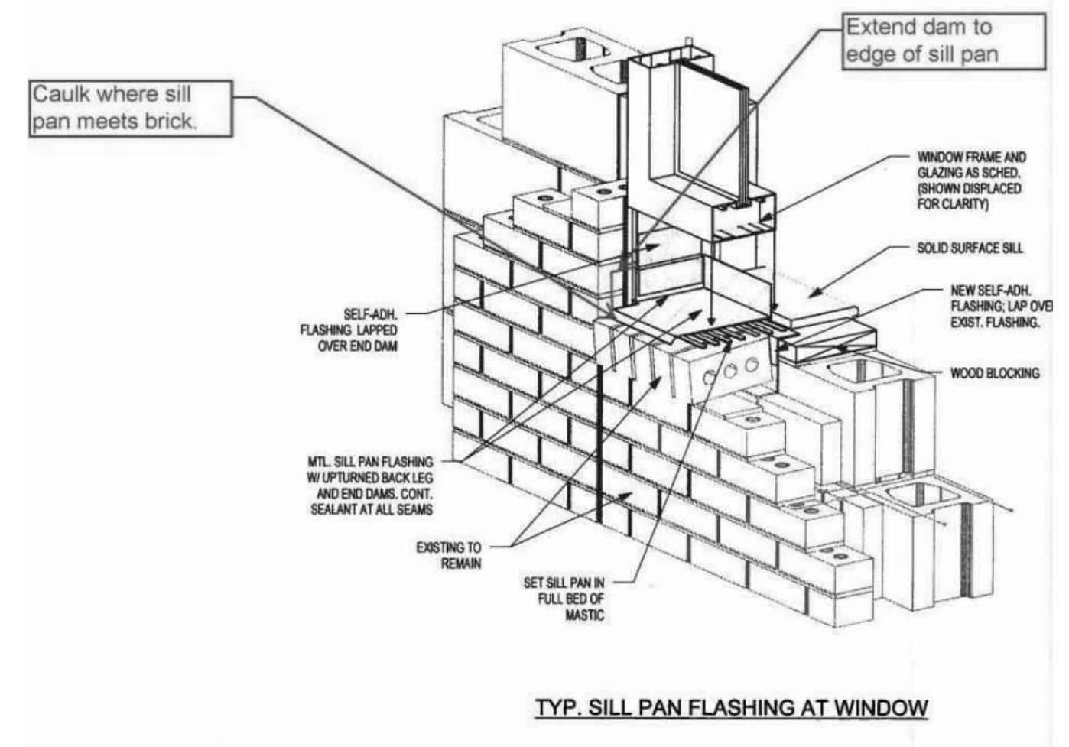
4 SILL DETAIL - WINDOW
3" = 1'-0"



7 SILL DETAIL - O/H DOOR
3" = 1'-0"



10 SILL DETAIL - AUDITORIUM STORAGE
3" = 1'-0"



11 EXT. WINDOW SILL
12" = 1'-0"

GLASS TYPE LEGEND

IG-1	INSULATED GLASS (EXTERIOR)
IR-1	9/16" THICK IMPACT RESISTANT GLASS (INTERIOR)
IR-2	3/8" THICK IMPACT RESISTANT GLASS (INTERIOR)
FR-1	FIRE-RATED GLASS
AC-1	ACOUSTICAL RATED GLASS
L-1	1/2" LAMINATED GLASS
S-3	1/4" TEMPERED GLASS
E	EXISTING IR GLAZING
IRF	IMPACT RESISTANT FILM (RE: SPEC)

INSTALLATION OF IMPACT RESISTANT GLASS (IR) TYPES SHALL COMPLY WITH GLASS MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. DOW CORNING 995 SILICON STRUCTURAL SEALANT IS REQUIRED.

REFER TO SPECIFICATION SECTION 08 80 00

KEYNOTES

042000 - A3	8X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - A6	U-SHAPED BOND BEAM BLOCK (WALL) OR LINTEL BLOCK (OPENING) - RE: STRUCT
042000 - C0	KING SIZED VENEER FACE BRICK - STRETCHER COURSES (RUNNING BOND) - SEE ELEVATIONS FOR BANDING & COLOR
042000 - E4	OPEN HEAD JOINT AT 24" O.C. MAX (WEEP) - FILLED WITH MOLDED PVC GRILLE, INSECT RESISTANT
042000 - E5	WEEP HOLES @ 24" OC - FILLED WITH MOLDED PVC GRILLE, INSECT RESISTANT
042000 - F1	ADJUSTABLE MASONRY VENEER WALL TIES AT 15" O.C. VERTICALLY MAX (16" O.C. STD BRICK) AND 16" O.C. HORIZONTALLY MAX - FOR UNEVEN WYTHES OF BRICK & CMU
042000 - F2	ADJUSTABLE HORIZONTAL TRUSS REINFORCEMENT WITH EYE-WIRE FOR ADJUSTABLE TIES. @ 16" OC VERTICALLY MAX @ CMU - FOR WYTHES OF KING SIZED BRICK & STANDARD CMU
054000 - A5	8" METAL STUD WALL FRAMING (CFMF) - RE: STRUCTURAL
054000 - B1	METAL STUD TRACK (CFMF) - SAME WIDTH AS WALL FRAMING - RE: STRUCTURAL
061600 - D1	5/8" EXTERIOR GYPSUM SHEATHING
072100 - A1	BATT INSULATION - THICKNESS SAME AS WALL FRAMING
072100 - B1	RIGID WALL INSULATION - 1-1/2" THICK IN WALL CAVITY - RE: SPECS
072500 - A2	FLUID APPLIED AIR BARRIER OVER EXTERIOR CMU
072500 - B2	SELF-ADHERING FLASHING MEMBRANE @ WALL OPENINGS
072500 - B3	SELF-ADHERING TRANSITION MEMBRANE @ WALL CONNECTIONS
079005 - A1	JOINT SEALANT AND CYLINDRICAL SEALANT BACKING REPLACEMENT AROUND ALL SIDES OF EXTERIOR WALL OPENINGS & PENETRATIONS
079005 - A2	JOINT SEALANT AND CYLINDRICAL SEALANT BACKING
085100 - A3	EXTRUDED ALUMINUM BREAK METAL SILL PAN FLASHING, SET IN MASTIC, WITH END DAMS AND UPTURNED. COLOR AND FINISH SHALL MATCH ALUMINUM STOREFRONT FRAMING.
085100 - A4	2" X 6" ALUMINUM STOREFRONT MULLION
085100 - A8	2" X 6" ALUMINUM STOREFRONT WINDOW SILL FRAME (SET IN SILL PAN)
088000 - A1	1" INSULATING, LOW-E COATED, TINTED TEMPERED GLAZING RE: SPECS
092116 - E1	5/8" GLASS MAT GYPSUM BOARD SHEATHING - RE: SPECS
NOTE 01 - 23	STEEL ANGLE - RE: STRUCTURAL
NOTE 01 - 26	STEEL TUBE FRAMING - RE: STRUCTURAL

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

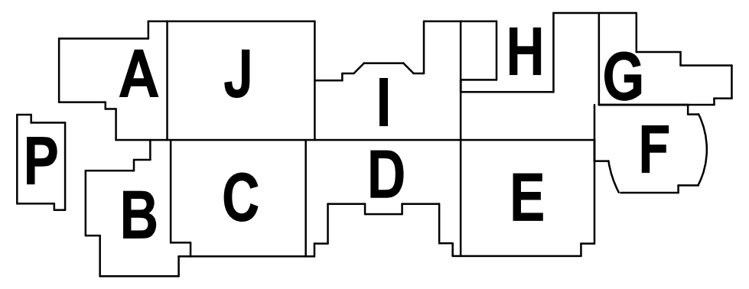
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

EXTERIOR OPENING TYPES

A5.00
of

AERIAL PHOTOS:
REFERENCE PHOTOS ARE SHOWN FOR BUILDING JOINTS REPLACEMENT SCOPE OF WORK . CONTRACTOR SHALL VERIFY ALL EXISTING ROOF & WALL CONDITIONS REQUIRED TO COMPLETE WORK. SEE ELEVATION SHEET A6'S FOR ADDITIONAL INFORMATION.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

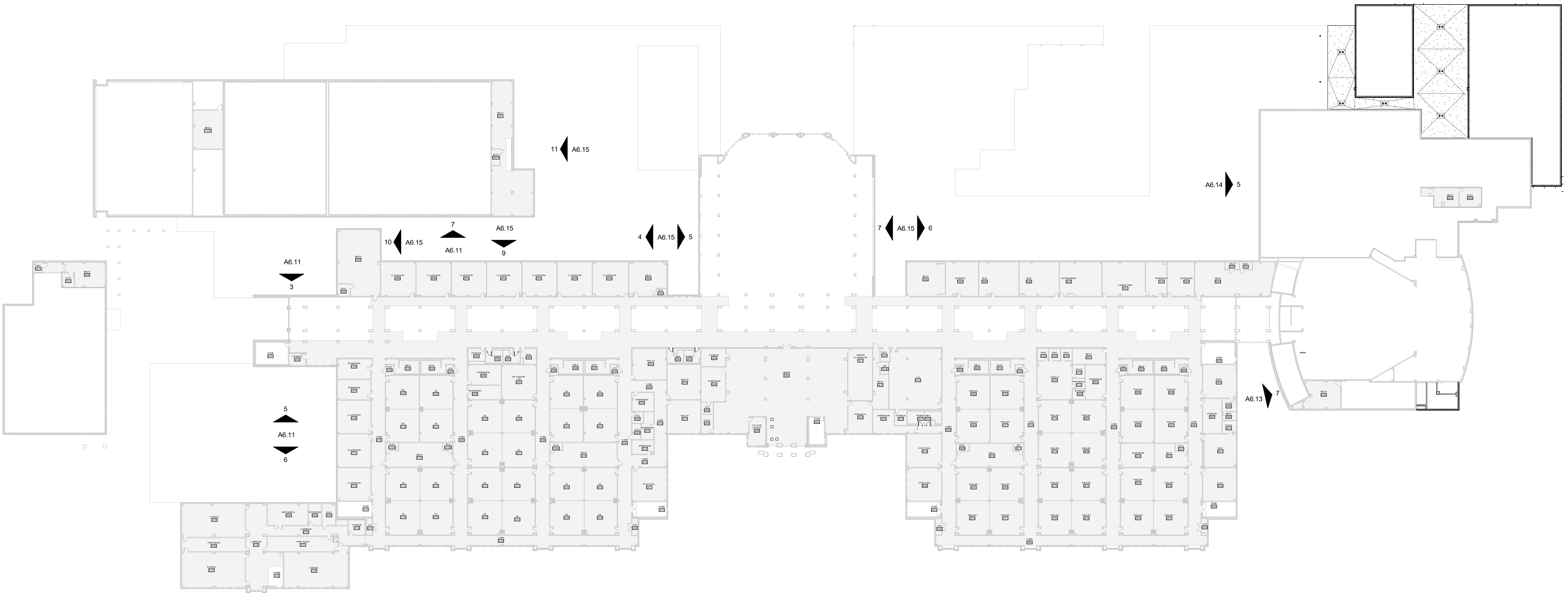
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

EXTERIOR AERIAL
PHOTOS

A6.00

____ of ____

11/14/2024 1:36:22 PM

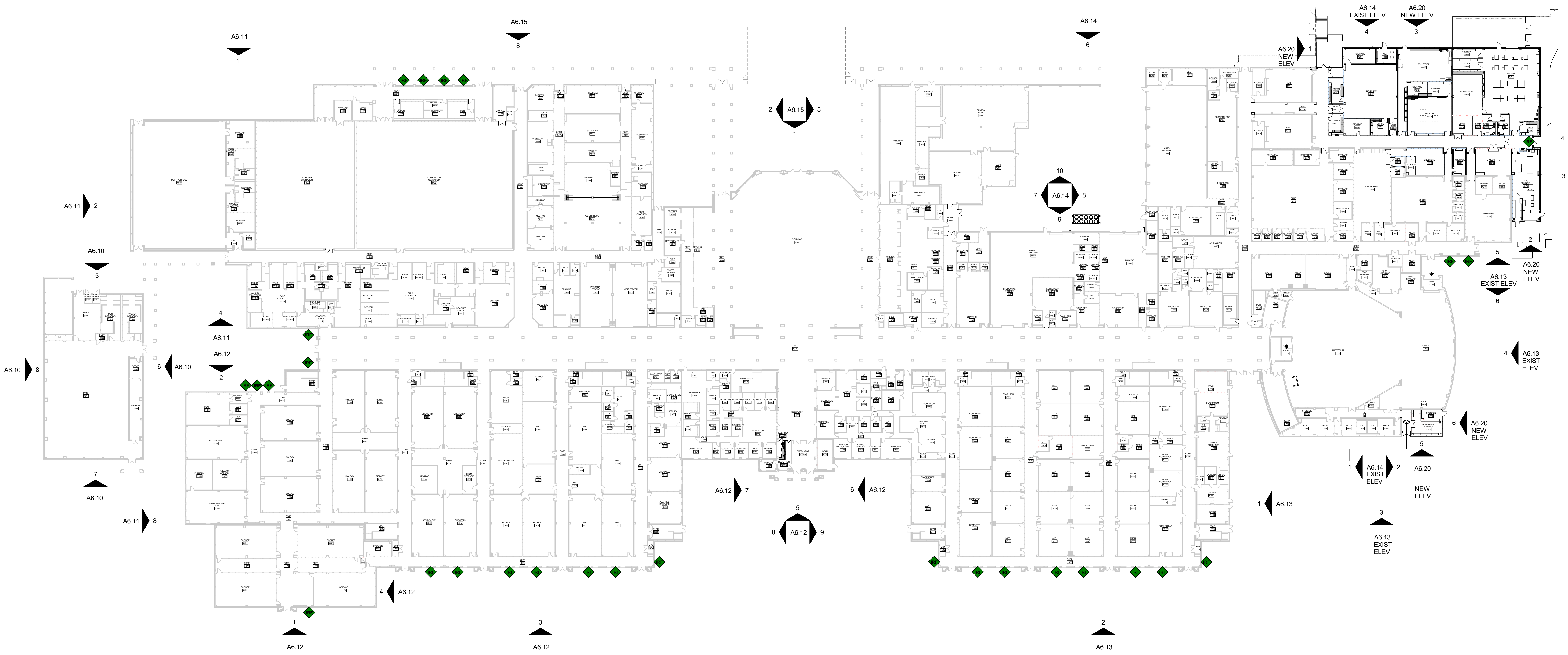


N
TRUE PLAN

2 2ND FLOOR PLAN - EXTERIOR ELEVATIONS

1" = 40'-0"

SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"



N
TRUE PLAN

1 1ST FLOOR PLAN - EXTERIOR ELEVATIONS

1" = 40'-0"

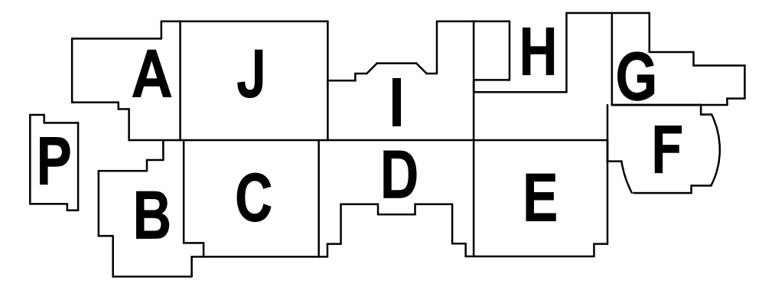
SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

PLAN LEGEND

IRF	NEW IMPACT RESISTANT GLAZING FILM ON EXISTING GLASS

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

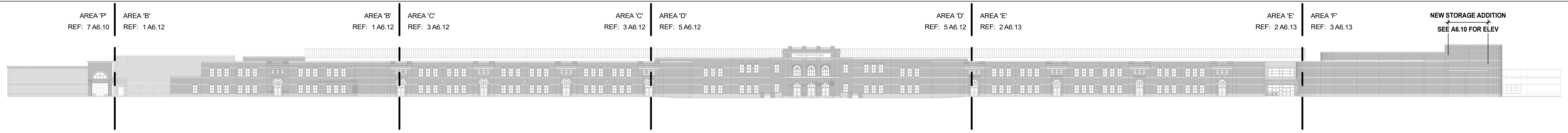
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

JOINT SEALANT & IRF LOCATION FLOOR PLANS

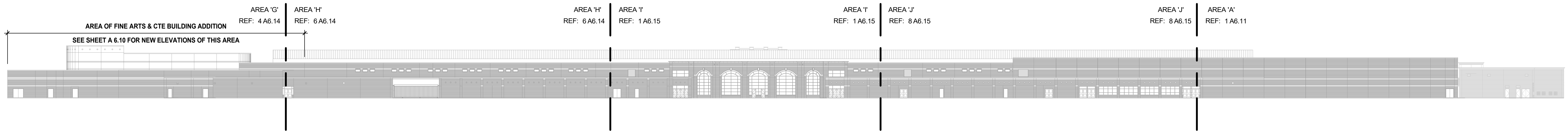
A6.01

___ of ___

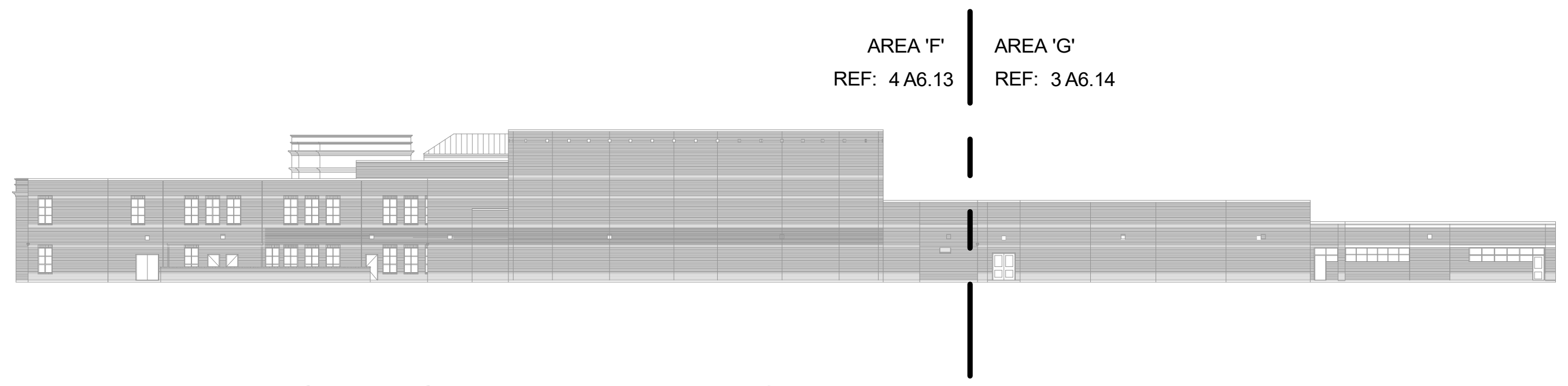
11/14/2024 1:36:24 PM



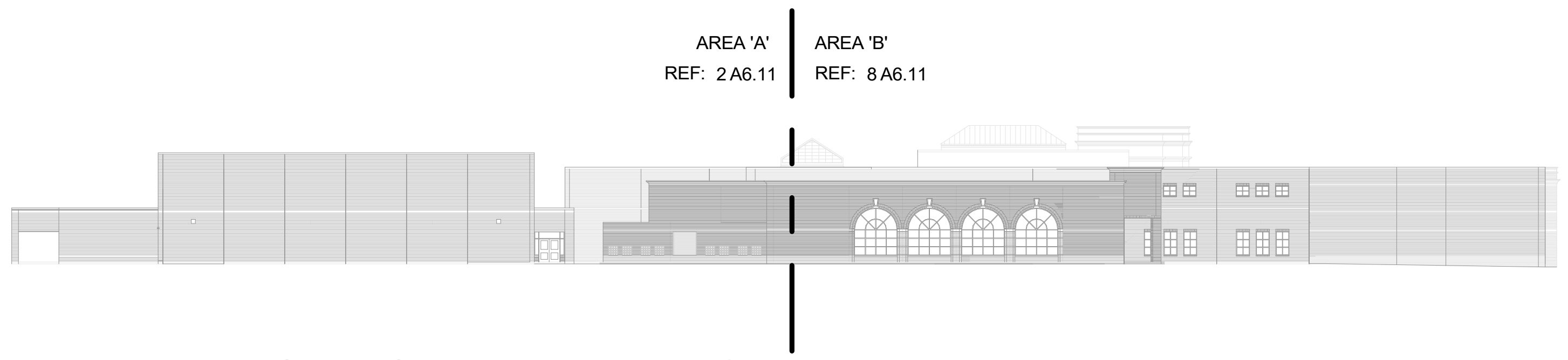
1 ELEVATION - OVERALL - SOUTH
1" = 40'-0"



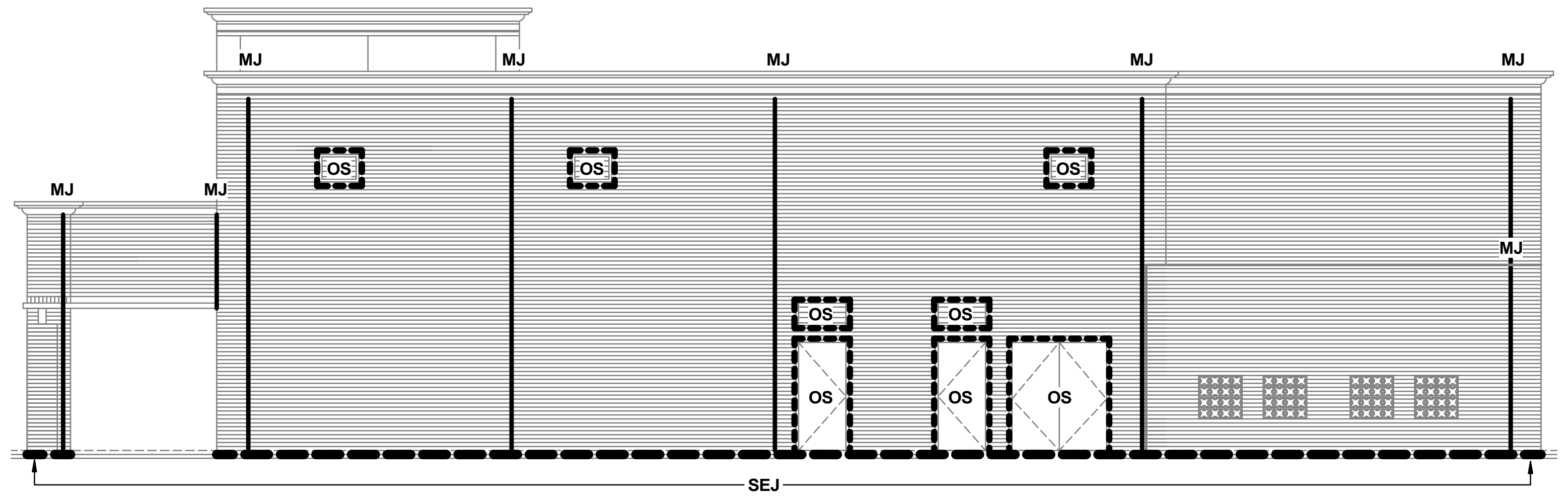
2 ELEVATION - OVERALL - NORTH
1" = 40'-0"



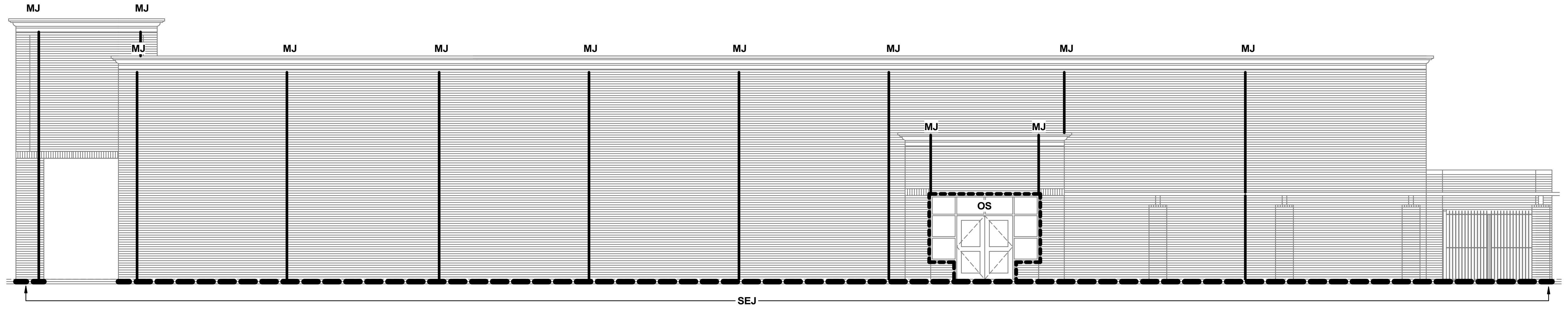
3 ELEVATION - OVERALL - EAST
1" = 40'-0"



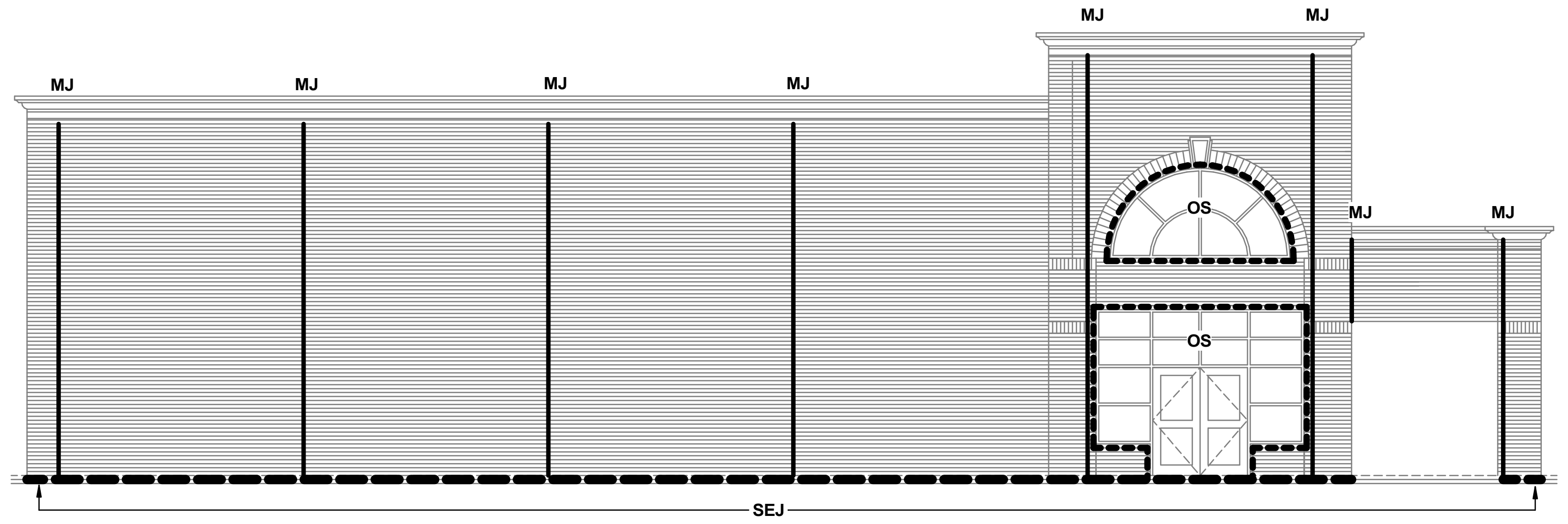
4 ELEVATION - OVERALL - WEST
1" = 40'-0"



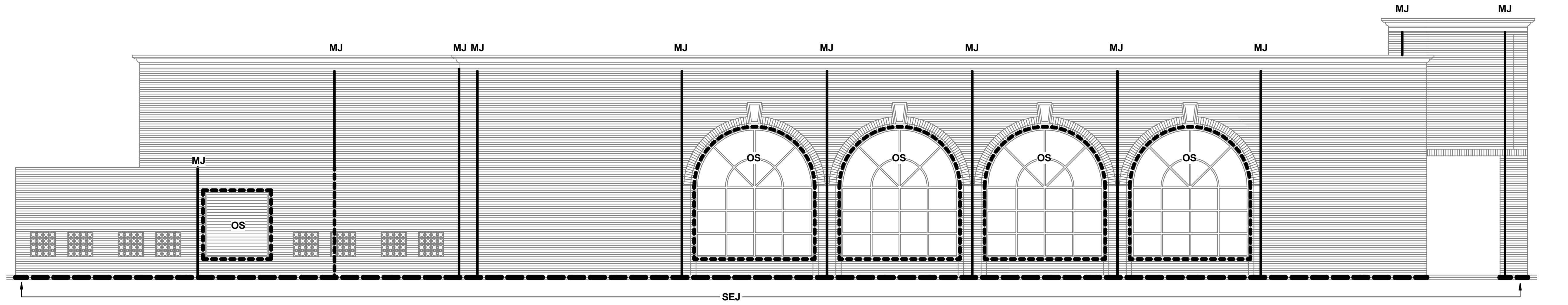
5 ELEVATION - POOL - NORTH
1/8" = 1'-0"



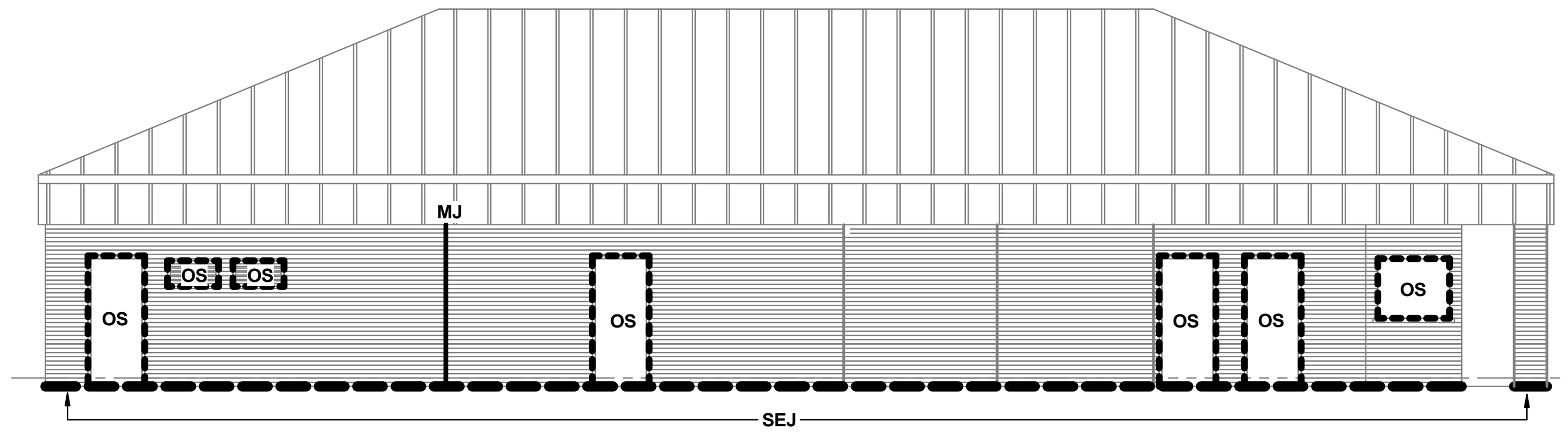
6 ELEVATION - POOL - EAST
1/8" = 1'-0"



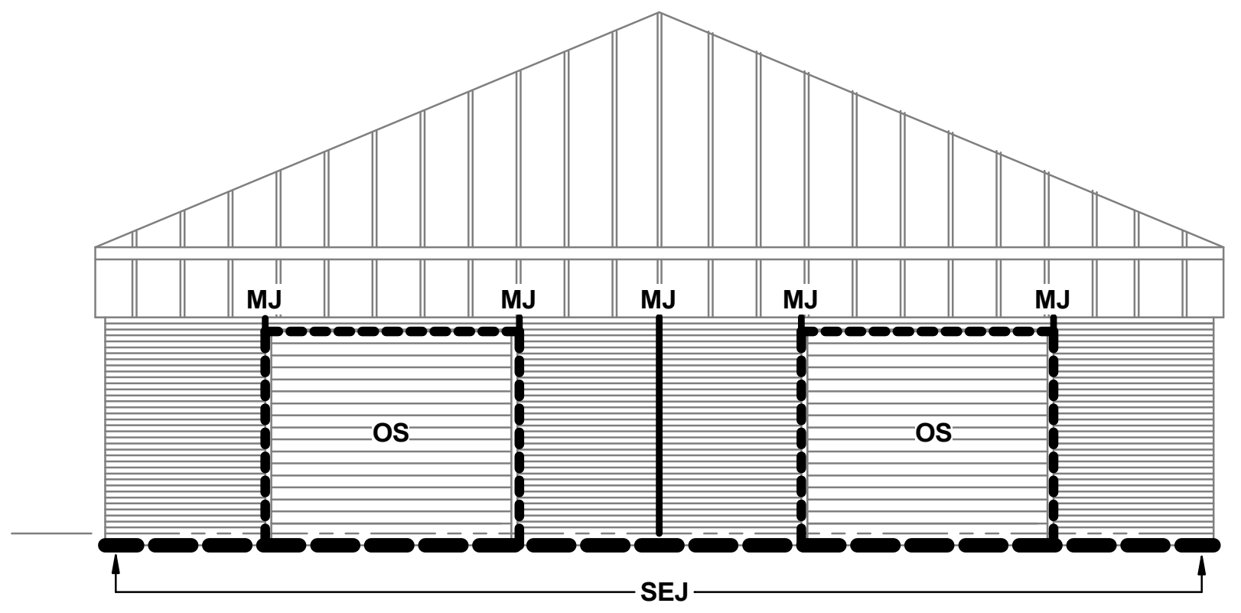
7 ELEVATION - POOL - SOUTH
1/8" = 1'-0"



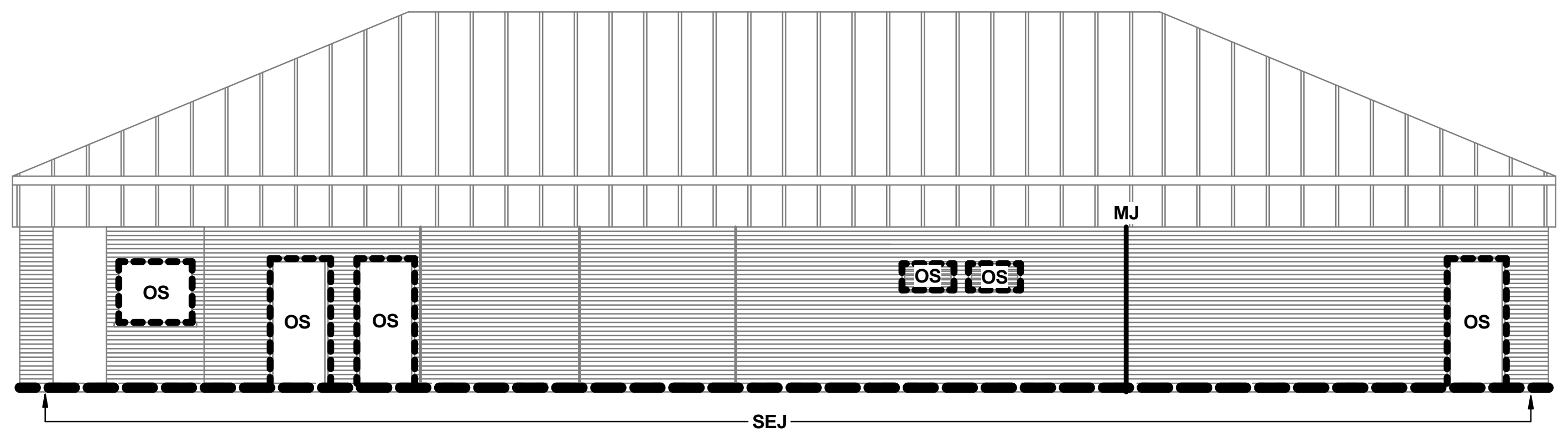
8 ELEVATION - POOL - WEST
1/8" = 1'-0"



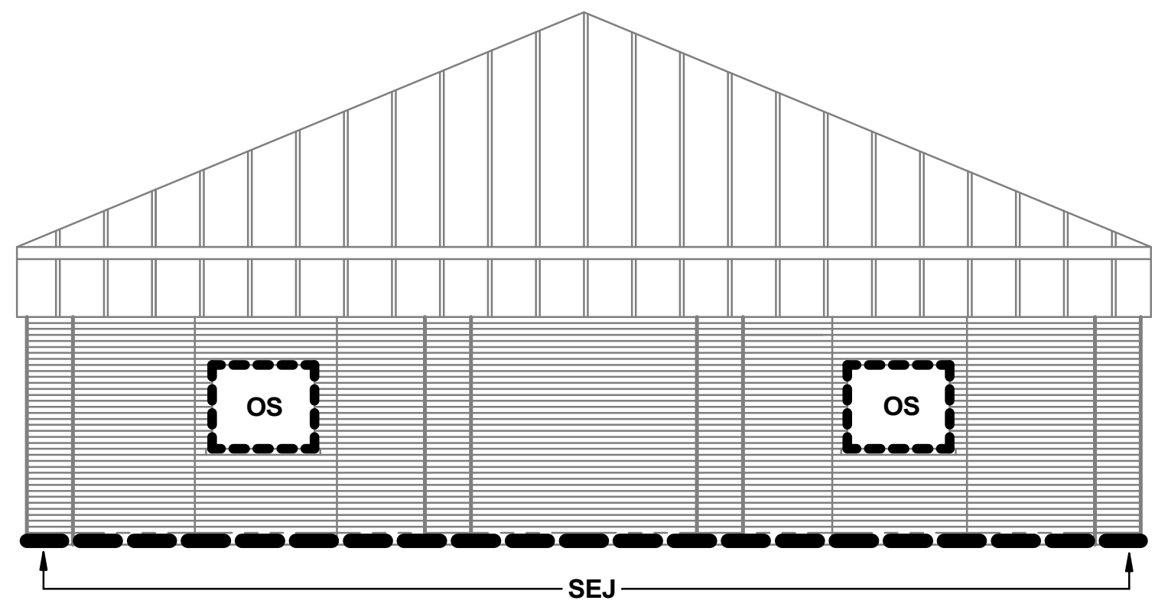
9 ELEV - CONCESSIONS - NORTH
1/8" = 1'-0"



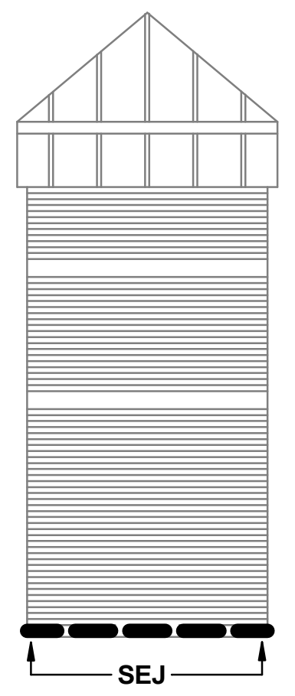
10 ELEV - CONCESSIONS - EAST
1/8" = 1'-0"



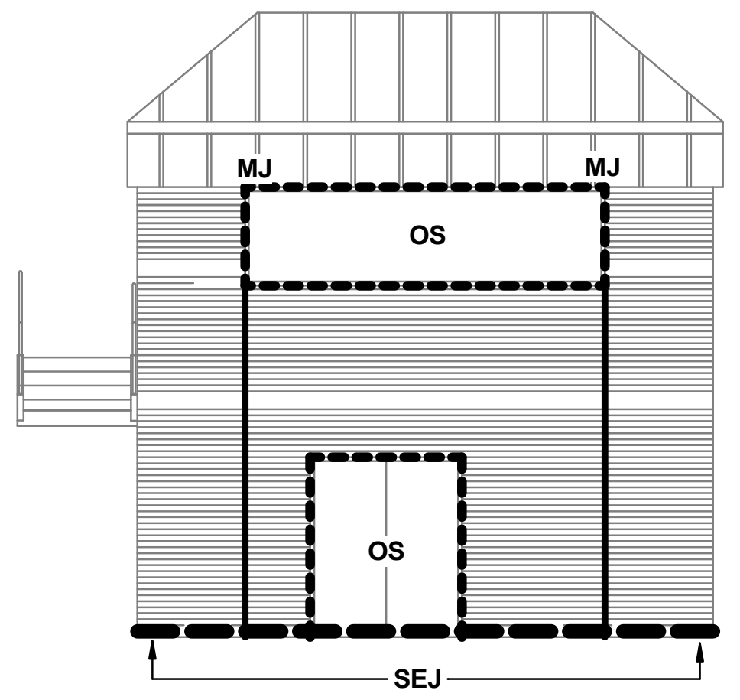
11 ELEV - CONCESSIONS - SOUTH
1/8" = 1'-0"



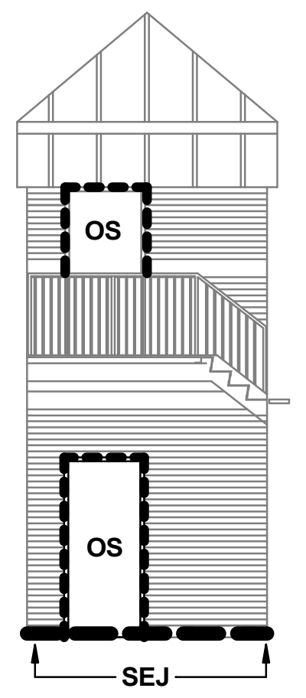
12 ELEV - CONCESSIONS - WEST
1/8" = 1'-0"



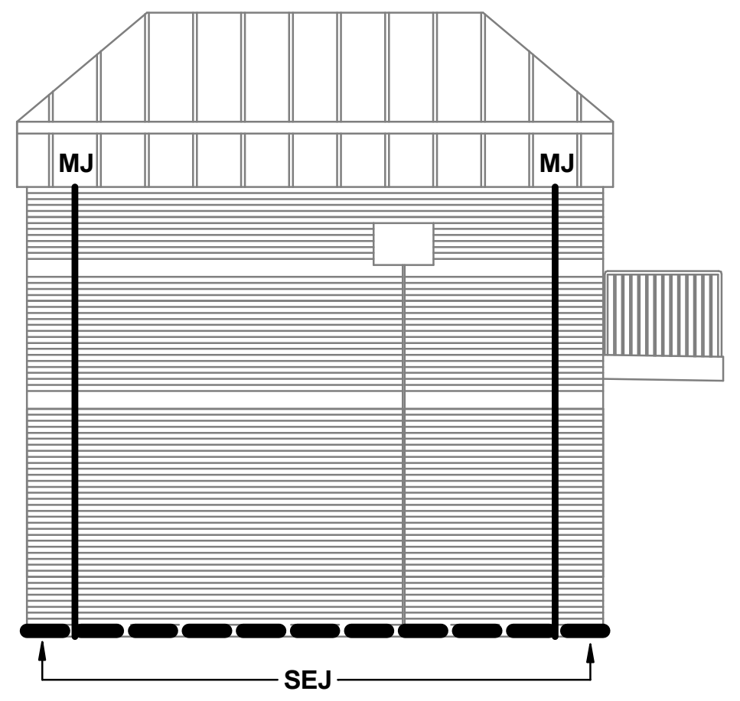
13 ELEV - PRESS BOX - NORTH
1/8" = 1'-0"



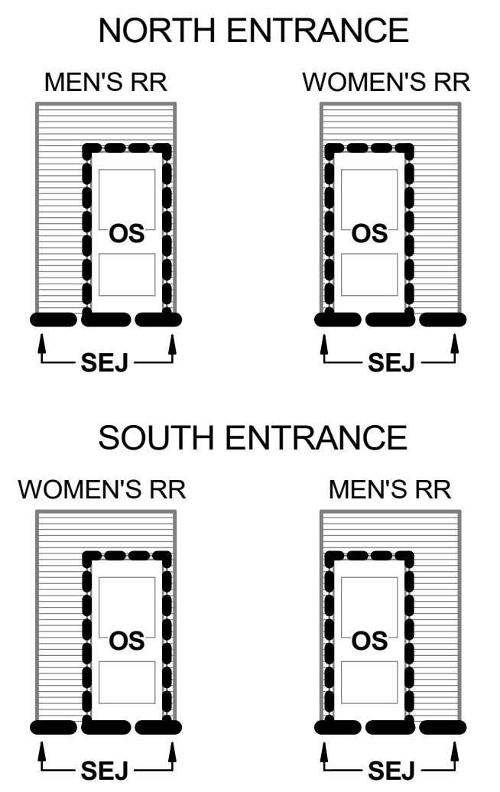
14 ELEV - PRESS BOX - EAST
1/8" = 1'-0"



15 ELEV - PRESS BOX - SOUTH
1/8" = 1'-0"



16 ELEV - PRESS BOX - WEST
1/8" = 1'-0"



17 ELEV - CONCESSIONS INSETS
1/8" = 1'-0"

BUILDING JOINT SEALANT LEGEND

SCOPE OF WORK: ALL EXTERIOR BUILDING JOINT SEALANTS SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW PER SPECIFICATIONS, WHETHER SPECIFICALLY SHOWN IN DRAWINGS OR NOT. JOINTS INCLUDE, BUT NOT LIMITED TO, MASONRY JOINTS, JOINTS AROUND WINDOWS, DOORS, WALL OPENINGS, & MISCELLANEOUS WALL PENETRATIONS. ALL SIDEWALK JOINTS BETWEEN BUILDING & PAVING AT BUILDING PERIMETER ON GROUND LEVEL, SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL WALL JOINTS, WALL OPENINGS , & WALL PENETRATIONS ON SITE.

MJ ━━	NEW MASONRY JOINT SEALANT SEE A6.01-A6.06 ELEVATIONS
MJ ▬ ▬ ▬	NEW MASONRY JOINT SEALANT BEHIND COLUMN - SEE A6.01-A6.06 ELEVATIONS
WEJ ━━	NEW WALL EXPANSION JOINT COVER & SEALANTS - SEE A6.01-A6.06 ELEVATIONS
OS ▬▬▬▬▬▬	NEW OPENING JOINT SEALANT & PENETRATION JOINT SEALANT ALL SIDES SEE A6.01-A6.06 ELEVATIONS
SEJ ▬ ▬ ▬	NEW SIDEWALK EXPANSION JOINT SEALANT BETWEEN BUILDING & PAVING ALL AROUND BUILDING PERIMETER SEE A2.10 PLAN
▨	DEMOLITION OF EXISTING ELEVATION COMPONENT - SEE DEMOLITION PLANS D2.01 & D2.02 FOR EXTENTS
IRF	INSTALL IMPACT RESISTANT GLAZING FILM ON EXISTING WINDOW PANES SHOWN IN SOLID GRAY HATCH. RE: SPEC

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

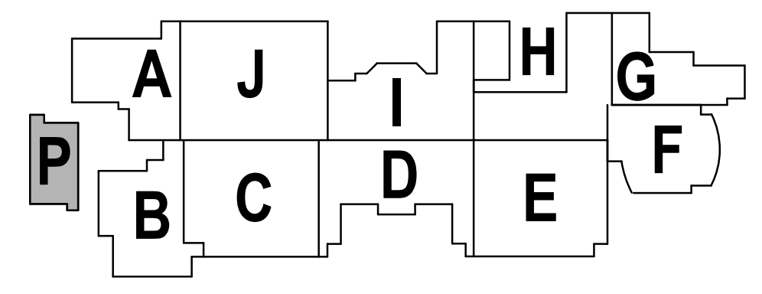
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



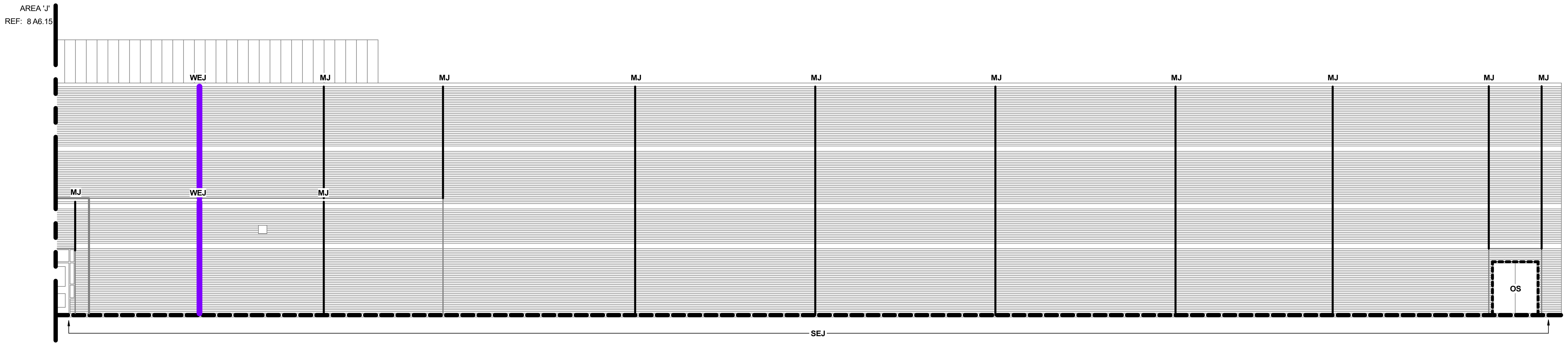
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

BUILDING ELEVATIONS - OVERALL

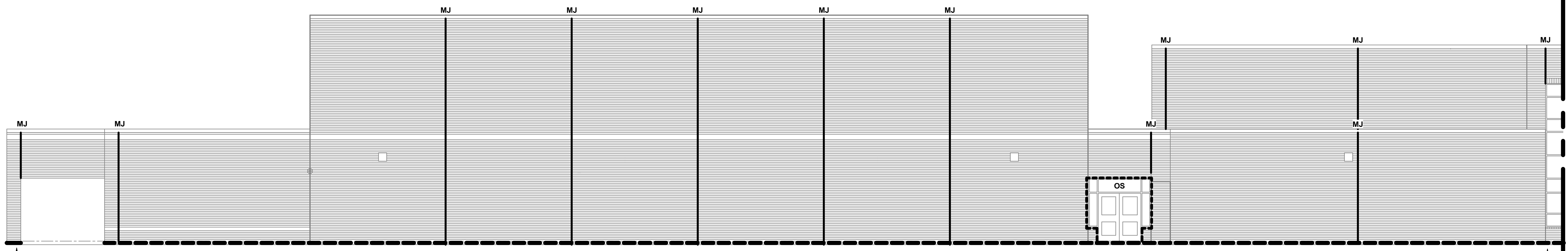
A6.10
of

Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

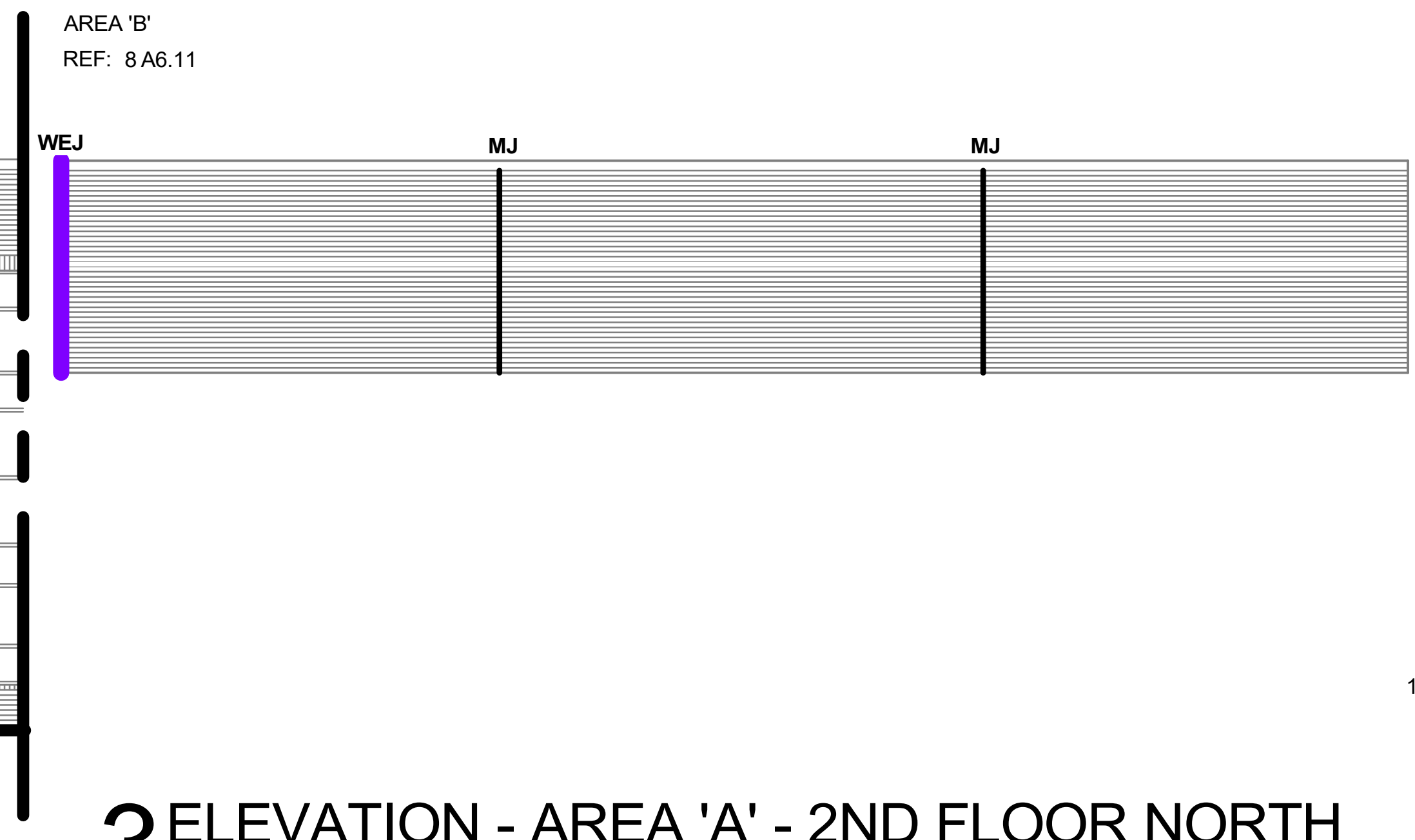
11/14/2024 1:36:25 PM



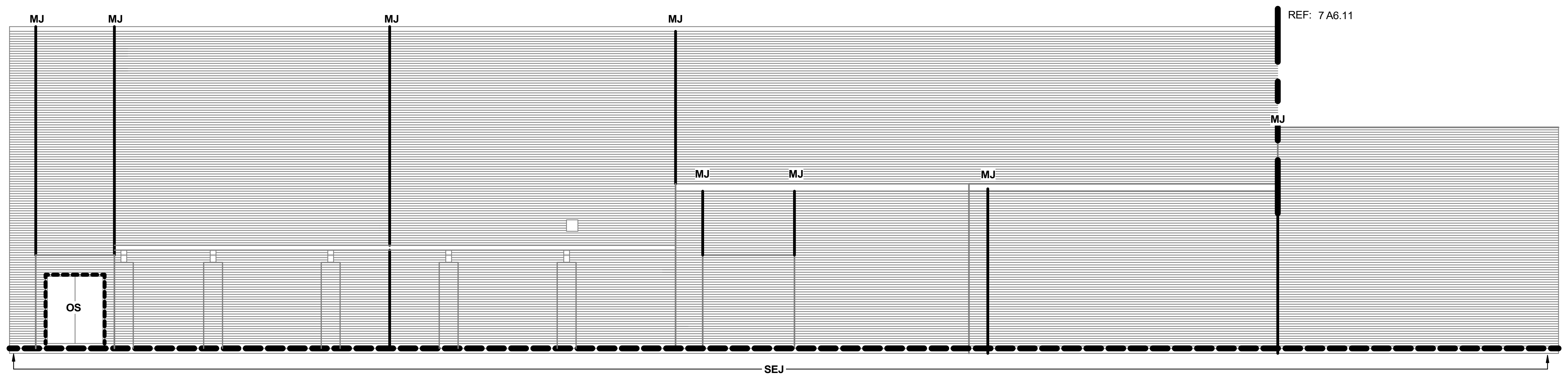
1 ELEVATION - AREA 'A' - NORTH
1/8" = 1'-0"



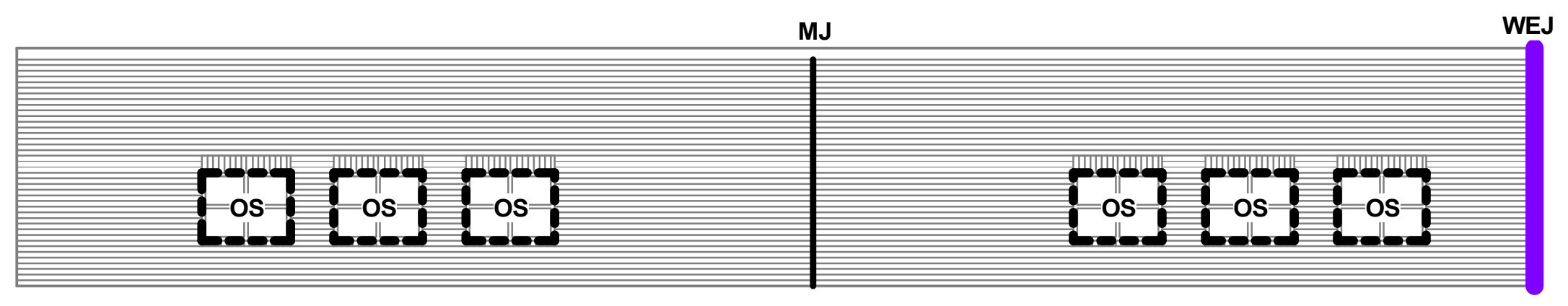
2 ELEVATION - AREA 'A' - WEST
1/8" = 1'-0"



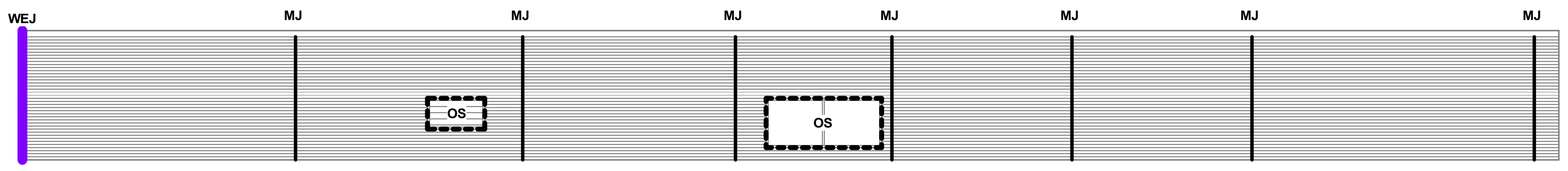
3 ELEVATION - AREA 'A' - 2ND FLOOR NORTH
1/8" = 1'-0"



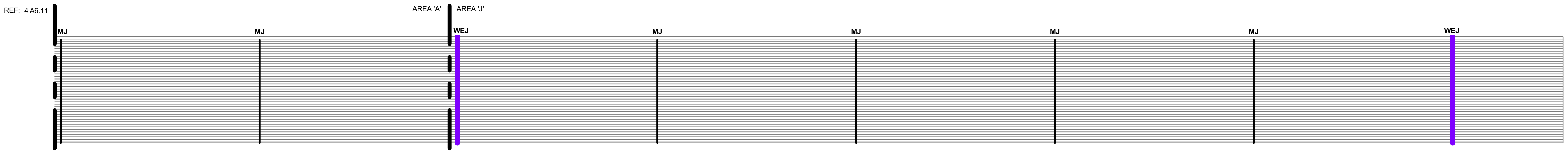
4 ELEVATION - AREA 'A' - SOUTH
1/8" = 1'-0"



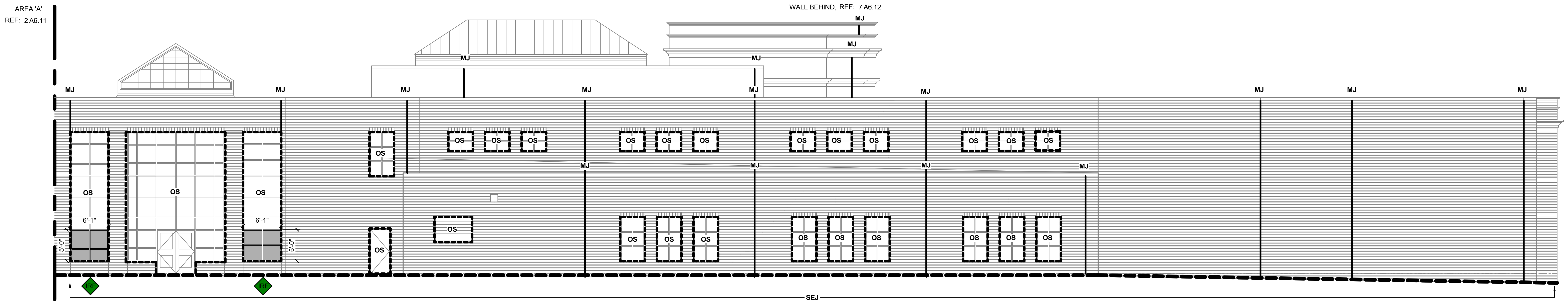
5 ELEVATION - AREA 'B' - 2ND FLOOR SOUTH
1/8" = 1'-0"



6 ELEVATION - AREA 'B' - 2ND FLOOR NORTH
1/8" = 1'-0"



7 ELEVATION - AREA 'A' - 2ND FLOOR SOUTH
1/8" = 1'-0"



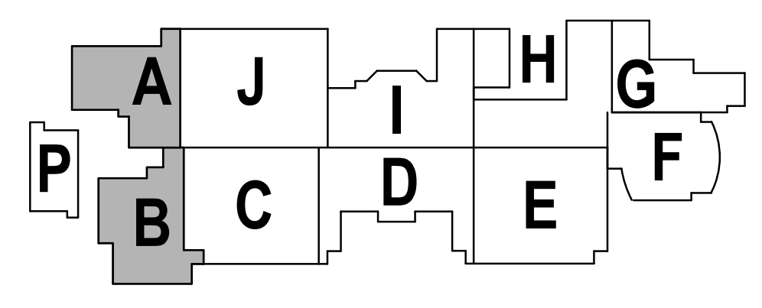
8 ELEVATION - AREA 'B' - WEST
1/8" = 1'-0"

BUILDING JOINT SEALANT LEGEND

SCOPE OF WORK: ALL EXTERIOR BUILDING JOINT SEALANTS SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW PER SPECIFICATIONS, WHETHER SPECIFICALLY SHOWN IN DRAWINGS OR NOT. JOINTS INCLUDE, BUT NOT LIMITED TO, MASONRY JOINTS, JOINTS AROUND WINDOWS, DOORS, WALL OPENINGS, & MISCELLANEOUS WALL PENETRATIONS. ALL SIDEWALK JOINTS BETWEEN BUILDING & PAVING AT BUILDING PERIMETER ON GROUND LEVEL, SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL WALL JOINTS, WALL OPENINGS , & WALL PENETRATIONS ON SITE.

MJ ▬	NEW MASONRY JOINT SEALANT SEE A6.01-A6.06 ELEVATIONS
MJ ▬ ▬ ▬	NEW MASONRY JOINT SEALANT BEHIND COLUMN - SEE A6.01-A6.06 ELEVATIONS
WEJ ▬	NEW WALL EXPANSION JOINT COVER & SEALANTS - SEE A6.01-A6.06 ELEVATIONS
OS - - - - - -	NEW OPENING JOINT SEALANT & PENETRATION JOINT SEALANT ALL SIDES SEE A6.01-A6.06 ELEVATIONS
SEJ ▬ ▬ ▬	NEW SIDEWALK EXPANSION JOINT SEALANT BETWEEN BUILDING & PAVING ALL AROUND BUILDING PERIMETER SEE A2.10 PLAN
▨	DEMOLITION OF EXISTING ELEVATION COMPONENT - SEE DEMOLITION PLANS D2.01 & D2.02 FOR EXTENTS
IRF	INSTALL IMPACT RESISTANT GLAZING FILM ON EXISTING WINDOW PANES SHOWN IN SOLID GRAY HATCH. RE: SPEC

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

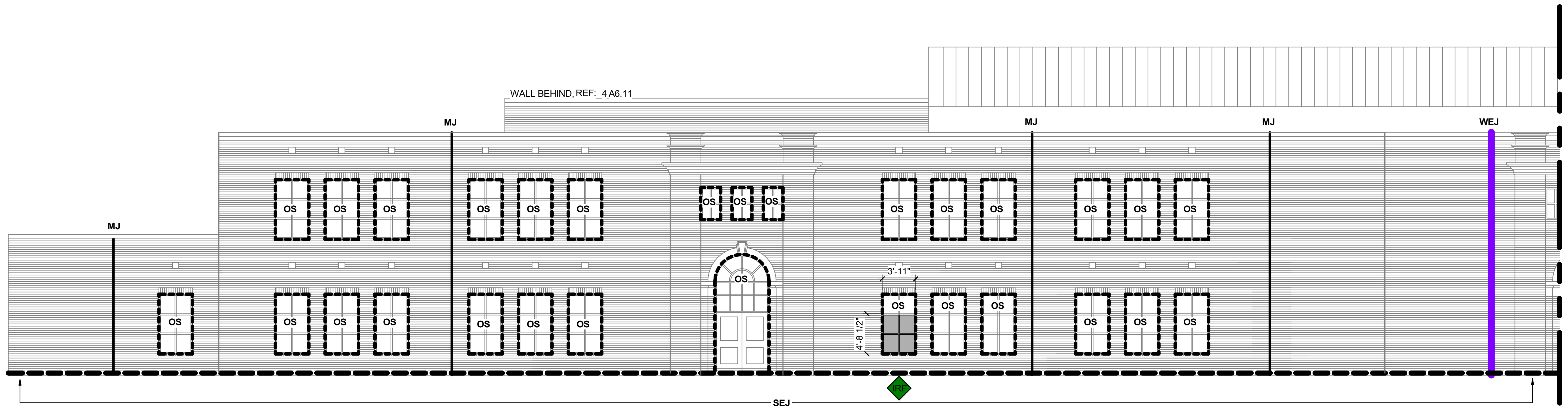
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

BUILDING
ELEVATIONS-SEALANT
REPLACEMENT
LOCATIONS

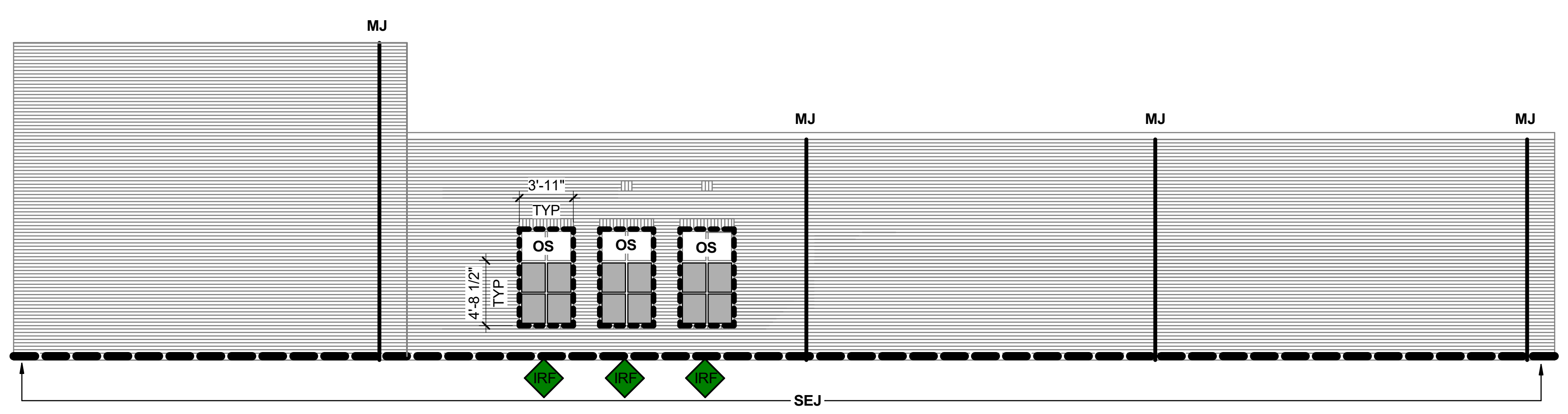
A6.11
____ of ____

Autodesk Docs://23072_CFISD_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt

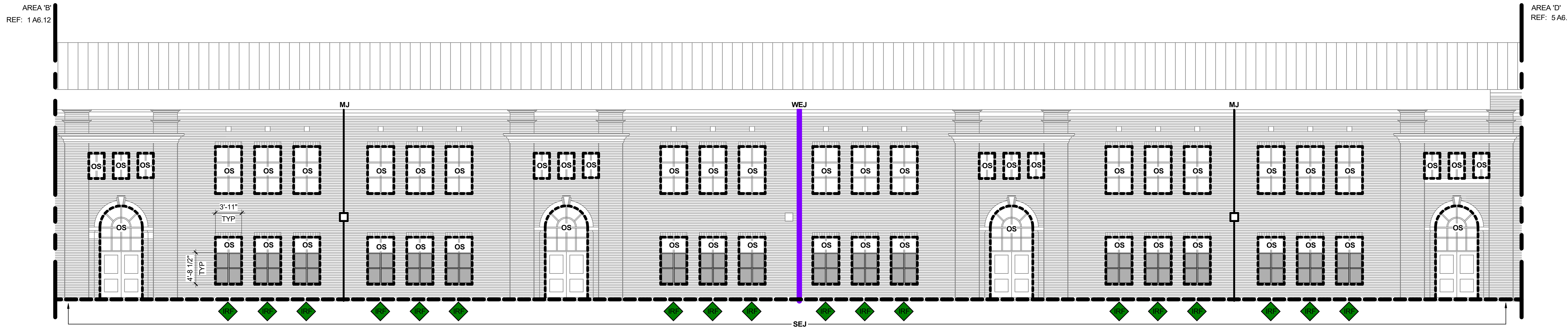
11/14/2024 1:36:27 PM



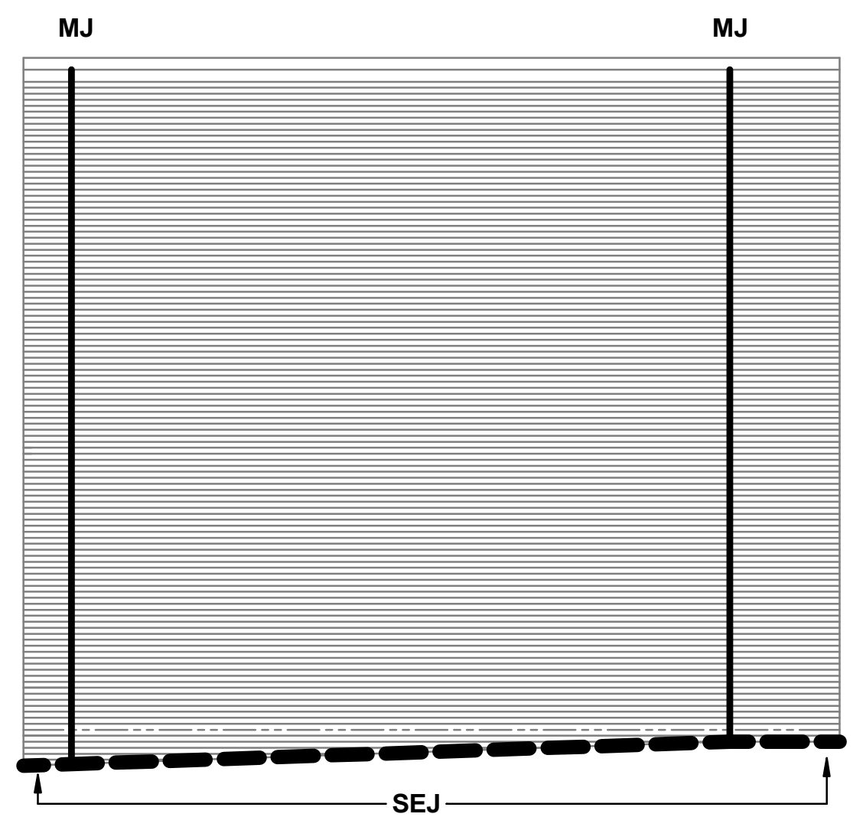
1 ELEVATION - AREA 'B' - SOUTH
1/8" = 1'-0"



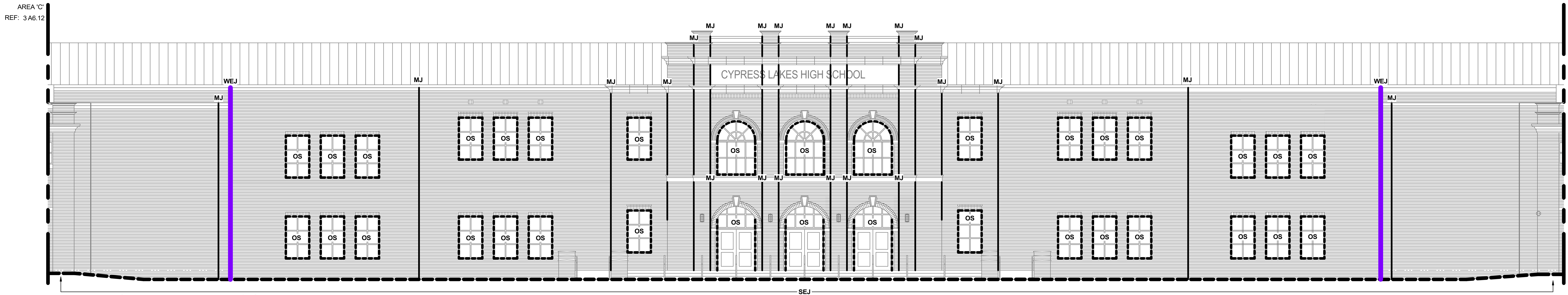
2 ELEVATION - AREA 'B' - NORTH
1/8" = 1'-0"



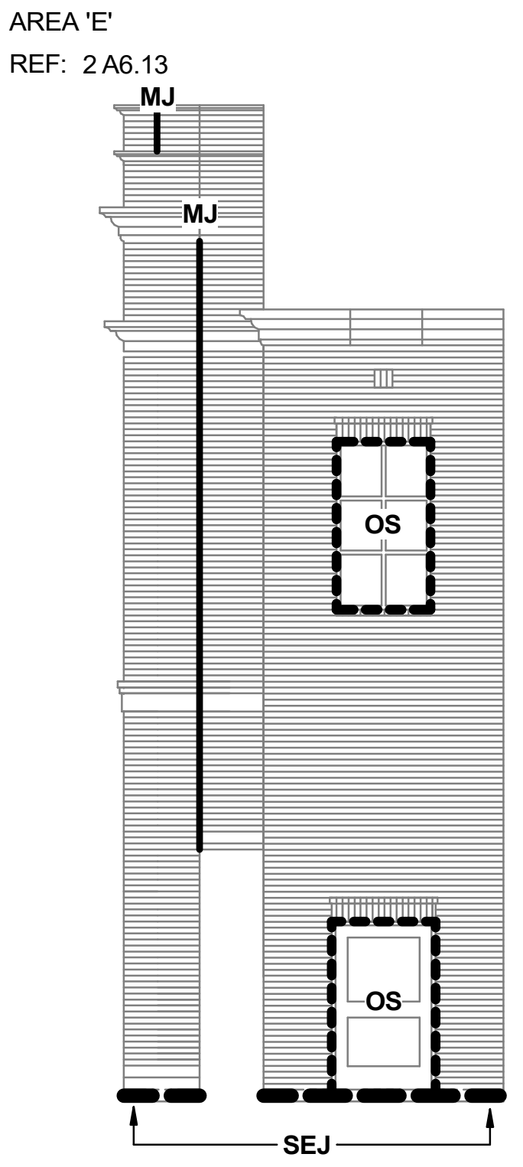
3 ELEVATION - AREA 'C' - SOUTH
1/8" = 1'-0"



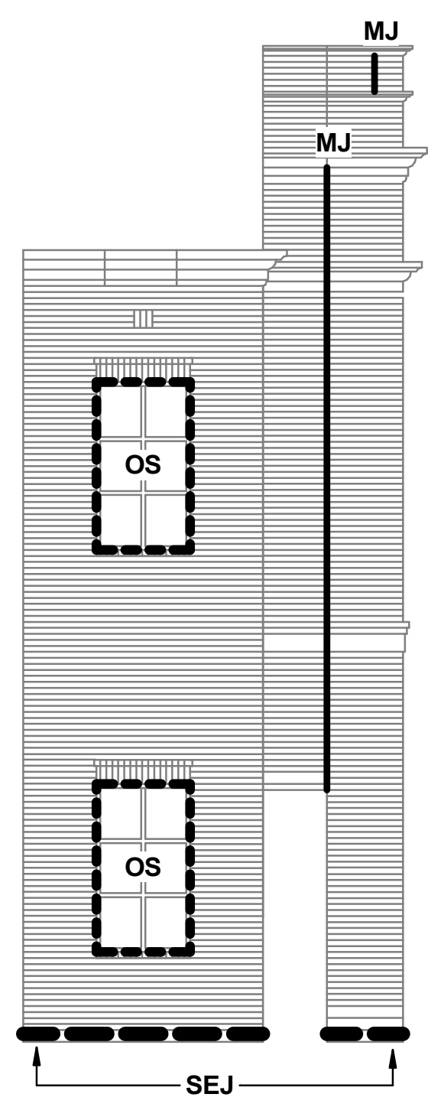
4 ELEVATION - AREA 'B' - EAST
1/8" = 1'-0"



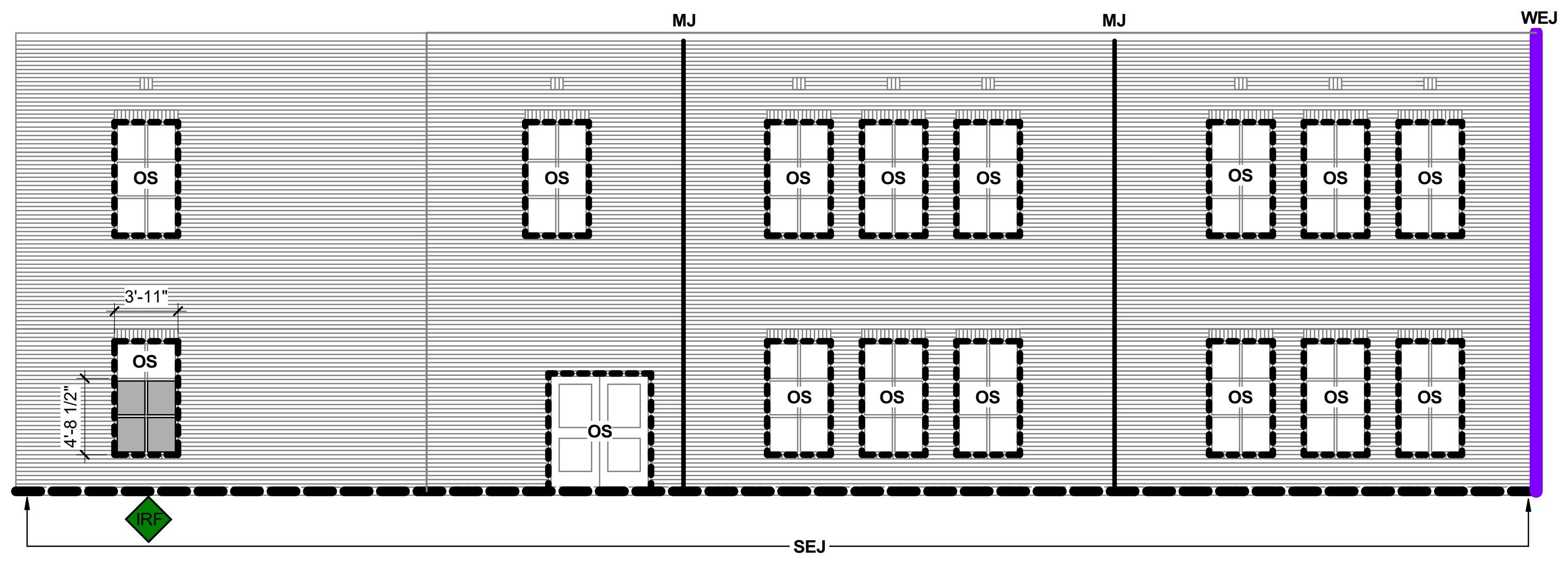
5 ELEVATION - AREA 'D' - SOUTH
1/8" = 1'-0"



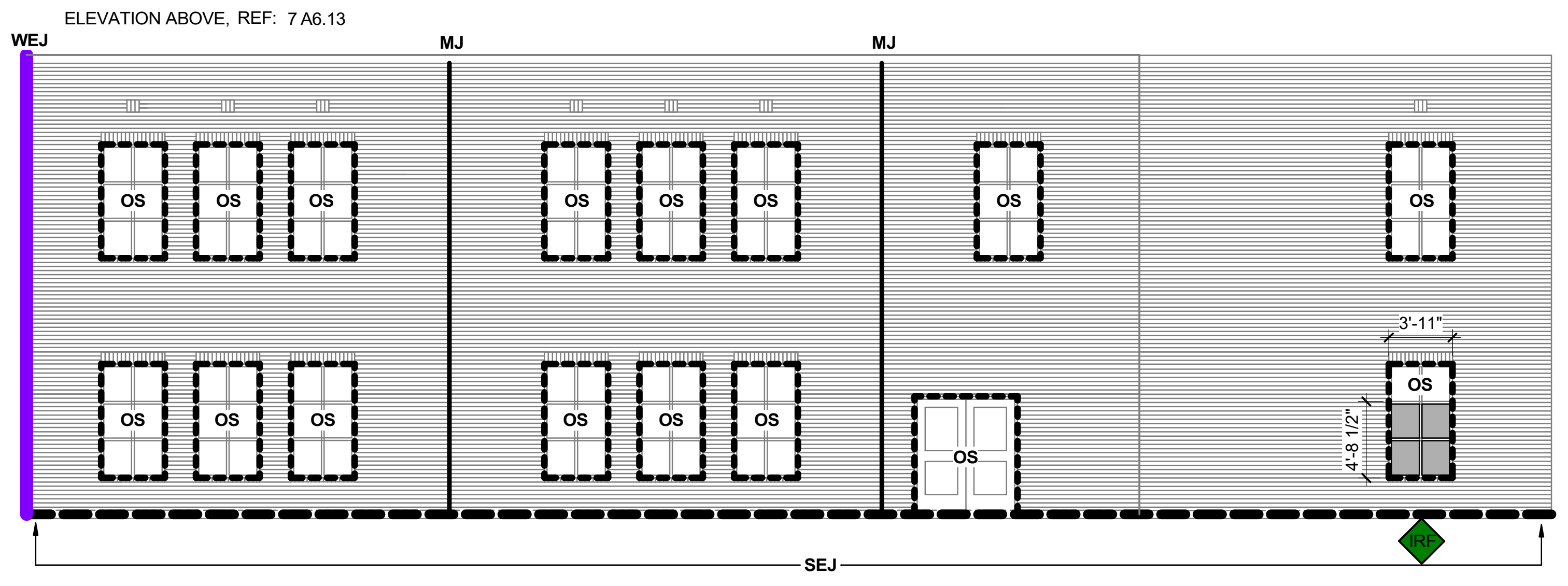
6 ELEV - AREA 'D' - EAST
1/8" = 1'-0"



7 ELEV - AREA 'D' - WEST
1/8" = 1'-0"



8 ELEVATION - AREA 'D' - EAST
1/8" = 1'-0"



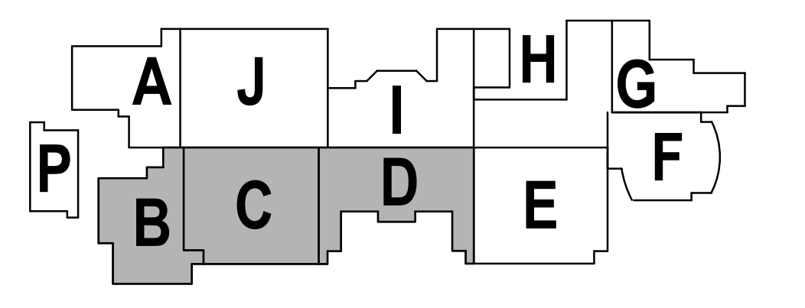
9 ELEVATION - AREA 'D' - WEST
1/8" = 1'-0"

BUILDING JOINT SEALANT LEGEND

SCOPE OF WORK: ALL EXTERIOR BUILDING JOINT SEALANTS SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW PER SPECIFICATIONS, WHETHER SPECIFICALLY SHOWN IN DRAWINGS OR NOT. JOINTS INCLUDE, BUT NOT LIMITED TO, MASONRY JOINTS, JOINTS AROUND WINDOWS, DOORS, WALL OPENINGS, & MISCELLANEOUS WALL PENETRATIONS. ALL SIDEWALK JOINTS BETWEEN BUILDING & PAVING AT BUILDING PERIMETER ON GROUND LEVEL, SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL WALL JOINTS, WALL OPENINGS , & WALL PENETRATIONS ON SITE.

MJ ▬	NEW MASONRY JOINT SEALANT SEE A6.01-A6.06 ELEVATIONS
MJ ▬ ▬ ▬	NEW MASONRY JOINT SEALANT BEHIND COLUMN - SEE A6.01-A6.06 ELEVATIONS
WEJ ▬	NEW WALL EXPANSION JOINT COVER & SEALANTS - SEE A6.01-A6.06 ELEVATIONS
OS ▬▬▬▬▬	NEW OPENING JOINT SEALANT & PENETRATION JOINT SEALANT ALL SIDES SEE A6.01-A6.06 ELEVATIONS
SEJ ▬ ▬ ▬	NEW SIDEWALK EXPANSION JOINT SEALANT BETWEEN BUILDING & PAVING ALL AROUND BUILDING PERIMETER SEE A2.10 PLAN
▨	DEMOLITION OF EXISTING ELEVATION COMPONENT - SEE DEMOLITION PLANS D2.01 & D2.02 FOR EXTENTS
◆ IRF	INSTALL IMPACT RESISTANT GLAZING FILM ON EXISTING WINDOW PANES SHOWN IN SOLID GRAY HATCH. RE: SPEC

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

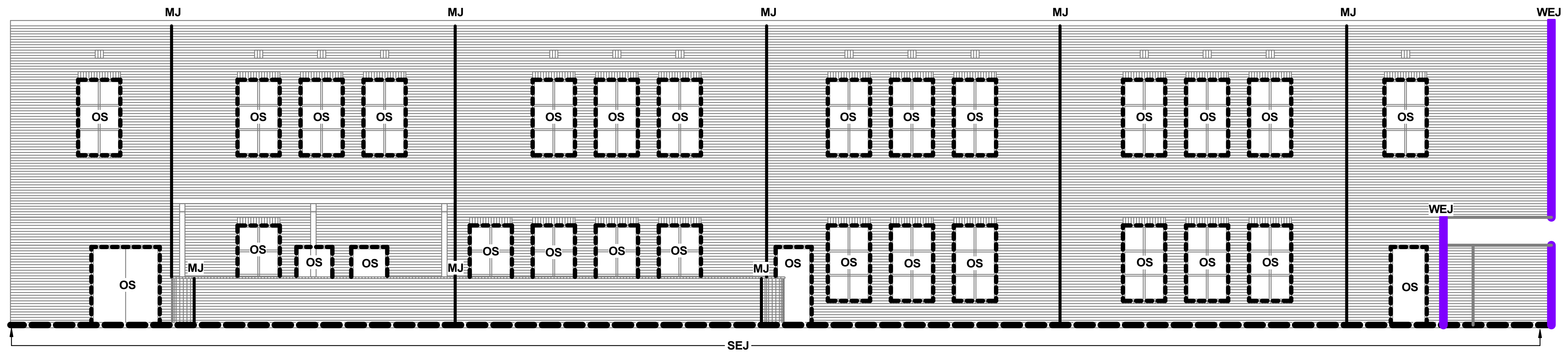
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

BUILDING ELEVATION
SEALANT
REPLACEMENT

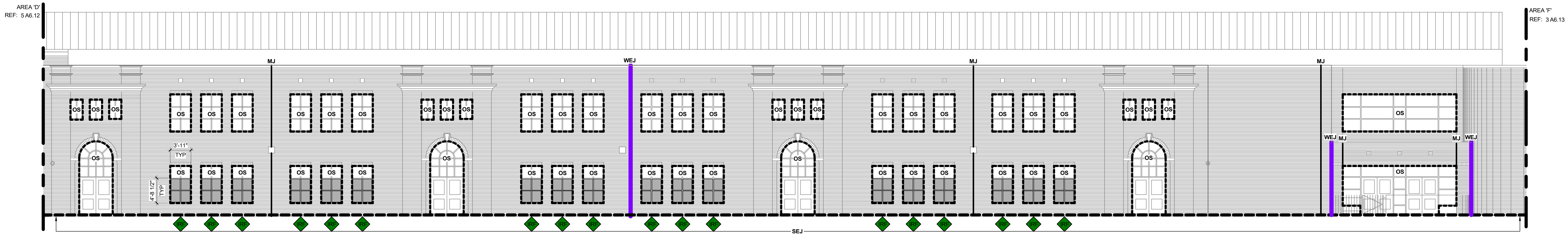
A6.12

_____ of _____

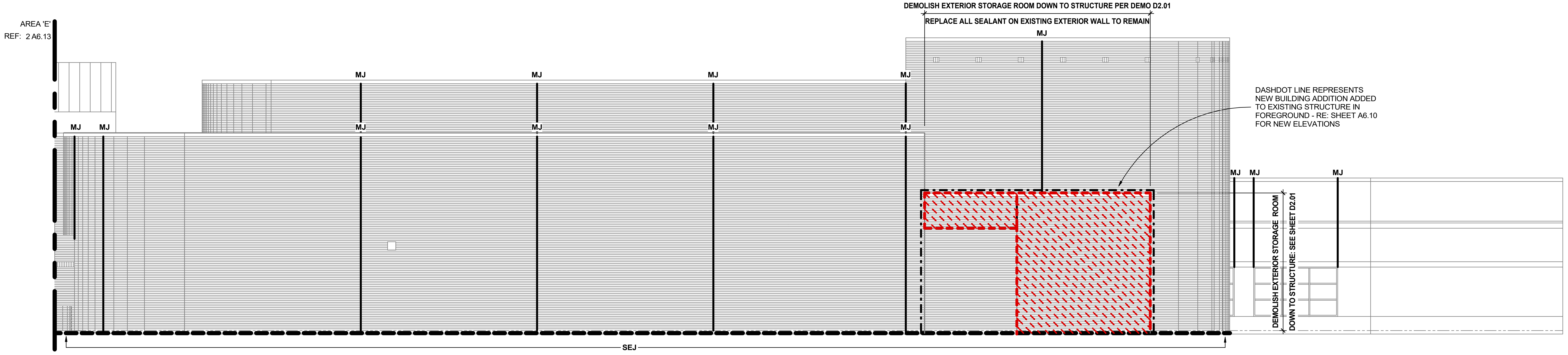
Autodesk Docs://23072_CFSID_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt



1 ELEVATION - AREA 'E' - EAST
1/8" = 1'-0"



2 ELEVATION - AREA 'E' - SOUTH
1/8" = 1'-0"



DEMOLISH EXTERIOR STORAGE ROOM DOWN TO STRUCTURE PER DEMO D2.01

REPLACE ALL SEALANT ON EXISTING EXTERIOR WALL TO REMAIN

DASHDOT LINE REPRESENTS NEW BUILDING ADDITION ADDED TO EXISTING STRUCTURE IN FOREGROUND - RE: SHEET A6.10 FOR NEW ELEVATIONS

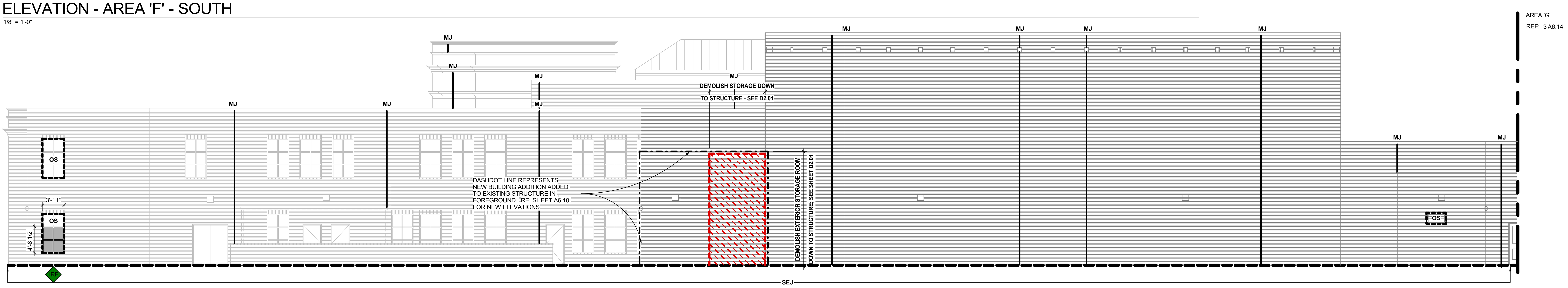
DEMOLISH EXTERIOR STORAGE ROOM DOWN TO STRUCTURE: SEE SHEET D2.01

3 ELEVATION - AREA 'F' - SOUTH
1/8" = 1'-0"

BUILDING JOINT SEALANT LEGEND

SCOPE OF WORK: ALL EXTERIOR BUILDING JOINT SEALANTS SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW PER SPECIFICATIONS, WHETHER SPECIFICALLY SHOWN IN DRAWINGS OR NOT. JOINTS INCLUDE, BUT NOT LIMITED TO, MASONRY JOINTS, JOINTS AROUND WINDOWS, DOORS, WALL OPENINGS, **&** MISCELLANEOUS WALL PENETRATIONS. ALL SIDEWALK JOINTS BETWEEN BUILDING & PAVING AT BUILDING PERIMETER ON GROUND LEVEL, SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL WALL JOINTS, WALL OPENINGS , & WALL PENETRATIONS ON SITE.

MJ	NEW MASONRY JOINT SEALANT SEE A6.01-A6.06 ELEVATIONS
MJ	NEW MASONRY JOINT SEALANT BEHIND COLUMN - SEE A6.01-A6.06 ELEVATIONS
WEJ	NEW WALL EXPANSION JOINT COVER & SEALANTS - SEE A6.01-A6.06 ELEVATIONS
OS	NEW OPENING JOINT SEALANT & PENETRATION JOINT SEALANT ALL SIDES SEE A6.01-A6.06 ELEVATIONS
SEJ	NEW SIDEWALK EXPANSION JOINT SEALANT BETWEEN BUILDING & PAVING ALL AROUND BUILDING PERIMETER SEE A2.10 PLAN
🟥	DEMOLITION OF EXISTING ELEVATION COMPONENT - SEE DEMOLITION PLANS D2.01 & D2.02 FOR EXTENTS
IRF	INSTALL IMPACT RESISTANT GLAZING FILM ON EXISTING WINDOW PANES SHOWN IN SOLID GRAY HATCH. RE: SPEC

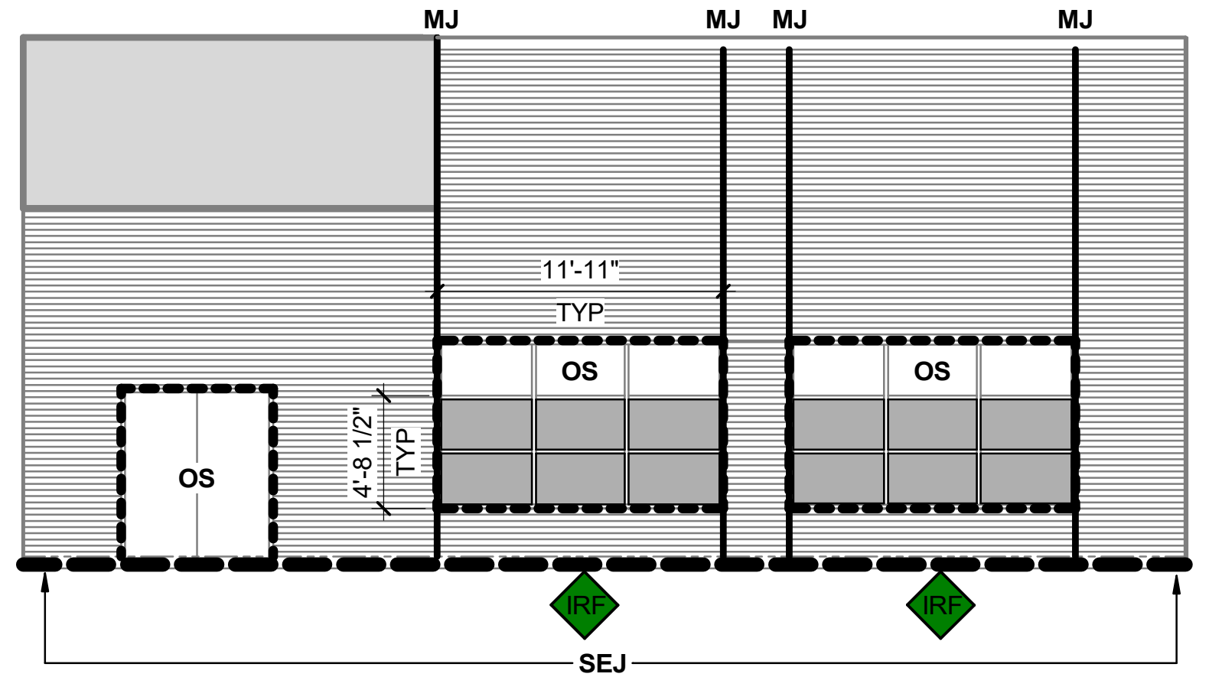


DEMOLISH STORAGE DOWN TO STRUCTURE - SEE D2.01

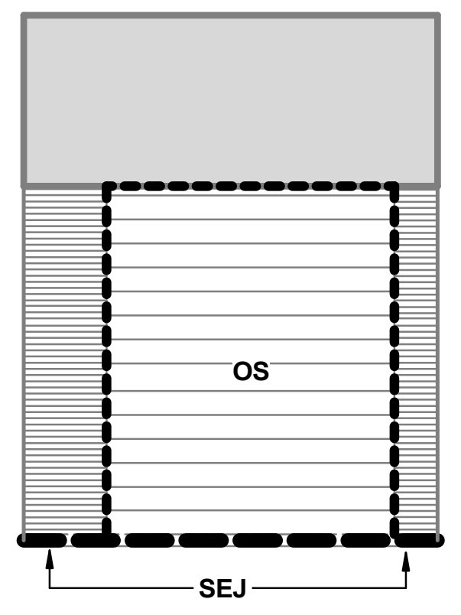
DASHDOT LINE REPRESENTS NEW BUILDING ADDITION ADDED TO EXISTING STRUCTURE IN FOREGROUND - RE: SHEET A6.10 FOR NEW ELEVATIONS

DEMOLISH EXTERIOR STORAGE ROOM DOWN TO STRUCTURE; SEE SHEET D2.01

4 ELEVATION - AREA 'F' - EAST
1/8" = 1'-0"



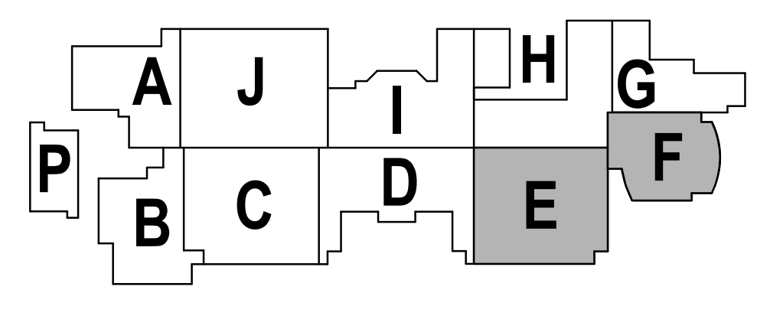
5 ELEVATION - AREA 'F' - SOUTH
1/8" = 1'-0"



6 ELEVATION - AREA 'F' - NORTH
1/8" = 1'-0"

7 ELEVATION - AREA 'F' - 2ND FLOOR WEST
1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

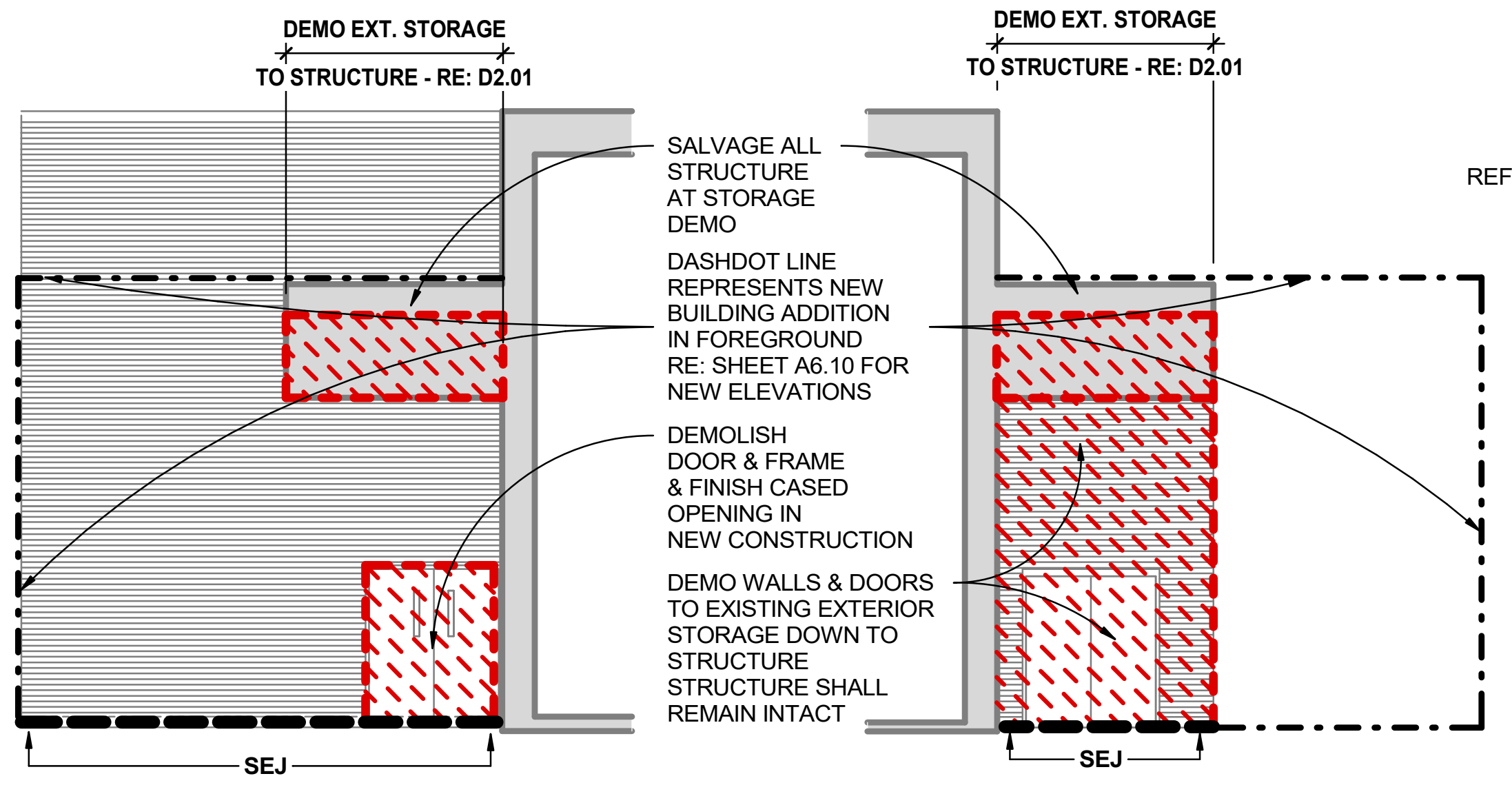
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

BUILDING
ELEVATIONS-SEALANT
REPLACEMENT

A6.13

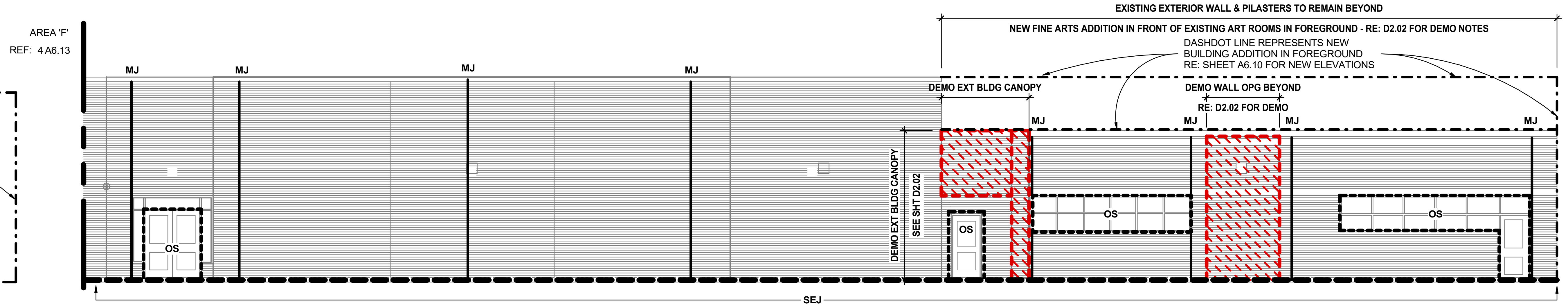
____ of ____

11/14/2024 1:36:31 PM

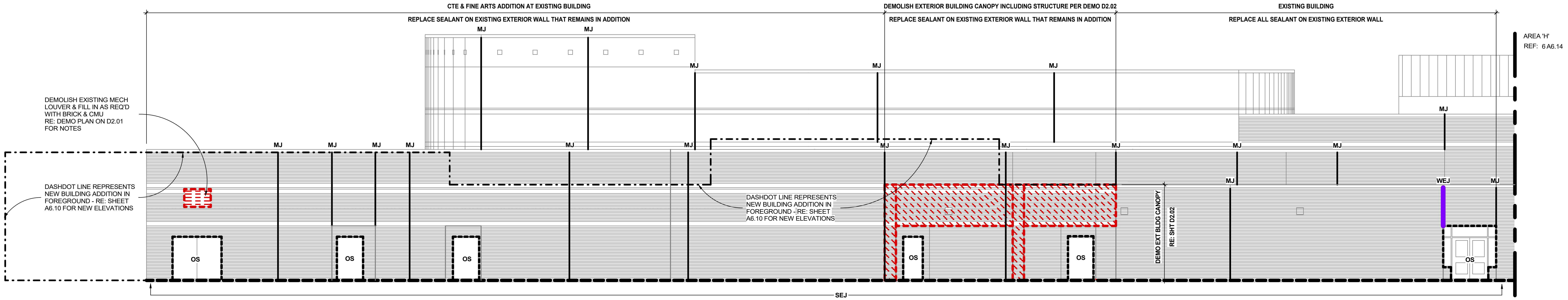


1 ELEV - AREA 'F' - E
1/8" = 1'-0"

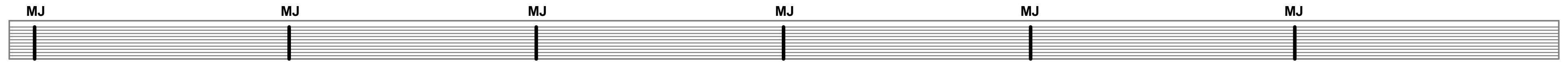
2 ELEV - AREA 'F' - W
1/8" = 1'-0"



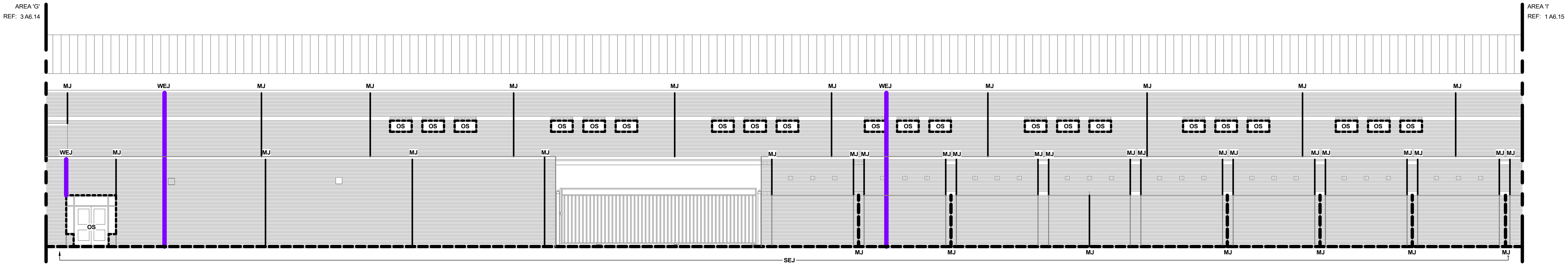
3 ELEVATION - AREA 'G' - EAST
1/8" = 1'-0"



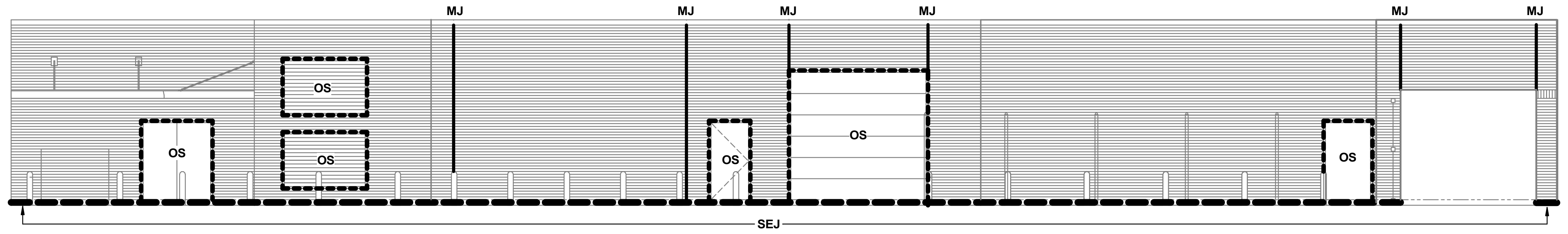
4 ELEVATION - AREA 'G' - NORTH
1/8" = 1'-0"



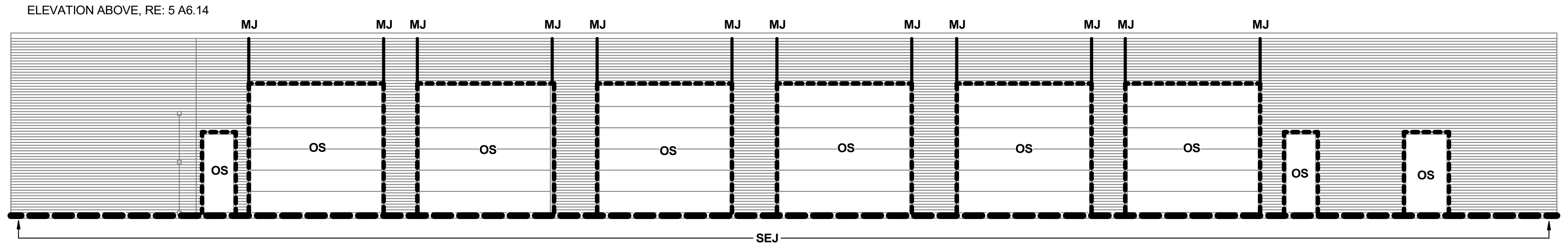
5 ELEVATION - AREA 'G' - 2ND FLOOR WEST
1/8" = 1'-0"



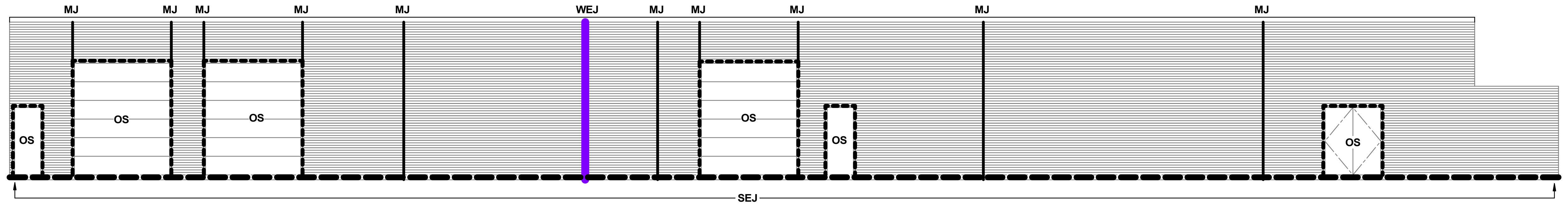
6 ELEVATION - AREA 'H' - NORTH
1/8" = 1'-0"



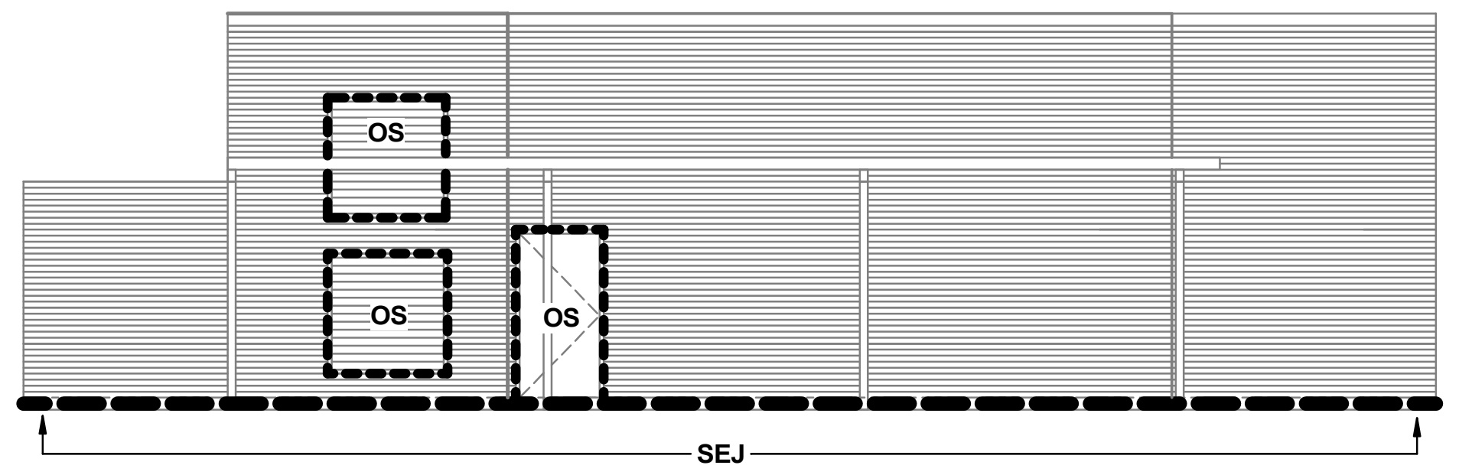
7 ELEVATION - AREA 'H' - EAST
1/8" = 1'-0"



8 ELEVATION - AREA 'H' - WEST
1/8" = 1'-0"



9 ELEVATION - AREA 'H' - NORTH
1/8" = 1'-0"



10 ELEVATION - AREA 'H' - SOUTH
1/8" = 1'-0"

BUILDING JOINT SEALANT LEGEND

SCOPE OF WORK: ALL EXTERIOR BUILDING JOINT SEALANTS SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW PER SPECIFICATIONS, WHETHER SPECIFICALLY SHOWN IN DRAWINGS OR NOT. JOINTS INCLUDE, BUT NOT LIMITED TO, MASONRY JOINTS, JOINTS AROUND WINDOWS, DOORS, WALL OPENINGS, & MISCELLANEOUS WALL PENETRATIONS. ALL SIDEWALK JOINTS BETWEEN BUILDING & PAVING AT BUILDING PERIMETER ON GROUND LEVEL, SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL WALL JOINTS, WALL OPENINGS , & WALL PENETRATIONS ON SITE.

MJ —	NEW MASONRY JOINT SEALANT SEE A6.01-A6.06 ELEVATIONS
MJ ▬ ▬ ▬	NEW MASONRY JOINT SEALANT BEHIND COLUMN - SEE A6.01-A6.06 ELEVATIONS
WEJ ▬	NEW WALL EXPANSION JOINT COVER & SEALANTS - SEE A6.01-A6.06 ELEVATIONS
OS ▬▬▬▬▬▬	NEW OPENING JOINT SEALANT & PENETRATION JOINT SEALANT ALL SIDES SEE A6.01-A6.06 ELEVATIONS
SEJ ▬ ▬ ▬	NEW SIDEWALK EXPANSION JOINT SEALANT BETWEEN BUILDING & PAVING ALL AROUND BUILDING PERIMETER SEE A2.10 PLAN
▨	DEMOLITION OF EXISTING ELEVATION COMPONENT - SEE DEMOLITION PLANS D2.01 & D2.02 FOR EXTENTS
IRF	INSTALL IMPACT RESISTANT GLAZING FILM ON EXISTING WINDOW PANES SHOWN IN SOLID GRAY HATCH. RE: SPEC

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

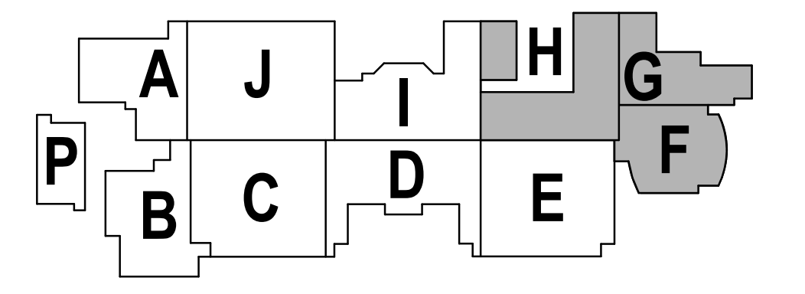
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

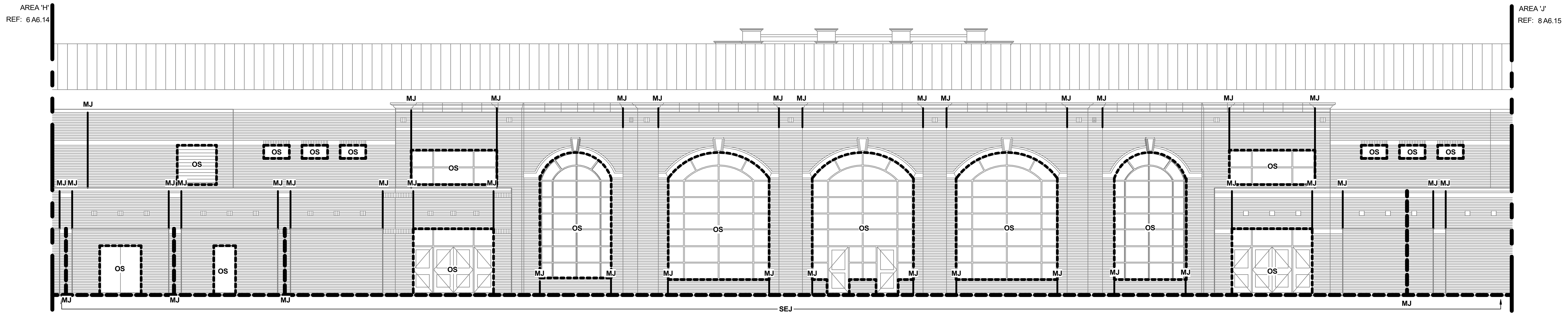
BUILDING
ELEVATIONS-SEALANT
REPLACEMENT

A6.14

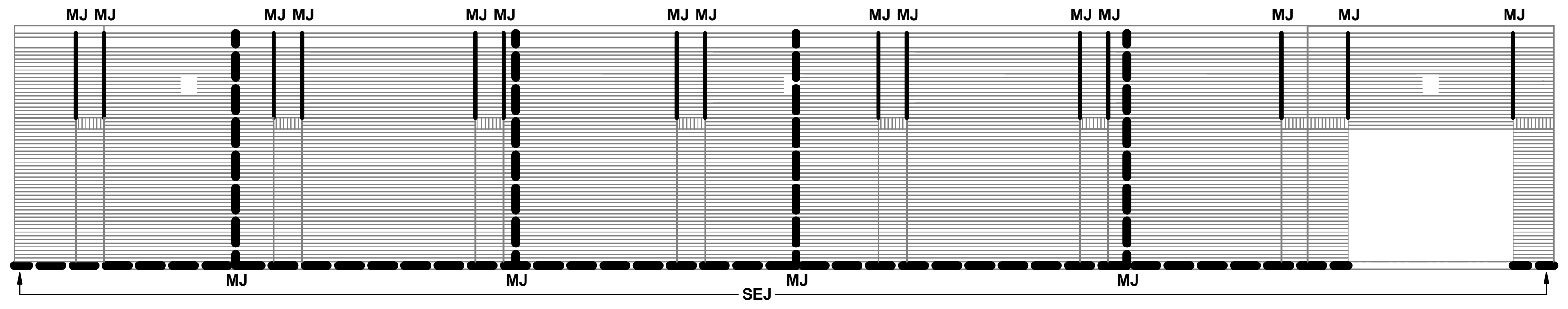
____ of ____

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

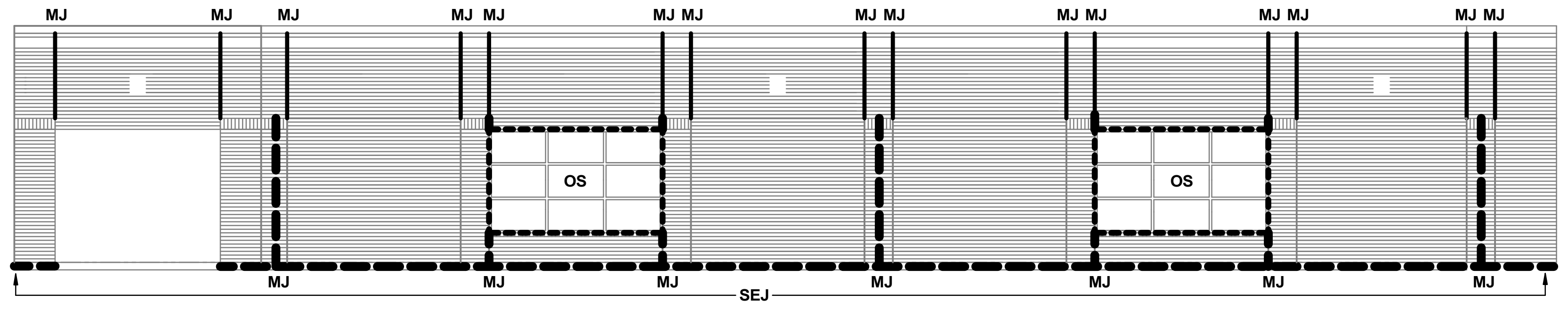
11/14/2024 1:36:33 PM



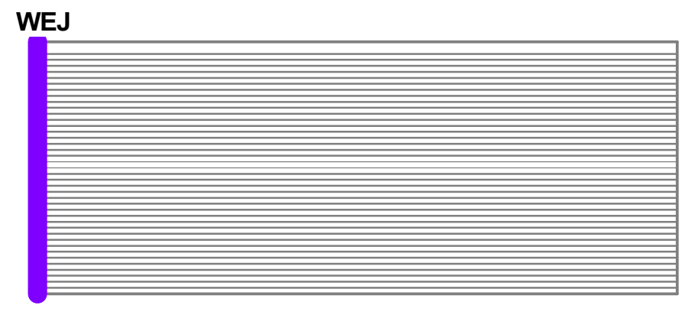
1 ELEVATION - AREA 'I' - NORTH
1/8" = 1'-0"
ELEVATION ABOVE, RE: 11 A6.15



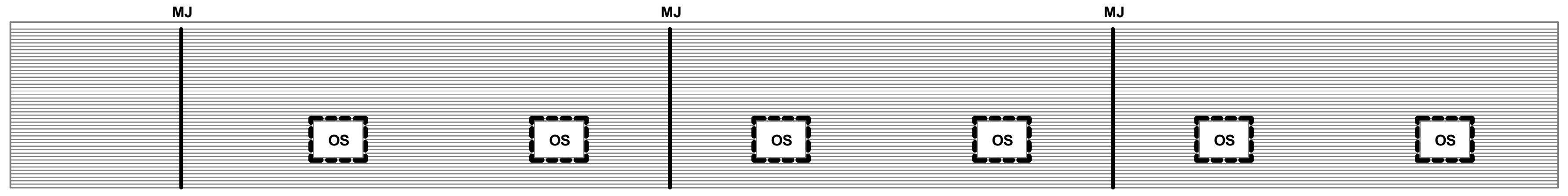
2 ELEVATION - AREA 'I' - EAST
1/8" = 1'-0"



3 ELEVATION - AREA 'I' - WEST
1/8" = 1'-0"

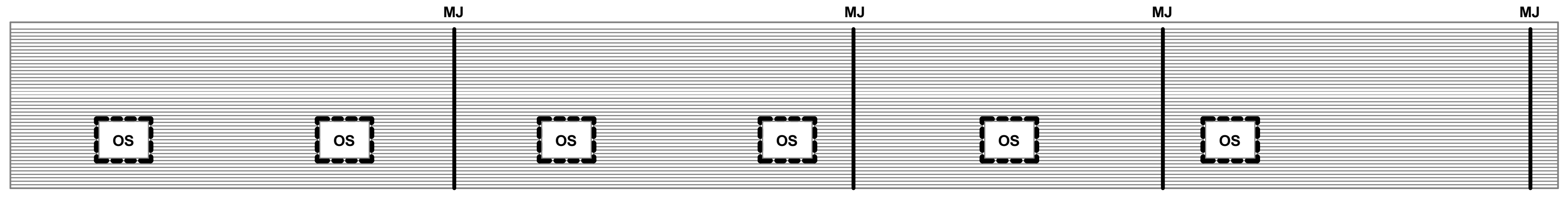


4 ELEVATION - AREA 'I' - 2ND FLOOR EAST
1/8" = 1'-0"

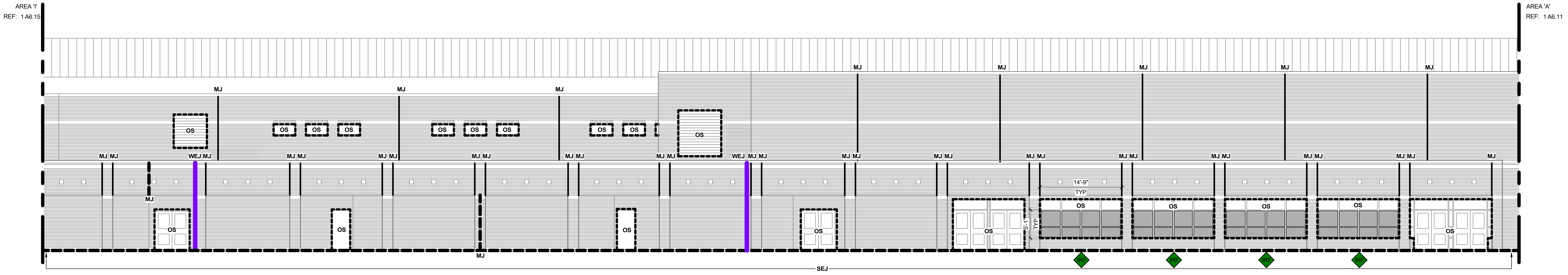


5 ELEVATION - AREA 'I' - 2ND FLOOR WEST
1/8" = 1'-0"

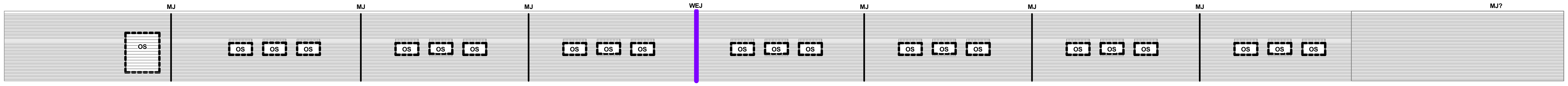
6 ELEVATION - AREA 'I' - 2ND FLOOR WEST
1/8" = 1'-0"



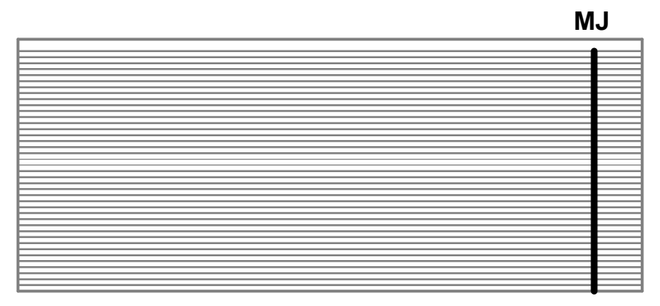
7 ELEVATION - AREA 'I' - 2ND FLOOR EAST
1/8" = 1'-0"



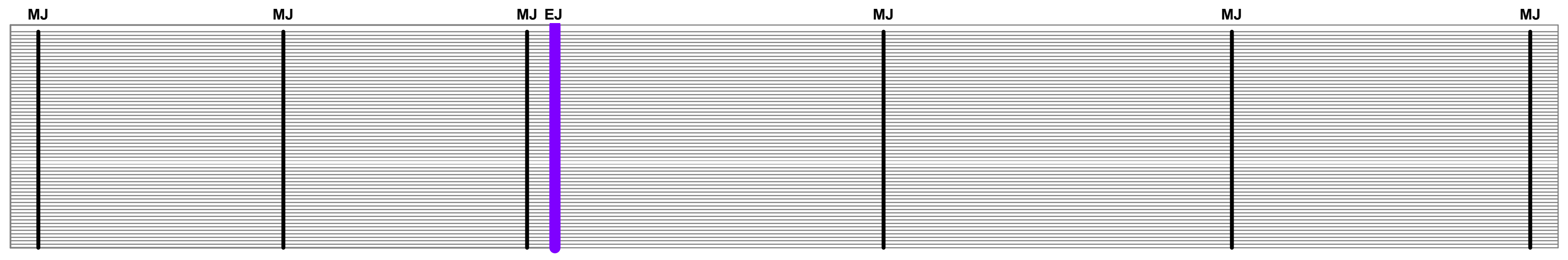
8 ELEVATION - AREA 'J' - NORTH
1/8" = 1'-0"



9 ELEVATION - AREA 'J' - 2ND FLOOR NORTH
1/8" = 1'-0"



10 ELEVATION - AREA 'J' - 2ND FLOOR EAST
1/8" = 1'-0"



11 ELEVATION - AREA 'J' - 2ND FLOOR EAST
1/8" = 1'-0"

BUILDING JOINT SEALANT LEGEND

SCOPE OF WORK: ALL EXTERIOR BUILDING JOINT SEALANTS SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW PER SPECIFICATIONS, WHETHER SPECIFICALLY SHOWN IN DRAWINGS OR NOT. JOINTS INCLUDE, BUT NOT LIMITED TO, MASONRY JOINTS, JOINTS AROUND WINDOWS, DOORS, WALL OPENINGS, & MISCELLANEOUS WALL PENETRATIONS. ALL SIDEWALK JOINTS BETWEEN BUILDING & PAVING AT BUILDING PERIMETER ON GROUND LEVEL, SHALL BE REMOVED, CLEANED, & REPLACED WITH NEW. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL WALL JOINTS, WALL OPENINGS , & WALL PENETRATIONS ON SITE.

MJ ━━	NEW MASONRY JOINT SEALANT SEE A6.01-A6.06 ELEVATIONS
MJ ▬ ▬ ▬	NEW MASONRY JOINT SEALANT BEHIND COLUMN - SEE A6.01-A6.06 ELEVATIONS
WEJ ━━	NEW WALL EXPANSION JOINT COVER & SEALANTS - SEE A6.01-A6.06 ELEVATIONS
OS ▬▬▬▬▬▬	NEW OPENING JOINT SEALANT & PENETRATION JOINT SEALANT ALL SIDES SEE A6.01-A6.06 ELEVATIONS
SEJ ▬ ▬ ▬	NEW SIDEWALK EXPANSION JOINT SEALANT BETWEEN BUILDING & PAVING ALL AROUND BUILDING PERIMETER SEE A2.10 PLAN
▨	DEMOLITION OF EXISTING ELEVATION COMPONENT - SEE DEMOLITION PLANS D2.01 & D2.02 FOR EXTENTS
IRF	INSTALL IMPACT RESISTANT GLAZING FILM ON EXISTING WINDOW PANES SHOWN IN SOLID GRAY HATCH. RE: SPEC

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

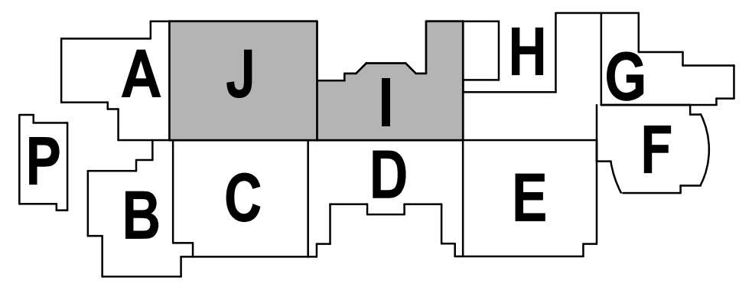
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

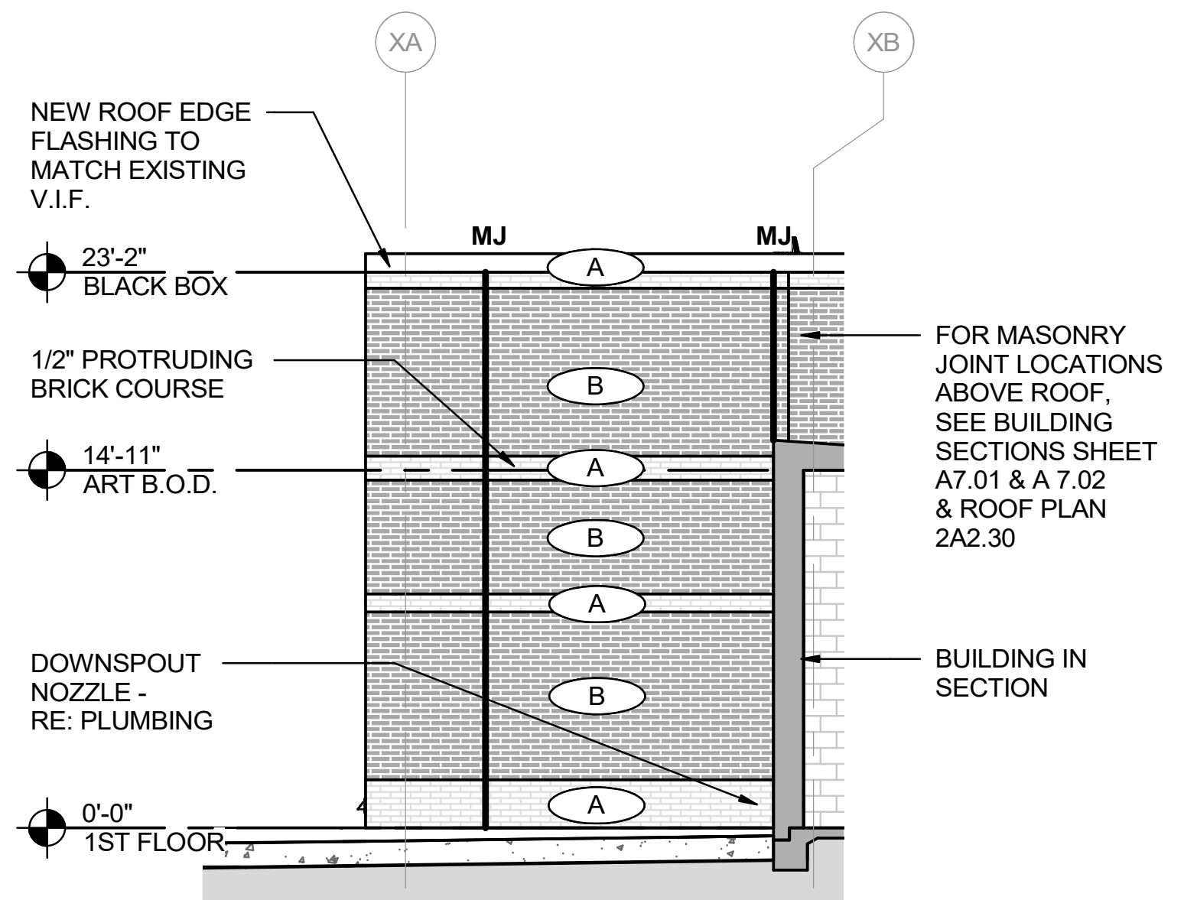


Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

BUILDING
ELEVATIONS-SEALANT
REPLACEMENT

A6.15
_____ of _____

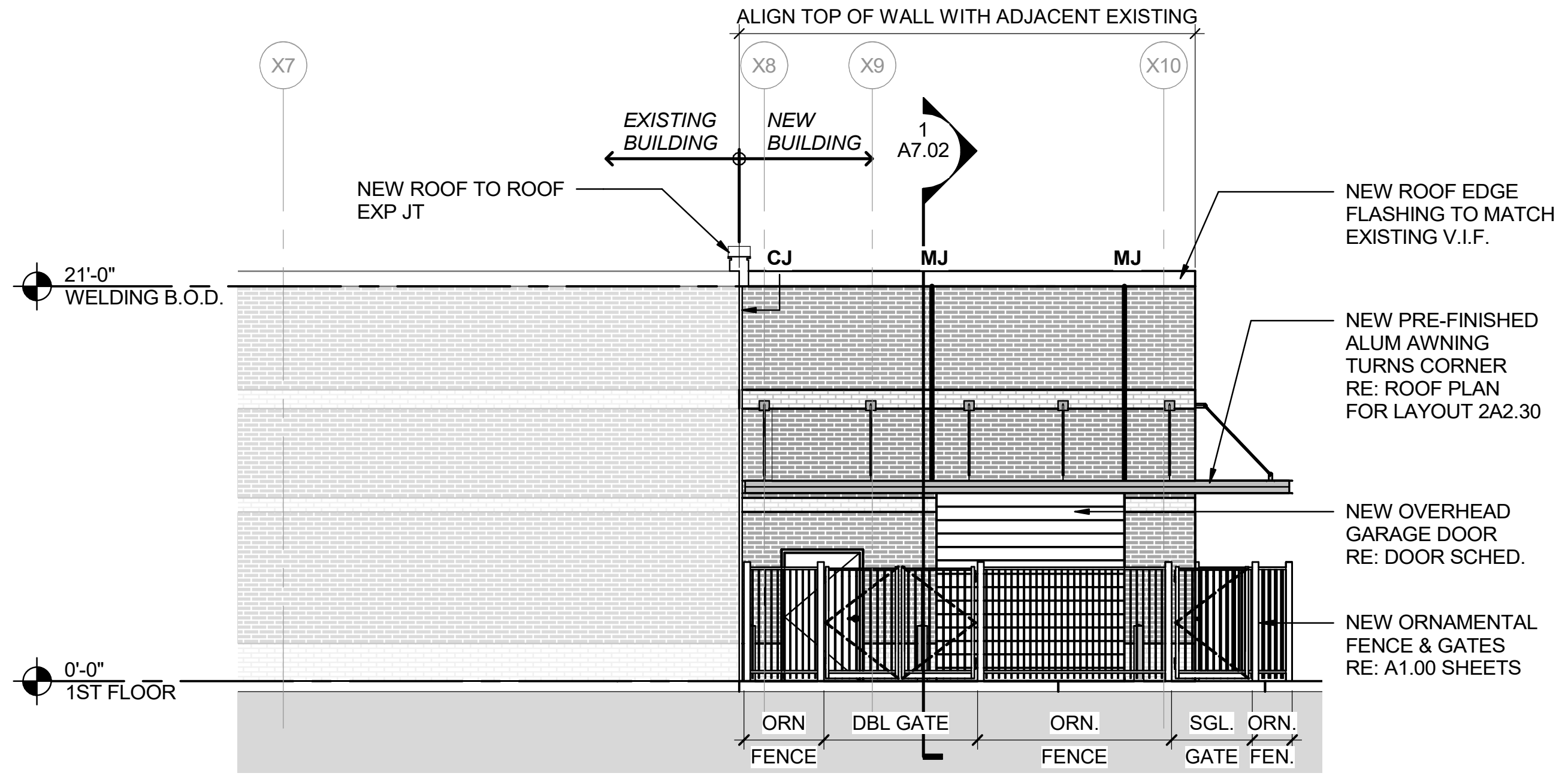
Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



TYPICAL ELEVATION

1 ENLG ELEVATION WEST - AREA G

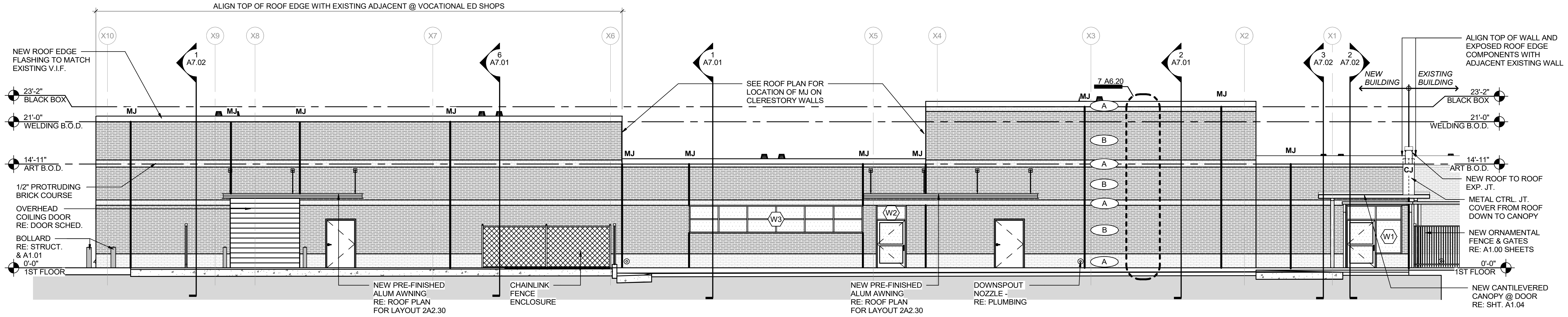
1/8" = 1'-0"



FOR NOTES NOT ON THIS ELEVATION SEE 1A6.20

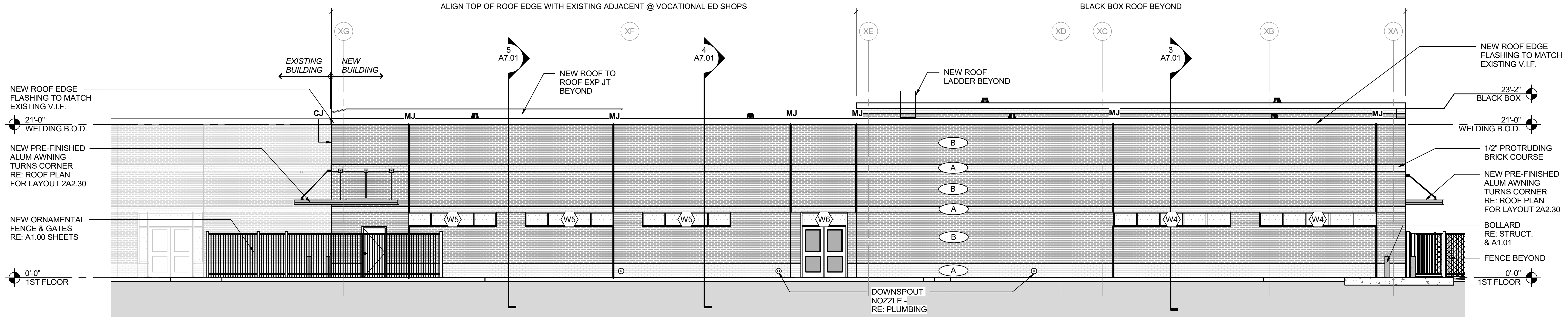
2 ENLG ELEVATION SOUTH - AREA G

1/8" = 1'-0"



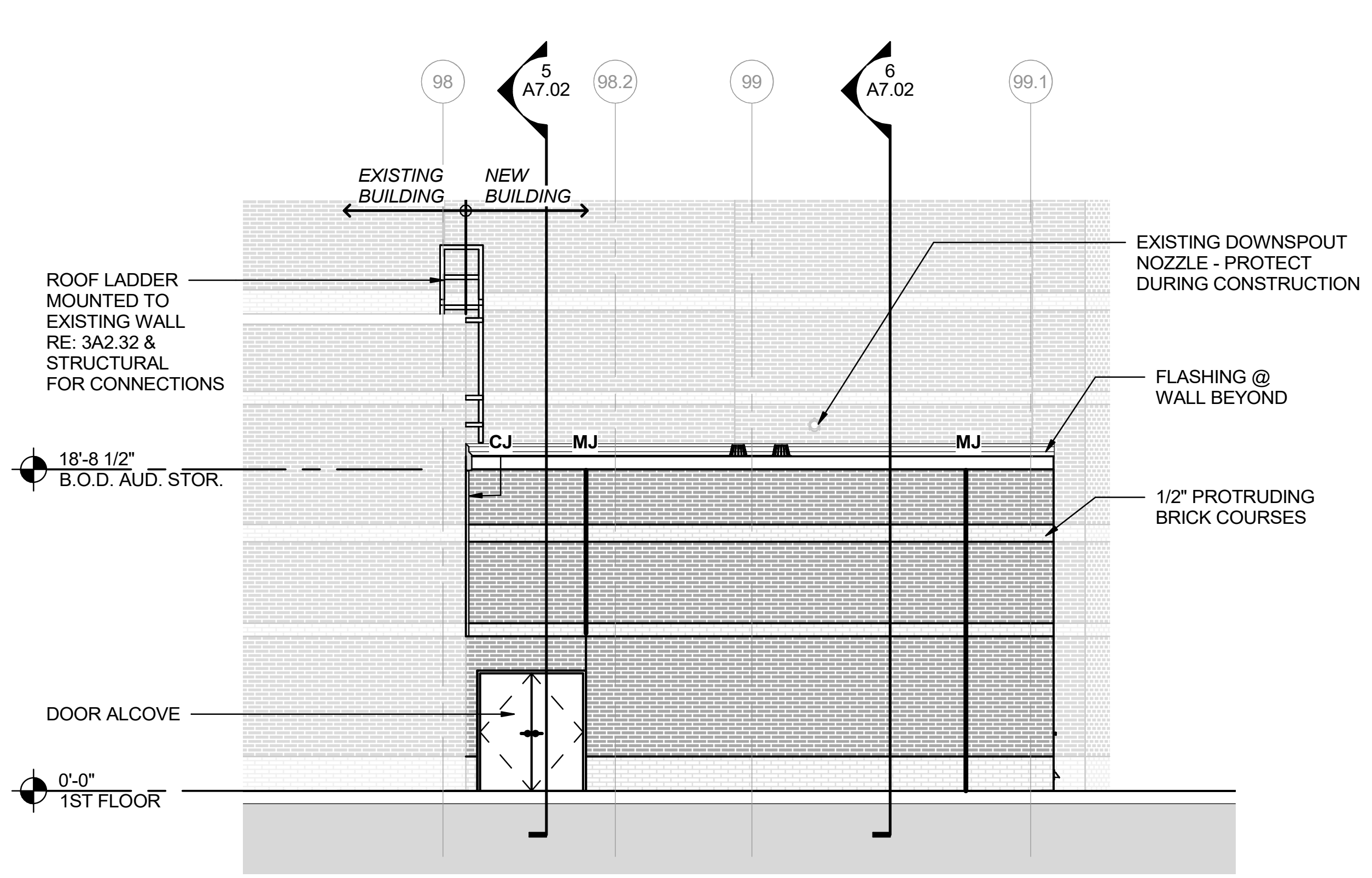
3 ENLG ELEVATION NORTH - AREA G

1/8" = 1'-0"



4 ENLG ELEVATION EAST - AREA G

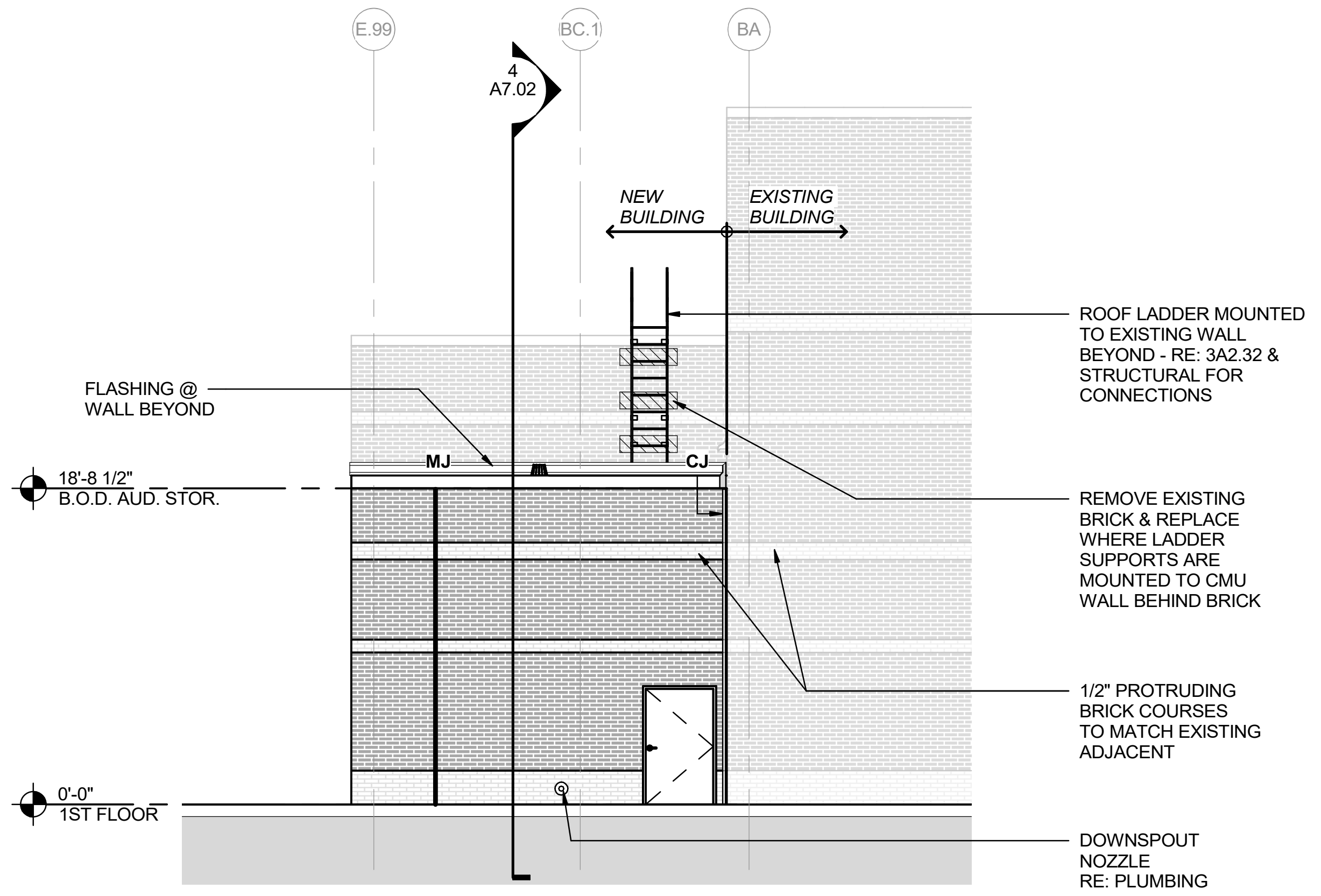
1/8" = 1'-0"



FOR NOTES NOT ON THIS ELEVATION SEE 1A6.20

5 ENLG ELEVATION SOUTH - AREA F

1/8" = 1'-0"



FOR NOTES NOT ON THIS ELEVATION SEE 1A6.20

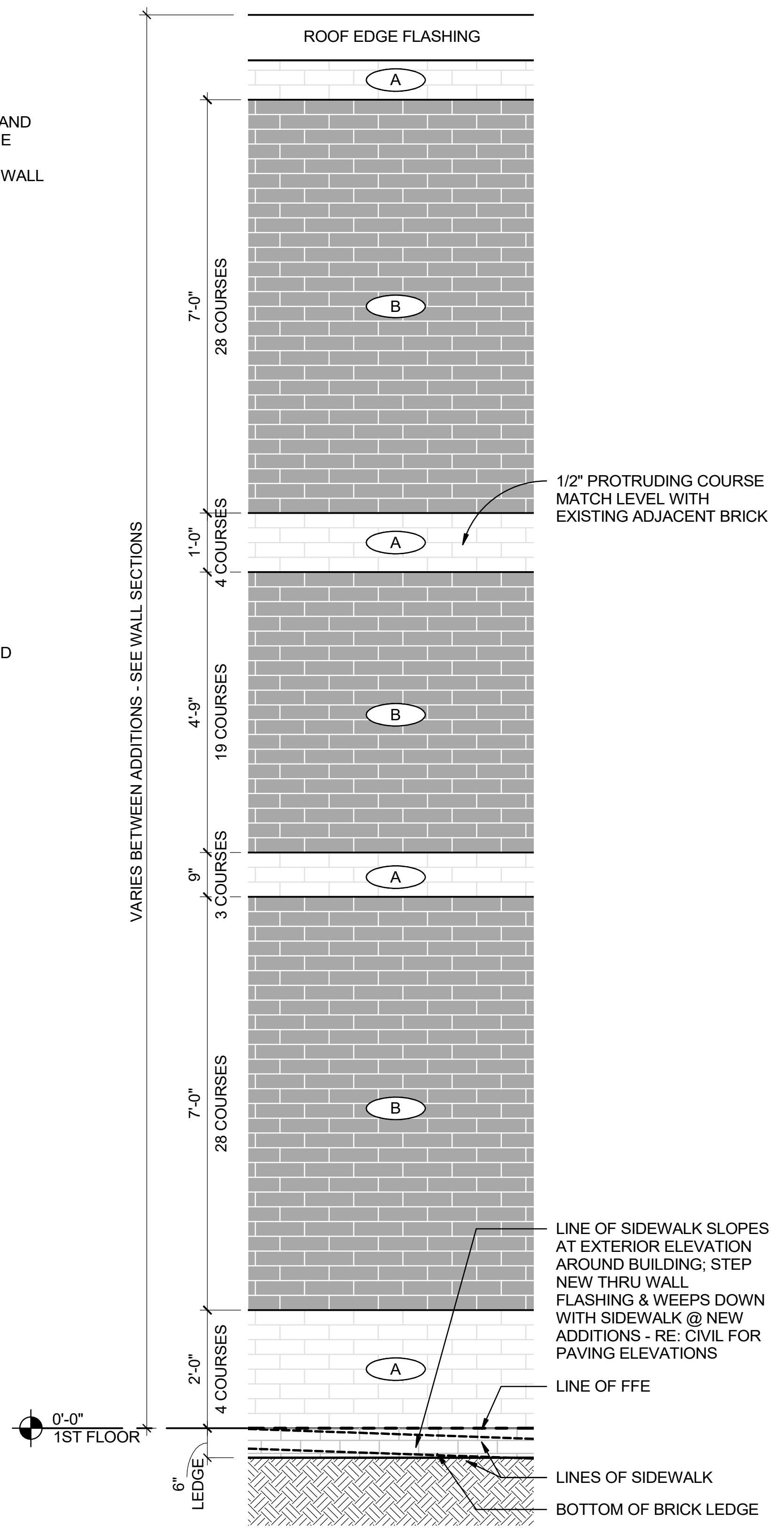
6 ENLG ELEVATION EAST - AREA F

1/8" = 1'-0"

CY-LAKES HIGH SCHOOL BRICK LEGEND

NOTE: FOR VERTICAL HEIGHTS OF BANDING, MATCH EXISTING BUILDING ADJACENT TO NEW ADDITION - SEE WALL SECTIONS FOR DIMENSIONS & DESCRIPTIONS MATCH BRICK LEDGE DEPTH - GC TO VERIFY IN FIELD

A	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING BANDING - LIGHT GRAY **ACME BRICK - DOVE GRAY**
B	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - MEDIUM GRAY **ACME BRICK - PALOMA GRAY**
C	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - WHITE **ACME BRICK - GLACIER WHITE** (ONLY @ MAIN ENTRY INT. WALL)
MJ	MASONRY JOINTS
CJ	WALL CONTROL JOINTS AT NEW TO EXISTING WALL CONNECTION

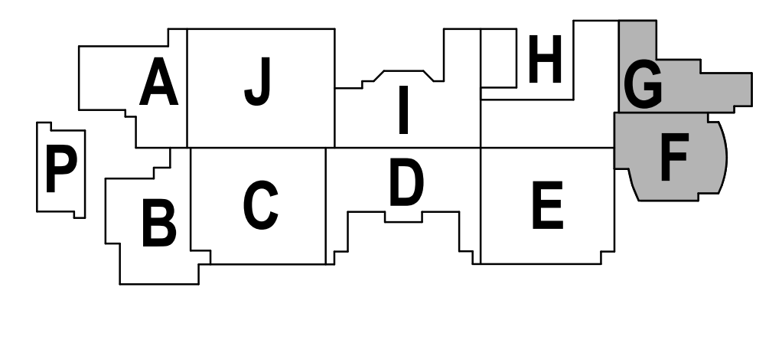


NOTE: NEW BRICK COURSING SHALL MATCH EXISTING BRICK COURSING ADJACENT TO NEW CONSTRUCTION. EXISTING DRAWINGS SHOW 6" DEEP BRICK LEDGE FOR STANDARD KING SIZED BRICK. GENERAL CONTRACTOR SHALL VERIFY HORI. WIDTH & VERT. DEPTH OF LEDGE AND BRICK SIZE & COURSING PRIOR TO DEMOLITION AND CONSTRUCTION; ARCHITECT SHALL BE INFORMED OF ANY LEDGE SIZE & DESCREPANCY & ANY BRICK SIZED DESCREPANCY

7 BRICK COURSING PATTERN

1/2" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

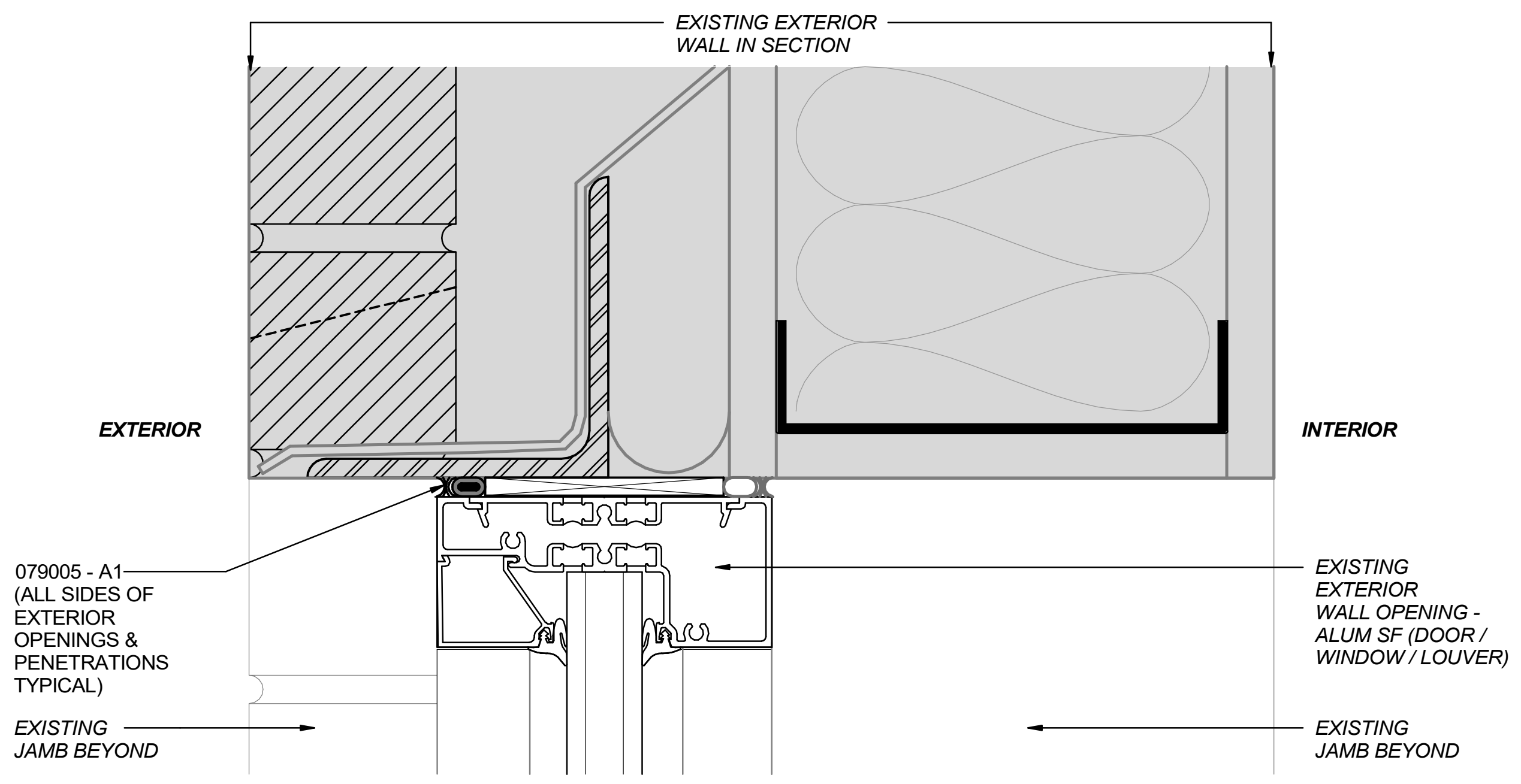
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

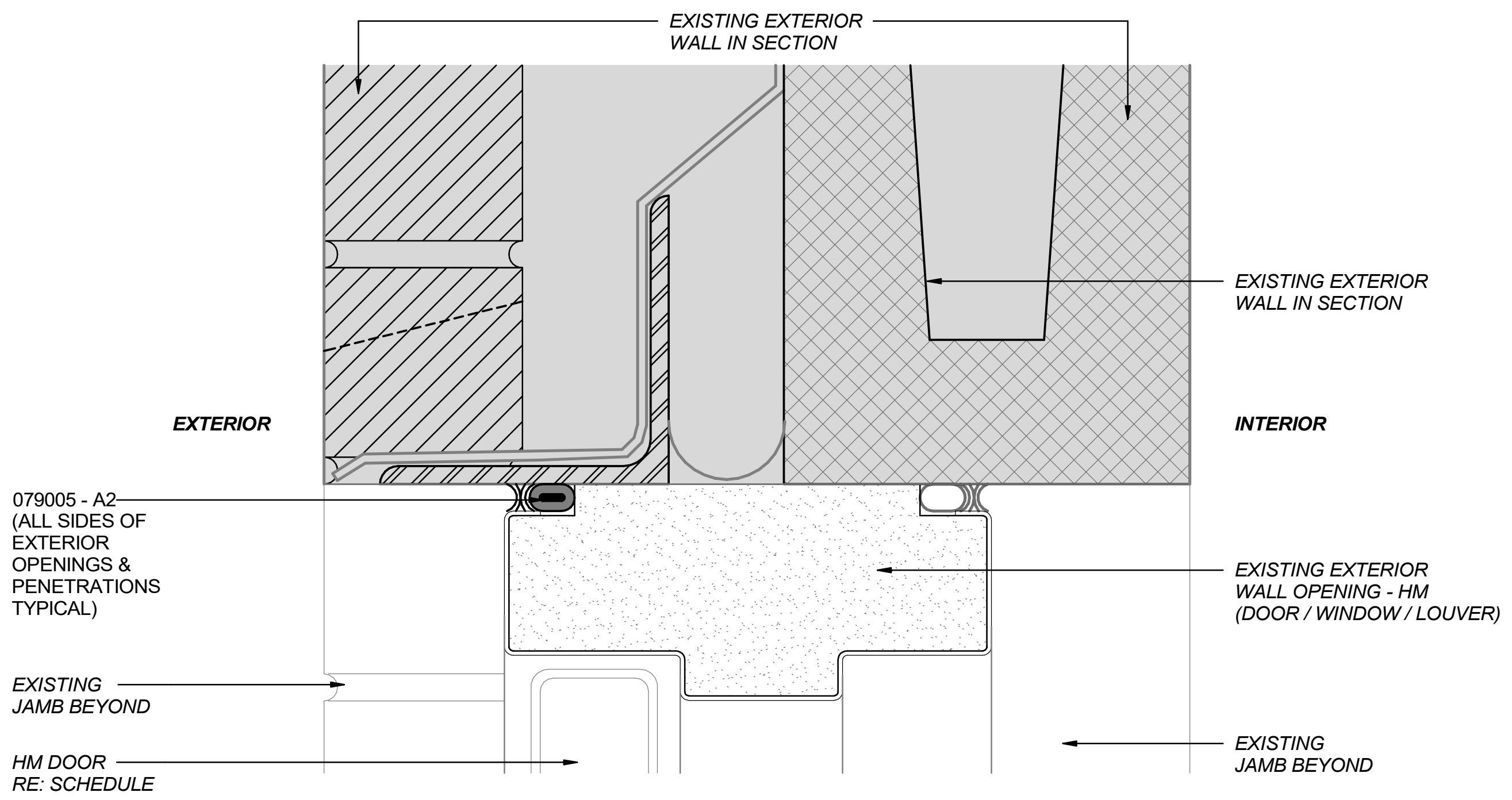
NEW FINE ARTS & CTE
ADDITION
ELEVATIONS

A6.20
of

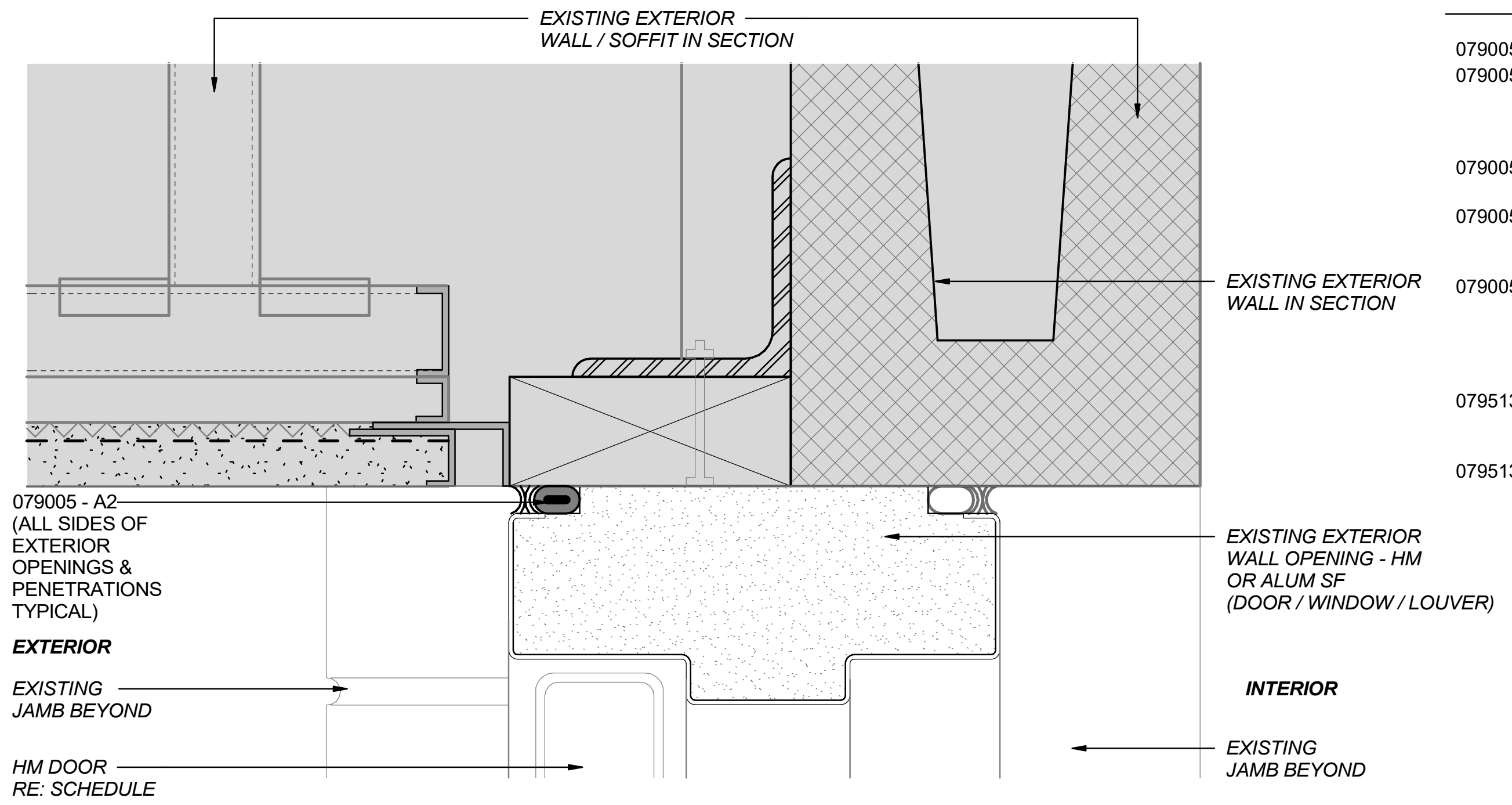
11/14/2024 1:36:45 PM



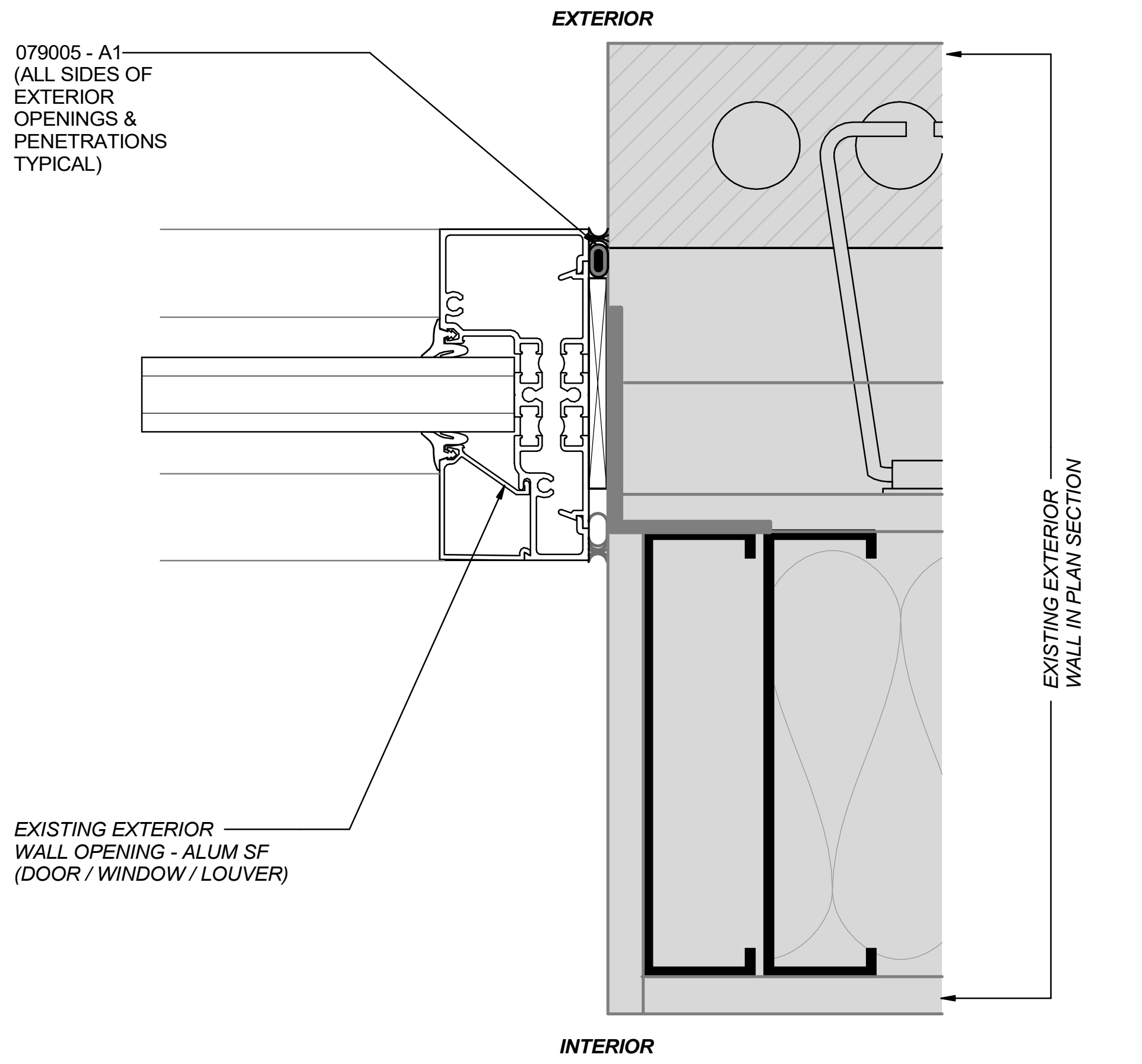
1 OS - HEAD SEALANT REPLACEMENT
6" = 1'-0"



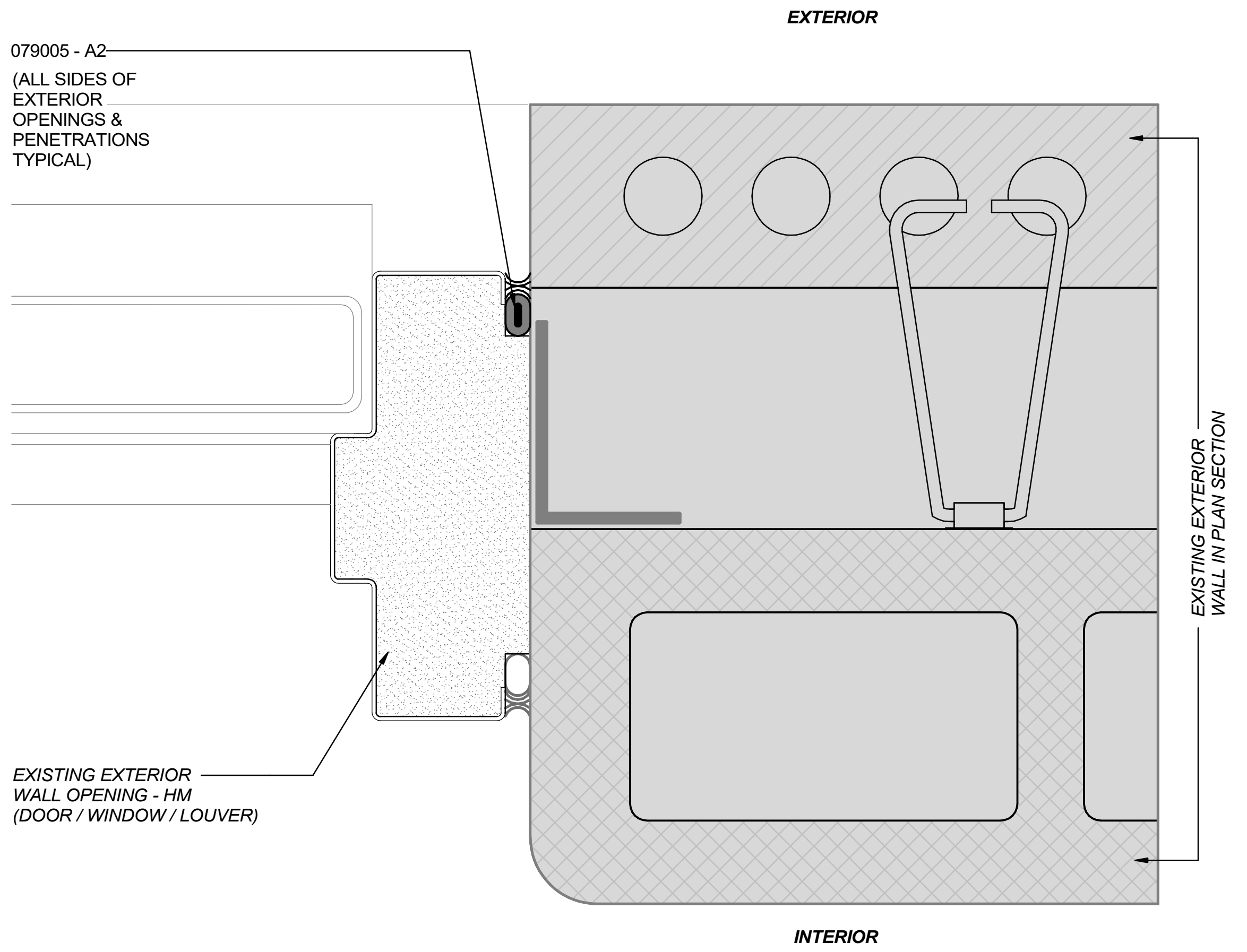
4 OS - HM HEAD SEALANT REPLACEMENT
6" = 1'-0"



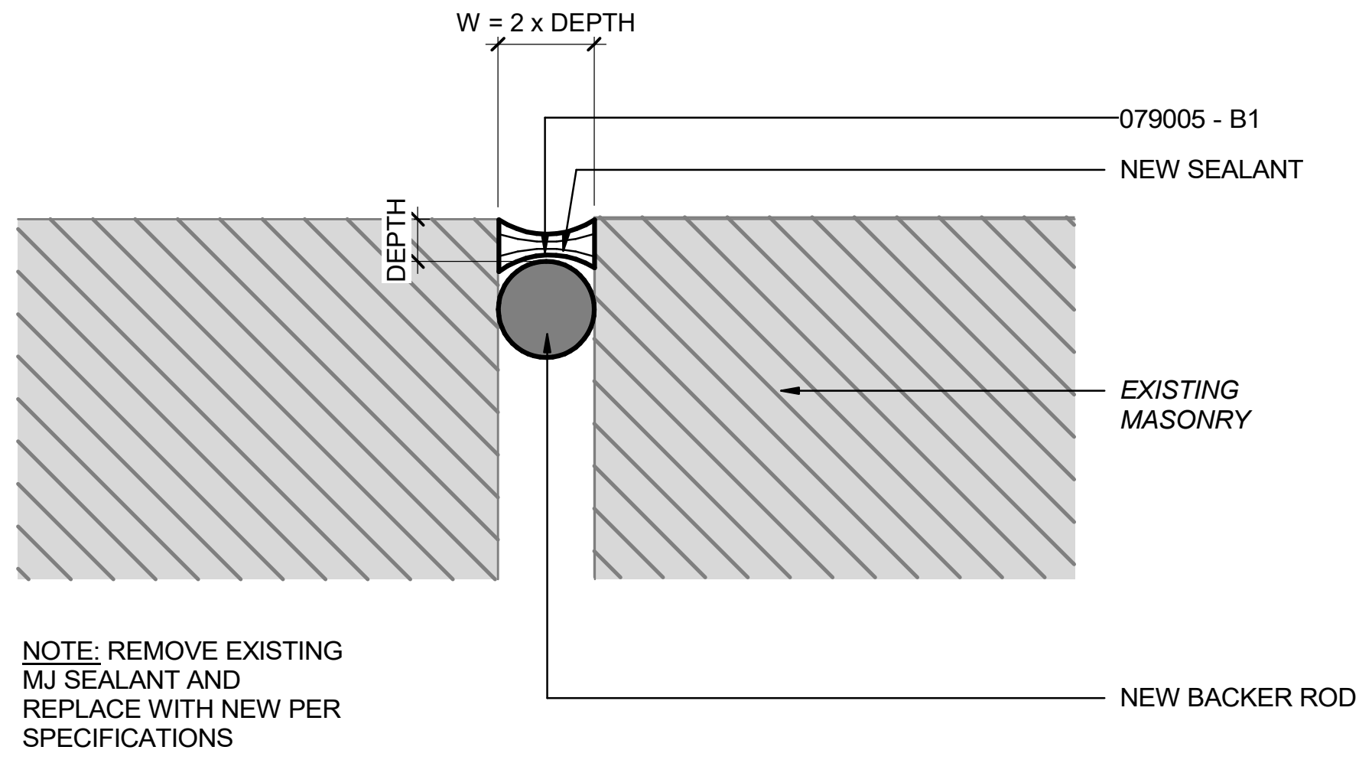
7 OS - HM HEAD SEALANT REPLACEMENT @ SOFFIT
6" = 1'-0"



2 OS - JAMB SEALANT REPLACEMENT
6" = 1'-0"

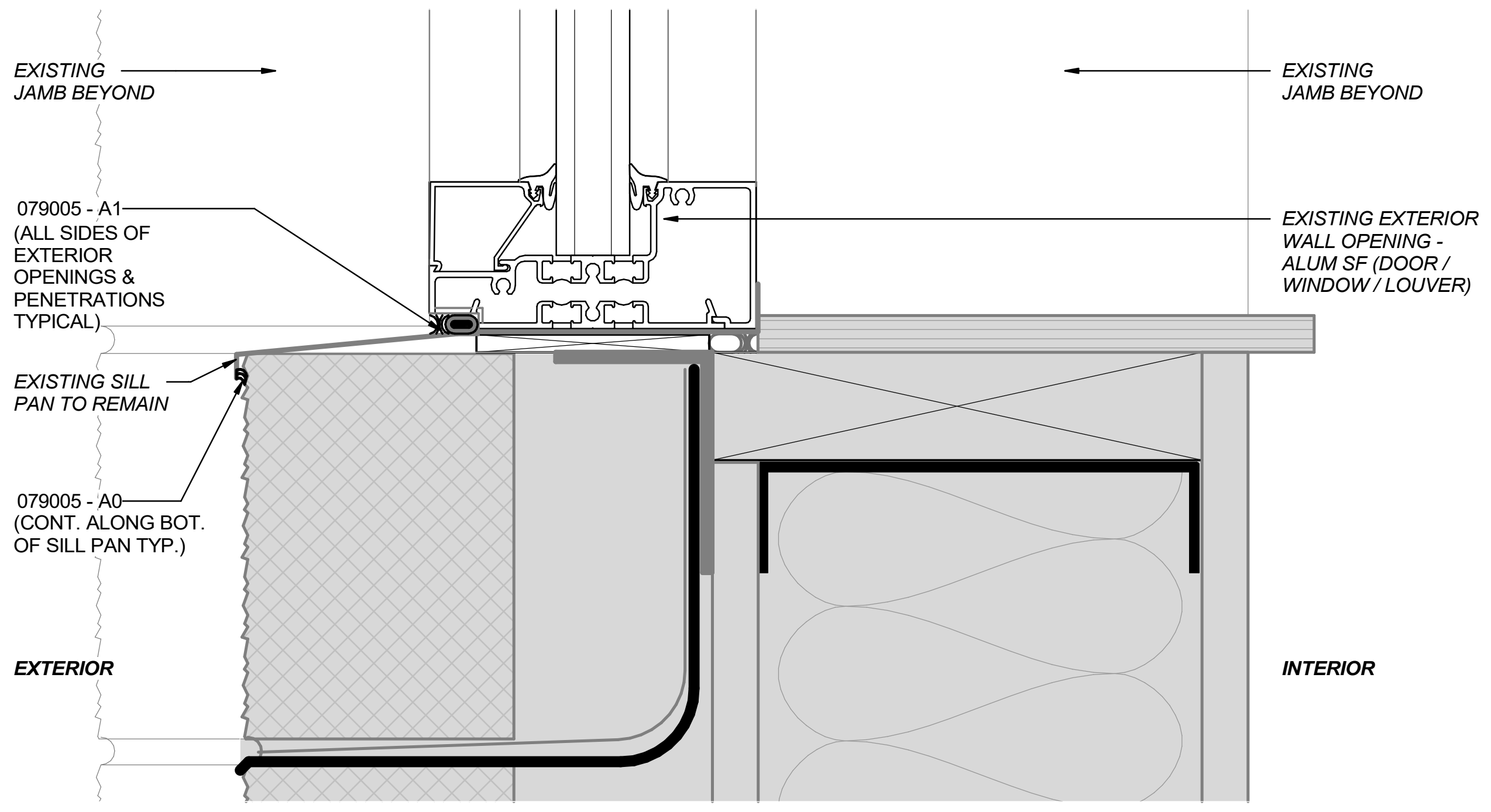


5 OS - HM JAMB SEALANT REPLACEMENT
6" = 1'-0"

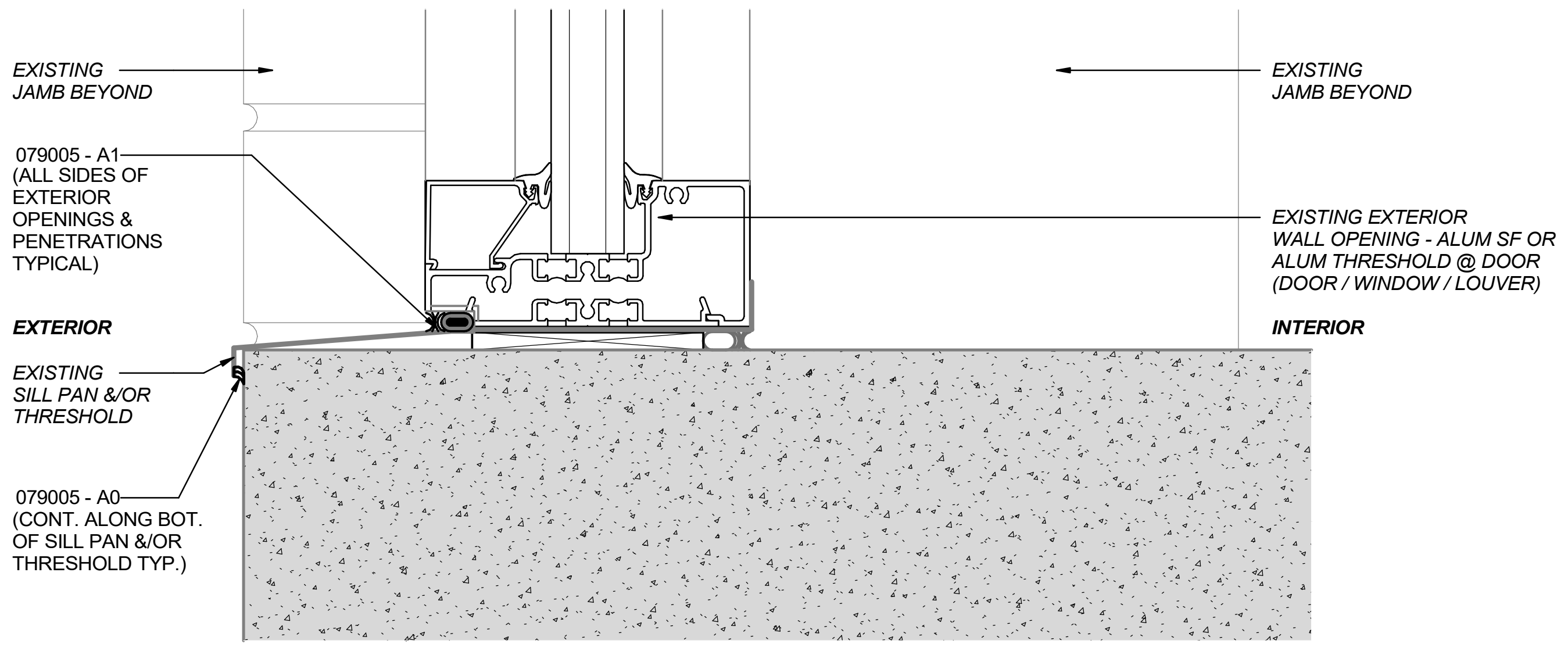


NOTE: REMOVE EXISTING MJ SEALANT AND REPLACE WITH NEW PER SPECIFICATIONS

8 MJ - MASONRY JOINT REPLACEMENT
6" = 1'-0"

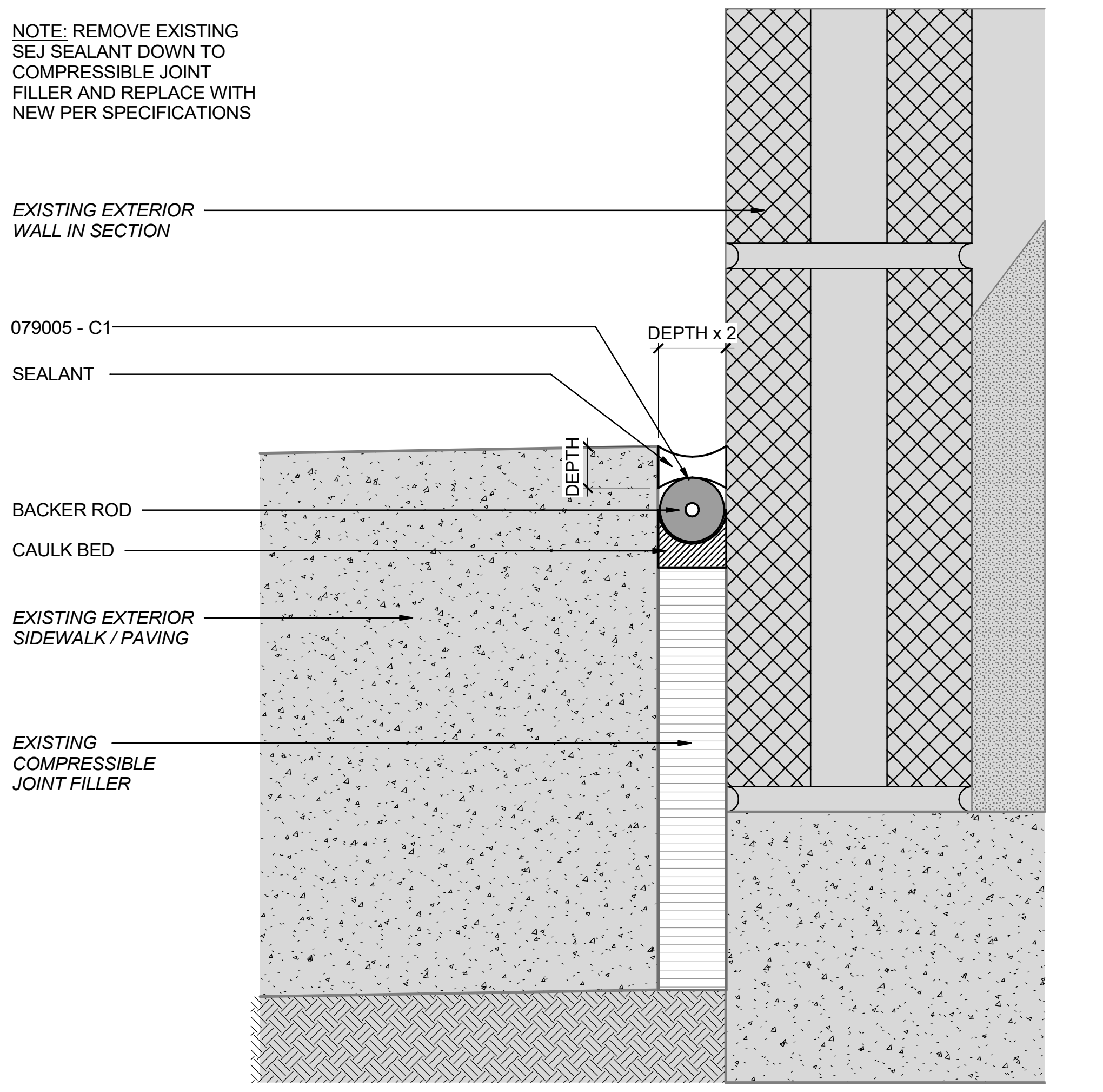


3 OS - ALUM SILL SEALANT REPLACEMENT
6" = 1'-0"

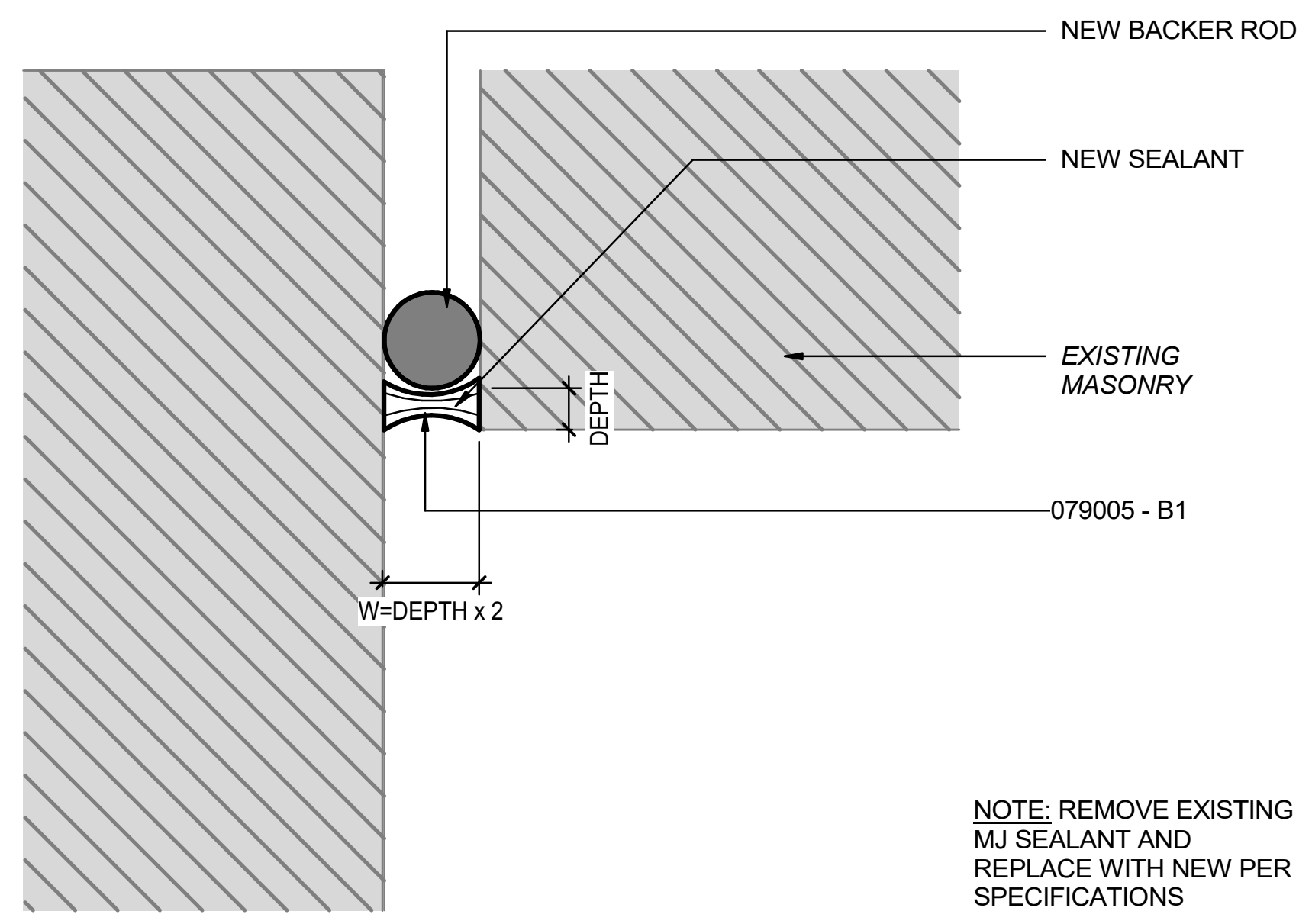


6 OS - OPENING SILL SEALANT REPLACEMENT
6" = 1'-0"

NOTE: REMOVE EXISTING SEJ SEALANT DOWN TO COMPRESSIBLE JOINT FILLER AND REPLACE WITH NEW PER SPECIFICATIONS



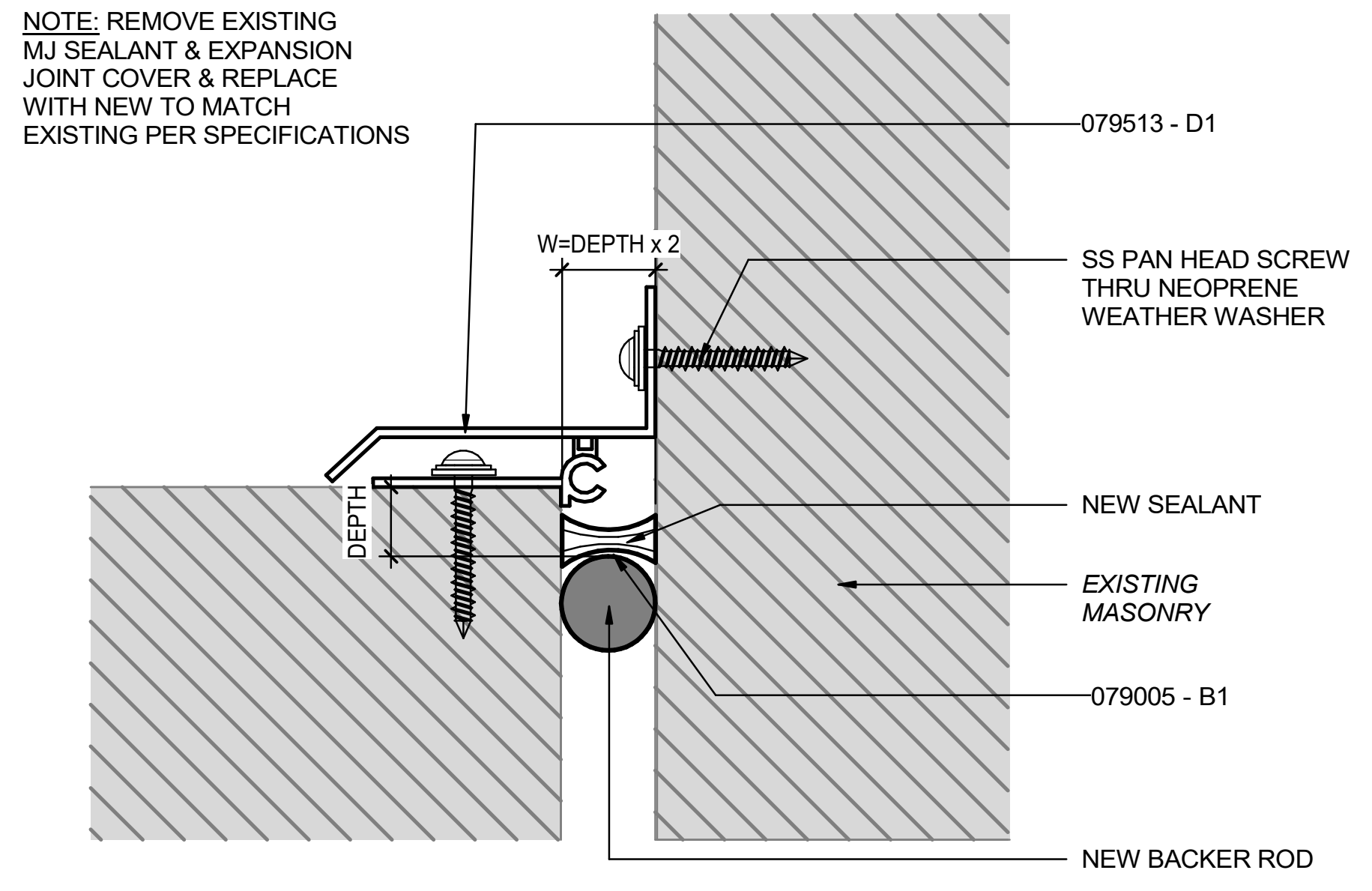
9 SEJ - CONCRETE EXPANSION JOINT REPLACEMENT
6" = 1'-0"



NOTE: REMOVE EXISTING MJ SEALANT AND REPLACE WITH NEW PER SPECIFICATIONS

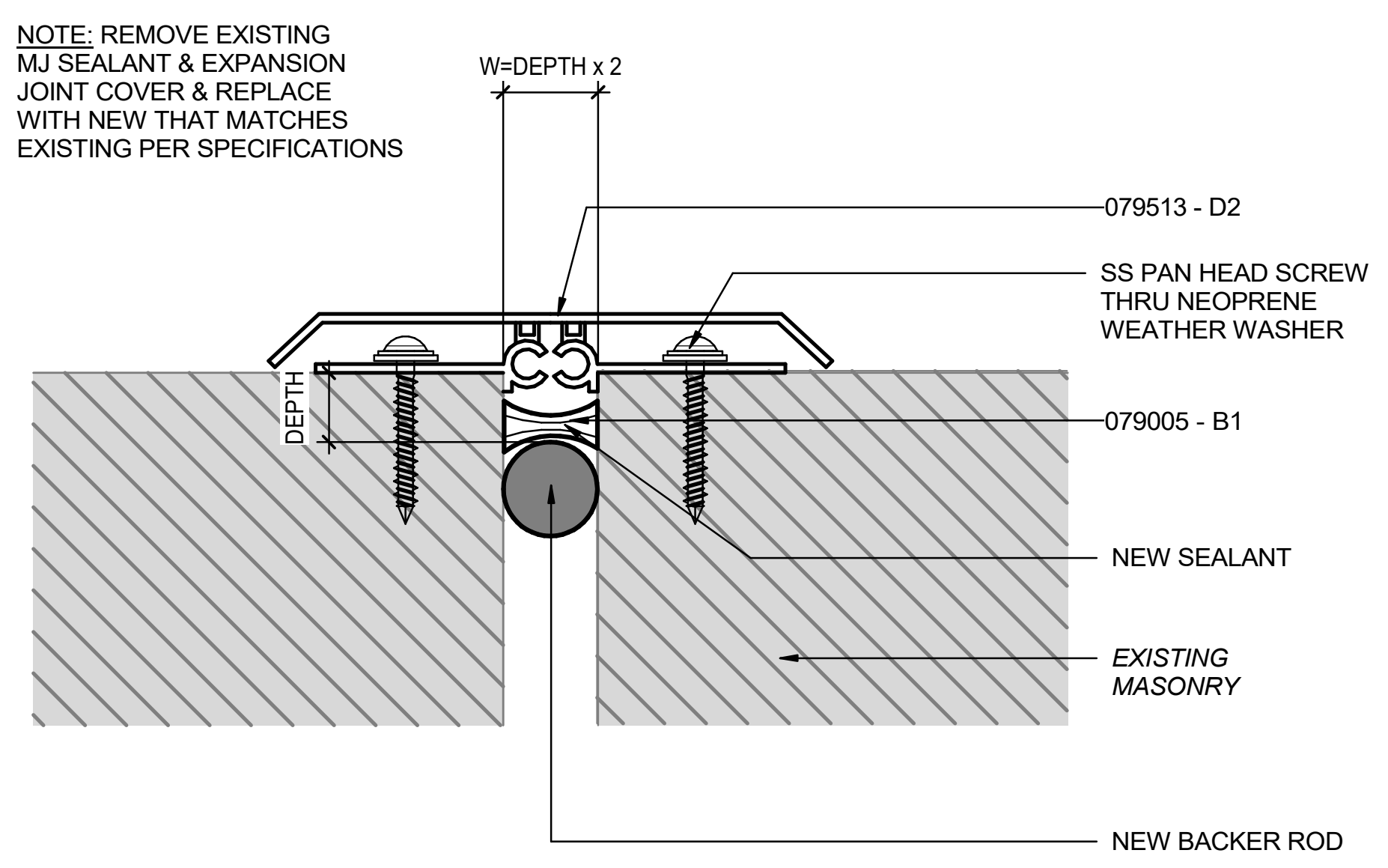
10 MJ - CORNER MASONRY JOINT REPLACEMENT
6" = 1'-0"

NOTE: REMOVE EXISTING MJ SEALANT & EXPANSION JOINT COVER & REPLACE WITH NEW TO MATCH EXISTING PER SPECIFICATIONS



11 WEJ - WALL EXPANSION JOINT REPLACEMENT
6" = 1'-0"

NOTE: REMOVE EXISTING MJ SEALANT & EXPANSION JOINT COVER & REPLACE WITH NEW THAT MATCHES EXISTING PER SPECIFICATIONS



12 WEJ - WALL EXPANSION JOINT REPLACEMENT
6" = 1'-0"

MATERIAL KEYNOTES

079005 - A0	JOINT SEALANT
079005 - A1	JOINT SEALANT AND CYLINDRICAL SEALANT BACKING REPLACEMENT AROUND ALL SIDES OF EXTERIOR WALL OPENINGS & PENETRATIONS
079005 - A2	JOINT SEALANT AND CYLINDRICAL SEALANT BACKING
079005 - B1	MASONRY JOINT SEALANT AND CYLINDRICAL SEALANT BACKING CONTROL JOINT & EXPANSION JOINT REPLACEMENT
079005 - C1	CONCRETE JOINT SEALANT AND COMPRESSIBLE BACKING EXPANSION JOINT REPLACEMENT AT BASE OF EXTERIOR WALL & PAVING INTERSECTION AROUND PERIMETER OF BUILDING
079513 - D1	EXTERIOR MANUFACTURED WALL EXPANSION JOINT COVER ASSEMBLY - WALL TO WALL INSIDE CORNER JOINT COVER
079513 - D2	EXTERIOR MANUFACTURED WALL EXPANSION JOINT COVER ASSEMBLY - WALL TO WALL DOUBLE GASKET EXPANSION JOINT COVER

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

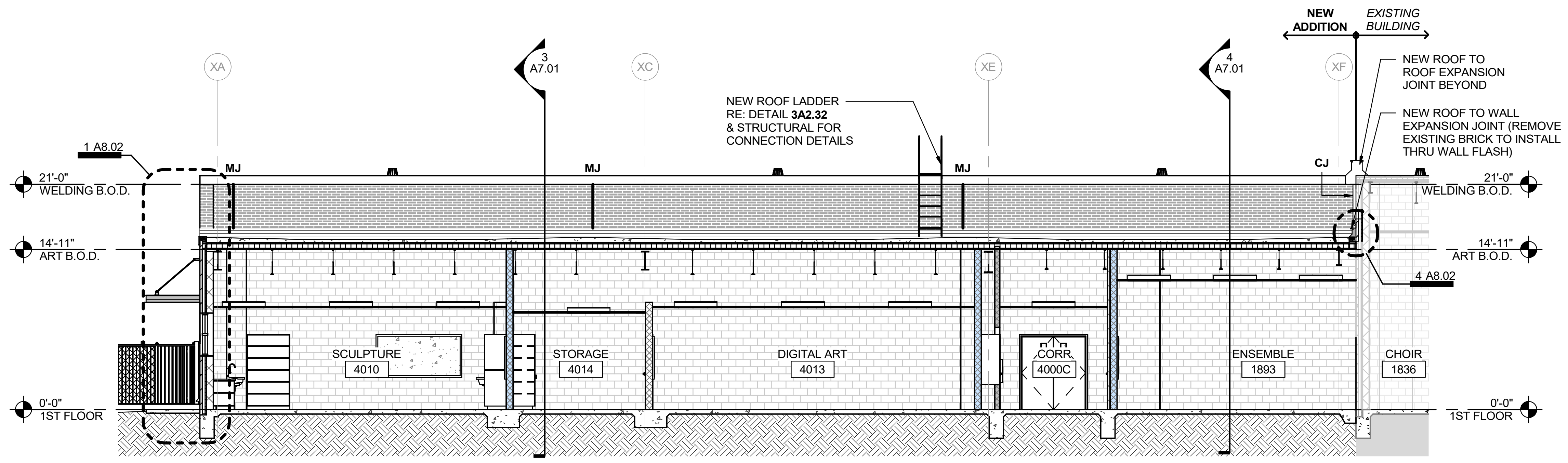
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

BUILDING SEALANT DETAILS

A6.30

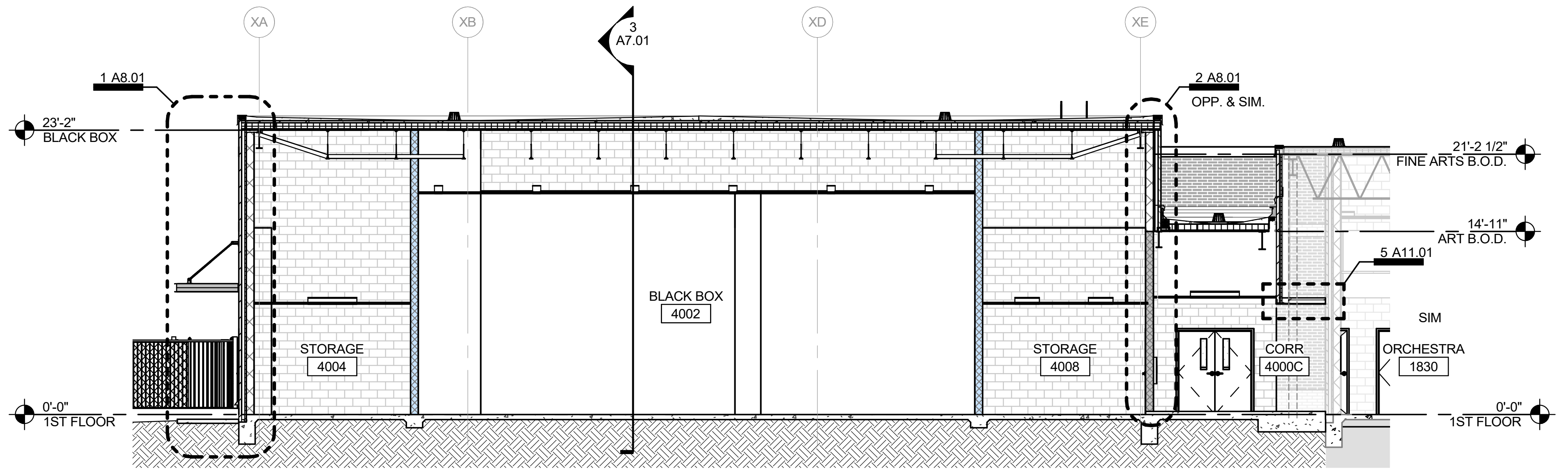
___ of ___

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



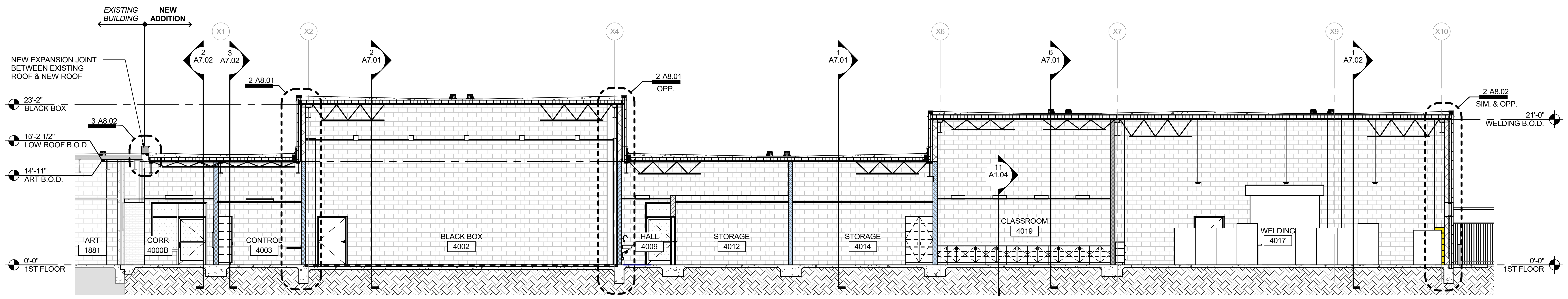
1 BLDG SECTION THRU ARTS

1/8" = 1'-0"



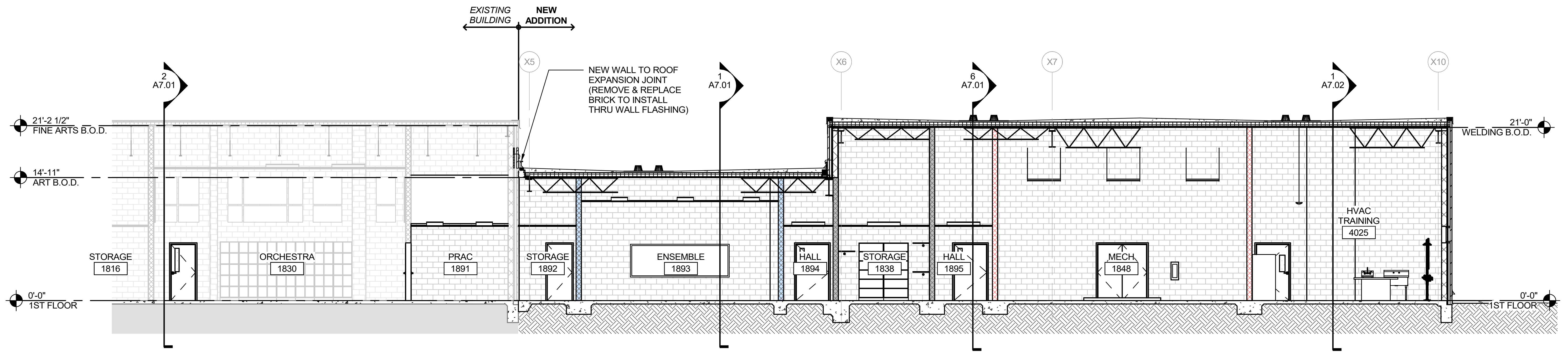
2 BLDG SECTION THRU BLACK BOX

1/8" = 1'-0"



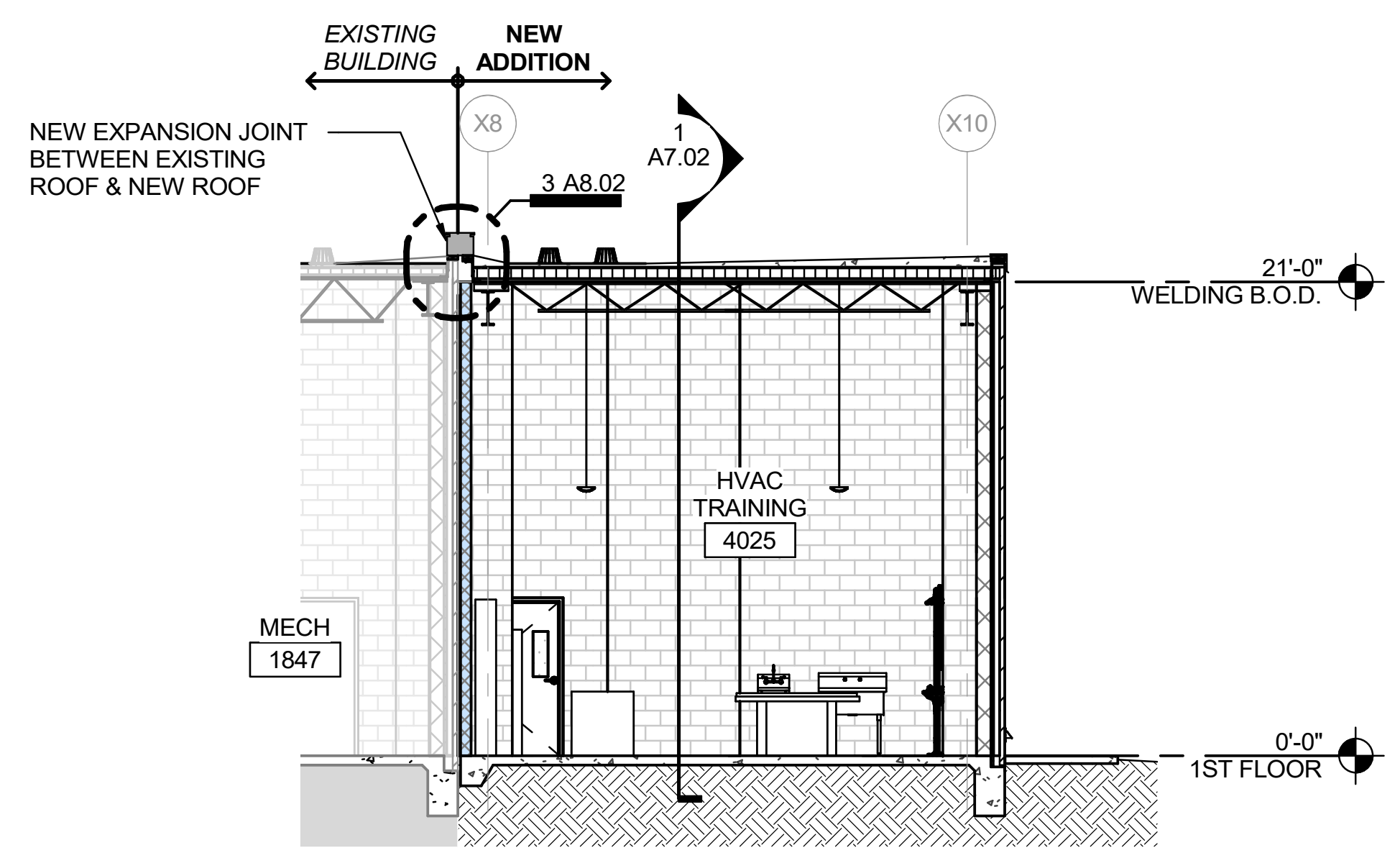
3 BLDG SECTION THRU BUILDING ADDITION - EW

1/8" = 1'-0"



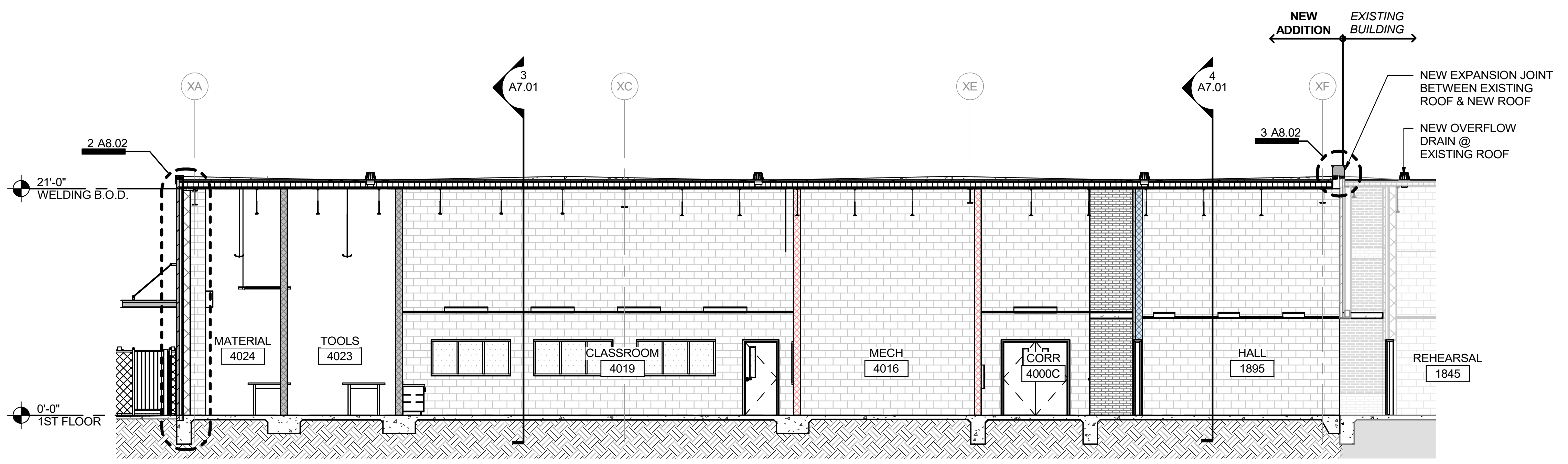
4 BLDG SECTION THRU HVAC & ENSEMBLE

1/8" = 1'-0"



5 BLDG SECTION THRU HVAC TRAINING

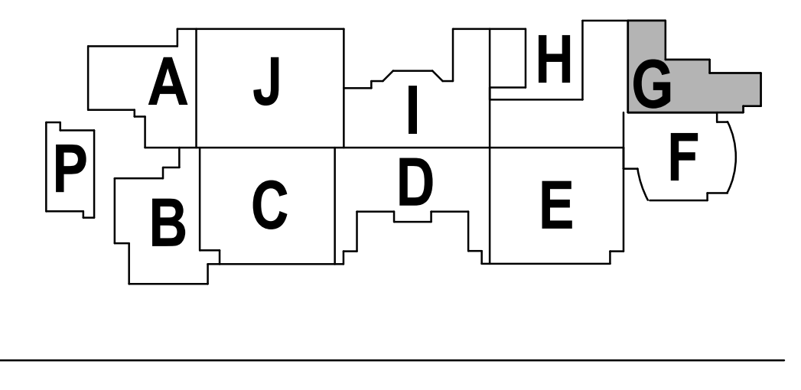
1/8" = 1'-0"



6 BLDG SECTION THRU WELDING

1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

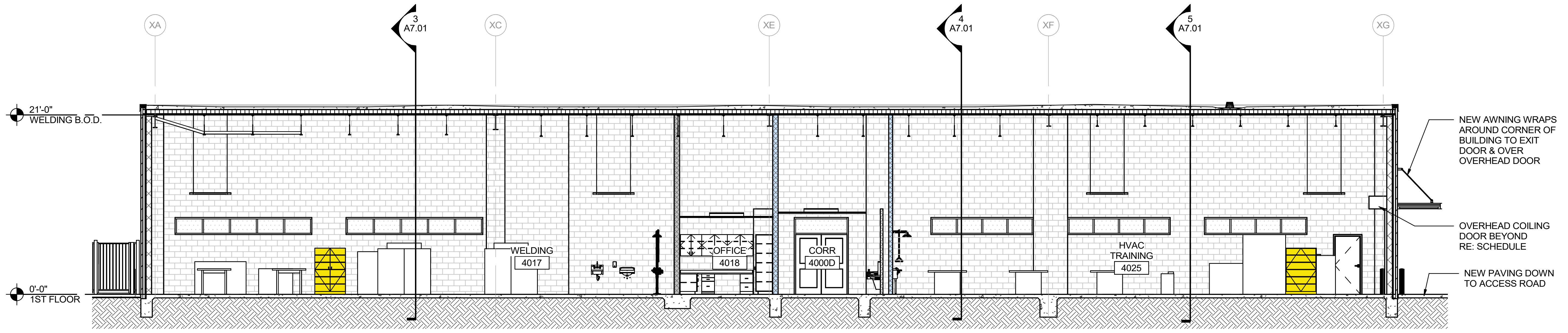
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

BUILDING SECTIONS

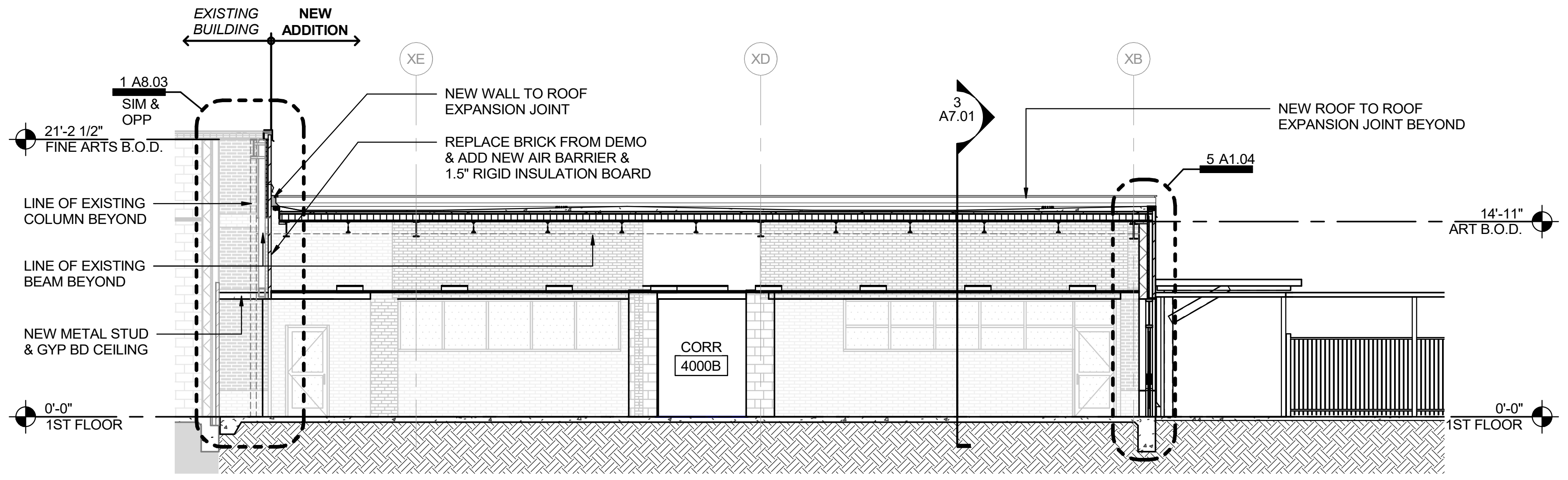
A7.01
____ of ____

11/14/2024 1:36:57 PM



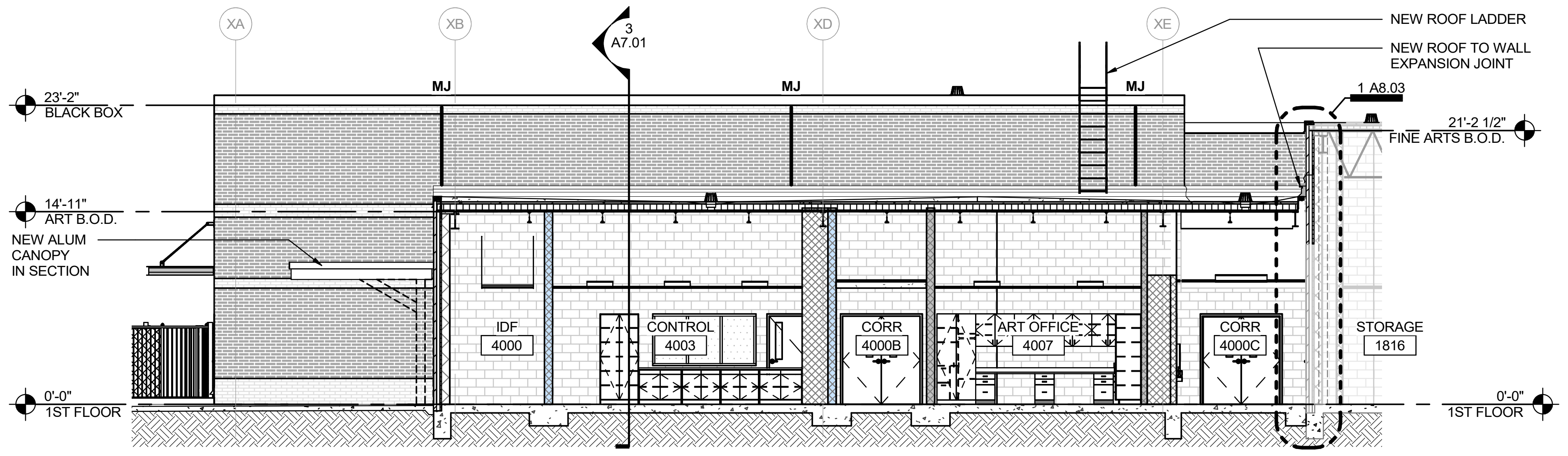
1 BLDG SECTION THRU WELDING & HVAC

1/8" = 1'-0"



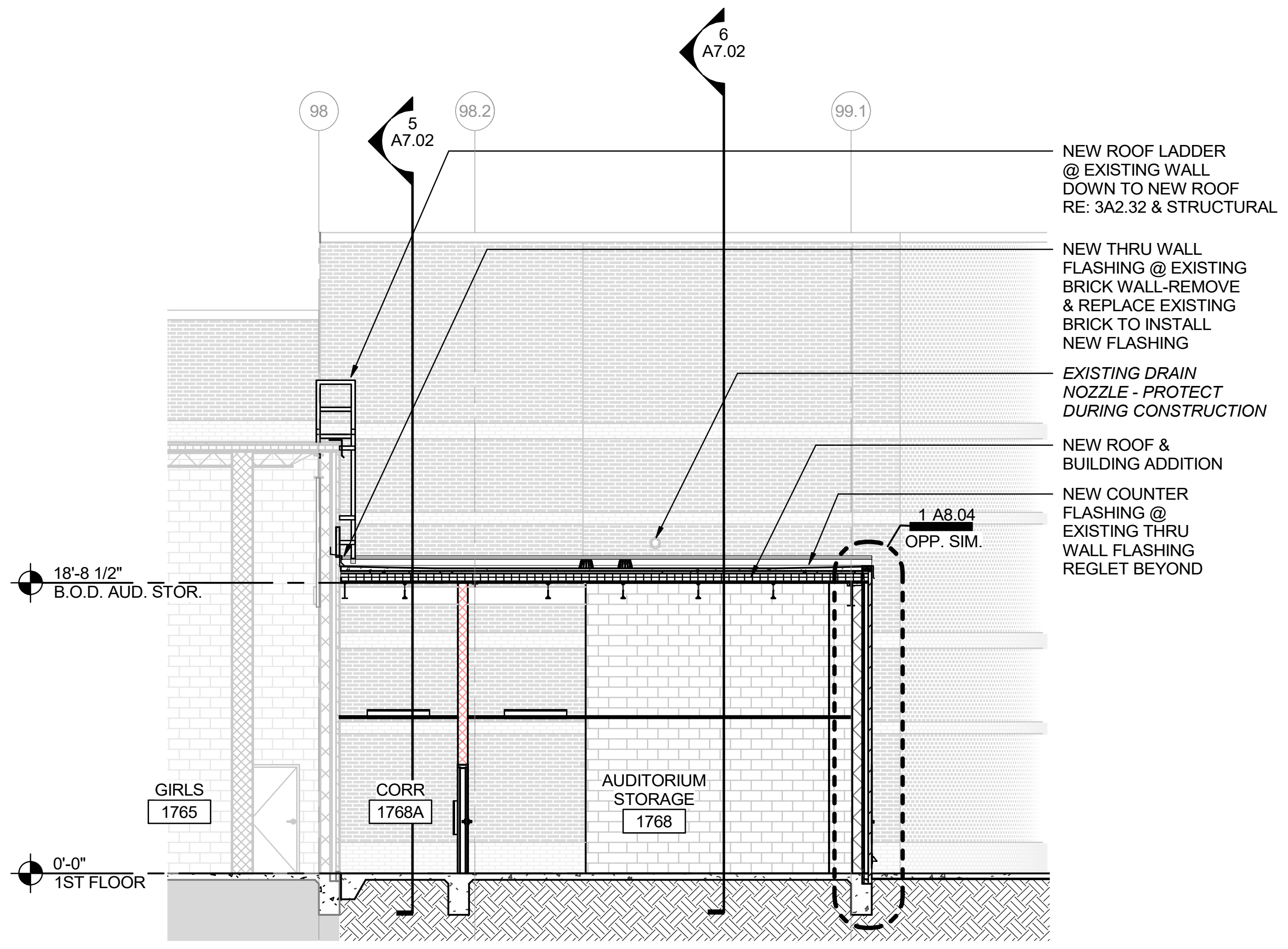
2 BLDG SECTION THRU ARTS CORRIDOR

1/8" = 1'-0"



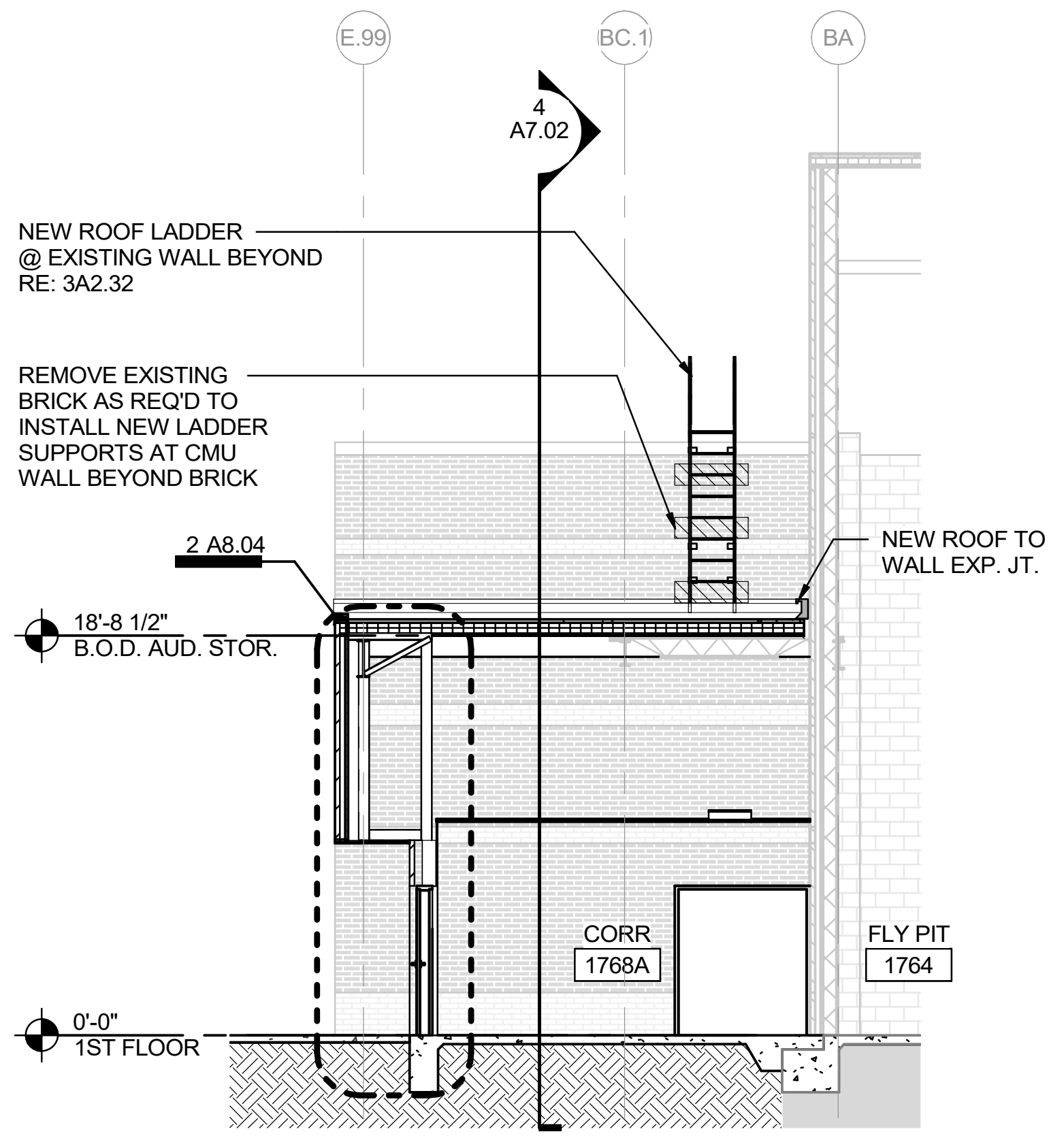
3 BLDG SECTION THRU BLACK BOX CONTROL

1/8" = 1'-0"



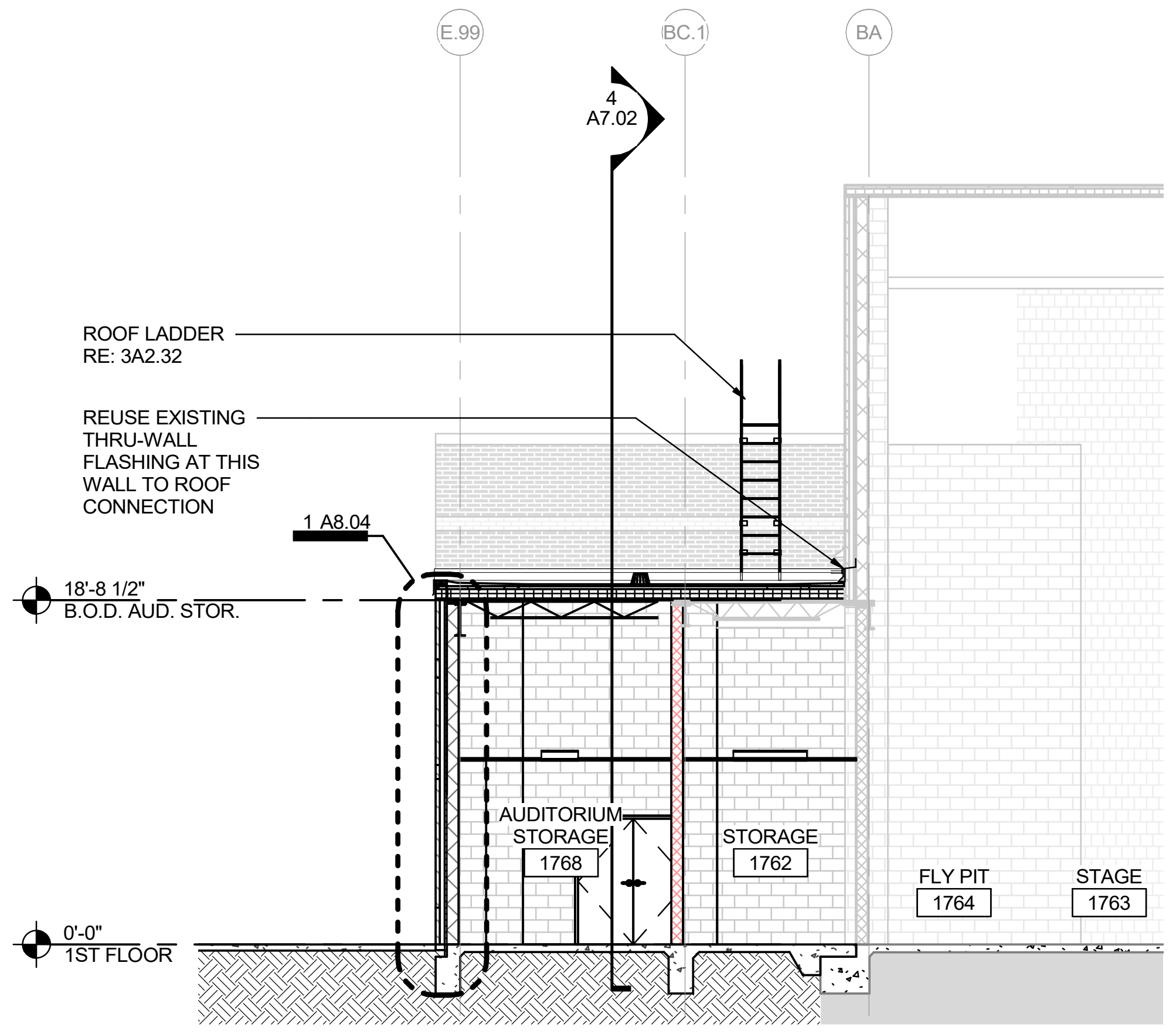
4 BUILDING SECTION - STORAGE

1/8" = 1'-0"



5 BUILDING SECTION - STORAGE

1/8" = 1'-0"



6 BUILDING SECTION - STORAGE

1/8" = 1'-0"

Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

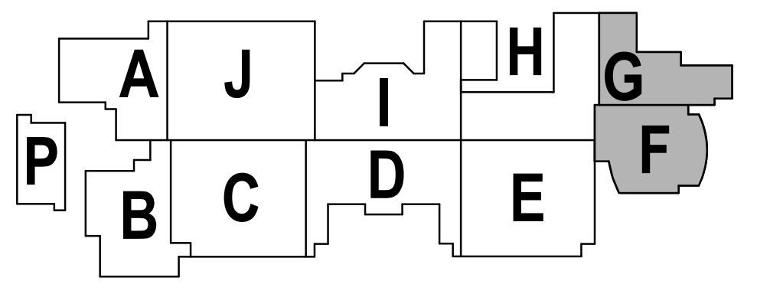
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



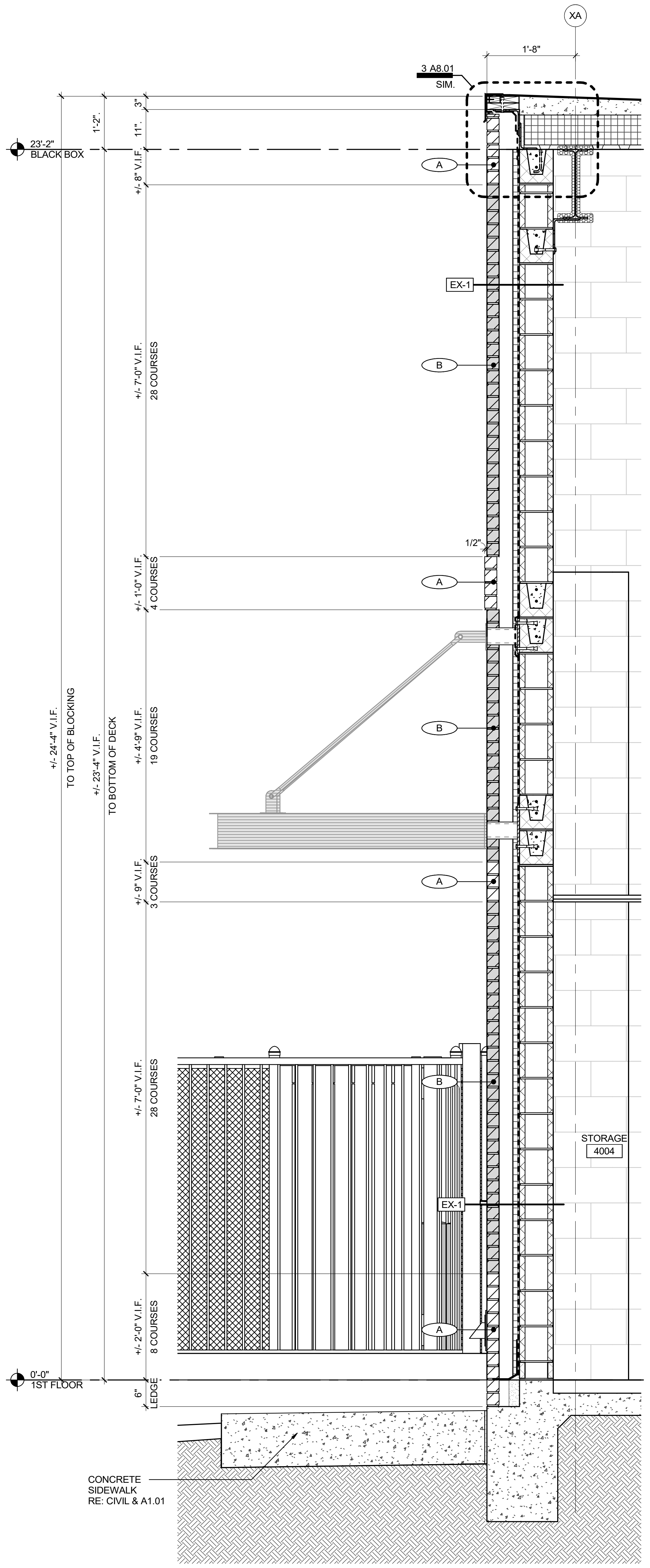
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

BUILDING SECTIONS

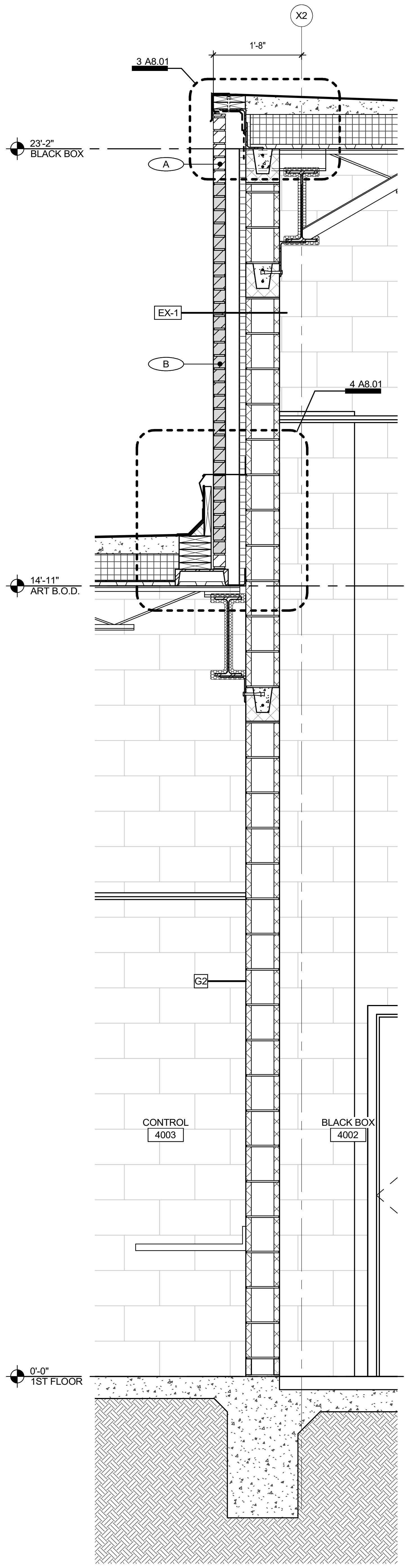
A7.02
___ of ___

11/14/2024 1:37:02 PM

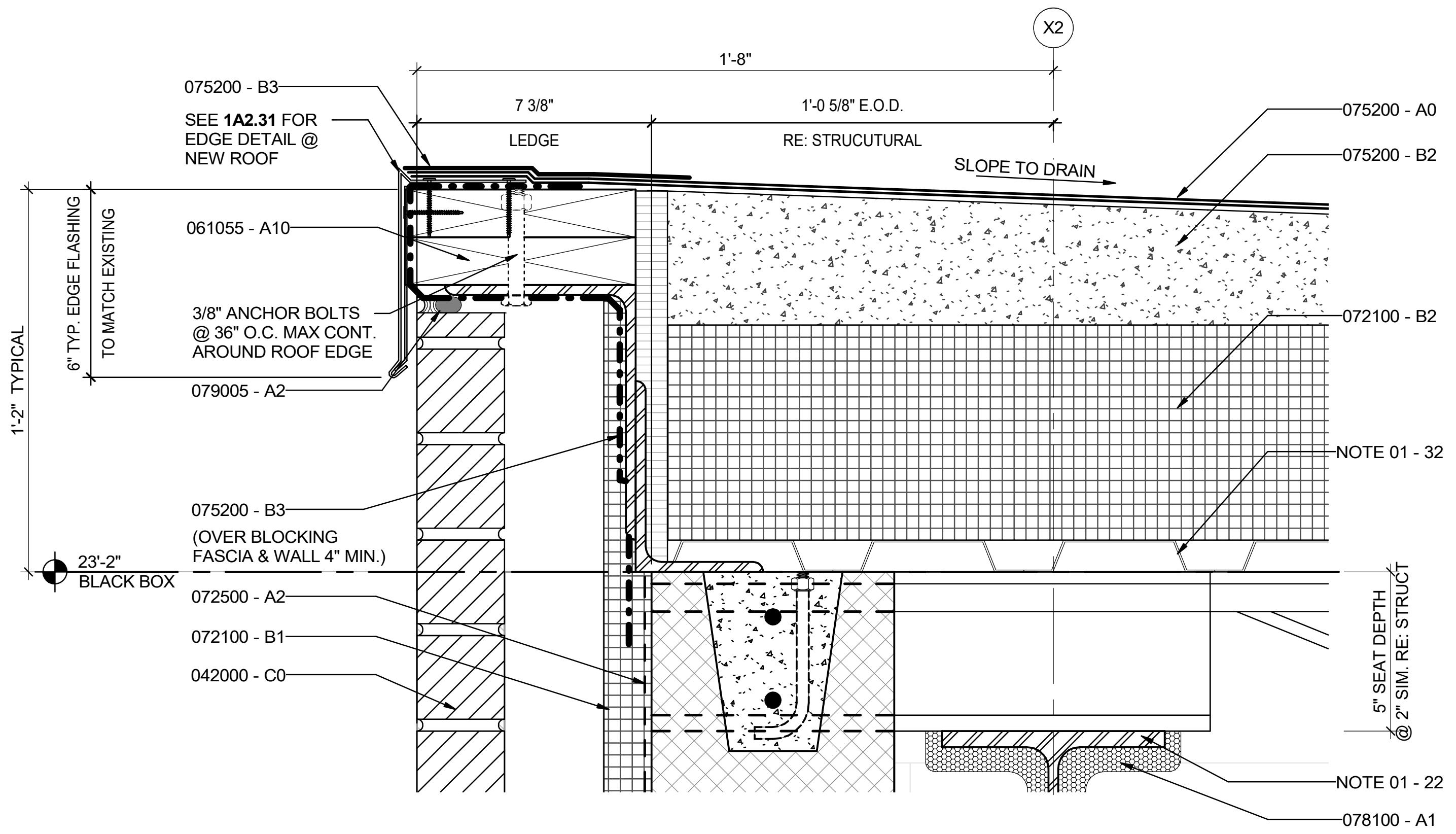
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



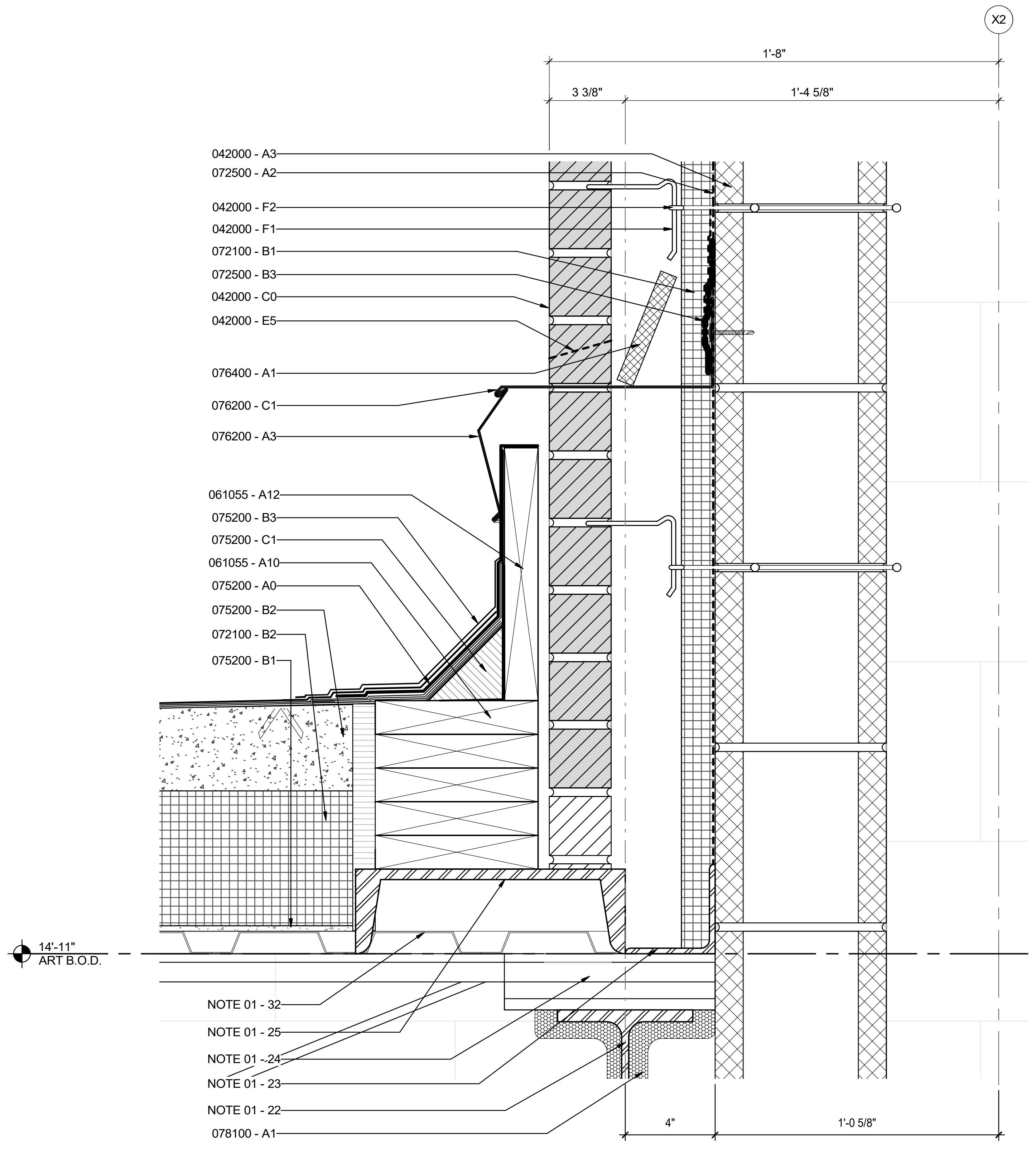
1 WALL SECTION - BLACK BOX STORAGE
3/4" = 1'-0"



2 WALL SECTION - HIGH TO LOW ROOF
3/4" = 1'-0"



3 TYPICAL EAVE DETAIL
3" = 1'-0"



4 THRU WALL FLASHING - ROOF TO WALL
3" = 1'-0"

CY-LAKES HIGH SCHOOL BRICK LEGEND

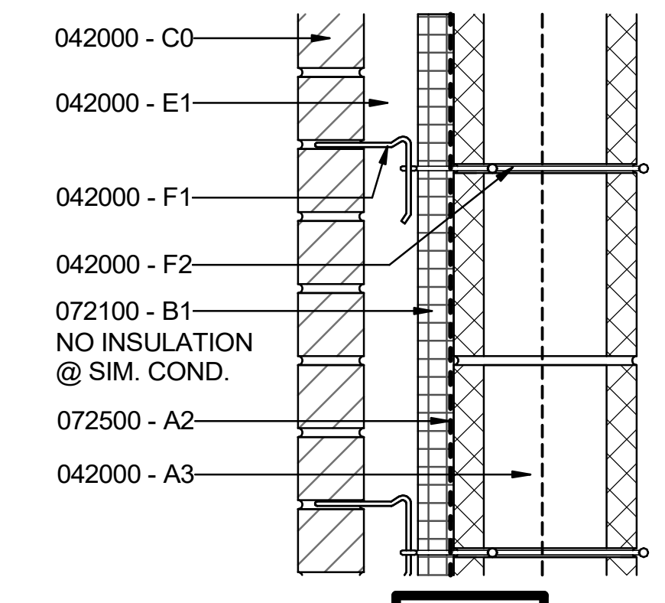
NOTE: FOR VERTICAL HEIGHTS OF BANDING, MATCH EXISTING BUILDING ADJACENT TO NEW ADDITION - SEE WALL SECTIONS FOR DIMENSIONS & DESCRIPTIONS MATCH BRICK LEDGE DEPTH - GC TO VERIFY IN FIELD

A	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING BANDING - LIGHT GRAY **ACME BRICK - DOVE GRAY**
B	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - MEDIUM GRAY **ACME BRICK - PALOMA GRAY**
C	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - WHITE **ACME BRICK - GLACIER WHITE** (ONLY @ MAIN ENTRY INT. WALL)
MJ	MASONRY JOINTS
CJ	WALL CONTROL JOINTS AT NEW TO EXISTING WALL CONNECTION

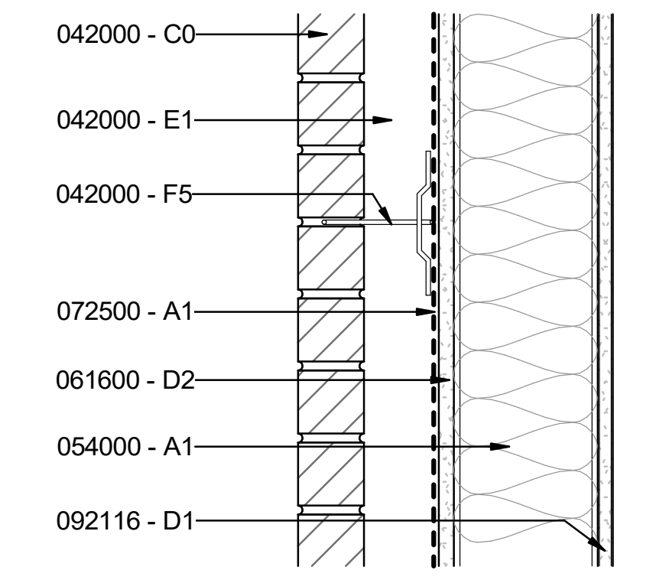
KEYNOTES

042000 - A3	8X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - C0	KING SIZED VENEER FACE BRICK - STRETCHER COURSES (RUNNING BOND) - SEE ELEVATIONS FOR BANDING & COLOR
042000 - E1	AIR SPACE
042000 - E5	WEEP HOLES @ 24" OC - FILLED WITH MOLDED PVC GRILLE, INSECT RESISTANT
042000 - F1	ADJUSTABLE MASONRY VENEER WALL TIES AT 15" O.C. VERTICALLY MAX (16" O.C. STD BRICK) AND 16" O.C. HORIZONTALLY MAX - FOR UNEVEN WYTHES OF BRICK & CMU
042000 - F2	ADJUSTABLE HORIZONTAL TRUSS REINFORCEMENT WITH EYE-WIRE FOR ADJUSTABLE TIES. @ 16" OC VERTICALLY MAX @ CMU - FOR WYTHES OF KING SIZED BRICK & STANDARD CMU
042000 - F5	ADJUSTABLE MASONRY WALL ANCHOR 15" OC EA WAY @ METAL STUD WALLS TYPICAL
054000 - A1	6" METAL STUD WALL FRAMING (CFMF) - RE: STRUCTURAL
061055 - A10	2X8 TREATED WOOD BLOCKING OR NAILER
061055 - A12	2X12 TREATED WOOD BLOCKING OR NAILER
061600 - D2	5/8" GLASS-MAT GYPSUM SHEATHING BOARD - TYPE X
072100 - B1	RIGID WALL INSULATION - 1-1/2" THICK IN WALL CAVITY - RE: SPECS
072100 - B2	RIGID ROOF INSULATION RE: ROOFING SPECS
072500 - A1	FLUID APPLIED AIR BARRIER OVER EXTERIOR SHEATHING
072500 - A2	FLUID APPLIED AIR BARRIER OVER EXTERIOR CMU
072500 - B3	SELF-ADHERING TRANSITION MEMBRANE @ WALL CONNECTIONS
075200 - A0	SBS-MODIFIED BITUMINOUS MEMBRANE ROOFING OVER LIGHTWEIGHT INSULATED CONCRETE & SLOTTED METAL DECK SYSTEM, SLOPED 1/4" PER FOOT MIN. TO INTERNAL AND OVERFLOW DRAINS - RE: SPECS
075200 - B1	LIGHTWEIGHT INSULATING CONCRETE OVER SLOTTED METAL DECK
075200 - B2	TAPERED LIGHTWEIGHT INSULATING CONCRETE, SLOPED TO INTERNAL DRAINS ON ROOF
075200 - B3	FULLY ADHERED MEMBRANE FLASHING
075200 - C1	NON-COMBUSTIBLE CANT
076200 - A3	METAL COUNTER FLASHING
076200 - C1	METAL THRU-WALL FLASHING
076400 - A1	COMBINATION FLEXIBLE SHEET FLASHING (076500), MORTAR DEFLECTION, & WEEP AS COMPLETE ONE-STEP SYSTEM RE: SPECS
078100 - A1	APPLIED FIRE-PROOFING TO STRUCTURAL ELEMENTS - RE: SPECIFICATIONS
079005 - A2	JOINT SEALANT AND CYLINDRICAL SEALANT BACKING
092116 - D1	5/8" GYPSUM BOARD FINISH - RE: SPECS
NOTE 01 - 22	STEEL BEAM - RE: STRUCTURAL
NOTE 01 - 23	STEEL ANGLE - RE: STRUCTURAL
NOTE 01 - 24	STEEL JOIST - RE: STRUCTURAL
NOTE 01 - 25	STEEL CHANNEL - RE: STRUCTURAL
NOTE 01 - 32	METAL ROOF DECK - RE: STRUCTURAL

EXTERIOR WALL TYPE KEY LEGEND



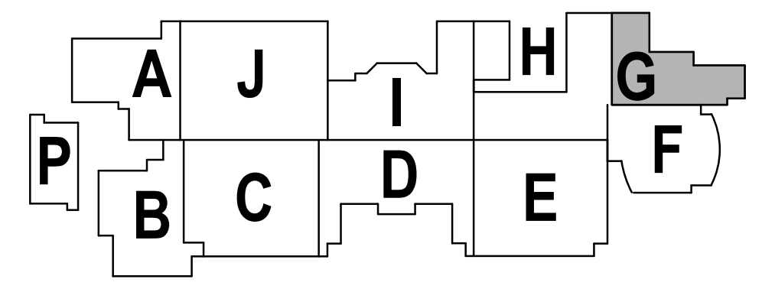
EX-1



NOTE:
ALL INTERIOR WALL
TYPES ARE FOUND ON
SHEET A4.20

EX-2

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

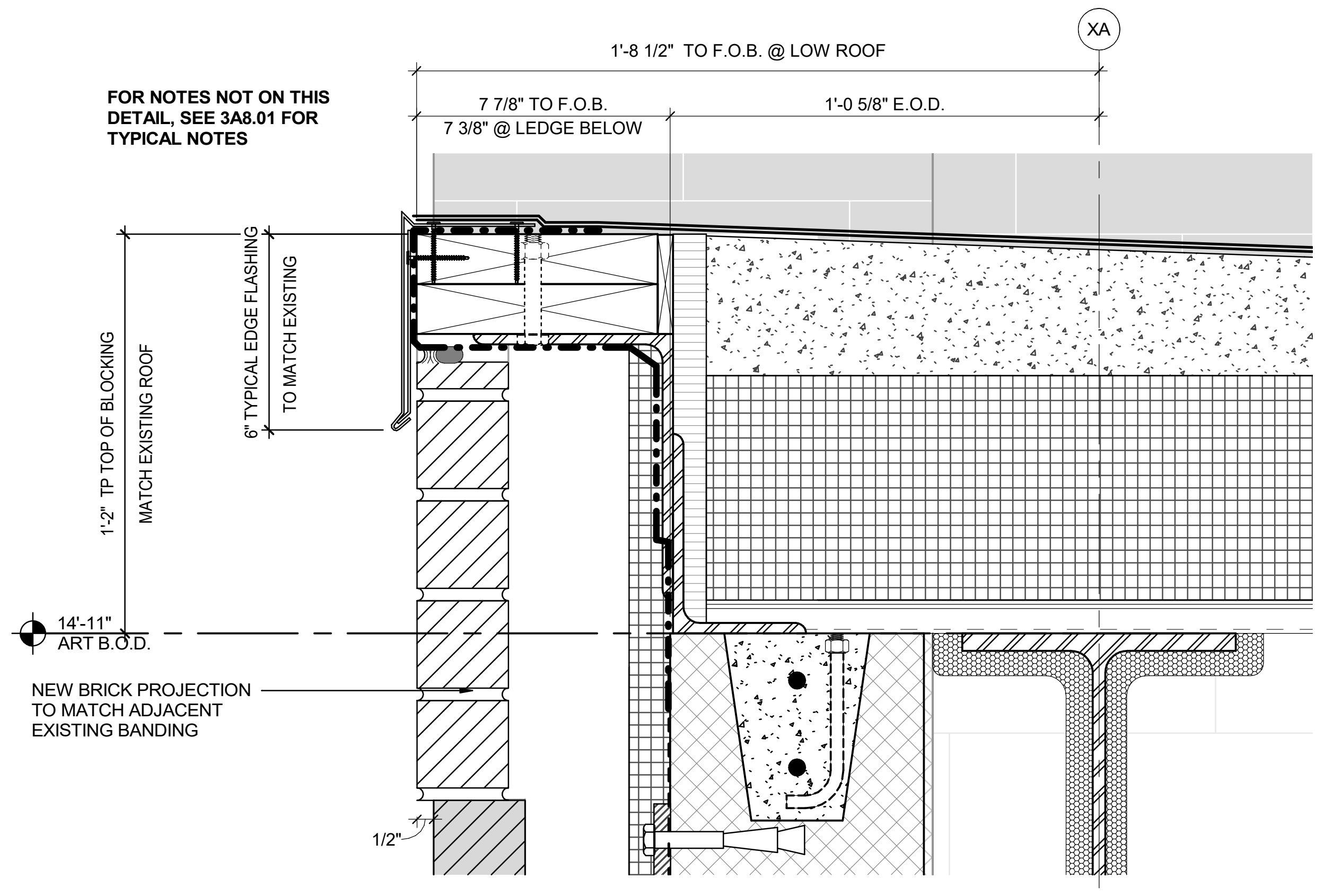
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

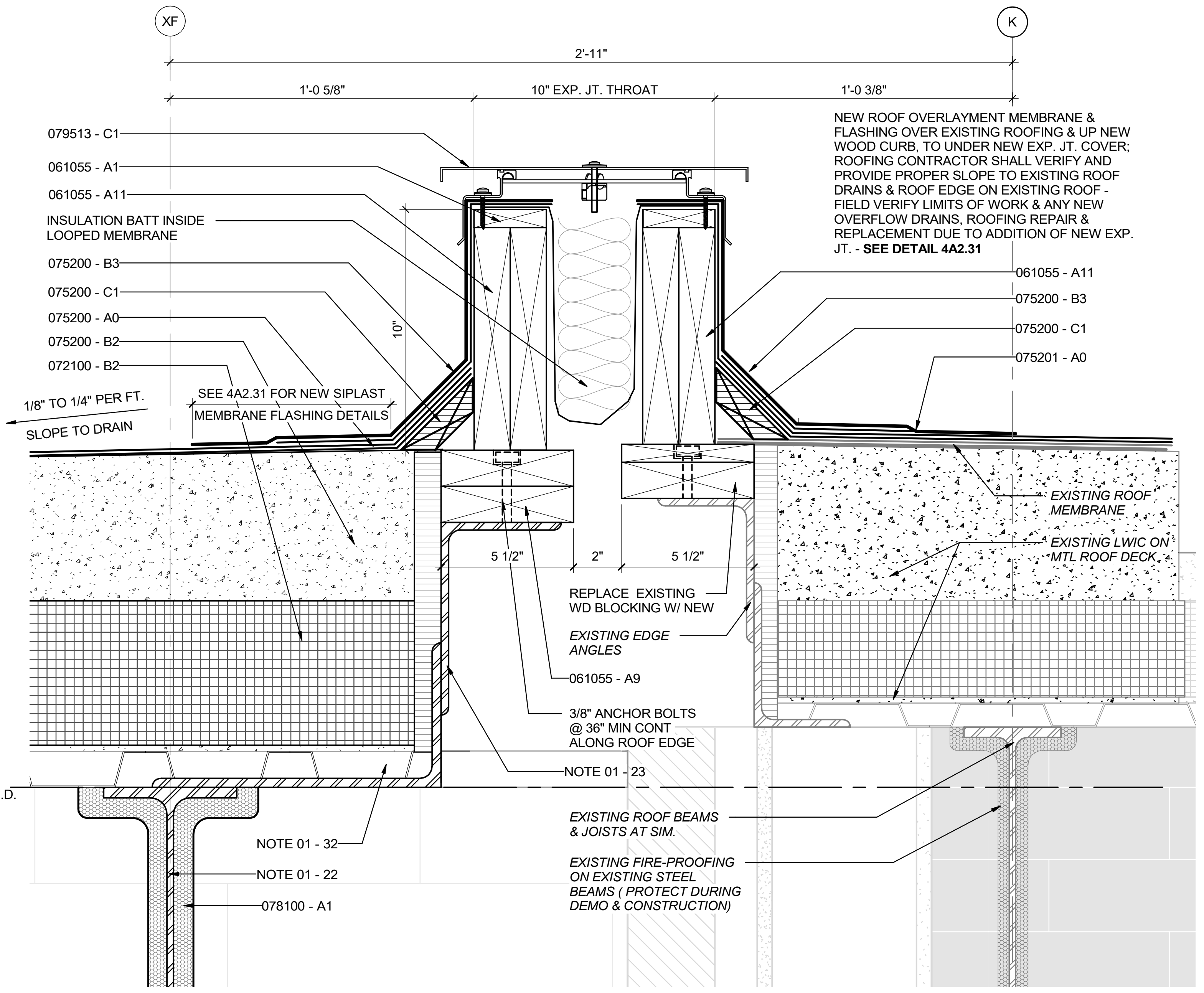
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

WALL SECTIONS & DETAILS

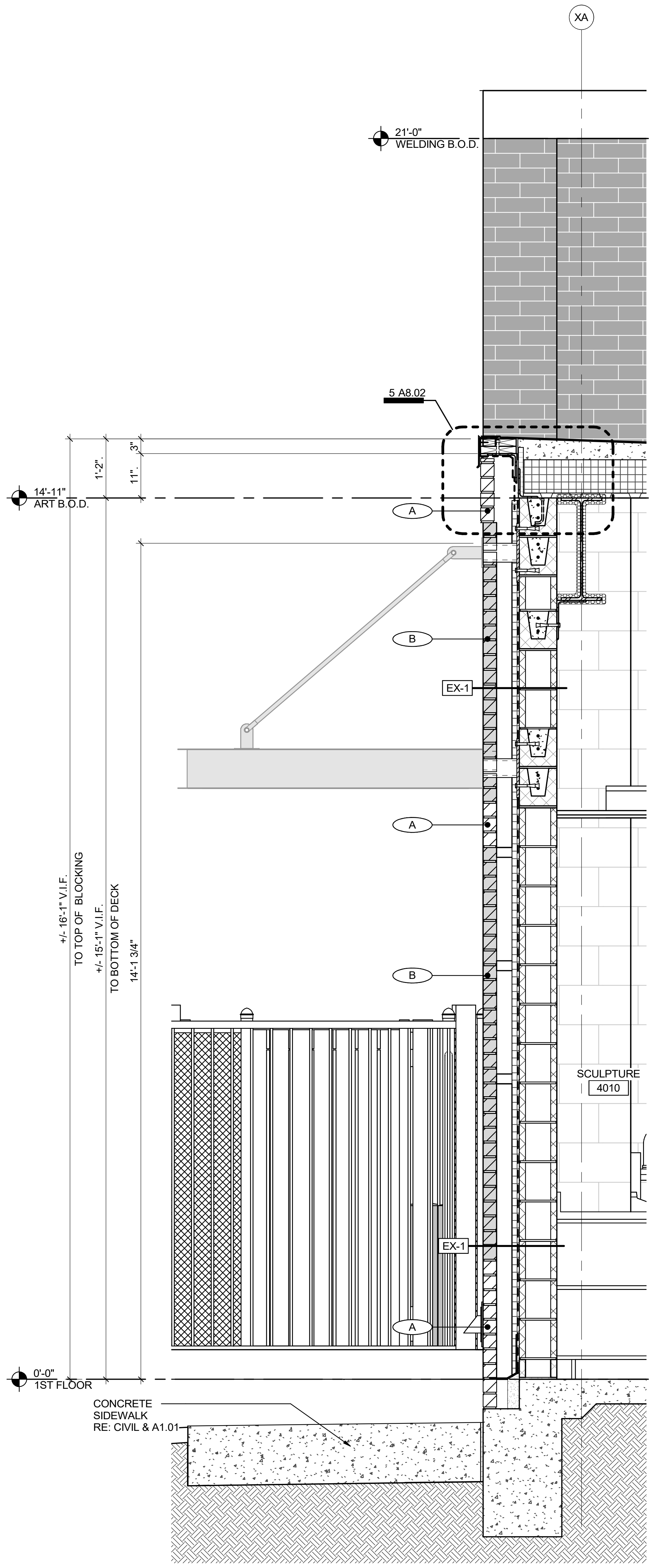
A8.01
____ of ____



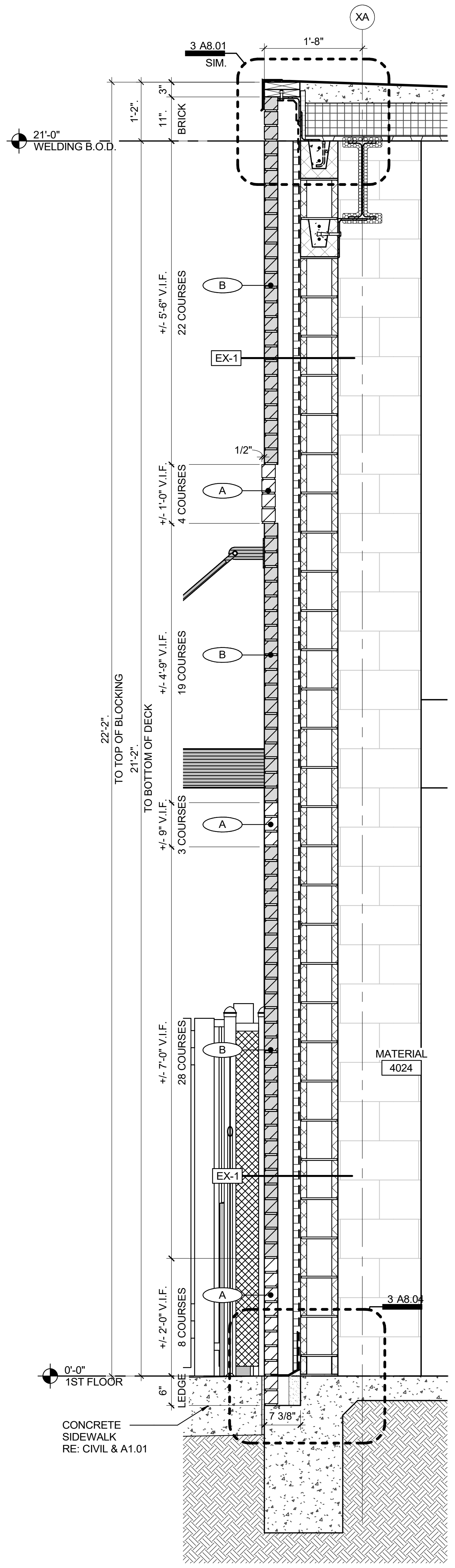
5 EAVE DETAIL @ LOW ROOF
3" = 1'-0"



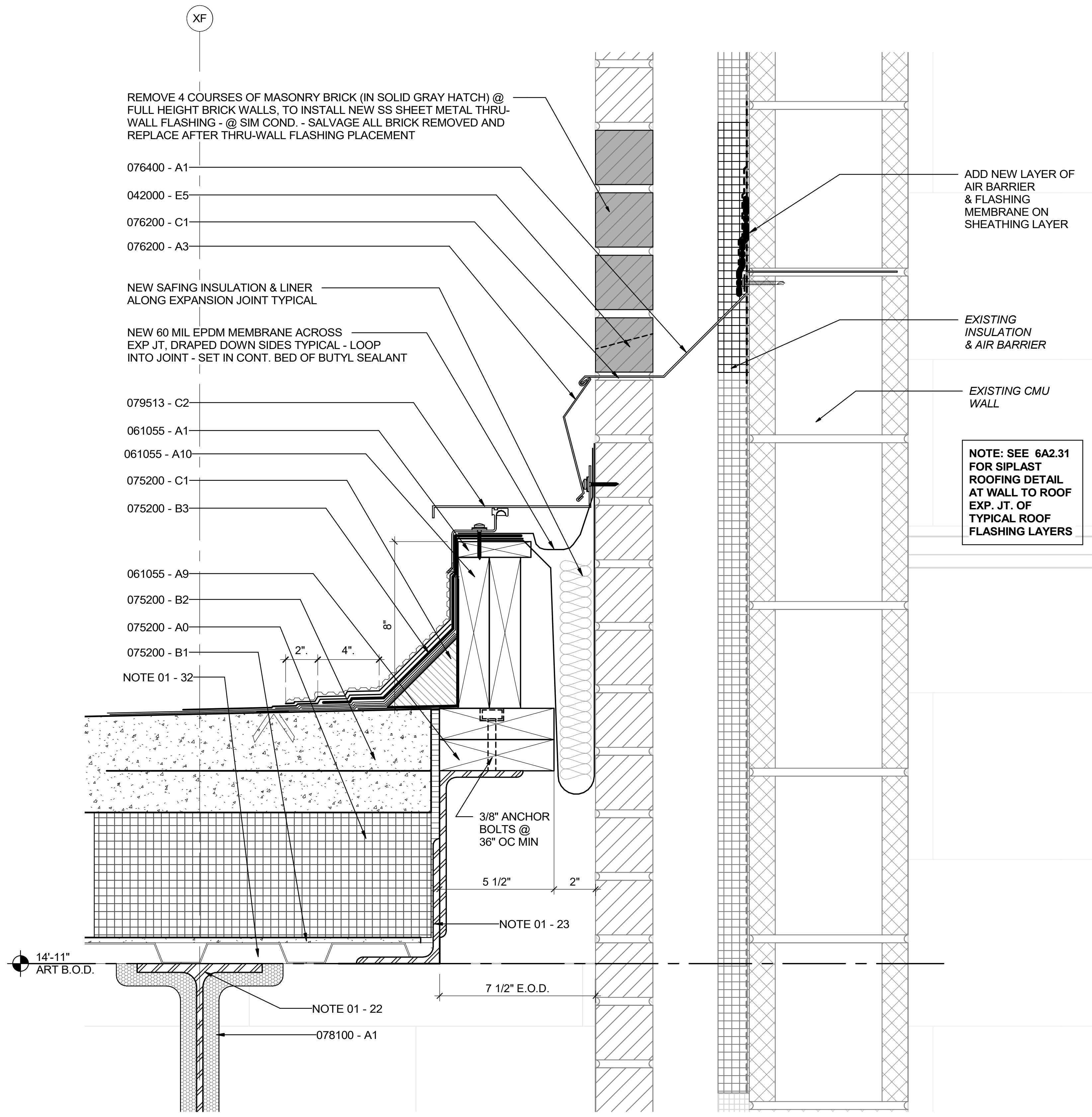
3 ROOF TO ROOF EXP. JT.
3" = 1'-0"



1 WALL SECTION - SCULPTURE
3/4" = 1'-0"



2 WALL SECTION - WELDING
3/4" = 1'-0"



NEW THRU-WALL FLASHING DETAIL @ EXISTING WALL ABOVE ROOF LEVEL BRICK WALLS BETWEEN HI & LO ROOFS

4 ROOF TO WALL EXP. JT.
3" = 1'-0"

CY-LAKES HIGH SCHOOL BRICK LEGEND

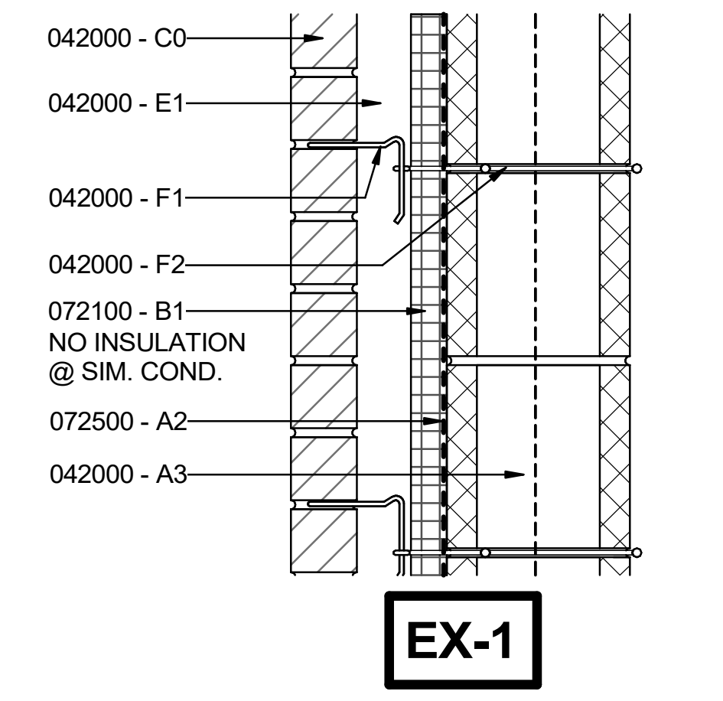
NOTE: FOR VERTICAL HEIGHTS OF BANDING, MATCH EXISTING BUILDING ADJACENT TO NEW ADDITION - SEE WALL SECTIONS FOR DIMENSIONS & DESCRIPTIONS MATCH BRICK LEDGE DEPTH - GC TO VERIFY IN FIELD

A	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING BANDING - LIGHT GRAY **ACME BRICK - DOVE GRAY**
B	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - MEDIUM GRAY **ACME BRICK - PALOMA GRAY**
C	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - WHITE **ACME BRICK - GLACIER WHITE** (ONLY @ MAIN ENTRY INT. WALL)
MJ	MASONRY JOINTS
CJ	WALL CONTROL JOINTS AT NEW TO EXISTING WALL CONNECTION

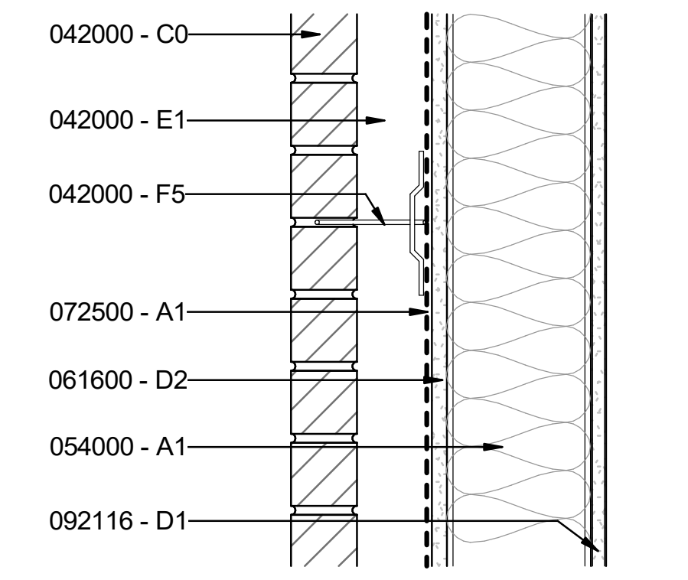
KEYNOTES

042000 - A3	8X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - C0	KING SIZED VENEER FACE BRICK - STRETCHER COURSES (RUNNING BOND) - SEE ELEVATIONS FOR BANDING & COLOR
042000 - E1	AIR SPACE
042000 - E5	WEEP HOLES @ 24" OC - FILLED WITH MOLDED PVC GRILLE, INSECT RESISTANT
042000 - F1	ADJUSTABLE MASONRY VENEER WALL TIES AT 15" O.C. VERTICALLY MAX (16" O.C. STD BRICK) AND 16" O.C. HORIZONTALLY MAX - FOR UNEVEN WYTHES OF BRICK & CMU
042000 - F2	ADJUSTABLE HORIZONTAL TRUSS REINFORCEMENT WITH EYE-WIRE FOR ADJUSTABLE TIES. @ 16" OC VERTICALLY MAX @ CMU - FOR WYTHES OF KING SIZED BRICK & STANDARD CMU
042000 - F5	ADJUSTABLE MASONRY WALL ANCHOR 15" OC EA WAY @ METAL STUD WALLS TYPICAL
054000 - A1	6" METAL STUD WALL FRAMING (CFMF) - RE: STRUCTURAL
061055 - A1	1X TREATED WOOD BLOCKING OR NAILER
061055 - A9	2X6 TREATED WOOD BLOCKING OR NAILER
061055 - A10	2X8 TREATED WOOD BLOCKING OR NAILER
061055 - A11	2X10 TREATED WOOD BLOCKING OR NAILER
061600 - D2	5/8" GLASS-MAT GYPSUM SHEATHING BOARD - TYPE X
072100 - B1	RIGID WALL INSULATION - 1-1/2" THICK IN WALL CAVITY - RE: SPECS
072100 - B2	RIGID ROOF INSULATION RE: ROOFING SPECS
072500 - A1	FLUID APPLIED AIR BARRIER OVER EXTERIOR SHEATHING
072500 - A2	FLUID APPLIED AIR BARRIER OVER EXTERIOR CMU
075200 - A0	SBS-MODIFIED BITUMINOUS MEMBRANE ROOFING OVER LIGHTWEIGHT INSULATED CONCRETE & SLOTTED METAL DECK SYSTEM, SLOPED 1/4" PER FOOT MIN. TO INTERNAL AND OVERFLOW DRAINS - RE: SPECS
075200 - B1	LIGHTWEIGHT INSULATING CONCRETE OVER SLOTTED METAL DECK
075200 - B2	TAPERED LIGHTWEIGHT INSULATING CONCRETE, SLOPED TO INTERNAL DRAINS ON ROOF
075200 - B3	FULLY ADHERED MEMBRANE FLASHING
075200 - C1	NON-COMBUSTIBLE CANT
075201 - A0	SBS-MODIFIED BITUMINOUS MEMBRANE OVERLAY, INCLUDING MULTI-PLY MEMBRANE ROOFING WITH GRANULE SURFACED TOP SHEET PLACED OVER PREPARED EXISTING ROOF SUBSTRATE, WITH NEW ALUMINUM FACED MEMBRANE FLASHING SYSTEM & NEW SHEET METAL COMPONENTS LIKE GRAVEL GUARD EDGES, RAISED METAL EDGES, EXPANSION JOINT COVERS, METAL CURBS, METAL PENETRATION FLASHING, METAL WALL FLASHINGS, ETC. - RE: 075200 FOR SPECIFIC MATERIALS AND SPECS
076200 - A3	METAL COUNTER FLASHING
076200 - C1	METAL THRU-WALL FLASHING
076400 - A1	COMBINATION FLEXIBLE SHEET FLASHING (076500), MORTAR DEFLECTION, & WEEP AS COMPLETE ONE-STEP SYSTEM RE: SPECS
078100 - A1	APPLIED FIRE-PROOFING TO STRUCTURAL ELEMENTS - RE: SPECIFICATIONS
079513 - C1	MANUFACTURED CURB MOUNTED EXTERIOR EXPANSION JOINT COVER W/ CENTERING BAR, AT ROOF TO ROOF CONNECTION - RE: SPECIFICATIONS
079513 - C2	MANUFACTURED CURB MOUNTED EXTERIOR EXPANSION JOINT COVER, AT ROOF TO WALL CONNECTION - RE: SPECIFICATIONS
092116 - D1	5/8" GYPSUM BOARD FINISH - RE: SPECS
NOTE 01 - 22	STEEL BEAM - RE: STRUCTURAL
NOTE 01 - 23	STEEL ANGLE - RE: STRUCTURAL
NOTE 01 - 32	METAL ROOF DECK - RE: STRUCTURAL

EXTERIOR WALL TYPE KEY LEGEND



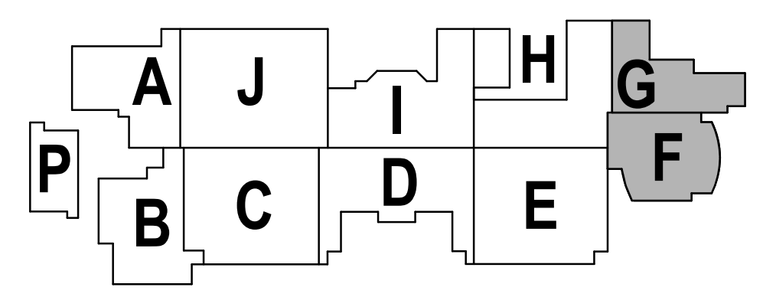
EX-1



NOTE:
ALL INTERIOR WALL TYPES ARE FOUND ON SHEET A4.20

EX-2

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

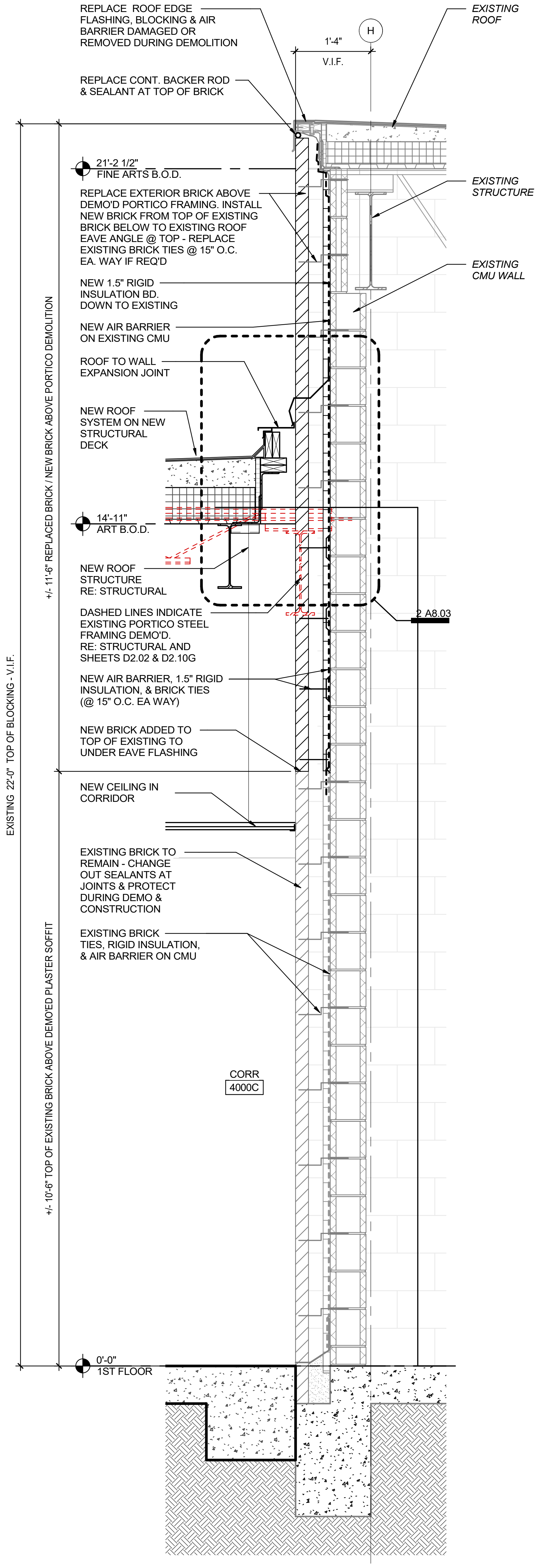
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

WALL SECTIONS & DETAILS

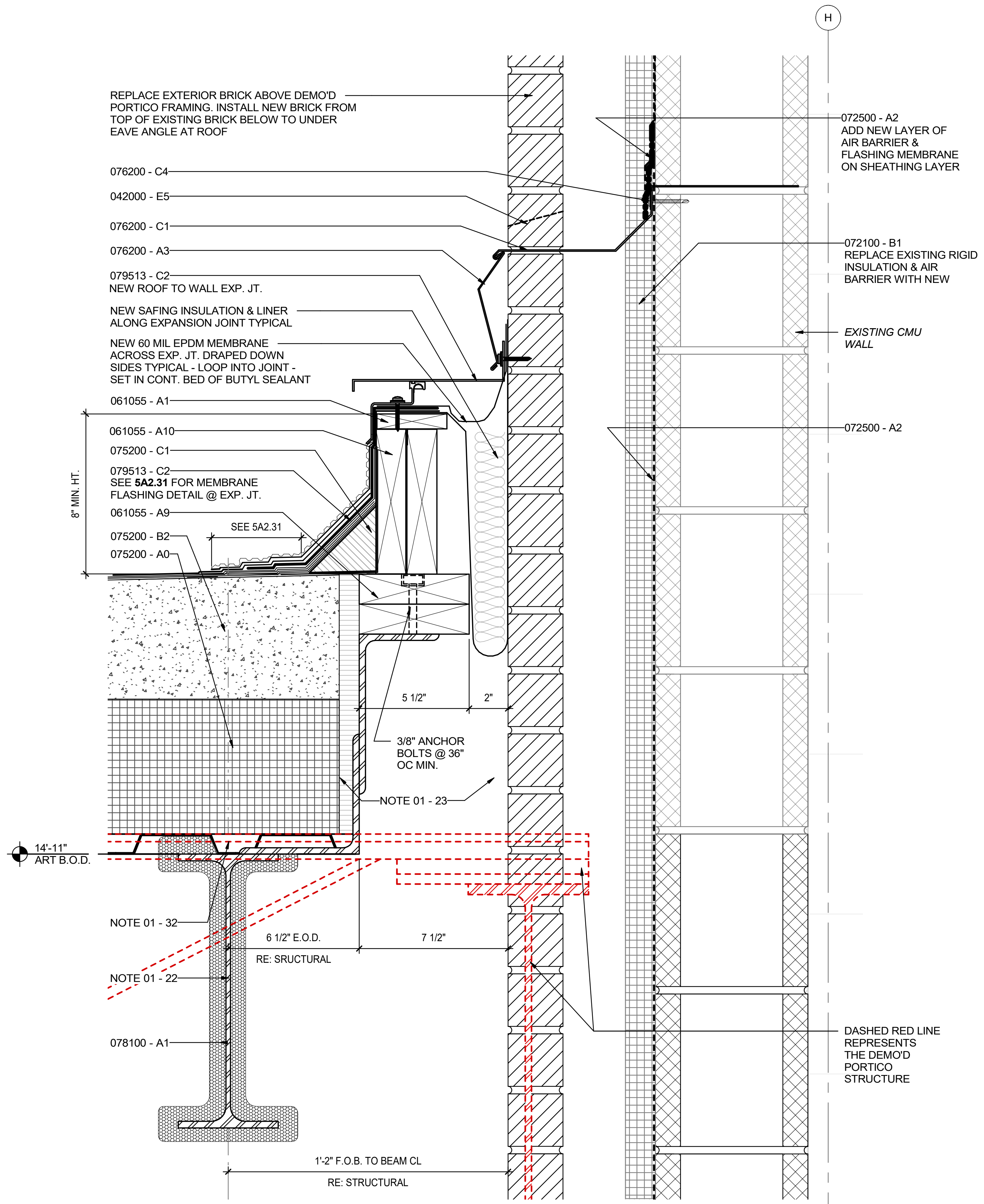
A8.02
____ of ____

11/14/2024 1:37:11 PM



1 WALL SECTION - DEMOLISHED PORTICO

3/4" = 1'-0"



2 EXPANSION JOINT - DEMOLISHED PORTICO

3" = 1'-0"

CY-LAKES HIGH SCHOOL BRICK LEGEND

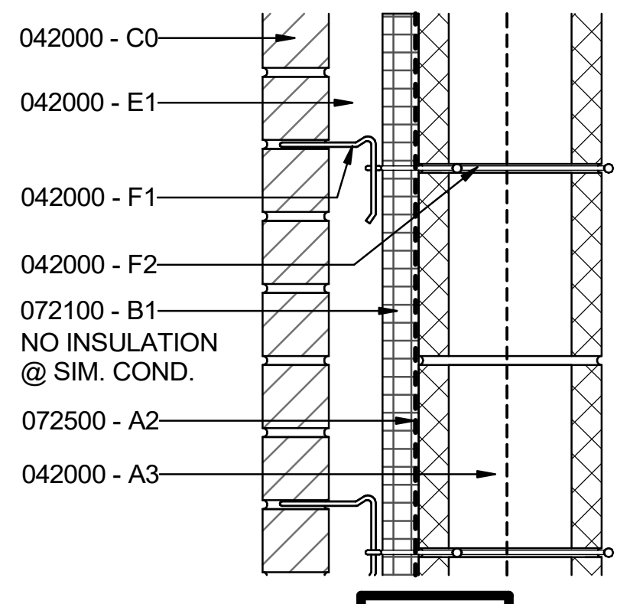
NOTE: FOR VERTICAL HEIGHTS OF BANDING, MATCH EXISTING BUILDING ADJACENT TO NEW ADDITION - SEE WALL SECTIONS FOR DIMENSIONS & DESCRIPTIONS MATCH BRICK LEDGE DEPTH - GC TO VERIFY IN FIELD

A	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING BANDING - LIGHT GRAY **ACME BRICK - DOVE GRAY**
B	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - MEDIUM GRAY **ACME BRICK - PALOMA GRAY**
C	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - WHITE **ACME BRICK - GLACIER WHITE** (ONLY @ MAIN ENTRY INT. WALL)
MJ	MASONRY JOINTS
CJ	WALL CONTROL JOINTS AT NEW TO EXISTING WALL CONNECTION

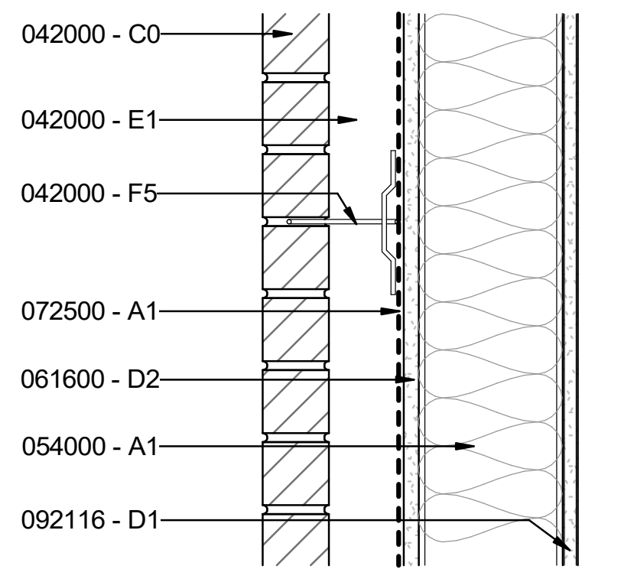
KEYNOTES

042000 - A3	8X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - C0	KING SIZED VENEER FACE BRICK - STRETCHER COURSES (RUNNING BOND) - SEE ELEVATIONS FOR BANDING & COLOR
042000 - E1	AIR SPACE
042000 - E5	WEEP HOLES @ 24" OC - FILLED WITH MOLDED PVC GRILLE, INSECT RESISTANT
042000 - F1	ADJUSTABLE MASONRY VENEER WALL TIES AT 15" O.C. VERTICALLY MAX (16" O.C. STD BRICK) AND 16" O.C. HORIZONTALLY MAX - FOR UNEVEN WYTHES OF BRICK & CMU
042000 - F2	ADJUSTABLE HORIZONTAL TRUSS REINFORCEMENT WITH EYE-WIRE FOR ADJUSTABLE TIES. @ 16" OC VERTICALLY MAX @ CMU - FOR WYTHES OF KING SIZED BRICK & STANDARD CMU
042000 - F5	ADJUSTABLE MASONRY WALL ANCHOR 15" OC EA WAY @ METAL STUD WALLS TYPICAL
054000 - A1	6" METAL STUD WALL FRAMING (CFMF) - RE: STRUCTURAL
061055 - A1	1X TREATED WOOD BLOCKING OR NAILER
061055 - A9	2X6 TREATED WOOD BLOCKING OR NAILER
061055 - A10	2X8 TREATED WOOD BLOCKING OR NAILER
061600 - D2	5/8" GLASS-MAT GYPSUM SHEATHING BOARD - TYPE X
072100 - B1	RIGID WALL INSULATION - 1-1/2" THICK IN WALL CAVITY - RE: SPECS
072500 - A1	FLUID APPLIED AIR BARRIER OVER EXTERIOR SHEATHING
072500 - A2	FLUID APPLIED AIR BARRIER OVER EXTERIOR CMU
075200 - A0	SBS-MODIFIED BITUMINOUS MEMBRANE ROOFING OVER LIGHTWEIGHT INSULATED CONCRETE & SLOTTED METAL DECK SYSTEM, SLOPED 1/4" PER FOOT MIN. TO INTERNAL AND OVERFLOW DRAINS - RE: SPECS
075200 - B2	TAPERED LIGHTWEIGHT INSULATING CONCRETE, SLOPED TO INTERNAL DRAINS ON ROOF
075200 - C1	NON-COMBUSTIBLE CANT
076200 - A3	METAL COUNTER FLASHING
076200 - C1	METAL THRU-WALL FLASHING
076200 - C4	TERMINATION BAR WITH CONTINUOUS BEAD OF SEALANT (AS REQ'D AT THRU WALL FLASHING)
078100 - A1	APPLIED FIRE-PROOFING TO STRUCTURAL ELEMENTS - RE: SPECIFICATIONS
079513 - C2	MANUFACTURED CURB MOUNTED EXTERIOR EXPANSION JOINT COVER, AT ROOF TO WALL CONNECTION - RE: SPECIFICATIONS
092116 - D1	5/8" GYPSUM BOARD FINISH - RE: SPECS
NOTE 01 - 22	STEEL BEAM - RE: STRUCTURAL
NOTE 01 - 23	STEEL ANGLE - RE: STRUCTURAL
NOTE 01 - 32	METAL ROOF DECK - RE: STRUCTURAL

EXTERIOR WALL TYPE KEY LEGEND



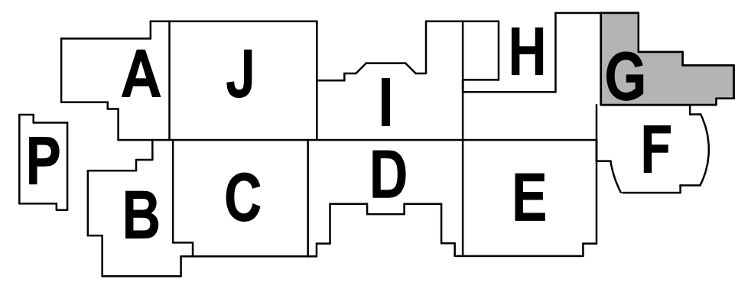
EX-1



NOTE:
ALL INTERIOR WALL TYPES ARE FOUND ON SHEET A4.20

EX-2

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

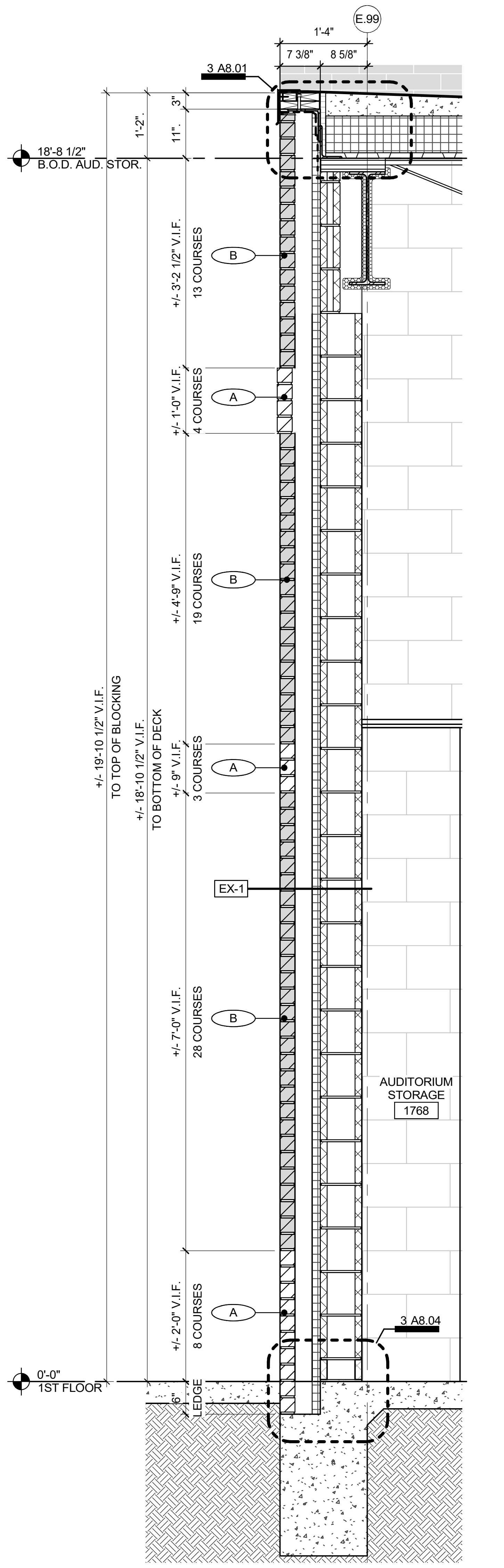
WALL SECTIONS & DETAILS

A8.03

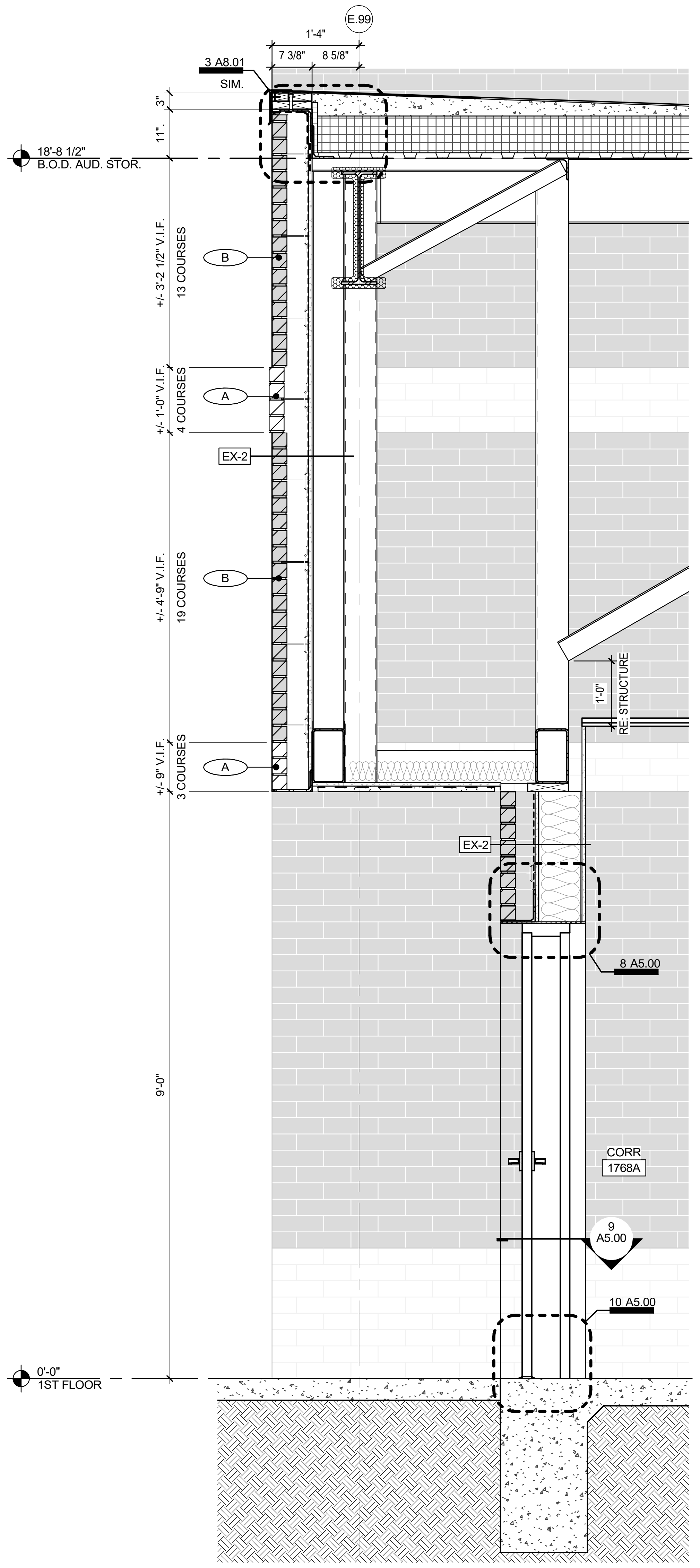
____ of ____

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

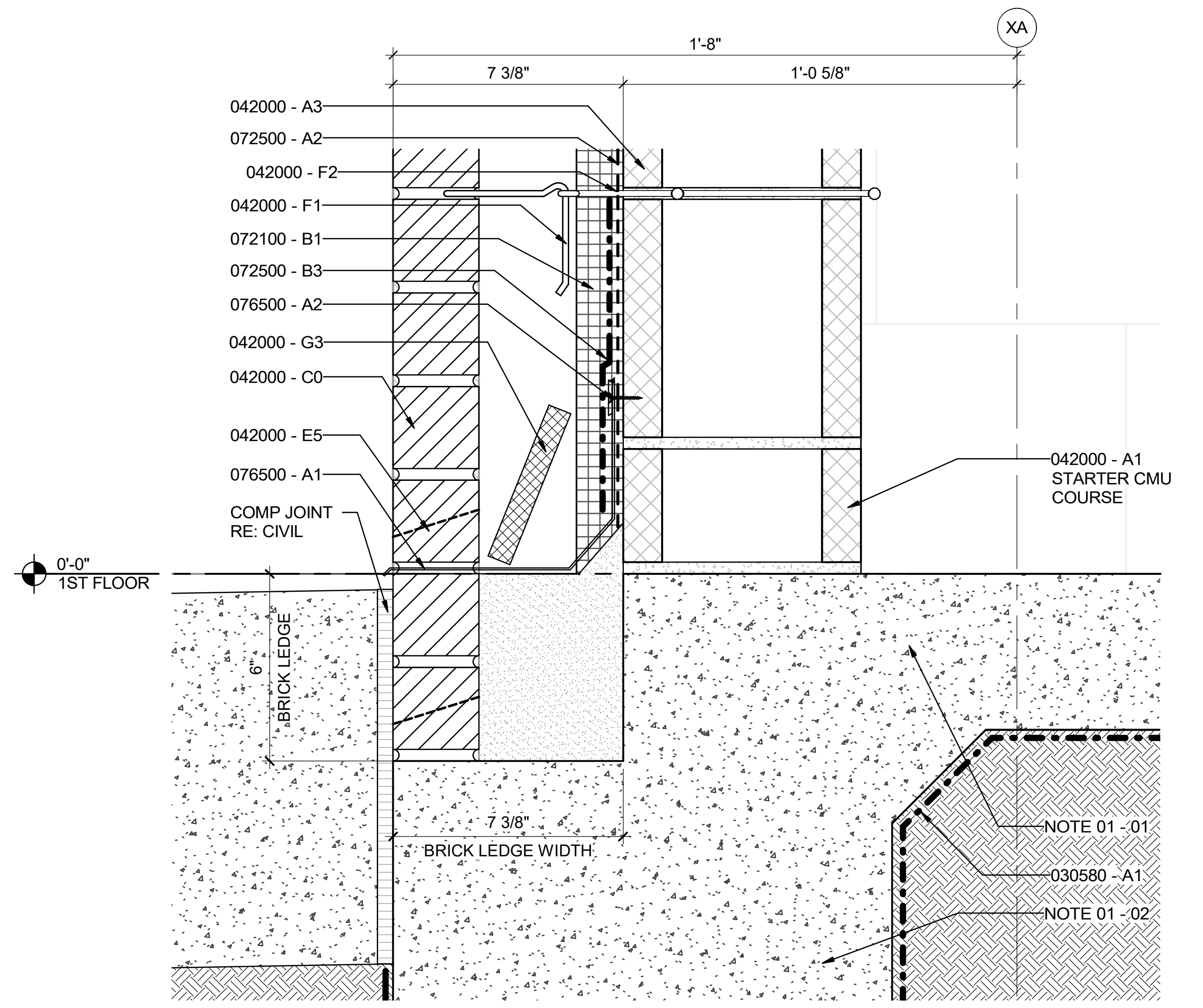
11/14/2024 1:37:16 PM



1 WALL SECTION - AUDITORIUM STOR.
3/4" = 1'-0"



2 WALL SECTION - AUDITORIUM STOR.
3/4" = 1'-0"



3 FOUNDATION DETAIL - FINE ARTS
3" = 1'-0"

CY-LAKES HIGH SCHOOL BRICK LEGEND

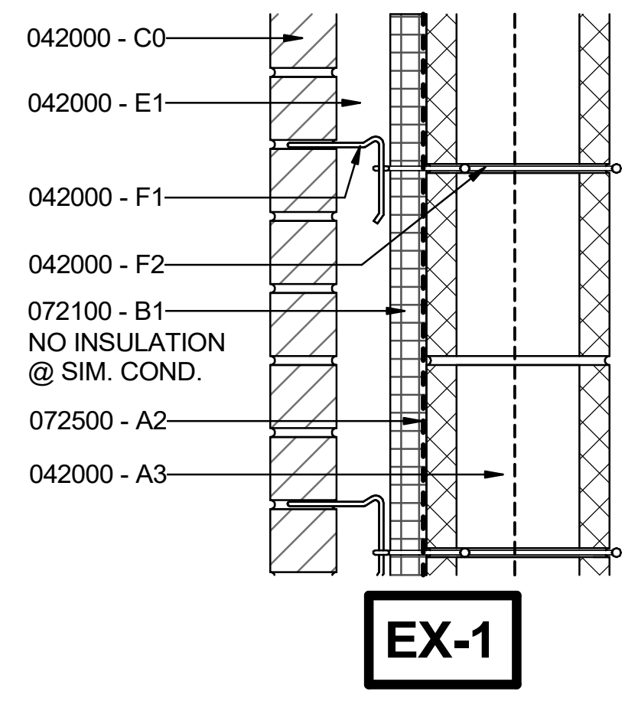
NOTE: FOR VERTICAL HEIGHTS OF BANDING, MATCH EXISTING BUILDING ADJACENT TO NEW ADDITION - SEE WALL SECTIONS FOR DIMENSIONS & DESCRIPTIONS MATCH BRICK LEDGE DEPTH - GC TO VERIFY IN FIELD

▦ A	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING BANDING - LIGHT GRAY **ACME BRICK - DOVE GRAY**
▦ B	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - MEDIUM GRAY **ACME BRICK - PALOMA GRAY**
▦ C	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - WHITE **ACME BRICK - GLACIER WHITE** (ONLY @ MAIN ENTRY INT. WALL)
MJ ━	MASONRY JOINTS
CJ ▭	WALL CONTROL JOINTS AT NEW TO EXISTING WALL CONNECTION

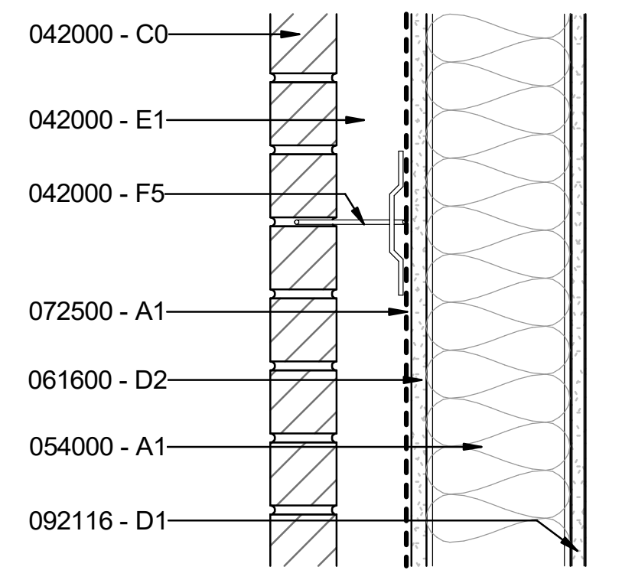
KEYNOTES

030580 - A1	UNDER-SLAB VAPOR RETARDER / BARRIER; RE: SPECIFICATIONS
042000 - A1	4X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - A3	8X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - C0	KING SIZED VENEER FACE BRICK - STRETCHER COURSES (RUNNING BOND) - SEE ELEVATIONS FOR BANDING & COLOR
042000 - E1	AIR SPACE
042000 - E5	WEEP HOLES @ 24" OC - FILLED WITH MOLDED PVC GRILLE, INSECT RESISTANT
042000 - F1	ADJUSTABLE MASONRY VENEER WALL TIES AT 15" O.C. VERTICALLY MAX (16" O.C. STD BRICK) AND 16" O.C. HORIZONTALLY MAX - FOR UNEVEN WYTHES OF BRICK & CMU
042000 - F2	ADJUSTABLE HORIZONTAL TRUSS REINFORCEMENT WITH EYE-WIRE FOR ADJUSTABLE TIES. @ 16" OC VERTICALLY MAX @ CMU - FOR WYTHES OF KING SIZED BRICK & STANDARD CMU
042000 - F5	ADJUSTABLE MASONRY WALL ANCHOR 15" OC EA WAY @ METAL STUD WALLS TYPICAL
042000 - G3	MORTAR NET TYPICAL AT ALL THRU WALL FLASHING
054000 - A1	6" METAL STUD WALL FRAMING (CFMF) - RE: STRUCTURAL
061600 - D2	5/8" GLASS-MAT GYPSUM SHEATHING BOARD - TYPE X
072100 - B1	RIGID WALL INSULATION - 1-1/2" THICK IN WALL CAVITY - RE: SPECS
072500 - A1	FLUID APPLIED AIR BARRIER OVER EXTERIOR SHEATHING
072500 - A2	FLUID APPLIED AIR BARRIER OVER EXTERIOR CMU
072500 - B3	SELF-ADHERING TRANSITION MEMBRANE @ WALL CONNECTIONS
076500 - A1	FLEXIBLE THRU-WALL FLASHING - STAINLESS STEEL CORE W/ POLYMER FABRIC LAMINATED TO BOTTOM OF SS FACE W/ ADHESIVE
076500 - A2	TERMINATION BAR W/ SELF TAPPING SCREWS
092116 - D1	5/8" GYPSUM BOARD FINISH - RE: SPECS
NOTE 01 - 01	CONCRETE SLAB - RE: STRUCTURAL
NOTE 01 - 02	FOUNDATION - RE: STRUCTURAL

EXTERIOR WALL TYPE KEY LEGEND



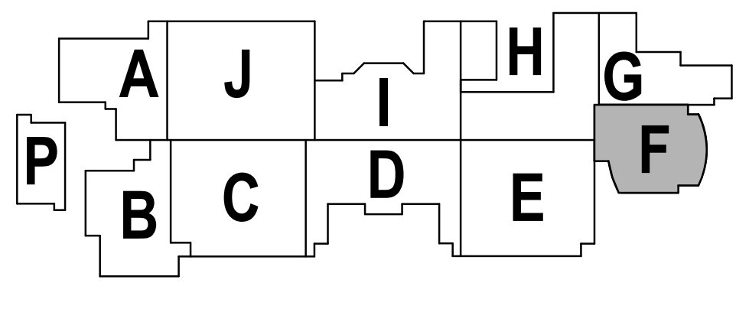
EX-1



NOTE:
ALL INTERIOR WALL TYPES ARE FOUND ON SHEET A4.20

EX-2

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

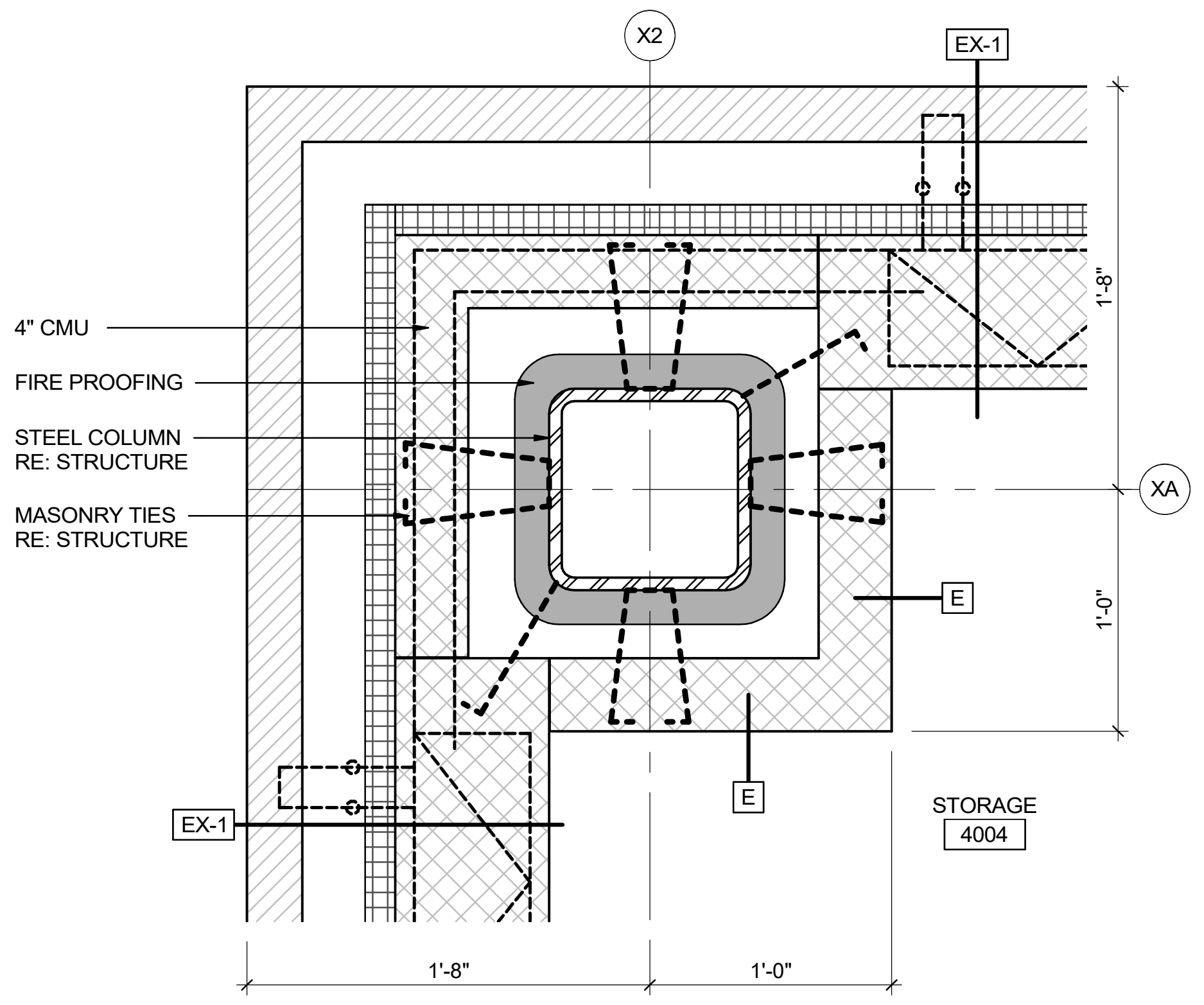
WALL SECTIONS & DETAILS

A8.04
____ of ____

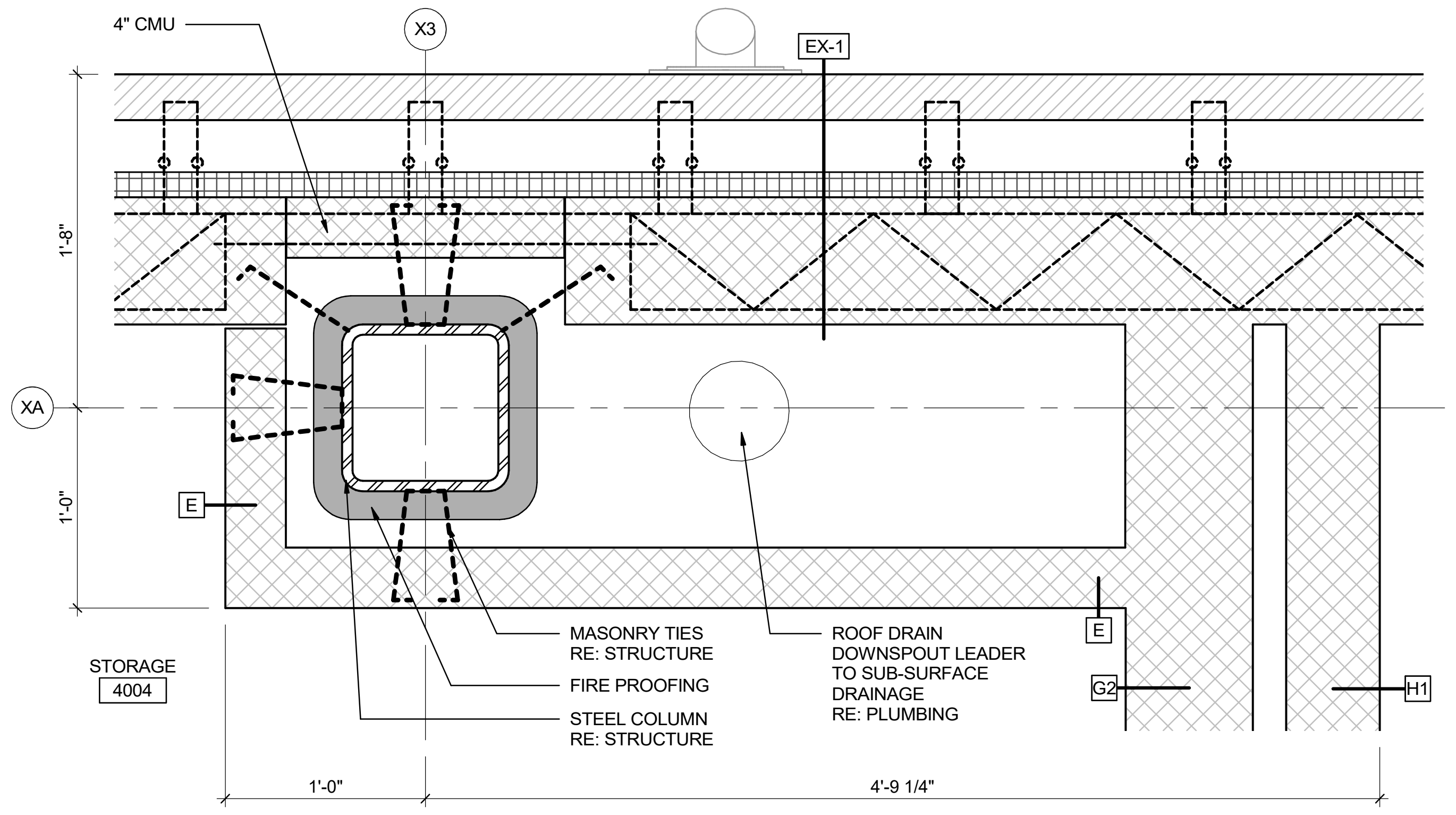
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:37:34 PM

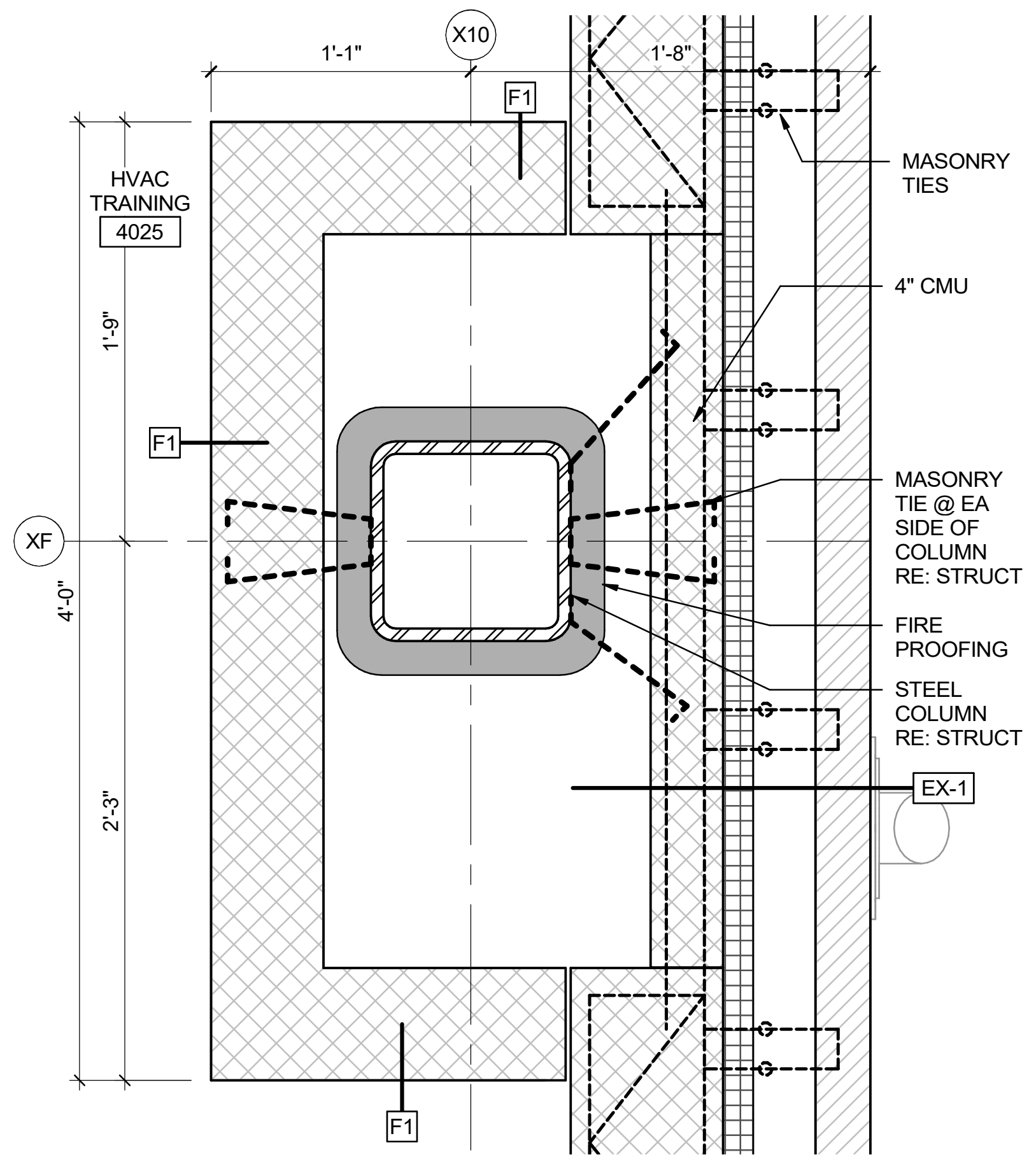
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



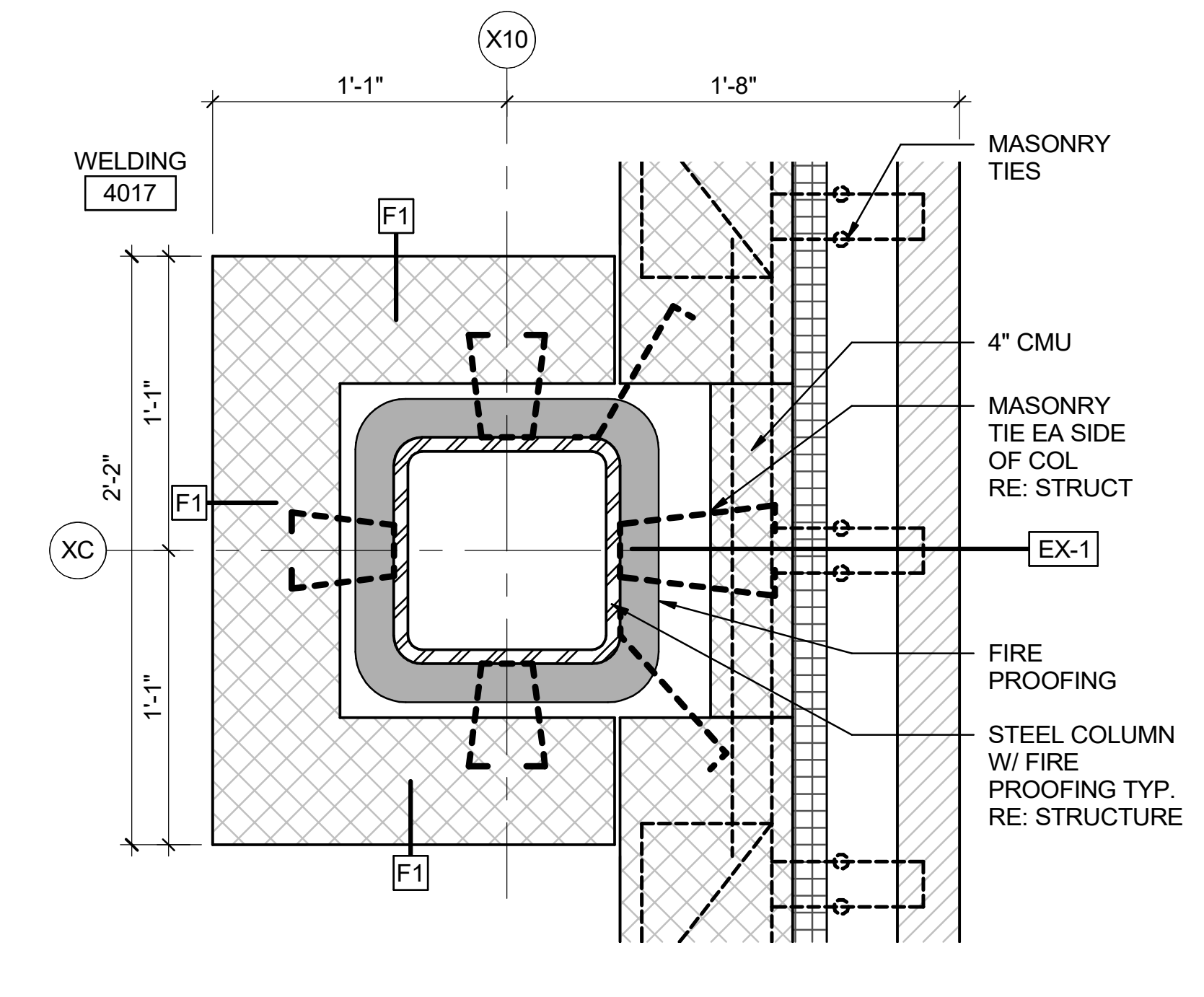
1 PLAN DETAIL - XA + X2
1 1/2" = 1'-0"



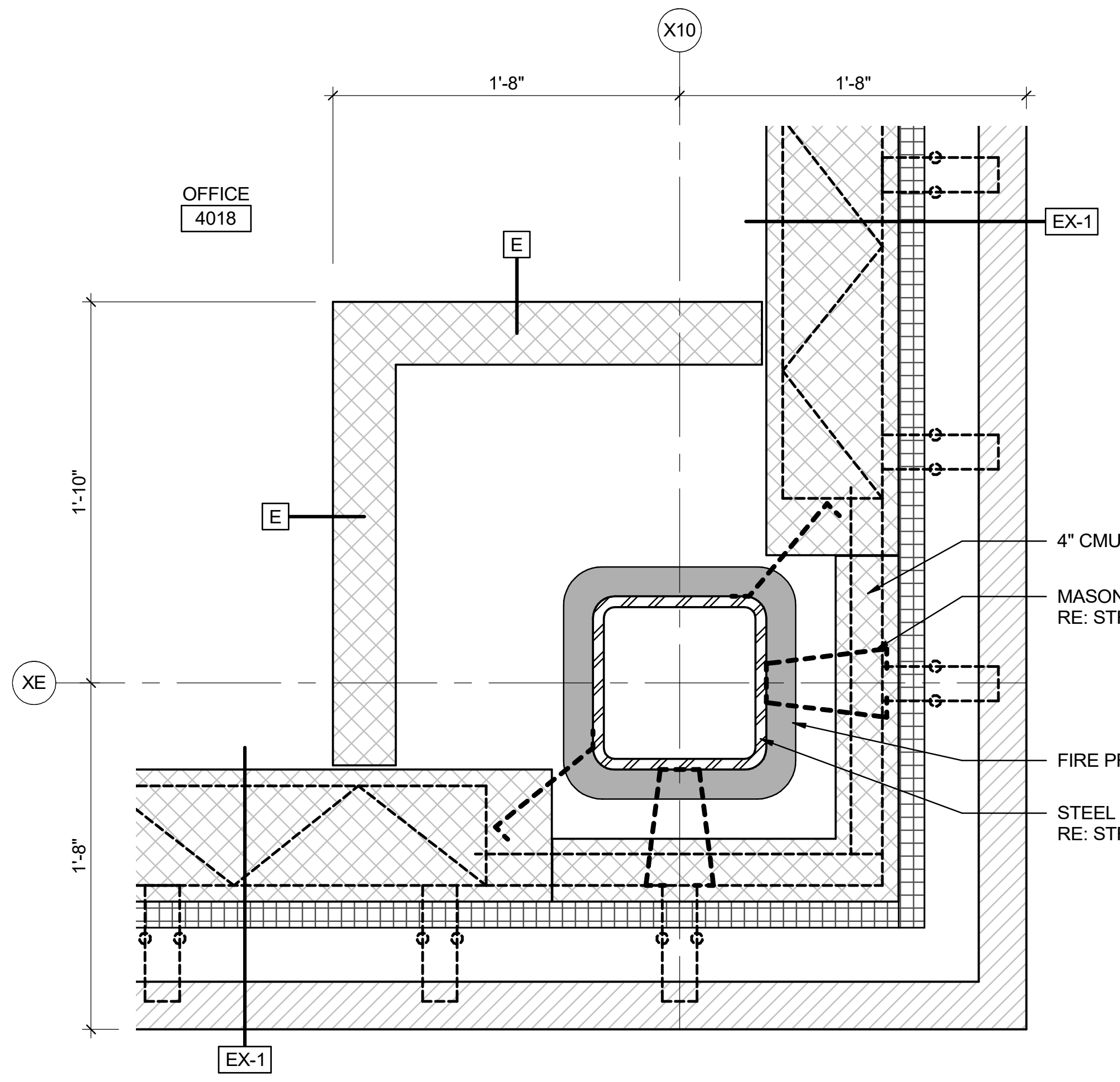
2 PLAN DETAIL - XA + X3
1 1/2" = 1'-0"



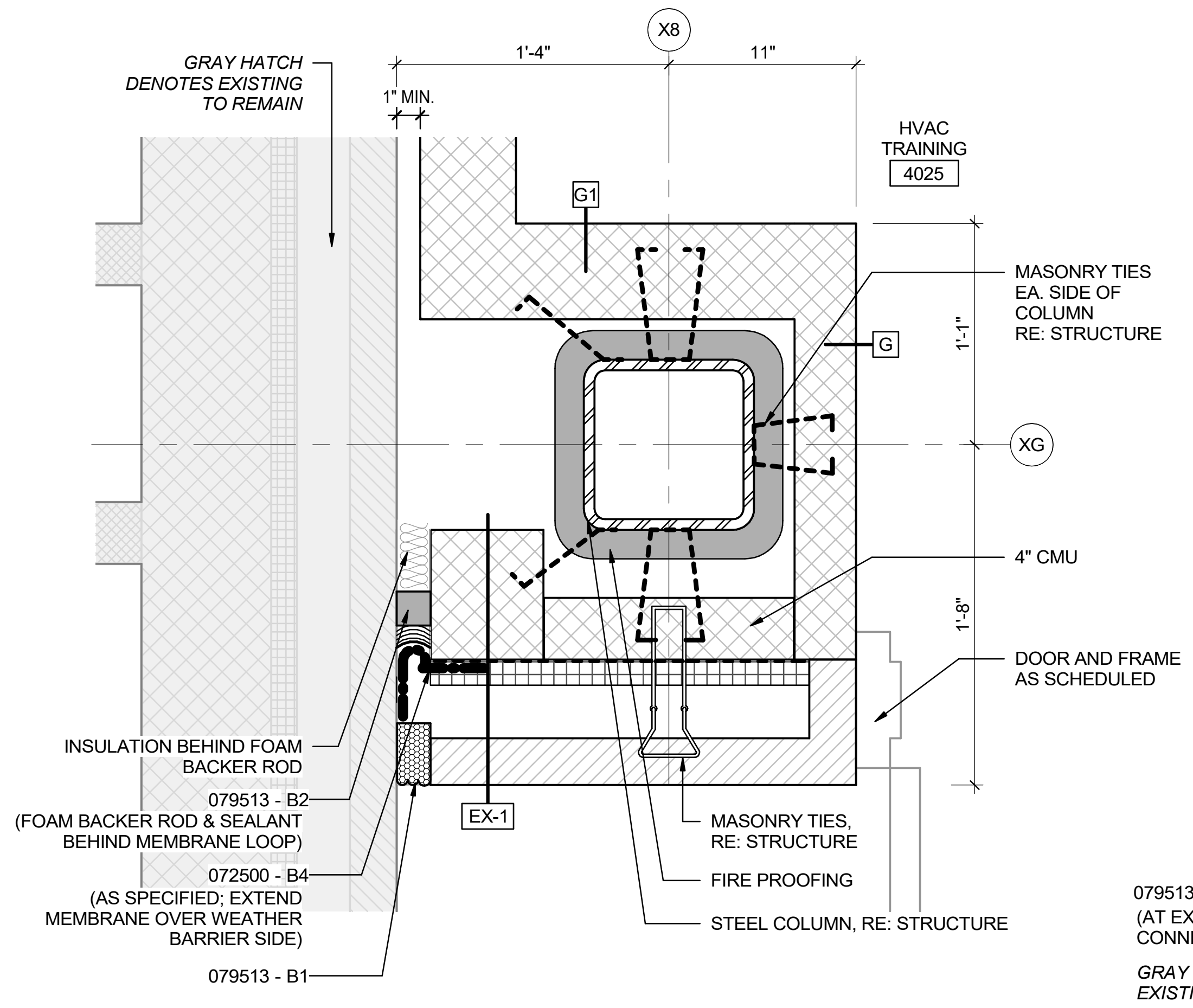
3 PLAN DETAIL - XF + X10
1 1/2" = 1'-0"



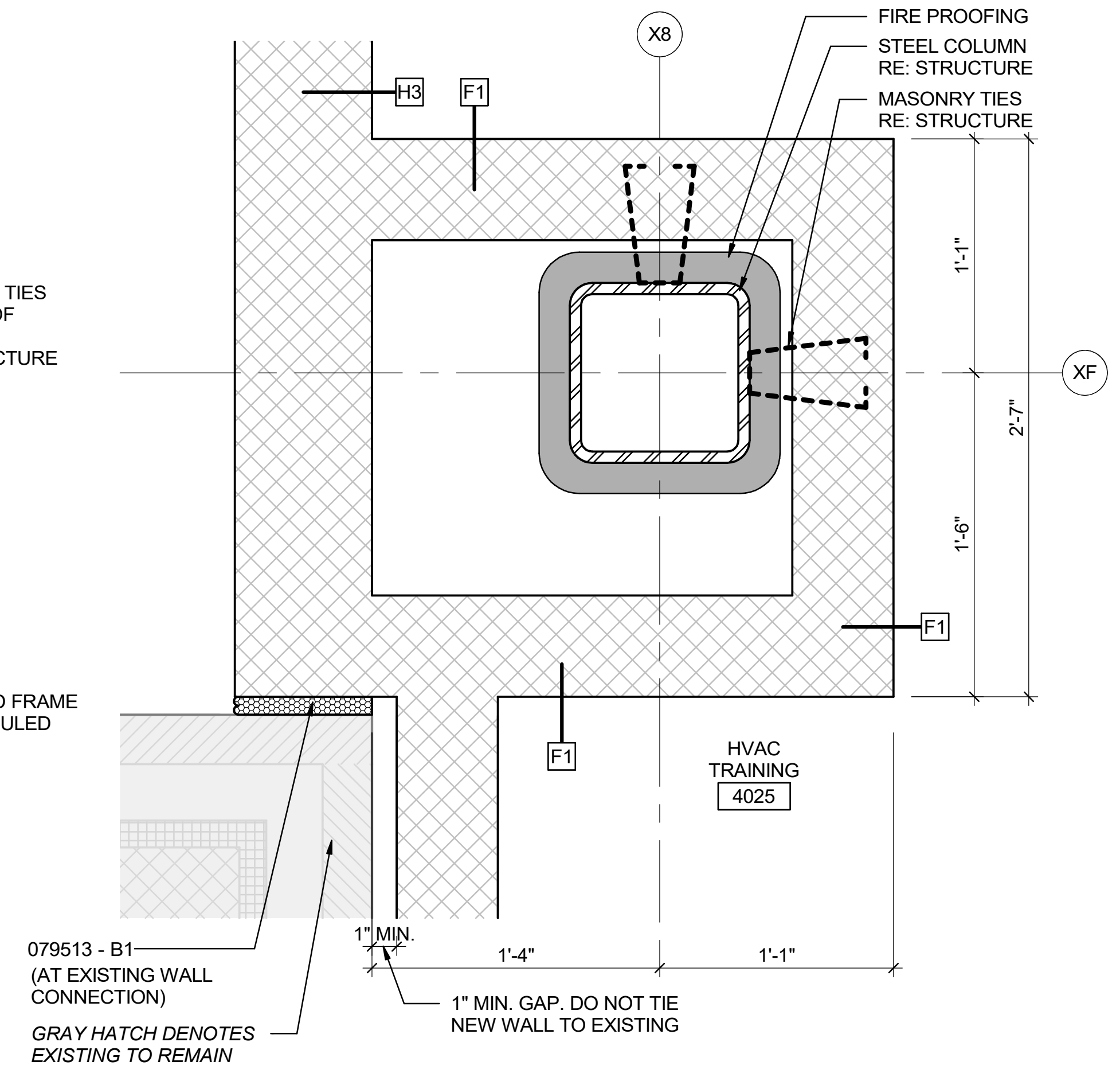
4 PLAN DETAIL - XC + X10
1 1/2" = 1'-0"



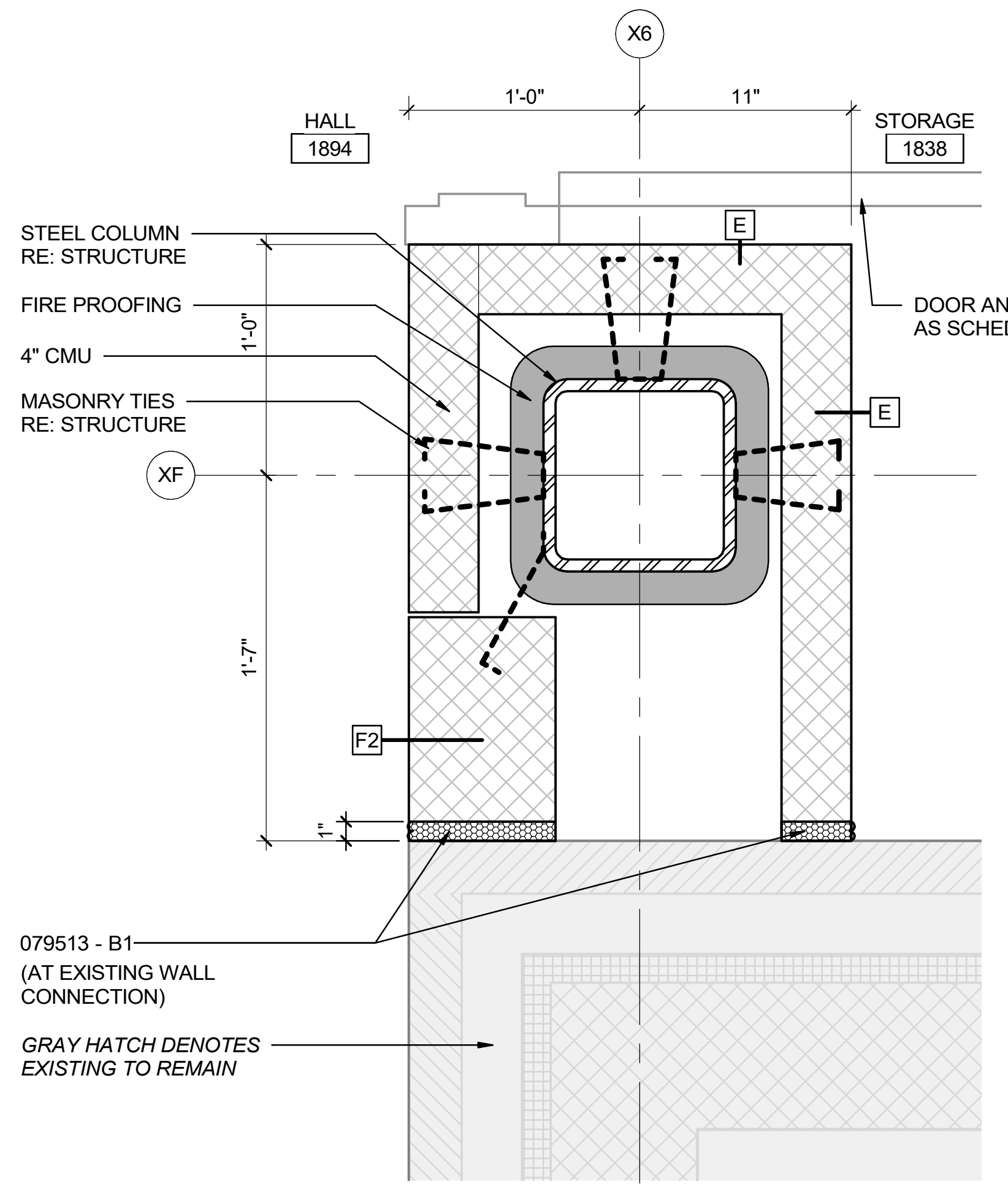
5 PLAN DETAIL - XE + X10
1 1/2" = 1'-0"



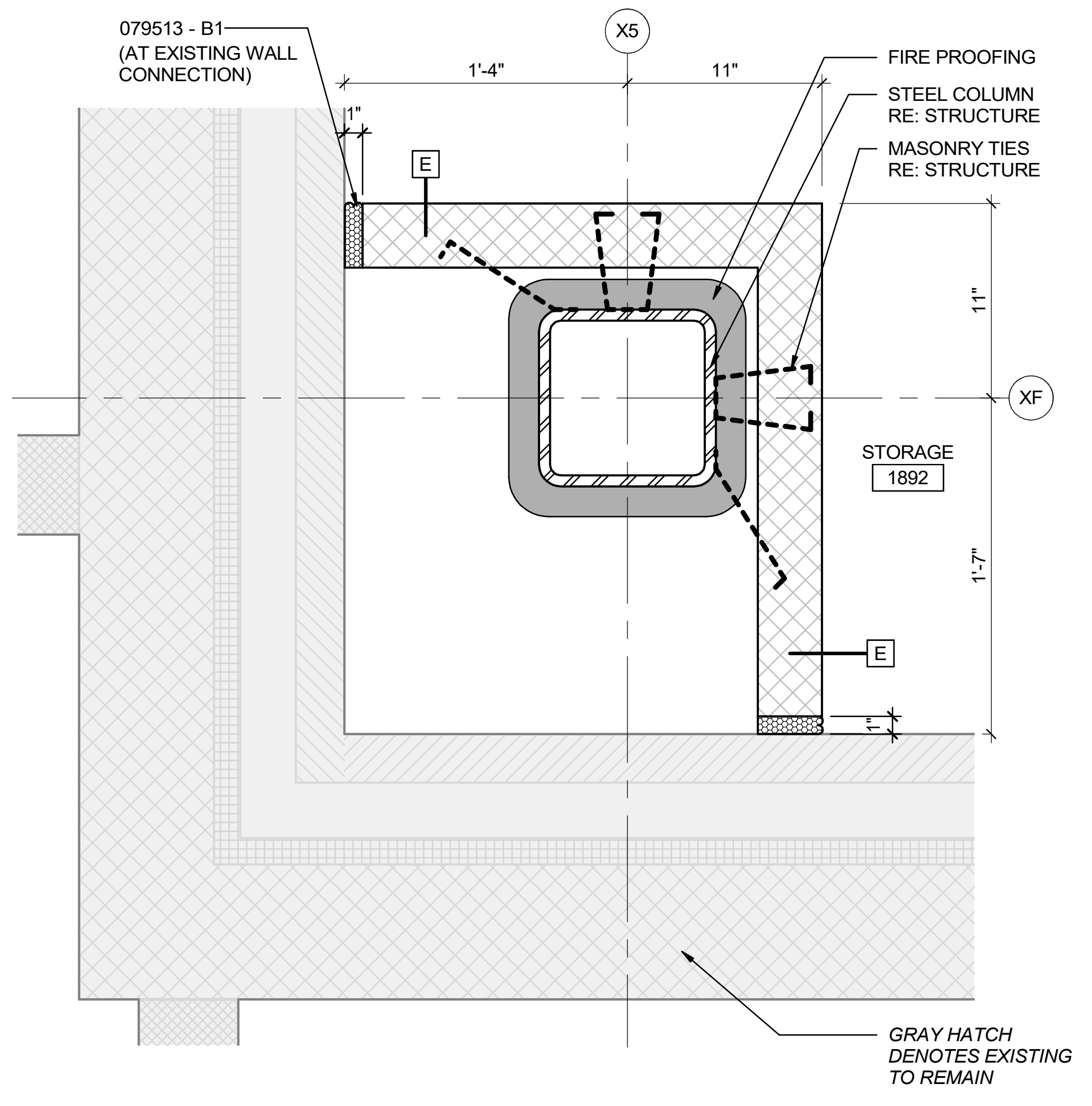
6 PLAN DETAIL - XG + X8
1 1/2" = 1'-0"



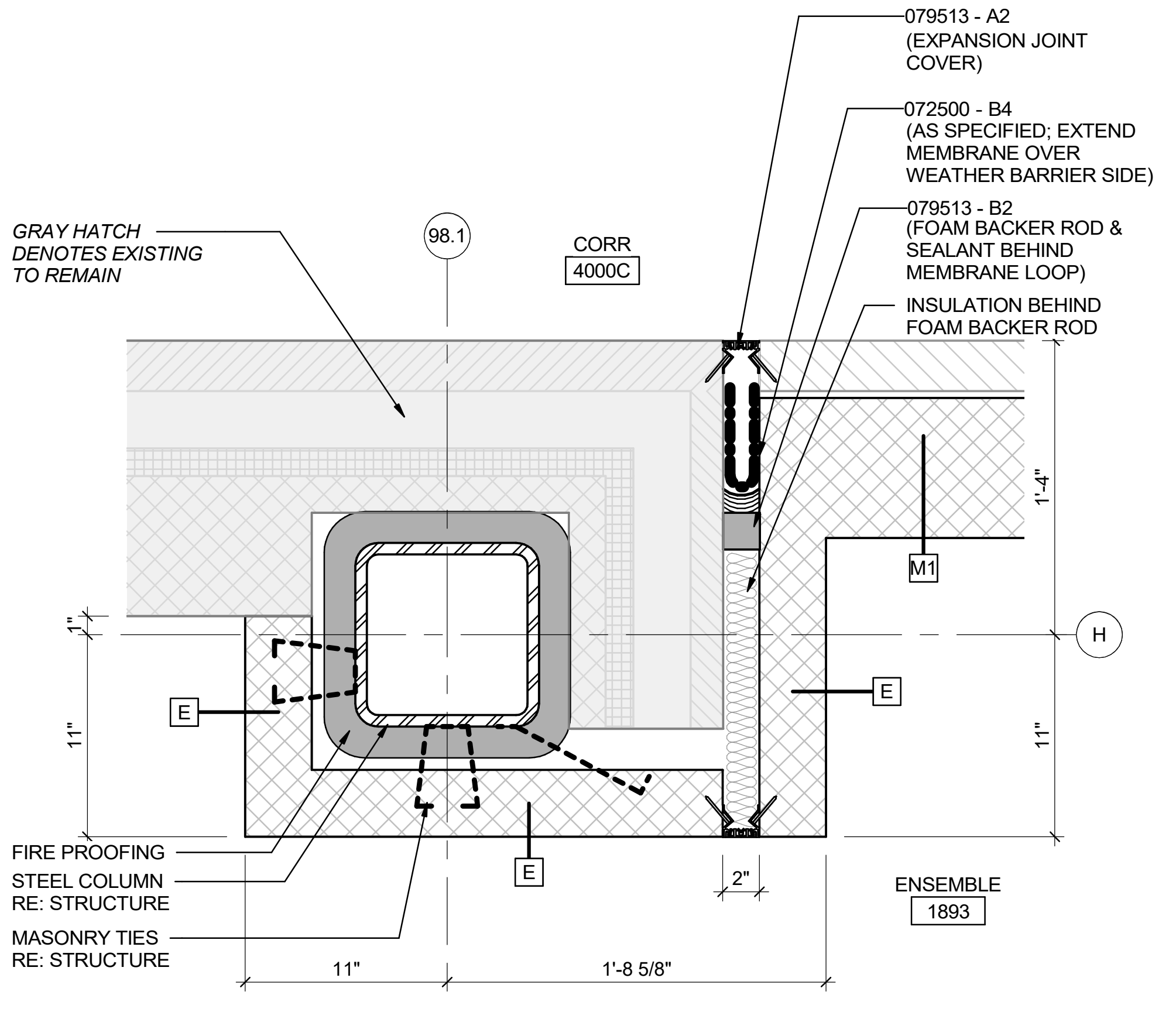
7 PLAN DETAIL - XF + X8
1 1/2" = 1'-0"



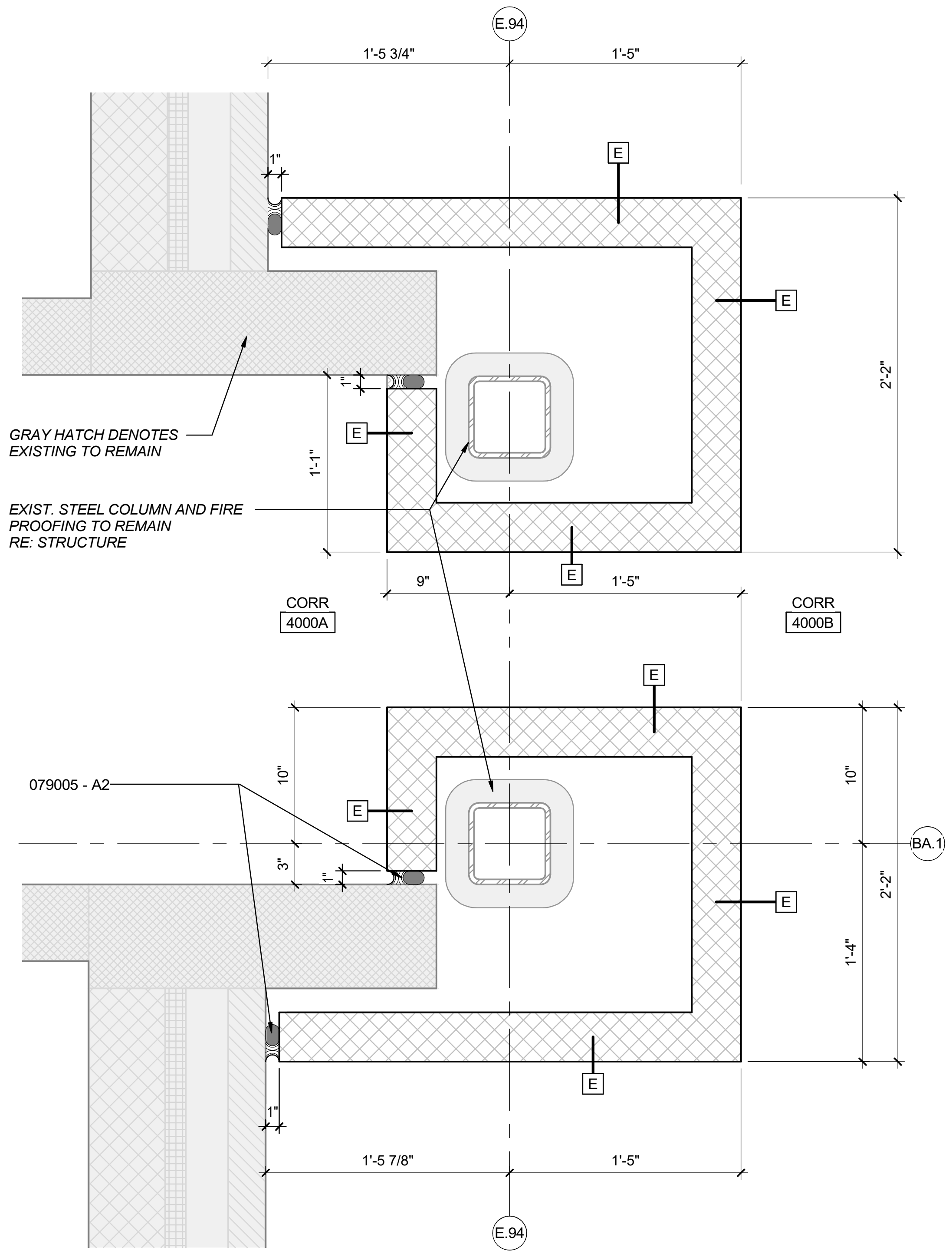
8 PLAN DETAIL - XF + X6
1 1/2" = 1'-0"



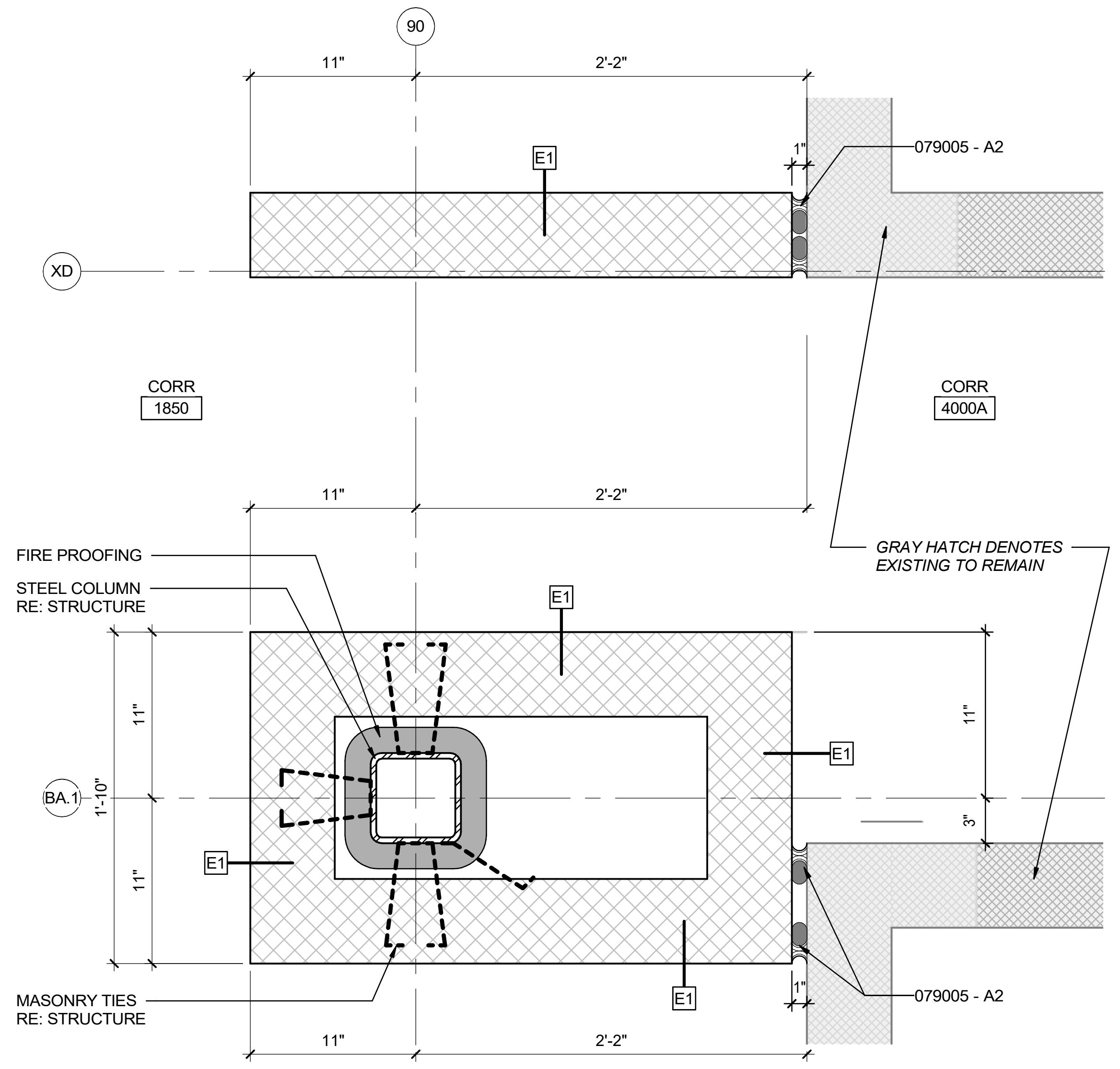
9 PLAN DETAIL - XF + X5
1 1/2" = 1'-0"



10 PLAN DETAIL - H + 98.1
1 1/2" = 1'-0"



11 PLAN DETAIL - 94 & BA.1 + 94
1 1/2" = 1'-0"

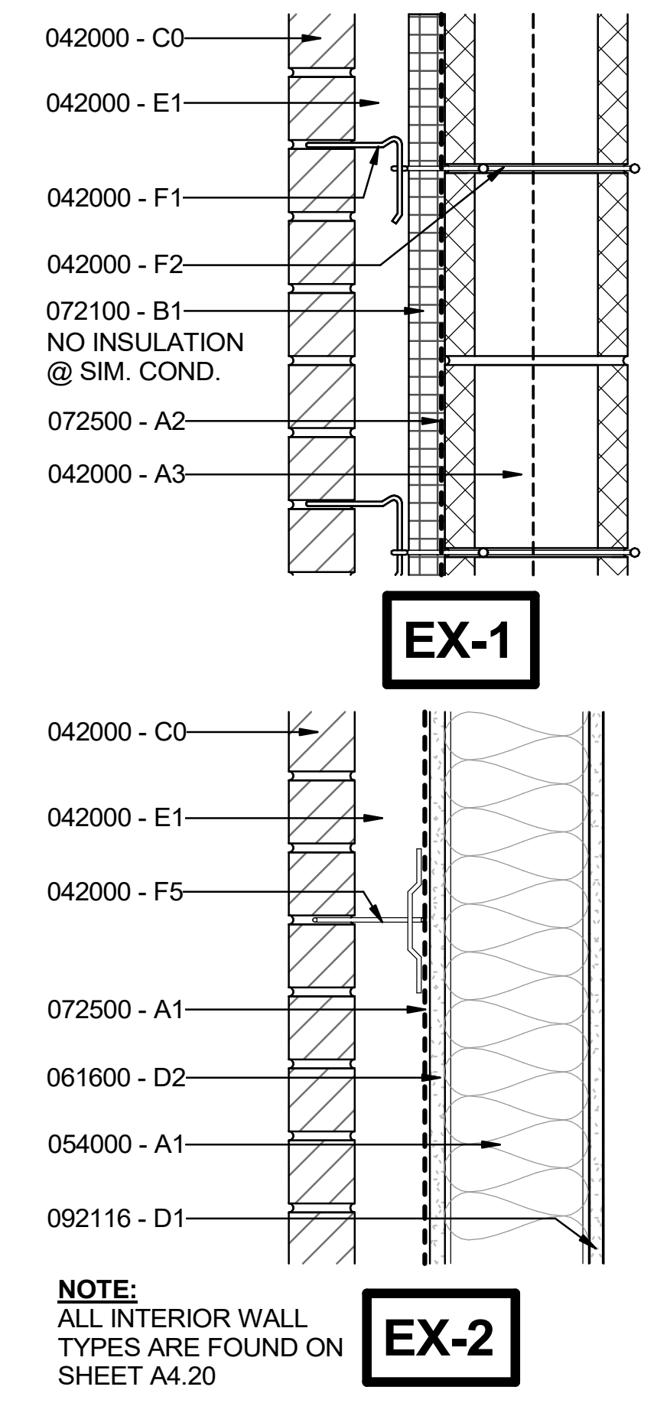


12 PLAN DETAIL - BA.1 + 90
1 1/2" = 1'-0"

KEYNOTES

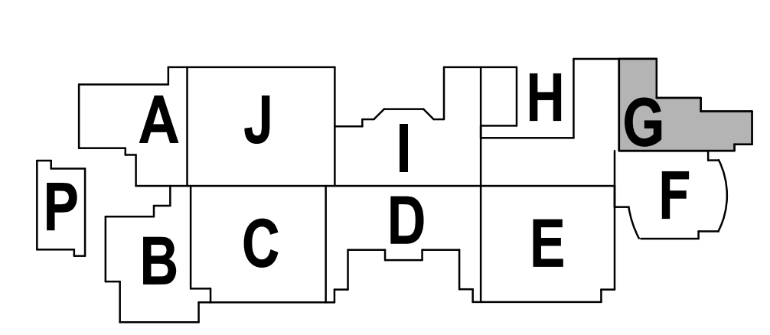
042000 - A3	8X8X16 CONCRETE MASONRY UNIT - RE: STRUCT
042000 - C0	KING SIZED VENEER FACE BRICK - STRETCHER COURSES (RUNNING BOND) - SEE ELEVATIONS FOR BANDING & COLOR
042000 - E1	AIR SPACE
042000 - F1	ADJUSTABLE MASONRY VENEER WALL TIES AT 15" O.C. VERTICALLY MAX (16" O.C. STD BRICK) AND 16" O.C. HORIZONTALLY MAX - FOR UNEVEN WYTHES OF BRICK & CMU
042000 - F2	ADJUSTABLE HORIZONTAL TRUSS REINFORCEMENT WITH EYE-WIRE FOR ADJUSTABLE TIES. @ 16" OC VERTICALLY MAX @ CMU - FOR WYTHES OF KING SIZED BRICK & STANDARD CMU
042000 - F5	ADJUSTABLE MASONRY WALL ANCHOR 15" OC EA WAY @ METAL STUD WALLS TYPICAL
054000 - A1	6" METAL STUD WALL FRAMING (CFMF) - RE: STRUCTURAL
061600 - D2	5/8" GLASS-MAT GYPSUM SHEATHING BOARD - TYPE X
072100 - B1	RIGID WALL INSULATION - 1-1/2" THICK IN WALL CAVITY - RE: SPECS
072500 - A1	FLUID APPLIED AIR BARRIER OVER EXTERIOR SHEATHING
072500 - A2	FLUID APPLIED AIR BARRIER OVER EXTERIOR CMU
072500 - B4	SELF-ADHERING TRANSITION MEMBRANE LOOPED INTO EXPANSION JOINT @ NEW & EXISTING WALL CONNECTION
079005 - A2	JOINT SEALANT AND CYLINDRICAL SEALANT BACKING
079513 - A2	WALL EXPANSION JOINT COVER ASSEMBLY - SINGLE GASKET EXPANSION JOINT COVER; RE: SPECIFICATIONS - INPRO 118 SERIES A07 FOR WALL TO WALL COVER
079513 - B1	EXPANDABLE WALL EXPANSION JOINT; HIGH DENSITY, OPEN MICRO-CELL IMPREGNATED POLYURETHANE FOAM WITH A FACTORY-APPLIED SILICONE - SEAL COLOR TBD BY ARCHITECT; RE: SPECIFICATIONS - EMSEAL SEISMIC COLORSEAL OR EMSHIELD SECURITY SEAL SSW2
079513 - B2	BACKER & SEALANT; SEALANT OVER A PRE-COMPRESSED FOAM SELF EXPANDING BACKER SEAL BEHIND FIELD APPLIED LIQUID SEALANT @ WALL CONTROL / EXPANSION JOINTS - EMSEAL BACKER SEAL & CAULK - SEE SPECIFICATIONS
092116 - D1	5/8" GYPSUM BOARD FINISH - RE: SPECS

EXTERIOR WALL TYPE KEY LEGEND



NOTE:
ALL INTERIOR WALL TYPES ARE FOUND ON SHEET A4.20

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

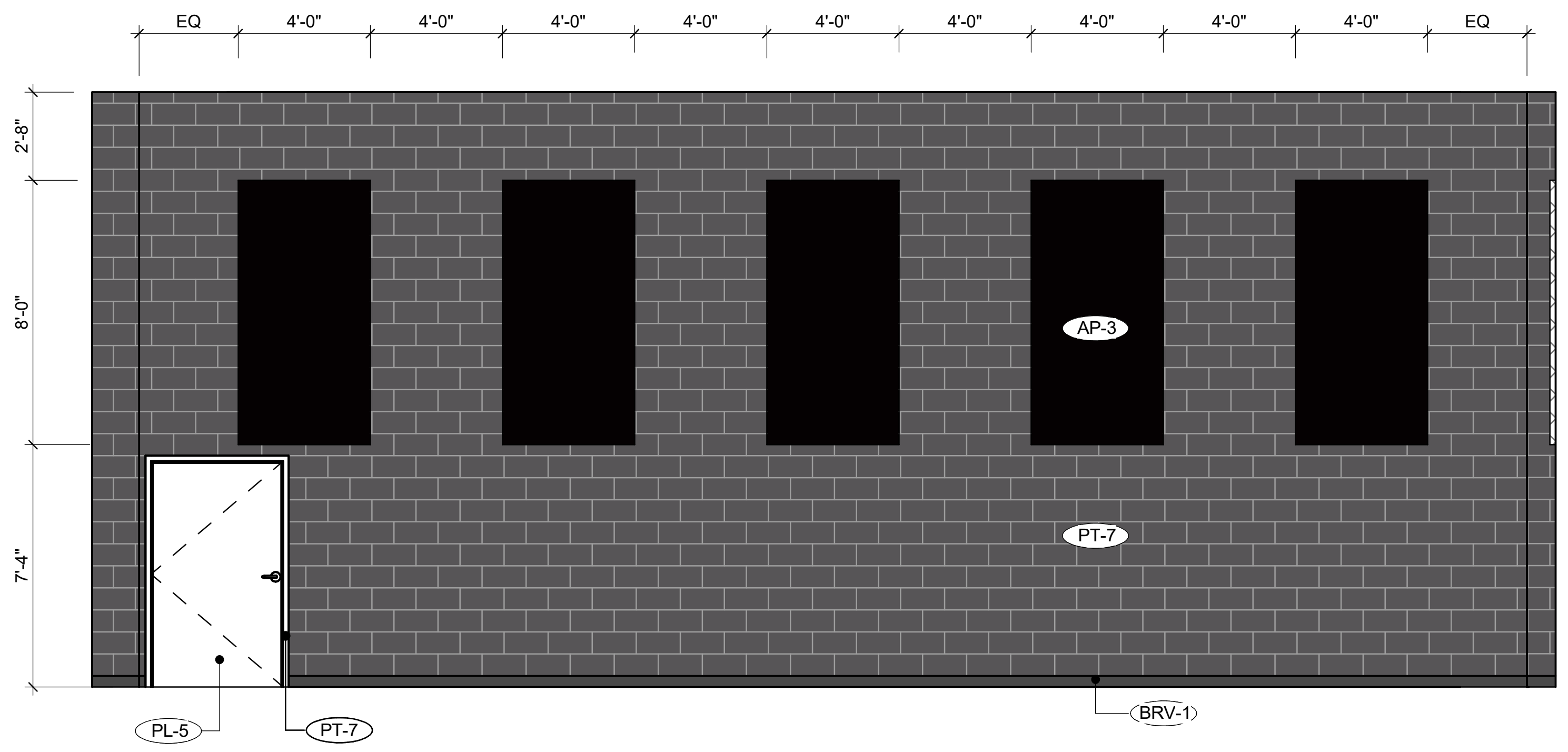
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

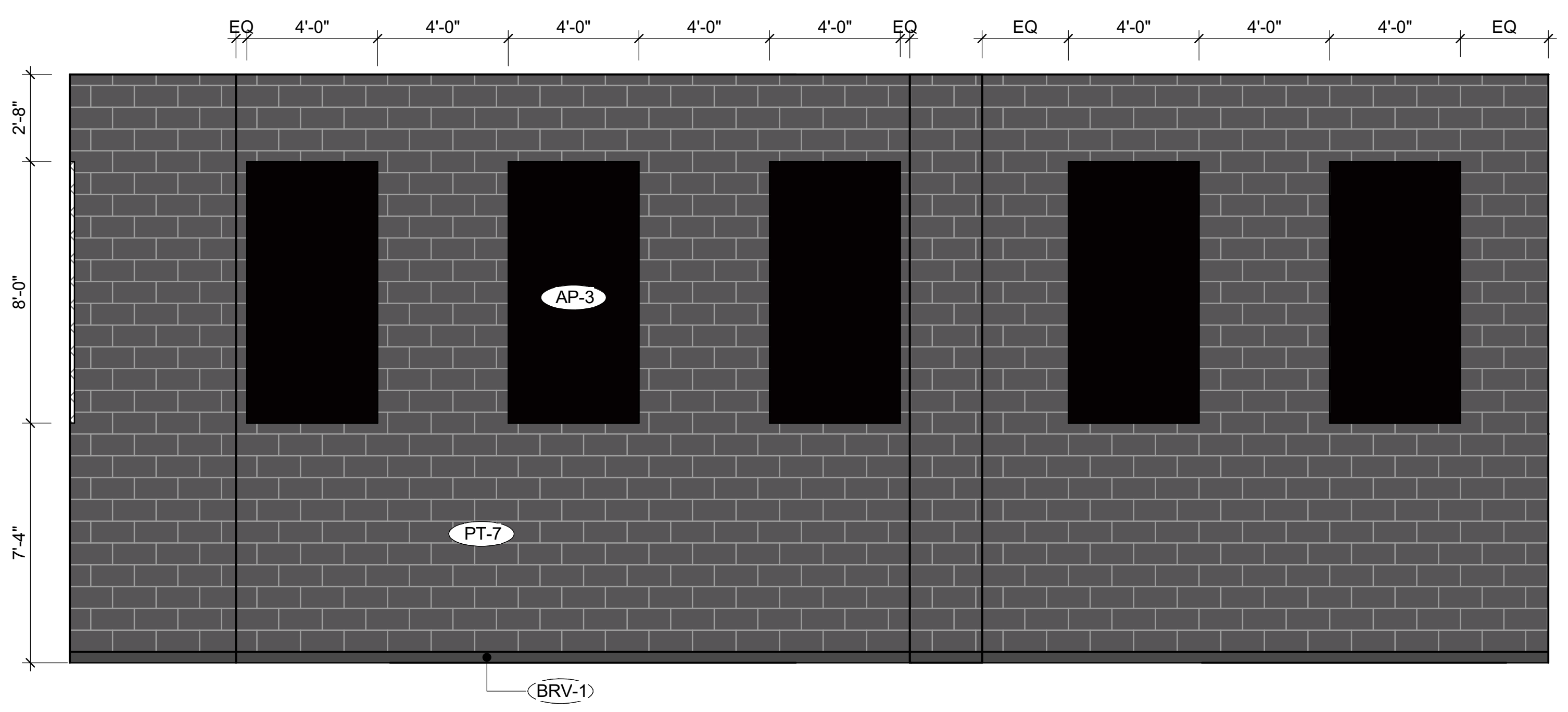
PLAN DETAILS

A9.01
of

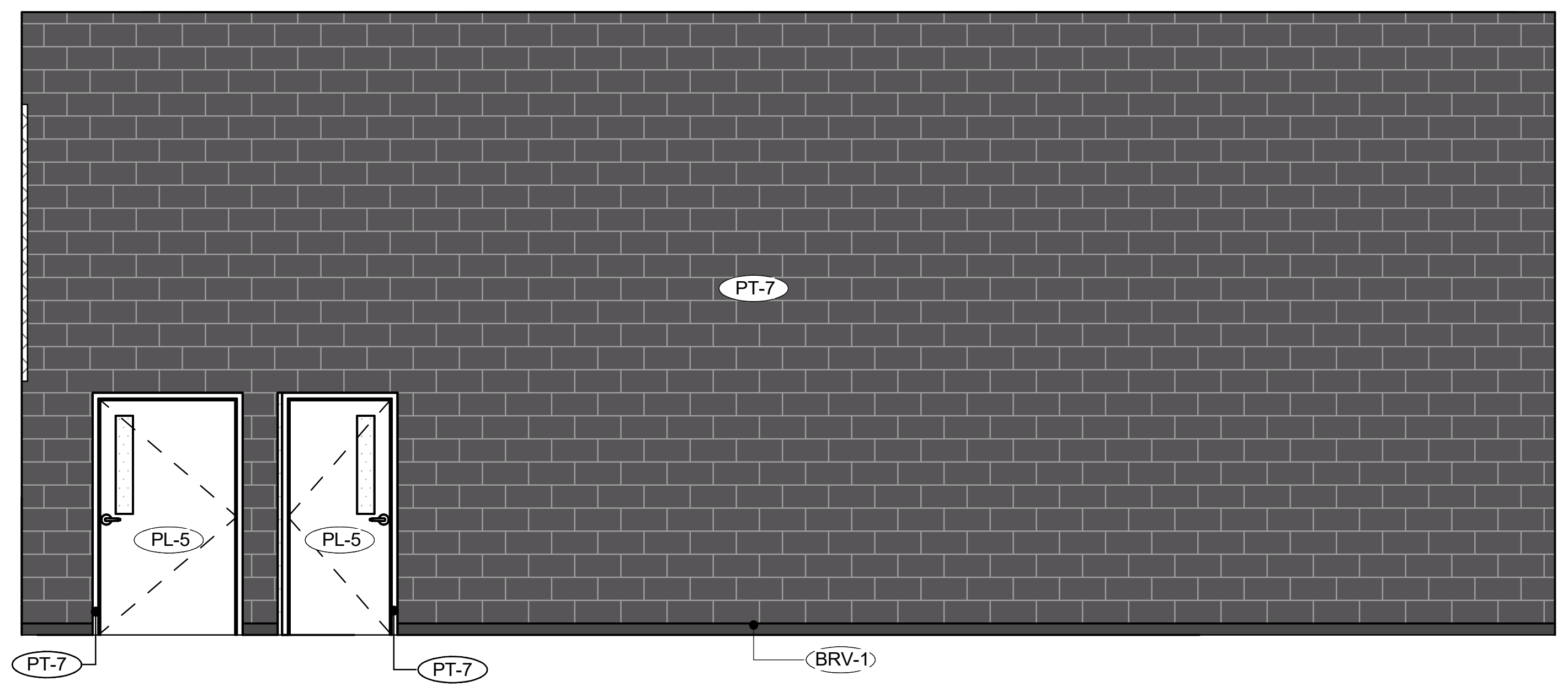
11/14/2024 1:37:39 PM



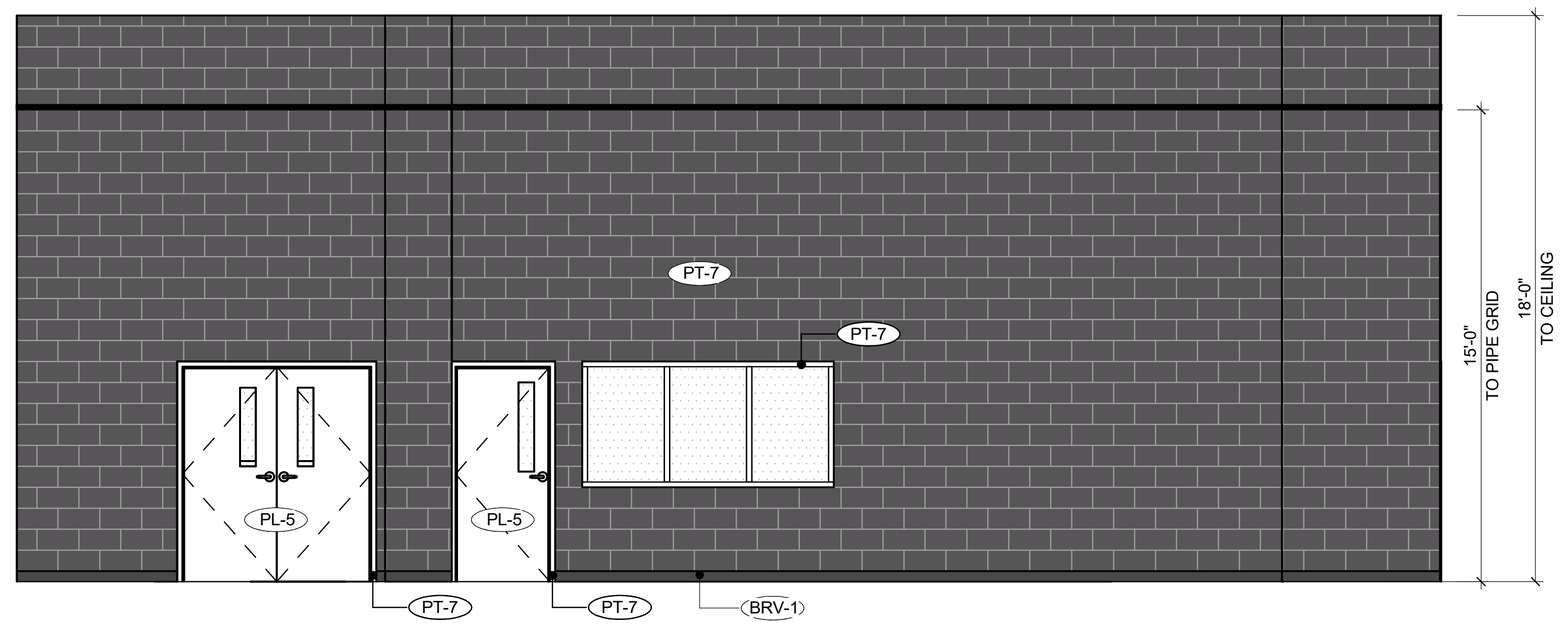
1 4002 - BLACK BOX - N
1/4" = 1'-0"



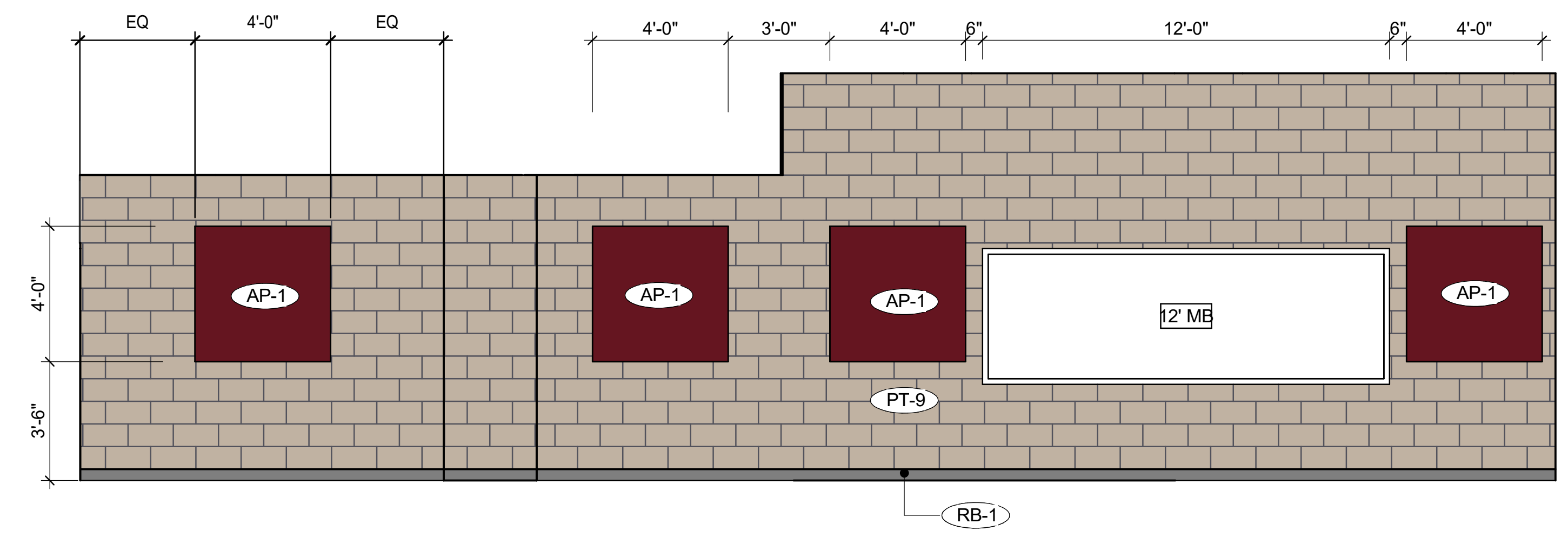
2 4002 BLACK BOX - E
1/4" = 1'-0"



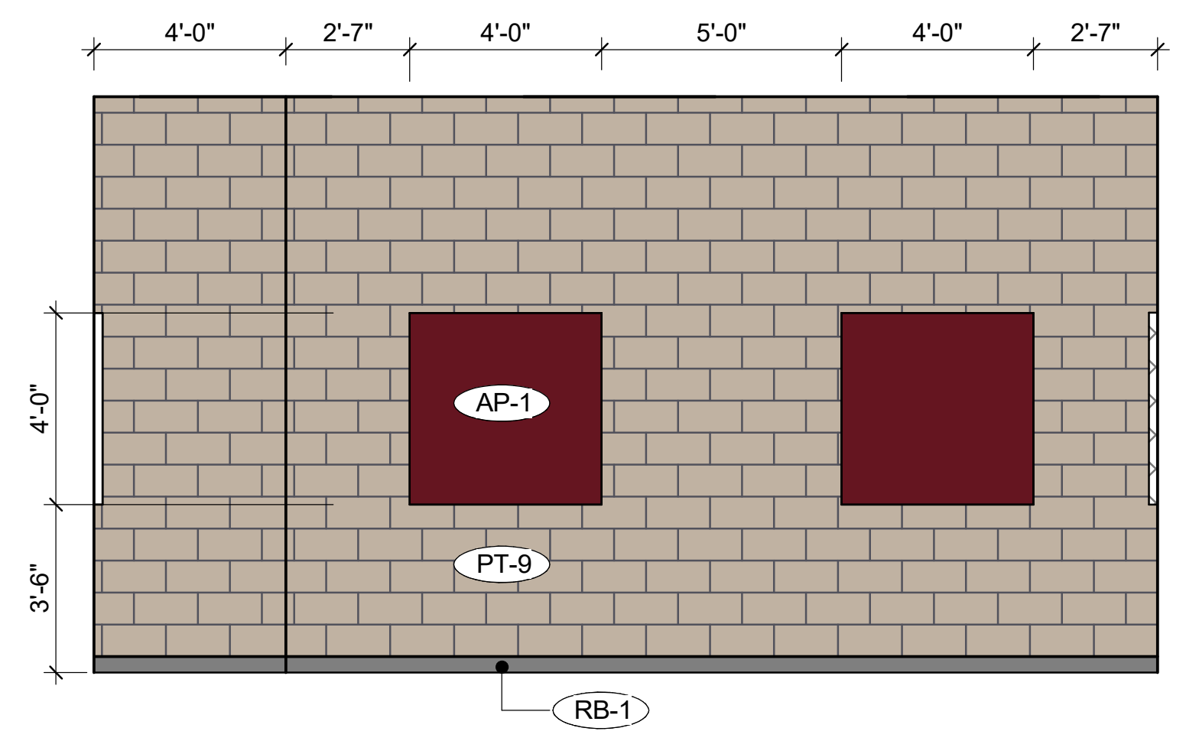
3 4002 - BLACK BOX - S
1/4" = 1'-0"



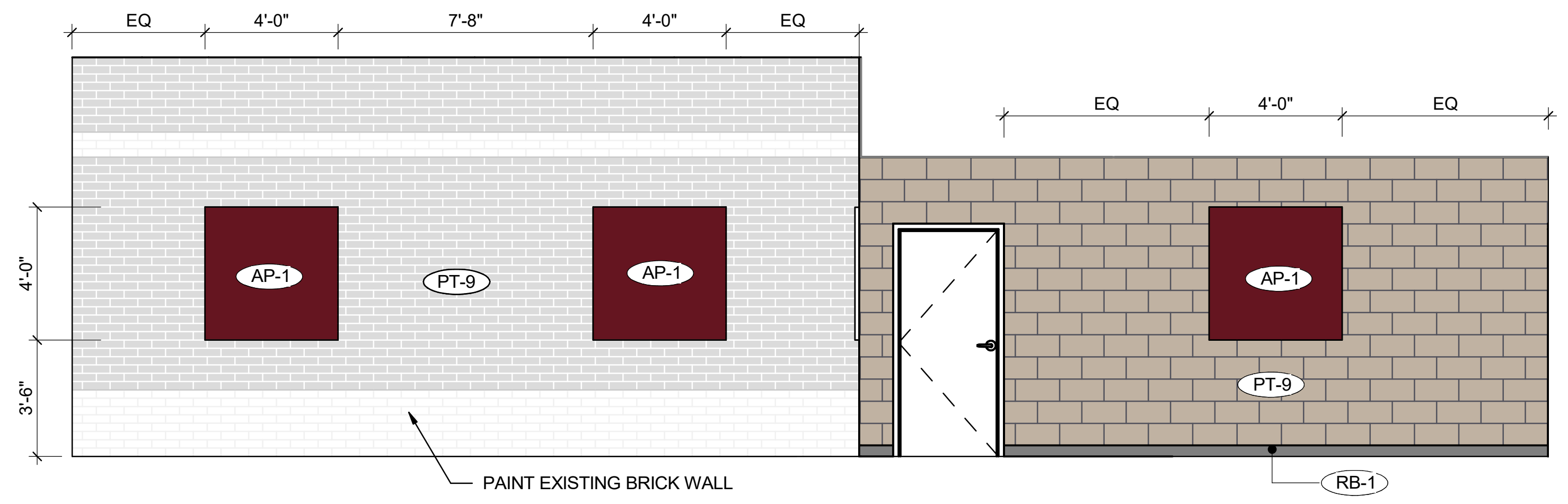
4 4002 - BLACK BOX - W
1/4" = 1'-0"



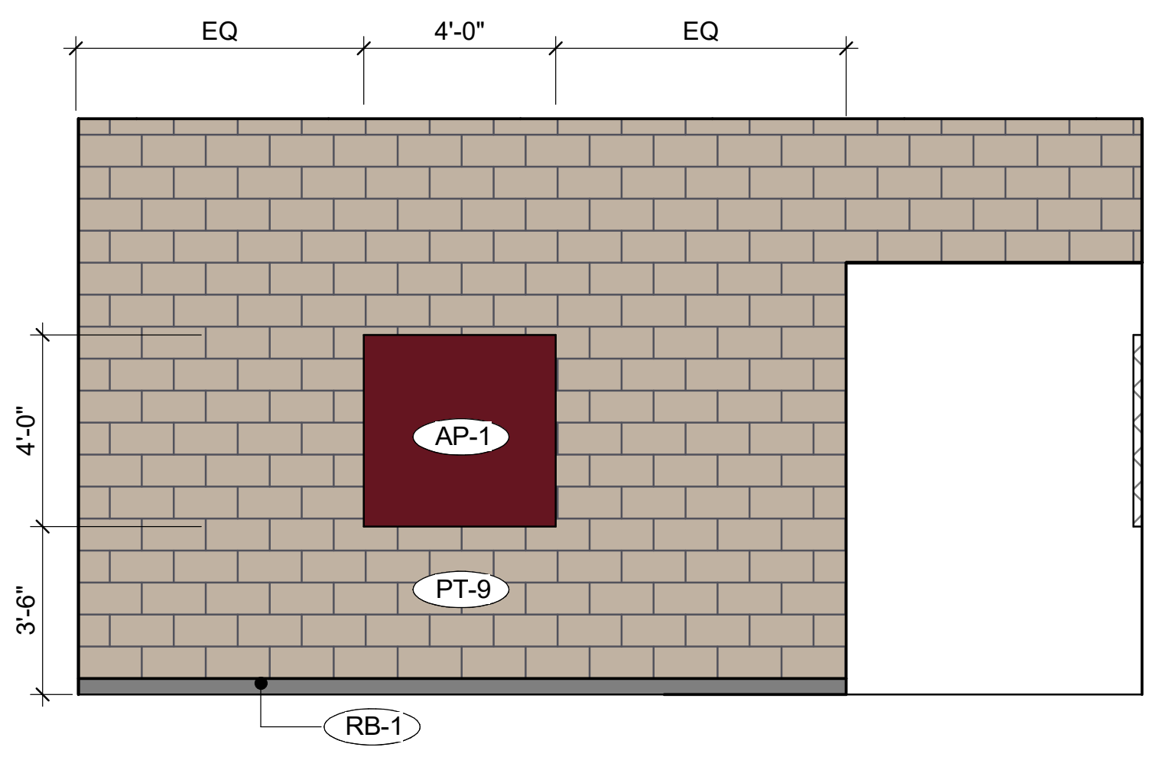
5 1893 - ENSEMBLE - N
1/4" = 1'-0"



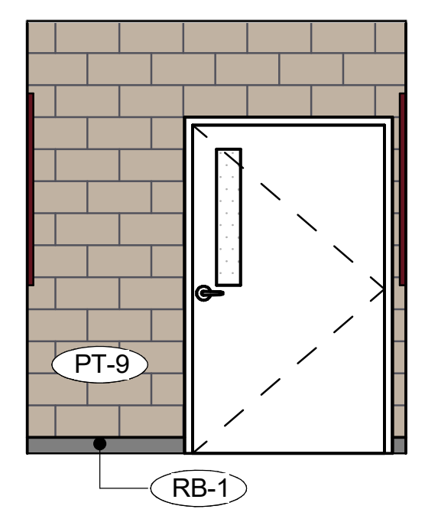
6 1893 - ENSEMBLE - E
1/4" = 1'-0"



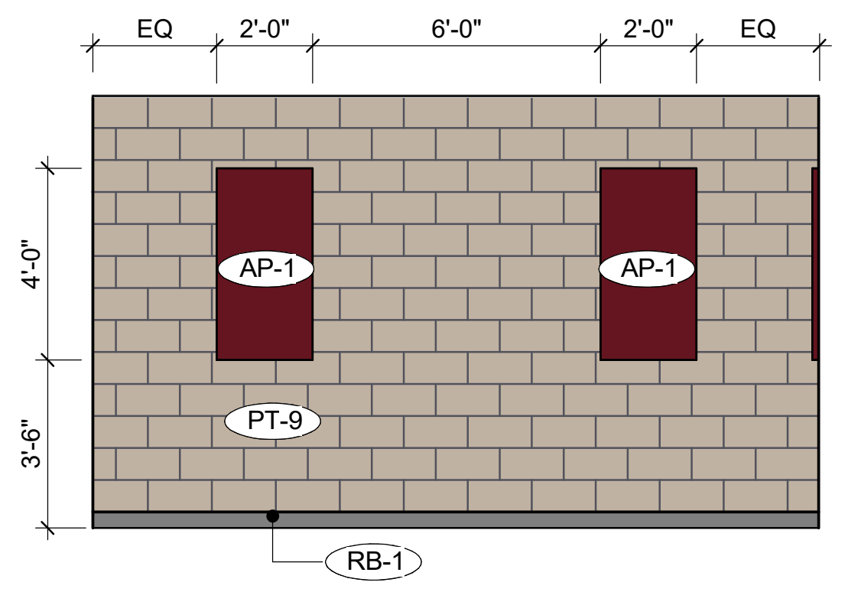
7 1893 - ENSEMBLE - S
1/4" = 1'-0"



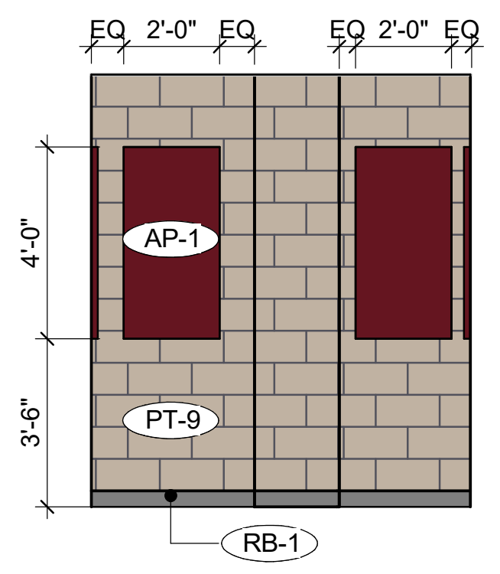
8 1893 - ENSEMBLE - W
1/4" = 1'-0"



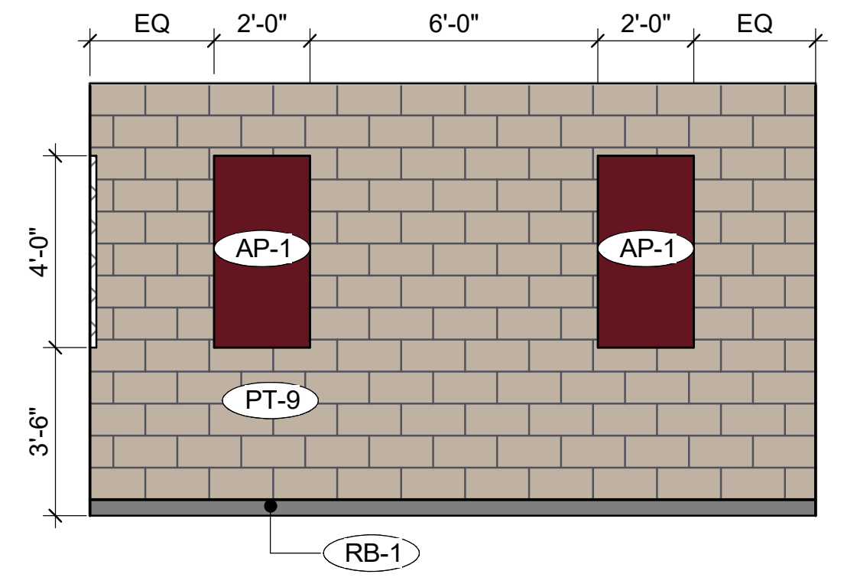
9 1832 - PRACTICE - N
1/4" = 1'-0"



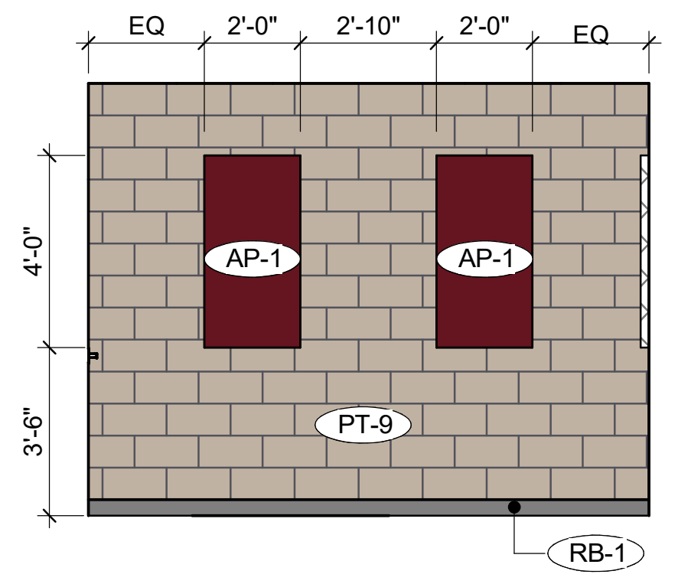
10 1832 - PRACTICE - E
1/4" = 1'-0"



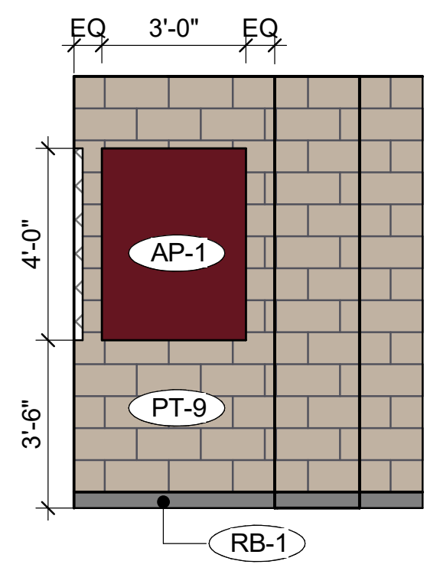
11 1832 - PRACTICE - S
1/4" = 1'-0"



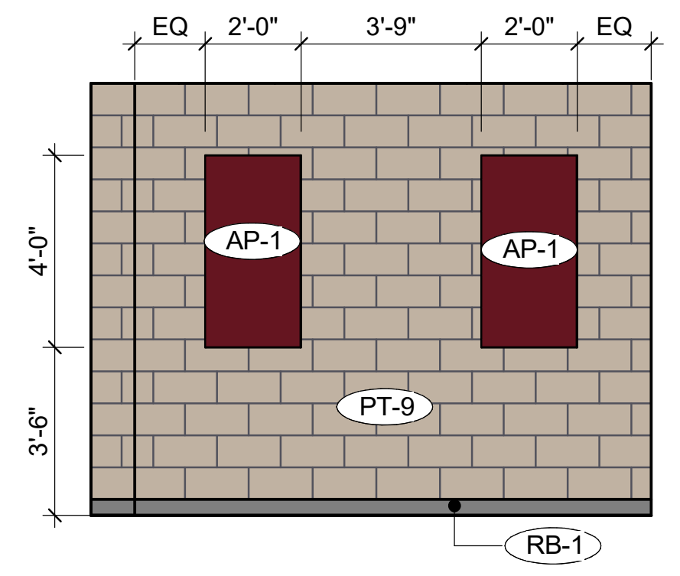
12 1832 - PRACTICE - W
1/4" = 1'-0"



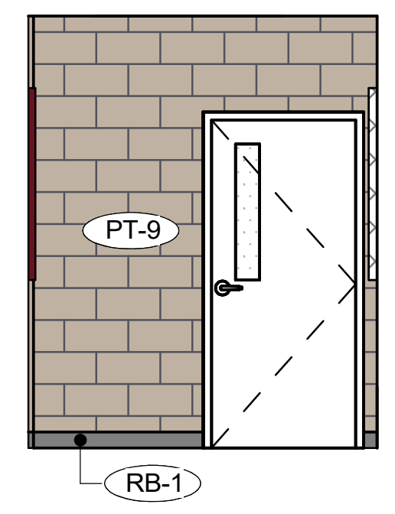
13 1891 - PRACTICE - N
1/4" = 1'-0"



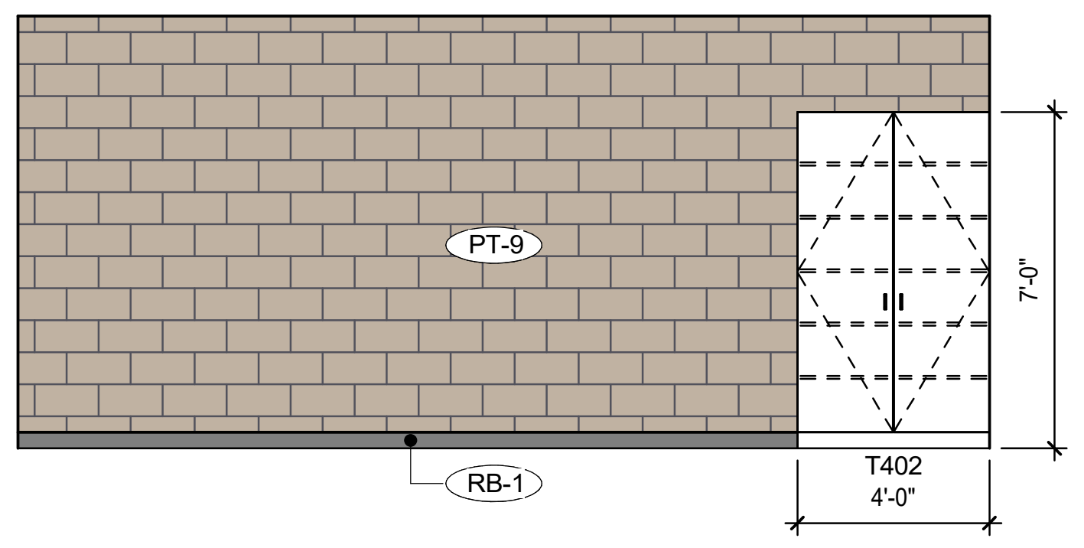
14 1891 - PRACTICE - E
1/4" = 1'-0"



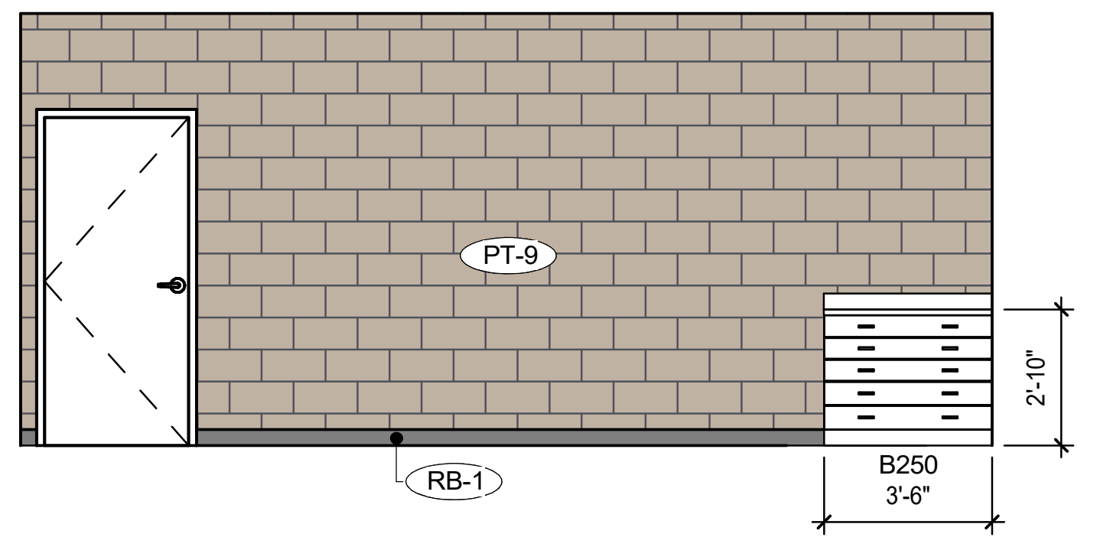
15 1891 - PRACTICE - S
1/4" = 1'-0"



16 1891 - PRACTICE - W
1/4" = 1'-0"



17 4014 - STORAGE - N
1/4" = 1'-0"



18 4014 - STORAGE - S
1/4" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

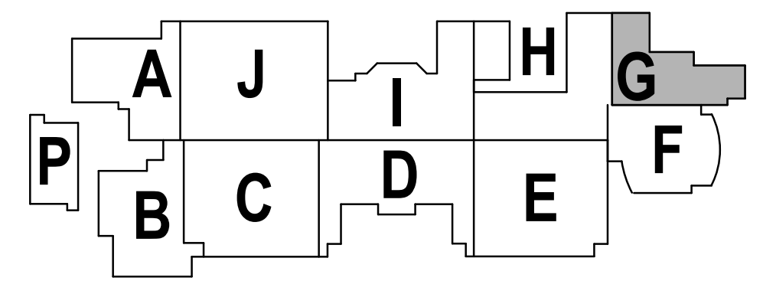
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

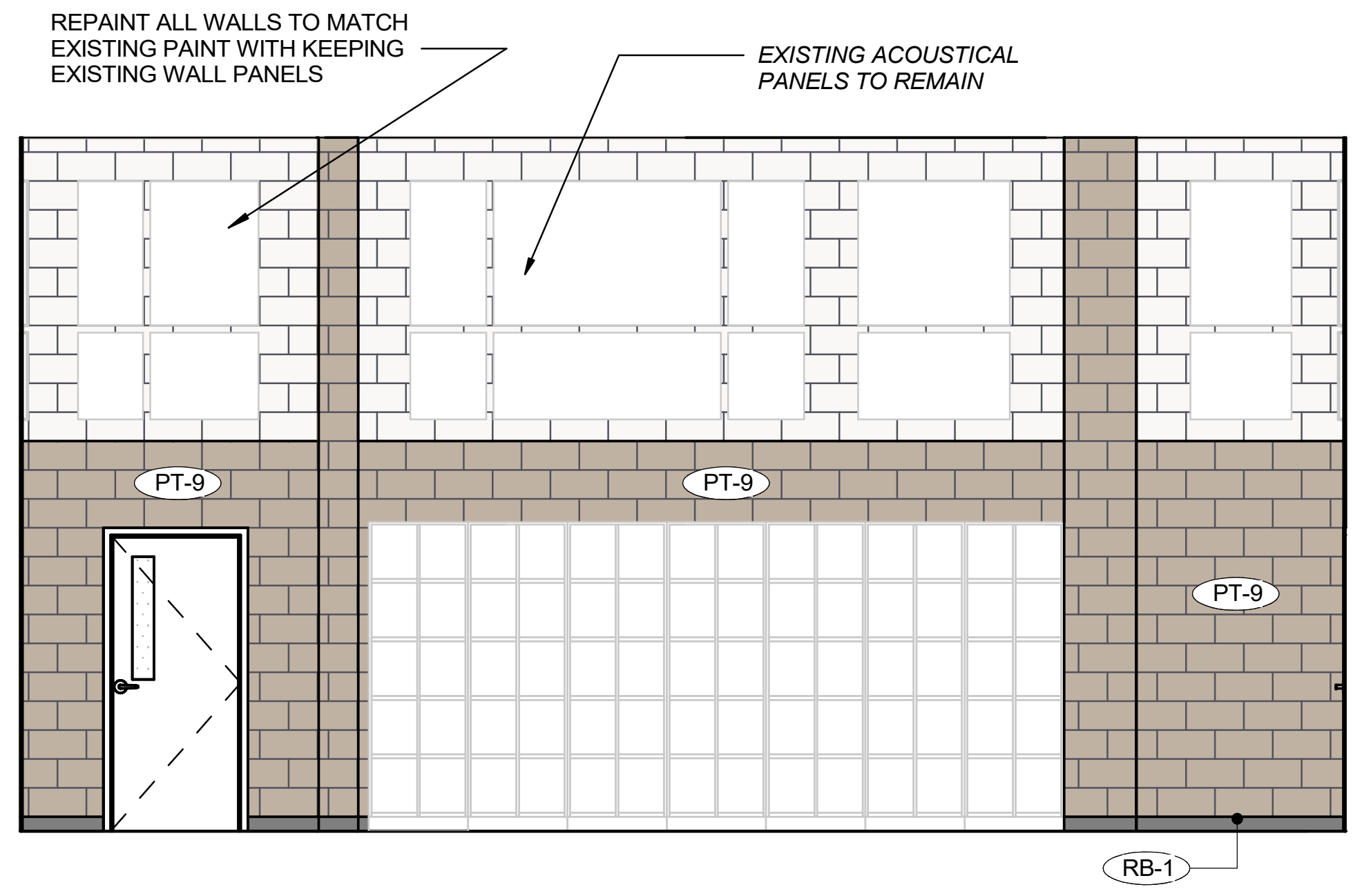


Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

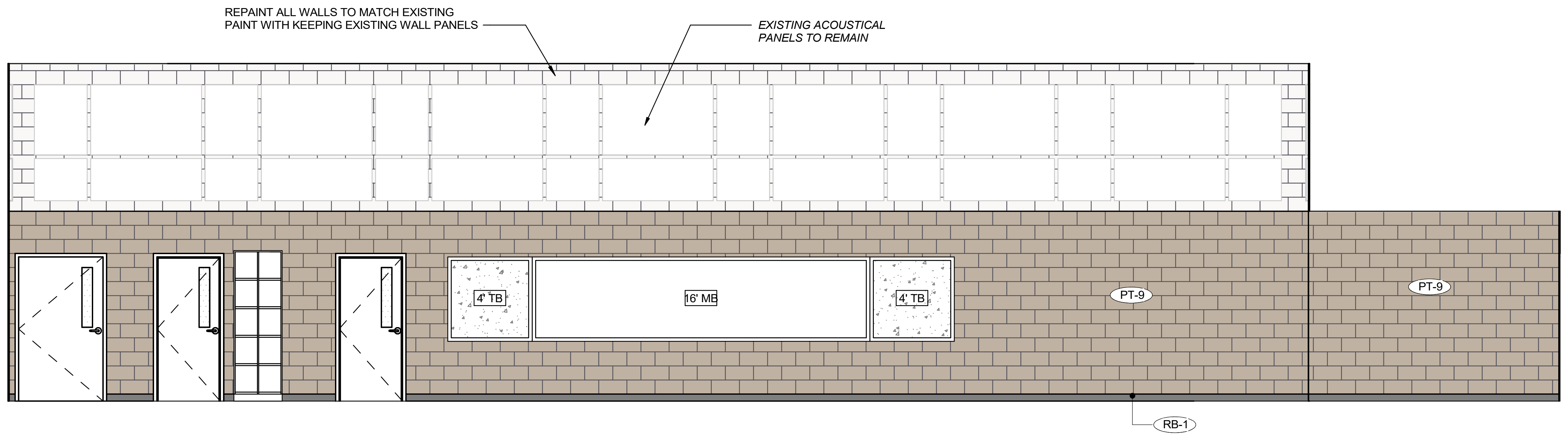
FINE ARTS
ELEVATIONS

A10.01
of

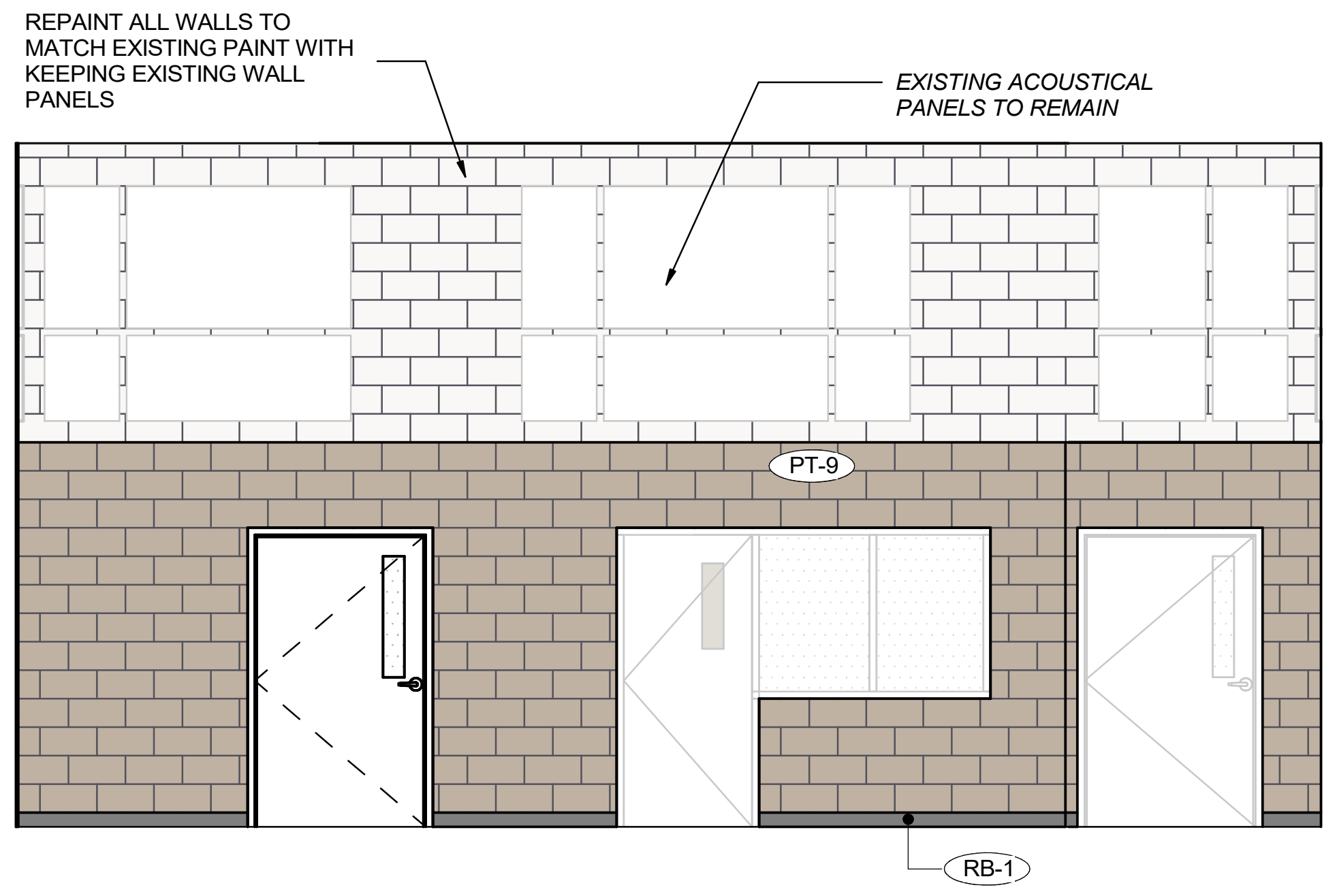
11/14/2024 1:37:41 PM



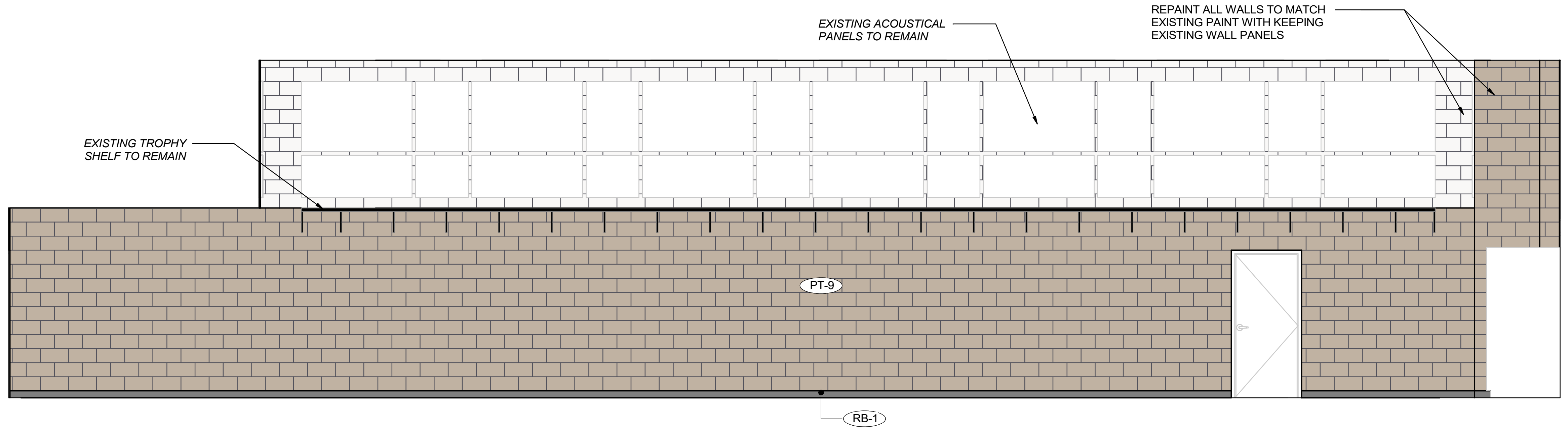
1 1830 - ORCHESTRA - N
1/4" = 1'-0"



2 1830 - ORCHESTRA - E
1/4" = 1'-0"

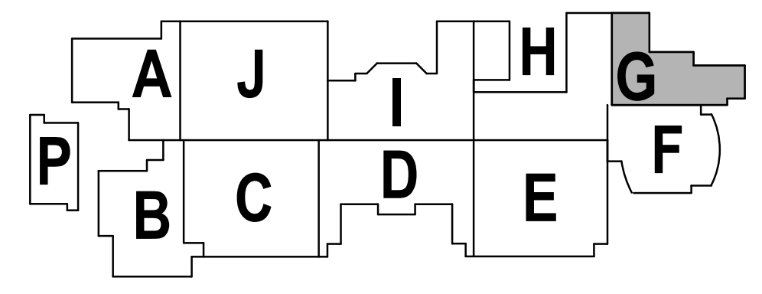


3 1830 - ORCHESTRA - S
1/4" = 1'-0"



4 1830 - ORCHESTRA - W
1/4" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

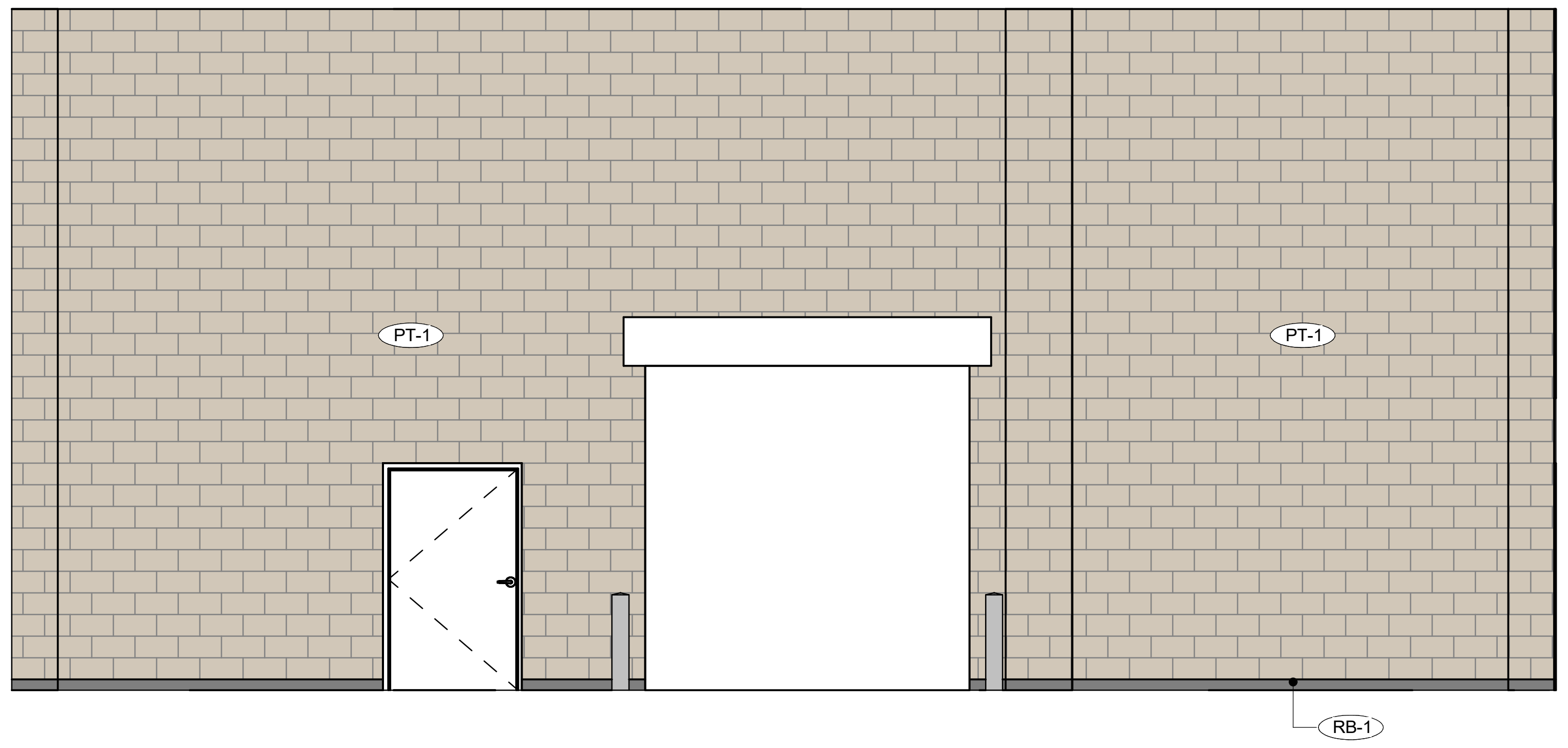
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

FINE ARTS
ELEVATIONS

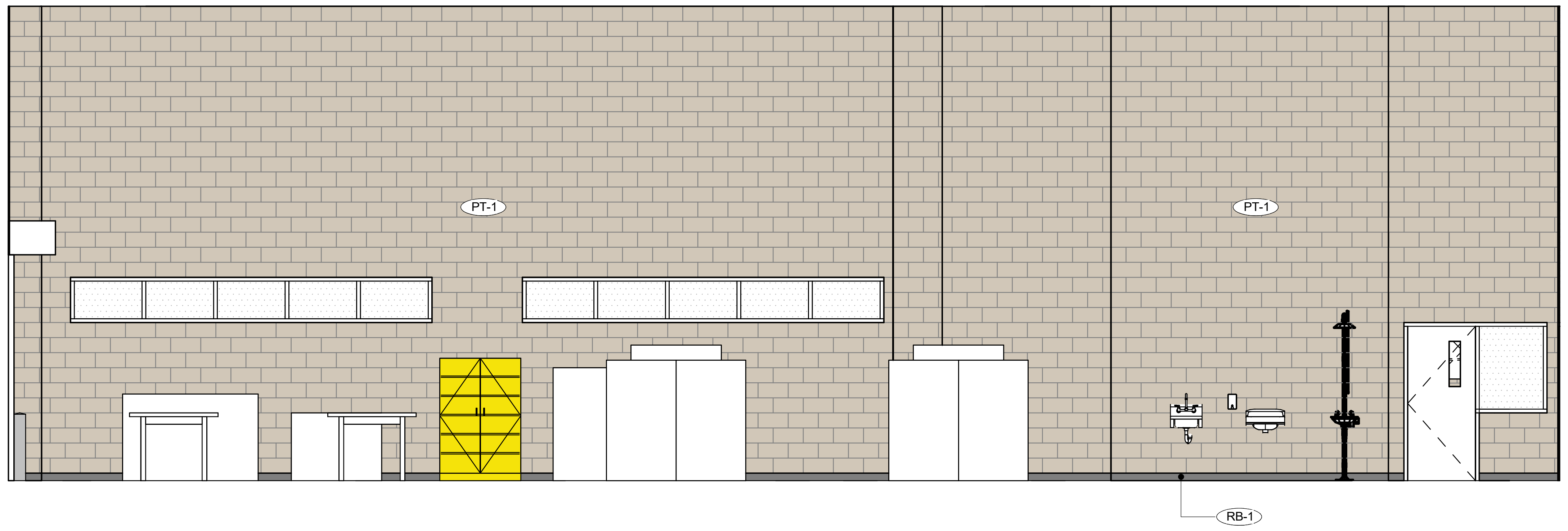
A10.02

____ of ____

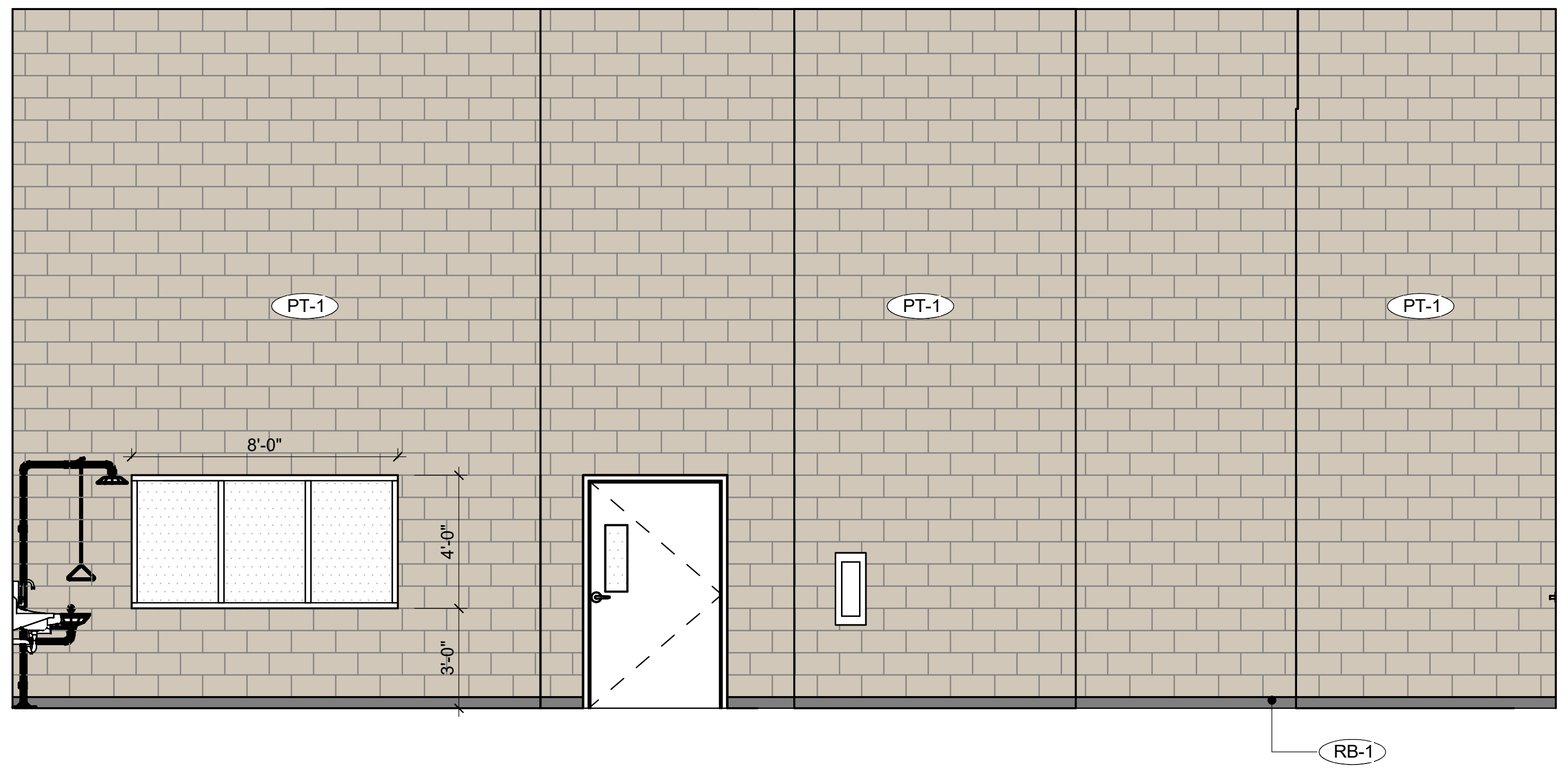
11/14/2024 1:37:45 PM



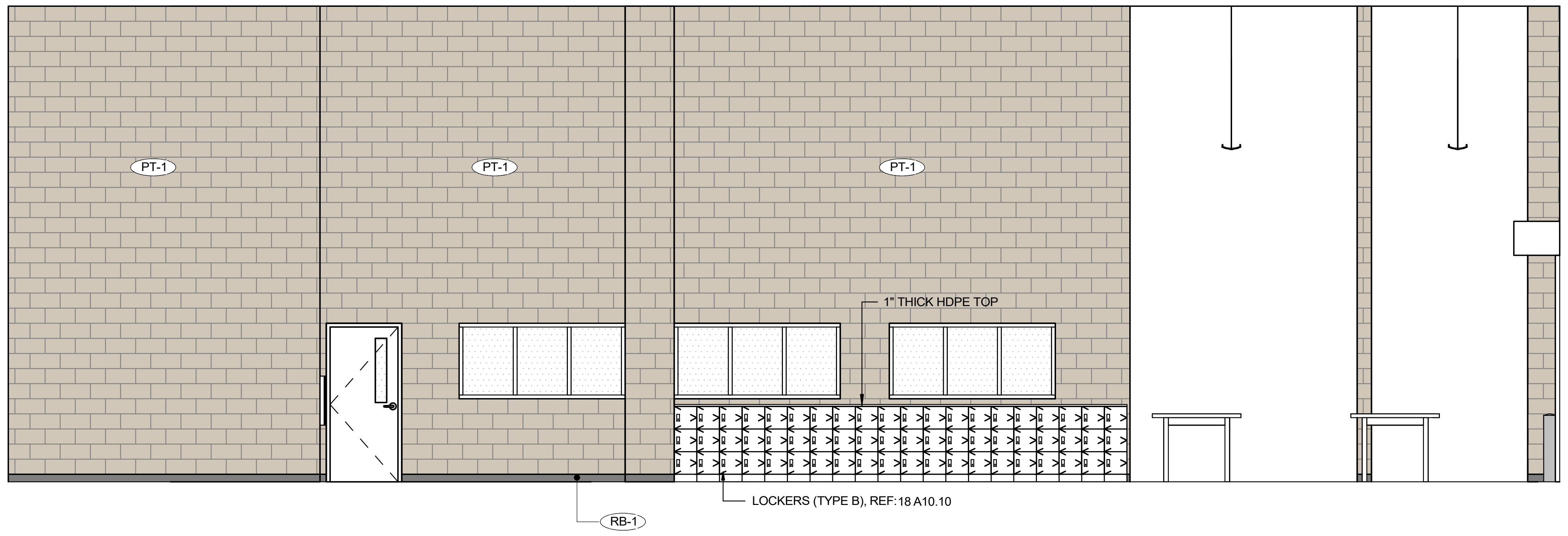
1 4017 - WELDING - N
1/4" = 1'-0"



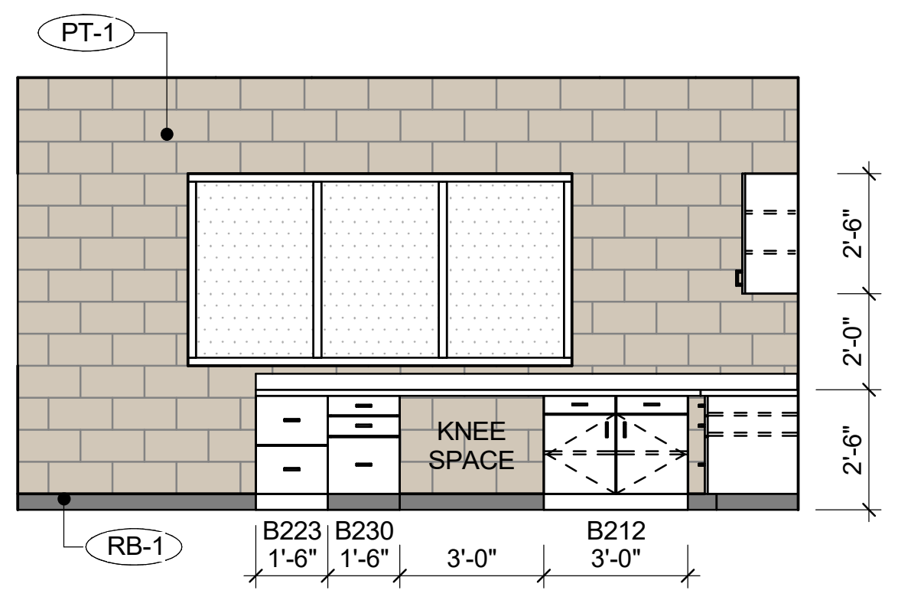
2 4017 - WELDING - E
1/4" = 1'-0"



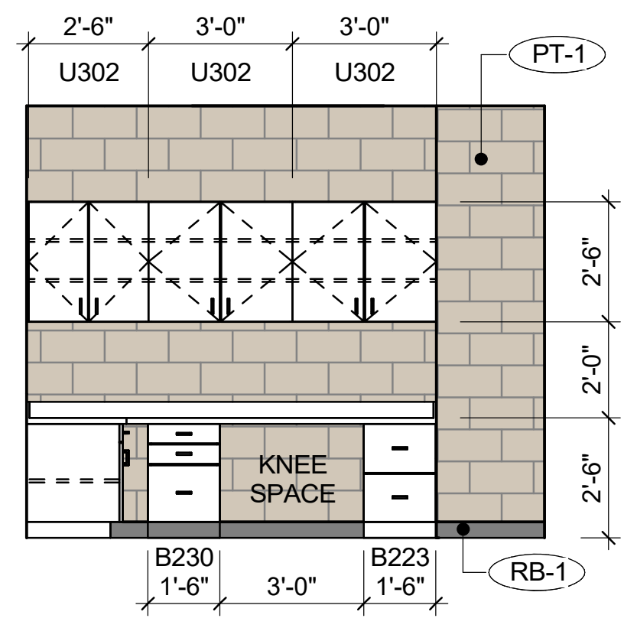
3 4017 - WELDING - S
1/4" = 1'-0"



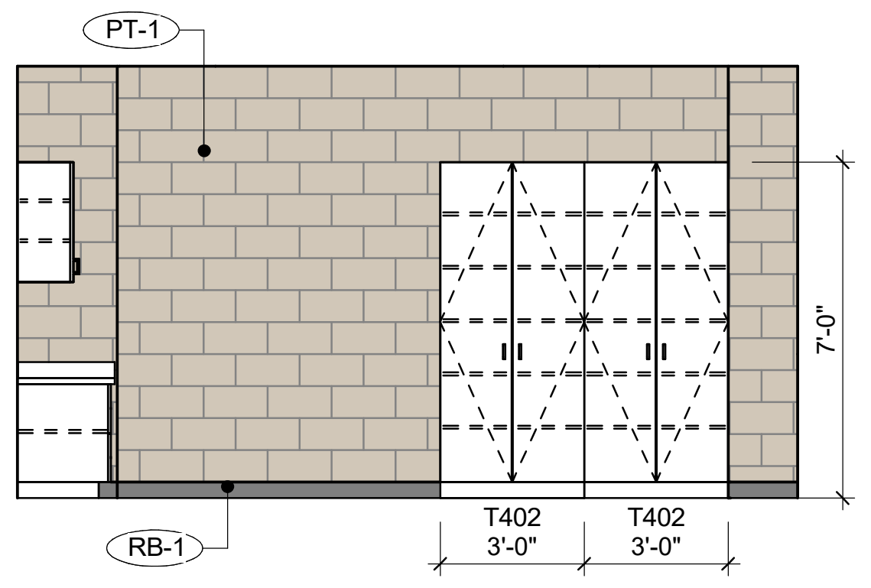
4 4017 - WELDING - W
1/4" = 1'-0"



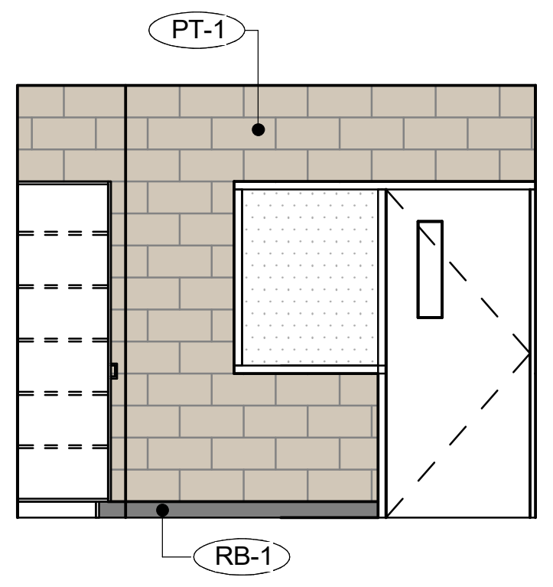
5 4018 - OFFICE - N
1/4" = 1'-0"



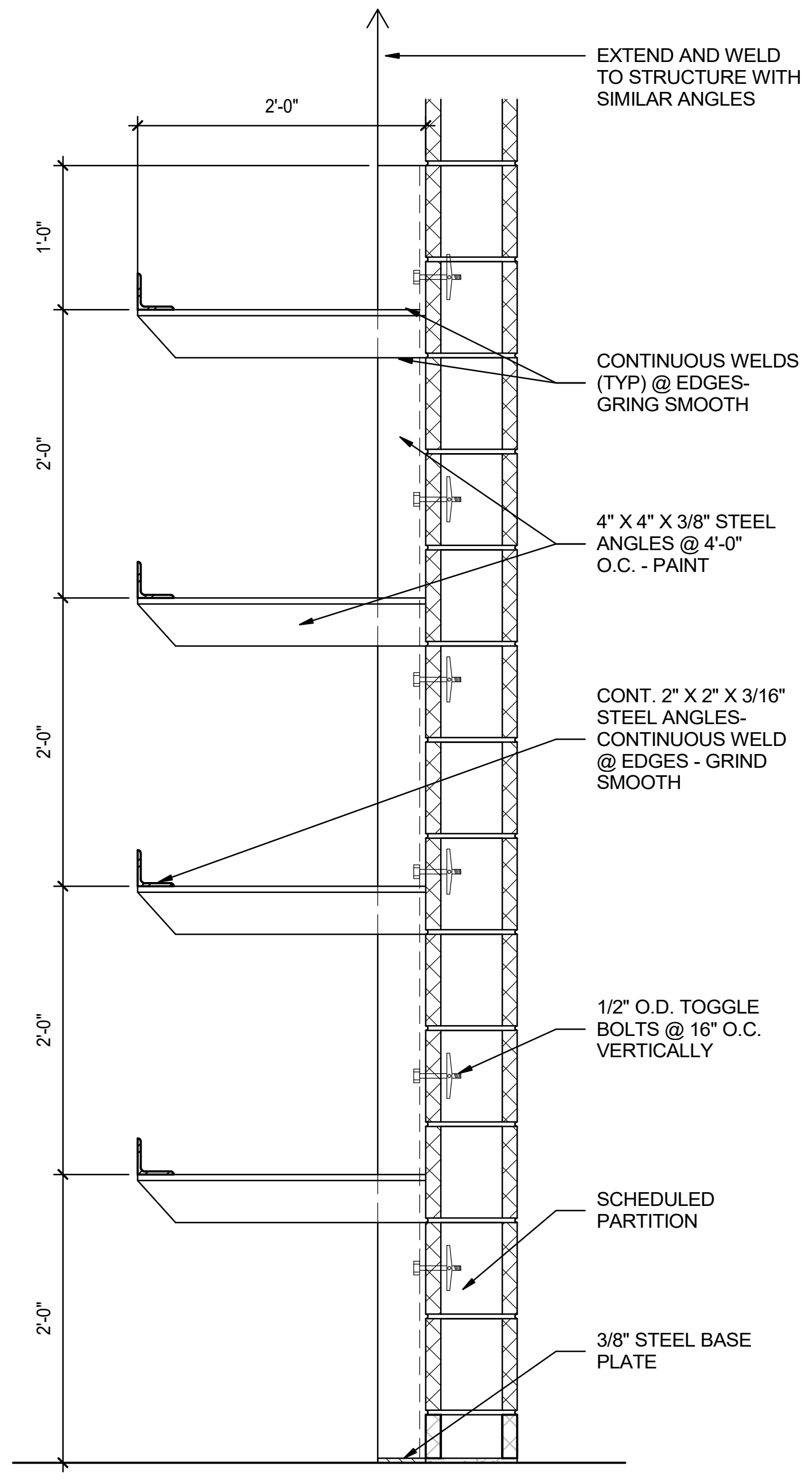
6 4018 - OFFICE - E
1/4" = 1'-0"



7 4018 - OFFICE - S
1/4" = 1'-0"



8 4018 - OFFICE - W
1/4" = 1'-0"



EXTEND AND WELD TO STRUCTURE WITH SIMILAR ANGLES

CONTINUOUS WELDS (TYP) @ EDGES- GRING SMOOTH

4" X 4" X 3/8" STEEL ANGLES @ 4'-0" O.C. - PAINT

CONT. 2" X 2" X 3/16" STEEL ANGLES- CONTINUOUS WELD @ EDGES - GRIND SMOOTH

1/2" O.D. TOGGLE BOLTS @ 16" O.C. VERTICALLY

SCHEDULED PARTITION

3/8" STEEL BASE PLATE

9 FOUR POST SHELVING SECTION
1" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

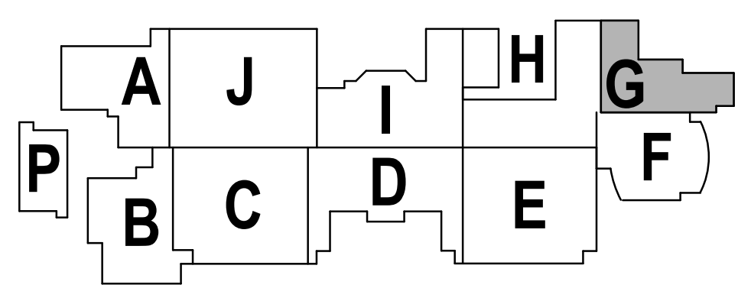
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



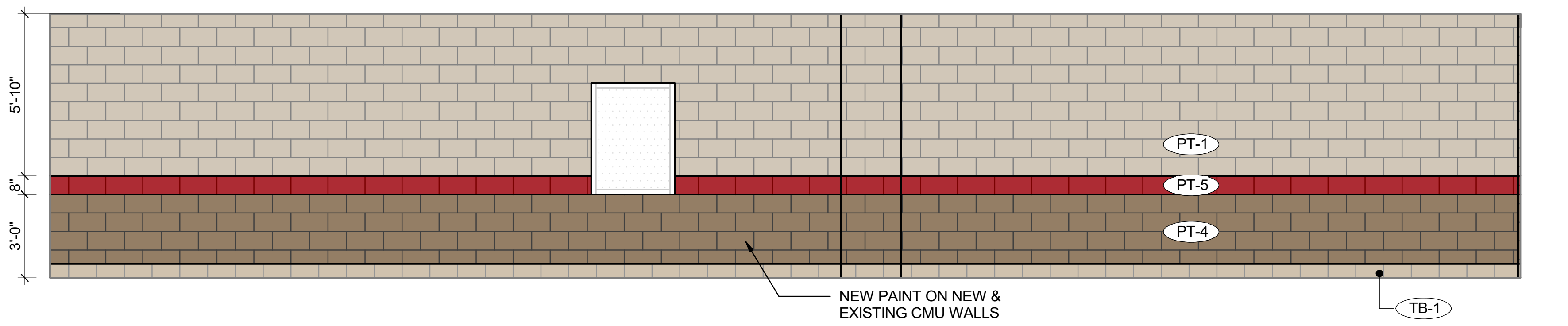
Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

WELDING LAB
ELEVATIONS

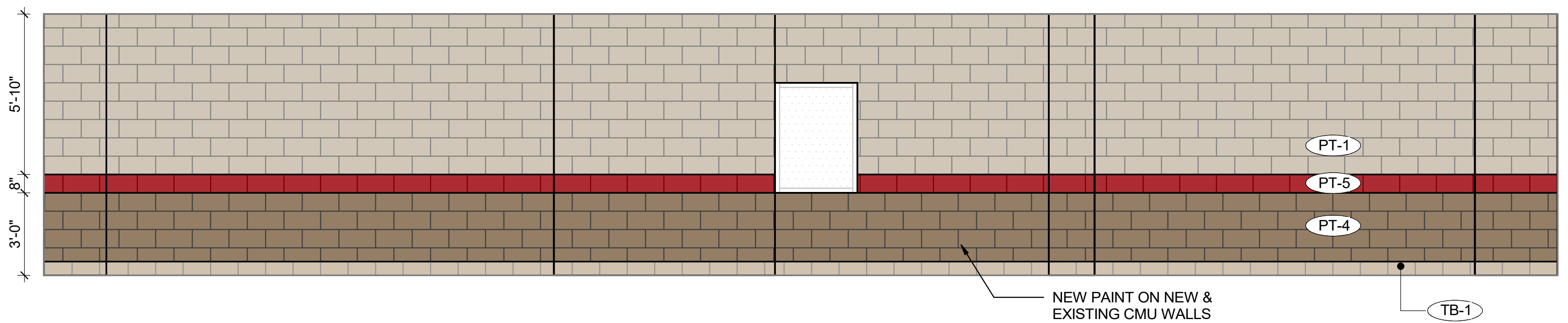
A10.03
____ of ____

Autodesk Docs://23072_CFISD_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

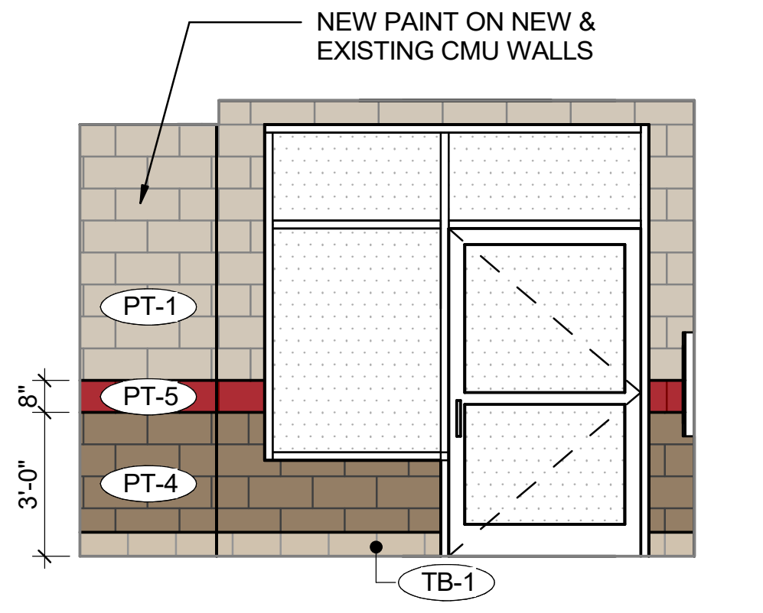
11/14/2024 1:37:50 PM



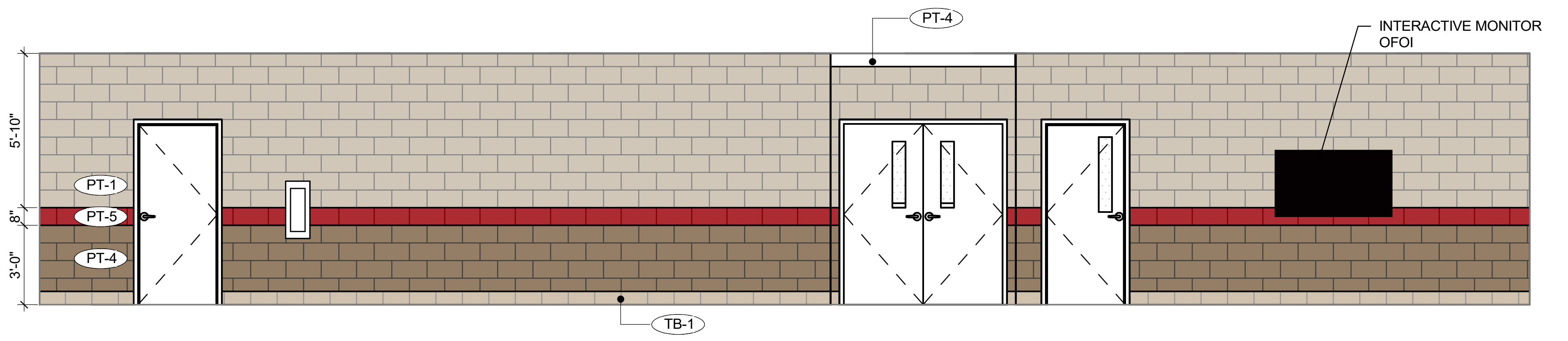
1 4000A - CORRIDOR - N
1/4" = 1'-0"



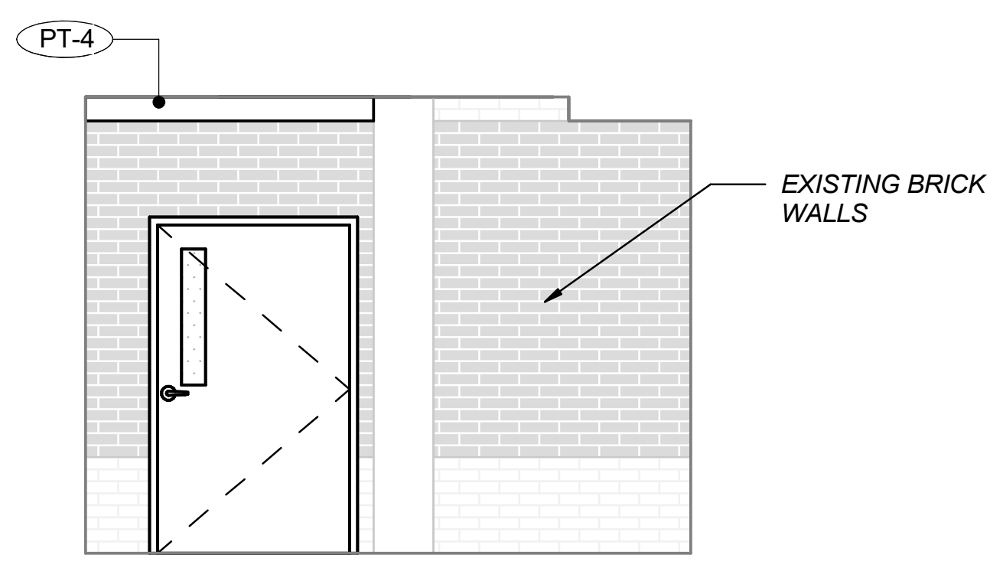
2 4000A - CORRIDOR - S
1/4" = 1'-0"



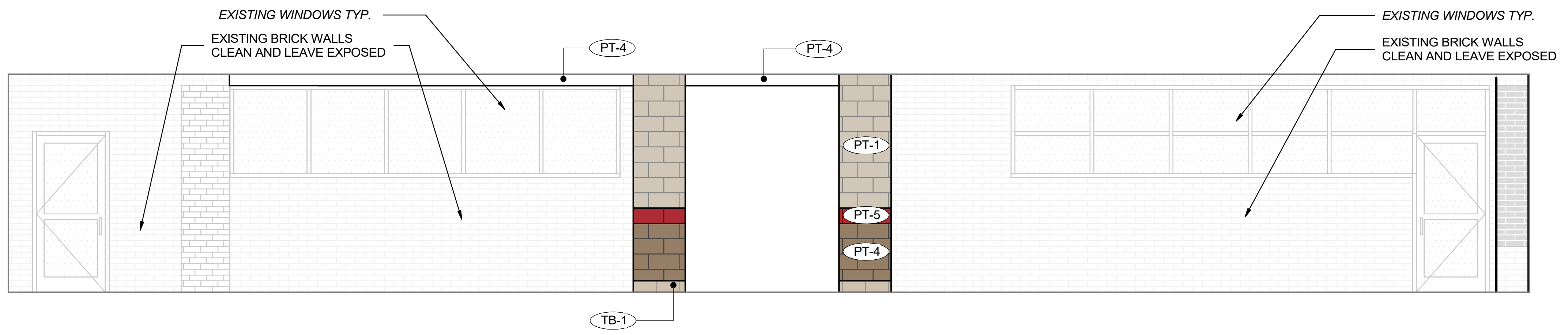
3 4000B - CORRIDOR - N
1/4" = 1'-0"



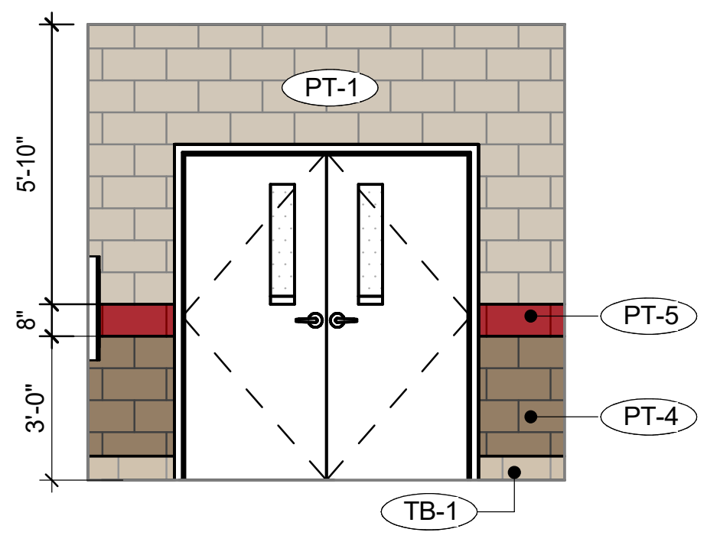
4 4000B - CORRIDOR - E
1/4" = 1'-0"



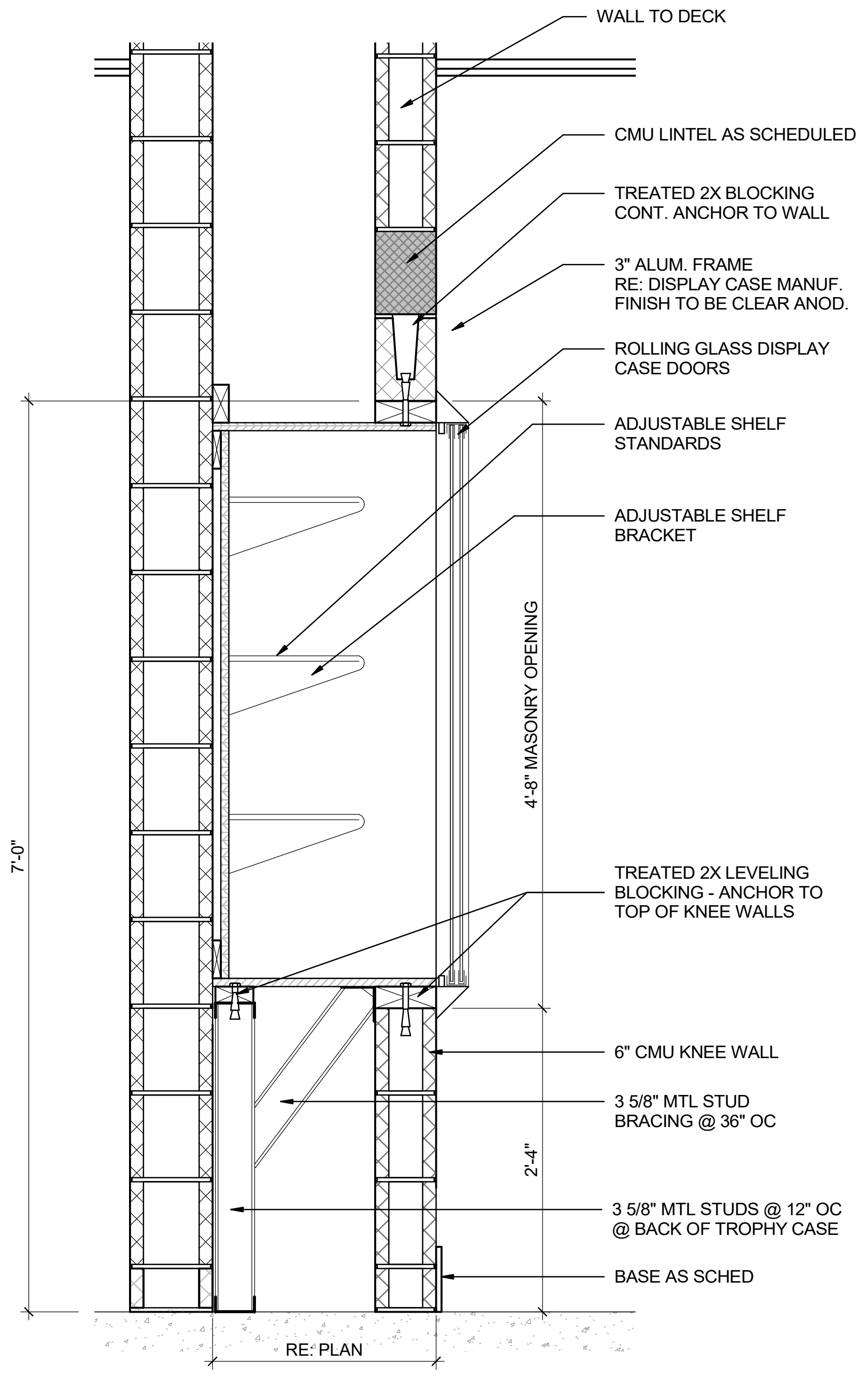
5 4000B - CORRIDOR - S
1/4" = 1'-0"



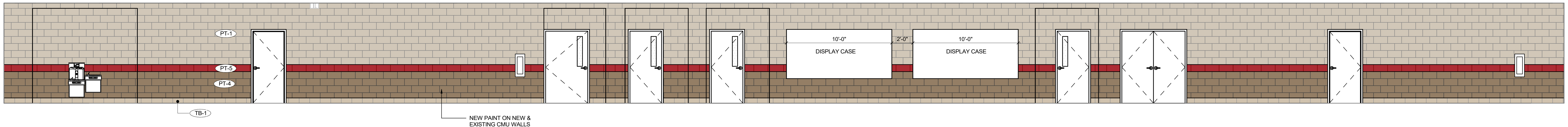
6 4000B - CORRIDOR - W
1/4" = 1'-0"



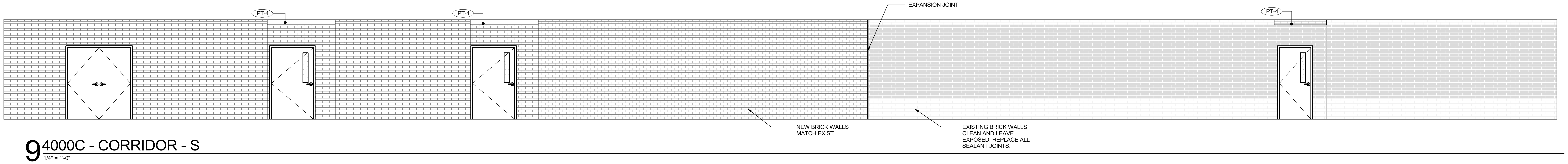
7 4000C - CORRIDOR - E
1/4" = 1'-0"



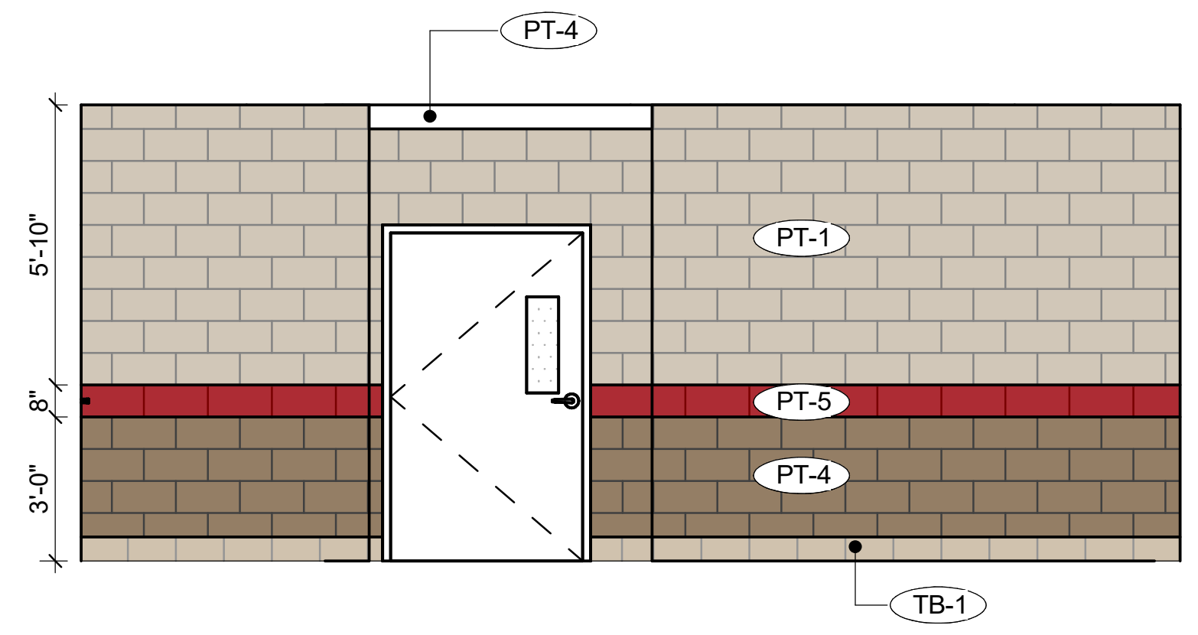
14 DISPLAY CASE DETAIL
1" = 1'-0"



8 4000C - CORRIDOR - N
1/4" = 1'-0"

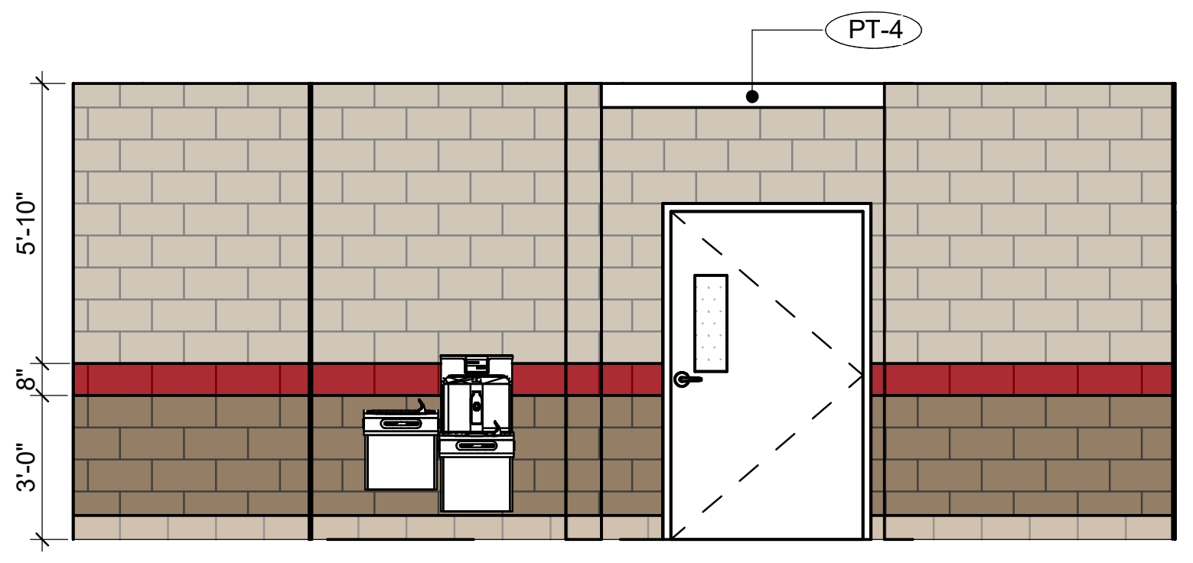


9 4000C - CORRIDOR - S
1/4" = 1'-0"

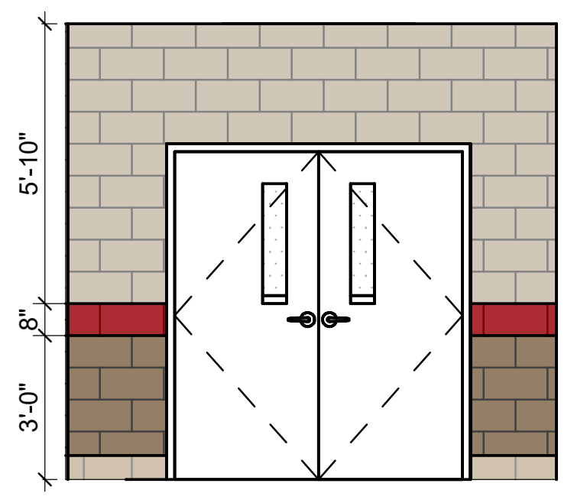


10 4000D - CORRIDOR - N
1/4" = 1'-0"

11 4000D - CORRIDOR - E
1/4" = 1'-0"

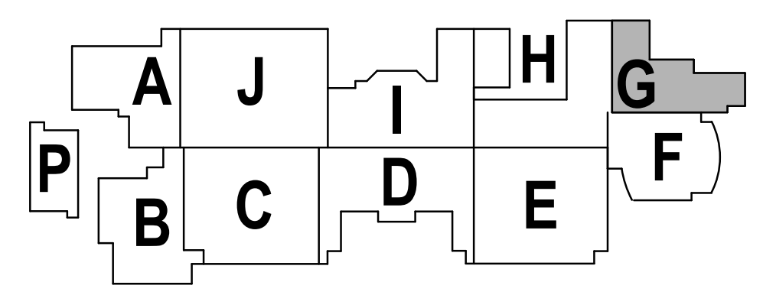


12 4000D - CORRIDOR -S
1/4" = 1'-0"



13 4000D - CORRIDOR - W
1/4" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

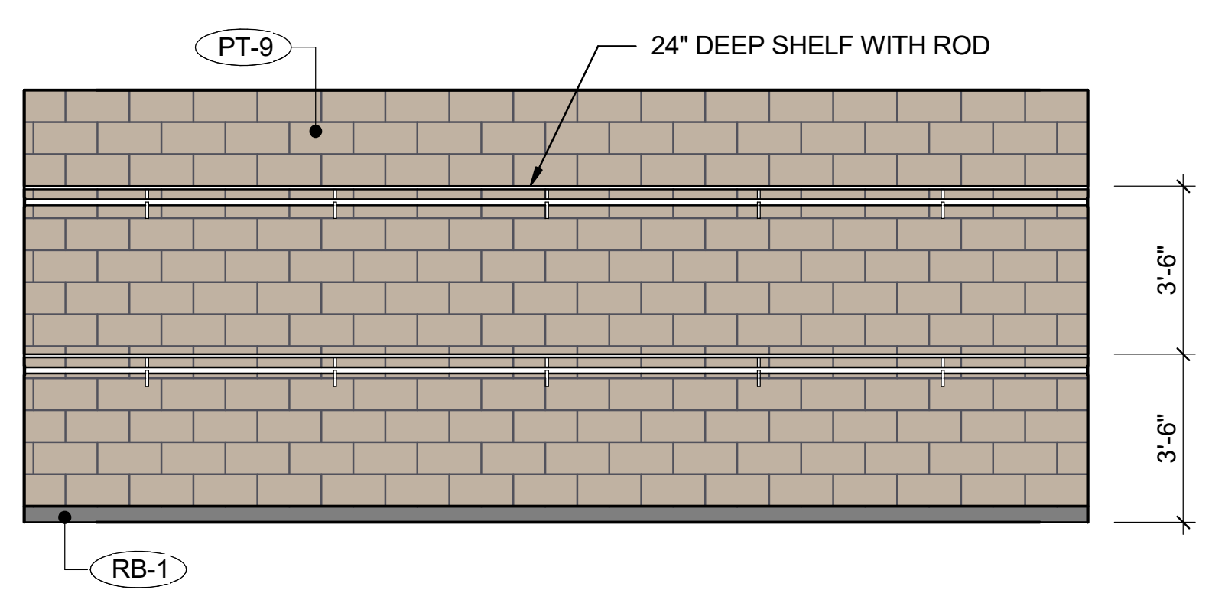
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

CORRIDOR
ELEVATIONS

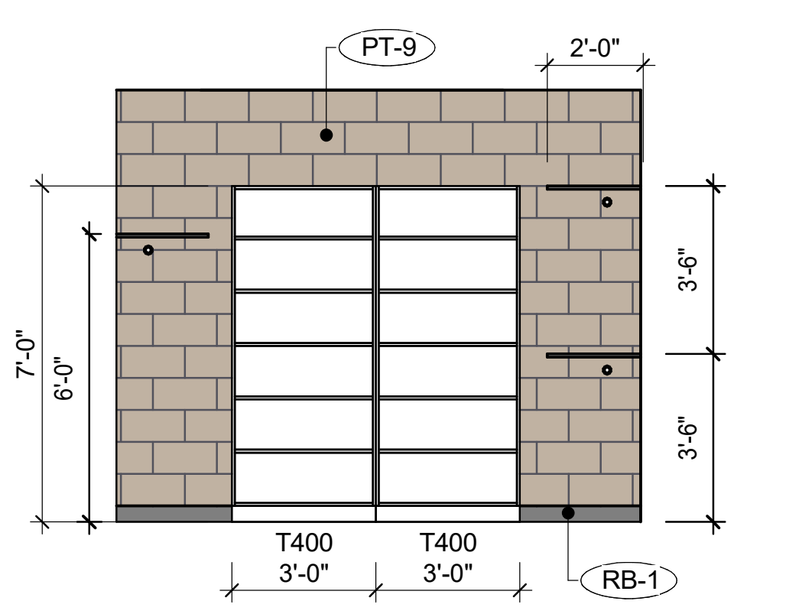
A10.04
____ of ____

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

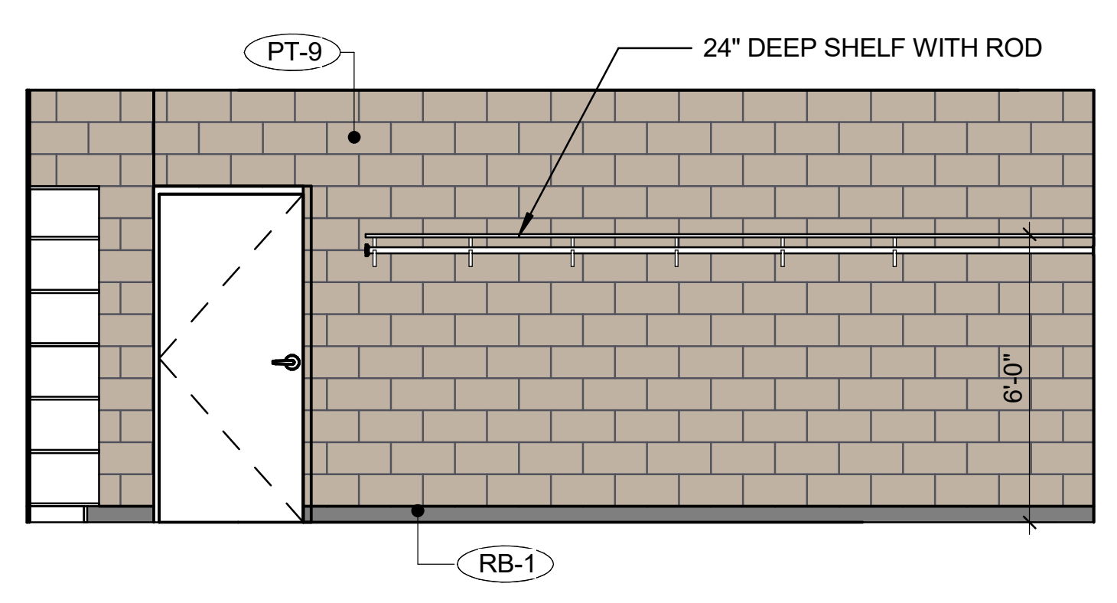
11/14/2024 1:37:58 PM



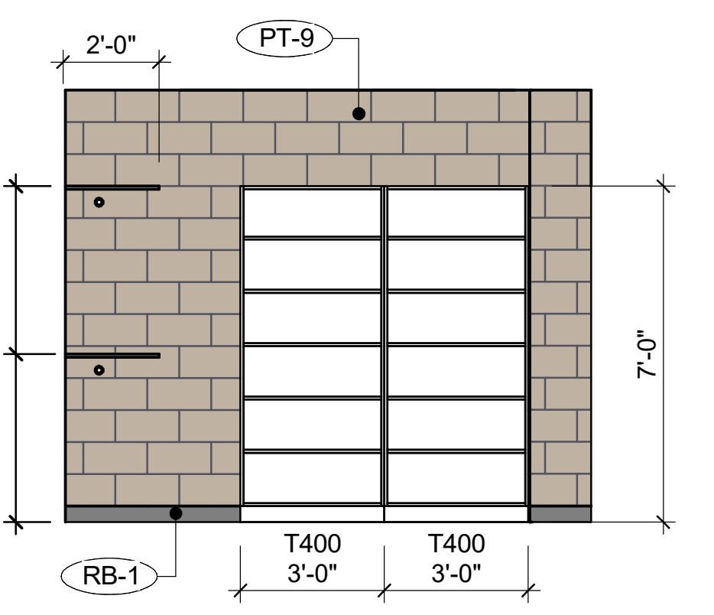
1 1838 - STORAGE - E
1/4" = 1'-0"



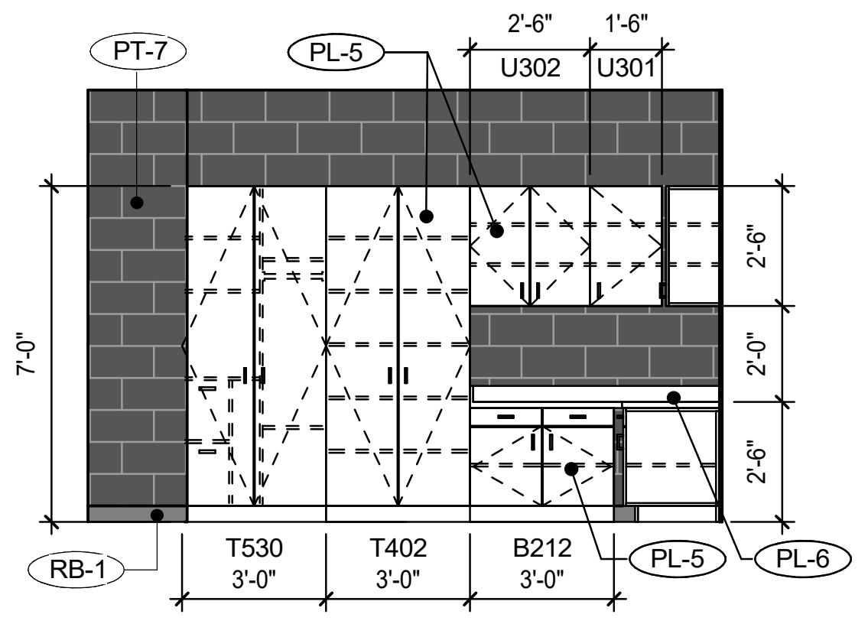
2 1838 - STORAGE - N
1/4" = 1'-0"



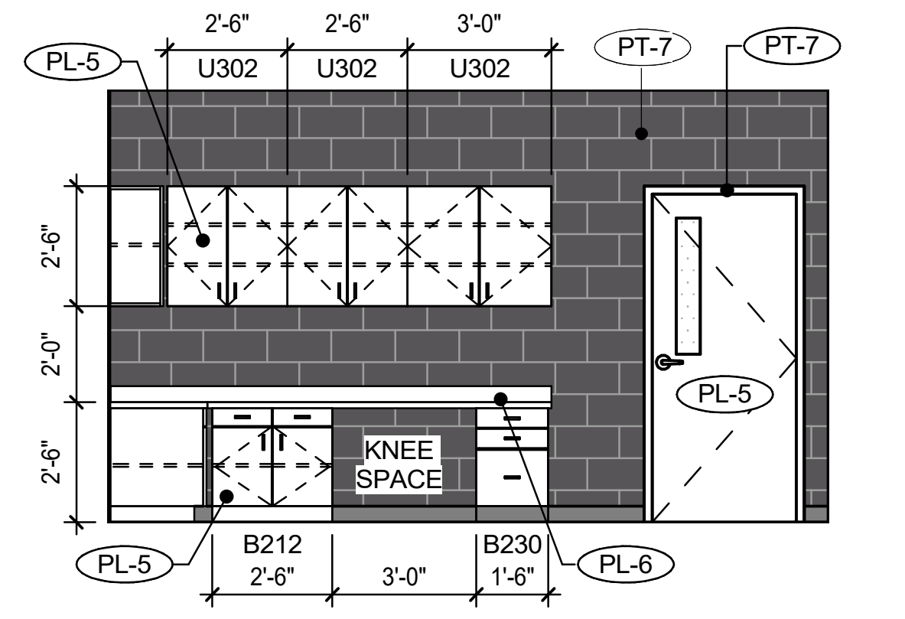
3 1838 - STORAGE - W
1/4" = 1'-0"



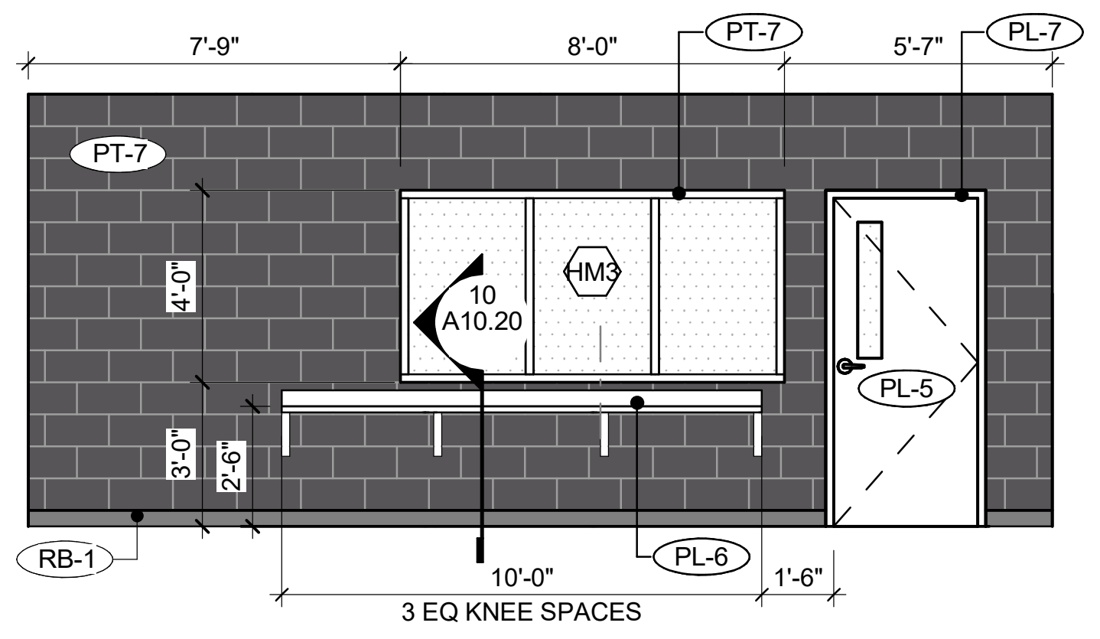
4 1838 - STORAGE - S
1/4" = 1'-0"



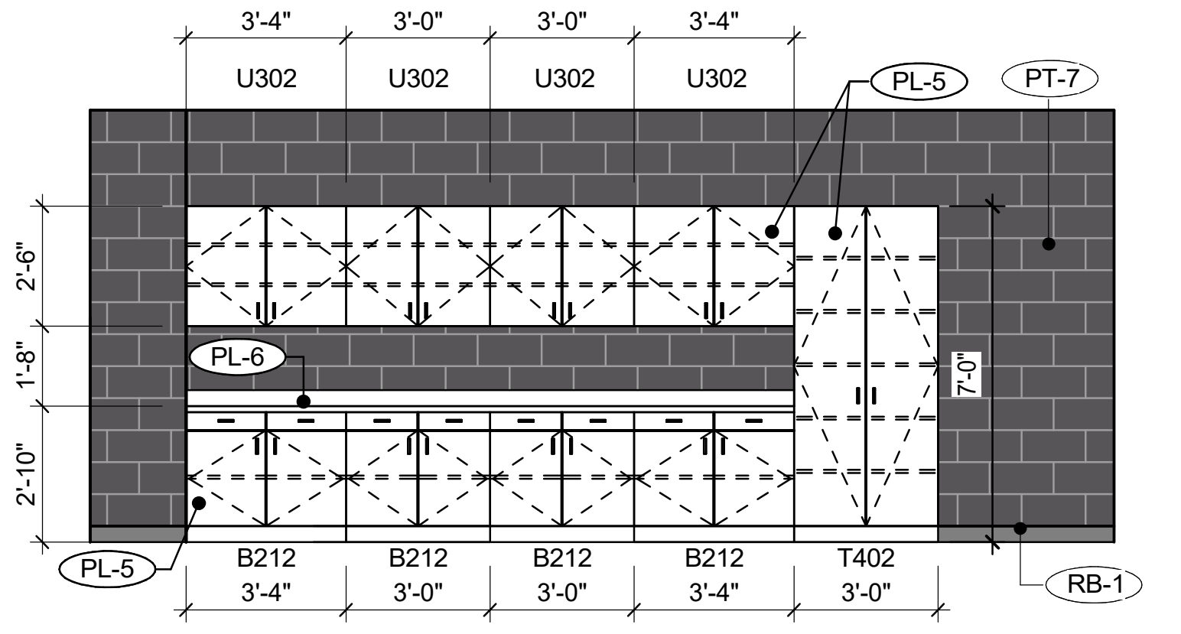
5 4005 - OFFICE - W
1/4" = 1'-0"



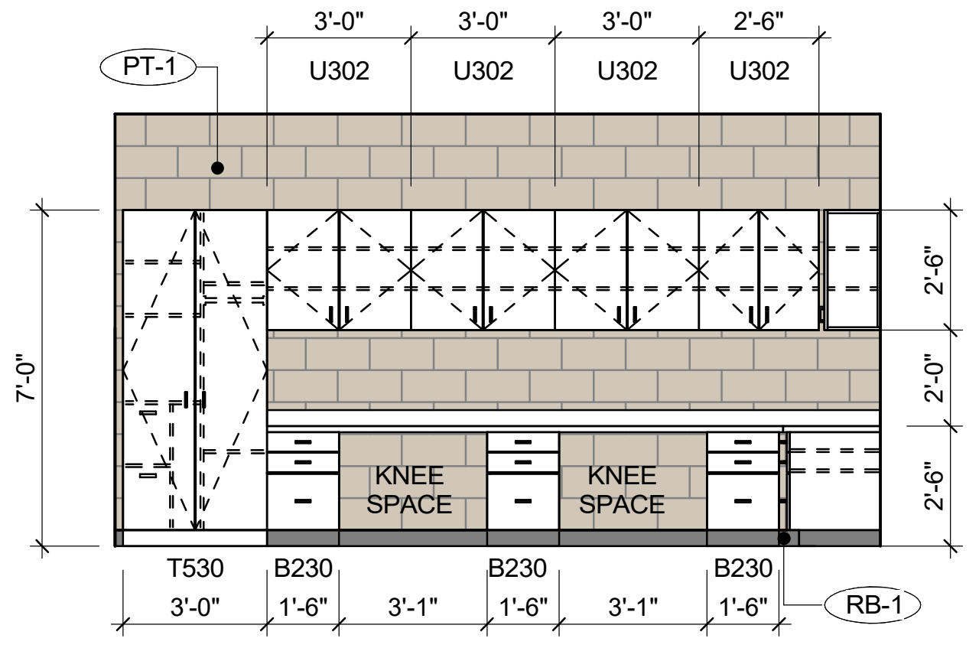
6 4005 - OFFICE - N
1/4" = 1'-0"



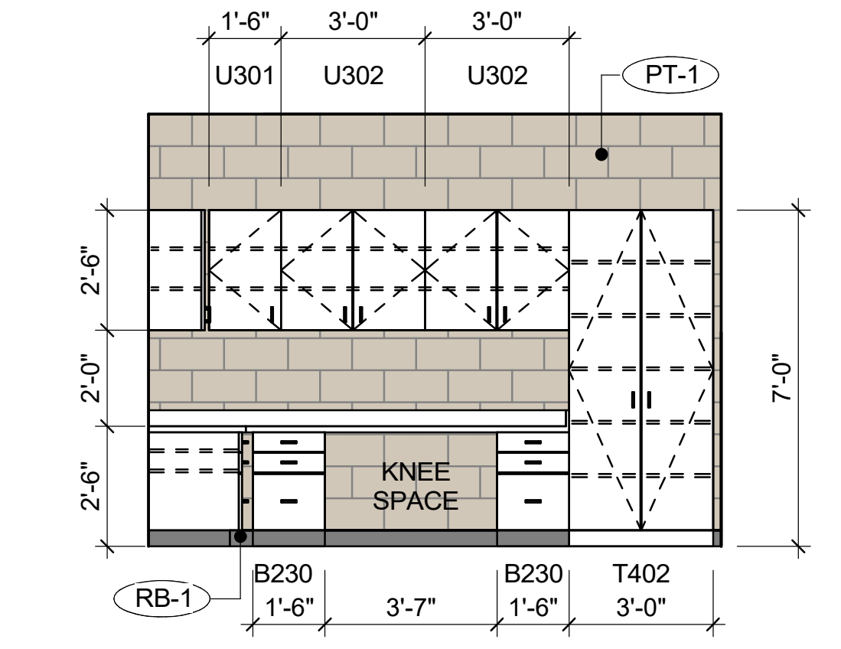
7 4003 - CONTROL - E
1/4" = 1'-0"



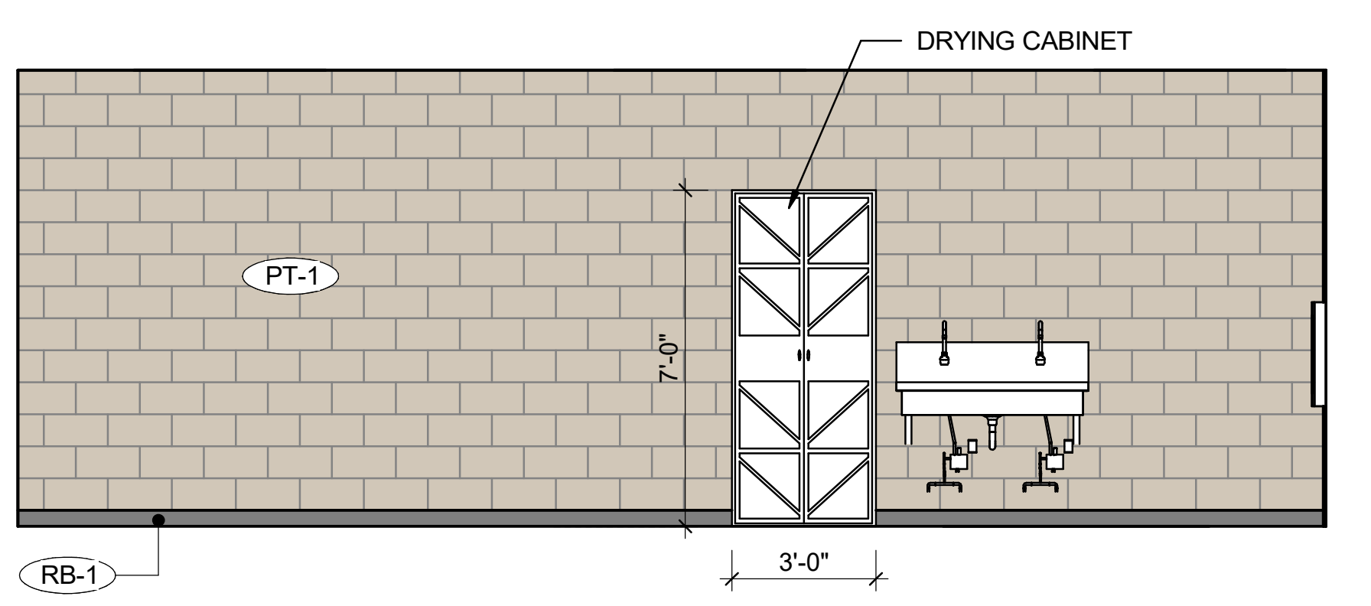
8 4003 - CONTROL - W
1/4" = 1'-0"



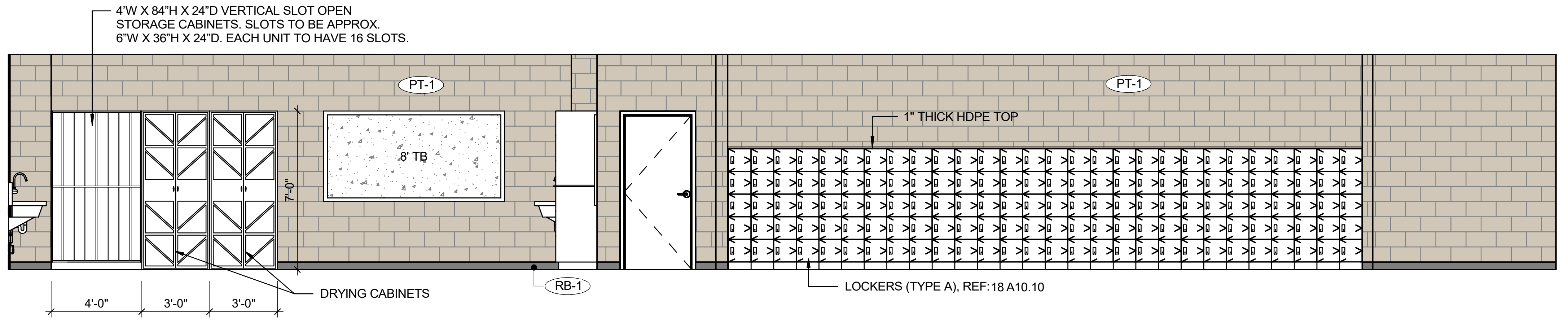
9 4007 - ART OFFICE - E
1/4" = 1'-0"



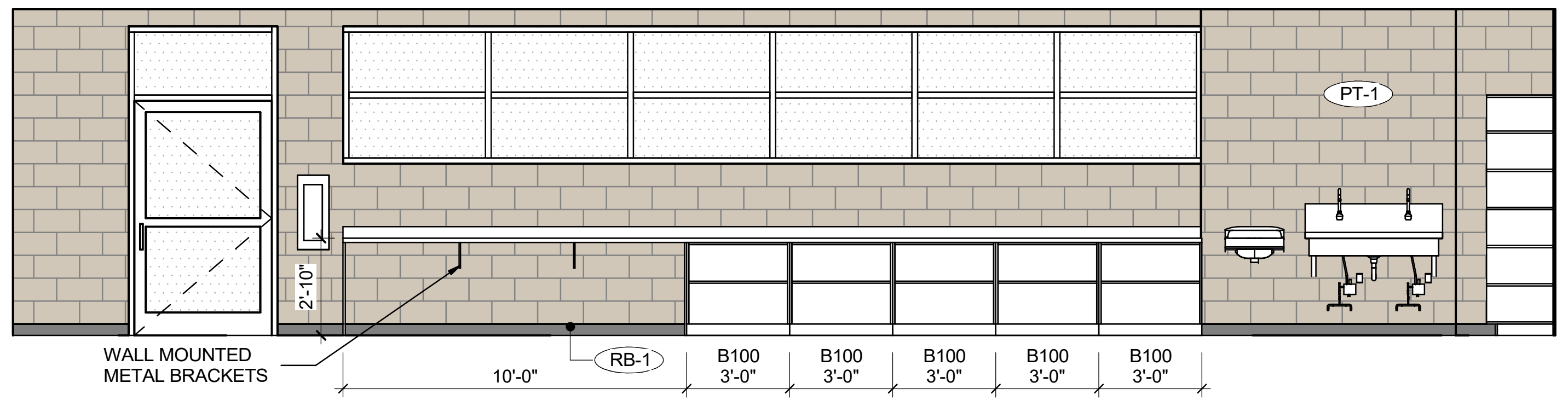
10 4007 - ART OFFICE - S
1/4" = 1'-0"



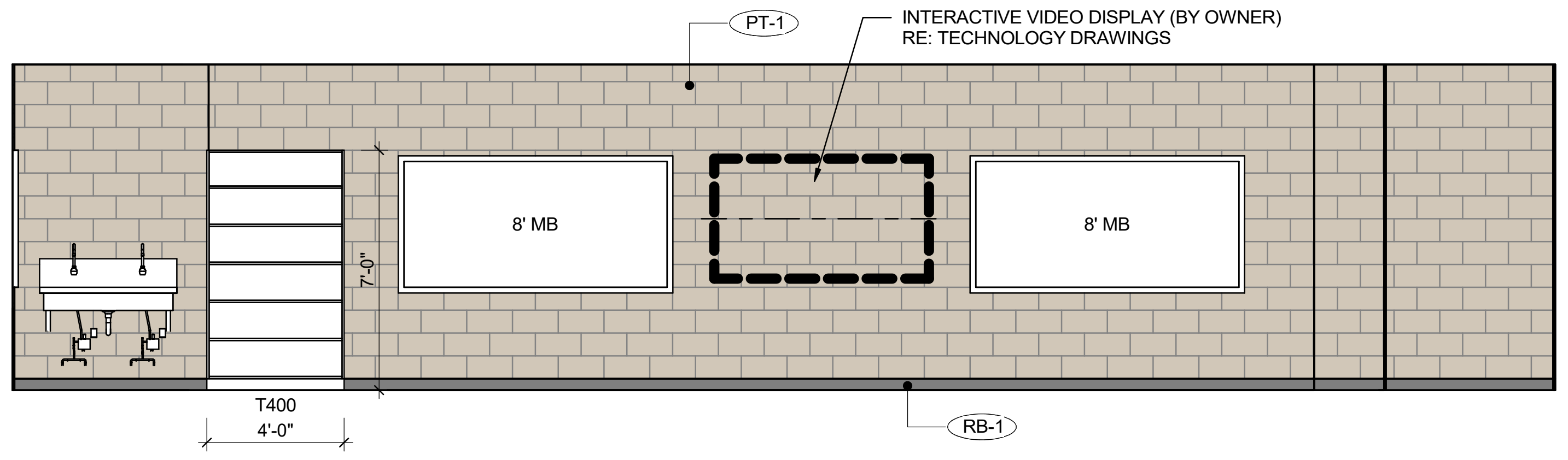
11 4010 - SCULPTURE - W
1/4" = 1'-0"



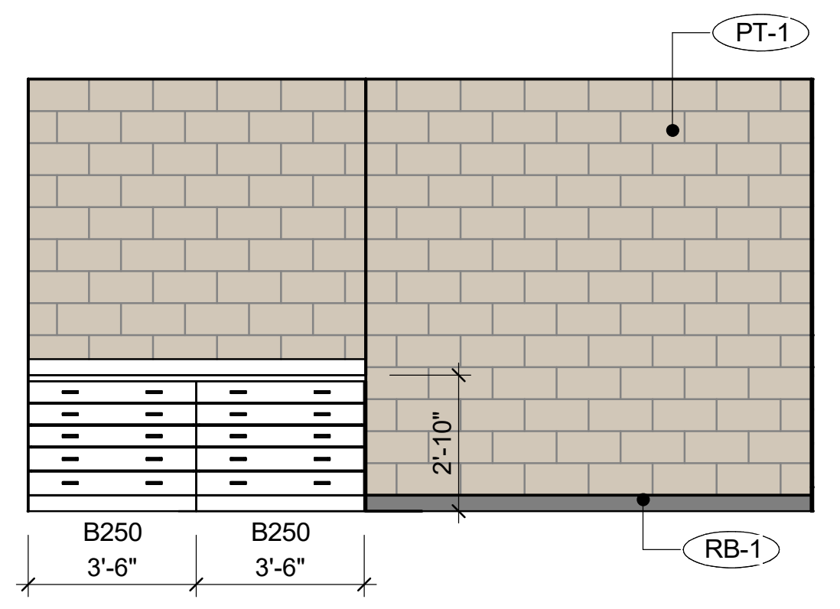
12 4010 - SCULPTURE - E
1/4" = 1'-0"



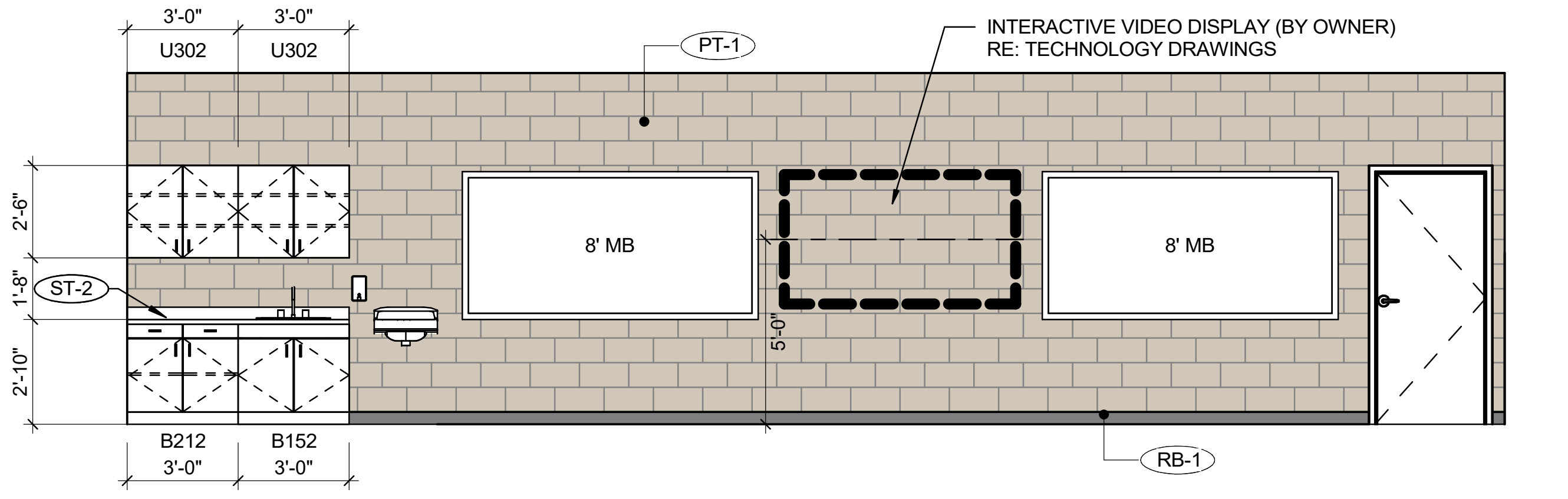
13 4010 - SCULPTURE - N
1/4" = 1'-0"



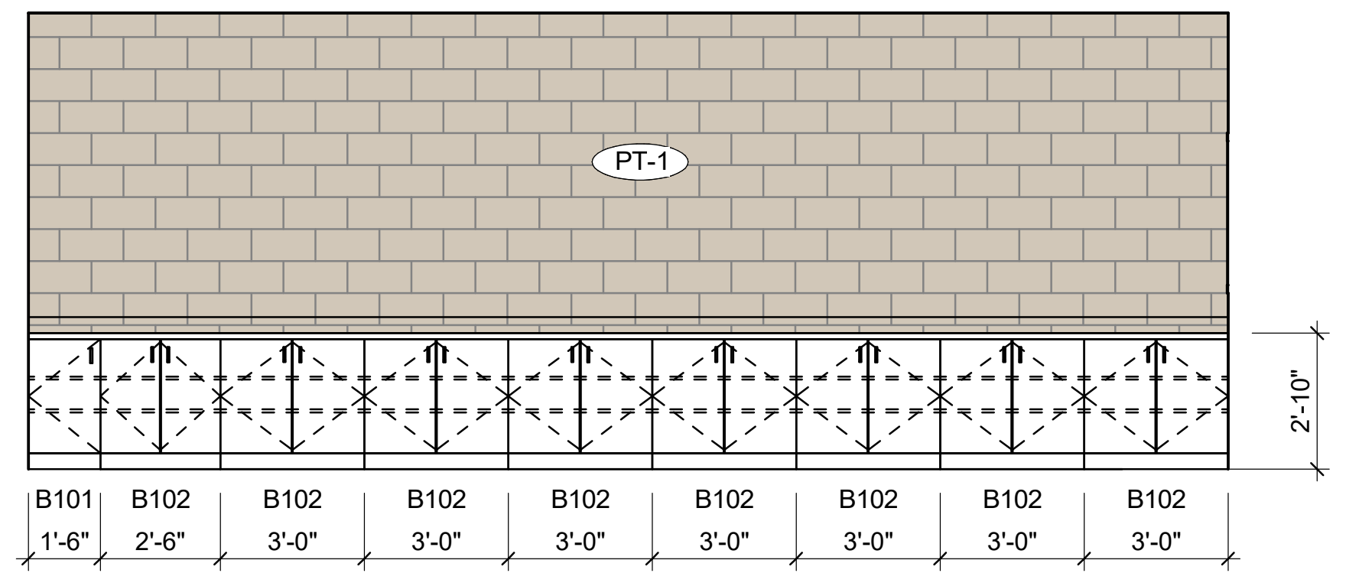
14 4010 - SCULPTURE - S
1/4" = 1'-0"



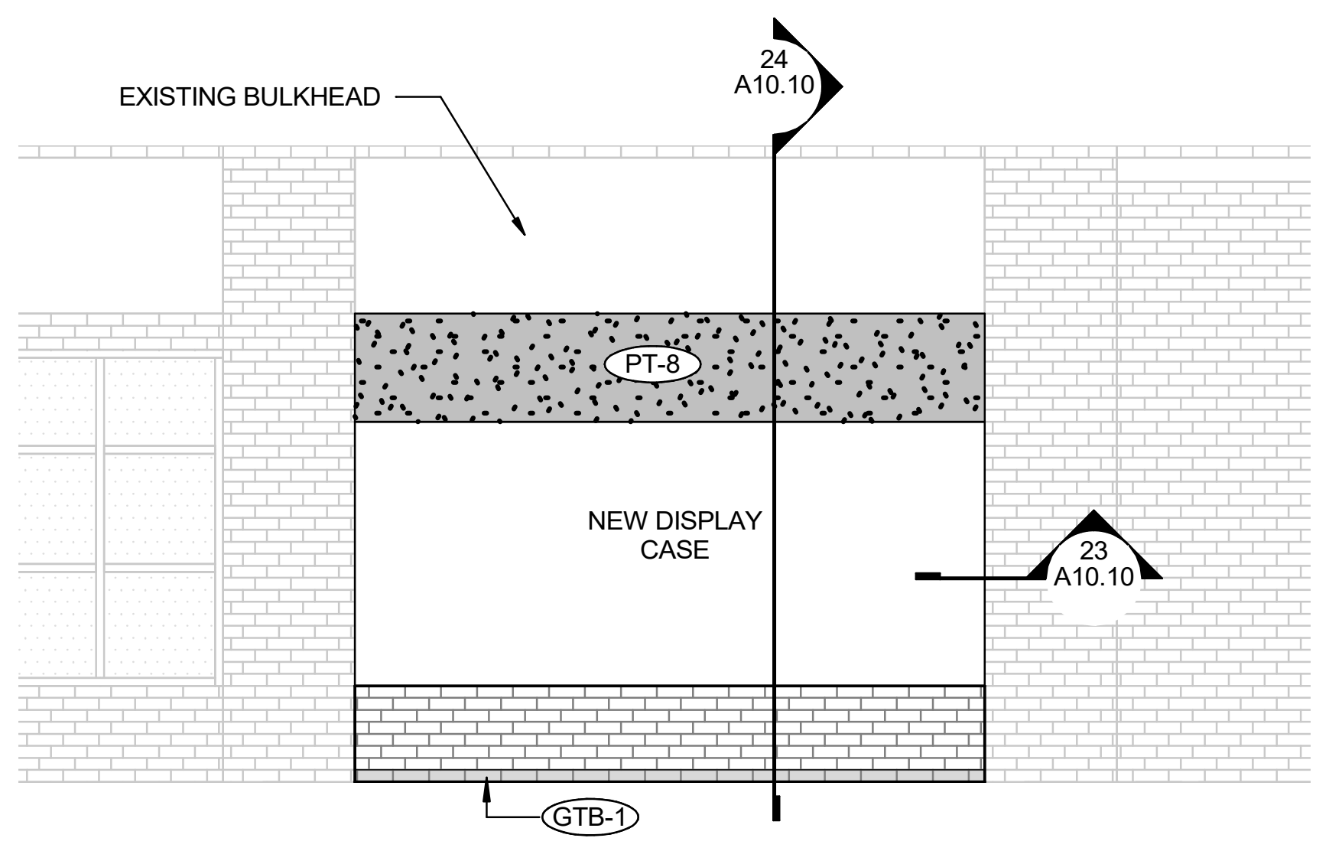
15 4012 - STORAGE - S
1/4" = 1'-0"



16 4013 - DIGITAL ART - N
1/4" = 1'-0"

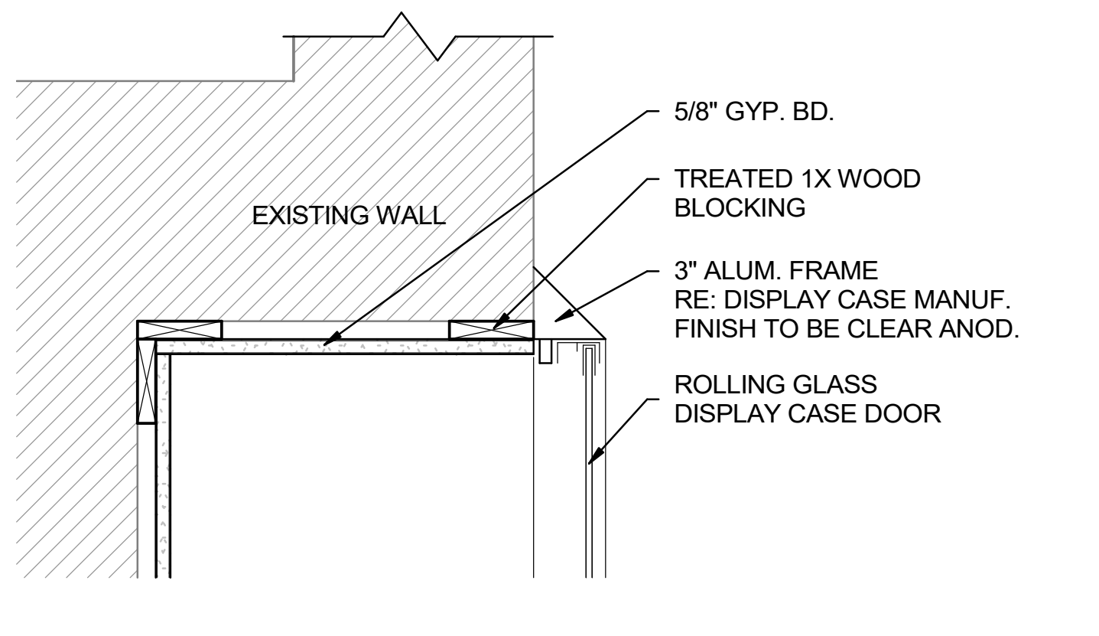


17 4019 - CLASSROOM - N
1/4" = 1'-0"

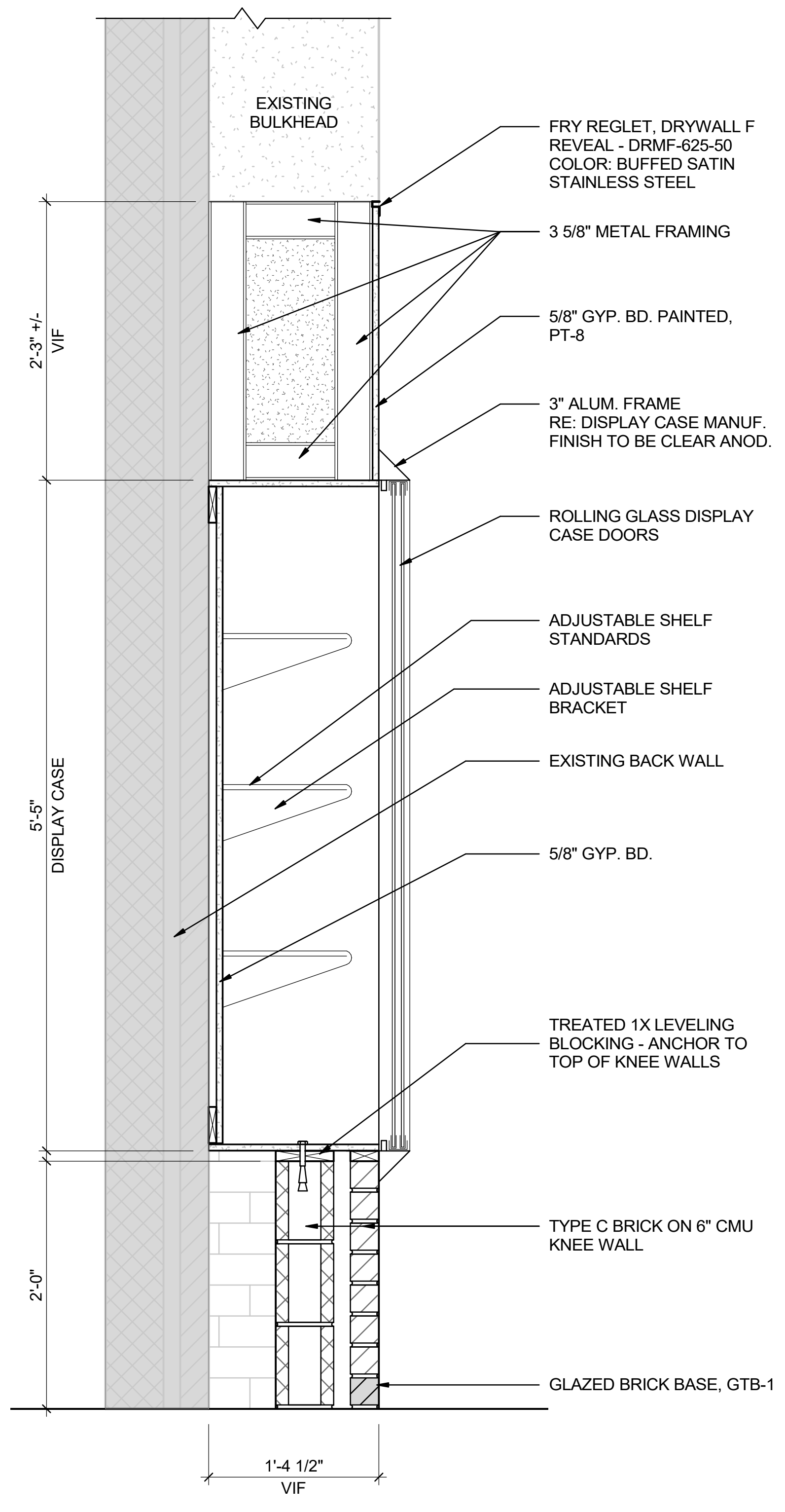


21 1500 MAIN ENTRY - DISPLAY CASE
1/4" = 1'-0"

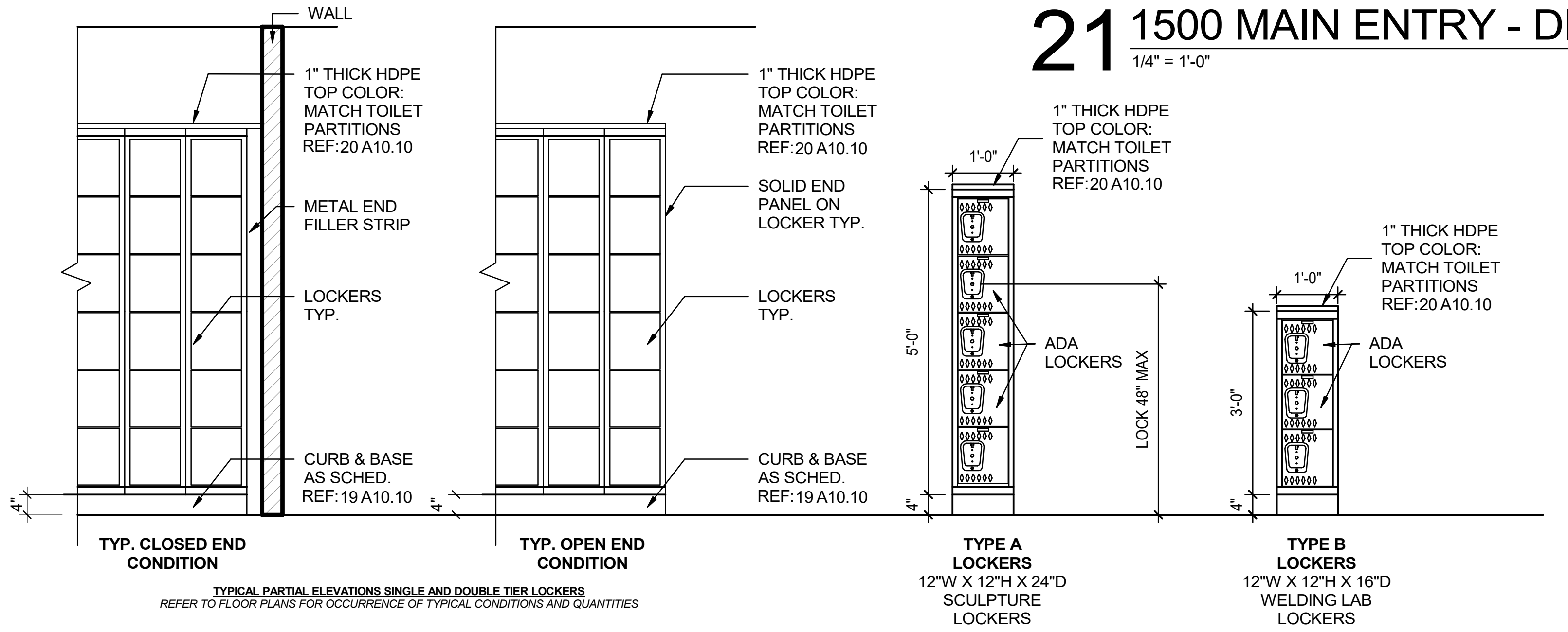
22 EXIST. WALL @ MAIN ENTRY
1/2" = 1'-0"



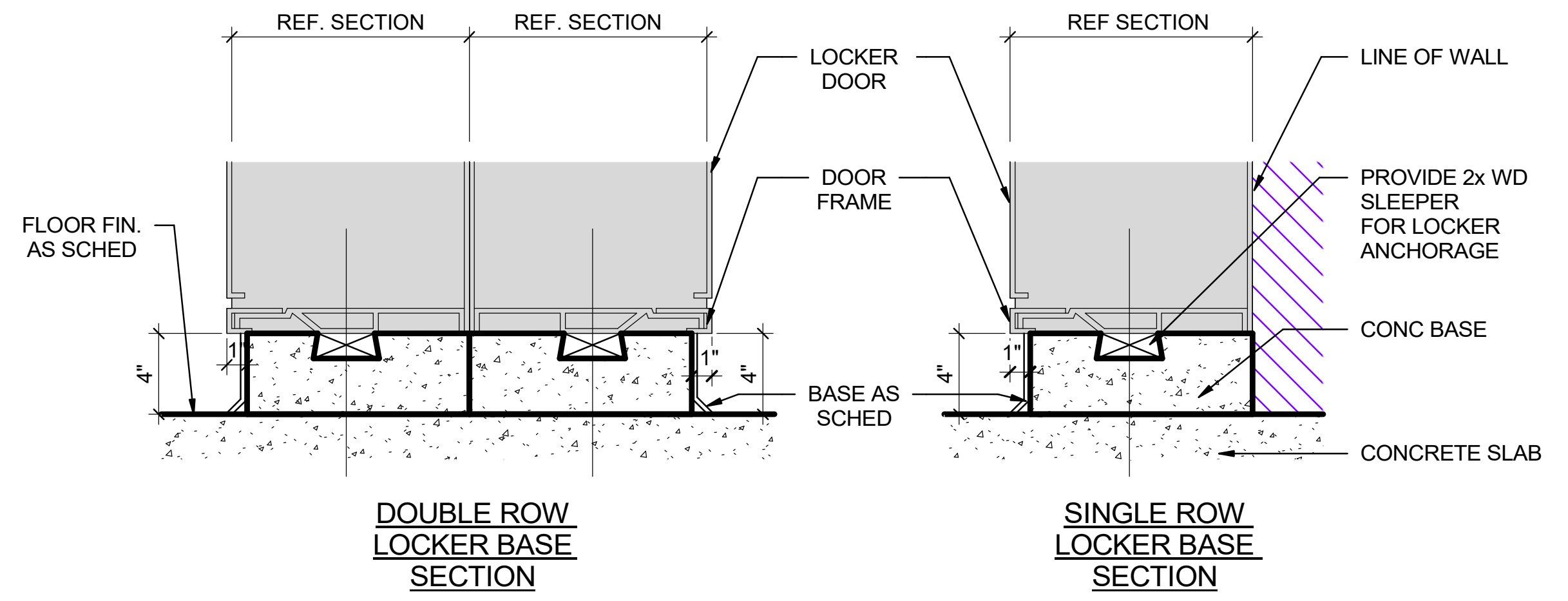
23 JAMB DETAIL - DISPLAY CASE
1 1/2" = 1'-0"



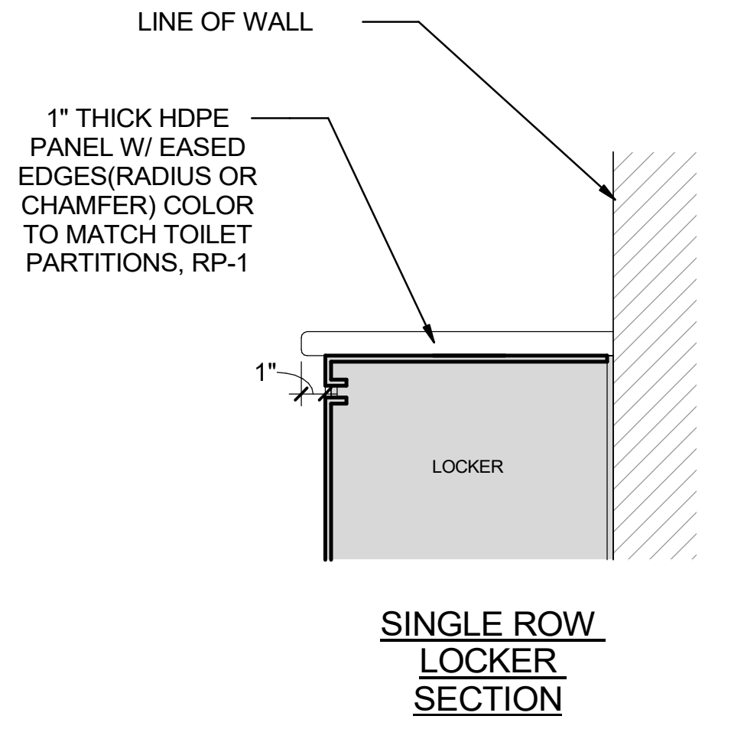
24 DISPLAY CASE DETAIL
1" = 1'-0"



18 LOCKER ELEVATION - FRONT
1/2" = 1'-0"



19 LOCKER BASE - 4" HIGH
1 1/2" = 1'-0"



20 LOCKER TOP - HDPE
1 1/2" = 1'-0"

CASEWORK GENERAL NOTES

1. PROVIDE GROMMET AT COUNTERTOP ABOVE ALL WORKSTATION KNEE SPACE. CENTER GROMMET WITH KNEE SPACE AND AS CLOSE TO BACK WALL AS POSSIBLE.
2. PROVIDE LOCKS AT ALL CABINETS AND DRAWERS. RE: SPECIFICATIONS.
3. PROVIDE ACCESSORIES PER SPECIFICATION FOR ALL FILE DRAWERS.
4. ALL SHELVINGS SHOULD BE ADJUSTIBLE.
5. PROVIDE AND INSTALL PLAM CLAD PLYWD INFILL PANELS BETWEEN CABINETS AND WALLS TO COVER ALL GAPS.
6. ALL EXPOSED PANELS SHALL HAVE PLAM FINISH
7. ALL ACCESSORIES SHALL BE INSTALLED PER ADA / TAS GUIDELINES.

CY-LAKES HIGH SCHOOL BRICK LEGEND

NOTE: FOR VERTICAL HEIGHTS OF BANDING, MATCH EXISTING BUILDING ADJACENT TO NEW ADDITION - SEE WALL SECTIONS FOR DIMENSIONS & DESCRIPTIONS MATCH BRICK LEDGE DEPTH - GC TO VERIFY IN FIELD

A	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING BANDING - LIGHT GRAY **ACME BRICK - DOVE GRAY**
B	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - MEDIUM GRAY **ACME BRICK - PALOMA GRAY**
C	KING SIZED BRICK @ BLDG 1/3 RUNNING BOND COURSING FIELD COLOR - WHITE **ACME BRICK - GLACIER WHITE** (ONLY @ MAIN ENTRY INT. WALL)
MJ	MASONRY JOINTS
CJ	WALL CONTROL JOINTS AT NEW TO EXISTING WALL CONNECTION

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

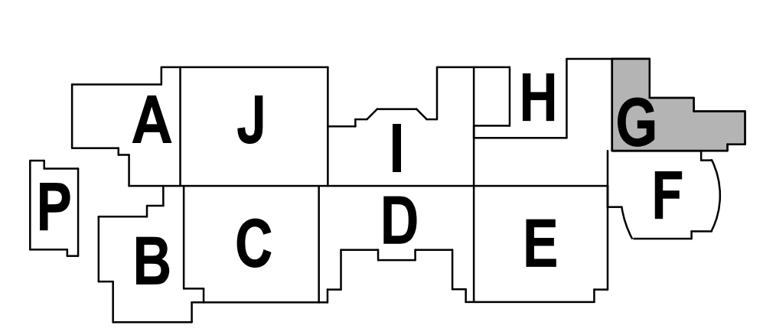
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



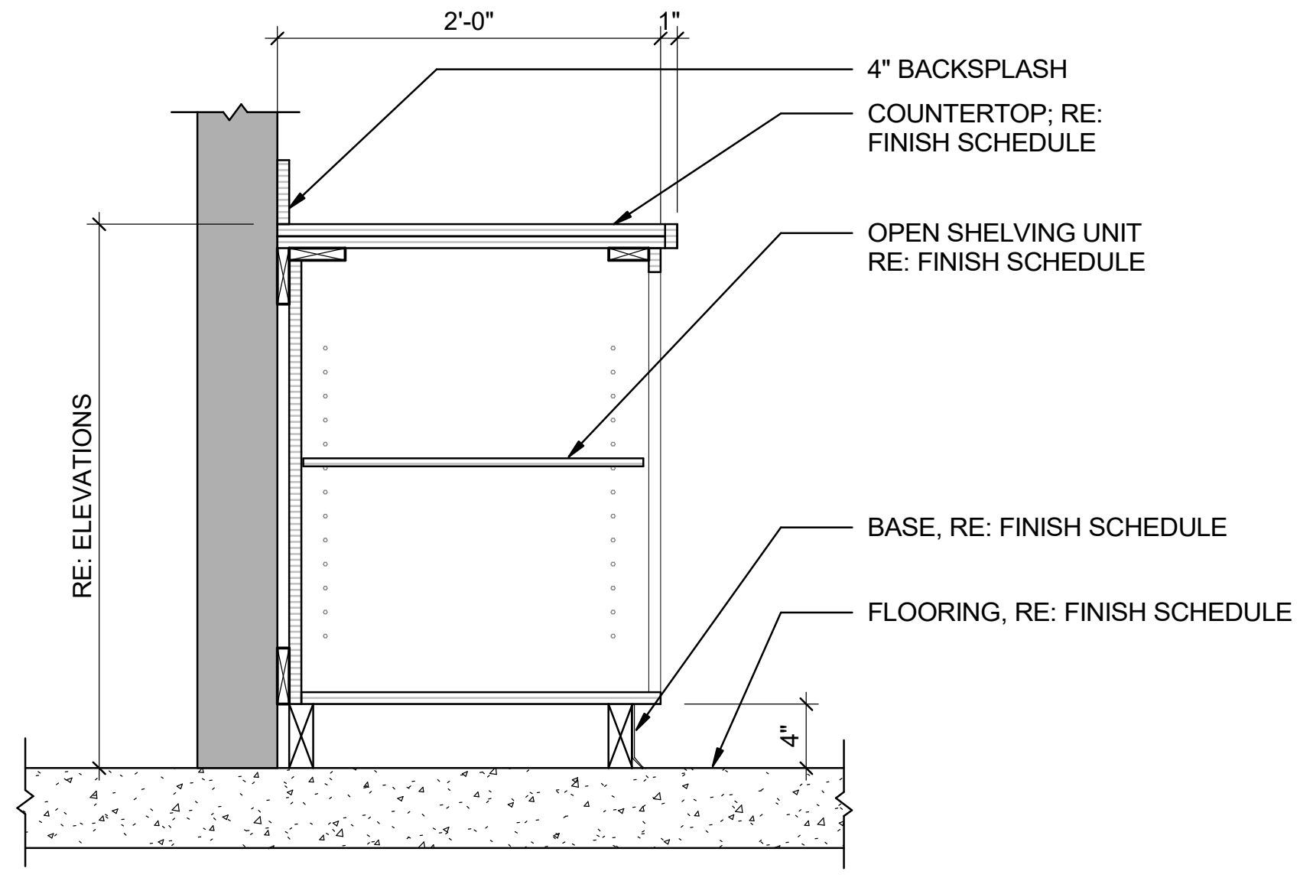
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

CASEWORK ELEVATIONS

A10.10
____ of ____

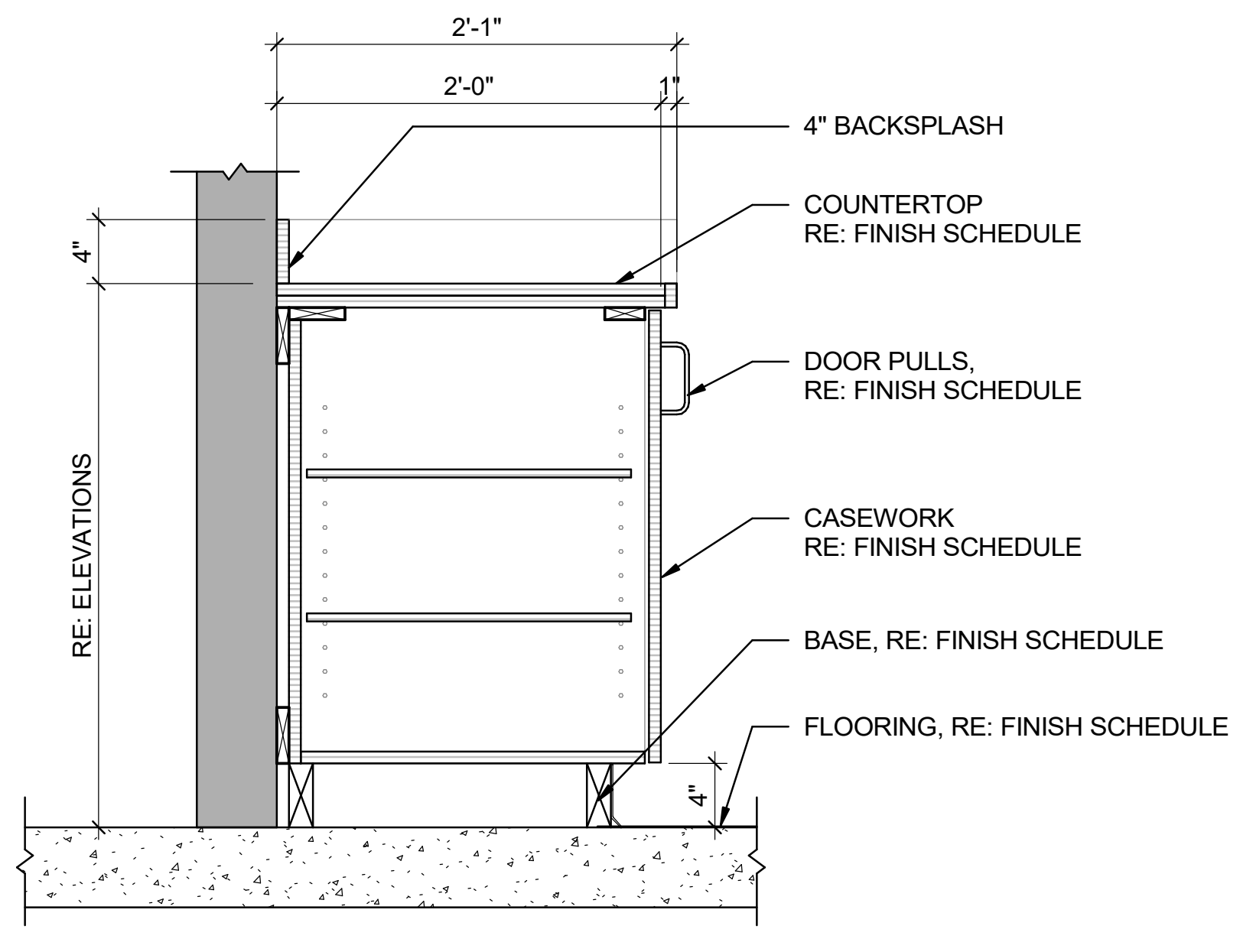
Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:38:00 PM



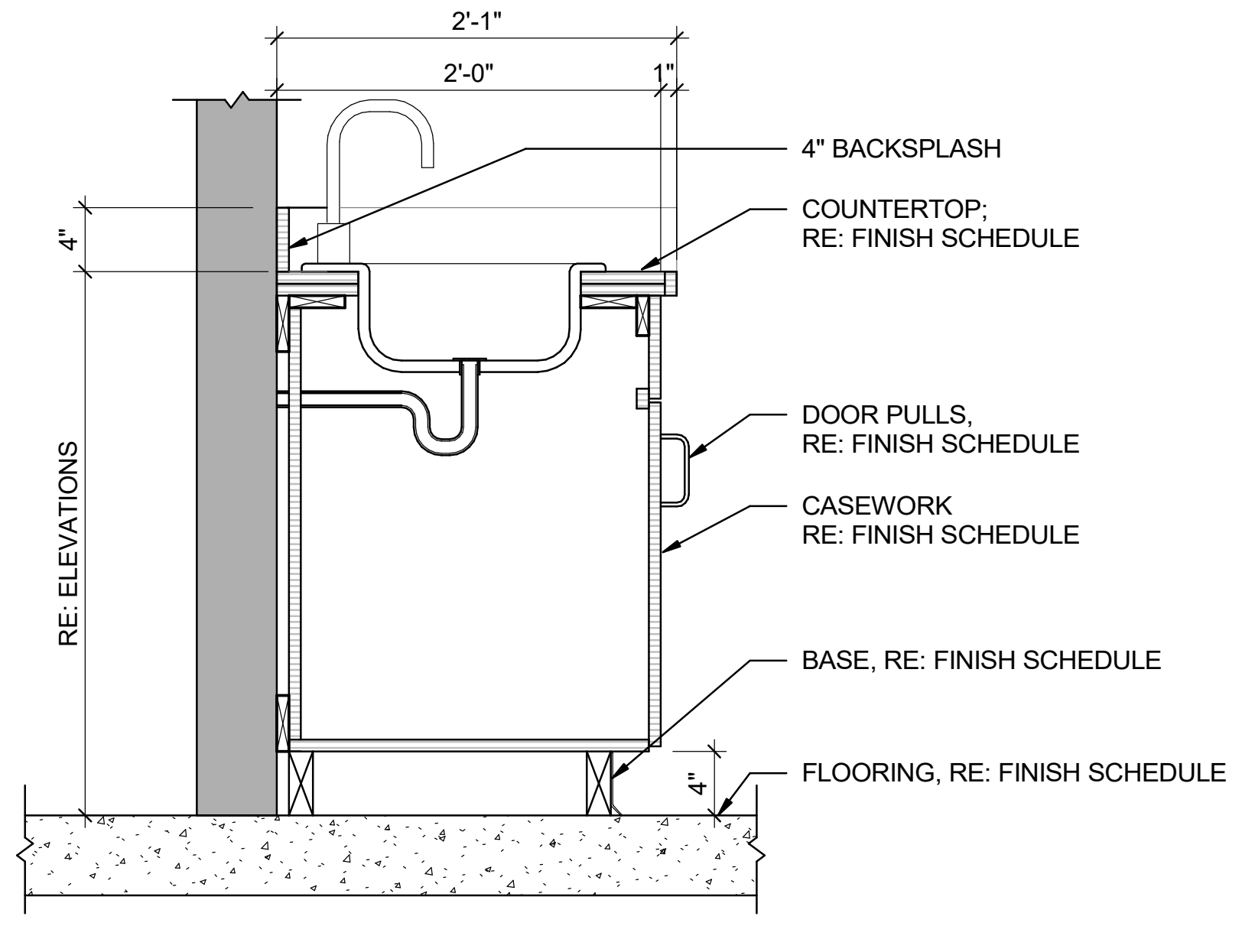
1 B100 - OPEN SHELF BASE CABINET

1" = 1'-0"



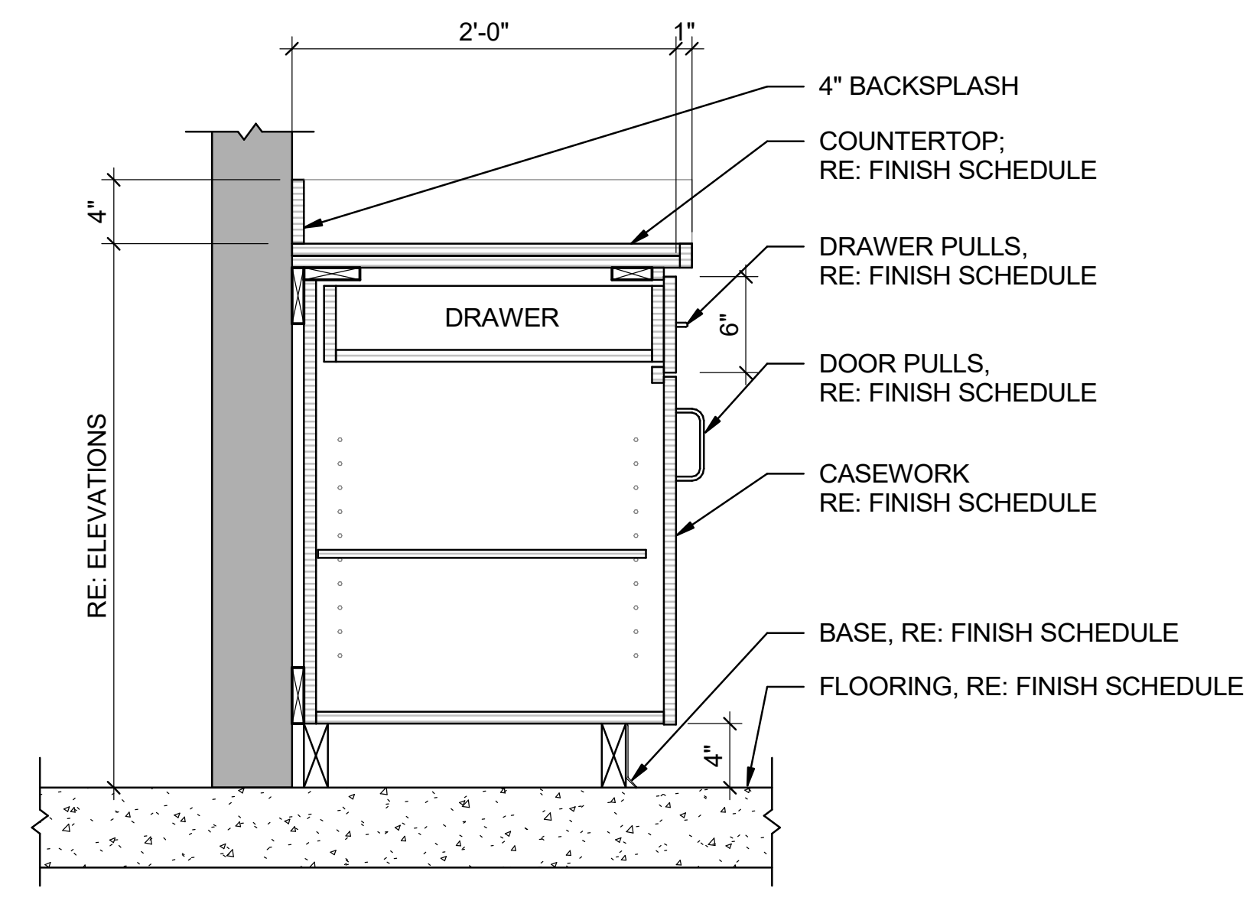
2 B101 & B102 - BASE CABINET W/ DOOR

1" = 1'-0"



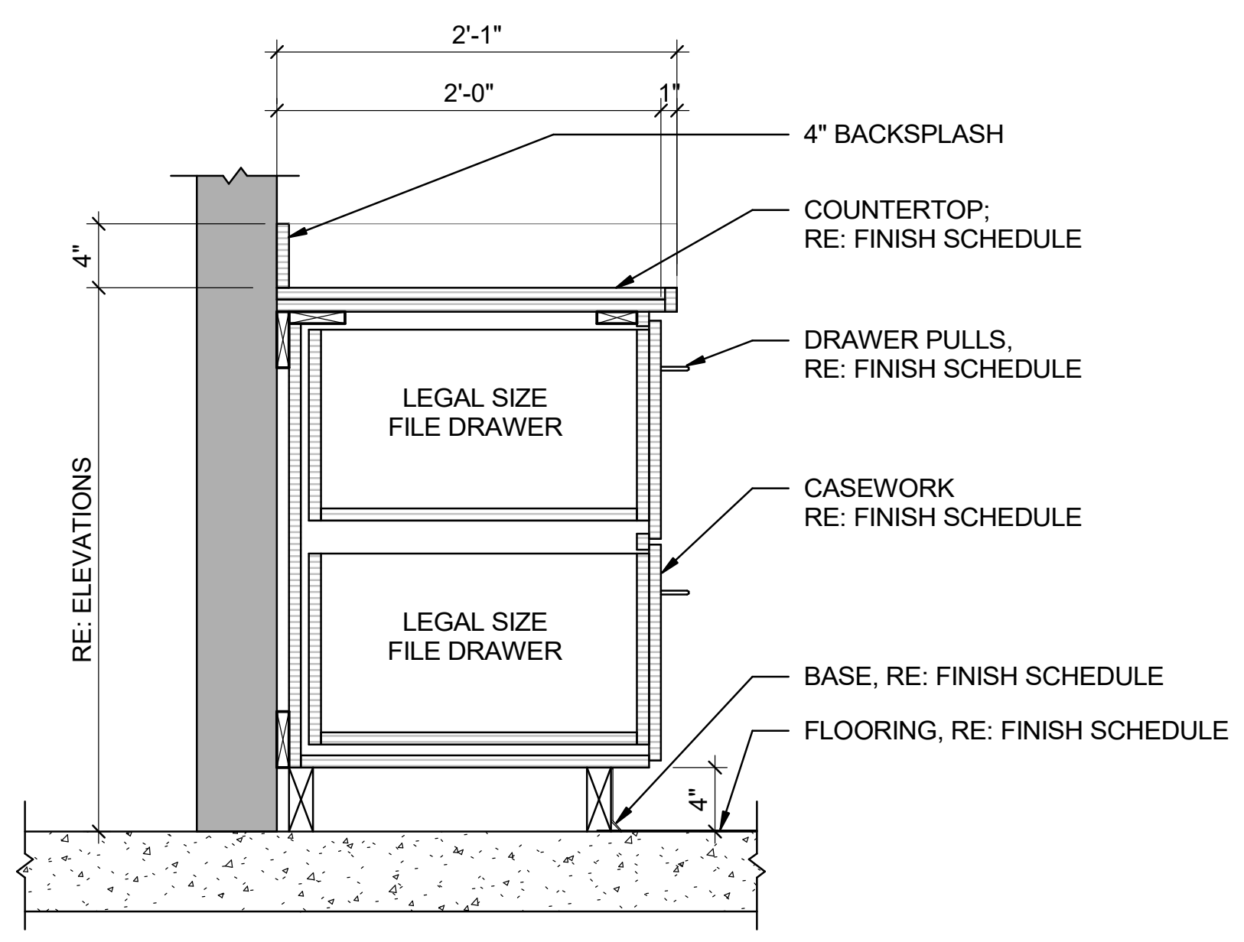
3 B152 - SINK CABINET

1" = 1'-0"



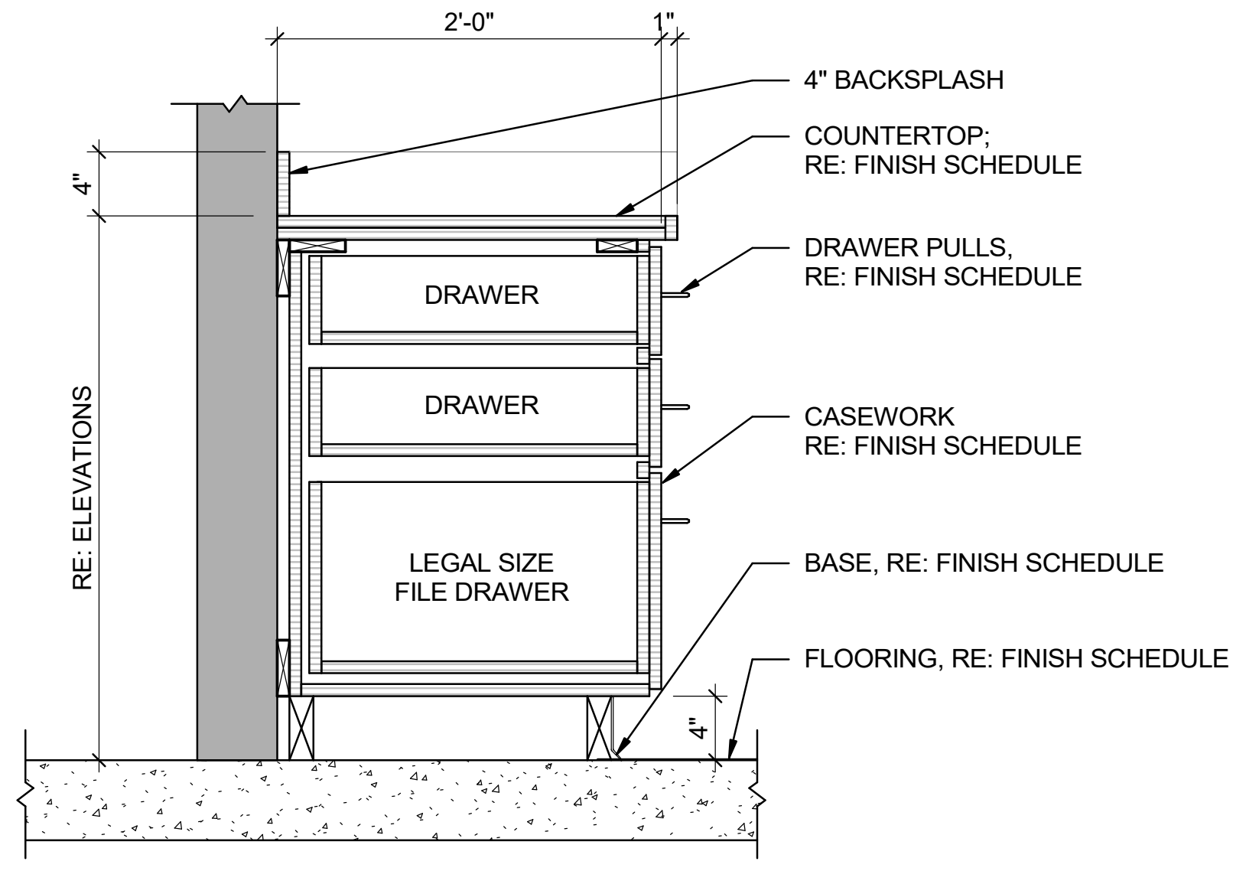
4 B211 & B212 - CABINET W/ DRAWER

1" = 1'-0"



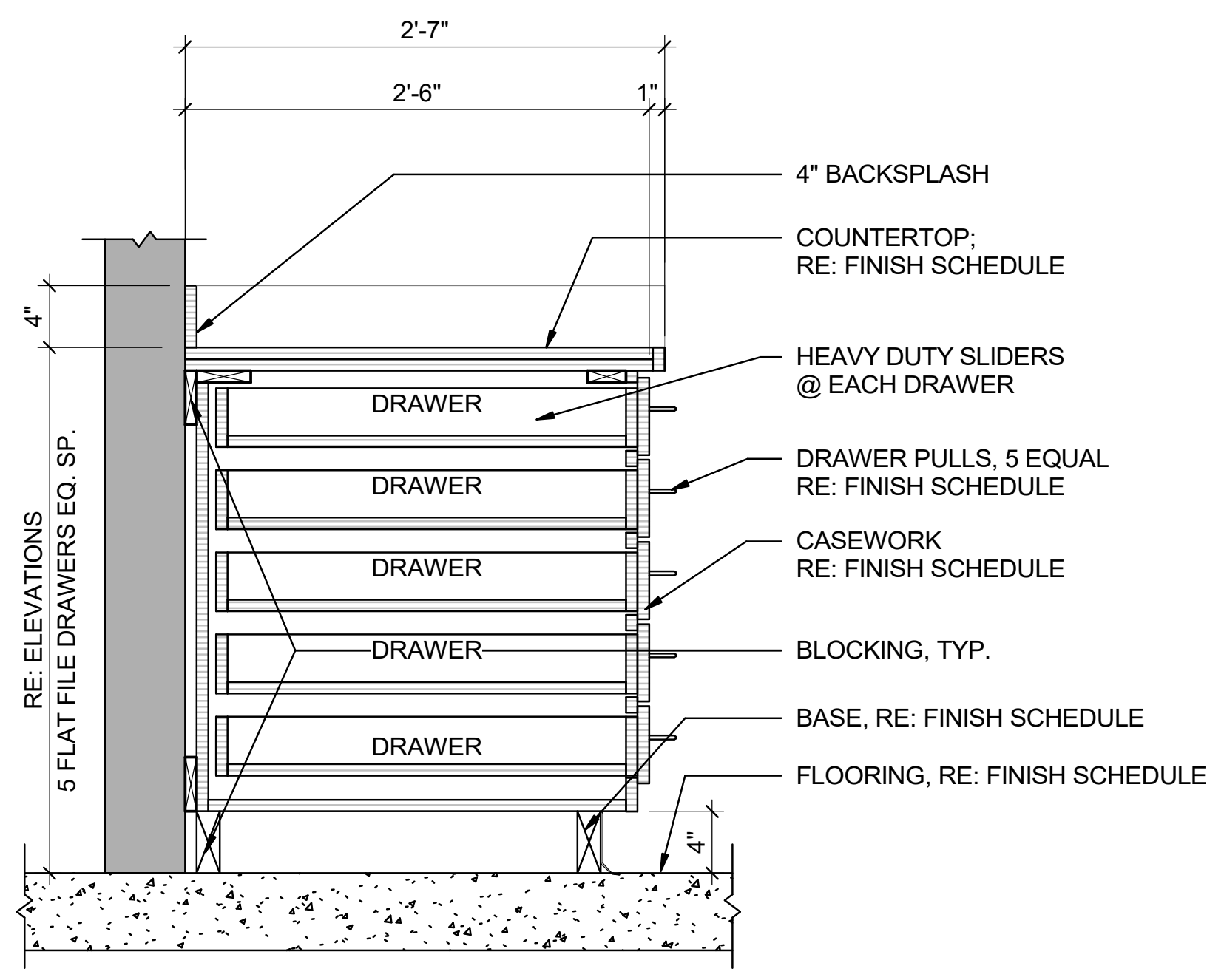
5 B223 - DOUBLE FILE DRAWER CABINET

1" = 1'-0"



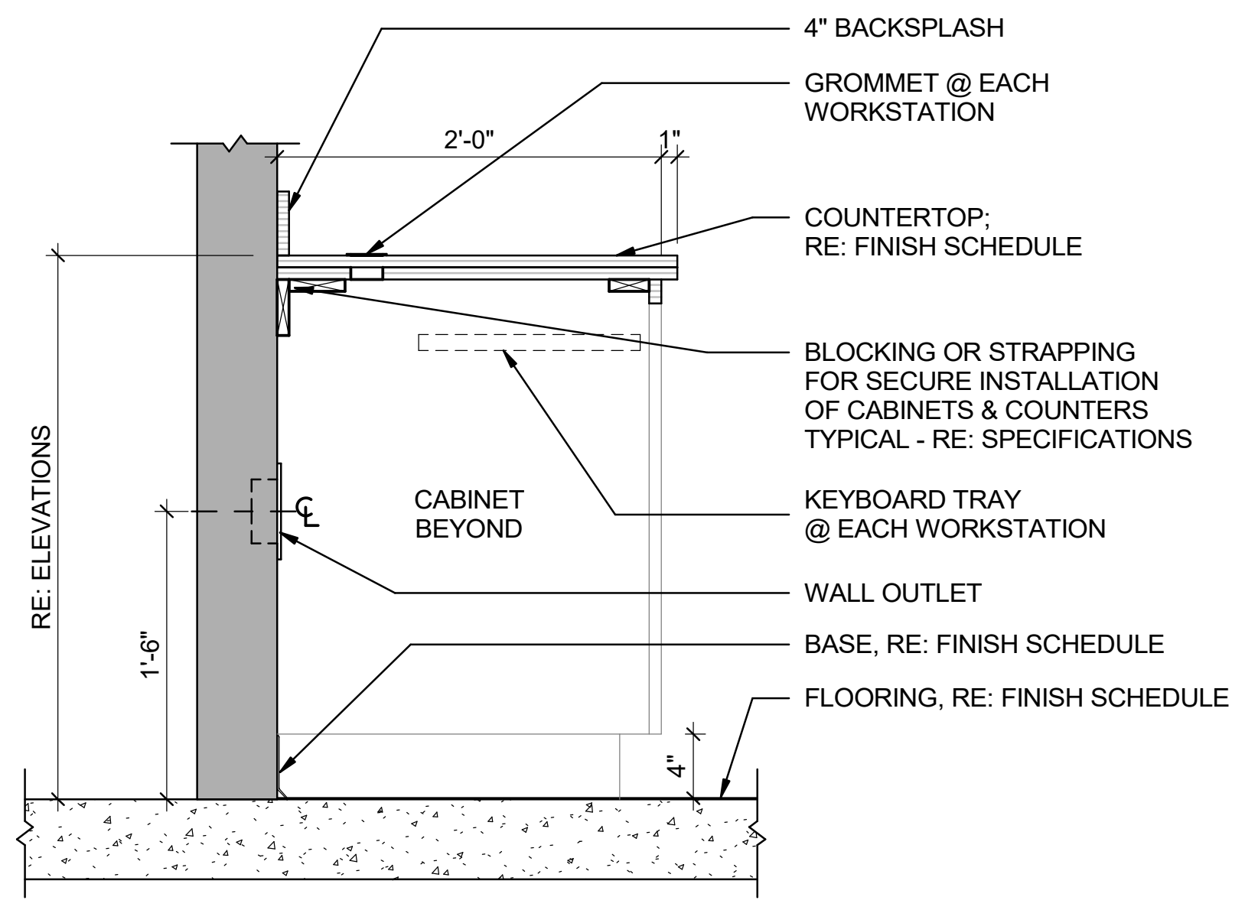
6 B230 - TRIPLE DRAWER CABINET

1" = 1'-0"



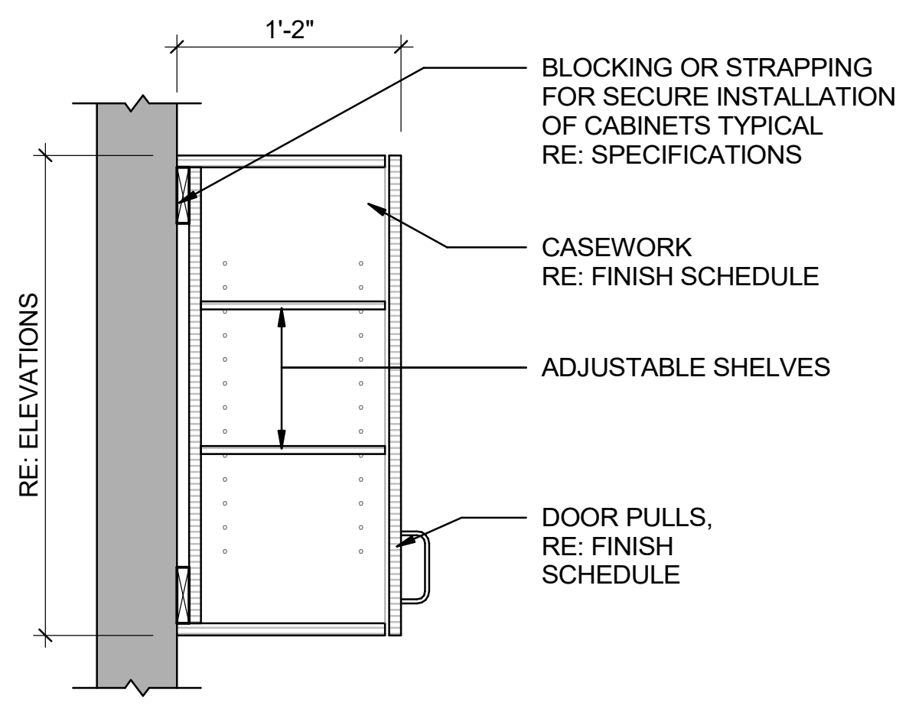
7 B250 - FLAT FILE DRAWER

1" = 1'-0"



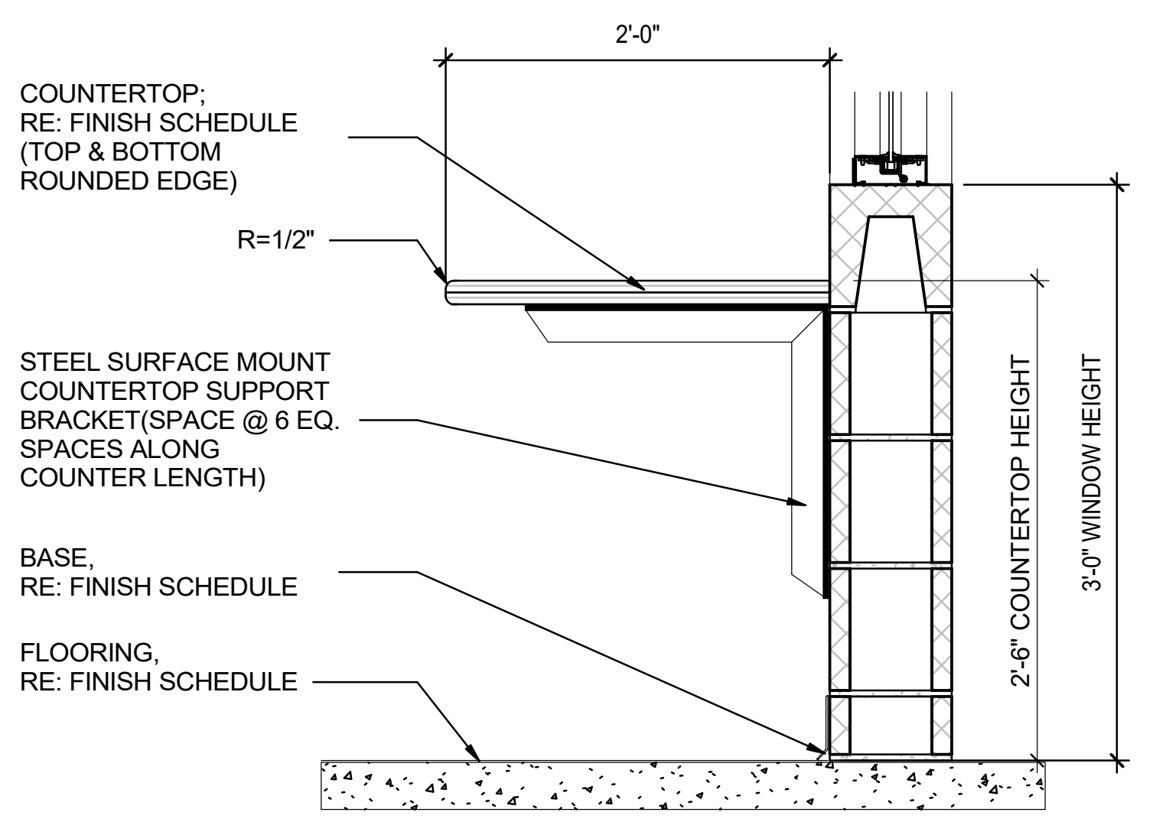
8 WORK STATION

1" = 1'-0"



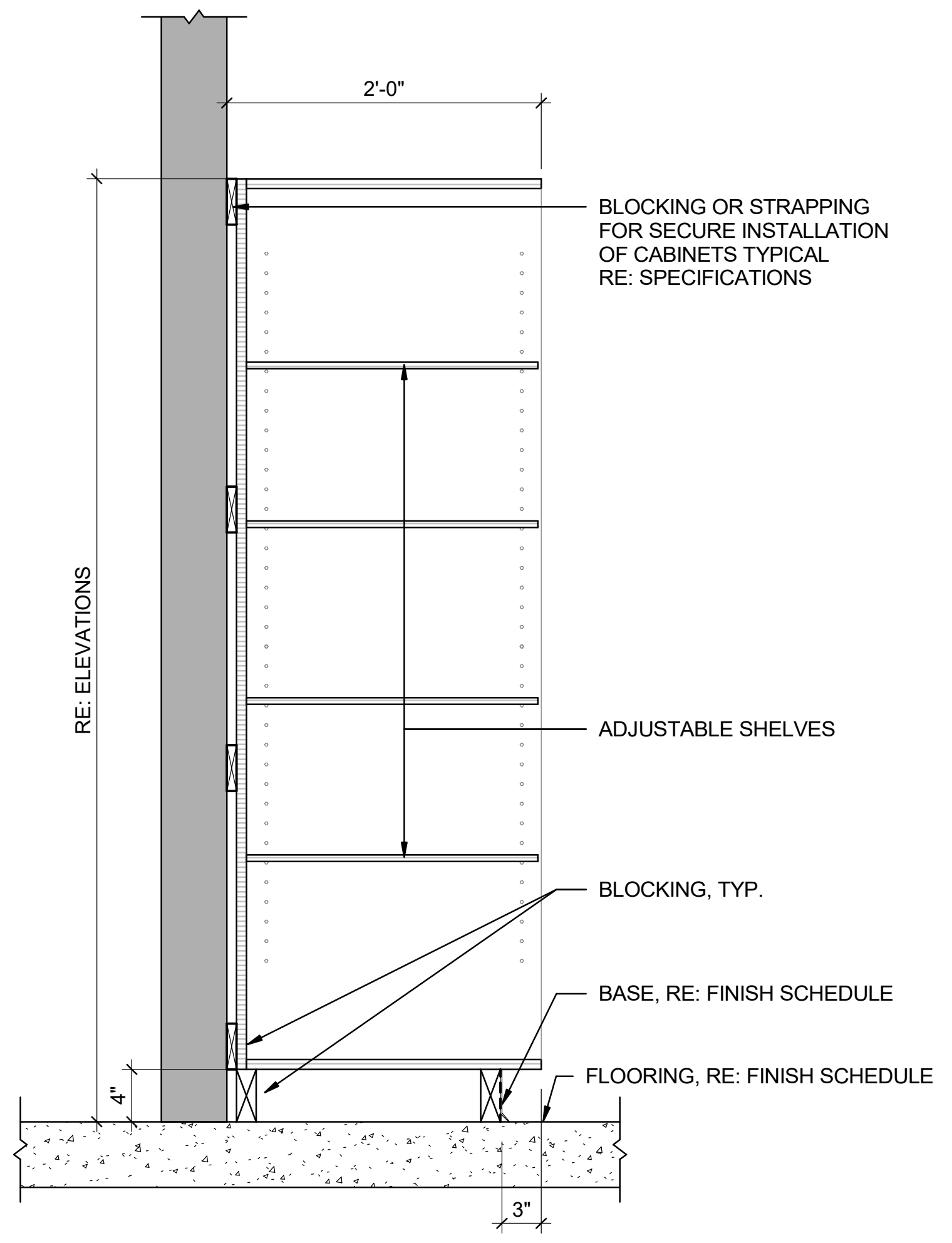
9 U301 & U302 - UPPER CABINET

1" = 1'-0"



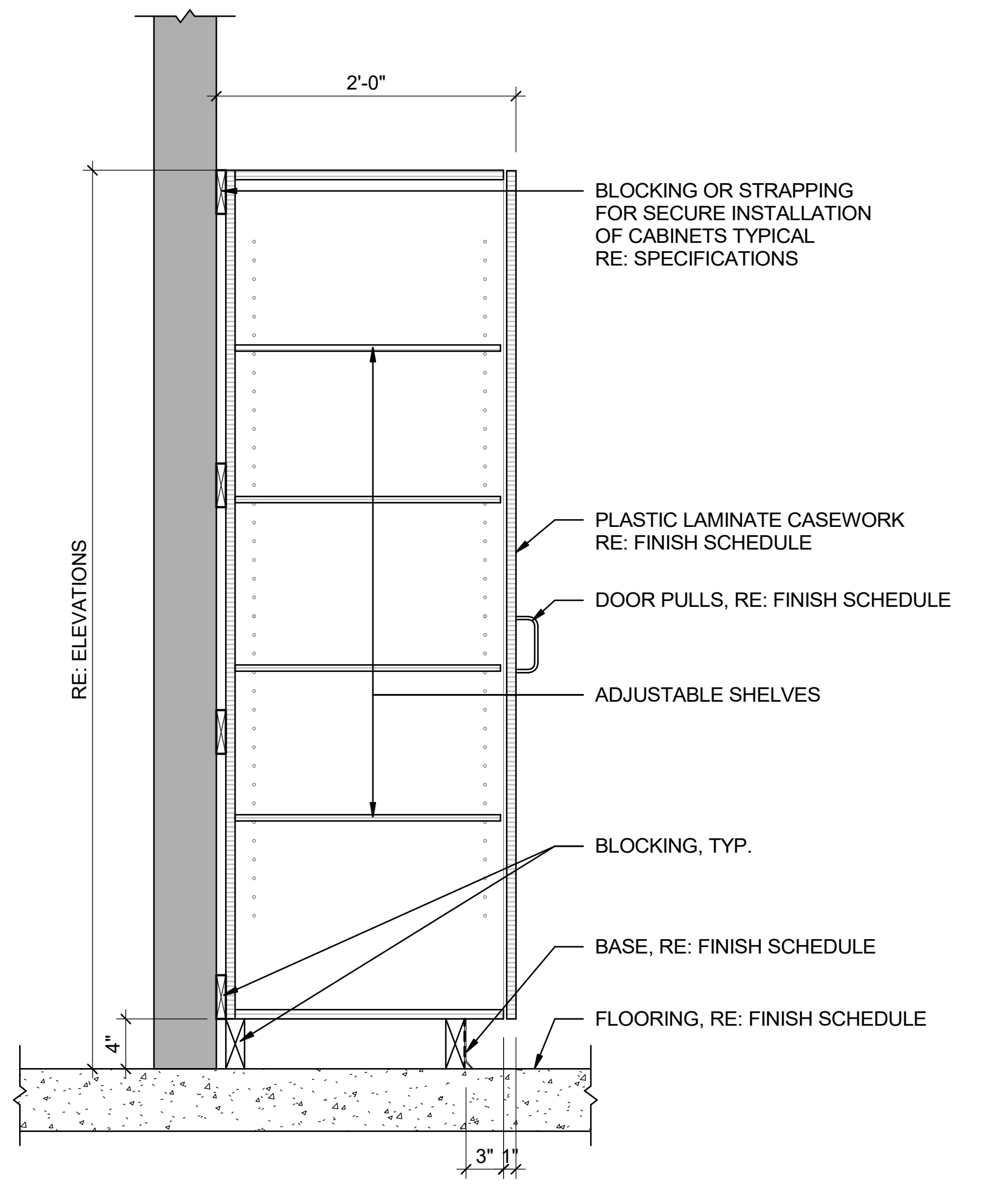
10 CONTROL ROOM COUNTERTOP

1" = 1'-0"



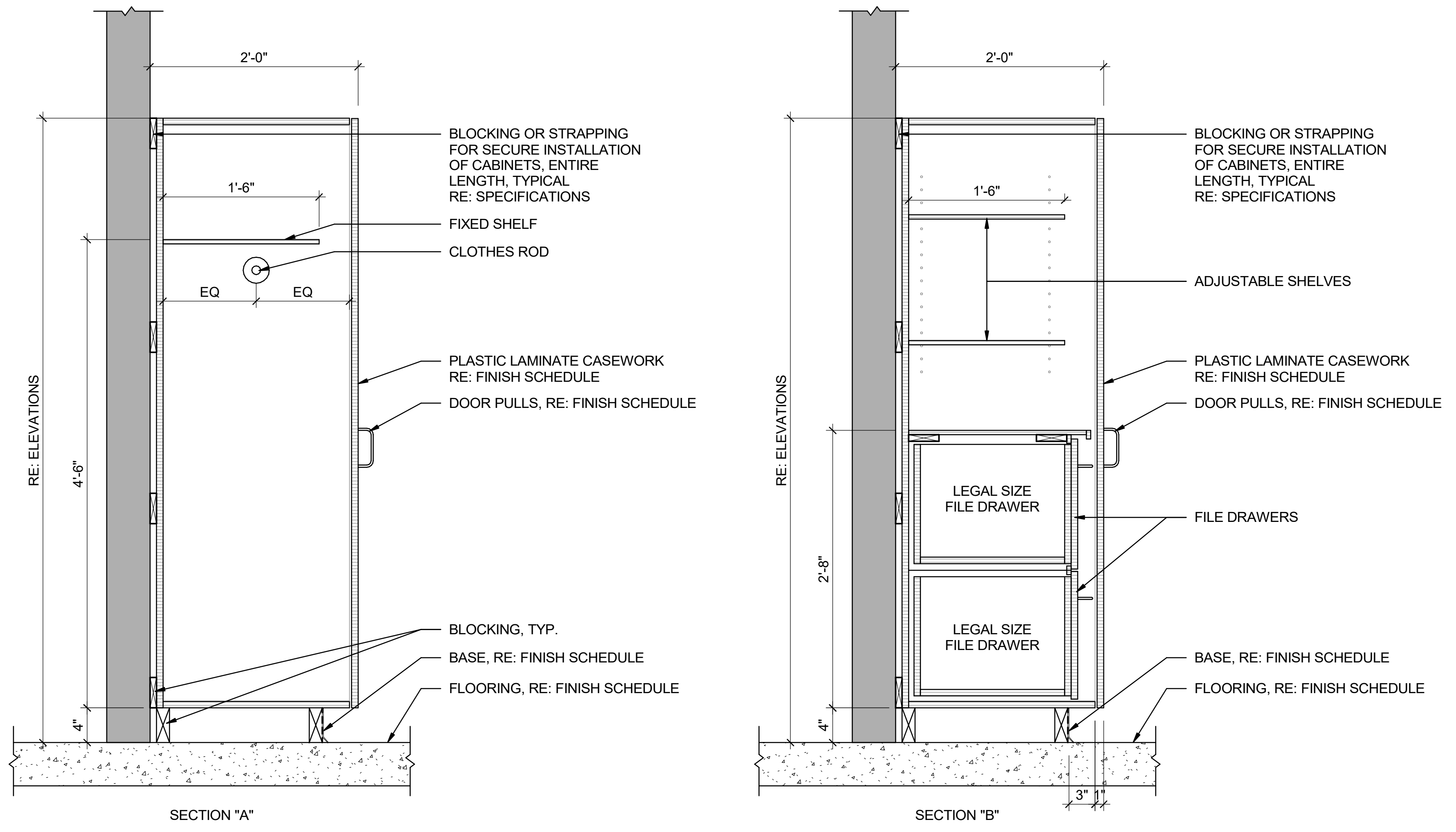
11 T400 - TALL OPEN SHELF CABINET

1" = 1'-0"



12 T402 - TALL SHELF CABINET W/ DOOR

1" = 1'-0"



13 T530 & T531 - TEACHER CABINET

1" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

CASEWORK GENERAL NOTES

1. PROVIDE GROMMET AT COUNTERTOP ABOVE ALL WORKSTATION KNEE SPACE. CENTER GROMMET WITH KNEE SPACE AND AS CLOSE TO BACK WALL AS POSSIBLE.
2. PROVIDE LOCKS AT ALL CABINETS AND DRAWERS. RE: SPECIFICATIONS.
3. PROVIDE ACCESSORIES PER SPECIFICATION FOR ALL FILE DRAWERS.
4. ALL SHELVINGS SHOULD BE ADJUSTIBLE.
5. PROVIDE AND INSTALL PLAM CLAD PLYWD INFILL PANELS BETWEEN CABINETS AND WALLS TO COVER ALL GAPS.
6. ALL EXPOSED PANELS SHALL HAVE PLAM FINISH
7. ALL ACCESSORIES SHALL BE INSTALLED PER ADA / TAS GUIDELINES.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

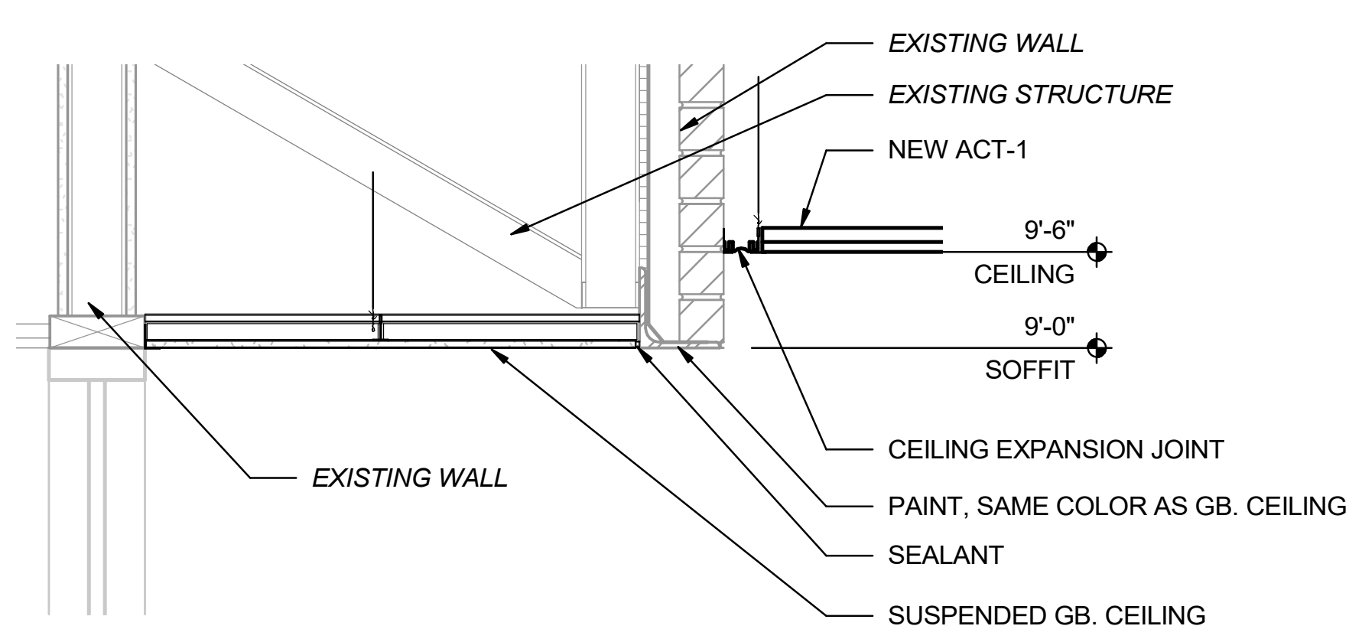
Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

CASEWORK SECTIONS
& DETAILS

A10.20
___ of ___

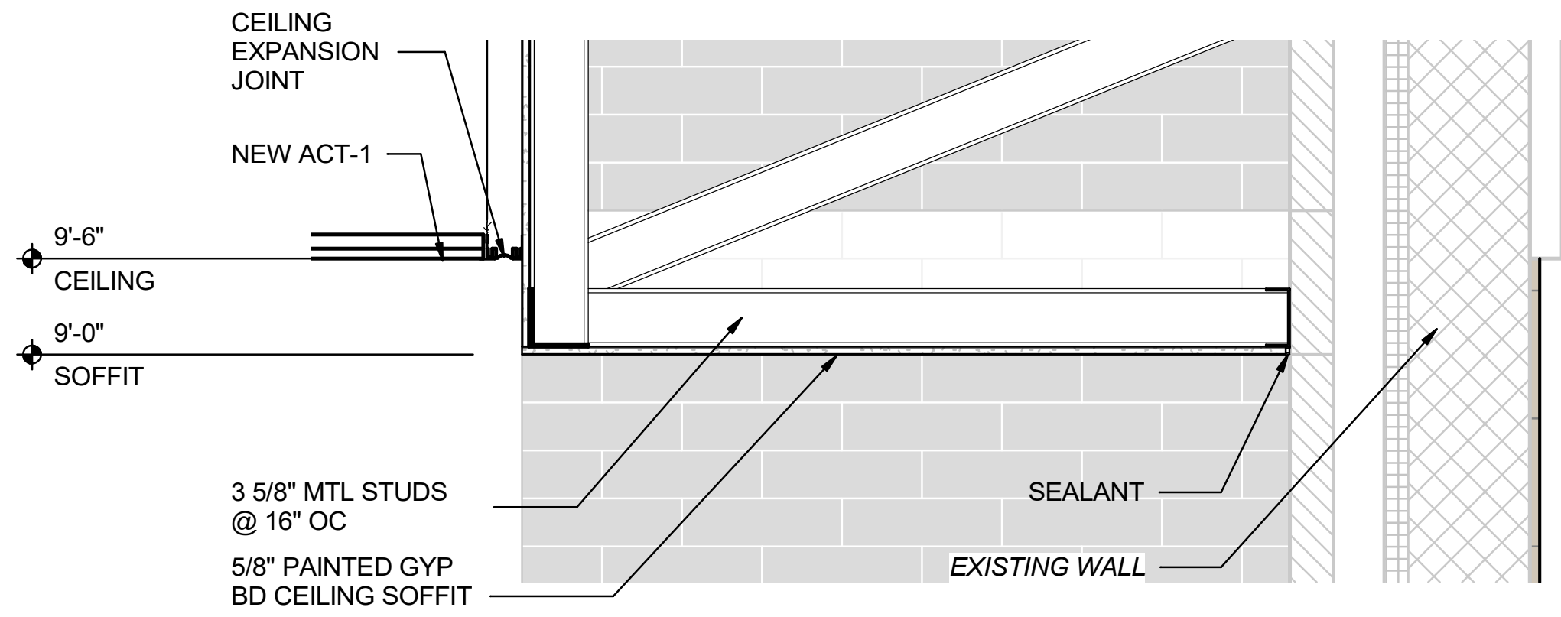
11/14/2024 1:38:15 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



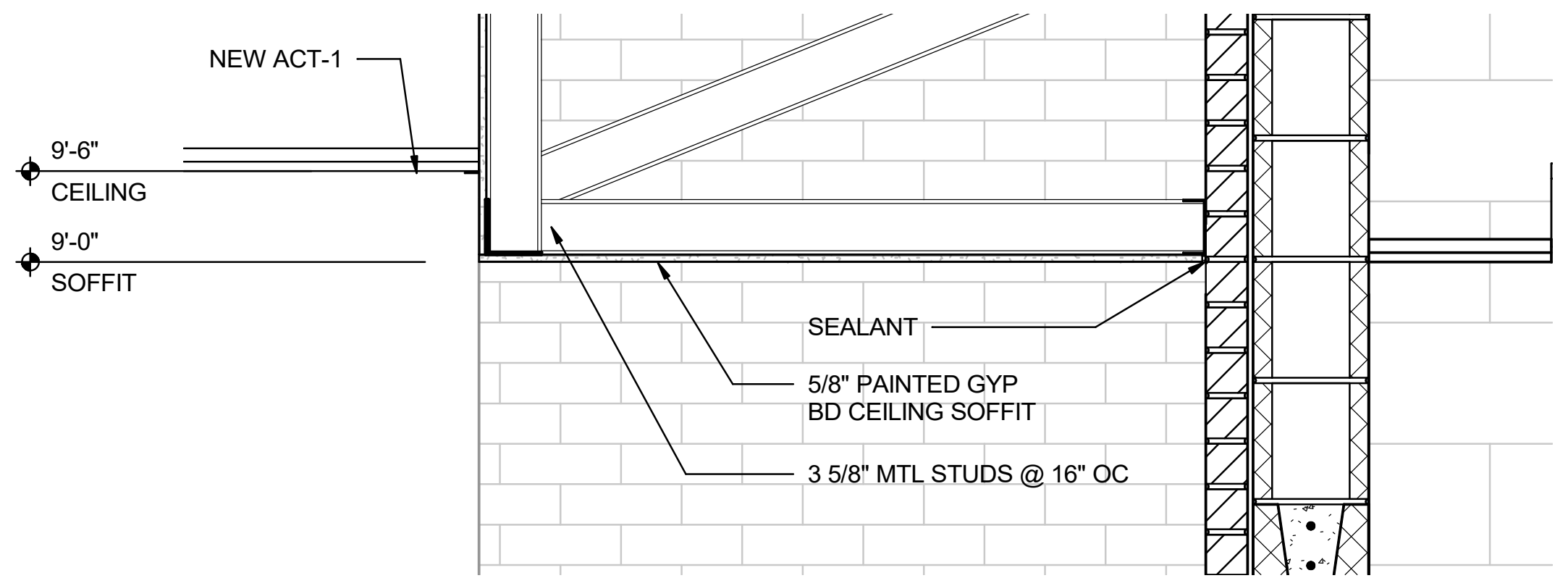
4 SOFFIT DETAIL @ ART ROOM

1" = 1'-0"



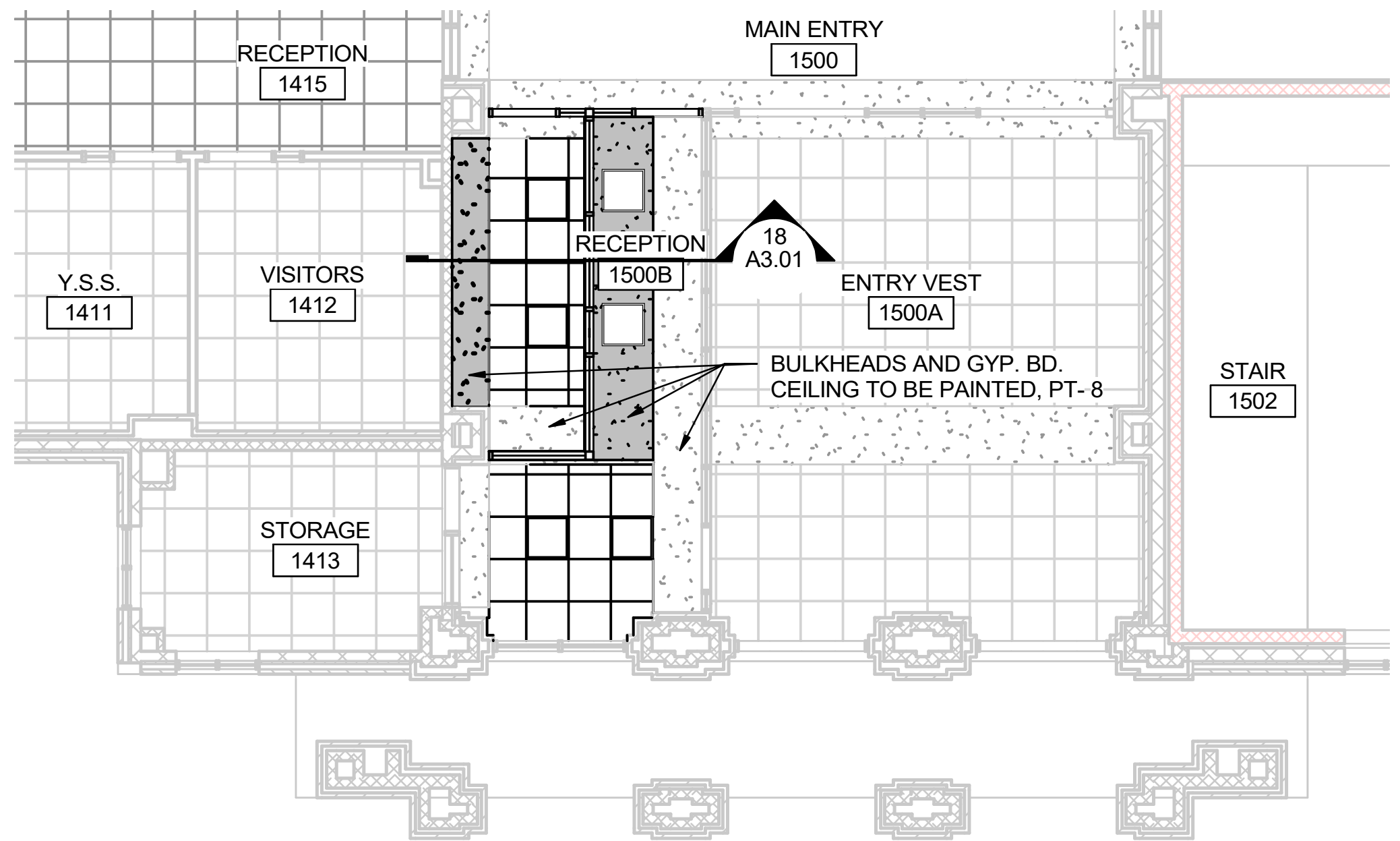
5 SOFFIT DETAIL @ ORCHESTRA

1" = 1'-0"



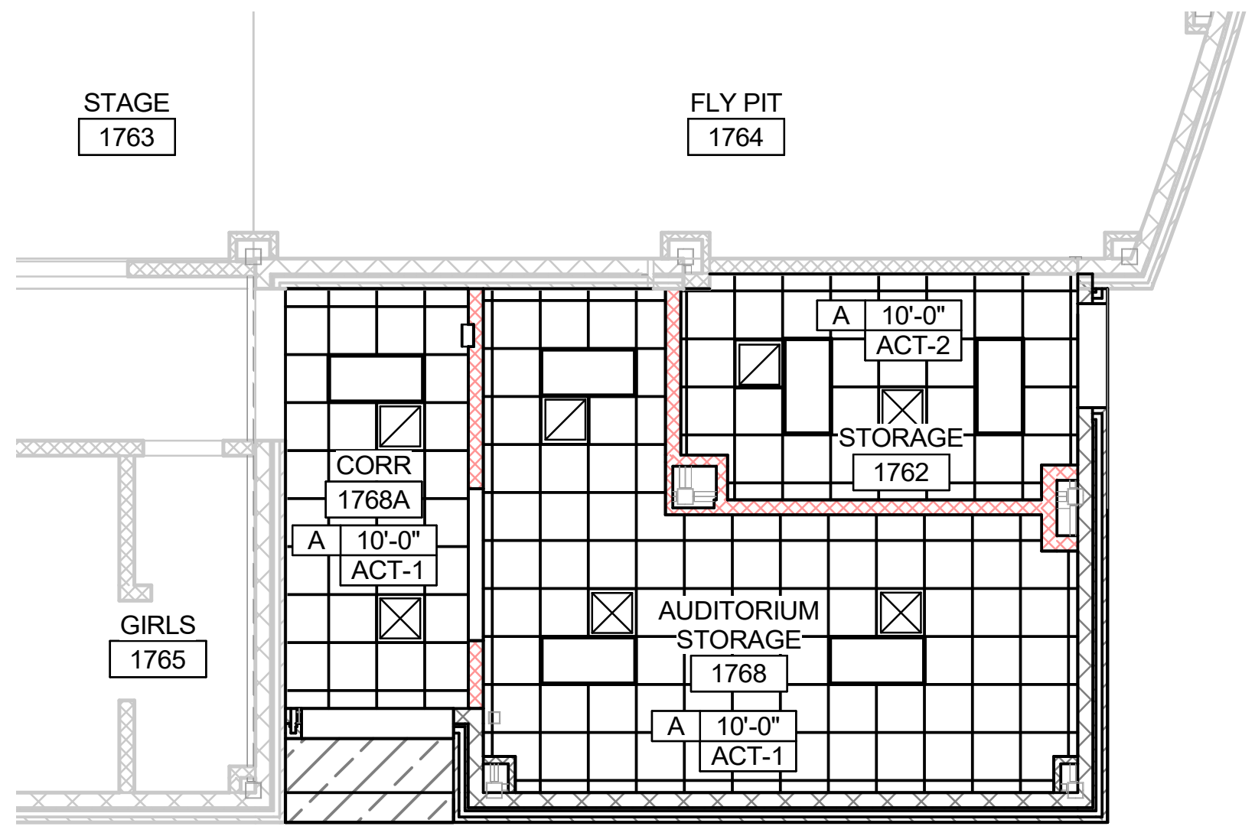
6 SOFFIT DETAIL @ CHOIR

1" = 1'-0"



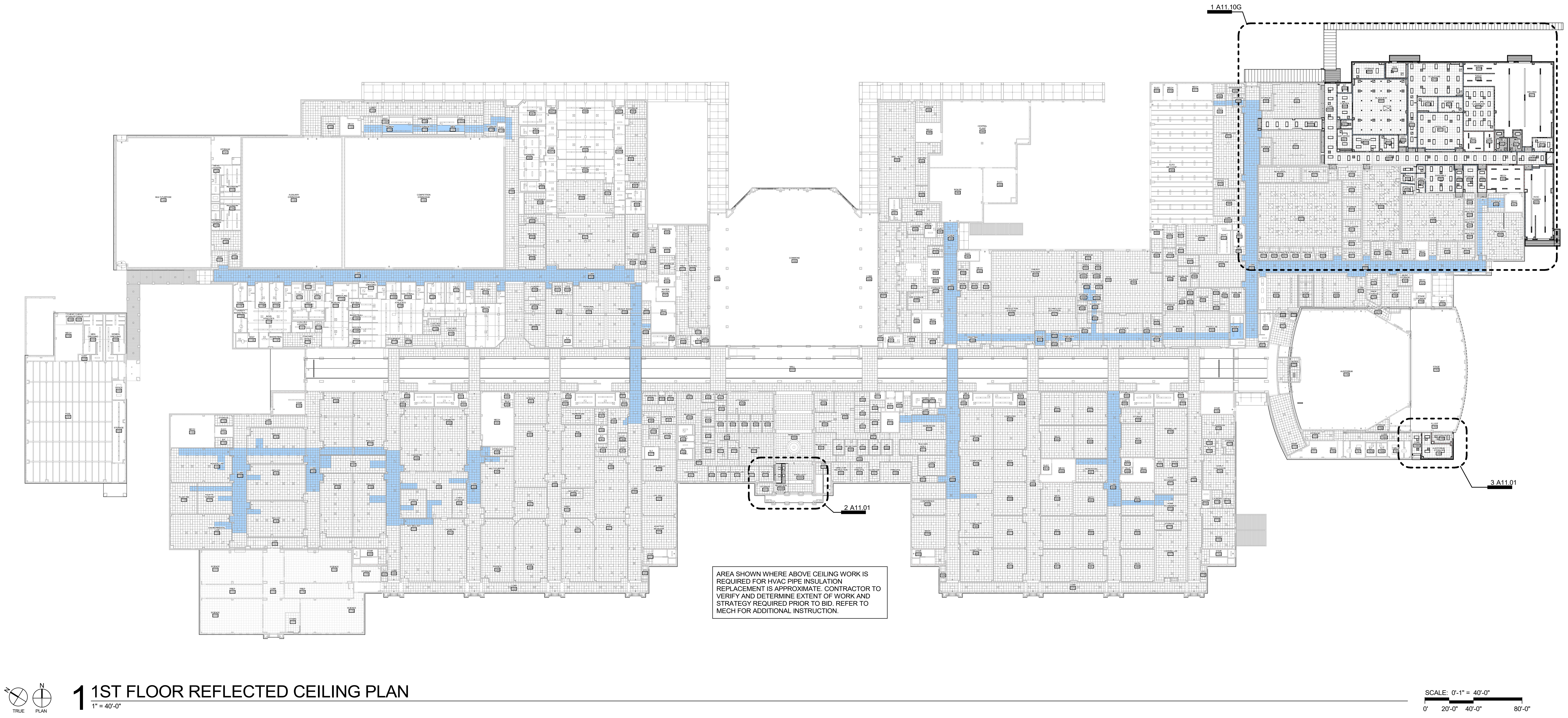
2 1ST FLOOR CEILING PLAN - RECEPTION

1/8" = 1'-0"



3 1ST FLOOR CEILING PLAN - AREA 'F' ADDITION

1/8" = 1'-0"



AREA SHOWN WHERE ABOVE CEILING WORK IS REQUIRED FOR HVAC PIPE INSULATION REPLACEMENT IS APPROXIMATE. CONTRACTOR TO VERIFY AND DETERMINE EXTENT OF WORK AND STRATEGY REQUIRED PRIOR TO BID. REFER TO MECH FOR ADDITIONAL INSTRUCTION.

1 1ST FLOOR REFLECTED CEILING PLAN

1" = 40'-0"

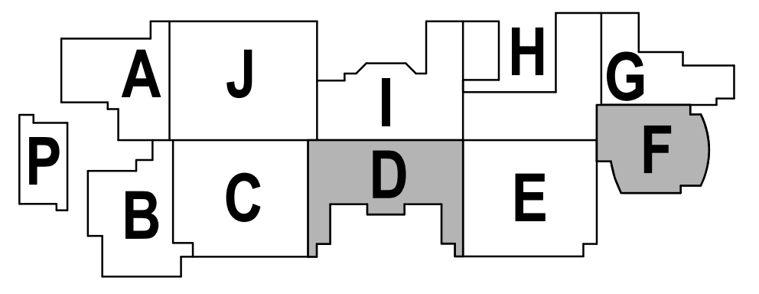
CEILING PLAN LEGEND

SYMBOL	DESCRIPTION
1' - 0" Finish	CEILING HEIGHT ABOVE FINISH FLOOR CEILING FINISH RE: A12.00
▭	2' X 4' LAY-IN LIGHT FIXTURE
⊘	RECESSED DOWN LIGHTS
☒	SUPPLY DIFFUSER GRILLE RE: MEP DRAWINGS
⧄	RETURN DIFFUSER GRILLE RE: MEP DRAWINGS
⊠	EXHAUST GRILLE RE: MEP DRAWINGS
↓⊗	EMERGENCY EXIT SIGN - RE: ELEC. LIGHTING PLAN & LIFE SAFETY SHEET G1.01
▦	EXISTING LAY-IN CEILING TO REMAIN
▦	2' X 2' LAY-IN CEILING
▩	GYPSUM BOARD CEILING
░	EXISTING GYPSUM BOARD CEILING
▭	EXPOSED STRUCTURE
▨	EXISTING EXTERIOR PLASTER
🟦	APPROX. AREA OF CEILING BELOW HVAC PIPE INSULATION REPLACEMENT WORK

CEILING PLAN GENERAL NOTES

1. REPLACE EXISTING CEILING TILES OR SUSPENSION SYSTEM TO REMAIN DAMAGED DUE TO SURROUNDING RENOVATION WORK.
2. EXISTING GYPSUM CEILING AND FURR-DNS SHALL REMAIN UNLESS OTHERWISE NOTED. PATCH / REPAIR/ FINISH DAMAGED AREAS TO MATCH ADJACENT SURFACES. PAINT AS SCHEDULED. REFER TO FINISH SCHEDULE.
3. HEIGHTS NOTED FOR CEILING WITHIN EXISTING BUILDING SHALL BE FIELD VERIFIED. INTENT IS TO INSTALL REPLACEMENT CEILING AT THE SAME HEIGHT TO ACCOMMODATE EXISTING DUCTWORK AND OTHER MEP SYSTEM SCHEDULED TO REMAIN. CONTRACTOR SHALL NOTIFY ARCHITECT IF ANY CONFLICTS PRIOR TO COMMENCING WORK.
4. CEILING ACESSORIES TO REMAIN IN ORIGINAL LOCATION UNLESS NOTED OTHERWISE. CONTRACTOR SHALL CAREFULLY REMOVE EXISTING CEILING (ACOUSTICAL CEILING TILE AND GRID OR GYPSUM BOARD). REMOVE OR TEMPORARILY SECURE ALL SPEAKERS, EXIT DEVICES, LOW VOLTAGE DEVICES AND SIMILAR CEILING MOUNTED EQUIPMENT AND ACCESSORIES AS REQUIRED FOR REMOVAL OF EXISTING CEILING. PROVIDE AND INSTALL NEW CEILING IN THE SAME LOCATION AS EXISTING UNLESS NOTED OTHERWISE. INSTALL NEW LIGHT FIXTURES AND CEILING MOUNTED DEVICES IN NEW CEILING AS SHOWN ON MEPT DRAWINGS. EXISTING SOUND REINFORCEMENT SYSTEM INSTALLED IN CEILING MUST BE PROTECTED AND REINSTALLED AS NECESSARY IN NEW CEILING. EXISTING SURROUNDING SURFACES TO REMAIN SHALL BE PROTECTED FROM DAMAGE.
5. REMOVE AND PROTECT EXISTING LIGHTSPEED SOUND REINFORCEMENT UNITS. TYPICAL ONE UNIT PER CLASSROOM. CONTRACTOR SHALL REINSTALL EXISTING LIGHTSPEED UNITS IN ITS ORIGINAL LOCATION.
6. ALL EXISTING CABLING ABOVE CEILING SCHEDULED TO REMAIN SHALL BE BUNDLED AND SUSPENDED FROM STRUCTURE ON J HOOKS.
7. FIXTURES AND EQUIPMENT LOCATED IN LAY-IN ACOUSTIC CEILINGS SHALL PREFERABLY BE LOCATED AT THE CENTER OF PANELS BUT IN NO CASE SHALL BE LOCATED CLOSER THAN 6-INCHES FROM THE PANEL EDGE.
8. WHERE GYPSUM BOARD CEILINGS AND ACOUSTICAL TILE CEILINGS JOIN IN THE SAME PLANE, INSTALL 3/4" x 3/4" REVEALS BETWEEN THEM.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

1ST FLOOR
REFLECTED CEILING
PLAN

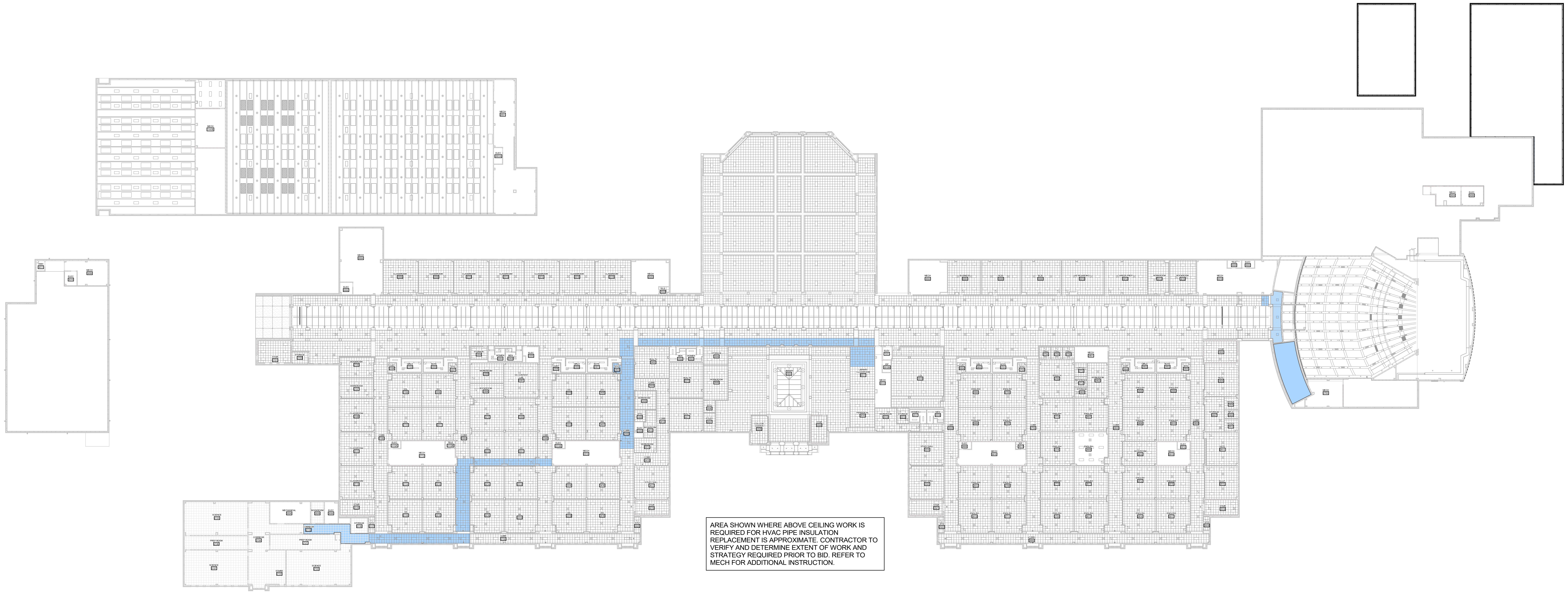
A11.01
___ of ___

CEILING PLAN LEGEND

SYMBOL	DESCRIPTION
1' - 0" Finish	CEILING HEIGHT ABOVE FINISH FLOOR CEILING FINISH RE: A12.00
▭	2' X 4' LAY-IN LIGHT FIXTURE
⊘	RECESSED DOWN LIGHTS
⊠	SUPPLY DIFFUSER GRILLE RE: MEP DRAWINGS
⧅	RETURN DIFFUSER GRILLE RE: MEP DRAWINGS
⧄	EXHAUST GRILLE RE: MEP DRAWINGS
↓⊗	EMERGENCY EXIT SIGN - RE: ELEC. LIGHTING PLAN & LIFE SAFETY SHEET G1.01
▦	EXISTING LAY-IN CEILING TO REMAIN
▦	2' X 2' LAY-IN CEILING
▩	GYPSUM BOARD CEILING
▒	EXISTING GYPSUM BOARD CEILING
▭	EXPOSED STRUCTURE
▨	EXISTING EXTERIOR PLASTER
🟦	APPROX. AREA OF CEILING BELOW HVAC PIPE INSULATION REPLACEMENT WORK

CEILING PLAN GENERAL NOTES

1. REPLACE EXISTING CEILING TILES OR SUSPENSION SYSTEM TO REMAIN DAMAGED DUE TO SURROUNDING RENOVATION WORK.
2. EXISTING GYPSUM CEILING AND FURR-DNS SHALL REMAIN UNLESS OTHERWISE NOTED. PATCH / REPAIR/ FINISH DAMAGED AREAS TO MATCH ADJACENT SURFACES. PAINT AS SCHEDULED. REFER TO FINISH SCHEDULE.
3. HEIGHTS NOTED FOR CEILING WITHIN EXISTING BUILDING SHALL BE FIELD VERIFIED. INTENT IS TO INSTALL REPLACEMENT CEILING AT THE SAME HEIGHT TO ACCOMMODATE EXISTING DUCTWORK AND OTHER MEP SYSTEM SCHEDULED TO REMAIN. CONTRACTOR SHALL NOTIFY ARCHITECT IF ANY CONFLICTS PRIOR TO COMMENCING WORK.
4. CEILING ACESSORIES TO REMAIN IN ORIGINAL LOCATION UNLESS NOTED OTHERWISE. CONTRACTOR SHALL CAREFULLY REMOVE EXISTING CEILING (ACOUSTICAL CEILING TILE AND GRID OR GYPSUM BOARD). REMOVE OR TEMPORARILY SECURE ALL SPEAKERS, EXIT DEVICES, LOW VOLTAGE DEVICES AND SIMILAR CEILING MOUNTED EQUIPMENT AND ACCESSORIES AS REQUIRED FOR REMOVAL OF EXISTING CEILING. PROVIDE AND INSTALL NEW CEILING IN THE SAME LOCATION AS EXISTING UNLESS NOTED OTHERWISE. INSTALL NEW LIGHT FIXTURES AND CEILING MOUNTED DEVICES IN NEW CEILING AS SHOWN ON MEPT DRAWINGS. EXISTING SOUND REINFORCEMENT SYSTEM INSTALLED IN CEILING MUST BE PROTECTED AND REINSTALLED AS NECESSARY IN NEW CEILING. EXISTING SURROUNDING SURFACES TO REMAIN SHALL BE PROTECTED FROM DAMAGE.
5. REMOVE AND PROTECT EXISTING LIGHTSPEED SOUND REINFORCEMENT UNITS. TYPICAL ONE UNIT PER CLASSROOM. CONTRACTOR SHALL REINSTALL EXISTING LIGHTSPEED UNITS IN ITS ORIGINAL LOCATION.
6. ALL EXISTING CABLING ABOVE CEILING SCHEDULED TO REMAIN SHALL BE BUNDLED AND SUSPENDED FROM STRUCTURE ON J HOOKS.
7. FIXTURES AND EQUIPMENT LOCATED IN LAY-IN ACOUSTIC CEILINGS SHALL PREFERABLY BE LOCATED AT THE CENTER OF PANELS BUT IN NO CASE SHALL BE LOCATED CLOSER THAN 6-INCHES FROM THE PANEL EDGE.
8. WHERE GYPSUM BOARD CEILINGS AND ACOUSTICAL TILE CEILINGS JOIN IN THE SAME PLANE, INSTALL 3/4" x 3/4" REVEALS BETWEEN THEM.



AREA SHOWN WHERE ABOVE CEILING WORK IS REQUIRED FOR HVAC PIPE INSULATION REPLACEMENT IS APPROXIMATE. CONTRACTOR TO VERIFY AND DETERMINE EXTENT OF WORK AND STRATEGY REQUIRED PRIOR TO BID. REFER TO MECH FOR ADDITIONAL INSTRUCTION.

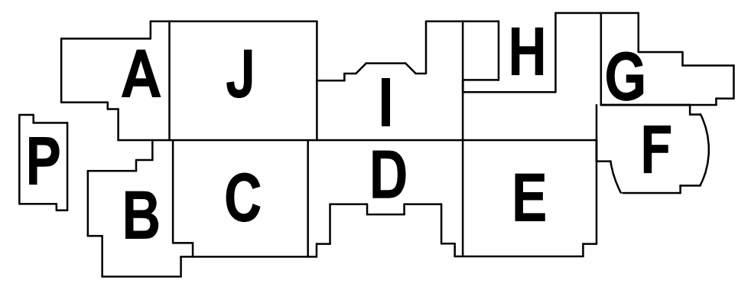
TRUE PLAN N

1 2ND FLOOR CEILING PLAN

1" = 40'-0"

SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

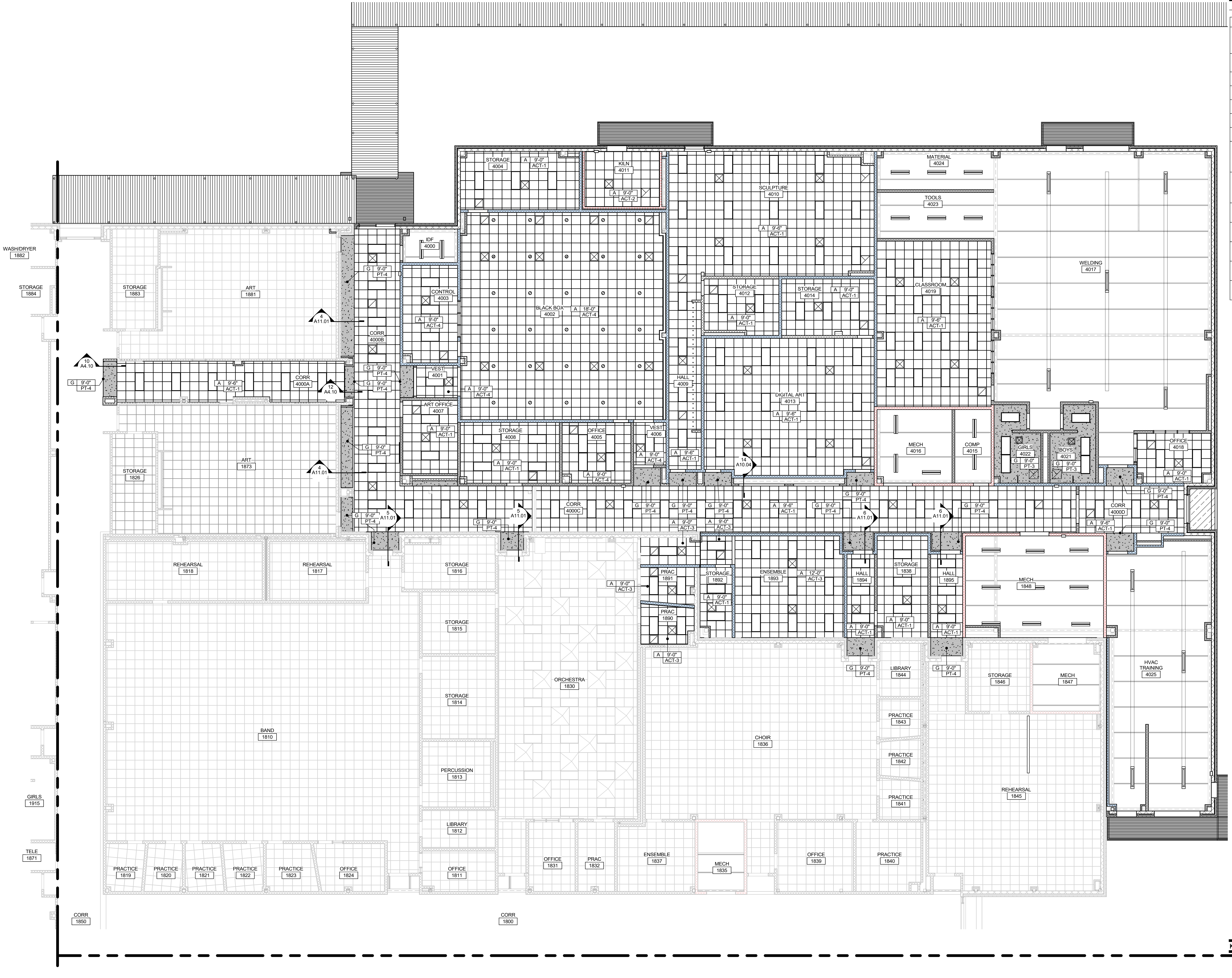
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

2ND FLOOR
REFLECTED CEILING
PLAN

A11.02

____ of ____



1 1ST FLOOR CEILING PLAN - AREA 'G' ADDITION

1/8" = 1'-0"

TRUE PLAN

SCALE: 0'-0 1/8" = 1'-0"
0' 4'-0" 8'-0" 16'-0"

CEILING PLAN LEGEND

SYMBOL	DESCRIPTION
1' - 0" Finish	CEILING HEIGHT ABOVE FINISH FLOOR CEILING FINISH RE: A12.00
▭	2' X 4' LAY-IN LIGHT FIXTURE
⊘	RECESSED DOWN LIGHTS
☒	SUPPLY DIFFUSER GRILLE RE: MEP DRAWINGS
⧅	RETURN DIFFUSER GRILLE RE: MEP DRAWINGS
⧅	EXHAUST GRILLE RE: MEP DRAWINGS
⊗	EMERGENCY EXIT SIGN - RE: ELEC. LIGHTING PLAN & LIFE SAFETY SHEET G1.01
⊞	EXISTING LAY-IN CEILING TO REMAIN
⊞	2' X 2' LAY-IN CEILING
▩	GYPSUM BOARD CEILING
▒	EXISTING GYPSUM BOARD CEILING
▭	EXPOSED STRUCTURE
▨	EXISTING EXTERIOR PLASTER
🟦	APPROX. AREA OF CEILING BELOW HVAC PIPE INSULATION REPLACEMENT WORK

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

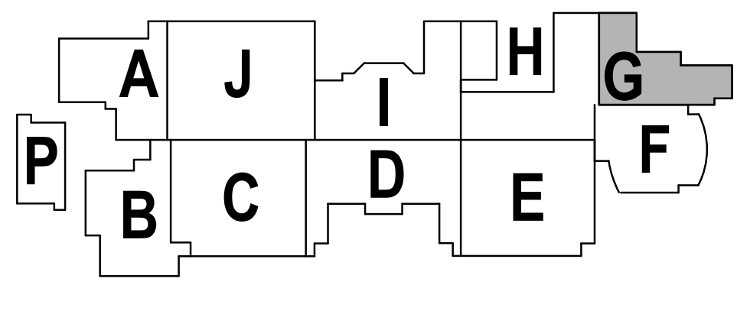
2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

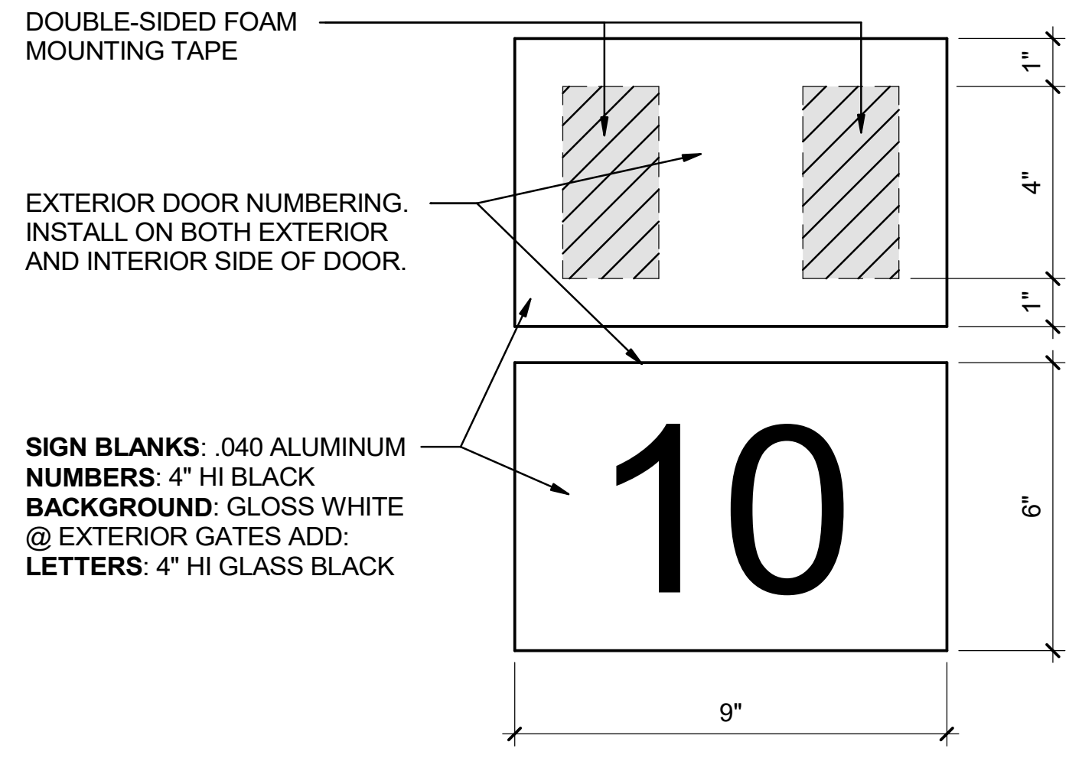
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



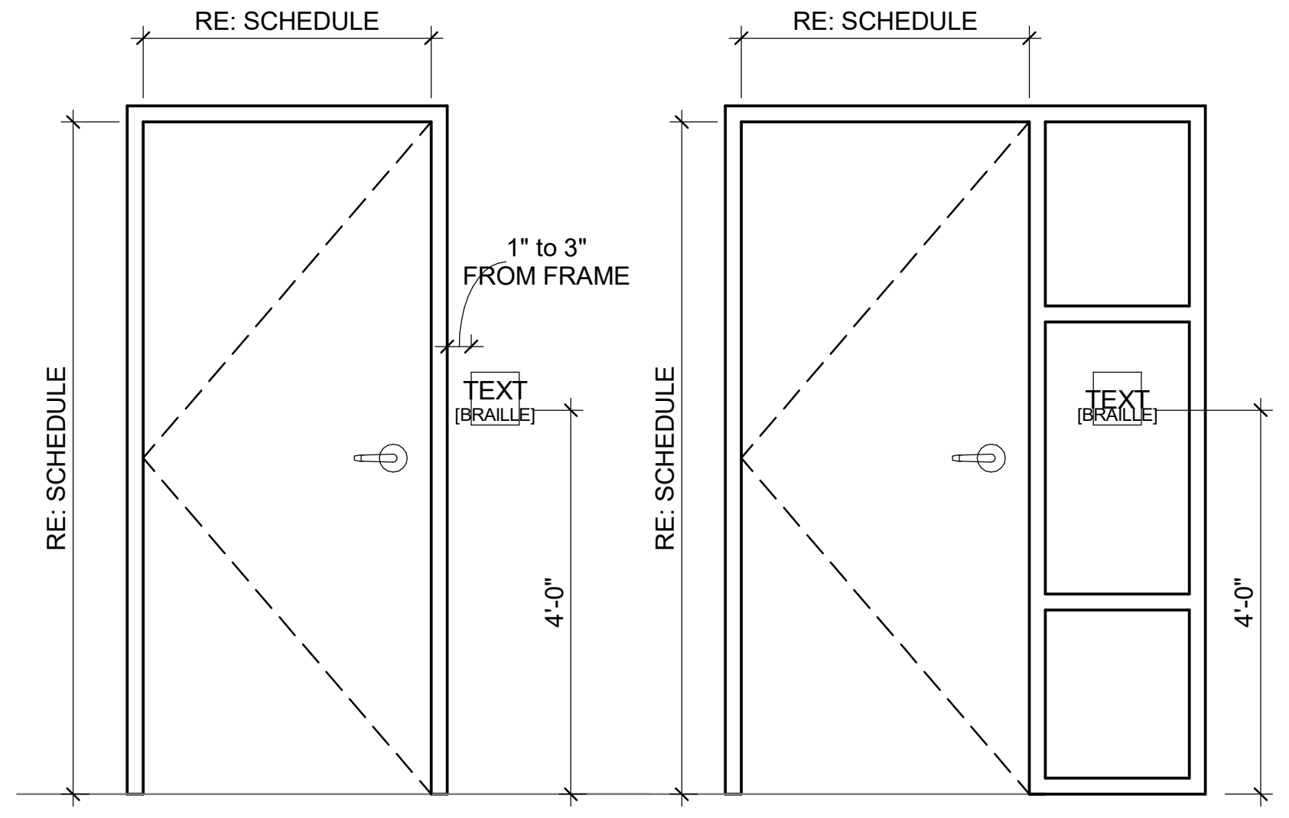
REFLECTED CEILING PLAN - AREA 'G'

A11.10G

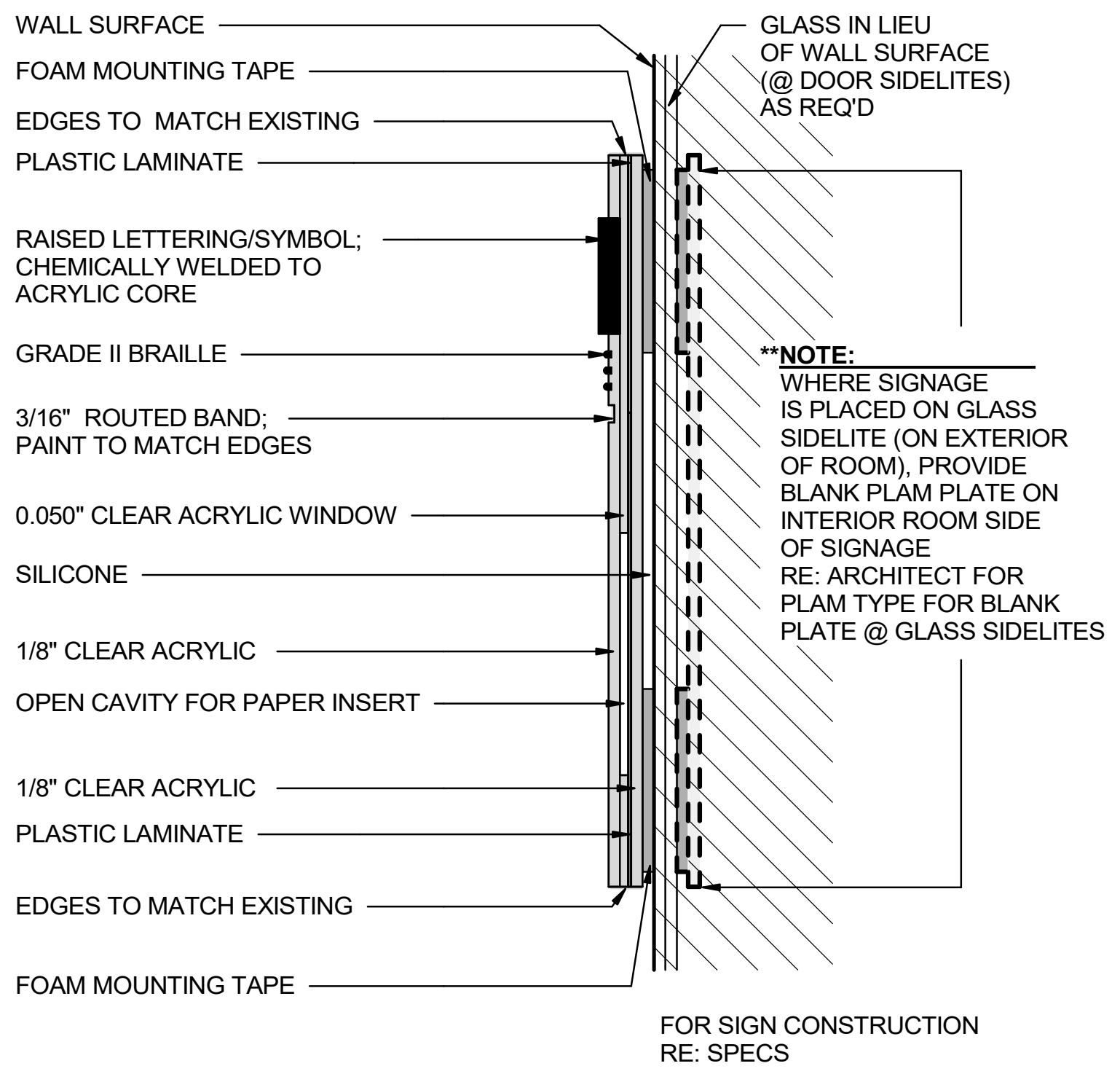
____ of ____



7 EXTERIOR DOOR NUMBER (GATE LETTER SIM)
3" = 1'-0"



6 INTERIOR SIGNAGE - TYPICAL PLACEMENT
1/2" = 1'-0"



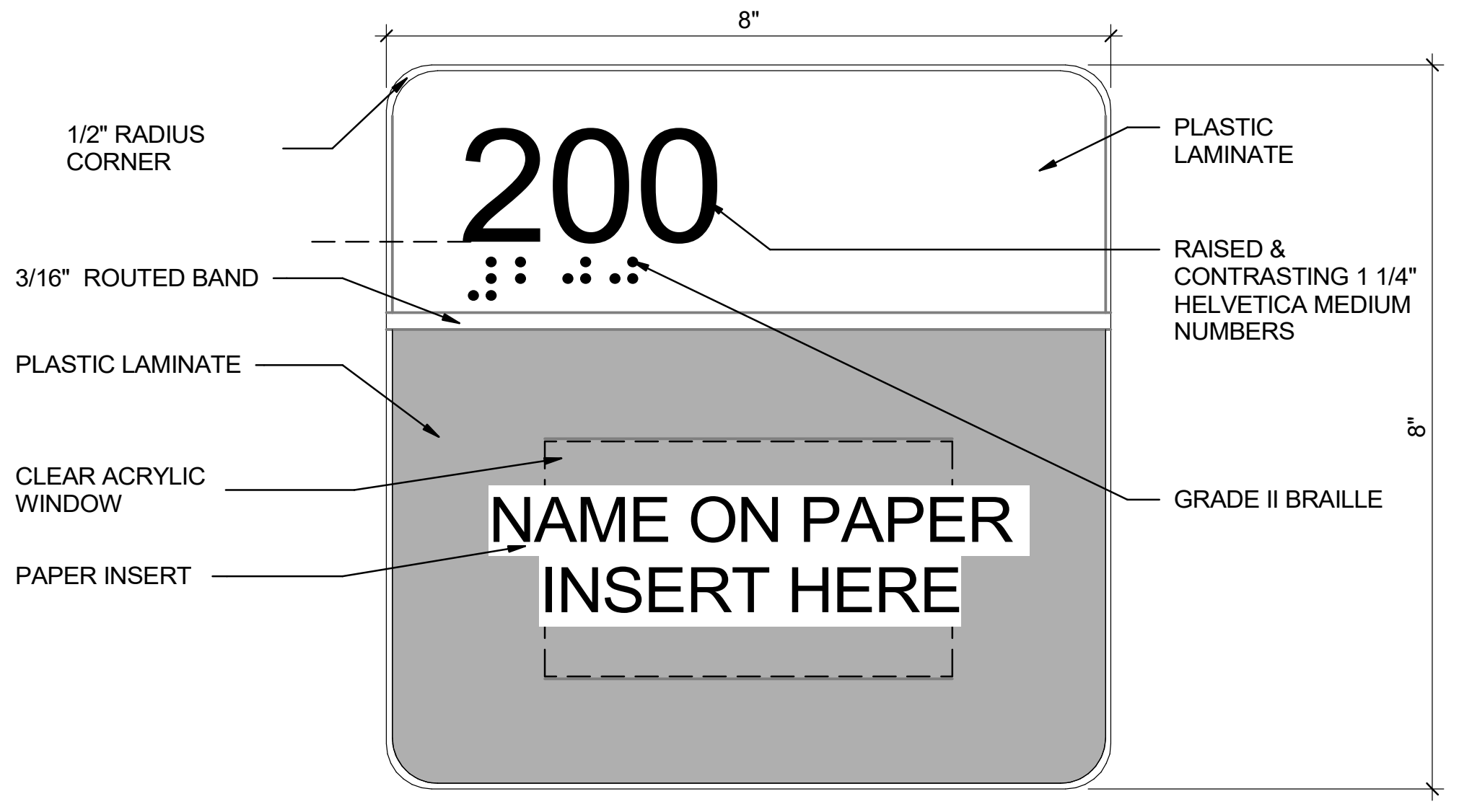
**NOTE:
WHERE SIGNAGE IS PLACED ON GLASS SIDELITE (ON EXTERIOR OF ROOM), PROVIDE BLANK PLAM PLATE ON INTERIOR ROOM SIDE OF SIGNAGE RE: ARCHITECT FOR PLAM TYPE FOR BLANK PLATE @ GLASS SIDELITES

5 INTERIOR SIGNAGE - SECTION
6" = 1'-0"

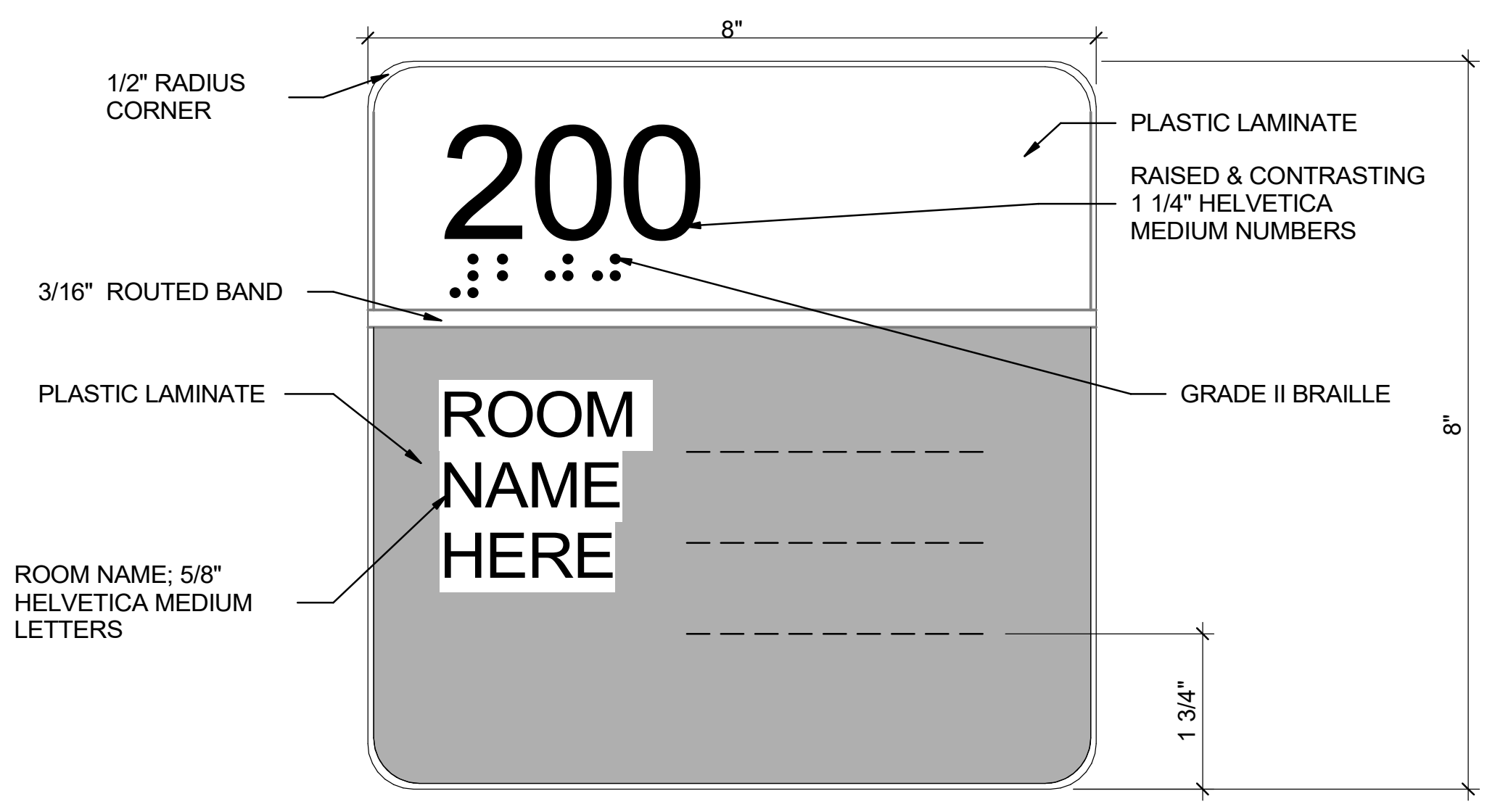
4 SIGNAGE TO MATCH EXISTING
1 1/2" = 1'-0"

FINISH LEGEND

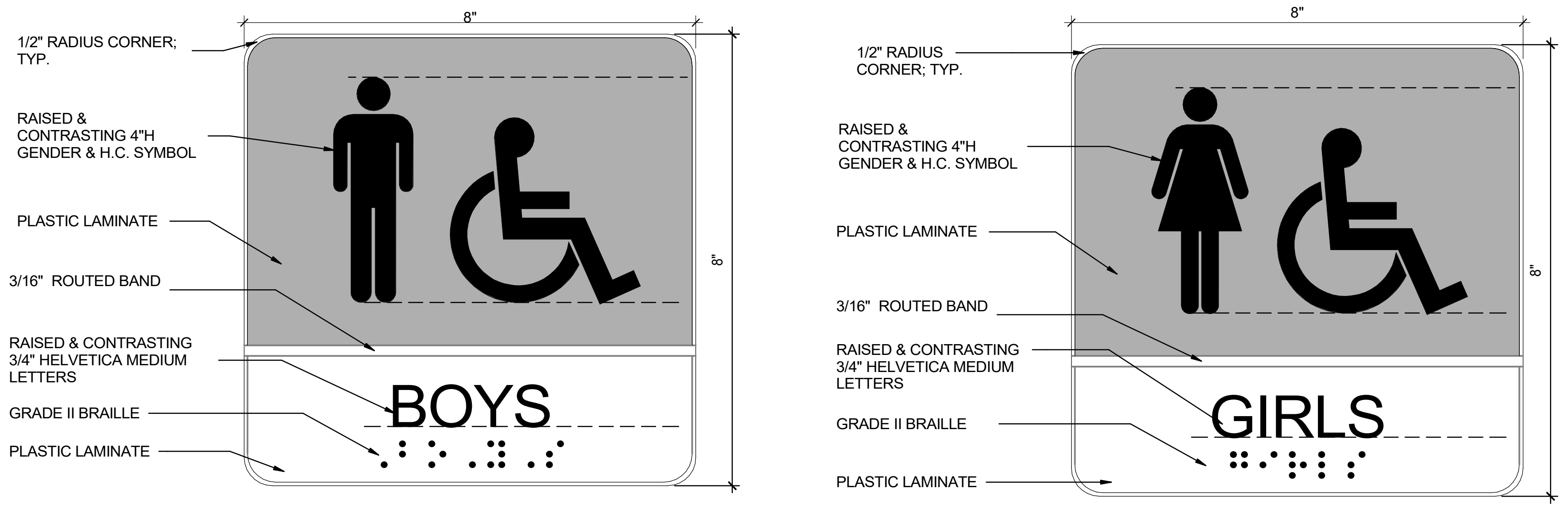
MARK	MANUFACTURER	DESCRIPTION	SIZE	SPEC....	COMMENTS
ACOUSTICAL CEILING TILE					
ACT-1	ARMSTRONG	SCHOOL ZONE FINE FISSURED, ITEM # 1713, COLOR: WHITE, GRID: PRELUDE XL15/16"	24" x 24" x 3/4"	095100	TYPICAL CEILING TILE
ACT-2	ARMSTRONG	CLEAN ROOM VL 868, GRID: 15/16" CLEAN ROOM ALUMINUM CAP	24" x 24" x 5/8"	095100	
ACT-3	ARMSTRONG	CALLA, ITEM #2820, COLOR: WHITE, GRID: PRELUDE XL 15/16" (WHITE)	24" X 24" X 1"	095100	
ACT-4	ARMSTRONG	CALLA; ITEM #2820BK, COLOR: BLACK, GRID: PRELUDE XL 15/16" (BLACK)	24" X 24" X 1"	095100	
CD-1	WENGER	PYRAMIDAL CEILING DIFFUSER PANELS	2' X 2'	095200	
UNIT MASONRY					
BRK-A	ACME BRICK	COLOR: DOVE GRAY	KING SIZE	042000	1/3 RUNNING BOND COURSING BANDING - LIGHT GRAY
BRK-B	ACME BRICK	COLOR: PALOMA GRAY	KING SIZE	042000	1/3 RUNNING BOND COURSING FIELD - MEDIUM GRAY
BRK-C	ACME BRICK	COLOR: GLACIER WHITE	KING SIZE	042000	MAIN ENTRY
EXTERIOR SPECIALTIES					
	AVADEX	CLEAR ANODIZED		107313	EXTRUDED ALUM. WALKWAY CANOPIES AND AWNINGS
		CLEAR ANODIZED TO MATCH EXISTING		085100	ALUMINUM STOREFRONT DOORS & FRAMES
		CLEAR ANODIZED TO MATCH EXISTING		085100	ALUMINUM WINDOWS
EXPANSION JOINTS					
	INPRO	SANTOPRENE SEALS; COLOR: OFF-WHITE		079513	CEILING EXPANSION JOINTS
	INPRO	SANTOPRENE SEALS; COLOR: BEIGE		079513	WALLS EXPANSION JOINTS
ACRYLIC PANEL					
ACP-1	3FORM	VARIA PANEL; STYLE: DIGITAL PRINT CENTERED (433942 CY LAKE V2,iv) ; FINISH: SANDSTONE, SO-581537S1.1	1/2" THICKNESS		RECEPTION
ACOUSTIC PANEL					
AP-1	KENETICS PRODUCTS	FABRIC: GUILFORD OF MAIN; FR701; COLOR: CLARET ACCENT	2 1/8" THICK	098433	ACOUSTIC PANEL
AP-2	KENETICS PRODUCTS	FABRIC: GUILFORD OF MAIN; FR701; COLOR: PEARL	2 1/8" THICK	098433	ACOUSTIC PANEL
AP-3	ARMSTRONG	TECTUM, COLOR: BLACK	2" TOTAL THICKNESS		1" PANEL ON 1" FURRING PLUS FIBERGLASS INFILL
CARPET					
CPT-1	TARKETT	PATTERN: TEXTURE MAP; COLOR: INDIAN INK 42809	POWERBOND	096800	TYPICAL CARPET
BOARDS					
TB-1	KOROSEAL	FABRICORK; PATTERN: HARBORWEAVE; COLOR: SILVER FOX 2118-93		101101	TACKBOARD
MB-1	CLARIDGE	PORCELAIN FACING SURFACE; COLOR: WHITE		101101	MARKER BOARD
HORIZONTAL BLINDS					
HB-1	SWF CONTRACT	HORIZONTAL BLINDS; COLOR: ALUMINUM; MATCH EXISTING BLINDS		122113	TYPICAL HORIZONTAL BLINDS
HB-2	SWF CONTRACT	HORIZONTAL BLINDS; COLOR: SIMPLY BLACK		122113	BLACK BOX
PAINT					
PT-1	SHERWIN WILLIAMS	ACCESSIBLE BEIGE SW7036	FINISH: EGGSHELL	099000	TYPICAL
PT-2	SHERWIN WILLIAMS	DOVETAIL SW7018	FINISH: EGGSHELL	099000	ACCENT - RECEPTION
PT-3	SHERWIN WILLIAMS	PURE WHITE SW7005	FINISH: FLAT	099000	TYPICAL CEILING
PT-4	SHERWIN WILLIAMS	DAPPER TAN SW6144	FINISH: EGGSHELL & FLAT	099000	CORRIDOR ACCENT CEILING & WALLS
PT-5	SHERWIN WILLIAMS	HEARTTHROB SW6866	FINISH EGGSHELL	099000	ACCENT - CORRIDORS
PT-6	SHERWIN WILLIAMS	GRIFFIN SW 7026; MATCH EXISTING	FINISH: SEMI-GLOSS	099000	HM DOOR AND FRAME
PT-7	SHERWIN WILLIAMS	BLACK MAGIC SW6991	FINISH MATTE	099000	BLACK BOX WALLS, DOORS & WINDOWS FRAME
PT-8	SHERWIN WILLIAMS	COLOR: TBD MATCH EXISTING	FINISH: EGGSHELL & FLAT	099000	RECEPTION WALLS & CEILING
PT-9	SHERWIN WILLIAMS	BALANCED BEIGE SW7037 MATCH EXISTING	FINISH: EGGSHELL	099000	FINE ARTS
PT-10	SHERWIN WILLIAMS	GREENS SW6748	FINISH: WATERPROOFING...	099000	TENNIS COURTS (CMU BEAT WALL)
PLASTIC LAMINATE					
PL-1	FORMICA	SELECT CHEERY (MATCH EXISTING DOOR PLAM)	FINISH: MATTE	081416&062000	DOORS & TYPICAL CASEWORK
PL-2	WILSONART	VALLEY FORGE ELM 8231K-79	FINISH: RIDGEWOOD	062000	RECEPTION
PL-3	FORMICA	CONCRETE STONE 7267	FINISH: MATTE	062000	TYPICAL CASEWORK COUNTERTOP
PL-5	WILSONART	BLACK 1595-60	FINISH: MATTE	062000	BLACK BOX DOORS & CASEWORK
PL-6	WILSONART	BLACKBIRD 5024K-19	FINISH: LENO WEAVE	062000	BLACK COUNTERTOP
MISC FLOORING					
LVT-1	TARKETT	ID LATITUDE ABSTRACT; COLOR: GREIGE 5103; INSTALLATION: VERTICAL ASHLAR	36" X 6"	096519.11	TYPICAL LVT
LVT-2	TARKETT	EVENT + ABSTRACT; COLOR: SILTSTONE 11187; INSTALLATION: QUARTER TURN	18" X 18"	096519.11	LVT - NATURAL
LVT-3	TARKETT	EVENT + ABSTRACT; COLOR: HEART THROB 11185; INSTALLATION: QUARTER TURN	18" X 18"	096519.11	LVT - RED
LVT-4	TARKETT	EVENT + ABSTRACT; COLOR: ONYX 11189; INSTALLATION: QUARTER TURN	18" X 18"	096519.11	LVT - BLACK
LVT-5	MOHAWK	MOLVEN STONES; COLOR: TBD		096519.11	PRESS BOX
EPX-1	MIRACOTE	MIRAFLOR CQ BROADCAST; COLOR: DFS-B-10		096723	LOCKER ROOMS
PC-1	POLISHED CONCRETE				
SC-1	SEALED CONCRETE				
WOOD FLOORING					
WD-1	RESILIENT WOOD FLOOR	REFER TO SPECIFICATION. COLOR: BLACK		096455	BLACK BOX
HDPE PANELS					
RP-1	SCRANTON PRODUCTS	HINY HIDERS; COLOR: 090 BLACK PAISLEY		102113.19	TYPICAL RESTROOM PARTITIONS AND LOCKER TOPS
RUBBER BASE					
RB-1	TARKETT	COVE BASE; COLOR: 123 CHARCOAL MATCH EXISTING	4" HIGH ROLLED GOODS	096500	TYPICAL BASE
BRV-1	TARKETT	VENTED COVE BASE; COLOR: VCO 40 BLACK		096500	BLACK BOX
QUARTZ					
ST-1	SILESTONE	COLLECTION: ETHEREAL; COLOR: ETHEREAL GLOW; FINISH: PULIDO	2 CM AND 3 CM	066520	COUNTERTOP AT RECEPTION
ST-2	CAMBRIA	COLLECTION: CLASSIC SERIES ; COLOR: TEMPLETON; FINISH: POLISHED	2 CM	066520	COUNTERTOP AT DIGITAL ART
TILE					
T-1	CROSSVILLE	SHADES 2.0; COLOR: SHD43 FOG UPS ; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	12" X 12"	093000	FIELD FLOOR TILE
T-2	CROSSVILLE	SHADES 2.0; COLOR: SHD45 CLAY UPS; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	12" X 12"	093000	ACCENT CORRIDOR FLOOR TILE
T-3	CROSSVILLE	CROSS COLOR MINGLES; COLOR: BURGUNDY SMOKE UPS; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	12" X 12"	093000	ACCENT CORRIDOR FLOOR TILE
WT-1	DALTILE	COLOR MATCH; COLOR: MATTE CARRARA 33; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	8" X 24"	093000	RESTROOM WALL TILE
WT-2	DALTILE	COLOR MATCH; COLOR: MATTE KIRSH 14; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	8" X 24"	093000	RESTROOM WALL TILE
WT-3	DALTILE	COLOR WHEEL LINEAR; COLOR: MATTE CHALKBOARD 0780; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	8" X 24"	093000	RESTROOM WALL TILE
WT-4	DALTILE	COLOR MATCH; COLOR: MATTE MUSHROOM 16; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	8" X 24"	093000	RESTROOM WALL TILE
TR-1	SCHLUTER	FINISHING AND EDGE-PROTECTION PROFILE; MODEL: RONDEC		093000	OUTSDIE CORNER TRIM
TB-1	CROSSVILLE	COVE BASE TILE; COLLECTION: SHADES 2.0; COLOR: SHD43 FOG UPS ; GROUT: CUSTOM BUILDING PRODUCTS #335 WINTER GRAY	6" x 12"	093000	TILE BASE TYPICAL
GTB-1	ELGIN BUTLER	5J KING GLAZED TILE BASE; COLOR: 4163 BUTTER (MATCHING EXISTING)	3 THICK X 2 5/8" X 9 5/8"	093000	MAIN ENTRY
MISC					
CF-1	RE: SPEC	COLOR: BLACK		116133	BLACK BOX CURTAIN
LK-1	RE: SPEC	COLOR: RED, MATCH EXISTING		105050	LOCKERS



1 INTERIOR SIGNAGE - TYPE 'A'
6" = 1'-0"



2 INTERIOR SIGNAGE - TYPE 'B'
6" = 1'-0"



3 INTERIOR SIGNAGE - TYPE 'C'
6" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

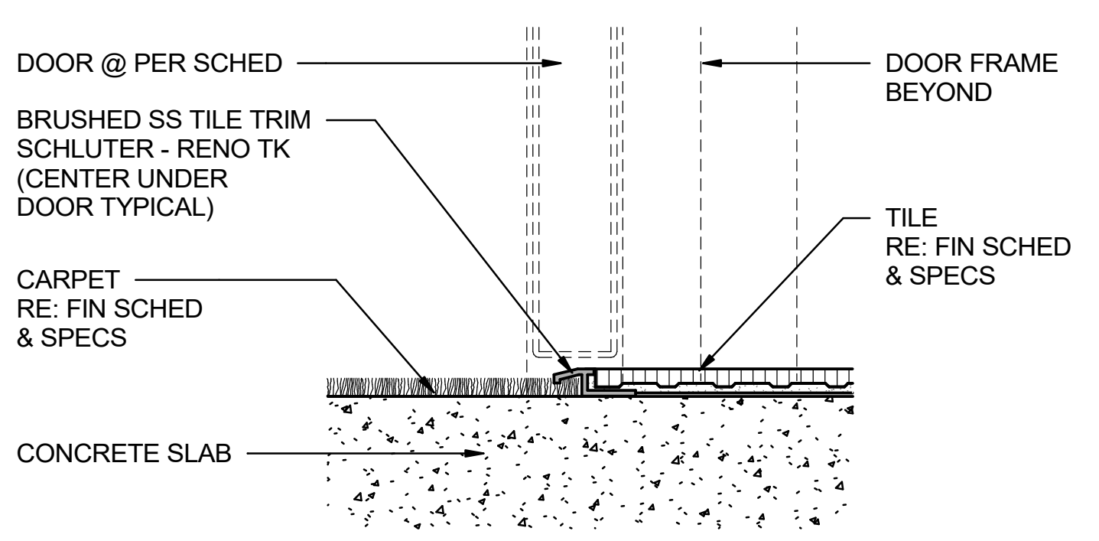
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

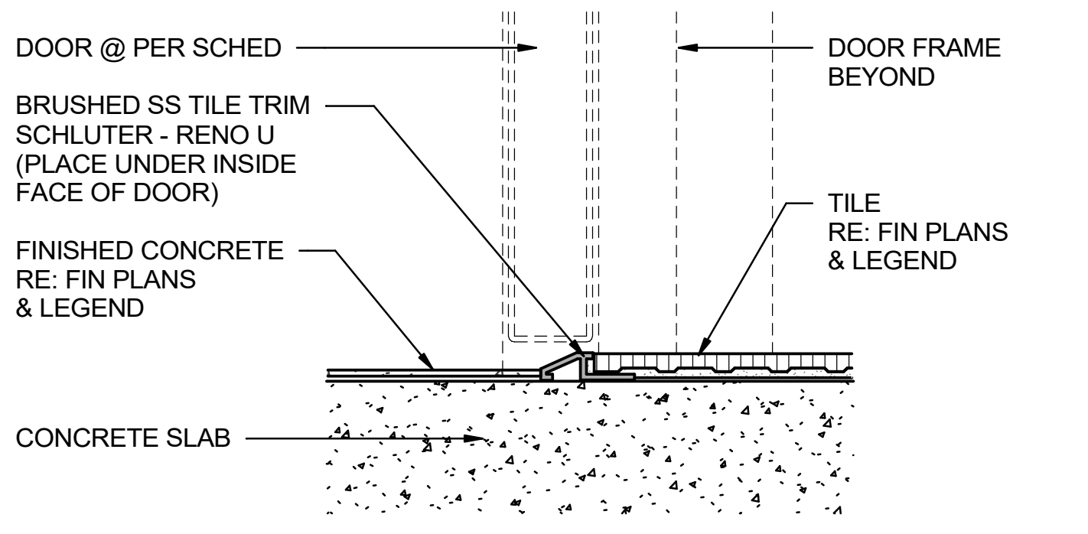
FINISH LEGEND &
ROOM SIGNAGE

A12.00
of

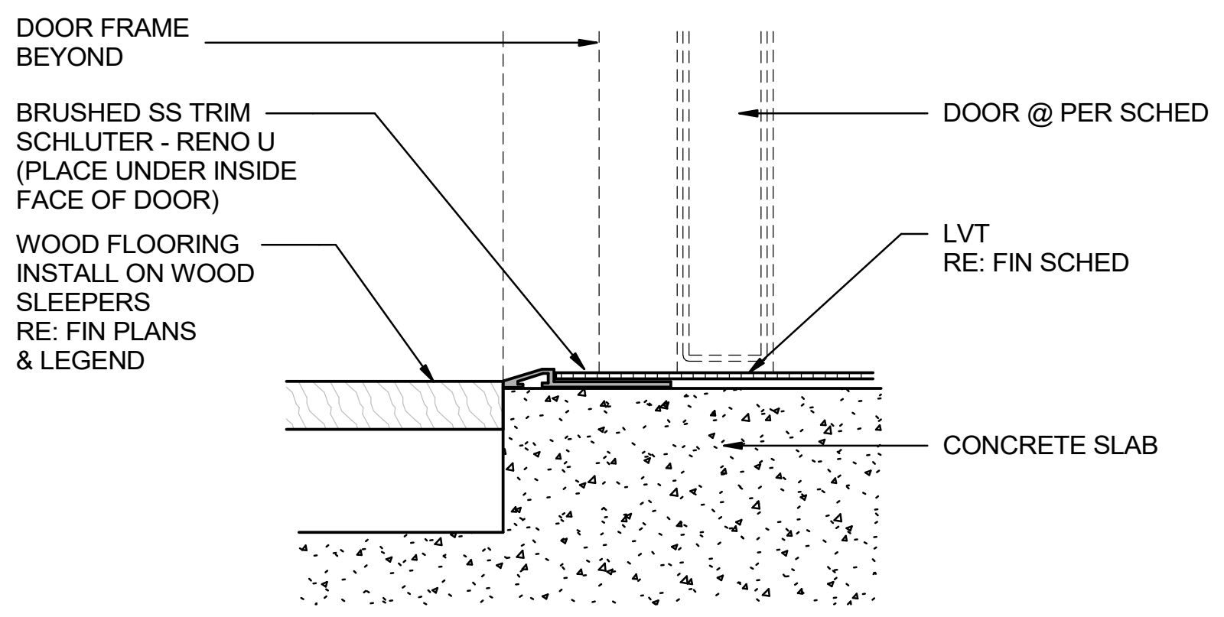
11/14/2024 1:38:43 PM



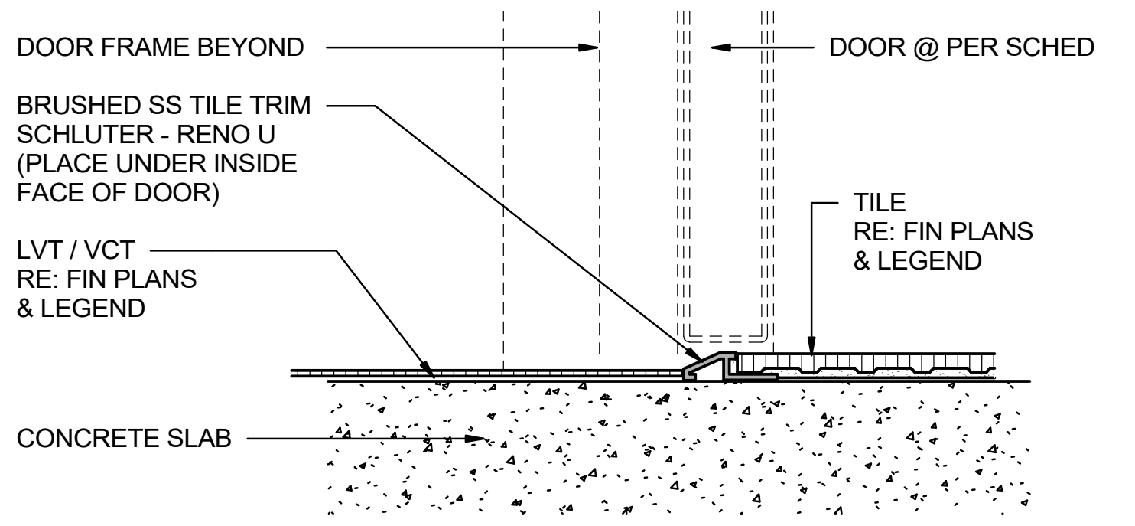
4 TRANSITION - TILE TO CARPET
3" = 1'-0"



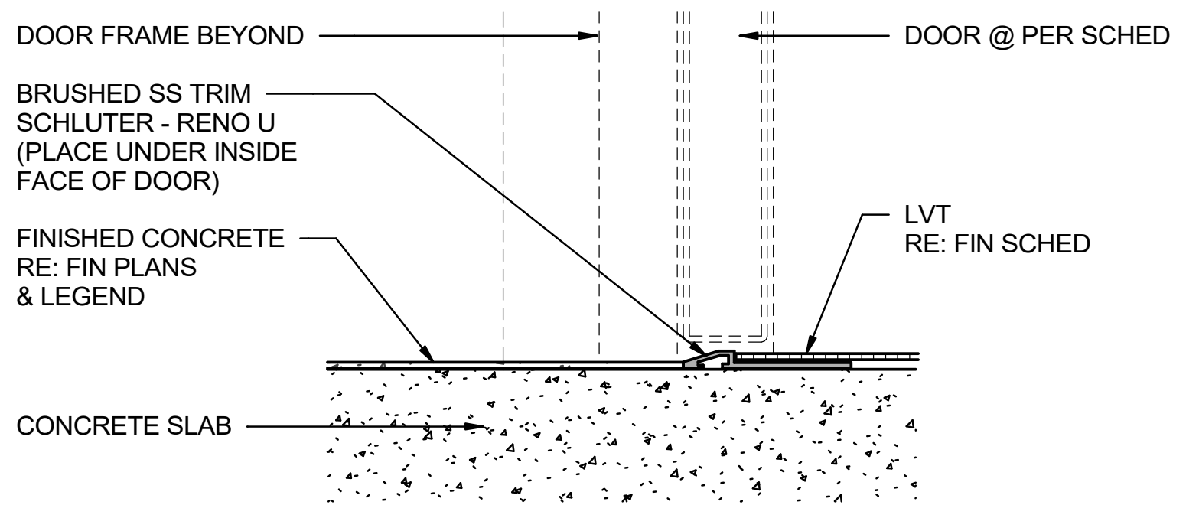
6 TRANSITION - TILE TO CONCRETE
3" = 1'-0"



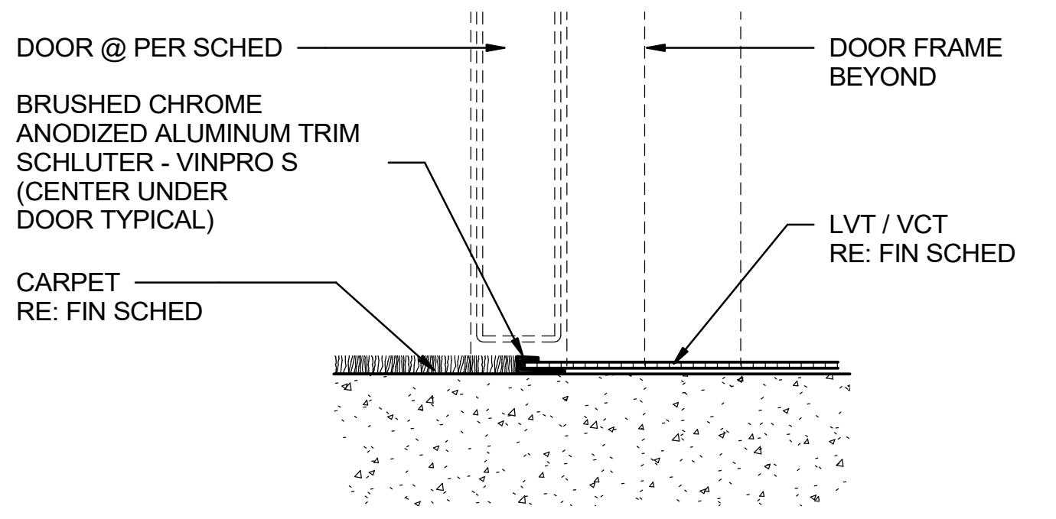
8 TRANSITION - LVT TO WOOD FR
3" = 1'-0"



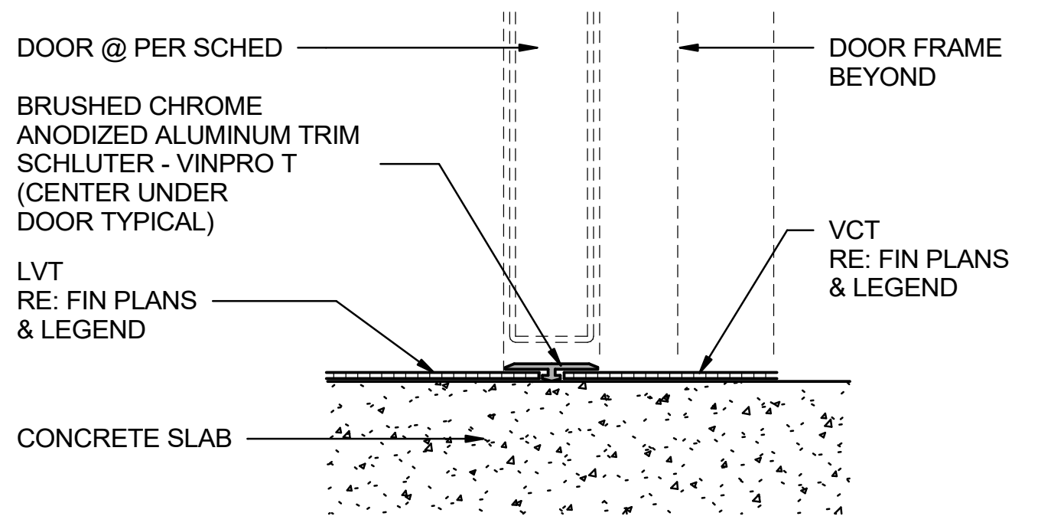
5 TRANSITION - TILE TO LVT
3" = 1'-0"



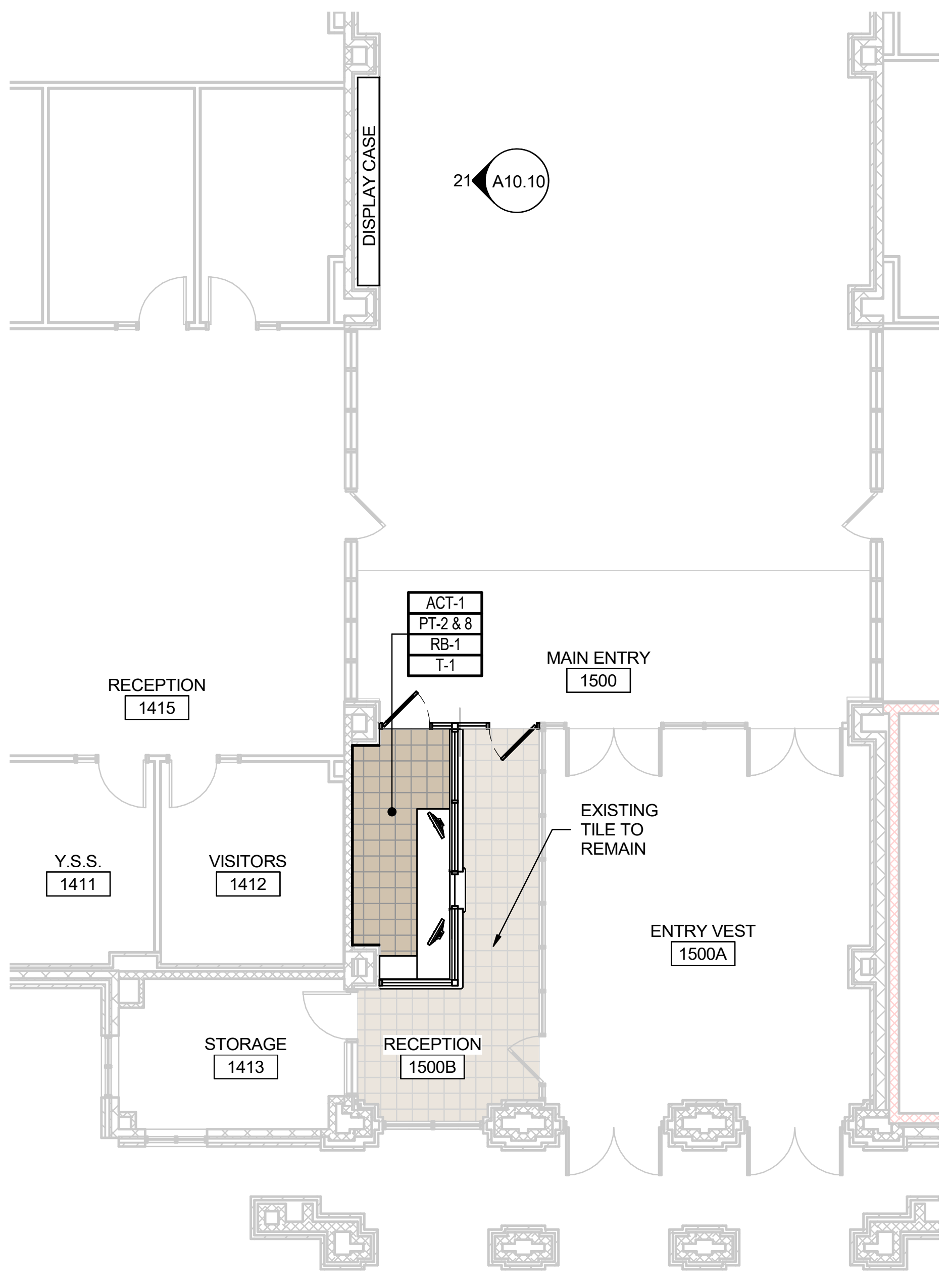
7 TRANSITION - LVT TO CONCRETE
3" = 1'-0"



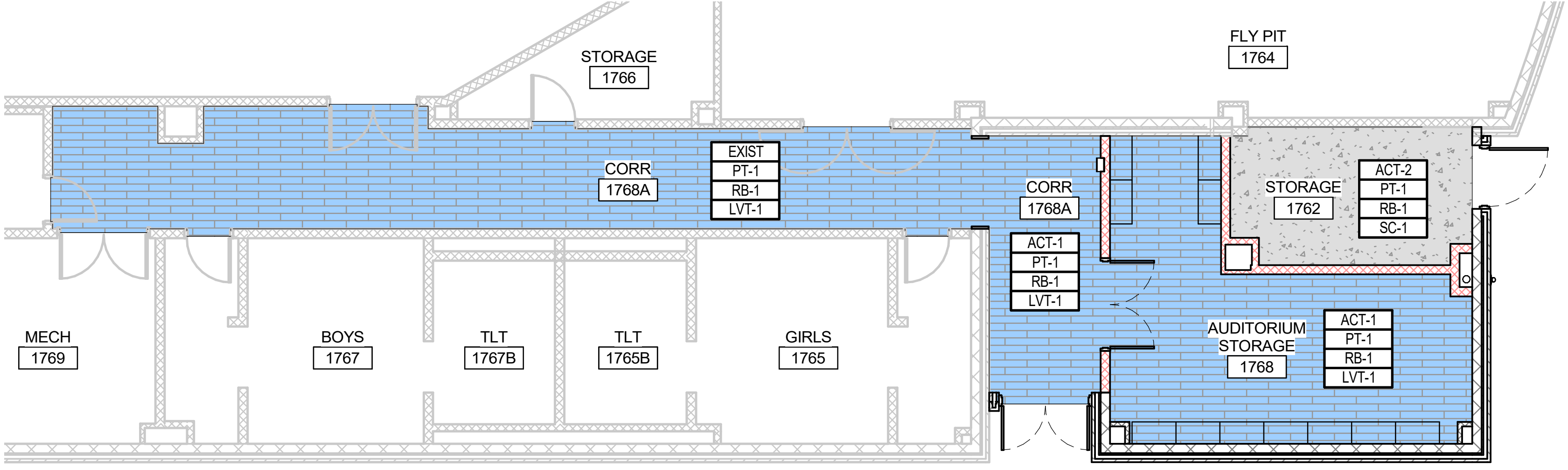
9 TRANSITION - LVT TO CARPET
3" = 1'-0"



10 TRANSITION - VCT TO LVT
3" = 1'-0"



2 1ST FLOOR FINISH PLAN - RECEPTION
1/8" = 1'-0"



3 1ST FLOOR FINISH PLAN - AREA 'F' ADDITION
1/8" = 1'-0"

REPLACE CARPET REMOVED FOR WORK IN THIS AREA. REFER TO D2.10F & A2.10F

1 1ST FLOOR FINISH PLAN - OVERALL
1" = 40'-0"

SCALE: 0'-1" = 40'-0"
0' 20'-0" 40'-0" 80'-0"

SIGN LEGEND

A	NEW GATE SIGN
#	NEW EXTERIOR DOOR NUMBER
#	REMOVE EXISTING EXTERIOR DOOR SIGN WITH NEW
RS	NEW INTERIOR ROOM SIGN

FINISH PLAN LEGEND

XX-#	CEILING
XX-#	WALL FINISH
XX-#	WALL BASE FINISH
XX-#	FLOOR FINISH

ROOM TAG CALLING OUT ROOM FINISHES

PT-# (LIMITS OF ACCENT PAINT)	MATERIAL TAG MARKING EXTENTS OF ACCENT WALL

NOTE: SEE FINISH LEGEND ON A12.00 FOR SCHED. FINISHES

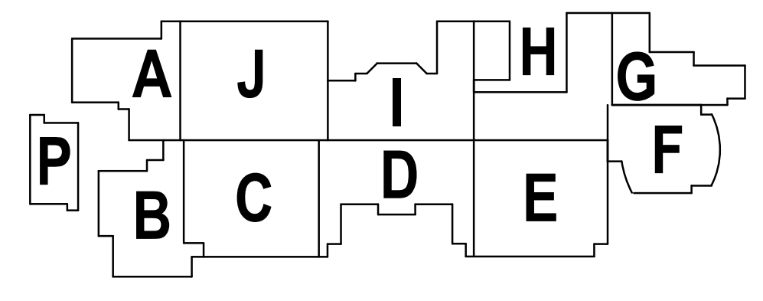
FINISH PLAN LEGEND

PATTERN	DESCRIPTION
▨	CARPET (CPT-1)
▨	LUXURY VINYL TILE (LVT-1)
▨	LUXURY VINYL TILE (LVT-2)
▨	LUXURY VINYL TILE (LVT-3)
▨	LUXURY VINYL TILE (LVT-4)
▨	FLOOR TILE (T-1)
▨	FLOOR TILE (T-2)
▨	FLOOR TILE (T-3)
▨	FLOOR TILE (T-4)
▨	EPOXY FLOORING (EPX-1)
▨	POLISHED CONCRETE (PC -1)
▨	SEALED CONCRETE (SC -1)
▨	MASONITE WOOD FLOORING (WD -1)
☐	EXIST. FLOOR - NO WORK
▨	EXIST. CARPET
▨	EXIST. VCT

FINISH PLAN GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING BUILDING CONDITIONS IN THE FIELD PRIOR TO BIDDING. CONTRACTOR SHALL NOT SCALE DRAWING FOR THE SOLE PURPOSE OF BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING PRIOR TO COMMENCING WORK.
2. PROTECT EXISTING FINISHES TO REMAIN. PATCH, REPAIR, FINISH OR REPLACE SURFACES TOUCHED OR DAMAGED BY ADJACENT RENOVATION WORK. CONTRACTOR SHALL DETERMINE EXTENT OF PATCHING REQUIRED TO COMPLETE WORK. VISIBLE PATCHING OR TOUCH UP PAINT IS NOT ACCEPTABLE. PAINT ENTIRE AREA IF NECESSARY SO NO PATCHING IS VISIBLE.
3. REMOVE EXISTING WALL MOUNTED ITEMS IN SPACES SCHEDULED TO BE PAINTED. REINSTALL ITEMS AFTER PAINTING IS COMPLETE UNLESS ITEMS IS SCHEDULED TO BE REMOVED. ITEMS INCLUDES BUT NOT LIMITED TO MARKER BOARDS, OUTLET COVERS AND MISC. DEVICES.
4. WHERE EXISTING WALL DEVICES ARE REMOVED, PATCH AND REPAIR EXISTING SURFACES. PREP FOR SCHEDULE FINISH.INSTALL COVER PLATE WHERE REQUIRED.
5. CONFIRM EXACT LOCATIONS OF MARKER BOARDS / TACKBOARDS WITH ARCHITECT PRIOR TO INSTALLATION.
6. ALL FLOOR MATERIAL CHANGES SHALL OCCUR AT CENTER LINE OF DOOR UNLESS NOTED OTHERWISE.
7. PROVIDE REDUCER AT ALL DISSIMILAR FLOOR MATERIALS UNLESS NOTED OTHERWISE.
8. ALL SPACES WITH FLOOR DRAINS SHALL HAVE FINISHED FLOOR SLOPE TO DRAIN. VERIFY WITH ARCHITECT IN FIELD.
9. INSPECT ENTIRE FLOOR SLAB PRIOR TO INSTALLING NEW FLOORING. APPLY LEVELING COMPOUND AS REQUIRED TO ENSURE FLOOR IS LEVEL WITH NO NOTICEABLE IRREGULARITIES.
10. DO NOT INSTALL FLOORING OVER EXISTING FLOOR DRAINS, CLEANOUTS AND OTHER FLOOR MOUNTED DEVICES UNLESS NOTED OTHERWISE. REPLACE OR REMOVE AND RE-INSTALL COVERS AS REQUIRED. REFER TO MEPT DRAWINGS FOR ADDITIONAL INSTRUCTION.
11. IN SPACES WHERE EXISTING CASEWORK IS SCHEDULED TO BE REPLACED AND EXISTING FLOORING TO REMAIN, REPLACE FLOOR BASE UNDER CASEWORK TO MATCH EXISTING ADJACENT.
12. REFER TO A10, A11 AND A12 SERIES FOR MATERIAL, COLOR AND FINISH LOCATION AND TYPES.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: WHL / KLO

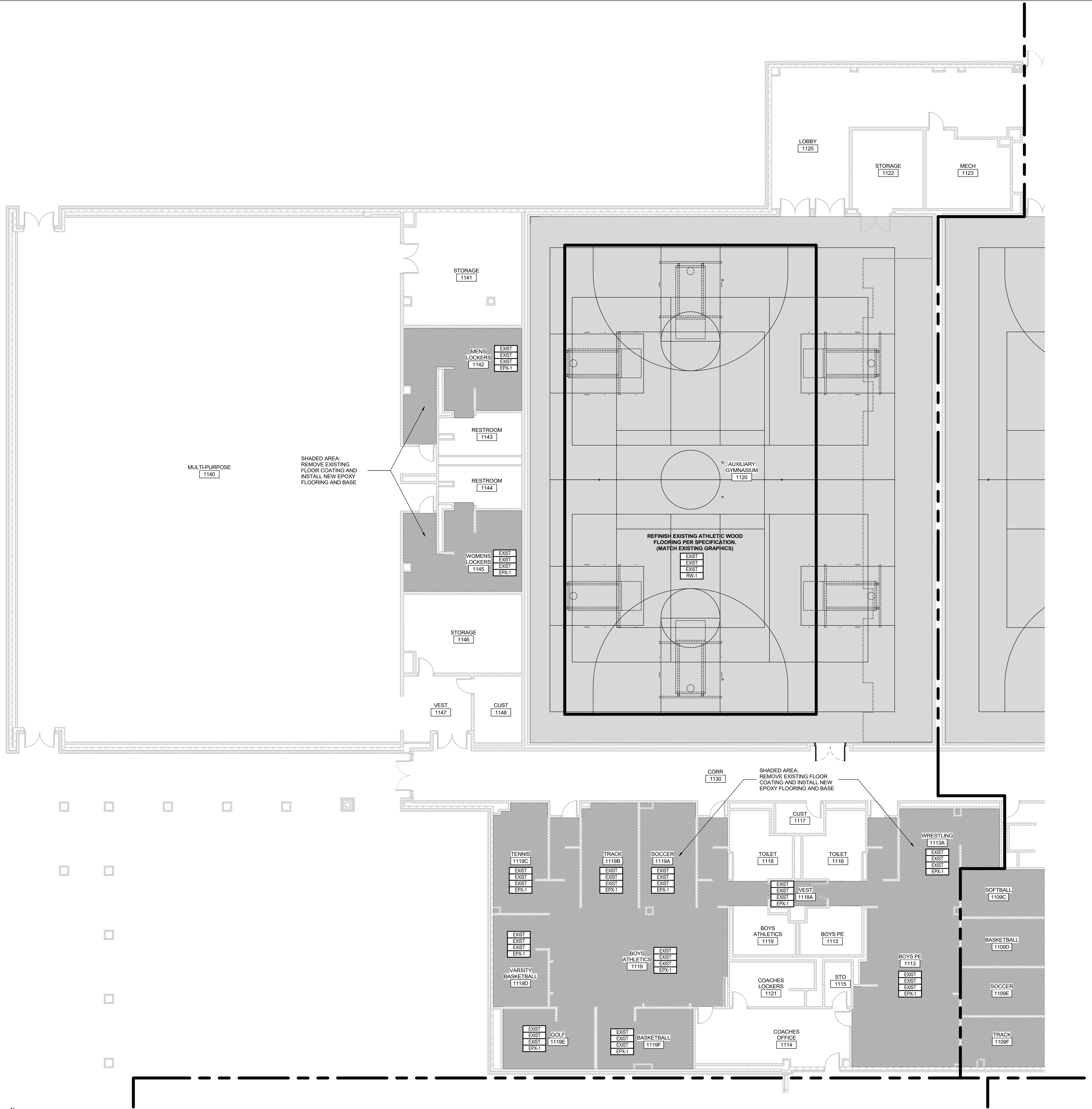
OVERALL FINISH PLANS

A12.10
of

Autodesk Docs://23072_CFSID_Phase 6_r22/23071_Cy-Lakes_HS_r22.rvt

11/14/2024 1:38:46 PM

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt



SHADED AREA:
REMOVE EXISTING
FLOOR COATING AND
INSTALL NEW EPOXY
FLOORING AND BASE

REFINISH EXISTING ATHLETIC WOOD FLOORING PER SPECIFICATION. (MATCH EXISTING GRAPHICS)

SHADED AREA:
REMOVE EXISTING FLOOR
COATING AND INSTALL NEW
EPOXY FLOORING AND BASE

1 1ST FLOOR FINISH PLAN - AREA 'A'

1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"

FINISH PLAN LEGEND

XX-# → CEILING
XX-# → WALL FINISH
XX-# → WALL BASE FINISH
XX-# → FLOOR FINISH

ROOM TAG CALLING OUT ROOM FINISHES

PT-# LIMITS OF ACCENT PAINT → MATERIAL TAG MARKING EXTENTS OF ACCENT WALL

NOTE: SEE FINISH LEGEND ON A12.00 FOR SCHED. FINISHES

FINISH PLAN LEGEND	
PATTERN	DESCRIPTION
🟦	CARPET (CPT-1)
🟦	LUXURY VINYL TILE (LVT-1)
▦	LUXURY VINYL TILE (LVT-2)
🟥	LUXURY VINYL TILE (LVT-3)
⬛	LUXURY VINYL TILE (LVT-4)
▦	FLOOR TILE (T-1)
▦	FLOOR TILE (T-2)
▦	FLOOR TILE (T-3)
▦	FLOOR TILE (T-4)
▩	EPOXY FLOORING (EPX-1)
▩	POLISHED CONCRETE (PC -1)
▩	SEALED CONCRETE (SC -1)
▤	MASONITE WOOD FLOORING (WD -1)
☐	EXIST. FLOOR - NO WORK
▩	EXIST. CARPET
▨	EXIST. VCT

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

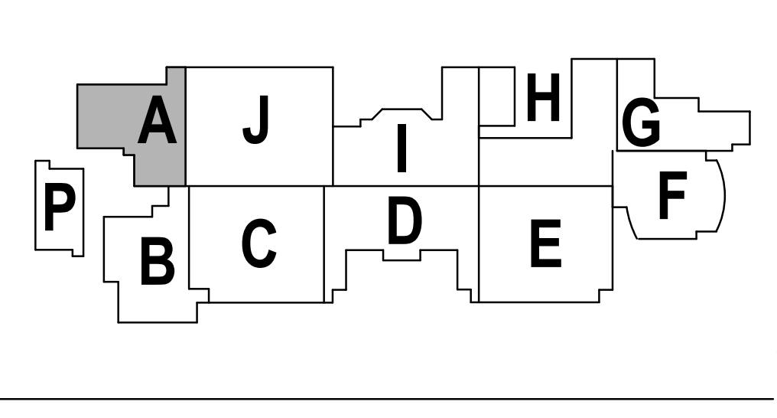
2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

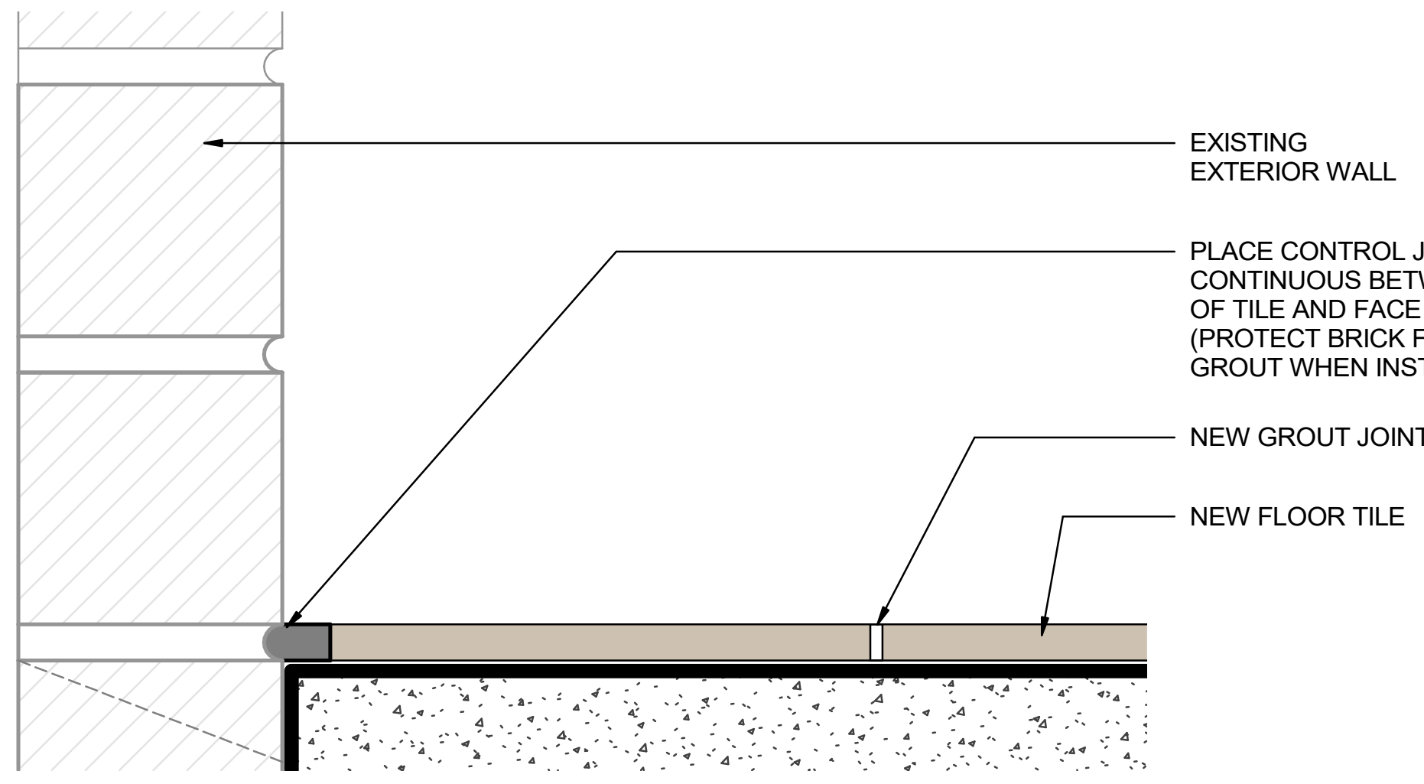
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



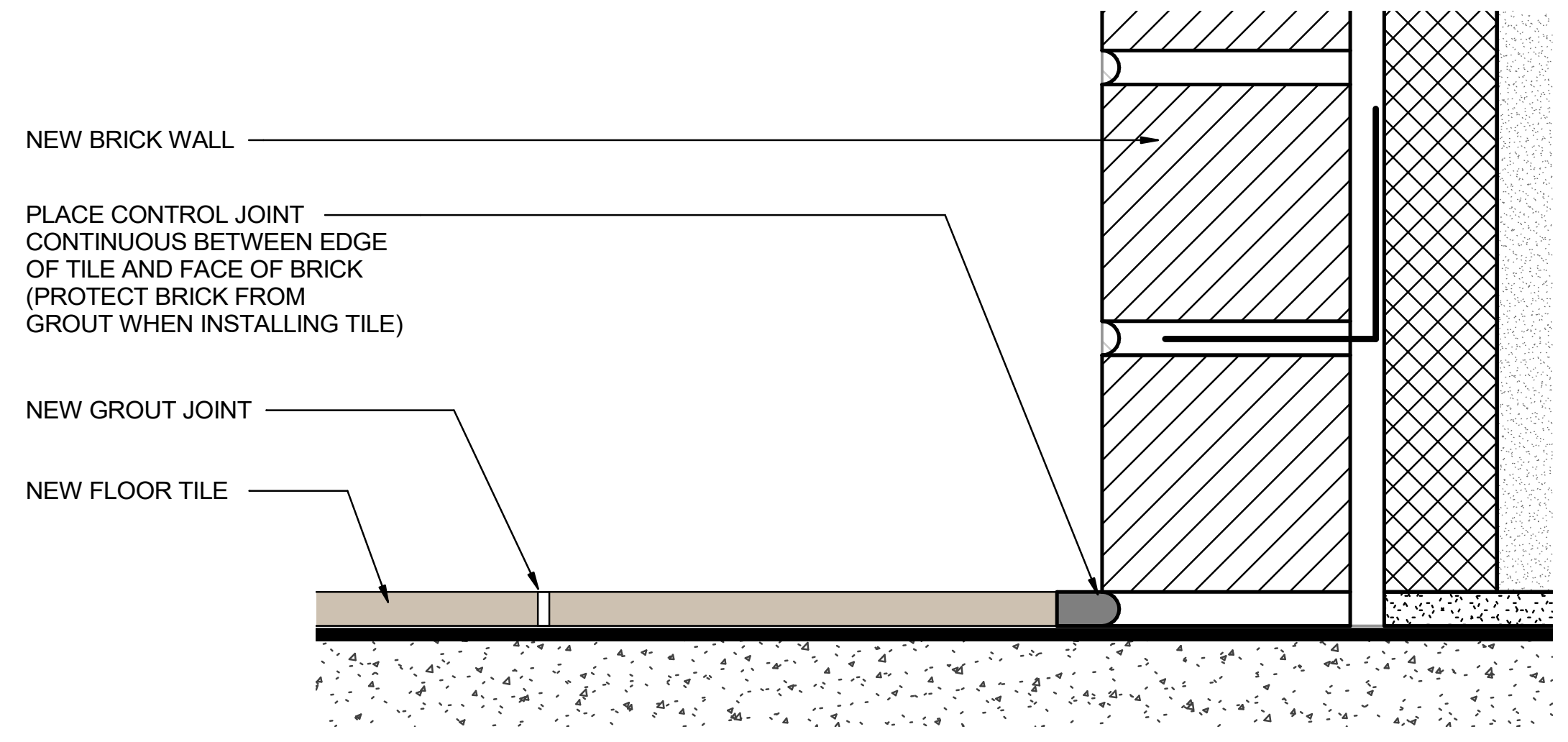
FINISH PLAN - AREA 'A'

A12.10A

_____ of _____



2 TILE FLR DETAIL - EXISTING BRICK WALL
6" = 1'-0"



3 TILE FLR DETAIL - NEW BRICK WALL
6" = 1'-0"

1 1ST FLOOR FINISH PLAN - AREA 'G' ADDITION
1/8" = 1'-0"

SCALE: 0'-0 1/8" = 1'-0"
0' 4'-0" 8'-0" 16'-0"

SIGN LEGEND

A	NEW GATE SIGN
#	NEW EXTERIOR DOOR NUMBER
#	REMOVE EXISTING EXTERIOR DOOR SIGN WITH NEW
RS	NEW INTERIOR ROOM SIGN

FINISH PLAN LEGEND

XX-#	CEILING
XX-#	WALL FINISH
XX-#	WALL BASE FINISH
XX-#	FLOOR FINISH

ROOM TAG CALLING OUT ROOM FINISHES

PT-# — LIMITS OF ACCENT PAINT — MATERIAL TAG MARKING EXTENTS OF ACCENT WALL

NOTE: SEE FINISH LEGEND ON A12.00 FOR SCHED. FINISHES

FINISH PLAN LEGEND

PATTERN	DESCRIPTION
▨	CARPET (CPT-1)
▨	LUXURY VINYL TILE (LVT-1)
▨	LUXURY VINYL TILE (LVT-2)
🟥	LUXURY VINYL TILE (LVT-3)
⬛	LUXURY VINYL TILE (LVT-4)
▦	FLOOR TILE (T-1)
▦	FLOOR TILE (T-2)
▦	FLOOR TILE (T-3)
▦	FLOOR TILE (T-4)
▩	EPOXY FLOORING (EPX-1)
▨	POLISHED CONCRETE (PC -1)
▨	SEALED CONCRETE (SC -1)
▤	MASONITE WOOD FLOORING (WD -1)
☐	EXIST. FLOOR - NO WORK
▨	EXIST. CARPET
▧	EXIST. VCT

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

REGISTERED ARCHITECT
MARIA CAROLINA WEITZMAN
11/17/2024
15620
STATE OF TEXAS

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

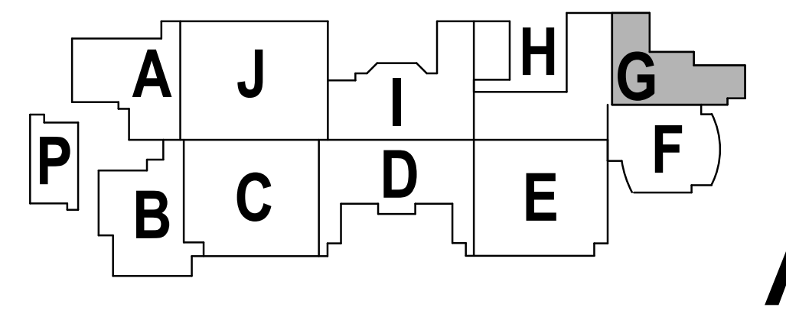
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

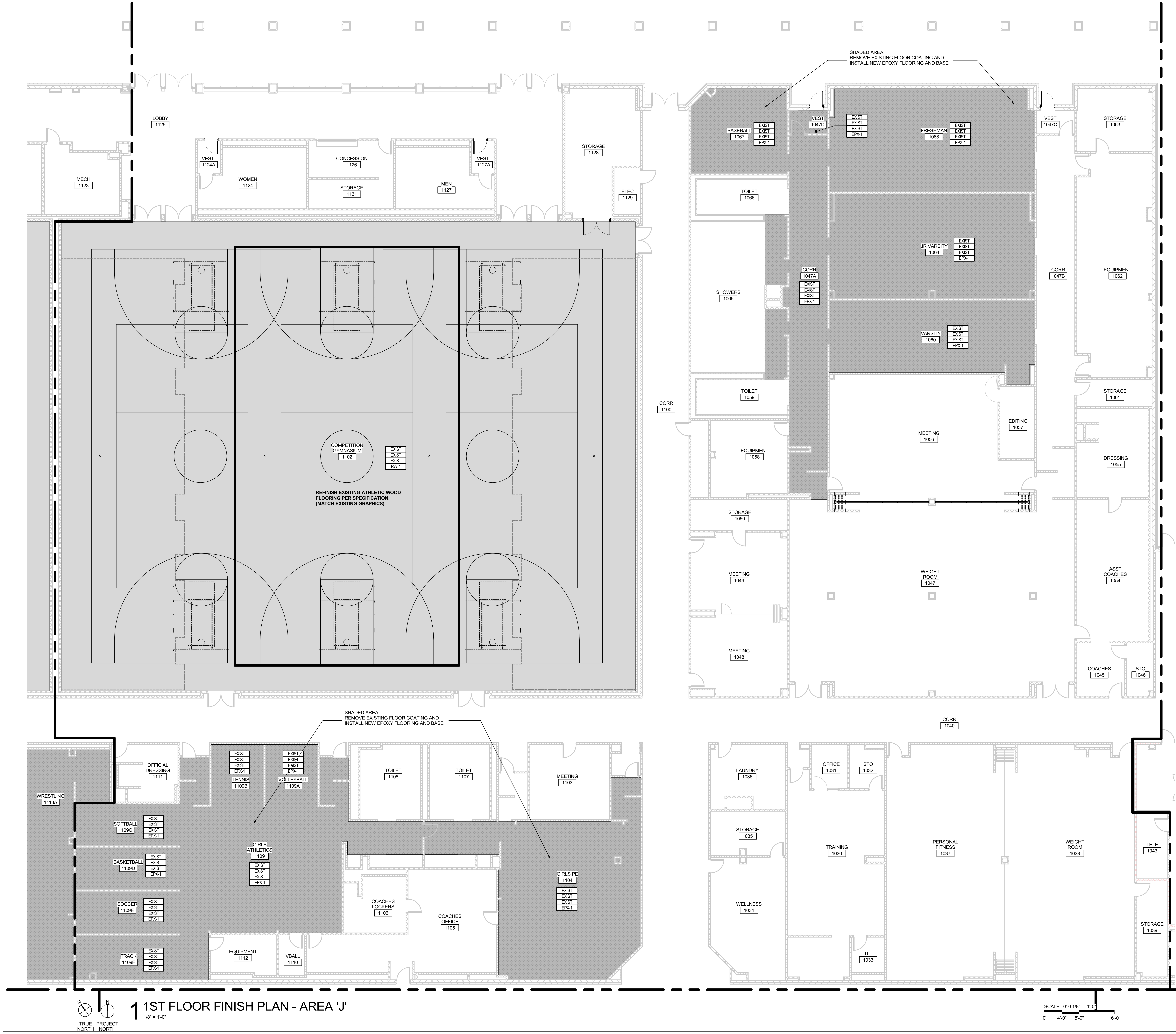


FINISH PLAN - AREA 'G'

A12.10G

____ of ____

11/14/2024 1:38:55 PM



SHADED AREA:
REMOVE EXISTING FLOOR COATING AND
INSTALL NEW EPOXY FLOORING AND BASE

REFINISH EXISTING ATHLETIC WOOD
FLOORING PER SPECIFICATION.
(MATCH EXISTING GRAPHICS)

SHADED AREA:
REMOVE EXISTING FLOOR COATING AND
INSTALL NEW EPOXY FLOORING AND BASE

1 1ST FLOOR FINISH PLAN - AREA 'J'

1/8" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/23071_Cy-Lakes_HS_r22.rvt

FINISH PLAN LEGEND

XX-# — CEILING
XX-# — WALL FINISH
XX-# — WALL BASE FINISH
XX-# — FLOOR FINISH

ROOM TAG CALLING OUT ROOM FINISHES

PT-# — LIMITS OF ACCENT PAINT — MATERIAL TAG MARKING EXTENTS OF ACCENT WALL

NOTE: SEE FINISH LEGEND ON A12.00 FOR SCHED. FINISHES

FINISH PLAN LEGEND	
PATTERN	DESCRIPTION
🟦	CARPET (CPT-1)
🟦	LUXURY VINYL TILE (LVT-1)
▦	LUXURY VINYL TILE (LVT-2)
🟥	LUXURY VINYL TILE (LVT-3)
⬛	LUXURY VINYL TILE (LVT-4)
▦	FLOOR TILE (T-1)
▦	FLOOR TILE (T-2)
🟥	FLOOR TILE (T-3)
▦	FLOOR TILE (T-4)
▩	EPOXY FLOORING (EPX-1)
▩	POLISHED CONCRETE (PC -1)
▩	SEALED CONCRETE (SC -1)
▤	MASONITE WOOD FLOORING (WD -1)
☐	EXIST. FLOOR - NO WORK
▩	EXIST. CARPET
▨	EXIST. VCT

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

MARIA CAROLINA WEITZMAN
11/17/2024
15620

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

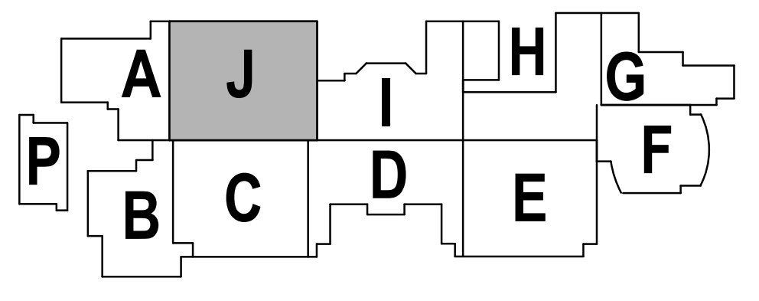
LANDSCAPE
LANDSCAPE GROUP
17041 EL CAMINO REAL, STE 204
HOUSTON, TX 77058
tel: 281.486.4040

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

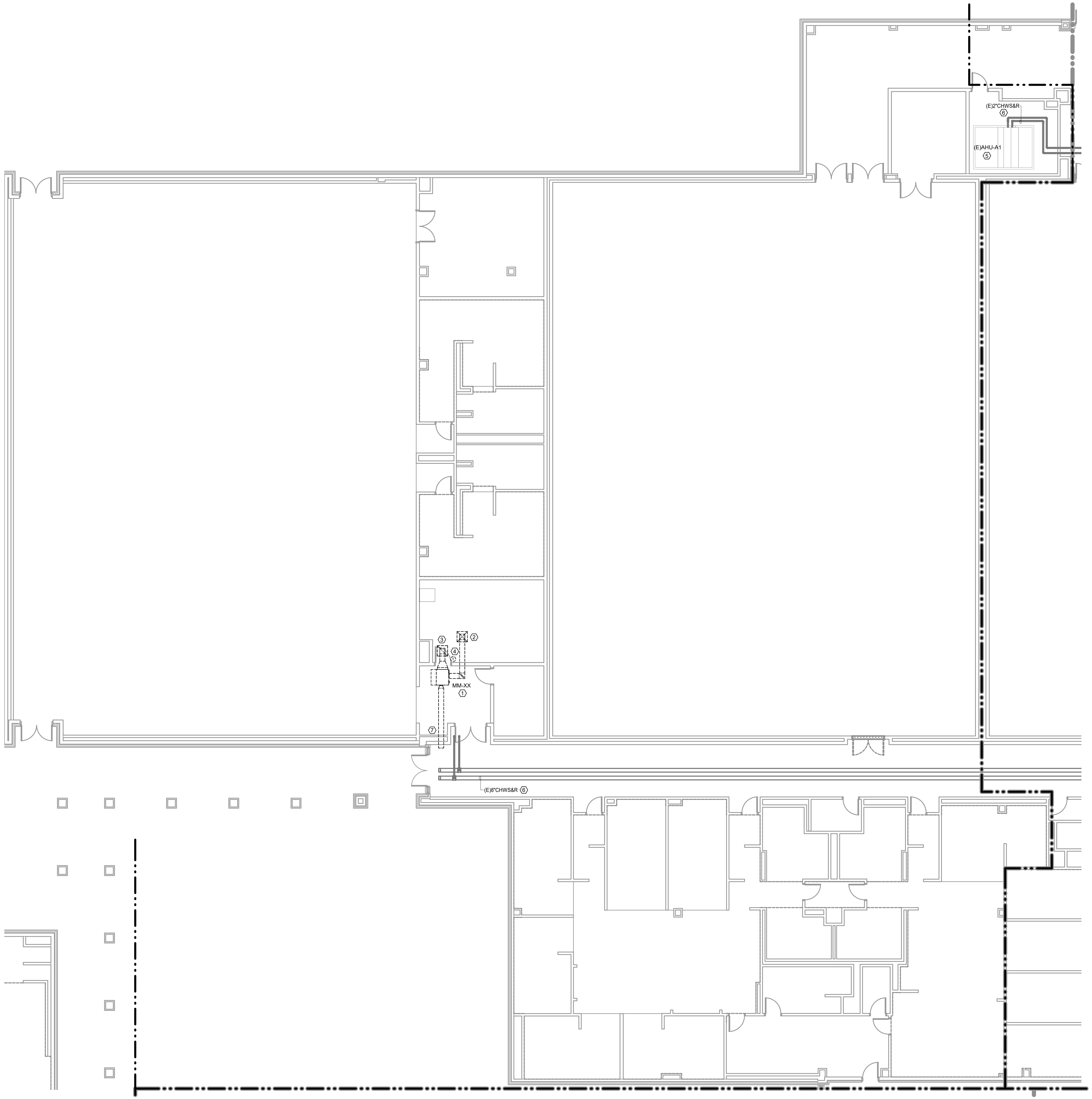


Project Number:	23071
Date:	11-17-2024
Drawn by:	WHL / KLO

FINISH PLAN - AREA 'J'

A12.10J

____ of ____



N

1 MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA A

Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

REFER TO M6 SERIES DRAWINGS FOR SCOPE OF WORK RELATED TO BUILDING MANAGEMENT SYSTEM REPLACEMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

1 REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK.

2 REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.

3 REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.

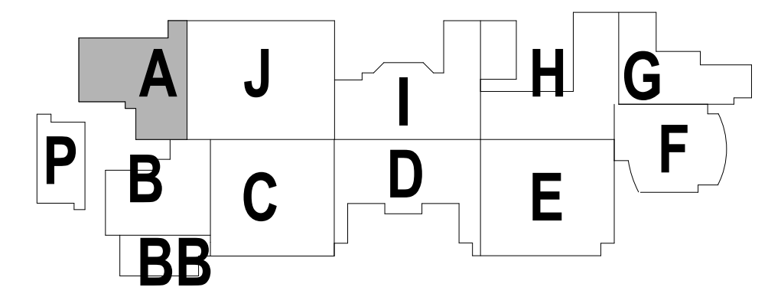
4 EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.

5 EXISTING EQUIPMENT TO REMAIN.

6 REFER TO M2.01 FOR PIPING INSULATION WORK.

7 PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL DEMOLITION FLOOR PLAN - AREA A

M0.01

of

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

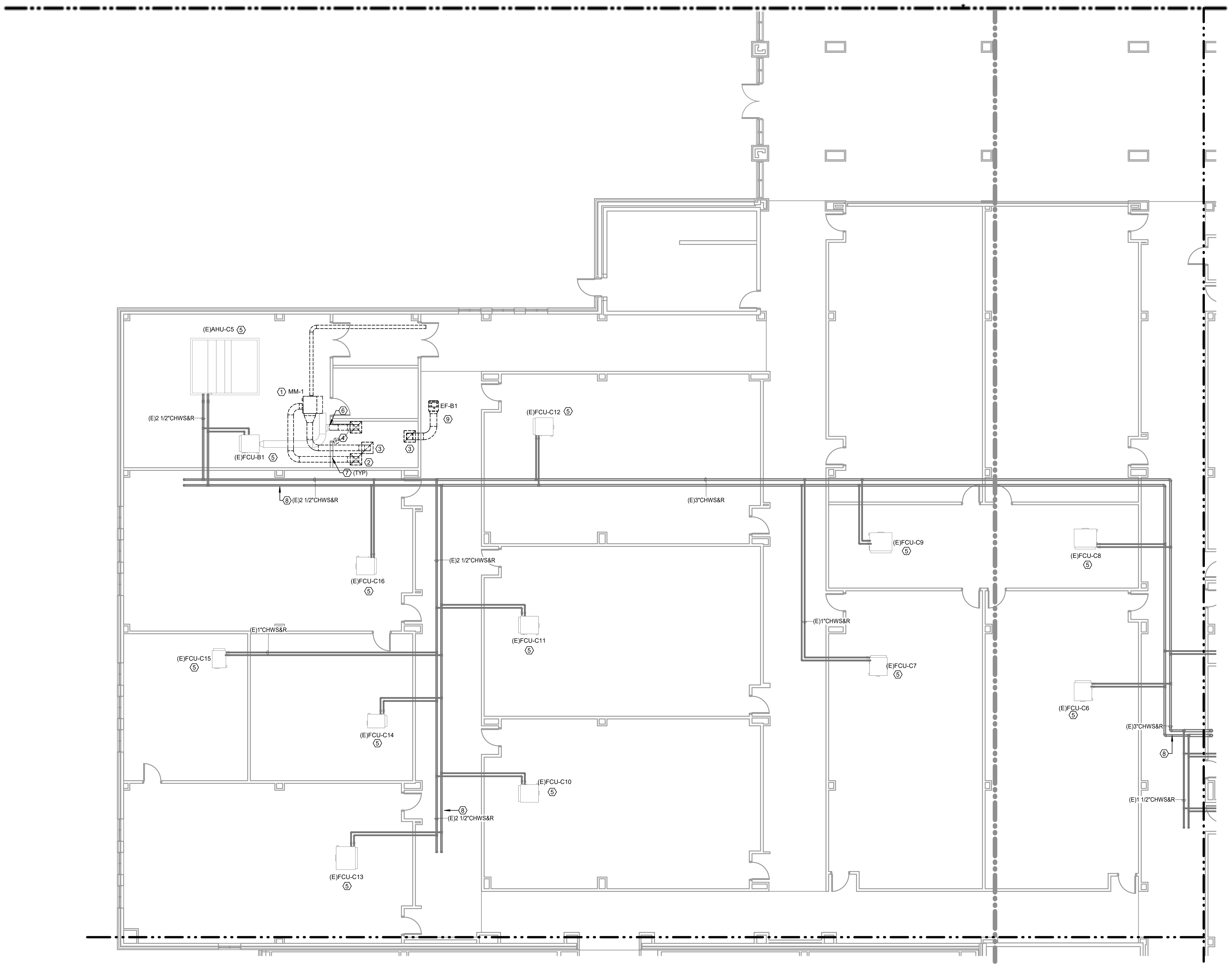
RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

1 REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.
2 REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
3 REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.
4 EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.
5 EXISTING EQUIPMENT TO REMAIN.
6 REMOVE EXISTING DUCTWORK UP TO THIS POINT.
7 PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.
8 REFER TO M2.02 FOR PIPING INSULATION WORK.
9 REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND CONTROLS.



1 **MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA B**
Scale: 1/8" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

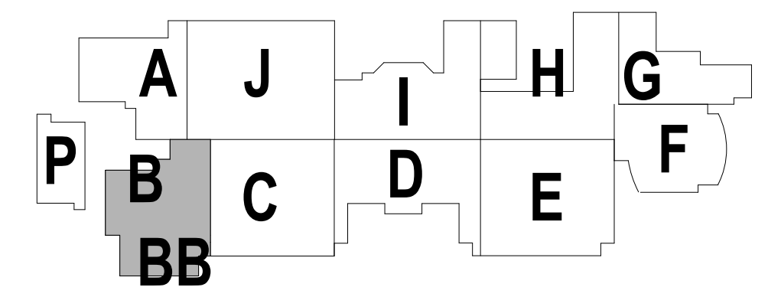
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

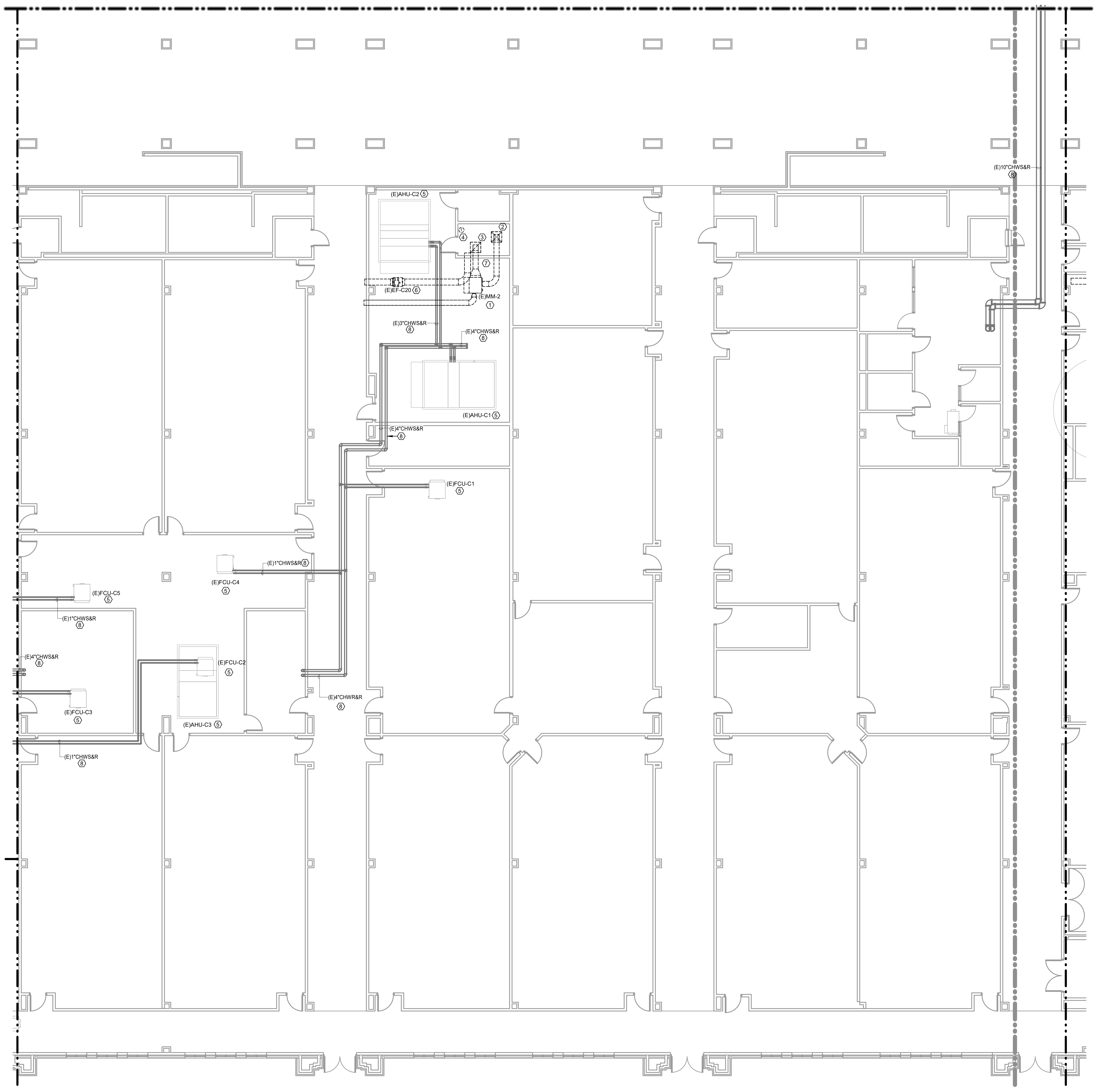


Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL
DEMOLITION FLOOR
PLAN - AREA B

M0.02

of



N

1 **MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA C**

Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

1 REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.

2 REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.

3 REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.

4 EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.

5 EXISTING EQUIPMENT TO REMAIN.

6 REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND CONTROLS.

7 PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

8 REFER TO M2.03 FOR PIPING INSULATION WORK.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

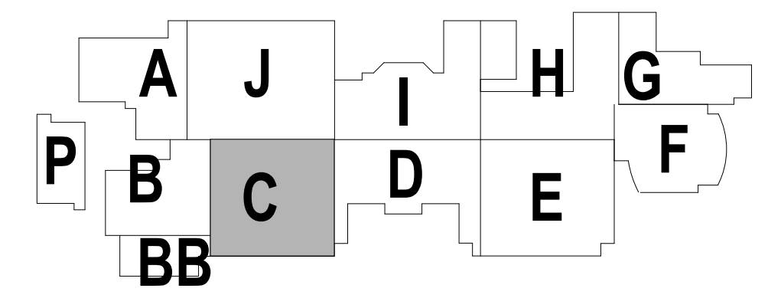
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

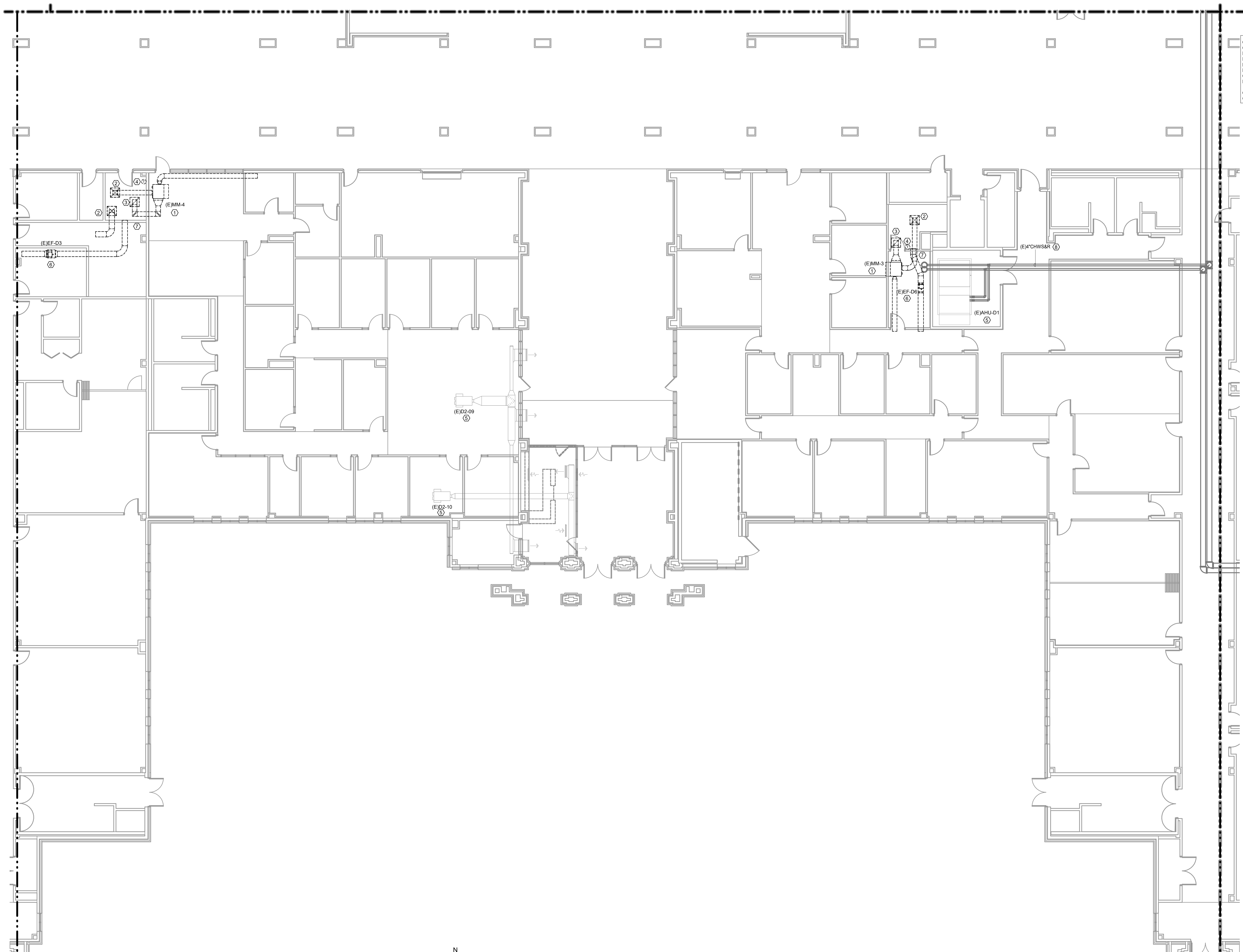


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL
DEMOLITION FLOOR
PLAN - AREA C

M0.03

____ of ____



1 MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA D

Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: **F-4111**
Project No: **2024-00197-00**

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

① REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.

② REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.

③ REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.

④ EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.

⑤ EXISTING EQUIPMENT TO REMAIN.

⑥ REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND CONTROLS.

⑦ PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

⑧ REFER TO M2.04 FOR PIPING INSULATION WORK.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

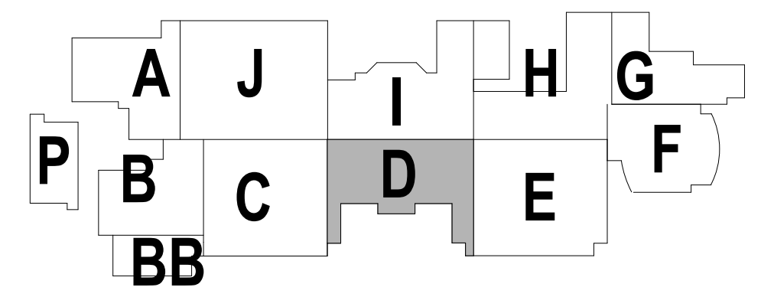
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

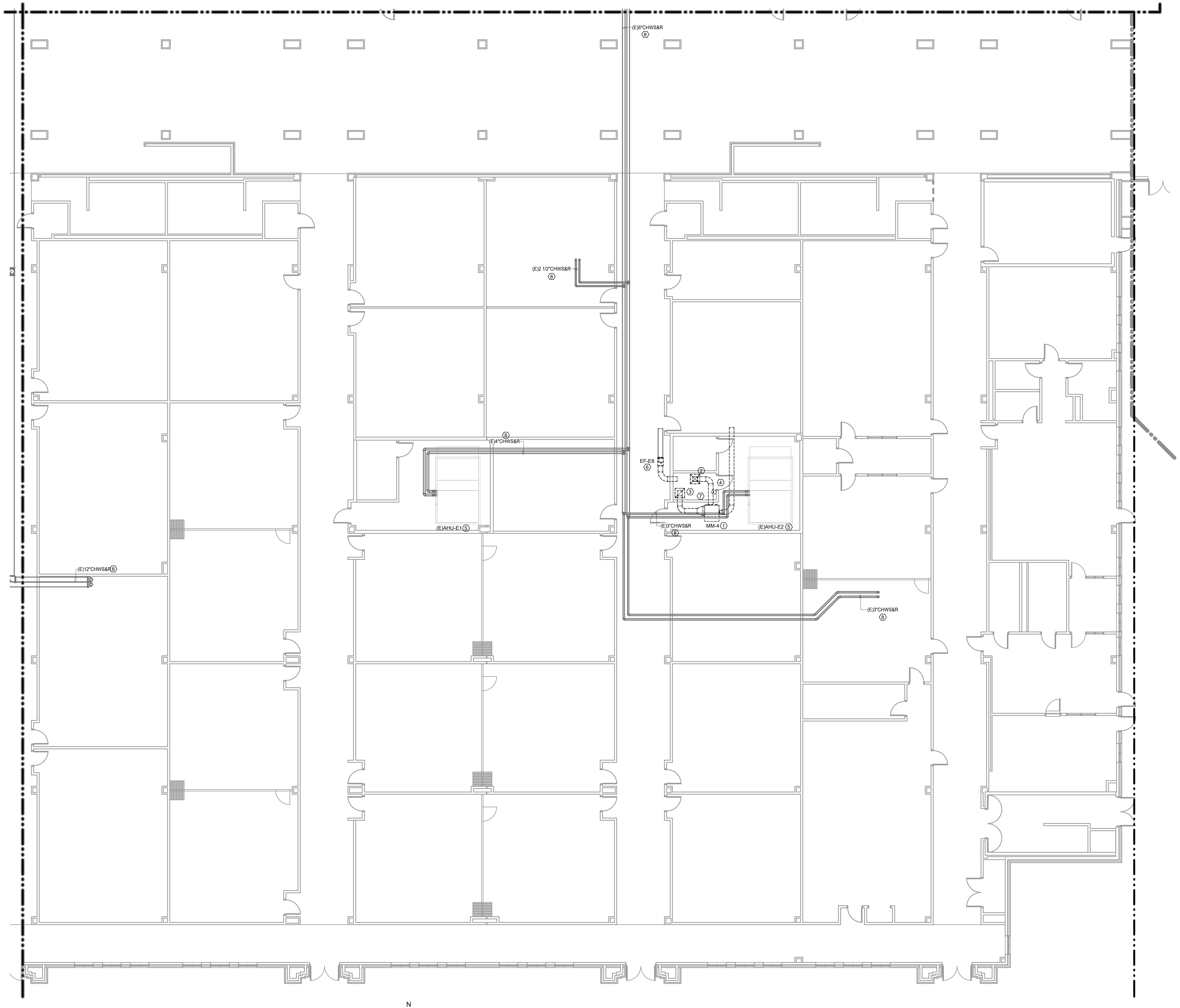


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL
DEMOLITION FLOOR
PLAN - AREA D

M0.04

of



1 MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA E

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: **F-4111**
Project No: **2024-00197-00**

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

⟨1⟩ REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.

⟨2⟩ REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.

⟨3⟩ REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.

⟨4⟩ EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.

⟨5⟩ EXISTING EQUIPMENT TO REMAIN.

⟨6⟩ REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND CONTROLS.

⟨7⟩ PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

⟨8⟩ REFER TO M2.05 FOR PIPING INSULATION WORK.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

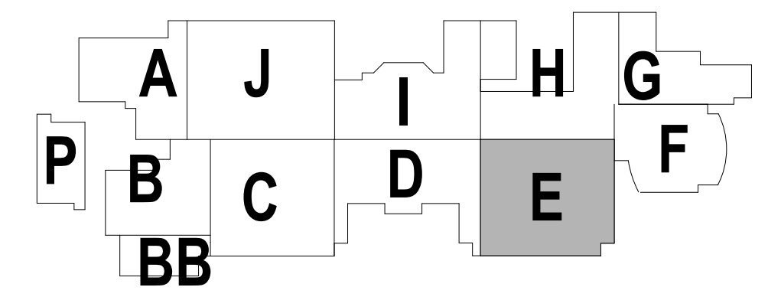
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

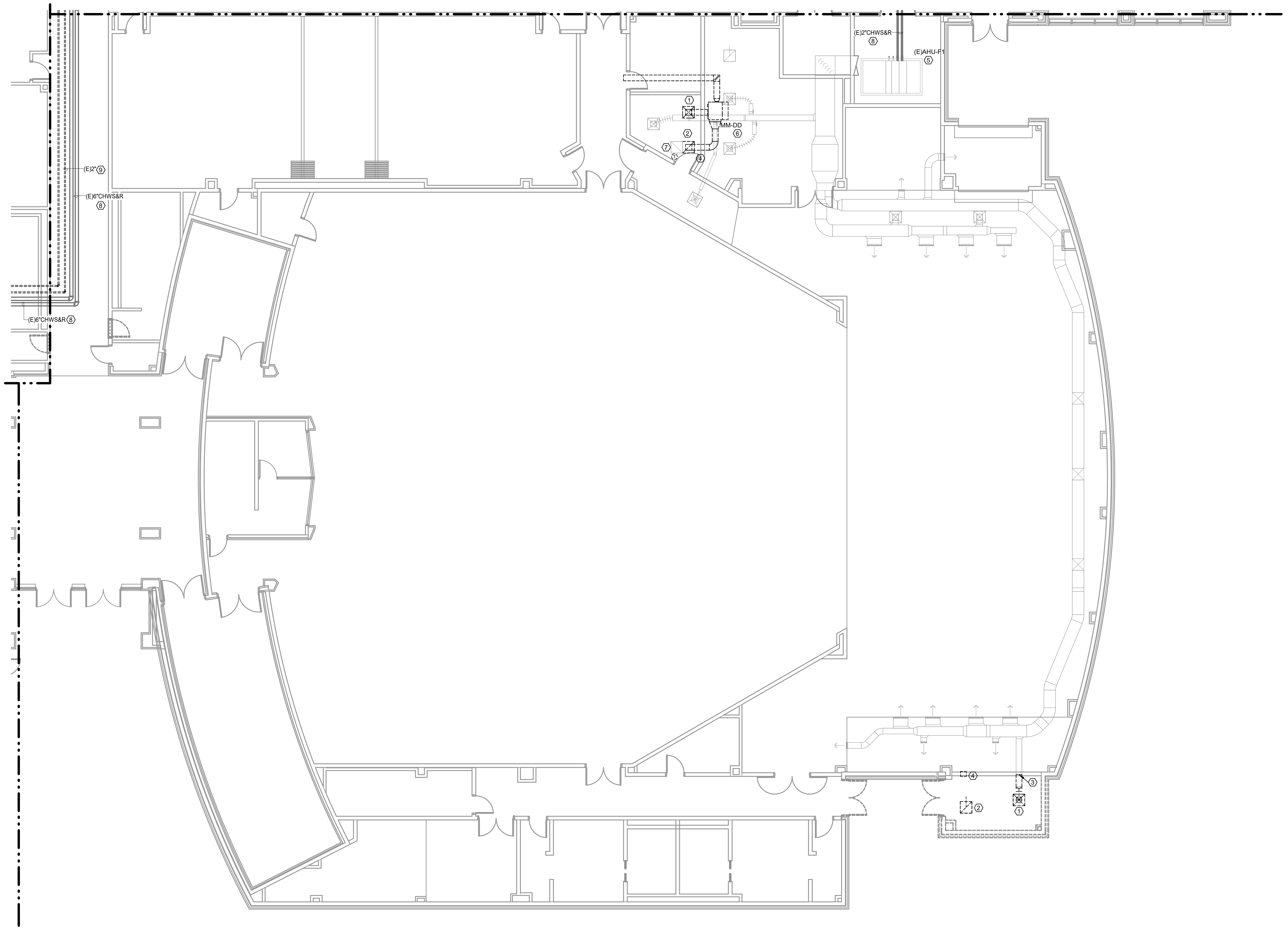


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL
DEMOLITION FLOOR
PLAN - AREA E

M0.05

of



N

1 MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA F
Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

① REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
② REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.
③ REMOVE EXISTING DUCTWORK UP TO THIS POINT.
④ PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.
⑤ EXISTING EQUIPMENT TO REMAIN.
⑥ REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.
⑦ EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.
⑧ REFER TO M2.06 FOR PIPING INSULATION WORK.
⑨ REMOVE EXISTING HWS&R PIPING AS SHOWN.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

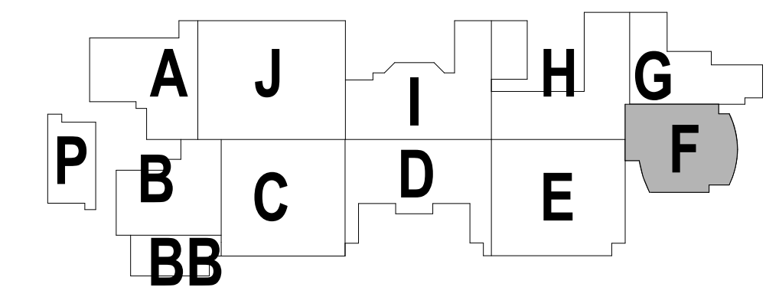
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL
DEMOLITION FLOOR
PLAN - AREA F

M0.06
____ of ____

Salas O'Brien
salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: **F-4111**
Project No: **2024-00197-00**

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

① REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.

② REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.

③ REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.

④ REMOVE EXISTING DUCTWORK UP TO THIS POINT.

⑤ PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

⑥ REMOVE EXISTING EXHAUST GRILLE AND EXISTING DUCTWORK AS INDICATED.

⑦ REMOVE EXISTING ROOF MOUNTED EXHAUST FAN AND ASSOCIATED EXHAUST DUCTWORK. EXISTING ROOF CURB TO BE COVERED RE: EXISTING ROOF OPENING COVER DETAIL FOR MORE INFORMATION.

⑧ REMOVE EXISTING ROOF MOUNTED RELIEF VENT AND ASSOCIATED KILN EXHAUST DUCTWORK. EXISTING ROOF CURB TO BE COVERED RE: EXISTING ROOF OPENING COVER DETAIL FOR MORE INFORMATION.

⑨ REMOVE EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND CONTROLS.

⑩ REMOVE EXISTING CHWS&R PIPING BACK TO THIS POINT.

⑪ REMOVE EXISTING HWS&R PIPING BACK TO THIS POINT.

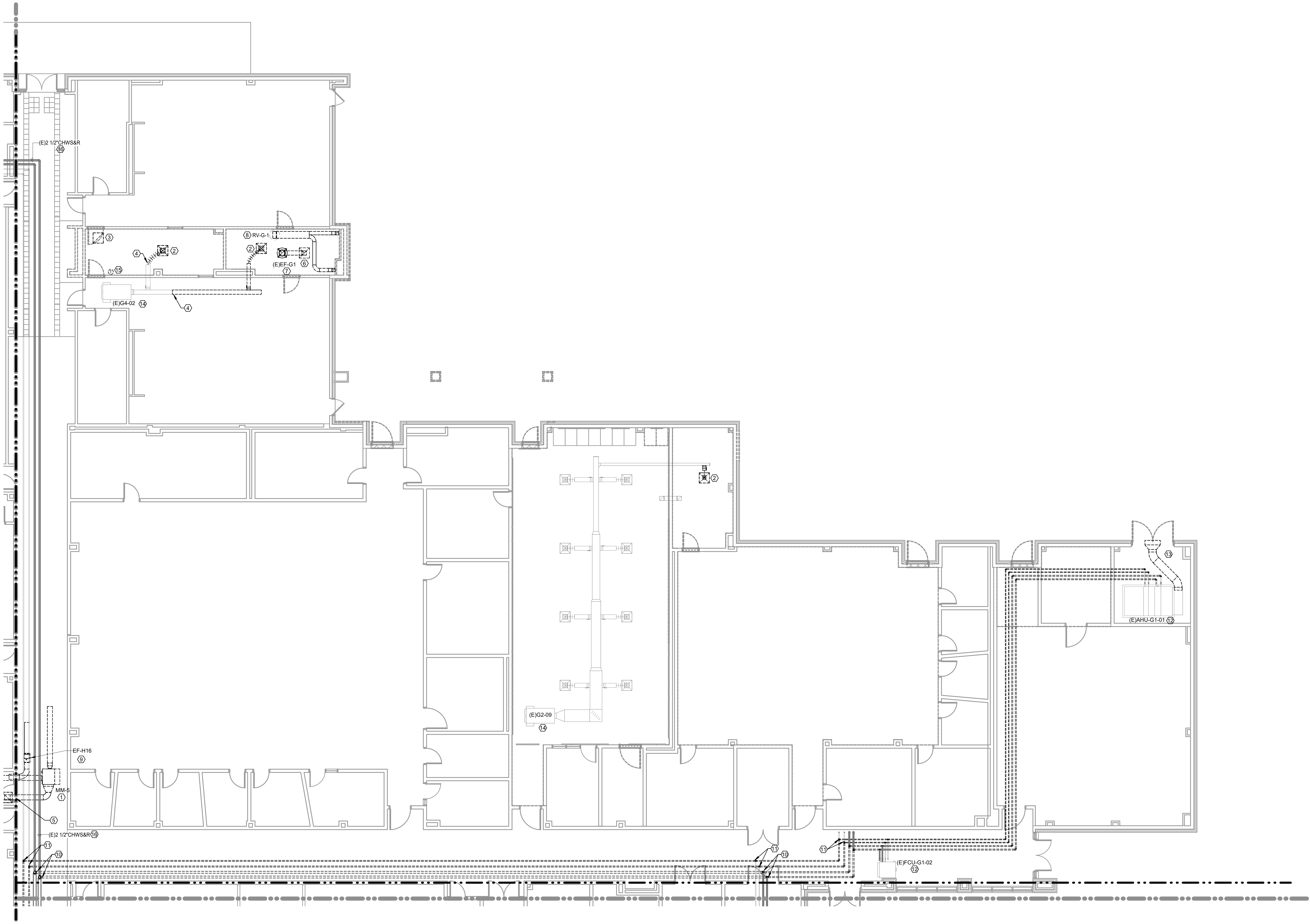
⑫ EXISTING AHU/FAN COIL UNIT SHALL REMAIN AND REUSED. EXISTING CHILLED AND HOT WATER PIPING BACK INDICATED POINT.

⑬ REMOVE EXISTING OUTSIDE AIR LOUVER AND EXISTING DUCTWORK AS INDICATED.

⑭ EXISTING EQUIPMENT TO REMAIN.

⑮ EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.

⑯ REFER TO M2.07 FOR PIPING INSULATION WORK.

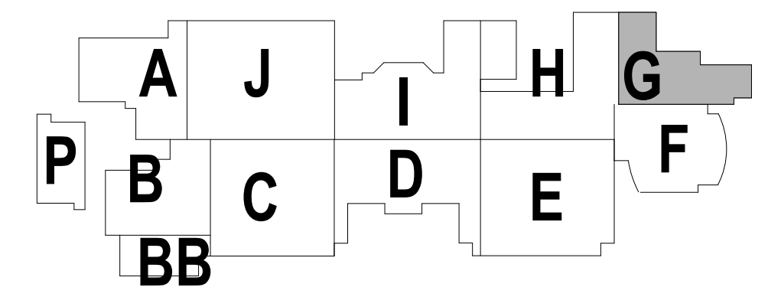


MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA G

1 Scale: 1/8" = 1'-0"

N

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

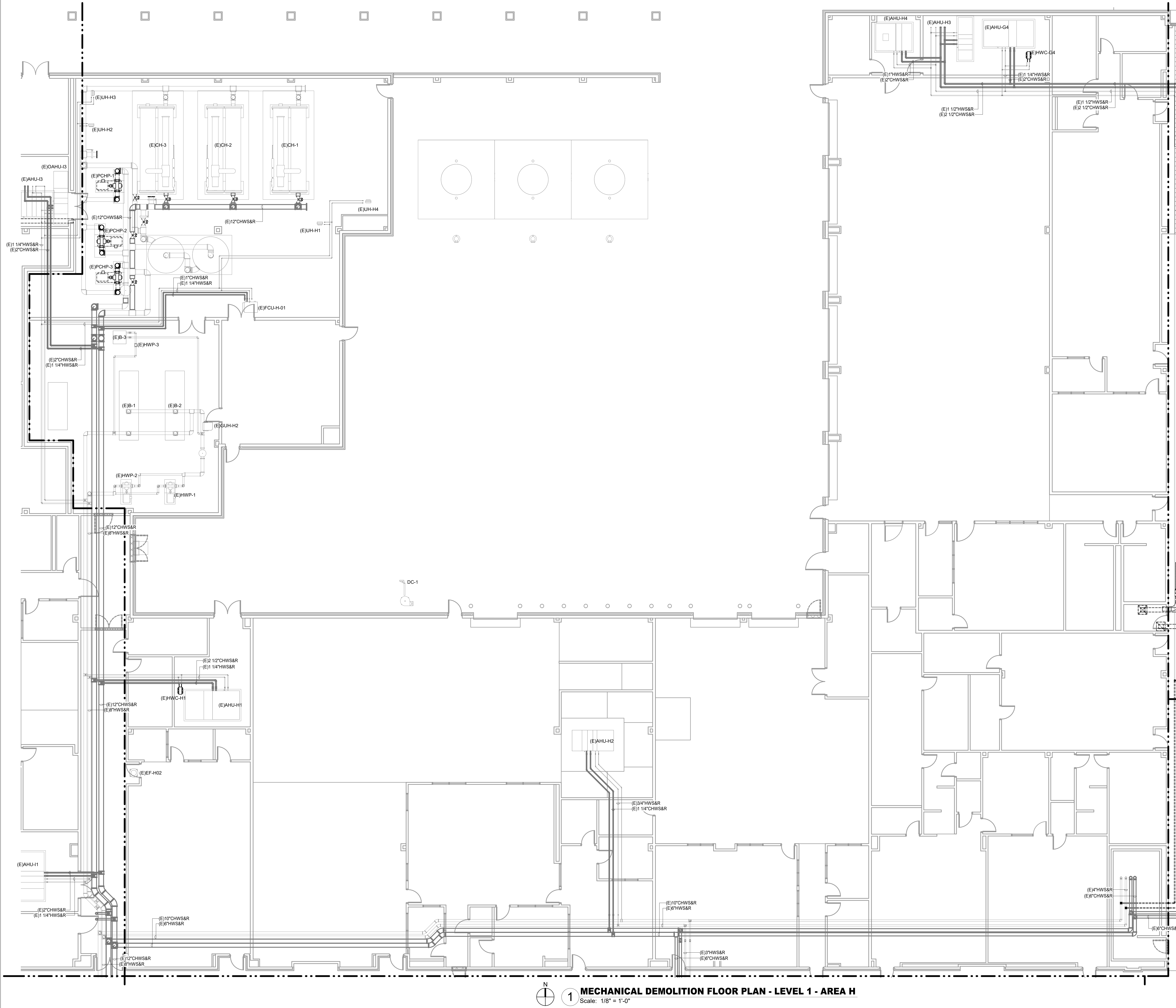
Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL
DEMOLITION FIRST
FLOOR PLAN - AREA G

M0.07

of



MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA H

1

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

⟨1⟩ REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.

⟨2⟩ REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.

⟨3⟩ REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.

⟨4⟩ EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.

⟨5⟩ EXISTING EQUIPMENT TO REMAIN.

⟨6⟩ REMOVE EXISTING DUCTWORK UP TO THIS POINT.

⟨7⟩ PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

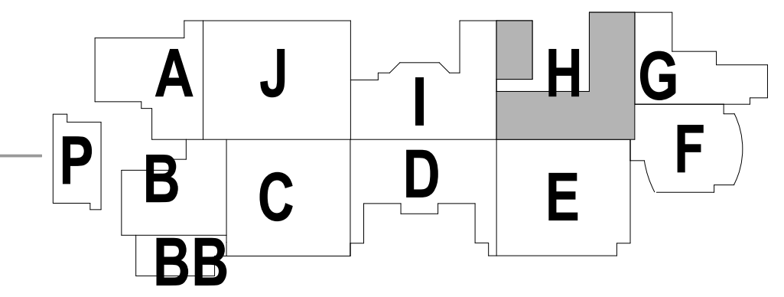
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

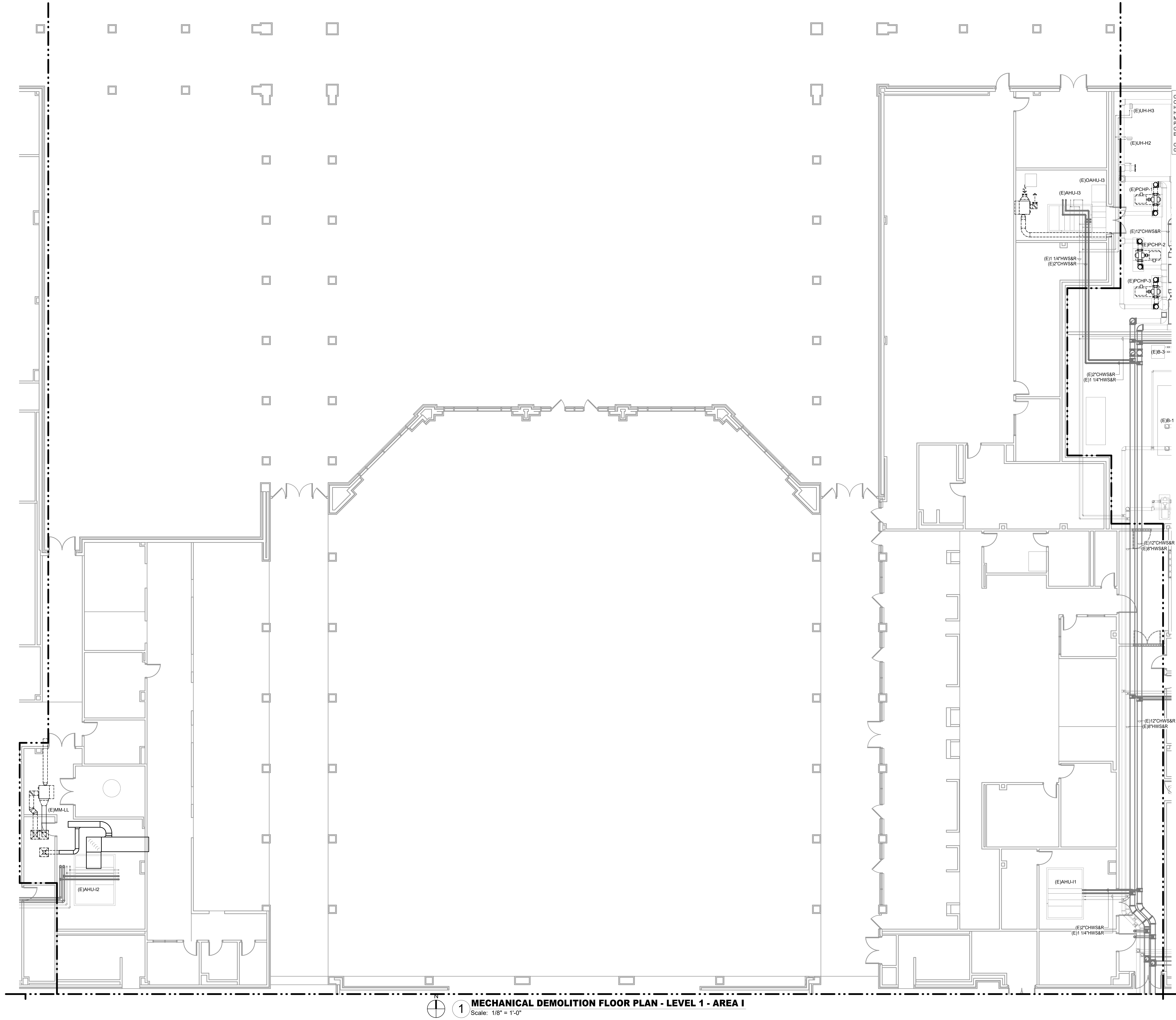


Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL DEMOLITION FIRST FLOOR PLAN - AREA H

M0.08

____ of ____



① **MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA I**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

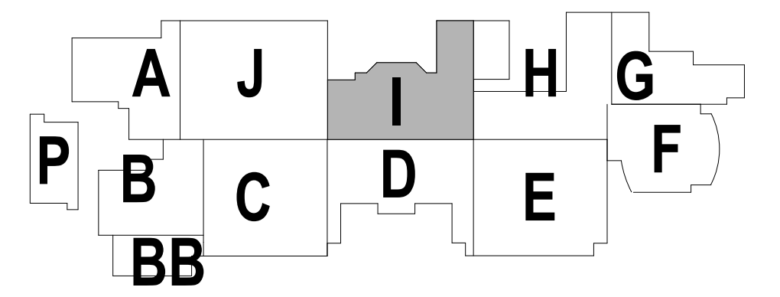
GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

1 REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.
2 REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
3 REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.
4 EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.
5 EXISTING EQUIPMENT TO REMAIN.
6 REMOVE EXISTING DUCTWORK UP TO THIS POINT.
7 PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

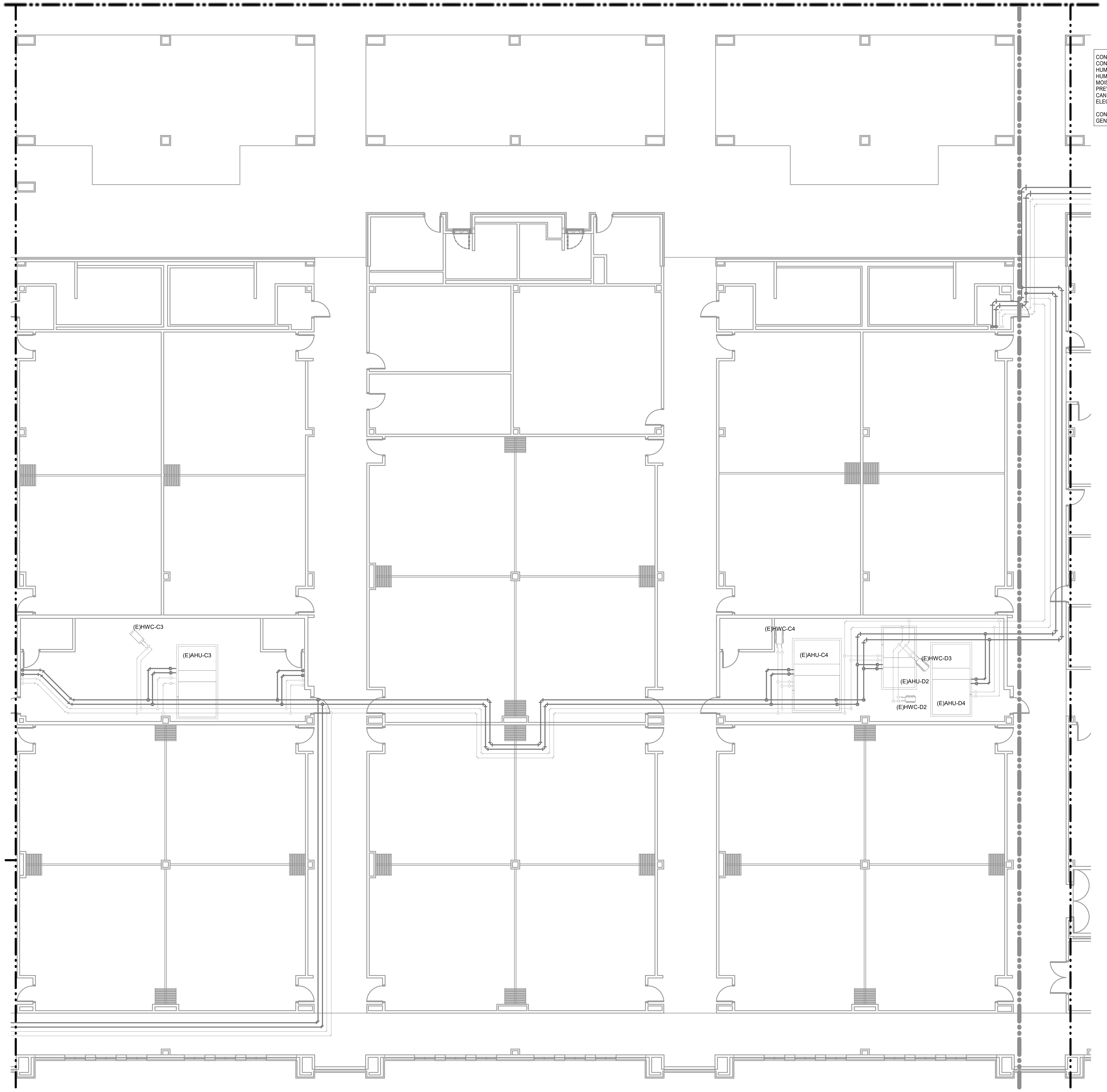
Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL DEMOLITION FIRST FLOOR PLAN - AREA I

M0.09

___ of ___



N

1 **MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA C**
Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

1 REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.
2 REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
3 REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.
4 EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.
5 EXISTING EQUIPMENT TO REMAIN.
6 REMOVE EXISTING DUCTWORK UP TO THIS POINT.
7 PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

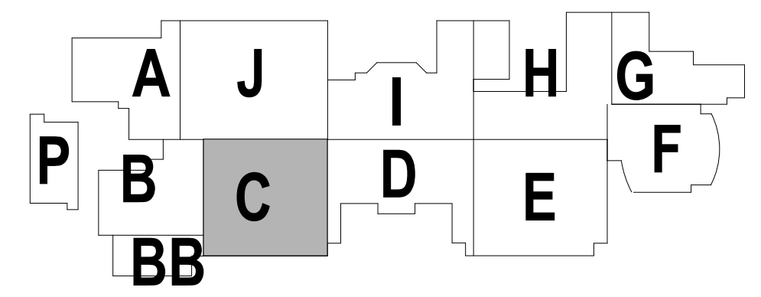
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

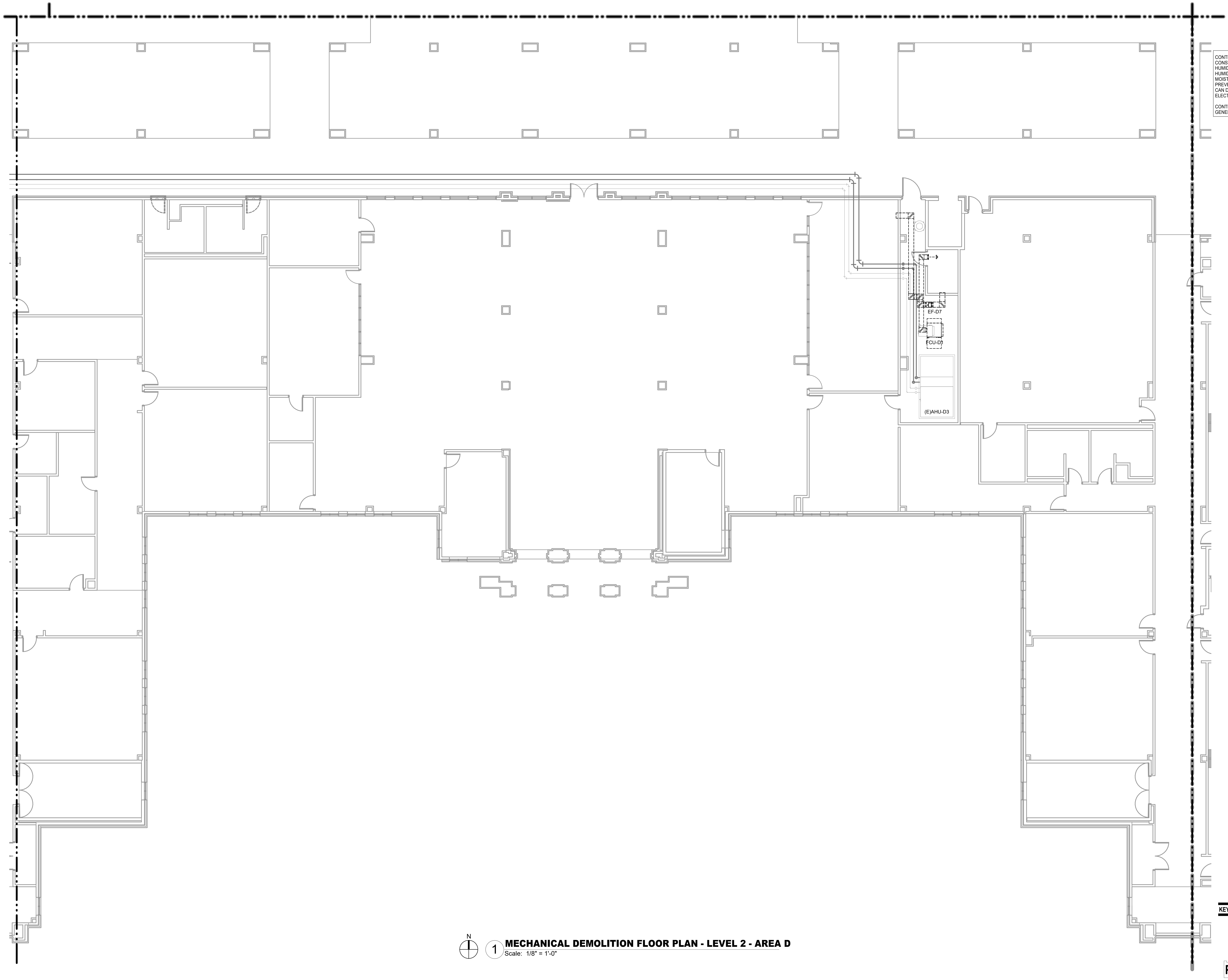


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL DEMOLITION SECOND FLOOR PLAN - AREA C

M0.10

____ of ____



1 MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA D
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: **F-4111**
Project No: **2024-00197-00**

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

⟨1⟩ REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.
⟨2⟩ REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
⟨3⟩ REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.
⟨4⟩ EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.
⟨5⟩ EXISTING EQUIPMENT TO REMAIN.
⟨6⟩ REMOVE EXISTING DUCTWORK UP TO THIS POINT.
⟨7⟩ PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

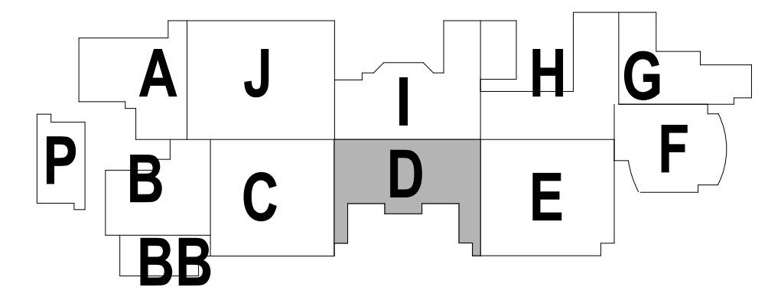
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

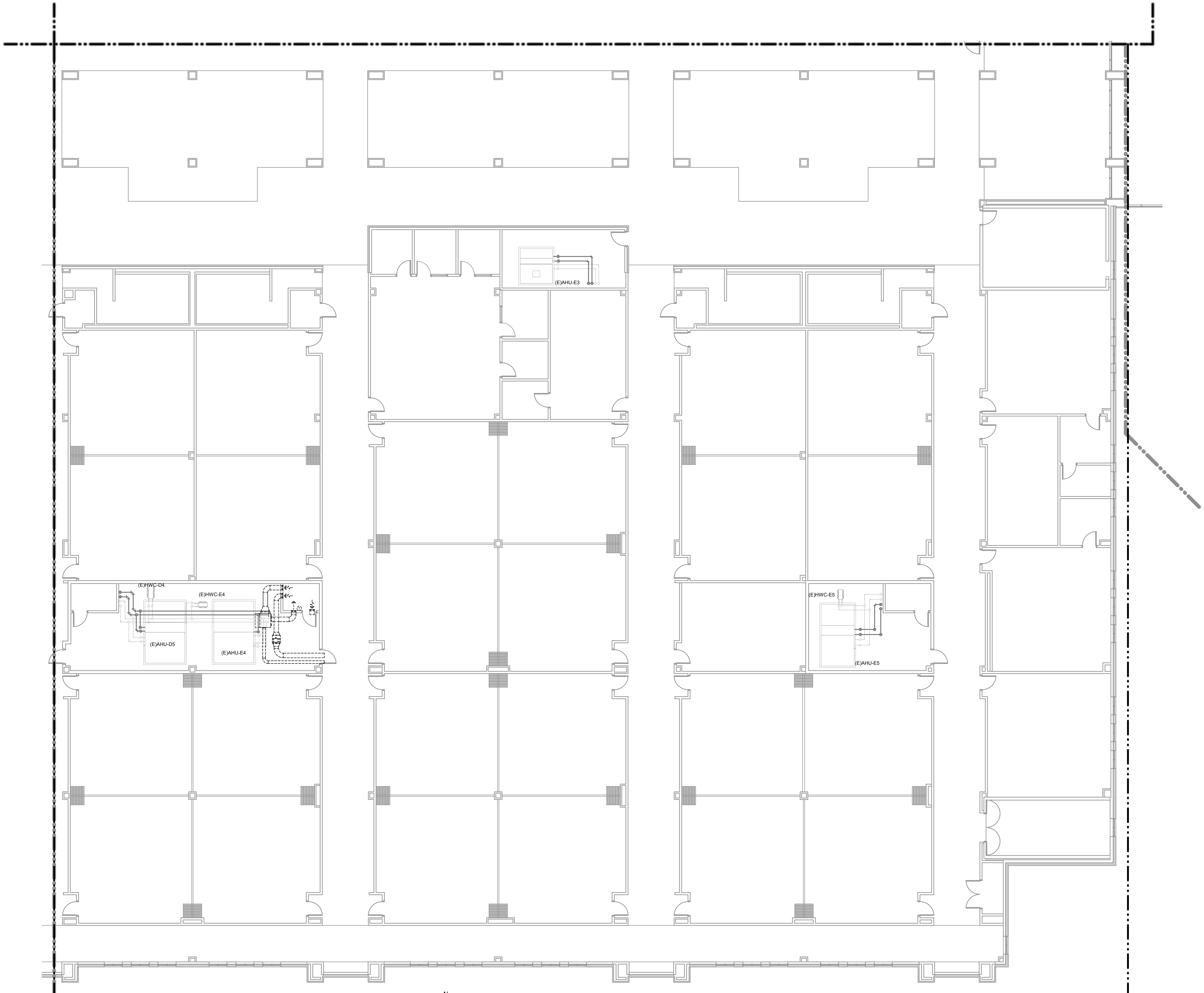


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL
DEMOLITION SECOND
FLOOR PLAN - AREA D

M0.11

of



1 MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA E

Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

⟨1⟩ REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.
⟨2⟩ REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
⟨3⟩ REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.
⟨4⟩ EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.
⟨5⟩ EXISTING EQUIPMENT TO REMAIN.
⟨6⟩ REMOVE EXISTING DUCTWORK UP TO THIS POINT.
⟨7⟩ PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

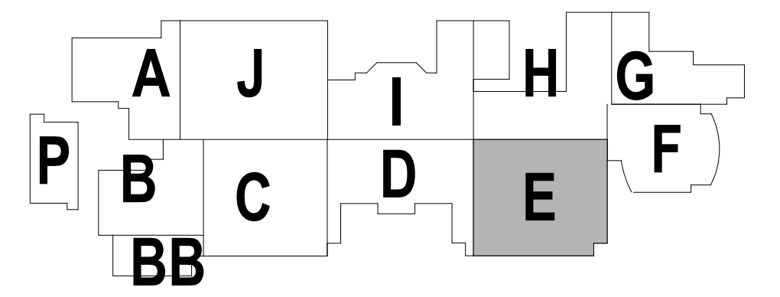
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL
DEMOLITION SECOND
FLOOR PLAN - AREA E

M0.12

of

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
☐	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

1 REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.
2 REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.
3 REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.
4 EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.
5 EXISTING EQUIPMENT TO REMAIN.
6 REMOVE EXISTING DUCTWORK UP TO THIS POINT.
7 PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

**COLEMAN PARTNERS
ARCHITECTS LLC**
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

**CIVIL ENGINEER
BROOKS AND SPARKS, INC.**
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

**STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.**
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

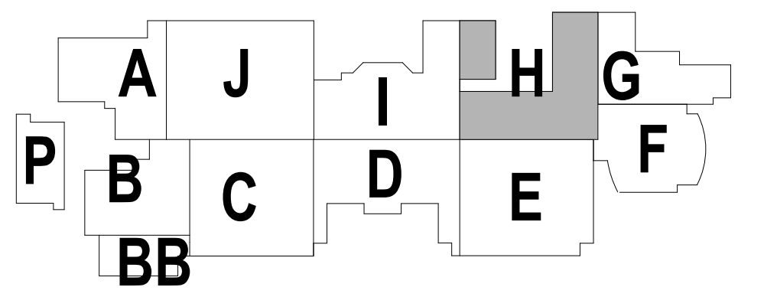
**MEPT ENGINEER
SALAS O'BRIEN**
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

1 MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA H
Scale: 1/8" = 1'-0"

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL
DEMOLITION SECOND
FLOOR PLAN - AREA H

M0.13

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXCISING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

DEMOLITION KEYED NOTES:

1 REMOVE EXISTING AIR HANDLING UNIT (LIEBERT UNIT), ASSOCIATED CONDENSATE PIPING, DUCTWORK, AND CONTROLS.

2 REMOVE EXISTING SUPPLY DIFFUSER AND EXISTING DUCTWORK AS INDICATED.

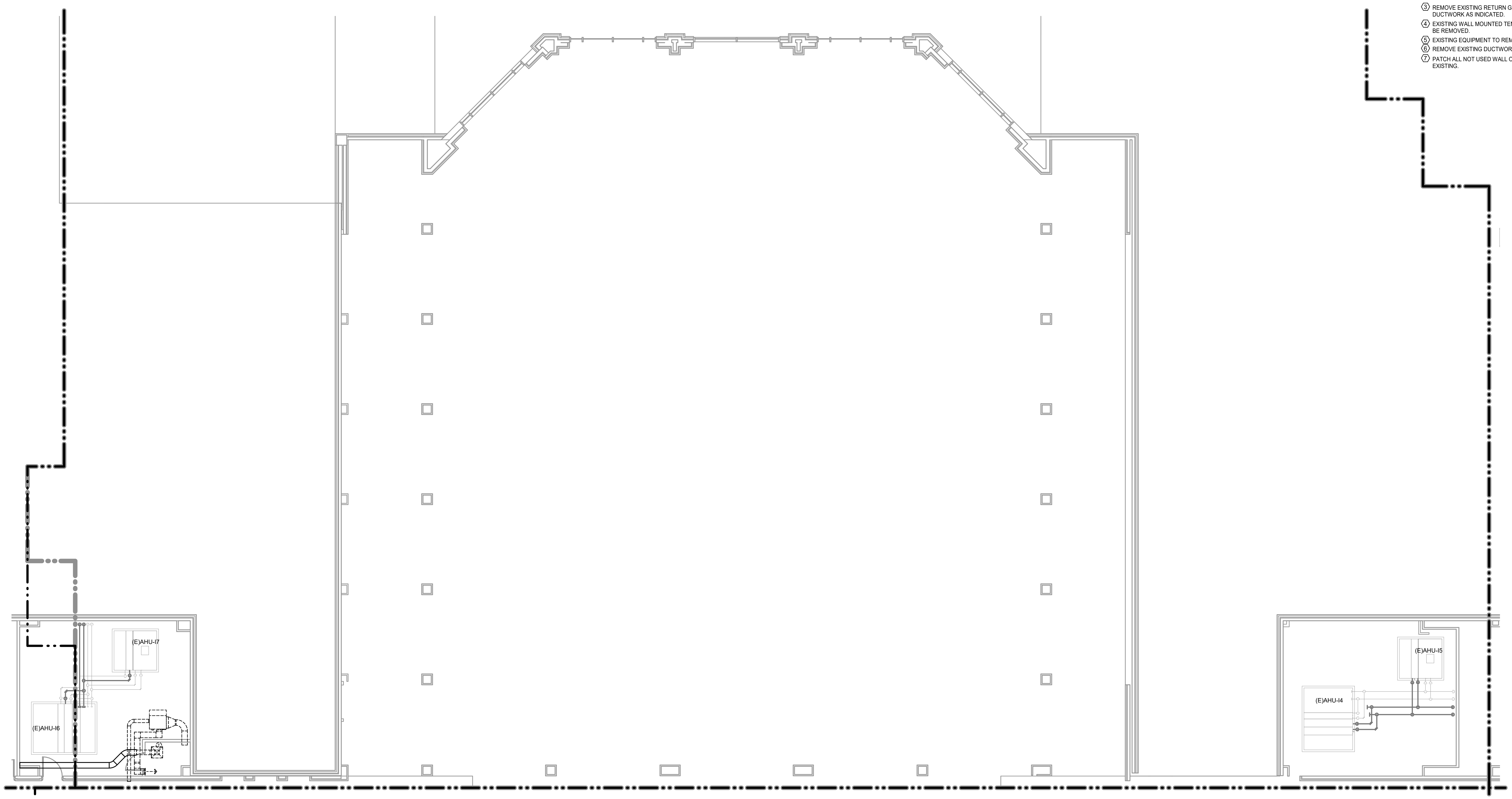
3 REMOVE EXISTING RETURN GRILLE AND EXISTING DUCTWORK AS INDICATED.

4 EXISTING WALL MOUNTED TEMPERATURE SENSOR SHALL BE REMOVED.

5 EXISTING EQUIPMENT TO REMAIN.

6 REMOVE EXISTING DUCTWORK UP TO THIS POINT.

7 PATCH ALL NOT USED WALL OPENING TO MATCH EXISTING.



N

1 **MECHANICAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA I**
Scale: 1/8" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

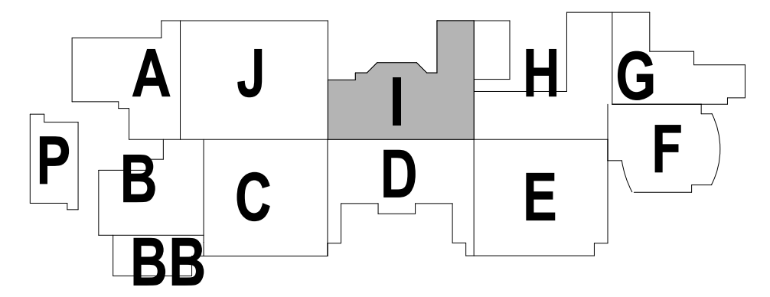
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

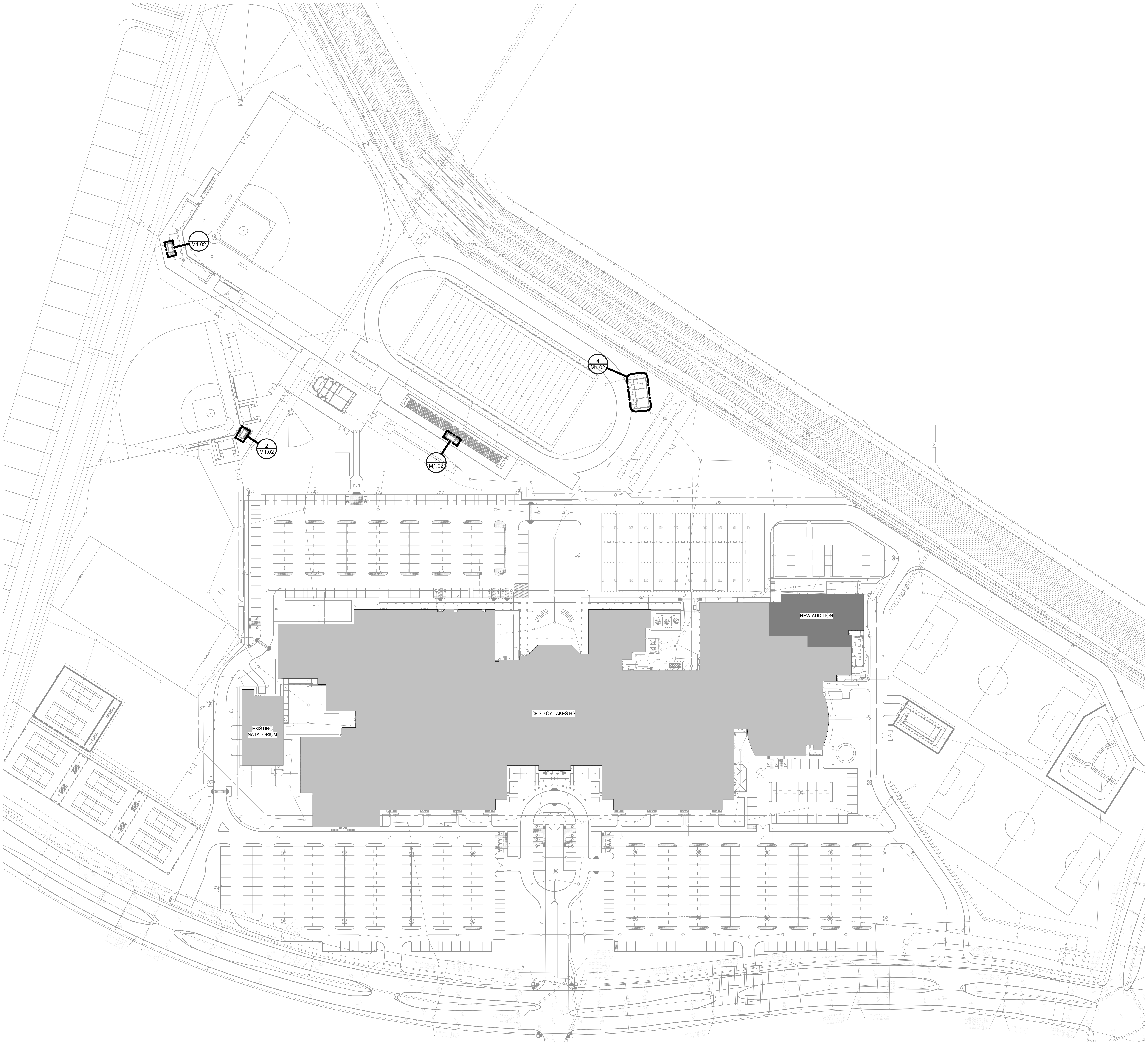


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL
DEMOLITION SECOND
FLOOR PLAN - AREA I

M0.14

___ of ___



1 MECHANICAL SITE PLAN
Scale: 1" = 80'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

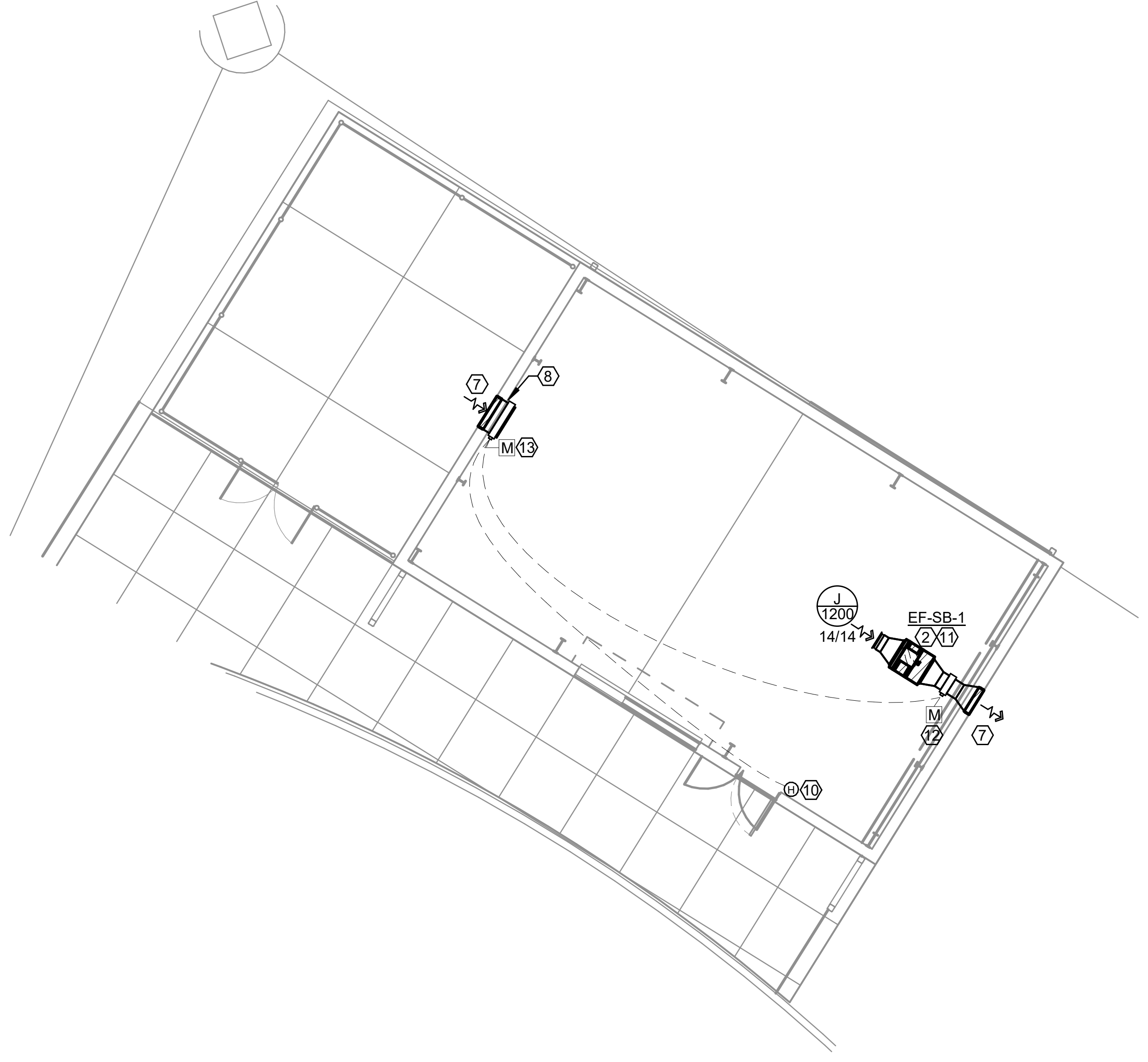
Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL SITE PLAN

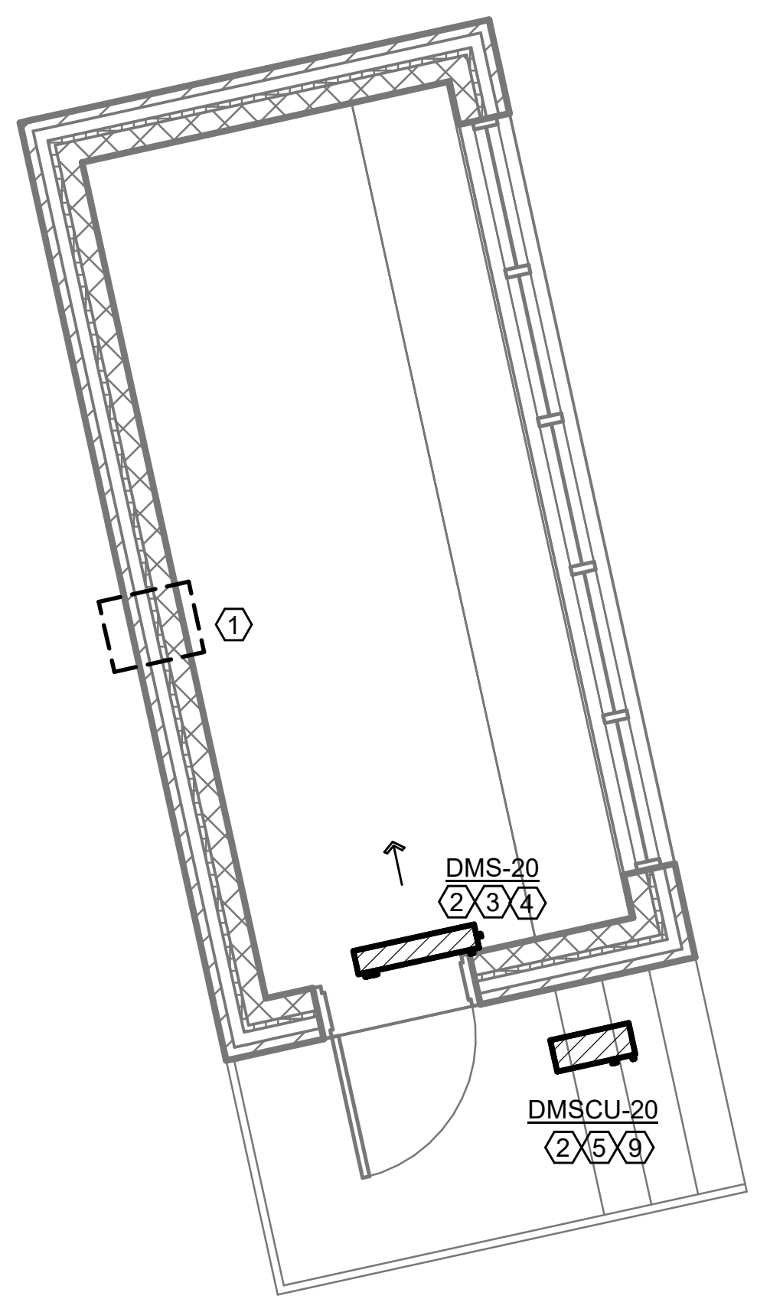
M1.01
of

FIELD STORAGE VENTILATION SEQUENCE OF OPERATION

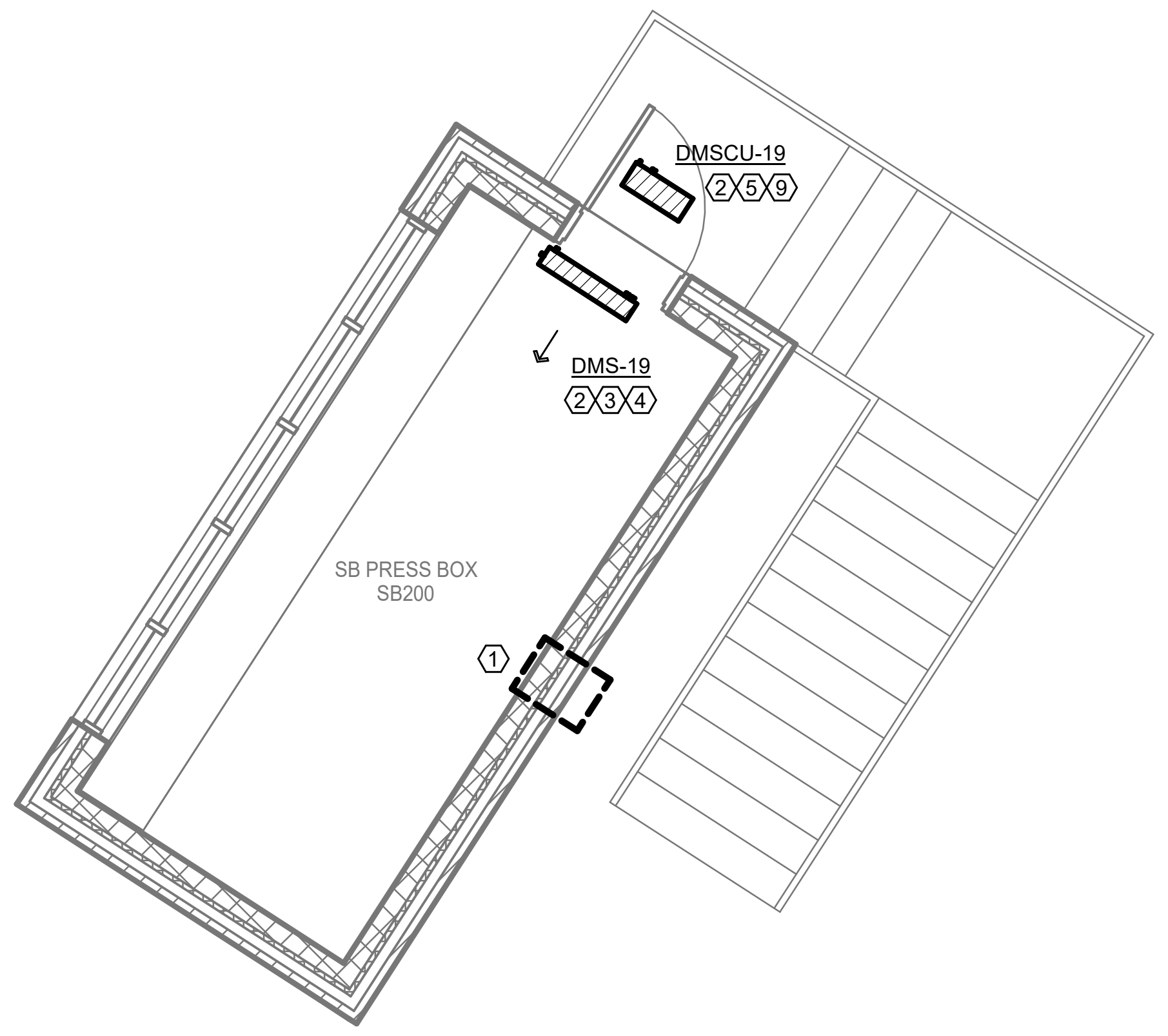
UPON HUMIDITY RISING ABOVE 80% (ADJ), OUTSIDE AIR DAMPER ON INTAKE LOUVER SHALL OPEN, EXHAUST FAN DAMPER SHALL OPEN AND EXHAUST FAN SHALL BE ENABLED.



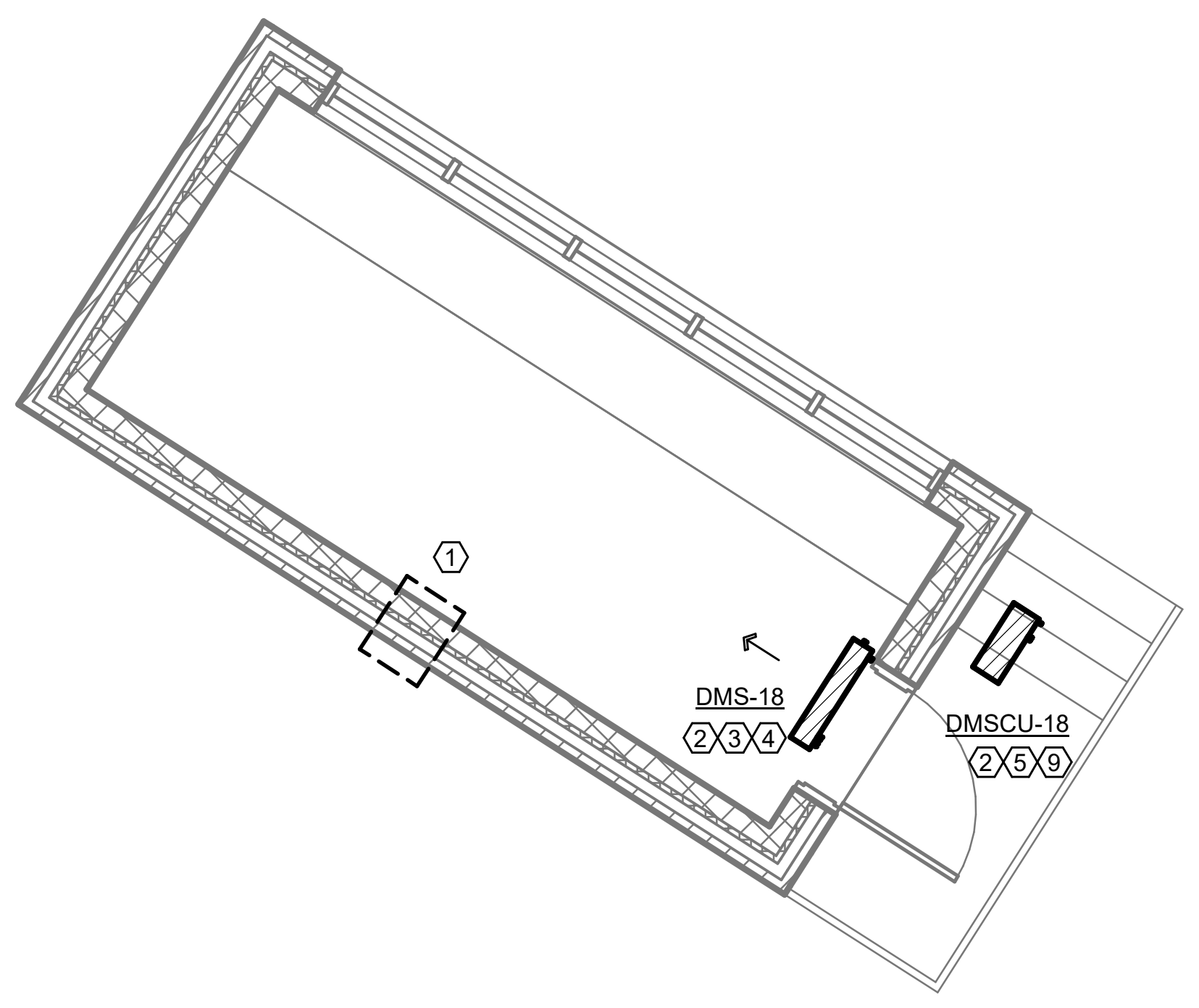
4 MECHANICAL SITE PLAN - ATHLETIC STORAGE
Scale: 1/8" = 1'-0"



3 MECHANICAL SITE PLAN - FOOTBALL PRESSBOX
Scale: 1/4" = 1'-0"



2 MECHANICAL SITE PLAN - SOFTBALL PRESSBOX
Scale: 1/4" = 1'-0"



1 MECHANICAL SITE PLAN - BASEBALL PRESSBOX
Scale: 1/4" = 1'-0"

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXCISING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1. REMOVE EXISTING PTAC UNIT AND ASSOCIATED CONDENSATE PIPING. EXISTING WALL OPENING SHALL BE PATCHED TO MATCH EXISTING.
2. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.
4. ROUTE FULL SIZE CONDENSATE DRAIN PIPE DOWN TO THE STORAGE BELOW AND THRU THE WALL TO EXISTING DRYWELL DRAIN.
5. INSTALL NEW AIR COOLED CONDENSING UNIT UNDER THE STAIR LANDING AREA.
6. PROVIDE WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER RUSKIN MODEL EME520MD OR APPROVED EQUAL WITH 30" WIDE X 30" HIGH AND MINIMUM FREE AREA OF 2.6 SQ.FT. AS NOTED. PROVIDE WITH BIRD SCREEN AND PAINT TO MATCH WALL OR AS SPECIFIED BY ARCHITECT.
7. PROVIDE WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER RUSKIN MODEL EME520MD OR APPROVED EQUAL WITH 20" WIDE X 20" HIGH AND MINIMUM FREE AREA OF 1.02 SQ.FT. AS NOTED. PROVIDE WITH BIRD SCREEN AND PAINT TO MATCH WALL OR AS SPECIFIED BY ARCHITECT.
8. 20"/20" SHEET METAL PLENUM ON REAR OF LOUVER WITH MOTORIZED DAMPER.
9. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.
10. PROVIDE LINE VOLTAGE HUMIDITY SENSOR AT LOCATION SHOWN.
11. PROVIDE 120V CIRCUIT FOR EXHAUST FAN. ASSOCIATED MOTORIZED DAMPERS SHALL BE ON SAME CIRCUIT. REFER TO ELECTRICAL.
12. MOTORIZED DAMPER SHALL BE ON SAME 120V CIRCUIT AS ASSOCIATED EXHAUST FAN.
13. MOTORIZED DAMPER TO BE INTERLOCKED WITH EF-SB-1. INTERLOCK SHALL OPERATE AS FOLLOWS, WHEN EF-SB-1 IS ENERGIZED THE DAMPER SHALL OPEN, WHEN EF-SB-1 IS DE-ENERGIZED THE DAMPER SHALL CLOSE.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

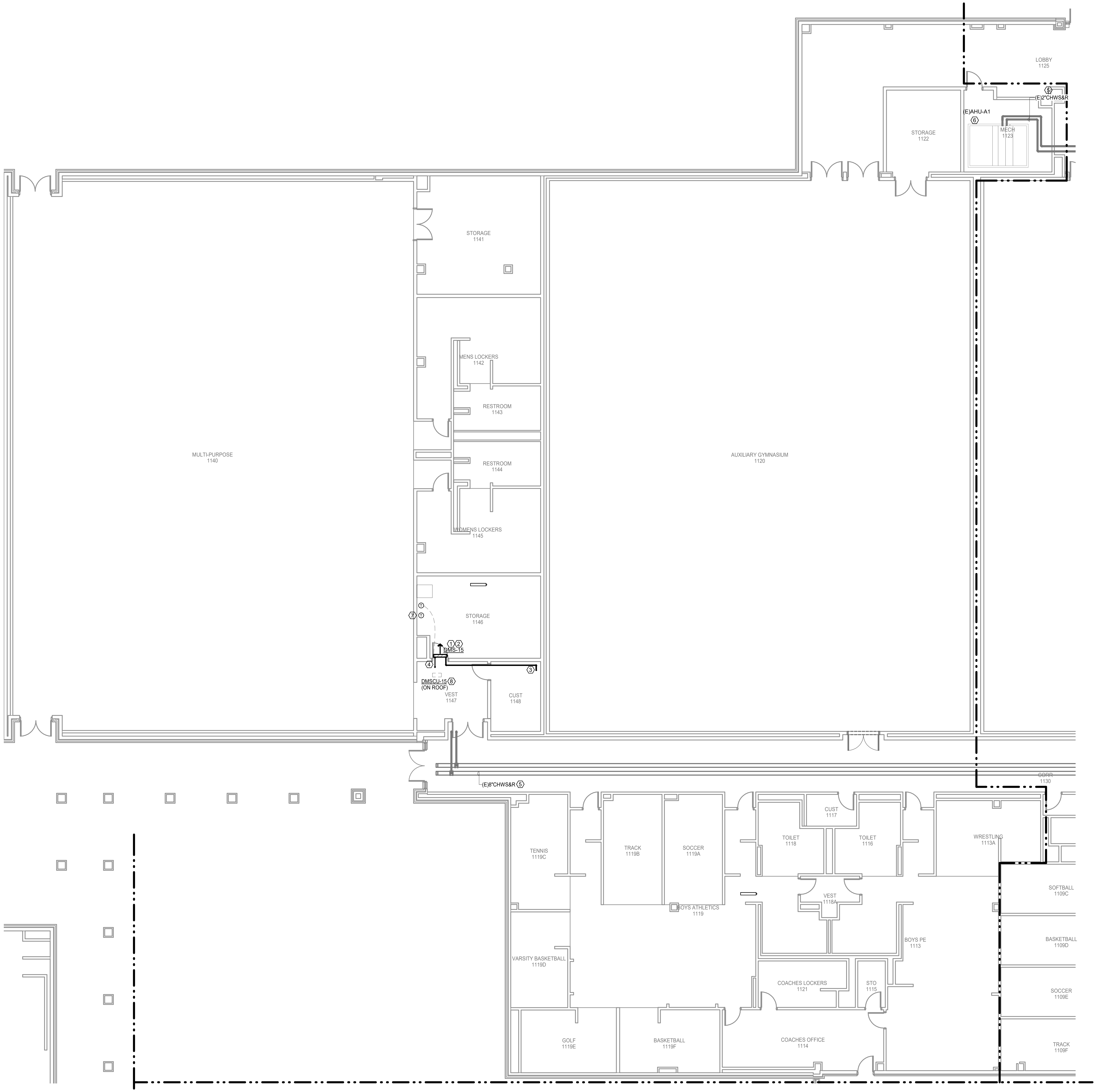
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL SITE PLAN -
ENLARGED VIEWS

M1.02
of



① MECHANICAL FLOOR PLAN - LEVEL 1 - AREA A

Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

③ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN CUST 1148.

④ REFER TO 1/M2.11, ROOM MECH 1141 FOR REFRIGERANT LINE CONTINUATION.

⑤ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⑥ EXISTING EQUIPMENT TO REMAIN.

⑦ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

⑧ MOUNT CONDENSING UNIT TO UNITSTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

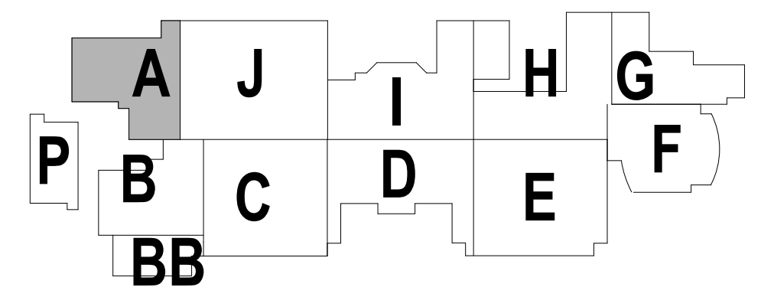
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

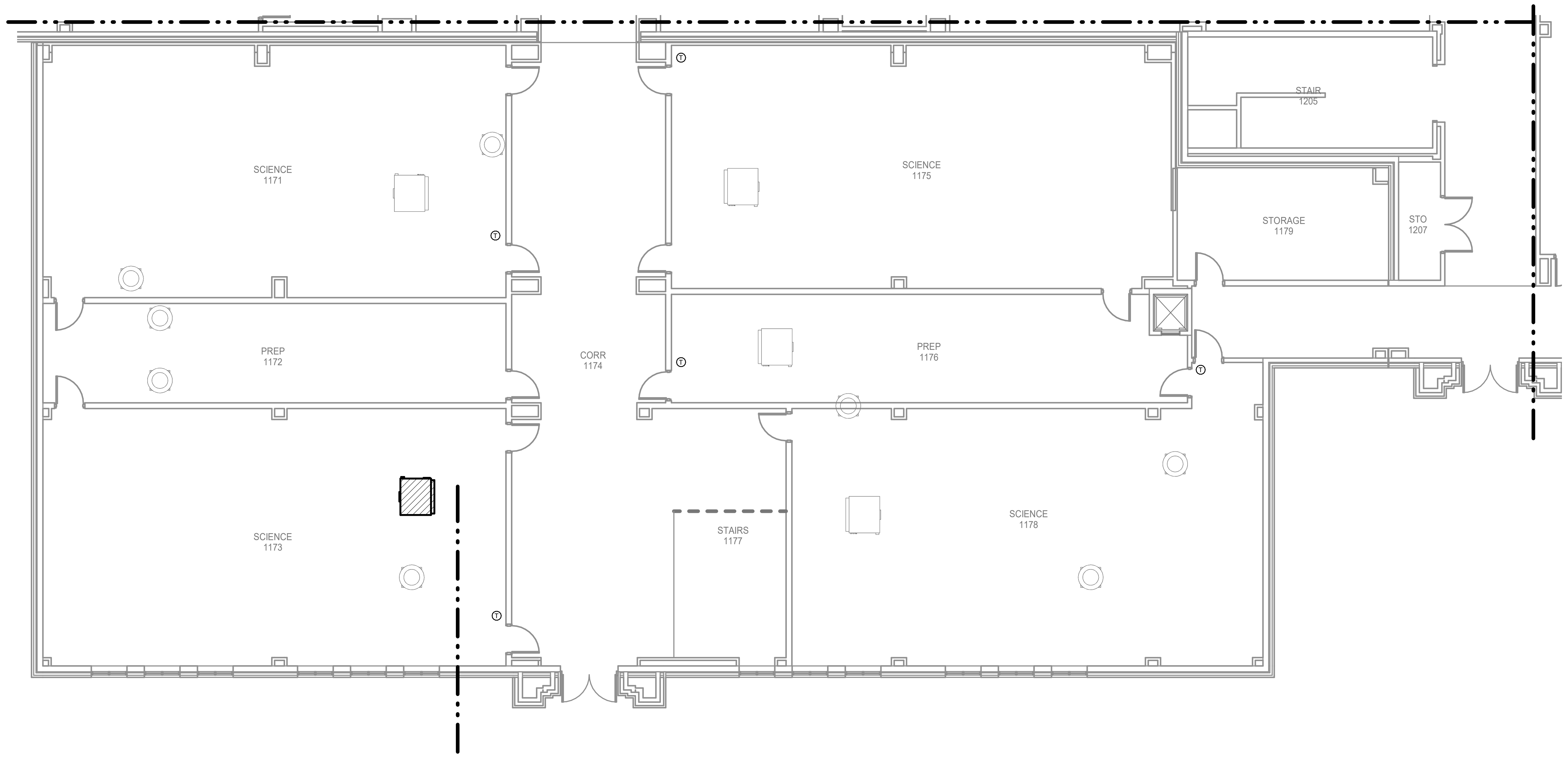


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

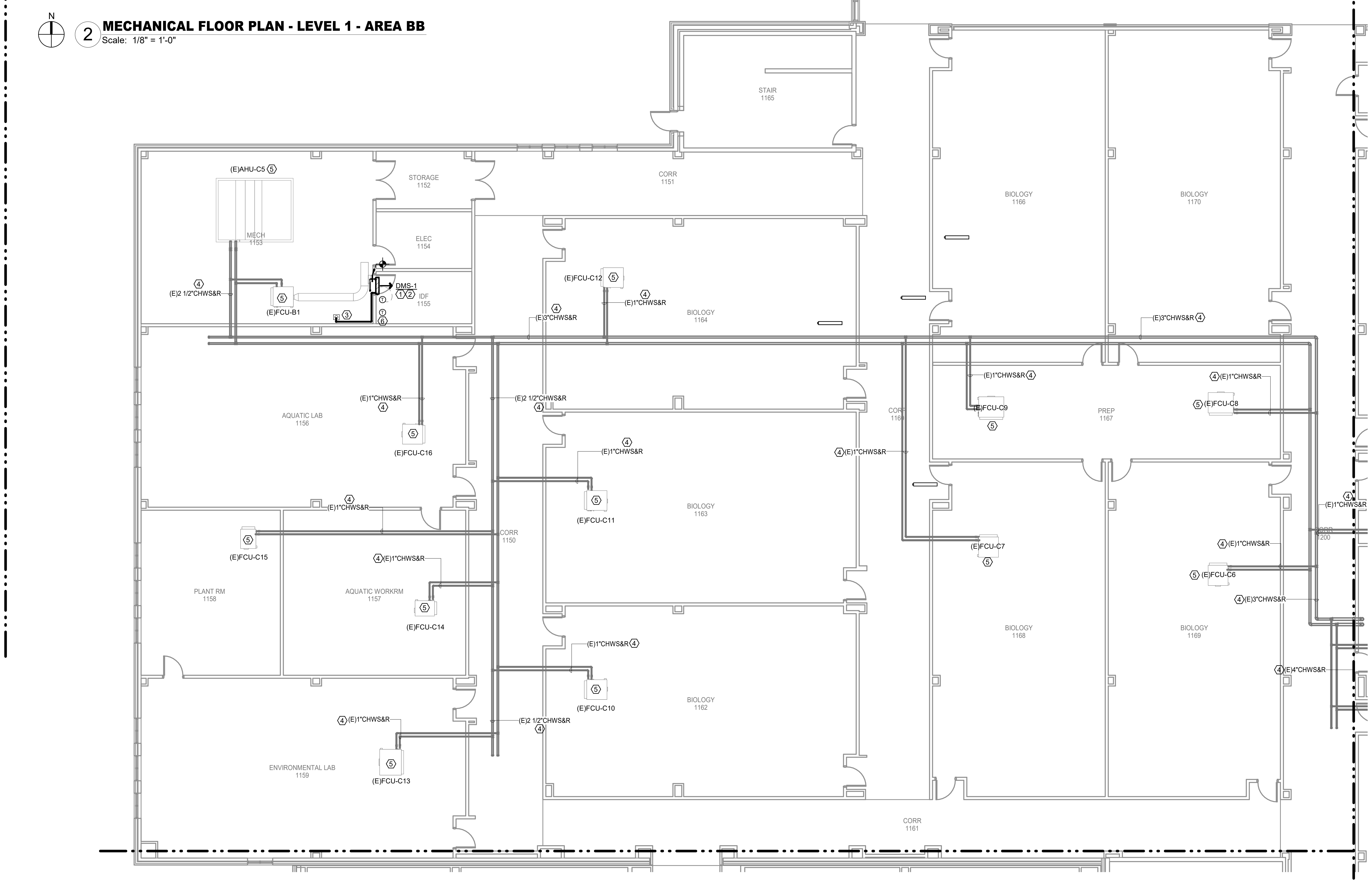
MECHANICAL FIRST
FLOOR PLAN - AREA A

M2.01

of



2 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA BB
Scale: 1/8" = 1'-0"



1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA B
Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

③ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 1153.

④ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⑤ EXISTING EQUIPMENT TO REMAIN.

⑥ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

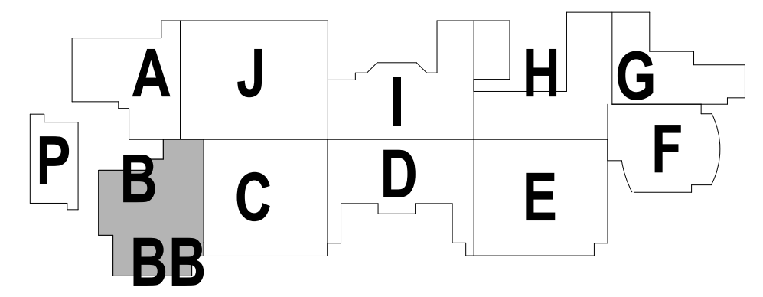
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

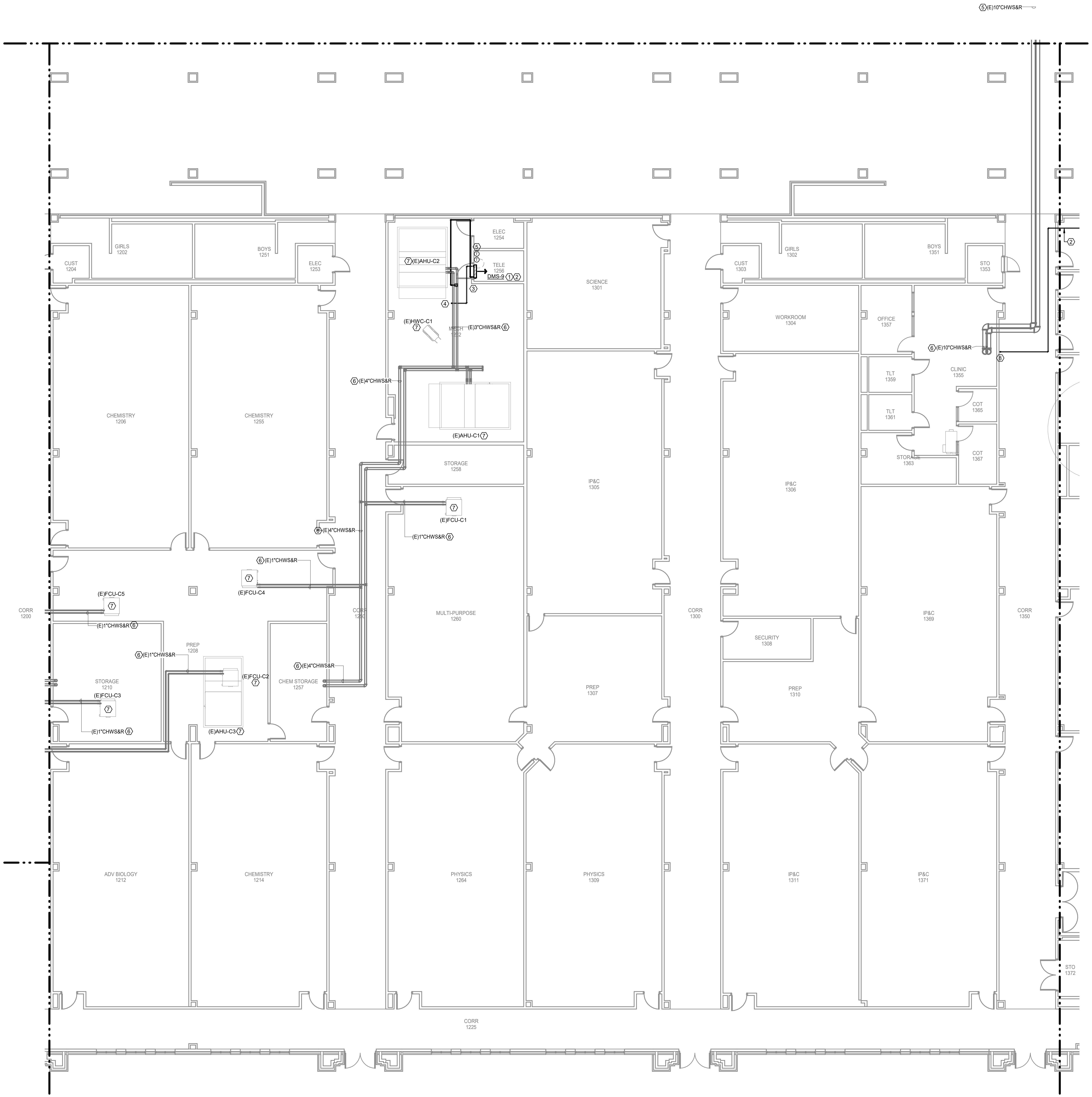
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL FIRST FLOOR PLAN - AREA B

M2.02
___ of ___



N

1 **MECHANICAL FLOOR PLAN - LEVEL 1 - AREA C**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.
③ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 1252.
④ REFER TO 1/M2.14, ROOM STOR 2204 FOR REFRIGERANT LINE CONTINUATION.
⑤ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.
⑥ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.
⑦ EXISTING EQUIPMENT TO REMAIN.
⑧ REFER TO 1/M2.14, ROOM STOR 2403 FOR REFRIGERANT LINE CONTINUATION.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

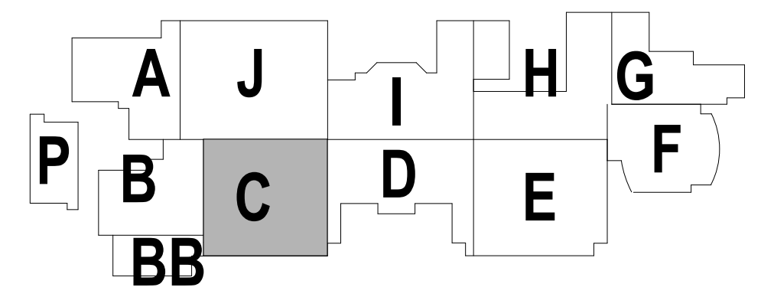
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL FIRST
FLOOR PLAN - AREA C

M2.03

of

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

③ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 1518.

④ REFER TO 1/M2.15, ROOM MECH 2512 FOR REFRIGERANT LINE CONTINUATION.

⑤ ROUTE NEW FULL SIZE CONDENSATE DRAIN PIPE TO CONNECT WITH EXISTING MMX4 CONDENSATE DRAIN PIPE. EXISTING DRAIN SHALL BE FLUSH AND CLEANED.

⑥ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⑦ EXISTING EQUIPMENT TO REMAIN.

⑧ RELOCATE EXISTING SUPPLY AIR SIDEWALL GRILLE TO NEW LOCATION SHOWN. EXTENDE SUPPLY DUCTWORK AS NEEDED.

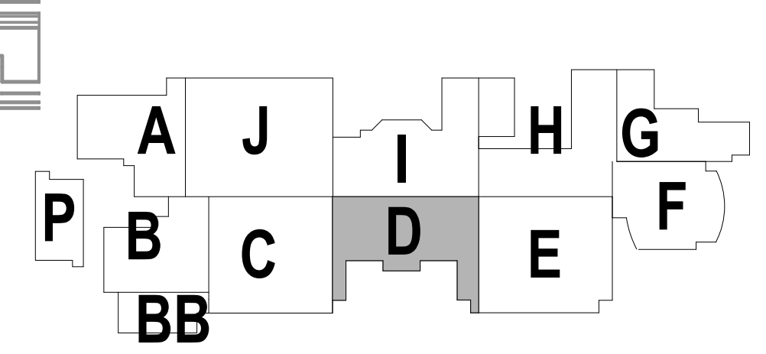
⑨ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

⑩ REFER TO 1/M2.03 FOR REFRIGERANT LINE CONTINUATION.

1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA D

Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL FIRST FLOOR PLAN - AREA D

M2.04

of

1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA E

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

⟨1⟩ VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

⟨2⟩ ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

⟨3⟩ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 1660.

⟨4⟩ REFER TO 1/M2.15, ROOM ENGLISH 2910 FOR REFRIGERANT LINE CONTINUATION.

⟨5⟩ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⟨6⟩ EXISTING EQUIPMENT TO REMAIN.

⟨7⟩ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

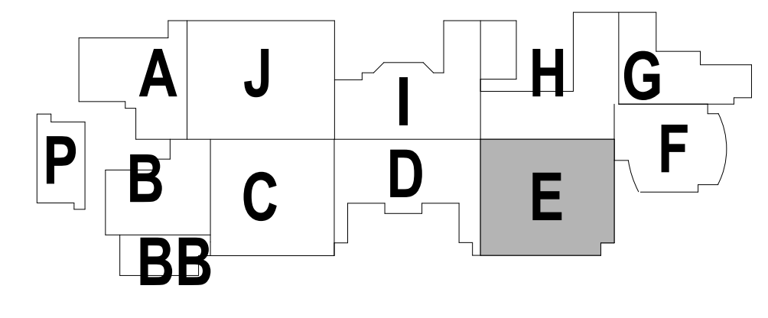
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL FIRST
FLOOR PLAN - AREA E

M2.05

____ of ____

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

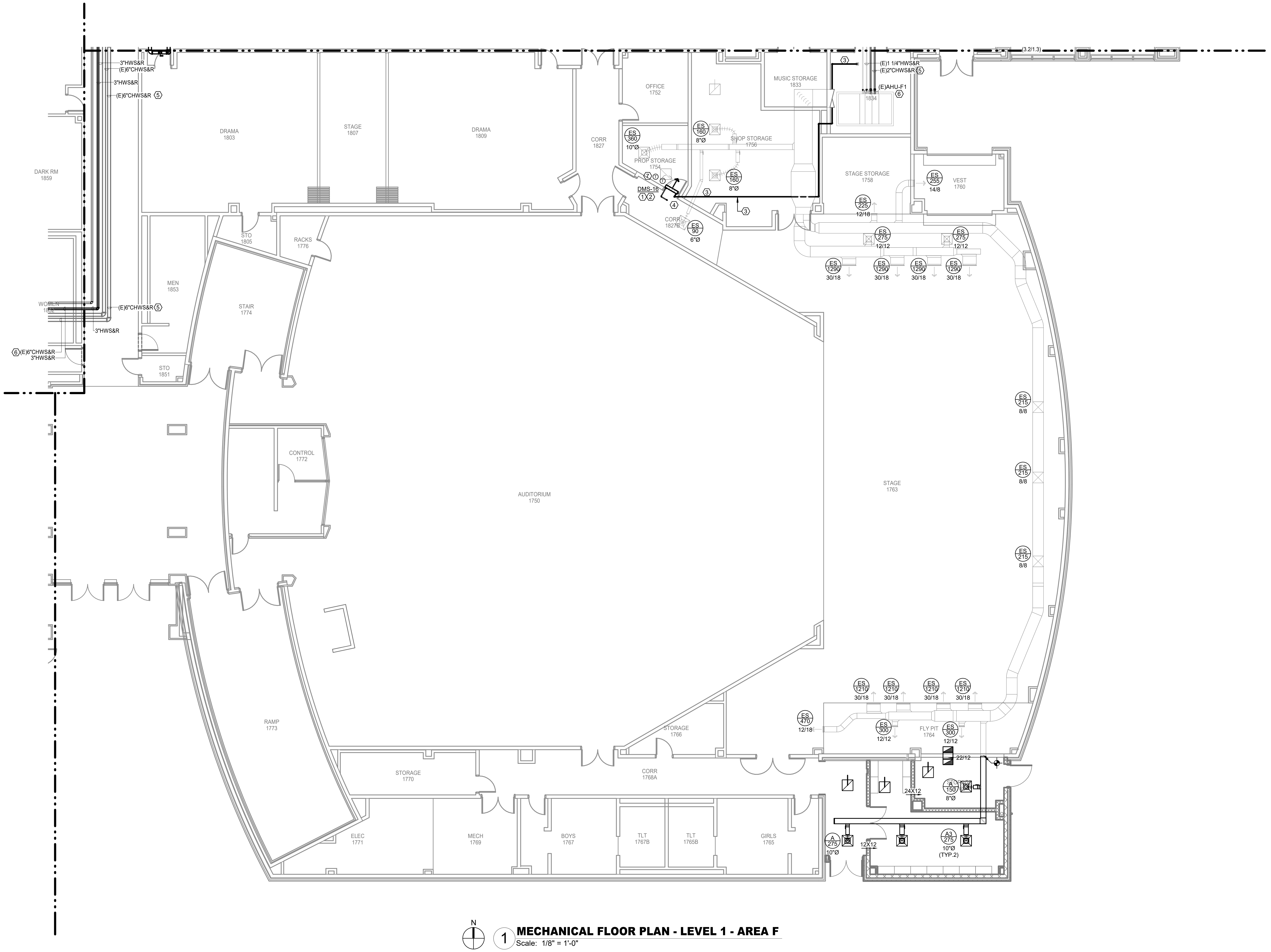
CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.
3. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 1834.
4. REFER TO 1/M2.17 FOR REFRIGERANT LINE CONTINUATION.
5. REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.
6. EXISTING EQUIPMENT TO REMAIN.
7. PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.



N

1 **MECHANICAL FLOOR PLAN - LEVEL 1 - AREA F**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

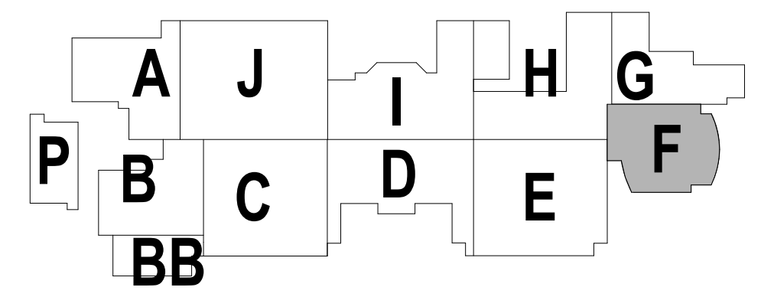
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

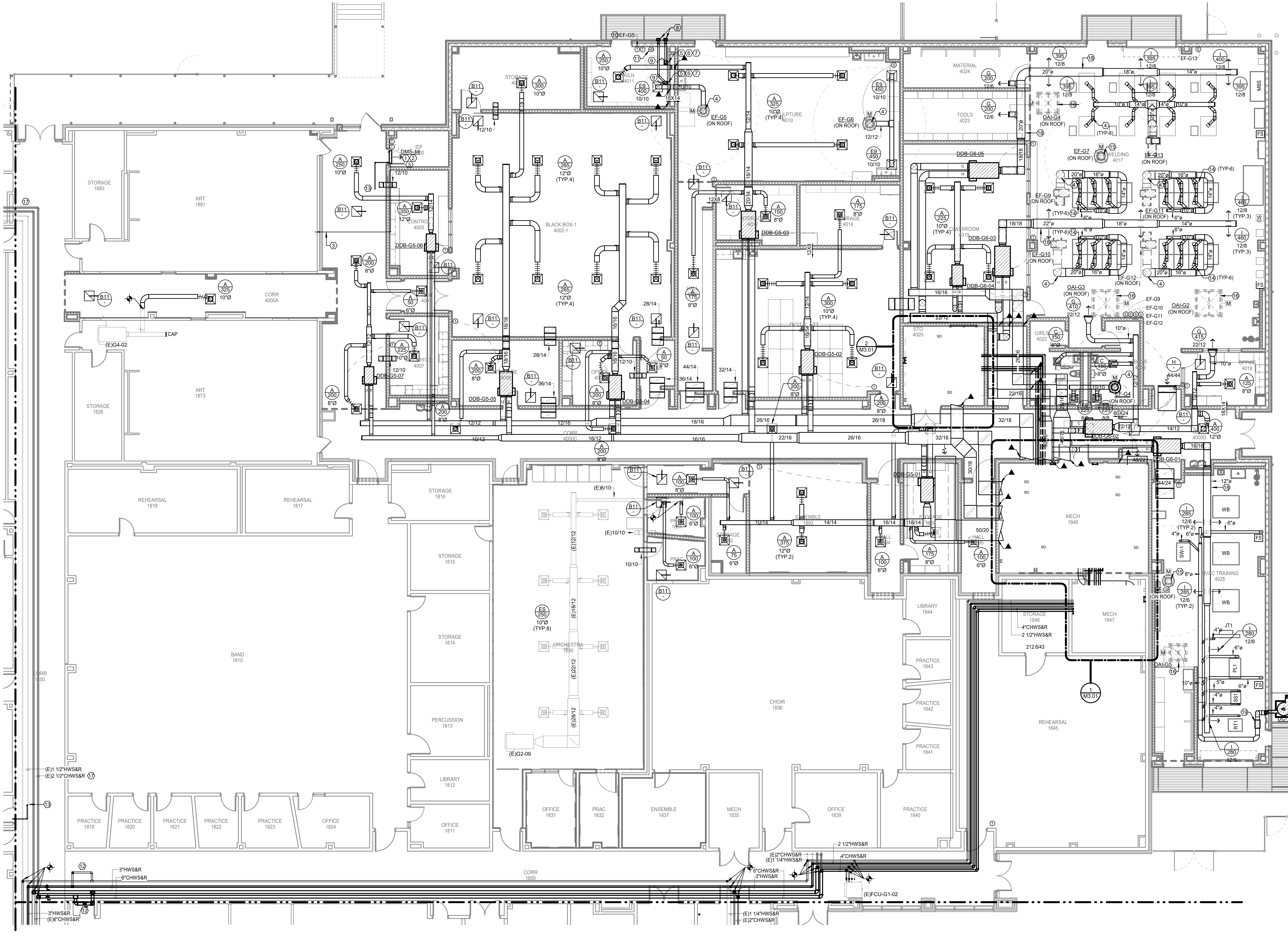


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL FIRST
FLOOR PLAN - AREA F

M2.06

of



1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA G

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

③ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO WYE TAILPIECE LOCATED IN ART 1881.

④ EXHAUST DUCTWORK (DIMENSION AS SHOWN) UP TO EXHAUST FAN. TRANSITION TO FAN INLET AS REQUIRED.

⑤ ROUTE KILN ALUMINUM DUCTWORK DOWN ALONG WALL TO 24" A.F.F FOR CONNECTION TO KILN FUME FAN.

⑥ MOUNT KILN FAN TO WALL. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

⑦ KILN VENTILATION SHALL BE ENVIROVENT 2 BY SKUTT. PROVIDE KILN WITH ENVIROLINK CONTROLLER AND ALL WIRES WITH SUFFICIENT LENGTH TO MAKE ALL CONNECTIONS AS PER MANUFACTURER RECOMMENDATIONS.

⑧ ROUTE FAN DISCHARGE DUCT TO WALL CAP AS SHOW. WALL CAP COLOR / FINISH SHALL BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL COLOR RANGE.

⑨ PROVIDE ALUMINUM FLEX TO CONNECT KILN ALUMINUM DUCT WITH KILN FAN.

⑩ THERMOSTAT SHALL BE SET TO 80°F.(ADJUSTABLE).

⑪ PROVIDE HEAT DETECTOR, INTERLOCK WITH KILN TO SHUT OFF POWER SOURCE AT 135 F(ADJUSTABLE) MOUNT HEAT DETECTOR ON CEILING AT LOCATION SHOWN.

⑫ PROVIDE NEW BYPASS PIPING AND VALVES AS SHOWN TO ALLOW FOR ISOLATING THE NEW PIPING FROM THE EXISTING HYDRONIC LOOPS. TESTING, FLUSHING, AND TREATEMENT OF NEW PIPING SHALL BE PERFORMED PRIOR TO OPENING THE NEW PIPING TO THE EXISTING HYDRONIC LOOPS. PURGERITE OR COMPARABLE COMPANY SHALL PROVIDE ASSISTANCE TO THE MECHANICAL CONTRACTOR TO CONFIRM FLUSHING AND CLEANING AT DESIGN SYSTEM FLOW RATES. CHEMICAL TREATEMENT MANUFACTURER SHALL TEST WATER TO CONFIRM COMPLIANCE OF FLUSHING AND TREATMENT OF WATER PRIOR TO OPENING THE NEW PIPING VALVES TO THE EXISTING HYDRONIC LOOP.

⑬ REFER TO 1/M2.18 FOR REFRIGERANT LINE CONTINUATION.

⑭ PROVIDE 6" FUME TELESCOPICSOURCE CAPTURE ARM AND ALL NECESSARY COMPONENTS REFER ON SPECIFICATION. COORDINATE FINAL MOUNTING HEIGHT AND LOCATION WITH WELDING BOOTH.

⑮ 14"x14" EXHAUST AIR DUCT UP TO INDICATED EXHAUST FAN ON ROOF; TRANSITION TO UNIT INLET. END DUCT AT 6" BELOW STRUCTURE WITH ALUMINUM WIRE MESH CLOTH.

⑯ INTAKE AIR DUCT FULL SIZE OF OAI OUTLET AIR OPENING SHALL EXTEND 1 FEET BELOW STRUCTURE. MOTORIZED DAMPER AND ACTUATOR SHALL BE PROVIDED AND INSTALLED BELOW ROOF DECK BY BAS. COORDINATE WITH ELECTRICAL'S DRAWING FOR ACTUATOR REQUIRED 120V CONNECTION.

⑰ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⑱ PROVIDE DOUBLE WALL ACUSTICAL INSULATED DUCT.

⑲ ECOMAXX NO RETURN VALVE PROVIDED BY DUST COLLECTION SYSTEM MANUFACTURER. VALVE SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS. REFER TO MANUFACTURER INSTALLATION MANUAL.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

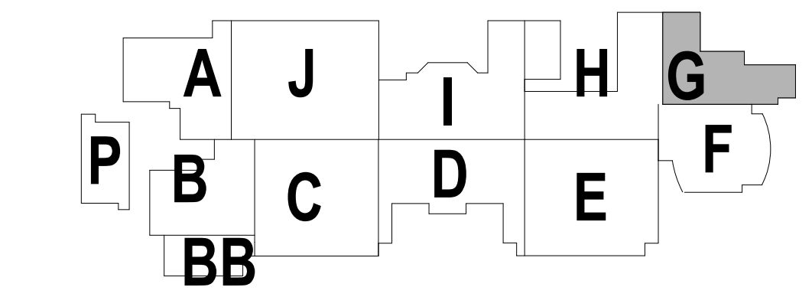
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

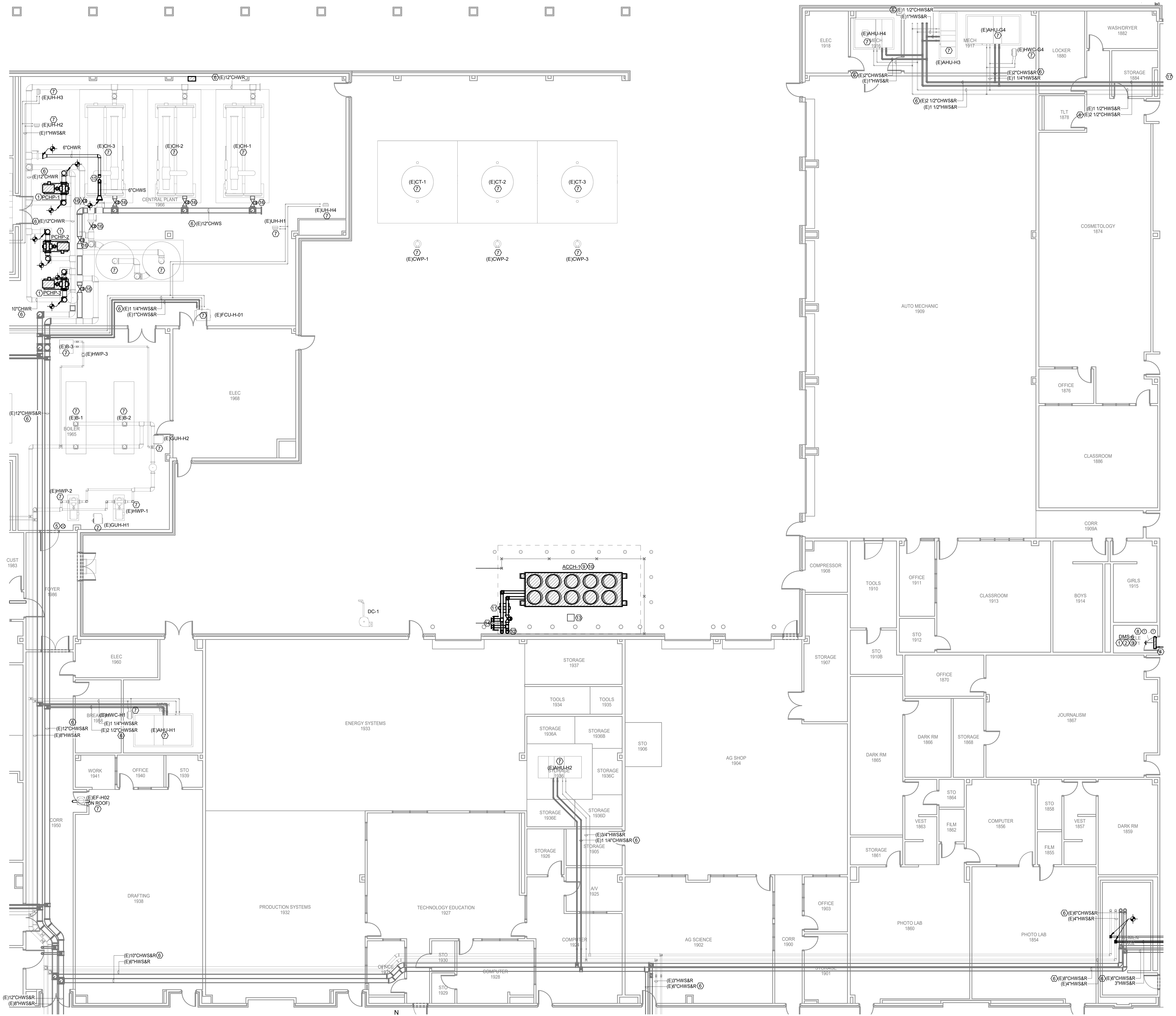


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL FIRST
FLOOR PLAN - AREA G

M2.07

___ of ___



1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA H

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

③ ROUTE NEW FULL SIZE CONDENSATE DRAIN PIPE TO CONNECT WITH EXISTING MMX1 CONDENSATE DRAIN PIPE. EXISTING DRAIN SHALL BE FLUSH AND CLEANED.

④ REFER TO 1/M2.07 FOR REFRIGERANT LINE CONTINUATION.

⑤ PROVIDE, INSTALL AND STARTUP NEW CARBON MONOXIDE MONITORING SYSTEM. CO MONITORING SYSTEM SHALL BE WIRED TO BOILER AND BE PROGRAMMED TO SHUT DOWN BOILER UPON DETECTION. BMCS INTERFACE IS NOT REQUIRED. REFER TO BMCS SPECIFICATION FOR ADDITIONAL INFORMATION ON CO MONITOR.

⑥ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⑦ EXISTING EQUIPMENT TO REMAIN.

⑧ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

⑨ NEW AIR COOLED CHILLER. VERIFY SERVICE AND AIRFLOW CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

⑩ 12X12 CONCRETE RUNNER (TYPICAL 2 PER CHILLER).

⑪ PROVIDE PIPE STAND AS INDICATED. REFER TO PIPE STAND DETAIL 19/M4.01 FOR MORE INFORMATION.

⑫ ROUTE PIPING UP WALL TO ABOVE ROOF LEVEL. PROVIDE EXTERIOR PIPE SUPPORT PER DETAIL 18/M4.01. SEE M2.19 FOR PIPE CONTINUATION.

⑬ COORDINATE CHILLER LOCATION WITH EXISTING STORM DRAIN. DO NOT BLOCK ACCESS TO EXISTING DRAIN.

⑭ PROVIDE ISOLATION VALVES AND BLIND FLANGES FOR TEMPORARY CHILLER CONNECTION.

⑮ CHILLED WATER PIPING DOWN FROM ROOF LEVEL ABOVE. SEE M2.19 FOR PIPE CONTINUATION.

⑯ SEE M7.04 FOR CONTROL VALVE REPLACEMENT SCOPE.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

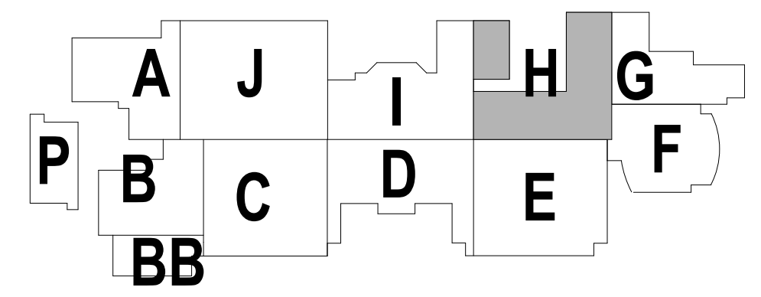
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL FIRST FLOOR PLAN - AREA H

M2.08

of

1 MECHANICAL FLOOR PLAN - LEVEL 1 - AREA I

Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

⟨1⟩ VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

⟨2⟩ ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

⟨3⟩ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECHANICAL ROOM.

⟨4⟩ REFER TO 1/M2.20 FOR REFRIGERANT LINE CONTINUATION.

⟨5⟩ PROVIDE, INSTALL AND STARTUP NEW CARBON MONOXIDE MONITORING SYSTEM. CO MONITORING SYSTEM SHALL BE WIRED TO BOILER AND BE PROGRAMMED TO SHUT DOWN BOILER UPON DETECTION. BMCS INTERFACE IS NOT REQUIRED. REFER TO BMCS SPECIFICATION FOR ADDITIONAL INFORMATION ON CO MONITOR.

⟨6⟩ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⟨7⟩ EXISTING EQUIPMENT TO REMAIN.

⟨8⟩ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

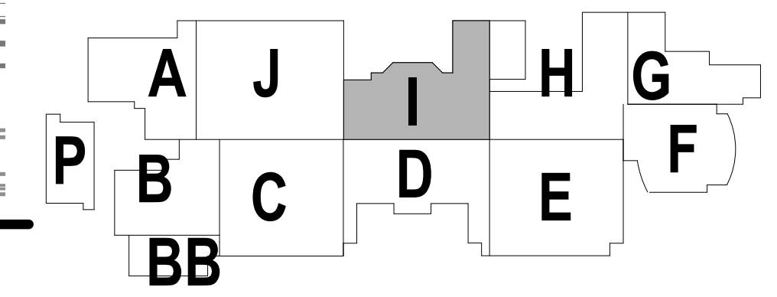
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

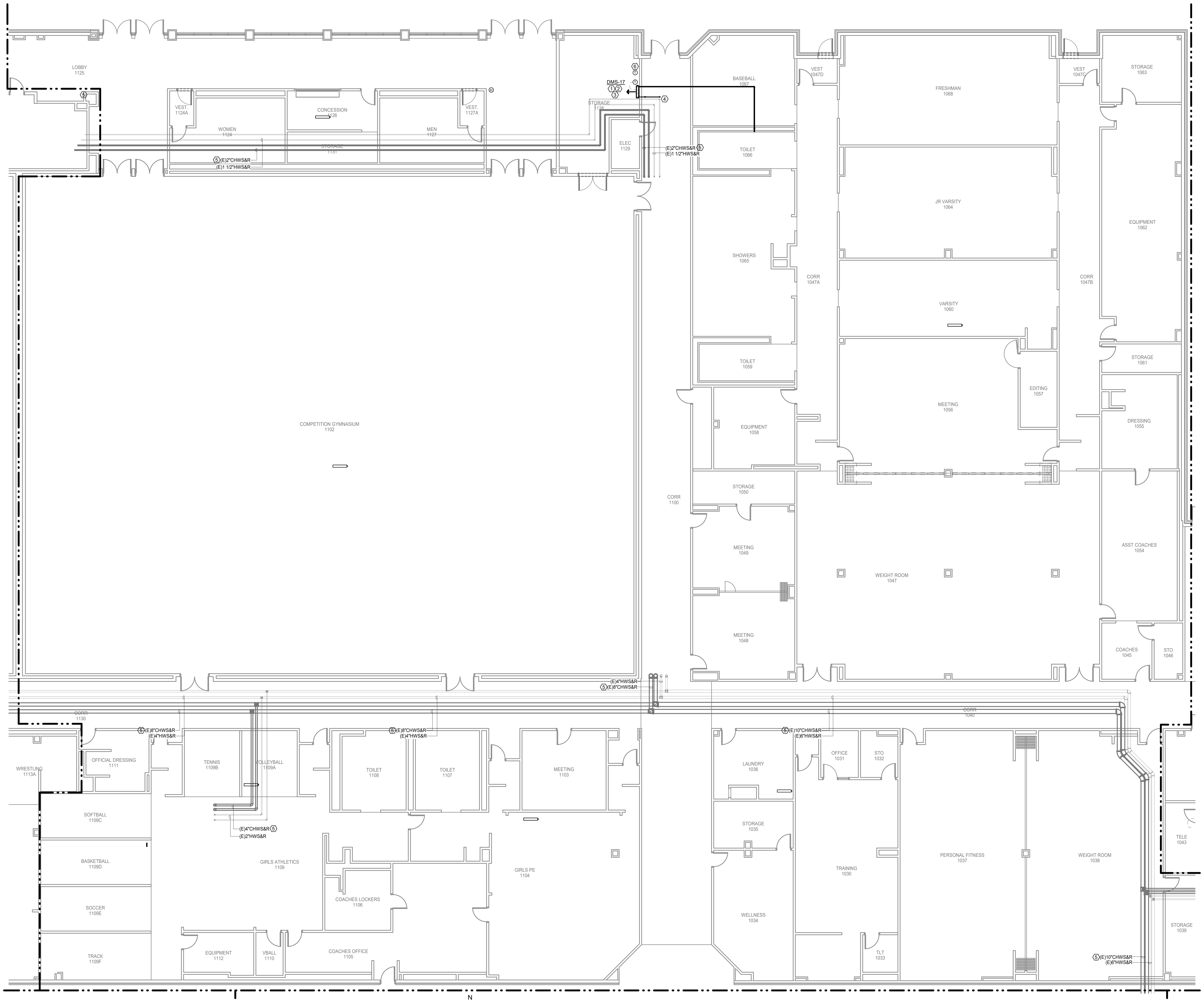


Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL FIRST FLOOR PLAN - AREA I

M2.09

____ of ____



1 **MECHANICAL FLOOR PLAN - LEVEL 1 - AREA J**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

③ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO WYE TAILPIECE LOCATED IN TOILET 1066.

④ REFER TO 1/M2.21 FOR REFRIGERANT LINE CONTINUATION.

⑤ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⑥ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

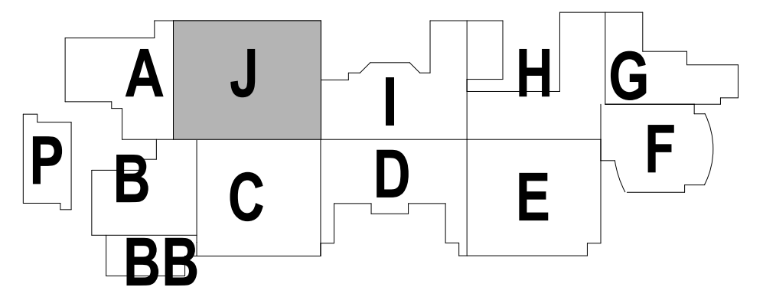
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

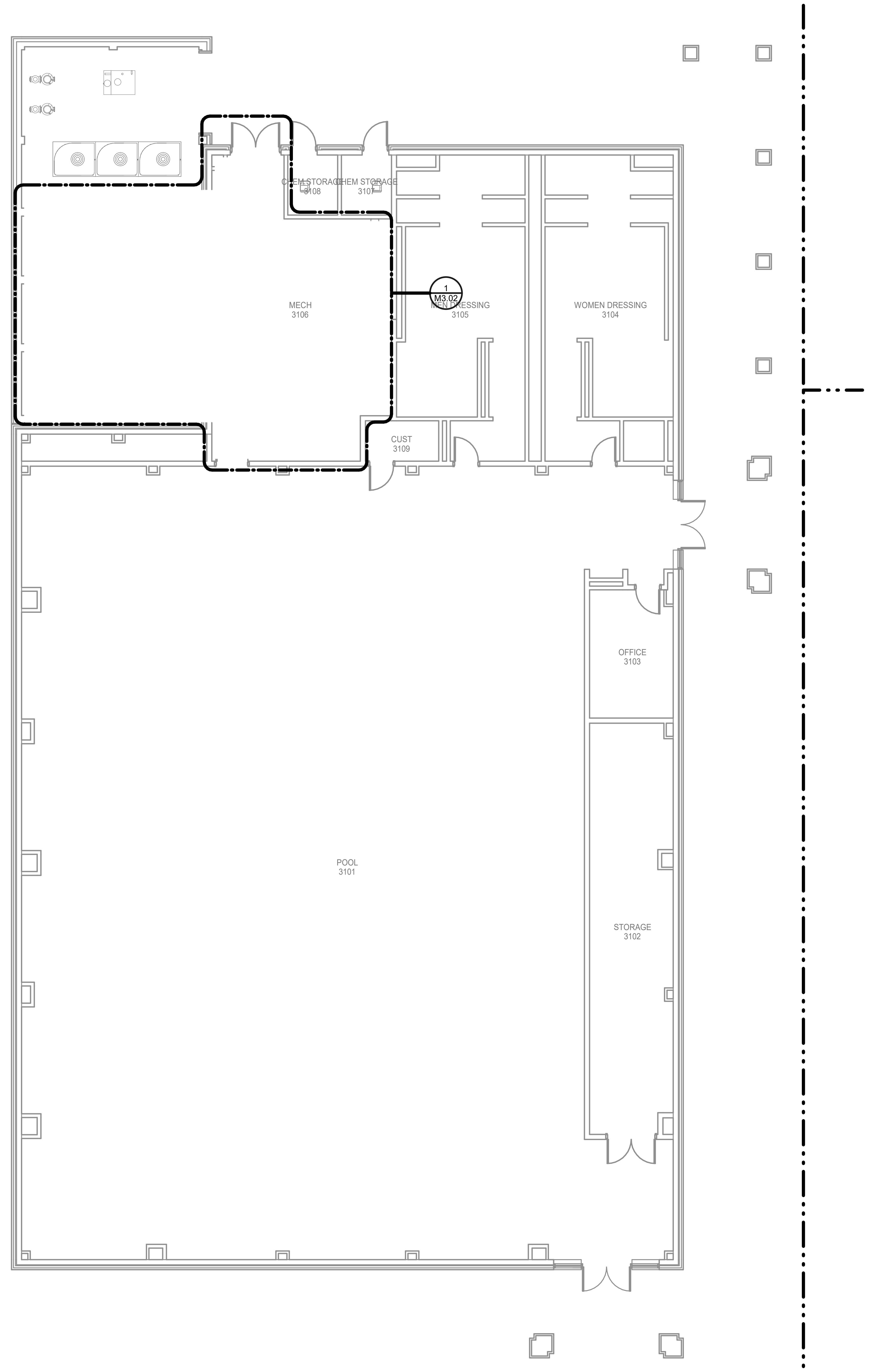


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL FIRST
FLOOR PLAN - AREA J

M2.10

of



N

1 **MECHANICAL FLOOR PLAN - LEVEL 1 - AREA P**

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

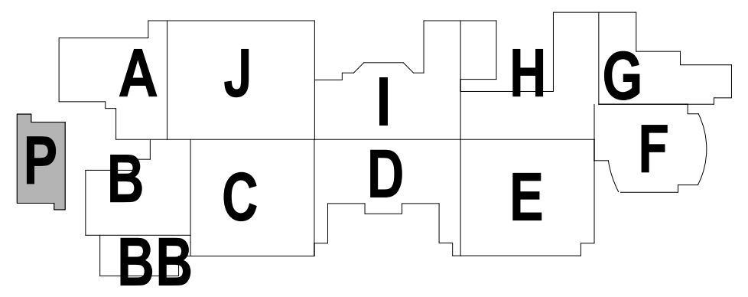
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

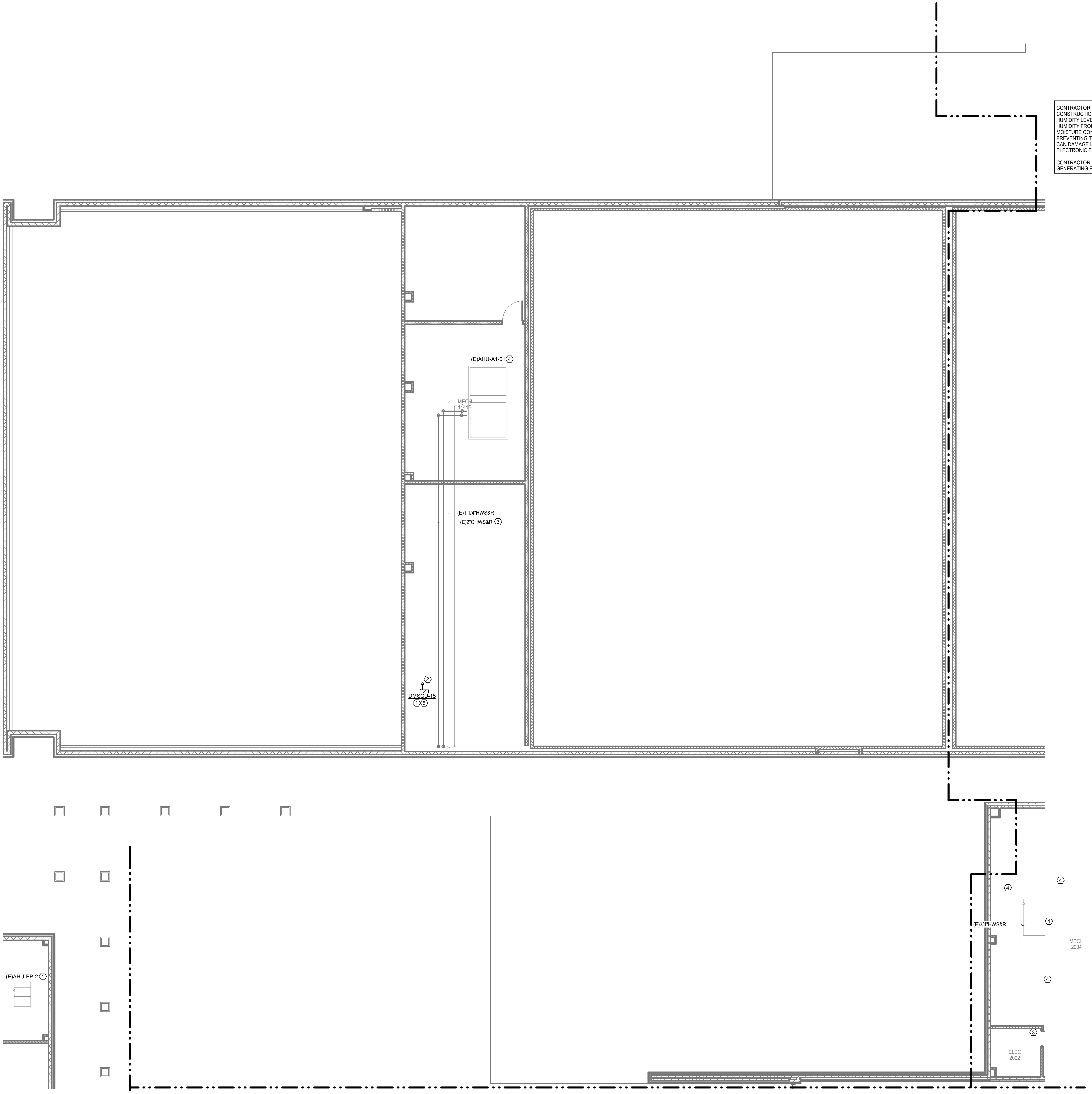


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL FIRST
FLOOR PLAN - AREA P

M2.11

of



① **MECHANICAL FLOOR PLAN - LEVEL 2 - AREA A**
Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
② REFER TO 1/M2.01, ROOM STORAGE 1146 FOR REFRIGERANT LINE CONTINUATION.
③ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.
④ EXISTING EQUIPMENT TO REMAIN.
⑤ MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

**COLEMAN PARTNERS
ARCHITECTS LLC**
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

**CIVIL ENGINEER
BROOKS AND SPARKS, INC.**
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

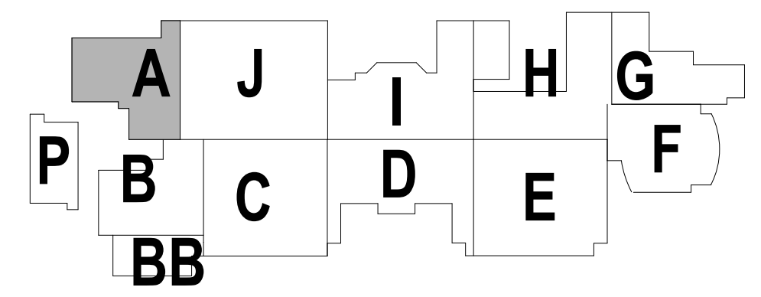
**STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.**
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

**MEPT ENGINEER
SALAS O'BRIEN**
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

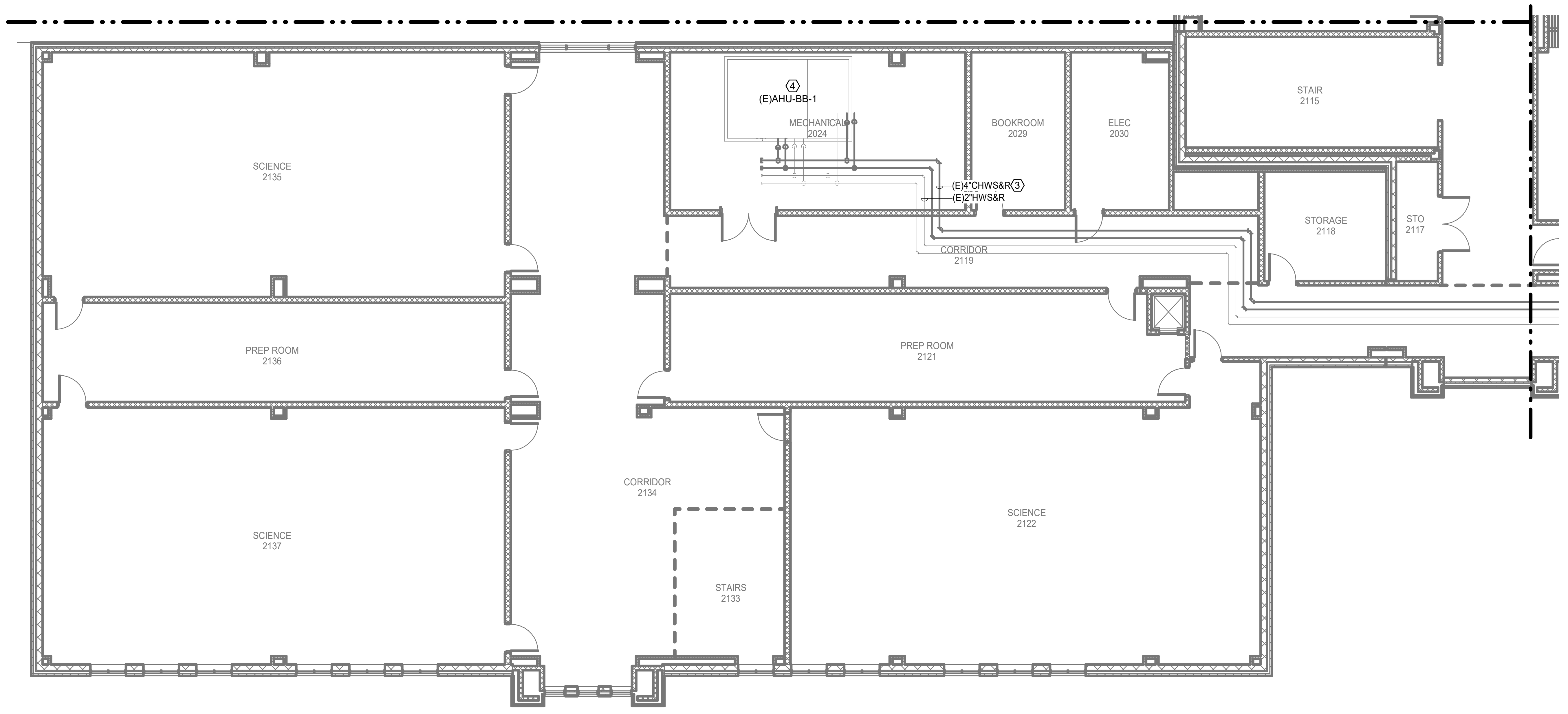
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

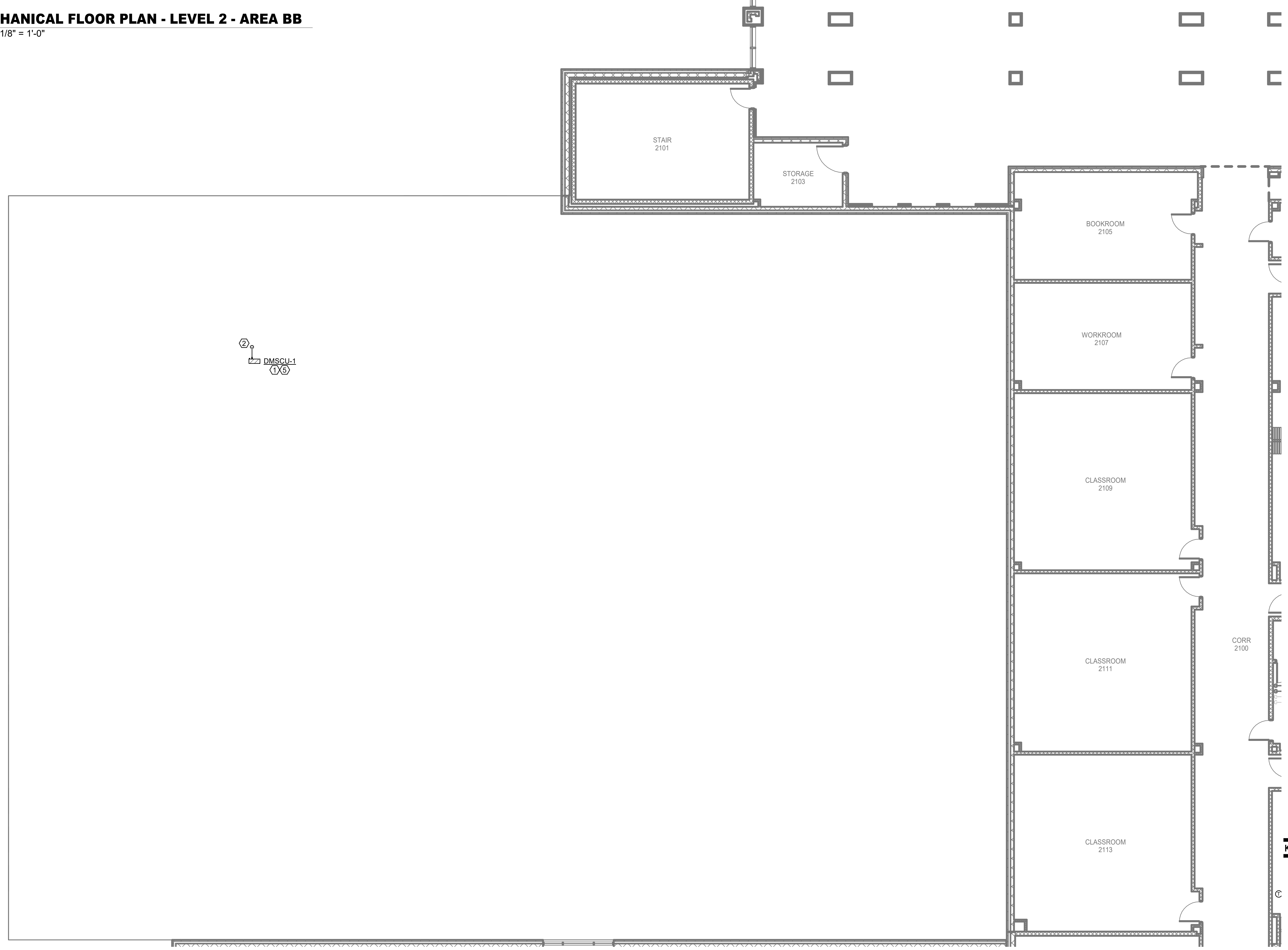
MECHANICAL SECOND
FLOOR PLAN - AREA A

M2.12
____ of ____



2 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA BB

Scale: 1/8" = 1'-0"



1 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA B

Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1 VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

2 REFER TO 1/M2.02, ROOM MECH 1153 FOR REFRIGERANT LINE CONTINUATION.

3 REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

4 EXISTING EQUIPMENT TO REMAIN.

5 MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

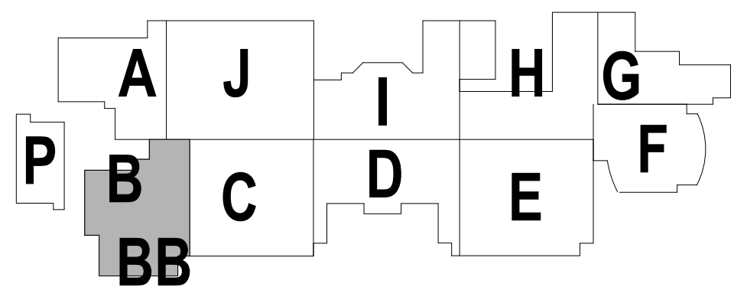
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

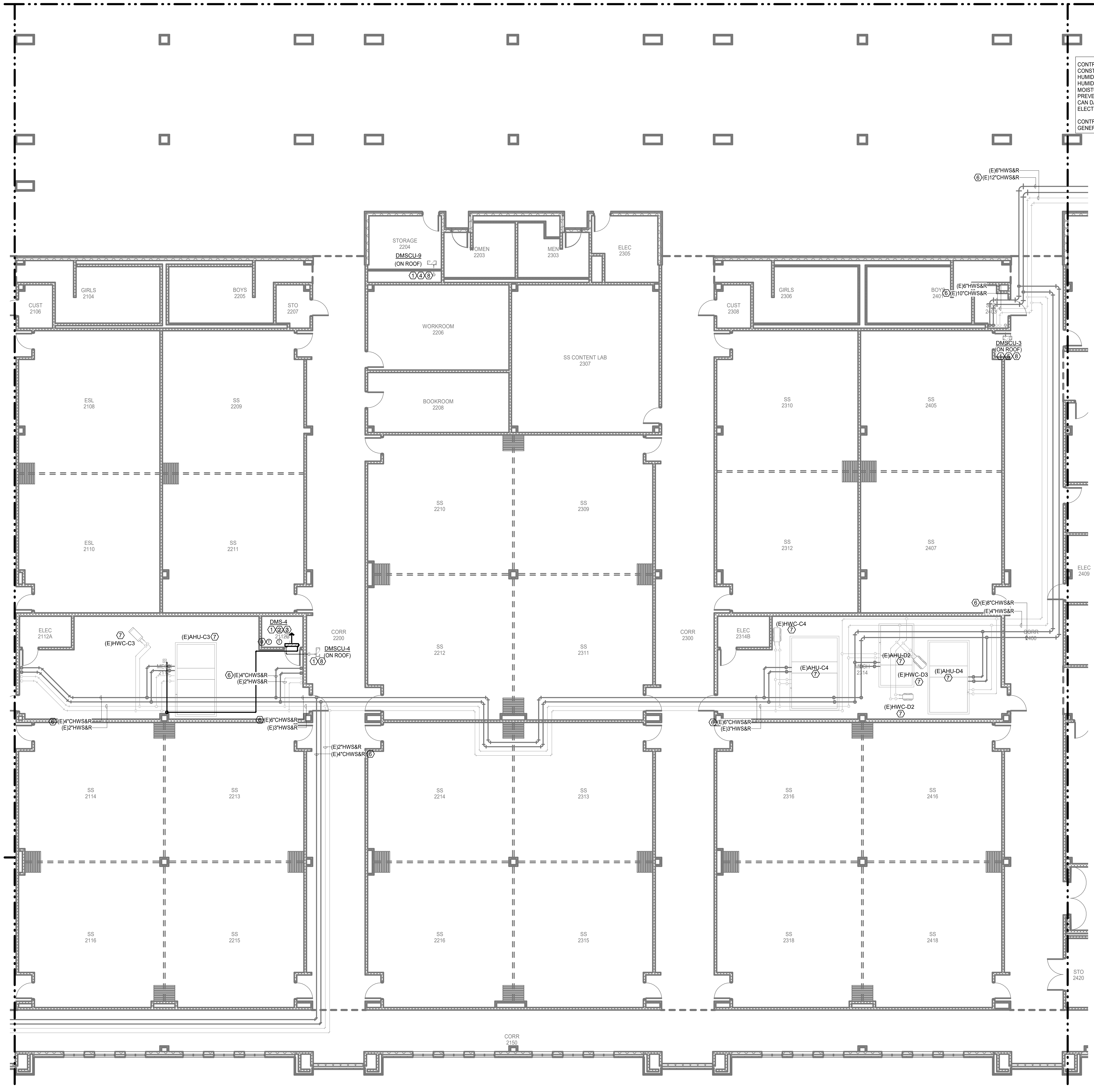


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL SECOND FLOOR PLAN - AREA B

M2.13

of



1 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA C
Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

⟨1⟩ VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

⟨2⟩ ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

⟨3⟩ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 2112.

⟨4⟩ REFER TO 1/M2.03, ROOM MECHANICAL 1252 FOR REFRIGERANT LINE CONTINUATION.

⟨5⟩ REFER TO 1/M2.03, ROOM CLINIC 1355 FOR REFRIGERANT LINE CONTINUATION.

⟨6⟩ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⟨7⟩ EXISTING EQUIPMENT TO REMAIN.

⟨8⟩ MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

⟨9⟩ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

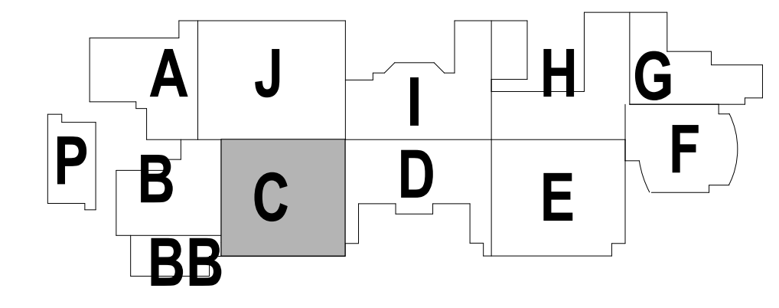
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

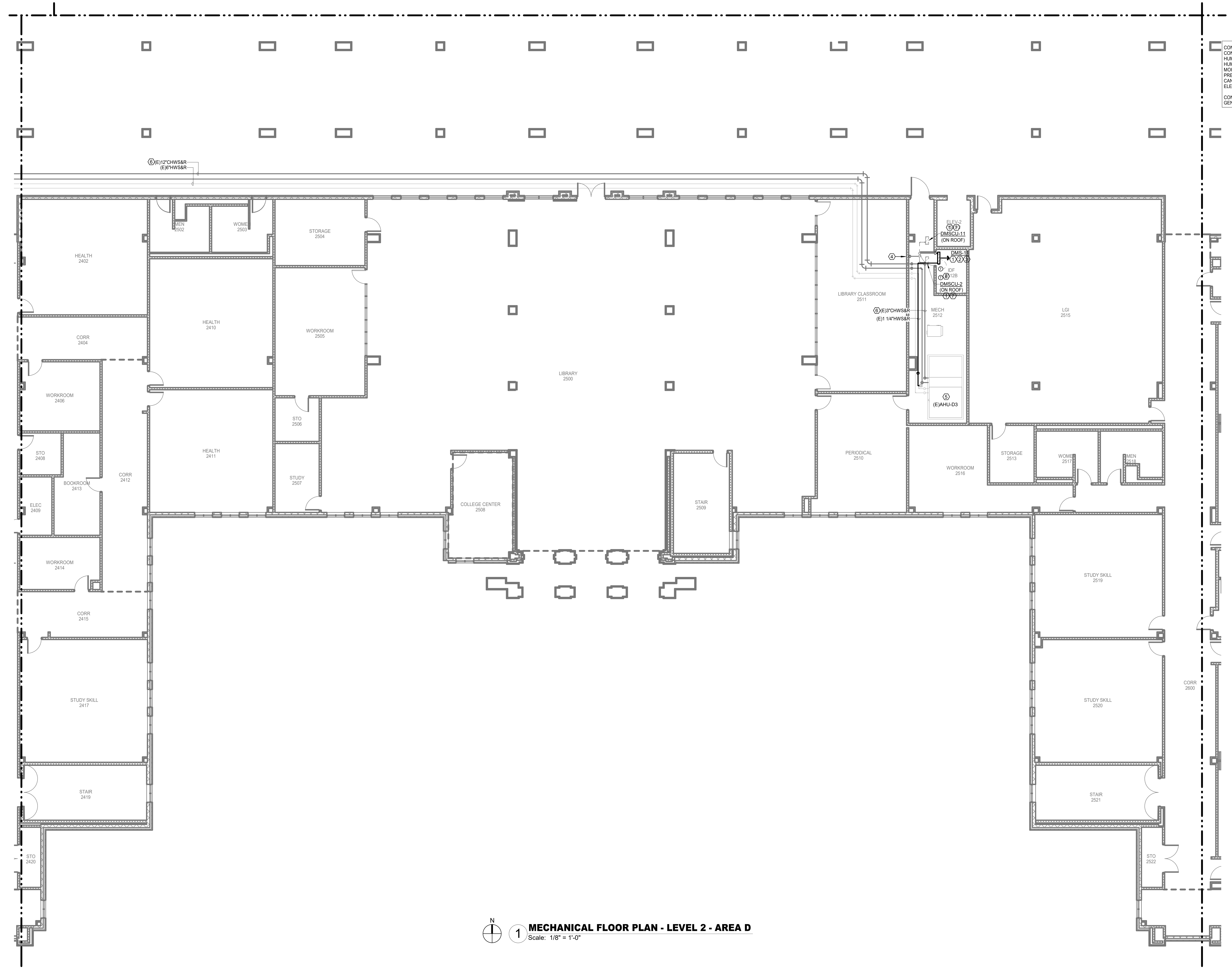


Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL SECOND FLOOR PLAN - AREA C

M2.14

of



1 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA D

Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

② ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

③ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 2512.

④ REFER TO 1/M2.04, ROOM STORAGE 1519 FOR REFRIGERANT LINE CONTINUATION.

⑤ EXISTING EQUIPMENT TO REMAIN.

⑥ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⑦ MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

⑧ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

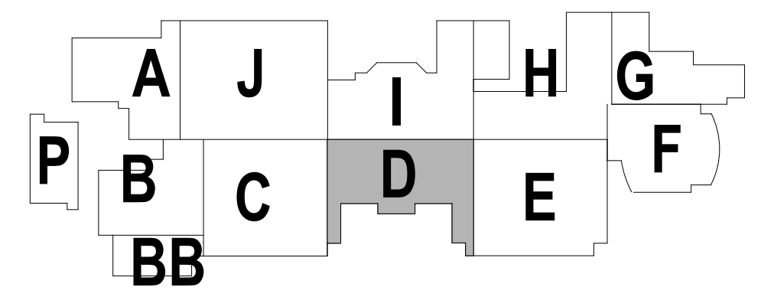
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL SECOND FLOOR PLAN - AREA D

M2.15

____ of ____

1 **MECHANICAL FLOOR PLAN - LEVEL 2 - AREA E**
Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

⟨1⟩ VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

⟨2⟩ ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

⟨3⟩ ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN MECH 2610.

⟨4⟩ REFER TO 1/M2.05, ROOM HOME ECONOMICS 1711 FOR REFRIGERANT LINE CONTINUATION.

⟨5⟩ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

⟨6⟩ EXISTING EQUIPMENT TO REMAIN.

⟨7⟩ MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

⟨8⟩ PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

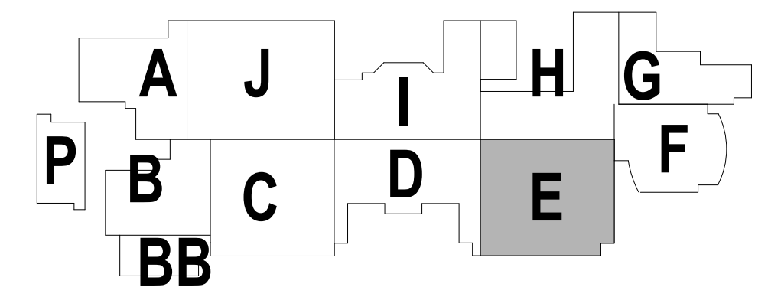
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

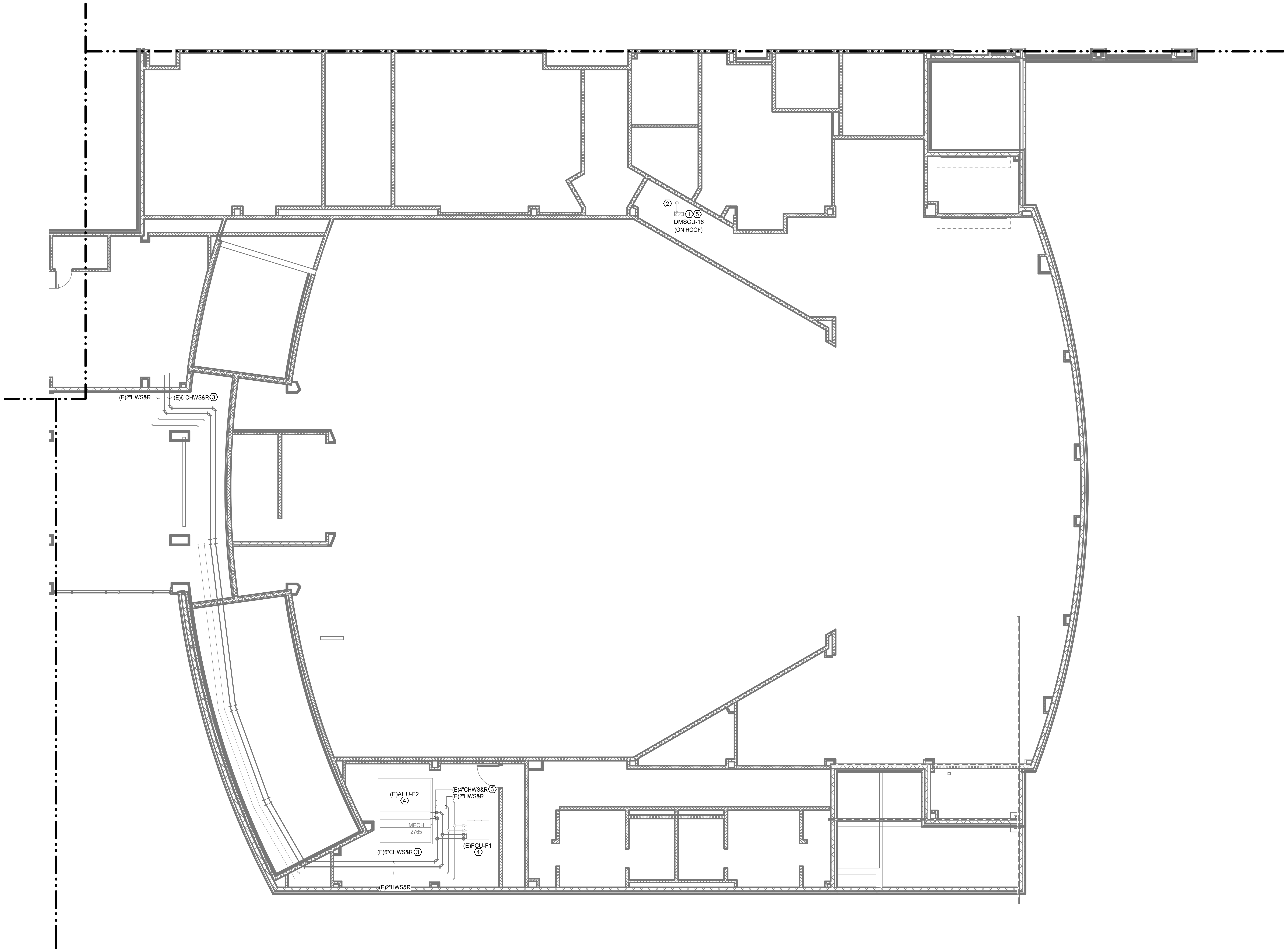
MECHANICAL SECOND FLOOR PLAN - AREA E

M2.16

____ of ____

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.



1 **MECHANICAL FLOOR PLAN - LEVEL 2 - AREA F**
Scale: 1/8" = 1'-0"

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1 VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2 REFER TO 1/M2.06, ROOM CORR 1827A FOR REFRIGERANT LINE CONTINUATION.
3 REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.
4 EXISTING EQUIPMENT TO REMAIN.
5 MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

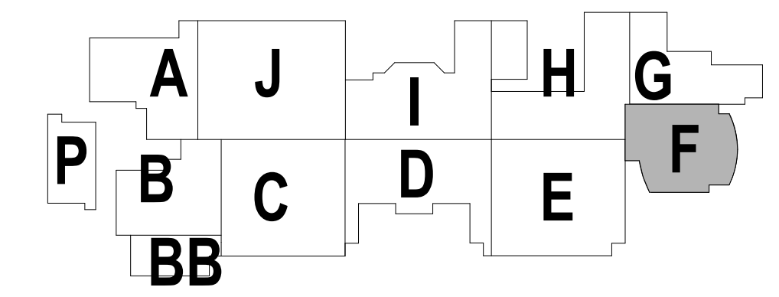
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

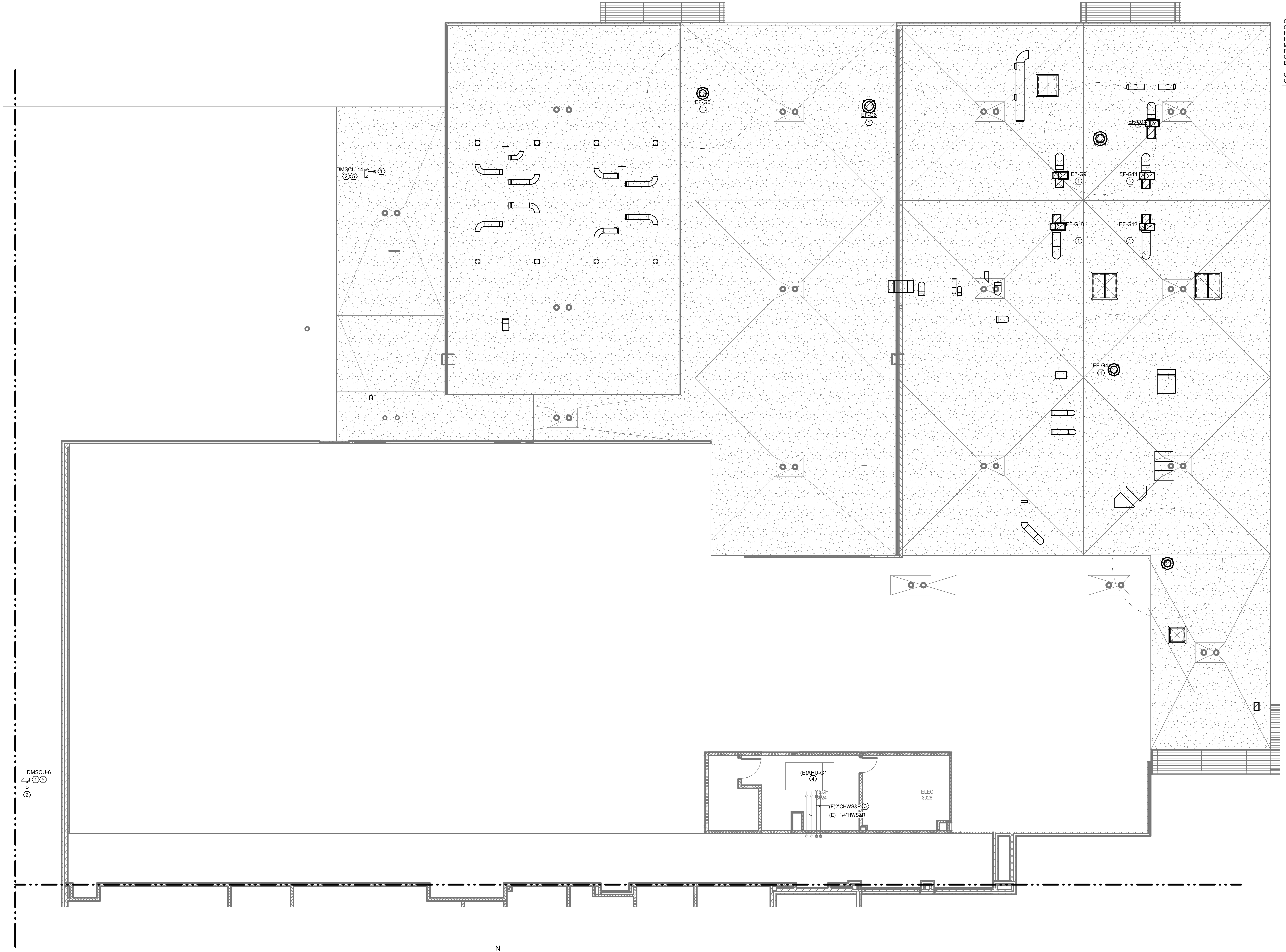


Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL SECOND FLOOR PLAN - AREA F

M2.17

of



1 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA G
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

① VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
② REFER TO 1/M2.07, FOR REFRIGERANT LINE CONTINUATION.
③ REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.
④ EXISTING EQUIPMENT TO REMAIN.
⑤ MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

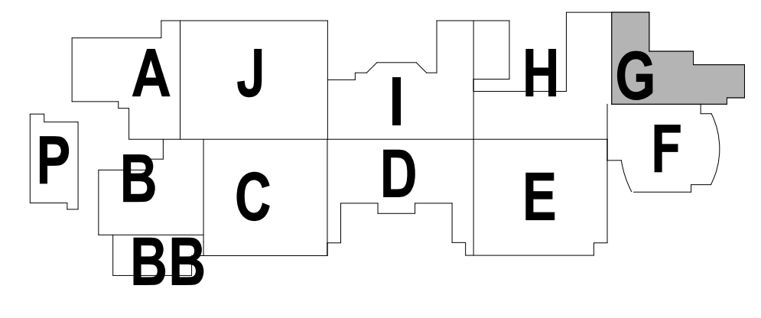
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

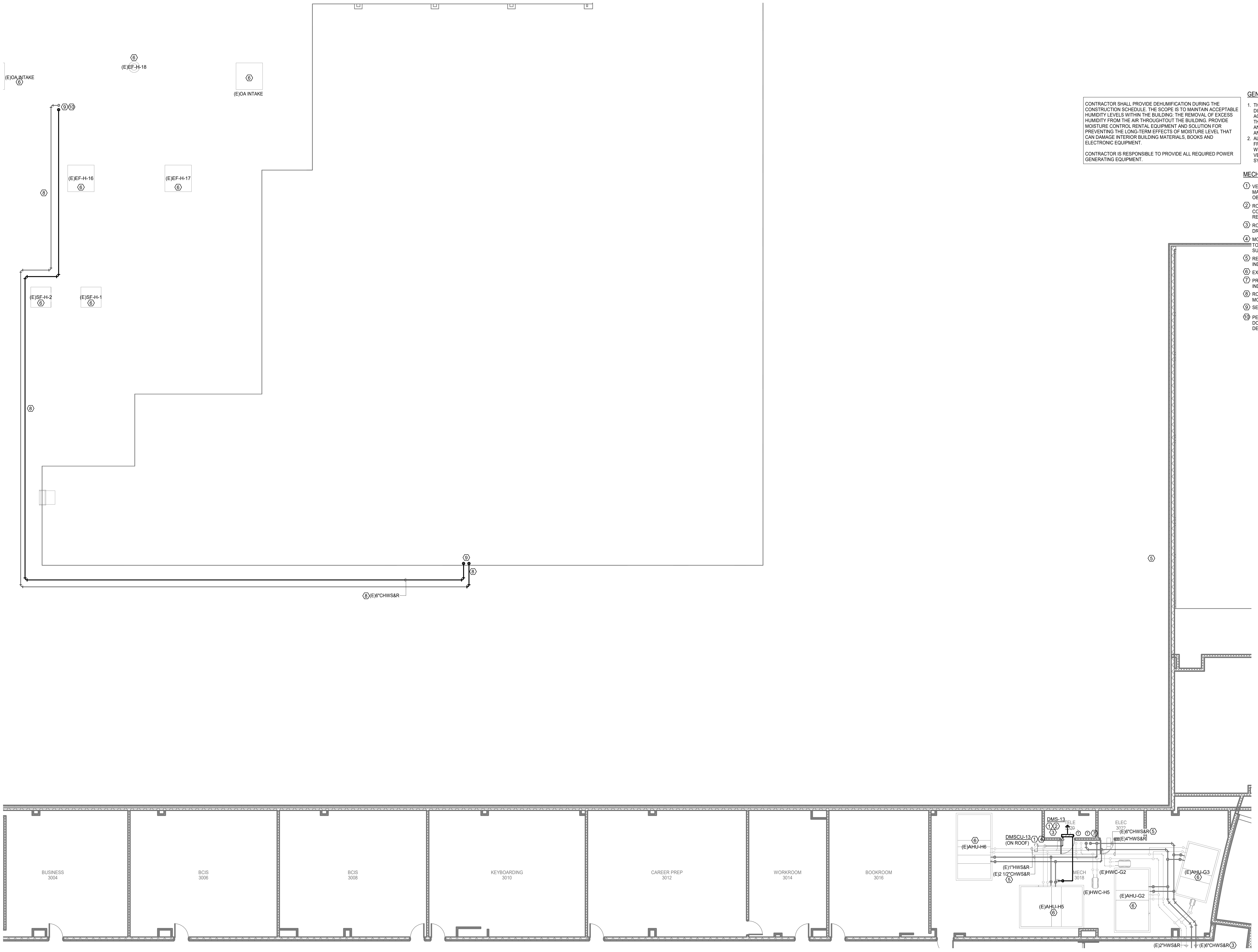


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL SECOND
FLOOR PLAN - AREA G

M2.18

of



N

1 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA H

Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1 VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

2 ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

3 ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN ROOM MECH 3018.

4 MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

5 REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

6 EXISTING EQUIPMENT TO REMAIN.

7 PROVIDE BMCS MONITORING TEMPERATURE SENSOR AS INDICATED.

8 ROUTE PIPING ON ROOF. PROVIDE PIPE SUPPORTS MODEL #PSE 10'-0" ON CENTER.

9 SEE M2.08 FOR PIPE CONTINUATION.

10 PENETRATE CHILLED WATER PIPING FROM ROOF LEVEL DOWN TO CENTRAL PLANT BELOW. REFER TO 2/M4.01 DETAIL.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

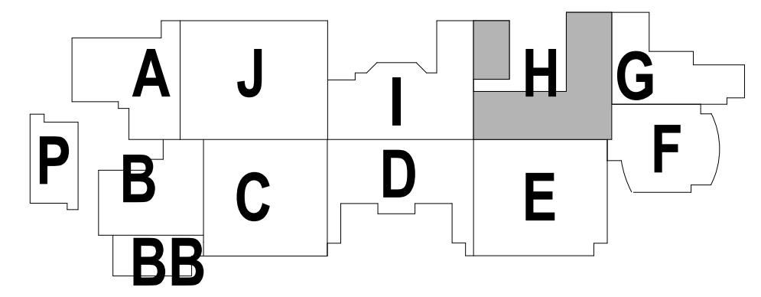
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

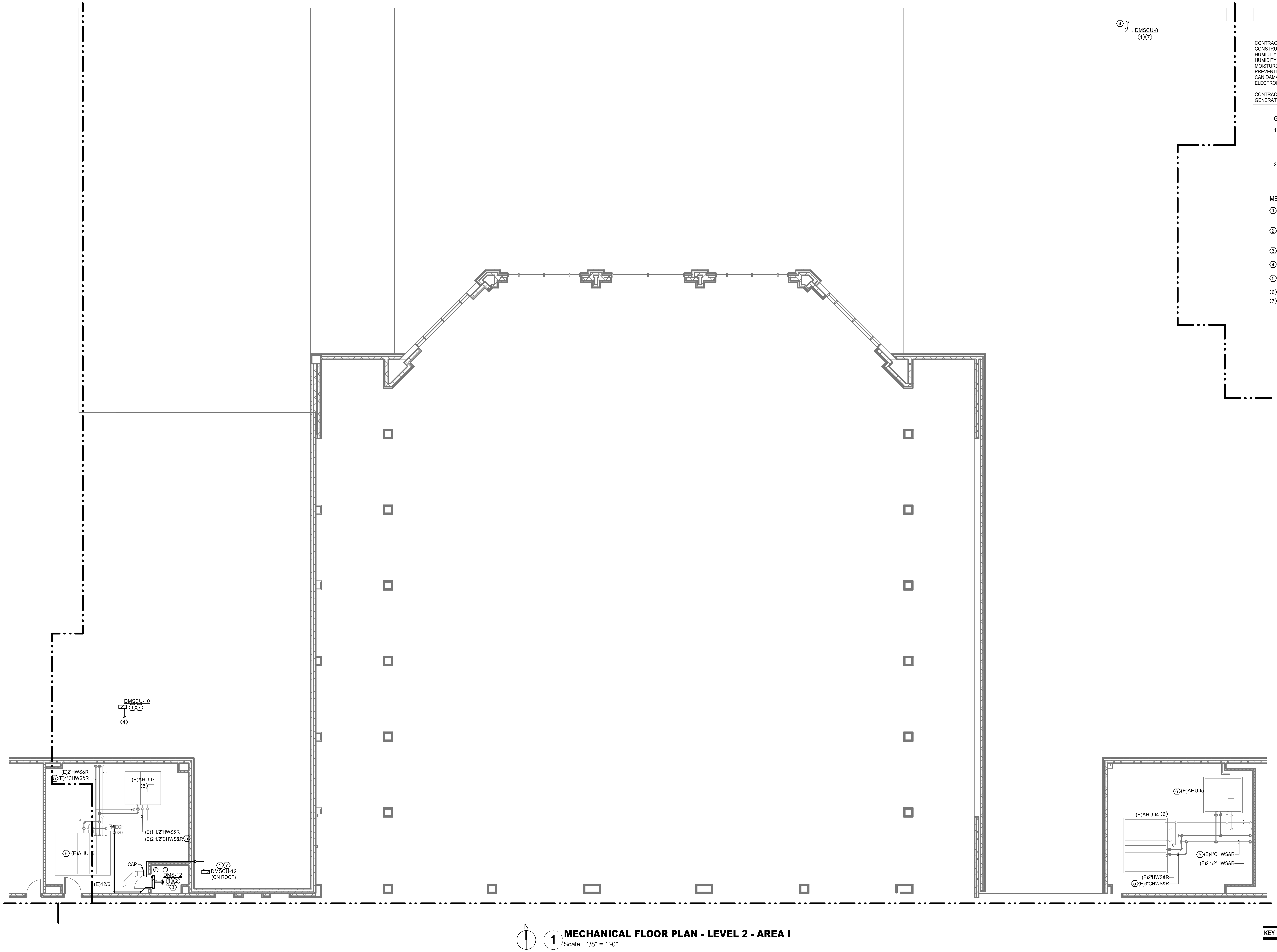


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL SECOND FLOOR PLAN - AREA H

M2.19

of



1 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA I
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1 VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.

2 ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.

3 ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN ROOM MECH 2020.

4 REFER TO 1/M2.09, FOR REFRIGERANT LINE CONTINUATION.

5 REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.

6 EXISTING EQUIPMENT TO REMAIN.

7 MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

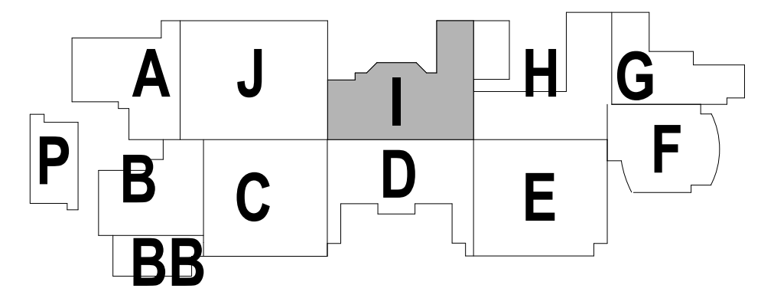
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

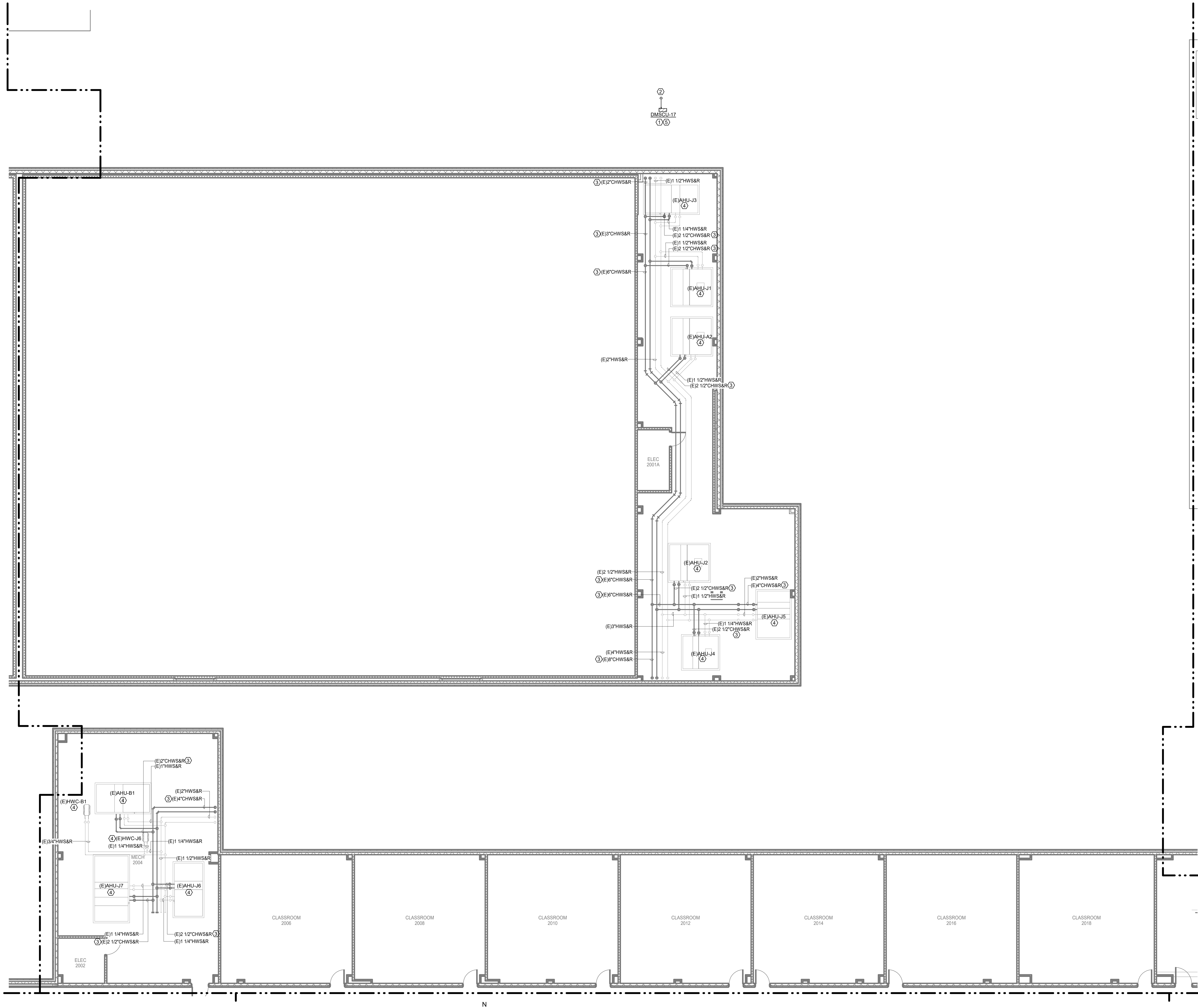


Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL SECOND FLOOR PLAN - AREA I

M2.20

of



1 **MECHANICAL FLOOR PLAN - LEVEL 2 - AREA J**
Scale: 1/8" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

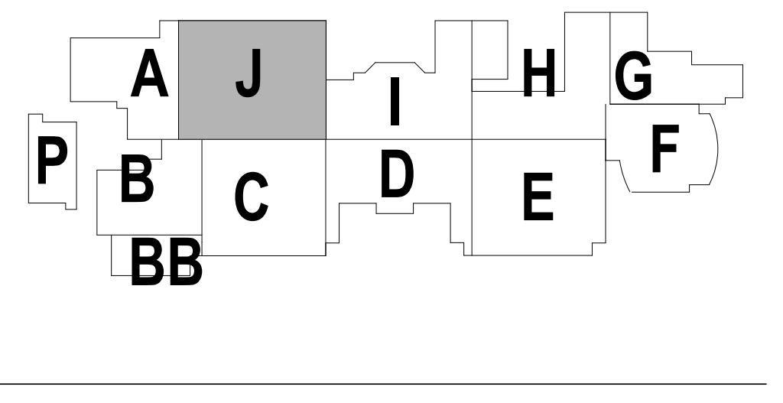
GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1 VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2 REFER TO 1/M2.10 ROOM CORR 1100, FOR REFRIGERANT LINE CONTINUATION.
3 REMOVE EXISTING CHWS&R PIPING INSULATION AS INDICATED, REINSULATE AND SEAL PER SPECIFICATIONS.
4 EXISTING EQUIPMENT TO REMAIN.
5 MOUNT CONDENSING UNIT TO UNISTRUT RACK. REFER TO TO ARCHITECTURAL AND STRUCTURAL EQUIPMENT SUPPORT DETAIL.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

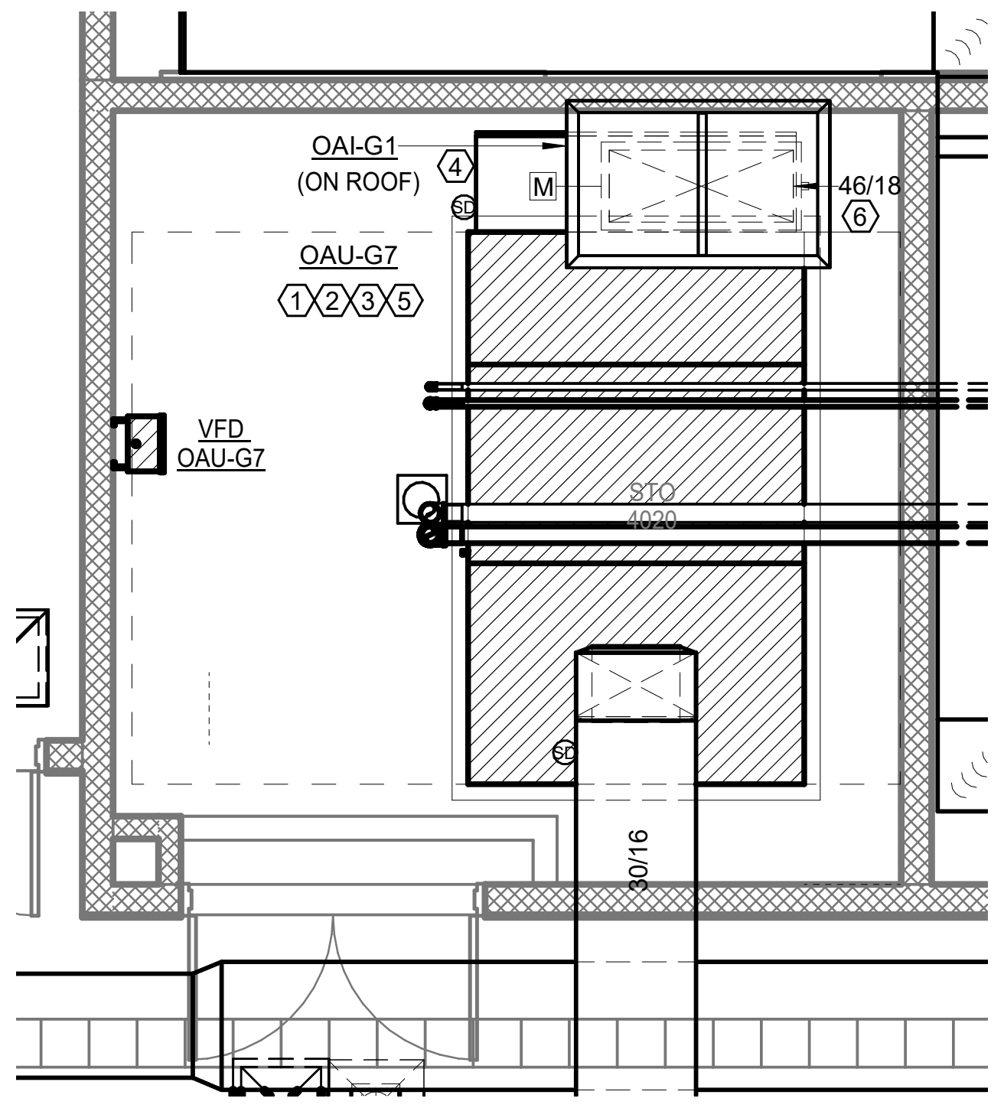
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

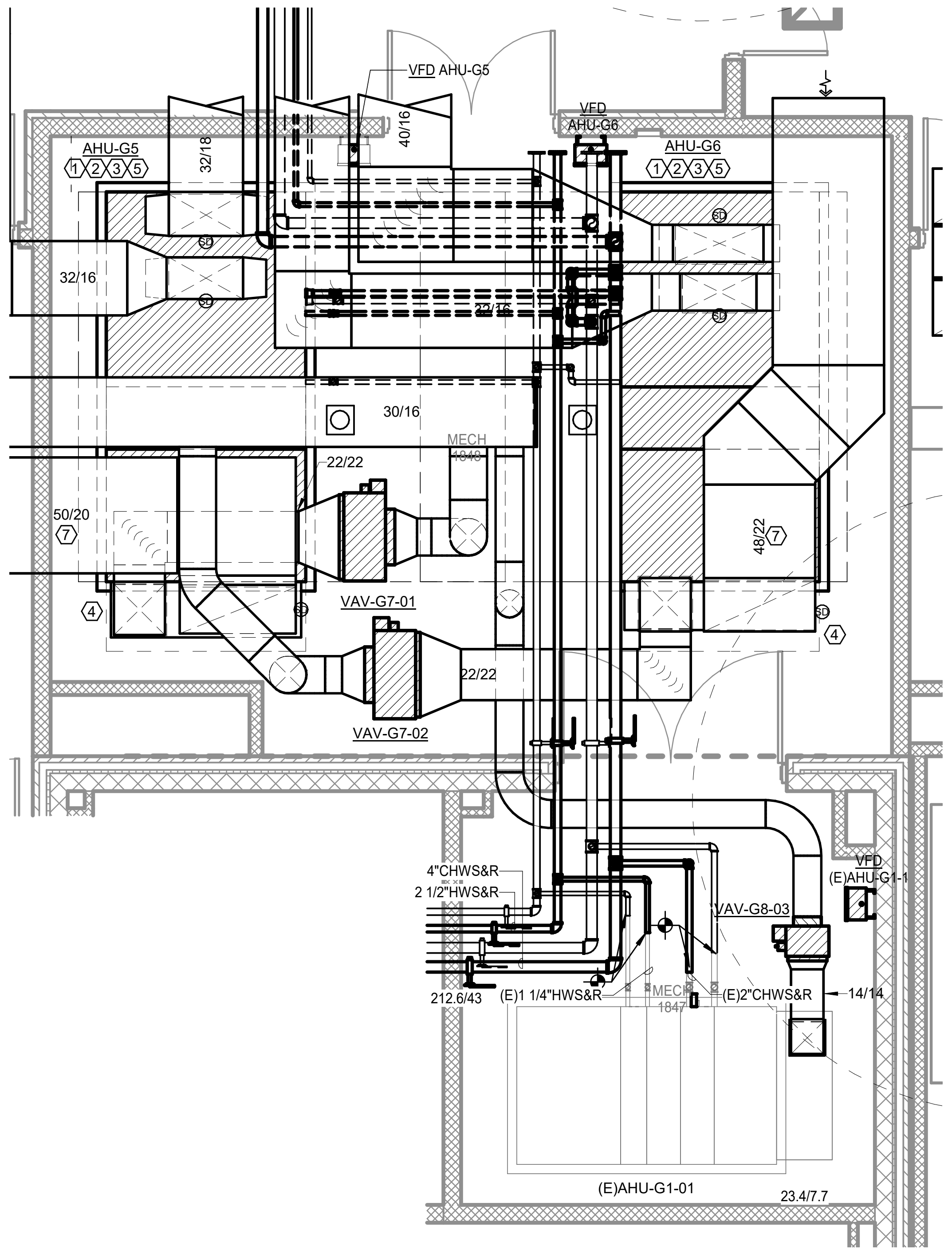
MECHANICAL SECOND
FLOOR PLAN - AREA J

M2.21
of



2 MECHANICAL FLOOR PLAN - ENLARGED MECH 4020

Scale: 1/4" = 1'-0"



1 MECHANICAL FLOOR PLAN - ENLARGED MECH 1848 AND MECH 1847

Scale: 1/4" = 1'-0"

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

MECHANICAL KEYED NOTES:

1. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.
4. SHEET METAL PLENUM, FULL SIZE OF UNIT RETURN AIR OPENING, LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
5. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO FLOOR DRAIN LOCATED IN THIS ROOM. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION OF FLOOR DRAIN.
6. FULL SIZE OUTSIDE AIR DUCTWORK DOWN FROM OUTSIDE AIR INTAKE ON ROOF. PROVIDE TRANSITION TO SIZE INDICATED.
7. PROVIDE INTERNALLY LINED RETURN AIR DUCTWORK (DIMENSIONS AS SHOWN).

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

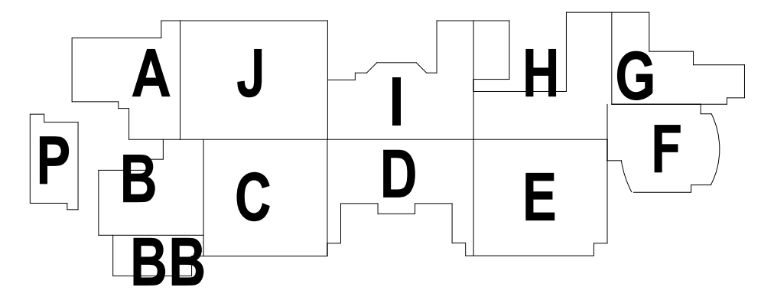
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



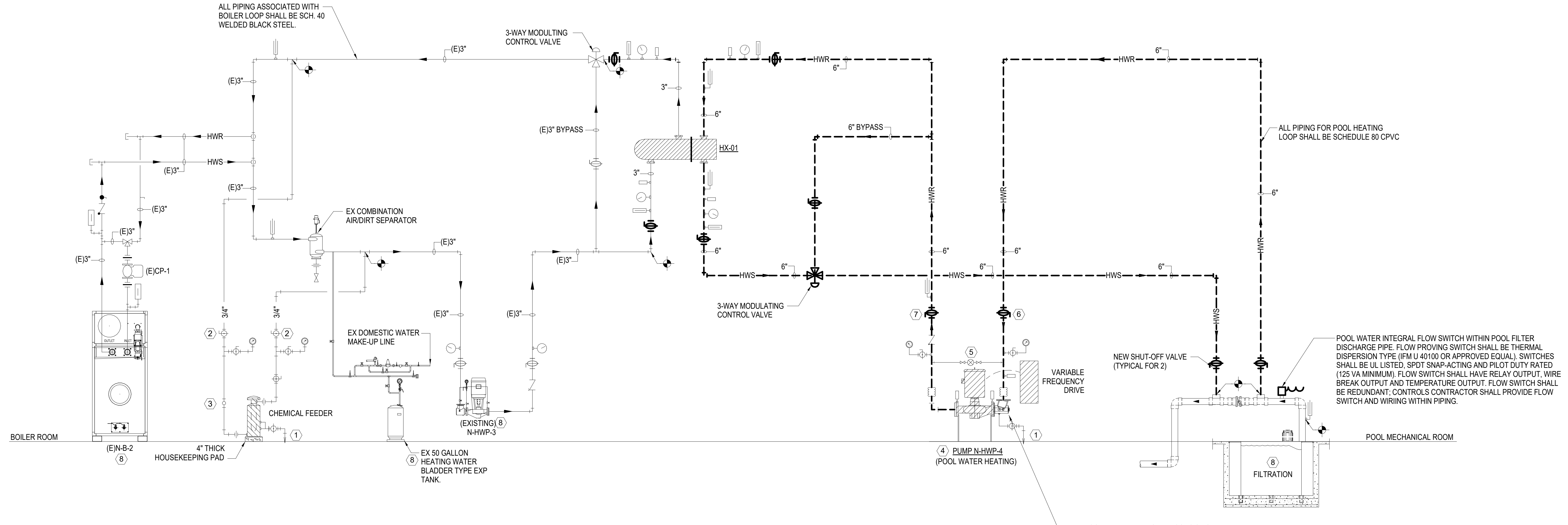
Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL ENLARGED PLANS

M3.01

____ of ____

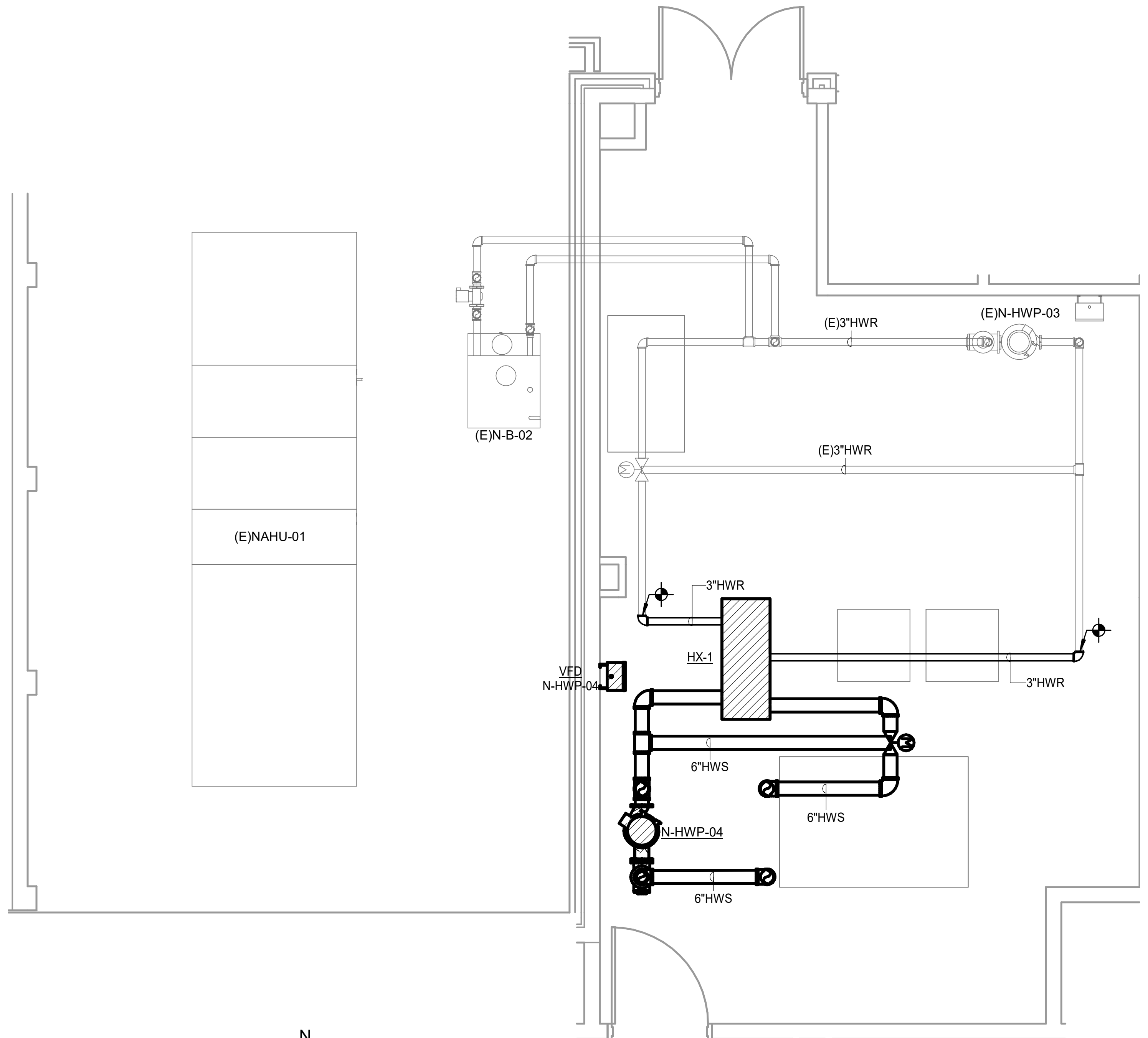
NOTE:
PIPING DIAGRAM IS DIAGRAMMATIC IN NATURE. CONTRACTOR SHALL CONFIRM EXISTING FILTER WATER INLET AND OUTLETS; REFER TO SHELL AND TUBE HEAT EXCHANGER MANUFACTURER'S INLET/OUTLET PIPING DIRECTIONS ETC.



POOL WATER INTEGRAL FLOW SWITCH WITHIN POOL FILTER DISCHARGE PIPE. FLOW PROVING SWITCH SHALL BE THERMAL DISPERSION TYPE (IFM U 40100 OR APPROVED EQUAL). SWITCHES SHALL BE UL LISTED, SPDT SNAP-ACTING AND PILOT DUTY RATED (125 VA MINIMUM). FLOW SWITCH SHALL HAVE RELAY OUTPUT, WIRE BREAK OUTPUT AND TEMPERATURE OUTPUT. FLOW SWITCH SHALL BE REDUNDANT; CONTROLS CONTRACTOR SHALL PROVIDE FLOW SWITCH AND WIRIING WITHIN PIPING.

POOL WATER PUMP SHALL CONSIST OF BRONZE CONTSTRUCTION; INTERNAL COMPONENTS SHALL HAVE FUSION BONDED EPOSY COATING TO WITHSTAND CHLORINATED WATER.

2 POOL WATER HEATING PIPING DIAGRAM
SCALE: NO SCALE



1 **MECHANICAL FLOOR PLAN - ENLARGED MECH 3106**
Scale: 1/4" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

GENERAL NOTES

1. ALL PIPING AND HEATING WATER SPECIALTIES SHALL HAVE PHENOLIC FOAM INSUALTION WITH ALUMINUM JACKET.
2. HEATING WATER SYSTEM SHALL BE FLUSHED AND CLEANED AND PROVIDED WITH NEW CLOSED LOOP CHEMICAL TREATMENT.
3. ALL PIPING AND FITTINGS ASSOCIATED WITH POOL WATER HEATING SHALL BE SCHEDULE 80 PVC.
4. ALL VALVES, SENSOR, GAUGES, ETC. ASSOCIATED WITH POOL WATER PIPING SHALL BE MADE TO WITHSTAND CHLORINATED POOL WATER.
5. ALL PIPING SUPPORT COMPONENTS SUCH AS BUT NOT LIMITED TO: ALL THREAD RODS, UNISTRUT, ETC. SHALL BE HOT-DIPPED GALVANIZED.
6. ALL PIPING AND FITTINGS ASSOCIATED WITH THE HVAC BOILER LOOP SHALL BE SCH. 40 WELDED BLACK STEEL; REFER TO SPECIFICATION.
7. CONTRACTOR SHALL PROVIDE ON INLET OF SHELL SIDE OF EACH HEAT EXCHANGER: MODULATING CONTROL VALVE, ISOLATION VALVE, THERMOMETER, PRESSURE GAUGE, PETE'S PLUG ON HEAT EXCHANGER OUTLET: THERMOMETER, PRESSURE GAUGE, PETE'S PLUG, BALANCING VALVE AND ISOLATION VALVE.
8. CONTRACTOR SHALL PROVIDE ON INLET OF TUBE SIDE OF EACH HEAT EXCHANGER: ISOLATION VALVE, THERMOMETER, PRESSURE GAUGE, PETE'S PLUG ON HEAT EXCHANGER: THERMOMETER, PRESSURE GAUGE, PETE'S PLUG, BALANCING VALVE AND ISOLATION VALVE.

MECHANICAL KEYED NOTES

- ⟨1⟩ ROUTE TYPE "L" COPPER DRAIN AT FULL SIZE OR SIZE INDICATED TO NEAREST FLOOR DRAIN.
- ⟨2⟩ PROVIDE ISOLATION VALVE AS CLOSE AS POSSIBLE TO POT FEEDER.
- ⟨3⟩ PROVIDE AN ERNEST GAUGE #E-57-3 BRONZE BODY SIGHT GLASS WITH S.S. SHAFT, PLASTIC SPINNER AND DOUBLE WINDOW. OPERATING TEMPERATURE AND PRESSURE SHALL BE 200°F, 125 PSI MINIMUM.
- ⟨4⟩ REFER TO VERTICAL INLINE PUMP DETAIL FOR MORE INFORMATION.
- ⟨5⟩ PROVIDE DIFFERENTIAL PRESSURE SWITCH.
- ⟨6⟩ PROVIDE ISOLATION VALVE.
- ⟨7⟩ BALANCING VALVE TO BE PROVIDED WITH INFINITE POSITION CRANK OR MEMORY STOP FOR BALANCING
- ⟨8⟩ EXISTING EQUIPMENT TO REMAIN.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

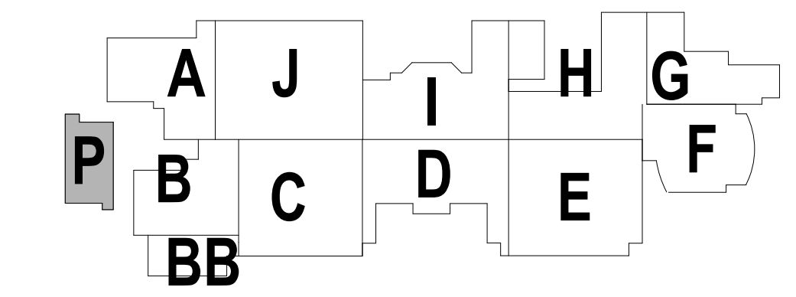
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

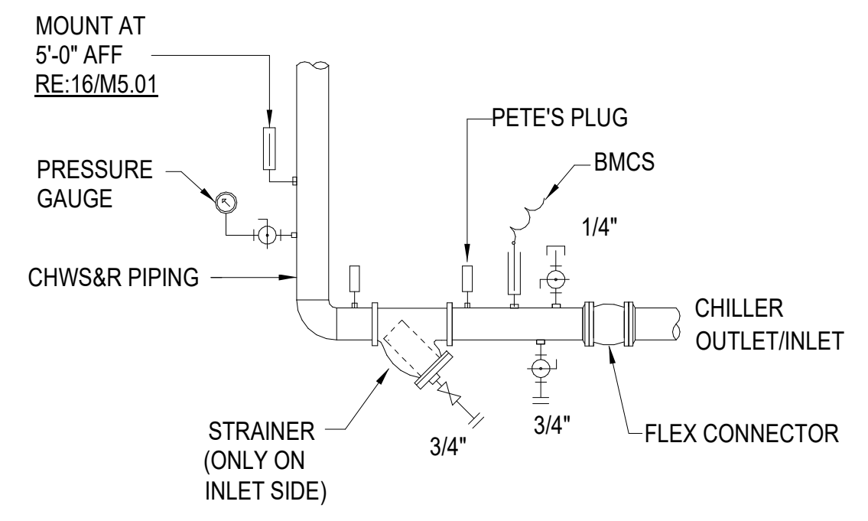
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL ENLARGED PLANS

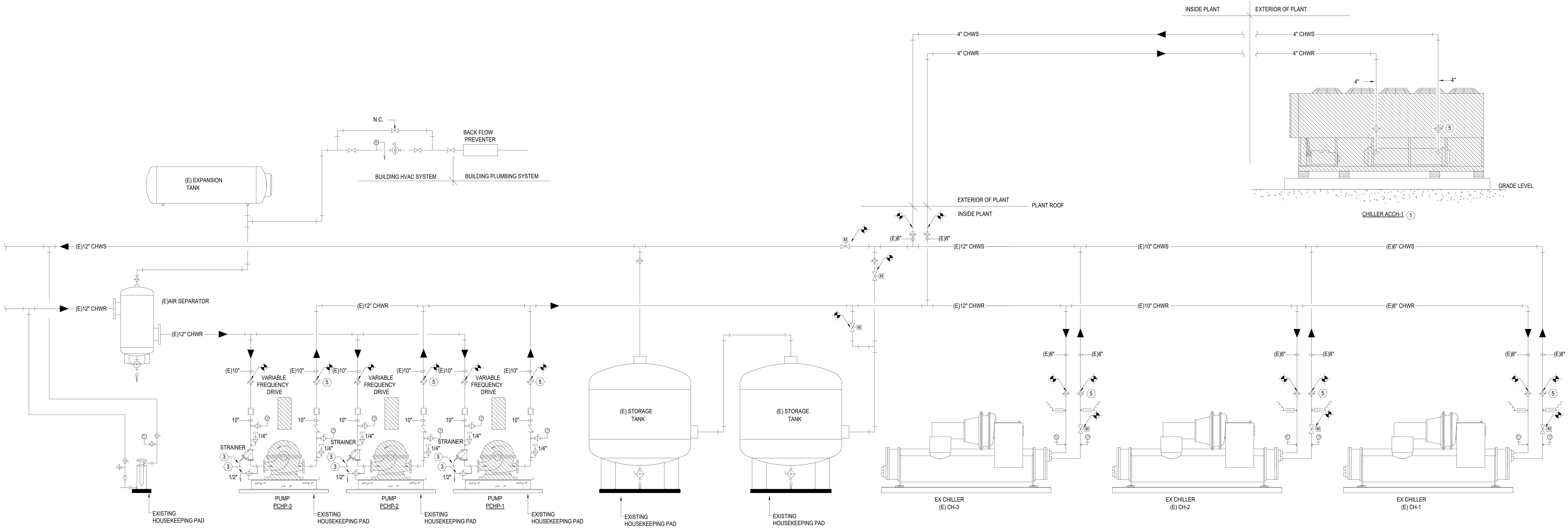
M3.02
____ of ____



3 TYPICAL PIPING AT INLET & OUTLET OF CHILLER
SCALE: NONE

MECHANICAL KEYED NOTES

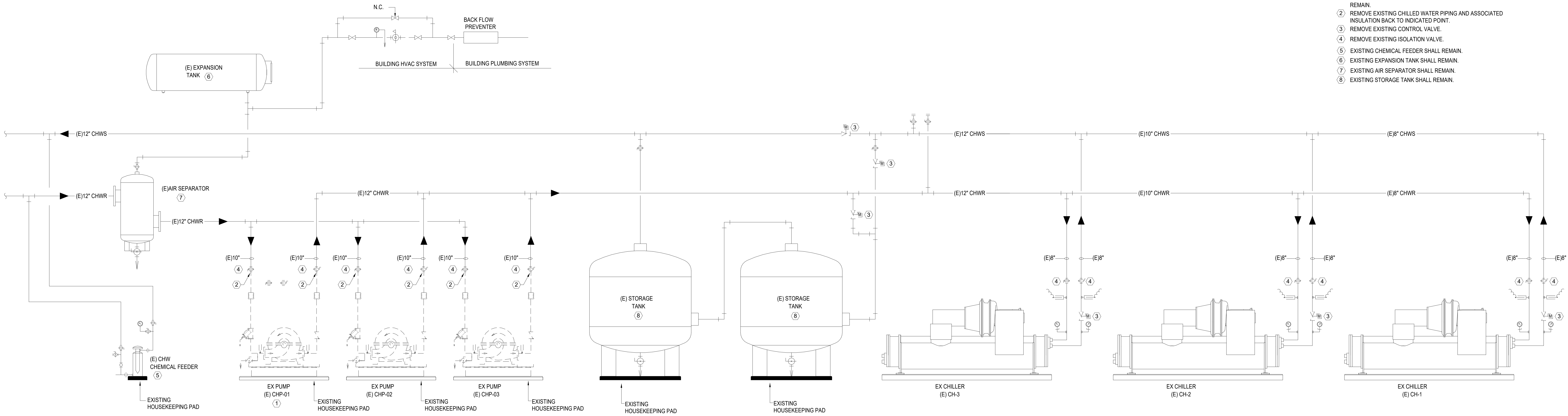
1. VERIFY SERVICE AND AIRFLOW CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. 12" WIDE X 12" TALL X UNIT LENGTH CONCRETE RUNNER REINFORCED WITH 4 CONTINUOUS #4 REBAR WITH #3 STIRRUPS AT 18" O.C. SPACING. PROVIDE 1-1/2" COVER ON TOP AND SIDES AND 3" COVER ON BOTTOM OF BEAM. (TYPICAL OF 2)
3. ROUTE TYPE "L" COPPER DRAIN AT FULL SIZE OR SIZE INDICATED TO NEAREST FLOOR DRAIN.
4. PROVIDE BALL VALVE WITH HOSE THREADED ADAPTER.
5. BALANCING VALVE TO BE PROVIDED WITH INFINITE POSITION CRANK OR MEMORY STOP FOR BALANCING SERVICE.



2 CHILLED WATER PIPING DIAGRAM
SCALE: NONE

DEMOLITION KEYED NOTES

1. REMOVE EXISTING PUMP, ASSOCIATED DEVICES AND VIBRATION ISOLATION. EXISTING CONCRETE PAD SHALL REMAIN.
2. REMOVE EXISTING CHILLED WATER PIPING AND ASSOCIATED INSULATION BACK TO INDICATED POINT.
3. REMOVE EXISTING CONTROL VALVE.
4. REMOVE EXISTING ISOLATION VALVE.
5. EXISTING CHEMICAL FEEDER SHALL REMAIN.
6. EXISTING EXPANSION TANK SHALL REMAIN.
7. EXISTING AIR SEPARATOR SHALL REMAIN.
8. EXISTING STORAGE TANK SHALL REMAIN.



1 DEMOLITION CHILLED WATER PIPING DIAGRAM
SCALE: SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

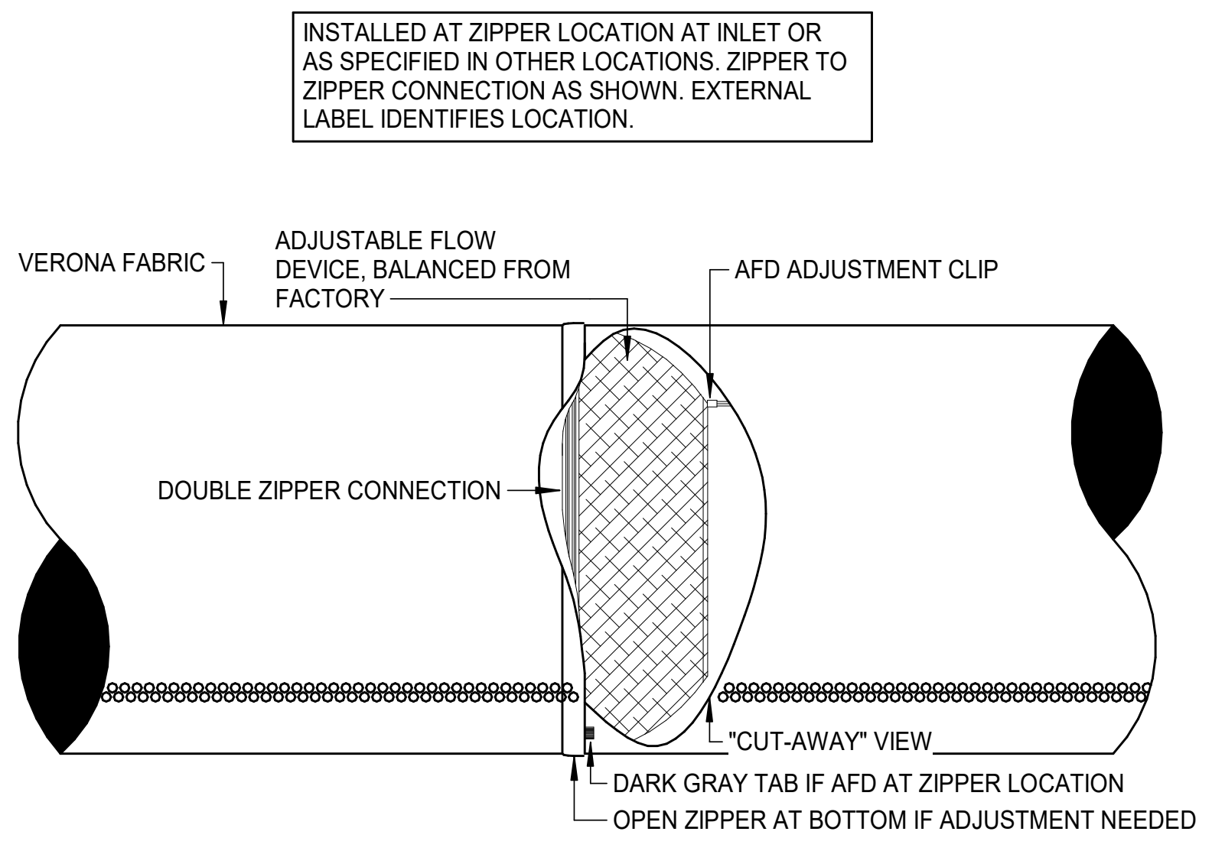
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

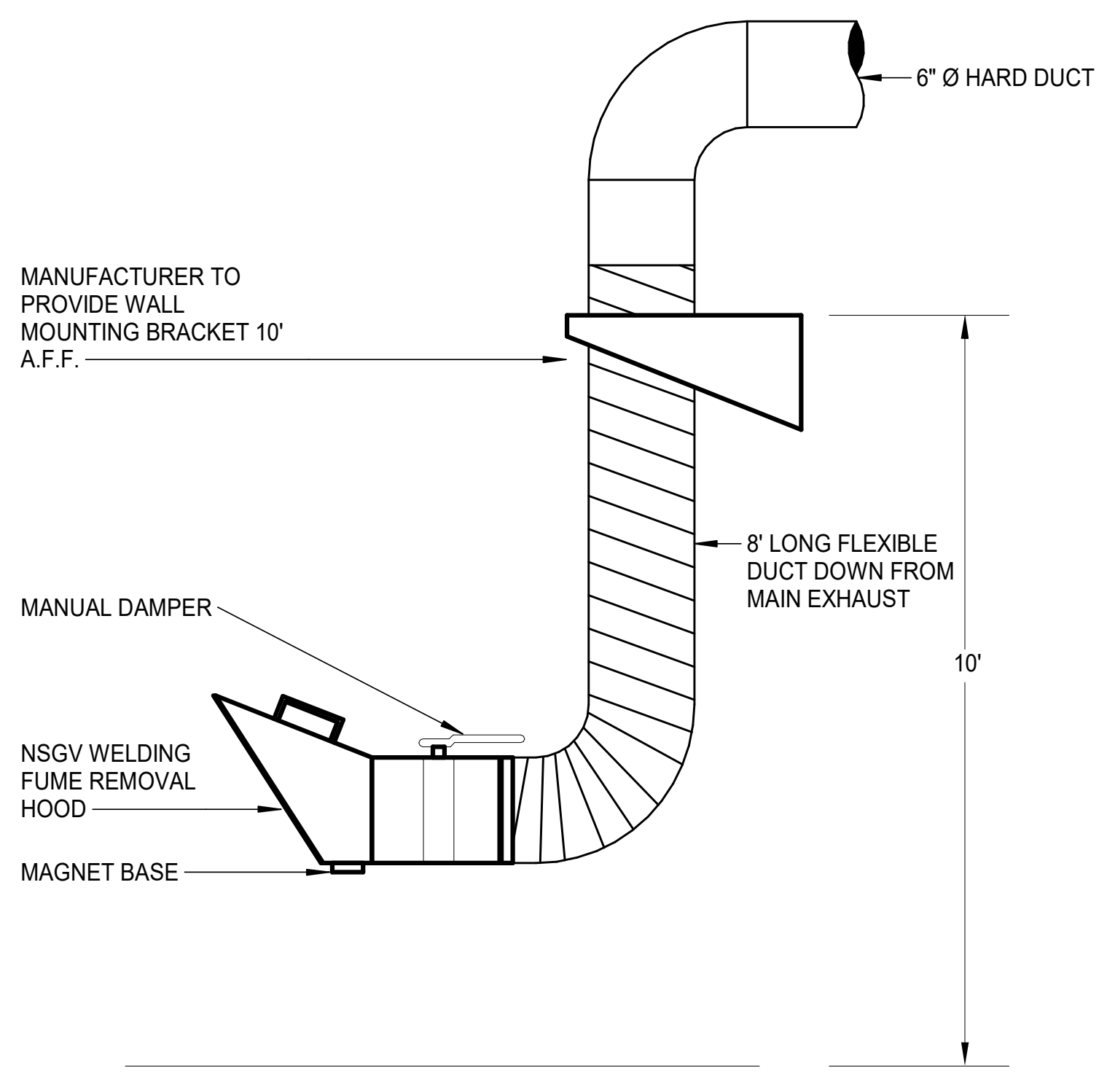
MECHANICAL PIPING DIAGRAM

M4.01
of



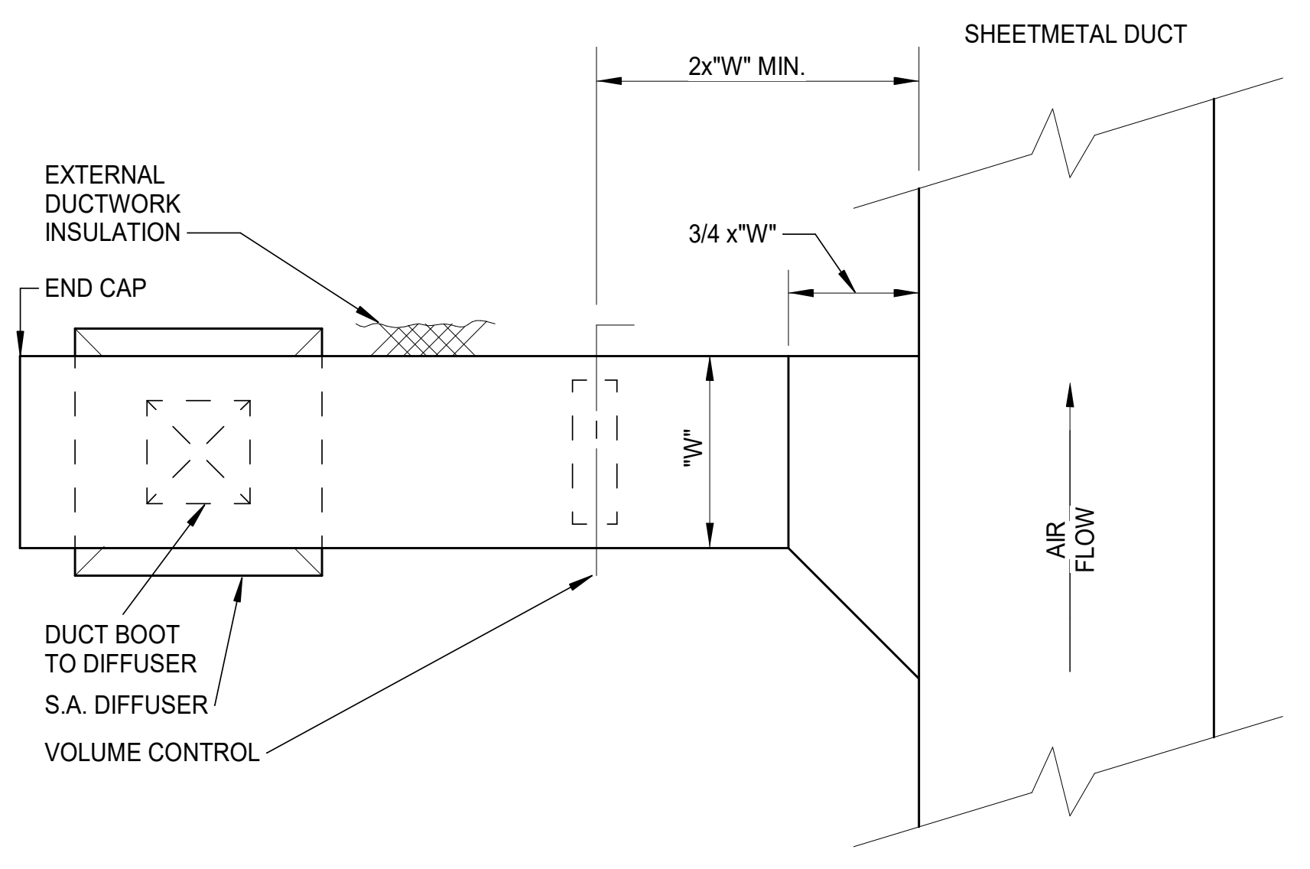
15 ADJUSTABLE FLOW DEVICE (AFD)

SCALE: NONE



12 WELDING EXHAUST DROP

SCALE: NONE



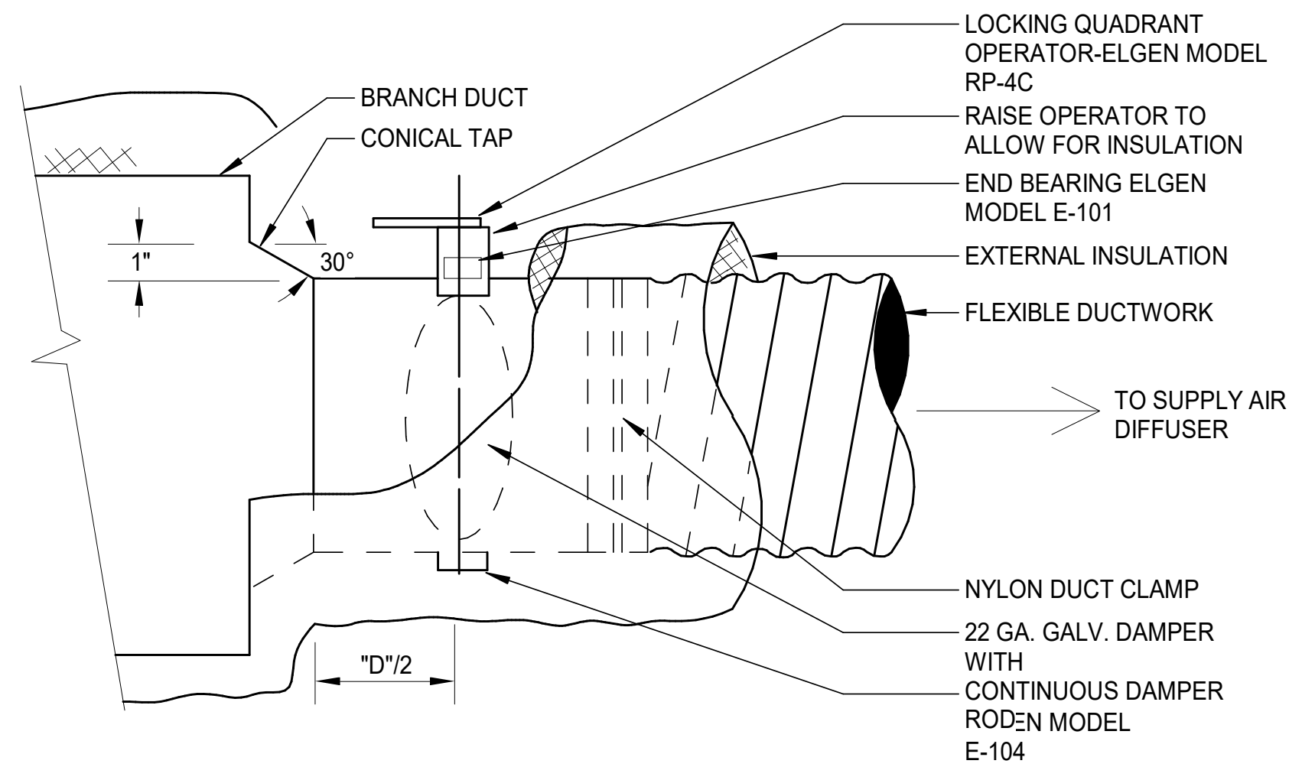
8 RIGID DUCT TAP TO SINGLE SUPPLY AIR DIFFUSER

SCALE: NONE

Salas O'Brien

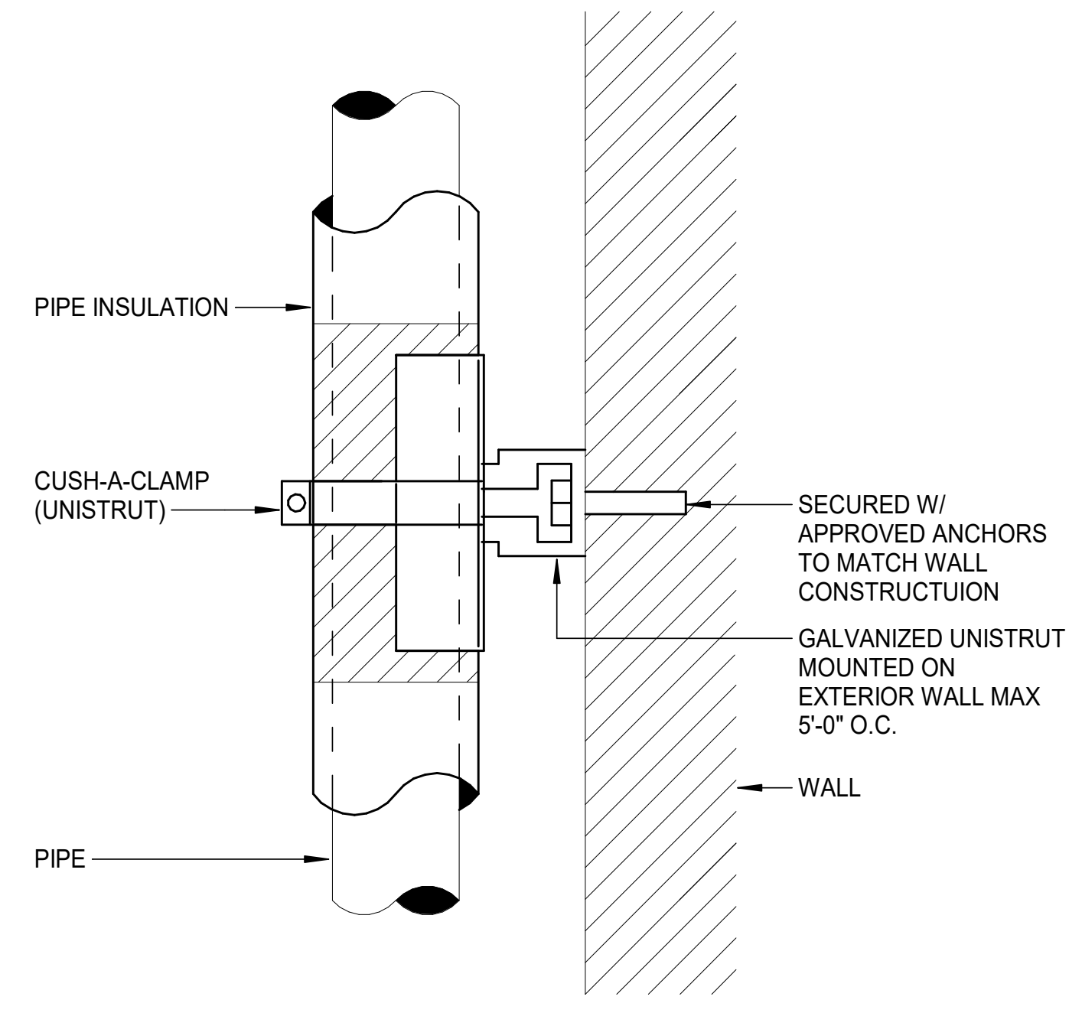
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00



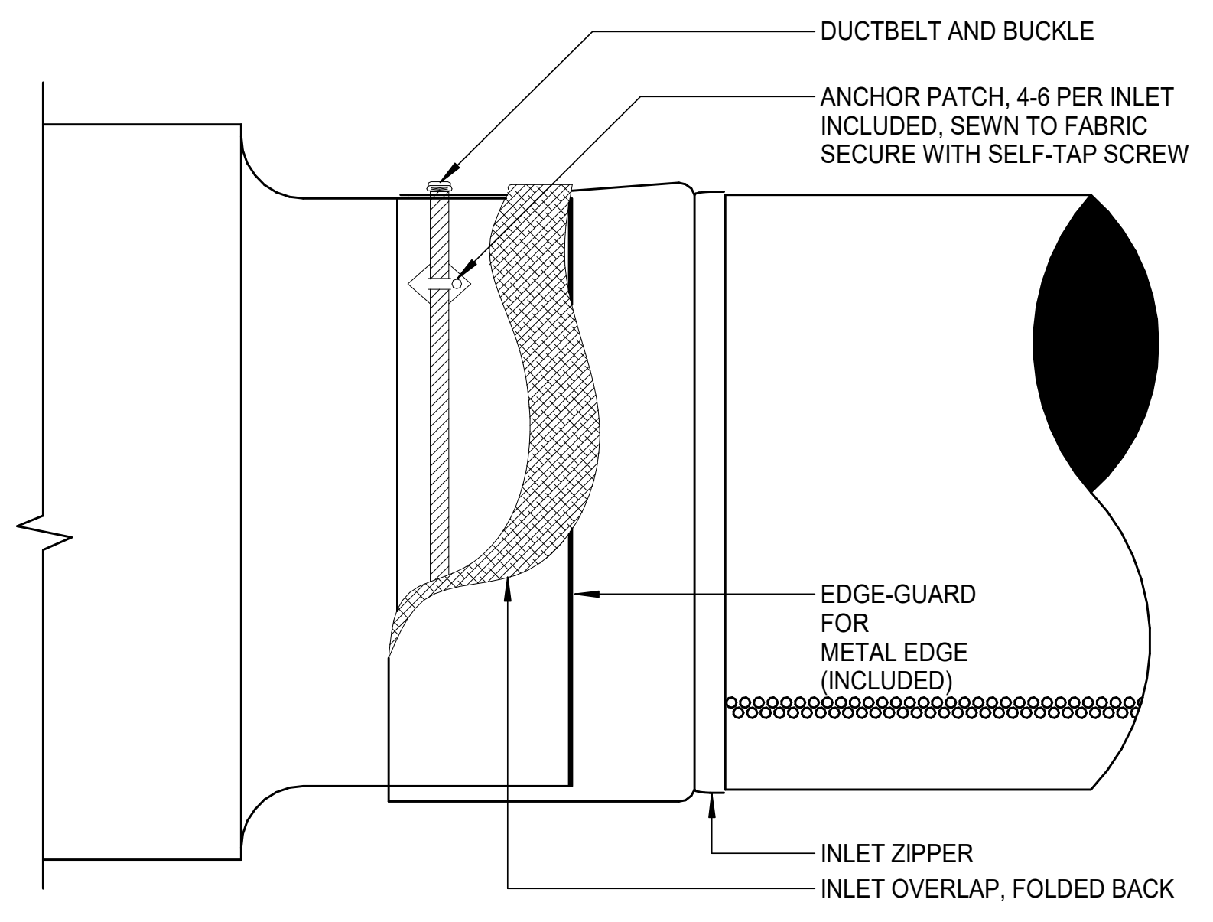
4 FLEXIBLE DUCT TAP - CONICAL

SCALE: NONE



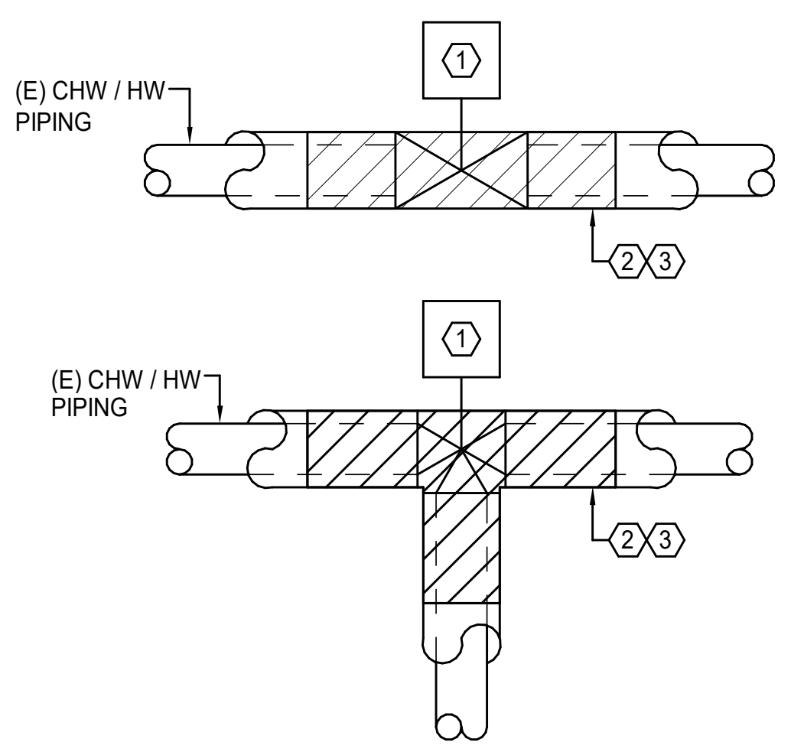
18 EXTERIOR PIPE MOUNTING DETAIL

SCALE: NONE



14 FABRIC DUCT INLET DETAIL

SCALE: NONE

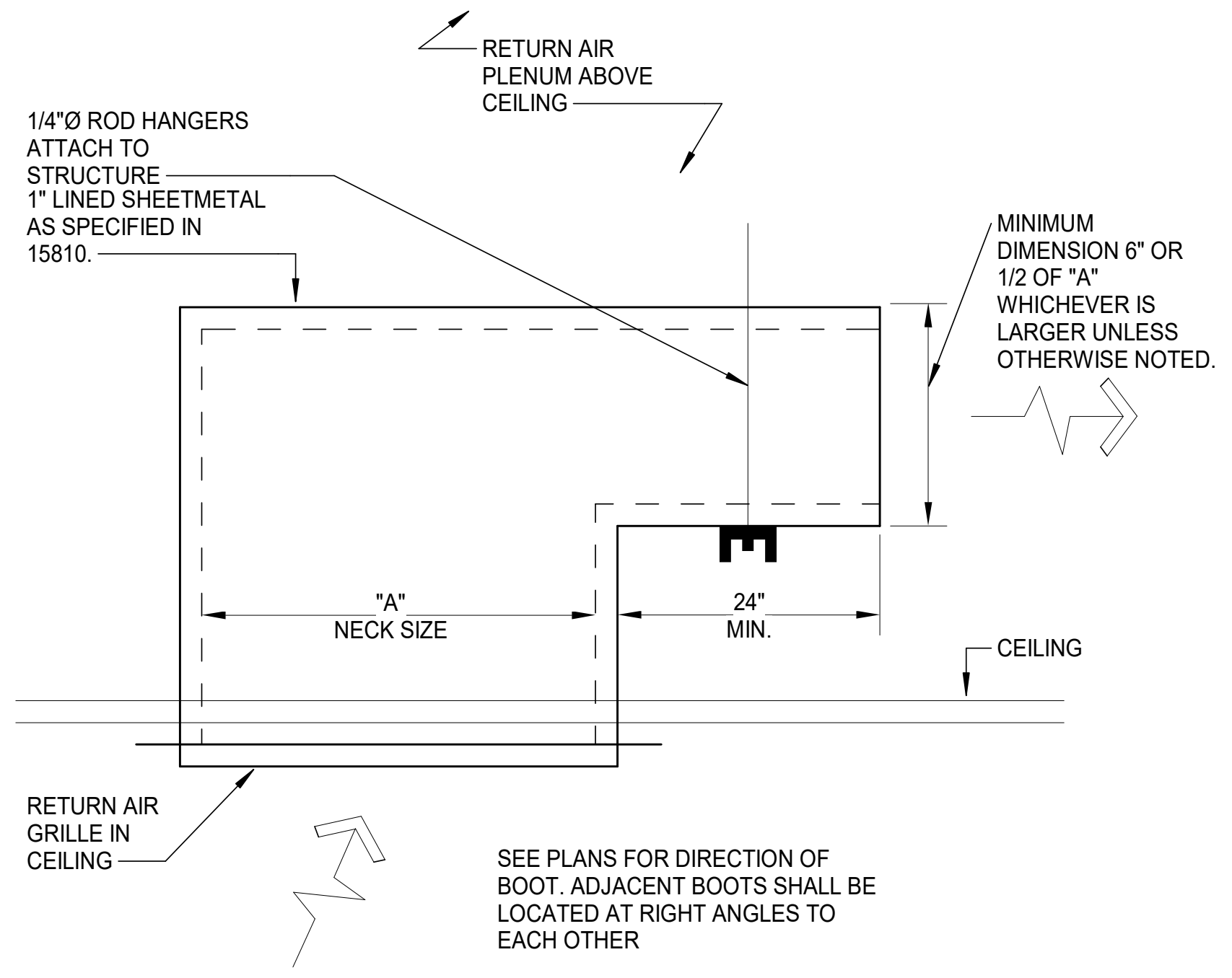


KEY NOTES:

1. REMOVE AND REPLACE EXISTING VALVE ACTUATORS. REFER TO SPECS FOR ADDITIONAL INFORMATION.
2. REMOVE EXISTING PIPE INSULATION AT CONTROL VALVE AND 6" ON EACH SIDE OF VALVE. THIS SCOPE DOES NOT INCLUDE HWC VALVES WITH SCREW ON TYPE VALVES.
3. REINSULATE EXISTING PIPING. REFER TO PIPE INSULATION SPECIFICATION FOR ADDITIONAL INFORMATION.

11 CHW & HW CONTROL VALVE PIPE INSULATION

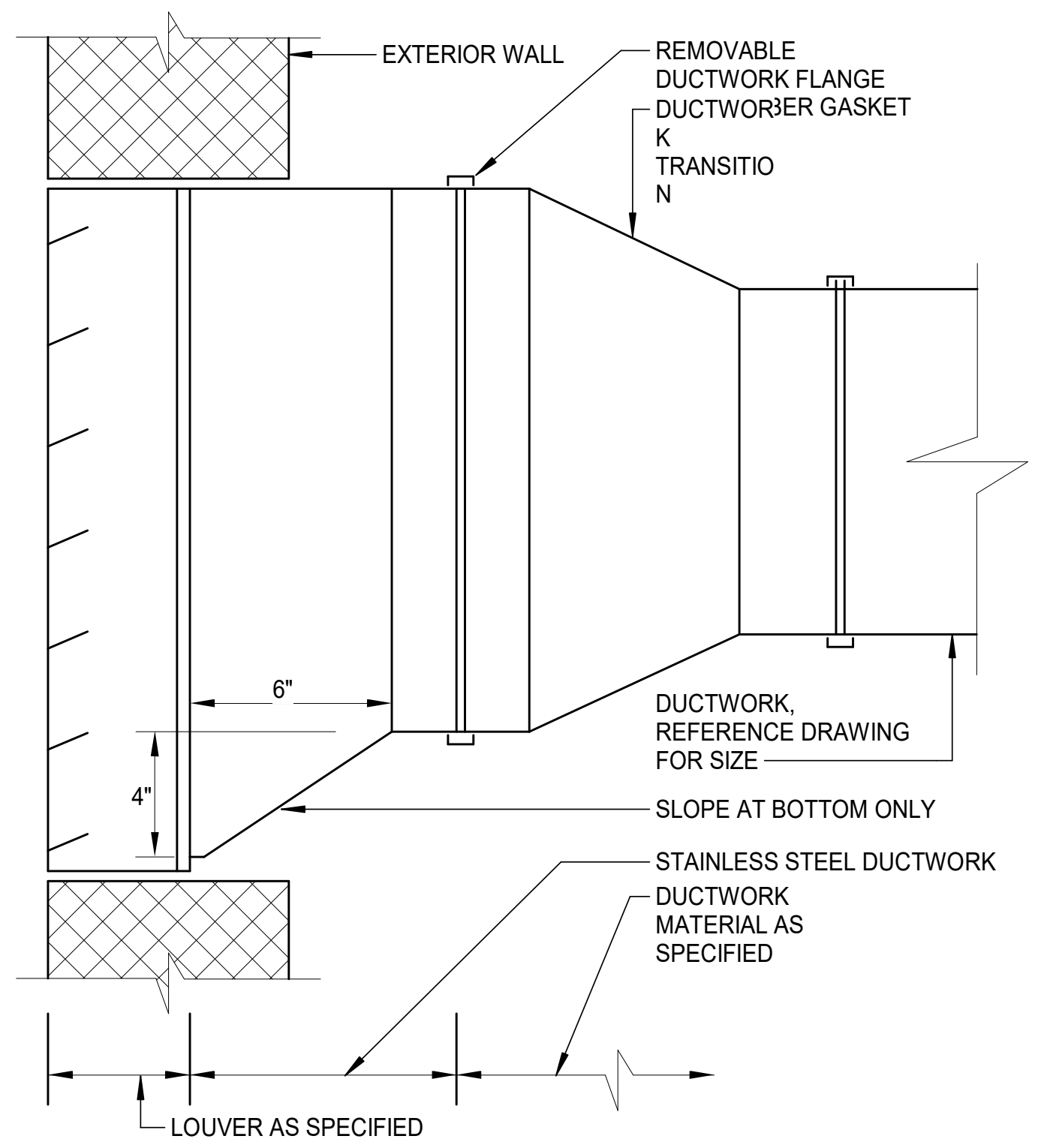
SCALE: NONE



SEE PLANS FOR DIRECTION OF BOOT. ADJACENT BOOTS SHALL BE LOCATED AT RIGHT ANGLES TO EACH OTHER

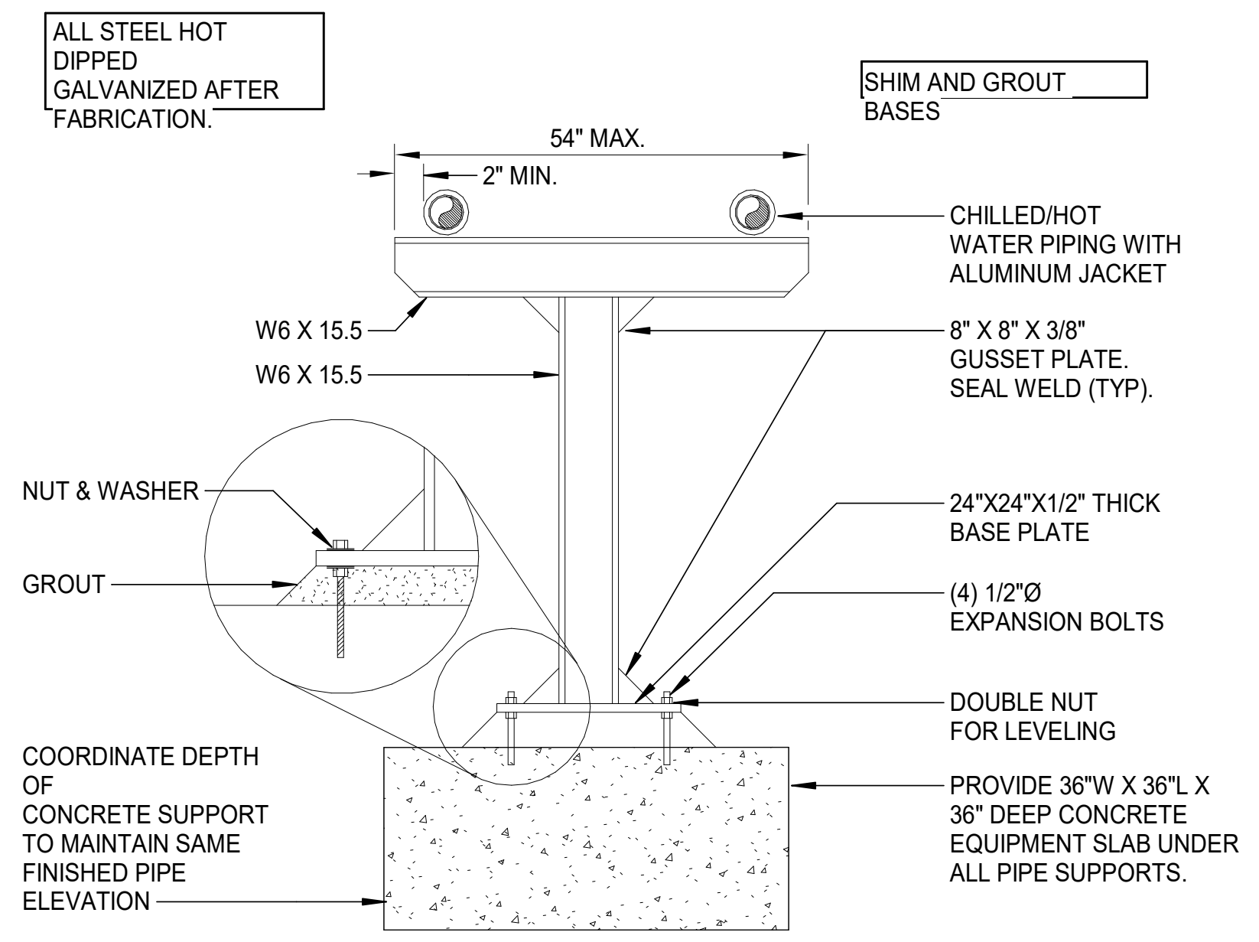
7 RETURN AIR GRILLE BOOT

SCALE: NONE



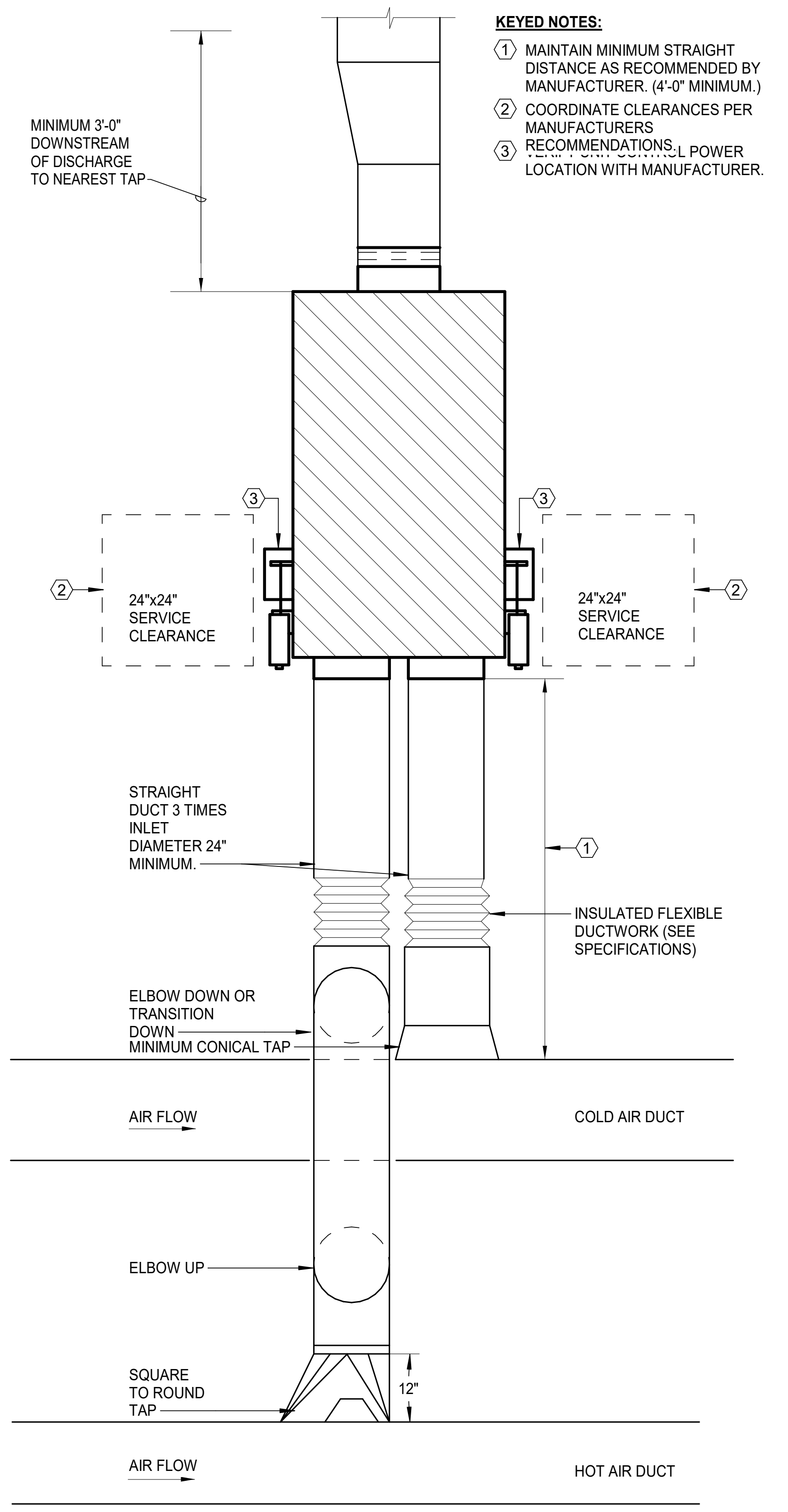
3 DUCTWORK AT LOUVER

SCALE: NONE



17 PIPE STAND

SCALE: NONE

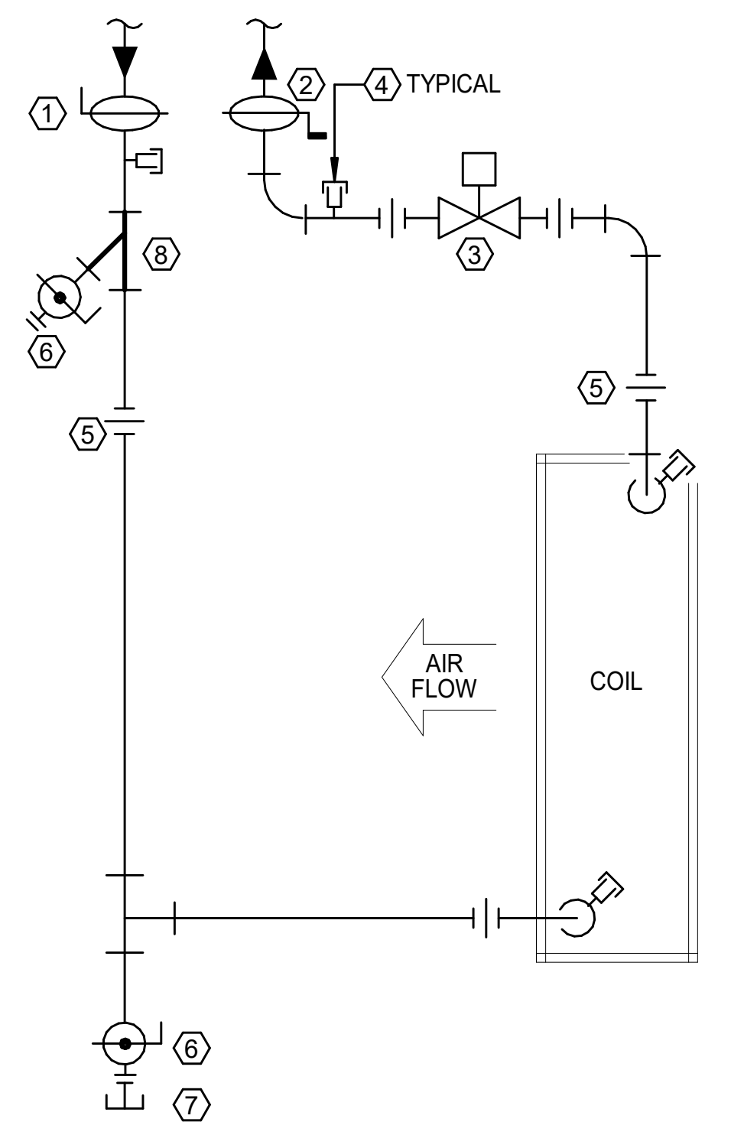


KEYED NOTES:

1. MAINTAIN MINIMUM STRAIGHT DISTANCE AS RECOMMENDED BY MANUFACTURER. (4'-0" MINIMUM.)
2. COORDINATE CLEARANCES PER MANUFACTURERS RECOMMENDATIONS.
3. VERIFY CONTROL POWER LOCATION WITH MANUFACTURER.

13 DUAL-DUCT BOX INSTALLATION

SCALE: NONE

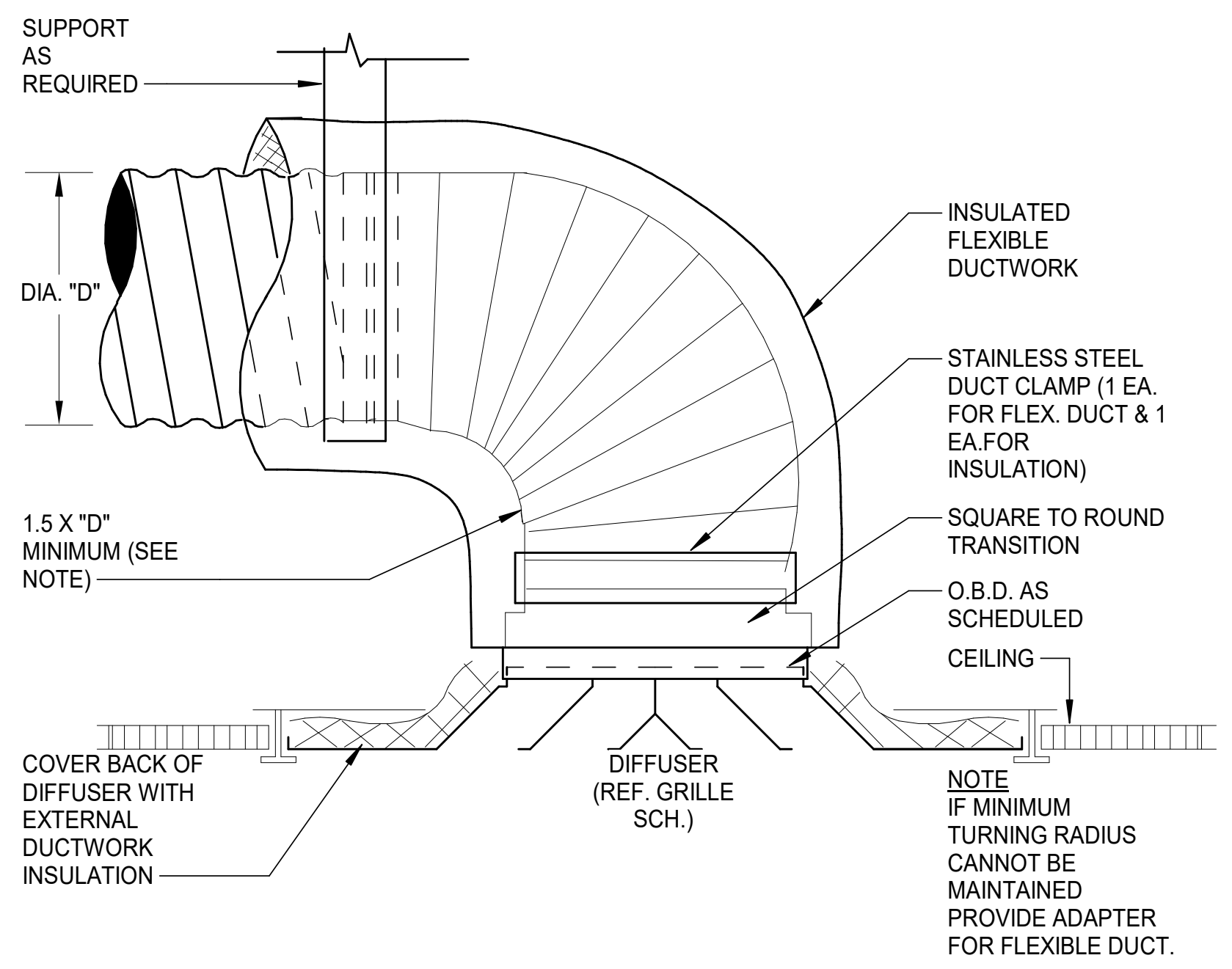


KEYED NOTES:

1. SHUT OFF VALVE
2. BALANCING VALVE
3. CONTROL VALVE
4. TEMPERATURE/PRESSURE TEST STATION
5. UNION (2" & SMALLER ONLY, FLANGE CONNECTION FOR LARGER PIPES)
6. 1/2" BALL VALVE WITH HOSE THREAD ADAPTER, CAP AND CHAIN
7. DIRT LEG
8. PIPE STRAINER

10 PIPING AT CHILLED WATER COIL

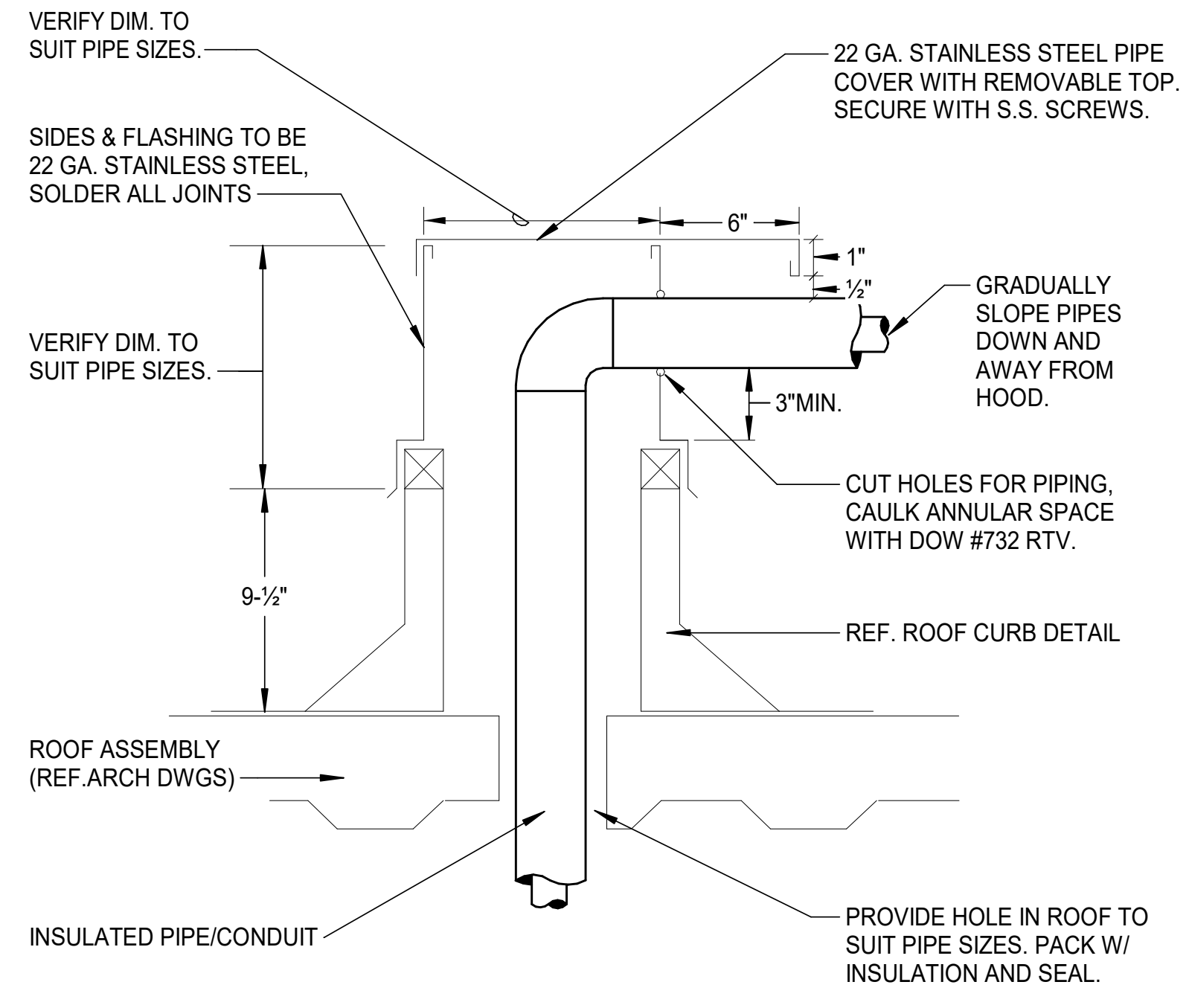
SCALE: NONE



NOTE
IF MINIMUM TURNING RADIUS CANNOT BE MAINTAINED PROVIDE ADAPTER FOR FLEXIBLE DUCT.

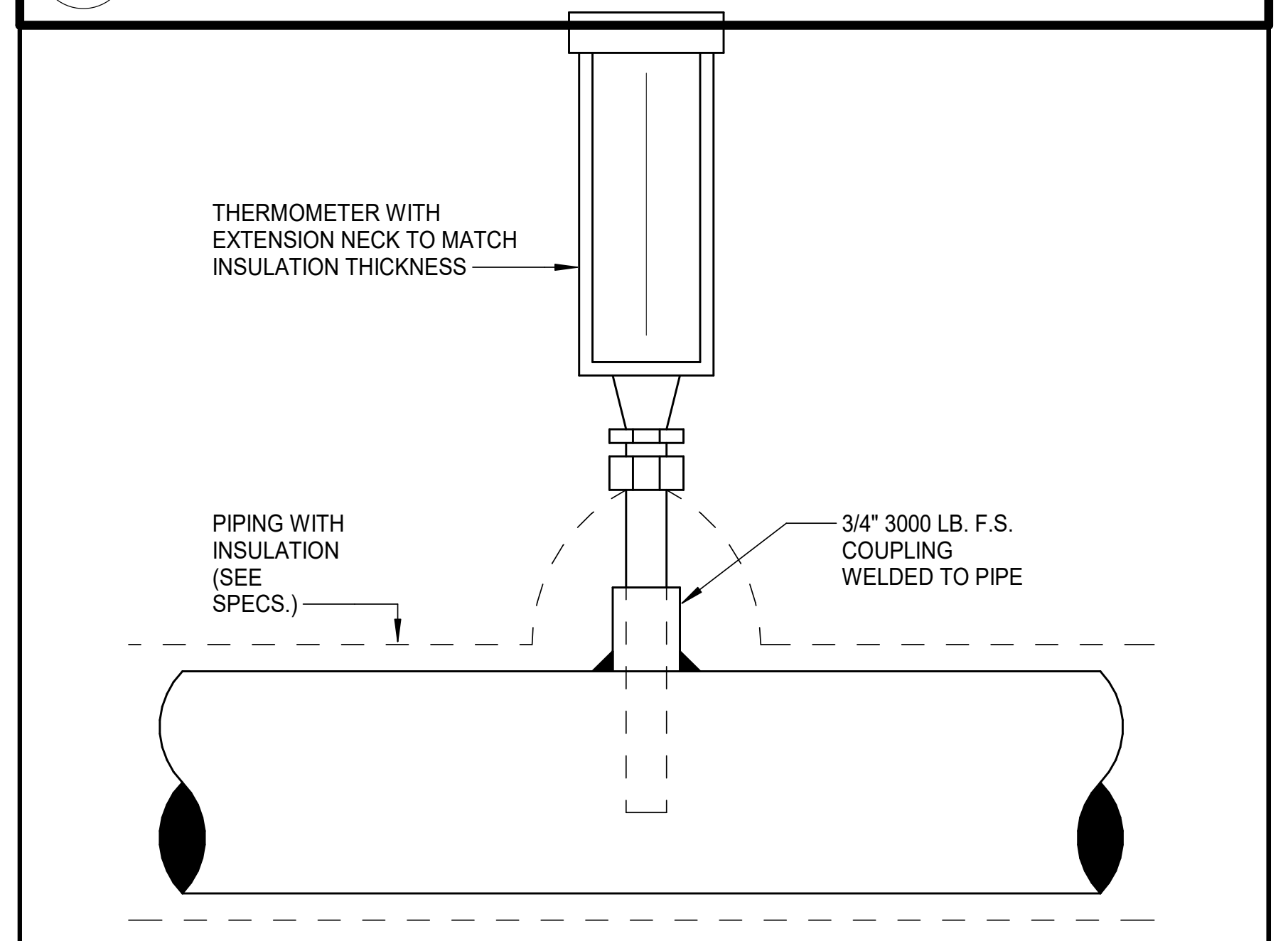
6 FLEX DUCT CONNECTION AT SUPPLY AIR DIFFUSER

SCALE: NONE



2 INSULATED PIPE THRU ROOF

SCALE: NONE

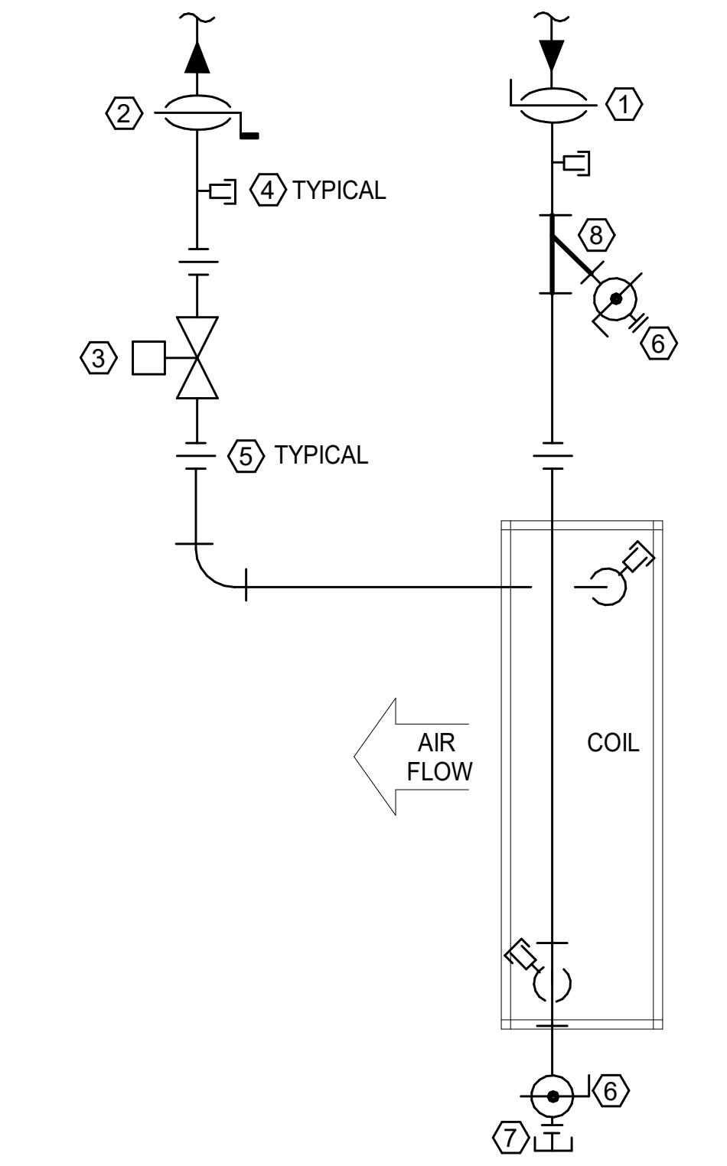


NOTES:

1. SEE TEMPERATURE TEST WELL DETAIL FOR MOUNTING ARRANGEMENTS AND CLEARANCES
2. MOUNT TO BE READABLE FROM FLOOR AT 5'-6" EYE LEVEL (7'-0" MAX.)

16 THERMOMETER INSTALLATION

SCALE: NONE

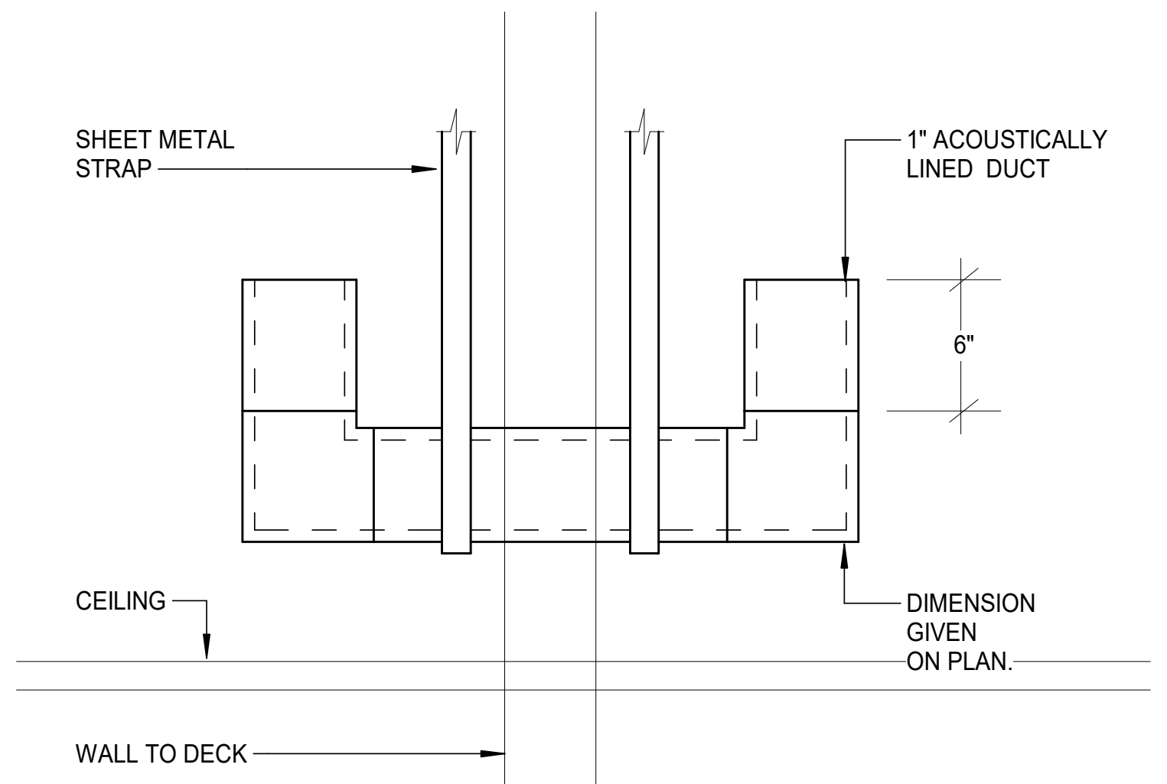


KEYED NOTES:

1. SHUT OFF VALVE
2. BALANCING VALVE
3. CONTROL VALVE
4. TEMPERATURE/PRESSURE TEST STATION
5. UNION (2" & SMALLER ONLY, FLANGE CONNECTION FOR LARGER PIPES)
6. 1/2" BALL VALVE WITH HOSE THREAD ADAPTER, CAP AND CHAIN
7. DIRT LEG
8. PIPE STRAINER

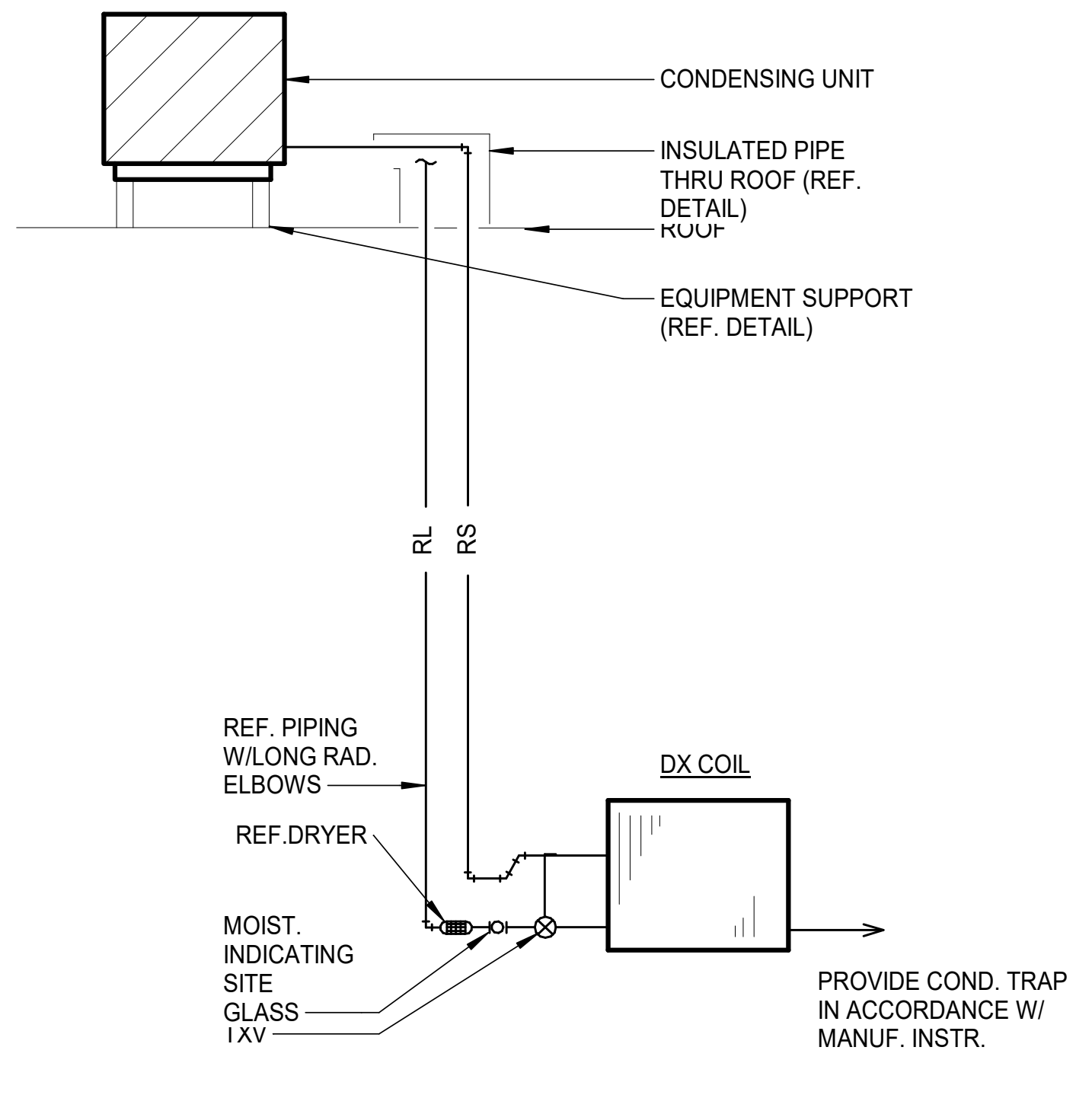
9 PIPING AT HOT WATER COIL 2-WAY

SCALE: NONE



5 TRANSFER AIR DUCT

SCALE: NONE



1 REFRIGERANT PIPING DIAGRAM

SCALE: NONE

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL DETAILS

M5.01

of

FAN SCHEDULE

TAG	LOCATION	CFM	EXT. STATIC PRESSURE (IN.W.C.)	MAX RPM	HORSE POWER	CURRENT CHAR			LOCALLY SWITCHED	INTERLOCK WITH	FAN TYPE	DRIVE TYPE	MANUFACTURER	MODEL NUMBER	REMARKS
						V	P	F							
EF-G4	BOYS 4019	450	0.35	1,225	0.25	120	1	60	-	AHU-G6	ROOF MOUNTED	BELT	COOK	ACEB	(1,2,3,4,5)
EF-G5	SCULPTURE 4010	400	0.35	1,050	0.25	120	1	60	T-STAT	-	ROOF MOUNTED	BELT	COOK	ACEB	(1,2,3,4,5)
EF-G6	SCULPTURE 4010	900	0.45	1,200	0.5	120	1	60	TIMER	-	ROOF MOUNTED	BELT	COOK	ACEB	(1,2,3,4,5)
EF-G7	BOYS 4019	1,450	0.35	1,200	0.5	120	1	60	-	AHU-G6	ROOF MOUNTED	BELT	COOK	ACEB	(1,2,3,4,5)
EF-G8	BOYS 4019	700	0.35	1,200	0.25	120	1	60	-	AHU-G6	ROOF MOUNTED	BELT	COOK	ACEB	(1,2,3,4,5)
EF-G9	WELDING 4017	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	(1,2,6)
EF-G10	WELDING 4017	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	(1,2,6)
EF-G11	WELDING 4017	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	(1,2,6)
EF-G12	WELDING 4017	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	(1,2,6)
EF-G13	WELDING 4017	4,800	2.50	2,000	5	460	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	(1,2,6)
EF-SB-1	ATH STOR	1,200	0.50	1,350	0.5	120	1	60	H-STAT	-	INLINE	DIRECT	COOK	SQND	(1,2,7,8)

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. REFER MANUFACTURER FOR INSTALLATION GUIDE.
2. PROVIDE WITH DISCONNECT SWITCH.
3. PROVIDE WITH ROOF CURB AND BIRD SCREEN.
4. PROVIDE WITH MOTORIZED DAMPER.
5. ROOF MOUNTED BELT DRIVEN DOWNBLAST CENTRIFUGAL EXHAUST FAN.
6. ROOF MOUNTED BELT DRIVEN UPBLAST VENT SET EXHAUST FAN.
7. SUSPEND UNIT WITH FOUR THREADED HANGER RODS ATTACHED TO TWO UNISTRUT RUNNERS SECURED TO STRUCTURE. PROVIDE SPRING ISOLATION. REFER TO MANUFACTURER FOR MORE DETAILS.
8. PROVIDE WITH FAN SPEED CONTROLLER

PUMP

TAG	SERVICE	TYPE	GPM	HEAD (FT.)	MOTOR HORSE POWER	MAX. RPM	CURRENT CHARAC.			MANUFACTURER	MODEL NUMBER	REMARKS
							V	P	F			
N-HWP-04	HW	VERTICAL INLINE	341	50.00	7.5	1800	460	3	60	ARMSTRONG	4300	1,2,3
PCHP-1	CHW	DOUBLE SUCTION SPLIT CASE	1,125	120.00	50.0	1800	480	3	60	ARMSTRONG	4600	1,2,3
PCHP-2	CHW	DOUBLE SUCTION SPLIT CASE	1,125	120.00	50.0	1800	480	3	60	ARMSTRONG	4600	1,2,3
PCHP-3	CHW	DOUBLE SUCTION SPLIT CASE	1,125	120.00	50.0	1800	480	3	60	ARMSTRONG	4600	1,2,3

GENERAL NOTES:
1. PUMP IS TO HAVE A NON-OVERLOADING MOTOR.
2. MINIMUM RECOMMENDED CLEARANCE AROUND A PUMP IS 24 INCHES. MAINTAIN MINIMUM CLEARANCES AS REQUIRED FOR SERVICE, MAINTENANCE, AND INSPECTION.

REMARKS:
1. PROVIDE WITH VARIABLE FREQUENCY DRIVE.
2. PROVIDE SUCTION DIFFUSER AT PUMP INLET.
3. PROVIDE PUMP WITH GAUGE TAPPINGS.

SHELL & TUBE HEAT EXCHANGER

MARK	ACTUAL CAPACITY (TONS)	TUBESIDE				SHELLSIDE				MANUFACTURER	MODEL NUMBER	REMARKS
		ENTERING WATER TEMP. (°F)	LEAVING WATER TEMP.(°F)	GPM	PRESSURE DROP (FT.)	ENTERING WATER TEMP.(°F)	LEAVING WATER TEMP. (°F)	GPM	PRESSURE DROP (FT.)			
HX-1	853,000	80 °F	85 °F	341	6.0	180 °F	160 °F	85	1.5	BELL & GOSSETT	CENTURY	1,2

REMARKS:
1. EXCHANGER SHALL MEET OR EXCEED EFFICIENCIES AS OUTLINED IN ASHRAE 90.1.
2. EXCHANGER SHALL MEET OR EXCEED CAPACITY AT SCHEDULED WATER TEMPERATURES.

SCROLL PACKAGED AIR COOLED CHILLER

MARK	ACTUAL CAPACITY (TONS)	LEAVING WATER TEMP.(°F)	GPM	PRESSURE DROP (FT.)	AMBIENT AIR TEMP. (°F)	CURRENT CHARAC.			BASIS OF DESIGN		REMARKS
						V	P	F	MOCP	MCA	
ACCH-1	150	42	302	20.0	95 °F	480		60	400	336	1,2,3,4,5

GENERAL NOTES:
1. MAXIMUM FOULING FACTOR FOR THE EVAPORATOR IS 0.0001
2. MAINTAIN MINIMUM CLEARANCES REQUIRED BY CHILLER MANUFACTURER FOR PROPER AIRFLOW TO FANS AND UNIT. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON EQUIPMENT FOR SERVICE, MAINTENANCE AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCES AS REQUIRED BY NEC.
3. CHILLER SHALL MEET OR EXCEED BOTH ABOVE SCHEDULED FULL-LOAD AND PART-LOAD EFFICIENCIES INDICATED IN IECC 2021. COMPLY BY PATH A OR BY PATH B AS REQUIRED BY IECC 2021.

REMARKS:
1. PROVIDE WITH LOW AMBIENT HEAD PRESSURE CONTROL.
2. PROVIDE WITH INTEGRAL MAIN ELECTRICAL DISCONNECT SWITCH.
3. PROVIDE WITH INSULATION ON ALL SUCTION LINES.
4. PROVIDE SCROLL CHILLER WITH MINIMUM EFFICIENCY AS INDICATED PATH A: 10.1 FULL LOAD 14.0 EER IPLV OR PATH B:9.7 EER FULL LOAD:16.1 EER IPLV.
5. PROVIDE WITH POLYMER CONDENSER FANS AND COMPRESSOR BLANKETS.

DUAL DUCT AIR HANDLING UNIT

MARK	FAN							COOLING							HEATING						PIPE SIZE TO COIL (IN.)		REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER	CURRENT			AIR TEMPERATURE (°F)				WATER			HEATING AIR CFM	ENTERING AIR TEMPERATURE (°F)	MIN. HEATING CAPACITY	WATER			CHILLED WATER	HOT WATER	
					V	PH	F	ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP (°F)	GPM	MAX. PRESSURE DROP (IN.)				ENTERING TEMP. (°F)	GPM	MAX. PRESSURE DROP (IN.)			
AHU-G5	9,495	3,000	2.50	15.0	480	3	60	75.0	62.5	54.0	53.5	45	38.0	15.0	7,600	64.5	250,212	180.0	12.6	120	2"	1 1/4"	(1,2,3,4,5,6,7,8)
AHU-G6	9,800	3,300	2.50	15.0	480	3	60	75.0	62.5	54.0	53.5	45	39.2	15.0	7,840	64.4	259,096	180.0	13.0	120	2"	1 1/2"	(1,2,3,4,5,6,7,8)

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. HORIZONTAL BLOW THROUGH DUAL DUCT UNIT.
2. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
3. PROVIDE LOW VELOCITY ANGLED FILTER SECTION.
4. PROVIDE VARIABLE FREQUENCY DRIVE.
5. PROVIDE 2-WAY COOLING CONTROL VALVES.
6. PROVIDE 2-WAY HEATING CONTROL VALVES.
7. PROVIDE UNIT WITH COLD TOP DISCHARGE.
8. PROVIDE UNIT WITH HOT TOP DISCHARGE.

100% OUTSIDE AIR HANDLING UNIT

MARK	FAN							COOLING								HEATING					PIPE SIZE TO COIL (IN.)		REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER	CURRENT			AIR TEMPERATURE (°F)				MIN. COOLING CAPACITY	WATER			ENTERING AIR TEMPERATURE (°F)	MIN. HEATING CAPACITY	WATER			CHILLED WATER	HOT WATER	
					V	PH	F	ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB		ENTERING TEMP (°F)	GPM	PRESSURE DROP (FT.)			ENTERING TEMP. (°F)	GPM	PRESSURE DROP (FT.)			
OAU-G7	7,800	7,800	1.50	10.0	480	3	60	98.0	79.0	53.0	52.5	727,000	45	121.0	15.0	27.0	193,752	180.0	9.8	10.0	4"	1 1/4"	1,2,3,4,5,6,7,8

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. VELOCITY NOT TO EXCEED 450 FPM ON COOLING COIL.
2. PROVIDE HORIZONTAL UNIT.
3. PROVIDE CONSTANT VOLUME UNIT WITH VARIABLE FREQUENCY DRIVE.
4. PROVIDE TOP DISCHARGE.
5. PROVIDE TWO-WAY COOLING CONTROL VALVES.
6. PROVIDE TWO-WAY HEATING CONTROL VALVES.
7. PROVIDE HOT WATER COIL IN PRE-HEAT POSITION.
8. PROVIDE UNIT WITH ANGLED FILTER SECITON.

DUCTLESS MINI-SPLIT - INDOOR UNIT

MARK	FAN					AIR TEMPERATURE (°F)		COOLING		HEATING			COOLING	REMARKS
	SUPPLY AIR CFM	WATTS	CURRENT CHARAC.			ENTERING DRY BULB	ENTERING WET BULB	MIN. TOTAL CAPACITY (BTUH)	MIN. SENS. CAPACITY (BTUH)	ENTERING AIR TEMP.(°F)	MINIMUM CAPACITY (BTUH)	KW	MINIMUM SEER/ HSPF2	
			V	P	F									
DMS-1	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-2	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,5,6)
DMS-3	900	40.0	208	1	60	75.0	62.5	36,000	28,800	0	0	2	15.0/-	(1,2,3,4,5,6)
DMS-4	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-5	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-6	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,5,6)
DMS-7	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-8	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-9	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-10	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-11	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-12	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-13	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,5,6)
DMS-14	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,5,6)
DMS-15	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-16	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,5,6)
DMS-17	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	(1,2,3,4,6)
DMS-18	375	40.0	208	1	60	75.0	62.5	18,000	14,400	72	7,290	2	14.3/7.5	(1,2,3,4,7)
DMS-19	375	40.0	208	1	60	75.0	62.5	18,000	14,400	72	7,290	2	14.3/7.5	(1,2,3,4,7)
DMS-20	375	40.0	208	1	60	75.0	62.5	18,000	14,400	72	7,290	2	14.3/7.5	(1,2,3,4,7)

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.

REMARKS:
1. UNIT TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. CONTROLLED BY PROGRAMMABLE WIRED THERMOSTAT.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT.
5. PROVIDE WITH LITTLE GIANT CONDENSATE PUMP MODEL VCMA-20ULS-C-PRO, 1/30 HP, 115V/1PH/60HZ. MOUNT PUMP UNDER HIGH WALL UNIT.
6. COOLING ONLY WALL MOUNTED UNIT.
7. HEAT PUMP WALL MOUNTED UNIT.

GRILLE

MARK	SERVICE	TYPE	DAMPER	CONSTRUCTION MATERIAL	FINISH COLOR	MANUFACTURER	MODEL NUMBER	DESCRIPTION
A	SUPPLY AIR	DIFFUSER	-	STEEL	WHITE	TITUS	TDC	EXPOSED T-BAR CEILING FRAME STYLE WITH 24"X24" FACE. LOUVERED FACE
B	RETURN AIR	DIFFUSER	-	STEEL	WHITE	TITUS	350RL	EXPOSED T-BAR CEILING FRAME STYLE WITH A 24"X24" FACE. PERFORATED.
C	SUPPLY AIR	DIFFUSER	-	STEEL	WHITE	TITUS	TDC	SURFACE MOUNT CEILING FRAME STYLE WITH 18"X18" OR 12"X12" FACE.
E	EXHAUST AIR	DIFFUSER	-	STEEL	WHITE	TITUS	350RL	EXPOSED T-BAR CEILING FRAME STYLE WITH A 24"X24" OR 12"X12" FACE. PERFORATED FACE.
F	EXHAUST AIR	DIFFUSER	-	STEEL	WHITE	TITUS	350RL	SURFACE MOUNT CEILING FRAME STYLE WITH 18"X18" OR 12"X12" FACE. PERFERATED FACE.
G	SUPPLY AIR	GRILLE	-	STEEL	WHITE	TITUS	300RL	DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)
H	GRILLE	SUPPLY AIR	-	STEEL	WHITE	TITUS	350RL	DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)
I	SUPPLY AIR	GRILLE	-	STEEL	WHITE	TITUS	S300FL	SPIRAL DUCT MOUNTED DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)
J	GRILLE	EXHAUST AIR	-	STEEL	WHITE	TITUS	350RL	DOUBLE DEFLECTION SIDEWALL GRILLE WITH HORIZONTAL FRONT BARS. SURFACE MOUNTED (1)

GENERAL NOTES:
1. DAMPERS NOTED AS U.L. SHALLBE A 'U.L.' CLASSIFIED CEILING RADIATION DAMPER WITH THERMAL BLANKET.
2. COORDINATE FINAL AIR DEVICE LOCATION AND FINISH COLOR WITH ARCHITECT.

REMARKS:
1. N/A

DAMPER

MARK	ACTUATOR	DUTY	BLADE ACTION	MANUFACTURER	MODEL NUMBER	REMARKS
D-1	MANUAL BALANCING	UNDER 9" WIDE	N/A	N/A	N/A	SEE SMACNA CONSTRUCTION DETAILS REFERENCED "TYPICAL CONSTRUCTION DETAILS FOR LOW VELOCITY DUCTS."
D-2	MANUAL BALANCING	OVER 9" WIDE	OPPOSED	RUSKIN	MD-35	MANUAL DAMPER WITH STANDARD CONSTRUCTION FEATURES AND VENTLOCK #639 LOCKING REGULATOR.
D-3	MOTORIZED	OVER 9" WIDE	OPPOSED	RUSKIN	CD-60	LOW LEAKAGE DAMPER WITH BLADE SEALS

NOTES:
N/A - NOT APPLICABLE

RELIEF VENT & O.A. INTAKE

MARK	CFM	MAX. S.P. (IN.WC.)	MIN. THROAT AREA	MODEL	SERVES	REMARKS
OAI-G1	7800	0.20	14.18	TRE	OAU-G7	(1,2)
OAI-G2	7200	0.10	20.34	TRE	EF-G11/EF-G12	(1,2)
OAI-G3	7200	0.10	20.34	TRE	EF-G9/EF-G10	(1,2)
OAI-G4	4800	0.10	12.31	TRE	EF-G13	(1,2)
OAI-G5	2800	0.10	7.11	TRE	DC-1	(1,2)

REMARKS:
1. PROVIDE WITH ROOF CURB.
2. PROVIDE WITH BIRD SCREEN.

DUST COLLECTOR

MARK	CFM	MAX S.P. (IN. W.G.)	HORSE POWER	CURRENT CHARAC.			MANUFACTURER	MODEL #	REMARKS
				V	PH	F			
DC-1	2,800	10.0	20	480		60	DONALDSON	DC	1,2

GENERAL NOTES:
1. N/A

REMARKS:
1. PROVIDE OUTLET SILENCER.
2. PROVIDE TWO 55 GALLON STORAGE DRUMS.

DUCTLESS MINI-SPLIT - OUTDOOR UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM SEER/HSPF 2	CURRENT CHARAC.			RELATED UNIT MARK	REMARKS
				V	PH	F		
DMSCU-1	18,000	95	15.0/-	208	1	60	DMS-1	(1,2,3)
DMSCU-2	18,000	95	15.0/-	208	1	60	DMS-2	(1,2,3)
DMSCU-3	36,000	95	15.0-/-	208	1	60	DMS-3	(1,2,3)
DMSCU-4	18,000	95	15.0/-	208	1	60	DMS-4	(1,2,3)
DMSCU-5	18,000	95	15.0/-	208	1	60	DMS-5	(1,2,3)
DMSCU-6	18,000	95	15.0/-	208	1	60	DMS-6	(1,2,3)
DMSCU-7	18,000	95	15.0/-	208	1	60	DMS-7	(1,2,3)
DMSCU-8	18,000	95	15.0/-	208	1	60	DMS-8	(1,2,3)
DMSCU-9	18,000	95	15.0/-	208	1	60	DMS-9	(1,2,3)
DMSCU-10	18,000	95	15.0/-	208	1	60	DMS-10	(1,2,3)
DMSCU-11	18,000	95	15.0/-	208	1	60	DMS-11	(1,2,3)
DMSCU-12	18,000	95	15.0/-	208	1	60	DMS-12	(1,2,3)
DMSCU-13	18,000	95	15.0/-	208	1	60	DMS-13	(1,2,3)
DMSCU-14	18,000	95	15.0/-	208	1	60	DMS-14	(1,2,3)
DMSCU-15	18,000	95	15.0/-	208	1	60	DMS-15	(1,2,3)
DMSCU-16	18,000	95	15.0/-	208	1	60	DMS-16	(1,2,3)
DMSCU-17	18,000	95	15.0/-	208	1	60	DMS-17	(1,2,3)
DMSCU-18	18,000	95	14.3/7.5	208	1	60	DMS-15	(1,2,3,4)
DMSCU-19	18,000	95	14.3/7.5	208	1	60	DMS-16	(1,2,3,4)
DMSCU-20	18,000	95	14.3/7.5	208	1	60	DMS-17	(1,2,3,4)

GENERAL NOTES:
1. MINIMUM RECOMMENDED CLEARANCE AROUND ROOFTOP UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. PROVIDE WITH LOW AMBIENT CONTROL DOWN TO 20°F.
2. PROVIDE WITH DISCONNECT SWITCH.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. PROVIDE WITH WALL MOUNT BRACKET FOR WALL MOUNT INSTALLATION.

DUAL DUCT TERMINAL BOX

MARK	COOLING			HEATING		REMARKS
	CFM		INLET DIAMETER SIZE (IN.)	MAXIMUM CFM	INLET DIAMETER SIZE (IN.)	
	MAX.	MIN.				
DDB-G5-01	1,700	540	14	1360	12	-
DDB-G5-02	1,375	440	12	1100	12	-
DDB-G5-03	1,875	600	14	1500	12	-
DDB-G5-04	1,510	480	12	1210	12	-
DDB-G5-05	1,760	560	14	1410	12	-
DDB-G5-06	600	190	8	480	7	-
DDB-G5-07	675	220	8	540	8	-
DDB-G6-01	3,400	1,150	16	2720	16	-
DDB-G6-02	1,650	560	14	1320	12	-
DDB-G6-03	2,775	940	16	2220	16	-
DDB-G6-04	900	310	10	720	9	-
DDB-G6-05	2,775	940	16	2220	16	-

GENERAL NOTES:
1. MAXIMUM STATIC PRESSURE DROP OF AIR THROUGH THE TERMINAL BOX SHALL BE 0.2" W.G.
2. MAXIMUM VELOCITY THROUGH DUCT INLET SHALL BE 2,000 FPM.
3. SUSPEND UNIT WITH FOUR THREADED HANGER RODS ATTACHED TO TWO UNISTRUT RUNNERS SECURED TO STRUCTURE. REFER TO MANUFACTURER FOR MORE DETAILS.
4. UNITS TO BE MOUNTED BETWEEN BEAMS AND 18" MAXIMUM ABOVE CEILING. AVOID MOUNTING OVER LIGHTS WHEREVER POSSIBLE.

REMARKS:
1. N/A

VARIABLE VOLUME TERMINAL BOX

MARK	MAXIMUM CFM	MINIMUM CFM	INLET DIAMETER SIZE (IN.)	REMARKS
VAV-G7-01	3,000	630	16	-
VAV-G7-02	3,300	630	16	-
VAV-G8-03	1,500	360	12	-

GENERAL NOTES:
1. MAXIMUM STATIC PRESSURE DROP OF AIR THROUGH THE TERMINAL BOX SHALL BE 0.2" ESP.
2. MAXIMUM VELOCITY THROUGH DUCT INLET SHALL BE 2,000 FPM.
3. MAXIMUM STATIC PRESSURE DROP THROUGH HEATER COIL SHALL BE 0.25" ESP.
SUSPEND UNIT WITH FOUR THREADED HANGER RODS ATTACHED TO TWO UNISTRUT RUNNERS SECURED TO STRUCTURE. REFER TO MANUFACTURER FOR MORE DETAILS.

REMARKS:
1. N/A

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

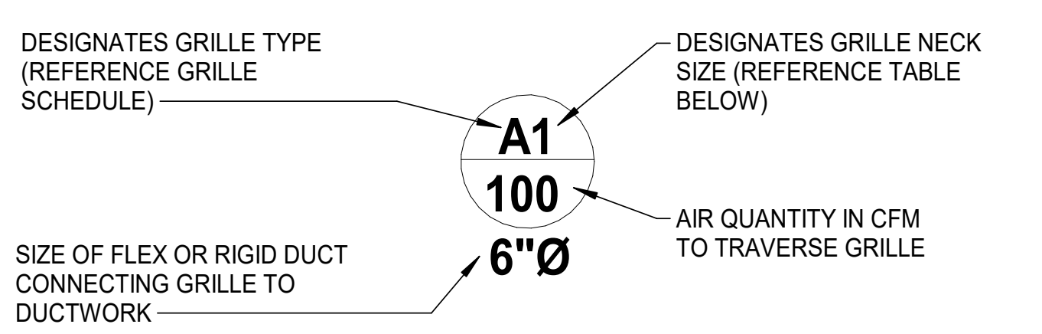
MECHANICAL LEGENDS & SCHEDULES

M6.01

of

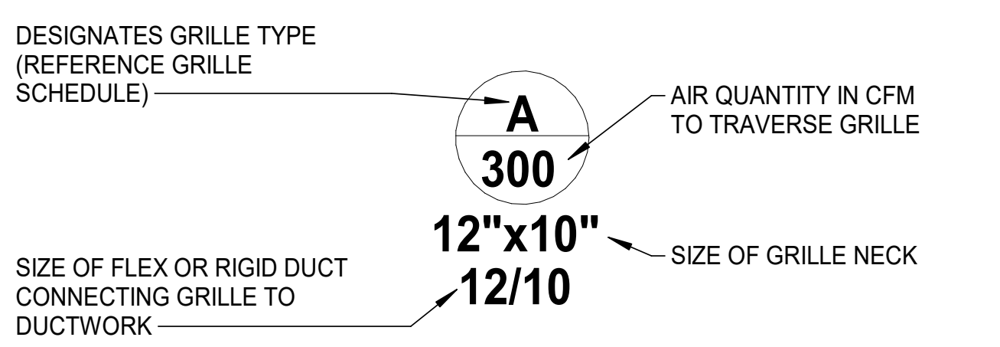
GRILLE SIZING SCHEDULE

STANDARD GRILLE



ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN.

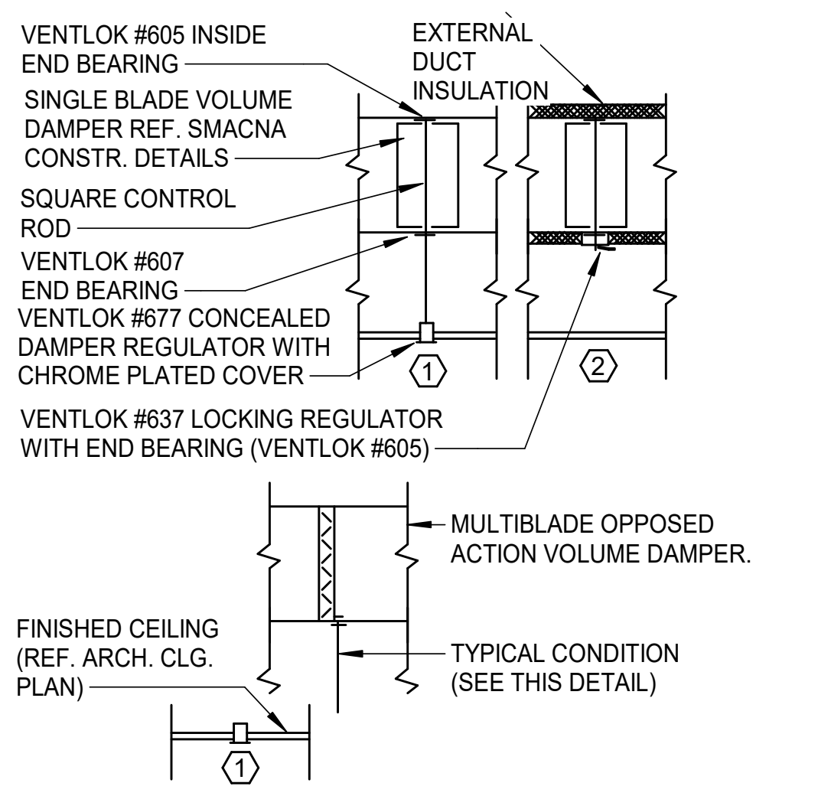
REGISTER OR NONSTANDARD GRILLE



ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN. ALL REGISTERS SHALL HAVE A 45° HORIZONTAL DEFLECTION UNLESS OTHERWISE SHOWN.

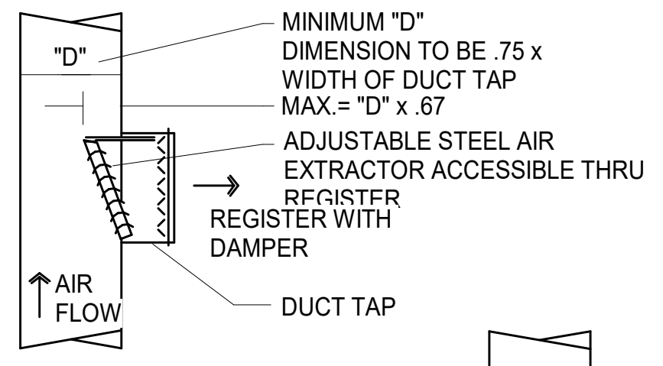
GRILLE SIZE DESIGNATION	GRILLE NECK SIZE	GRILLE SIZE DESIGNATION	GRILLE NECK SIZE
1	6" x 6"	7	15" x 15"
2	8" x 8"	8	16" x 16"
3	9" x 9"	9	18" x 18"
4	10" x 10"	10	20" x 20"
5	12" x 12"	11	22" x 22"
6	14" x 14"	12	24" x 24"

DUCTWORK CONSTRUCTION DETAILS



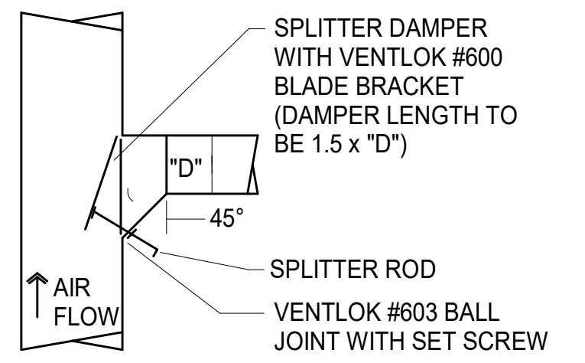
① **DAMPER ABOVE INACCESSIBLE CEILING**

② **DAMPER ABOVE LIFT-OUT CEILING**

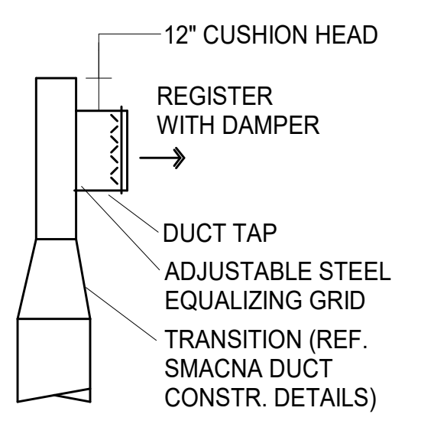


NOTES:
1. MAX. WIDTH OF DUCT TAP SHALL BE 48". PROVIDE BOTTOM BRACKET FOR SUPPORT WHERE EXTRACTOR EXCEEDS 16".
2. MAX. HEIGHT OF DUCT TAP SHALL BE 12" (MIN.= 4")

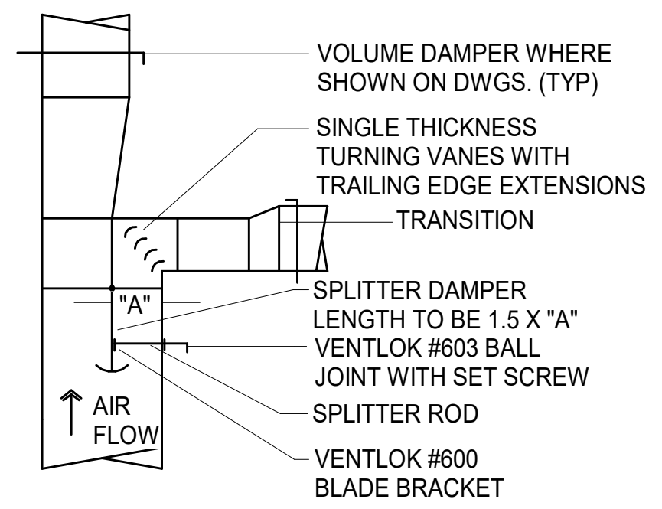
EXTRACTOR SIDEWALL REGISTER



DUCT TAP



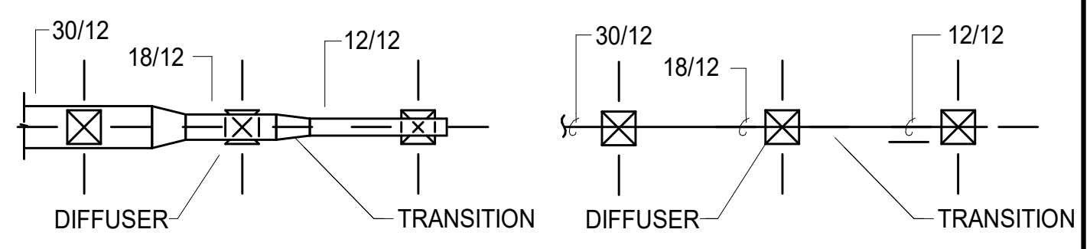
SIDEWALL REGISTER AT END OF DUCT



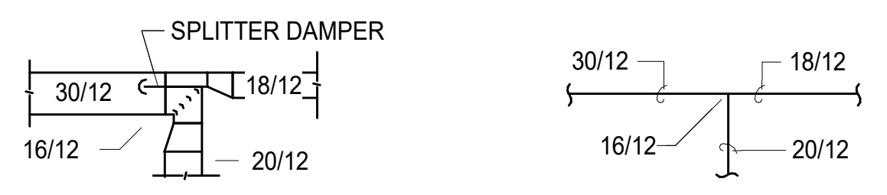
SPLITTER

DUCTWORK SYMBOLS LEGEND

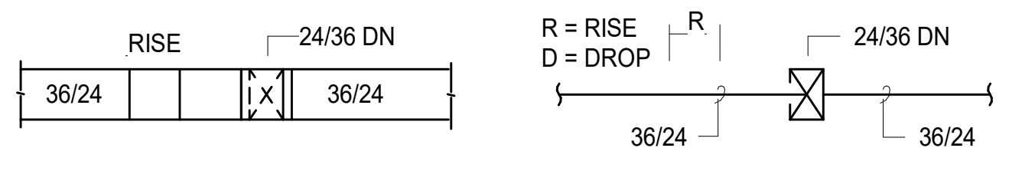
TRANSITIONS



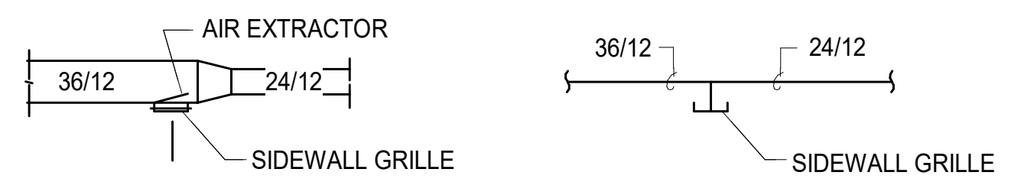
MAIN BRANCH TAKE-OFFS



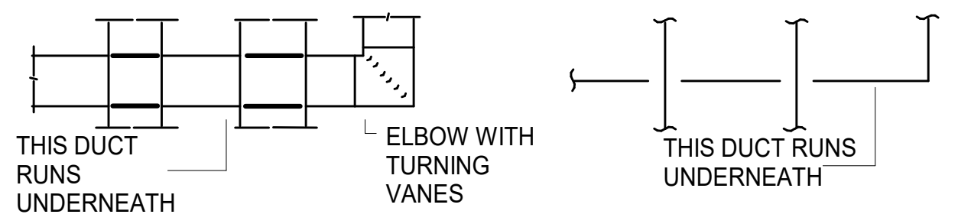
RISERS



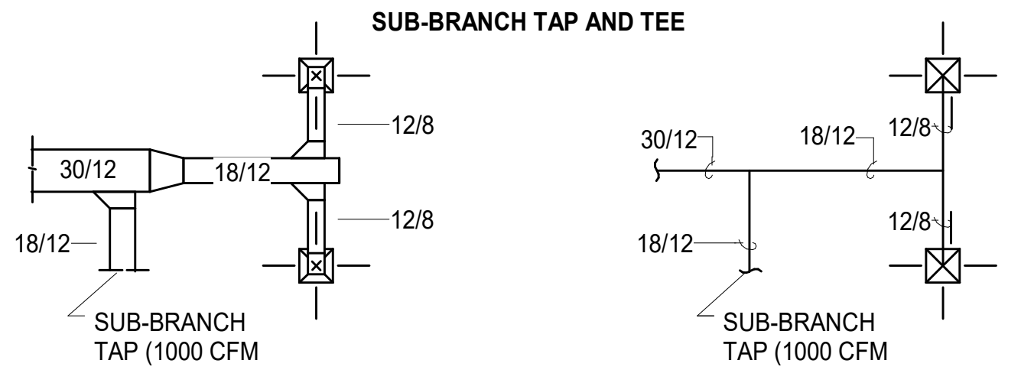
SIDEWALL REGISTERS

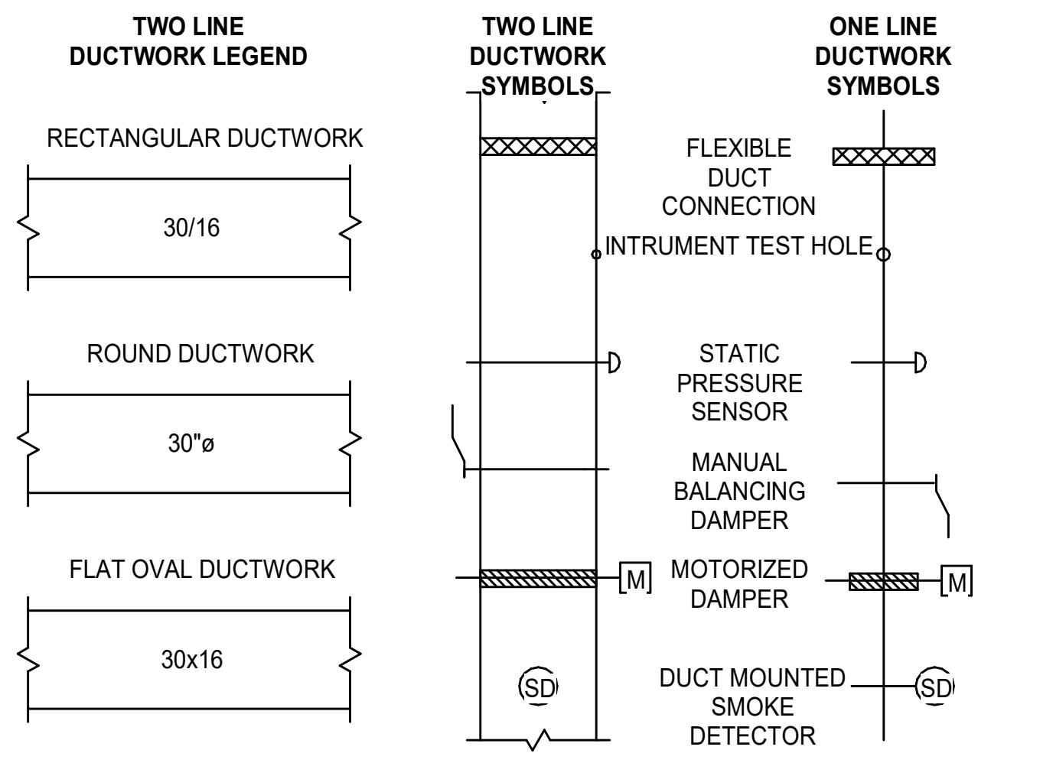


DUCT CROSSOVERS

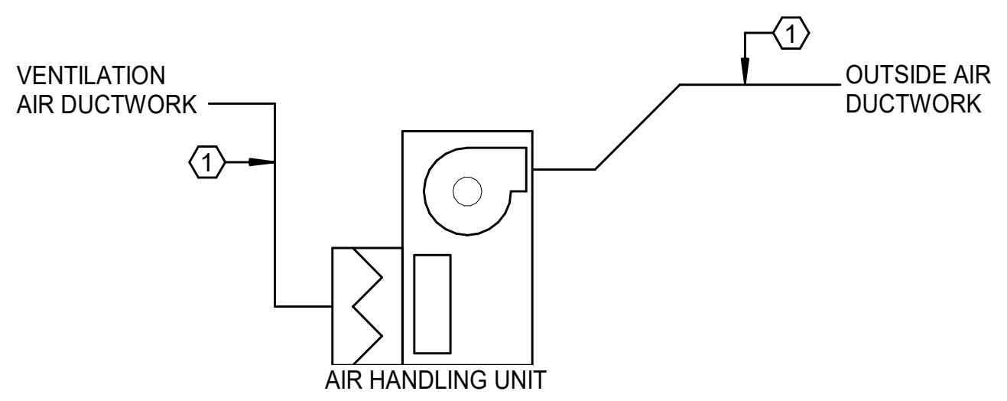


SUB-BRANCH TAP AND TEE

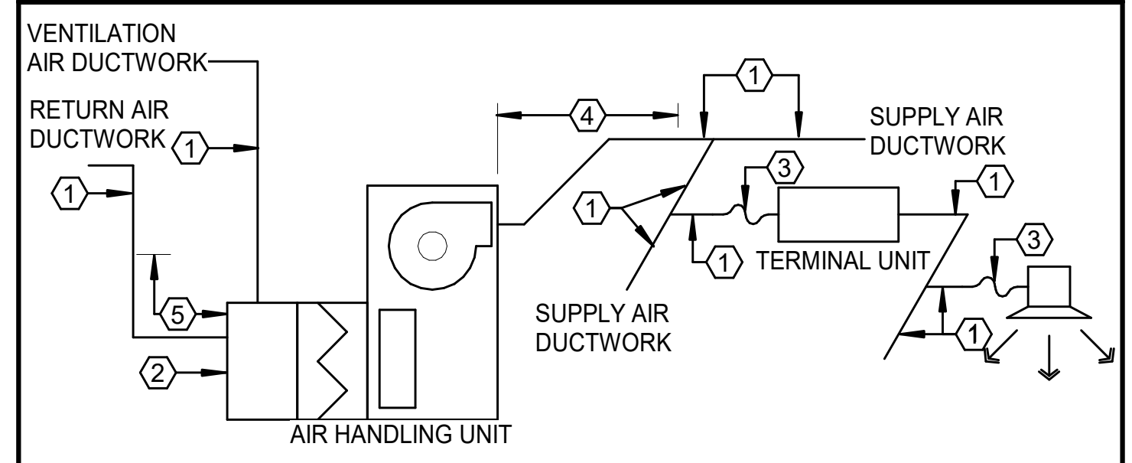




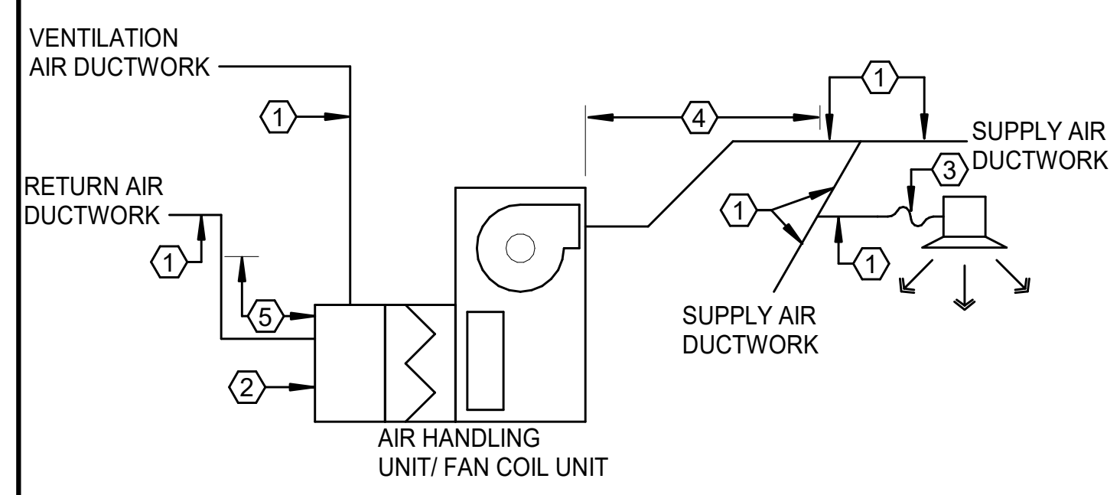
DUCT LINER AND INSULATION



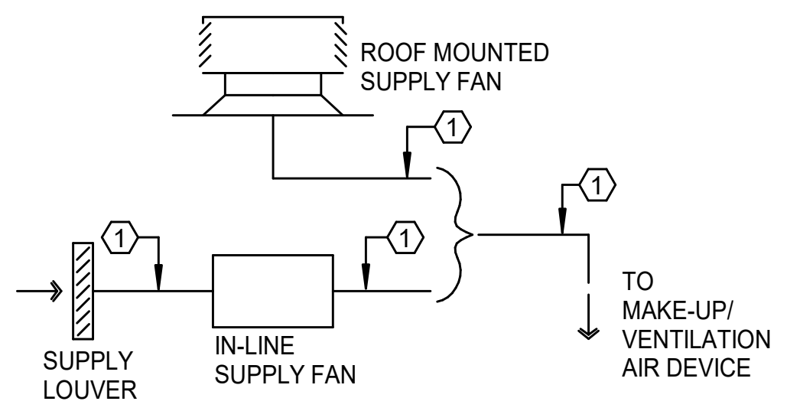
OUTSIDE AIR PRETREATMENT UNIT



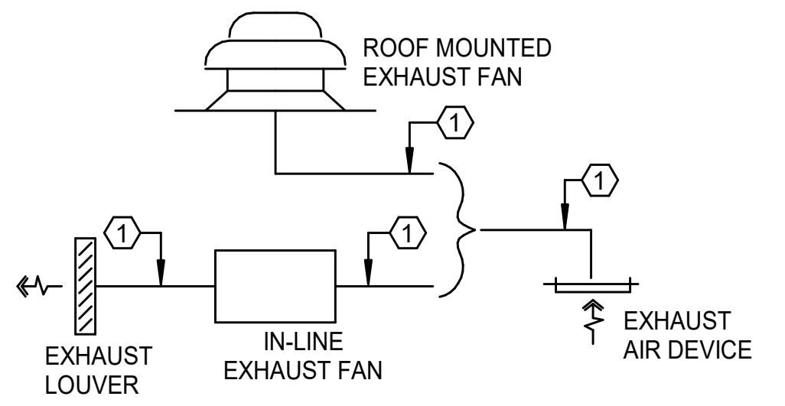
VARIABLE AIR VOLUME AIR HANDLING UNITS



AIR HANDLING UNITS AND FAN COIL UNITS



MAKE-UP/VENTILATION AIR SYSTEMS



EXHAUST AIR SYSTEMS

KEYED NOTES:

① SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.

② SHEETMETAL DUCTWORK RETURN AIR PLENUM WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.

③ FLEXIBLE DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.

④ SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT DISCHARGE TO 10'-0" DOWNSTREAM.

⑤ SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT INLET TO 10'-0" UPSTREAM.

⑥ EXHAUST DUCTWORK AS SPECIFIED WITH FIREBOARD INSULATION AS SPECIFIED.

⑦ SHEETMETAL DUCTWORK ONLY. NO INSULATION REQUIRED.

SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
⟨#⟩	KEY NOTE TAG
△#	REVISION TAG
▨	NEW EQUIPMENT
DUCTWORK	
⊠	SUPPLY AIR DUCTWORK
⧄	RETURN AIR AND OUTSIDE AIR DUCTWORK
⊠	EXHAUST AIR DUCTWORK
┼┼┼┼	FLEXIBLE DUCTWORK
⊠	SUPPLY AIR DUCTWORK THROUGH HORIZONTAL PARTITION
◣	RETURN AIR DUCTWORK THROUGH HORIZONTAL PARTITION
◀	EXHAUST AIR DUCTWORK THROUGH HORIZONTAL PARTITION
▲	FIRE DAMPER (VERTICAL)
◆	FIRE DAMPER (HORIZONTAL)
S	SMOKE DAMPER (VERTICAL)
S	SMOKE DAMPER (HORIZONTAL)
FS	COMBINATION FIRE & SMOKE DAMPER (VERTICAL)
FS	COMBINATION FIRE & SMOKE DAMPER (HORIZONTAL)
	MANUAL BALANCING DAMPER (SEE DAMPER SCHEDULE)
M	MOTORIZED DAMPER (SEE DAMPER SCHEDULE)
SENSORS	
Ⓣ	THERMOSTAT AND TEMPERATURE SENSOR
Ⓗ	HUMIDISTAT
SD	SMOKE DETECTOR
HD	HEAT DETECTOR
AIR DEVICES	
⊖	GRILLE SIZE TAG (REFER TO GRILLE SIZE LEGEND)
⊠	SUPPLY AIR GRILLE WITH FOUR-WAY THROW
⊠	SUPPLY AIR GRILLE WITH THREE-WAY THROW
⧗	SUPPLY AIR GRILLE WITH TWO-WAY THROW
◩	SUPPLY AIR GRILLE WITH TWO-WAY CORNER THROW
■	SUPPLY AIR GRILLE WITH ONE-WAY THROW
⧄	RETURN AIR GRILLE
⧄	RETURN AIR GRILLE WITH SOUND BOOT
⊠	EXHAUST AIR GRILLE
↥	SUPPLY AIR SIDEWALL GRILLE
↧	RETURN AIR SIDEWALL GRILLE
20X12	RETURN AIR OPENING ABOVE CEILING
PIPING	
-CHWS&R-	CHILLED WATER SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
—CHWS—	CHILLED WATER SUPPLY
—CHWR—	CHILLED WATER RETURN
-HWS&R-	HOT WATER FOR HYDRONIC HEATING SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
—HWS—	HOT WATER FOR HYDRONIC HEATING SUPPLY
—HWR—	HOT WATER FOR HYDRONIC HEATING RETURN
—D—	CONDENSATE DRAIN LINE
—AD—	AUXILLARY CONDENSATE DRAIN LINE
—RLR—	REFRIGERANT LIQUID & GAS RECIRCULATION LINE (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
—RL—	REFRIGERANT LIQUID LINE
—HG—	REFRIGERANT HOT GAS LINE
—RS—	REFRIGERANT SUCTION LINE
—○	ELBOW UP
—◌	ELBOW DOWN
	90° ELBOW
	45° ELBOW
	TEE
	TEE DOWN
—○—	TEE UP
	TOP BRANCH CONNECTION
	BOTTOM BRANCH CONNECTION
—‖	FLANGE
—]	CAP
	CONTINUATION
⊡	FLOOR DRAIN (REFER TO PLUMBING DRAWINGS)
—⋈—	GATE VALVE
—⋈—	GLOBE VALVE
	CHECK VALVE
	BUTTERFLY VALVE
	BUTTERFLY VALVE WITH OPERATOR
	PLUG VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
(R)	PRESSURE RELIEF VALVE
	BALL VALVE
	STRAINER
—╫—	UNION
	THERMOMETER WELL
	PETE'S PLUG
	PRESSURE GAUGE
	TEMPERATURE SENSOR IN PIPE
	VENTURI FLOW METER
	FLOW SWITCH
FM	FLOW MEASURING STATION
	EXPANSION JOINT
	FLEXIBLE CONNECTION
G.C.	GAUGE COCK
—○—	SITE GLASS
—⊗—	DIFFERENTIAL PRESSURE SENSOR
	TURBINE FLOW METER
—×—	ANCHOR
═	PIPE GUIDE
SUBSCRIPTS AND ABREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BBS	BELOW BOTTOM OF STRUCTURE
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
CA	COMBUSTION AIR
CFM	CUBIC FEET PER MINUTE
EA	EXHAUST AIR
FPM	FEET PER MINUTE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL LEGENDS & NOTES

M6.02

of

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

⟨1⟩ PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

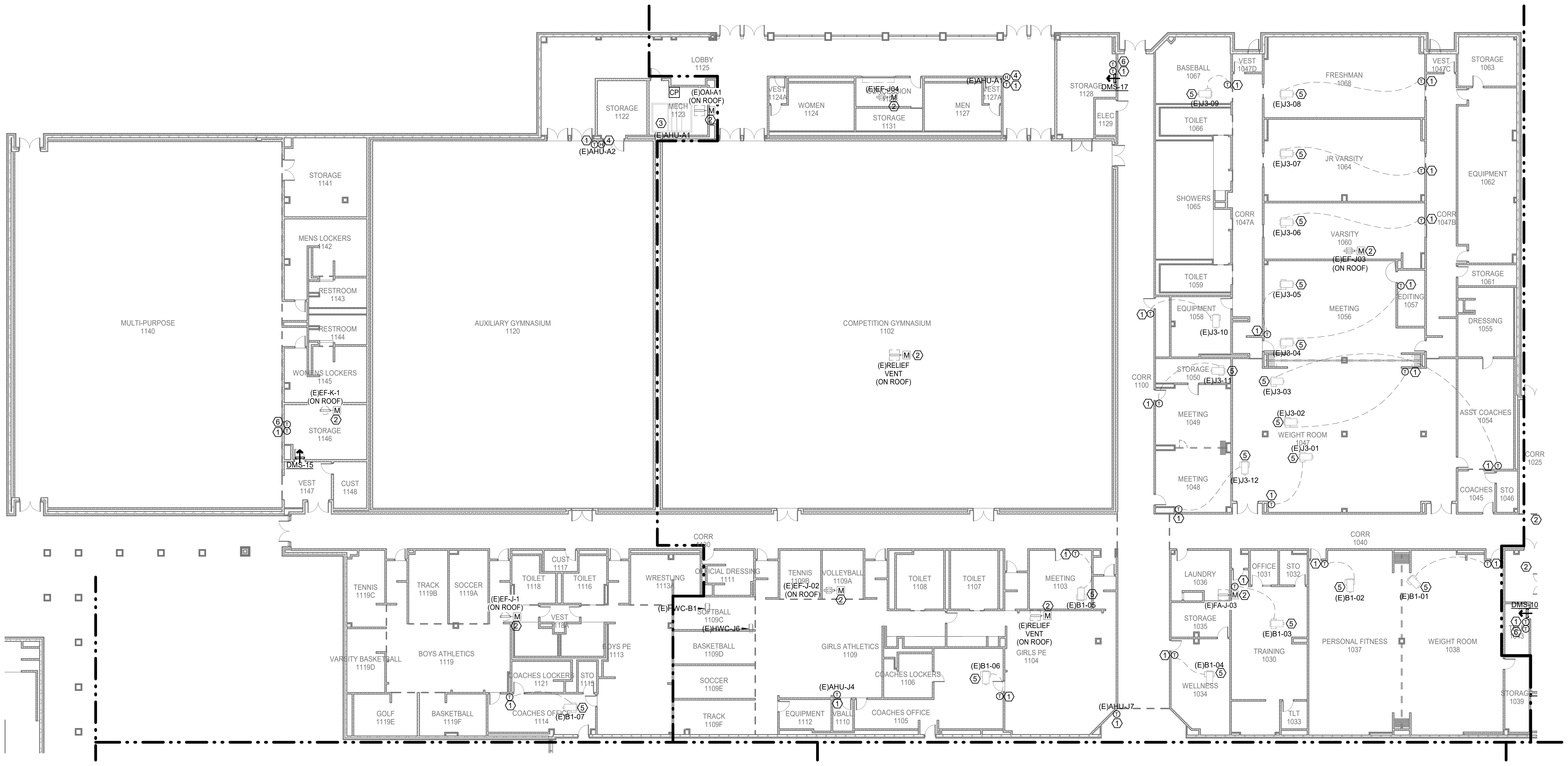
⟨2⟩ PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

⟨3⟩ EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

⟨4⟩ PROVIDE NEW DDC HUMIDITY SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

⟨5⟩ EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.

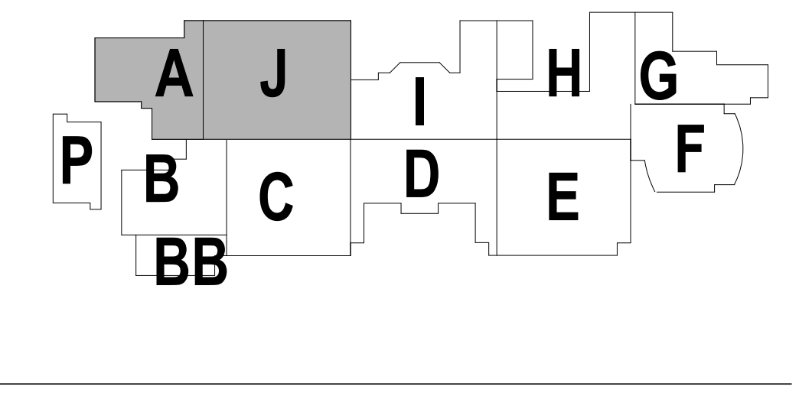
⟨6⟩ PROVIDE NEW TEMPERATURE SENSOR FOR BMCS.



N

1 **MECHANICAL CONTROLS FLOOR PLAN - LEVEL 1 - AREA A & J**
Scale: 1/16" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL CONTROLS FIRST FLOOR PLAN - AREA A & J

M7.01
____ of ____

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

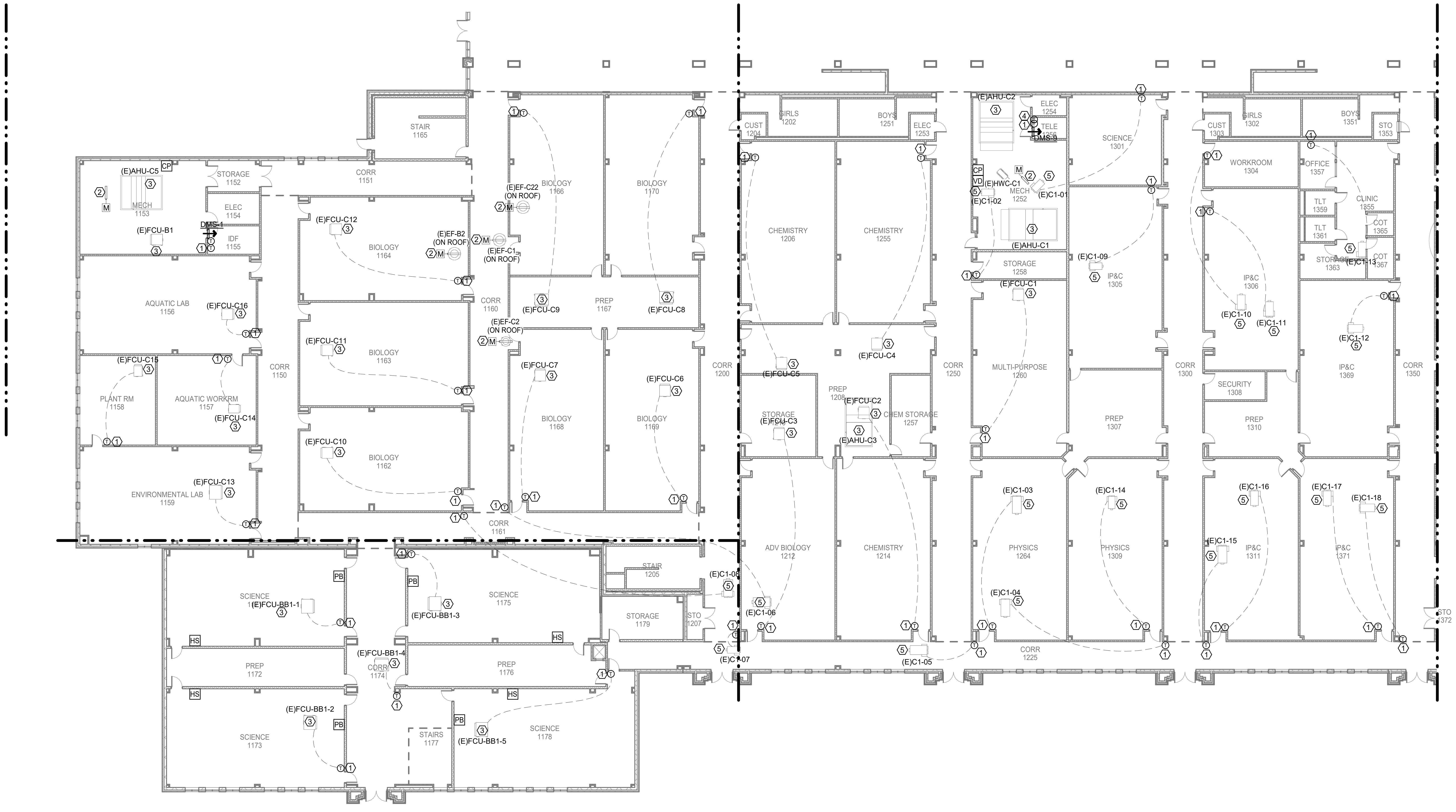
1 PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

2 PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

3 EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

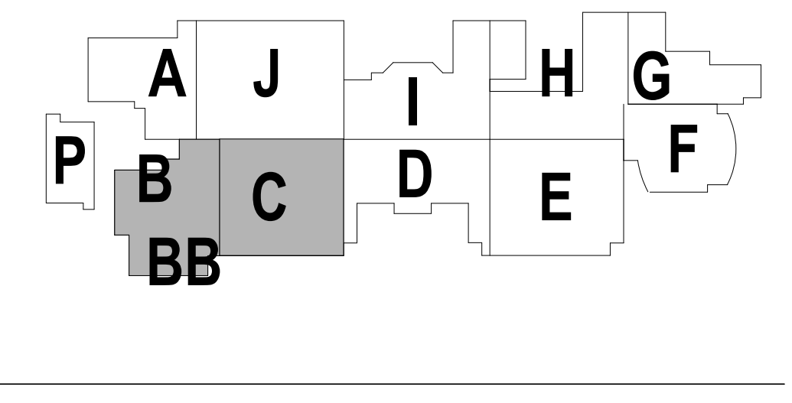
4 PROVIDE NEW TEMPERATURE SENSOR FOR BMCS.

5 EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.



1 **MECHANICAL CONTROLS FLOOR PLAN - LEVEL 1 - AREA B & C**
Scale: 1/16" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

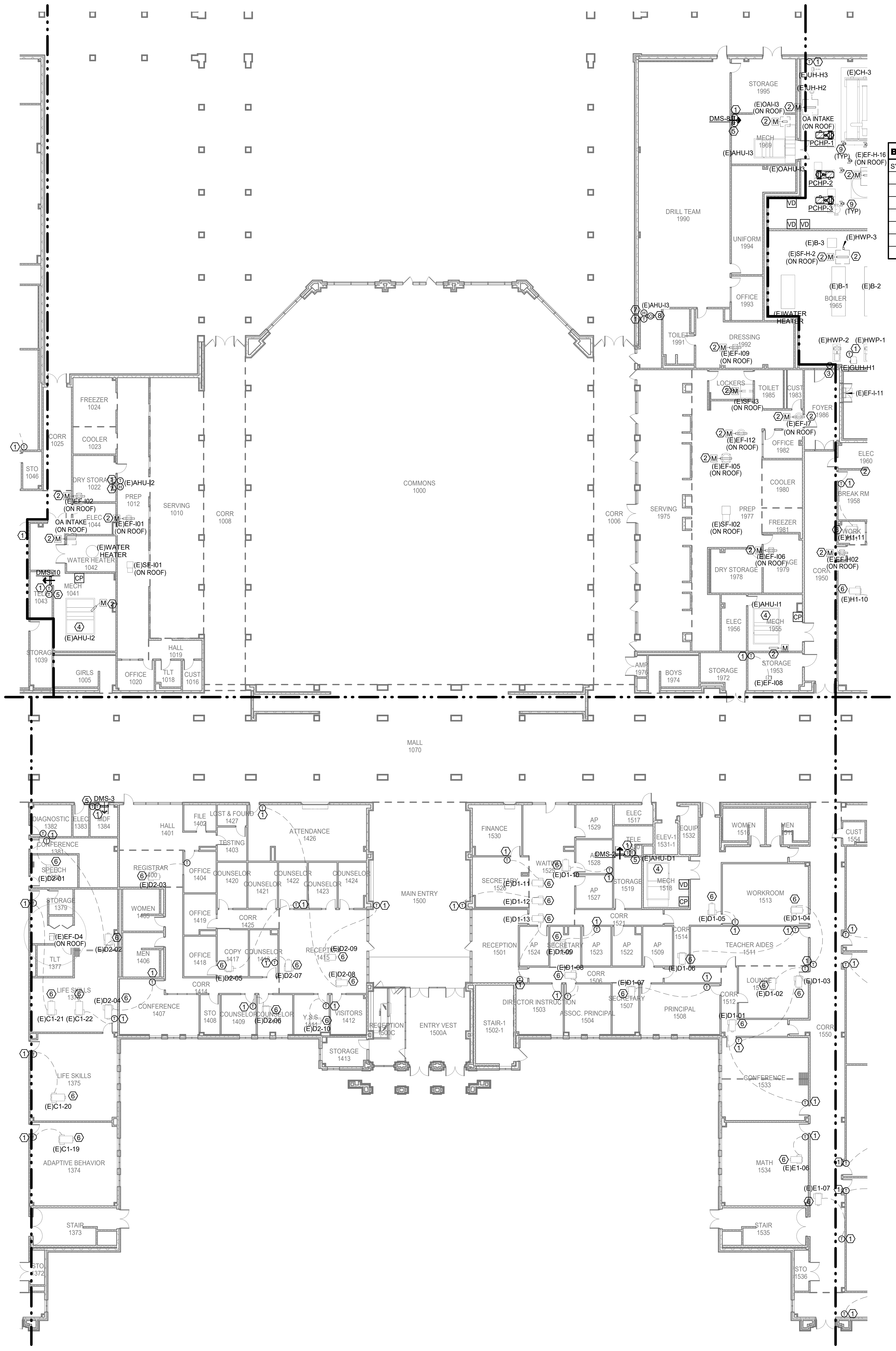
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS FIRST FLOOR PLAN - AREA B, & C

M7.02

of



1 MECHANICAL CONTROLS FLOOR PLAN - LEVEL 1 - AREA D & I

Scale: 1/16" = 1'-0"

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

⟨1⟩ PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

⟨2⟩ PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

⟨3⟩ PROVIDE, INSTALL AND STARTUP NEW CARBON MONOXIDE MONITORING SYSTEM. CO MONITORING SYSTEM SHALL BE WIRED TO BOILER AND BE PROGRAMMED TO SHUT DOWN BOILER UPON DETECTION. BMCS INTERFACE IS NOT REQUIRED. REFER TO BMCS SPECIFICATION FOR ADDITIONAL INFORMATION ON CO MONITOR.

⟨4⟩ EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

⟨5⟩ PROVIDE NEW TEMPERATURE SENSOR FOR BMCS.

⟨6⟩ EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.

⟨7⟩ PROVIDE NEW DDC HUMIDITY SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

⟨8⟩ PROVIDE NEW DDC CARBON DIOXIDE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

⟨9⟩ REPLACE EXISTING MOTORIZED CONTROL VALVE WITH NEW.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

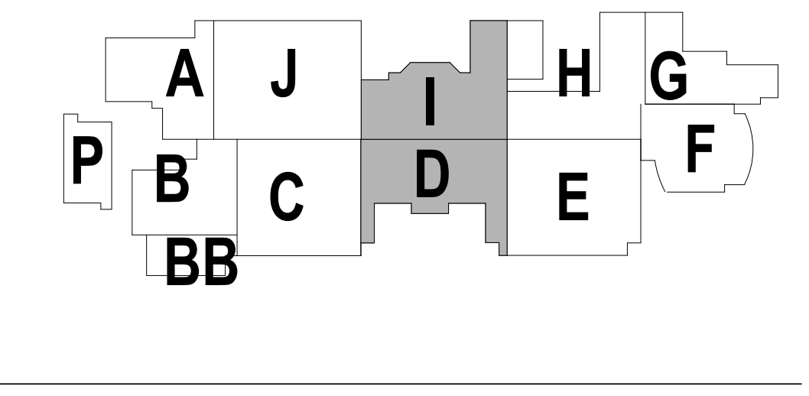
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS
FIRST FLOOR PLAN -
AREA D & I

M7.03

of

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

- ⟨1⟩ PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- ⟨2⟩ PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.
- ⟨3⟩ PROVIDE, INSTALL AND STARTUP NEW CARBON MONOXIDE MONITORING SYSTEM. CO MONITORING SYSTEM SHALL BE WIRED TO BOILER AND BE PROGRAMMED TO SHUT DOWN BOILER UPON DETECTION. BMCS INTERFACE IS NOT REQUIRED. REFER TO BMCS SPECIFICATION FOR ADDITIONAL INFORMATION ON CO MONITOR.
- ⟨4⟩ EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.
- ⟨5⟩ PROVIDE NEW TEMPERATURE SENSOR FOR BMCS.
- ⟨6⟩ PROVIDE NEW DDC HUMIDITY SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- ⟨7⟩ EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.
- ⟨8⟩ REPLACE EXISTING REFRIGERANT MONITORING STATION AND CONNECT TO BMCS. REFER TO SPEC FOR ADDITIONAL INFORMATION.
- ⟨9⟩ REPLACE EXISTING MOTORIZED CONTROL VALVE WITH NEW.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

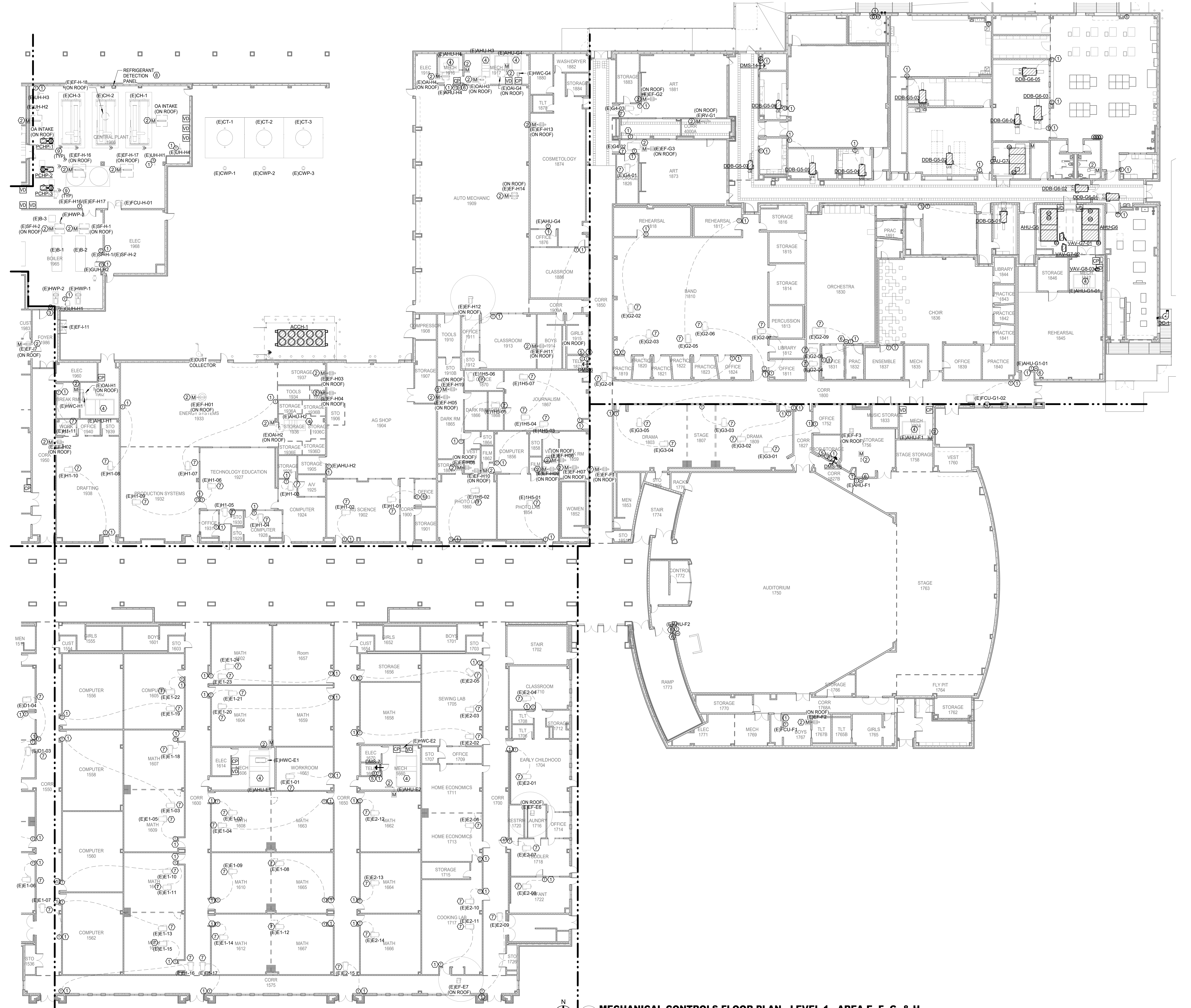
Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL CONTROLS
FIRST FLOOR PLAN -
AREA E, F, G & H

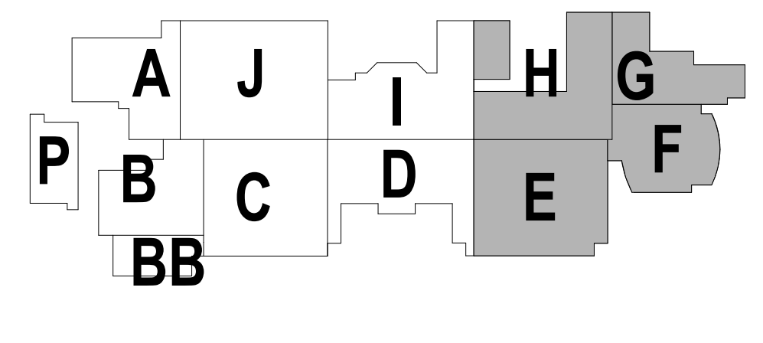
M7.04

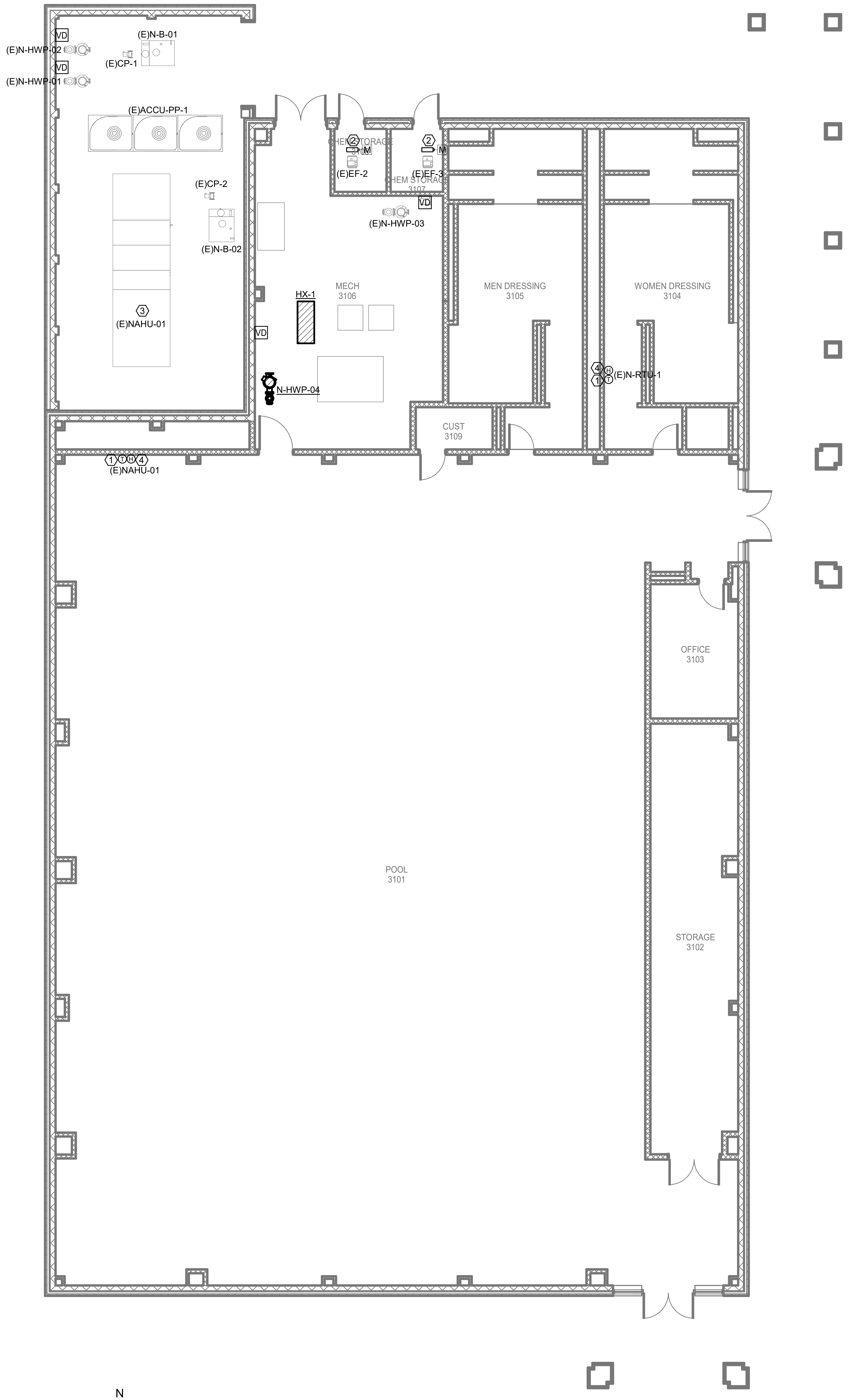
___ of ___



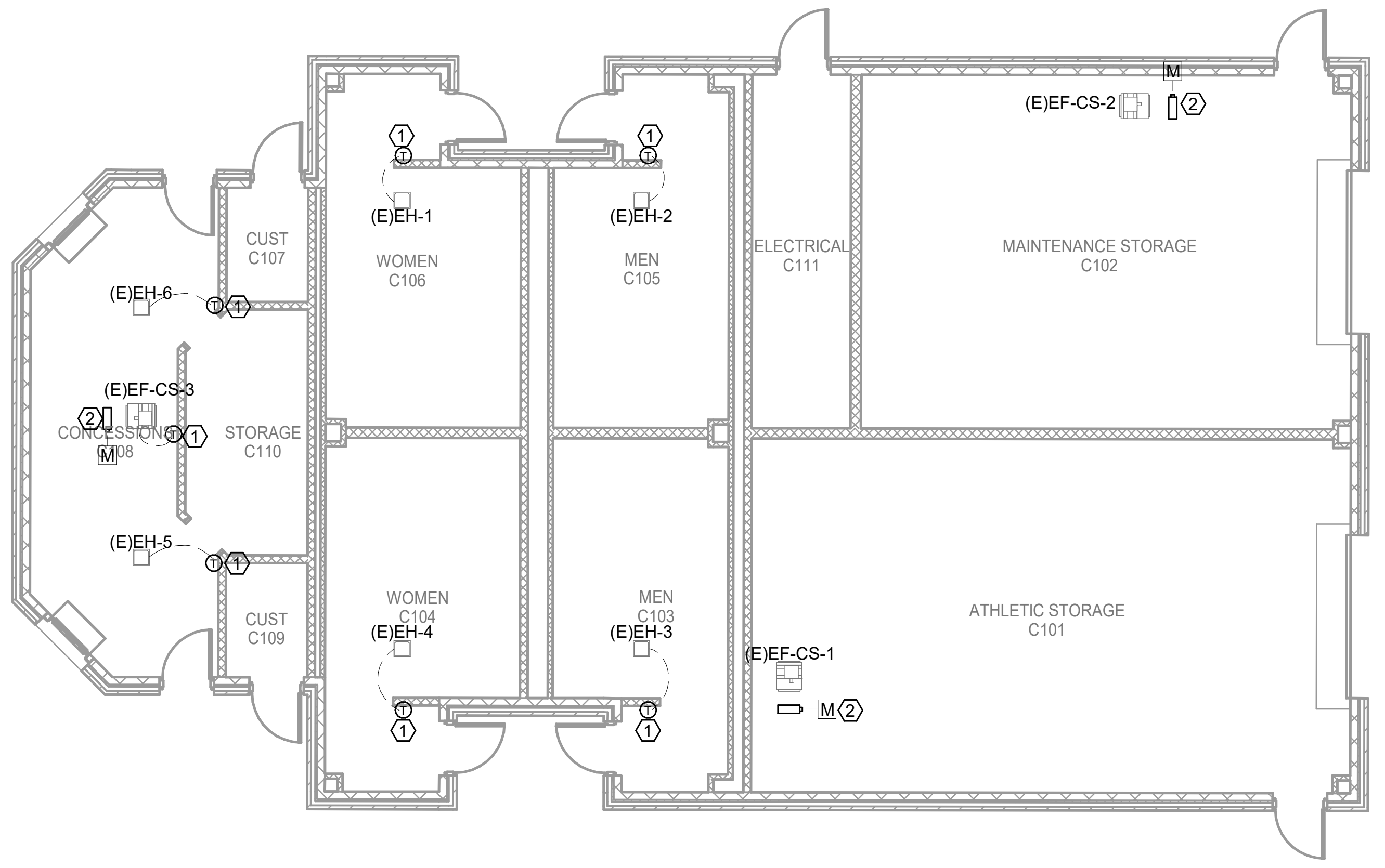
MECHANICAL CONTROLS FLOOR PLAN - LEVEL 1 - AREA E, F, G, & H
Scale: 1/16" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING





1 MECHANICAL CONTROLS FLOOR PLAN - LEVEL 1 - AREA P
Scale: 1/8" = 1'-0"



2 MECHANICAL CONTROLS FLOOR PLAN - CONCESSION
Scale: 1/8" = 1'-0"

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

1. PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
2. PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.
3. EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.
4. PROVIDE NEW DDC HUMIDITY SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

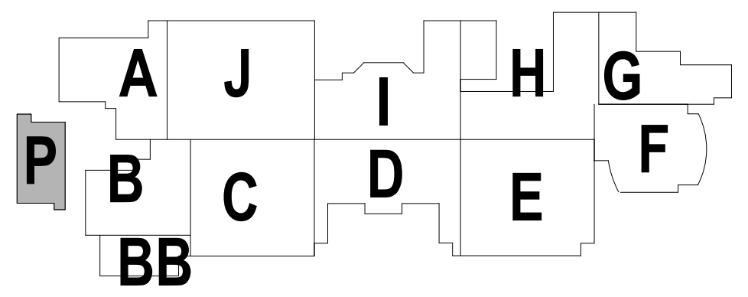
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS
FIRST FLOOR PLAN -
AREA P

M7.05
____ of ____

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

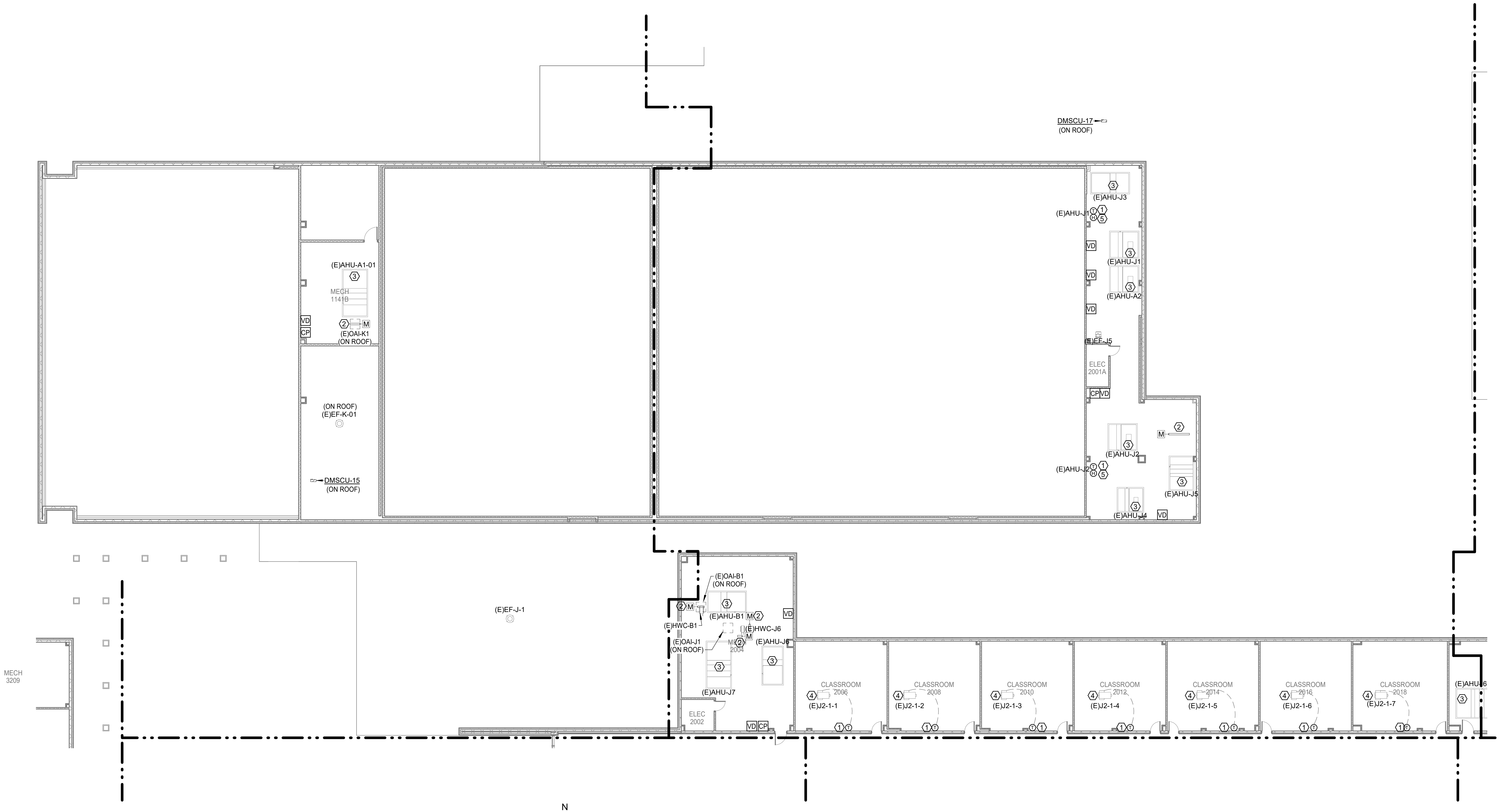
⟨1⟩ PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

⟨2⟩ PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

⟨3⟩ EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

⟨4⟩ EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.

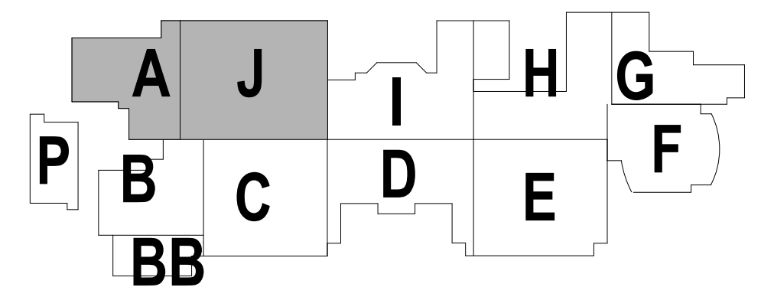
⟨5⟩ PROVIDE NEW DDC HUMIDITY SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.



1 **MECHANICAL CONTROLS FLOOR PLAN - LEVEL 2 - AREA A & J**
Scale: 1/16" = 1'-0"

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS
SECOND FLOOR PLAN -
AREA A & J

M7.06

of

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

⟨1⟩ PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

⟨2⟩ PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

⟨3⟩ EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

⟨4⟩ PROVIDE NEW TEMPERATURE SENSOR FOR BMCS.

⟨5⟩ EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

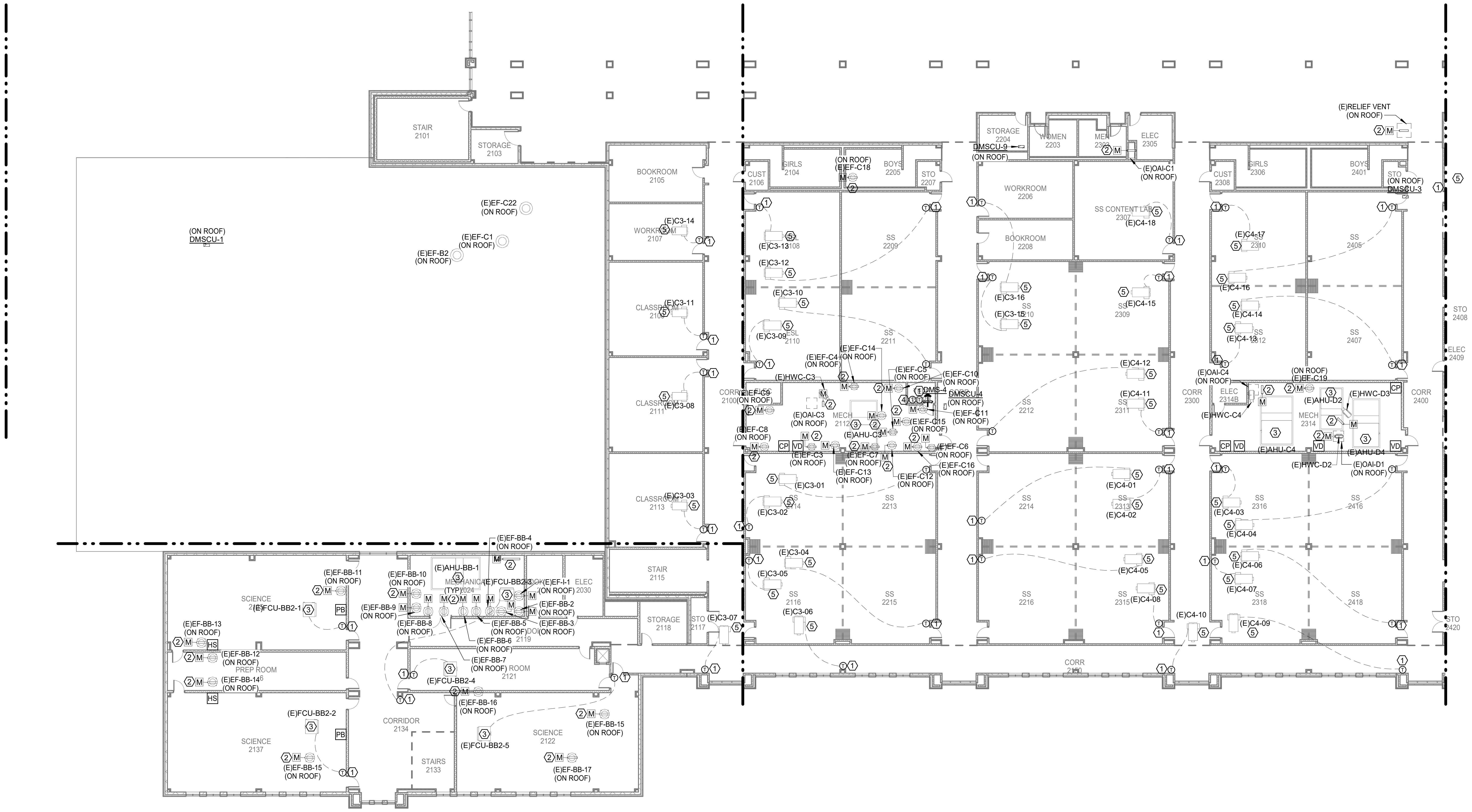
CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

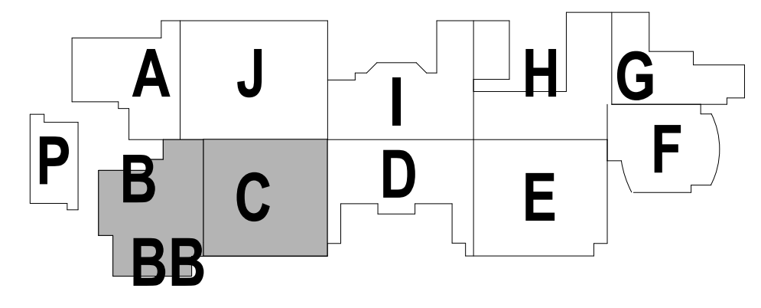


N

1 MECHANICAL CONTROLS FLOOR PLAN - LEVEL 2 - AREA B & C

Scale: 1/16" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	IP

MECHANICAL CONTROLS SECOND FLOOR PLAN - AREA B, & C

M7.07

of

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

1 PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

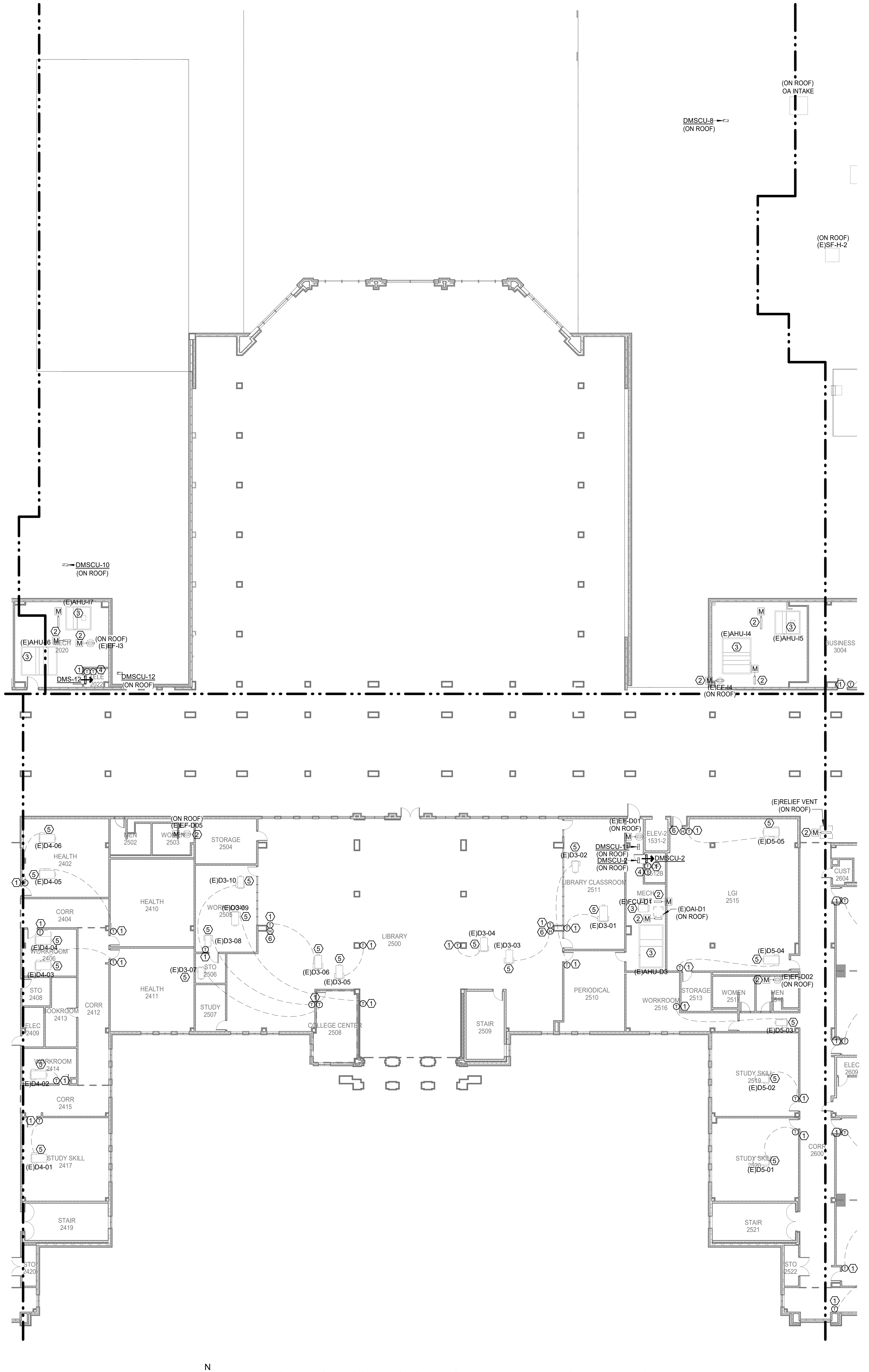
2 PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

3 EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

4 PROVIDE NEW TEMPERATURE SENSOR FOR BMCS.

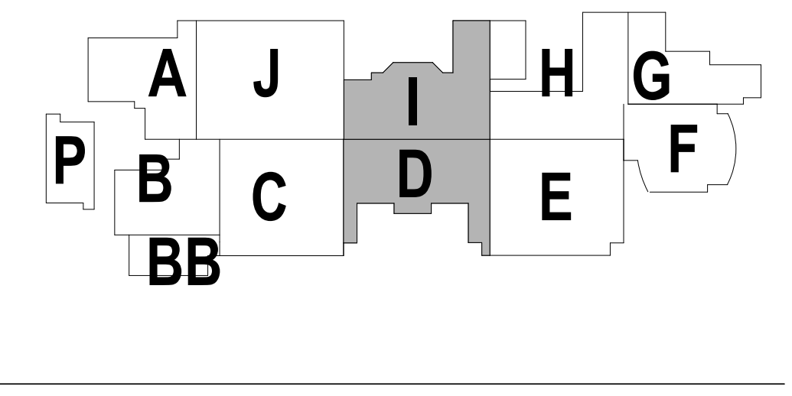
5 EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.

6 PROVIDE NEW DDC HUMIDITY SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.



1 **MECHANICAL CONTROLS FLOOR PLAN - LEVEL 2 - AREA D & I**
Scale: 1/16" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



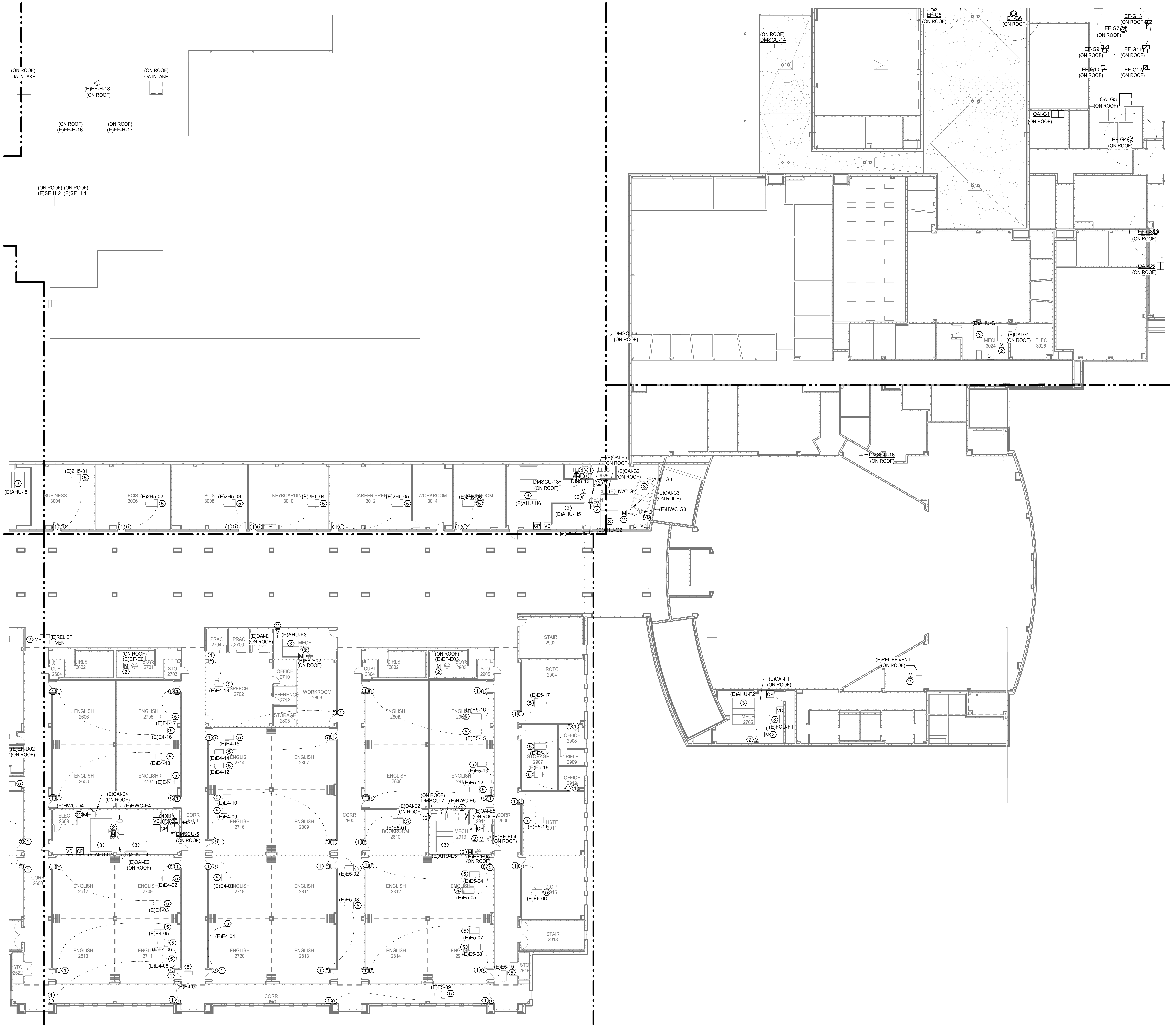
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS SECOND FLOOR PLAN - AREA D & I

M7.08
of



1 **MECHANICAL CONTROLS FLOOR PLAN - LEVEL 2 - AREA E, F, G, & H**
Scale: 1/16" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

BMCS SYMBOL LEGEND	
SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

1 PROVIDE NEW DDC TEMPERATURE SENSOR AND CONTROL WIRING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

2 PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

3 EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING CHILLED AND HOT WATER ISOLATION VALVE, BALANCING VALVE AND CONTROL VALVE WITH NEW. REPLACE EXISTING CHILLED AND HOT WATER PIPING WITH NEW AS REQUIRED FOR INSTALLATION OF NEW VALVES AND APPURTENANCES. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

4 PROVIDE NEW TEMPERATURE SENSOR FOR BMCS.

5 EXISTING TERMINAL UNIT TO REMAIN. PROVIDE NEW DDC CONTROLLER AND ACTUATOR. REPLACE EXISTING FLOW MEASUREMENT TUBING, TAPS, GROMMETS AND ANY OTHER APPURTENANCES AS REQUIRED TO OBTAIN ACCURATE FLOW MEASUREMENTS WITH NEW CONTROLS.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

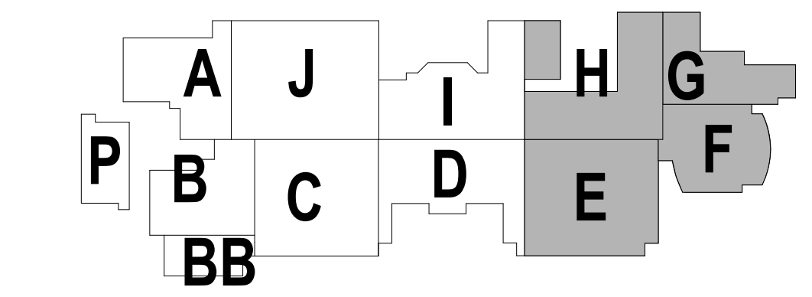
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

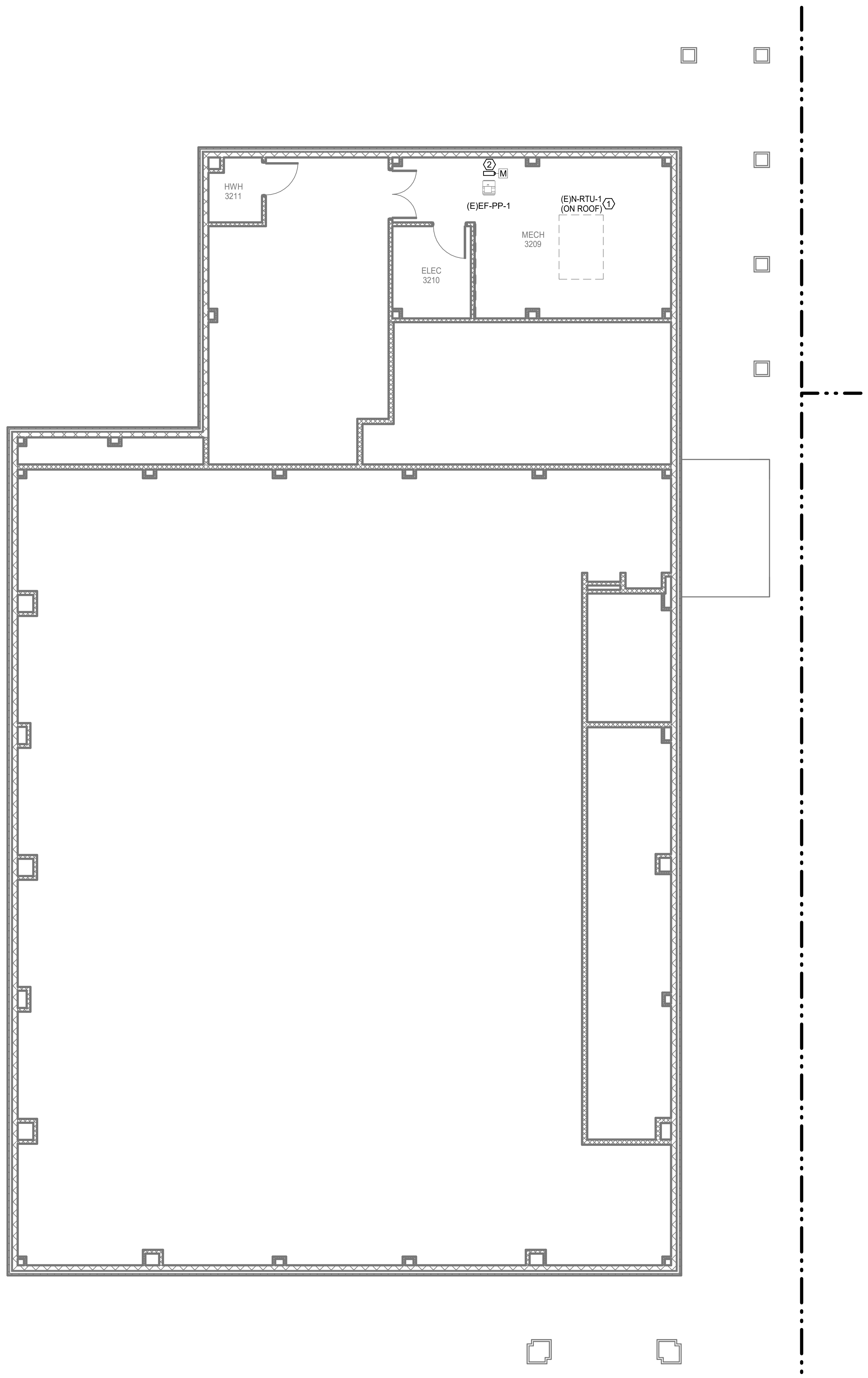
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS
SECOND FLOOR PLAN -
AREA E, F, G & H

M7.09
____ of ____



2 MECHANICAL FLOOR PLAN - LEVEL 2 - AREA P

Scale: 1/8" = 1'-0"

BMCS SYMBOL LEGEND

SYMBOL	DESCRIPTION
VD	VARIABLE FREQUENCY DRIVE
CP	CONTROL PANEL
DS	DISCONNECT SWITCH
M	MOTORIZED DAMPER
RM	REFRIGERANT MONITORING SYSTEM
PB	PURGE BUTTON
HS	FUME HOOD SWITCH

CONTRACTOR SHALL PROVIDE DEHUMIFICATION DURING THE CONSTRUCTION SCHEDULE. THE SCOPE IS TO MAINTAIN ACCEPTABLE HUMIDITY LEVELS WITHIN THE BUILDING: THE REMOVAL OF EXCESS HUMIDITY FROM THE AIR THROUGHTOUT THE BUILDING. PROVIDE MOISTURE CONTROL RENTAL EQUIPMENT AND SOLUTION FOR PREVENTING THE LONG-TERM EFFECTS OF MOISTURE LEVEL THAT CAN DAMAGE INTERIOR BUILDING MATERIALS, BOOKS AND ELECTRONIC EQUIPMENT.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED POWER GENERATING EQUIPMENT.

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL POWER REQUIREMENTS.

MECHANICAL KEYED NOTES:

① EXISTING AIR HANDLING UNIT SHALL REMAIN. REPLACE EXISTING SENSORS ASSOCIATED WITH UNIT. REFER TO M7.11 SPECIFICATIONS FOR WORK AT AIR HANDLING UNIT.

② PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

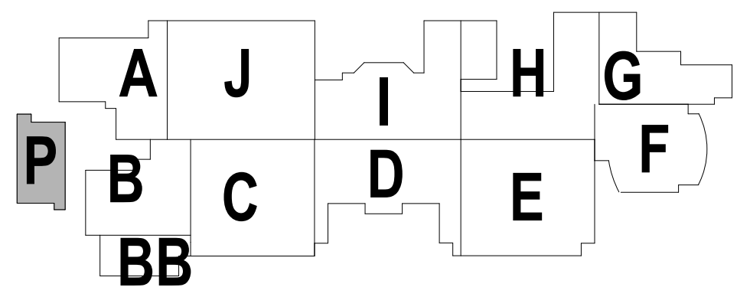
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS
SECOND FLOOR PLAN -
AREA P

M7.10

of

FAN

MARK	CFM	EXT. STATIC PRESSURE (IN. W.C.)	MAX. FAN RPM	HORSE POWER	CURRENT CHARAC.			LOCALLY SWITCHED BY	INTERLOCKED WITH	FAN TYPE	DRIVE TYPE	MANUFACTURER	MODEL NUMBER	REMARKS
					V	P	F							
(E)EF-B1	300	0.25	1,000	0.25	120	1	60	T-STAT	-	IN-LINE	BELT	ACME	DB	1
(E)EF-C1	2,115	0.375	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C2	1,640	0.375	1,000	0.25	120	1	60	-	OAHU-C5	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C3	1,000	1.00	1,020	0.25	120	1	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C4	1,000	1.00	1,020	0.25	120	1	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C5	1,000	1.00	1,020	0.25	120	1	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C6	1,000	1.00	1,020	0.25	120	1	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C7	1,000	1.00	1,020	0.25	120	1	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C8	1,680	0.375	1,000	0.25	120	1	60	PUSH BUTTON	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C9	1,680	0.375	1,000	0.25	120	1	60	PUSH BUTTON	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C10	1,680	0.375	1,000	0.25	120	1	60	PUSH BUTTON	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C11	1,680	0.375	1,000	0.25	120	1	60	PUSH BUTTON	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C12	1,680	0.375	1,000	0.25	120	1	60	PUSH BUTTON	-	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C13	1,640	0.375	1,000	0.25	120	1	60	-	OAHU-C5	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C14	2,400	0.375	1,000	0.33	120	1	60	-	OAHU-C5	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C15	585	0.375	1,075	0.166	120	1	60	-	CONTINUOUS	ROOF MOUNTED	DIRECT	COOK	ACRUD	1
(E)EF-C16	1,215	0.375	1,000	0.25	120	1	60	-	OAHU-C5	ROOF MOUNTED	BELT	COOK	ACRUB	1
(E)EF-C18	1,510	0.375	1,000	0.5	120	1	60	-	-	ROOF MOUNTED	BELT	COOK	HCL-B	1
(E)EF-C19	2,900	0.375	1,000	0.5	120	1	60	-	-	ROOF MOUNTED	BELT	COOK	HCL-B	1
(E)EF-C20	300	0.375	1,000	0.25	120	1	60	T-STAT	-	IN-LINE	BELT	ACME	DB	1
(E)EF-C21	300	0.375	1,000	0.25	120	1	60	T-STAT	-	IN-LINE	BELT	ACME	DB	1
(E)EF-C22	1,100	0.375	1,000	0.25	120	1	60	-	-	-	BELT	COOK	HCL-B	1
(E)EF-D1	400	0.375	1,080	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-D2	400	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-D3	600	0.25	1,000	0.25	120	1	60	-	-	IN-LINE	BELT	ACME	DB	1
(E)EF-D4	300	1.0	1,000	0.25	120	1	60	-	DRYER	INLINE	BELT	ACME	QB	1
(E)EF-D5	400	0.25	1,000	0.25	120	1	60	-	DRYER	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-D6	300	0.25	1,000	0.25	120	1	60	-	DRYER	INLINE	BELT	ACME	DB	1
(E)EF-D7	400	0.25	1,000	0.25	120	1	60	-	DRYER	INLINE	BELT	ACME	DB	1
(E)EF-E1	1,110	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-E2	2,220	0.375	1,080	0.5	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-E3	1,110	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-E4	320	0.375	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-E5	1,620	0.375	1,000	0.25	120	1	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	ACME	PNU	1
(E)EF-E6	300	1.0	1,000	0.25	120	1	60	-	DRYER	INLINE	BELT	ACME	QB	1
(E)EF-E7	300	1.0	1,000	0.25	120	1	60	-	DRYER	INLINE	BELT	ACME	QB	1
(E)EF-E8	300	0.25	1,000	0.25	120	1	60	-	DRYER	INLINE	BELT	ACME	DB	1
(E)EF-E9	300	0.25	1,000	0.25	120	1	60	-	DRYER	INLINE	BELT	ACME	DB	1
(E)EF-F1	1,050	0.375	1,080	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-F2	600	0.375	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-F3	600	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-G1	280	0.25	800	0.25	120	1	60	T-STAT	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-G2	1,600	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-G3	2,400	0.25	850	0.25	120	1	60	TIMER	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H1	6,500	0.25	600	1.0	480	3	60	WALL SWITCH	-	ROOF MOUNTED	BELT	ACME	PNU	1
(E)EF-H2	500	0.25	850	0.25	120	1	60	TIMER	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H3	4,000	0.25	1,000	1.0	480	3	60	WALL SWITCH	-	ROOF MOUNTED	BELT	ACME	PNU	1
(E)EF-H4	4,000	0.25	1,000	1.0	480	3	60	WALL SWITCH	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H5	775	0.25	920	0.25	120	1	60	TIMER	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H6	400	0.25	850	0.25	120	1	60	TIMER	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H7	820	1.25	1,123	0.33	120	1	60	TIMER	-	ROOF MOUNTED	BELT	COOK	ACRU	1
(E)EF-H8	900	0.25	1,000	0.25	120	1	60	TIMER	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H9	900	0.25	1,000	0.25	120	1	60	TIMER	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H10	200	0.25	800	0.25	120	1	60	TIMER	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H11	880	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H12	5,400	5.0	1,760	7.5	480	3	60	WALL SWITCH	-	ROOF MOUNTED	BELT	DSP MONOVENT	CPS	1
(E)EF-H13	300	0.25	800	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-H14	3,000/,6000	0.25	300/600	0.75	480	3	60	WALL SWITCH	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)SF-H1	3,000	0.1	830	0.25	120	1	60	T-STAT	-	ROOF MOUNTED	BELT	COOK	HXFL	1
(E)EF-H16	300	0.25	1,000	0.25	120	1	60	T-STAT	-	INLINE	BELT	ACME	DB	1
(E)EF-H17	300	0.25	1,000	0.25	120	1	60	T-STAT	-	INLINE	BELT	ACME	DB	1
(E)EF-H18	300	0.25	1,000	0.25	120	1	60	T-STAT	-	INLINE	BELT	ACME	DB	1
(E)EF-H19	820	1.25	1,123	0.33	120	1	60	T-STAT	-	ROOF MOUNTED	BELT	COOK	ACRU	1
(E)EF-I1	3,542	1.5	1,000	2.0	480	3	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	COOK	245VCR	1
(E)EF-I2	2,000	0.25	1,000	0.25	120	1	60	T-STAT	-	ROOF MOUNTED	BELT	ACME	PNU	1
(E)EF-I3	2,770	0.25	850	0.33	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PNU	1
(E)EF-I4	400	0.25	800	0.33	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-I5	6,500	1.5	800	3.0	480	3	60	HOOD SWITCH	-	ROOF MOUNTED	BELT	COOK	330VCR	1
(E)EF-I6	2,500	0.25	1,080	0.33	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PNU	1
(E)EF-I7	2,400	0.25	800	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PNU	1
(E)EF-I8	500	0.25	1,000	0.25	120	1	60	T-STAT	-	INLINE	BELT	COOK	DB	1
(E)EF-I9	940	0.25	1,025	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-I10	300	0.25	1,000	0.25	120	1	60	-	-	INLINE	BELT	COOK	DB	1
(E)EF-I11	5,100	-	1,725	(2) 0.5	480	3	60	DOOR SWITCH	-	WALL	DIRECT	MARS	72CH	1
(E)EF-I12	1,800	1.25	1,100	0.75	480	3	60	-	-	ROOF MOUNTED	-	COOK	225VCR	1
(E)SF-I1	2,100	0.75	800	0.75	120	1	60	-	EF-I1	ROOF MOUNTED	BELT	COOK	ASP	1
(E)SF-I2	3,900	0.75	800	1.0	480	3	60	-	EF-I5	ROOF MOUNTED	BELT	COOK	ASP	1
(E)SF-I3	900	0.75	1,000	0.33	120	1	60	-	EF-I5	ROOF MOUNTED	BELT	COOK	ASP	1
(E)EF-J1	1,700	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-J2	1,915	0.25	1,025	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-J3	1,920	0.25	1,025	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-J4	800	0.25	1,000	0.25	120	1	60	-	-	ROOF MOUNTED	BELT	ACME	PL	1
(E)EF-J5	600	0.25	1,000	0.25	120	1	60	T-STAT	-	INLINE	BELT	ACME	DM	1
(E)EF-J6	500	0.25	1,000	0.25	120	1	60	T-STAT	-	INLINE	BELT	ACME	DM	1
(E)EF-J7	300	0.25	1,000	0.25	120	1	60	T-STAT	-	INLINE	BELT	ACME	DM	1
(E)EF-CP-1	6,800	0.25	835	1.5	480	3	60	T-STAT	-	ROOF MOUNTED	BELT	COOK	VCR	1
(E)EF-CP-2	6,800	0.25	835	1.5	480	3	60	T-STAT	-	ROOF MOUNTED	BELT	COOK	VCR	1
(E)EF-BR-1	6,000	0.10	-	0.33	120	1	60	VFD	-	ROOF MOUNTED	BELT	-	-	1
(E)EF-PP-1	1,130	0.375	1,000	0.33	120	1	60	HOOD SWITCH	-	INLINE	BELT	COOK	DB	1
(E)EF-PP-2	185	0.25	1,360	0.062	120	1	60	HOOD SWITCH	-	INLINE	DIRECT	COOK	GN	1
(E)EF-PP-3	185	0.25	1,360	0.062	120	1	60	HOOD SWITCH	-	INLINE	DIRECT	COOK	GN	1
(E)EF-CS-1	3,200	0.375	500	0.75	480	3	60	HOOD SWITCH	-	INLINE	BELT	ACME	DM-15	1
(E)EF-CS-2	3,200	0.375	500	0.75	480	3	60	HOOD SWITCH	-	INLINE	BELT	ACME	DM-15	1
(E)EF-CS-3	3,000	0.50	500	0.75	480	3	60	HOOD SWITCH	-	INLINE	BELT	ACME	DM-15	1
EF-G4	450	0.35	1,225	0.25	120	1	60	-	AHU-G6	ROOF MOUNTED	BELT	COOK	ACEB	2
EF-G5	400	0.35	1,050	0.25	120	1	60	T-STAT	-	ROOF MOUNTED	BELT	COOK	ACEB	2
EF-G6	900	0.45	1,200	0.5	120	1	60	TIMER	-	ROOF MOUNTED	BELT	COOK	ACEB	2
EF-G7	1,450	0.35	1,200	0.5	120	1	60	-	AHU-G6	ROOF MOUNTED	BELT	COOK	ACEB	2
EF-G8	700	0.35	1,200	0.25	120	1	60	-	AHU-G6	ROOF MOUNTED	BELT	COOK	ACEB	2
EF-G9	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	2
EF-G10	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	2
EF-G11	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	2
EF-G12	3,600	2.50	1,700	3	480	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	2
EF-G13	4,800	2.50	2,000	5	460	3	60	TIMER	-	VENT SET	BELT	COOK	CPS	2
EF-SB-1	1,200	0.50	1,350	0.5	120	1	60	H-STAT	-	INLINE	DIRECT	COOK	SQND	2

REMARKS:

1. PROVIDE NEW LOW LEAKAGE MOTORIZED DAMPER THAT SHALL CLOSE WHEN UNIT IS NOT OPERATING, ACTUATOR AND CONTROLS. PROVIDED BY BMCS INSTALLED IN DUCTWORK BY MECHANICAL CONTRACTOR. MODIFY EXISTING DUCTWORK AND INSULATION AS REQUIRED. AFFECTED DUCTWORK SHALL BE SEALED AND RE-INSULATED TO MATCH EXISTING.
2. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION. REFER TO BUILDING RENOVATIONS DRAWINGS FOR ADDITIONAL INFORMATION.

COOLING TOWER

MARK	ENTERING WATER TEMP.(°F)	LEAVING WATER TEMP.(°F)	GPM	AMBIENT WET BULB TEMP. (°F)	MOTOR HP	CURRENT CHARAC.			MANUFACTURER	MODEL	REMARKS
						V	P	F			
(E)CT-1	96.0	86.0	1800	80	40	480	3	60	-	-	1
(E)CT-2	96.0	86.0	1800	80	40	480	3	60	-	-	1
(E)CT-3	96.0	86.0	1800	80	40	480	3	60	-	-	1

REMARKS:

1. REPLACE BYPASS CONTROL VALVES ON CONDENSER WATER PIPING

SCROLL PACKAGED AIR COOLED CHILLER

MARK	ACTUAL CAPACITY (TONS)	LEAVING WATER TEMP.(°F)	GPM	PRESSURE DROP (FT.)	AMBIENT AIR TEMP. (°F)	CURRENT CHARAC.			BASIS OF DESIGN		REMARKS
						V	P	F	MOCP	MCA	
ACCH-1	150	42	302	20.0	95 °F	480		60	400	336	1

REMARKS:

1. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION. REFER TO BUILDING RENOVATIONS DRAWINGS FOR ADDITIONAL INFORMATION.

(E)RELIEF VENT

MARK	CFM	MAX P.D. (IN. W.G.)	MIN. THROAT	ACME MODEL NUMBER	SERVES	REMARKS
(E)RV-A-01	5,500	0.10	30x30	EV	AHU-A-2	1
(E)RV-G-01	-	0.10	12x16	LEV	AHU-G-4	1
(E)RV-F-01	5,000	0.10	36x36	EV	AHU-F-1 & AHU-F-2	1
(E)RV-J-01	9,350	0.10	48x48	EV	AHU-J-1 & AHU-J-2	1

REMARKS:

1. PROVIDE NEW MOTORIZED DAMPER AND 24V ACTUATOR.

(E)UNIT HEATER - ELECTRIC

MARK	MINIMUM CAPACITY (BTUH)	KW	CURRENT CHARAC.			CFM	MANUFACTURER	MODEL	REMARKS
			V	P	F				
(E)EH-1	17,061	4.0	277	1	60	425	MARKEL	3474	-
(E)EH-2	17,061	4.0	277	1	60	425	MARKEL	3474	-
(E)EH-3	17,061	4.0	277	1	60	425	MARKEL	3474	-
(E)EH-4	17,061	4.0	277	1	60	425	MARKEL	3474	-
(E)EH-5	17,061	4.0	277	1	60	425	MARKEL	3474	-
(E)EH-6	17,061	4.0	277	1	60	425	MARKEL	3474	-

DUST COLLECTOR

MARK	CFM	MAX S.P. (IN. W.G.)	HORSE POWER	CURRENT CHARAC.			MANUFACTURER	MODEL #	REMARKS
				V	PH	F			
DC-1	2,800	10.0	20	480	3	60	DONALDSON	DC	1

REMARKS:

1. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION. REFER TO BUILDING RENOVATIONS DRAWINGS FOR MORE INFO.

(E)AIR HANDLING UNIT

MARK	TYPE	FAN							COOLING								HEATING						PIPE SIZE TO COIL (IN.)		REMARKS
		SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER	CURRENT CHARAC.			AIR TEMPERATURE (°F)				WATER				ENTERING AIR TEMPERATURE (°F)	MIN. HEATING CAPACITY	WATER				CHILLED WATER	HOT WATER	
						V	PH	F	ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP (°F)	GPM	PRESSURE DROP (FT.)	VALVE TYPE			ENTERING TEMP. (°F)	GPM	PRESSURE DROP (FT.)	VALVE TYPE			
(E)AHU-A1	SZU	5,330	1,660	1.0	7.5	480	3	60	84.3	68.6	53.0	-	42	33.6	15.0	2-WAY	51.7	185,884	180.0	12.4	10.0	2-WAY	2"	1-1/2"	1,2
(E)AHU-A2	SZU	18,750	6,000	1.0	20	480	3	60	75.0	62.0	54.0	-	42	79.8	15.0	2-WAY	67.0	299,745	180.0	20.0	10.0	2-WAY	2-1/2"	1-1/2"	1,2
(E)AHU-B1	SZU	5,235	1,650	1.5	5	480	3	60	89.2	69.5	56.0	-	42	40.2	15.0	2-WAY	66.8	70,444	180.0	4.7	10.0	2-WAY	2"	1"	1,2
(E)AHU-C1	DDU	23,300	3,340	1.5	25	480	3	60	80.9	65.8	55.0	-	42	105.4	15.0	2-WAY	73.3	217,433	180.0	14.5	10.0	3-WAY	3"	1-1/2"	1,2
(E)AHU-C2	SZU	18,860	1,800	1.0	20	480	3	60	77.0	64.0	53.2	-	42	75.3	15.0	2-WAY	69.8	165,884	180.0	11.0	10.0	2-WAY	2-1/2"	1"	1,2
(E)AHU-C3	DDU	14,620	4,640	1.5	20	480	3	60	90.4	70.5	55.0	-	42	107.0	15.0	2-WAY	62.4	268,288	180.0	17.9	10.0	3-WAY	3"	2"	1,2
(E)AHU-C4	DDU	15,410	6,000	1.5	20	480	3	60	92.6	71.5	55.0	-	42	125.2	15.0	2-WAY	64.3	290,569	180.0	19.3	10.0	3-WAY	4"	1-1/2"	1,2
(E)AHU-C5	DDU	6,060	6,060	1.0	7.5	480	3	60	82.0	76.5	55.0	-	42	65.3	15.0	2-WAY	20.0	199,942	180.0	13.3	10.0	3-WAY	4"	1-1/2"	1,2,3
(E)AHU-D1	DDU	9,955	2,650	1.5	15	480	3	60	84.8	68.5	55.0	-	42	57.1	15.0	2-WAY	67.6	106,887	180.0	7.1	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-D2	DDU	8,645	1,955	1.5	10	480	3	60	83.8	67.7	55.0	-	42	47.5	15.0	2-WAY	69.7	93,191	180.0	6.2	10.0	3-WAY	2"	3/4"	1,2
(E)AHU-D3	DDU	11,760	4,350	1.5	15	480	3	60	90.1	70.9	55.0	-	42	86.6	15.0	2-WAY	61.7	215,458	180.0	14.3	10.0	3-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-D4	SZU	6,645	1,620	1.5	7.5	480	3	60	87.4	69.0	53.1	-	42	40.0	15.0	2-WAY	64.8	102,506	180.0	6.8	10.0	2-WAY	2"	1-1/4"	1,2
(E)AHU-D5	DDU	6,915	2,655	1.5	10	480	3	60	91.3	71.0	53.2	-	42	49.1	15.0	2-WAY	61.4	132,520	180.0	8.8	10.0	2-WAY	2-1/2"	1-1/2"	1,2
(E)AHU-E1	DDU	22,100	8,025	1.5	25	480	3	60	85.6	69.4	55.0	-	42	150.8	15.0	2-WAY	65.5	281,500	180.0	18.7	10.0	2-WAY	4"	2"	1,2
(E)AHU-E2	DDU	17,300	3,885	1.5	25	480	3	60	83.5	67.5	55.0	-	42	100.3	15.0	2-WAY	68.8	171,955	180.0	11.4	10.0	2-WAY	3"	1-1/4"	1,2
(E)AHU-E3	SZU	14,225	1,425	1.0	20	480	3	60	77.1	64.3	54.0	-	42	59.2	15.0	2-WAY	69.5	143,201	180.0	9.5	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-E4	DDU	14,800	5,825	1.5	20	480	3	60	92.3	71.7	55.0	-	42	119.2	15.0	2-WAY	60.9	261,865	180.0	17.4	10.0	2-WAY	3"	2"	1,2
(E)AHU-E5	DDU	15,500	4,835	1.5	20	480	3	60	90.3	70.3	55.0	-	42	112.6	15.0	2-WAY	62.8	274,520	180.0	18.3	10.0	2-WAY	3"	2"	1,2
(E)AHU-F1	SZU	14,325	650	1.0	15	480	3	60	76.1	63.5	54.0	-	42	51.5	15.0	2-WAY	72.3	148,284	180.0	9.9	10.0	2-WAY	2"	1-1/4"	1,2
(E)AHU-F2	SZU	24,890	6,480	1.0	30	480	3	60	80.6	66.8	54.0	-	42	164.0	15.0	2-WAY	60.7	463,148	180.0	30.8	10.0	3-WAY	4"	2"	1,2
(E)AHU-G1	SZU	3,035	1,555	1.5	5	480	3	60	90.5	72.1	53.0	-	42	26.2	15.0	2-WAY	41.6	132,409	180.0	8.8	10.0	2-WAY	2"	1-1/4"	1,2
(E)AHU-G2	DDU	7,550	4,200	1.5	10	480	3	60	95.9	73.4	55.0	-	42	71.1	15.0	2-WAY	56.3	176,296	180.0	11.7	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-G3	DDU	3,440	1,325	1.5	5	480	3	60	95.8	72.2	55.0	-	42	28.1	15.0	2-WAY	58.6	62,828	180.0	4.2	10.0	2-WAY	2"	3/4"	1,2
(E)AHU-G4	DDU	3,910	870	1.5	5	480	3	60	87.3	68.5	55.0	-	42	23.4	15.0	2-WAY	56.8	102,132	180.0	6.8	10.0	2-WAY	2"	1"	1,2
(E)AHU-G1-01	DDU	2,225	1,500	1.0	5	480	3	60	93.4	74.1	50.3	-	45	23.4	15.0	2-WAY	33.0	115,822	180.0	7.7	10.0	2-WAY	2-1/2"	1-1/2"	1,2
(E)AHU-H1	DDU	13,750	2,135	1.5	15	480	3	60	82.8	66.5	55.0	-	42	68.3	15.0	2-WAY	70.2	108,340	180.0	7.2	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-H2	SZU	4,365	485	1.0	5	480	3	60	77.3	64.4	53.0	-	42	18.0	15.0	2-WAY	68.9	51,453	180.0	3.4	10.0	2-WAY	1-1/4"	3/4"	1,2
(E)AHU-H3	SZU	2,385	930	1.0	3	480	3	60	88.9	70.5	53.0	-	42	18.1	15.0	2-WAY	52.9	60,336	180.0	4.0	10.0	2-WAY	1-1/2"	1"	1,2
(E)AHU-H4	SZU	6,150	375	1.0	7.5	480	3	60	76.7	63.6	53.0	-	42	21.7	15.0	2-WAY	73.1	68,649	180.0	4.6	10.0	2-WAY	2"	1"	1,2
(E)AHU-H5	DDU	15,795	4,590	1.5	15	480	3	60	87.3	69.2	55.0	-	42	100.9	15.0	2-WAY	64.7	207,438	180.0	13.8	10.0	2-WAY	3"	1-1/4"	1,2
(E)AHU-H6	SZU	11,220	1,125	1.0	15	480	3	60	77.1	64.3	53.0	-	42	47.9	15.0	2-WAY	72.5	125,055	180.0	8.3	10.0	2-WAY	2-1/2"	1"	1,2
(E)AHU-I1	SZU	12,110	5,450	1.0	15	480	3	60	76.9	63.0	53.0	-	42	47.4	15.0	2-WAY	62.5	165,401	180.0	11.0	10.0	2-WAY	2"	1-1/4"	1,2
(E)AHU-I2	SZU	8,585	3,120	1.0	10	480	3	60	79.0	64.0	53.0	-	42	41.6	15.0	2-WAY	52.9	206,426	180.0	13.7	10.0	2-WAY	2"	1-1/4"	1,2
(E)AHU-I3	SZU	5,885	1,220	1.0	7.5	480	3	60	83.1	67.0	53.0	-	42	45.0	15.0	2-WAY	60.5	89,350	180.0	5.9	10.0	2-WAY	2-1/2"	1"	1,2
(E)AHU-I4	SZU	19,900	3,750	1.0	25	480	3	60	75.0	62.5	54.0	-	42	80.5	15.0	2-WAY	70.3	414,396	180.0	27.6	10.0	2-WAY	2-1/2"	2"	1,2
(E)AHU-I5	SZU	9,200	9,200	1.0	10	480	3	60	82.0	76.5	55.0	-	42	99.1	15.0	2-WAY	20.0	303,542	180.0	20.2	10.0	2-WAY	2-1/2"	2"	1,2,3
(E)AHU-I6	SZU	19,900	3,750	1.0	25	480	3	60	75.0	62.5	54.0	-	42	80.5	15.0	2-WAY	70.3	414,396	180.0	27.6	10.0	2-WAY	2-1/2"	2"	1,2
(E)AHU-I7	SZU	6,870	6,870	1.0	7.5	480	3	60	82.0	76.5	55.0	-	42	74.0	15.0	2-WAY	20.0	226,667	180.0	15.1	10.0	2-WAY	2-1/2"	2"	1,2,3
(E)AHU-J1	SZU	15,510	5,450	1.0	20	480	3	60	74.0	62.0	53.0	-	42	73.2	15.0	2-WAY	66.5	191,440	180.0	12.7	10.0	2-WAY	2-1/2"	1-1/2"	1,2
(E)AHU-J2	SZU	15,510	5,450	1.0	20	480	3	60	74.0	62.0	53.0	-	42	73.2	15.0	2-WAY	66.5	191,440	180.0	12.7	10.0	2-WAY	2-1/2"	1-1/2"	1,2
(E)AHU-J3	DDU	8,700	1,700	1.5	10	480	3	60	85.3	66.0	55.0	-	42	51.1	15.0	2-WAY	63.2	124,763	180.0	8.3	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-J4	SZU	9,225	3,070	1.0	15	480	3	60	87.5	66.5	52.0	-	42	51.8	15.0	2-WAY	66.7	278,235	180.0	18.5	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-J5	SZU	21,670	21,670	0.75	20	480	3	60	82.0	77.8	55.0	-	42	233.4	15.0	2-WAY	20.0	303,542	180.0	20.2	10.0	2-WAY	2-1/2"	1-1/4"	1,2,3
(E)AHU-J6	DDU	6,590	2,625	1.5	7.5	480	3	60	91.0	71.0	55.0	-	42	48.6	15.0	2-WAY	63.2	121,813	180.0	8.1	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-J7	SZU	9,360	850	1.0	10	480	3	60	76.9	64.3	53.3	-	42	37.9	15.0	2-WAY	69.1	140,517	180.0	9.4	10.0	2-WAY	2-1/2"	1-1/4"	1,2
(E)AHU-A1-1	MZU	8,585	1,650	1.0	10	480	3	60	77.3	64.4	54.1	-	42	40.3	15.0	2-WAY	65.6	217,200	180.0	10.9	10.0	2-WAY	2"	1-1/4"	1,2
AHU-G5	DDU	9,495	3,000	2.5	15	480	3	60	75.0	62.5	54.0	-	45	38.0	15.0	2-WAY	64.5	250,212	180.0	12.6	10.0	2-WAY	2"	1-1/4"	4
AHU-G6	DDU	9,800	3,300	2.5	15	480	3	60	75.0	62.5	54.0	-	45	39.2	15.0	2-WAY	64.4	259,096	180.0	13.0	10.0	2-WAY	2"	1-1/2"	4
OAHU-G7	SZU	7,800	7,800	1.5	10	480	3	60	98.0	79.0	53.0	-	45	121.0	15.0	2-WAY	27.0	193,752	180.0	9.8	10.0	2-WAY	4"	1-1/4"	4

REMARKS:

1. REPLACE EXISTING CHILLED WATER CONTROL VALVE AND ACTUATORS, BALANCING AND ISOLATION VALVES AND EXISTING PIPING AND APPURTENANCES AS INDICATED ON DETAIL #10/M5.01 WITH NEW.
2. REPLACE EXISTING HEATING HOT WATER CONTROL VALVE AND ACTUATORS, BALANCING AND ISOLATION VALVES AND EXISTING PIPING AND APPURTENANCES AS INDICATED ON DETAIL #9/M5.01 WITH NEW.
3. REPLACE EXISTING OUTSIDE AIR DAMPER WITH NEW. REFER TO DAMPER SCHEDULE FOR ADDITIONAL INFORMATION.
4. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION. REFER TO BUILDING RENOVATIONS DRAWINGS FOR ADDITIONAL INFORMATION.

(E) FAN COIL UNIT

MARK	FAN								COOLING								HEATING						PIPE SIZE TO COIL (IN.)		REMARKS
	TYPE	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT.STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.			AIR TEMPERATURE (°F)				WATER				ENTERING AIR TEMPERATURE (°F)	MIN. CAPACITY (BTUH)	WATER				CHILLED WATER	HOT WATER	
						V	P	F	ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP(°F)	GPM	PRESSURE DROP (FT.)	VALVE TYPE			ENTERING TEMP.(°F)	GPM	PRESSURE DROP (FT.)	VALVE TYPE			
(E)FCU-B1	SINGLE ZONE	810	0	0.5	0.75	480	3	60	83.0	66.4	55.3	-	42	2.7	15.0	2-WAY	70.1	8,284	180	0.6	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C1	SINGLE ZONE	1,470	465	0.5	1	480	3	60	74.1	62.0	54.0	-	42	5.2	15.0	2-WAY	63.1	7,671	180	0.5	10.0	2-WAY	1"	3/4"	1,2
(E)FCU-C2	SINGLE ZONE	1,535	570	0.5	1	480	3	60	73.9	62.0	54.1	-	42	5.2	15.0	2-WAY	63.1	9,403	180	0.6	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C3	SINGLE ZONE	1,095	390	0.5	0.75	480	3	60	73.9	62.0	53.9	-	42	3.8	15.0	2-WAY	65.3	6,434	180	0.4	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C4	SINGLE ZONE	1,200	465	0.5	1	480	3	60	73.8	62.0	53.6	-	42	4.0	15.0	2-WAY	65.3	7,671	180	0.5	10.0	2-WAY	1"	3/4"	1,2
(E)FCU-C5	SINGLE ZONE	1,200	465	0.5	1	480	3	60	73.8	62.0	536	-	42	4.1	15.0	2-WAY	65.3	7,671	180	0.5	10.0	2-WAY	1"	3/4"	1,2
(E)FCU-C6	SINGLE ZONE	945	375	0.5	0.75	480	3	60	73.8	62.0	53.7	-	42	3.3	15.0	2-WAY	65.3	6,186	180	0.4	10.0	2-WAY	1"	3/4"	1,2
(E)FCU-C7	SINGLE ZONE	945	375	0.5	0.75	480	3	60	73.8	62.0	53.7	-	42	3.3	15.0	2-WAY	65.3	6,186	180	0.4	10.0	2-WAY	1"	3/4"	1,2
(E)FCU-C8	SINGLE ZONE	1,320	465	0.5	1	480	3	60	73.8	62.0	53.8	-	42	4.5	15.0	2-WAY	63.1	7,671	180	0.5	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C9	SINGLE ZONE	1,320	465	0.5	1	480	3	60	73.7	62.0	53.8	-	42	4.5	15.0	2-WAY	63.1	7,671	180	0.5	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C10	SINGLE ZONE	945	375	0.5	0.75	480	3	60	73.8	62.0	53.8	-	42	3.3	15.0	2-WAY	63.1	6,186	180	0.4	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C11	SINGLE ZONE	945	375	0.5	0.75	480	3	60	73.8	62.0	53.7	-	42	3.3	15.0	2-WAY	63.1	6,186	180	0.4	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C12	SINGLE ZONE	945	375	0.5	0.75	480	3	60	73.8	62.0	54.0	-	42	3.3	15.0	2-WAY	63.1	6,186	180	0.4	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C13	SINGLE ZONE	1,500	375	0.5	1	480	3	60	74.3	62.0	53.9	-	42	4.6	15.0	2-WAY	63.8	26,299	180	1.8	10.0	2-WAY	1"	3/4"	1,2
(E)FCU-C14	SINGLE ZONE	430	120	0.5	0.5	480	3	60	74.2	62.0	51.3	-	42	1.6	15.0	2-WAY	60.5	1,980	180	0.1	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C15	SINGLE ZONE	950	120	0.5	0.75	480	3	60	74.6	62.0	53.7	-	42	3.0	15.0	2-WAY	59.8	10,528	180	0.7	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-C16	SINGLE ZONE	1,400	375	0.5	1	480	3	60	74.2	62.0	54.0	-	42	4.5	15.0	2-WAY	63.8	14,529	180	1.0	10.0	2-WAY	3/4"	3/4"	1,2
(E)FCU-F1	SINGLE ZONE	2,335	500	0.5	1.5	480	3	60	86.3	-	55.0	-	42	14.3	15.0	2-WAY	59.3	52,433	180	3.5	10.0	2-WAY	1 1/2"	3/4"	1,2
(E)FCU-G1-2	SINGLE ZONE	1,200	42	0.5	1	480	3	60	74.9	62.0	53.6	-	42	3.2	15.0	2-WAY	63.1	19,954	180	1.3	10.0	2-WAY	1 1/2"	3/4"	1,2
(E)FCU-H1	SINGLE ZONE	1,350	100	0.5	0.75	480	3	60	82.5	-	54.0	-	42	6.3	15.0	2-WAY	64.2	30,081	180	2.0	10.0	2-WAY	1"	3/4"	1,2

REMARKS:

1. REPLACE EXISTING CHILLED WATER CONTROL VALVE AND ACTUATORS, BALANCING AND ISOLATION VALVES AND EXISTING PIPING AND APPURTENANCES AS INDICATED ON DETAIL #10/M5.01 WITH NEW.
2. REPLACE EXISTING HEATING HOT WATER CONTROL VALVE AND ACTUATORS, BALANCING AND ISOLATION VALVES AND EXISTING PIPING AND APPURTENANCES AS INDICATED ON DETAIL #9/M5.01 WITH NEW.

(E) GAS UNIT HEATER

MARK	INPUT CAPACITY (BTUH)	OUTPUT CAPACITY (BTUH)	CURRENT CHARAC.			CFM	MANUFACTURER	MODEL	REMARKS
			V	P	F				
(E)GFUH-H-1	30,000	24,300	-	-	-	440	MODINE	PAE-30	-
(E)GFUH-H-2	30,000	24,300	-	-	-	440	MODINE	PAE-30	-

PUMP

MARK	SERVICE	TYPE	GPM	HEAD (FT.)	MOTOR HORSE POWER	MAX. RPM	CURRENT CHARAC.			MANUFACTURER	MODEL NUMBER
							V	P	F		
PCHP-1	CHILLED WATER	HORIZONTAL SPLIT CASE	1125	120	50	1800	480	3	60	ARMSTRONG	4600
PCHP-2	CHILLED WATER	HORIZONTAL SPLIT CASE	1125	120	50	1800	480	3	60	ARMSTRONG	4600
PCHP-3	CHILLED WATER	HORIZONTAL SPLIT CASE	1125	120	50	1800	480	3	60	ARMSTRONG	4600
(E)CWP-1	COND. WATER	VERTICAL TURBINE	1800	95	75	1750	480	3	60	BELL & GOSSETT	14RJH0
(E)CWP-2	COND. WATER	VERTICAL TURBINE	1800	95	75	1750	480	3	60	BELL & GOSSETT	14RJH0
(E)CWP-3	COND. WATER	VERTICAL TURBINE	1800	95	75	1750	480	3	60	BELL & GOSSETT	14RJH0
(E)HWP-1	HEATING HOT WATER	HORIZONTAL SPLIT CASE	351	140	25	1750	480	3	60	BELL & GOSSETT	150
(E)HWP-2	HEATING HOT WATER	HORIZONTAL SPLIT CASE	351	140	25	1750	480	3	60	BELL & GOSSETT	150
N-HWP-04	HEATING HOT WATER	VERTICAL INLINE	341	50	7.5	1800	480	3	60	ARMSTRONG	4600
(E)N-HWP-01	HEATING HOT WATER	VERTICAL INLINE	64	50	2	1800	480	3	60	-	-
(E)N-HWP-02	HEATING HOT WATER	VERTICAL INLINE	64	50	2	1800	480	3	60	-	-
(E)N-HWP-03	HEATING HOT WATER	VERTICAL INLINE	64	50	3	1200	480	3	60	-	-

(E)WATER COOLED CHILLER

MARK	TONS	EVAPORATOR			CONDENSER	VALVE TYPE	PIPE SIZE	REMARKS
		MAX GPM	MIN GPM	LWT	FLOW GPM			
(E)CH-01	600	900	450	42°	1800	2-WAY	8"	1
(E)CH-02	600	900	450	42°	1800	2-WAY	8"	1
(E)CH-03	600	900	450	42°	1800	2-WAY	8"	1

REMARKS:

1. EXISTING CONDENSER WATER AND CHILLED WATER ISOLATIONS SHALL BE REPLACED.

(E) BOILER SCHEDULE

MARK	EWT (°F)	LWT (°F)	GPM	MINIMUM INPUT (MBH)	MINIMUM HEATING OUTPUT (MBH)	GAS MANIFOLD PRESSURE (PSI)	FLUE SIZE (IN. ROUND)	ELECTRICAL		REMARKS
								BLOWER HP	CURRENT CHARAC. (V/PH/HZ)	
(E)B-1	150°	180°	351	8,370	6,700	-	-	-	480/3/60	1
(E)B-2	150°	180°	351	8,370	6,700	-	-	-	480/3/60	1
(E)B-3	160°	188°	120	2,000	1,700	-	12	-	480/3/60	1

REMARKS:

1. REPLACE EXISTING HEATING HOT WATER CONTROL VALVE AND ACTUATORS, BALANCING AND ISOLATION VALVES AND EXISTING PIPING AND APPURTENANCES

(E) HOT WATER UNIT HEATER

MARK	CFM	GPM	MIN. CAPACITY (BTH)	MAXIMUM PRESSURE DROP		MANUFACTURER	MODEL	HW PIPE SIZE (IN.)	REMARKS
				AIR (IN. W.G.)	WATER				
(E)UH-H1	1,050	2.75	38,900	-	-	REZNOR	HH300	3/4"	1
(E)UH-H2	1,050	2.75	38,900	-	-	REZNOR	HH300	3/4"	1
(E)UH-H3	1,050	2.75	38,900	-	-	REZNOR	HH300	3/4"	1
(E)UH-H4	1,050	2.75	38,900	-	-	REZNOR	HH300	3/4"	1

REMARKS:

1. REPLACE EXISTING HEATING HOT WATER CONTROL VALVE AND ACTUATORS, BALANCING AND ISOLATION VALVES AND EXISTING PIPING AND APPURTENANCES AS INDICATED ON DETAIL #9/M5.01 WITH NEW.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
⬡#	KEY NOTE TAG
(#)	NOTE SPECIFIC TO DETAIL TAG
△#	REVISION TAG
DH	ELECTRIC DUCT HEATER
UH	ELECTRIC UNIT HEATER
◬	PUMP
DS	MOTOR STARTER/DISCONNECT
VD	VARIABLE FREQUENCY DRIVE
CP	BUILDING MANAGEMENT CONTROL PANEL (EXISTING)
D	FLOW METER DISPLAY
LC	LIGHTING CONTACTOR
CONTROL	
△FS	COMBINATION FIRE & SMOKE DAMPER (VERTICAL)
◇FS	COMBINATION FIRE & SMOKE DAMPER (HORIZONTAL)
M	MOTORIZED DAMPER
SENSORS	
Ⓣ	THERMOSTAT AND TEMPERATURE SENSOR
Ⓗ	HUMIDISTAT
Ⓑ	LIGHTING TLO BUTTON (1)
ⓜ	HVAC TLO BUTTON (1)
Ⓔ	EMERGENCY SHUTDOWN STATION (1)
(CO²)	CARBON DIOXIDE SENSOR
(TS)	TIMER SWITCH
(TL)	LINE VOLTAGE THERMOSTAT
(KT)	KILN TIMER
(CO)	CARBON MONOXIDE MONITOR
(PB)	PURGE BUTTON
(HS)	FUME HOOD SWITCH
SUBSCRIPTS AND ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BBS	BELOW BOTTOM OF STRUCTURE
CFM	CUBIC FEET PER MINUTE
EA	EXHAUST AIR
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
HWC	HOT WATER COIL

REMARKS:

1. COORDINATE LOCATION WITH OWNER, COMMISSIONING AND ENGINEER.

NOTE: SCHEDULES INCLUDED ON THIS SHEET ARE SUPPLEMENTARY INFORMATION FOR THE NEW EQUIPMENT INSTALLED AS PART OF THE BUILDING RENOVATION. REFER TO BUILDING RENOVATION DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

OUTSIDE AIR INTAKE

MARK	CFM	MAX P.D. (IN. W.G.)	MIN. THROAT	ACME MODEL NUMBER	SERVES	REMARKS
(E)OAI-A1	1,610	0.10	18x18	IV	AHU-A1	1
(E)OAI-B1	1,650	0.10	18x18	IV	AHU-B1	1
(E)OAI-C1	5,140	0.10	36x18	IV	AHU-C1&C2	1
(E)OAI-C3	4,640	0.10	22x22	IV	AHU-C3	1
(E)OAI-C4	6,000	0.10	60x36	IV	AHU-C4	1
(E)OAI-D1	7,000	0.10	36x36	IV	AHU-D1&D3	1
(E)OAI-D2	4,335	0.10	30x30	IV	AHU-D2&D3	1
(E)OAI-D3	525	0.15	12x12	IV	AHU-D4	1
(E)OAI-D4	3,815	0.10	30x30	IV	AHU-D5	1
(E)OAI-E1	8,025	0.15	48x42	IV	AHU-E1	1
(E)OAI-E1A	1,425	0.10	16x14	IV	AHU-E3	1
(E)OAI-E2	3,885	0.10	36x36	IV	AHU-E2	1
(E)OAI-E2A	5,825	0.10	36x36	IV	AHU-E4	1
(E)OAI-E5	4,835	0.10	24x24	IV	AHU-E5	1
(E)OAI-F1	6,980	0.10	36x36	IV	AHU-F2 & FCU-F1	1
(E)OAI-G2	4,200	0.10	30x30	IV	AHU-G2	1
(E)OAI-G3	1,325	0.10	14x12	IV	AHU-G3	1
(E)OAI-G4	870	0.10	14x14	IV	AHU-G4	1
(E)OAI-H1	2,135	0.10	24x24	IV	AHU-H1	1
(E)OAI-H2	485	0.10	12x12	IV	AHU-H2	1
(E)OAI-H3	930	0.10	14x14	IV	AHU-H3	1
(E)OAI-H4	375	0.10	12x12	IV	AHU-H4	1
(E)OAI-H5	5,715	0.10	24x30	IV	AHU-H4	1
(E)OAI-I1	1,220	0.10	16x16	IV	AHU-I3	1
(E)OAI-J1	3,475	0.10	22x20	IV	AHU-J6&J7	1
(E)OAI-CP-1	13,600	0.10	54x54	IV	CENTRAL PLANT	1
(E)OAI-A1-01	1,650	0.10	18x18	IV	AHU-A1	1
OAI-G1	7,800	0.20	-	TRE	OAU-G7	2
OAI-G2	7,200	0.10	-	TRE	EF-G11/ EF-G12	2
OAI-G3	7,200	0.10	-	TRE	EF-G9/ EF-G10	2
OAI-G4	4,800	0.10	-	TRE	EF-G13	2
OAI-G5	2,800	0.10	-	TRE	DC-1	2

REMARKS:

1. PROVIDE NEW MOTORIZED DAMPER AND 24V ACTUATOR.
2. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION. REFER TO BUILDING RENOVATIONS DRAWINGS FOR MORE INFO.

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS SCHEDULES

M7.11
of

DUCTLESS MINI-SPLIT - INDOOR UNIT

MARK	FAN					AIR TEMPERATURE (°F)		COOLING		HEATING			COOLING	REMARKS
	SUPPLY AIR CFM	WATTS	CURRENT CHARAC.			ENTERING DRY BULB	ENTERING WET BULB	MIN. TOTAL CAPACITY (BTUH)	MIN. SENS. CAPACITY (BTUH)	ENTERING AIR TEMP.(°F)	MINIMUM CAPACITY (BTUH)	KW	MINIMUM SEER/ HSPF2	
			V	P	F									
DMS-1	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-2	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-3	900	40.0	208	1	60	75.0	62.5	36,000	28,800	0	0	2	15.0/-	1
DMS-4	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-5	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-6	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-7	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-8	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-9	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-10	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-11	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-12	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-13	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-14	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-15	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-16	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-17	375	40.0	208	1	60	75.0	62.5	18,000	14,400	0	0	0	15.0/-	1
DMS-18	375	40.0	208	1	60	75.0	62.5	18,000	14,400	72	7,290	2	14.3/7.5	1
DMS-19	375	40.0	208	1	60	75.0	62.5	18,000	14,400	72	7,290	2	14.3/7.5	1
DMS-20	375	40.0	208	1	60	75.0	62.5	18,000	14,400	72	7,290	2	14.3/7.5	1

REMARKS:

1. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION.
   REFER TO BUILDING RENOVATIONS DRAWINGS FOR ADDITIONAL INFORMATION.

DUCTLESS MINI-SPLIT - OUTDOOR UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM SEER/HSPF 2	CURRENT CHARAC.			RELATED UNIT MARK	REMARKS
				V	PH	F		
DMSCU-1	18,000	95	15.0/-	208	1	60	DMS-1	1
DMSCU-2	18,000	95	15.0/-	208	1	60	DMS-2	1
DMSCU-3	36,000	95	15.0-/-	208	1	60	DMS-3	1
DMSCU-4	18,000	95	15.0/-	208	1	60	DMS-4	1
DMSCU-5	18,000	95	15.0/-	208	1	60	DMS-5	1
DMSCU-6	18,000	95	15.0/-	208	1	60	DMS-6	1
DMSCU-7	18,000	95	15.0/-	208	1	60	DMS-7	1
DMSCU-8	18,000	95	15.0/-	208	1	60	DMS-8	1
DMSCU-9	18,000	95	15.0/-	208	1	60	DMS-9	1
DMSCU-10	18,000	95	15.0/-	208	1	60	DMS-10	1
DMSCU-11	18,000	95	15.0/-	208	1	60	DMS-11	1
DMSCU-12	18,000	95	15.0/-	208	1	60	DMS-12	1
DMSCU-13	18,000	95	15.0/-	208	1	60	DMS-13	1
DMSCU-14	18,000	95	15.0/-	208	1	60	DMS-14	1
DMSCU-15	18,000	95	15.0/-	208	1	60	DMS-15	1
DMSCU-16	18,000	95	15.0/-	208	1	60	DMS-16	1
DMSCU-17	18,000	95	15.0/-	208	1	60	DMS-17	1
DMSCU-18	18,000	95	14.3/7.5	208	1	60	DMS-15	1
DMSCU-19	18,000	95	14.3/7.5	208	1	60	DMS-16	1
DMSCU-20	18,000	95	14.3/7.5	208	1	60	DMS-17	1

REMARKS:

1. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION.
   REFER TO BUILDING RENOVATIONS DRAWINGS FOR ADDITIONAL INFORMATION.

DUAL DUCT TERMINAL BOX

MARK	COOLING			HEATING		REMARKS
	MAXIMUM CFM	MINIMUM CFM	INLET DIAMETER SIZE (IN.)	MAXIMUM CFM	INLET DIAMETER SIZE (IN.)	
DDB-G5-01	1700	540	14	1360	12	2
DDB-G5-02	1375	440	12	1100	12	2
DDB-G5-03	1875	600	14	1500	12	2
DDB-G5-04	1510	480	12	1210	12	2
DDB-G5-05	1760	560	14	1410	12	2
DDB-G5-06	600	190	8	480	7	2
DDB-G5-07	675	220	8	540	8	2
DDB-G6-01	3400	1,150	16	2720	16	2
DDB-G6-02	1650	560	14	1320	12	2
DDB-G6-03	2775	940	16	2220	16	2
DDB-G6-04	900	310	10	720	10	2
DDB-G6-05	2775	940	16	2220	16	2
(E)C1-01	1705	480	16	1025	14	1
(E)C1-02	760	260	14	455	12	1
(E)C1-03	1020	360	14	615	12	1
(E)C1-04	1350	360	14	810	12	1
(E)C1-05	1350	360	14	810	12	1
(E)C1-06	1315	360	14	790	12	1
(E)C1-07	525	180	10	315	8	1
(E)C1-08	1785	480	16	1075	14	1
(E)C1-09	960	260	12	580	10	1
(E)C1-10	520	180	10	315	8	1
(E)C1-11	880	260	12	530	10	1
(E)C1-12	1615	1575	16	970	14	1
(E)C1-13	1070	970	14	645	12	1
(E)C1-14	870	260	12	520	10	1
(E)C1-15	1350	360	14	810	12	1
(E)C1-16	870	260	12	520	10	1
(E)C1-17	870	260	12	520	10	1
(E)C1-18	915	260	12	450	10	1
(E)C1-19	1360	360	14	820	12	1
(E)C1-20	1360	360	14	820	12	1
(E)C1-21	1360	1330	14	820	12	1
(E)C1-22	420	180	10	255	8	1
(E)D2-01	730	260	12	440	10	1
(E)D2-02	250	100	8	150	6	1
(E)D2-03	985	260	12	595	10	1
(E)D2-04	1125	360	14	675	12	1
(E)D2-05	1220	360	14	735	12	1
(E)D2-06	1455	360	14	875	12	1
(E)D2-07	990	260	12	595	10	1
(E)D2-08	550	180	10	330	8	1
(E)D2-09	1650	480	16	990	14	1
(E)D2-10	500	180	10	250	8	1
(E)D1-01	530	180	10	320	8	1
(E)D1-02	700	180	12	420	10	1
(E)D1-03	530	180	10	320	8	1
(E)D1-04	390	180	10	235	8	1
(E)D1-05	1295	360	14	780	12	1
(E)D1-06	445	180	10	270	8	1
(E)D1-07	1200	360	14	720	12	1
(E)D1-08	1440	360	14	865	12	1
(E)D1-09	660	590	12	400	10	1
(E)D1-10	1515	1465	14	910	12	1
(E)D1-11	395	100	10	240	8	1
(E)D1-12	1100	360	14	660	12	1
(E)D1-13	440	180	10	265	8	1
(E)E1-01	540	180	10	325	8	1
(E)E1-02	680	180	12	410	10	1
(E)E1-03	1520	480	14	910	12	1
(E)E1-04	680	180	12	410	10	1
(E)E1-05	795	260	12	480	10	1
(E)E1-06	930	260	12	560	10	1
(E)E1-07	965	260	12	580	10	1
(E)E1-08	680	180	12	410	10	1
(E)E1-09	680	180	12	410	10	1
(E)E1-10	1520	480	14	915	12	1
(E)E1-11	680	180	12	410	10	1
(E)E1-12	680	180	12	410	10	1
(E)E1-13	1520	480	14	915	12	1
(E)E1-14	680	180	12	410	10	1
(E)E1-15	795	260	12	480	10	1
(E)E1-16	2360	630	18	1420	16	1
(E)E1-17	1660	480	16	1000	14	1
(E)E1-18	1245	360	14	750	12	1
(E)E1-19	1654	480	16	990	14	1
(E)E1-20	680	180	12	410	10	1
(E)E1-21	680	180	12	410	10	1
(E)E1-22	1850	1760	16	1110	14	1
(E)E1-23	680	180	12	410	10	1
(E)E1-24	680	180	12	410	10	1
(E)E2-01	1460	360	14	880	12	1
(E)E2-02	1095	1005	14	660	12	1
(E)E2-03	960	260	12	575	10	1
(E)E2-04	1060	360	14	635	12	1
(E)E2-05	710	620	12	430	10	1
(E)E2-06	1525	480	14	915	12	1
(E)E2-07	1055	360	14	635	12	1
(E)E2-08	580	180	10	350	8	1
(E)E2-09	1080	360	14	650	12	1
(E)E2-10	2520	2430	18	1515	16	1
(E)E2-11	2380	630	18	1430	16	1
(E)E2-12	795	260	12	480	10	1
(E)E2-13	680	180	12	410	10	1
(E)E2-14	795	260	12	480	10	1
(E)E2-15	2360	630	18	1420	16	1
(E)B1-01	1260	360	14	760	12	1
(E)B1-02	990	260	12	595	10	1
(E)B1-03	1320	1280	14	795	12	1
(E)B1-04	760	260	12	460	10	1
(E)B1-05	305	100	8	185	6	1
(E)B1-06	970	260	12	580	10	1
(E)B1-07	510	180	10	310	8	1
(E)J3-01	1550	480	14	930	12	1
(E)J3-02	1240	360	14	745	12	1
(E)J3-03	1335	1295	14	805	12	1
(E)J3-04	250	100	8	150	6	1
(E)J3-05	1350	360	14	810	12	1
(E)J3-06	1190	360	14	715	12	1
(E)J3-07	2175	630	18	1305	16	1
(E)J3-08	1825	1705	16	1095	14	1
(E)J3-09	1100	360	14	660	12	1
(E)J3-10	1405	360	14	845	12	1
(E)J3-11	370	100	8	225	6	1
(E)J3-12	370	100	8	225	6	1
(E)H1-01	310	260	8	190	6	1
(E)H1-02	800	260	12	480	10	1
(E)H1-03	1325	1275	14	800	12	1
(E)H1-04	460	180	10	275	8	1
(E)H1-05	370	200	8	225	6	1
(E)H1-06	820	260	12	490	10	1
(E)H1-07	2180	630	18	1310	16	1
(E)H1-08	2180	630	18	1310	16	1
(E)H1-09	1760	480	16	1060	14	1
(E)H1-10	1940	1900	16	1165	14	1
(E)H1-11	730	260	12	440	10	1

REMARKS:

1. REPLACE EXISTING ACTUATORS WITH NEW. CONTROL
   DAMPER TO REMAIN AND BE REUSED.
2. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION.
   REFER TO BUILDING RENOVATIONS DRAWINGS FOR MORE INFO.

VARIABLE VOLUME TERMINAL BOX

MARK	MAXIMUM CFM	MINIMUM CFM	INLET DIAMETER SIZE (IN.)	REMARKS
VAV-G7-01	3,000	630	16	1
VAV-G7-02	3,300	630	16	1
VAV-G8-03	1,500	360	12	1

REMARKS:

1. NEW EQUIPMENT PROVIDED AS PART OF BUILDING RENOVATION.
   REFER TO BUILDING RENOVATIONS DRAWINGS FOR MORE INFO.

DUAL DUCT TERMINAL BOX

MARK	COOLING			HEATING		REMARKS
	MAXIMUM CFM	MINIMUM CFM	INLET DIAMETER SIZE (IN.)	MAXIMUM CFM	INLET DIAMETER SIZE (IN.)	
(E)1H5-01	730	260	12	440	10	1
(E)1H5-02	730	260	12	440	10	1
(E)1H5-03	1370	360	14	825	12	1
(E)1H5-04	650	180	12	390	10	1
(E)1H5-05	1090	965	14	655	12	1
(E)1H5-06	1620	1450	16	975	14	1
(E)1H5-07	2235	630	18	1345	16	1
(E)2H5-01	970	260	12	585	10	1
(E)2H5-02	1640	480	16	985	14	1
(E)2H5-03	1640	480	16	985	14	1
(E)2H5-04	1720	480	16	1035	14	1
(E)2H5-05	1640	480	16	985	14	1
(E)2H5-06	1300	360	14	780	12	1
(E)G2-01	750	260	12	450	10	1
(E)G2-02	285	100	8	175	6	1
(E)G2-03	1380	360	14	830	12	1
(E)G2-04	450	180	10	270	8	1
(E)G2-05	435	180	10	260	8	1
(E)G2-06	1380	360	14	830	12	1
(E)G2-07	545	180	10	330	8	1
(E)G2-08	470	180	10	285	8	1
(E)G2-09	2200	630	18	1320	16	1
(E)G3-01	230	100	8	140	6	1
(E)G3-02	720	260	12	430	10	1
(E)G3-03	730	260	12	440	10	1
(E)G3-04	720	260	12	430	10	1
(E)G3-05	1265	360	14	760	12	1
(E)G4-01	1710	1640	16	1030	14	1
(E)G4-02	1485	360	14	290	12	1
(E)G4-03	1875	1750	16	1110	14	1
(E)J2-1-01	970	260	12	585	10	1
(E)J2-1-02	970	260	12	585	10	1
(E)J2-1-03	970	260	12	585	10	1
(E)J2-1-04	970	260	12	585	10	1
(E)J2-1-05	970	260	12	585	10	1
(E)J2-1-06	970	260	12	585	10	1
(E)J2-1-07	1120	360	14	675	12	1
(E)C3-01	770	260	12	465	10	1
(E)C3-02	770	260	12	465	10	1
(E)C3-03	1265	360	14	800	12	1
(E)C3-04	1045	360	14	630	12	1
(E)C3-05	770	260	12	465	10	1
(E)C3-06	2315	630	18	1390	16	1
(E)C3-07	1555	480	14	935	12	1
(E)C3-08	1020	360	14	615	12	1
(E)C3-09	955	260	12	575	10	1
(E)C3-10	955	260	12	575	10	1
(E)C3-11	1020	360	14	615	12	1
(E)C3-12	1210	1120	14	730	12	1
(E)C3-13	1045	360	14	630	12	1
(E)C3-14	630	180	12	380	10	1
(E)C3-15	770	260	12	465	10	1
(E)C3-16	920	260	12	555	10	1
(E)C4-01	770	260	12	465	10	1
(E)C4-02	830	260	12	500	10	1
(E)C4-03	770	260	12	465	10	1
(E)C4-04	770	260	12	465	10	1
(E)C4-05	770	260	12	465	10	1
(E)C4-06	770	260	12	465	10	1
(E)C4-07	770	260	12	465	10	1
(E)C4-08	830	260	12	500	10	1
(E)C4-09	1605	480	16	965	14	1
(E)C4-10	2315	630	18	1390	16	1
(E)C4-11	965	260	12	580	10	1
(E)C4-12	965	260	12	580	10	1
(E)C4-13	975	260	12	585	10	1
(E)C4-14	770	260	12	465	10	1
(E)C4-15	770	260	12	465	10	1
(E)C4-16	1075	360	14	645	12	1
(E)C4-17	880	260	12	530	10	1
(E)C4-18	770	260	12	465	10	1
(E)D3-01	1840	480	16	1105	14	1
(E)D3-02	1275	360	14	765	12	1
(E)D3-03	1185	360	14	715	12	1
(E)D3-04	1400	360	14	840	12	1
(E)D3-05	1400	360	14	840	12	1
(E)D3-06	1250	360	14	750	12	1
(E)D3-07	740	260	12	445	10	1
(E)D3-08	1080	1010	14	650	12	1
(E)D3-09	2380	630	18	1425	16	1
(E)D3-10	455	180	10	275	8	1
(E)D4-01	1700	480	16	1020	14	1
(E)D4-02	650	180	12	295	10	1
(E)D4-03	2000	480	16	1200	14	1
(E)D4-04	195	100	8	120	6	1
(E)D4-05	1605	480	16	965	14	1
(E)D4-06	850	260	12	510	10	1
(E)D5-01	1830	480	16	1100	14	1
(E)D5-02	1300	360	14	780	12	1
(E)D5-03	1245	1180	14	750	12	1
(E)D5-04	1530	480	14	920	12	1
(E)D5-05	1530	480	14	920	12	1
(E)E4-01	730	260	12	440	10	1
(E)E4-02	905	260	12	545	10	1
(E)E4-03	790	260	12	475	10	1
(E)E4-04	730	260	12	440	10	1
(E)E4-05	790	260	12	475	10	1
(E)E4-05	905	260	12	545	10	1
(E)E4-07	2315	630	18	1390	16	1
(E)E4-08	1555	480	14	935	12	1
(E)E4-09	760	260	12	460	10	1
(E)E4-10	760	260	12	460	10	1
(E)E4-11	1080	360	14	650	12	1
(E)E4-12	760	260	12	460	10	1
(E)E4-13	965	260	12	580	10	1
(E)E4-14	760	260	12	460	10	1
(E)E4-15	420	370	10	255	8	1
(E)E4-16	955	260	12	575	10	1
(E)E4-17	1045	955	14	630	12	1
(E)E4-18	1235	360	14	740	12	1
(E)E5-01	375	180	8	225	6	1
(E)E5-02	730	260	10	440	8	1
(E)E5-03	730	260	10	440	8	1
(E)E5-04	730	260	10	440	8	1
(E)E5-05	790	260	10	475	8	1
(E)E5-06	1600	480	16	1070	14	1
(E)E5-07	730	260	10	440	8	1
(E)E5-08	845	260	12	510	10	1
(E)E5-09	2315	630	18	1390	16	1
(E)E5-10	1605	480	16	965	14	1
(E)E5-11	1400	360	14	840	12	1
(E)E5-12	1045	360	14	630	12	1
(E)E5-13	730	260	12	440	10	1
(E)E5-14	1400	360	12	840	12	1
(E)E5-15	1010	360	14	610	12	1
(E)E5-16	1100	1010	14	660	12	1
(E)E5-17	1530	480	14	920	12	1
(E)E5-18	480	180	10	290	8	1

REMARKS:

1. REPLACE EXISTING ACTUATORS WITH NEW. EXISTING CONTROL
   DAMPER TO REMAIN AND BE REUSED.

SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
#	KEY NOTE TAG
#	NOTE SPECIFIC TO DETAIL TAG
#	REVISION TAG
DH	ELECTRIC DUCT HEATER
UH	ELECTRIC UNIT HEATER
△	PUMP
DS	MOTOR STARTER/DISCONNECT
VD	VARIABLE FREQUENCY DRIVE
CP	BUILDING MANAGEMENT CONTROL PANEL (EXISTING)
D	FLOW METER DISPLAY
LC	LIGHTING CONTACTOR
CONTROL	
FS	COMBINATION FIRE & SMOKE DAMPER (VERTICAL)
FS	COMBINATION FIRE & SMOKE DAMPER (HORIZONTAL)
M	MOTORIZED DAMPER
SENSORS	
T	THERMOSTAT AND TEMPERATURE SENSOR
H	HUMIDISTAT
B	LIGHTING TLO BUTTON (1)
m	HVAC TLO BUTTON (1)
E	EMERGENCY SHUTDOWN STATION (1)
CO^2	CARBON DIOXIDE SENSOR
TS	TIMER SWITCH
TL	LINE VOLTAGE THERMOSTAT
KT	KILN TIMER
CO	CARBON MONOXIDE MONITOR
PB	PURGE BUTTON
HS	FUME HOOD SWITCH
SUBSCRIPTS AND ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BBS	BELOW BOTTOM OF STRUCTURE
CFM	CUBIC FEET PER MINUTE
EA	EXHAUST AIR
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
HWC	HOT WATER COIL

REMARKS:

1. COORDINATE LOCATION WITH OWNER,
   COMMISSIONING AND ENGINEER.

NOTE: SCHEDULES INCLUDED ON THIS SHEET ARE SUPPLEMENTARY INFORMATION FOR THE NEW EQUIPMENT INSTALLED AS PART OF THE BUILDING RENOVATION. REFER TO BUILDING RENOVATION DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

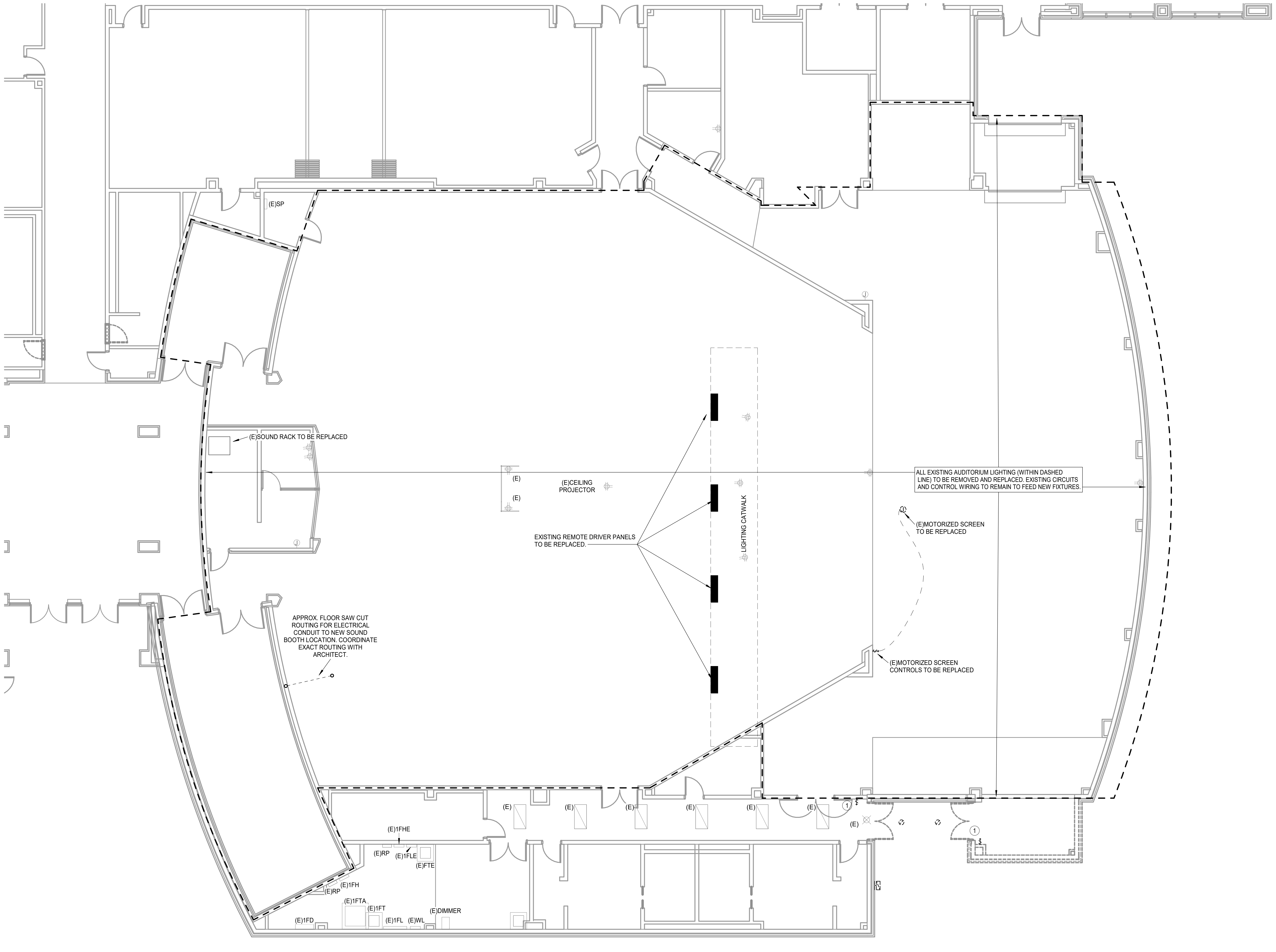
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: IP

MECHANICAL CONTROLS SCHEDULES

M7.12
of



N

1 **ELECTRICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA F**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINE TYPE LEGEND

────	EXISTING TO REMAIN
― ― ― ―	DISCONNECT AND REMOVE
━━━━	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR TO NOTIFY CAREY RAMSEY WITH DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

EXISTING RACEWAYS AND LOCATION OF ELECTRICAL OUTLETS ON EXISTING WALLS TO REMAIN SHALL BE RE-USED AS PRACTICAL FOR NEW DEVICES AS PART OF NEW WORK.

PROVIDE NEW ELECTRICAL DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE ADDITION OF GYPSUM BOARD OR OTHER WALL COVERING OVER EXISTING SURFACES ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURALS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING MOUNTED ELECTRICAL DEVICES FOR AREAS THAT REQUIRE CEILING REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY AND PLUMBING SCOPE OF AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

ELECTRICAL DEMOLITION NOTES

2 NLESS NOTED OTHERWISE, ALL EXISTING ELECTRICAL SWITCHBOARDS, PANELBOARDS & TRANSFORMERS SHALL REMAIN.

3 DISCONNECT & REMOVE ALL ELECTRICAL POWER DEVICES FROM WALLS SCHEDULED TO BE DEMOLISHED. UNLESS INDICATED OTHERWISE, PULL EXISTING CONDUCTORS BACK TO CEILING AND LEAVE IN PLACE FOR RE-USE. REFER TO ARCHITECURAL DRAWINGS FOR EXISTING WALL DEMOLITION.

4 REMOVE AND STORE ALL EXISTING LIGHT SPEED CLASSROOM SOUND ENHANCEMENT SYSTEMS TO FACILITATE DEMOLITION OF EXISTING CEILING GRID AND RELOCATION OF CLASSROOMS.

5 RETURN ANY REMOVED LIGHTING CONTROL PANELS & RELAY PANELS TO THE OWNER.

6 PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS.

7 UNLESS NOTED OTHERWISE, PULL CONDUCTORS FOR DEMOLISHED RECEPTACLES BACK TO CEILING AND LEAVE IN PLACE FOR RE-USE.

8 ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.

VV VERIFY ALL DEMOLITION WORK WITH ARCHITECT/OWNER PRIOR TO COMMENCEMENT OF WORK.

ELECTRICAL KEYED NOTES

1	DISCONNECT AND REMOVE ALL LIGHTING AND ASSOCIATED CONDUIT/WIRE BACK TO NEAREST ACTIVE BOX ABOVE CEILING. LIGHTING INCLUDES BUT IS NOT LIMITED TO: LIGHT FIXTURES, LIGHT SWITCHES, LIGHTING CONTROLS, LIGHTING RELAYS, ETC. ALL EXISTING LIGHT SWITCH BOXES SHALL REMAIN AND SHALL BE RE-USED AS PRACTICAL FOR NEW WIRING DEVICES.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

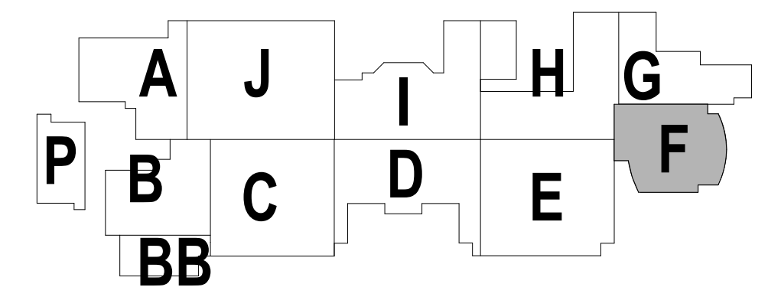
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL DEMOLITION FIRST FLOOR PLAN - AREA F

E0.01

of

ELECTRICAL KEYED NOTES

1	EXISTING FIXTURE TO BE REMOVED. EXISTING CIRCUIT TO BE REMOVED BACK TO NEAREST J-BOX.
2	REMOVE EXISTING SITE LIGHTING FROM FIXTURE TO BE DEMOLISHED BACK TO BUILDING. EXISTING CIRCUIT TO BE RE-USED AND RE-ROUTED AROUND NEW BUILDING FOOTPRINT TO RE-FEED EXISTING SITE LIGHTING. REFER TO SHEET E1.01 FOR MORE INFORMATION.
3	EXISTING SITE LIGHTING TO BE DEMOLISHED. REMOVE EXISTING CONDUIT AND WIRING BACK TO SOURCE OR NEXT EXISTING DEVICE TO REMAIN.

ELECTRICAL DEMOLITION NOTES

7 UNLESS NOTED OTHERWISE, PULL CONDUCTORS FOR DEMOLISHED RECEPTACLES BACK TO CEILING AND LEAVE IN PLACE FOR RE-USE.

8 ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.

VV VERIFY ALL DEMOLITION WORK WITH ARCHITECT/OWNER PRIOR TO COMMENCEMENT OF WORK.

ELECTRICAL DEMOLITION NOTES

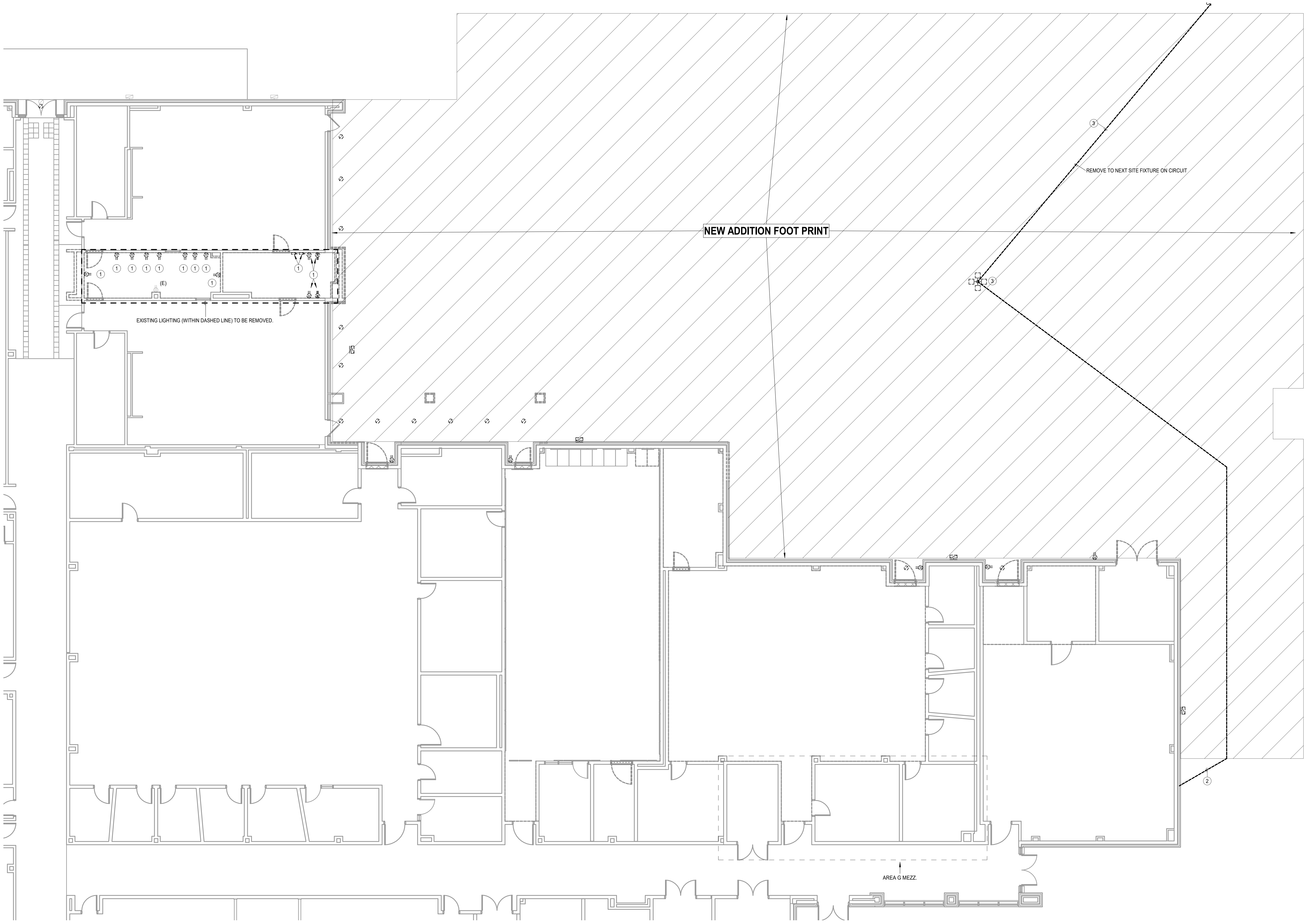
2 NLESS NOTED OTHERWISE, ALL EXISTING ELECTRICAL SWITCHBOARDS, PANELBOARDS & TRANSFORMERS SHALL REMAIN.

3 DISCONNECT & REMOVE ALL ELECTRICAL POWER DEVICES FROM WALLS SCHEDULED TO BE DEMOLISHED. UNLESS INDICATED OTHERWISE, PULL EXISTING CONDUCTORS BACK TO CEILING AND LEAVE IN PLACE FOR RE-USE. REFER TO ARCHITECURAL DRAWINGS FOR EXISTING WALL DEMOLITION.

4 REMOVE AND STORE ALL EXISTING LIGHT SPEED CLASSROOM SOUND ENHANCEMENT SYSTEMS TO FACILITATE DEMOLITION OF EXISTING CEILING GRID AND RELOCATION OF CLASSROOMS.

5 RETURN ANY REMOVED LIGHTING CONTROL PANELS & RELAY PANELS TO THE OWNER.

6 PROVIDE COVER PLATE FOR ANY REMOVED ELECTRICAL EQUIPMENT SUCH AS BUT NOT LIMITED TO RECEPTACLES OR SWITCHES ON EXISTING TO REMAIN WALLS.



N

① **ELECTRICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA G**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINE TYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR TO NOTIFY CAREY RAMSEY WITH DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

EXISTING RACEWAYS AND LOCATION OF ELECTRICAL OUTLETS ON EXISTING WALLS TO REMAIN SHALL BE RE-USED AS PRACTICAL FOR NEW DEVICES AS PART OF NEW WORK.

PROVIDE NEW ELECTRICAL DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE ADDITION OF GYPSUM BOARD OR OTHER WALL COVERING OVER EXISTING SURFACES ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURALS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING MOUNTED ELECTRICAL DEVICES FOR AREAS THAT REQUIRE CEILING REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY AND PLUMBING SCOPE OF AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

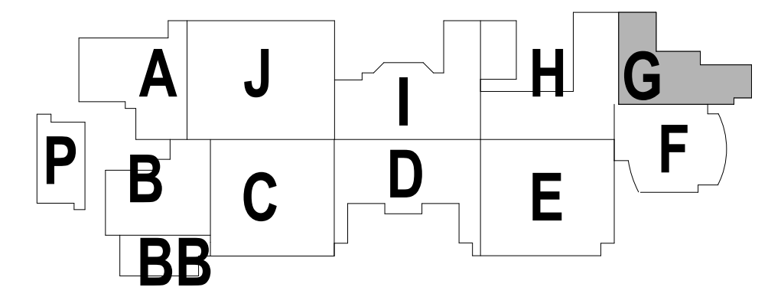
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

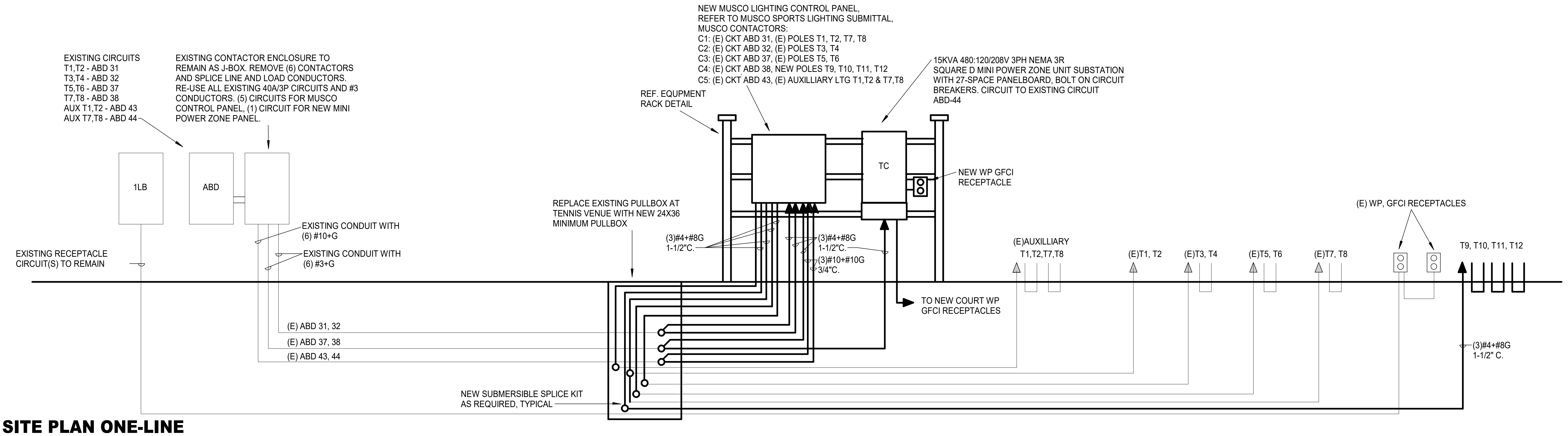


Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

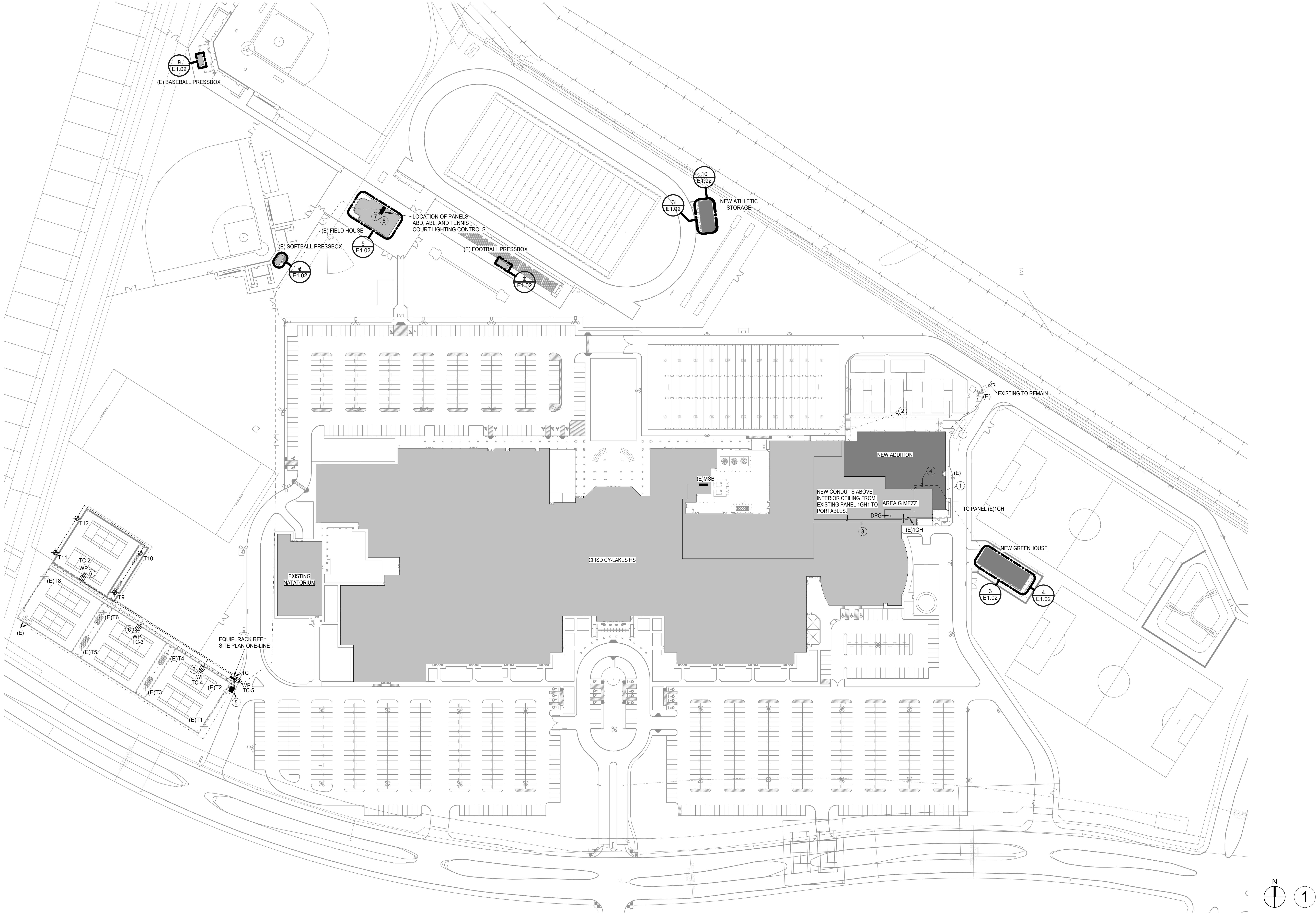
ELECTRICAL DEMOLITION
FIRST FLOOR PLAN -
AREA G

E0.02

of



2 SITE PLAN ONE-LINE
Scale: 12" = 1'-0"



1 ELECTRICAL SITE PLAN
Scale: 1" = 80'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINE TYPE LEGEND

────	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
━━━━	NEW WORK

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	PROVIDE NEW CONDUIT AND WIRING MATCHING THE SIZE OF THE EXISTING SITE LIGHTING CIRCUIT FROM PANEL 1GH LOCATED IN THE ELEC MEZZANINE. EXTEND NEW CONDUIT AND WIRING FROM EXISTING PANEL TO EXISTING SITE LIGHTING TO REMAIN OUTSIDE OF NEW BUILDING FOOTPRINT AS SHOWN. COORDINATE NEW WALL PENETRATION WITH ARCHITECT BEFORE ROUGH-IN.
2	ROUTE NEW CONDUIT AND WIRING, MATCHING EXISTING SIZES AND QUANTITIES, TO EXISTING PORTABLE CONNECTIONS. CONTRACTOR TO LOCATE EXACT EXISTING EQUIPMENT CONNECTION LOCATIONS, CONDUIT QUANTITIES, CONDUIT SIZES, AND WIRE SIZING FOR NEW CIRCUITS FROM EXISTING UPSTREAM 480V 3PH PANEL '1GH1'. REFER TO PANEL SCHEDULE FOR MORE INFORMATION. CONTRACTOR TO COORDINATE NEW ROUTING WITH EXISTING CIVIL UTILITIES.
3	SUGGESTED ROUTING OF NEW FEEDERS ABOVE INTERIOR CEILING THROUGH EXISTING BUILDING TO NEW PANELS. REFER TO ELECTRICAL RISER DIAGRAM FOR NEW PANEL AND FEEDER INFORMATION.
4	ROUTE NEW FEEDER DOWN NEW INTERIOR WALL OF ADDITION, UNDERGROUND, TO NEW FEED GREENHOUSE PANEL. REFER TO RISER DIAGRAM FOR FEEDER INFORMATION.
5	REPLACE EXISTING PULLBOX IN THIS APPROXIMATE LOCATION AT TENNIS VENUE WITH NEW IN GRADE RATED PULLBOX. REFER TO SITE PLAN ONE-LINE FOR MORE INFORMATION.
6	WP GFCI DUPLEX ON EACH SIDE OF FENCE. STAINLESS STEEL STRAP TO EXISTING FENCE POST.
7	EXISTING TENNIS COURT LIGHTING CONTACTOR PANEL TO REMAIN AS J-BOX. REMOVE (4) CONTACTORS AND SPLICE LINE AND LOAD CONDUCTORS TOGETHER.
8	PROVIDE NEW 25A, 3 POLE BREAKER IN EXISTING 480V PANEL ABD TO FEED NEW MINI POWER ZONE 'TC'.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

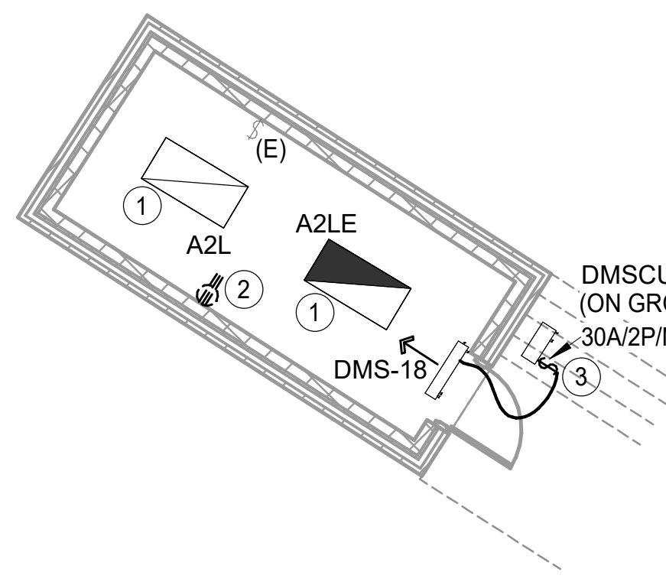
Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

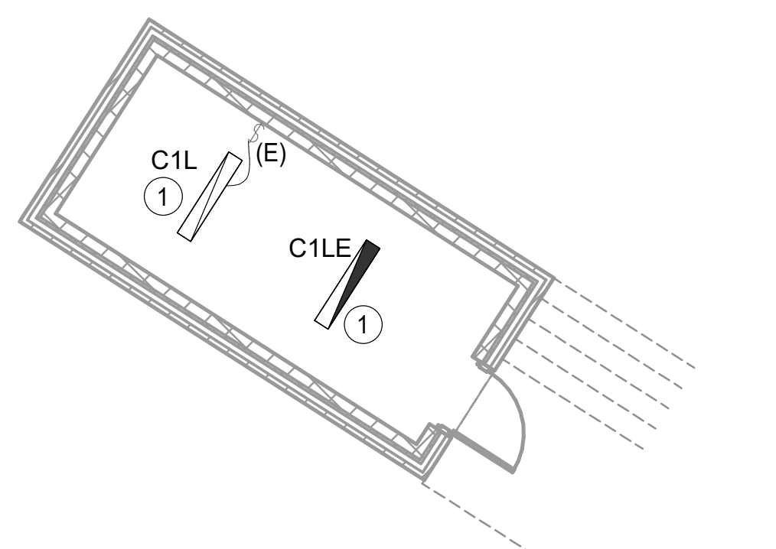
ELECTRICAL SITE PLAN

E1.01

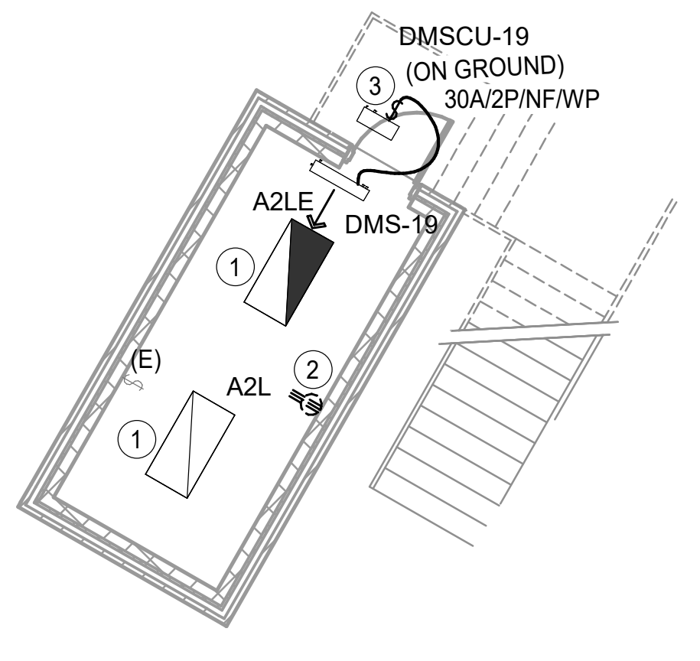
of



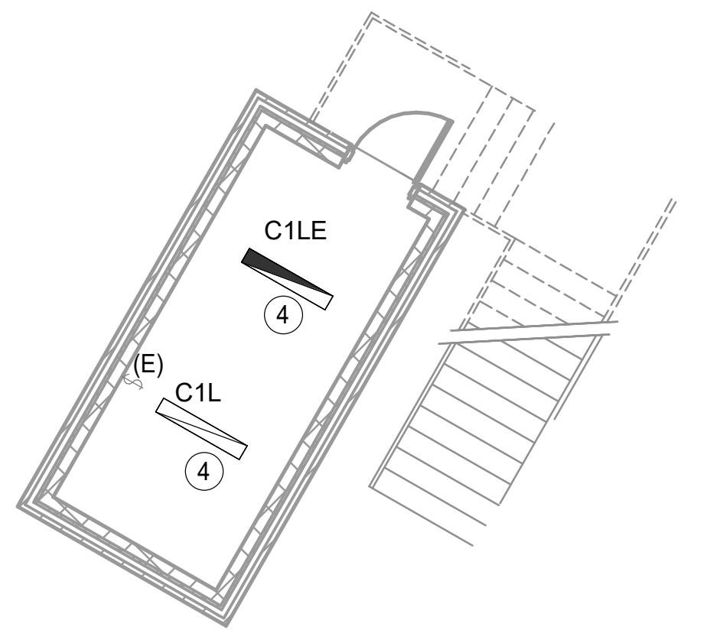
1 ELECTRICAL SITE PLAN -FOOTBALL PRESSBOX - POWER AND LIGHTING
Scale: 1/8" = 1'-0"



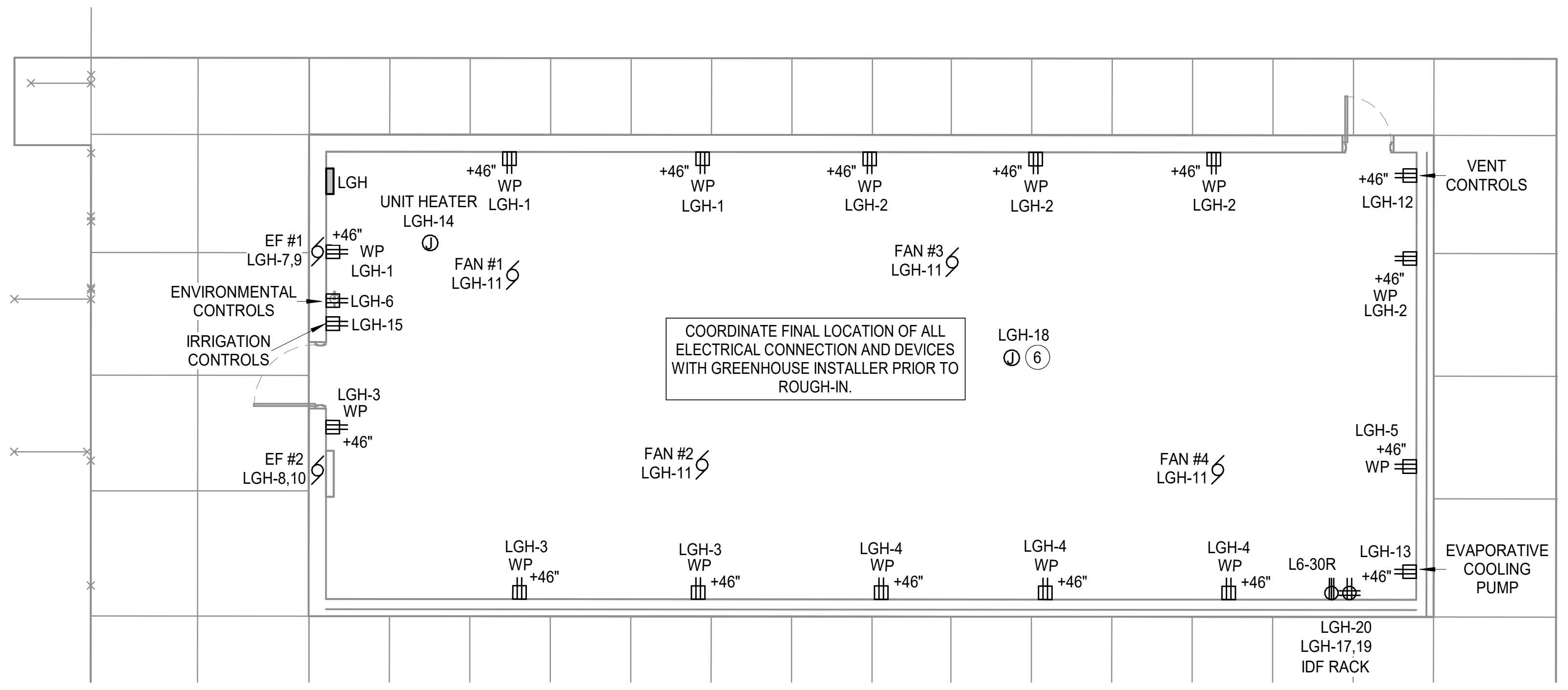
2 ELECTRICAL SITE PLAN -FOOTBALL PRESSBOX - POWER AND LIGHTING - STORAGE
Scale: 1/8" = 1'-0"



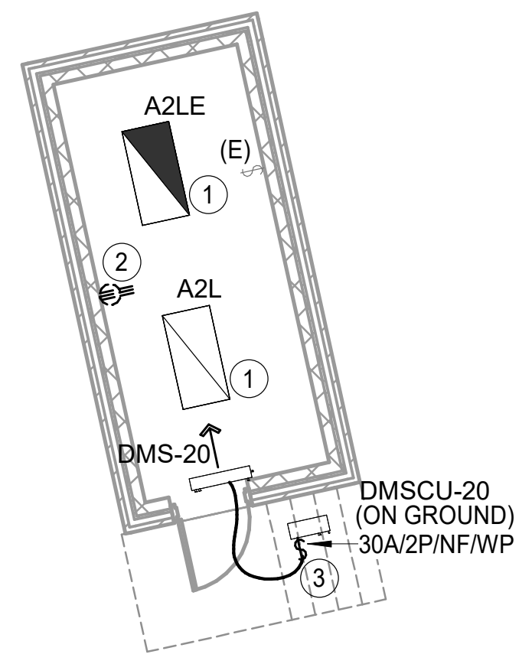
6 ELECTRICAL SITE PLAN -SOFTBALL PRESSBOX - POWER AND LIGHTING
Scale: 1/8" = 1'-0"



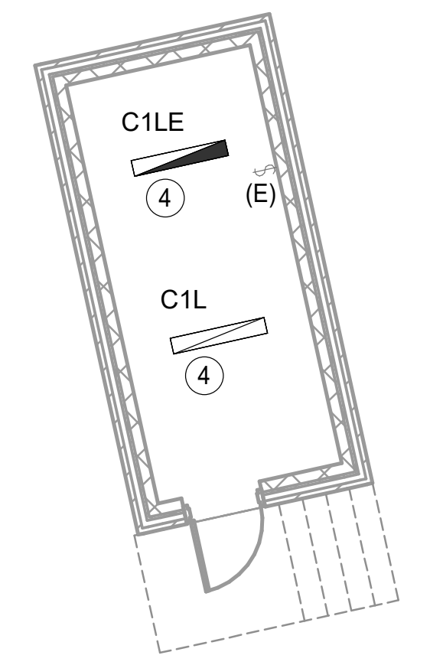
7 ELECTRICAL SITE PLAN -SOFTBALL PRESSBOX - POWER AND LIGHTING - STORAGE
Scale: 1/8" = 1'-0"



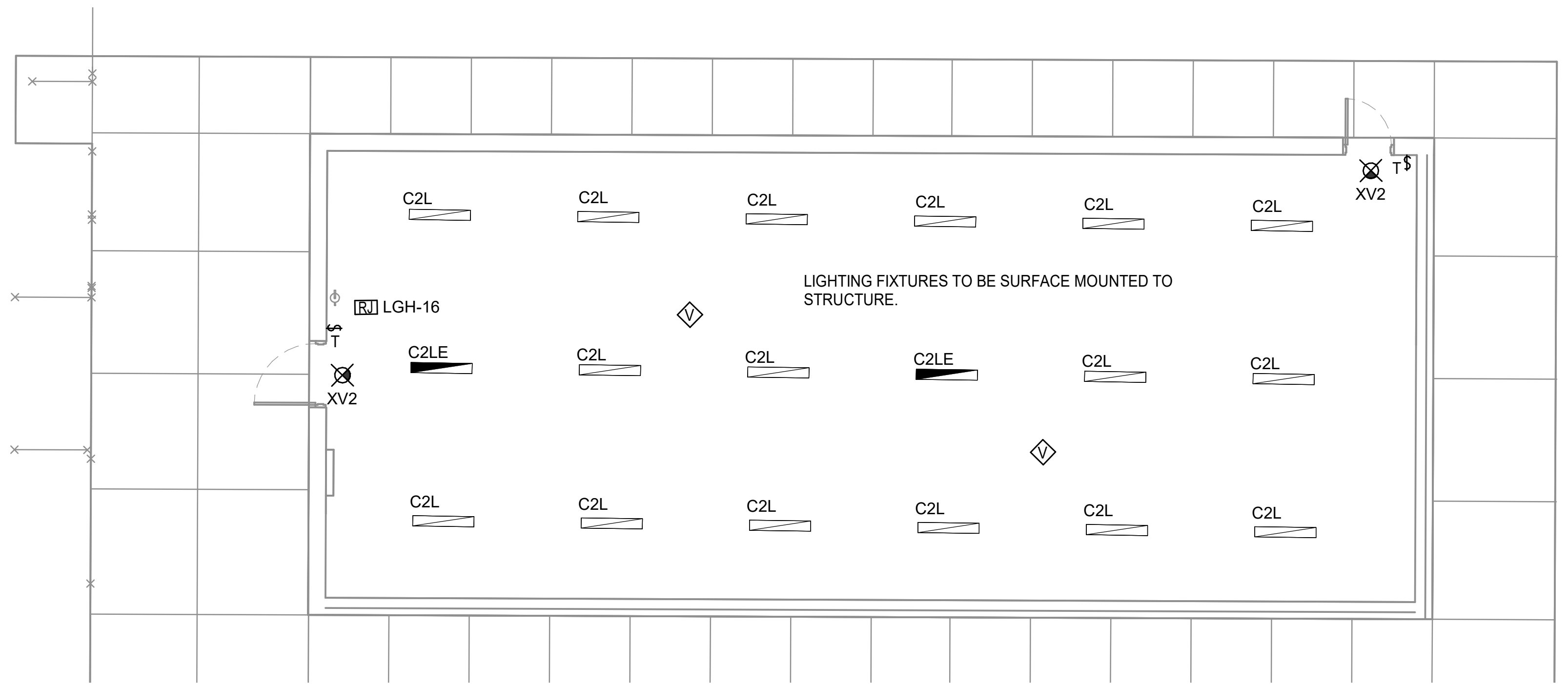
3 ELECTRICAL SITE PLAN -GREENHOUSE - POWER
Scale: 1/8" = 1'-0"



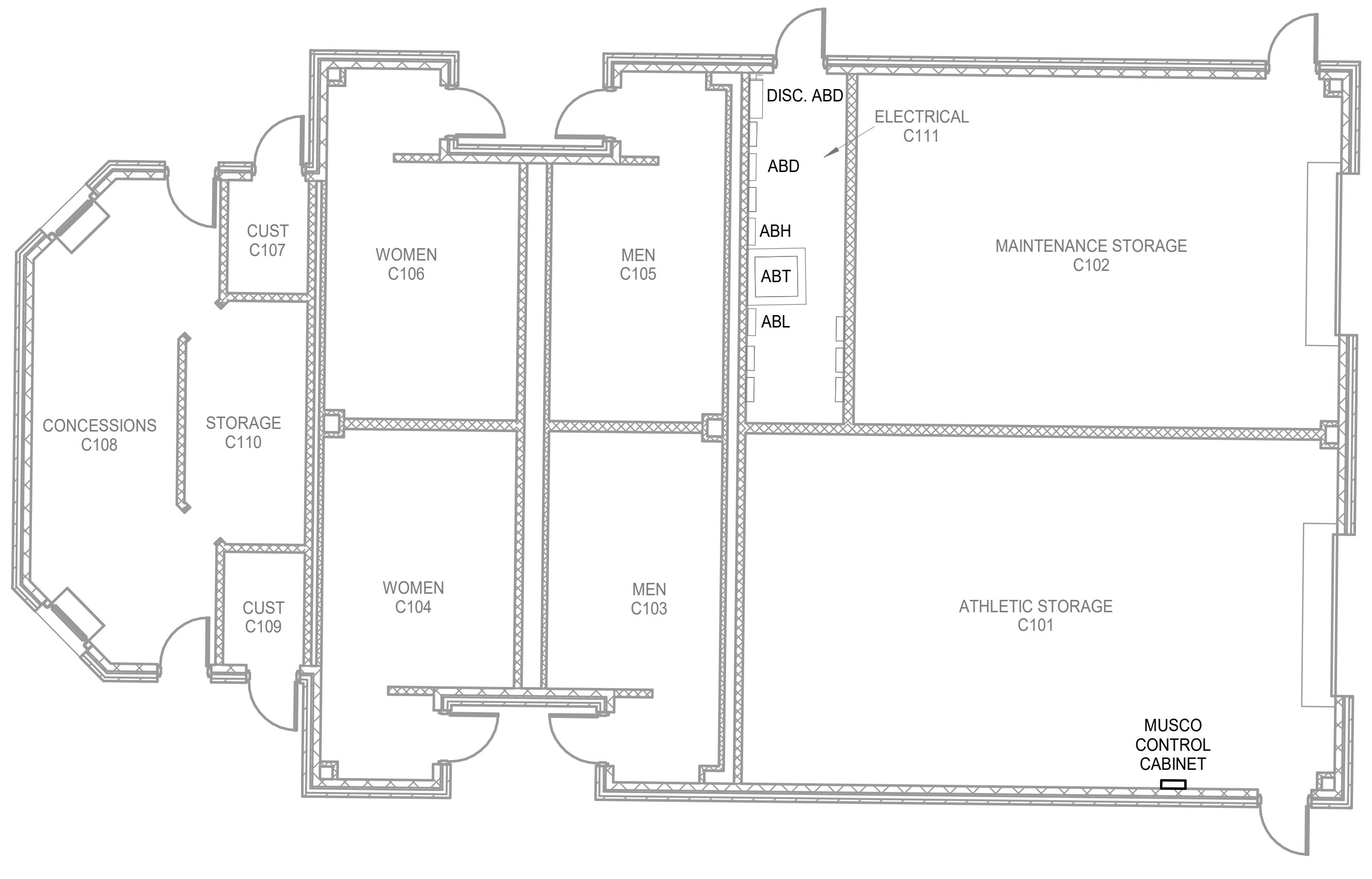
8 ELECTRICAL SITE PLAN -BASEBALL PRESSBOX - POWER AND LIGHTING
Scale: 1/8" = 1'-0"



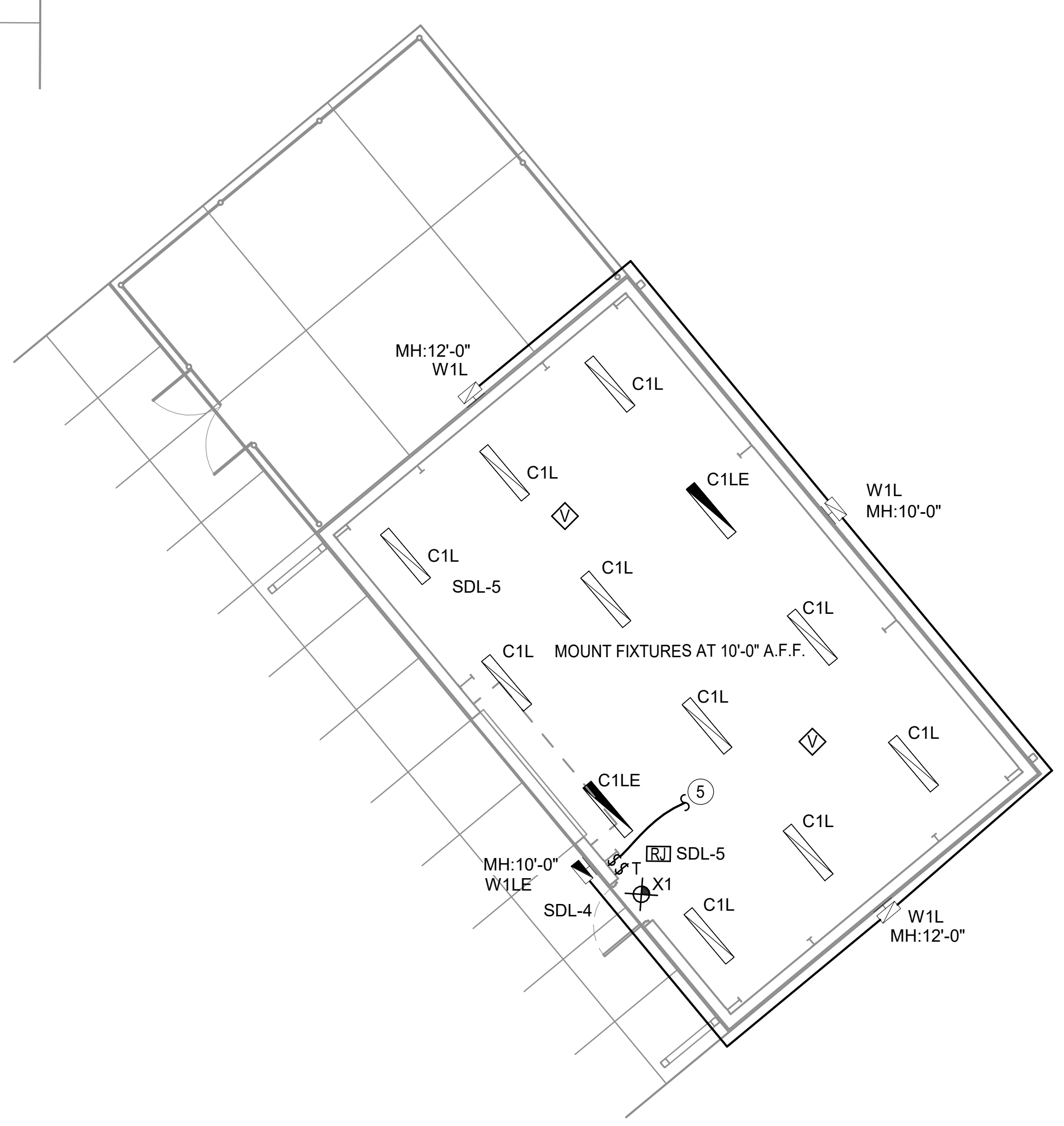
9 ELECTRICAL SITE PLAN -BASEBALL PRESSBOX - POWER AND LIGHTING - STORAGE
Scale: 1/8" = 1'-0"



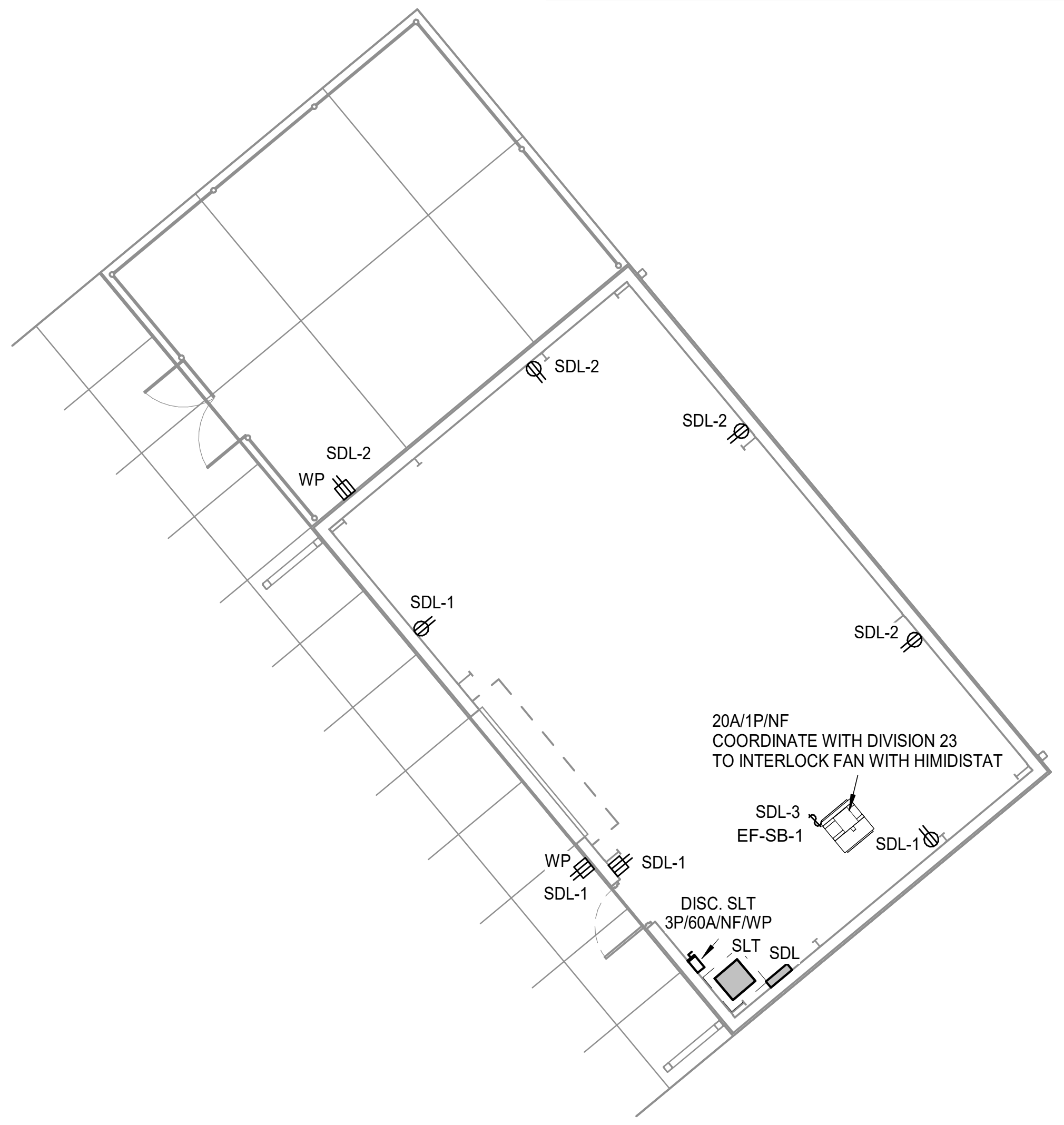
4 ELECTRICAL SITE PLAN -GREENHOUSE - LIGHTING
Scale: 1/8" = 1'-0"



5 ELECTRICAL SITE PLAN - FIELDHOUSE
Scale: 1/8" = 1'-0"



10 ELECTRICAL SITE PLAN - ATHLETIC STORAGE BLDG. LIGHTING
Scale: 1/8" = 1'-0"



11 ELECTRICAL SITE PLAN - ATHLETIC STORAGE BLDG. POWER
Scale: 1/8" = 1'-0"

LINETYPE LEGEND

───	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━	NEW WORK

PROVIDE NEW LIGHTING DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

EXISTING RACEWAYS AND LOCATION OF ELECTRICAL OUTLETS ON EXISTING WALLS TO REMAIN SHALL BE RE-USED AS PRACTICAL FOR NEW DEVICES AS PART OF NEW WORK.

PROVIDE (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR BUILDING OCCUPIED/UNOCCUPIED ADJACENT TO OR IN THE BMCS MASTER PANEL.

ALL PANELS, CONTACTORS, RELAYS, TRANSFORMERS, WIRING, AND CONDUIT NEEDED FOR POWER AT THE GREENHOUSE ARE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

PROVIDE POWER FOR TEMPERATURE SENSORS AND THREMOSTATS IN PRESSBOXES, GREENHOUSE, AND ATHLETIC STORAGE BUILDING FROM NEAREST ACCEPTABLE 120V CIRCUIT WITH #12 WIRE. CONTRACTOR TO ENSURE TOTAL FINAL CIRCUIT LOAD DOES NOT EXCEED 1920VA.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	EXISTING LIGHTING TO BE REMOVED AND REPLACED. PROVIDE POWER TO NEW LIGHTS SHOWN FROM EXISTING CIRCUIT. NEW FIXTURES TO BE SURFACE MOUNTED TO CEILING. RECONNECT EXISTING LIGHTING CONTROLS TO NEW FIXTURES.
2	EXISTING HVAC UNIT AND MULTIPOLE RECEPTACLE TO BE DEMOLISHED, REMOVE EXISTING CIRCUIT BACK TO PRESSBOX PANEL. EXISTING BREAKER TO BE REUSED TO FEED NEW UNIT IN THIS AREA.
3	PROVIDE POWER TO NEW UNIT FROM EXISTING 208V 3PH PANEL LOCATED IN PRESSBOX. UTILIZE EXISTING 30A/2P BREAKER REMAINING AFTER THE REMOVAL OF EXISTING WALL MOUNTED UNIT. PROVIDE NEW #10 WIRE TO NEW 30A/2P/NF DISCONNECT AT UNIT.
4	NEW FIXTURE TO BE MOUNTED IN MULLION.
5	PROVIDE INTERMATIC EI600XX TIME SWITCH AND CONTROL PHOTOCELL OUTSIDE FOR CIRCUIT.
6	PROVIDE POWER TO LOCAL SPEAKER SYSTEM. COORDINATE FINAL LOCATION WITH DIVISION 27.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

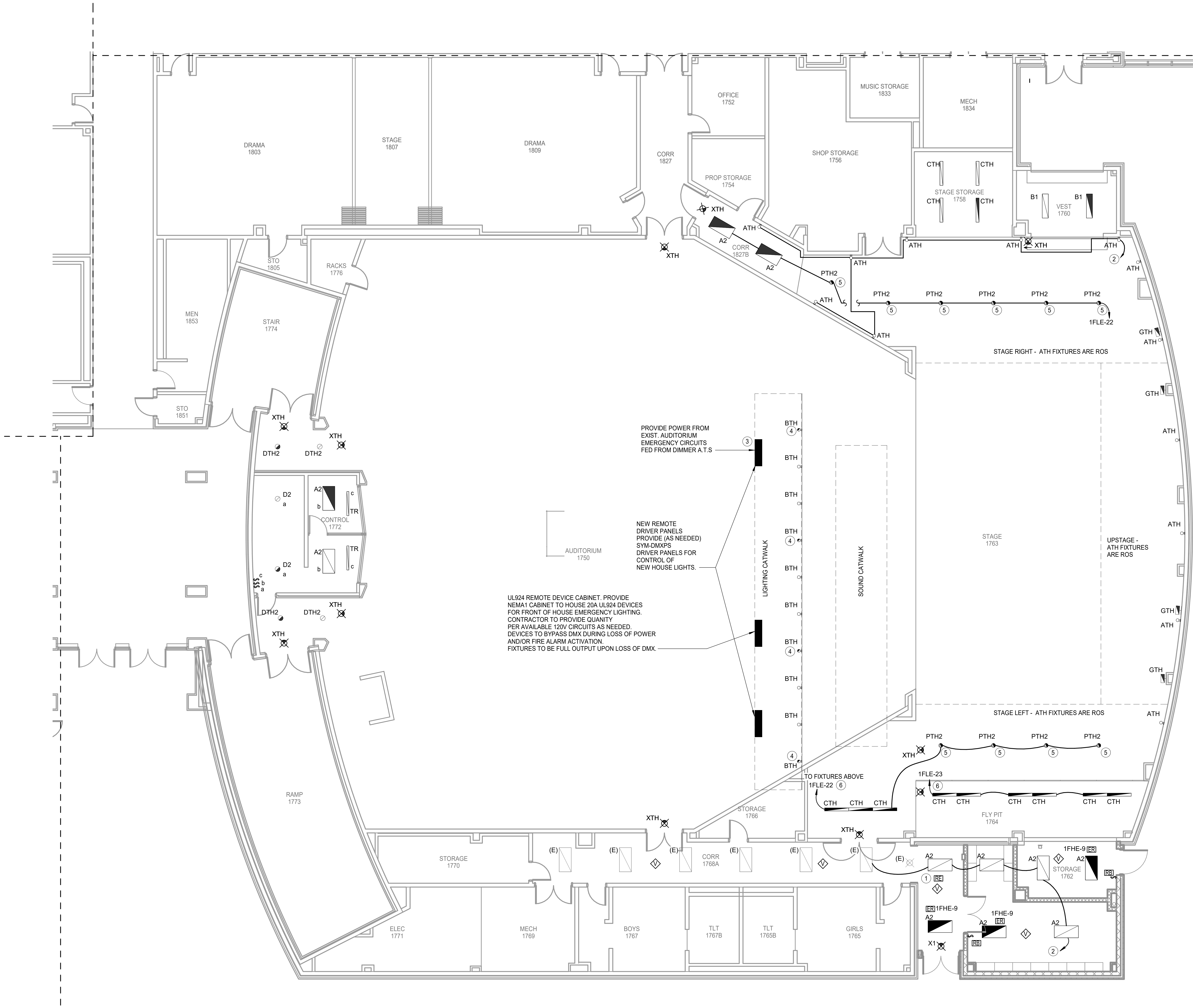
Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL SITE PLAN - ENLARGED VIEWS

E1.02
of

ELECTRICAL KEYED NOTES

1	PROVIDE NEW CONTROLS IN THIS SPACE TO ENSURE EXISTING AND NEW LIGHTING FIXTURES ARE CONTROLLED TOGETHER.
2	PROVIDE POWER TO NEW LIGHT(S) FROM EXISTING LIGHTING CIRCUIT AS SHOWN. EXTEND CONDUIT AND WIRING AS NECESARY.
3	REMOTE CENTRAL DRIVERS FOR HOUSE LIGHTING. FIELD VERIFY FINAL LOCATION IN THE SPACE. CONNECT NEW HOUSE LIGHTING DRIVERS TO EXISTING CONSTANT 120V CIRCUITS LEFT IN PLACE AFTER DEMOLITION, AND PROVIDE NEW CONTROLLED WIRING FROM EXISTING CONTROL SOURCE WITH ZONING AS SHOWN. EXTEND WIRING WITH MATCHING CONDUCTORS / CONDUIT TO REMOTE DRIVERS. PROVIDE DEDICATED REMOTE DRIVER UNITS FOR EMERGENCY FIXTURES. REFER TO SPECIFICATIONS AND DETAIL SHEETS.
4	PROVIDE POWER TO NEW EMERGENCY FIXTURES FROM CIRCUIT SHOWN. NEW EMERGENCY LIGHTS TO BE CONTROLLED VIA DIMMER/ATS EMERGENCY RELAY.
5	MOUNT NEW WORK LIGHT PENDANT FIXTURES BETWEEN THE EXISTING DUCT AND SUPPLY/RETURN GRILLES IN THIS SPACE (DASHED LINE). COORDINATE FIXTURE MOUNTING WITH DUCT AND THEATRICAL RIGGING. FIXTURES TO BE MOUNTED AT A HEIGHT WHERE THE BOTTOM OF FIXTURE IS LEVEL WITH THE BOTTOM OF THE DUCT.
6	PROVIDE LISTED UL924 EMERGENCY LOAD CONTROL RELAY.



1 ELECTRICAL LIGHTING FLOOR PLAN - LEVEL 1 - AREA F

Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
━━━━	NEW WORK

PROVIDE NEW LIGHTING DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

EXISTING RACEWAYS AND LOCATION OF ELECTRICAL OUTLETS ON EXISTING WALLS TO REMAIN SHALL BE RE-USED AS PRACTICAL FOR NEW DEVICES AS PART OF NEW WORK.

PROVIDE (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR BUILDING OCCUPIED/UNOCCUPIED ADJACENT TO OR IN THE BMCS MASTER PANEL; (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR EXTERIOR FACADE LIGHTING ON/OFF AND (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR PARKING LOT LIGHTING ON/OFF IN MAIN ELECTRICAL.

CONNECT NEW INTERIOR LIGHT FIXTURES AND/OR EXIT SIGNS TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION OR NEW AS SHOWN. EXTEND/RE-ROUTE WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES/LIGHTING CONTROLS. FIELD VERIFY CONNECTED LOAD ON EACH 20A BRANCH CIRCUIT NOT TO EXCEED 3500 W @ 277V. TYPICAL.

CONTRACTOR TO PROVIDE NEW DMX CONTROL WIRING TO NEW THEATRICAL FIXTURES. COORDINATE REQUIREMENTS WITH THEATRICAL CONTRACTOR BEFORE INSTALLATION.

CONTRACTOR TO FIELD COORDINATE FINAL LOCATION OF ALL REPLACEMENT AND NEW LIGHTING FIXTURES WITH EXISTING CEILING MOUNTED DEVICES, AND TO NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND THE NEW LIGHTING LAYOUT PRIOR TO COMMENCEMENT OF WORK.

LIGHTING GENERAL NOTES

1 REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES SHOWN ON THIS DRAWING.

2 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

3 ELECTRICAL CONTRACTOR SHALL CONFIRM COMPATIBILITY OF ALL LIGHTING CONTROL SYSTEMS.

4 PROVIDE A CONSTANT HOT FROM PANEL BOARD DIRECTLY TO ALL EMERGENCY BATTERY PACKS IN EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS. EMERGENCY LIGHTING FIXTURES SHALL TURN ON TO FULL BRIGHTNESS IN CASE OF POWER LOSS.

5 ALL CLASSROOMS AND SPACES DO NOT REQUIRE DAYLIGHT HARVESTING CONTROLS, UNLESS NOTED ON PLAN, PER 2015 IECC C405.2.3 WATTAGE REQUIREMENT.

6 CORRIDOR LIGHTING DOES NOT REQUIRE OCCUPANCY SENSING DEVICES AND/OR DAYLIGHT HARVESTING CONTROLS PER 2015 IECC C405.2 REGARDING EXIT PASSAGEWAYS AND SAFETY/SECURITY REQUIREMENTS.

7 LOWER CASE LETTER INDICATES SWITCHING SCHEME.

8 CONNECT NEW INTERIOR LIGHT FIXTURES AND/OR EXIT SIGNS TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION OR NEW AS SHOWN. EXTEND/RE-ROUTE WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES/LIGHTING CONTROLS. FIELD VERIFY CONNECTED LOAD ON EACH 20A BRANCH CIRCUIT NOT TO EXCEED 3500 W @ 277V. TYPICAL.

9 LOCATION OF NEW / REPLACEMENT LIGHT FIXTURES SHALL RE-USE EXISTING J-BOX AND EXISTING LIGHT FIXTURE WHIPS AS PRACTICAL. EXTEND WIRING WITH MATCHING CONDUCTORS / CONDUIT AND PROVIDE NEW J-BOX ABOVE ACCESIBLE CEILING WITH ½-INCH FLEXIBLE STEEL CONDUIT OR STEEL MC CABLE, LENGTH NOT TO EXCEED 6-FEET, “DAISY CHAINING” LIGHT FIXTURES INSTALLED FOR LAY-IN CEILING AREAS IS NOT ALLOWED. FOR NON-ACCESIBLE CEILINGS, LIGHT FIXTURE WHIPS SHALL BE ½-INCH FLEXIBLE STEEL CONDUIT, LENGTH AS REQUIRED TO MAKE A TAP AT AN ACCESSIBLE J-BOX. RECESSED LIGHT FIXTURES IN NON-ACCESSIBLE CEILINGS MAY BE DAISY CHAINED USING THE LIGHT FIXTURE’S INTEGRAL, UL LISTED J-BOX OR INTERNAL WIRE WAY THAT IS ACCESSIBLE THROUGH FIXTURE FROM BELOW THE CEILING. REFER TO 26 05 33 CONDUIT SYSTEMS.

10 LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER ABOVE ACCESSIBLE CEILING DIRECTLY ABOVE SWITCH CONTROLLING THE SPACE; IN NON-ACCESSIBLE AND /OR HIGH CEILING AREAS, LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND/OR EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL WITH WORDING IDENTIFYINGASSOCIATED SPACE PER SPECIFICATIONS.

11 LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER FOR CLASSROOMS ABOVE ACCESSIBLE CEILING IN CORRIDOR DIRECTLY OUTSIDE OF ENTRY DOOR. PROVIDE LABEL IDENTIFYING ASSOCIATED SPACE, GRID MARKERS WITH WORDING PER SPECIFICATIONS.

12 OCCUPANCY/VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED, CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS REQUIRED.

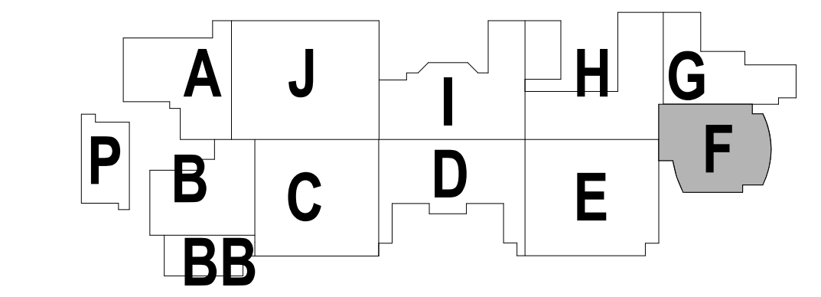
13 SPACES WITH MULTIPLE OCCUPANCY/VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.

14 CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND/OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD CONTROL RELAYS AND EXIT SIGNS.

15 COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.

16 PROVIDE SEPARATE RACEWAY SYSTEMS FOR LIGHTING CONTROL SYSTEM, CONTROLS WIRING (DIMMERS OR OTHERWISE) SHALL NOT BE INSTALLED IN THE SAME RACEWAY AS LINE VOLTAGE. REFER TO 26 05 33.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

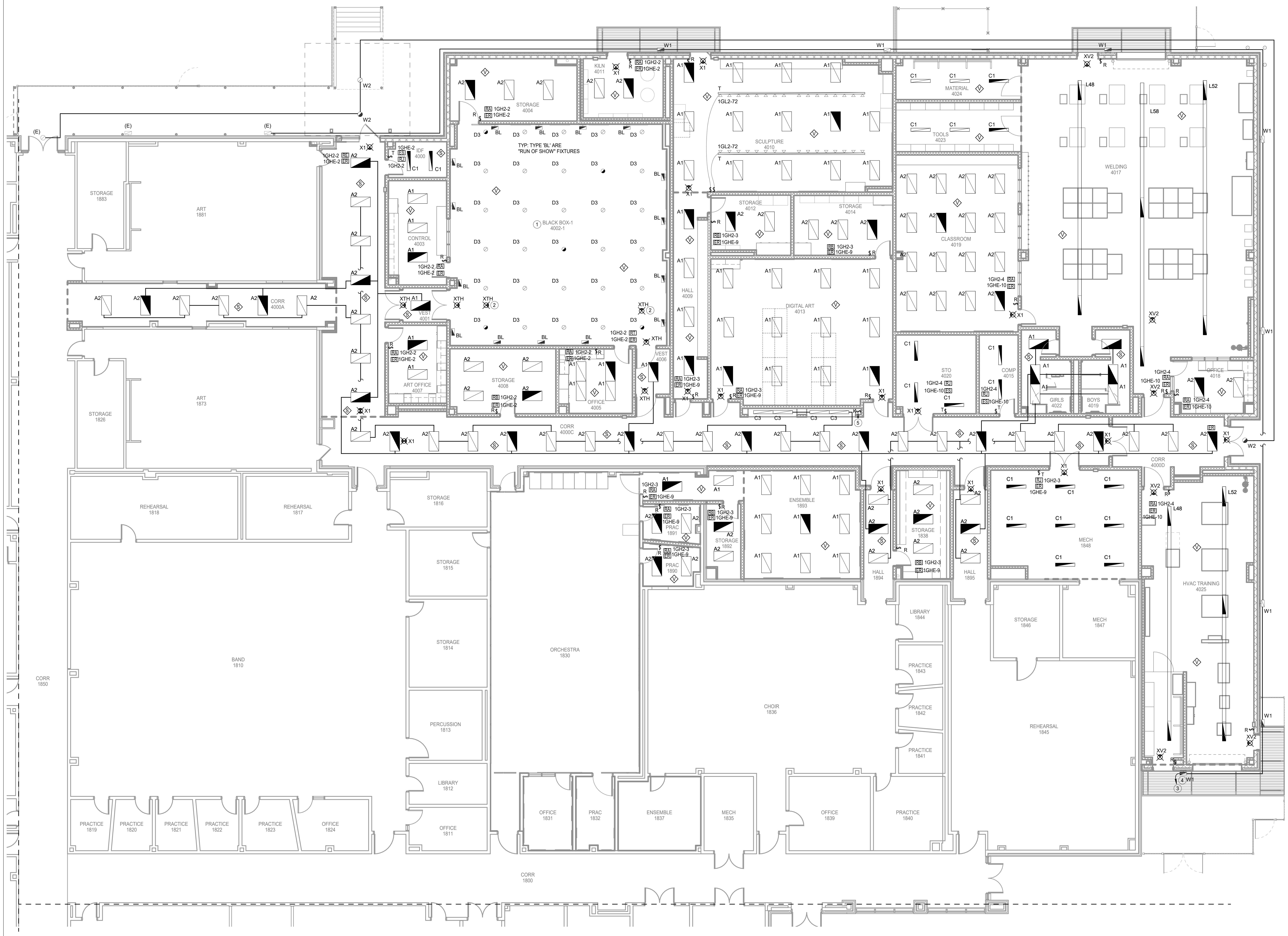
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL LIGHTING
FIRST FLOOR PLAN -
AREA F

E2.01

____ of ____



1 ELECTRICAL LIGHTING FLOOR PLAN - LEVEL 1 - AREA G
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

———	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
━━━	NEW WORK

PROVIDE NEW LIGHTING DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

EXISTING RACEWAYS AND LOCATION OF ELECTRICAL OUTLETS ON EXISTING WALLS TO REMAIN SHALL BE RE-USED AS PRACTICAL FOR NEW DEVICES AS PART OF NEW WORK.

PROVIDE (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR BUILDING OCCUPIED/UNOCCUPIED ADJACENT TO OR IN THE BMCS MASTER PANEL; (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR EXTERIOR FACADE LIGHTING ON/OFF AND (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR PARKING LOT LIGHTING ON/OFF IN MAIN ELECTRICAL.

CONNECT NEW INTERIOR LIGHT FIXTURES AND/OR EXIT SIGNS TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION OR NEW AS SHOWN. EXTEND/RE-ROUTE WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES/LIGHTING CONTROLS. FIELD VERIFY CONNECTED LOAD ON EACH 20A BRANCH CIRCUIT NOT TO EXCEED 3500 W @ 277V. TYPICAL.

CONTRACTOR TO PROVIDE NEW DMX CONTROL WIRING TO NEW THEATRICAL FIXTURES. COORDINATE REQUIREMENTS WITH THEATRICAL CONTRACTOR BEFORE INSTALLATION.

CONTRACTOR TO FIELD COORDINATE FINAL LOCATION OF ALL REPLACEMENT AND NEW LIGHTING FIXTURES WITH EXISTING CEILING MOUNTED DEVICES, AND TO NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND THE NEW LIGHTING LAYOUT PRIOR TO COMMENCEMENT OF WORK.

LIGHTING GENERAL NOTES

1 REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES SHOWN ON THIS DRAWING.

2 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

3 ELECTRICAL CONTRACTOR SHALL CONFIRM COMPATIBILITY OF ALL LIGHTING CONTROL SYSTEMS.

4 PROVIDE A CONSTANT HOT FROM PANEL BOARD DIRECTLY TO ALL EMERGENCY BATTERY PACKS IN EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS. EMERGENCY LIGHTING FIXTURES SHALL TURN ON TO FULL BRIGHTNESS IN CASE OF POWER LOSS.

5 ALL CLASSROOMS AND SPACES DO NOT REQUIRE DAYLIGHT HARVESTING CONTROLS, UNLESS NOTED ON PLAN, PER 2015 IECC C405.2.3 WATTAGE REQUIREMENT.

6 CORRIDOR LIGHTING DOES NOT REQUIRE OCCUPANCY SENSING DEVICES AND/OR DAYLIGHT HARVESTING CONTROLS PER 2015 IECC C405.2 REGARDING EXIT PASSAGEWAYS AND SAFETY/SECURITY REQUIREMENTS.

7 LOWER CASE LETTER INDICATES SWITCHING SCHEME.

8 CONNECT NEW INTERIOR LIGHT FIXTURES AND/OR EXIT SIGNS TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION OR NEW AS SHOWN. EXTEND/RE-ROUTE WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES/LIGHTING CONTROLS. FIELD VERIFY CONNECTED LOAD ON EACH 20A BRANCH CIRCUIT NOT TO EXCEED 3500 W @ 277V. TYPICAL.

9 LOCATION OF NEW / REPLACEMENT LIGHT FIXTURES SHALL RE-USE EXISTING J-BOX AND EXISTING LIGHT FIXTURE WHIPS AS PRACTICAL. EXTEND WIRING WITH MATCHING CONDUCTORS / CONDUIT AND PROVIDE NEW J-BOX ABOVE ACCESIBLE CEILING WITH ½-INCH FLEXIBLE STEEL CONDUIT OR STEEL MC CABLE, LENGTH NOT TO EXCEED 6-FEET, "DAISY CHAINING" LIGHT FIXTURES INSTALLED FOR LAY-IN CEILING AREAS IS NOT ALLOWED. FOR NON-ACCESIBLE CEILINGS, LIGHT FIXTURE WHIPS SHALL BE ½-INCH FLEXIBLE STEEL CONDUIT, LENGTH AS REQUIRED TO MAKE A TAP AT AN ACCESSIBLE J-BOX. RECESSED LIGHT FIXTURES IN NON-ACCESSIBLE CEILINGS MAY BE DAISY CHAINED USING THE LIGHT FIXTURE'S INTEGRAL, UL LISTED J-BOX OR INTERNAL WIRE WAY THAT IS ACCESSIBLE THROUGH FIXTURE FROM BELOW THE CEILING. REFER TO 26 05 33 CONDUIT SYSTEMS.

10 LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER ABOVE ACCESSIBLE CEILING DIRECTLY ABOVE SWITCH CONTROLLING THE SPACE; IN NON-ACCESSIBLE AND /OR HIGH CEILING AREAS, LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND/OR EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL WITH WORDING IDENTIFYINGASSOCIATED SPACE PER SPECIFICATIONS.

11 LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER FOR CLASSROOMS ABOVE ACCESSIBLE CEILING IN CORRIDOR DIRECTLY OUTSIDE OF ENTRY DOOR. PROVIDE LABEL IDENTIFYING ASSOCIATED SPACE, GRID MARKERS WITH WORDING PER SPECIFICATIONS.

12 OCCUPANCY/VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED, CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS REQUIRED.

13 SPACES WITH MULTIPLE OCCUPANCY/VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.

14 CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND/OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD CONTROL RELAYS AND EXIT SIGNS.

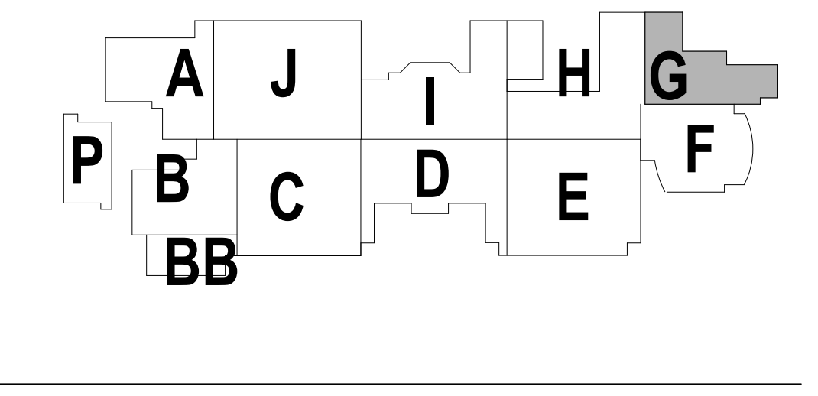
15 COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.

16 PROVIDE SEPARATE RACEWAY SYSTEMS FOR LIGHTING CONTROL SYSTEM, CONTROLS WIRING (DIMMERS OR OTHERWISE) SHALL NOT BE INSTALLED IN THE SAME RACEWAY AS LINE VOLTAGE. REFER TO 26 05 33.

ELECTRICAL KEYED NOTES

1	MOUNT BOTTOM EDGE OF PENDANT FIXTURES LEVEL WITH PIPE GRID.
2	MOUNT EXIT LIGHT FROM PIPE GRID. FIXTURE TO BE MOUNTED WITHIN CURTAIN AREA AND VISIBLE WHEN CURTAIN IS CLOSED.
3	PROVIDE POWER AND LIGHTING CONTROL TO NEW FIXTURES FROM EXISTING CIRCUIT AS SHOWN. CONDUIT AND WIRING FOR POWER AND CONTROLS TO BE CONCEALED WITHIN BUILDING ENVELOPE. EXTEND CONDUIT AND WIRING AS NECESSARY. NEW FIXTURES TO BE CONTROLLED WITH EXISTING FIXTURE(S) USING EXISTING WATTSTOPPER RELAY.
4	CONTRACTOR TO ENSURE NEW EXTERIOR LIGHTING FIXTURES ARE ON THE EMERGENCY LIGHTING RELAY PANEL 1GRE AND THE LIGHTING CIRCUIT IS FED FROM EMERGENCY PANEL 1GHE.
5	DISPLAY CASE LIGHTING TO BE CONTROLLED WITH CORRIDOR LIGHTS ON BMCS SYSTEM. CIRCUIT LIGHTING TO CORRIDOR SWITCHED LEG AND WITH ADDITIONAL LINE VOLTAGE KEY SWITCH LABELED AS "CASE LTG".

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

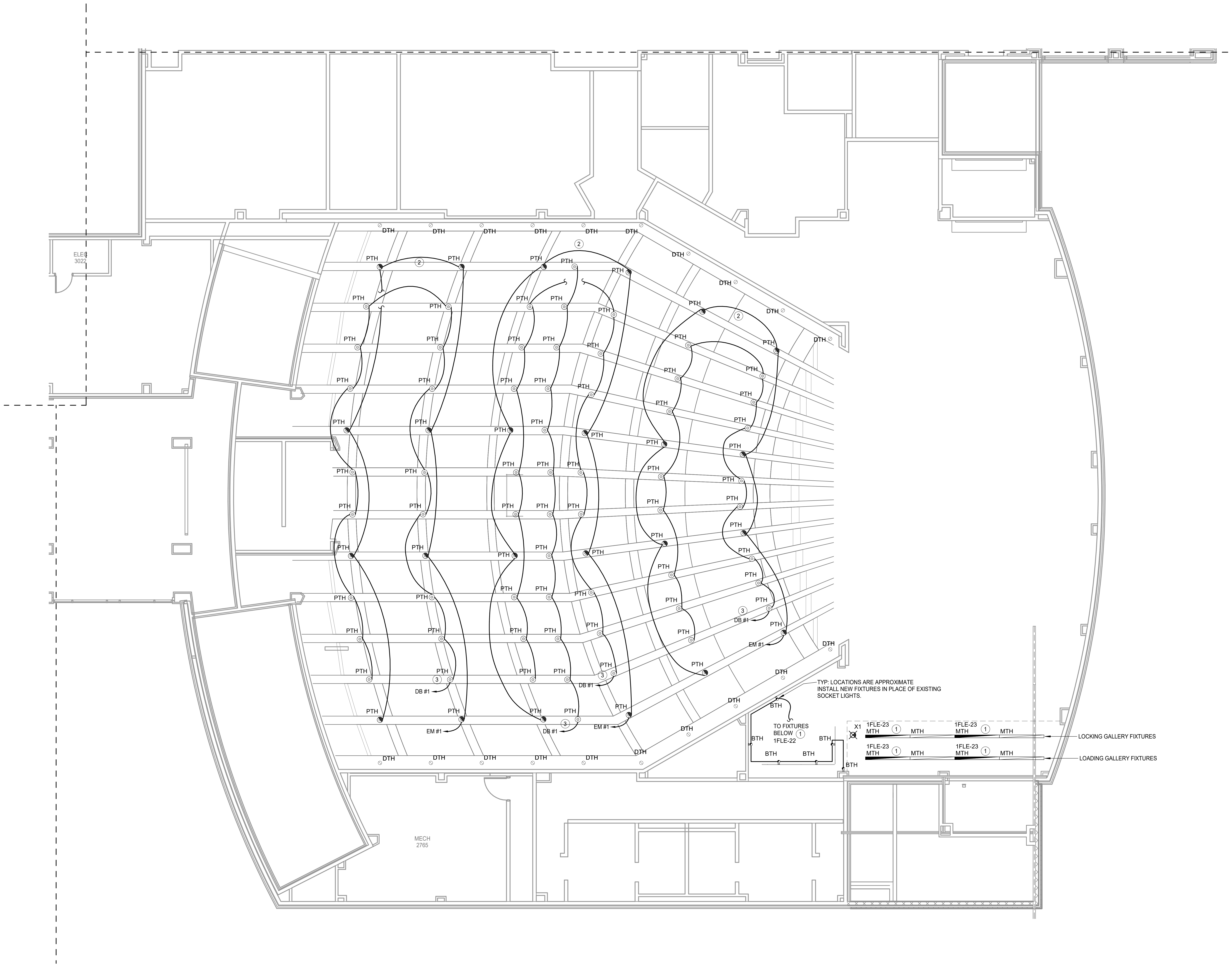
ELECTRICAL LIGHTING FIRST FLOOR PLAN - AREA G

E2.02

____ of ____

ELECTRICAL KEYED NOTES

1	PROVIDE POWER TO NEW EMERGENCY FIXTURES FROM CIRCUIT SHOWN. NEW EMERGENCY LIGHTS TO BE CONTROLLED VIA DIMMER/ATS EMERGENCY RELAY.
2	EXTEND EXISTING EMERGENCY CIRCUIT FED FROM DIMMER ATS TO COMBINE EMERGENCY FIXTURE ROWS. EXTEND CONDUIT AND WIRING AS NECESSARY.
3	INTERCEPT EXISTING HID LIGHTING CIRCUIT IN AUDITORIUM TO FEED NEW PENDANT FIXTURES SHOWN. REUSE EXISTING CONDUIT AND WIRING BETWEEN FIXTURES WHERE POSSIBLE. MOUNT NEW FIXTURES IN EXISTING FIXTURE LOCATIONS.



TYP: LOCATIONS ARE APPROXIMATE
INSTALL NEW FIXTURES IN PLACE OF EXISTING
SOCKET LIGHTS.

1 ELECTRICAL LIGHTING FLOOR PLAN - LEVEL 2 - AREA F

Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

PROVIDE NEW LIGHTING DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

EXISTING RACEWAYS AND LOCATION OF ELECTRICAL OUTLETS ON EXISTING WALLS TO REMAIN SHALL BE RE-USED AS PRACTICAL FOR NEW DEVICES AS PART OF NEW WORK.

PROVIDE (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR BUILDING OCCUPIED/UNOCCUPIED ADJACENT TO OR IN THE BMCS MASTER PANEL; (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR EXTERIOR FACADE LIGHTING ON/OFF AND (1) MOMENTARY BMCS OVERRIDE TIME-OUT SWITCH FOR PARKING LOT LIGHTING ON/OFF IN MAIN ELECTRICAL.

CONNECT NEW INTERIOR LIGHT FIXTURES AND/OR EXIT SIGNS TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION OR NEW AS SHOWN. EXTEND/RE-ROUTE WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES/LIGHTING CONTROLS. FIELD VERIFY CONNECTED LOAD ON EACH 20A BRANCH CIRCUIT NOT TO EXCEED 3500 W @ 277V. TYPICAL.

CONTRACTOR TO PROVIDE NEW DMX CONTROL WIRING TO NEW THEATRICAL FIXTURES. COORDINATE REQUIREMENTS WITH THEATRICAL CONTRACTOR BEFORE INSTALLATION.

CONTRACTOR TO FIELD COORDINATE FINAL LOCATION OF ALL REPLACEMENT AND NEW LIGHTING FIXTURES WITH EXISTING CEILING MOUNTED DEVICES, AND TO NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND THE NEW LIGHTING LAYOUT PRIOR TO COMMENCEMENT OF WORK.

LIGHTING GENERAL NOTES

1 REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES SHOWN ON THIS DRAWING.

2 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

3 ELECTRICAL CONTRACTOR SHALL CONFIRM COMPATIBILITY OF ALL LIGHTING CONTROL SYSTEMS.

4 PROVIDE A CONSTANT HOT FROM PANEL BOARD DIRECTLY TO ALL EMERGENCY BATTERY PACKS IN EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS. EMERGENCY LIGHTING FIXTURES SHALL TURN ON TO FULL BRIGHTNESS IN CASE OF POWER LOSS.

5 ALL CLASSROOMS AND SPACES DO NOT REQUIRE DAYLIGHT HARVESTING CONTROLS, UNLESS NOTED ON PLAN, PER 2015 IECC C405.2.3 WATTAGE REQUIREMENT.

6 CORRIDOR LIGHTING DOES NOT REQUIRE OCCUPANCY SENSING DEVICES AND/OR DAYLIGHT HARVESTING CONTROLS PER 2015 IECC C405.2 REGARDING EXIT PASSAGEWAYS AND SAFETY/SECURITY REQUIREMENTS.

7 LOWER CASE LETTER INDICATES SWITCHING SCHEME.

8 CONNECT NEW INTERIOR LIGHT FIXTURES AND/OR EXIT SIGNS TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION OR NEW AS SHOWN. EXTEND/RE-ROUTE WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES/LIGHTING CONTROLS. FIELD VERIFY CONNECTED LOAD ON EACH 20A BRANCH CIRCUIT NOT TO EXCEED 3500 W @ 277V. TYPICAL.

9 LOCATION OF NEW / REPLACEMENT LIGHT FIXTURES SHALL RE-USE EXISTING J-BOX AND EXISTING LIGHT FIXTURE WHIPS AS PRACTICAL. EXTEND WIRING WITH MATCHING CONDUCTORS / CONDUIT AND PROVIDE NEW J-BOX ABOVE ACCESIBLE CEILING WITH ½-INCH FLEXIBLE STEEL CONDUIT OR STEEL MC CABLE, LENGTH NOT TO EXCEED 6-FEET, “DAISY CHAINING” LIGHT FIXTURES INSTALLED FOR LAY-IN CEILING AREAS IS NOT ALLOWED. FOR NON-ACCESIBLE CEILINGS, LIGHT FIXTURE WHIPS SHALL BE ½-INCH FLEXIBLE STEEL CONDUIT, LENGTH AS REQUIRED TO MAKE A TAP AT AN ACCESSIBLE J-BOX. RECESSED LIGHT FIXTURES IN NON-ACCESSIBLE CEILINGS MAY BE DAISY CHAINED USING THE LIGHT FIXTURE’S INTEGRAL, UL LISTED J-BOX OR INTERNAL WIRE WAY THAT IS ACCESSIBLE THROUGH FIXTURE FROM BELOW THE CEILING. REFER TO 26 05 33 CONDUIT SYSTEMS.

10 LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER ABOVE ACCESSIBLE CEILING DIRECTLY ABOVE SWITCH CONTROLLING THE SPACE; IN NON-ACCESSIBLE AND /OR HIGH CEILING AREAS, LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING; IN AREAS WITH NO CEILING AND/OR EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD. PROVIDE LABEL WITH WORDING IDENTIFYINGASSOCIATED SPACE PER SPECIFICATIONS.

11 LOCATE PLENUM RATED DIGITAL LIGHTING CONTROLLER FOR CLASSROOMS ABOVE ACCESSIBLE CEILING IN CORRIDOR DIRECTLY OUTSIDE OF ENTRY DOOR. PROVIDE LABEL IDENTIFYING ASSOCIATED SPACE, GRID MARKERS WITH WORDING PER SPECIFICATIONS.

12 OCCUPANCY/VACANCY SENSOR AND DAYLIGHTING SENSOR LOCATIONS INDICATE SPACE OR AREA CONTROLLED, CONTRACTOR TO PROVIDE ACTUAL QUANTITIES, TYPES, AND MOUNTING LOCATIONS AS REQUIRED.

13 SPACES WITH MULTIPLE OCCUPANCY/VACANCY SENSORS OR WHERE LINE OF SIGHT MAY BE OBSCURED, SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.

14 CONTRACTOR SHALL MAINTAIN CONSTANT UNSWITCHED CIRCUITS FROM EXISTING SOURCE AND/OR NEW AS SHOWN FOR EMERGENCY FIXTURES, EMERGENCY LOAD CONTROL RELAYS AND EXIT SIGNS.

15 COORDINATE LOCATION OF LIGHT FIXTURES IN ALL MECHANICAL AND ELECTRICAL ROOMS WITH MECHANICAL EQUIPMENT, PIPING, AND ALL OTHER TRADES.

16 PROVIDE SEPARATE RACEWAY SYSTEMS FOR LIGHTING CONTROL SYSTEM, CONTROLS WIRING (DIMMERS OR OTHERWISE) SHALL NOT BE INSTALLED IN THE SAME RACEWAY AS LINE VOLTAGE. REFER TO 26 05 33.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

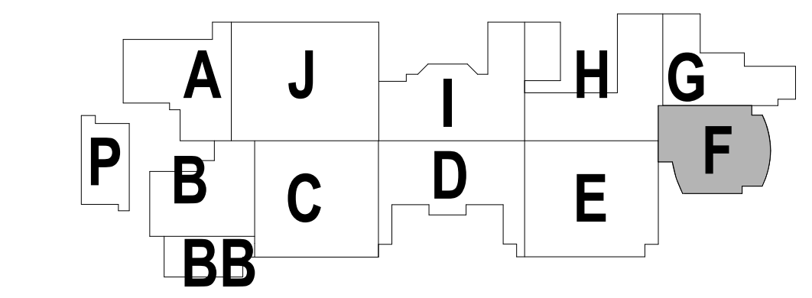
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

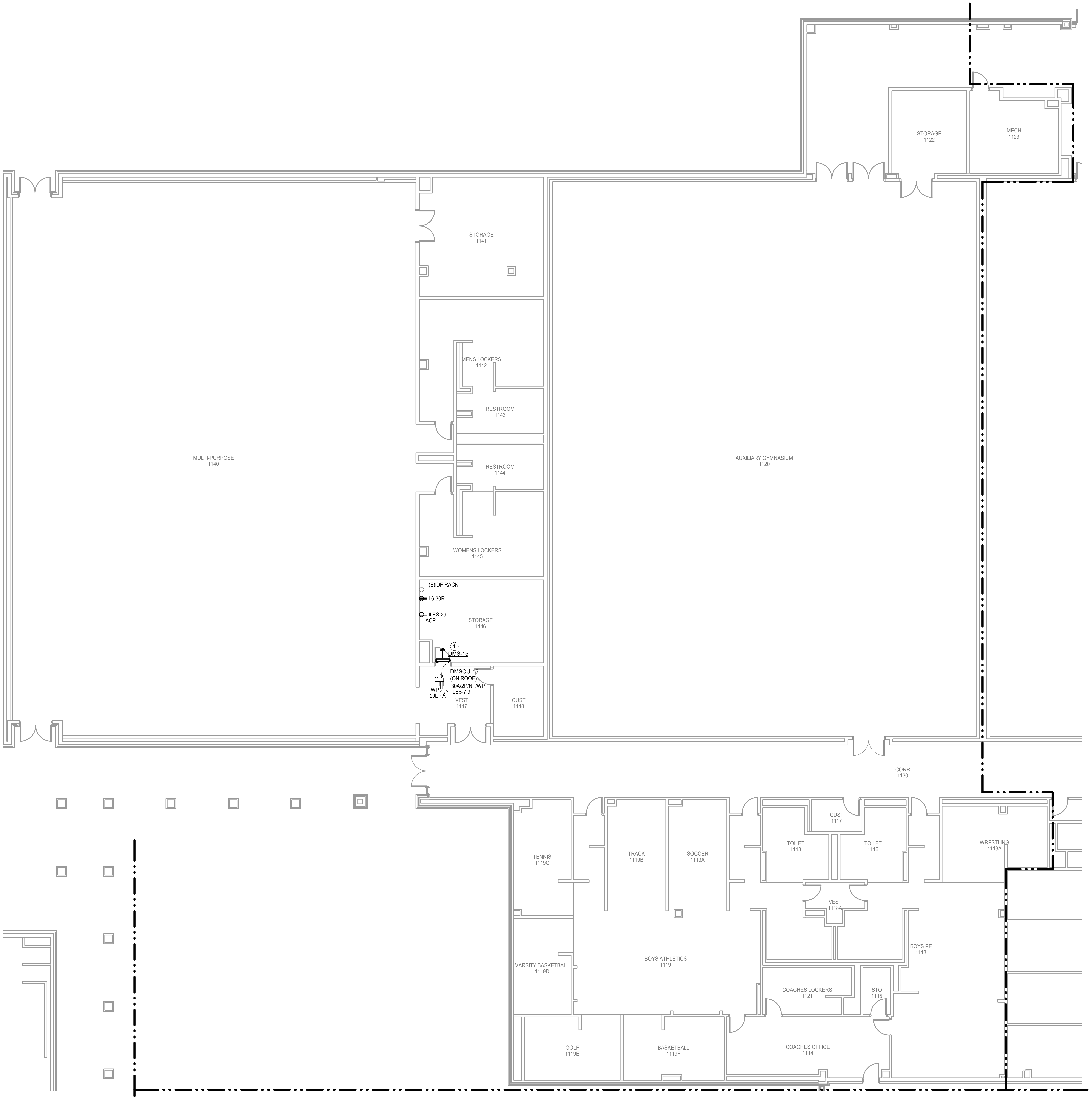


Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL LIGHTING
SECOND FLOOR PLAN -
AREA F

E2.03

___ of ___



1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA A

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

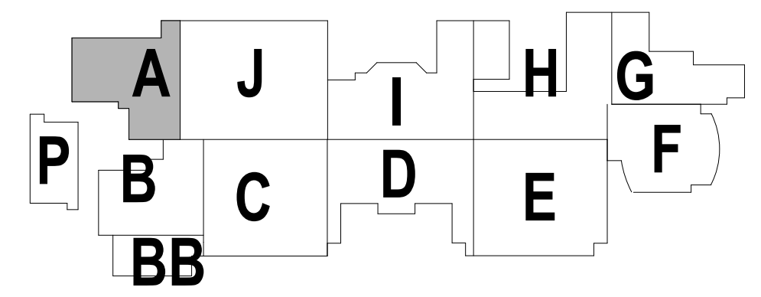
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA A

E3.01

of

N

① **ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA B**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

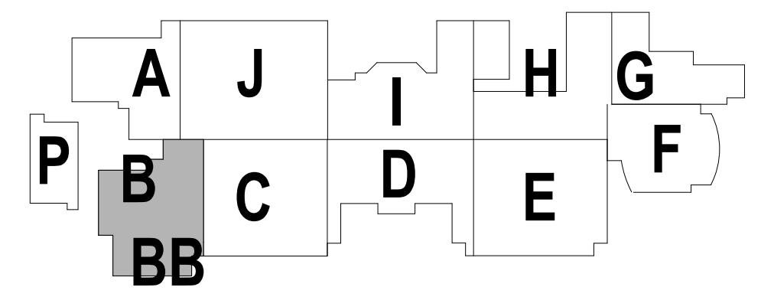
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

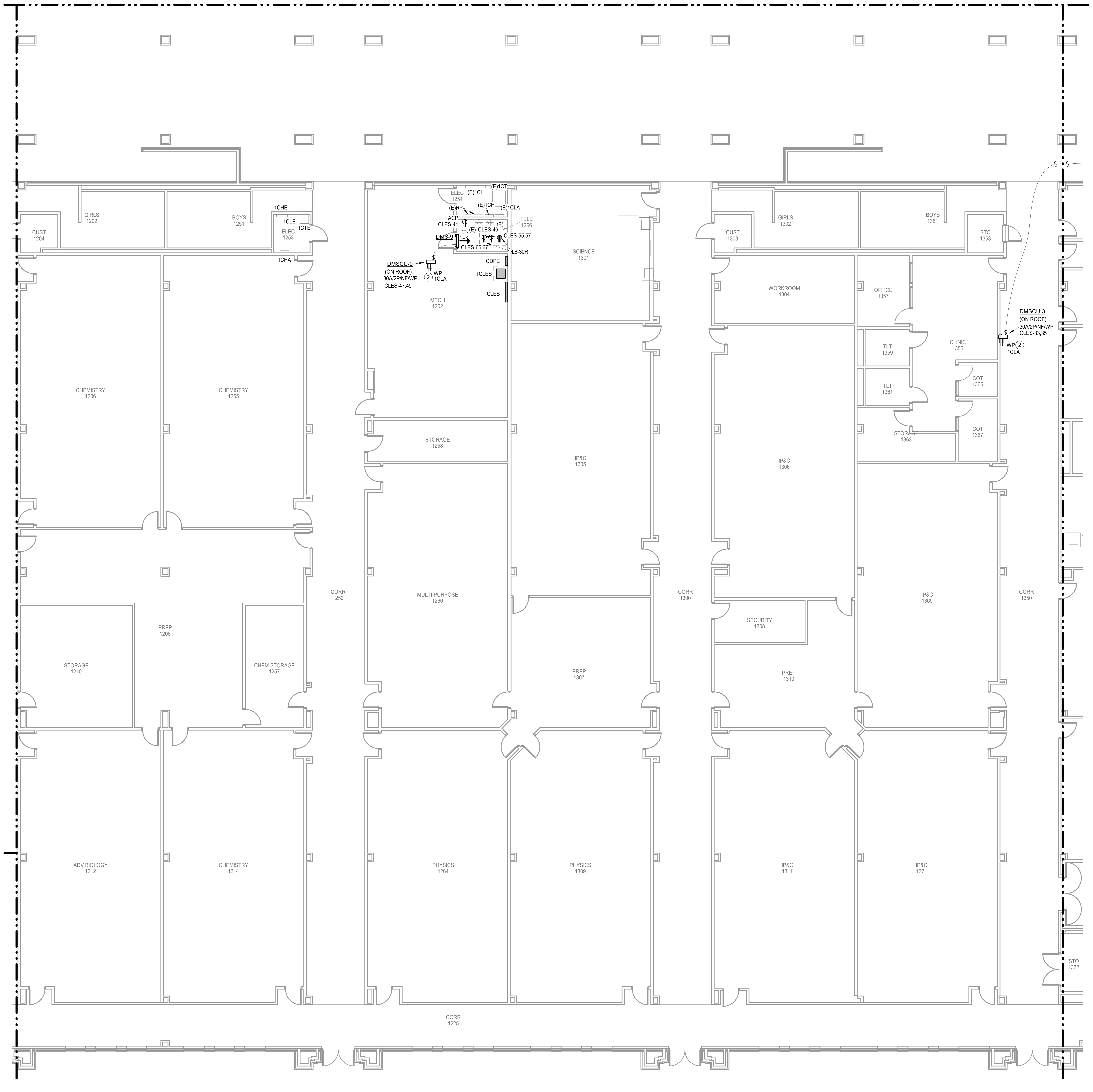
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA B

E3.02
of



N

1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA C
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

─────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

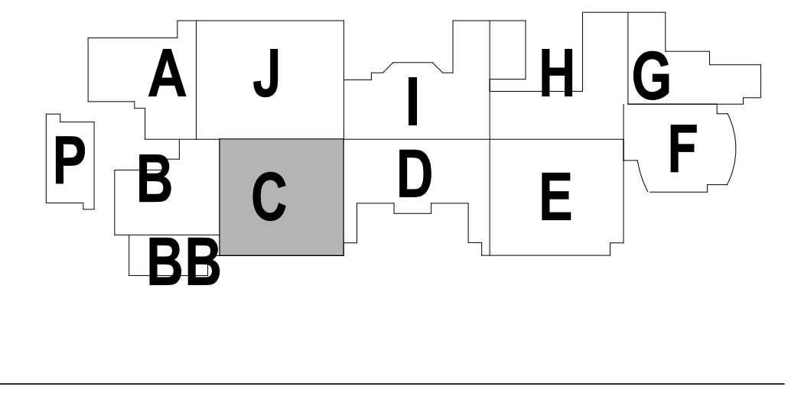
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

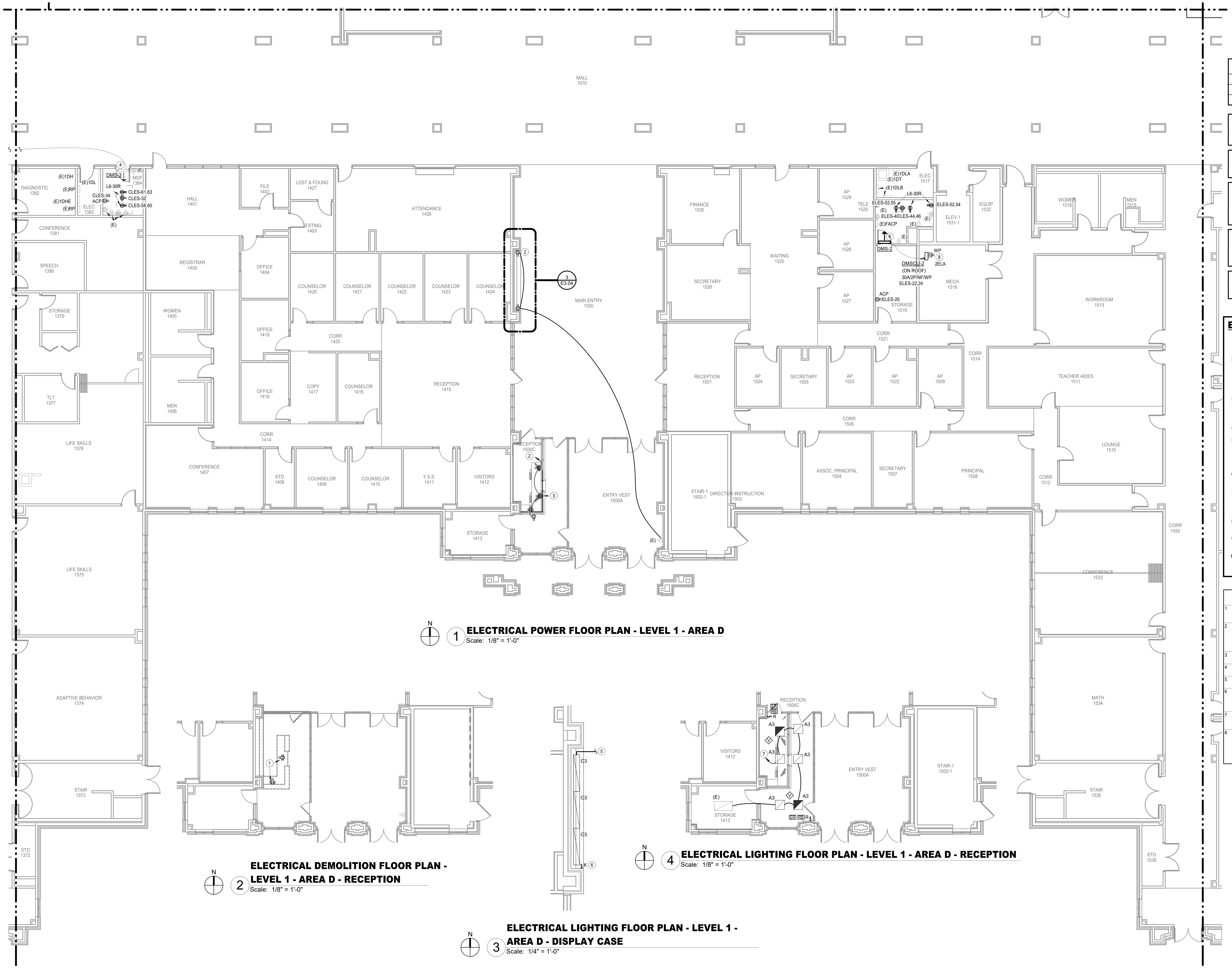
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA C

E3.03
____ of ____



1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA D
Scale: 1/8" = 1'-0"

2 ELECTRICAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA D - RECEPTION
Scale: 1/8" = 1'-0"

3 ELECTRICAL LIGHTING FLOOR PLAN - LEVEL 1 - AREA D - DISPLAY CASE
Scale: 1/4" = 1'-0"

4 ELECTRICAL LIGHTING FLOOR PLAN - LEVEL 1 - AREA D - RECEPTION
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
─ ─ ─ ─	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

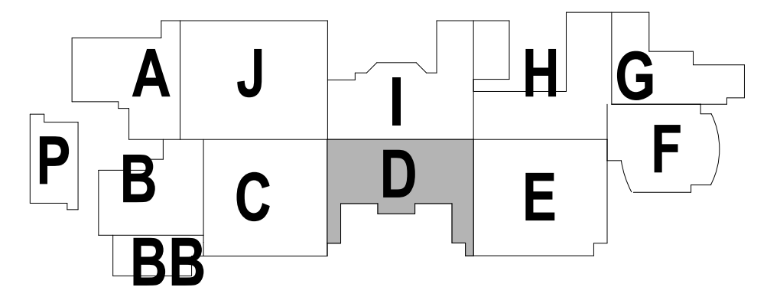
ELECTRICAL GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3. CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4. ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6. ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7. CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9. NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.
10. PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	EXISTING POWER DEVICE/EQUIPMENT TO BE REMOVED. EXISTING CIRCUIT TO REMAIN TO FEED NEW DEVICE(S) IN THIS SPACE.
2	PROVIDE NEW RECEPTACLES AS SHOWN AND CONNECT TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION, EXTEND CONDUCTORS / CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V.
3	DO NOT USE FLEXIBLE CONDUIT IN RECEPTION WALL FOR CONNECTION OF NEW RECEPTACLES. TYPICAL.
4	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
5	PROVIDE POWER TO NEW DISPLAY CASE LIGHT FIXTURES FROM EXISTING CORRIDOR LIGHTING CIRCUIT.
6	DISPLAY CASE LIGHTING TO BE CONTROLLED WITH CORRIDOR LIGHTS ON BMCS SYSTEM. CIRCUIT LIGHTING TO CORRIDOR SWITCHED LEG AND WITH ADDITIONAL LINE VOLTAGE KEY SWITCH LABELED AS "CASE LTG".
7	PROVIDE POWER TO NEW LIGHT(S) FROM EXISTING LIGHTING CIRCUIT AS SHOWN. EXTEND CONDUIT AND WIRING AS NECESARY.
8	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

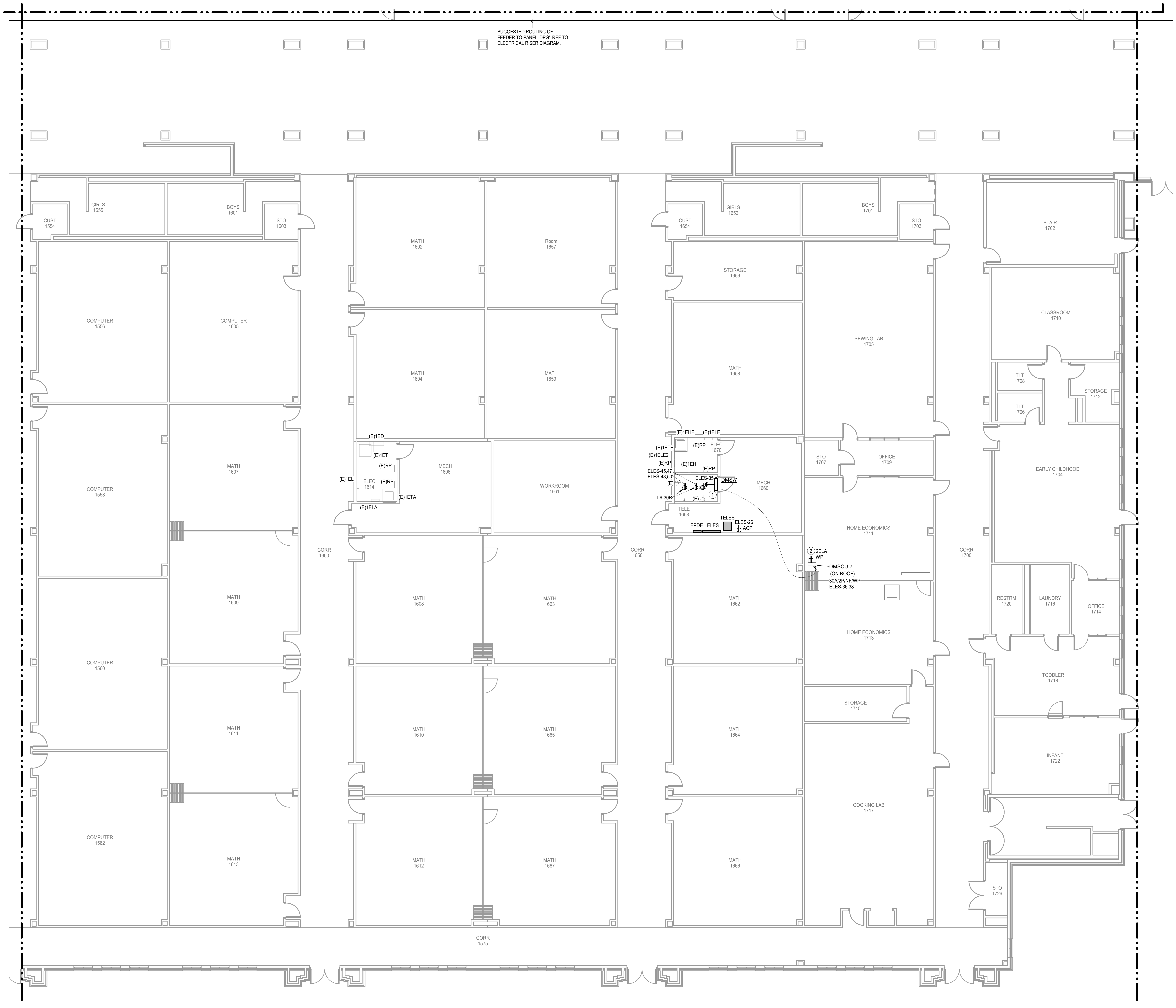
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA D

E3.04
of



① ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA E

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

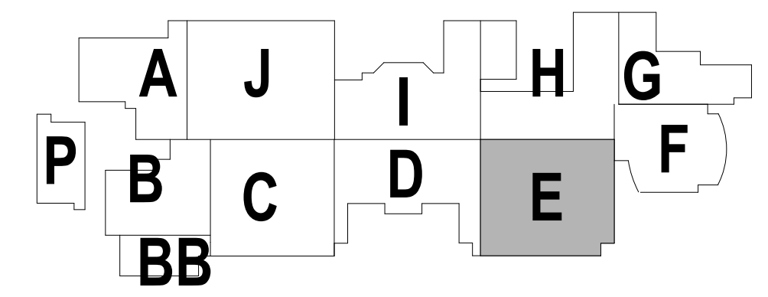
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

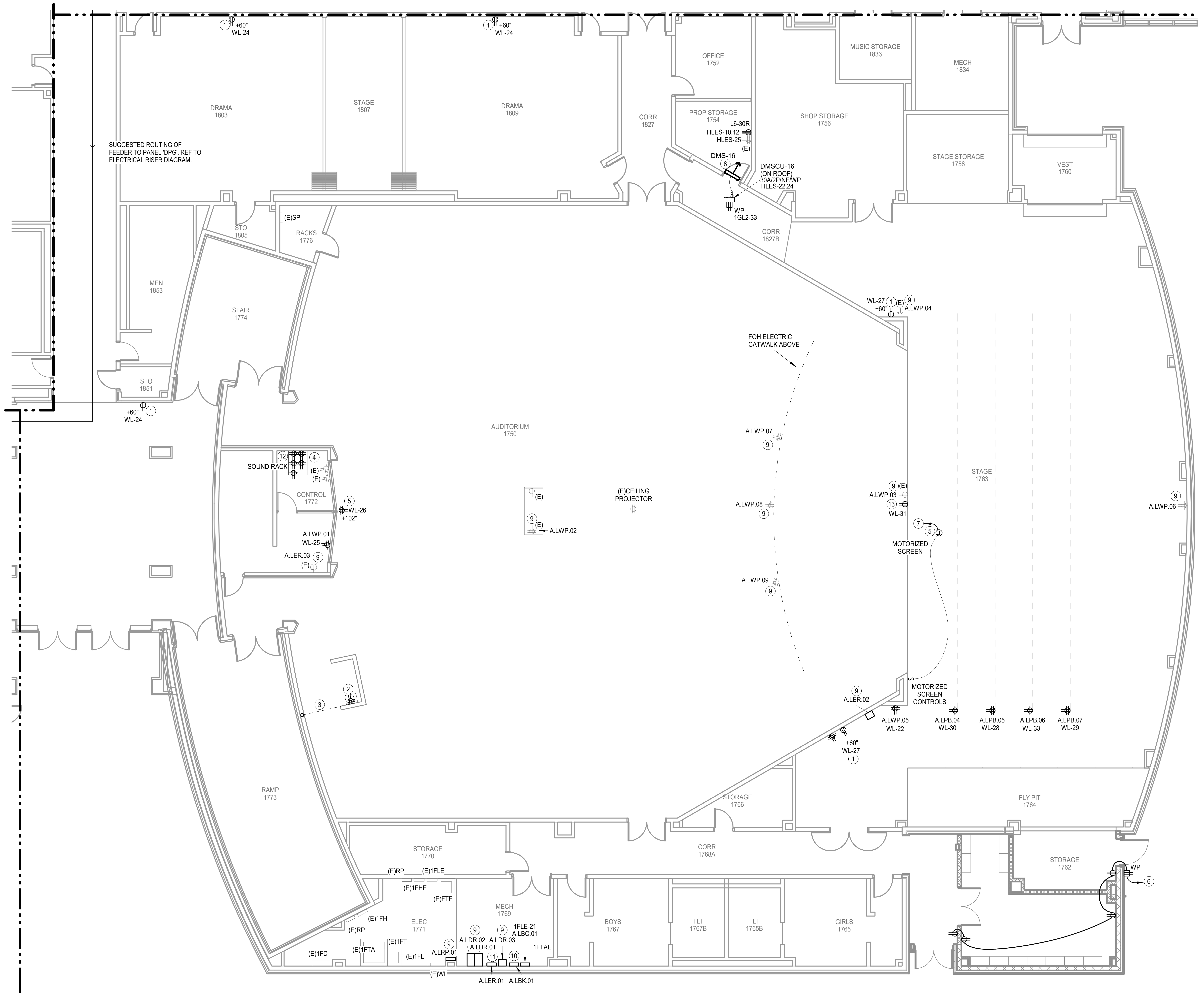


Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA E

E3.05

____ of ____



N

1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA F

Scale: 1/8" = 1'-0"

ELECTRICAL KEYED NOTES

1	TV RECEPTACLE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH AV CONTRACTOR BEFORE INSTALLATION.
2	NEW SOUND CONTROL POWER LOCATION. RECEPTACLE TO BE MOUNTED INSIDE LEG OF DESK ADJACENT TO AV PLATE. COORDINATE FINAL LOCATION WITH AV CONTRACTOR.
3	ROUTE (2)-1" CONDUIT(S) DOWN REAR WALL CONCEALED BEHIND WOOD SLATS. CUT/CHIP/PATCH FLOOR AS REQUIRED TO CONTROL LOCATION. COORDINATE ROUTING WITH AV CONTRACTOR UNDERGROUND TO NEW CONTROL STATION.
4	COORDINATE NUMBER OF EXISTING CIRCUITS IN THIS LOCATION BEFORE INSTALLING NEW CIRCUITS. NEW EQUIPMENT RACK REQUIRES (5) DEDICATED CIRCUITS TERMINATED TO MODULAR RACE WAY MODULE INSIDE OF EQUIPMENT RACK. ONLY PROVIDE CIRCUITS NECESSARY TO INSTALL NEW EQUIPMENT RACK.
5	NEW PROJECTOR/PROJECTOR SCREEN. COORDINATE RECEPTACLE MOUNTING WITH ARCHITECT AND AV CONTRACTOR BEFORE CONSTRUCTION.
6	PROVIDE POWER TO NEW DEVICE(S) AS SHOWN FROM EXISTING 120/208V PANEL '1FL'. PROVIDE NEW 20A, 1POLE BREAKER WITH #12 WIRE.
7	PROVIDE POWER TO NEW DEVICES AS SHOWN FROM EXISTING CIRCUITS REMAINING AFTER DEMOLITION. EXTEND CONDUIT AND WIRING AS NECESSARY. EXISTING LAB CONTROLS TO REMAIN OPERATIONAL AT NEW LAB TABLE CONNECTIONS.
8	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
9	UTILIZE EXISTING CIRCUIT FOR NEW THEATRICAL EQUIPMENT. EXTEND CONDUIT AND WIRING AS NECESSARY.
10	PROVIDE POWER TO NEW DEVICE FROM EXISTING 208V 3PH PANEL 1FL. PROVIDE NEW 20A, 3 POLE BREAKER WITH #12 WIRE.
11	PROVIDE POWER TO NEW DEVICE FROM EXISTING 208V 3PH PANEL 1FL. PROVIDE NEW 20A, 1 POLE BREAKER WITH #12 WIRE.
12	PROVIDE POWER TO NEW RECEPTACLES TO BE MOUNTED WITHIN NEW EQUIPMENT RACK FROM CIRCUITS REMAINING AFTER DEMOLITION. EXTEND CONDUIT AND WIRING AS NECESSARY TO NEW DEVICES. ANY CIRCUITS REMAINING AND NOT USED ARE TO BE CAPPED AND MARKED SPARE FOR FUTURE USE.
13	CONTRACTOR TO COORDINATE EXACT RECEPTACLE LOCATION AND MOUNTING HEIGHT WITH AV CONTRACTOR BEFORE ROUGH-IN. RECEPTACLES TO BE MOUNTED ADJACENT TO AV DEVICE(S).

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3. CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4. ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6. ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7. CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9. NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.
10. PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

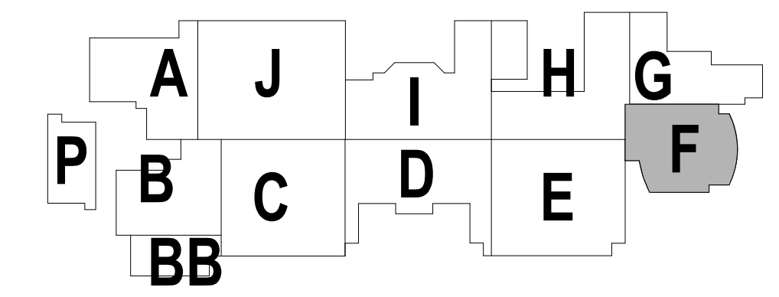
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

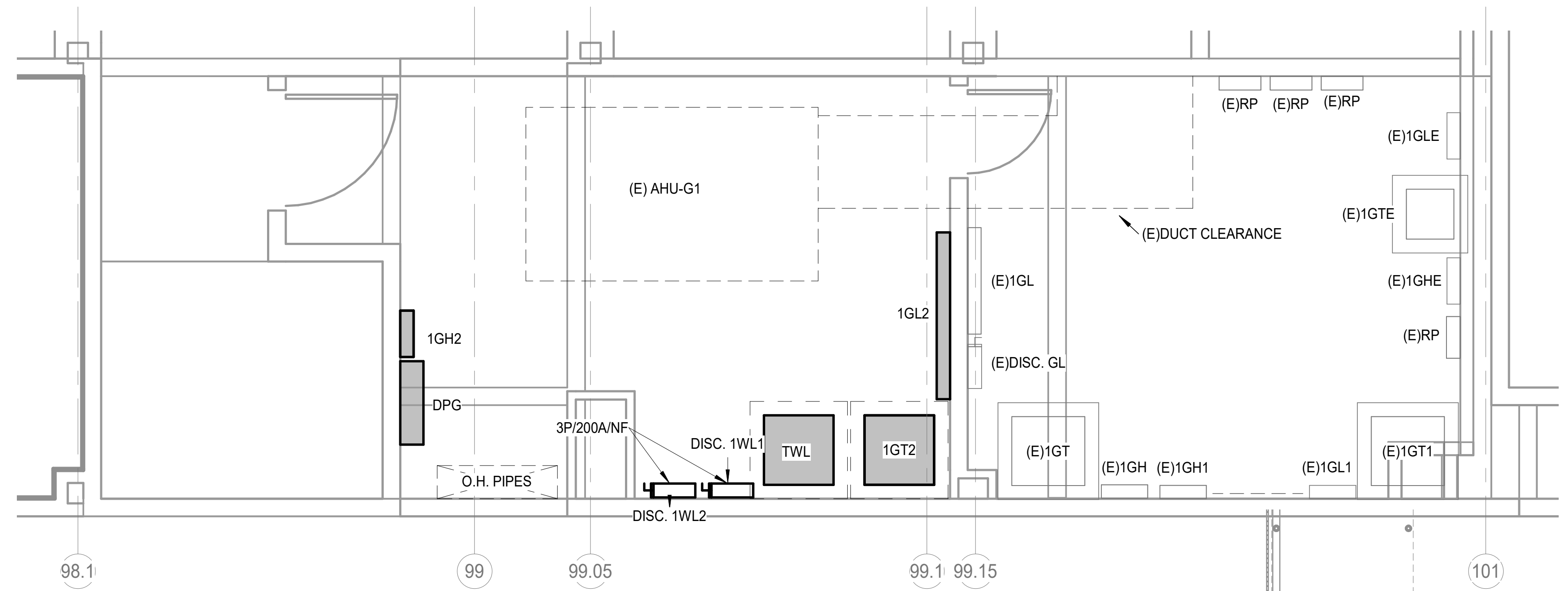


Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

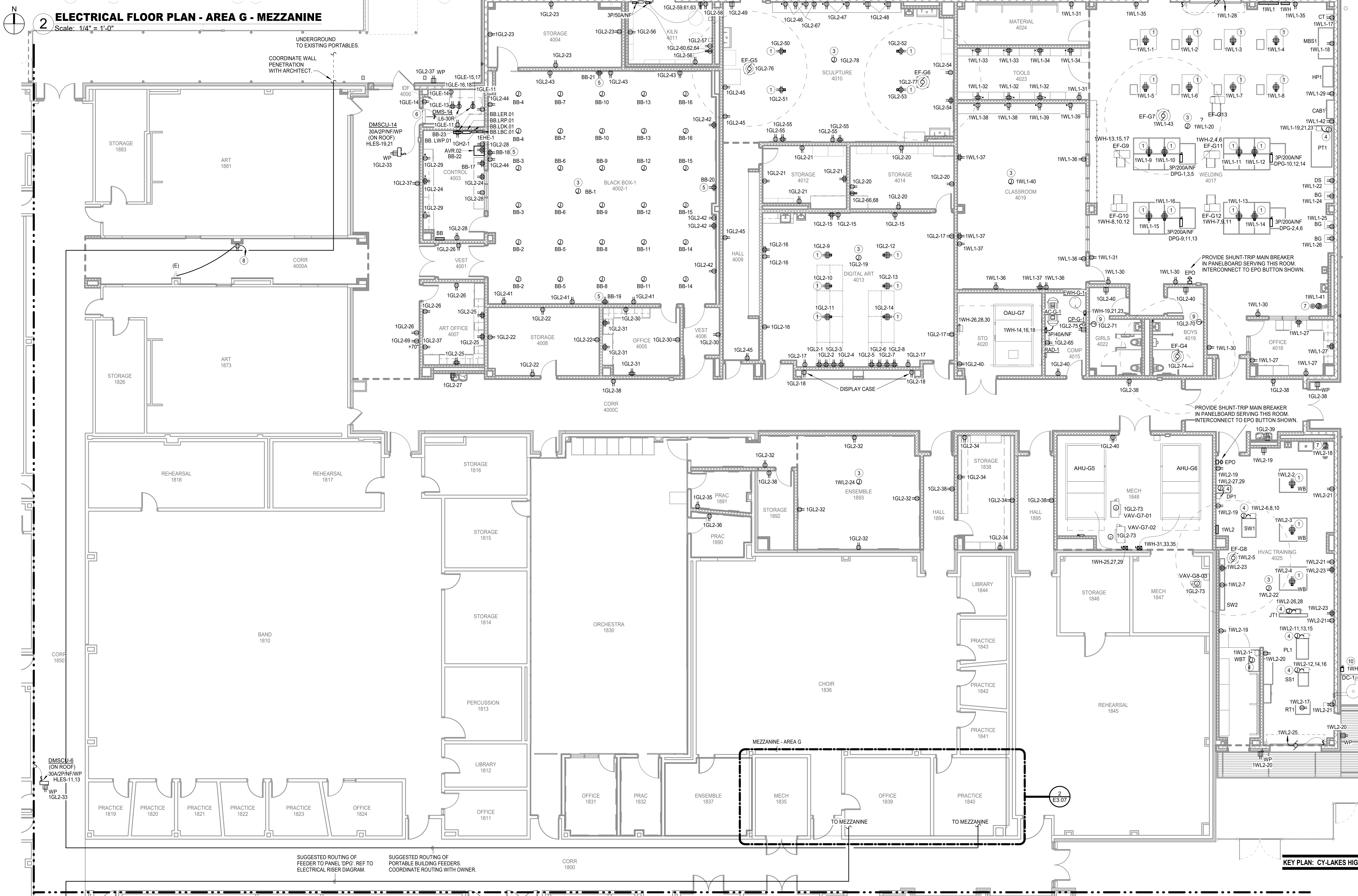
ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA F

E3.06

of



2 ELECTRICAL FLOOR PLAN - AREA G - MEZZANINE
Scale: 1/4" = 1'-0"



1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA G
Scale: 1/8" = 1'-0"

ELECTRICAL KEYED NOTES

1	CORD REEL. PROVIDE 20 AMP (2) DUPLEX RECEPTACLE HUBBELL CORD REEL WITH RECESSED ENCLOSURE. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
2	
3	PROVIDE POWER TO LOCAL SPEAKER SYSTEM. COORDINATE FINAL LOCATION WITH DIVISION 27.
4	CONTRACTOR TO PROVIDE 208V:240V BUCK BOOST TRANSFORMER FOR PROPER OPERATION OF EQUIPMENT. COORDINATE POWER AND INSTALLATION REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
5	CONTRACTOR TO COORDINATE EXACT RECEPTACLE LOCATION AND MOUNTING HEIGHT WITH AV CONTRACTOR BEFORE ROUGH-IN. RECEPTACLES TO BE MOUNTED ADJACENT TO AV DEVICE(S).
6	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
7	POWER FOR FLOW SWITCH/INDICATOR LIGHT (120V/24V XFMR) COORDINATE FINAL LOCATION AND ROUGH-INS WITH PLUMBING CONTRACTOR PRIOR TO INSTALLATION.
8	PROVIDE POWER TO NEW FIXTURES FROM EXISTING CIRCUIT AS SHOWN. CONDUIT AND WIRING TO BE CONCEALED WITHIN BUILDING ENVELOPE. EXTEND CONDUIT AND WIRING AS NECESSARY.
9	PROVIDE FLUSH MOUNTED JUNCTION BOX FOR CONNECTION OF ELECTRIC HAND DRYER. REFER TO ARCHITECTURAL DRAWINGS FRO FINAL MOUNTING HEIGHT AND LOCATION.
10	PROVIDE 100A/3P/70AF/N3R DISCONNECT FOR DUST COLLECTOR DC-1. PROVIDE STARTER WITH PUSH START/STOP INSIDE OF HVAC 4025. FIELD COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.

ELECTRICAL GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3. CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4. ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

ELECTRICAL GENERAL NOTES

6. ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7. CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8. ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9. NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.
10. PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

LINETYPE LEGEND

───	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
━━━	NEW WORK

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

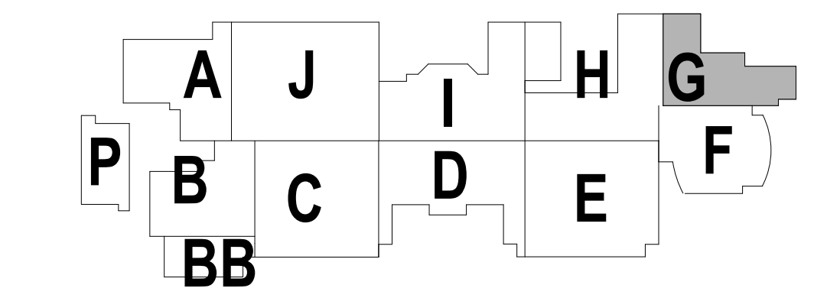
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

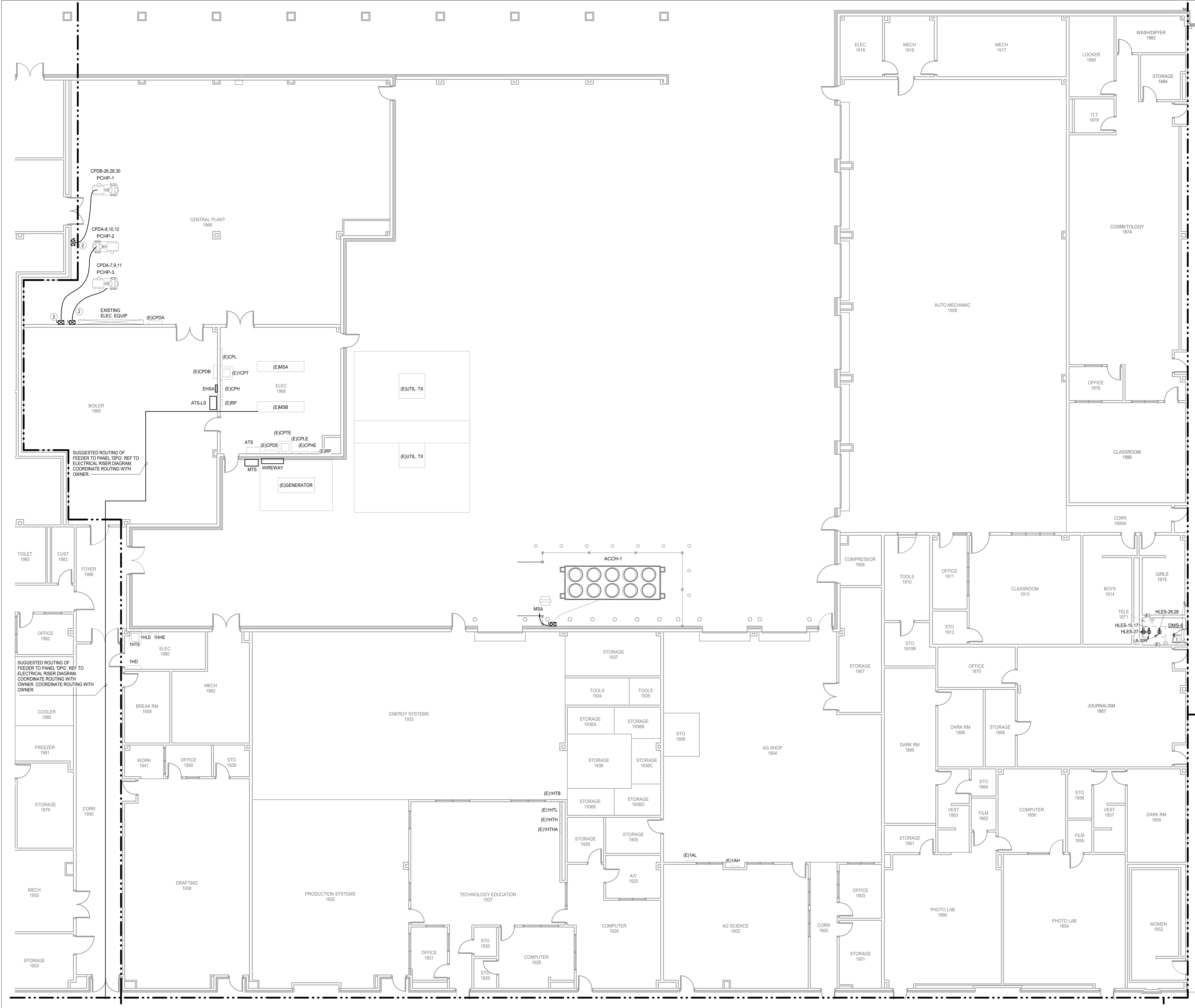


Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA G

E3.07

of



1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA H

Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

LINETYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

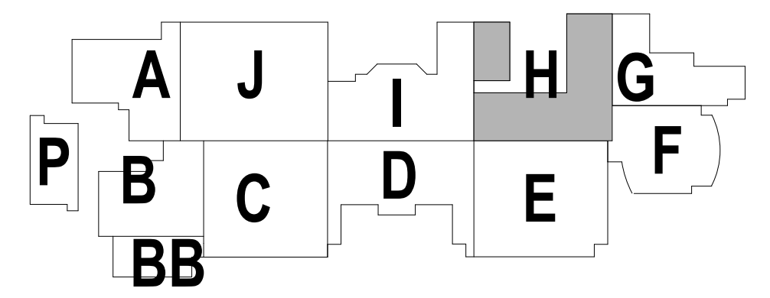
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	EXISTING PUMP TO BE REPLACED. EXISTING CONDUIT TO BE REUSED WHERE POSSIBLE. PROVIDE NEW WIRING FROM EXISTING PANEL TO NEW VFD AND TO NEW PUMP AS NOTED IN PANEL SCHEDULES.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

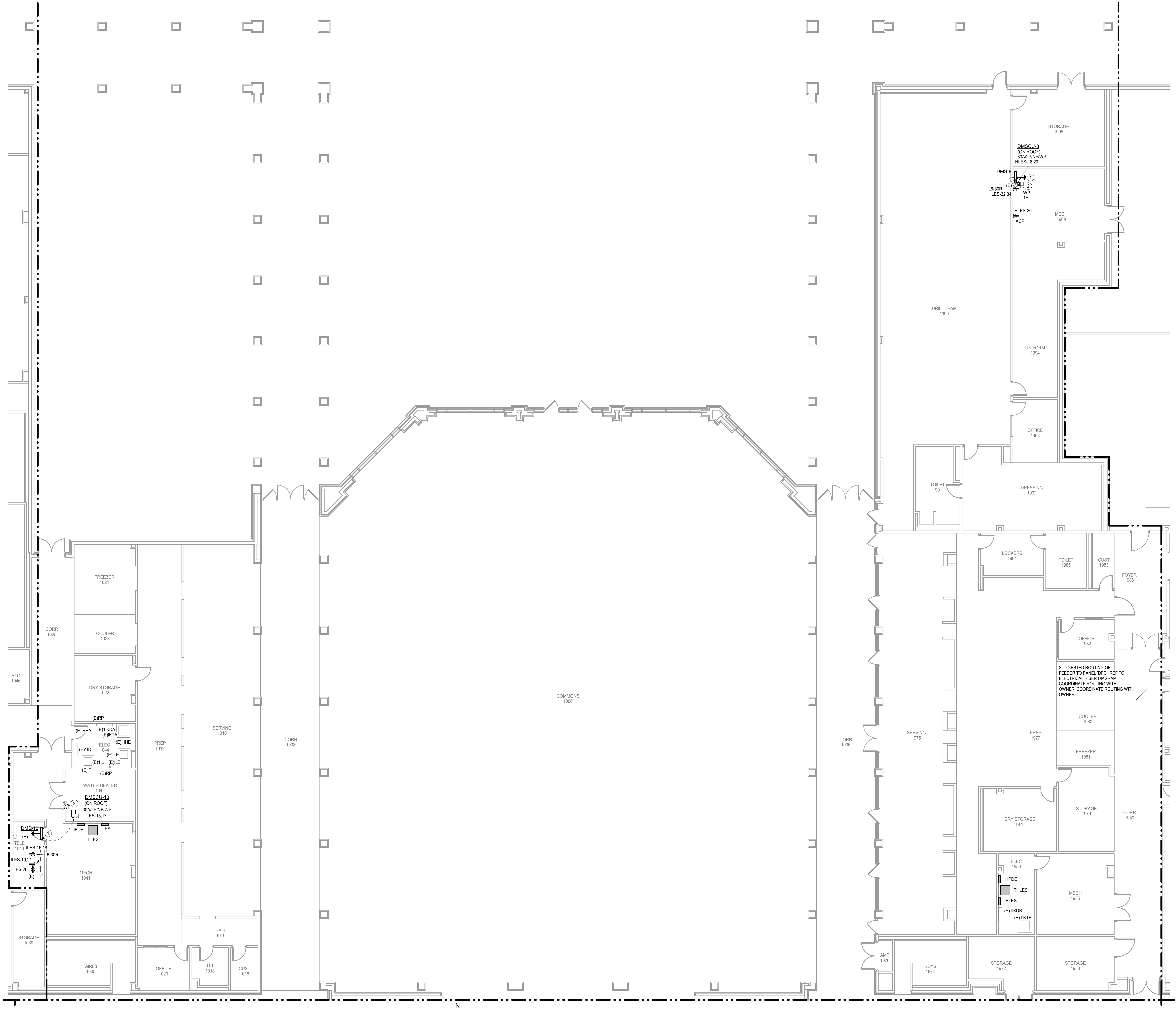
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER FIRST FLOOR PLAN - AREA H

E3.08

of



1 ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA I

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

───	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

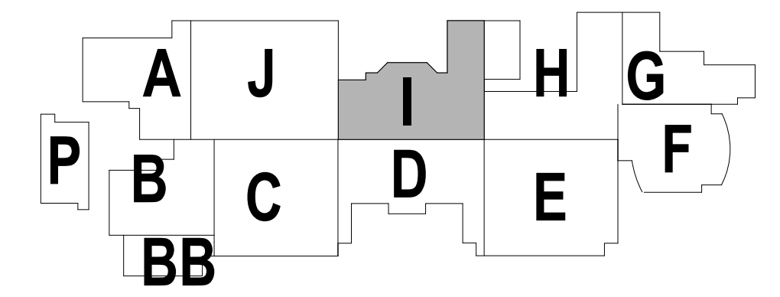
ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.
10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

**COLEMAN PARTNERS
ARCHITECTS LLC**
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

**CIVIL ENGINEER
BROOKS AND SPARKS, INC.**
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

**STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.**
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

**MEPT ENGINEER
SALAS O'BRIEN**
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

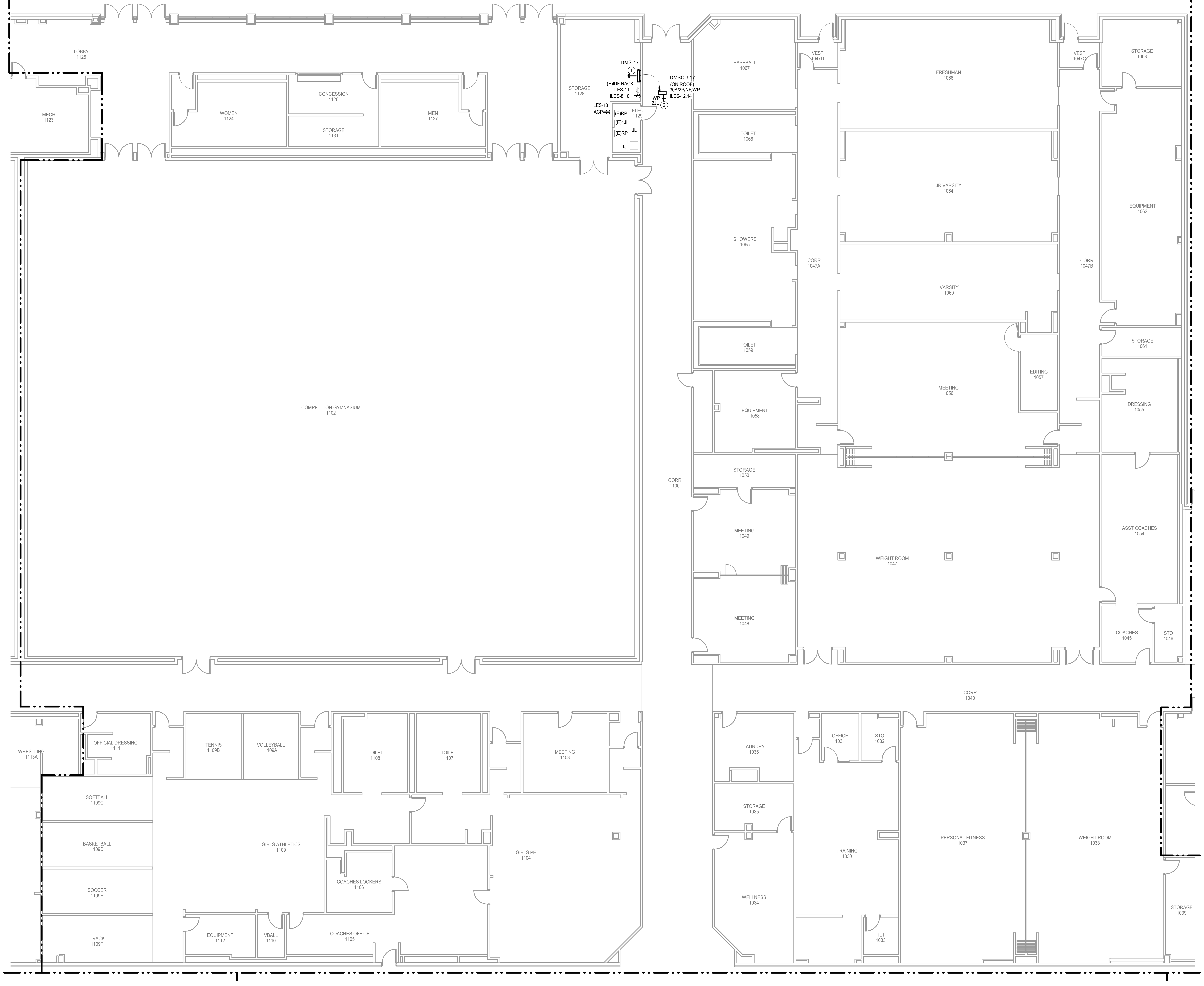
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER FIRST FLOOR PLAN - AREA I

E3.09

of



N

① **ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA J**

Scale: 1/8" = 1'-0"

Salas O'Brien

salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

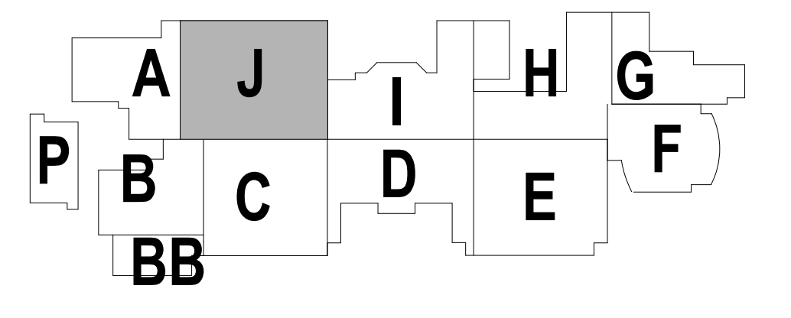
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

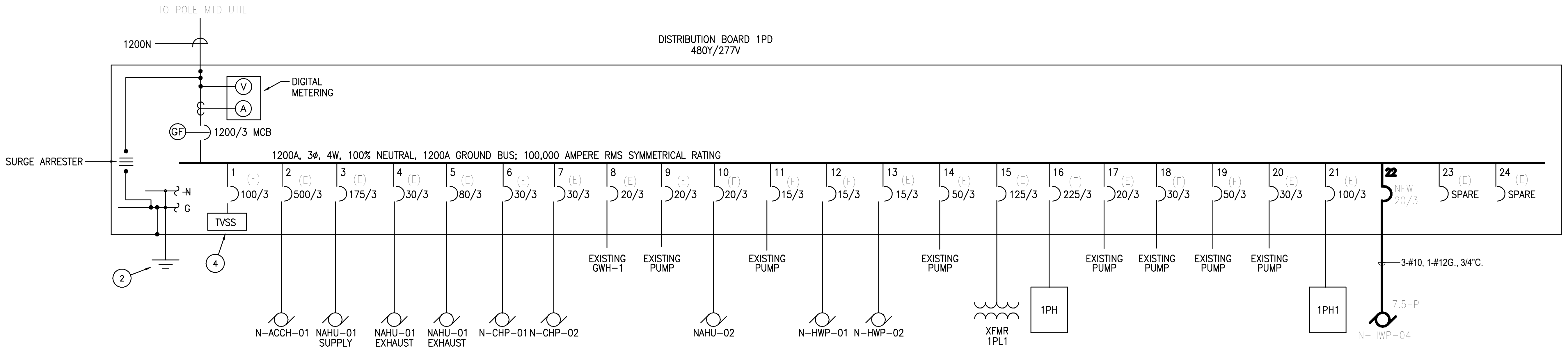
Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

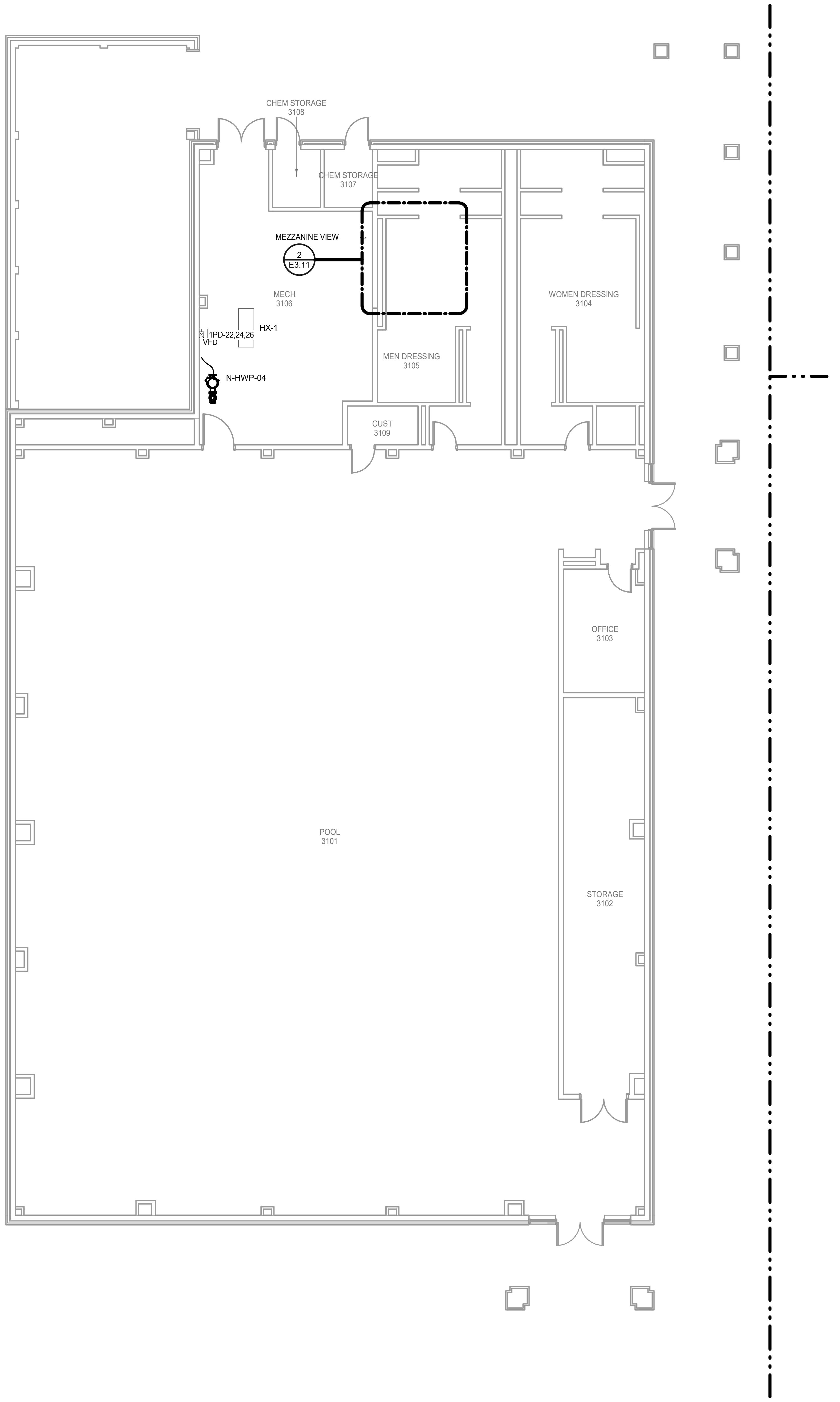
ELECTRICAL POWER
FIRST FLOOR PLAN -
AREA J

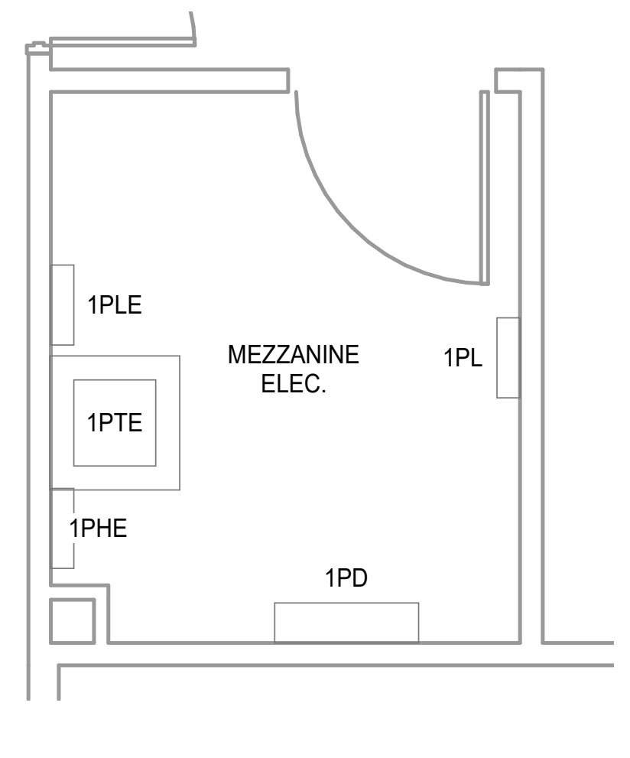
E3.10

of



N
3 **NATATORIUM RISER**
Scale: N.T.S.





N
2 **ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - AREA P - MEZZANINE ELEC.**
Scale: 1/4" = 1'-0"

N
1 **ELECTRICAL POWER FLOOR PLAN - LEVEL 1 - NATATORIUM**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

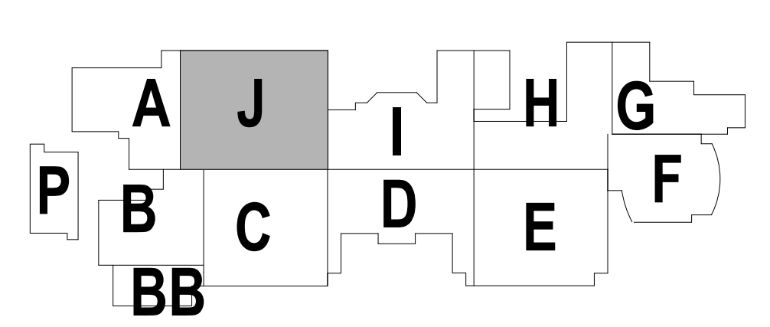
WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.
10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

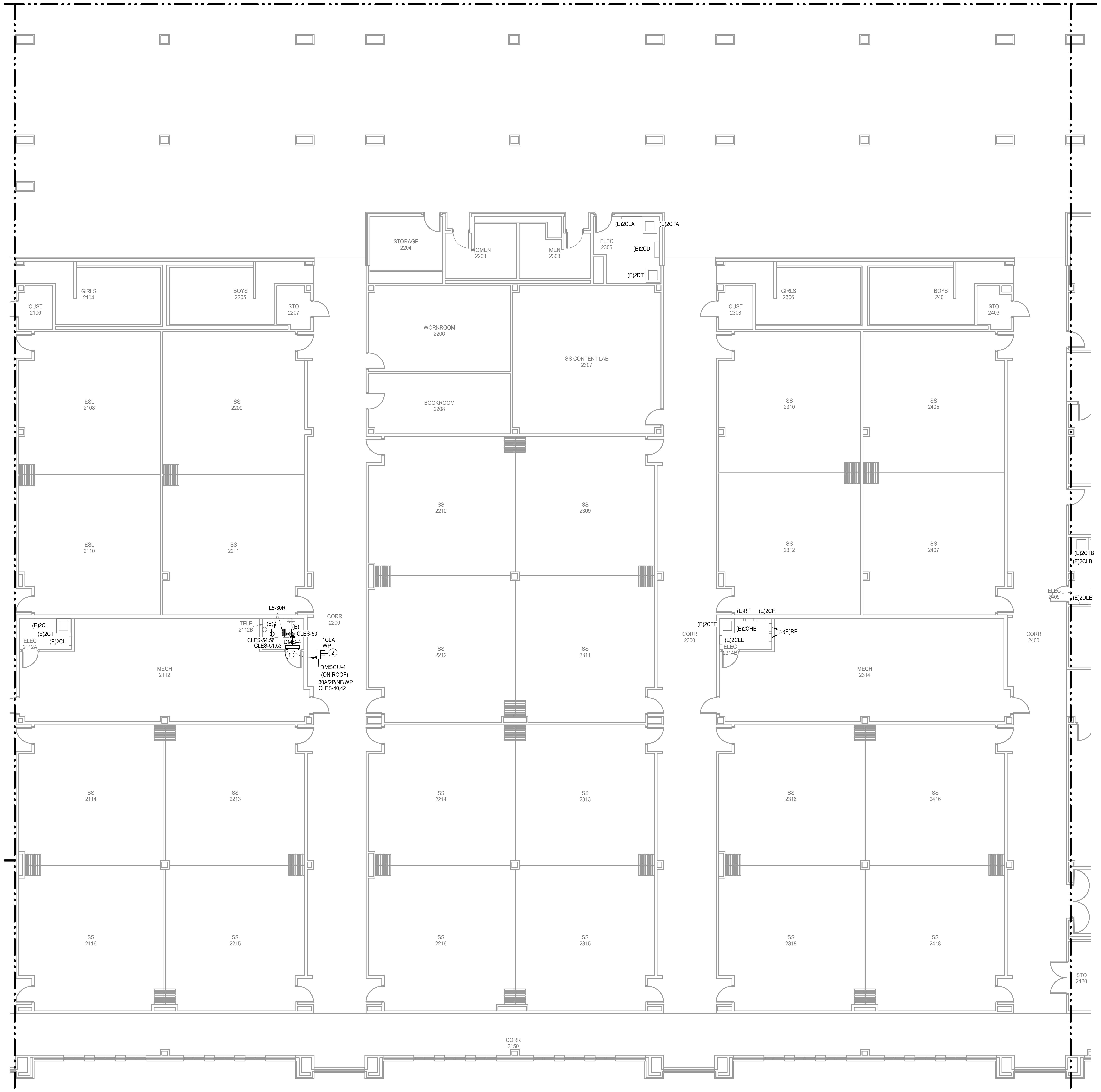
2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER FIRST FLOOR PLAN - NATATORIUM

E3.11
of



1 ELECTRICAL POWER FLOOR PLAN - LEVEL 2 - AREA C

Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

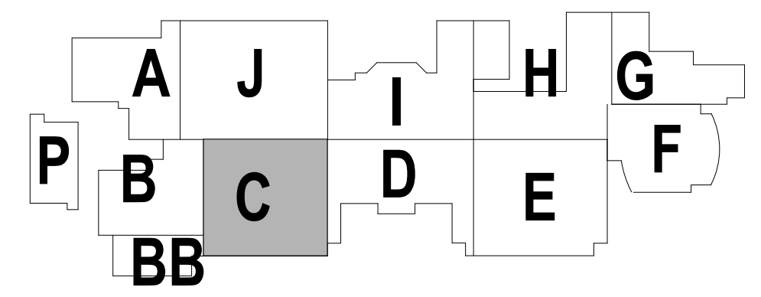
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

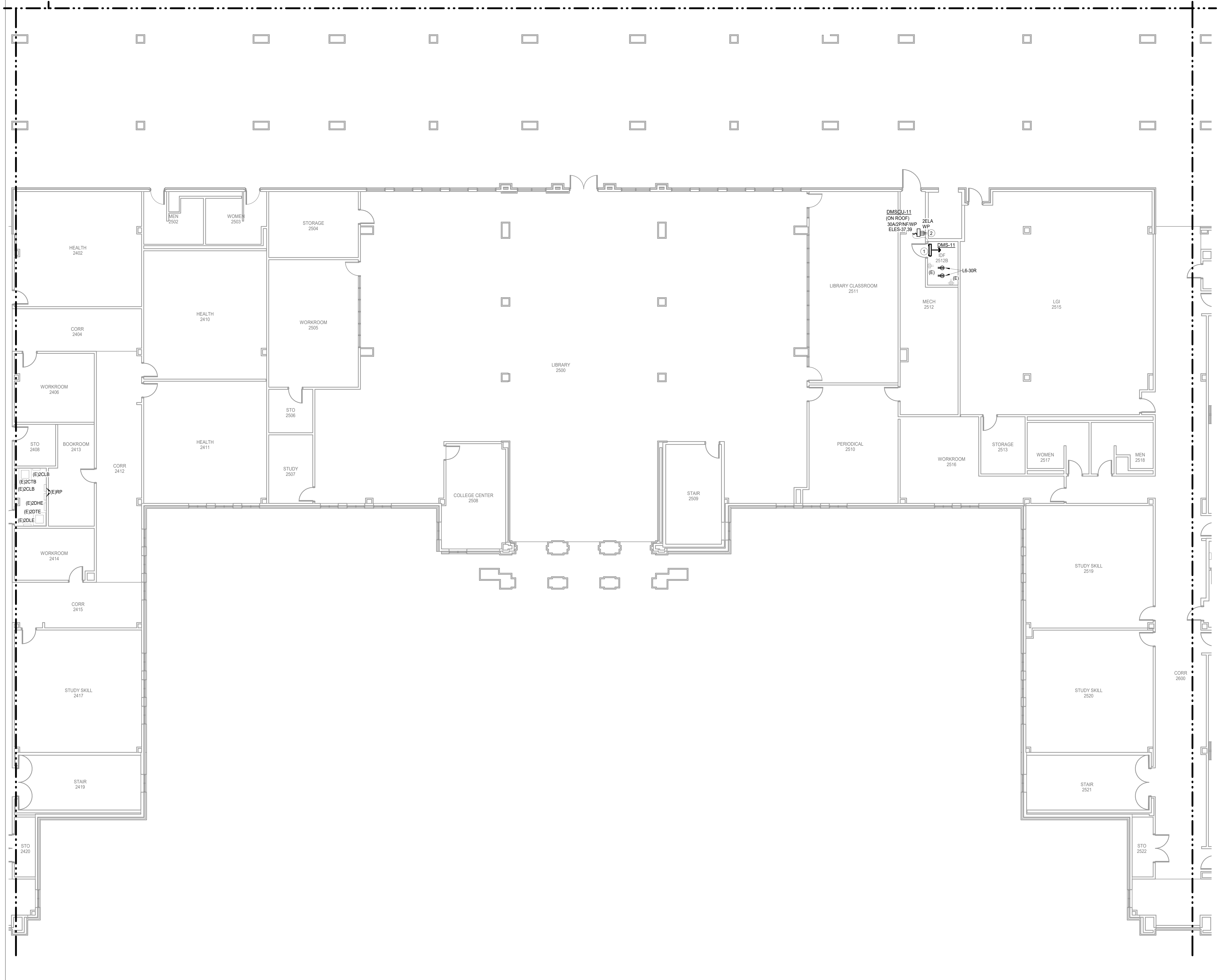
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER SECOND FLOOR PLAN - AREA C

E3.12

of



N

① **ELECTRICAL POWER FLOOR PLAN - LEVEL 2 - AREA D**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

LINETYPE LEGEND

────────	EXISTING TO REMAIN
─ ─ ─ ─	DISCONNECT AND REMOVE
━━━━━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

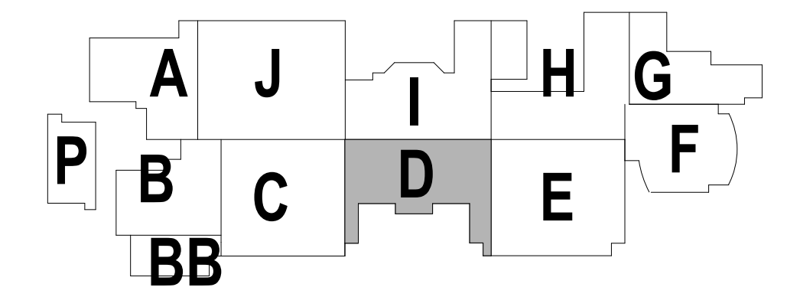
WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

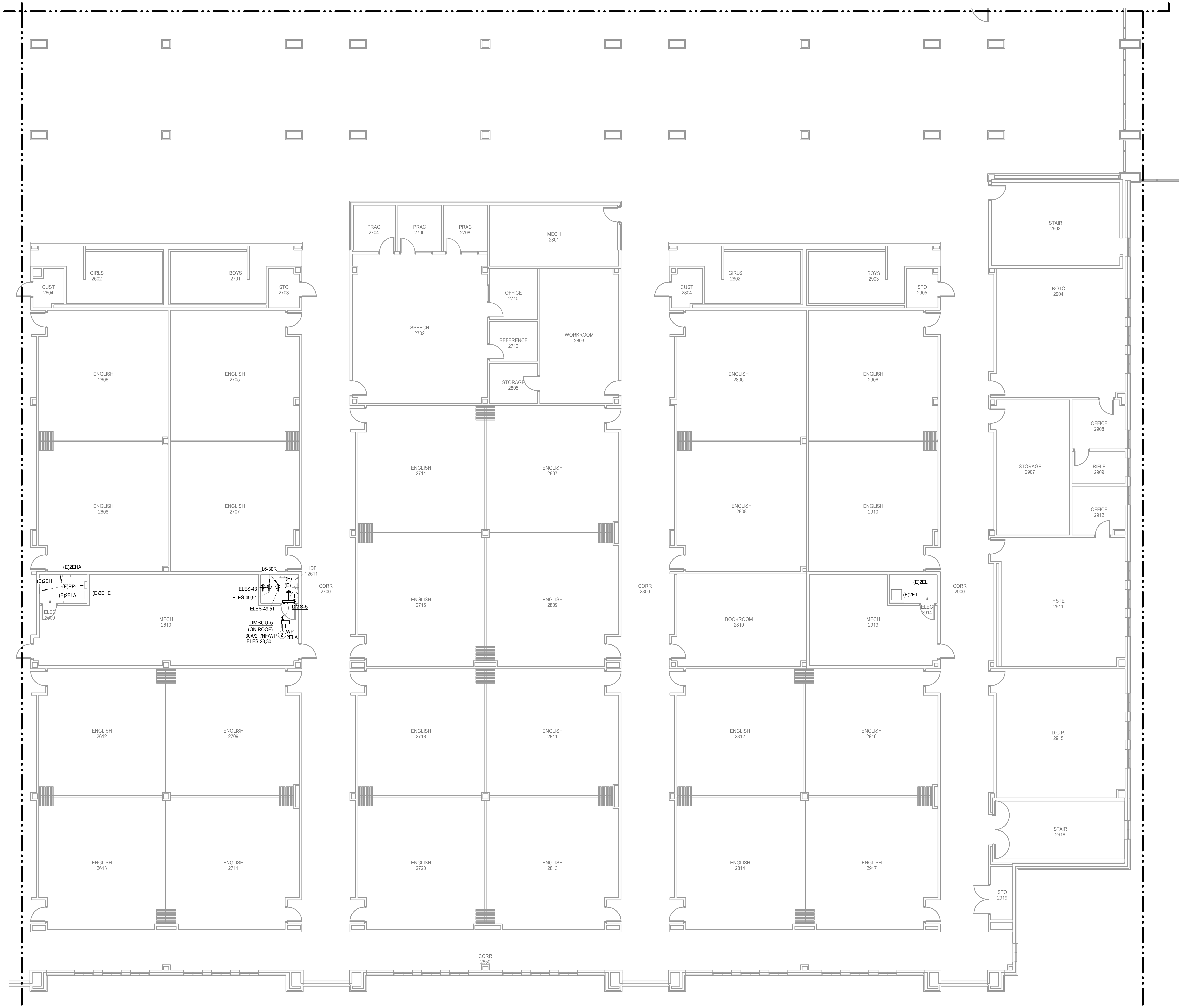
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER
SECOND FLOOR PLAN -
AREA D

E3.13
____ of ____



1 **ELECTRICAL POWER FLOOR PLAN - LEVEL 2 - AREA E**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.
10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

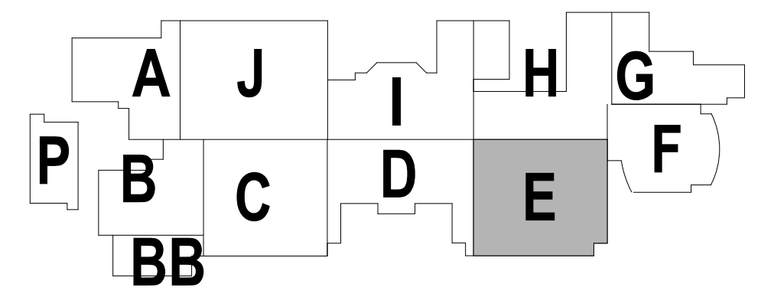
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

ELECTRICAL POWER
SECOND FLOOR PLAN -
AREA E

E3.14
of

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

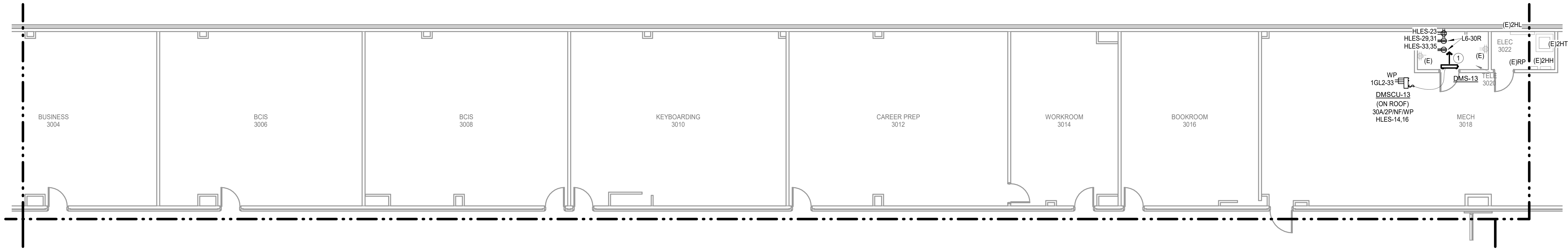
8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

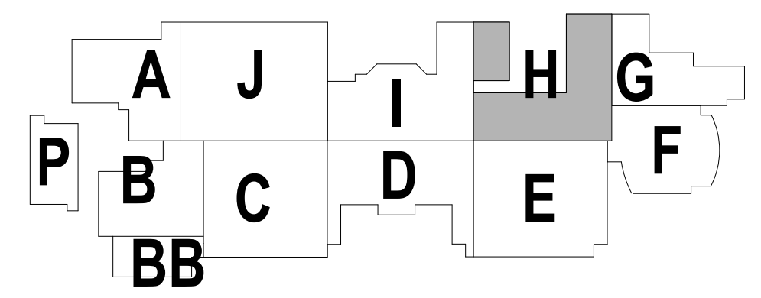
ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.



1 **ELECTRICAL POWER FLOOR PLAN - LEVEL 2 - AREA H**
Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

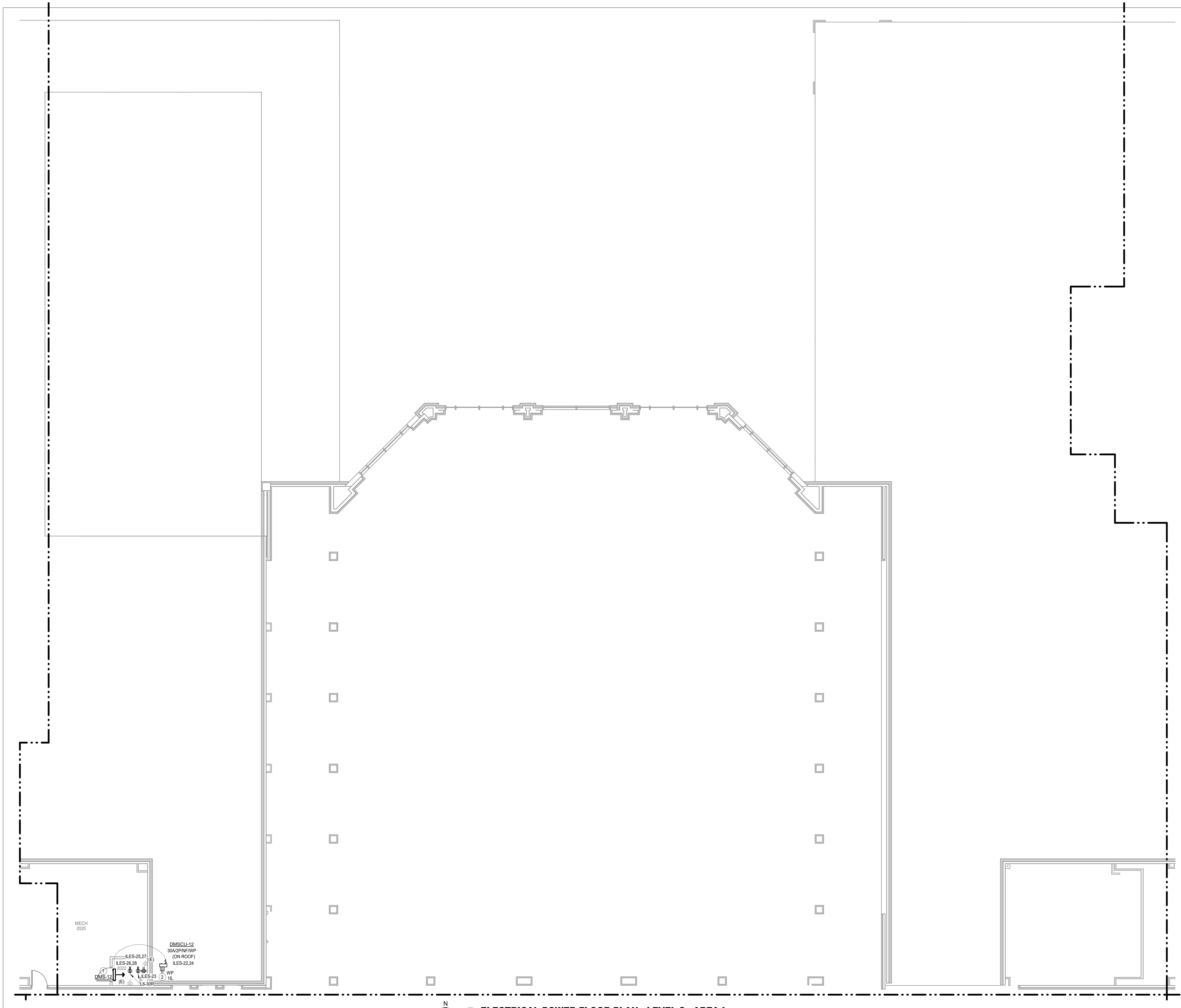
Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

ELECTRICAL POWER
SECOND FLOOR PLAN -
AREA H

E3.15

____ of ____



1 ELECTRICAL POWER FLOOR PLAN - LEVEL 2 - AREA I
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

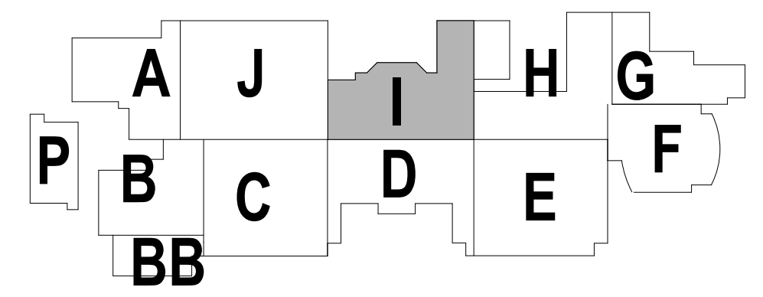
ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.
2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.
3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.
5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.
6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.
7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.
9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.
10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

ELECTRICAL KEYED NOTES

1	ROUTE 3/4" C. TO ASSOCIATED OUTDOOR UNIT ON ROOF. ROUTE PARALLEL WITH REFRIGERATION LINES.
2	PROVIDE POWER TO NEW MAINTENACE RECEPTACLE MOUNTED BELOW DMSCU DISCONNECT ON ROOF FROM 208V PANEL NOTED. PROVIDE NEW 20A, 1POLE BREAKER WITH #10 WIRE. UP TO 7 DEVICES CAN BE PLACED ON ONE CIRCUIT, CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1500W.

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

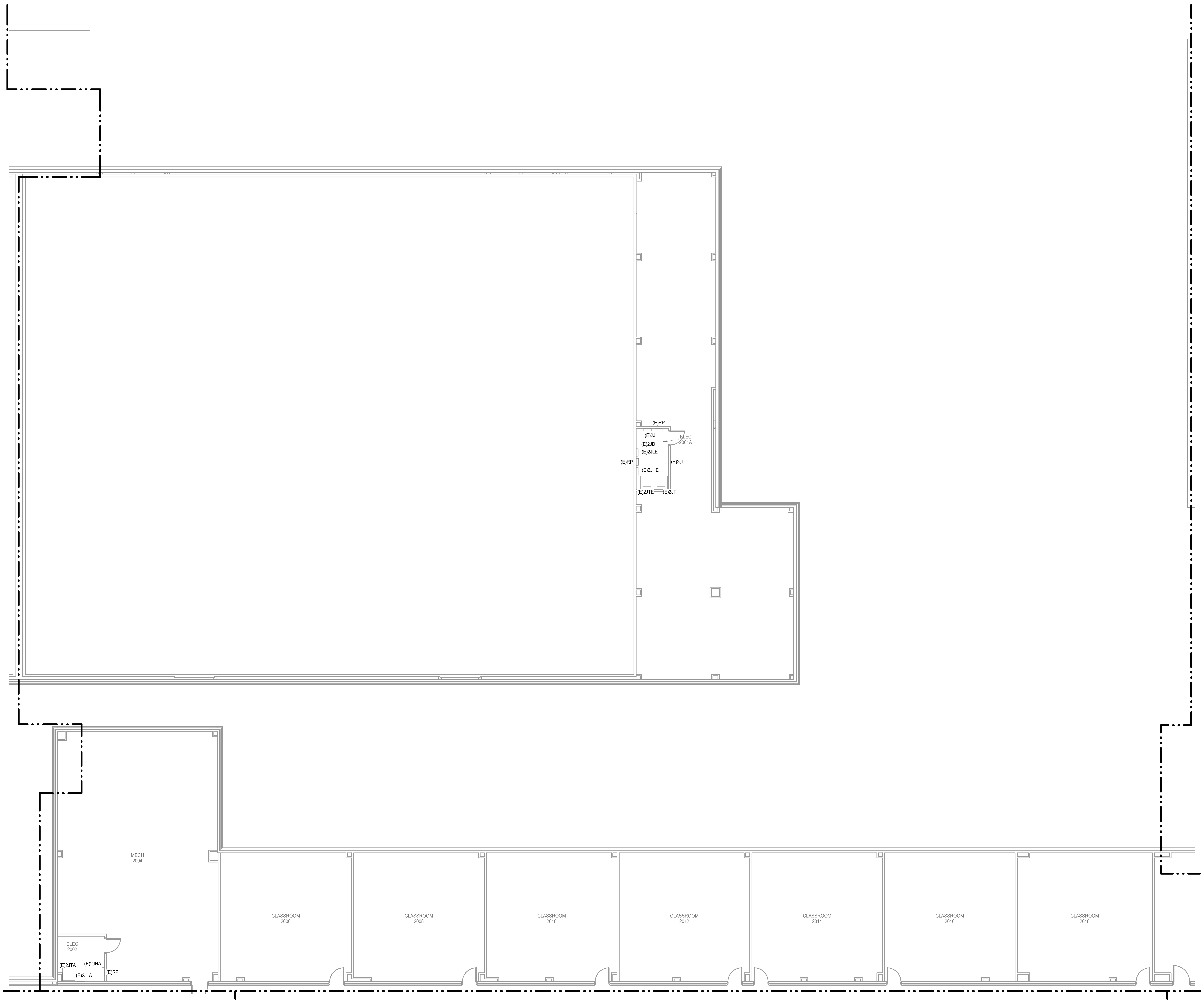
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL POWER SECOND FLOOR PLAN - AREA I

E3.16

___ of ___



1 **ELECTRICAL POWER FLOOR PLAN - LEVEL 2 - AREA J**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — —	DISCONNECT AND REMOVE
━━━	NEW WORK

WHERE ANY NEW WALL TERMINATES AT THE SAME LOCATION AS AN EXISTING WALL MOUNTED ELECTRICAL AND TECHNOLOGY DEVICE, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE.

PROVIDE NEW POWER DEVICES AND SWITCH BOX EXTENSIONS IN ALL AREAS WHERE GYPSUM BOARD OR OTHER WALL COVERING ADDS TO THE THICKNESS OF WALLS. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

TEMPORARILY DISCONNECT AND REMOVE ALL CEILING / WALL MOUNTED ELECTRICAL AND FIRE ALARM DEVICES FOR AREAS THAT REQUIRE CEILING / WALL REMOVALS AND/OR REPLACEMENT, INCLUDING MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION RELOCATE TO PREVIOUS LOCATION AS REQUIRED.

WHERE ANY EXISTING JUNCTION BOX AND/OR PULLBOX IS LOCATED AT A NEW NON-ACCESSIBLE CEILING AREA, CONTRACTOR SHALL RELOCATE DEVICE AND EXTEND WIRING AND CONDUIT ABOVE NEAREST ACCESSIBLE CEILING AS INSTRUCTED BY OWNER OR ITS REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR AREAS AFFECTED.

FIRE ALARM SYSTEM INSTALLER SHALL DISCONNECT AND RECONNECT FIRE ALARM SHUTDOWN AT NEW REPLACEMENT VARIABLE FREQUENCY DRIVES (VFDS). SHUT DOWN OF VFD SHALL BE IN HAND AND AUTO POSITION.

ELECTRICAL GENERAL NOTES

1 ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY OR LOAD CAPACITY PRIOR TO INSTALLATION.

2 CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT AND SCHEDULES. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DISCONNECTS, BRANCH CIRCUITRY, STARTERS/CONTROLS, CIRCUIT BREAKERS AND CONNECTIONS REQUIRED TO POWER EQUIPMENT.

3 CONTRACTOR TO COORDINATE EXACT LOCATION OF DISCONNECT SWITCHES, JUNCTION BOXES AND SINGLE POLE TOGGLE SWITCHES FOR MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

4 ALL RECEPTACLES LOCATED WITHIN 6'-0" OF SINK SHALL BE GFCI TYPE.

5 CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF RECEPTACLES AND SWITCHES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ELECTRICAL ROUGH-IN. ADJUST DEVICES AS REQUIRED SO THAT NO DEVICES ARE INSTALLED BEHIND CABINETS OR SHELVES.

6 ALL BLANK FACE GFCI DEVICES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION AND NOT BEHIND EQUIPMENT.

7 CONTRACTOR SHALL REFER TO TECHNOLOGY SERIES CONSTRUCTION DOCUMENTS FOR EXACT LOCATION AND REQUIREMENTS OF ALL LOW VOLTAGE BACK BOXES, FITTINGS, AND CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

8 ALL EXTERIOR OUTLETS SHALL BE WP GFI IN METAL WHILE-IN -USE LOCKABLE ENCLOSURE WITH EXCEPTION TO INTEGRAL RTU RECEPTACLES.

9 NO NEW SURFACE MOUNTED RACEWAY. ALL NEW DEVICES ON EXISTING WALLS SHALL BE CUT IN TO BE FLUSH MOUNTED.

10 PROVIDE POWER TO ALL MOTORIZED DAMPERS FROM NEAREST ACCEPTABLE 120V GENERAL PURPOSE CIRCUIT. CONTRACTOR TO ENSURE TOTAL CIRCUIT LOAD DOES NOT EXCEED 1920W.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

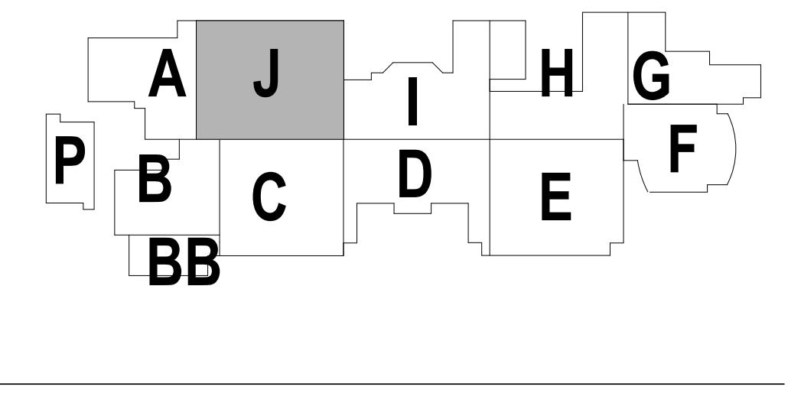
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	KJ

ELECTRICAL POWER
SECOND FLOOR PLAN -
AREA J

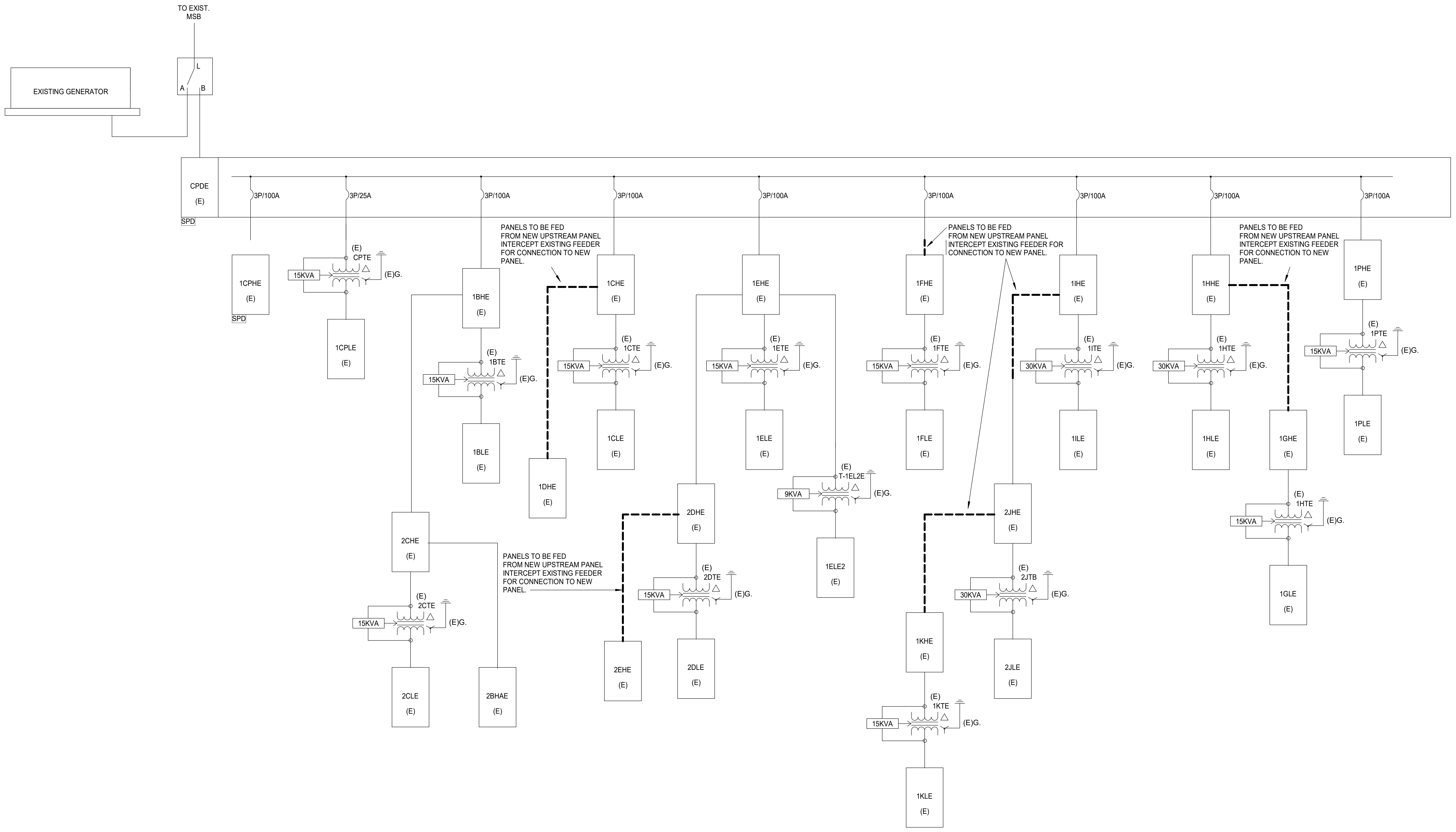
E3.17
of

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINE TYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK



PANELS TO BE FED FROM NEW UPSTREAM PANEL INTERCEPT EXISTING FEEDER FOR CONNECTION TO NEW PANEL.

PANELS TO BE FED FROM NEW UPSTREAM PANEL INTERCEPT EXISTING FEEDER FOR CONNECTION TO NEW PANEL.

PANELS TO BE FED FROM NEW UPSTREAM PANEL INTERCEPT EXISTING FEEDER FOR CONNECTION TO NEW PANEL.

PANELS TO BE FED FROM NEW UPSTREAM PANEL INTERCEPT EXISTING FEEDER FOR CONNECTION TO NEW PANEL.

N

1 PARTIAL DEMOLITION ONE LINE DIAGRAM

Scale: 12" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

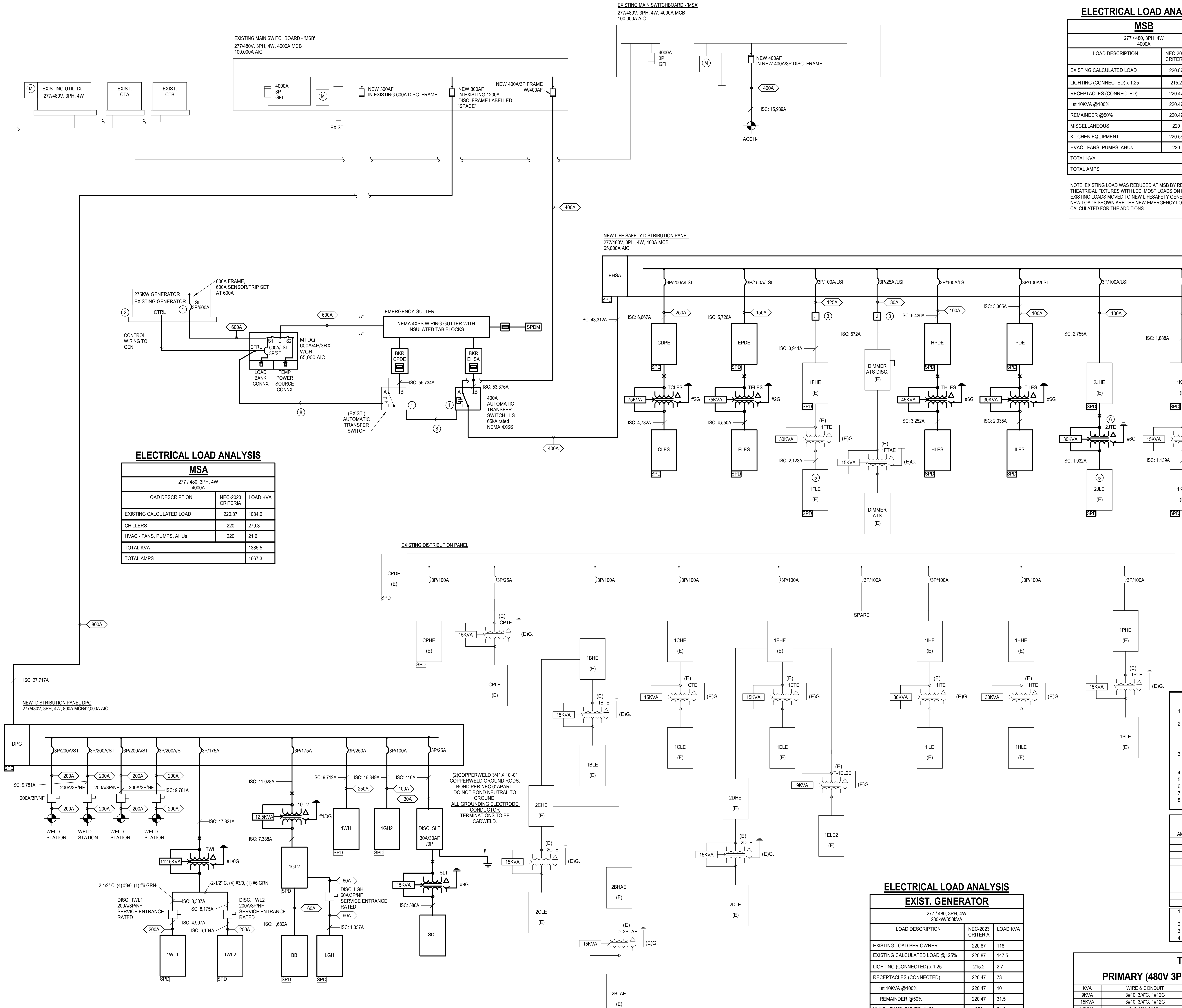
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PARTIAL DEMOLITION ONE-LINE DIAGRAM

E4.01

of



① **PARTIAL ONE LINE DIAGRAM**
Scale: 12" = 1'-0"

ELECTRICAL LOAD ANALYSIS

MSA

277 / 480, 3PH, 4W
4000A

LOAD DESCRIPTION	NEC-2023 CRITERIA	LOAD KVA
EXISTING CALCULATED LOAD	220.87	1084.6
CHILLERS	220	279.3
HVAC - FANS, PUMPS, AHUs	220	21.6
TOTAL KVA		1385.5
TOTAL AMPS		1667.3

ELECTRICAL LOAD ANALYSIS

MSB

277 / 480, 3PH, 4W
4000A

LOAD DESCRIPTION	NEC-2023 CRITERIA	LOAD KVA
EXISTING CALCULATED LOAD	220.87	1378.6
LIGHTING (CONNECTED) x 1.25	215.2	14.2
RECEPTACLES (CONNECTED)	220.47	216
1st 10KVA @100%	220.47	10
REMAINDER @50%	220.47	103
MISCELLANEOUS	220	256.9
KITCHEN EQUIPMENT	220.56	0
HVAC - FANS, PUMPS, AHUs	220	168.4
TOTAL KVA		1931.1
TOTAL AMPS		2323.8

NOTE: EXISTING LOAD WAS REDUCED AT MSB BY REPLACING HID THEATRICAL FIXTURES WITH LED. MOST LOADS ON NEW PANELS ARE EXISTING LOADS MOVED TO NEW LIFESAFETY GENERATOR BRANCH. NEW LOADS SHOWN ARE THE NEW EMERGENCY LOADS CALCULATED FOR THE ADDITIONS.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

LINE TYPE LEGEND

────	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
━━━━	NEW WORK

UNLESS NOTED OTHERWISE, RETAIN IN PLACE ALL EXISTING CIRCUITS AND FEEDER FROM SOURCE FOR ALL EXISTING PANELS LABELED TO BE REPLACED AND/OR RELOCATED. EXTEND/RE-ROUTE EXISTING BRANCH CIRCUITS AND FEEDER LEFT IN PLACE AFTER DEMOLITION FROM EXISTING PANELS TO BE RELOCATED AND/OR REPLACED.

CONTRACTOR TO FIELD VERIFY INTERRUPTING FAULT CURRENT CAPACITY OF EXISTING PANELS AND/OR SWITCHBOARDS AND TO PROVIDE NEW BREAKERS/FUSES TO MATCH EXISTING.

DEMOLITION/EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EUIOPMENT BEING REMOVED FROM THIS PROJECT. CONTRACTOR TO NOTIFY CAREY RAMSEY WITH DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

ELECTRICAL RISER KEYED NOTES

1 PROVIDE DRY CONTACT WITH SEPARATE MONITORING INTERFACE FOR EACH ATS WITH SECURITY PANEL.
2 SELECTIVELY COORDINATE ALL EQUIPMENT DEDICATED TO THE LIFE SAFETY EMERGENCY SYSTEM, INCLUDING BUT NOT LIMITED TO, PANELBOARDS TYPE AND SIZE, BRANCH AND FEEDER CIRCUIT BREAKERS, AND GENERATOR WITH MANUFACTURER TO COMPLY WITH COORDINATION STUDY REQUIREMENTS PRIOR TO SUBMITTAL. REFER TO NEC-2023:700.
3 INTERCEPT EXISTING FEEDER AND EXTEND CONDUITS AND WIRING TO NEW UPSTREAM DISTRIBUTION PANEL. INTERCEPT EXISTING PANEL FEEDER AT CLOSEST POSSIBLE LOCATION TO NEW SUPPLY PANEL.
4 PROVIDE NEW 480V 3PH, 3POLE 600A LSI BREAKER.
5 PROVIDE NEW LSI RATED MAIN BREAKER IN EXISTING PANEL.
6 REPLACE EXISTING TRANSFORMER.
7 PROVIDE NEW 3P/25A BREAKER IN EXISTING PANEL.
8 1" C TO ATS FOR CONTROL WIRING REFER TO SPECIFICATIONS AND COORDINATE WITH MANUFACTURER. TYPICAL.

FEEDER SCHEDULE

AMPERAGE	# SETS	CONDUCTOR (QTY.)/SIZE	GROUND (QTY.)/SIZE	CONDUIT
30A	1	(4) #10	#10	3/4"C
60A	1	(4) #4	#10	1-1/4"C
100A	1	(4) #3	#8	1-1/4"C
125A	1	(4) #1	#6	2"C
150A	1	(4) #1/0	#6	2"C
200A	1	(4) #3/0	#6	2-1/2"C
250A	1	(4) #250KCMIL	#4	3"C
400A	2	(4) #3/0	#3	2-1/2"C
600A	2	(4) #350KCMIL	#1/0	3-1/2"C
800A	3	(4) #300KCMIL	#1/0	3"C

1 CONDUIT QUANTITIES BASED ON 3-PHASE, 4-WIRE SYSTEM; FOR EQUIPMENT THAT DOES NOT REQUIRE A NEUTRAL OR IS SINGLE PHASE, DEDUCT
2 CONDUCTOR SIZES BASED ON NEC TABLE 310.16 - COPPER 75°.
3 GROUND SIZES BASED ON NEC TABLE 250.122 - COPPER.
4 CONDUIT FILL BASED ON NEC ANNEX C - THW CONDUCTOR INSULATION.

ELECTRICAL LOAD ANALYSIS

EXIST. GENERATOR

277 / 480, 3PH, 4W
280kW/350kVA

LOAD DESCRIPTION	NEC-2023 CRITERIA	LOAD KVA
EXISTING LOAD PER OWNER	220.87	118
EXISTING CALCULATED LOAD @125%	220.87	147.5
LIGHTING (CONNECTED) x 1.25	215.2	2.7
RECEPTACLES (CONNECTED)	220.47	73
1st 10KVA @100%	220.47	10
REMAINDER @50%	220.47	31.5
HVAC - FANS, PUMPS, AHUs	220	64.6
TOTAL		256.3
TOTAL AMPS		308.4

TRANSFORMER SCHEDULE

	PRIMARY (480V 3PH 3W)		SECONDARY (208V 3PH 4W)	
KVA	WIRE & CONDUIT	CIRCUIT BREAKER	WIRE & CONDUIT	CIRCUIT BREAKER
9KVA	3#10, 3/4"C, 1#12G	3P-15A	4#6, 1-1/4", 1#10G	3P-40A
15KVA	3#10, 3/4"C, 1#12G	3P-25A	4#6, 1-1/4", 1#10G	3P-60A
30KVA	3#6, 1"C, 1#10G	3P-45A	4#1, 2"C, 1#6G	3P-100A
45KVA	3#4, 1"C, 1#8G	3P-70A	4#1/0, 2"C, 1#6G	3P-150A
75KVA	3#1, 1-1/4"C, 1#6G	3P-125A	4#250KCMIL, 3"C, 1#4G	3P-250A
112.5KVA	3#2/0, 1-1/2"C, 1#6G	3P-175A	(2) SETS: 4#3/0, 2-1/2"C, 1#1/0G	3P-400A

TRANSFORMER SCHEDULE NOTES:
UNLESS OTHERWISE NOTED ON DRAWINGS

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PARTIAL
ONE-LINE DIAGRAM

E4.02

of

Branch Panel: CDPE

NEW PANEL

Location: MECH 1252
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 200A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
R	1	LIGHTS 1225	--	20	1	2.5 / 1.5			1	20	--	Lights 1364, 1359, 1307	2	R
R	3	Emer Lts 1100s, 1200s, 1300s	--	20	1		2.6 / 0.2		1	20	--	RC 1CRE - 1253	4	R
R	5	EXIT LTG AREA C	--	20	1			0.6 / 0.5	1	20	--	RC 1CRE Cont Pwr - 1253	6	R
R	7	Lights 1310	--	20	1	1.5 / 0.5			1	20	--	Exit Signs - Area B	8	R
R	9	Emer Lts 1100s	--	20	1		0.8 / 2.5		1	20	--	Lights 1167	10	R
R	11	Emer Lts corridors 1100s	--	20	1			2.6 / 0.8	1	20	--	1BRE - Cont Power - 1154	12	R
R	13	Emer. Lts - 2100s-2400s	--	20	1	1.7 / 0.5			1	20	--	EXIT SIGNS	14	R
R	15	Lts - 2205, 2104, 2200, 2100, 2150, 2115, 2109	--	20	1		4.1 / 0.5		1	20	--	EXIT SIGNS	16	R
R	17	EXIT LTG	--	20	1			0.6 / 0.4	1	20	--	RC CONTROL 2 BRAE, 2BRA	18	R
R	19	EXIT LTG	--	20	1	0.6 / 0.5			1	20	--	RC-2BRAE	20	R
R	21	LIGHTS 2400s-2500s	--	20	1		2.5 / 0.5		1	20	--	RC-2BRAE	22	R
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	TCLES	ONE LINE	125	3	19.3 / 0.0			3	30	--	SPDL	38	
	39						19.8 / 0.0						40	
	41							18.2 / 0.0					42	
			Total Load:			28.6 kVA	33.5 kVA	23.7 kVA						
			Total Amps:			106 A	124 A	85 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	15.2 kVA	100.00%	15.2 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	85.7 kVA
Receptacles	20.5 kVA	74.34%	15.3 kVA	Total Est. Demand:	80.4 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	103 A
				Total Est. Demand Current:	97 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	50.0 kVA	100.00%	50.0 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S): 1BHE, 1CHE, 2CHE, 2BHAE

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: CLES

NEW PANEL

Location: MECH 1252
Supply From: TCLES
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 250A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
R	1	MDF	--	20	1	1.2 / 1.0			1	20	--	TELEPHONE EQUIPMENT - 1256	2	R
R	3	MDF	--	20	1		1.2 / 1.5		1	20	--	3 REC, WATTSOPPER REPEATER 1338, MDF, FA	4	R
R	5	RELAY PNL. - 1253	--	20	1			0.5 / 1.2	1	20	--	IDF-B-1155	6	R
R	7	RELAY PNL. - 1253	--	20	1	0.5 / 1.2			1	20	--	IDF-B-1155	8	R
R	9	TELEPHONE EQUIPMENT 1384	--	20	2		1.2 / 1.2		1	20	--	IDF-B-1155	10	R
	11							1.2 / 0.1	1	20	--	FIRE SMOKE DAMPERS	12	R
R	13	DDC CONTROLS/FA PANEL 1153	--	20	1	0.5 / 0.5			1	20	--	FA PANEL 2303,2203,2305,2112	14	R
R	15	RELAY PNL 1154	--	20	1		0.4 / 0.4		1	20	--	RELAY PNL 2314B	16	R
R	17	FIRE SMOKE DAMPERS 2112	--	20	1			0.5 / 1.2	1	20	--	CORR EGRESS LTG (D2)	18	R
R	19	TELE. EQUIPMENT 2512	--	20	1	0.5 / 0.5			1	20	--	FIRE SMOKE DAMPERS	20	R
R	21	TELE. EQUIPMENT 2112	--	20	1		0.3 / 0.3		1	20	--	FA PANEL 2609,2610,2801,2409,2512	22	R
R	23	TELE. EQUIPMENT 2512	--	20	1			0.3 / 0.7	1	20	--	DATA RACK 2611, 3014	24	R
R	25	FIRE SMOKE DAMPERS	--	20	1	0.5 / 0.7			1	20	--	DATA RACK 2611	26	R
R	27	FIRE ALARM CONTROL PANEL	--	20	1		1.2 / 0.4		1	20	--	RELAY PANEL 2409	28	R
R	29	HALL EGRESS LTG (F2)	--	20	1			0.3 / 0.4	1	20	--	RELAY PANEL 2409	30	R
R	31	FA REMOTE POWER 2512	--	20	1	0.3 / 1.0			1	20	#12	IDF Rack	32	
	33	DMSCU-3	#10	30	2		1.9 / 0.5		1	20	#12	ACP	34	
	35							1.9 / 1.0	2	30	#10	L6-30R IDF 1155	36	
	37	L6-30R IDF 1155	#10	30	2	1.0 / 1.0							38	
	39						1.0 / 1.9		2	30	#10	DMSCU-4	40	
	41	ACP	#12	20	1			0.5 / 1.9					42	
	43	DMSCU-1	#6	30	2	1.9 / 0.5			1	20	#12	ACP	44	
	45						1.9 / 1.0		1	20	#12	IDF Rack	46	
	47	DMSCU-9	#10	30	2			1.9 / 1.0	1	20	#12	IDF Rack	48	
	49					1.9 / 1.0			1	20	#12	IDF Rack	50	
	51	L6-30R TELE 2112B	#10	30	2		1.0 / 0.0		1	--	--	SPACE	52	
	53							1.0 / 1.0	2	30	#10	L6-30R TELE 2112B	54	
	55	L6-30R TELE 1256	#10	30	2	1.0 / 1.0							56	
	57						1.0 / 1.0		2	30	#10	L6-30R MDF 1384	58	
	59	SPACE	--	--	1			0.0 / 1.0					60	
	61	L6-30R MDF 1384	#10	30	2	1.0 / 0.0			1	--	--	SPACE	62	
	63						1.0 / 0.0		1	--	--	SPACE	64	
	65	L6-30R TELE 1256	#10	30	2			1.0 / 0.0	1	--	--	SPACE	66	
	67					1.0 / 0.0			1	--	--	SPACE	68	
	69	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	70	
	71	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	72	
	73	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	74	
	75	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	76	
	77	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	78	
	79	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	80	
	81	SPARE	--	20	1		0.0 / 0.0						82	
	83	SPARE	--	20	1			0.0 / 0.0					84	
			Total Load:			19.3 kVA	19.8 kVA	18.2 kVA						
			Total Amps:			162 A	166 A	152 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	15.2 kVA	100.00%	15.2 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	57.2 kVA
Receptacles	20.5 kVA	74.34%	15.3 kVA	Total Est. Demand:	52.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	159 A
				Total Est. Demand Current:	144 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	21.5 kVA	100.00%	21.5 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S): 1BLE, 1CLE, 2CLE, 2DLE, 2BLAE

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: EPDE

NEW PANEL

Location: MECH 1660
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 18,000
Enclosure: Type 1
Mains: 150A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
R	1	EXIT LTG AREA (E)	--	20	1	0.6 / 1.7			1	20	--	Emer. Lights corridor 1600	2	R
R	3	NEW 1670 UNITS	--	20	1		1.2 / 1.7		1	20	--	RC 1ELE CONTROL POWER	4	R
R	5	Emer. Lights 1600s, 1700s	--	20	1			3.4 / 0.0	1	--	--	SPACE	6	
	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	32	
	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	
	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	
	37	TELES	ONE LINE	70	3	16.3 / 0.0			3	30	--	SPDL	38	
	39						17.4 / 0.0						40	
	41							16.0 / 0.0					42	
			Total Load:			18.6 kVA	20.3 kVA	19.4 kVA						
			Total Amps:			67 A	74 A	70 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	15.2 kVA	100.00%	15.2 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	58.2 kVA
Receptacles	17.2 kVA	79.10%	13.6 kVA	Total Est. Demand:	54.6 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	70 A
				Total Est. Demand Current:	66 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	25.8 kVA	100.00%	25.8 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S):

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: ELES

NEW PANEL

Location: MECH 1660
Supply From: TELES
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 250A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	ELEVATOR CONTROLS 1532	--	20	1	0.3 / 0.3			1	20	--	MAIN COMM RACK 1520	2	
	3	F/A	--	20	1		0.5 / 0.3		1	20	--	MAIN COMM RACK 1520	4	
	5	TELE. EQUIPMENT 1668	--	20	1			0.5 / 1.5	1	20	--	SECURITY SYSTEM 1413	6	
	7	FA REMOTE POWER 1660	--	20	1	0.3 / 1.5			1	20	--	SECURITY SYSTEM 1413	8	
	9	FA REMOTE POWER 1660	--	20	1		0.3 / 1.5		1	20	--	SECURITY SYSTEM 1413	10	
	11	FA 1520	--	20	1			0.5 / 0.3	1	20	--	TELE. EQUIPMENT 1668	12	
	13	SECURITY SYSTEM 1531	--	20	1	1.5 / 0.3			1	20	--	RELAY PANEL 1670	14	
	15	SECURITY SYSTEM 1520	--	20	1		1.5 / 0.4		1	20	--	RELAY PANEL 1670	16	
	17	SECURITY SYSTEM 1532	--	20	1			1.5 / 0.5	1	20	--	FIRE/SMOKE DAMPER 1660	18	
	19	TELE. EQUIPMENT 1668	--	20	1	0.5 / 0.5			1	20	#12	ACP	20	
	21	BLG. COMM SYSTEM 1520	--	20	1		0.5 / 1.9		2	30	#6	DMSCU-2	22	
	23	TELE. EQUIPMENT 1520	--	20	1			0.3 / 1.9					24	
	25	TELE. EQUIPMENT 1520	--	20	1	0.7 / 0.5			1	20	#12	ACP	26	
	27	RELAY PANEL 1670	--	20	1		0.4 / 1.9		2	30	#8	DMSCU-5	28	
	29	FA SMOKE DAMPER	--	20	1			0.5 / 1.9					30	
	31	TELE. EQUIPMENT 1668	--	20	1	0.5 / 1.0			2	30	#10	L6-30R IDF 2611	32	
	33	TELE. EQUIPMENT 1668	--	20	1		0.7 / 1.0						34	
	35	IDF Rack TELE 1668	#12	20	1			1.0 / 1.9	2	30	#10	DMSCU-7	36	
	37	DMSCU-11	#6	30	2	1.9 / 1.9							38	
	39						1.9 / 1.0		1	20	#12	IDF Rack TELE 1520	40	
	41	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	42	
	43	IDF Rack IDF 2611	#12	20	1	1.0 / 1.0			2	30	#10	L6-30R TELE 1520	44	
	45	L6-30R TELE 1668	#10	30	2		1.0 / 1.0						46	
	47							1.0 / 1.0	2	30	#10	L6-30R TELE 1668	48	
	49	L6-30R IDF 2611	#10	30	2	1.0 / 1.0							50	
	51						1.0 / 1.0		2	30	#10	L6-30R TELE 1520	52	
	53	L6-30R TELE 1520	#10	30	2			1.0 / 1.0					54	
	55					1.0 / 0.0			1	--	--	SPACE	56	
	57	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	58	
	59	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	60	
	61	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	62	
	63	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	64	
	65	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	66	
	67	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	68	
	69	SPARE	--	20	1		0.0 / 0.0						70	
	71	SPARE	--	20	1			0.0 / 0.0					72	
			Total Load:			16.3 kVA	17.4 kVA	16.0 kVA						
			Total Amps:			136 A	145 A	133 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	15.2 kVA	100.00%	15.2 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	49.6 kVA
Receptacles	17.2 kVA	79.10%	13.6 kVA	Total Est. Demand:	46.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	138 A
				Total Est. Demand Current:	128 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	17.2 kVA	100.00%	17.2 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S):

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: 1FHE

EXISTING PANEL

Location: ELEC 1771
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	Emer. Lights Auditorium	--	20	1	0.0 / 0.0			1	20	--	SPARE	2	E
E	3	Exit Lights Auditorium	--	20	1		0.0 / 0.0		1	20	--	SPARE	4	E
E	5	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	E
E	7	SPARE	--	20	1	0.0 / 0.0			1	20	--	RELAY PANEL	8	E
	9	Lighting Room 1762, 1768A, 1768	#12	20	1		0.1 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			3	30	--	SPDL	32	
	33	SPACE	--	--	1		0.0 / 0.0						34	
	35	SPACE	--	--	1			0.0 / 0.0					36	
	37	SPACE	--	--	1	0.0 / 5.2			3	45	ONE LINE	FTE	38	E
E	39	SPARE	--	20	1		0.0 / 8.1						40	
E	41	SPARE	--	20	1			0.0 / 5.5					42	
			Total Load:			5.2 kVA	8.2 kVA	5.5 kVA						
			Total Amps:			19 A	30 A	20 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.9 kVA	125.00%	1.2 kVA	Total Conn. Load:	18.9 kVA
Receptacles	1.2 kVA	100.00%	1.2 kVA	Total Est. Demand:	19.1 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	23 A
				Total Est. Demand Current:	23 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	16.7 kVA	100.00%	16.7 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

1FHE

Branch Panel: 1FLE

EXISTING PANEL

Location: ELEC 1771
Supply From: FTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	LOW VOLT CONTROL - 1771	--	20	1	0.4 / 0.3			1	20	--	FA VOICE 1772	2	E
E	3	DIMMER ATS 1771	--	20	1		2.0 / 2.0		1	20	--	DIMMER ATS 1771	4	E
E	5	DIMMER ATS 1771	--	20	1			2.0 / 2.0	1	20	--	DIMMER ATS 1771	6	E
E	7	DIMMER ATS 1771	--	20	1	2.0 / 2.0			1	20	--	DIMMER ATS 1771	8	E
E	9	SPARE	--	20	1		0.0 / 2.0		1	20	--	DIMMER ATS 1771	10	E
E	11	DDC CONT. 1634	--	20	1			0.5 / 0.0	1	20	--	SPARE	12	E
E	13	ATS CONTROLS 1771	--	15	2	0.1 / 0.0			1	20	--	SPARE	14	E
	15						0.1 / 0.4		1	20	--	2 REC 1771, 1834, 2765	16	E
E	17	ATS CONTROLS 1771	--	15	2			0.1 / 0.5	1	20	--	DDC CONTROLLER 1769	18	E
	19					0.1 / 0.4			1	20	--	RELAY PNL CONT. PWR 177	20	E
	21	A.LBC.01 1769	#12	20	1		1.2 / 0.5		1	20	#12	Lighting	22	
	23	Lighting	#12	20	1			0.4 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		3	30	--	SPDL	34	
	35	SPACE	--	--	1			0.0 / 0.0					36	
	37	SPACE	--	--	1	0.0 / 0.0							38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	E
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
			Total Load:			5.2 kVA	8.1 kVA	5.5 kVA						
			Total Amps:			43 A	68 A	46 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.8 kVA	125.00%	1.1 kVA	Total Conn. Load:	18.8 kVA
Receptacles	1.2 kVA	100.00%	1.2 kVA	Total Est. Demand:	19.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	52 A
				Total Est. Demand Current:	53 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	16.7 kVA	100.00%	16.7 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

1FLE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PANEL SCHEDULES

E5.01
of

Branch Panel: HPDE

NEW PANEL

Location: ELEC 1956
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 18,000
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
R	1	EXIT LTG AREA (H)	--	20	1	0.3 / 1.8			1	20	--	Emer. Lights 1800s, 1900s	2	R
R	3	EXIT LTG AREA (I)	--	20	1		0.1 / 0.6		1	20	--	Emer. Lights 3000s	4	R
R	5	EXIT LTG AREA (CP)	--	20	1			0.3 / 0.6	1	20	--	Lights 1969, 1965	6	R
R	7	CPRE POWER - 1968	--	20	1	1.0 / 1.0			1	20	--	Lights 1968	8	R
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	THLES	ONE LINE	70	3	12.7 / 0.0			3	30	--	SPDL	38	
	39						12.7 / 0.0						40	
	41							11.7 / 0.0					42	
		Total Load:				16.8 kVA	13.4 kVA	12.5 kVA						
		Total Amps:				61 A	49 A	45 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	19.0 kVA	100.00%	19.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	42.6 kVA
Receptacles	14.8 kVA	83.83%	12.4 kVA	**Total Est. Demand:**	40.3 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	51 A
				Total Est. Demand Current:	48 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	8.9 kVA	100.00%	8.9 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S): 1HHE, 1CPHE

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: HLES

NEW PANEL

Location: ELEC 1956
Supply From: THLES
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 150A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
R	1	TELE. EQUIPMENT 1871	--	20	1	0.3 / 0.5			1	20	--	FIRE/SMOKE DAMPERS 1962	2	R
R	3	FIRE SUPPRESSION 1977	--	20	1		0.3 / 0.5		1	20	--	FA REMOTE POWER - 1968	4	R
R	5	RELAY PNL - 1960	--	20	1			0.4 / 0.4	1	20	--	RELAY PNL - 1968	6	R
R	7	1 REC F/A -1960	--	20	1	0.5 / 0.0			1	20	--	SPARE	8	
R	9	F/A -1960	--	20	1		0.5 / 1.0		2	30	#8	L6-30R PROP STORAGE 1754	10	
	11	DMSCU-6	#6	30	2			1.9 / 1.0					12	
	13					1.9 / 1.9			2	30	#6	DMSCU-13	14	
	15	L6-30R TELE 1871	#10`	30	2		1.0 / 1.9						16	
	17							1.0 / 1.9	2	30	#8	DMSCU-8	18	
	19	DMSCU-14	#4	30	2	1.9 / 1.9							20	
	21						1.9 / 1.9		2	30	#4	DMSCU-16	22	
	23	IDF Rack TELE 3020	#10	20	1			1.0 / 1.9					24	
	25	IDF Rack PROP STORAGE 1754	#10	20	1	1.0 / 1.0			2	30	#10`	L6-30R TELE 1871	26	
	27	IDF Rack TELE 1871	#12	20	1		1.0 / 1.0						28	
	29	L6-30R TELE 3020	#10	20	2			1.0 / 0.5	1	20	#12	IDF Rack MECH 1969	30	
	31					1.0 / 1.0			2	30	#10	L6-30R MECH 1969	32	
	33	L6-30R TELE 3020	#10	20	2		1.0 / 1.0						34	
	35							1.0 / 0.0	1	20	--	SPARE	36	
	37	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	38	
	39	SPARE	--	20	1		0.0 / 0.0						40	
	41	SPARE	--	20	1			0.0 / 0.0					42	
		Total Load:				12.7 kVA	12.7 kVA	11.7 kVA						
		Total Amps:				107 A	107 A	97 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	19.0 kVA	100.00%	19.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	37.0 kVA
Receptacles	14.8 kVA	83.83%	12.4 kVA	**Total Est. Demand:**	34.6 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	103 A
				Total Est. Demand Current:	96 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	3.2 kVA	100.00%	3.2 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S): 1HLE, CPLE

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: IPDE

NEW PANEL

Location: MECH 1041
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
R	1	Emer. Lights 1000s	--	20	1	1.2 / 0.0			1	--	--	SPACE	2	
R	3	Emer. Lights 1900s	--	20	1		1.7 / 0.0		1	--	--	SPACE	4	
R	5	Exit Ltg Area H	--	20	1			4.5 / 0.0	1	--	--	SPACE	6	
	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	32	
	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	
	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	
	37	TILES	ONE LINE	50	3	10.0 / 0.0			3	30	--	SPDL	38	
	39						11.7 / 0.0						40	
	41							9.8 / 0.0					42	
		Total Load:				11.2 kVA	13.4 kVA	14.3 kVA						
		Total Amps:				41 A	49 A	53 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	15.2 kVA	100.00%	15.2 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	38.9 kVA
Receptacles	15.0 kVA	83.24%	12.5 kVA	**Total Est. Demand:**	36.3 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	47 A
				Total Est. Demand Current:	44 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	8.6 kVA	100.00%	8.6 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S): 1IHE

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: ILES

NEW PANEL

Location: MECH 1041
Supply From: TILES
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 100A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
R	1	F/A VOICE	--	20	1	0.3 / 0.7			1	20	--	Telephone Room 1043	2	R
	3	Fire Supression 1012	--	20	1		0.3 / 1.0		2	30	#10	IDF Rack - L6-30R	4	
	5	IDF Rack	#10	20	1			0.4 / 1.0					6	
	7	DMSCU-15	#6	30	2	1.9 / 1.0			2	30	#10	IDF Rack - L6-30R	8	
	9						1.9 / 1.0						10	
	11	IDF Rack	#10	20	1			0.4 / 1.9	2	30	#6	DMSCU-17	12	
	13	ACP	#12	20	1	0.5 / 1.9							14	
	15	DMSCU-10	#10	30	2		1.9 / 1.0		2	30	#10	IDF Rack - L6-30R	16	
	17							1.9 / 1.0					18	
	19	IDF Rack - L6-30R	#10	30	2	1.0 / 1.0			1	20	#12	IDF Rack	20	
	21						1.0 / 1.9		2	30	#10	DMSCU-12	22	
	23	IDF Rack	#10	20	1			1.0 / 1.9					24	
	25	IDF Rack - L6-30R	#10	30	2	1.0 / 1.0			2	30	#10	IDF Rack - L6-30R	26	
	27						1.0 / 1.0						28	
	29	ACP	#12	20	1			0.5 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	
	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	
	37	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	38	
	39	SPARE	--	20	1		0.0 / 0.0						40	
	41	SPARE	--	20	1			0.0 / 0.0					42	
		Total Load:				10.0 kVA	11.7 kVA	9.8 kVA						
		Total Amps:				84 A	97 A	82 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	15.2 kVA	100.00%	15.2 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	31.5 kVA
Receptacles	15.0 kVA	83.24%	12.5 kVA	**Total Est. Demand:**	28.9 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	87 A
				Total Est. Demand Current:	80 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	1.2 kVA	100.00%	1.2 kVA

Notes:
R - CIRCUIT RELOCATED FROM EXISTING PANEL, PROVIDE NEW BREAKERS IN NEW PANEL, CONTRACTOR TO EXTEND CONDUIT AND WIRING MATCHING EXISTING SIZE TO THIS PANEL LOCATION. ITEMS IN THIS PANEL RELOCATED FROM EXISTING PANEL(S): 1ILE

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

RELOCATED EXISTING CIRCUITS SHOWN HAVE BEEN DETERMINED FROM EXISTING PANEL SCHEDULES. CONTRACTOR TO DETERMINE AND RELOCATE ALL NEC 700 CIRCUITS TO NEAREST DESIGNATED LIFE SAFETY...

Branch Panel: 2JHE

EXISTING PANEL

Location: ELEC 2001A
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	Lights 1100	--	20	1	2.3 / 2.5			1	20	--	Relay Panel	2	E
E	3	Lights 1129,1000s	--	20	1		2.1 / 1.0		1	20	--	Exit Lights	4	E
E	5	Exit Signs	--	20	1			0.6 / 0.0	1	--	--	SPACE	6	
E	7	Lights 1120	--	20	1	1.5 / 0.0			1	--	--	SPACE	8	
E	9	Lights 1106, 1109, 1111	--	20	1		1.5 / 0.0		1	--	--	SPACE	10	
E	11	Lights Gym 1102	--	20	1			4.0 / 0.0	1	--	--	SPACE	12	
E	13	Lights 2000s	--	20	1	1.0 / 0.0			1	--	--	SPACE	14	
E	15	Lights 2004	--	20	1		1.0 / 0.0		1	--	--	SPACE	16	
E	17	Lights 1123	--	20	1			2.5 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 3.6			3	50	ONE LINE	2JTE	26	
	27	SPACE	--	--	1		0.0 / 0.5						28	
	29	SPACE	--	--	1			0.0 / 1.5					30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPDL	--	30	3			0.0 / 0.0	1	--	--	SPACE	36	
	37					0.0 / 0.0			1	--	--	SPACE	38	
	39						0.0 / 0.0		1	20	--	SPARE	40	E
E	41	Unlabeled	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
		Total Load:				10.9 kVA	6.1 kVA	8.6 kVA						
		Total Amps:				41 A	22 A	33 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	25.6 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	25.6 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	31 A
				Total Est. Demand Current:	31 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	25.6 kVA	100.00%	25.6 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 2JLE

EXISTING PANEL

Location: ELEC 2001A
Supply From: 2JTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 100A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	Security System 1129	--	20	1	0.5 / 1.2			1	20	--	**SPARE**	2	S
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	4	S
E	5	FACP	--	20	1			0.5 / 0.0	1	20	--	**SPARE**	6	S
E	7	Fire Smoke Damper - 2001	--	20	1	0.5 / 0.3			1	20	--	Fire Smoke Damper - 2001	8	E
S	9	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	10	S
E	11	Remote Annunciator - 2022	--	20	1			0.5 / 0.0	1	20	--	**SPARE**	12	S
E	13	Tele. Equipment 2022	--	20	1	0.3 / 0.9			1	20	--	5 Rec 2020, 2021	14	E
E	15	SPARE	--	20	1		0.0 / 0.5		1	20	--	Tele. Equip. 2022	16	E
S	17	**SPARE**	--	30	2			0.0 / 0.5	1	20	--	Remote. F. A. Annunciator	18	E
	19					0.0 / 0.0			1	20	--	**SPARE**	20	S
E	21	SPARE	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	22	S
E	23	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	24	
E	25	SPARE	--	20	1	0.0 / 0.0			1	--	--	SPACE	26	
E	27	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	28	
E	29	Unlabeled	--	20	1			0.0 / 0.0	1	--	--	SPACE	30	
E	31	Unlabeled	--	20	1	0.0 / 0.0			1	--	--	SPACE	32	
E	33	Unlabeled	--	20	1		0.0 / 0.0		1	--	--	SPACE	34	
E	35	Unlabeled	--	20	1			0.0 / 0.0	1	--	--	SPACE	36	
E	37	Unlabeled	--	20	1	0.0 / 0.0			3	30	--	SPDL	38	
E	39	SPARE	--	20	1		0.0 / 0.0						40	
E	41	SPARE	--	20	1			0.0 / 0.0					42	
		Total Load:				3.6 kVA	0.5 kVA	1.5 kVA						
		Total Amps:				31 A	4 A	14 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	5.6 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	5.6 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	16 A
				Total Est. Demand Current:	16 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	5.6 kVA	100.00%	5.6 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO NEW PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

Branch Panel: 1KHE

EXISTING PANEL

Location: MECH 1141B
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	SPARE	--	20	1	0.0 / 1.5			1	20	--	Lights 1140	2	E
E	3	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	4	E
E	5	SPARE	--	20	1			0.0 / 1.8	1	20	--	Lights 1143,1119,1118,1113,1114,1141,...	6	E
E	7	Exit Signs	--	20	1	0.6 / 1.0			1	20	--	Lights 1120	8	E
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPDL	--	30	3	0.0 / 0.4			3	25	ONE LINE	1KTE	38	E
	39						0.0 / 0.3						40	
	41							0.0 / 0.5					42	
		Total Load:				3.4 kVA	0.3 kVA	2.3 kVA						
		Total Amps:				13 A	1 A	9 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	6.0 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	6.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	7 A
				Total Est. Demand Current:	7 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	6.0 kVA	100.00%	6.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1KLE

EXISTING PANEL

Location: MECH 1141B
Supply From: 1KTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	2 REC 1141B	--	20	1	0.4 / 0.0			1	20	--	SPARE	2	E
E	3	MULTIPURPOSE RM AMP 1141	--	20	1		0.3 / 0.0		1	--	--	SPACE	4	
E	5	FIRE SMOKE DAMPERS 1141	--	20	1			0.5 / 0.0	1	--	--	SPACE	6	
	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPDL	--	30	3	0.0 / 0.0			1	--	--	SPACE	14	
	15						0.0 / 0.0		1	--	--	SPACE	16	
	17							0.0 / 0.0	1	--	--	SPACE	18	
		Total Load:				0.4 kVA	0.3 kVA	0.5 kVA						
		Total Amps:				3 A	3 A	4 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	1.2 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	1.2 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	3 A
				Total Est. Demand Current:	3 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	1.2 kVA	100.00%	1.2 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1DHE

EXISTING PANEL

Location: ELEC 1383
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	Emer. corridor lights 1350	--	20	1	2.6 / 0.6			1	20	--	RC 1DRE Control Power	2	E
E	3	Emer. Lights 1300s, 1400s	--	20	1		2.1 / 0.0		1	--	--	SPACE	4	
E	5	Emer Main Entry Lights 1500	--	20	1			1.4 / 0.0	1	--	--	SPACE	6	
E	7	Emer. Lights 1500s	--	20	1	2.2 / 0.0			1	--	--	SPACE	8	
E	9	Exit LTG Area D	--	20	1		0.0 / 0.0		1	--	--	SPACE	10	
E	11	MDF 1384 - AC UNIT	--	35	1			2.6 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			3	30	--	SPDL	38	
	39	SPACE	--	--	1		0.0 / 0.0						40	
	41	SPACE	--	--	1			0.0 / 0.0					42	
		Total Load:				5.4 kVA	2.1 kVA	4.0 kVA						
		Total Amps:				21 A	7 A	16 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	11.5 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	11.5 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	14 A
				Total Est. Demand Current:	14 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	11.5 kVA	100.00%	11.5 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PANEL SCHEDULES

E5.02

of

Branch Panel: 2EHE

EXISTING PANEL

Location: ELEC 2609
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	Lights 2600s-2900s	--	20	1	1.6 / 0.0			1	20	--	SPARE	2	E
E	3	Lights 205	--	20	1		2.5 / 0.0		1	--	--	SPACE	4	
E	5	Lights 208	--	20	1			3.0 / 0.0	1	--	--	SPACE	6	
E	7	Exit LTG	--	20	1	0.6 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		3	30	--	SPDL	34	
	35	SPACE	--	--	1			0.0 / 0.0					36	
	37	SPACE	--	--	1	0.0 / 0.0							38	
	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	
	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	
				Total Load:		2.2 kVA	2.5 kVA	3.0 kVA						
				Total Amps:		8 A	9 A	11 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	7.7 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	7.7 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	9 A
				Total Est. Demand Current:	9 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	7.7 kVA	100.00%	7.7 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1GHE

EXISTING PANEL

Location: ELEC 3026
Supply From: EHSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 400A

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	Emer. Lights 1800s	--	20	1	2.0 / 1.1			1	20	#12	Lighting IDF 4000	2	
E	3	Emer. Lights 1800s	--	20	1		2.0 / 0.0		1	20	--	SPARE	4	E
E	5	EXIT LTG AREA (G)	--	20	1			0.6 / 0.0	1	20	--	SPARE	6	E
E	7	SPARE	--	20	1	0.0 / 0.6			1	20	--	RELAY PANEL	8	E
	9	Lighting	#12	20	1		0.8 / 0.3		1	20	#12	Lighting	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 2.2			3	25	ONE LINE	1GTE	26	
	27	SPACE	--	--	1		0.0 / 2.4						28	
	29	SPACE	--	--	1			0.0 / 2.8					30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		3	30	--	SPDL	34	
	35	SPACE	--	--	1			0.0 / 0.0					36	
	37	SPACE	--	--	1	0.0 / 0.0							38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	E
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
				Total Load:		5.9 kVA	5.5 kVA	3.4 kVA						
				Total Amps:		22 A	21 A	12 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	2.2 kVA	125.00%	2.7 kVA	Total Conn. Load:	14.7 kVA
Receptacles	5.5 kVA	100.00%	5.5 kVA	Total Est. Demand:	15.2 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	18 A
				Total Est. Demand Current:	18 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	7.1 kVA	100.00%	7.1 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1GLE

EXISTING PANEL

Location: ELEC 3026
Supply From: 1GTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A LSI MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	1 REC 202	--	20	1	0.2 / 0.5			1	20	--	RELAY PNL - G201	2	E
E	3	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	4	E
E	5	RELAY PNL - G201	--	20	1			0.5 / 0.0	1	20	--	SPARE	6	E
E	7	1 REC 1847	--	20	1	0.2 / 0.0			1	20	--	SPARE	8	E
E	9	DDC CONTROLLER	--	20	1		0.5 / 0.0		1	20	--	SPARE	10	E
	11	IDF Rack IDF 4000	#12	20	1			0.4 / 0.0	1	20	--	SPARE	12	E
	13	IDF Rack IDF 4000	#12	20	1	1.0 / 0.4			1	20	#12	IDF Rack IDF 4000	14	
	15	L6-30R IDF 4000	#10	30	2		1.0 / 1.0		2	30	#10	L6-30R IDF 4000	16	
	17							1.0 / 1.0					18	
	19												20	
	21												22	
	23												24	
	25												26	
	27												28	
	29												30	
	31												32	
	33						0.0 / 0.0		3	30	--	SPDL	34	
	35							0.0 / 0.0					36	
	37					0.0 / 0.0							38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	E
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
				Total Load:		2.2 kVA	2.4 kVA	2.8 kVA						
				Total Amps:		18 A	20 A	23 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	7.3 kVA
Receptacles	5.5 kVA	100.00%	5.5 kVA	Total Est. Demand:	7.3 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	20 A
				Total Est. Demand Current:	20 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	1.9 kVA	100.00%	1.9 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: CPHE

EXISTING PANEL

Location: ELEC 1968
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	2	S
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	4	S
	5	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	6	
	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
E	23	SPARE	--	20	3			0.0 / 0.0	1	--	--	SPACE	24	
	25					0.0 / 0.0			1	--	--	SPACE	26	
	27						0.0 / 0.0		1	--	--	SPACE	28	
E	29	SPARE	--	20	3			0.0 / 0.0	1	20	--	SPARE	30	E
	31					0.0 / 0.0			1	20	--	SPARE	32	E
	33						0.0 / 0.0		1	20	--	SPARE	34	E
E	35	SPARE	--	20	1			0.0 / 0.0	3	20	--	SPARE	36	E
E	37	SPARE	--	20	1	0.0 / 0.0							38	
E	39	SPARE	--	20	1		0.0 / 0.0						40	
	41	SPACE	--	--	1			0.0 / 0.0	1	20	--	SPARE	42	E
				Total Load:		0.0 kVA	0.0 kVA	0.0 kVA						
				Total Amps:		0 A	0 A	0 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	0.0 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	0.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	0 A
				Total Est. Demand Current:	0 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	0.0 kVA	0.00%	0.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: CPLE

EXISTING PANEL

Location: ELEC 1968
Supply From: CPTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	1969 REC	--	20	1	0.4 / 0.0			1	20	--	**SPARE**	2	S
E	3	5 REC 1966, 1968, 1965	--	20	1		1.2 / 0.5		1	20	--	ROC EXT 1968	4	E
E	5	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	E
E	7	SPARE	--	20	1	0.0 / 1.2			1	20	--	EF-H-18 (1/2HP) 1969	8	E
	9	SPACE	--	--	1		0.0 / 0.5		1	20	--	3 REC 1966	10	E
	11	SPACE	--	--	1			0.0 / 0.0	1	20	--	**SPARE**	12	S
	13	SPACE	--	--	1	0.0 / 0.5			1	20	--	BAS PNL - 1968	14	E
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.5	1	20	--	REFRIGERANT DETECTION 1966	18	E
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	40	
E	41	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	42	
				Total Load:		2.1 kVA	2.2 kVA	0.5 kVA						
				Total Amps:		19 A	21 A	4 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	4.8 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	4.8 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	13 A
				Total Est. Demand Current:	13 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	4.8 kVA	100.00%	4.8 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1BHE

EXISTING PANEL

Location: ELEC 1154
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	2	S
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	SPARE	4	E
S	5	**SPARE**	--	20	1			0.0 / 0.0	1	--	--	SPACE	6	
S	7	**SPARE**	--	20	1	0.0 / 0.0			1	--	--	SPACE	8	
E	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
E	11	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	1BTE	ONE LINE	25	3	0.5 / 0.0			1	--	--	SPACE	38	
	39						0.6 / 0.0		1	20	--	SPARE	40	E
	41							0.0 / 0.0	1	20	--	SPARE	42	E
				Total Load:		1.3 kVA	0.6 kVA	0.5 kVA						
				Total Amps:		5 A	2 A	2 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	2.3 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	2.3 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	3 A
				Total Est. Demand Current:	3 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	2.3 kVA	100.00%	2.3 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1BLE

EXISTING PANEL

Location: ELEC 1154
Supply From: 1BTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	PLUGS 1153, 1154	--	20	1	0.5 / 0.0			1	--	--	SPACE	2	
E	3	PLUGS 1155	--	20	1		0.6 / 0.0		1	20	--	SPARE	4	E
S	5	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	E
S	7	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	8	S
	9	SPACE	--	--	1		0.0 / 0.0		1	20	--	**SPARE**	10	S
	11	SPACE	--	--	1			0.0 / 0.0	1	20	--	**SPARE**	12	S
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	E
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
				Total Load:		0.5 kVA	0.6 kVA	0.0 kVA						
				Total Amps:		5 A	5 A	0 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	1.1 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	1.1 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	3 A
				Total Est. Demand Current:	3 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	1.1 kVA	100.00%	1.1 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 2CHE

EXISTING PANEL

Location: ELEC 2314B
Supply From: 1BHE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			3	50	ONE LINE	2BHAE	2	E
S	3	**SPARE**	--	20	1		0.0 / 0.0						4	
S	5	**SPARE**	--	20	1			0.0 / 0.0					6	
E	7	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	8	E
E	9	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	10	E
E	11	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	12	E
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.8			3	25	ONE LINE	2CTE	38	E
E	39	SPARE	--	20	1		0.0 / 0.0						40	
E	41	SPARE	--	20	1			0.0 / 0.5					42	
				Total Load:		0.8 kVA	0.0 kVA	0.5 kVA						
				Total Amps:		3 A	0 A	2 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	Total Conn. Load:	1.3 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	Total Est. Demand:	1.3 kVA
Power	0.0 kVA	0.00%	0.0 kVA	Total Conn. Current:	2 A
				Total Est. Demand Current:	2 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	1.3 kVA	100.00%	1.3 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PANEL SCHEDULES

E5.03

of

Branch Panel: 2CLE

EXISTING PANEL

Location: ELEC 2314B
Supply From: 2CTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	TTB 2112	--	20	1	0.3 / 0.0			1	20	--	SPARE	2	E
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	4	S
S	5	**SPARE**	--	20	1			0.0 / 0.5	1	20	--	DDC CONTROLLER 2112	6	E
S	7	**SPARE**	--	20	1	0.0 / 0.5			1	20	--	DDC CONTROLLER 2314	8	E
S	9	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	10	S
	11	SPACE	--	--	1			0.0 / 0.0	1	20	--	**SPARE**	12	S
	13	SPACE	--	--	1	0.0 / 0.0			1	20	--	SPARE	14	E
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	E
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
			Total Load:			0.8 kVA	0.0 kVA	0.5 kVA						
			Total Amps:			7 A	0 A	5 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	1.3 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	1.3 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	3 A
				Total Est. Demand Current:	3 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	1.3 kVA	100.00%	1.3 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 2BHAE

EXISTING PANEL

Location: ELEC 2030
Supply From: 2CHE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	2	
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	4	
S	5	**SPARE**	--	20	1			0.0 / 0.0	1	--	--	SPACE	6	
	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
E	31	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	32	E
E	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	E
E	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	E
E	37	SPARE	--	20	1	0.0 / 0.0			3	25	ONE LINE	2BTAE	38	
	39	SPACE	--	--	1		0.0 / 0.0						40	
	41	SPACE	--	--	1			0.0 / 0.0					42	
			Total Load:			0.0 kVA	0.0 kVA	0.0 kVA						
			Total Amps:			0 A	0 A	0 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	0.0 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	0.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	0 A
				Total Est. Demand Current:	0 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	0.0 kVA	0.00%	0.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 2BLAE

EXISTING PANEL

Location: ELEC 2030
Supply From:
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	DDC CONTROLLER	--	20	1	0.5 / 0.0			1	20	--	**SPARE**	2	S
E	3	ACTUATOR	--	20	1		0.5 / 0.4		1	20	--	CLOCK TRANSFORMER	4	E
S	5	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	E
E	7	2 REC B2024, B2030	--	20	1	0.4 / 0.0			1	20	--	SPARE	8	E
E	9	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	10	E
E	11	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	12	E
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
	39	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	40	
	41	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	42	
			Total Load:			0.9 kVA	0.9 kVA	0.0 kVA						
			Total Amps:			8 A	8 A	0 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	1.7 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	1.7 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	5 A
				Total Est. Demand Current:	5 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	1.7 kVA	100.00%	1.7 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1CHE

EXISTING PANEL

Location: ELEC 1253
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	2	S
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	4	S
S	5	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	E
E	7	SPARE	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	8	S
S	9	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	SPARE	10	E
E	11	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	1CTE	ONE LINE	25	3	0.4 / 0.0			1	--	--	SPACE	38	
	39						1.5 / 0.0		1	20	--	SPARE	40	E
	41							1.2 / 0.0	1	20	--	SPARE	42	E
			Total Load:			0.4 kVA	1.5 kVA	1.2 kVA						
			Total Amps:			1 A	6 A	5 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	3.0 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	3.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	4 A
				Total Est. Demand Current:	4 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	3.0 kVA	100.00%	3.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1CLE

EXISTING PANEL

Location: ELEC 1253
Supply From: 1CTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	RECEPTS 1384	--	20	1	0.4 / 0.0			1	20	--	**SPARE**	2	S
E	3	TELEPHONE EQUIPMENT 1256	--	20	1		0.5 / 0.0		1	20	--	SPARE	4	E
S	5	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	E
S	7	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	8	E
E	9	REFR - NURSE - 1355	--	20	1		1.0 / 0.0		1	20	--	**SPARE**	10	S
E	11	SPARE	--	20	1			0.0 / 1.2	1	20	--	CLOCK - 1384	12	E
E	13	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	14	E
S	15	**SPARE**	--	20	2		0.0 / 0.0		1	--	--	SPACE	16	
	17							0.0 / 0.0	1	--	--	SPACE	18	
S	19	**SPARE**	--	20	1	0.0 / 0.0			1	--	--	SPACE	20	
S	21	**SPARE**	--	20	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	E
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
			Total Load:			0.4 kVA	1.5 kVA	1.2 kVA						
			Total Amps:			3 A	13 A	11 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	3.0 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	3.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	8 A
				Total Est. Demand Current:	8 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	3.0 kVA	100.00%	3.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1EHE

EXISTING PANEL

Location: ELEC 1670
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	BB.LBC.01	#10	20	1	1.0 / 0.0			1	20	--	**SPARE**	2	S
	3	SPACE	--	--	1		0.0 / 0.0		1	20	--	**SPARE**	4	S
	5	SPACE	--	--	1			0.0 / 0.0	3	20	ONE LINE	1ETE2	6	
S	7	**SPARE**	--	20	1	0.0 / 0.0							8	
E	9	SPARE	--	20	1		0.0 / 0.0						10	
E	11	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	12	E
S	13	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	14	S
E	15	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	16	E
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	1ETE	ONE LINE	25	3	1.5 / 0.5			3	50	ONE LINE	2DHE	38	
	39						3.2 / 1.3						40	
	41							2.6 / 1.0					42	
			Total Load:			2.9 kVA	4.4 kVA	3.6 kVA						
			Total Amps:			11 A	16 A	13 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	10.9 kVA
Receptacles	1.0 kVA	100.00%	1.0 kVA	**Total Est. Demand:**	10.9 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	13 A
				Total Est. Demand Current:	13 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	10.0 kVA	100.00%	10.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

Branch Panel: 1ELE

EXISTING PANEL

Location: ELEC 1670
Supply From: 1ETE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.3			1	20	--	SOUND CONSOLE	2	E
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	SPARE	4	S
E	5	MASTER TIME 1501	--	20	1			0.7 / 0.0	1	20	--	SPARE	6	S
S	7	**SPARE**	--	20	1	0.0 / 0.4			1	20	--	REC 1668	8	E
S	9	**SPARE**	--	20	1		0.0 / 0.4		1	20	--	REC 1668	10	E
S	11	**SPARE**	--	20	1			0.0 / 0.5	1	20	--	DDC CONTROLLER 1518	12	E
S	13	**SPARE**	--	20	1	0.0 / 0.5			1	20	--	DDC CONTROLLER 1606	14	E
S	15	**SPARE**	--	20	1		0.0 / 0.5		1	20	--	DDC CONTROLLER 1606, 1660	16	E
S	17	**SPARE**	--	20	1			0.0 / 0.4	1	20	--	2REC 1670, 1660	18	E
S	19	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	20	S
E	21	2 REC 1606, 1604	--	20	1		0.4 / 0.0		1	20	--	SPARE	22	S
S	23	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	24	S
S	25	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	26	S
S	27	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	SPARE	28	S
S	29	**SPARE**	--	20	1			0.0 / 0.5	1	20	--	ROLLING DOORS 1702	30	E
S	31	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	32	S
E	33	4 REC	--	20	1		1.0 / 0.5		1	20	--	ROLLING DOORS 1702	34	E
S	35	**SPARE**	--	20	1			0.0 / 0.5	1	20	--	ROLLING DOORS 1702	36	E
E	37	DDC CONTROL POWER 1660	--	20	1	0.0 / 0.4			1	20	--	DDC CONTROLLER 1660	38	E
S	39	**SPARE**	--	20	1		0.0 / 0.5		1	20	--	ACTUATOR 1660	40	E
S	41	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	S
			Total Load:			1.5 kVA	3.2 kVA	2.6 kVA						
			Total Amps:			12 A	28 A	23 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	7.2 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	7.2 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	20 A
				Total Est. Demand Current:	20 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	7.2 kVA	100.00%	7.2 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1ELE2

EXISTING PANEL

Location: ELEC 1670
Supply From:
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 30A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	MAIN BREAKER	--	30	3	0.0 / 0.9			1	20	--	Fridge	2	E
	3						0.0 / 0.9		1	20	--	Fridge	4	E
	5							0.0 / 0.9	1	20	--	Fridge	6	E
E	7	Fridge	--	20	1	0.9 / 0.0							8	
	9												10	
	11												12	
	13												14	
	15												16	
	17												18	
			Total Load:			1.8 kVA	0.9 kVA	0.9 kVA						
			Total Amps:			15 A	8 A	8 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	3.6 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	3.6 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	10 A
				Total Est. Demand Current:	10 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	3.6 kVA	100.00%	3.6 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PANEL SCHEDULES

E5.04

of

Branch Panel: 2DHE

EXISTING PANEL

Location: ELEC 2409
Supply From: 1EHE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	SPARE	--	20	1	0.0 / 0.0			1	--	--	SPACE	2	
S	3	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	4	
E	5	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	6	
E	7	SPARE	--	20	1	0.0 / 0.0			1	--	--	SPACE	8	
E	9	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
E	25	SPARE	--	20	1	0.0 / 0.5			3	25	ONE LINE	2DTE	26	E
E	27	SPARE	--	20	1		0.0 / 1.3						28	
	29	SPARE	--	20	1			0.0 / 1.0					30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	20	--	SPARE	38	
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	
				Total Load:		0.5 kVA	1.3 kVA	1.0 kVA						
				Total Amps:		2 A	5 A	4 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	2.8 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	2.8 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	3 A
				Total Est. Demand Current:	3 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	2.8 kVA	100.00%	2.8 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1ILE

EXISTING PANEL

Location: ELEC 1044
Supply From:
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	SPARE	--	20	1	0.0 / 1.0			1	20	--	#1 Cooler Light 1024	2	E
S	3	**SPARE**	--	20	1		0.0 / 0.6		1	20	--	#2 Cooler Heater 1023	4	E
E	5	SPARE	--	20	1			0.0 / 0.5	1	20	--	#3 Cooler Coil 1023	6	E
E	7	Clocks-1006	--	20	1	0.5 / 0.0			1	20	--	SPARE	8	E
E	9	Soc. Cam-1000	--	20	1		0.5 / 0.0		1	20	--	**SPARE**	10	S
E	11	Reach-In Ref. 1012	--	20	1			0.8 / 0.9	1	20	--	#4 Freezer Heater 1024	12	E
E	13	Reach-In Freezer 1012	--	20	1	0.6 / 1.0			1	20	--	3 REC 1041,1044,1042	14	E
E	15	BAS-DDC Controls 1041	--	20	1		0.5 / 0.0		1	20	--	**SPARE**	16	S
E	17	Rolling Doors	--	20	1			0.5 / 0.0	1	20	--	SPARE	18	E
E	19	Freezer 1012	--	20	1	0.8 / 0.0			1	--	--	SPACE	20	
E	21	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			3	50	--	REFRIGERATION RACK	38	E
E	39	SPARE	--	20	1		0.0 / 0.0						40	
E	41	SPARE	--	20	1			0.0 / 0.0					42	
				Total Load:		3.8 kVA	1.6 kVA	2.7 kVA						
				Total Amps:		33 A	13 A	24 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	8.1 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	8.1 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	22 A
				Total Est. Demand Current:	22 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	8.1 kVA	100.00%	8.1 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1PHE

EXISTING PANEL

Location: ELEC 3210
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Exit Signs	--	20	1	0.3 / 0.0			1	--	--	SPACE	2	
	3	RC 1PRE	--	20	1		2.8 / 0.0		1	--	--	SPACE	4	
	5	RC 1PRE	--	20	1			2.5 / 0.0	1	--	--	SPACE	6	
	7	RC 1PRE	--	20	1	1.2 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 1.4	3	25	ONE LINE	1PTE	30	E
	31	SPACE	--	--	1	0.0 / 0.4							32	
	33	SPACE	--	--	1		0.0 / 0.5						34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
	39	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	40	
	41	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	42	
				Total Load:		1.8 kVA	3.3 kVA	3.9 kVA						
				Total Amps:		7 A	13 A	15 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	9.0 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	9.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	11 A
				Total Est. Demand Current:	11 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	9.0 kVA	100.00%	9.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 2DLE

EXISTING PANEL

Location: ELEC 2409
Supply From: 2DTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	2	S
E	3	TTB 3020	--	20	1		0.0 / 0.3		1	20	--	TTB 3020	4	E
E	5	AMPLIFIER (LGI) 2512B	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	S
S	7	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	8	E
S	9	**SPARE**	--	20	1		0.0 / 0.5		1	20	--	DDC CONTROLLER 2913	10	E
E	11	2 REC 3018, 3022	--	20	1			0.0 / 0.5	1	20	--	DDC CONTROLLER 2810	12	E
S	13	**SPARE**	--	20	1	0.0 / 0.5			1	20	--	DDC CONTROLLER 2801, 3002	14	E
S	15	**SPARE**	--	20	1		0.0 / 0.5		1	20	--	DDC CONTROLLER 3018	16	E
S	17	**SPARE**	--	20	1			0.0 / 0.5	1	20	--	DDC CONTROLLER 2512	18	E
S	19	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	20	E
	21												22	
	23												24	
	25												26	
	27												28	
	29												30	
	31												32	
	33												34	
	35												36	
	37												38	
	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	
	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	
				Total Load:		0.5 kVA	1.3 kVA	1.0 kVA						
				Total Amps:		4 A	11 A	9 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	2.8 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	2.8 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	8 A
				Total Est. Demand Current:	8 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	2.8 kVA	100.00%	2.8 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1HHE

EXISTING PANEL

Location: ELEC 1960
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	2	S
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	4	S
E	5	AMP 1006	--	20	1			1.0 / 0.0	1	--	--	SPACE	6	
E	7	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	8	E
E	9	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
E	37	1HTE	ONE LINE	45	3	8.7 / 0.0			1	--	--	SPACE	38	
	39						9.0 / 0.0		1	--	--	SPACE	40	
	41							9.8 / 0.0	1	--	--	SPACE	42	
				Total Load:		8.7 kVA	9.0 kVA	10.8 kVA						
				Total Amps:		31 A	32 A	39 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	28.4 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	28.4 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	34 A
				Total Est. Demand Current:	34 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	28.4 kVA	100.00%	28.4 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1PLE

EXISTING PANEL

Location: ELEC 3210
Supply From: 1PTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 50A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	1 Rec	--	20	1	0.2 / 1.2			1	20	--	Sound Rack	2	
	3	2 Rec	--	20	1		0.4 / 0.0		1	--	--	SPACE	4	
	5	DDC Controller	--	20	1			0.5 / 0.0	1	--	--	SPACE	6	
	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	
	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	
	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	
	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	
	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	
	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	
	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	
	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	
	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	
	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	
	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	
	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
	39	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	40	
	41	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	42	
				Total Load:		1.4 kVA	0.4 kVA	0.5 kVA						
				Total Amps:		12 A	3 A	4 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	2.3 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	2.3 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	6 A
				Total Est. Demand Current:	6 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	2.3 kVA	100.00%	2.3 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1IHE

EXISTING PANEL

Location: ELEC 1044
Supply From: CPDE
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
S	1	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	2	E
S	3	**SPARE**	--	20	1		0.0 / 0.0		1	20	--	SPARE	4	E
S	5	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	6	E
E	7	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	8	E
E	9	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	10	E
E	11	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	12	E
E	13	SPARE	--	20	1	0.0 / 0.0							14	
	15												16	
	17												18	
	19												20	
	21												22	
	23												24	
	25												26	
	27												28	
	29												30	
	31												32	
	33												34	
	35												36	
S	37	**SPARE**	--	50	3	0.0 / 0.0			3	25	#10	1ITE	38	E
	39						0.0 / 0.0						40	
	41							0.0 / 0.0					42	
				Total Load:		0.0 kVA	0.0 kVA	0.0 kVA						
				Total Amps:		0 A	0 A	0 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	0.0 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	0.0 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	0 A
				Total Est. Demand Current:	0 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	0.0 kVA	0.00%	0.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: 1HLE

EXISTING PANEL

Location: ELEC 1960
Supply From: 1HTE
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 100A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	#6 REFRIG COMP - East Kitchen	--	35	3	3.5 / 0.0			1	20	--	**SPARE**	2	S
	3						3.5 / 0.5		1	20	--	DDC CONTROLLER	4	E
	5							3.5 / 0.5	1	20	--	DDC CONTROLLER	6	E
E	7	SPARE	--	20	1	0.0 / 0.6			1	20	--	COOLER-LIGHT #1 #9 1980	8	E
E	9	2 Rec 1956, 1955	--	20	1		0.4 / 0.6		1	20	--	COOLER - HEATER #2 1980	10	E
E	11	REFRIGERATOR 1871	--	20	1			0.8 / 0.5	1	20	--	COOLER - COIL #3 1980	12	E
S	13	**SPARE**	--	20	1	0.0 / 0.6			1	20	--	FREEZER - HEATER 1981	14	E
E	15	SPARE	--	20	1		0.0 / 4.0		3	40	--	#6 REFRIG COMP - East Kitchen	16	E
E	17	BAS-DDC CONTROLLER 1917	--	20	1			0.5 / 4.0					18	
S	19	**SPARE**	--	20	1	0.0 / 4.0							20	
E	21	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	22	E
S	23	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	SPARE	24	E
S	25	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	SPARE	26	E
S	27	**SPARE**	--	20	1		0.0 / 0.0		1	--	--	SPACE	28	
E	29	SPARE	--	20	1			0.0 / 0.0	1	--	--	SPACE	30	
	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	
	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	
	35	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	36	
	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	
	39	SPACE	--	--	1		0.0 / 0.0		1	20	--	SPARE	40	E
	41	SPACE	--	--	1			0.0 / 0.0	1	20	--	SPARE	42	E
				Total Load:		8.7 kVA	9.0 kVA	9.8 kVA						
				Total Amps:		73 A	75 A	82 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	27.5 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	27.5 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	76 A
				Total Est. Demand Current:	76 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	27.5 kVA	100.00%	27.5 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PANEL SCHEDULES

E5.05

of

Branch Panel: 1WL1
NEW PANEL

Location: WELDING 4017
Supply From: TWL
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 200A SHUNT-TRIP MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Cord Reel	#12	20	1	0.5 / 0.5			1	20	#12	Cord Reel	2	
	3	Cord Reel	#12	20	1		0.5 / 0.5		1	20	#12	Cord Reel	4	
	5	Cord Reel	#12	20	1			0.5 / 0.5	1	20	#12	Cord Reel	6	
	7	Cord Reel	#12	20	1	0.5 / 0.5			1	20	#12	Cord Reel	8	
	9	Cord Reel	#12	20	1		0.5 / 0.5		1	20	#12	Cord Reel	10	
	11	Cord Reel	#12	20	1			0.5 / 0.5	1	20	#12	Cord Reel	12	
	13	Cord Reel	#12	20	1	0.5 / 0.5			1	20	#12	Cord Reel	14	
	15	Cord Reel	#12	20	1		0.5 / 0.5		1	20	#12	Cord Reel	16	
	17	Cutting Track	#12	20	1			1.5 / 1.5	1	20	#12	Miter Band Saw	18	
	19	Plasma Table	#8	40	3	1.8 / 1.0			1	20	#12	Sound System	20	
	21						1.8 / 1.4		1	20	#12	Disc Sander	22	
	23							1.8 / 1.2	1	20	#12	Disc Sander	24	
	25	Disc Sander	#12	20	1	1.2 / 1.2			1	20	#12	Disc Sander	26	
	27	Receptacle	#12	20	1		1.1 / 1.0		1	20	#12	Motorized OH Door	28	
	29	Receptacle	#12	20	1			0.2 / 0.7	1	20	#12	Receptacle	30	
	31	Receptacle	#12	20	1	0.5 / 1.1			1	20	#12	Receptacle	32	
	33	Receptacle	#12	20	1		0.7 / 0.7		1	20	#12	Receptacle	34	
	35	Receptacle, GFCI Receptacle	#12	20	1			0.5 / 0.7	1	20	#12	Receptacle	36	
	37	Receptacle	#10	20	1	1.3 / 0.4			1	20	#12	Receptacle	38	
	39	Receptacle	#12	20	1		0.4 / 1.0		1	20	#12	Sound System	40	
	41	Plumbing Sensor	#12	20	1			0.0 / 1.2	1	20	#12	Plasma Table Controls	42	
	43	EF-G7	#12	20	1	1.2 / 0.0			1	--	--	SPACE	44	--
--	45	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	46	--
--	47	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	48	--
--	49	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	50	--
--	51	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	52	--
--	53	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	54	--
--	55	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	56	--
--	57	SPACE	--	--	1		0.0 / 0.0		1	20	--	SPARE	58	--
--	59	SPACE	--	--	1			0.0 / 0.0	1	20	--	SPARE	60	--
--	61	SPACE	--	--	1	0.0 / 0.0			1	20	--	SPARE	62	--
--	63	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	64	--
--	65	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	66	--
--	67	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	68	--
--	69	SPARE	--	20	1		0.0 / 0.0						70	
--	71	SPARE	--	20	1			0.0 / 0.0					72	
		Total Load:				12.8 kVA	11.3 kVA	11.5 kVA						
		Total Amps:				107 A	94 A	96 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	2.2 kVA	100.00%	2.2 kVA		
Receptacles	33.5 kVA	64.93%	21.7 kVA	**Total Conn. Load:**	35.7 kVA
				Total Est. Demand:	23.9 kVA
				Total Conn. Current:	99 A
				Total Est. Demand Current:	66 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: 1WL2
NEW PANEL

Location: HVAC TRAINING 4025
Supply From:
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 200A SHUNT-TRIP MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Wheel Barrow Mixer	#12	20	1	0.8 / 0.5			1	20	#12	Cord Reel	2	
	3	Cord Reel	#12	20	1		0.5 / 0.5		1	20	#12	Cord Reel	4	
	5	EF-G8	#12	20	1			1.2 / 1.6	3	40	#8	Table Saw	6	
	7	Panel Saw	#12	20	1	1.6 / 1.6							8	
--	9	SPACE	--	--	1		0.0 / 1.6						10	
	11	Planer	#8	40	3			1.8 / 0.8	3	20	#12	Belt and Disc Sander	12	
	13					1.8 / 0.8							14	
	15						1.8 / 0.8						16	
	17	Router	#8	40	1			1.4 / 0.0	1	20	#12	Plumbing Sensor	18	
	19	Receptacle, GFCI Receptacle	#12	20	1	0.7 / 0.5			1	20	#12	GFCI Receptacle, Receptacle	20	
	21	Receptacle	#12	20	1		0.7 / 1.0		1	20	#12	Sound System	22	
	23	Receptacle	#12	20	1			1.1 / 1.0	1	20	#12	Sound System	24	
	25	Motorized OH Door	#12	20	1	1.0 / 2.7			2	40	#8	Jointer	26	
	27	Drill Press	#8	40	2		1.1 / 2.7						28	
	29							1.1 / 0.0	1	--	--	SPACE	30	--
--	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	--
--	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	--
--	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	--
--	37	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	38	--
--	39	SPARE	--	20	1		0.0 / 0.0						40	
--	41	SPARE	--	20	1			0.0 / 0.0					42	
		Total Load:				12.1 kVA	10.8 kVA	10.0 kVA						
		Total Amps:				102 A	91 A	83 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	2.2 kVA	100.00%	2.2 kVA		
Receptacles	30.7 kVA	66.30%	20.3 kVA	**Total Conn. Load:**	32.9 kVA
				Total Est. Demand:	22.5 kVA
				Total Conn. Current:	91 A
				Total Est. Demand Current:	63 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: 1WH
NEW PANEL

Location: WELDING 4017
Supply From: DPG
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 18,000
Enclosure: Type 1
Mains: 250A SHUNT-TRIP MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1					0.0 / 0.7			3	30	#10	EF-G9	2	
	3						0.0 / 0.7						4	
	5							0.0 / 0.7					6	
	7	EF-G11	#10	30	3	0.7 / 0.7			3	30	#10	EF-G10	8	
	9						0.7 / 0.7						10	
	11							0.7 / 0.7					12	
	13	EF-G8	#10	30	3	0.7 / 7.5			3	50	#6	AC-G-1	14	
	15						0.7 / 7.5						16	
	17							0.7 / 7.5					18	
	19	EWH-G-1	#12	20	3	4.1 / 11.0			3	60	#4	Dust Collector	20	
	21						4.1 / 11.0						22	
	23							4.1 / 11.0					24	
	25	AHU-G5	#8	40	3	5.8 / 3.9			3	30	#10	OAU-G7	26	
	27						5.8 / 3.9						28	
	29							5.8 / 3.9					30	
	31	AHU-G6	#8	40	3	5.8 / 0.0			1	--	--	SPACE	32	--
	33						5.8 / 0.0		1	--	--	SPACE	34	--
	35							5.8 / 0.0	1	--	--	SPACE	36	--
--	37	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	38	--
--	39	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	40	--
--	41	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	42	--
--	43	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	44	--
--	45	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	46	--
--	47	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	48	--
--	49	SPARE	--	60	3	0.0 / 0.0			3	30	--	SPARE	50	--
	51						0.0 / 0.0						52	
	53							0.0 / 0.0					54	
		Total Load:				41.1 kVA	41.1 kVA	41.1 kVA						
		Total Amps:				148 A	148 A	148 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	55.6 kVA	100.00%	55.6 kVA		
Power	45.3 kVA	100.00%	45.3 kVA	**Total Conn. Load:**	123.3 kVA
Receptacles	22.4 kVA	72.28%	16.2 kVA	**Total Est. Demand:**	117.1 kVA
				Total Conn. Current:	148 A
				Total Est. Demand Current:	141 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: 1GH2
NEW PANEL

Location:
Supply From: DPG
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 18,000
Enclosure: Type 1
Mains: 100A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	BB.LDK.01 4003	#12	20	1	1.0 / 2.3			1	20	#12	Lighting STORAGE 4004	2	
	3	Lighting	#12	20	1		1.5 / 3.1		1	20	#12	Lighting MATERIAL 4024	4	
--	5	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	6	--
--	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	--
--	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	--
--	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	--
--	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	--
--	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	--
--	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	--
--	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	--
--	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	--
--	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	--
--	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	--
--	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	--
--	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	--
--	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	--
--	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	--
--	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	--
--	37	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	38	--
--	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	--
--	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	--
		Total Load:				3.3 kVA	4.5 kVA	0.0 kVA						
		Total Amps:				14 A	18 A	0 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	6.9 kVA	125.00%	8.6 kVA		
Receptacles	1.0 kVA	100.00%	1.0 kVA	**Total Conn. Load:**	7.8 kVA
				Total Est. Demand:	9.6 kVA
				Total Conn. Current:	9 A
				Total Est. Demand Current:	11 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: 1GL2
NEW PANEL

Location: MECH 3024
Supply From: 1GT2
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 400A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Receptacle	#12	20	1	0.4 / 0.4			1	20	#12	Receptacle	2	
	3	Receptacle	#12	20	1		0.4 / 0.4		1	20	#12	Receptacle	4	
	5	Receptacle	#12	20	1			0.4 / 0.4	1	20	#12	Receptacle	6	
	7	Receptacle	#12	20	1	0.4 / 0.4			1	20	#12	Receptacle	8	
	9	Cord Reel	#12	20	1		0.5 / 0.5		1	20	#12	Cord Reel	10	
	11	Cord Reel	#12	20	1			0.5 / 0.5	1	20	#12	Cord Reel	12	
	13	Cord Reel	#12	20	1	0.5 / 0.5			1	20	#12	Cord Reel	14	
	15	Receptacle	#12	20	1		0.7 / 0.7		1	20	#10	Receptacle	16	
	17	Receptacle	#12	20	1			0.7 / 0.4	1	20	#12	Receptacle	18	
	19	Sound System	#10	20	1	1.0 / 0.7			1	20	#12	Receptacle	20	
	21	Receptacle	#10	20	1		0.9 / 0.7		1	20	#10	Receptacle	22	
	23	Receptacle	#10	20	1			0.7 / 0.7	1	20	#10	Receptacle	24	
	25	Receptacle	#8	20	1	1.1 / 0.7			1	20	#10	Receptacle	26	
	27	EDF - Thru GFCI Bkr	#10	20	1		0.8 / 0.5		1	20	#10	Receptacle	28	
	29	Receptacle	#12	20	1			0.4 / 0.5	1	20	#12	Receptacle	30	
	31	Receptacle	#8	20	1	1.1 / 0.9			1	20	#12	Receptacle	32	
	33	GFCI Receptacle	#8	20	1		0.7 / 0.7		1	20	#12	Receptacle	34	
	35	Receptacle	#12	20	1			0.2 / 0.2	1	20	#12	Receptacle	36	
	37	Receptacle, GFCI Receptacle	#10	20	1	0.5 / 1.3			1	20	#8	Receptacle, GFCI Receptacle	38	
	39	EDF - Thru GFCI Bkr	#10	20	1		0.8 / 0.9		1	20	#10	Receptacle, GFCI Receptacle	40	
	41	Receptacle	#12	20	1			0.5 / 1.1	1	20	#8	Receptacle	42	
	43	Receptacle	#10	20	1	0.5 / 0.4			1	20	#12	Receptacle	44	
	45	Receptacle	#10	20	1		0.7 / 0.4		1	20	#12	Receptacle	46	
	47	Receptacle	#12	20	1			0.4 / 0.4	1	20	#12	GFCI Receptacle	48	
	49	GFCI Receptacle	#12	20	1	0.4 / 0.4			1	20	#12	Receptacle	50	
	51	Receptacle	#12	20	1		0.4 / 0.4		1	20	#12	Receptacle	52	
	53	Receptacle	#12	20	1			0.4 / 0.5	1	20	#12	Receptacle	54	
	55	Receptacle	#8	20	1	1.1 / 0.4			1	20	#12	Receptacle	56	
	57	Receptacle	#12	20	1		0.2 / 0.2		1	20	#12	Receptacle	58	
	59	Kiln - 3ph	#6	50	3			3.8 / 3.8	3	50	#6	Kiln - 3ph	60	
	61					3.8 / 3.8							62	
	63						3.8 / 3.8						64	
	65	Refrigerated Air Dryer	#8	20	1			1.5 / 0.5	2	30	#10	Plotter	66	
	67	Receptacle	#12	20	1	0.4 / 0.5							68	
	69	T.V.	#8	20	1		1.0 / 1.9		1	20	#8	Hand Dryer	70	
	71	Hand Dryer	#8	20	1			1.9 / 0.2	1	20	#8	Track Lighting	72	
	73	VAV-G7-01, VAV-G7-02, VAV-G8-03	#12	20	1	0.5 / 1.2			1	20	#12	EF-G4	74	
	75	Circulation Pump	#12	20	1		0.6 / 1.2		1	20	#12	EF-G5	76	
	77	EF-G6	#12	20	1			1.2 / 1.0	1	20	#12	Sound System	78	
--	79	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	80	--
--	81	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	82	--
--	83	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	84	--
--	85	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	86	--
--	87	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	88	--
--	89	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	90	--
--	91	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	92	--
--	93	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	94	--
--	95	SPARE	--	20	1			0.0 / 4.5	3	60	ONE LINE	LGH	96	
--	97	SPARE	--	20	1	0.0 / 4.5							98	
--	99	SPARE	--	20	1		0.0 / 2.0						100	
	101	BB	ONE LINE	60	3			4.9 / 0.0	3	30	--	SPDL	102	--
	103					5.5 / 0.0							104	
	105						4.2 / 0.0						106	
		Total Load:				33.0 kVA	30.0 kVA	32.1 kVA						
		Total Amps:				277 A	250 A	270 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Heating	0.4 kVA	100.00%	0.4 kVA		
Lighting	1.4 kVA	125.00%	1.7 kVA	**Total Conn. Load:**	95.1 kVA
Motor	9.4 kVA	100.00%	9.4 kVA	**Total Est. Demand:**	58.5 kVA
Receptacles	83.9 kVA	55.96%	47.0 kVA	**Total Conn. Current:**	264 A
				Total Est. Demand Current:	162 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

3-SECTION PANEL

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Registration: F-4111
Project No: 2024-00197-00

Branch Panel: WL
EXISTING PANEL

Location: ELEC 1771
Supply From:
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 250A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	Stage Left ROS & Dimmers & SMJB	--	20	1	0.0 / 0.0			1	20	--	Up Stage ROS lights	2	
E	3	Stage Left ROS & Dimmers & SMJB	--	20	1		0.0 / 0.0		1	20	--	Locking Gallery Index & Dimmer Station	4	
E	5	Loading Gallery Index & Dimmer Station	--	20	1			0.0 / 0.0	1	20	--	a,b,c Catwalk Access Stairs, Catwalks, Fly Pit	6	
E	7	abc stage left entry, stage right entry, stage right...	--	20	1	0.0 / 0.0			1	20	--	Catwalk Rehearsal Lights - House Left	8	
E	9	Catwalk rehersal lights - House Right	--	20	1		0.0 / 0.0		1	20	--	Catwalk Ghost Lights - House Center	10	
E	11	1st electric Rehearsal Lights	--	20	1			0.0 / 0.0	1	20	--	2nd Electric Rehearsal Lights	12	
E	13	3rd electric Rehearsal Lights	--	20	1	0.0 / 0.0			1	20	--	4th Electric Rehearsal Lights	14	
E	15	Upstage Wall Rehearsal Lights	--	20	1		0.0 / 0.0		1	20	--	**SPARE**	16	
	17	**SPARE**	--	20	1			0.0 / 0.0	1	20	--	**SPARE**	18	
	19	**SPARE**	--	20	1	0.0 / 0.0			1	20	--	**SPARE**	20	
	21	**SPARE**	--	20	1		0.0 / 1.0		1	20	#10	AV Equipment	22	
E	23	Projector Screen	--	20	1			0.0 / 2.9	1	20	#10	T.V.	24	
	25	AV Equipment	#12	20	1	1.0 / 1.0			1	20	#12	Projector	26	
	27	T.V.	#10	20	1		1.9 / 1.0		1	20	#10	AV Equipment	28	
	29	AV Equipment	#10	20	1			1.0 / 1.0	1	20	#10	AV Equipment	30	
	31	AV Equipment	#10	20	1	1.0 / 0.0			1	20	--	SPARE	32	E
	33	AV Equipment	#10	20	1		1.0 / 0.0		1	20	--	SPARE	34	E
E	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	E
E	37	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	38	E
E	39	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	40	E
E	41	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	42	E
		Total Load:				2.9 kVA	4.8 kVA	4.8 kVA						
		Total Amps:				24 A	42 A	42 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	0.0 kVA	0.00%	0.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	12.5 kVA
Receptacles	12.5 kVA	90.06%	11.2 kVA	**Total Est. Demand:**	11.2 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	35 A
				Total Est. Demand Current:	31 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	0.0 kVA	0.00%	0.0 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: BB
NEW PANEL

Location: CONTROL 4003
Supply From: 1GL2
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 60A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Sound System	#12	20	1	1.0 / 0.7			1	20	#12	BB Grid Power	2	
	3	BB Grid Power	#12	20	1		0.7 / 0.7		1	20	#12	BB Grid Power	4	
	5	BB Grid Power	#12	20	1			0.7 / 0.7	1	20	#12	BB Grid Power	6	
	7	BB Grid Power	#12	20	1	0.7 / 0.7			1	20	#12	BB Grid Power	8	
	9	BB Grid Power	#12	20	1		0.7 / 0.7		1	20	#12	BB Grid Power	10	
	11	BB Grid Power	#12	20	1			0.7 / 0.7	1	20	#12	BB Grid Power	12	
	13	BB Grid Power	#12	20	1	0.7 / 0.7			1	20	#12	BB Grid Power	14	
	15	BB Grid Power	#12	20	1		0.7 / 0.7		1	20	#12	BB Grid Power	16	
	17	BB. LWP.01	#12	20	1			0.2 / 0.2	1	20	#12	BB. LWP.01	18	
	19	BB. LWP.01	#12	20	1	0.2 / 0.2			1	20	#12	BB. LWP.01	20	
	21	BB. LWP.01	#12	20	1		0.2 / 1.0		1	20	#12	BB. LWP.01	22	
	23	BB. LWP.01	#12	20	1			1.0 / 0.0	1	--	--	SPACE	24	--
--	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	--
--	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	--
--	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	--
--	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	--
--	33	SPARE	--	20	1		0.0 / 0.0		1	20	--	SPARE	34	--
--	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	--
--	37	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	38	--
--	39	SPARE	--	20	1		0.0 / 0.0						40	
--	41	SPARE	--	20	1			0.0 / 0.0					42	
		Total Load:				4.9 kVA	5.5 kVA	4.2 kVA						
		Total Amps:				42 A	46 A	35 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacles	14.6 kVA	84.29%	12.3 kVA		
				Total Conn. Load:	14.6 kVA
				Total Est. Demand:	12.3 kVA
				Total Conn. Current:	40 A
				Total Est. Demand Current:	34 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PANEL SCHEDULES

E5.06
of

Branch Panel: TC

NEW PANEL

Location:
Supply From:
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 3R
Mains: 400A

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1					0.0 / 0.2			1	20	#12	GFCI Receptacles - Site	2	
	3	GFCI Receptacles - Site	#12	20	1		0.2 / 0.2		1	20	#12	GFCI Receptacles - Site	4	
	5	GFCI Receptacles - Site	#12	20	1			0.2 / 0.0					6	
	7												8	
	9												10	
	11												12	
	13												14	
	15												16	
	17												18	
	19												20	
	21												22	
--	23	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	24	--
--	25	SPARE	--	20	1	0.0 / 0.0			1	20	--	SPARE	26	--
--	27	SPARE	--	20	1		0.0 / 0.0		1	--	--	SPACE	28	--
			Total Load:			0.2 kVA	0.4 kVA	0.2 kVA						
			Total Amps:			2 A	3 A	2 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacles	0.7 kVA	100.00%	0.7 kVA		
				Total Conn. Load:	0.7 kVA
				Total Est. Demand:	0.7 kVA
				Total Conn. Current:	2 A
				Total Est. Demand Current:	2 A

Notes:
THIS PANEL IS A POWER ZONE UNIT - CONTRACTOR TO PROVIDE 15KVA 480:208V 3PH NEMA 3R SQUARE D MINI POWER ZONE UNIT SUBSTATION WITH 27-SPACE PANELBOARD, BOLT ON CIRCUIT BREAKERS.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: SDL

NEW PANEL

Location:
Supply From: SLT
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 1
Mains: 50A

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	Receptacles	#12	20	1	0.7 / 0.7			1	20	#12	Receptacles	2	
	3	EF-SB-01	#12	20	1		1.2 / 0.2		1	20	#12	Lighting	4	
	5	Lighting	#12	20	1			0.4 / 0.0	1	--	--	SPACE	6	--
--	7	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	8	--
--	9	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	10	--
--	11	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	12	--
--	13	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	14	--
--	15	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	16	--
--	17	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	18	--
--	19	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	20	--
--	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	--
--	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	--
--	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	--
--	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	--
--	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	--
--	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	--
--	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	--
--	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	--
--	37	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	38	--
--	39	SPARE	--	20	1		0.0 / 0.0						40	
--	41	SPARE	--	20	1			0.0 / 0.0					42	
			Total Load:			1.4 kVA	1.4 kVA	0.4 kVA						
			Total Amps:			13 A	13 A	3 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	0.5 kVA	125.00%	0.7 kVA		
Receptacles	2.6 kVA	100.00%	2.6 kVA	**Total Conn. Load:**	3.2 kVA
				Total Est. Demand:	3.3 kVA
				Total Conn. Current:	9 A
				Total Est. Demand Current:	9 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: LGH

NEW PANEL

Location: GREENHOUSE G1001
Supply From: 1GL2
Mounting: Surface
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000
Enclosure: Type 4XSS
Mains: 60A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
	1	GFCI Receptacle	#12	20	1	0.5 / 0.7			1	20	#12	GFCI Receptacle	2	
	3	GFCI Receptacle	#12	20	1		0.5 / 0.5		1	20	#12	GFCI Receptacle	4	
	5	GFCI Receptacle	#12	20	1			0.2 / 0.2	1	20	#12	Environmental Controls	6	
	7	GH EF #1	#12	20	2	1.0 / 1.0			2	20	#12	GH EF #2	8	
	9						1.0 / 1.0						10	
	11	GH FAN #1, GH FAN #2, GH FAN #3, GH FAN #4	#10	20	1			1.4 / 0.2	1	20	#12	Vent Controls	12	
	13	Evaporative Cooling Pump	#10	20	1	1.0 / 0.4			1	20	#12	GH - Unit Heater	14	
	15	Irrigation Controls	#12	20	1		0.4 / 1.2		1	20	#10	Lighting	16	
G	17	L6-30R IDF Rack	#10	30	2			1.0 / 1.0	1	20	#12	Sound System	18	
	19					1.0 / 1.0			1	20	#12	IDF Rack	20	G
--	21	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	22	--
--	23	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	24	--
--	25	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	26	--
--	27	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	28	--
--	29	SPACE	--	--	1			0.0 / 0.0	1	--	--	SPACE	30	--
--	31	SPACE	--	--	1	0.0 / 0.0			1	--	--	SPACE	32	--
--	33	SPACE	--	--	1		0.0 / 0.0		1	--	--	SPACE	34	--
--	35	SPARE	--	20	1			0.0 / 0.0	1	20	--	SPARE	36	--
--	37	SPARE	--	20	1	0.0 / 0.0			3	30	--	SPDL	38	--
--	39	SPARE	--	20	1		0.0 / 0.0						40	
--	41	SPARE	--	20	1			0.0 / 0.0					42	
			Total Load:			6.4 kVA	4.5 kVA	3.9 kVA						
			Total Amps:			54 A	38 A	32 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Heating	0.4 kVA	100.00%	0.4 kVA		
Lighting	1.2 kVA	125.00%	1.4 kVA	**Total Conn. Load:**	14.8 kVA
Motor	5.2 kVA	100.00%	5.2 kVA	**Total Est. Demand:**	15.1 kVA
Receptacles	8.0 kVA	100.00%	8.0 kVA	**Total Conn. Current:**	41 A
				Total Est. Demand Current:	42 A

Notes:

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE

Branch Panel: CPDA

EXISTING PANEL

Location: CENTRAL PLANT 1966
Supply From: MSA
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 1200A

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	CT-1	--	70	3	9.4 / 1.6			3	20	--	EF-1	2	E
	3						9.4 / 1.6						4	
	5							9.4 / 1.6					6	
	7	PCHP-3	#1	125	3	18.0 / 18.0			3	125	#1	PCHP-1	8	
	9						18.0 / 18.0						10	
	11							18.0 / 18.0					12	
E	13	EF-H-16	--	20	3	0.9 / 9.4			3	70	--	CT-3	14	E
	15						0.9 / 9.4						16	
	17							0.9 / 9.4					18	
E	19	CWP-1	--	200	3	26.6 / 26.6			3	200	--	CWP-3	20	E
	21						26.6 / 26.6						22	
	23							26.6 / 26.6					24	
E	25	HWP-2	--	70	3	9.0 / 1.2			3	20	--	SF-CP-2	26	E
	27						9.0 / 1.2						28	
	29							9.0 / 1.2					30	
	31	SPACE	--	--	3	0.0 / 0.0			3	--	--	SPACE	32	
	33						0.0 / 0.0						34	
	35							0.0 / 0.0					36	
	37	SPACE	--	--	3	0.0 / 0.0			1	--	--	SPACE	38	
	39						0.0 / 0.0		1	--	--	SPACE	40	
	41							0.0 / 0.0	1	--	--	SPACE	42	
			Total Load:			120.7 kVA	120.7 kVA	120.7 kVA						
			Total Amps:			436 A	436 A	436 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	108.0 kVA	100.00%	108.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	362.1 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	362.1 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	436 A
				Total Est. Demand Current:	436 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	254.1 kVA	100.00%	254.1 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Branch Panel: CPDB

EXISTING PANEL

Location: BOILER 1965
Supply From: MSB
Mounting: Surface
Volts: 277/480 Wye
Phases: 3
Wires: 4
A.I.C. Rating: EXIST.
Enclosure: Type 1
Mains: 1200A

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker		A	B	C	Breaker		Wire	Circuit Description	CKT	Note
E	1	SCHP-6	--	200	3	18.0 / 0.0			1	--	--	SPACE	2	
	3						18.0 / 0.0		1	--	--	SPACE	4	
	5							18.0 / 0.0	1	--	--	SPACE	6	
E	7	HWP-1	--	70	3	9.0 / 5.8			3	40	--	BOILER B-02	8	E
	9						9.0 / 5.8						10	
	11							9.0 / 5.8					12	
E	13	SPARE	--	100	3	0.0 / 0.0			3	20	--	SPARE	14	E
	15						0.0 / 0.0						16	
	17							0.0 / 0.0					18	
E	19	SPARE	--	100	3	0.0 / 1.0			3	20	--	SF-CP-1	20	E
	21						0.0 / 1.0						22	
	23							0.0 / 1.0					24	
E	25	CWP-2	--	150	3	26.6 / 18.0			3	125	#1	PCHP-2	26	
	27						26.6 / 18.0						28	
	29							26.6 / 18.0					30	
E	31	CT-2	--	70	3	9.4 / 5.8			3	40	--	BOILER B-01	32	E
	33						9.4 / 5.8						34	
	35							9.4 / 5.8					36	
E	37	DIST PNL CPH	--	100	3	11.0 / 0.0			3	100	--	SPARE	38	E
	39						11.0 / 0.0						40	
	41							11.0 / 0.0					42	
			Total Load:			104.6 kVA	104.6 kVA	104.6 kVA						
			Total Amps:			378 A	378 A	378 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	54.0 kVA	100.00%	54.0 kVA		
Lighting	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	313.8 kVA
Receptacles	0.0 kVA	0.00%	0.0 kVA	**Total Est. Demand:**	313.8 kVA
Power	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Current:**	377 A
				Total Est. Demand Current:	377 A

Existing Loads	Existing Connected	Existing Demand...	Existing Demand
Existing Load	259.8 kVA	100.00%	259.8 kVA

Notes:
EXISTING PANEL - Total Calculated Existing load shown in calculations.

S - EXISTING CIRCUIT RELOCATED TO LS PANEL, RELABLE CIRCUIT AS 'SPARE' IN PANEL DIRECTORY.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
E - EXISTING LOAD

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL PANEL SCHEDULES

E5.07

of

LIGHTING FIXTURE SCHEDULE

Type Mark	CATALOG NUMBER		MOUNTING	LAMP TYPE	CCT	CRI	VOLTAGE	LOAD	REMARKS
	MANUFACTURER	MODEL							
A1	DAYBRITE	2-FPZ-48L-840-4-DS-UNV-DIM	RECESSED	4800L LED	4000 K	80	277 V	37 W	LED 2x4' FLAT PANEL TROFFER. ACRYLIC DIFUSSER. 0-10V DIMMING DRIVER. DLC CERTIFIED.
A2	DAYBRITE	2-FPZ-43L-840-4-DS-UNV-DIM	RECESSED	4300L LED	4000 K	80	277 V	30 W	LED 2x4' FLAT PANEL TROFFER. ACRYLIC DIFUSSER. 0-10V DIMMING DRIVER. DLC CERTIFIED.
A2L	DAYBRITE	2-FPZ-43L-840-4-DS-UNV-DIM	RECESSED	4300L LED	4000 K	80	120 V	30 W	LED 2x4' FLAT PANEL TROFFER. ACRYLIC DIFUSSER. 0-10V DIMMING DRIVER. DLC CERTIFIED.
A2LE	DAYBRITE	2-FPZ-43L-840-4-DS-UNV-DIM-BSL10LST	RECESSED	4300L LED	4000 K	80	120 V	30 W	LED 2x4' FLAT PANEL TROFFER. ACRYLIC DIFUSSER. 0-10V DIMMING DRIVER. DLC CERTIFIED.
A3	DAYBRITE	2-FPZ-38B-840-2-DS-UNV-DIM	RECESSED	3800L LED	4000 K	80	277 V	34 W	LED 2'x2' FLAT PANEL TROFFER. ACRYLIC DIFUSSER. 0-10V DIMMING DRIVER. DLC CERTIFIED.
ATH	ZANIBONI	LAR3S-13W-RW-B-6-C-BK-X0	WALL	944L LED	RGBW	80	120 V	13 W	LED 3" CYLINDER WALL MOUNT DOWNLIGHT WITH BLACK HOUSING. RGBW WITH DMX CONTROL AND 60 DEGREE BEAM. MOUNTING HEIGHT TO MATCH EXISTING FIXTURES. PROVIDE RGB FIXTURE WITH DMX CONTROLS. FIXTURE USE FOR 'RUN OF SHOW' DEFAULT RGB COLOR SETTING TO BE BLUE.
B1	DAYBRITE	1FPZ-38L-840-4-ADS-UNV-DIM	RECESSED	3800L LED	4000 K	80	277 V	0 W	ECONOMY 1X4 FLAT LENSED TROFFER, ACRYLIC DIFFUSER. 0-10V DIMMING DRIVER. DLC CERTIFIED.
BL	ETC	BLUEDOME-BSDB-F-BSEL	WALL	870L LED	4000 K	80	277 V	8 W	BLUEDOME RUN OF SHOW LIGHTS. PROVIDE WITH DMX LOW VOLTAGE POWER SUPPLY AND EYELID ACCESSORY. PROVIDE (1) RECESSED RACO 4 SQUARE BACK BOX AT 24" AFF.
BTH	STONCO	VWXL-14-NW-G1-8	WALL	1390L LED	4000 K	80	120 V	14 W	LED 6" VAPOR TIGHT JAR LIGHT. WALL MOUNT DOWNLIGHT MOUNTING HEIGHT TO MATCH EXISTING FIXTURES. DLC CERTIFIED.
C1	DAYBRITE	FSS4-40L-840-UNV-DIM/FKR-126/FSSWG4	SURFACE / CHAIN HANG	4000L LED	4000 K	80	277 V	30 W	LED 4-FEET STRIP, ACRYLIC LENS. 0-10V DIMMING DRIVER. DLC CERTIFIED. PROVIDE WITH WIREGUARD.
C1L	DAYBRITE	FSS4-40L-840-UNV-DIM/FKR-126/FSSWG4	SURFACE / CHAIN HANG	4000L LED	4000 K	80	120 V	30 W	LED 4-FEET STRIP, ACRYLIC LENS. 0-10V DIMMING DRIVER. DLC CERTIFIED. PROVIDE WITH WIREGUARD.
C1LE	DAYBRITE	FSS4-40L-840-UNV-DIM/FKR-126/FSSWG4	SURFACE / CHAIN HANG	4000L LED	4000 K	80	120 V	30 W	LED 4-FEET STRIP, ACRYLIC LENS. 0-10V DIMMING DRIVER. DLC CERTIFIED. PROVIDE EMERGENCY BATTERY BACKUP. PROVIDE WITH WIREGUARD.
C2L	DAYBRITE	VRVT4LED-LD5-9-DR-UNV-L840	SURFACE/SUSPENDED	9000L LED	4000 K	80	120 V	64 W	LED 1x4' LUMINAIRE, STANDARD 0-10V DIMMING, DLC CERTIFIED, IP65 WET RATED, VANDAL RESISTANT HOUSING.
C2LE	DAYBRITE	VRVT4LED-LD5-9-DR-UNV-L840-EL10W	SURFACE/SUSPENDED	9000L LED	4000 K	80	120 V	64 W	LED 1x4' LUMINAIRE, STANDARD 0-10V DIMMING, DLC CERTIFIED, IP65 WET RATED, VANDAL RESISTANT HOUSING.
C3	INSIGHT	PCM-5-40K-120-SM-48-UNV-DIM-MG-FL	SURFACE	1925L LED	4000 K	80	277 V	64 W	LED 4' LINEAR DISPLAY CASE STRIP LIGHTING WITH 0-10V DIMMING DRIVER.
CTH	DAYBRITE	FSS4-40L-835-UNV-DIM/FKR-126/FSSWG4	SURFACE / CHAIN HANG	4000L LED	3500 K	80	120 V	30 W	LED 4-FEET STRIP, ACRYLIC LENS. 0-10V DIMMING DRIVER. DLC CERTIFIED. PROVIDE WITH WIREGUARD.
D2	LIGHTOLIER	6RN/P6R-DL-30-940-M-CC-Z10-U	RECESSED	3000L LED	4000 K	80	277 V	30 W	LED 6" RECESSED CAN LIGHT.0-10V DIMMING DRIVER. DLC CERTIFIED.
D3	LIGHTOLIER	6RN/P6R-DL-50-940-M-CC-BK-B-Z10-U	RECESSED	5000L LED	4000 K	80	277 V	42 W	LED 6" RECESSED CAN LIGHT. BLACK REFLECTOR AND BLACK TRIM. 0-10V DIMMING DRIVER. DLC CERTIFIED.
DTH	LIGHTOLIER	6RN/P6R-DL-30-835-M-CC-BK-B-Z10-U	RECESSED	3000L LED	3500 K	80	120 V	30 W	LED 6" RECESSED CAN LIGHT. BLACK REFLECTOR AND BLACK TRIM. 0-10V DIMMING DRIVER. DLC CERTIFIED.
DTH2	LIGHTOLIER	CALCULITE - C2RPC_DL-15-935--NS-UPZU-B	RECESSED	1500L LED	3500 K	90	120 V	25 W	LED 2" PENDANT DOWNLIGHT CYLINDER THEATRICAL ACCENT LIGHTING FIXTURE. 0-10V DIMMING DRIVER.
GTH	GARDCO	GWM-A07-840-T3M-UNV-BK	WALL	4000L LED	4000 K	80	120 V	23 W	LED ARCHITECTURAL WALLPAK, BLACK HOUSING. COORDINATE FINISH WITH ARCHITECT. DLC CERTIFIED.
L48	CORELITE	SQ4-F-0U-100D-840-1-D-E-UNV-STD-	PENDANT	983 LUMEN/FT LED	4000 K	80	277 V	400 W	DIRECT/INDIRECT CONTINOUS RUN PENDANT FIXTURE. VERIFY EXACT CABLE LENGTH WITH OWNER.
L52	CORELITE	SQ4-F-0U-100D-840-1-D-E-UNV-STD-	PENDANT	983 LUMEN/FT LED	4000 K	80	277 V	600 W	DIRECT/INDIRECT CONTINOUS RUN PENDANT FIXTURE. VERIFY EXACT CABLE LENGTH WITH OWNER.
L58	CORELITE	SQ4-F-0U-100D-840-1-D-E-UNV-STD-	PENDANT	983 LUMEN/FT LED	4000 K	80	277 V	500 W	DIRECT/INDIRECT CONTINOUS RUN PENDANT FIXTURE. VERIFY EXACT CABLE LENGTH WITH OWNER.
MTH	SSRC	LED-IRL-8-1B-1W-2-DIM	SURFACE / CHAIN HANG	4000L LED	4000 K	80	120 V	50 W	LED 8-FEET INDEX RAIL LIGHT STRIP, (1) WHITE STRIP LIGHT AND (1) BLUE STRIP LIGHT. POLYCARBONATE LENS. WITH IRL DIMMER CONTROL BOX.
PTH	KIRLIN	SSR-09620-4000L-3500K-MFL-38-ASB	PENDANT	4000L LED	3500 K	90	120 V	42 W	LED 6" PENDANT MOUNT DIRECT LED 48". BLACK HOUSING. DMX CONTROL. MEDIUM BEAM.
PTH2	LIGHTOLIER	CALCULITE - C6-P-DL-35-935-M-DMX-U-BK-B	PENDANT	3500L LED	3500 K	90	120 V	30 W	LED 6" PENDANT MOUNT DIRECT LED 48". BLACK HOUSING. DMX CONTROL.
T	LIGHTOLIER	6002X/9630	SURFACE	TRACK HEAD AS SPECIFIED	4000 K	80	120 V	120 W	TRACK LIGHT. PROVIDE 16 HEADS PER EACH RUN OF TRACK AS SHOWN ON PLANS. PROVIDE 60 WATT A19 LAMP FOR EACH HEAD. PROVIDE WATTSTOPPER LMPL-101 LOAD CONTROLLER FOR EACH LENGTH OF TRACK.
TR	LIGHTOLIER	LC-L-10-940-BK-LLM-RF	TRACK	TRACK HEAD AS SPECIFIED	4000 K	80	120 V	30 W	TRACK LIGHTING. PROVIDE THREE HEADS AND NEW 3' TRACK. PROVIDE WITH WIREGUARD.
W1	GARDCO	GWM-A09-840-T3M-UNV	WALL	6000L LED	4000 K	80	277 V	30 W	MOUNT FIXTURE AT 10'-6" AFF
W1L	GARDCO	GWM-A09-840-T3M-UNV	WALL	6000L LED	4000 K	80	120 V	40 W	LED ARCHITECTURAL WALLPAK, ALUMINUM HOUSING. COORDINATE FINISH WITH EXISTING EXTERIOR FIXTURES. DLC CERTIFIED.
W1LE	GARDCO	GWM-A09-840-T3M-UNV-EC	WALL	6000L LED	4000 K	80	120 V	40 W	LED ARCHITECTURAL WALLPAK, ALUMINUM HOUSING. COORDINATE FINISH WITH EXISTING EXTERIOR FIXTURES. DLC CERTIFIED.PROVIDE INTEGRAL EMERGENCY BATTERY PACK.
W2	FAILSAFE	TRO11-LD4-25W-40-OPL-XX-UNV-EDC1	SURFACE	1695L LED	4000 K	80	277 V	25 W	LED 11-INCH ARCHITECTURAL ROUND FIXTURE, SURFACE MOUNTED, WET LOCATION LISTED, ALUMINUM HOUSING, POLYCARBONATE LENS. COORDINATE FINISH WITH ARCHITECT. DLC CERTIFIED.
X1	EMERGILITE	PRESTIEGE X40	UNIVERSAL	LED	4000 K	80	277 V	3 W	UNIVERSAL LED EXIT SIGN WITH BLACK HOUSING, RED LETTERING AND EMERGENCY BATTERY BACK-UP.
XTH	EMERGILITE	SVX-BB-R	UNIVERSAL	LED	4000 K	80	277 V	3 W	UNIVERSAL LED EXIT SIGN WITH BLACK VANDAL-RESISTANT HOUSING, RED LETTERING AND EMERGENCY BATTERY BACK-UP.
XV2	EMERGILITE	SVX-BB-R	UNIVERSAL	LED	4000 K	80	277 V	3 W	DOUBLE-FACED VANDAL RESISTANT EXIT SIGN, WHITE HOUSING, RED LETTERING. PROVIDE CHEVRON DIRECTIONAL ARROWS PER PLANS OR AS DIRECTED BY AHJ.

1 FIXTURES SHOWN ON THE FLOORPLAN HAVING A DESIGNATION OF "E" FOLLOWING THE BASE DESIGNATION (I.E. - A FIXTURE TYPE "AE, C2E, FE") AND/OR A HALF SHADED REGION SHALL BE THE BASE FIXTURE TYPE EQUIPPED WITH THE APPROPRIATE BATTERY BACK-UP. BATTERY BACK-UPS SHALL BE INTEGRAL TO THE FIXTURE AND REMOTE SHALL BE SELECTED ONLY IN INSTANCES WHERE IT IS SPECIFIED OR WHEN IT IS THE ONLY AVAILABLE EMERGENCY OPTION. THE LOCATION OF REMOTE BATTERY BACKUPS SHALL BE SELECTED BY THE OWNER/ARCHITECT PRIOR TO INSTALLATION BY THE CONTRACTOR.

2 REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT INDICATED IN THE LIGHTING FIXTURE SCHEDULE. WHERE THERE IS AN INCONSISTENCY BETWEEN THE LIGHTING FIXTURE SCHEDULE AND THE SPECIFICATIONS, THE GREATER QUANTITY OR HIGHER QUALITY OF WORK SHALL BE INCLUDED IN THE PROPOSAL.

3 UNLESS OTHERWISE INDICATED ON THE SCHEDULE ABOVE, THE ARCHITECT/OWNER SHALL SELECT ALL FINISHES, COLORS, AND TRIMS.

4 ALL LED FIXTURE BOARDS AND DRIVERS SHALL BE OF THE LATEST GENERATION, BASED UPON THE INDIVIDUAL MANUFACTURER'S STATED LITERATURE. IF A "GEN 5" IS AVAILABLE, "GEN 4" FIXTURES ARE NOT ACCEPTABLE.

5 EXIT SIGNS AND EMERGENCY BATTERY BACK-UPS SHALL BE CONNECTED TO THE NEAREST LIGHTING CIRCUIT AHEAD OF ALL SWITCHING AS REQUIRED TO MAINTAIN THE BATTERIES AT FULL CHARGE. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL WIRING AS REQUIRED.

6 LIGHTING FIXTURE MANUFACTURERS OTHER THAN THOSE LISTED IN THE LIGHTING FIXTURE SCHEDULE AND DESIRING TO BID THIS PROJECT SHALL REQUEST PRIOR APPROVAL OF THE FIXTURES THEY WISH TO SUBSTITUTE. PRIOR APPROVAL REQUEST SHALL INCLUDE FIXTURE CUT SHEETS.

7 FOR PRIOR APPROVALS AND SUBMITTALS THAT DEVIATE FROM NOMINAL WATTAGE AND/OR DELIVERED LUMENS, IT SHALL BE UP THE ENGINEER'S SOLE DISCRETION TO APPROVE OR DECLINE THESE FIXTURES BASED ON ANY AND ALL FACTORS INCLUDING BUT NOT LIMITED TO INTENDED LIGHTING LEVELS FOR EACH SPACE AND IMPACT ON THE OVERALL ELECTRICAL POWER SYSTEM.

8 THE CONTRACTOR SHALL PROVIDE ALL HARDWARE AND ACCESSORIES AS REQUIRED TO INSTALL FIXTURES IN LOCATIONS AS ILLUSTRATED WITH MOUNTING METHODS DESIRED.

9 WHEN A UNIVERSAL (120-277V) VOLTAGE OPTION IS AVAILABLE, IT SHALL BE PROVIDED. OTHERWISE PROVIDE AS INDICATED IN SCHEDULE.

10 FOR ALL SUSPENDED FIXTURES, COORDINATE THE EXACT MOUNTING ELEVATION ABOVE FINISHED FLOOR WITH ARCHITECT PRIOR TO INSTALLATION. PROVIDE SUSPENSION HARDWARE IN LENGTHS AS REQUIRED.

APPROVED LIGHTING MANUFACTURERS:

SURFACE / RECESSED LIGHTING: SIGNIFY, LITHONIA, METALUX, AXIS, CURRENT, PINNACLE, H.E. WILLIAMS, CREE, NULITE, ALW
DOWN / TRACK LIGHTING: GOTHAM, LIGHTOLIER, PORTFOLIO, CREE, CURRENT, INDY, H.E. WILLIAMS
ARCHITECTURAL WALLPACK: LITHONIA, VISIONAIRE, CURRENT, GARDCO, McGRAW EDISON, HUBBELL, LSI, LUMARK, LIGMAN
EXIT SIGNAGE: CHLORIDE, LITHONIA, EMERGI-LITE, DUAL-LITE, SURE-LITES, EVENLITE

LIGHTING CONTROLS SCHEDULE

Type	Sensor Operation	# of Lighting Zones	Description
RA	VACANCY - MANUAL ON / AUTO OFF	1	ON/OFF SWITCH WITH RAISE LOWER; 0-10V DIMMING.
RB	VACANCY - MANUAL ON / AUTO OFF	1	ON/OFF MOMENTARY CONTACT SWITCH.
RE	OCCUPANCY - AUTO ON / AUTO OFF	1	CORRIDOR ROOM CONTROLLER, NO DIMMING. BMCS ON/OFF INTERFACE FOR OCCUPIED / UNOCCUPIED BUILDING OPERATION. PROVIDE OCCUPANCY BASED SENSORS WHERE SHOWN. LOCATE (1) KEYED SWITCH AT MAIN ENTRY DOOR ADJACENT TO SECURITY KEYPAD.
RJ	NONE	1	MECHANICALLY WOUND TIMER SWITCH. WHERE MULTIPLE SWITCHES ARE USED, THESE SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.
RT	NONE	1	DMX CONTROLS. REFER TO THEATRICAL DRAWINGS FOR MORE INFORMATION.
ER	-	-	UL924 LOAD CONTROL RELAY, PLENUM RATED, 0-10V COMPATIBLE, 16A MINIMUM
ES	-	-	UL1008 GENERATOR TRANSFER DEVICE, PLENUM RATED, 0-10V COMPATIBLE, 16A MINIMUM

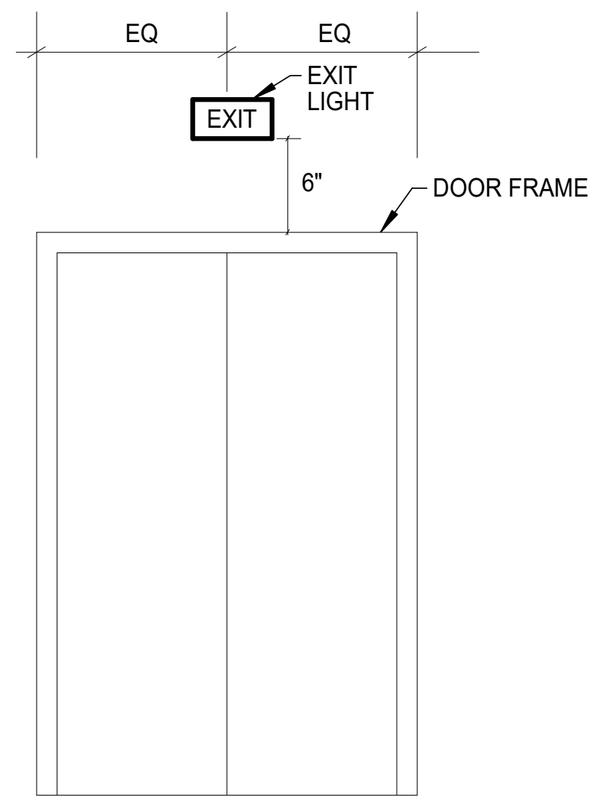
1 PER IECC-2015, SECTION C405, AREAS / ROOMS WHERE AUTOMATIC SHUTOFF FOR LIGHTING WOULD ENDANGER OCCUPANT SAFETY ARE EXEMPT FROM AUTOMATIC CONTROLS.

2 PROVIDE PHOTOCELL WITHIN DAYLIGHT ZONE ONLY WHERE SHOWN ON FLOORPLANS.

3 LOCATE PHOTOSENSOR SURFACE MOUNTED ON THE NORTH SIDE OF THE BUILDING. LOCATION IS TO BE APPROVED BY ARCHITECT/OWNER REPRESENTATIVE.

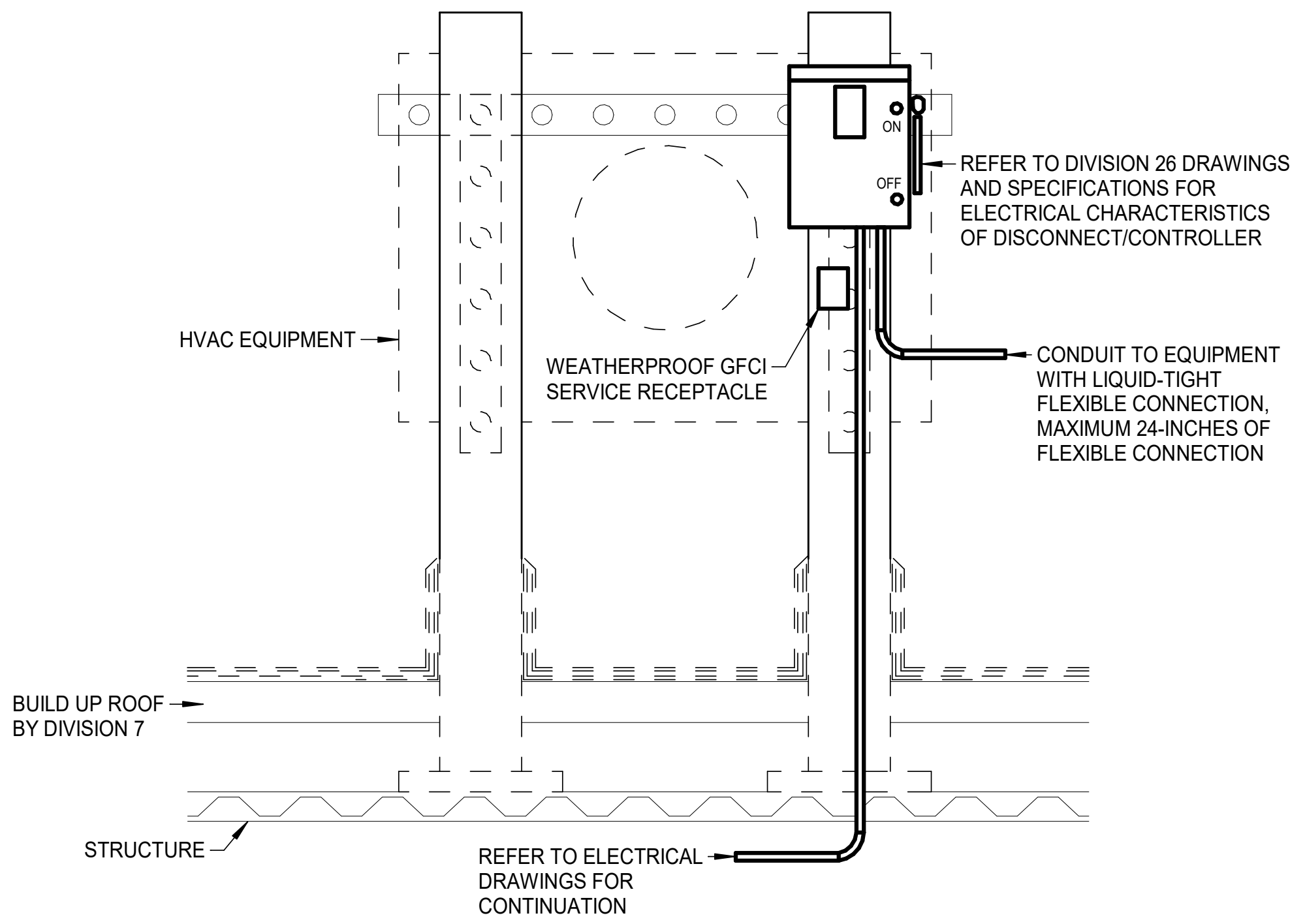
4 CONTRACTOR TO COORDINATE EXACT PROGRAMING OF TIME-SCHEDULE WITH OWNER REPRESENTATIVE.

5 REFER TO LIGHTING CONTROL DETAILS FOR TYPICAL INSTALLATION.



8 EXIT SIGN LOCATION

Scale: NOT TO SCALE



NOTES:
1. REFER TO ARCHITECTURAL, STRUCTURAL AND ROOFING DRAWINGS AND SPECIFICATIONS FOR HVAC EQUIPMENT SUPPORT CONSTRUCTION DETAILS.

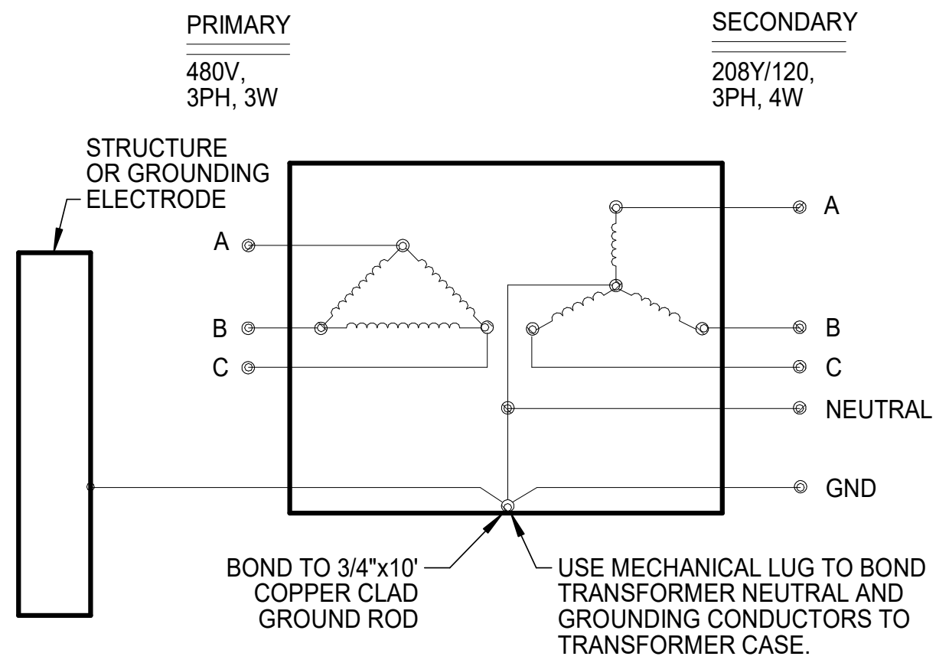
5 ROOF DMSCU DISCONNECT SUPPORT

Scale: NOT TO SCALE

SYMBOL SCHEDULE

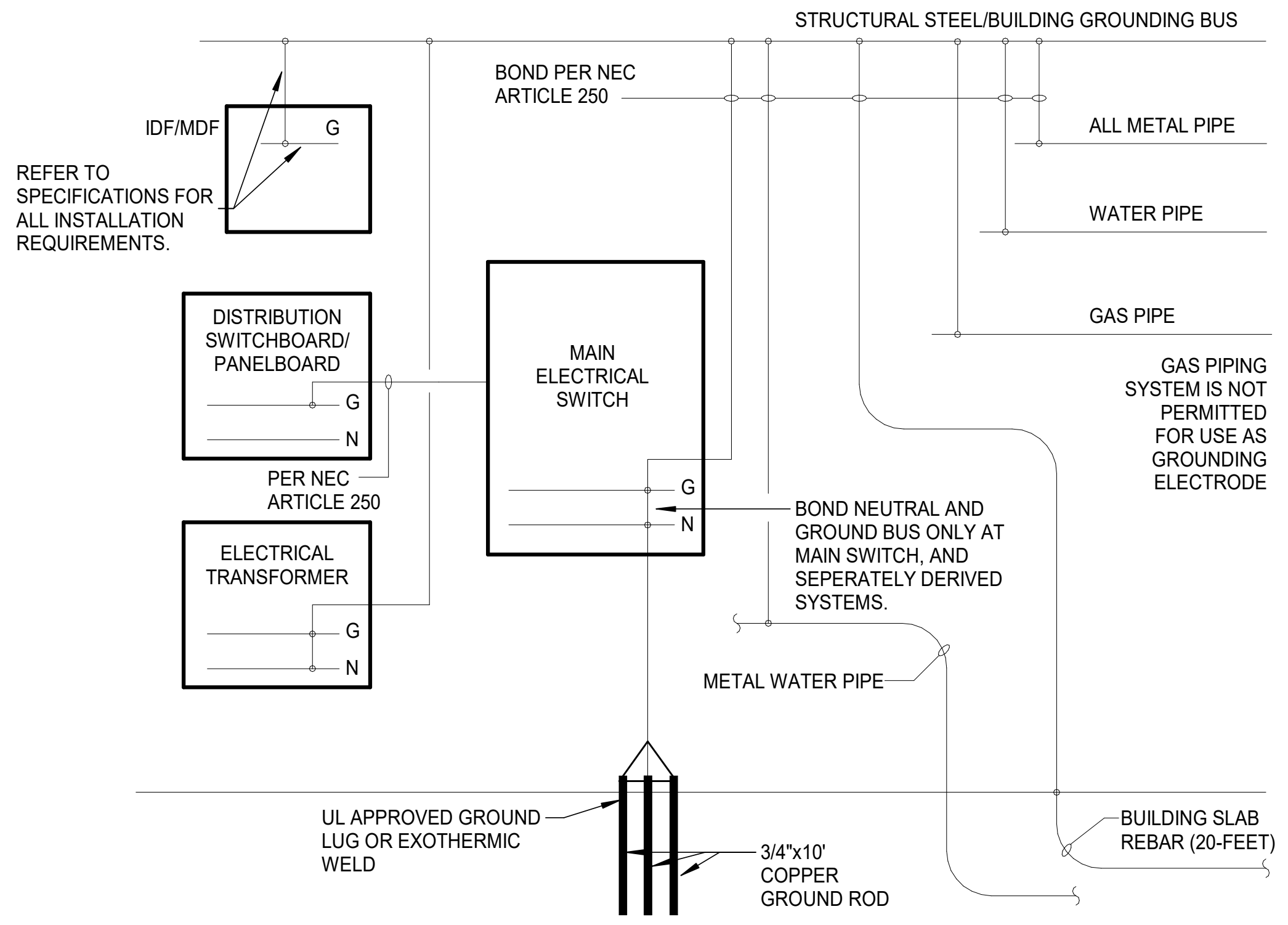
SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
LIGHTING (LETTER DENOTES TYPE - SEE LIGHT FIXTURE SCHEDULE)	
▭	LIGHT FIXTURE
◢	FIXTURE ON EMERGENCY CIRCUIT
○	DOWNLIGHT FIXTURE
⊢○	LIGHT FIXTURE - WALL MOUNTED
◐	DOWNLIGHT FIXTURE ON EMERGENCY CIRCUIT
⊢◐	LIGHT FIXTURE - WALL MOUNTED ON EMERGENCY CIRCUIT
⊗	EXIT LIGHT-CEILING MTD WITH DIRECTIONAL ARROWS AS REQUIRED
⊢⊗	EXIT LIGHT-WALL MTD WITH DIRECTIONAL ARROWS AS REQUIRED
SWITCHES	
$	LINE VOLTAGE SINGLE POLE SWITCH
$2	LINE VOLTAGE 2-POLE SWITCH
$3	LINE VOLTAGE 3-WAY SWITCH
$4	LINE VOLTAGE 4-WAY SWITCH
$K	LINE VOLTAGE KEYED SWITCH
$3K	LINE VOLTAGE KEYED 3-WAY SWITCH
$D	LINE VOLTAGE WALL DIMMER SWITCH, SIZE AND TYPE AS REQUIRED
$VD	LINE VOLTAGE WALL MOUNTED DIMMER SWITCH WITH VACANCY SENSOR. MANUAL ON / AUTO OFF
$V	LINE VOLTAGE WALL MOUNTED SWITCH WITH VACANCY SENSOR. MANUAL ON / AUTO OFF
$OC	LINE VOLTAGE WALL MOUNTED SWITCH WITH VACANCY SENSOR. AUTO ON / AUTO OFF
$P	LINE VOLTAGE SWITCH WITH PILOT LIGHT
$MC	MOMENTARY CONTACT SWITCH
☐D	PUSH BUTTON
$T	SPRING WOUND MECHANICAL TIME SWITCH, 20 AMP, 12-HOUR WITH HOLD, UNLESS NOTED OTHERWISE
ER	LISTED UL924, EMERGENCY LOAD CONTROL RELAY, 0-10V DIMMING COMPATIBLE
ES	LISTED UL1008 EMERGENCY TRANSFER SWITCH, 0-10V DIMMING COMPATIBLE
LOW VOLTAGE LIGHTING CONTROLS	
$R	LOW VOLTAGE LIGHTING CONTROLLER WALL SWITCH
$B	BMCS TIMER LOCAL OVERRIDE SWITCH
◇P	CEILING MOUNTED PHOTO SENSOR. HB= HIGH-BAY SENSOR
◇V	CEILING MOUNTED VACANCY SENSOR, MANUAL ON / AUTO OFF. HB= HIGH-BAY SENSOR
◇S	CEILING MOUNTED OCCUPANCY SENSOR, AUTO ON TO 100% / AUTO OFF. HB= HIGH-BAY SENSOR
RX	LIGHTING CONTROLLER. X= DENOTES CONTROL SEQUENCE, REFER TO CONTROL SCHEDULE
RECEPTACLES AND OUTLETS	
⊖	SIMPLEX RECEPTACLE
⊖	DUPLEX RECEPTACLE
⦶	POWER POLE
⊜	125/250 VOLT, 1 PHASE, 3-WIRE, 20 AMPS, UNLESS NOTED OTHERWISE
⊕	DOUBLE DUPLEX IN 2-GANG BOX WITH SINGLE COVER PLATE
⊞	DOUBLE DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE IN 2-GANG BOX WITH SINGLE COVER PLATE
⊟	DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
⦶	CONCEALED SERVICE FLOOR BOX, DUPLEX RECEPTACLE OUTLET
⊞	CONCEALED SERVICE FLOOR BOX, DOUBLE DUPLEX RECEPTACLE OUTLET
⦶△	CONCEALED SERVICE MULTI-ACCESS FLOOR BOX WITH WIRING DEVICES AS INDICATED ON DRAWINGS. SIZE TO MATCH DEVICE QUANTITIES
MISCELLANEOUS EQUIPMENT	
FACP	FIRE ALARM CONTROL PANEL
ANNC	FIRE ALARM REMOTE ANNUCIATOR
T	TRANSFORMER FOR DOOR BELL/BUZZER
☐	CHIME/BUZZER
G	REMOTE BLANK FACE GFCI DEVICE
MOTOR CONTROLLERS AND EQUIPMENT	
⌀	MOTOR, MAKE FINAL MOTOR CONNECTION
☐	DISCONNECT SWITCH AS REQUIRED
☒	COMBINATION MOTOR STARTER/DISCONNECT SWITCH AS REQUIRED
☒	MOTOR STARTER AS REQUIRED
$M	MANUAL MOTOR SWITCH AS REQUIRED
⊕	PREWIRED DEVICE, MAKE ELECTRICAL FINAL CONNECTIONS
■	VARIABLE FREQUENCY DRIVE MOTOR CONTROLLER FURNISHED BY DIVISION 23, INSTALLED BY DIVISION 26
ELECTRICAL EQUIPMENT	
▬	ELECTRICAL DISTRIBUTION OR PANELBOARD
■	DRY TYPE TRANSFORMER
CIRCUITING	
──	CONDUIT
– – –	CONDUIT BELOW FLOOR, SLAB, OR GRADE
⊣⊢→	3/4"C. UNLESS OTHERWISE NOTED; LONG HATCH, NEUTRAL; SHORT HATCH, PHASE; "Z" HATCH OR HOOK, GROUND. ARROW INDICATES HOMERUN
SUBSCRIPTS AND ABBREVIATIONS	
WP	INDICATES WEATHERPROOF
WG	INDICATES WIREGUARD
H	INDICATES HORIZONTAL
TL	INDICATES TWIST LOCK
NL	LIGHT FIXTURE ON NIGHT LIGHT CIRCUIT
E	INDICATES EXISTING TO REMAIN
REP	INDICATES REPLACE EXISTING WITH NEW
1-L	REFER TO ONE-LINE DIAGRAM
⊢	INDICATES WALL MOUNTED DEVICE
U	INDICATES TO PROVIDE COMBINATION USB/RECEPTACLE DEVICE
SR	SWITCH CONTROLLED RECEPTACLE. RECEPTACLE SHALL BE PERMANENTLY FACTORY MARKED AS CONTROLLED.
SPDX	X = L LOW EXPOSURE SPD; X = M MEDIUM EXPOSURE SPD; X = H HIGH EXPOSURE SPD; X = VH VERY HIGH EXPOSURE SPD.
●	NEXT TO ANY SYMBOL INDICATES FINAL ROUGH-IN FIELD COORDINATION BY CONTRACTOR WITH ARCHITECTURAL MILLWORK DRAWINGS AND OTHER TRADES

GENERAL NOTES:
-ALL EXTERIOR BUILDING ELECTRICAL EQUIPMENT TO BE WEATHERPROOF NEMA-4X MINIMUM.



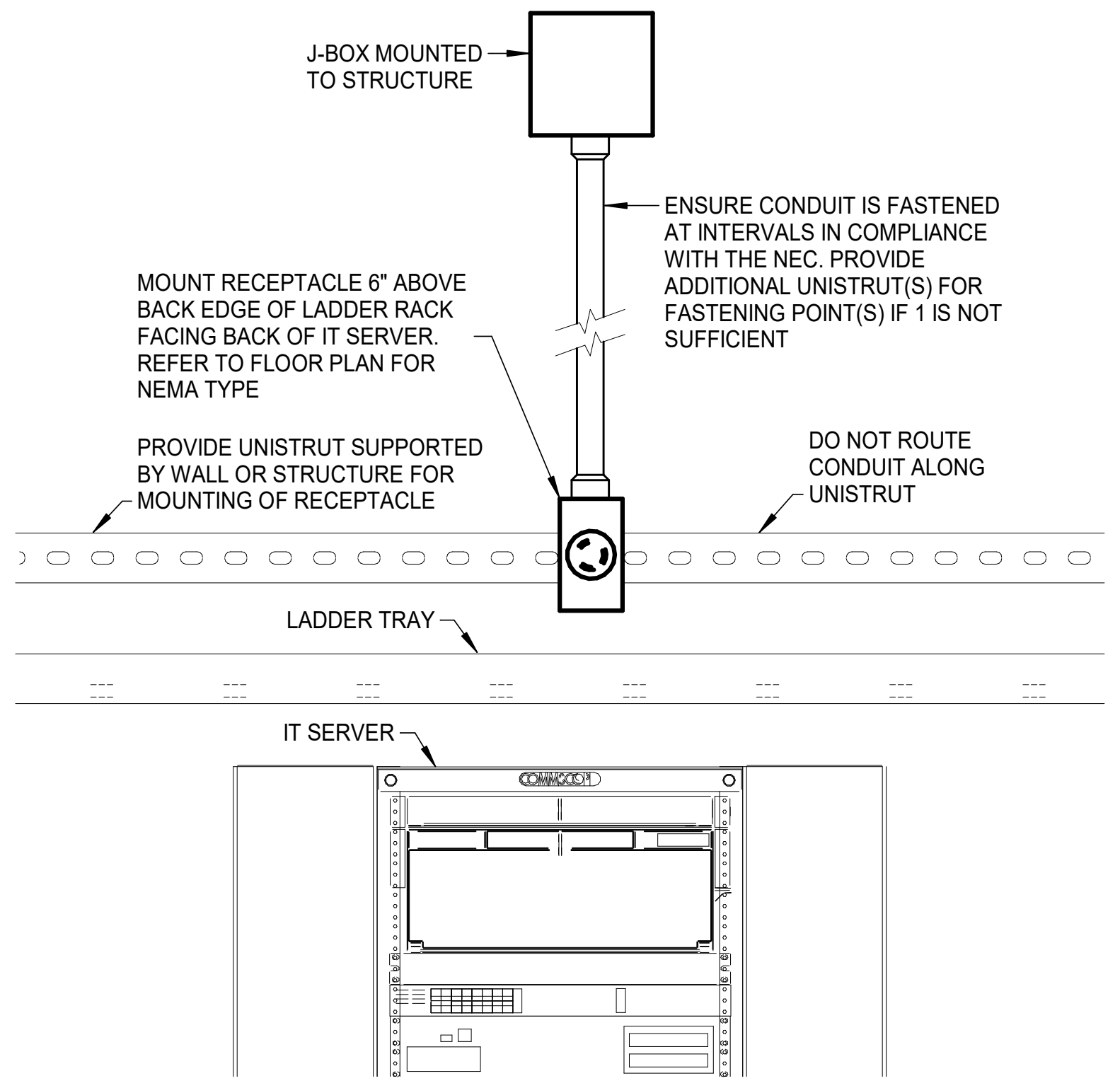
3 GROUNDING FOR TRANSFORMERS

Scale: NOT TO SCALE



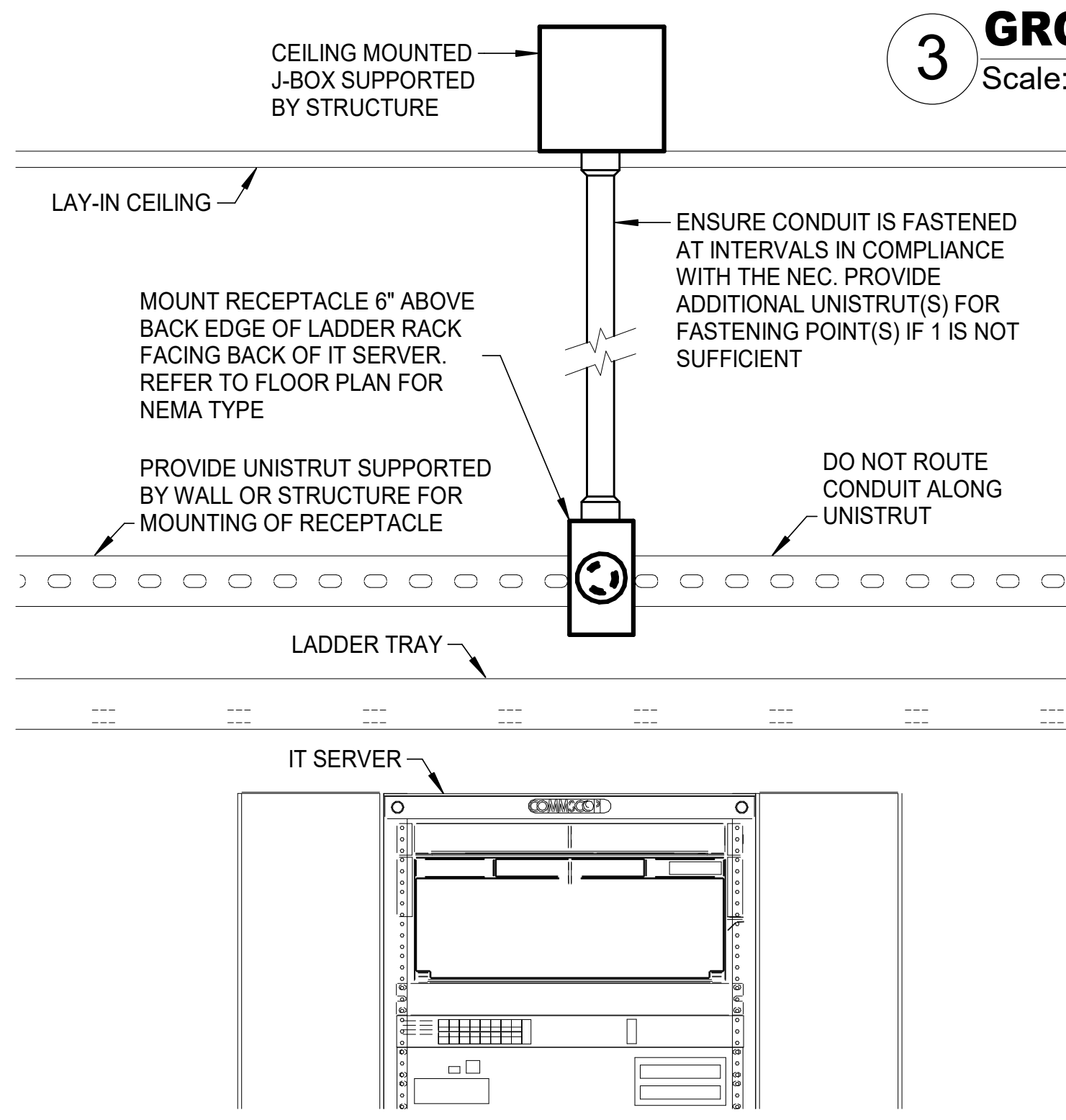
6 SYSTEM GROUNDING

Scale: NOT TO SCALE



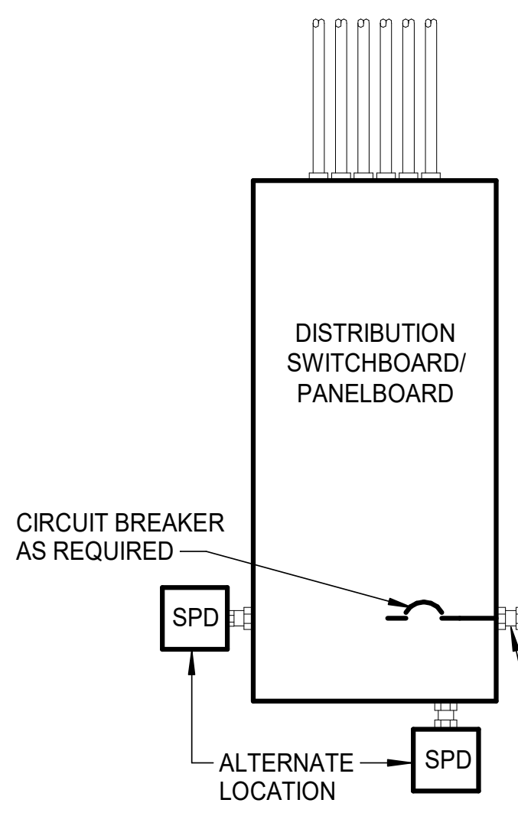
1 EXPOSED CEILING IDF/MDF RACK RECEPTACLE

Scale: NOT TO SCALE



2 LAY-IN CEILING IDF/MDF RACK RECEPTACLE

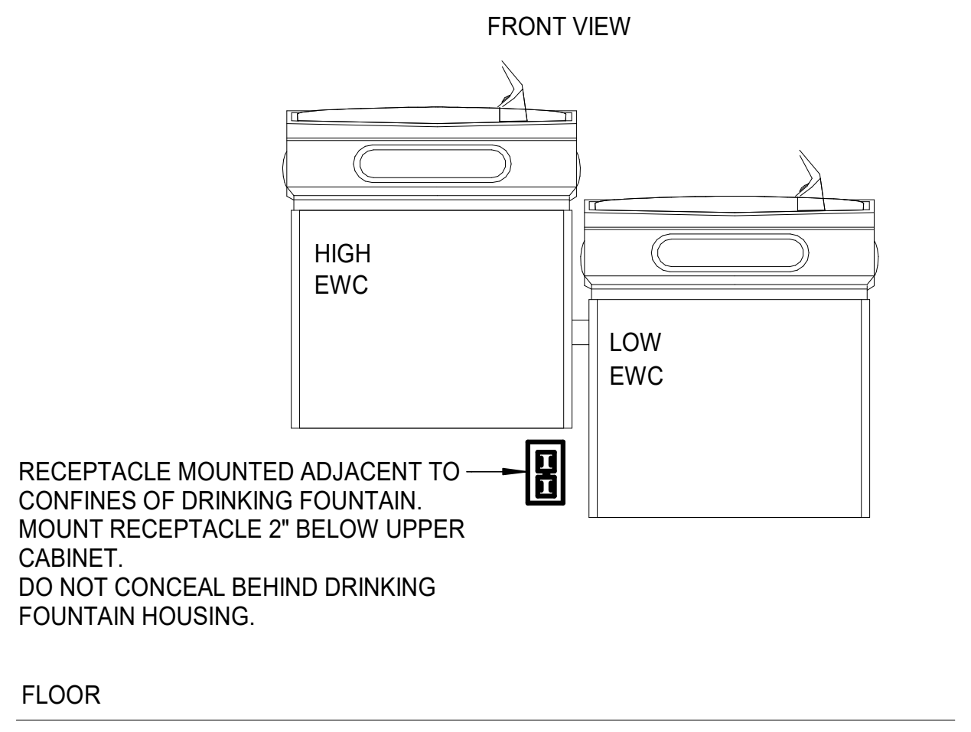
Scale: NOT TO SCALE



NOTES:
1. PROVIDE, LOCATE AND INSTALL SURGE PROTECTION DEVICE AS REQUIRED PER SPECIFICATIONS.
2. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAM FOR QUANTITY, MODEL NUMBER, CIRCUIT BREAKER, & WIRE SIZE.
3. MOUNT DIRECTLY TO PANELBOARD / SWITCHBOARD ENCLOSURE VIA SPD PROVIDED NIPPLE OR RGC NIPPLE.
4. TWIST PHASE CONDUCTOR UP TO CIRCUIT BREAKER TERMINATIONS.
5. TWIST NEUTRAL AND EQUIPMENT GROUND CONDUTOR AS MUCH AS POSSBILE TO BUS TERMINATIONS.

4 SURGE PROTECTION DEVICE

Scale: NOT TO SCALE



7 DRINKING FOUNTAIN WITH GFCI RECEPTACLE

Scale: NOT TO SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL DETAILS, LEGENDS, AND SCHEDULES

E6.01
of

CONTRACTOR TO COORDINATE LIGHTING CONTROL INTERFACE WITH BMCS REPLACEMENT.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

**COLEMAN PARTNERS
ARCHITECTS LLC**
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

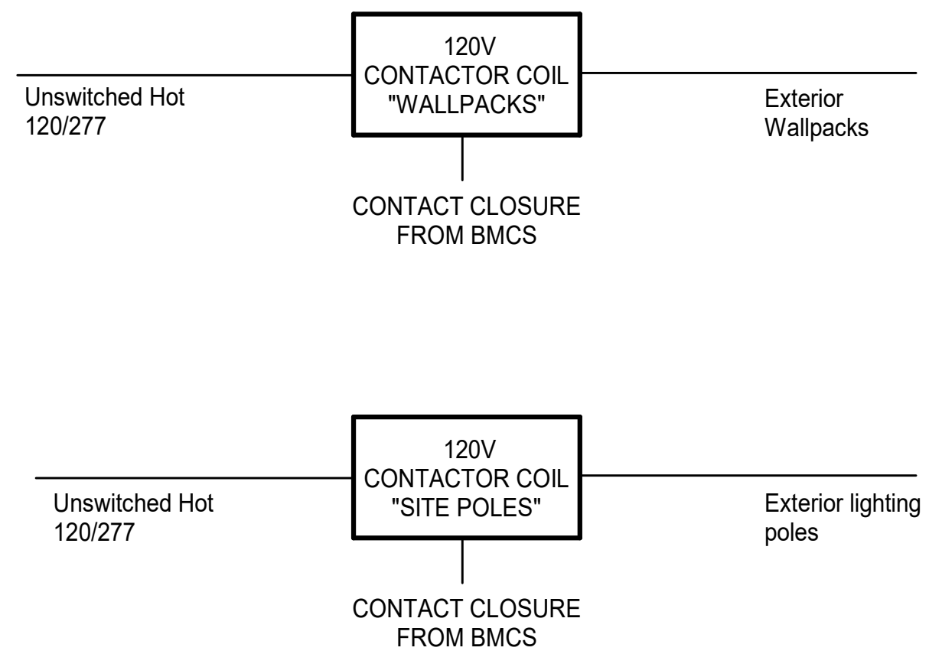
**CIVIL ENGINEER
BROOKS AND SPARKS, INC.**
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

**STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.**
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

**MEPT ENGINEER
SALAS O'BRIEN**
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

#9 TYPICAL EXTERIOR LIGHTING

ADJUST AND PROGRAM SYSTEM FOR SEQUENCE OF OPERATION:
1. CONTACT CLOSURE FROM BMCS WITH INTERFACE FOR PHOTOSENSOR / SCHEDULE.
2. PROVIDE HOA ON ALL CONTACTORS.

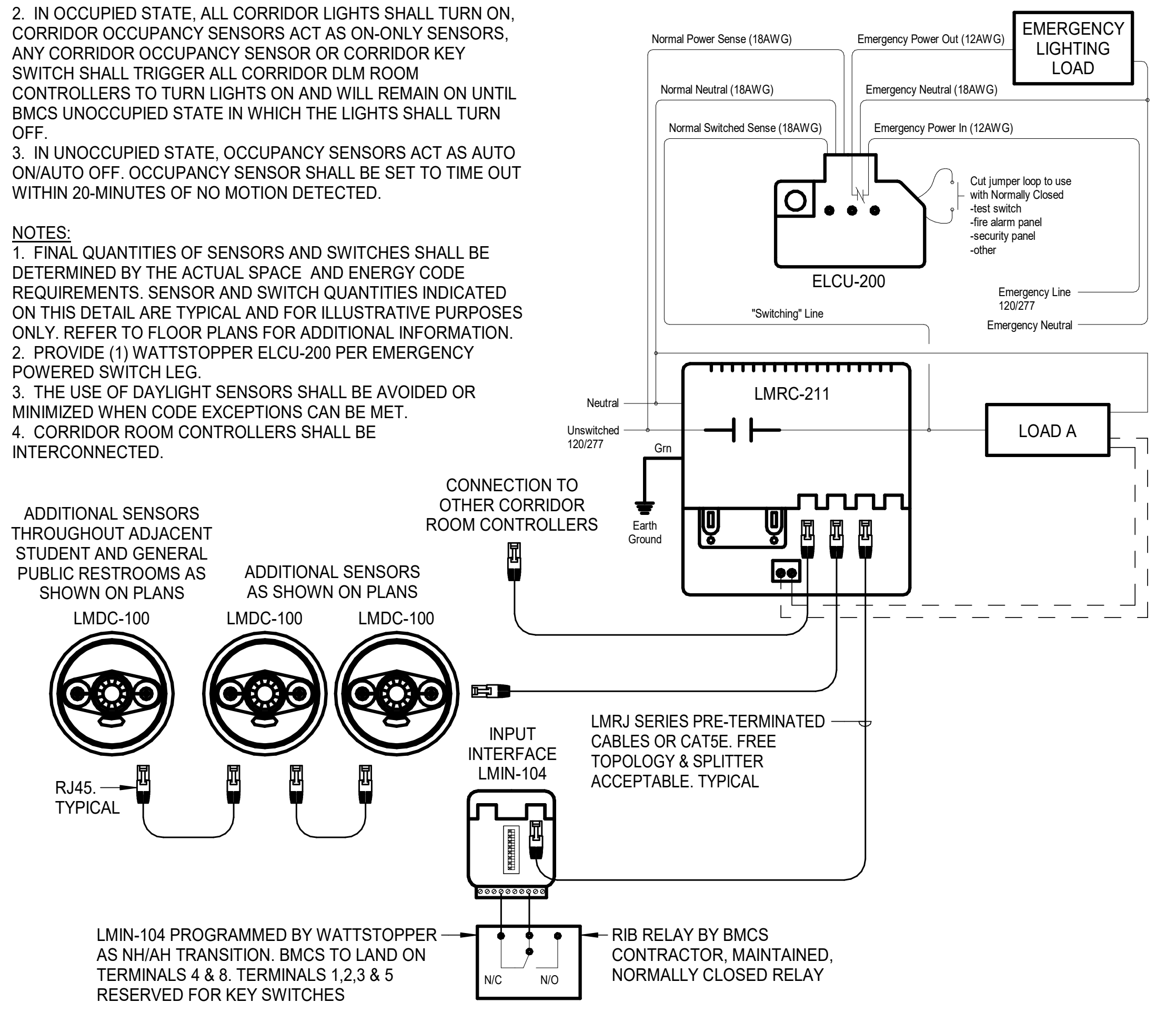


#6 TYPICAL CORRIDOR WITHOUT ENTRY KEYPAD

Wattstopper DLM

ADJUST AND PROGRAM SYSTEM FOR SEQUENCE OF OPERATION:
1. CONTACT CLOSURE FROM BMCS, USING A DIRECT LOW VOLTAGE CONNECTION TO LMIN, TRIGGERS OCCUPIED OR UNOCCUPIED STATE.
2. IN OCCUPIED STATE, ALL CORRIDOR LIGHTS SHALL TURN ON, CORRIDOR OCCUPANCY SENSORS ACT AS ON-ONLY SENSORS, ANY CORRIDOR OCCUPANCY SENSOR OR CORRIDOR KEY SWITCH SHALL TRIGGER ALL CORRIDOR DLM ROOM CONTROLLERS TO TURN LIGHTS ON AND WILL REMAIN ON UNTIL BMCS UNOCCUPIED STATE IN WHICH THE LIGHTS SHALL TURN OFF.
3. IN UNOCCUPIED STATE, OCCUPANCY SENSORS ACT AS AUTO ON/AUTO OFF. OCCUPANCY SENSOR SHALL BE SET TO TIME OUT WITHIN 20-MINUTES OF NO MOTION DETECTED.

NOTES:
1. FINAL QUANTITIES OF SENSORS AND SWITCHES SHALL BE DETERMINED BY THE ACTUAL SPACE AND ENERGY CODE REQUIREMENTS. SENSOR AND SWITCH QUANTITIES INDICATED ON THIS DETAIL ARE TYPICAL AND FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.
2. PROVIDE (1) WATTSTOPPER ELCU-200 PER EMERGENCY POWERED SWITCH LEG.
3. THE USE OF DAYLIGHT SENSORS SHALL BE AVOIDED OR MINIMIZED WHEN CODE EXCEPTIONS CAN BE MET.
4. CORRIDOR ROOM CONTROLLERS SHALL BE INTERCONNECTED.



WALL DEVICES TO BE GRAY WITH NON-MAGNETIC STAINLESS STEEL FACEPLATES

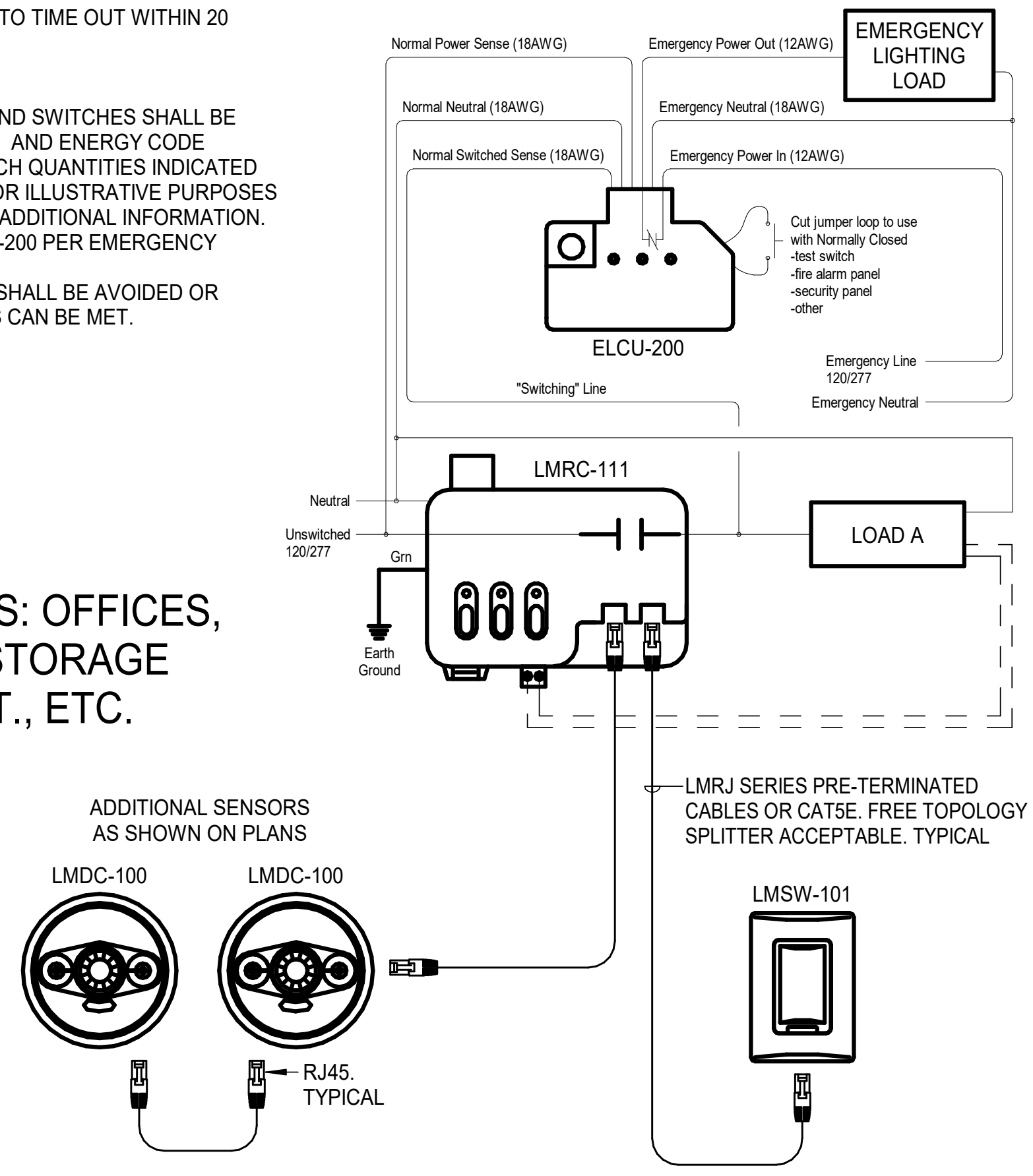
#4 TYPICAL SINGLE ZONE WITH DIMMING

Wattstopper DLM

ADJUST AND PROGRAM SYSTEM FOR SEQUENCE OF OPERATION:
1. SWITCHING SHALL BE IN MANUAL ON OPERATION OCCUPANCY SENSORS WILL TURN ALL LOADS OFF BASED ON OCCUPANCY.
2. LIGHTING SHALL TURN ON AT INITIAL SETPOINT OF 80% OUTPUT WITH A MINIMUM OF 30 FOOTCANDLES.
3. VACANCY SENSOR SHALL BE SET TO TIME OUT WITHIN 20 MINUTES OF NO MOTION DETECTED.

NOTES:
1. FINAL QUANTITIES OF SENSORS AND SWITCHES SHALL BE DETERMINED BY THE ACTUAL SPACE AND ENERGY CODE REQUIREMENTS. SENSOR AND SWITCH QUANTITIES INDICATED ON THIS DETAIL ARE TYPICAL AND FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.
2. PROVIDE (1) WATTSTOPPER ELCU-200 PER EMERGENCY POWERED SWITCH LEG.
3. THE USE OF DAYLIGHT SENSORS SHALL BE AVOIDED OR MINIMIZED WHEN CODE EXCEPTIONS CAN BE MET.

TYPICAL SPACES: OFFICES,
ANCILLARY, STORAGE
> 100 SQ. FT., ETC.



WALL DEVICES TO BE GRAY WITH NON-MAGNETIC STAINLESS STEEL FACEPLATES

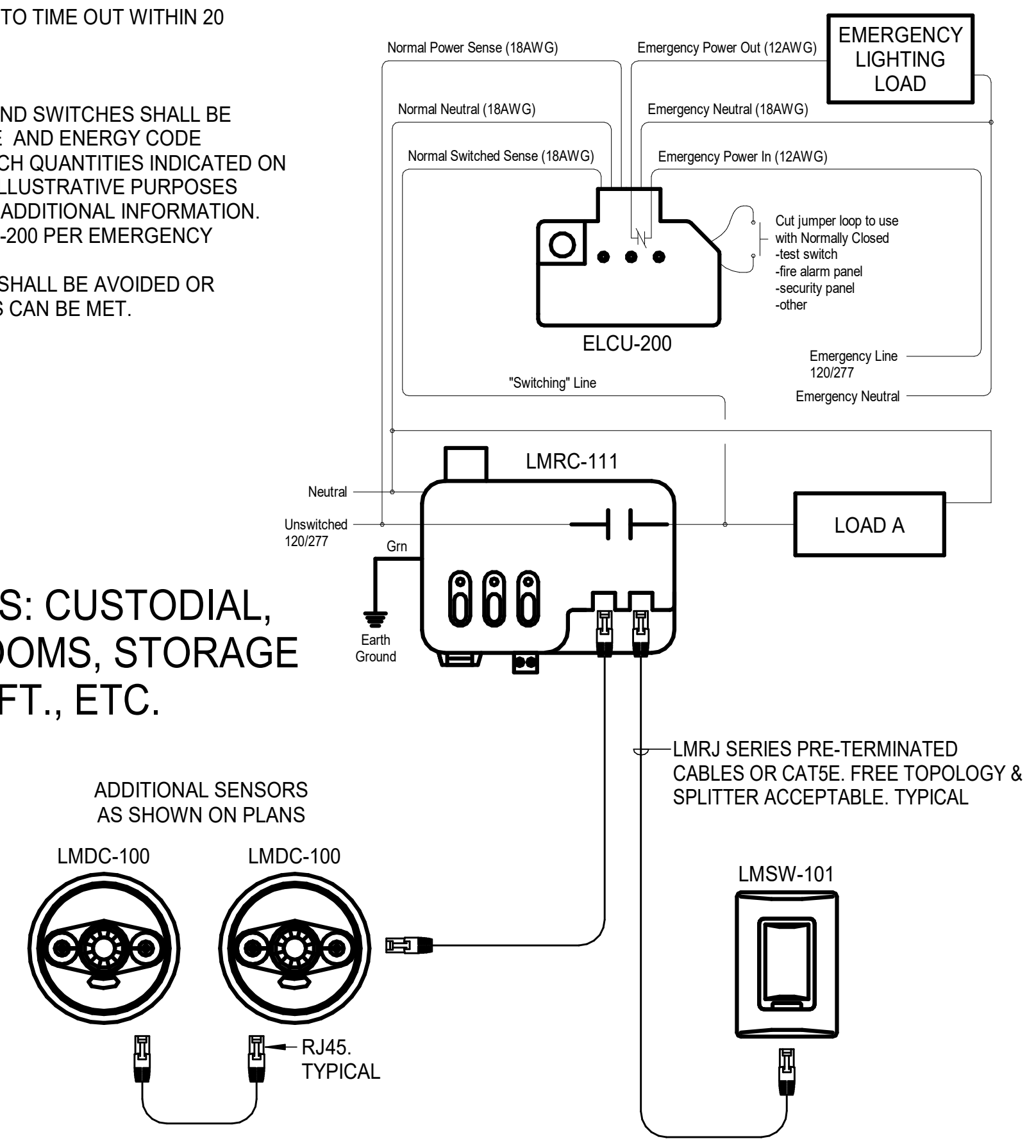
#3 TYPICAL SINGLE ZONE

Wattstopper DLM

ADJUST AND PROGRAM SYSTEM FOR SEQUENCE OF OPERATION:
1. SWITCHING SHALL BE IN MANUAL ON OPERATION OCCUPANCY SENSORS WILL TURN ALL LOADS OFF BASED ON OCCUPANCY.
2. LIGHTING SHALL TURN ON AT INITIAL SETPOINT OF 80% OUTPUT WITH A MINIMUM OF 30 FOOTCANDLES.
3. VACANCY SENSOR SHALL BE SET TO TIME OUT WITHIN 20 MINUTES OF NO MOTION DETECTED.

NOTES:
1. FINAL QUANTITIES OF SENSORS AND SWITCHES SHALL BE DETERMINED BY THE ACTUAL SPACE AND ENERGY CODE REQUIREMENTS. SENSOR AND SWITCH QUANTITIES INDICATED ON THIS DETAIL ARE TYPICAL AND FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.
2. PROVIDE (1) WATTSTOPPER ELCU-200 PER EMERGENCY POWERED SWITCH LEG.
3. THE USE OF DAYLIGHT SENSORS SHALL BE AVOIDED OR MINIMIZED WHEN CODE EXCEPTIONS CAN BE MET.

TYPICAL SPACES: CUSTODIAL,
PRIVATE RESTROOMS, STORAGE
< 100 SQ. FT., ETC.



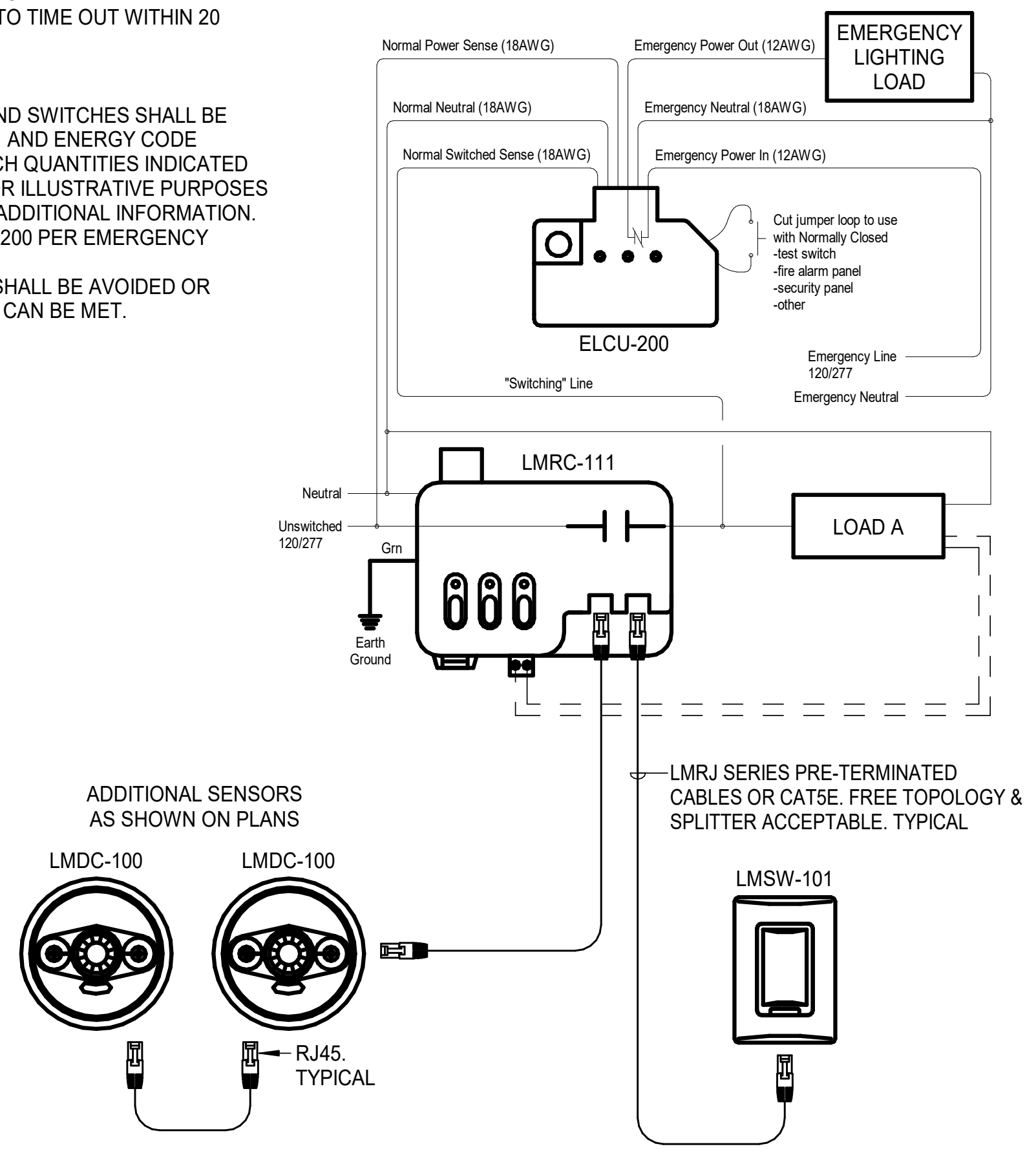
WALL DEVICES TO BE GRAY WITH NON-MAGNETIC STAINLESS STEEL FACEPLATES

#2 TYPICAL CLASSROOM

Wattstopper DLM

ADJUST AND PROGRAM SYSTEM FOR SEQUENCE OF OPERATION:
1. SWITCHING SHALL BE IN MANUAL ON OPERATION OCCUPANCY SENSORS WILL TURN ALL LOADS OFF BASED ON OCCUPANCY.
2. LIGHTING SHALL TURN ON AT INITIAL SETPOINT OF 80% OUTPUT WITH A MINIMUM OF 30 FOOTCANDLES.
3. VACANCY SENSOR SHALL BE SET TO TIME OUT WITHIN 20 MINUTES OF NO MOTION DETECTED.

NOTES:
1. FINAL QUANTITIES OF SENSORS AND SWITCHES SHALL BE DETERMINED BY THE ACTUAL SPACE AND ENERGY CODE REQUIREMENTS. SENSOR AND SWITCH QUANTITIES INDICATED ON THIS DETAIL ARE TYPICAL AND FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.
2. PROVIDE (1) WATTSTOPPER ELCU-200 PER EMERGENCY POWERED SWITCH LEG.
3. THE USE OF DAYLIGHT SENSORS SHALL BE AVOIDED OR MINIMIZED WHEN CODE EXCEPTIONS CAN BE MET.

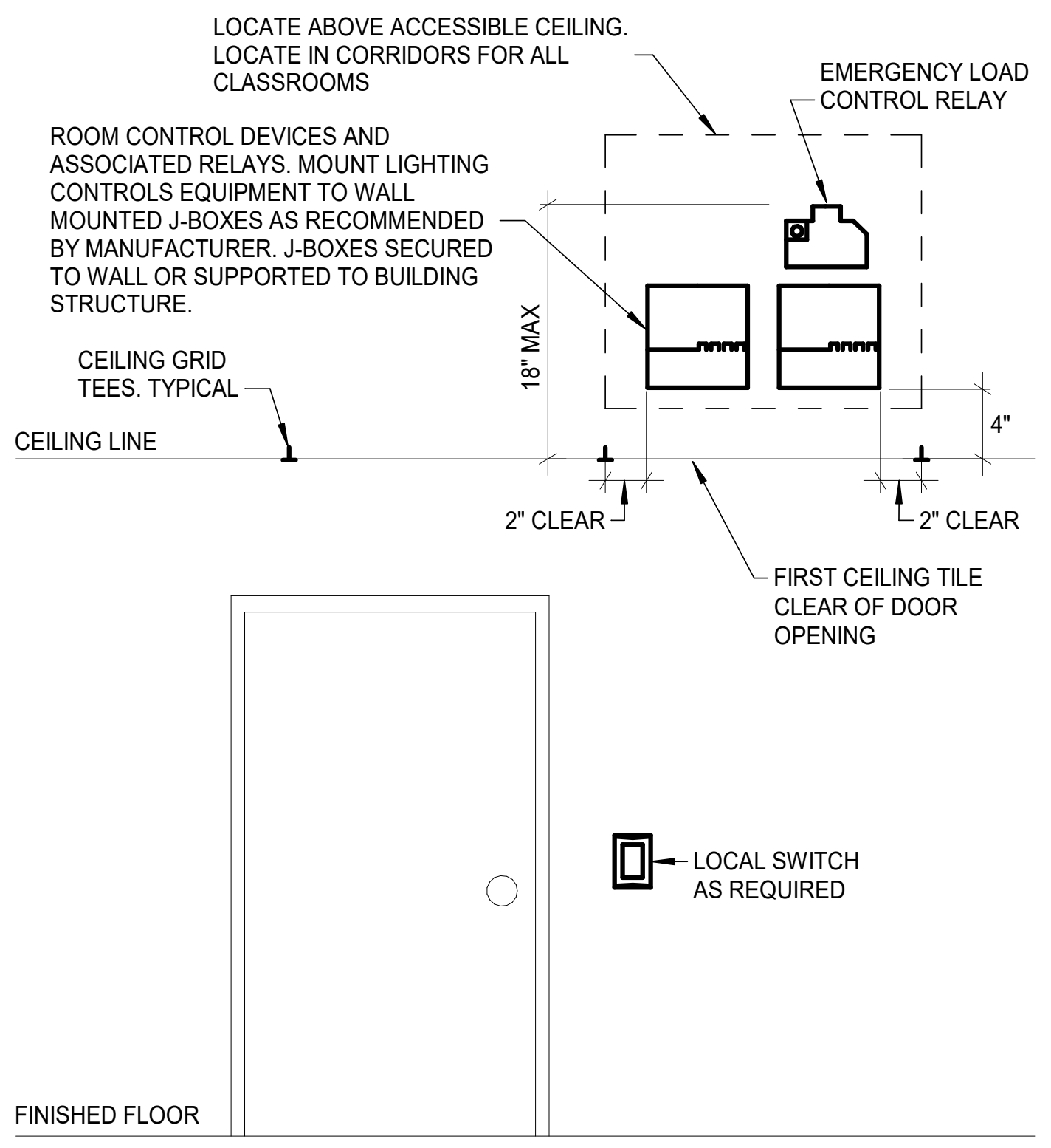


WALL DEVICES TO BE GRAY WITH NON-MAGNETIC STAINLESS STEEL FACEPLATES

#1 TYPICAL MOUNTING DETAIL

Wattstopper DLM

ADJUST AND PROGRAM SYSTEM FOR SEQUENCE OF OPERATION:
1. LOCATE DIGITAL LIGHTING CONTROLLER AND/OR EMERGENCY LOAD CONTROL RELAY ABOVE ACCESSIBLE CEILING 12-FEET AFF OR BELOW, ADJACENT TO SWITCH CONTROLLING THE SPACE.
2. IN NON-ACCESSIBLE AND/OR HIGH CEILING AREAS, LOCATE DIGITAL LIGHTING CONTROLLER IN ADJACENT ANCILLARY AREA WITH ACCESSIBLE CEILING.
3. PROVIDE PLASTIC TAPE MACHINE TYPED NAME PLATE TO BOTTOM OF CEILING T-GRID BELOW RELAY LOCATION. WHITE LETTERS ON BLACK BACKGROUND WITH 1/4" HIGH LETTERS ON 1/2" TALL LABEL FOR DIGITAL MODULE, INDICATE AS: DLM AND ASSOCIATED SPACE AND ROOM NUMBER.
4. IN AREAS WITH NO CEILING AND/OR IN EXTERIOR APPLICATIONS LOCATE ADJACENT TO PANEL SERVING THE LOAD.
5. ON REMOTE DLM LOCATIONS, PROVIDE PLASTIC TAPE MACHINE TYPED NAME PLATE ON EQUIPMENT. WHITE LETTERS ON BLACK BACKGROUND WITH 1/4" HIGH LETTERS ON 1/2" TALL LABEL FOR DIGITAL MODULE, INDICATE AS: DLM AND ASSOCIATED SPACE AND ROOM NUMBER.



WALL DEVICES TO BE GRAY WITH NON-MAGNETIC STAINLESS STEEL FACEPLATES

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: KJ

ELECTRICAL LIGHTING
CONTROLS DETAILS

E6.02

of

PLUMBING GENERAL DEMOLITION NOTES:

1. IT IS IMPRACTICAL DUE TO THE STREET SEWER, STRUCTURAL FEATURES AND ARRANGMENT OF BUILDING TO OBTAIN A SLOPE OF 1/4" PER FOOT PIPING 4" THRU 6" SHALL HAVE A SLOPE OF 1/8" PER FOOT BELOW BUILDING TO 5'-0" OUTSIDE OF BUILDING.
2. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
4. SAWCUT EXISTING SLAB AS REQUIRED TO INSTALL NEW PIPING BELOW FLOOR SEAL AND PATCH FLOOR TO MATCH EXISTING UPON COMPLETTION.

PLUMBING KEYED NOTES:

1 EXISTING 6" STORM ROOF DRAIN AND PIPING TO BE REMOVED FROM POINT INDICATED ON PLANS.

2 EXISTING 6" STORM PIPING TO BE REMOVED BACK TO STORM MAIN. REFER TO CIVIL PLANS..

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

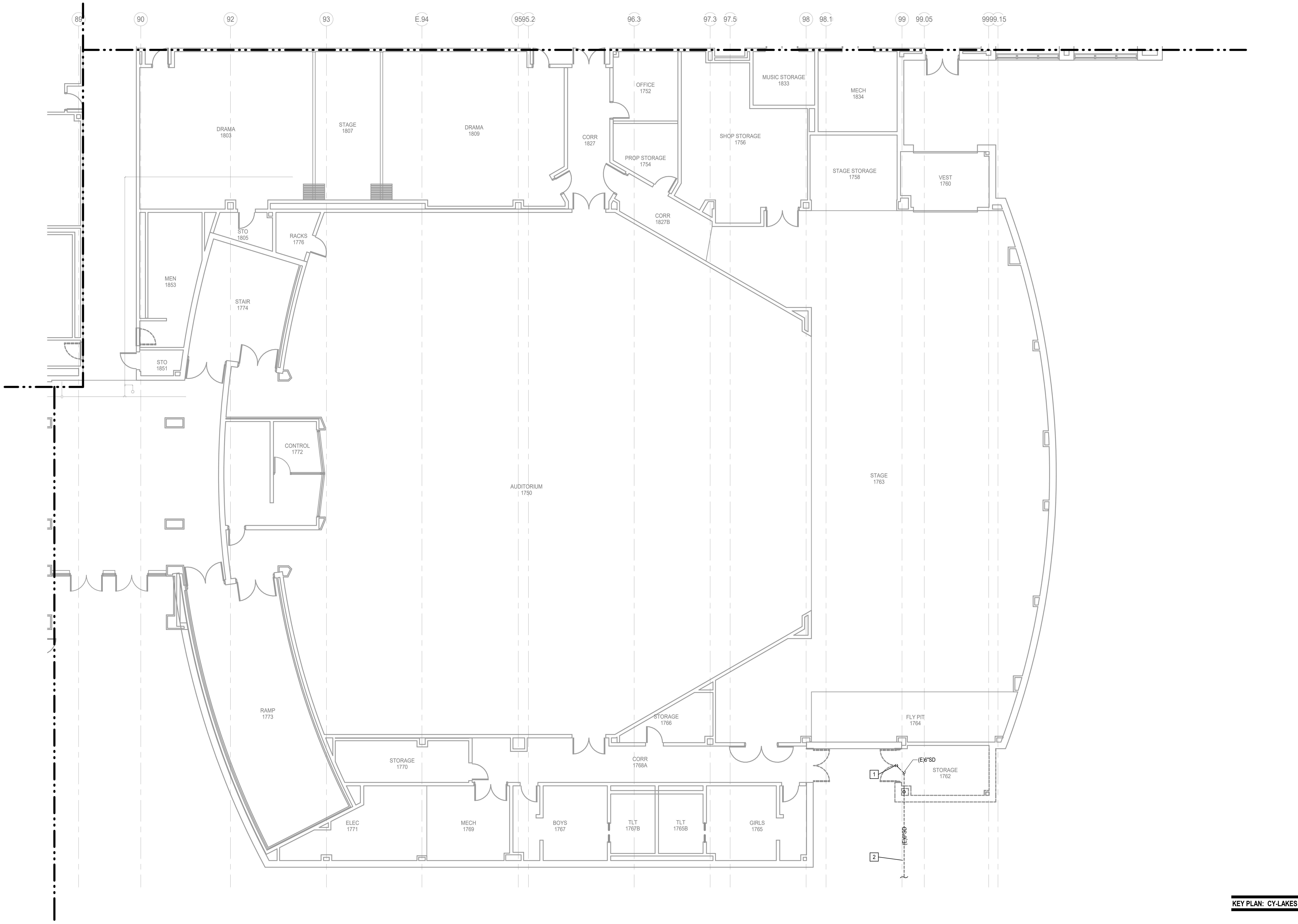
CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900



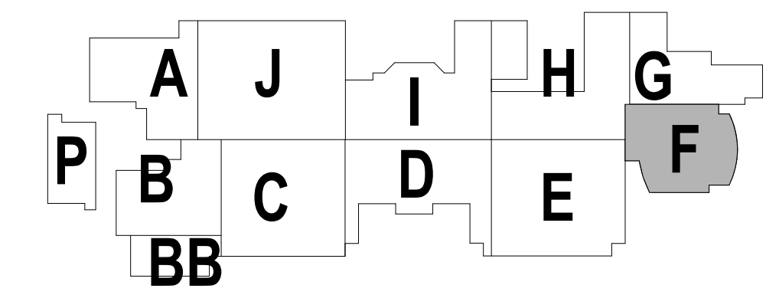
N

1 **PLUMBING DEMOLITION FLOOR PLAN - LEVEL 1 - AREA F**
Scale: 1/8" = 1'-0"

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING DEMOLITION
FIRST FLOOR PLAN -
AREA F

P0.01

of

PLUMBING GENERAL DEMOLITION NOTES:

1. IT IS IMPRACTICAL DUE TO THE STREET SEWER, STRUCTURAL FEATURES AND ARRANGMENT OF BUILDING TO OBTAIN A SLOPE OF 1/4" PER FOOT PIPING 4" THRU 6" SHALL HAVE A SLOPE OF 1/8" PER FOOT BELOW BUILDING TO 5'-0" OUTSIDE OF BUILDING.
2. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
3. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
4. SAWCUT EXISTING SLAB AS REQUIRED TO INSTALL NEW PIPING BELOW FLOOR SEAL AND PATCH FLOOR TO MATCH EXISTING UPON COMPLETTION.

PLUMBING KEYED NOTES:

1 EXISTING STORM PIPING BELOW SLAB TO BE REMOVED FROM POINT INDICATED ON PLANS.
2 EXISTING STORM CATCH BASIN BELOW SLAB TO BE REMOVED FROM POINT INDICATED ON PLANS.
3 EXISTING 3" FLOOR DRAIN TO REMOVED.
4 EXISTING 3" WASTE PIPING BELOW SLAB TO BE REMOVED.
5 EXISTING 2" VENT PIPING TO BE REMOVED.
6 EXISTING WALL HYDRANT AND 3/4" COLD WATER PIPING TO BE REMOVED FROM POINT INDICATED ON PLANS.
7 EXISTING WALL MOUNT DRINKING FOUNTAIN TO BE REMOVED. EXISTING WASTE VENT AND DOMESTIC WATER TO BE CAPPED IN CHASE ABOVE FLOOR. REFER TO ARCHITECTURAL PLANS.

Salas O'Brien
salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: **F-4111**
Project No: **2024-00197-00**

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

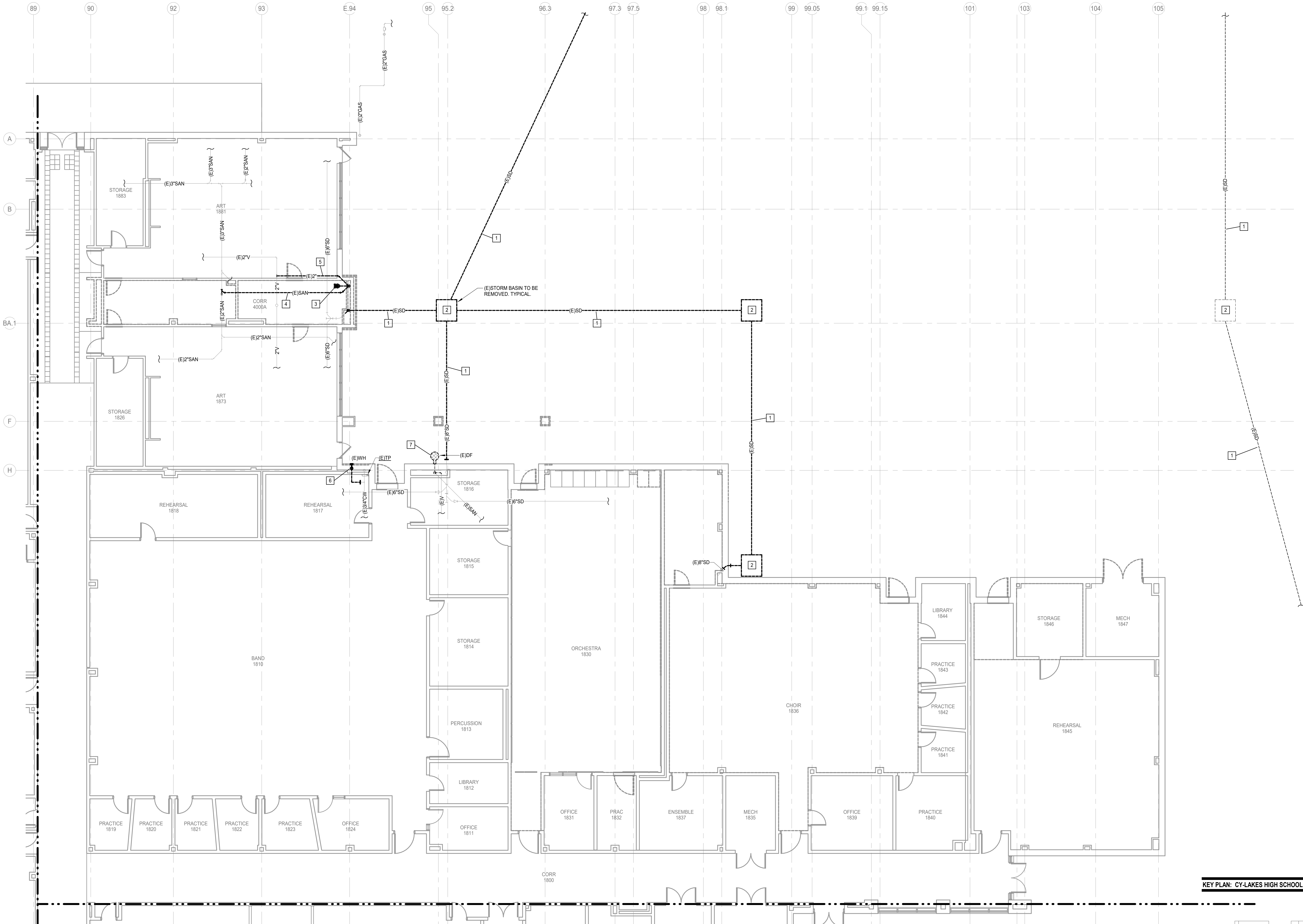
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

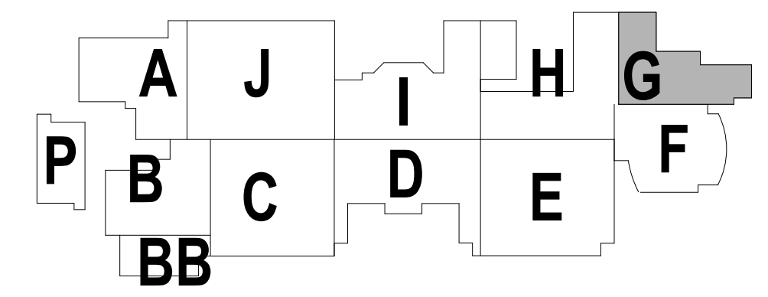


N

1 PLUMBING DEMOLITION FLOOR PLAN - LEVEL 1 - AREA G

Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING DEMOLITION FIRST FLOOR PLAN - AREA G

P0.02

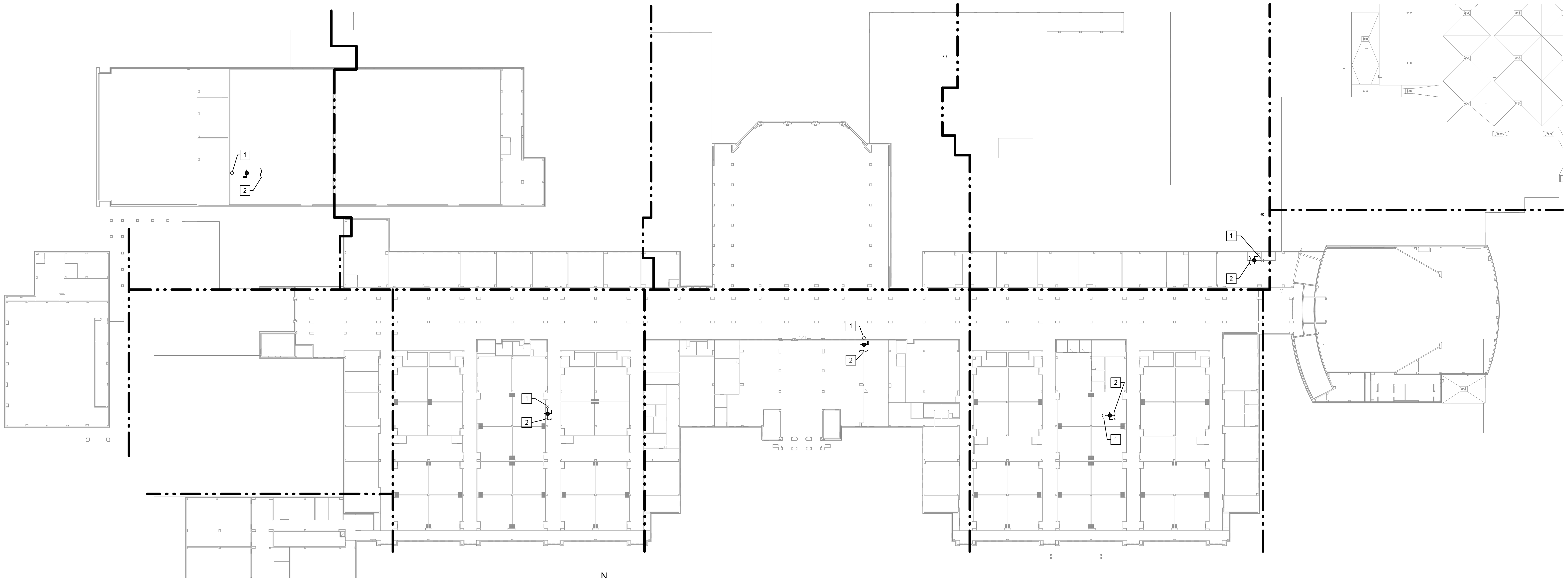
of

PLUMBING KEYED NOTES:

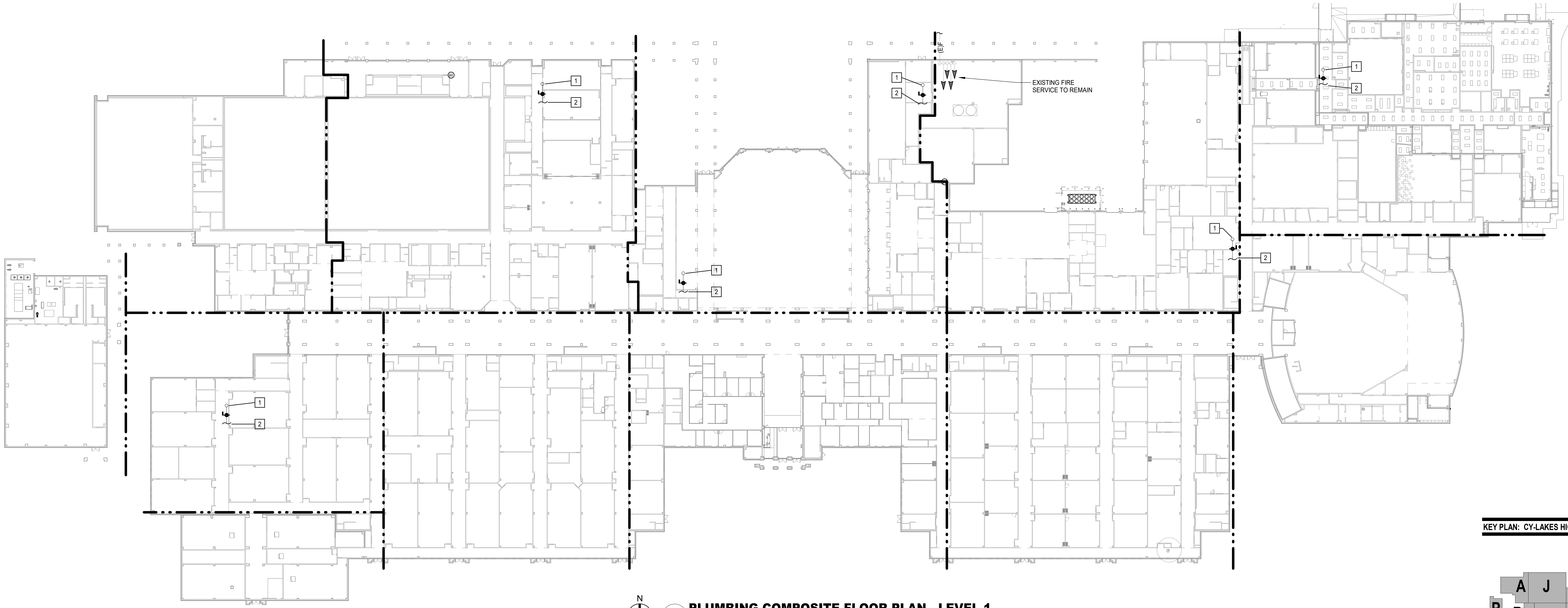
1. 3/4" COLD WATER UP TO SERVE ROOF HYDRANT (RH-1).
2. CONNECT NEW 3/4" COLD WATER PIPING TO CLOSEST 3/4" OR LARGER COLD WATER MAIN PIPING ROUTED IN CEILING SPACE BELOW. PROVIDE ACCESSIBLE SHUT-OFF VALVE. FIELD VERIFY EXACT SIZE, ROUTING, CONDITION OF EXISTING PIPING PRIOR TO PERFORMING ANY WORK.

Salas O'Brien
salasobrien.com **281-664-1900**
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00



2 **PLUMBING COMPOSITE FLOOR PLAN - LEVEL 2**
Scale: 1" = 40'-0"



1 **PLUMBING COMPOSITE FLOOR PLAN - LEVEL 1**
Scale: 1" = 40'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

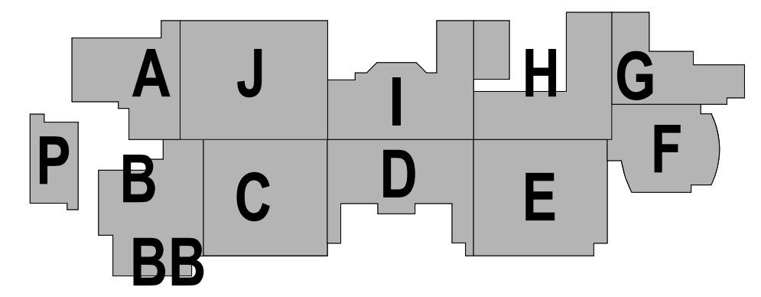
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING COMPOSITE
FLOOR PLANS

P1.00
____ of ____

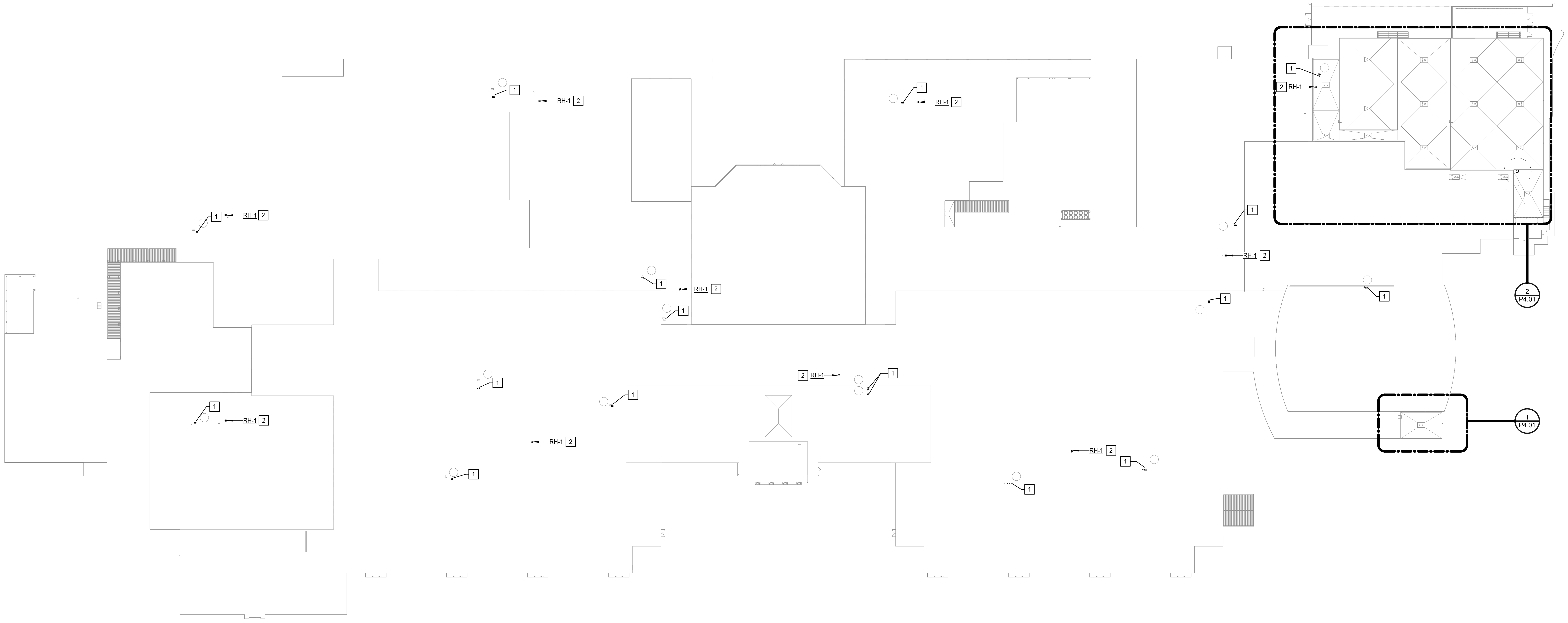
Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

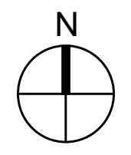
Registration: F-4111
Project No: 2024-00197-00

PLUMBING KEYED NOTES:

1. MECHANICAL CONDENSING UNIT ON ROOF.
2. ROOF HYDRANT (RH-1) MOUNTED ON ROOF TO SERVE MULTIPLE MECHANICAL CONDENSING UNITS.

GENERAL NOTE:
1. ROOF SURFACES SHALL NEVER BE USED FOR STORAGE OF MATERIALS AND SUPPLIES. IN THE EVENT THE ROOF SURFACE IS DAMAGED CONSTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIR COST. CLIENT WILL NOT ASSUME ANY RESPONSIBLILTY.





1 PLUMBING COMPOSITE ROOF PLAN
Scale: 1" = 40'-0"

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

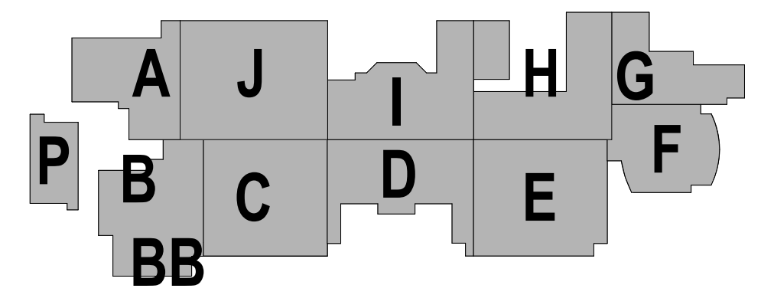
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

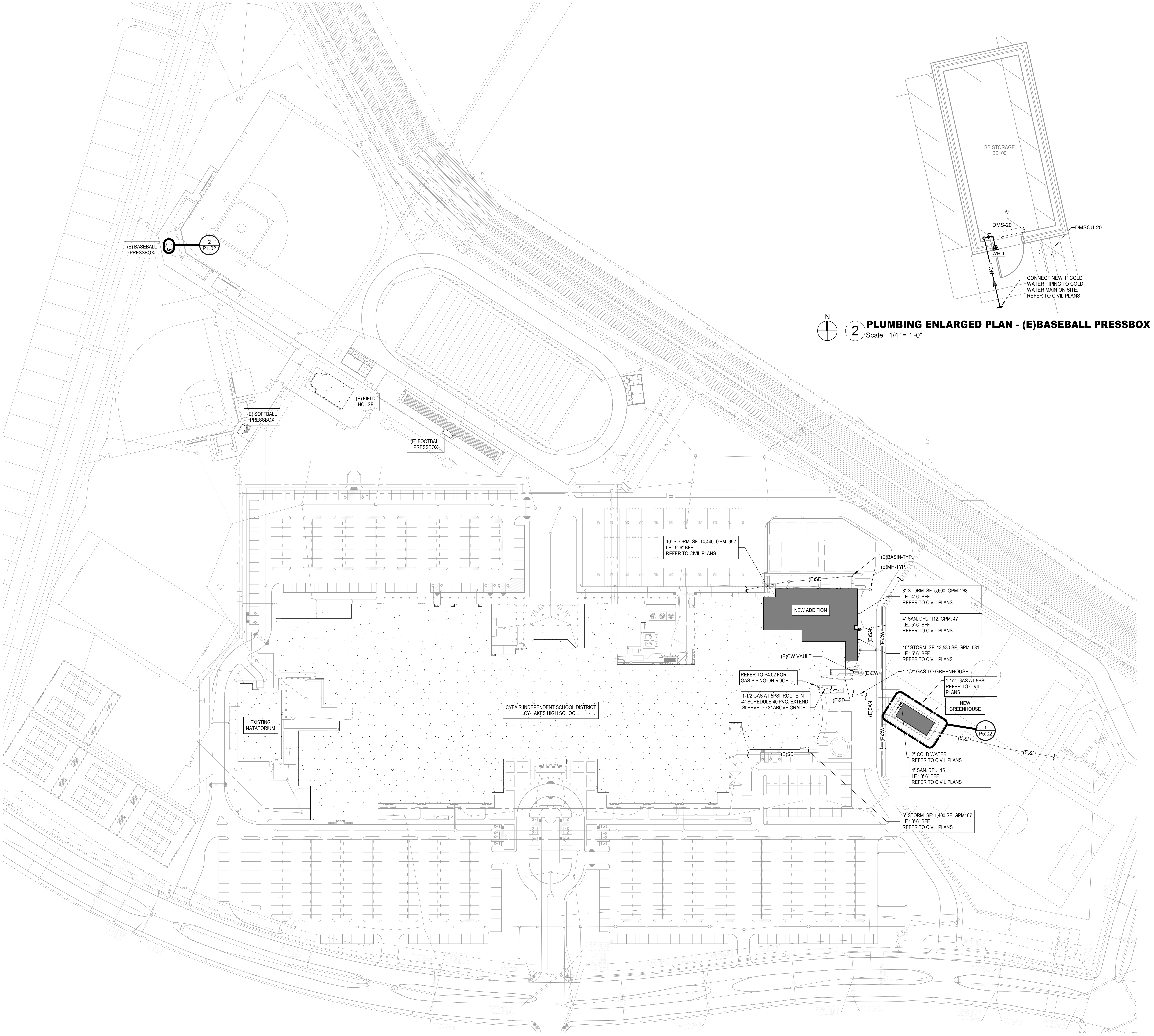


Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING COMPOSITE ROOF PLAN

P1.01

____ of ____



N

2 PLUMBING ENLARGED PLAN - (E)BASEBALL PRESSBOX
Scale: 1/4" = 1'-0"

N

1 PLUMBING SITE PLAN
Scale: 1" = 80'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING SITE PLAN

P1.02
of

PLUMBING KEYED NOTES:

1. 4" STORM FROM ROOF DRAIN ABOVE.
2. SAWCUT AND REMOVE CONCRETE FOR CONNECTION AND INSTALLATION OF NEW STORM TO EXISTING STORM BELOW FLOOR. CONTRACTOR TO VERIFY LOCATION OF EXISTING STORM BELOW FLOOR PRIOR TO PERFORMING ANY WORK.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

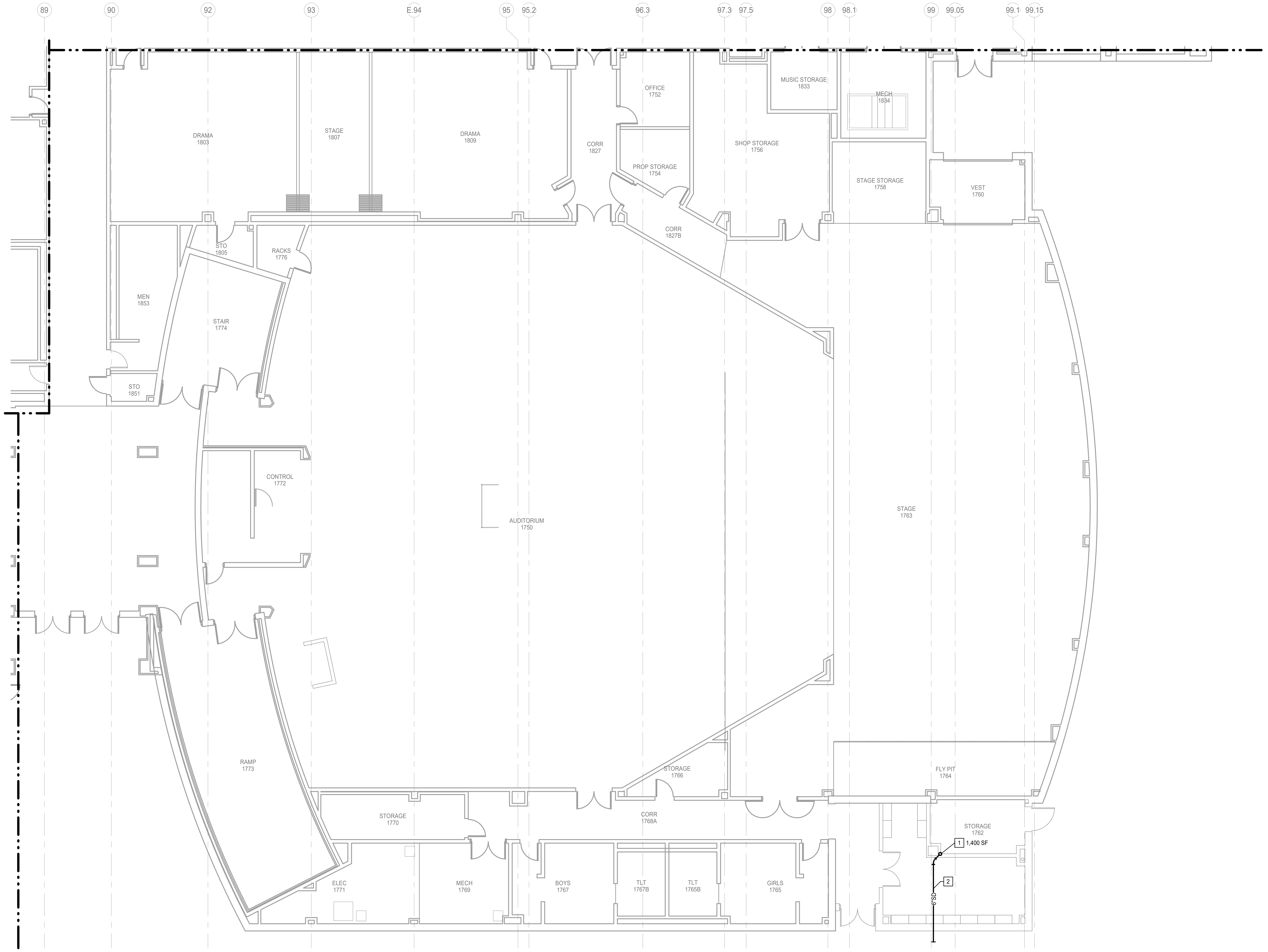
CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

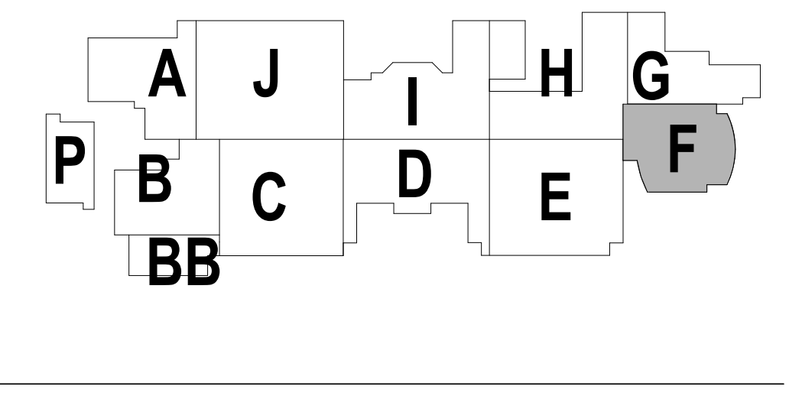


1 PLUMBING UNDERFLOOR PLAN - AREA F

Scale: 1/8" = 1'-0"

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING UNDERFLOOR PLAN - AREA F

P2.06

of

PLUMBING KEYED NOTES:

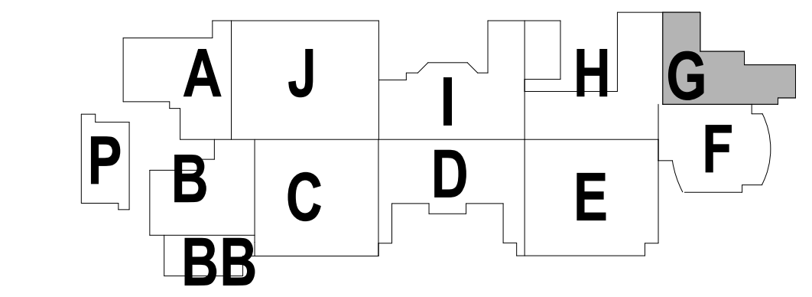
1. 6" STORM FROM ROOF DRAIN ABOVE.
2. 8" STORM FROM ROOF DRAIN ABOVE.
3. 2" VENT UP.
4. 2" WASTE FROM ABOVE.
5. 3" WASTE FROM ABOVE.
6. 4" WASTE FROM ABOVE.
7. FULL SIZE WASTE FROM CLEANOUT ABOVE.
8. SAWCUT AND REMOVE CONCRETE FOR CONNECTION AND INSTALLATION OF NEW STORM TO EXISTING STORM BELOW FLOOR. CONTRACTOR TO VERIFY LOCATION OF EXISTING STORM BELOW FLOOR PRIOR TO PERFORMING ANY WORK.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

1 PLUMBING UNDERFLOOR PLAN - AREA G
Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING UNDERFLOOR PLAN - AREA G

P2.07

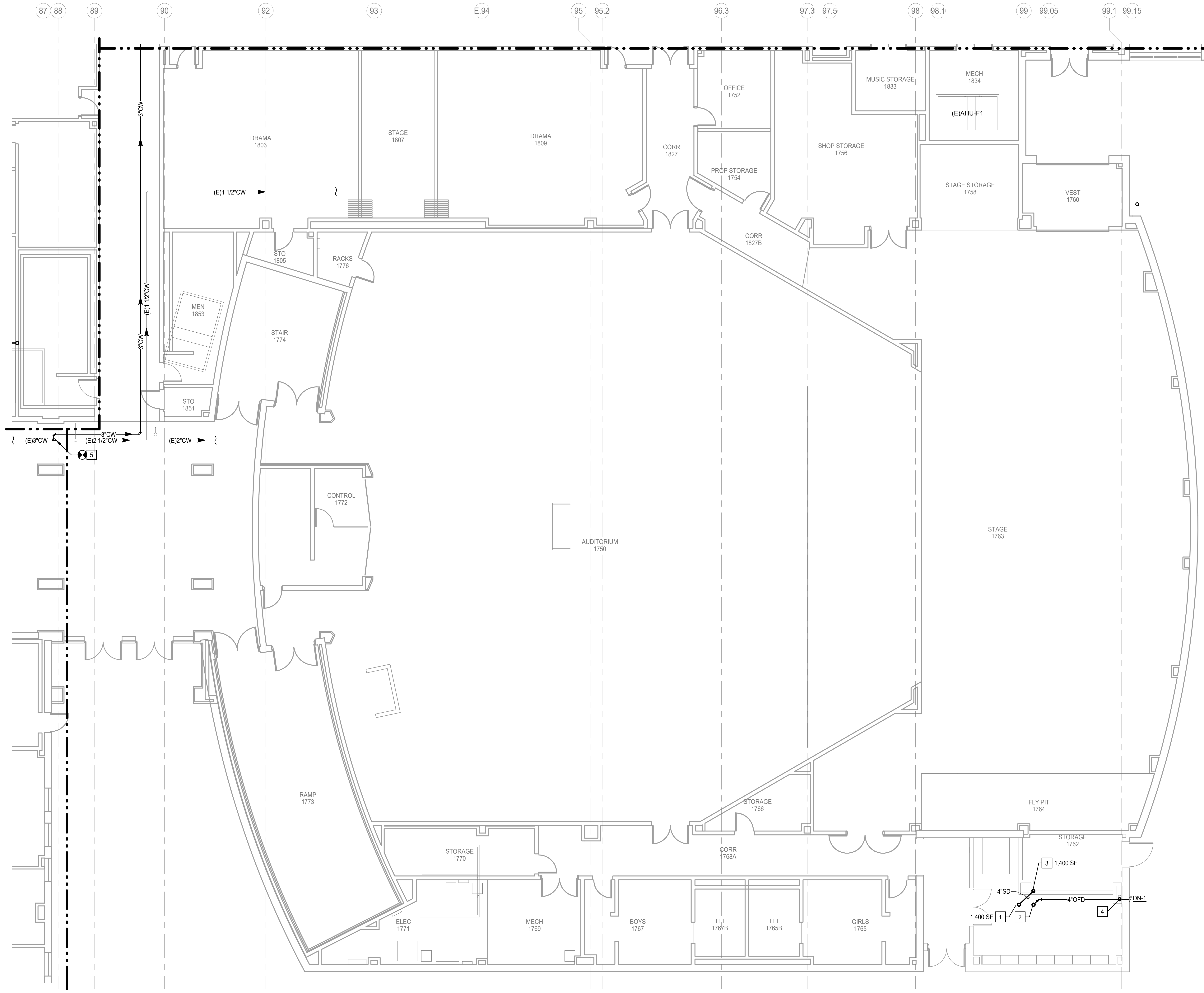
of

FIRE SPRINKLER NOTE:

EXISTING FIRE SPRINKLER SYSTEM TO BE MAINTAINED IN FULL OPERATING ORDER FOR ENTIRE BUILDING AT ALL TIMES. LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND CALCULATIONS FOR UP DATE CHANGES TO EXISTING SYSTEM AND TO COMPLY WITH NEW SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING KEYED NOTES:

1 4" STORM FROM ROOF DRAIN ABOVE.
2 4" STORM OVERFLOW FROM ROOF DRAIN ABOVE.
3 4" STORM DOWN TO RECONNECT TO EXISTING STORM PIPING BELOW FLOOR SLAB.
4 4" STORM OVERFLOW DOWN TO SERVE DOWNSPOUTY NOZZLE (DN-1).
5 CONNECT NEW 3" COLD WATER TO EXISTING 3" COLD WATER MAIN ABOVE CEILING IN CORRIDOR. FIELD VERIFY PRIOR TO PERFORMING ANY WORK.



1 PLUMBING FLOOR PLAN - LEVEL 1 - AREA F
Scale: 1/8" = 1'-0"

N

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

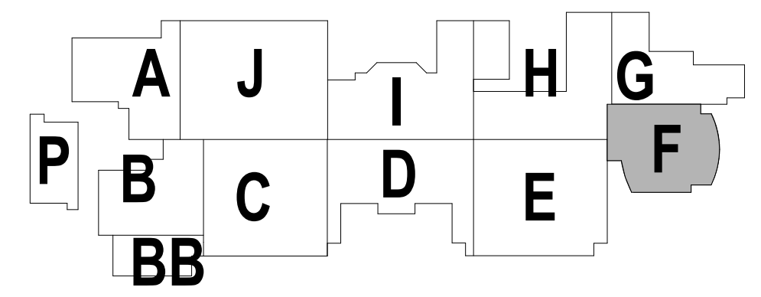
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING FIRST FLOOR PLAN - AREA F

P3.06

of

FIRE SPRINKLER NOTE:

EXISTING FIRE SPRINKLER SYSTEM TO BE MAINTAINED IN FULL OPERATING ORDER FOR ENTIRE BUILDING AT ALL TIMES. LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND CALCULATIONS FOR UP DATE CHANGES TO EXISTING SYSTEM AND TO COMPLY WITH NEW SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING KEYED NOTES:

1 4" STORM FROM ROOF DRAIN ABOVE.
2 6" STORM FROM ROOF DRAIN ABOVE.
3 4" STORM OVERFLOW FROM ROOF DRAIN ABOVE.
4 6" STORM OVERFLOW FROM ROOF DRAIN ABOVE.
5 4" STORM DOWN.
6 4" STORM OVERFLOW DOWN.
7 6" STORM DOWN
8 6" STORM OVERFLOW DOWN.
9 8" STORM DOWN
10 8" STORM OVERFLOW DOWN
11 2" VENT FROM BELOW.
12 2" WASTE DOWN, 2" VENT UP.
13 2" WASTE DOWN, 2" VENT UP, 3/4" HOT AND COLD WATER DOWN TO SERVE FIXTURE(S).
14 3/4" COLD WATER DOWN TO SERVE FIXTURE(S).
15 EMERGENCY SHOWER ARE TO HAVE FLOW SENSOR AND CONNECT TO BLUE ALARM LIGHT IN ADJACENT CORRIDOR.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

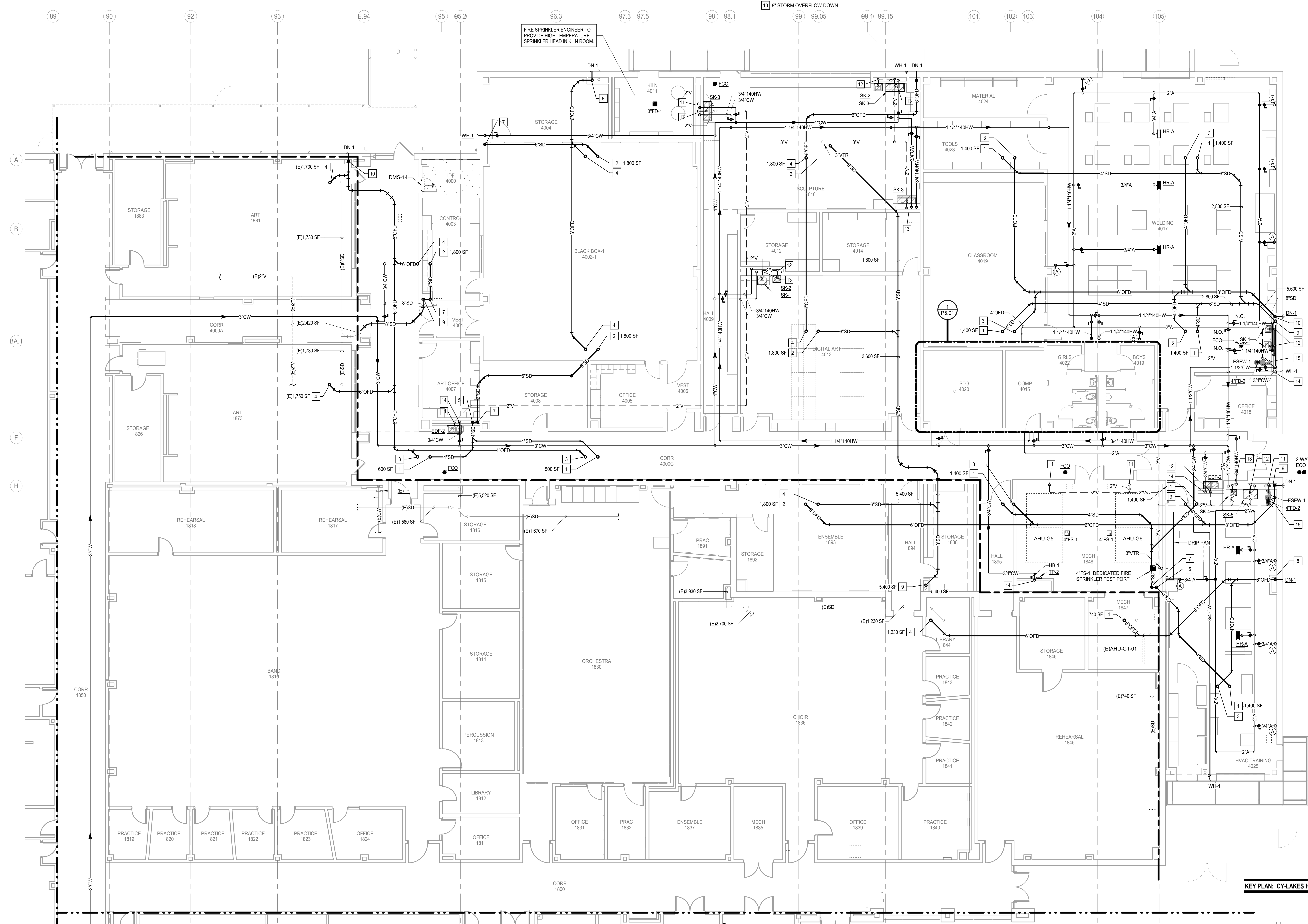
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

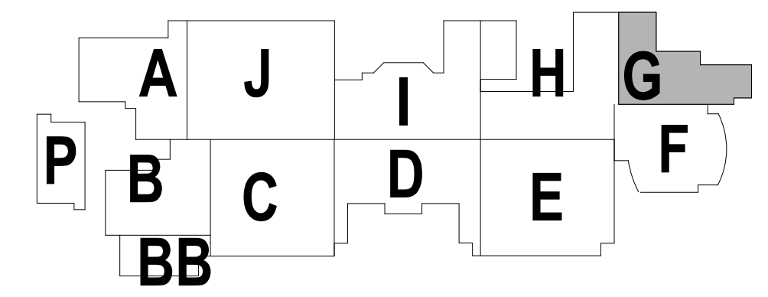
Revisions / Submission



1 PLUMBING FLOOR PLAN - LEVEL 1 - AREA G

Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: VU

PLUMBING FIRST FLOOR PLAN - AREA G

P3.07

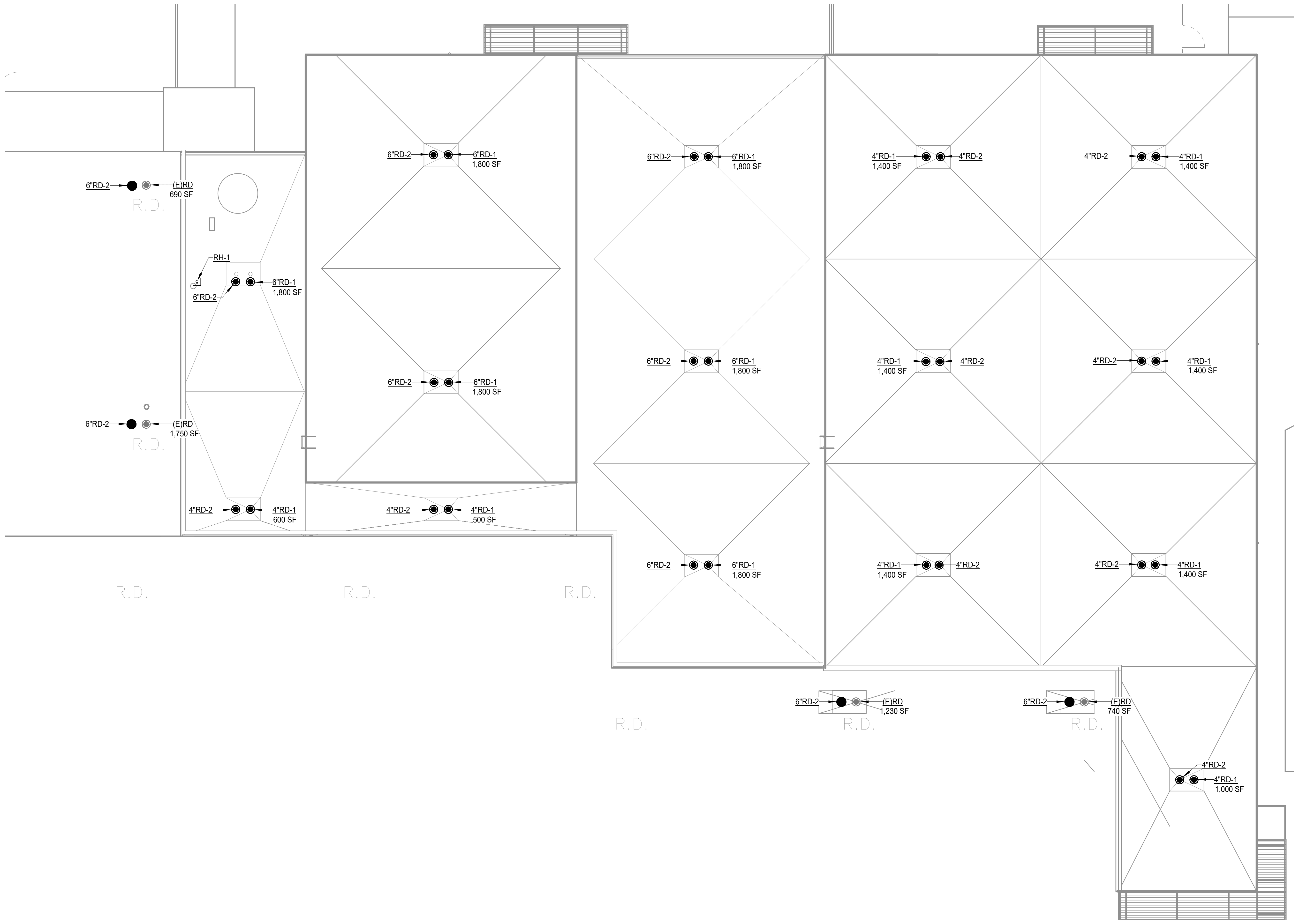
of

PLUMBING GENERAL STORM NOTES:

1. STORM SIZING IS BASED ON IPC 2018 - HOUSTON TEXAS OF 4.5" PER HOUR 100 YEAR STORM RAINFALL RATE. USED 4.5" RAINFALL RATE COLUMN.
2. UNLESS OTHERWISE SHOWN ON PLUMBING DRAWINGS, REFER TO ARCHITECTURAL PLANS FOR OVERFLOW STORM SYSTEM.
3. STORM DRAIN DISCHARGE, SLOPE ALL EXTERIOR STORM DRAIN RUN OUTS TO 5FT LINE. POINT OF CONNECTION WITH SITE CIVIL DRAINS. AT 1/4 INCH PER FOOT.ALL OTHER STORM DRAIN PIPING SHALL SLOPE 1/8 INCH PER FOOT UNLESS NOTED OTHERWISE. CONTRACTOR SHALL FIELD COORDINATE EXACT LOCATIONS AND DEPTHS OF PIPING PRIOR TO INSTALLATION. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING MISALIGNED PIPING.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

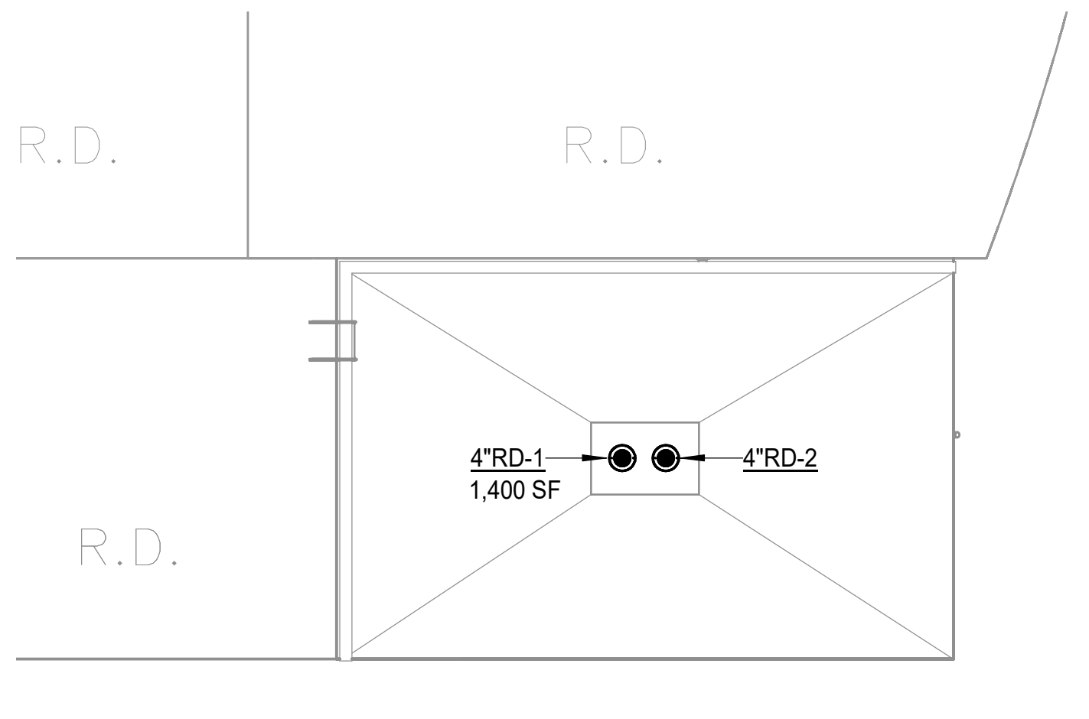
Registration: F-4111
Project No: 2024-00197-00



N

2 PLUMBING ENLARGED ROOF PLAN - AREA G

Scale: 3/32" = 1'-0"

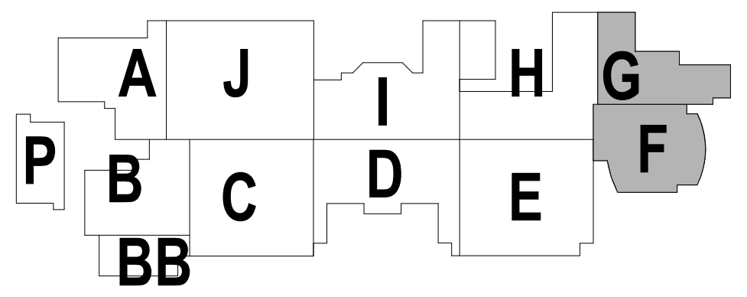


N

1 PLUMBING ENLARGED ROOF PLAN - AREA F

Scale: 3/32" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: VU

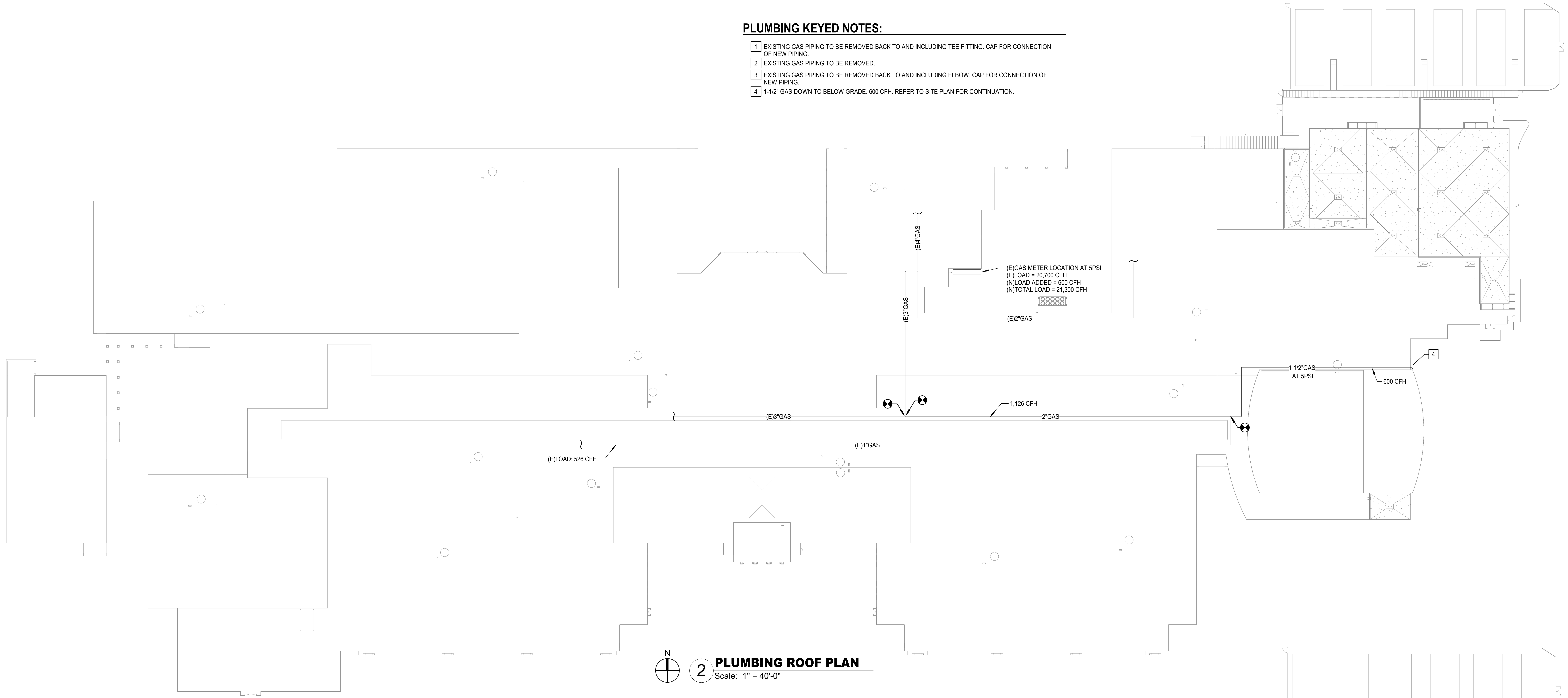
PLUMBING ROOF PLAN

P4.01

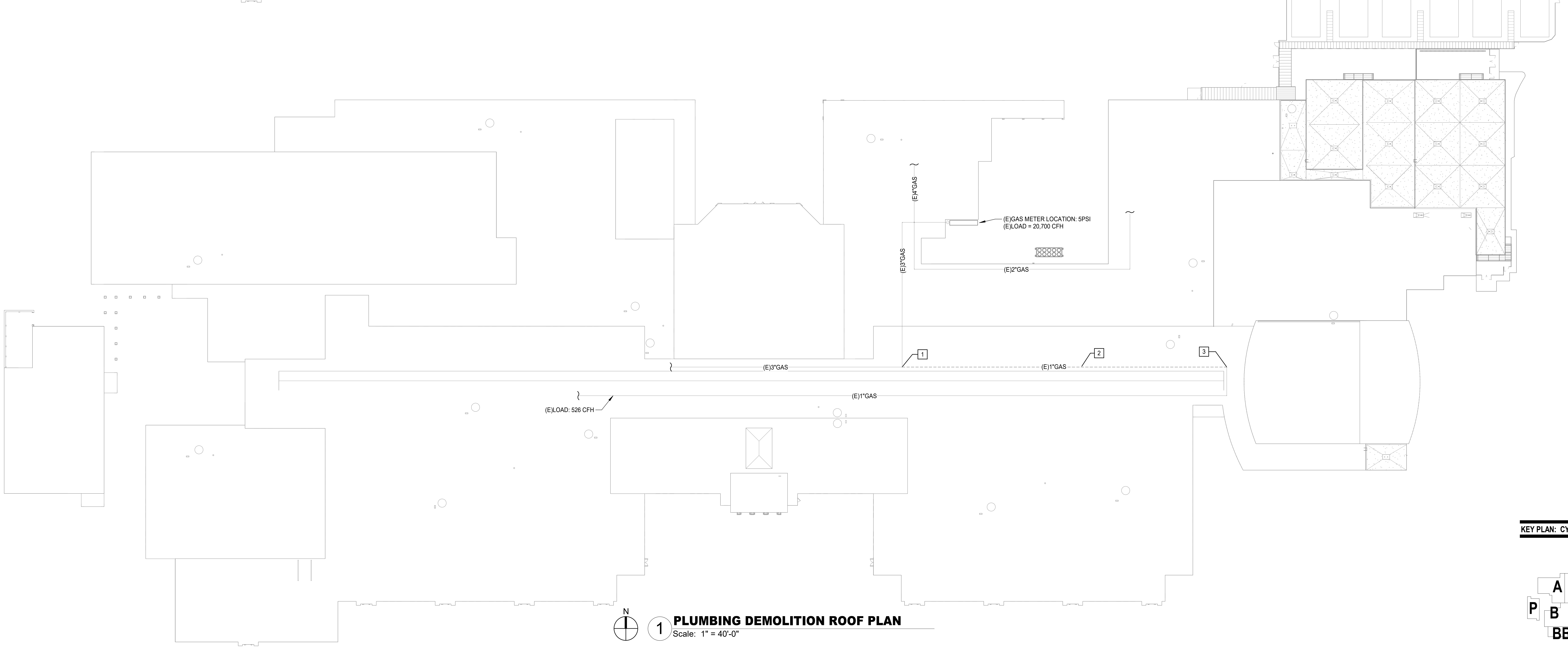
of

PLUMBING KEYED NOTES:

1. EXISTING GAS PIPING TO BE REMOVED BACK TO AND INCLUDING TEE FITTING. CAP FOR CONNECTION OF NEW PIPING.
2. EXISTING GAS PIPING TO BE REMOVED.
3. EXISTING GAS PIPING TO BE REMOVED BACK TO AND INCLUDING ELBOW. CAP FOR CONNECTION OF NEW PIPING.
4. 1-1/2" GAS DOWN TO BELOW GRADE. 600 CFH. REFER TO SITE PLAN FOR CONTINUATION.



2 PLUMBING ROOF PLAN
Scale: 1" = 40'-0"



1 PLUMBING DEMOLITION ROOF PLAN
Scale: 1" = 40'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

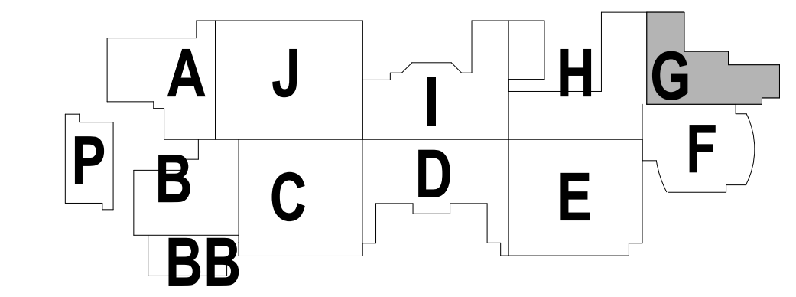
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING ROOF PLANS - NATURAL GAS

P4.02

___ of ___

FIRE SPRINKLER NOTE:

EXISTING FIRE SPRINKLER SYSTEM TO BE MAINTAINED IN FULL OPERATING ORDER FOR ENTIRE BUILDING AT ALL TIMES. LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND CALCULATIONS FOR UP DATE CHANGES TO EXISTING SYSTEM AND TO COMPLY WITH NEW SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL CODE REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLUMBING KEYED NOTES:

1 2"VENT FROM BELOW.
2 2" WASTE DOWN, 2"VENT UP.
3 4" WASTE DOWN, 2"VENT UP.
4 3/4" COLD WATER DOWN TO SERVE FIXTURE(S).
5 2" COLD WATER DOWN TO SERVE FIXTURE(S).
6 1-1/4" HOT WATER DOWN IN CHASE TO SERVE FIXTURE(S).
7 1-1/4" HOT WATER FROM CHASE BELOW.
8 4"FS-1. DEDICATED FLOOR SINK FOR FIRE SPRINKLER TEST PORT. REFER TO REFER TO FIRE PROTECTION PLANS FOR ROUTING OF DRAIN.
9 4" WASTE DOWN BELOW SLAB.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

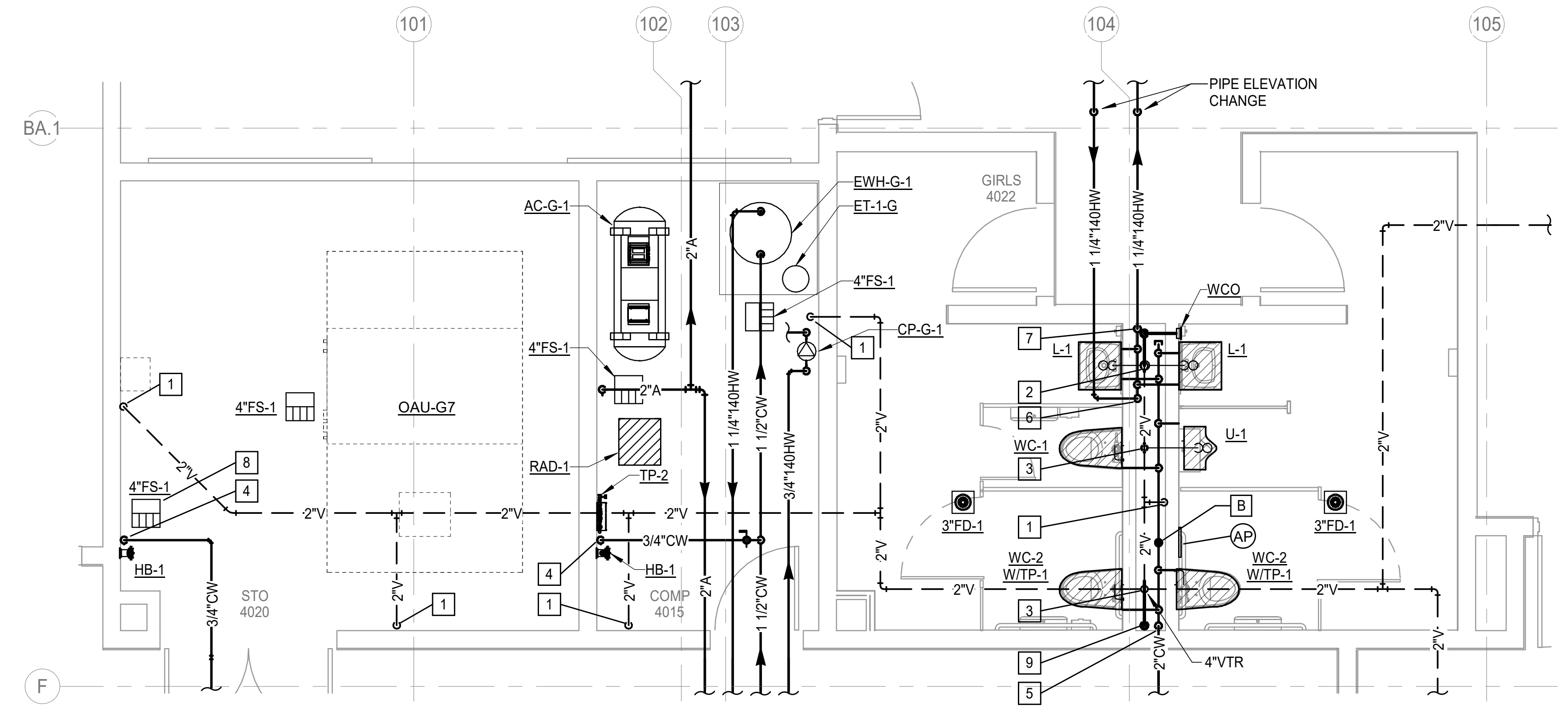
CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900



PLUMBING FLOOR PLAN - LEVEL 1 - AREA G - MECH 4016, GIRLS 4022, BOYS 4019

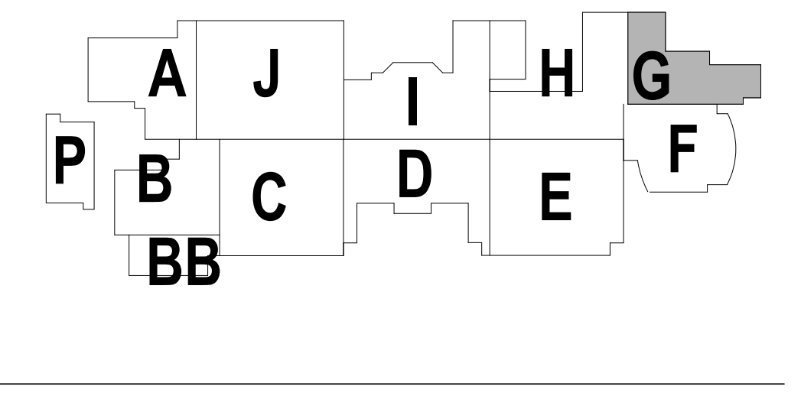
N
1
Scale: 1/4" = 1'-0"

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	VU

PLUMBING ENLARGED
PLANS

P5.01
____ of ____

PLUMBING KEYED NOTES:

1. REFER TO SHEET P1.02 FOR CONTINUATION.
2. GAS PIPING THROUGH WALL 18" ABOVE FINISH GRADE THEN UP TO AS HIGH AS POSSIBLE INSIDE GREENHOUSE. REFER TO DETAIL.
3. 2"CW FROM BELOW SLAB. 2" WATER ENTRY. REFER TO DETAIL.
4. 2" GAS UP AT 4OZ PRESSURE.
5. 3/4" CW DOWN.
6. 3" VENT UP TO 4" VTR.
7. INSTALL CHECK VALVE. 2" COLD WATER PIPING TO WATER CONNECTION OF PRE-PACKAGED GREEHOUSE. SHALL INCLUDE CONNECTION TO BUILDING MISTING SYSTEM.
8. 1-1/2" GAS DOWN FOR UNIT HEATER CONNECTION. 300 CFH.
9. 1" CW DOWN.
10. PRESSURE REGULATOR IN VERTICAL FROM 5PSI TO 4OZ PRESSURE. 600 CFH.
11. 2" CW UP.
12. 1" CW DOWN TO SERVES PLUMBING FIXTURES.
13. REFER TO DETAIL FOR DOMESTIC WATER PIPING AND INSTANTANEOUS WATER HEATER SPECIFICATION.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

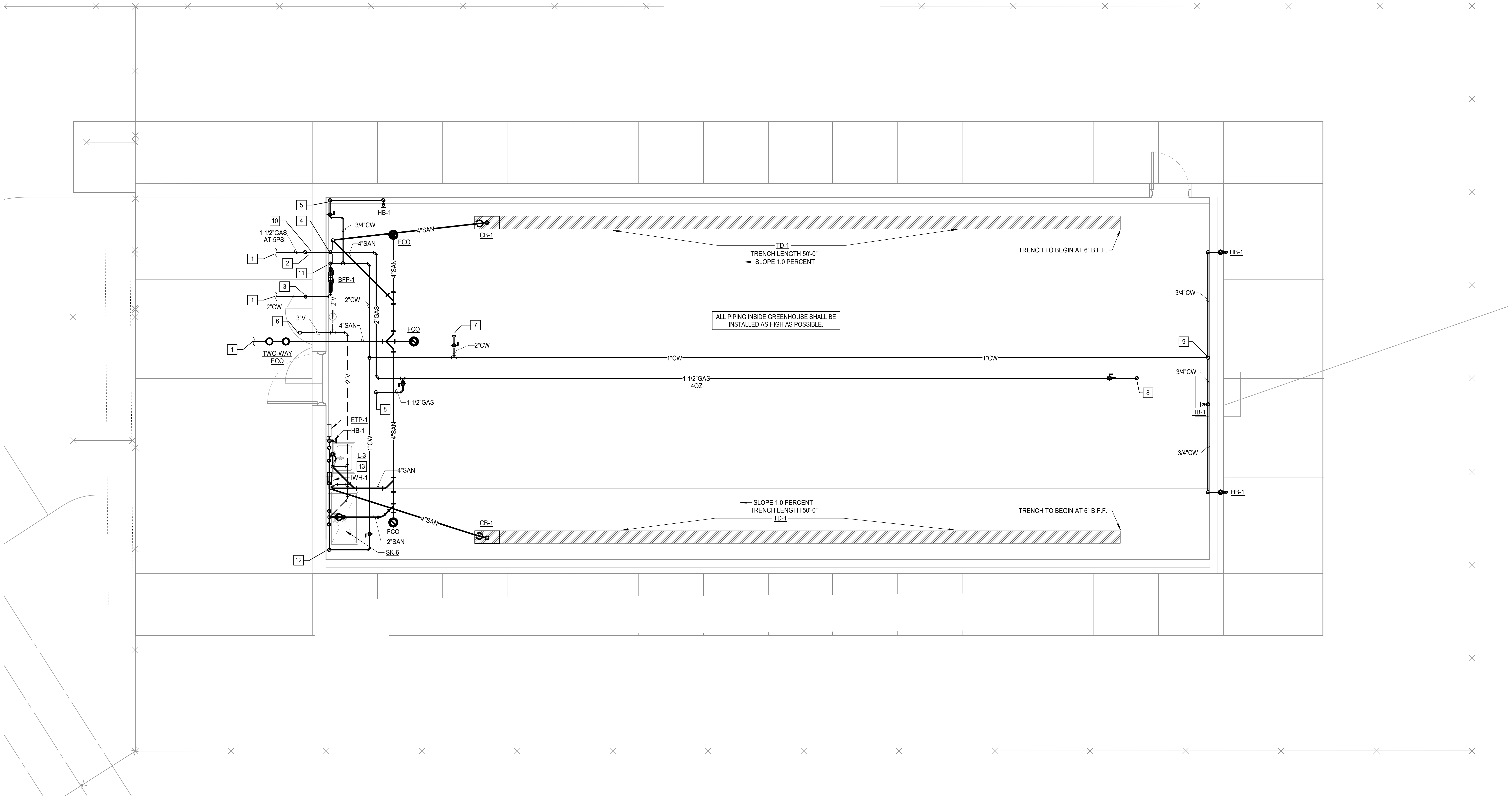
Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP



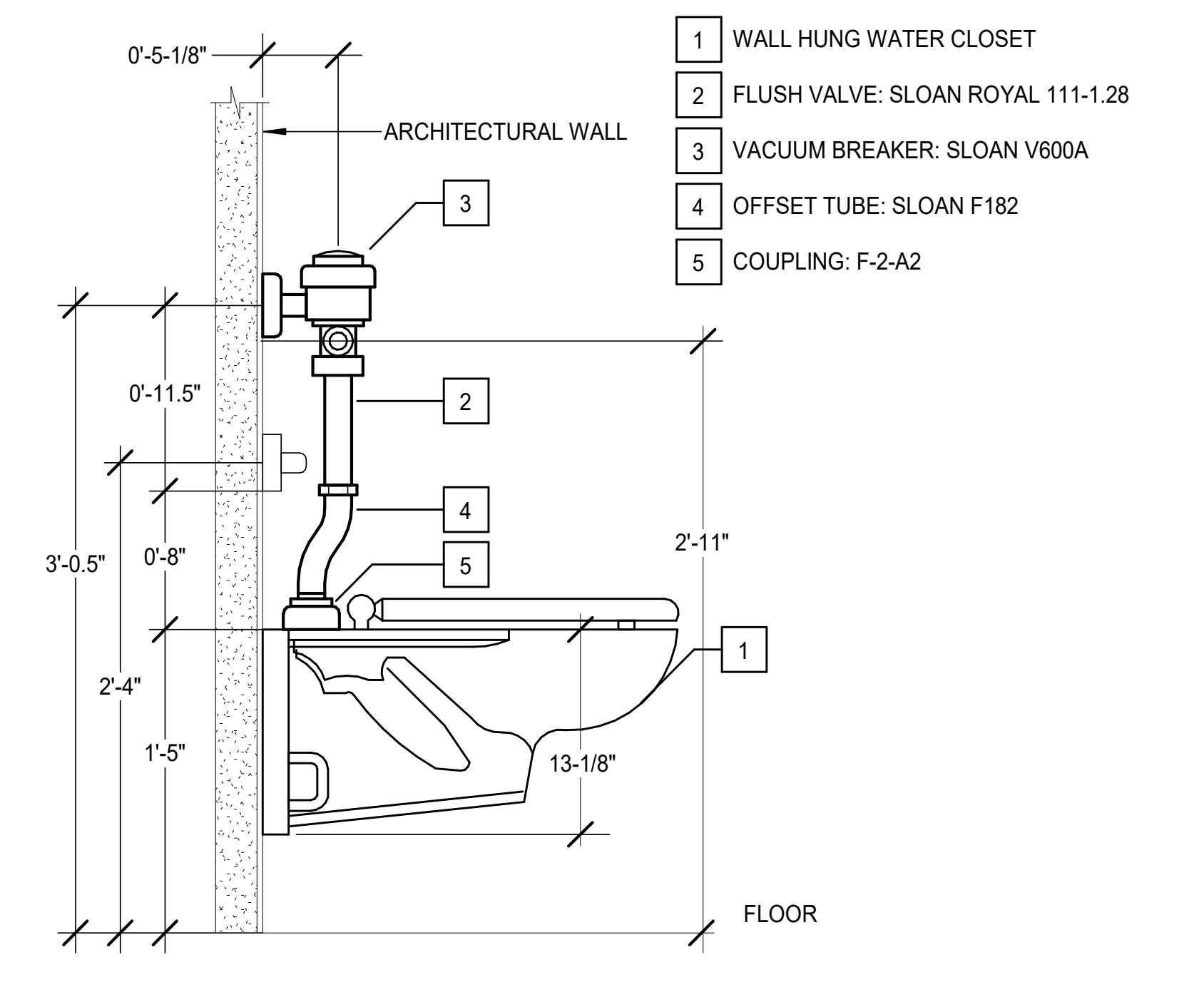
N
1 **PLUMBING ENLARGED PLAN - NEW GREENHOUSE**
Scale: 1/4" = 1'-0"

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: VU

PLUMBING ENLARGED FLOOR PLAN - GREENHOUSE

P5.02
of

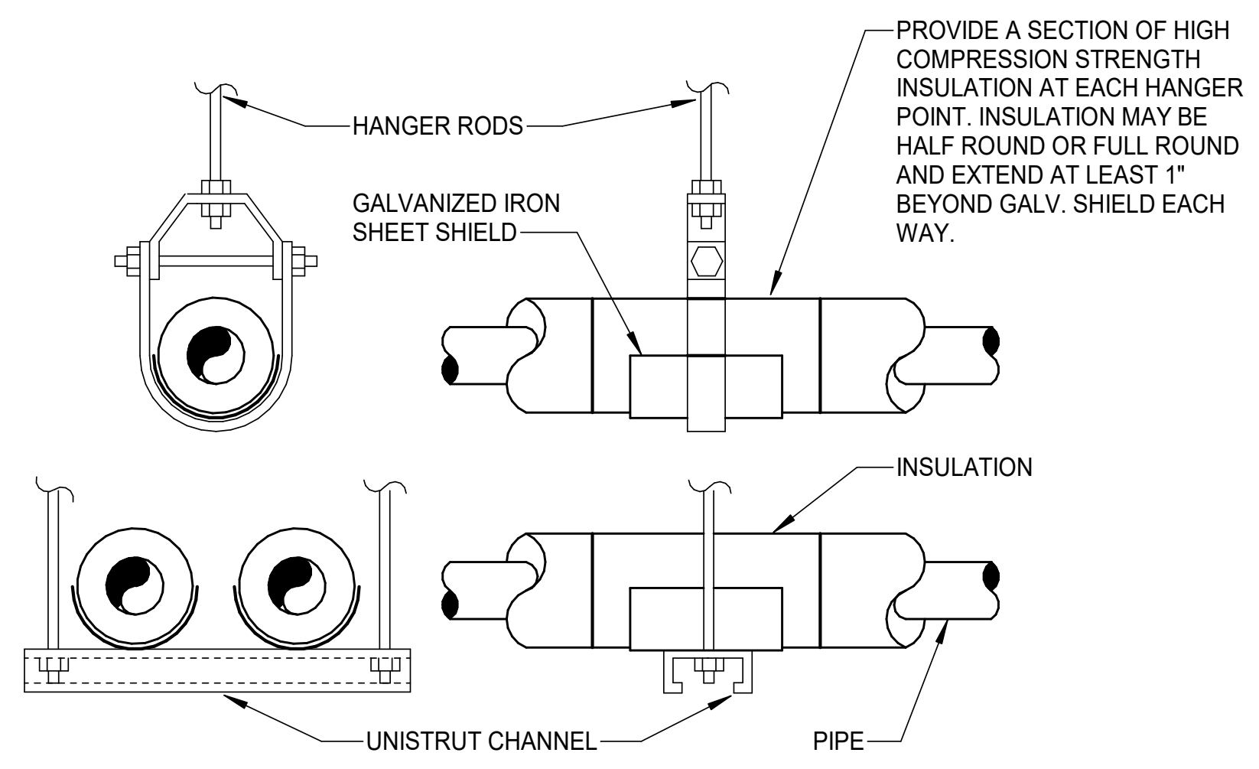


20 ADA FLUSH VALVE OFFSET TUBE

SCALE: NONE

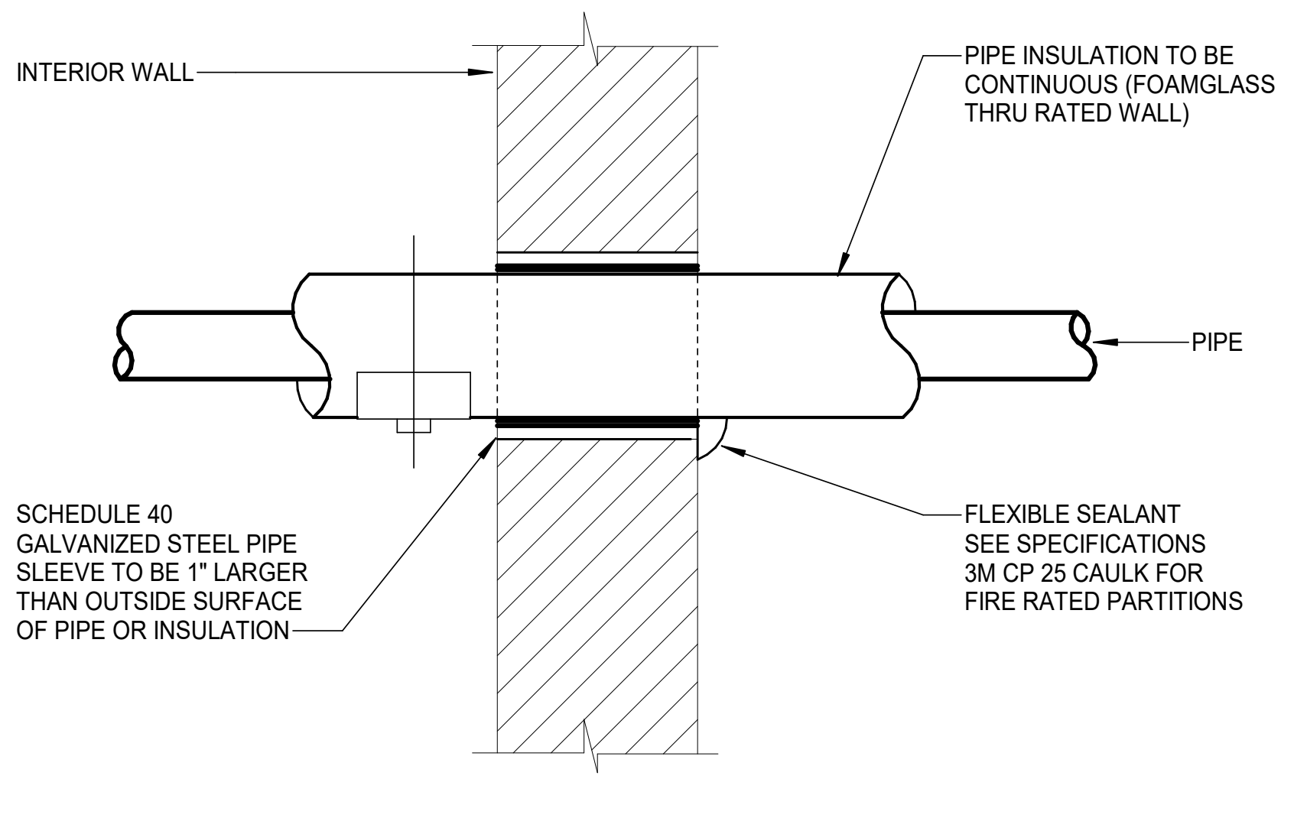
MINIMUM DIMENSIONS OF GALVANIZED SHEETMETAL PROTECTION SHIELDS AT PIPE HANGERS

NOMINAL SIZE PIPE	SHIELD LENGTH (IN.)	GAUGE THICKNESS
1/2" & 3/4"	12	18
1" - 2-1/2"	12	18
3" - 4"	16	18
6"	18	16



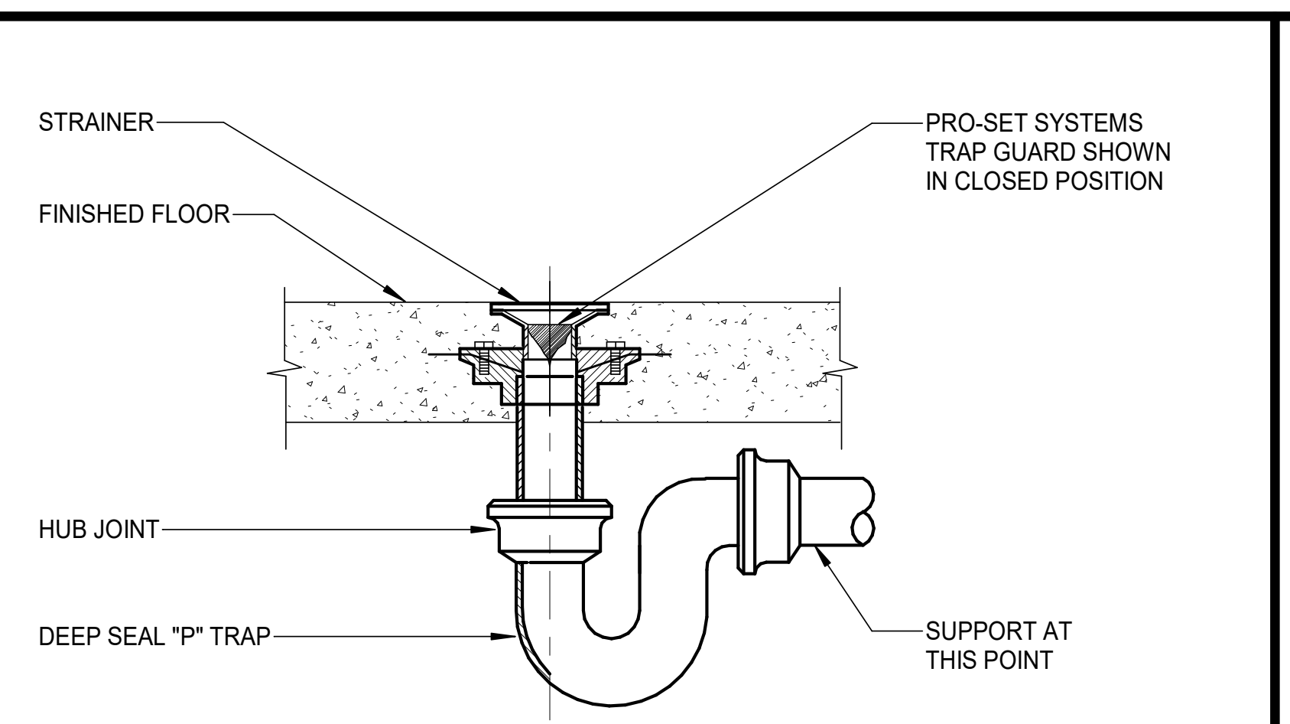
16 PIPE SHIELDS FOR INSULATED PIPING

SCALE: NONE



12 INTERIOR WALL PENETRATION

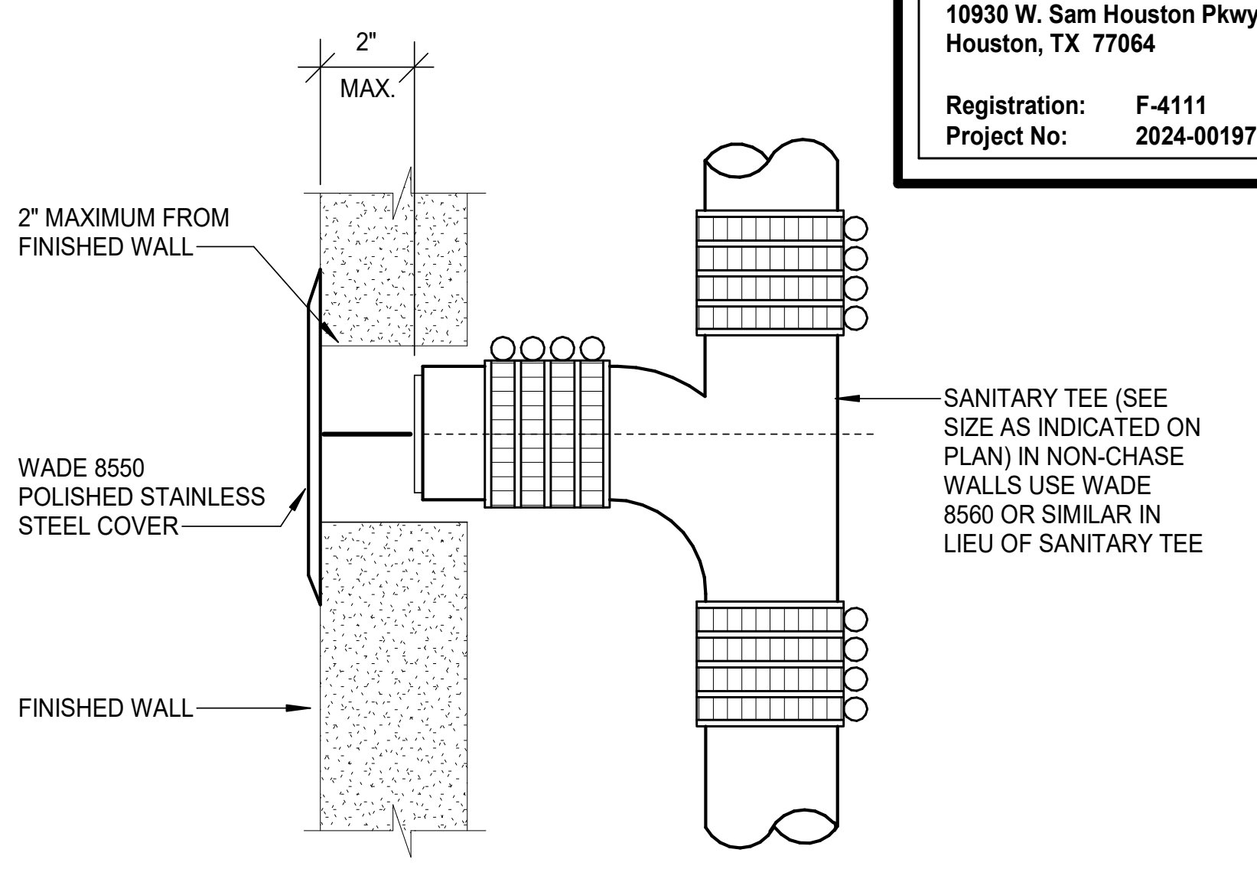
SCALE: NONE



NOTES:
1. TRAP GUARD SHALL BE FACTORY FITTED TO MATCH EACH FLOOR DRAIN (ANDFLOOR SINK) BY SIZE, MODEL, AND MANUFACTURER.
2. FLOOR SINK TRAP GUARD INSTALLATION IS SIMILAR.
3. INSTALLATION OF TRAP GUARD TO BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. INSERT TRAP GUARD ONLY AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS TITE SEAL. FOR DRAIN RODDING AFTER INSTALLATION, INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

8 TRAP SEAL PROTECTION

SCALE: NONE

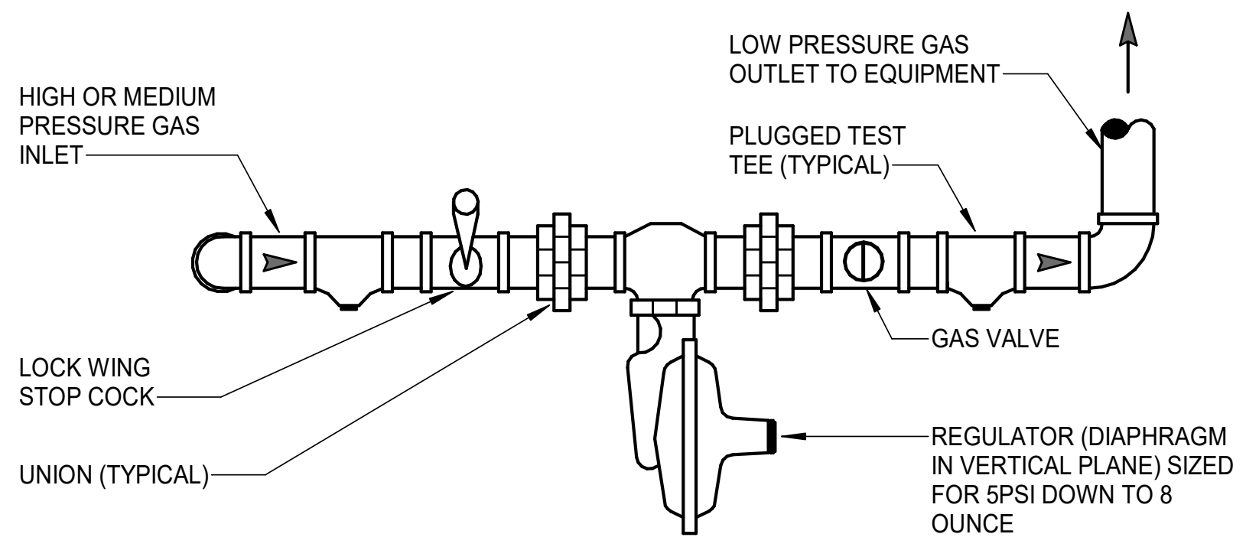


4 WALL CLEANOUT - TYPICAL

SCALE: NONE

PROVIDE AMERICAN METER COMPANY REGULATORS OR APPROVED EQUAL, SUITABLE FOR OUTDOOR INSTALLATION. REGULATORS OUTSIDE EXPOSED TO WEATHER SHALL BE INSTALLED WITH VENT IN VERTICAL DOWN POSITION.

SHALL CONFORM TO MATERIAL REQUIREMENTS OF ASTM A420 OR ASME B16.3 AND PERFORMANCE CRITERIA OF ANSI/CSA LC4.

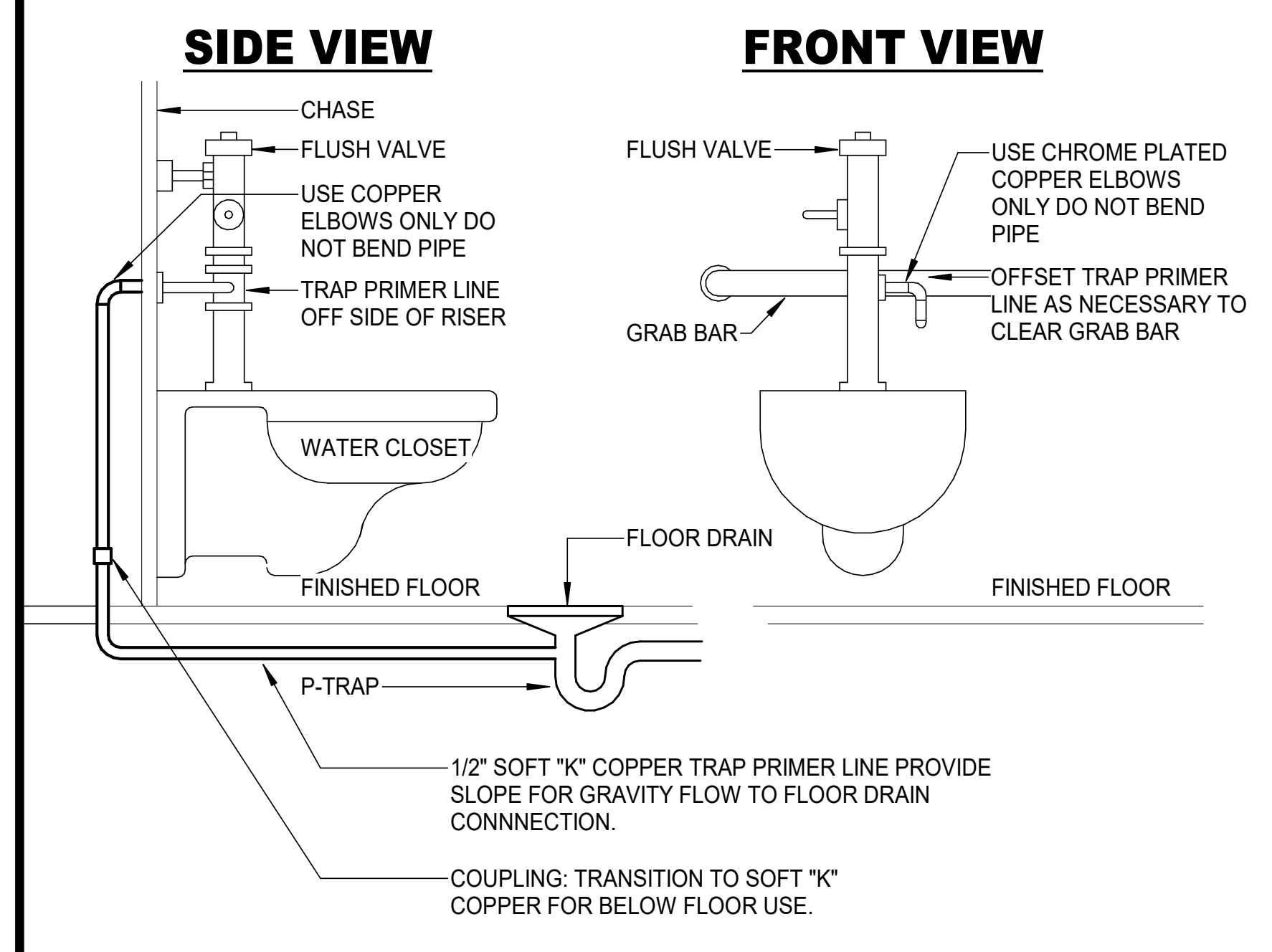


REFER TO PLANS FOR PIPE SIZES.

NOTE:
ALL GAS PRESSURE REGULATOR LOCATED IN PLENUMS ARE TO BE ROUTED TO EXTERIOR ACCORDING TO JURISDICTION HAVING AUTHROITY.

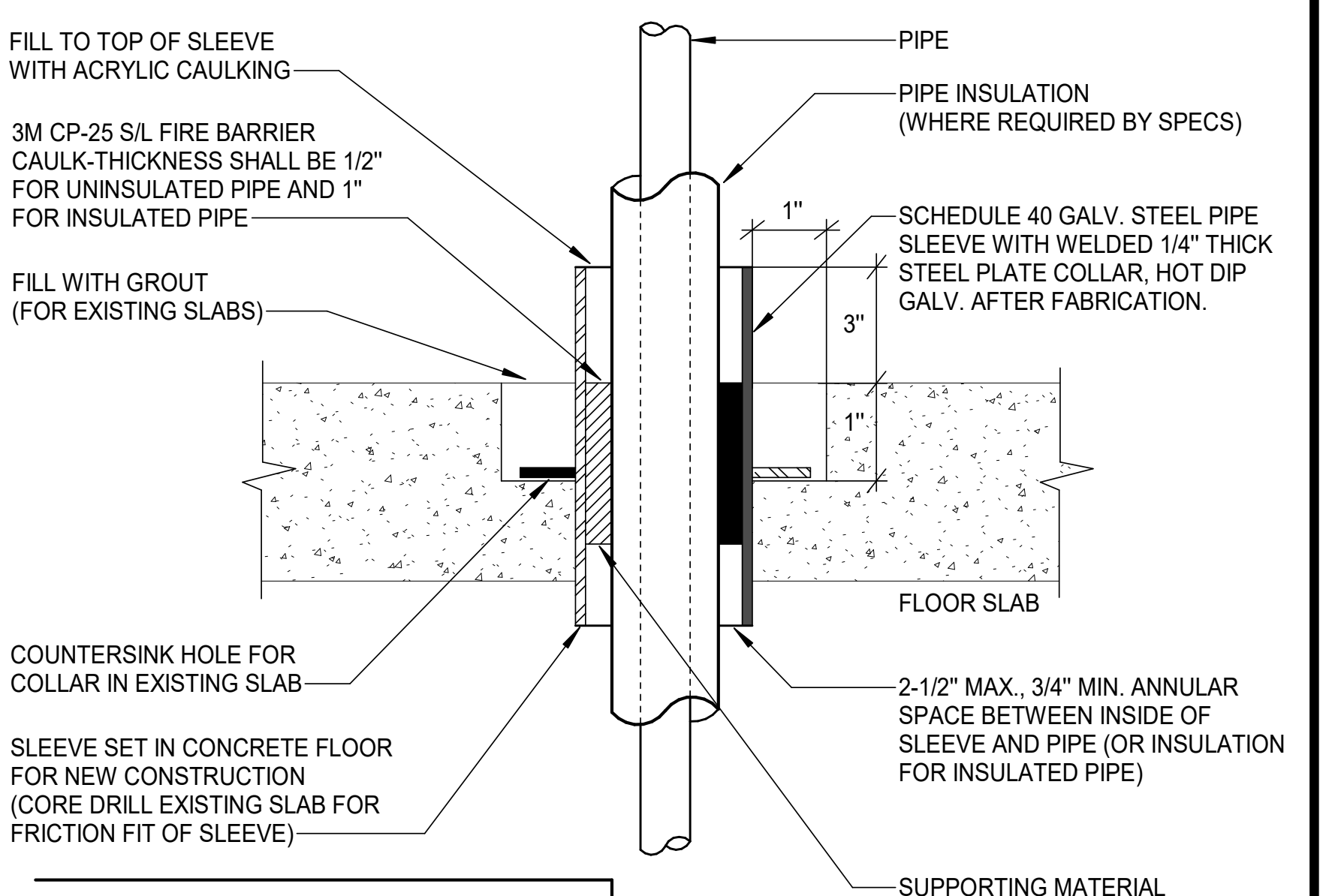
19 GAS PRESSURE REGULATOR INSTALLATION

SCALE: NONE



15 MECHANICAL FLUSH VALVE TRAP PRIMER

SCALE: NONE

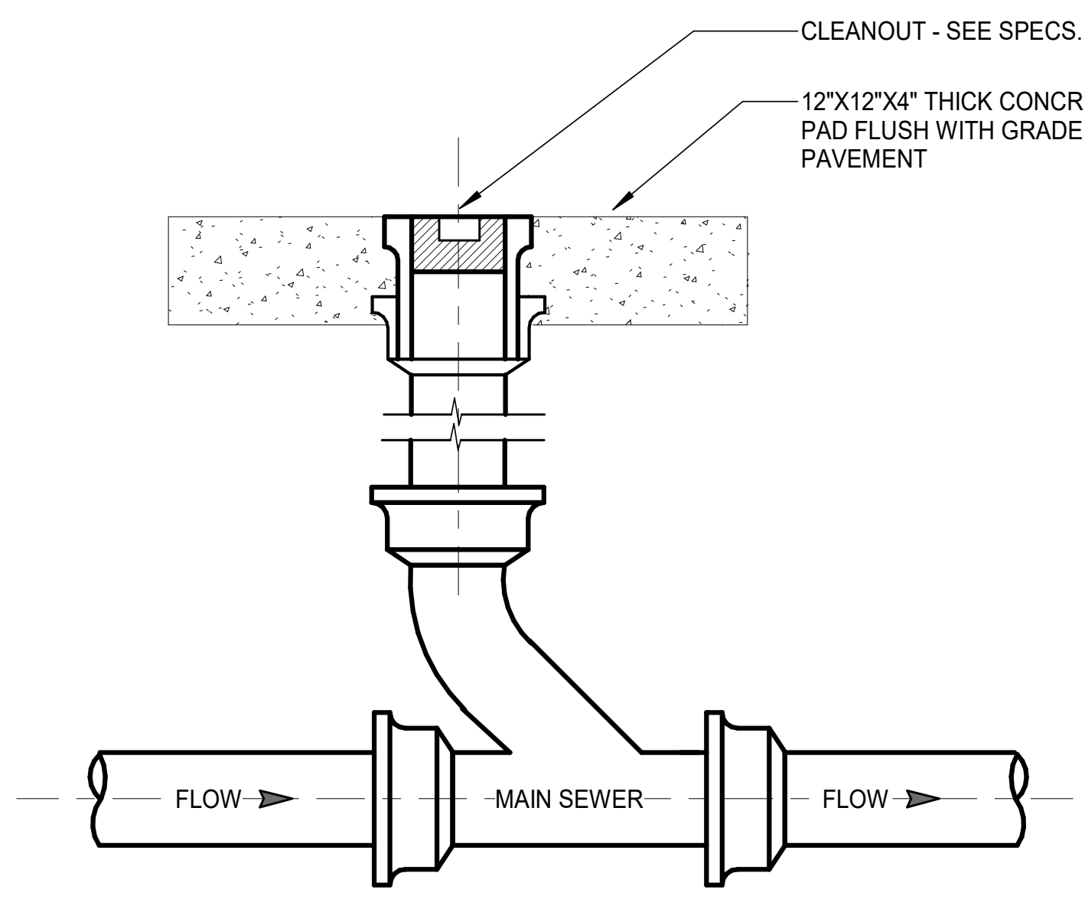


SUPPORTING MATERIAL (FIBERGLASS INSULATION, BACKER ROD OR SAFING) NEED ONLY ENOUGH TO SUPPORT WEIGHT OF CP-25 CAULKING

NOTE:
UL APPROVED PIPING ASSEMBLIES EQUAL TO UL SYSTEM #49 FOR UNINSULATED PIPE AND SYSTEM #91 FOR INSULATED PIPE

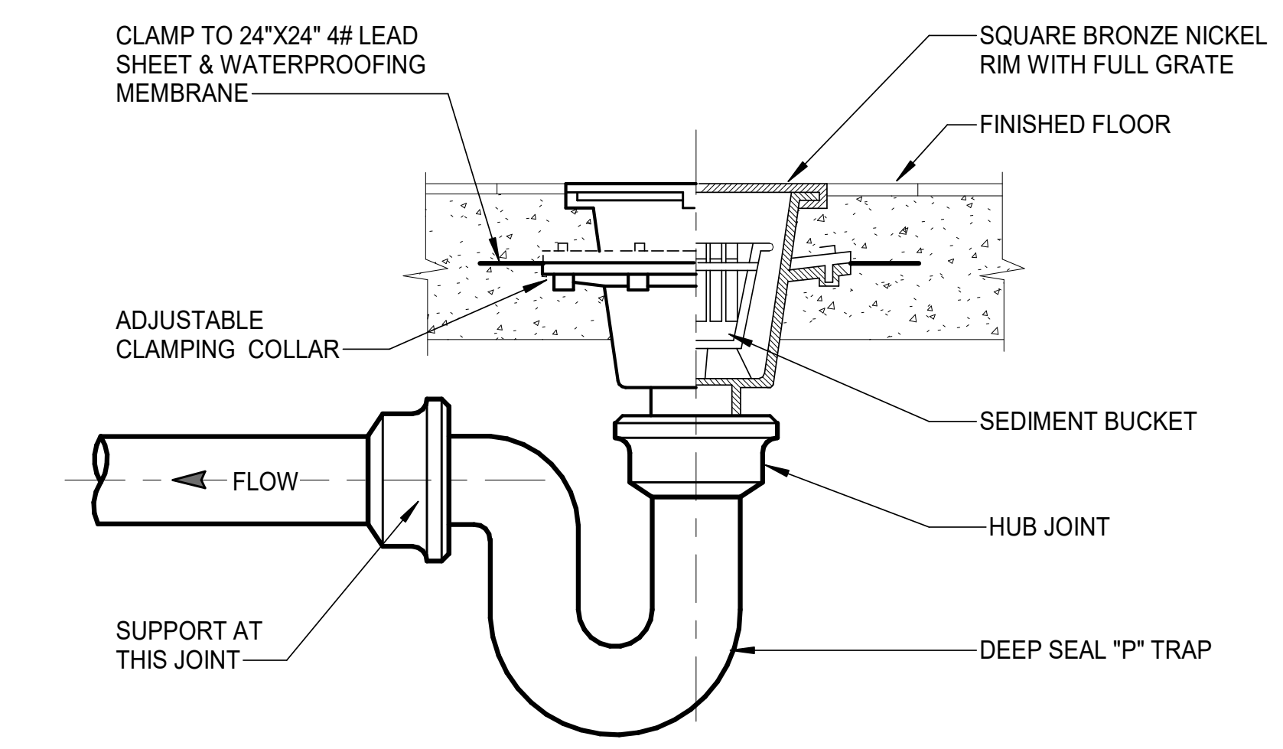
11 INTERIOR FLOOR PENETRATION

SCALE: NONE



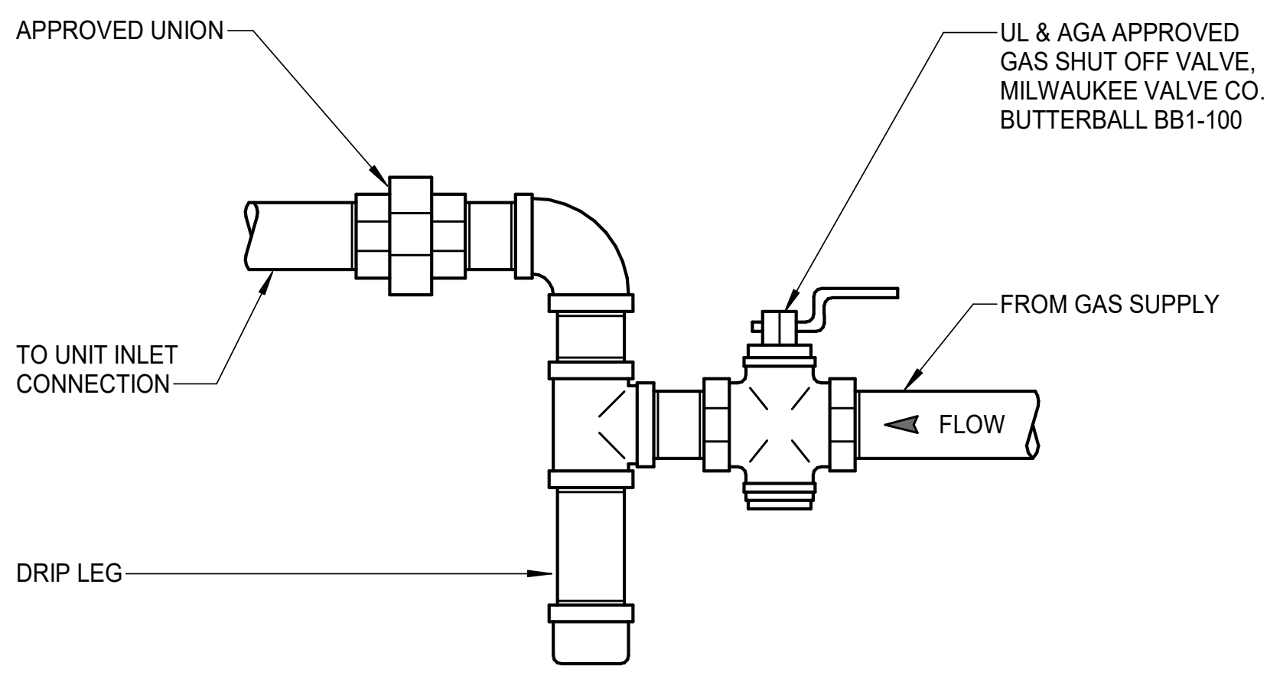
7 EXTERIOR CLEANOUT - TYPICAL

SCALE: NONE



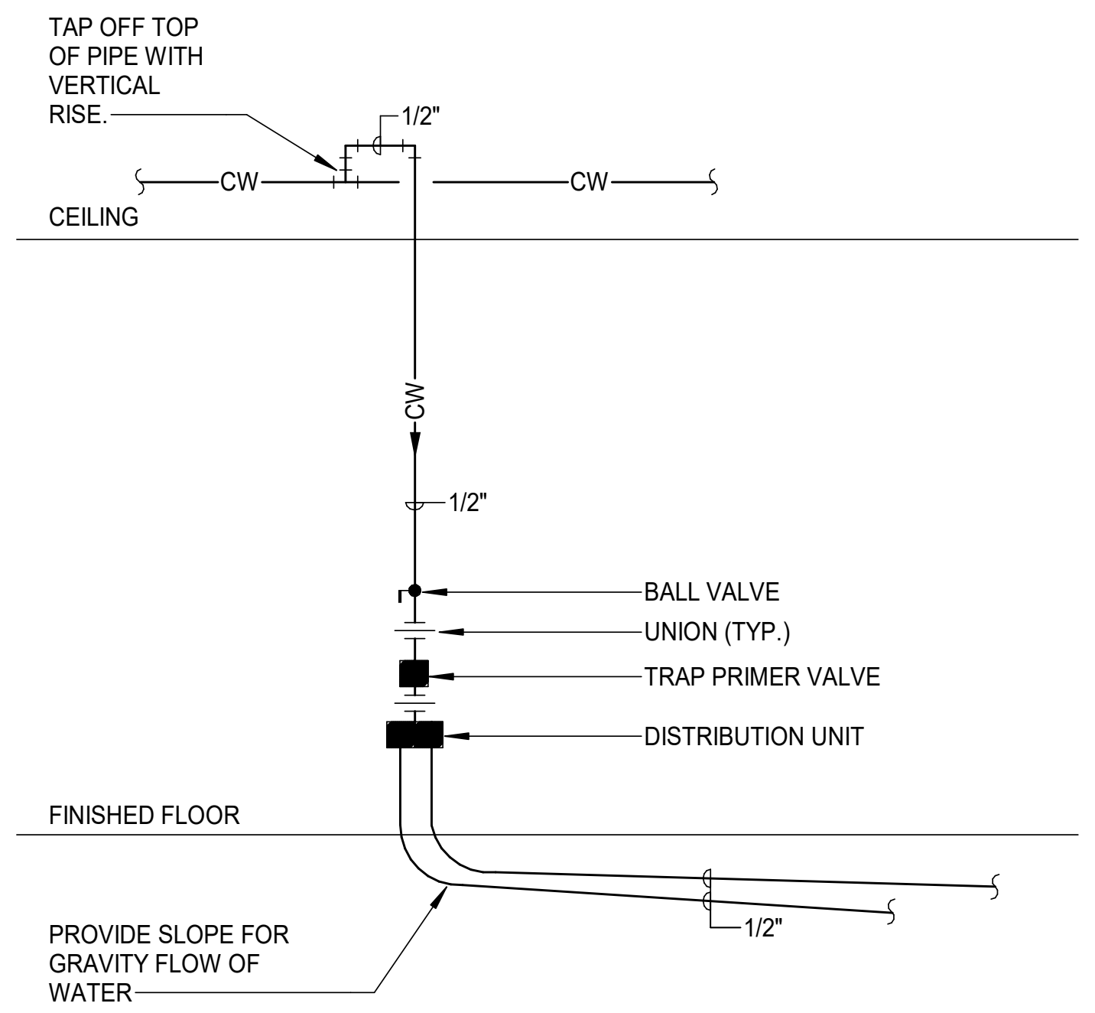
3 FLOOR SINK -TYPICAL

SCALE: NONE



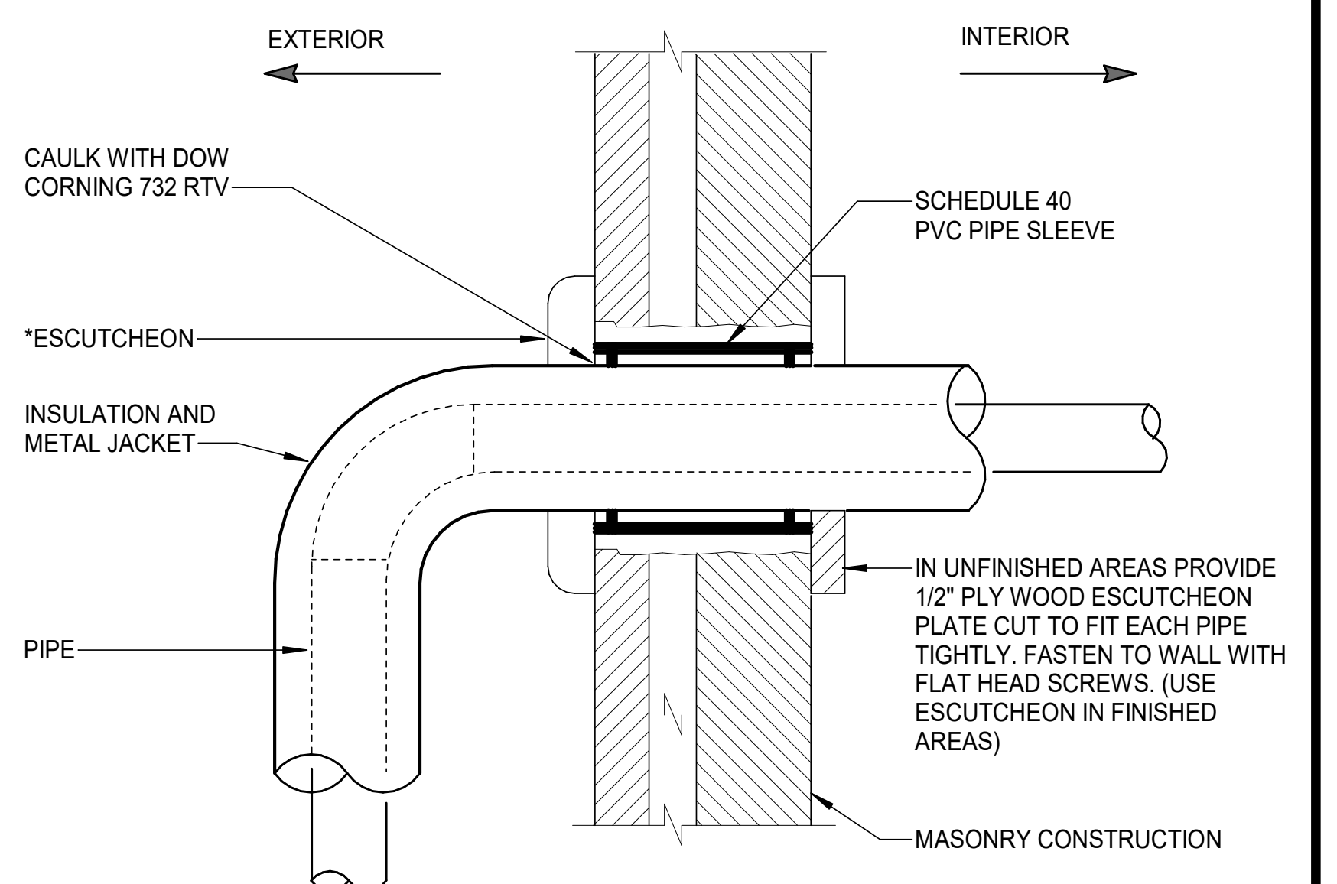
18 GAS CONNECTION

SCALE: NONE



14 ELECTRONIC TRAP PRIMER - CUSTODIAL

SCALE: NONE

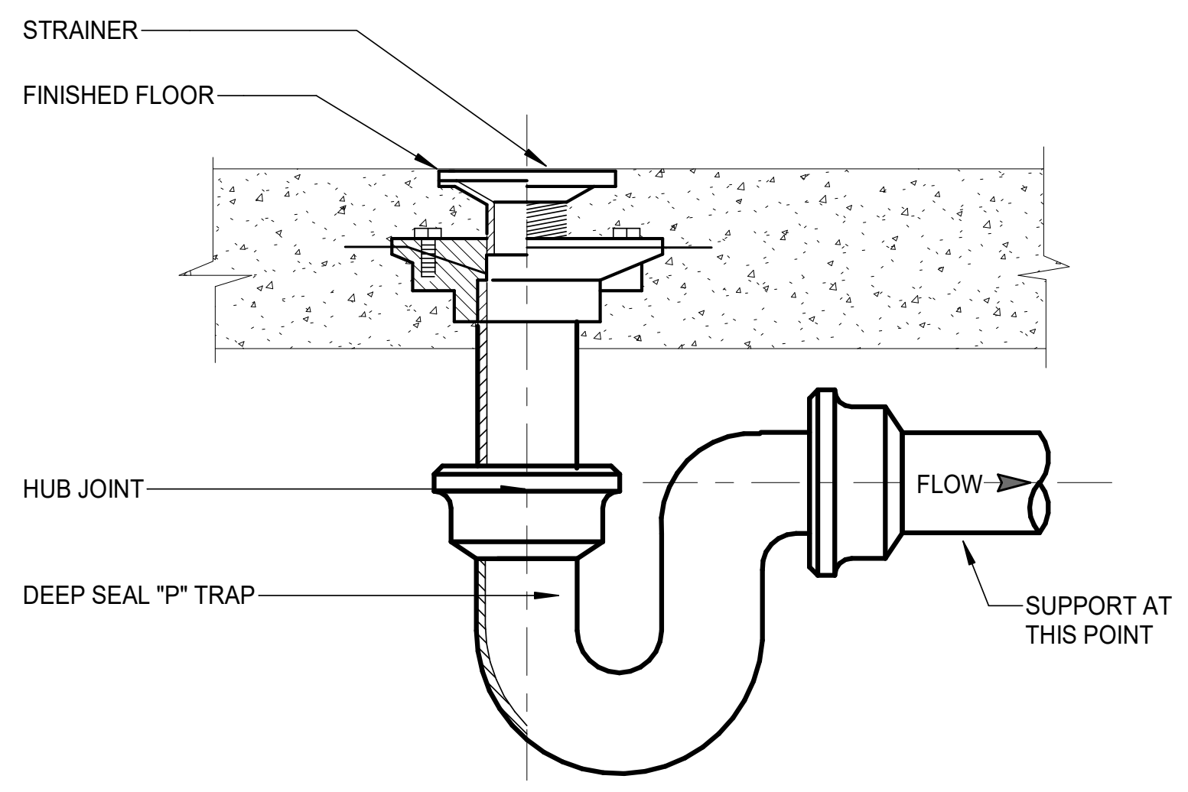


NOTE:
TYPICAL FOR UNINSULATED PIPE AND CONDUIT

*CONTRACTORS OPTIONS:
USE FIELD FABRICATED 302/304 STAINLESS STEEL PLATE WITH CRIMPED EDGES

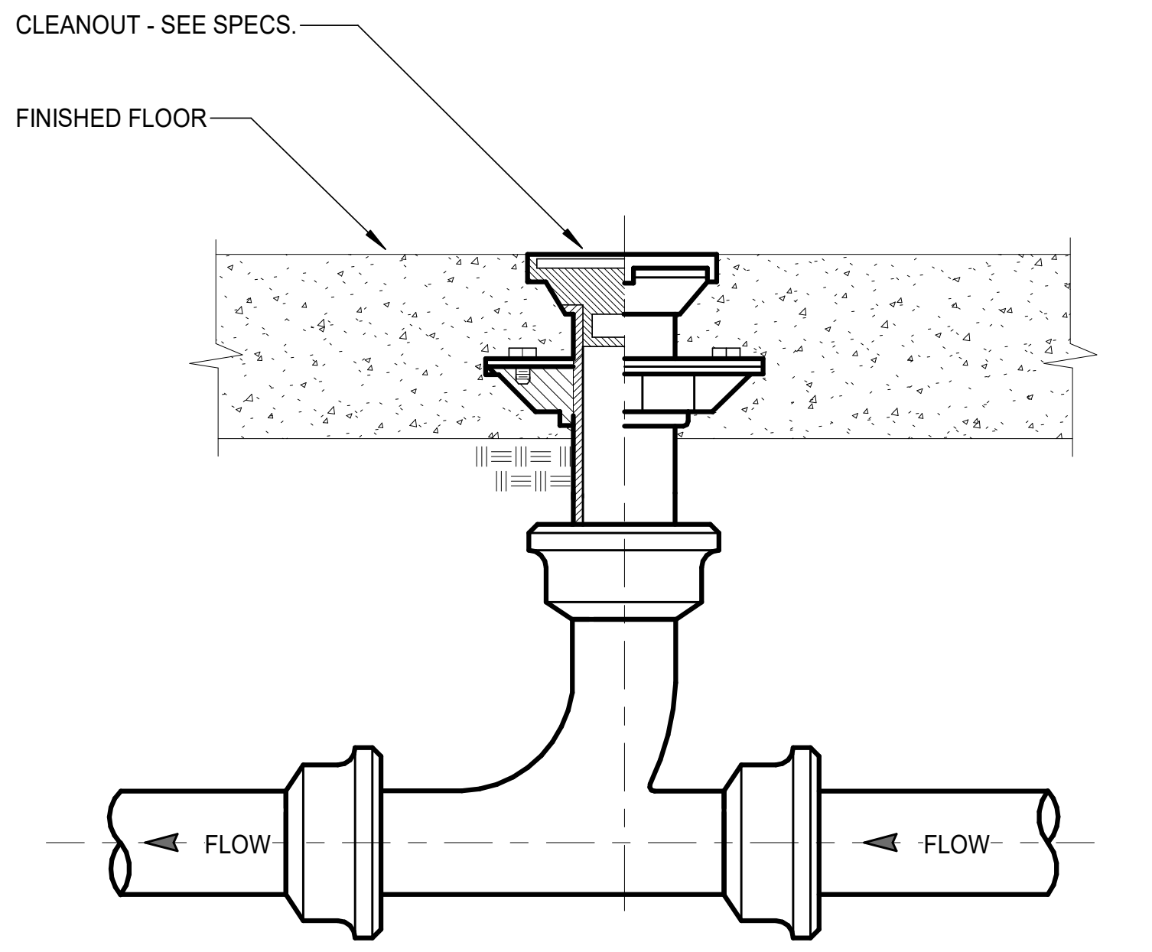
10 EXTERIOR WALL PENETRATION

SCALE: NONE



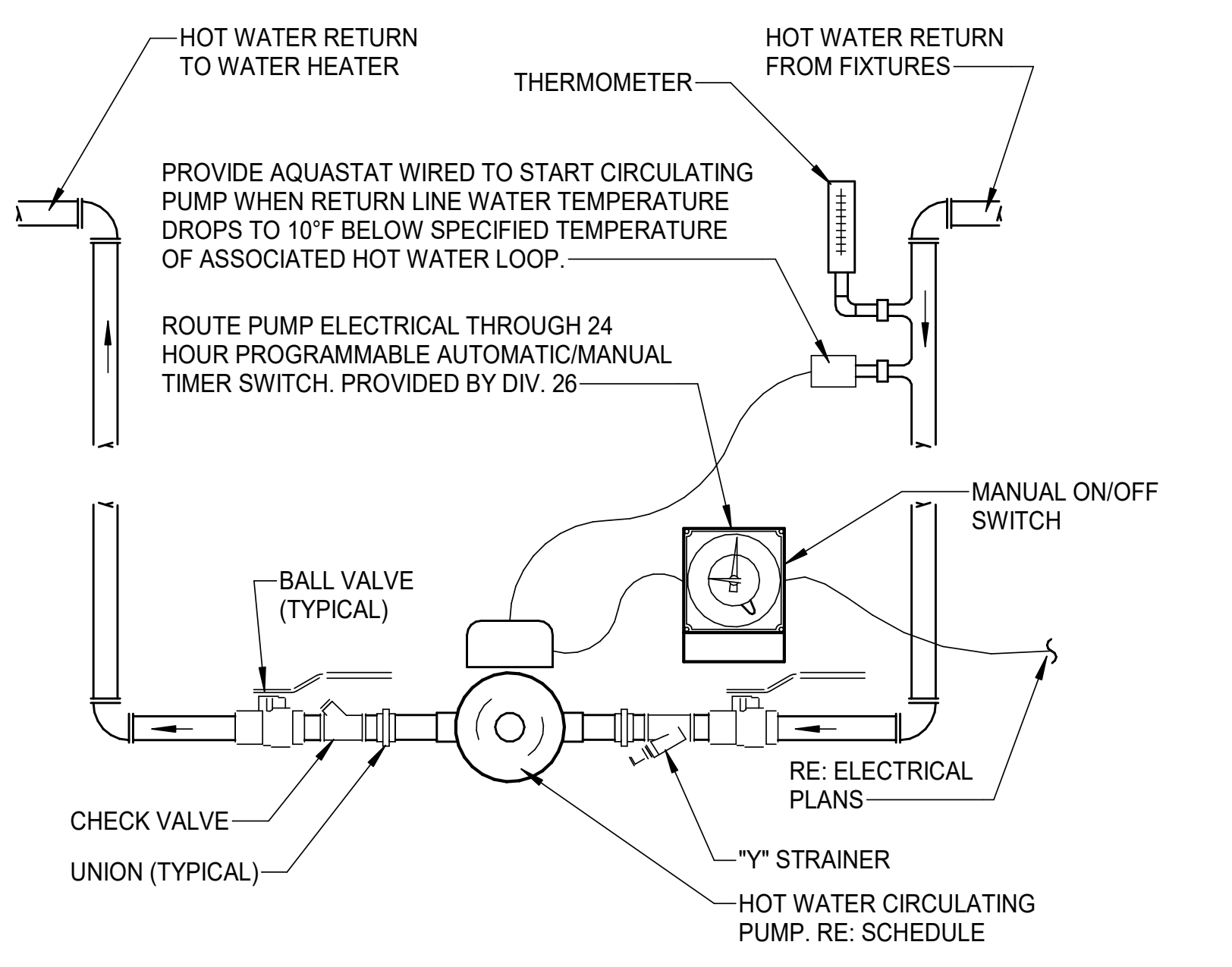
6 FLOOR DRAIN - TYPICAL

SCALE: NONE



2 FLOOR CLEANOUT - TYPICAL

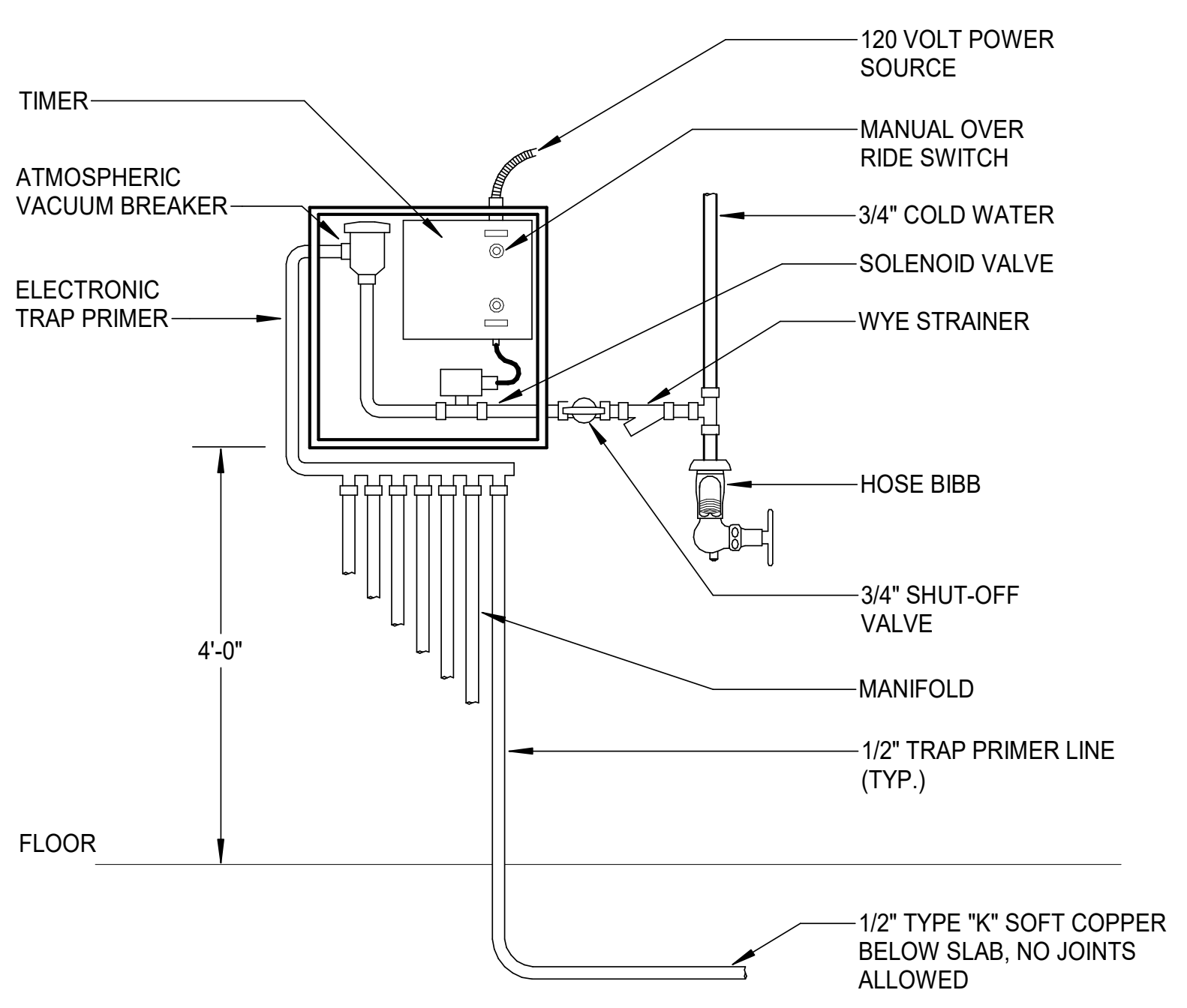
SCALE: NONE



NOTE: MOUNT AT 54"-60" A.F.F. UNLESS NOTED OTHERWISE ON PLANS.

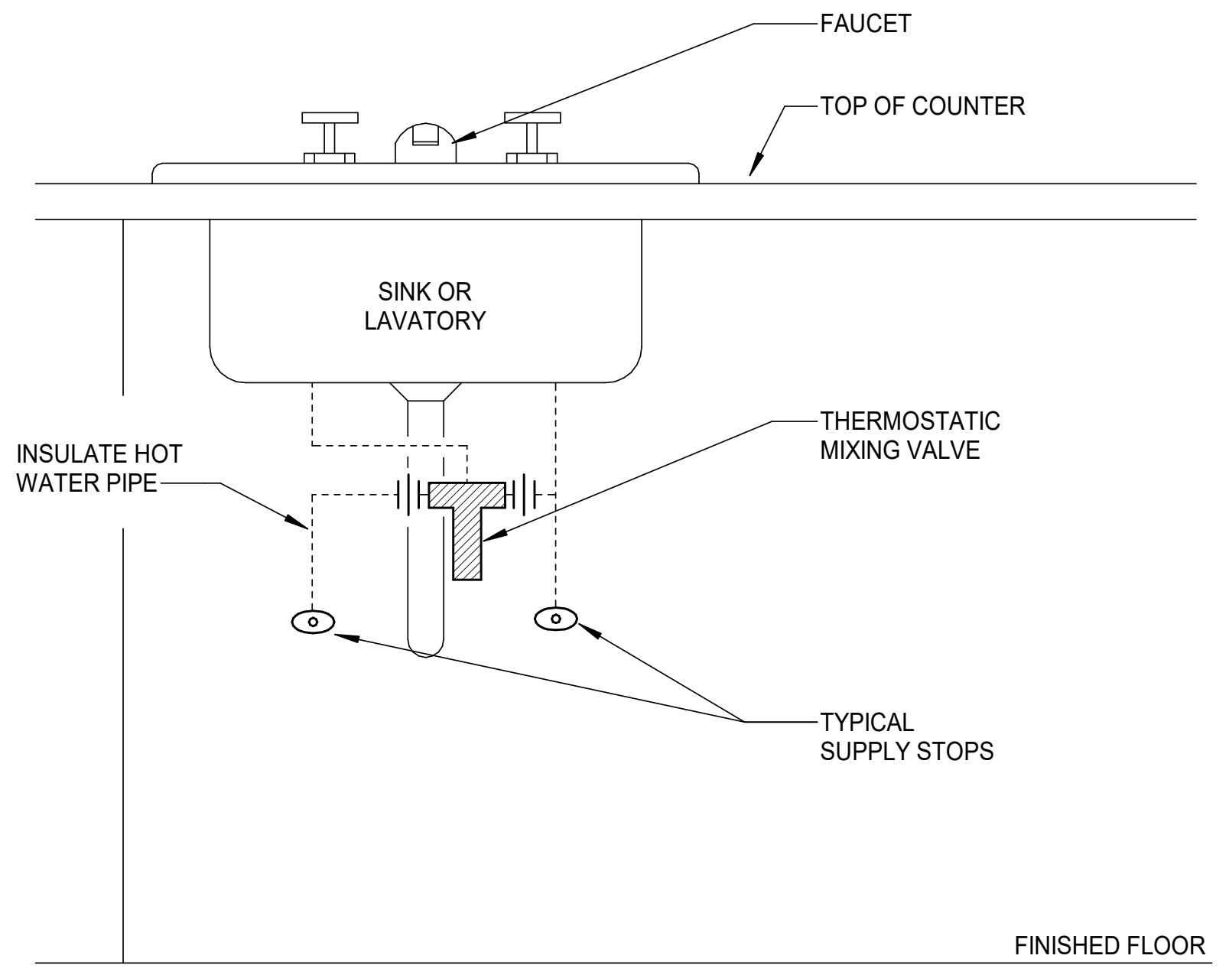
17 DOMESTIC HOT WATER CIRCULATING PUMP

SCALE: NONE



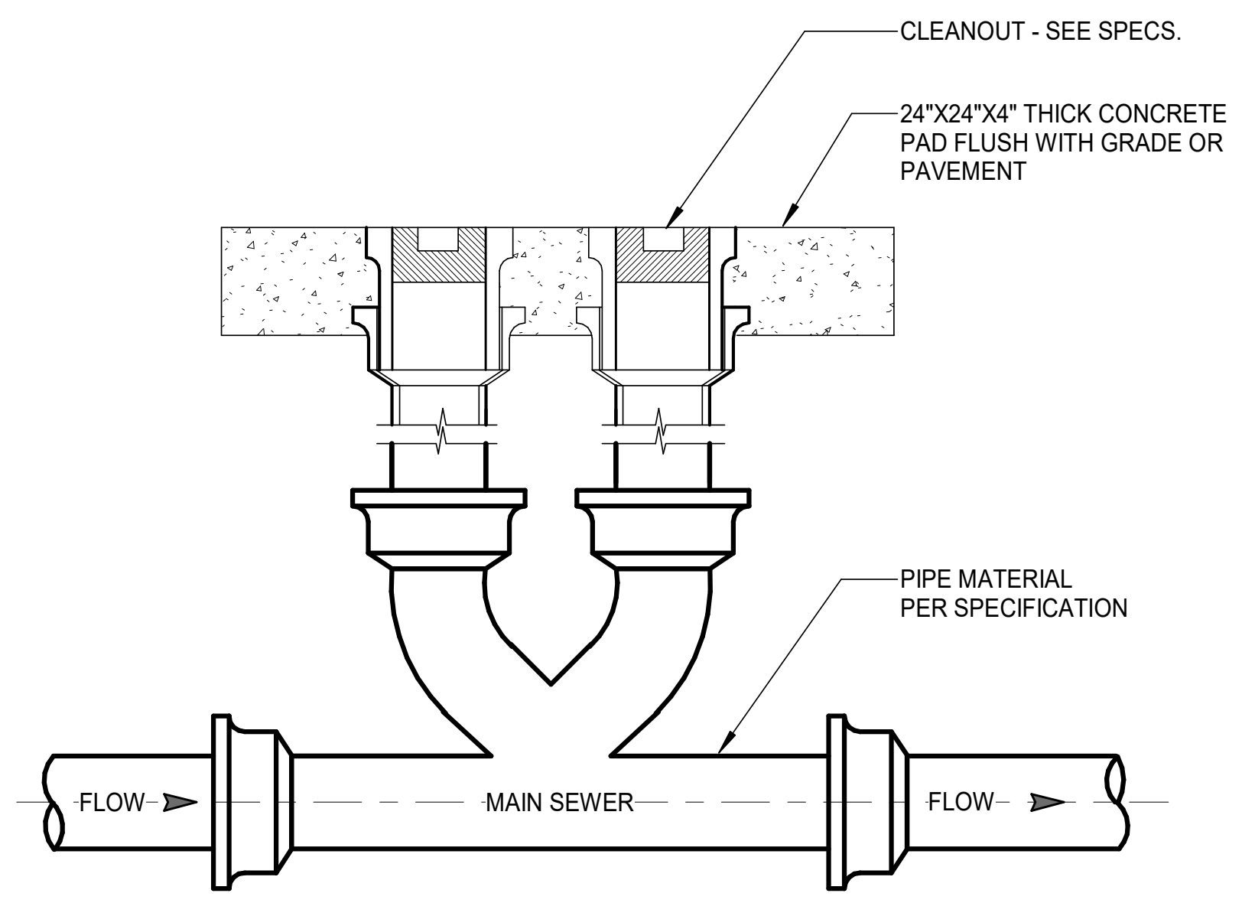
13 ELECTRONIC TRAP PRIMER

SCALE: NONE



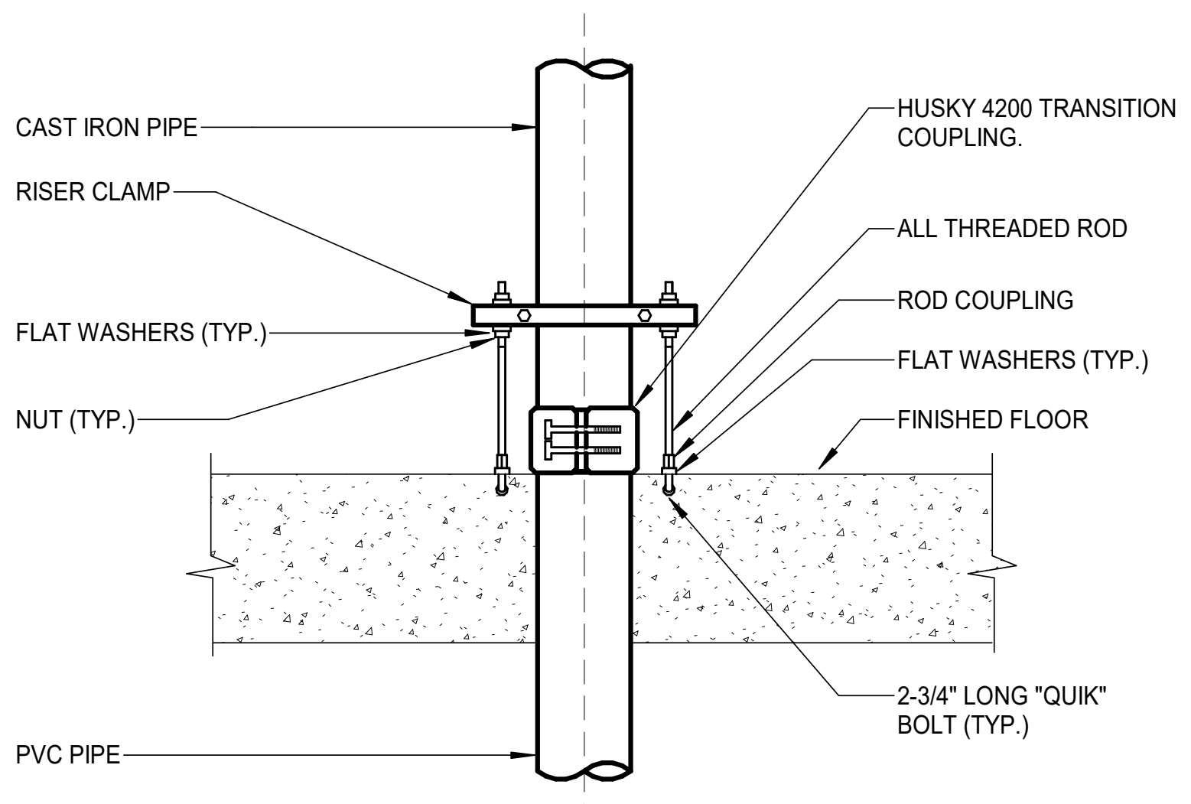
9 MIXING VALVE @ DUAL TEMPERATURE SINK

SCALE: NONE



5 TWO-WAY EXTERIOR CLEANOUT - TYPICAL

SCALE: NONE



NOTE:
1. MAKE CONNECTION FROM PVC BELOW SLAB TO CAST IRON ABOVE SLAB WITH HUSKY 4200 TRANSITION COUPLING.
2. THERE IS TO BE NO EXPOSED PVC ABOVE SLAB.

1 CAST IRON TO PVC TRANSITION

SCALE: NONE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: VU

PLUMBING DETAILS

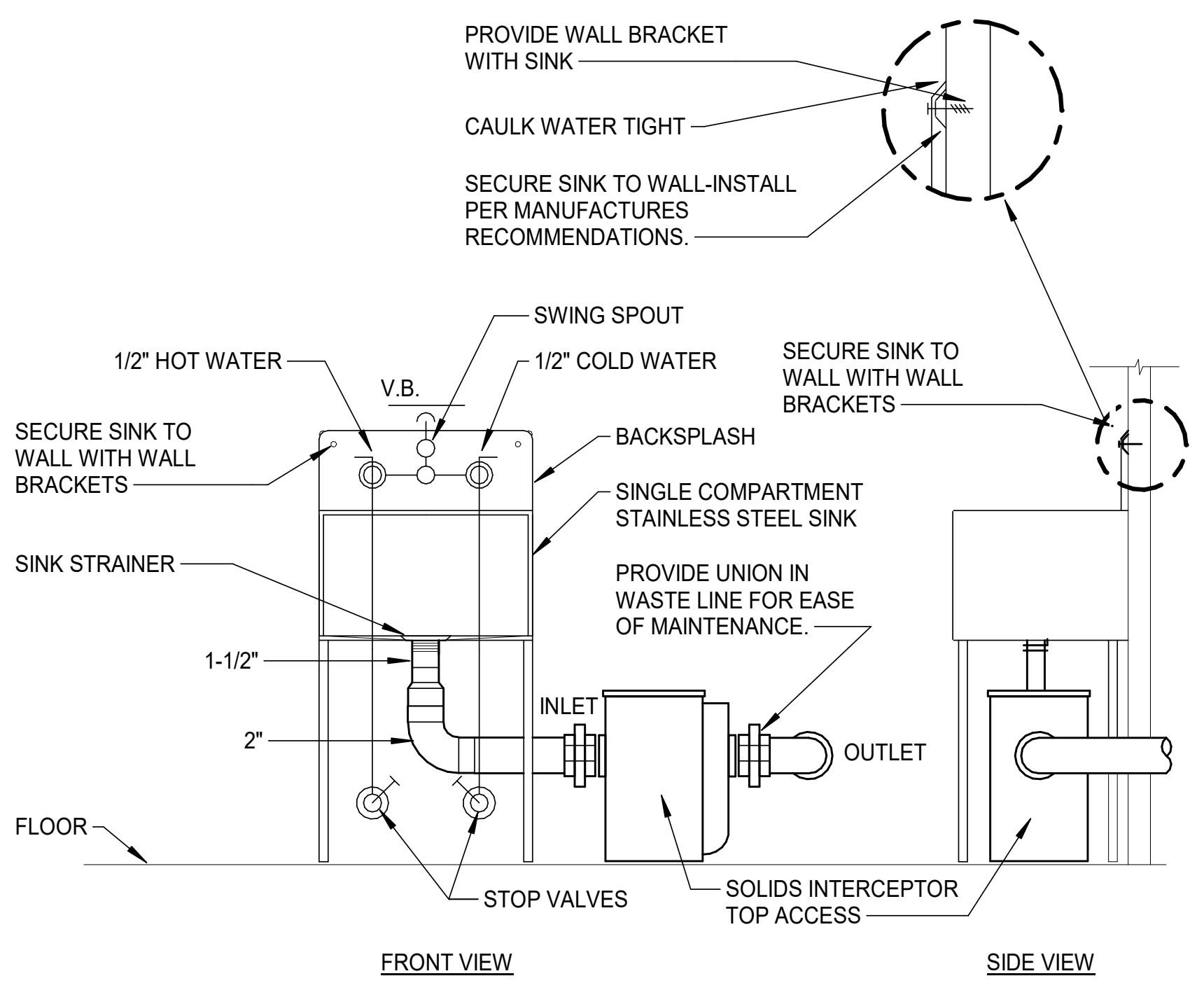
P6.01
of

- INTENTIONALLY BLANK

SCALE: NONE

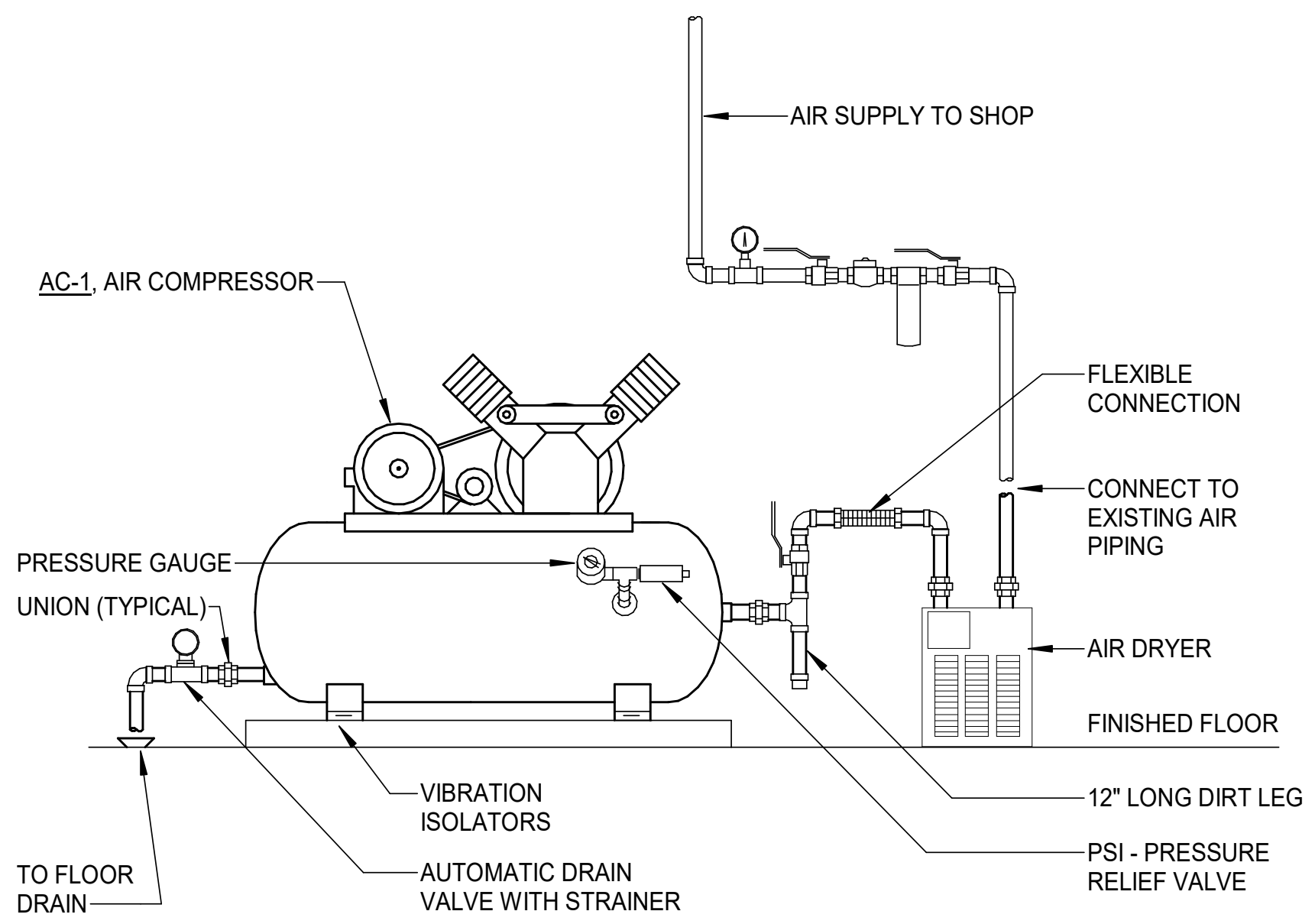
- INTENTIONALLY BLANK

SCALE: NONE



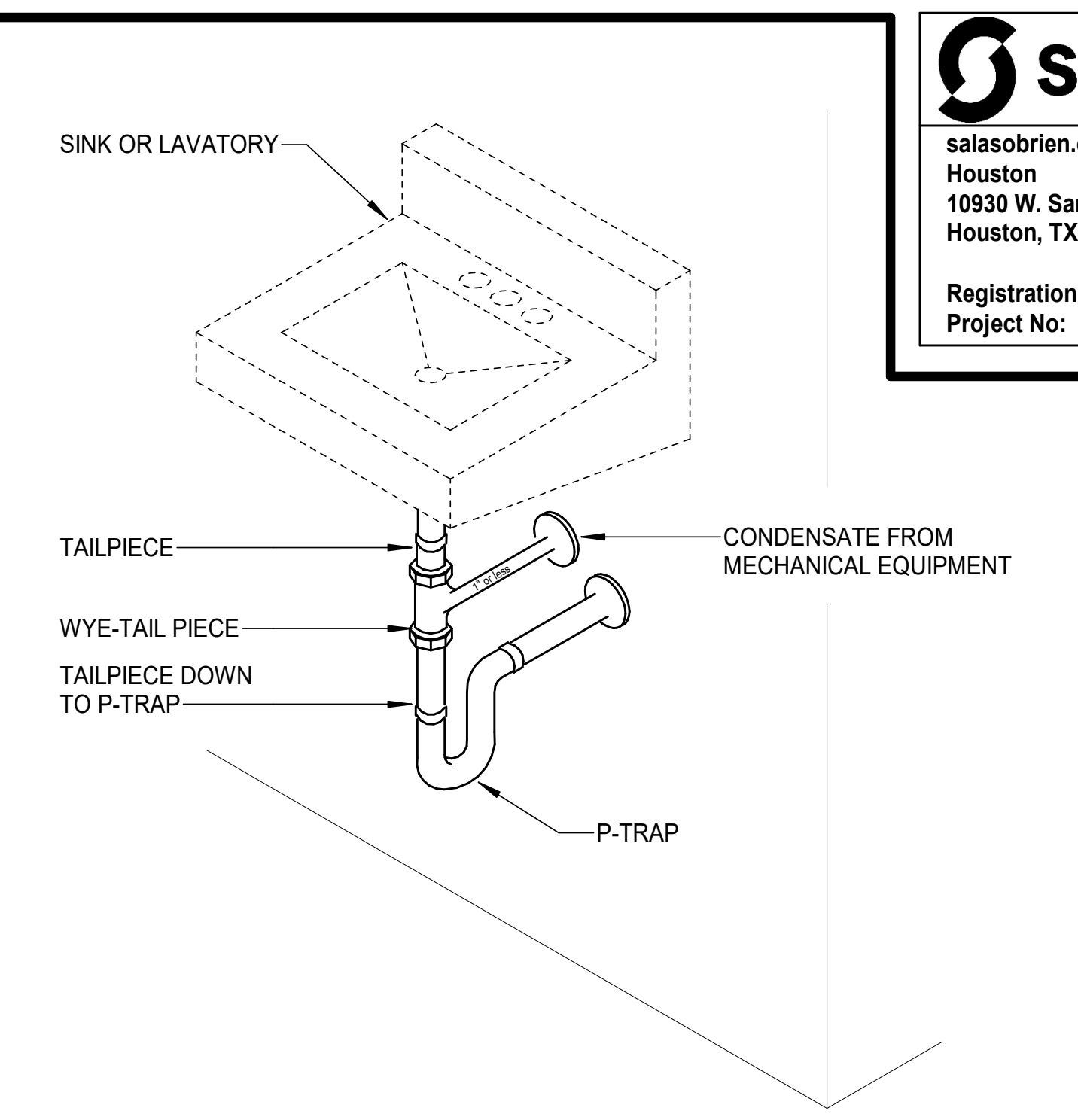
12 BASIN SINK WITH SOILDS INTERCEPTOR

SCALE: NONE



8 SHOP AIR COMPRESSOR WITH AIR DRYER

SCALE: NONE

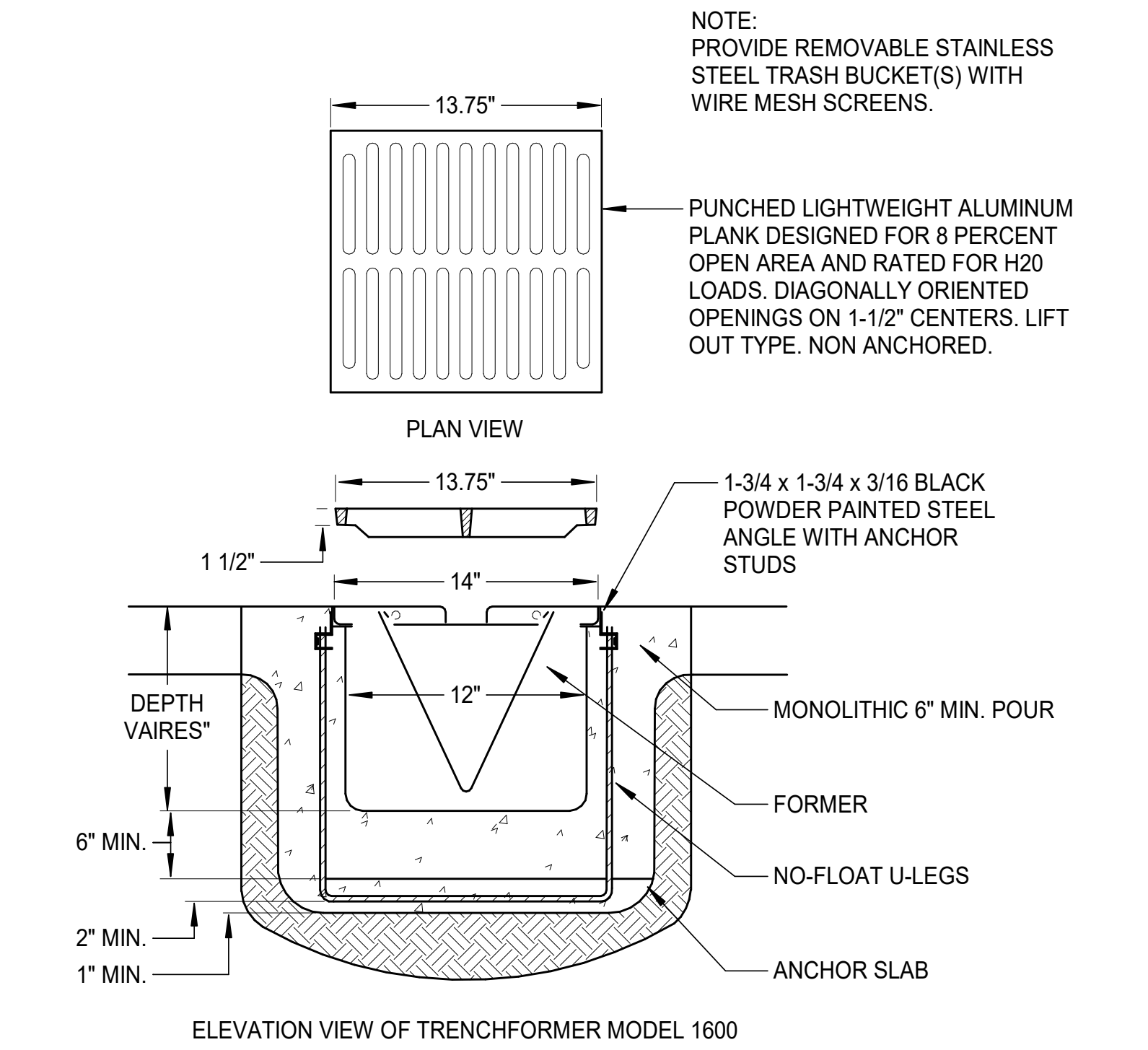


4 WYE-TAILPIECE CONDENSATE CONNECTION

SCALE: NONE

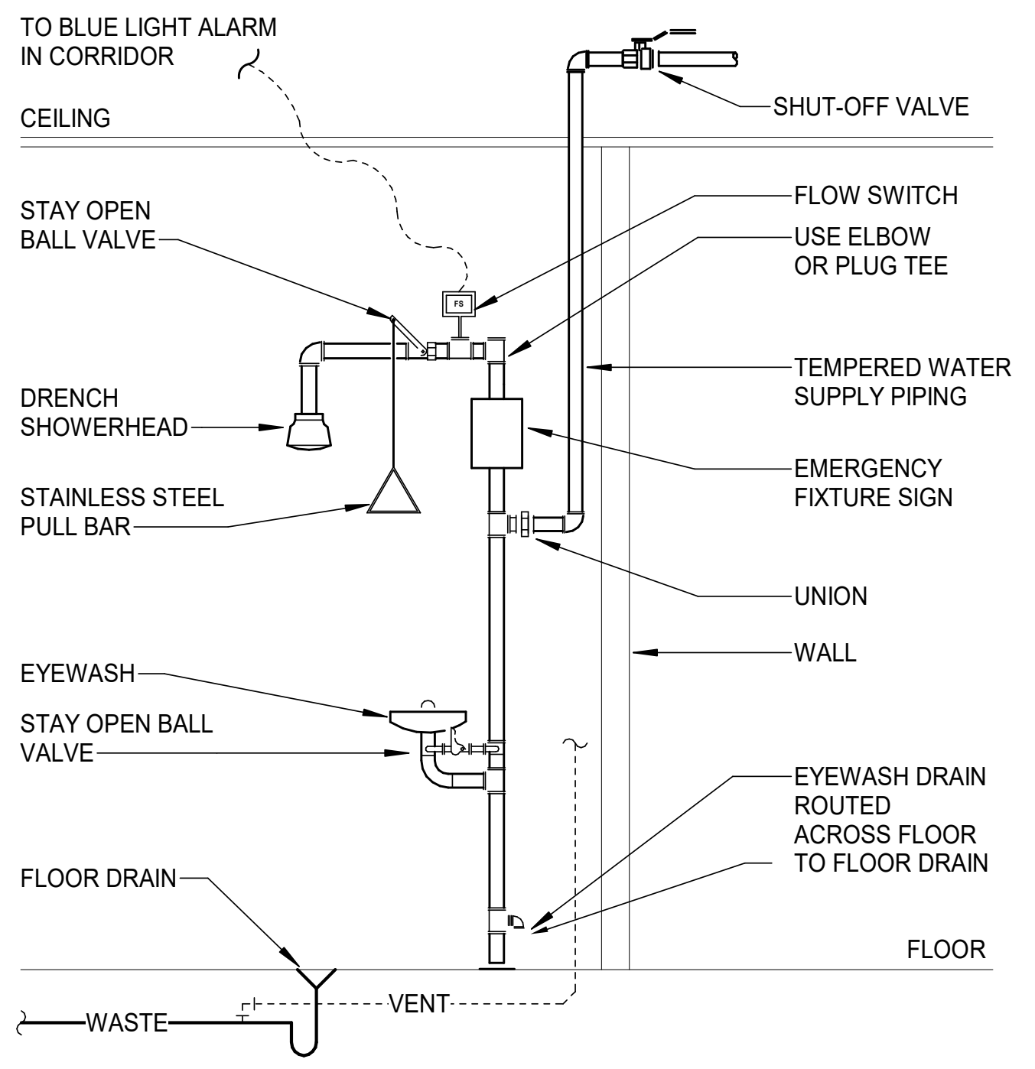
- INTENTIONALLY BLANK

SCALE: NONE



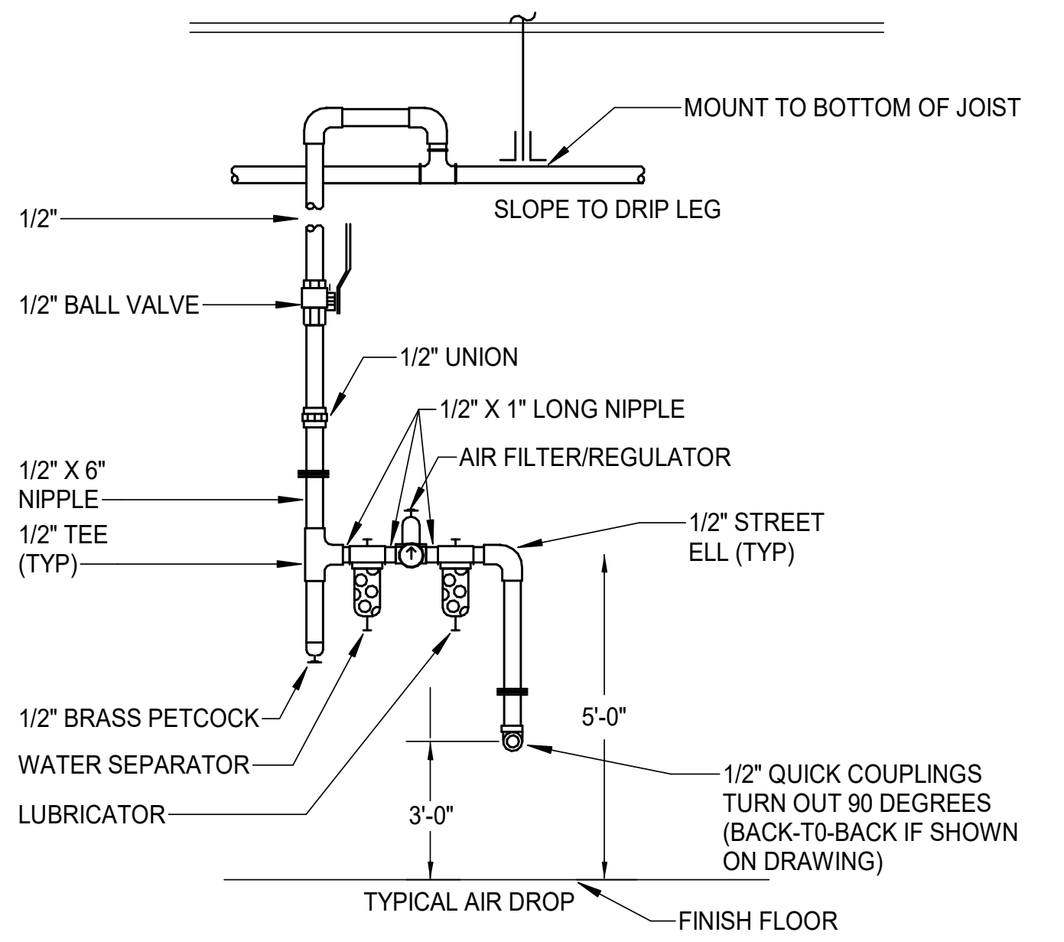
14 ABT TRECHFORMER TRENCH DRAIN (TD-1)

SCALE: NONE



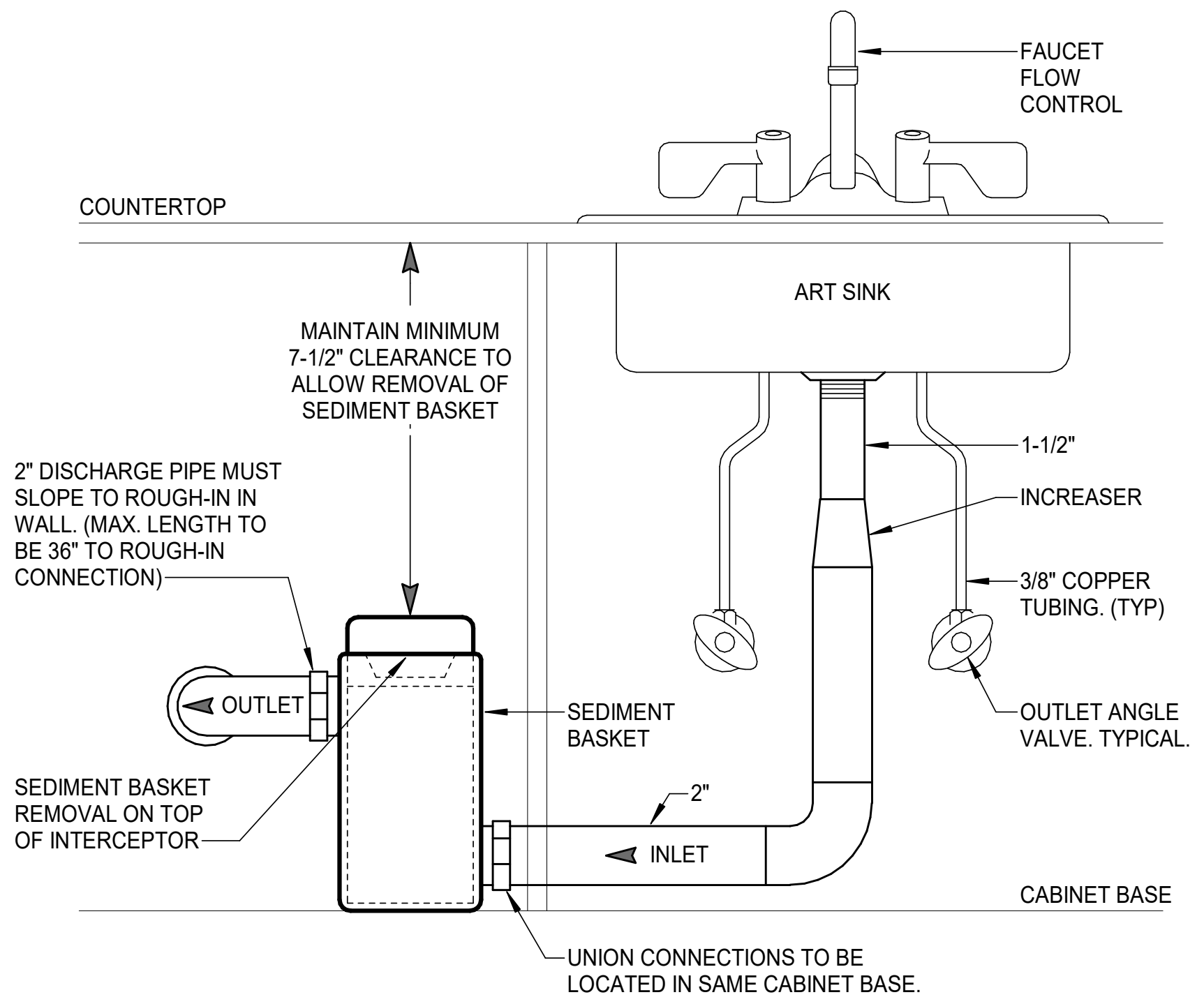
11 EMERGENCY SHOWER W/ SENSOR

SCALE: NONE



7 SHOP AIR DROP W/ AIR FILTER/REGULATOR

SCALE: NONE

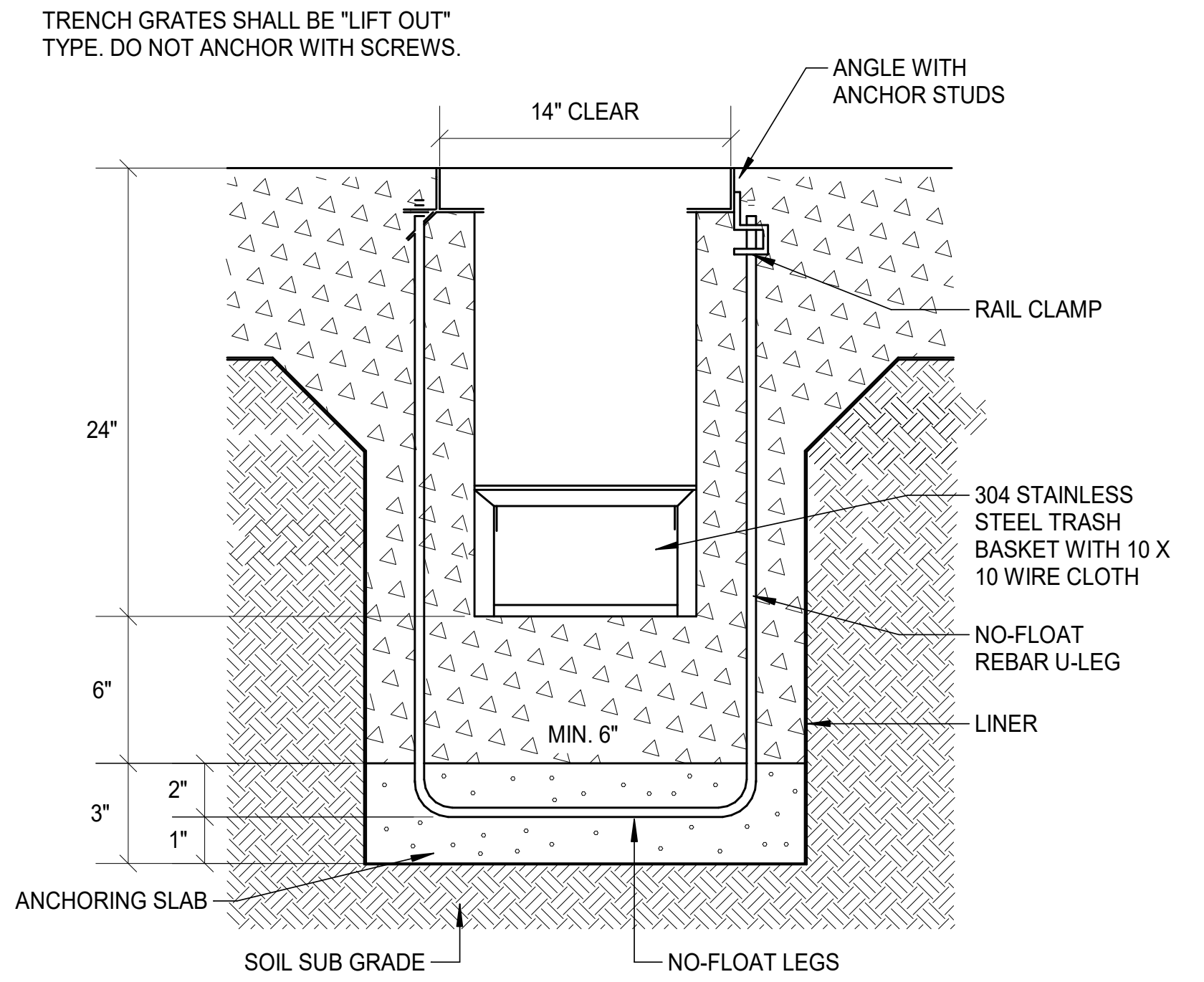


3 SINK WITH SOLIDS INTERCEPTOR

SCALE: NONE

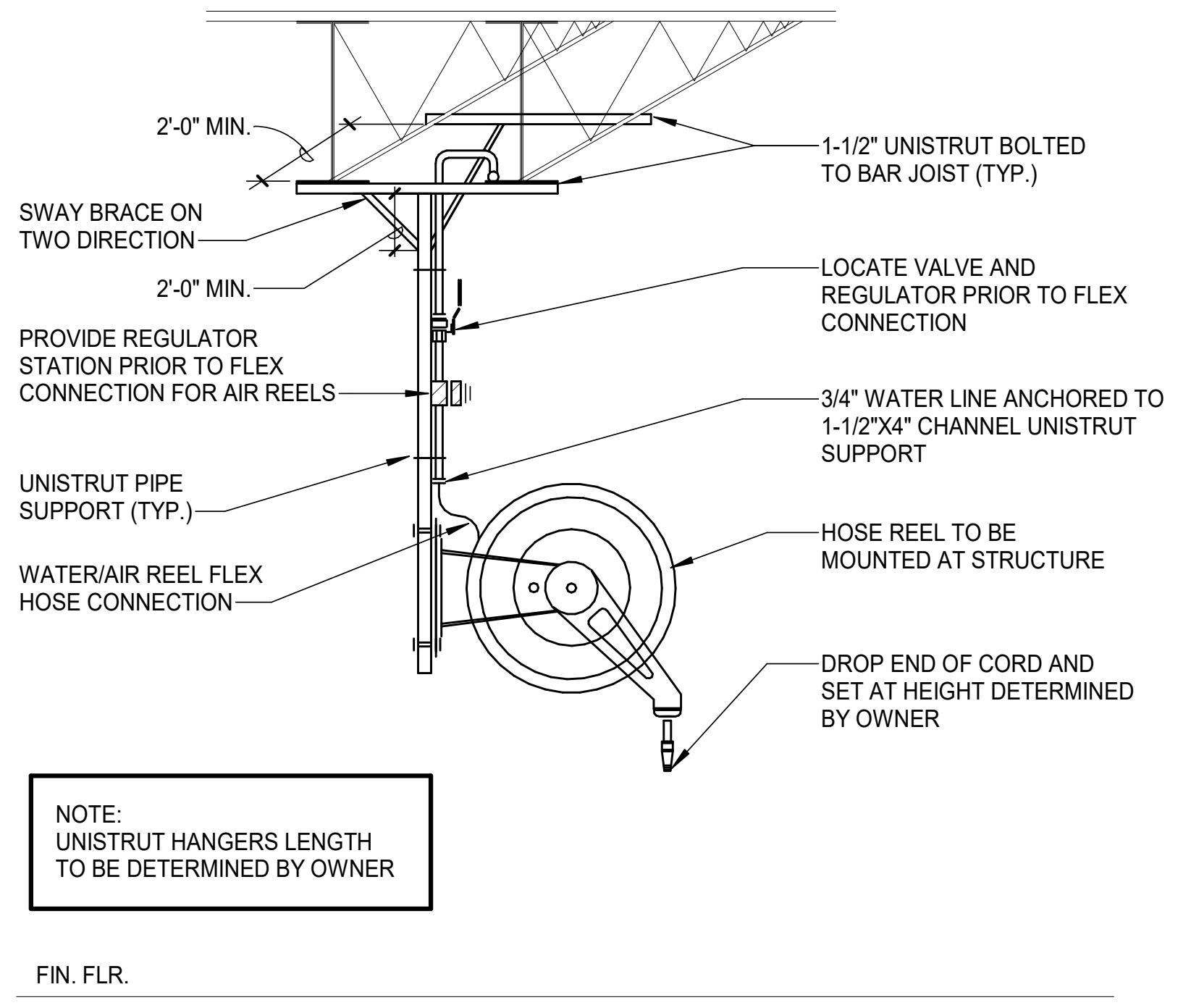
- INTENTIONALLY BLANK

SCALE: NONE



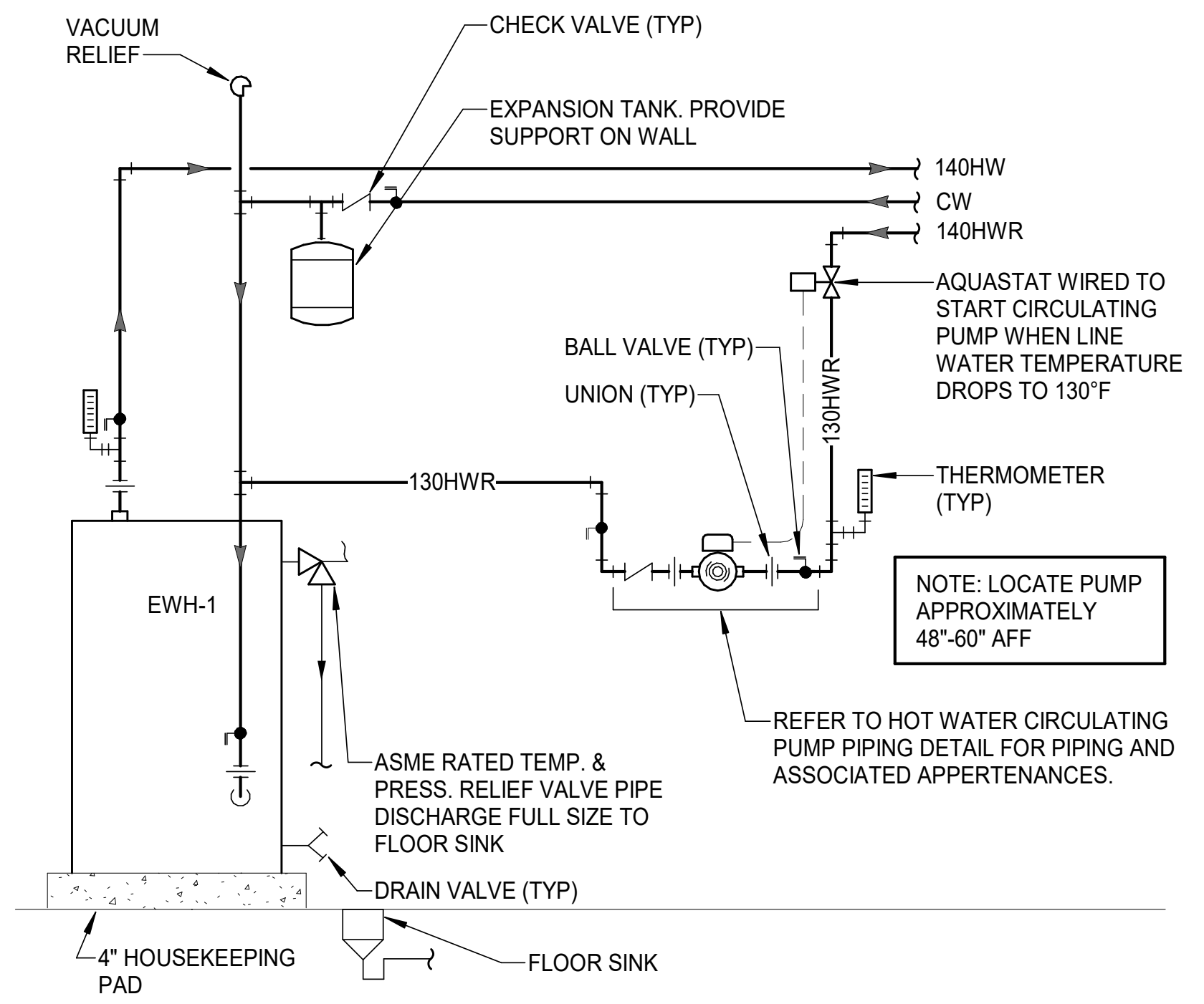
13 TRENCHFORMER CATCH BASIN (CB-1)

SCALE: NONE



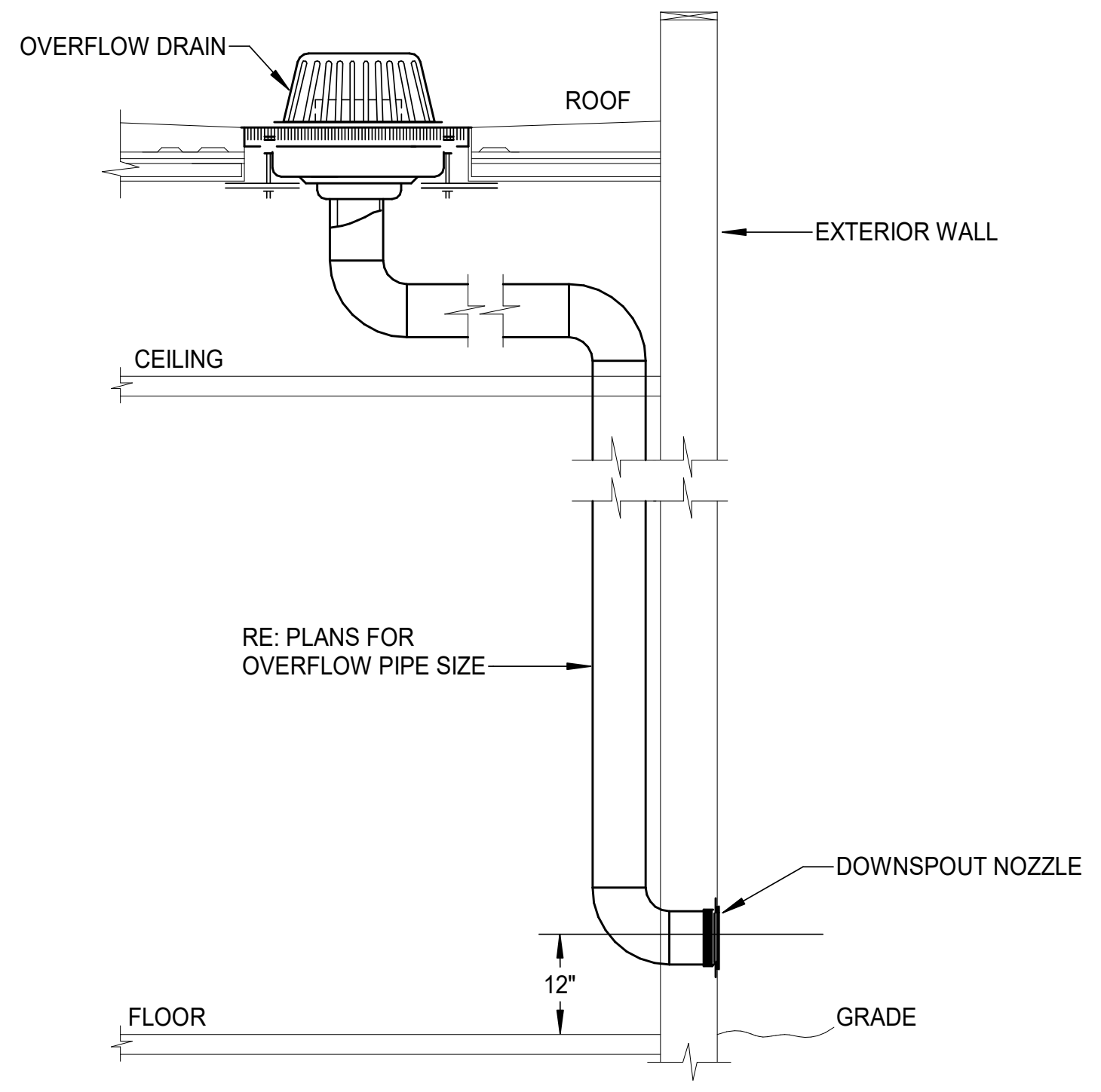
10 HOSE REEL MOUNTING TO STRUCTURE

SCALE: NONE



6 DOMESTIC SINGLE ELECTRIC WATER HEATER

SCALE: NONE



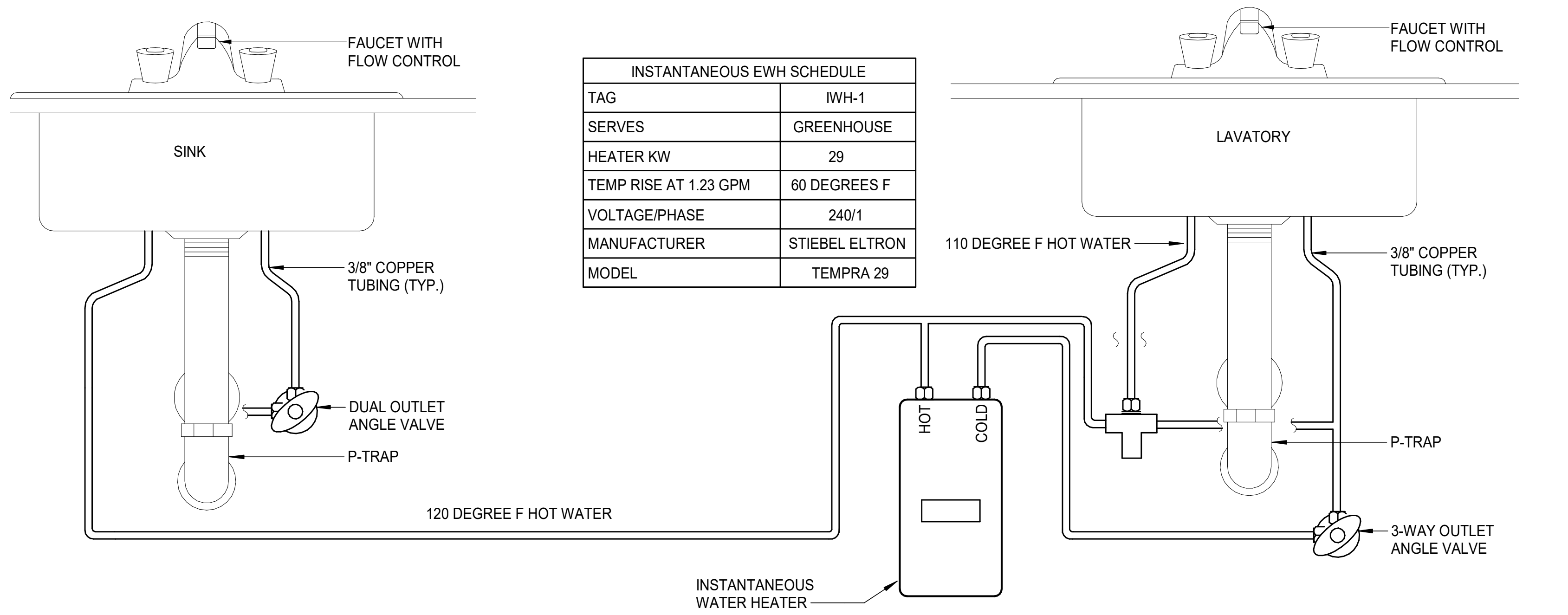
2 EXTERIOR DOWNSPOUT NOZZLE - TYPICAL

SCALE: NONE

- INTENTIONALLY BLANK

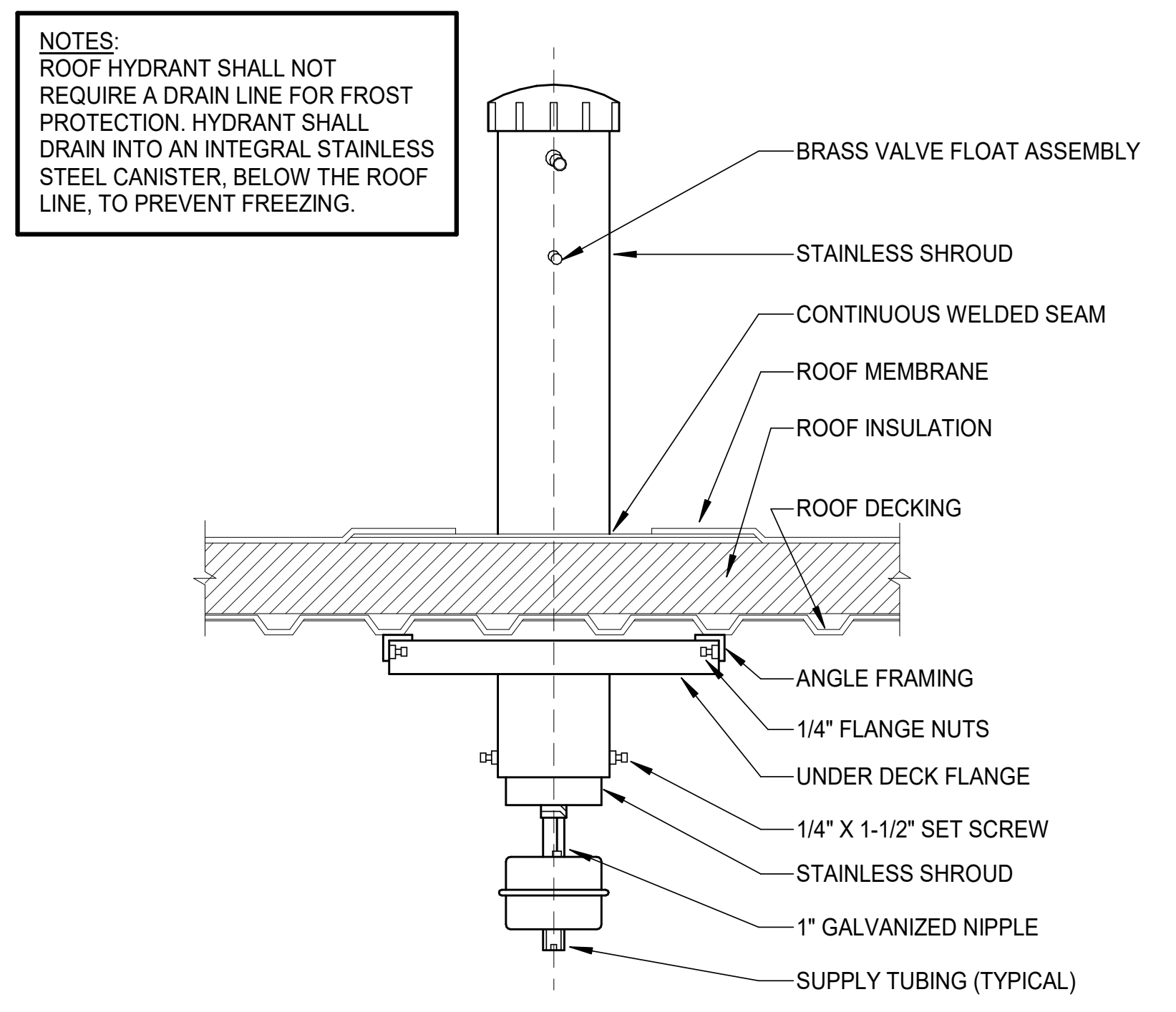
SCALE: NONE

INSTANTANEOUS EWH SCHEDULE	
TAG	IWH-1
SERVES	GREENHOUSE
HEATER KW	29
TEMP RISE AT 1.23 GPM	60 DEGREES F
VOLTAGE/PHASE	240/1
MANUFACTURER	STIEBEL ELTRON
MODEL	TEMPRA 29



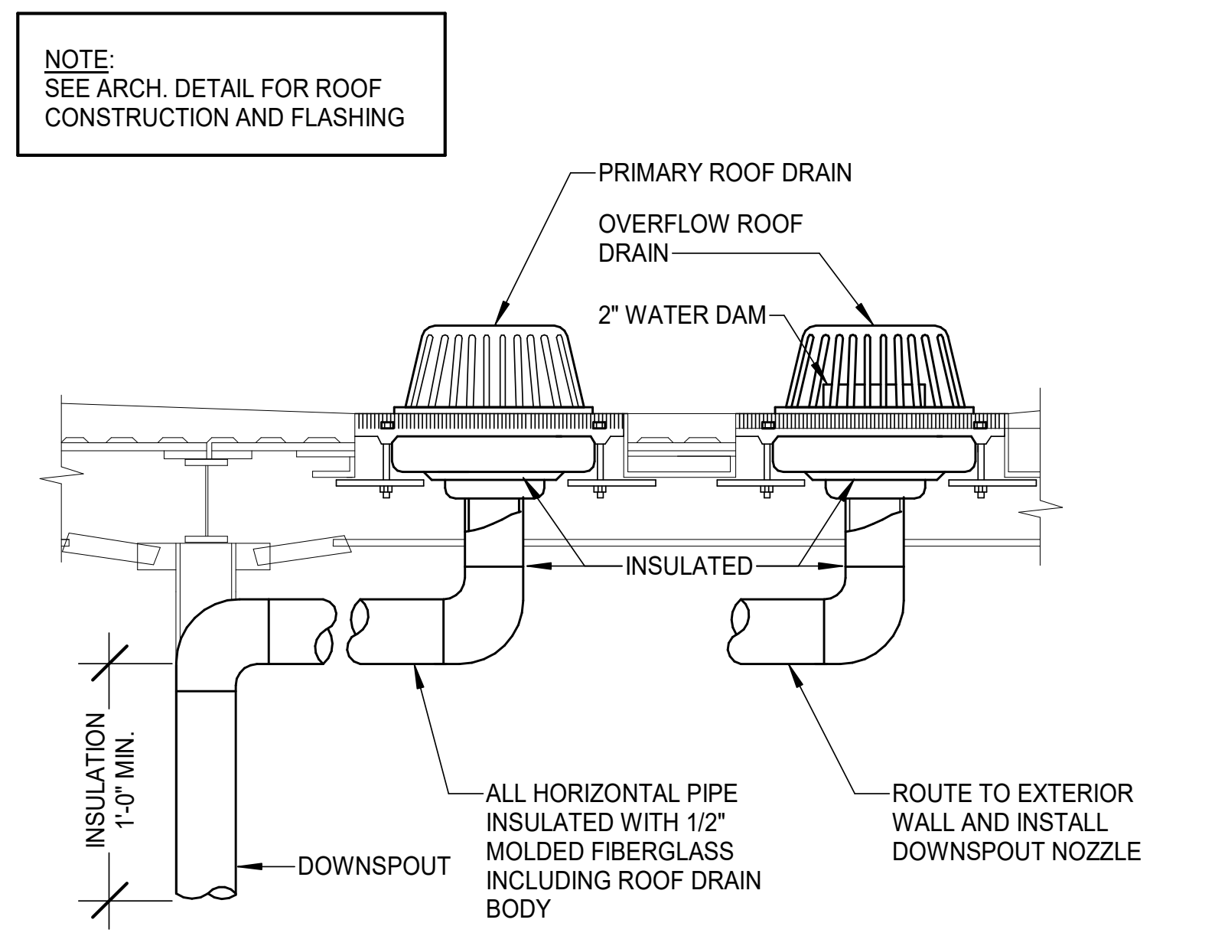
9 INSTANTANEOUS ELECTRIC WATER HEATER PIPING FOR SINK/LAVATORY - GREENHOUSE

SCALE: NONE



5 VENTURI ROOF HYDRANT - FREEZE-PROOF

SCALE: NONE



1 ROOF AND OVERFLOW DRAIN INSULATION

SCALE: NONE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: VU

PLUMBING DETAILS

P6.02
of

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
——SAN——	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
— —SAN— —	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
——GW——	GREASE WASTE PIPING (GW)
— — GW — —	GREASE WASTE PIPING BELOW GRADE (GW)
——SD——	STORM DRAIN PIPING (SD)
——SD——	STORM DRAIN PIPING BELOW GRADE (GW)
——SSD——	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
——AW——	ACID WASTE PIPING (AW)
— —AW— —	ACID WASTE PIPING BELOW GRADE (AW)
——PD——	PUMPED DISCHARGE (PD)
——CD——	CONDENSATE DRAIN PIPING (CD)
—— D ——	CONDENSATE - INDIRECT DRAIN PIPING (D)
- - - - - - - -	VENT PIPING (V)
——CW——	COLD WATER PIPING (CW)
——HW——	HOT WATER PIPING (HW)
——HWR——	HOT WATER RETURN PIPING (HWR)
——SCW——	SOFT COLD WATER PIPING (SCW)
——CDW——	CHILLED DRINKING WATER PIPING (CDW)
——TP——	TRAP PRIMER LINE (TP)
—— F ——	FIRE PROTECTION PIPING (F)
——AS——	AUTOMATIC SPRINKLER PIPING (AS)
——GAS——	NATURAL GAS PIPING (G)
- - - GV - - -	GAS VENT PIPING (GV)
—— AIR ——	COMPRESSED AIR PIPING (A)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
	BALANCING VALVE (BV)
	SOLENOID VALVE (SV)
	BALL VALVE (BV)
	BUTTERFLY VALVE
	LUBRICATED PACKED PLUG STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
◪	GAS METER
▬	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER
	AIR CHAMBER
(E)	EXISTING
(N)	NEW
VTR	VENT THRU ROOF
B.F.F.	BELOW FINISHED FLOOR
A.F.F.	ABOVE FINISHED FLOOR
	NEW CONNECTION
IE=100.00'	INVERT ELEVATION
1	DELTA CHANGE SYMBOL
P 1 4" VTR	RISER FLAG

PLUMBING GENERAL RENOVATION NOTES:

1. WITHIN THE EXISTING BUILDING, EXISTING WATER, WASTE AND VENT SERVICES ARE TO BE MODIFIED AS REQUIRED AND REUSED FOR THE INSTALLATION OF NEW AND/OR RELOCATED PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.
2. WITHIN THE EXISTING BUILDING, SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW AND/OR RELOCATED PLUMBING FIXTURES, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING.
3. IN AREAS WHERE THE FLOOR SLAB IS REMOVED, CONTRACTOR SHALL ALSO REMOVE UNDERSLAB WASTE AND VENT PIPING WHICH SERVES FIXTURES DESIGNATED FOR REMOVAL. PRIOR TO ANY REMOVAL, FIELD VERIFY THAT LINES TO BE REMOVED DO NOT SERVE ANY EXISTING FIXTURES TO REMAIN OR NEW FIXTURES TO BE INSTALLED.
4. IN AREAS WHERE THE FLOOR SLAB IS NOT REMOVED, CONTRACTOR SHALL ABANDON IN PLACE ANY UNDERSLAB WASTE AND VENT PIPING NO LONGER NEEDED, UNLESS THE PIPING MUST BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION. IF NEW WORK DOES NOT NECESSITATE THEIR REMOVAL, CUT AND PLUG SUCH LINES BELOW SLAB, AND PATCH FLOOR TO MATCH EXISTING.
5. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION. ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
6. WASTE LINES TO BE RE-USED OR RECONNECTED TO SHALL BE THOROUGHLY RODDED OUT AND FLUSHED TO ENSURE THEY ARE FREE FROM BLOCKAGES.
7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
8. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
9. CONTRACTOR TO COORDINATE ALL REMODEL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
10. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
11. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
12. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE, INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
14. THE PROPER INSTALLATION OF NEW FIXTURES AND THE PROPER CONTINUED OPERATION OF EXISTING FIXTURES TO REMAIN SHALL DETERMINE THE EXTENT AND NATURE OF PLUMBING REMODEL WORK.
15. EACH VENT SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE ROOF, MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES, AND A MINIMUM 5'-0" FROM ANY EXTERIOR WALL.
16. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE BUILDING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE AS DIRECTED.
17. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
18. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN BID TO DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
19. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
20. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER HEATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER, AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.
21. FIELD VERIFY EXISTING CONDITIONS AND ACTUAL UTILITY USES PRIOR TO FINAL CONNECTIONS. EXISTING DRAWINGS MAY NOT HAVE BEEN AVAILABLE FOR ALL REQUIRED INFORMATION. USE PIPE INSPECTION CAMERA SYSTEM TO FIELD VERIFY EXISTING SANITARY / GREASE WASTE CONNECTIONS. VERIFY FLOW DIRECTION AND DEPTH PRIOR TO CONNECTION TO EXISTING PLUMBING SYSTEMS.

SHOP AIR COMPRESSOR

ITEM NO.	HP	CFM DELIVERED @125 PSI	CFM DELIVERED @175 PSI	RECEIVER TANK SIZE (GALLONS), ORIENTATION	POWER V/PH/HZ	MANUFACTURER / COMMENTS
AC-G-1	20	91.9	76.7	120 GALLONS HORIZONTAL	460/3/60	CHAMPION R-SERIES MODEL HRA20-12 FULLY PACKAGED 72"X27-1/2"X64-1/4" APPROX. WT. - 1325LBS.

NOTES:
1. HORIZONTAL TANK MOUNTED SIMPLEX UNIT TO INCLUDE ASME AIR RECEIVER TANK, AUTOMATIC TANK DRAIN, ASME PRESSURE RELIEF VALVE, LOW OIL LEVEL SHUT-DOWN SWITCH, PRESSURE GAUGE, ENCLOSED BELT GUARD, MOUNTED AND WIRED MAGNETIC STARTER, ON-OFF SWITCH, AIR COOLED AFTERCOOLER, AND SHALL BE MOUNTED ON RUBBER VIBRATION ISOLATION PADS. PROVIDE HOUSEKEEPING PAD PER SPECIFICATIONS. PROVIDE REFRIGERATED AIR DRYER (RAD-1) DOWNSTREAM OF AFTER-COOLER. CHAMPION CRN SERIES MODEL 200. DIMENSIONS 39"X34"X32", ELECTRIC- 460/3/60 H = HORIZONTAL RECEIVER TANK
2. PROVIDE HOUSEKEEPING PAD PER SPECIFICATIONS.
3. PROVIDE REFRIGERATED AIR DRYER UPSTREAM OF AFTER-COOLER. MODEL #CRH20.

SHOCK ARRESTORS

P.D.I. SYMBOLS:	FIXTURE UNITS:	THREADED CONNECTION	CERTIFICATION
A	1 - 11	1/2"	ASSE 1010
B	12 - 32	3/4"	ASSE 1010
C	33 - 60	1"	ASSE 1010
D	61 - 113	1"	ASSE 1010
E	114 - 154	1"	ASSE 1010
F	155 - 330	1"	ASSE 1010

PLUMBING FIXTURE ROUGH-IN

FIXTURE	SAN	VENT	CW	HW
WATER CLOSET	4"	2"	1"	--
LAVATORY	2"	2"	1/2"	1/2"
SINK	2"	2"	1/2"	1/2"
MOP SINK	3"	2"	1/2"	1/2"
URINAL	2"	2"	3/4"	--

ELECTRIC WATER HEATER

ITEM NO.	KW INPUT	GALS. PER HR. RECOVERY RATE 100°F RISE	STORAGE CAPACITY	POWER (V/PH/HZ)	STORED WATER TEMP.	MANUFACTURER / COMMENTS
EWH-G-1	12.3	50	100	480/3/60	140 F	A.O. SMITH DSE-100A

DOMESTIC CIRCULATING PUMP

ITEM NO.	DESCRIPTION	TYPE	GPM	HEAD FEET	H.P. MIN.	POWER (V/PH/HZ)	MAX RPM	MANUFACTURER AND MODEL
CP-G-1	CIRCULATION PUMP 140° F HOT WATER SERVES EWH-G-1	IN-LINE STAINLESS STEEL	3	12	1/25	120/1/60	2400	GRUNDFOS ALPHA HWR SERIES #15-55 SF

DOMESTIC HW EXPANSION TANK

ITEM NO.	DESCRIPTION	MAX. WORK PRESSURE	TANK VOL. GALLONS	MAX. ACCEPT. GALLONS	DIMENSIONS DIA X HT (INCHES)	MANUFACTURER AND MODEL
ET-G-1	HOT WATER EXPANSION TANK	150 PSI	8	5.3	12 X 20	WATTS #DETA-20 FLOOR MOUNTED

NOTES:
1. ALL EXPANSION TANKS SHALL BE ASME RATED.
2. ET-G-1 SHALL BE PIPE IN CONJUNCTION WITH EWH-G-1.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: VU

PLUMBING SCHEDULES

P7.01
of

PLUMBING FIXTURE SCHEDULE

TYPE: WC-1 (STANDARD HEIGHT)
DESCRIPTION: WATER CLOSET, WALL HUNG, WHITE VITREOUS CHINA, 1.28 GALLON PER FLUSH SIPHON JET ACTION, ELONGATED CLOSET BOWL WITH ANTI-MICROBIAL FINISH, 1- 1/2" TOP SPUD AND BOLT COVERS. AMERICAN STANDARD "AFWALL" #3351.101.
SEAT: ELONGATED OPEN FRONT BLACK PLASTIC SEAT WITH SELF SUSTAINING CONCEALED CHECK HINGES. BEMIS #1955SSCT.
FLUSH VALVE: 1.28 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE, CHROME PLATED CLOSET FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 1-1/2" TOP SPUD. SLOAN 'ROYAL' #111-1.28-SG
CARRIER: WADE #311 AND #330 SERIES -AM1.
ROUGH-IN: 4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: WC-2 (T.A.S. COMPLIANT)
DESCRIPTION: WATER CLOSET, WALL HUNG, WHITE VITREOUS CHINA, 1.28 GALLON PER FLUSH SIPHON JET ACTION, ELONGATED CLOSET BOWL WITH ANTI-MICROBIAL FINISH, 1- 1/2" TOP SPUD AND BOLT COVERS. AMERICAN STANDARD "AFWALL" #3351.101.
SEAT: ELONGATED OPEN FRONT BLACK PLASTIC SEAT WITH SELF SUSTAINING CONCEALED CHECK HINGES. BEMIS #1955SSCT.
FLUSH VALVE: 1.28 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE, CHROME PLATED CLOSET FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 1-1/2" TOP SPUD. SLOAN 'ROYAL' #111-1.28-SG
CARRIER: WADE #311 AND #330 SERIES -AM1.
ROUGH-IN: 4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: U-1 (T.A.S. COMPLIANT)
DESCRIPTION: URINAL, WALL HUNG, WHITE VITREOUS CHINA, 0.5 GALLON PER FLUSH, WASHOUT FLUSH ACTION, INTEGRAL TRAP, REMOVABLE DOMED STRAINER. AMERICAN STANDARD "ALLBROOK" #6550.005
FLUSH VALVE: 0.5 GALLON FLUSH CYCLE. EXPOSED, DIAPHRAGM TYPE, CHROME PLATED URINAL FLUSHOMETER. VACUUM BREAKER, SPUD COUPLING FOR 3/4" TOP SPUD. SLOAN 'ROYAL' #186-0.5-H-573-CP.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 4" SQUARE BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE, UPPER AND LOWER BEARING PLATES WITH THREADED STUDS. WADE #401-AM1-M36.
ROUGH-IN: 2" WASTE, 2" VENT, 3/4" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: L-1 (T.A.S. COMPLIANT) METERED
DESCRIPTION: LAVATORY, WALL HUNG, WHITE VITREOUS CHINA, 20-1/2" X 18-1/4" WITH FRONT OVERFLOW AND CONCEALED ARM SUPPORTS, 4" FAUCET SPREAD. AMERICAN STANDARD "LUCERNE" #0356.015.
FAUCET: CHROME PLATED BRASS DECK MOUNTED LAVATORY FAUCET WITH COVER PLATE, 4-1/8" SPOUT, AND PUSH BUTTON HANDLE INDEXED "PUSH". SELF CLOSING METERING CARTRIDGE, VANDAL RESISTANT 0.5 GPM FLOW OUTLET. CHICAGO MODEL #857-E12-665PSHVPACP.
MIX VALVE: ASSE 1070 CERTIFIED POINT OF USE MIXING VALVE, BRASS BODY, INTEGRAL CHECK VALVES, LEAD FREE, WAX FILLED THERMOSTAT AND MOUNTING BRACKET. BRADLEY #S59-4007BY AND #S59-2976 MOUNTING BRACKET. (FACTORY SET TO 105°F OUTLET TEMPERATURE).
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE #8872C.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #LFH2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE, THREADED CONCEALED ARMS, ALIGNMENT BAR, LOCKING DEVICE, AND LEVELING SCREWS. WADE #520-M36.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER, TEMPERED WATER OUT. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: L-2 (T.A.S. COMPLIANT) - ADULTS
DESCRIPTION: LAVATORY, UNDERCOUNTER MOUNT, VITREOUS CHINA, 19-1/4" X 15-3/4" WITH REAR OVERFLOW, NO DECK FAUCET HOLES. AMERICAN STANDARD "OVALYN" #9482.000.
FAUCET: 8" FIXED CENTERS, CHROME PLATED BRASS DECK MOUNTED LAVATORY FAUCET WITH 5" SPOUT, VANDAL PROOF 4" WRIST BLADE HANDLES ON 4" CENTERS. QUARTER TURN CERAMIC DISC OPERATING CARTRIDGES, PRESSURE COMPENSATING NON-AERATOR LAMINAR FLOW OUTLET 0.5 GPM. CHICAGO MODEL #404-E70-317XKABCP.
MIX VALVE: ASSE 1070 CERTIFIED POINT OF USE MIXING VALVE, BRASS BODY, INTEGRAL CHECK VALVES, LEAD FREE, WAX FILLED THERMOSTAT AND MOUNTING BRACKET. BRADLEY #S59-4007BY AND #S59-2976 MOUNTING BRACKET. (FACTORY SET TO 105°F OUTLET TEMPERATURE).
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE #8872C.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #LFH2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE, THREADED CONCEALED ARMS, ALIGNMENT BAR, LOCKING DEVICE, AND LEVELING SCREWS. WADE #520-M36.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: L-3 (T.A.S. COMPLIANT) - GREENHOUSE
DESCRIPTION: LAVATORY, WALL HUNG, 18 GAUGE 304 STAINLESS STEEL, BUFFED SATIN FINISH, 22" X 19" X 10", REAR DRAIN, SINGLE HOLE, WALL HANGER, SUPPORT BRACKETS. ELKAY #ELVWO2219.
FAUCET: CHROME PLATED BRASS DECK MOUNTED FITTING WITH 5-1/4" RIGID/SWING SPOUT AND 4" WRISTBLADE HANDLES ON 8" CENTERS, QUARTER TURN CERAMIC OPERATING CARTRIDGES, VANDAL PROOF, VANDAL RESISTANT 1.0 GPM NON-AERATING LAMINAR FLOW OUTLET. CHICAGO #201-G8AE65VP-317XKAB.
MIX VALVE: ASSE 1070 CERTIFIED POINT OF USE MIXING VALVE, LEAD FREE BRONZE BODY, INTEGRAL CHECK VALVES, COMPRESSION FITTINGS, COPPER ENCAPSULATED THERMOSTAT ASSEMBLY WITH POLYMER THERMOPLASTIC SHUTTLE. LEONARD 170-LF-BRKT. (110F)
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE #8872C.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #LFH2165LK.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: SK-1 (NON COMPLIANT)
SERVICE: DIGITAL ART G154
DESCRIPTION: SINK, COUNTER MOUNTED, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL, 22" X 19" X 10-1/8" DEEP, SINGLE COMPARTMENT WITH FAUCET DECK. THREE FAUCET HOLES ON 4" CENTERS. ELKAY #LRAD221910.
FAUCET: CHROME PLATED BRASS DECK MOUNTED FITTING WITH 11-5/8" HIGH GOOSENECK SPOUT AND 4" WRISTBLADE HANDLES ON 8" CENTERS. QUARTER TURN CERAMIC DISC OPERATING CARTRIDGES, VANDAL RESISTANT 1.5 GPM OUTLET. CHICAGO MODEL #786-E335XKABCP.
STRAINER: CHROME PLATED WROUGHT BRASS 4-1/2" WIDE GRID SINK STRAINER, 1-1/4" 17 GAUGE CHROME PLATED BRASS TAILPIECE. MCGUIRE #152.
P-TRAP: 1-1/2" 17 GAUGE CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE #8912.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS

TYPE: SK-2 (T.A.S. COMPLIANT)
SERVICE: DIGITAL ART G154, ART G156
DESCRIPTION: LAVATORY, WALL HUNG, WHITE VITREOUS CHINA, 20-1/2" X 18-1/4" WITH FRONT OVERFLOW AND CONCEALED ARM SUPPORTS, FAUCET HOLES ON 4" CENTERS. AMERICAN STANDARD "LUCERNE" #0355.012.
FAUCET: 4" FIXED CENTERS, 4" CHROME PLATED WRIST BLADE HANDLES, QUARTER TURN CERAMIC DISC CARTRIDGES, 5-1/4" RIGID SWING GOOSENECK SPOUT 1.5 GPM. CHICAGO MODEL #895-317GN2FCXKABCP
MIXING VALVE: ASSE 1070 CERTIFIED POINT OF USE MIXING VALVE, BRASS BODY, INTEGRAL CHECK VALVES, LEAD FREE, WAX FILLED THERMOSTAT AND MOUNTING BRACKET. BRADLEY #S59-4007BY AND #S45-2976 MOUNTING BRACKET. (108 F)
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH 6" TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE, THREADED CONCEALED ARMS, ALIGNMENT BAR, LOCKING DEVICE, AND LEVELING SCREWS. WADE #520-08.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS

TYPE: SK-3 (NON T.A.S. COMPLIANT) - ART TROUGH SINK
SERVICE: ART G156
DESCRIPTION: 14 GAUGE, TYPE 304 STAINLESS STEEL WALL MOUNTED MULTI-STATION SINK MEASURES 48"X 20"X 8", 10" STAINLESS STEEL BACKSPLASH WITH 2 SETS OF 2-HOLES ON 8" CENTERS, NO DRAINBOARD, 45" X 16"X 8" DEEP COMPARTMENT PROVIDE WITH WALL MOUNTING BRACKET. ELKAY #EWMA48204.
FAUCET: CHROME PLATED BRASS WALL MOUNT FAUCET (2) WITH 5-1/4" RIGID SWING GOOSENECK SPOUT, 1.5 GPM FLOW OUTLET AND 4" WRIST BLADE HANDLES ON 8" CENTERS. QUARTER TURN CERAMIC DISC OPERATING CARTRIDGE. CHICAGO #W8W-GN2AE35-317AB
STRAINER: CHROME PLATED BRASS WIDE TOP SINK STRAINER WITH PERFORATED STRAINER, 1-1/2" CHROME PLATED BRASS TAILPIECE. MCGUIRE #152MN.
INTERCEPTOR: A.R.C CAST ALUMINUM SOLIDS INTERCEPTOR WITH TOP ACCESS GASKETED COVER, STAINLESS STEEL MESH LINED BUCKET, 2" FEMALE IRON PIPE INLET AND OUTLET 15 GPM FLOW RATE. WADE #5720-123.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D. CHROME PLATED LOOSE KEY STOP VALVES WITH ESCUTCHEONS AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS

TYPE: SK-4 (T.A.S. COMPLIANT) - SHOP HAND SINKS
DESCRIPTION: LAVATORY, WALL HUNG, STAINLESS STEEL, 16-3/4" X 15-1/2" X 13", SINGLE BOWL, BUFFED SATIN, 304 STAINLESS STEEL, CENTER DRAIN LOCATION. ELKAY #CHS17162.
FAUCET: WALL MOUNT FAUCET, 8" CENTERSET, 5-1/4" GOOSENECK SPOUT, QUARTER TURN CERMIC CARTIDGES, 0.5 GPM NON AERATING LAMINAR FLOW OUTLET, VANDAL PROOF 4" WRISTBLADE HANDLE, CHICAGO # 632-GN2AE66VP317XKAB.
MIX VALVE: ASSE 1070 CERTIFIED POINT OF USE MIXING VALVE, BRASS BODY, INTEGRAL CHECK VALVES, LEAD FREE, WAX FILLED THERMOSTAT AND MOUNTING BRACKET. BRADLEY #S59-4007BY AND #S59-2976 MOUNTING BRACKET. (FACTORY SET TO 105°F OUTLET TEMPERATURE).
STRAINER: 1-1/4" 17 GAUGE CHROME PLATED BRASS GRID STRAINER WITH TAILPIECE. MCGUIRE #155A.
P-TRAP: 1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE #8872C.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #LFH2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE WITH (4) 1/2" BOLTS, ADJUSTABLE SLEEVE, THREADED CONCEALED ARMS, ALIGNMENT BAR, LOCKING DEVICE, AND LEVELING SCREWS. WADE #520-M36.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER, TEMPERED WATER OUT. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: SK-5 (NON-COMPLIANT) - UTILITY SINK
SERVICE: HVAC TRAINING 4025
DESCRIPTION: 14 GAUGE, TYPE 304 STAINLESS STEEL SINGLE COMPARTMENT FREESTANDING SINK MEASURES 39" X 27-1/2" X 44", 8" STAINLESS STEEL BACKSPLASH WITH 2-HOLES ON 8" CENTERS, NO DRAINBOARD, 36" X 24"X14" DEEP COMPARTMENT (4) 16 GAUGE 1-5/8" TUBULAR LEGS, ADJUSTABLE BULLET FEET. ELKAY #WNSF81362
FAUCET: CHROME PLATED BRASS WALL MOUNT FITTING WITH 9-1/2" L-TYPE SWING SPOUT AND VANDAL PROOF 2-3/8" LEVER HANDLES ON 3"-8-3/8" CENTERS. QUATURN TURN CARTRIDGES, 1.5 GPM OUTLET FLOW VANDAL PROOF PRESSURE COMPENSATING SOFT-FLO AREATOR. CHICAGO #445-L9E35VPCABCP.
STRAINER: CHROME PLATED BRASS WIDE TOP SINK STRAINER WITH PERFORATED STRAINER, 1-1/2" CHROME PLATED BRASS TAILPIECE. MCGUIRE #152MN.
INTERCEPTOR: A.R.C CAST ALUMINUM SOLIDS INTERCEPTOR WITH TOP ACCESS GASKETED COVER, STAINLESS STEEL MESH LINED BUCKET, 2" FEMALE IRON PIPE INLET AND OUTLET 15 GPM FLOW RATE. WADE #5720-123..
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: SK-6 - GREENHOUSE UTILITY SINK (NON ADA)
DESCRIPTION: SINK, WALL HUNG, 304 STAINLESS STEEL, 14 GAUGE, TWO FAUCETS WITH HOLES ON 8" CENTERS, SINGLE BOWL, 48" X 20" X 18", BACKSPLASH, BUFFED SATIN FINISH, STAINLESS STEEL SUPPORT BRACKETS. ELKAY #EWMA4820.
FAUCET: (2) CHROME PLATED, 8" FIXED CENTERS, 5-1/4" RIGID/SWING GOOSENECK SPOUT, VANDAL PROOF 1.0 GPM LAMINAR FLOW NON AERATING OUTLET, VANDAL PROOF 4" WRISTBLADE HANDLES, CERAMIC QUARTER TURN DISK CARTRIDGE. CHICAGO #631-GN2AE65VP-317AB.
STRAINER: CHROME PLATED WROUGHT BRASS 4-1/2" WIDE GRID SINK STRAINER, 1-1/4" 20 GAUGE CHROME PLATED BRASS TAILPIECE. MCGUIRE #152MN.
P-TRAP: 1-1/2" 17 GAUGE CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE. MCGUIRE #8912.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: FD-1
SERVICE: TOILET ROOMS AND GENERAL USE
DESCRIPTION: FLOOR DRAIN, PAINTED CAST IRON BODY WITH ANCHOR FLANGE, SEEPAGE OPENINGS, CAST IRON ADJUSTABLE 6" DIAMETER TOP, STAINLESS STEEL FRAME WITH SECURED SLOTTED GRATE, REVERSIBLE CLAMPING COLLAR, BOTTOM OUTLET, LOAD RATING - LIGHT DUTY. WADE #1100-MR6-85.
TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH DRAIN BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / FLOOR CONSTRUCTION.

TYPE: FD-2
SERVICE: EMERGENCY EYEWASH AND SHOWER, EMERGENCY FACE WASH
DESCRIPTION: FLOOR DRAIN, PAINTED CAST IRON BODY WITH ANCHOR FLANGE, 8" SQUARE STAINLESS STEEL PERFORATED HINGED GRATE, MEDIUM SUMP, SECONDARY STRAINER AND VANDAL PROOF SCREWS, INTEGRAL CLAMPING DEVICE, STAINLESS STEEL MESH LINED BUCKET, BOTTOM OUTLET. WADE #2350-14-26-123-304.
TRAP SEAL: PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR DRAIN BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / DRAINAGE TRENCH CONSTRUCTION.

TYPE: FS-1
SERVICE: ICE MACHINE DRAIN / BACKFLOW PREVENTER DISCHARGE
DESCRIPTION: CAST IRON 8" SQUARE FLOOR SINK WITH 6" DEEP SUMP, A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER, 1/2 STAINLESS STEEL TOP, CLAMPING DEVICE. WADE 9110-15026-27-SS.
TRAP SEAL: TRAP SERVED BY TRAP PRIMING DEVICE, REFER TO PLANS FOR SPECIFIC TYPE.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION WITH ARCHITECTURAL DRAWINGS / EQUIPMENT PLACEMENT.

TYPE: HB-1 - COLD WATER
DESCRIPTION: HOSE BIBB. EXPOSED TYPE, MILD CLIMATE, WALL-MOUNTED FAUCET WITH 3/4" F.P.T. INLET, 3/4" MALE HOSE THREAD OUTLET AND SELF-DRAINING ANTI SIPHON VACUUM BREAKER. CHROME PLATED BRASS FINISH WITH REMOVABLE TEE HANDLE. CHICAGO #952-CP.
ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 12"-18" A.F.F. OR AS DIRECTED BY ARCHITECT/OWNER.

TYPE: WH-1
DESCRIPTION: WALL HYDRANT IN S.S. BOX, 3/4" NON FREEZE, HALF TURN CERAMIC DISC CARTRIDGE, STAINLESS STEEL FINISH WITH ANTI SIPHON VACUUM BREAKER AND LOOSE TEE KEY. INSTALL WITH BOTTOM OF HYDRANT 18" A.F.F. WADE 8601-MT-175.
ROUGH-IN: 3/4" COLD WATER

TYPE: RH-1
DESCRIPTION: ROOF HYDRANT, DRAIN CANISTER BELOW ROOF LINE,3/4" FIP INLET AND 3/4" OUTLET HOSE. 1" SCHEDULE 40 GALVANIZED RISER AND SELF ADJUSTING SOLID BRASS OPERATING ROD. MAPA PRODUCTS #MPH-24-FP.
ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 18"AFF OR AS DIRECTED BY ARCHITECT/OWNER.

TYPE: RD-1
DESCRIPTION: ROOF DRAIN. CAST IRON BODY WITH FLANGE, FLASHING RING WITH GRAVEL STOP, ALUMINUM DOME, UNDERDECK CLAMP AND ADJUSTABLE EXTENSION AS REQUIRED FOR ROOF CONSTRUCTION. WADE 3000-46-52-53 FOR 6" AND SMALLER, WADE 3001-46-52-53 FOR 8" AND LARGER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.

TYPE: RD-2
DESCRIPTION: OVERFLOW ROOF DRAIN. CAST IRON BODY WITH FLANGE, FLASHING RING WITH GRAVEL STOP, ALUMINUM DOME, 2" HIGH WATER DAM, BEARING PAN, UNDERDECK CLAMP AND ADJUSTABLE EXTENSION AS REQUIRED FOR ROOF CONSTRUCTION. WADE 3000-D-46-52-53 FOR 6" AND SMALLER, WADE 3001-D-46-52-53 FOR 8" AND LARGER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.

TYPE: RD-1
DESCRIPTION: ROOF DRAIN. CAST IRON BODY WITH FLANGE, FLASHING RING WITH GRAVEL STOP, ALUMINUM DOME, UNDERDECK CLAMP AND ADJUSTABLE EXTENSION AS REQUIRED FOR ROOF CONSTRUCTION. WADE 3000-46-52-53 FOR 6" AND SMALLER, WADE 3001-46-52-53 FOR 8" AND LARGER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.

TYPE: RD-2
DESCRIPTION: OVERFLOW ROOF DRAIN. CAST IRON BODY WITH FLANGE, FLASHING RING WITH GRAVEL STOP, ALUMINUM DOME, 2" HIGH WATER DAM, BEARING PAN, UNDERDECK CLAMP AND ADJUSTABLE EXTENSION AS REQUIRED FOR ROOF CONSTRUCTION. WADE 3000-D-46-52-53 FOR 6" AND SMALLER, WADE 3001-D-46-52-53 FOR 8" AND LARGER.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.

TYPE: DN-1
DESCRIPTION: OVERFLOW DOWNSPOUT NOZZLE. CAST BRONZE WITH THREADED OR NO HUB OUTLET AND FLANGE TO SECURE NOZZLE TO WALL. INSTALL AT 12" ABOVE FINISHED SLAB OR AS DIRECTED BY ARCHITECT. WADE 3941-VP.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.

TYPE: TP-1
SERVICE: SERVES SINGLE FLOOR DRAIN TRAP.
DESCRIPTION: FLUSH VALVE TRAP PRIMER, 1-1/2" O.D. X 12" 17 GAUGE PRIMING TUBE WITH VACUUM BREAKER. PRECISION PLUMBING PRODUCTS FVP-1VB.

TYPE: TP-2
SERVICE: SERVES 1 TO 4 FLOOR DRAIN TRAPS, REFER TO PLANS.
DESCRIPTION: ELECTRONIC TRAP PRIMER WITH DISTRIBUTION UNIT AND NEMA 1 BOX. SURFACE MOUNT IN MECHANICAL ROOM OR CUSTODIAL CLOSET. PRECISION PLUMBING PRODUCTS MINI-PRIME MPB-500-115V WITH DISTRIBUTION UNIT.
ROUGH-IN: 1/2" COLD WATER

TYPE: HR-1
DESCRIPTION: OVERHEAD MOUNTED COMPRESSED AIR HOSE REEL COMPLETE WITH 50 FEET OF 3/8" ID AIR HOSE AND 3/8" NPT MALE OUTLET. BALCRANK PREMIUM SERIES MODEL 2111-036.
ROUGH-IN: 1/2" COMPRESSED AIR. COORDINATE FINAL LOCATIONS AND INSTALLATION WITH STRUCTURE, ARCHITECT/OWNER, AND THE WORK OF OTHER TRADES.

TYPE: A-1
DESCRIPTION: AIR DROP WITH REGULATOR, 1/2" AIR KWICK COUPLING MILTON "G" STYLE. BALCRANK MINI PIGGYBACK FILTER/REGULATOR COMBO UNIT RATED FOR 150 PSI AND FLOWS OF 15 SCFM.
ROUGH-IN: 1/2" COMPRESSED AIR. INSTALL WITH OUTLET AT 30" A.F.F. OR AS DIRECTED BY ARCHITECT/OWNER. COORDINATE FINAL QUANTITY, LOCATIONS, AND INSTALLATION WITH ARCHITECTURAL DRAWINGS.

TYPE: BFP-1 (2" AND SMALLER)
DESCRIPTION: BACKFLOW PREVENTER, REDUCED PRESSURE ZONE TYPE WITH TWO INLINE INDEPENDENT CHECK VALVES WITH AN INTERMEDIATE RELIEF VALVE. COMPLETE WITH TWO FULL PORTED BALL VALVE SHUT-OFFS AND BALL TYPE TEST COCKS. BRONZE STRAINER ON INLET. REFER TO FLOOR PLANS FOR SIZES. MOUNT AT 48" A.F.F. UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE AIR GAP WITH DRAIN PIPE TO NEAREST FLOOR DRAIN. WATTS 909-QT-S.

TYPE: BFP-2 (2 1/2" AND LARGER)
DESCRIPTION: BACKFLOW PREVENTER, REDUCED PRESSURE ZONE TYPE WITH TWO INLINE INDEPENDENT CHECK VALVES WITH AN INTERMEDIATE RELIEF VALVE. COMPLETE WITH TWO FULL PORTED BALL VALVE SHUT-OFFS AND BALL TYPE TEST COCKS. BRONZE STRAINER ON INLET. PROVIDE AIR GAP WITH DRAIN PIPE TO NEAREST FLOOR DRAIN. WATTS 909 SERIES.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. MOUNT AT 48" A.F.F. UNLESS NOTED OTHERWISE ON DRAWINGS.

TYPE: ECO
DESCRIPTION: EXTERIOR CLEANOUT TO GRADE, CAST IRON BODY WITH ADJUSTABLE COMBINED ACCESS COVER/PLUG TOP ASSEMBLY WITH PRIMARY GASKET SEAL, AND ROUND SCORIATED VANDAL RESISTANT DUCTILE IRON TRACTOR TYPE COVER. IF LOCATED IN ASPHALT OR DIRT PROVIDE 18"X18"X12" CONCRETE PAD. WADE 6000-Z.

TYPE: FCO
DESCRIPTION: FLOOR CLEANOUT, CAST IRON BODY AND ADJUSTABLE COMBINED ACCESS COVER/PLUG TOP ASSEMBLY WITH PRIMARY GASKET SEAL, AND ROUND SCORIATED STAINLESS STEEL COVER. WADE 6000-153. FOR CARPETED FLOORS PROVIDE WADE 6000-CM.

TYPE: WCO
DESCRIPTION: WALL CLEANOUT. CAST IRON CLEANOUT FERRULE WITH DUCTILE IRON COMBINED COVER/PLUG AND ROUND STAINLESS COVER PLATE WITH CENTER SECURING SCREW. WADE 8550 WITH 8480-R6. PROVIDE WADE 8560 CAST IRON CLEANOUT TEE IN LIEU OF FERRULE AS REQUIRED FOR WALL CONSTRUCTION.

TYPE: TD-1
DESCRIPTION: CAST IN PLACE CONCRETE FORMED WITH PRE-MANUFACTURED EXPANDED POLYSTYRENE FORMS WITH EMBEDDED GALVANIZED STEEL INLAY RAILS WITH NO-FLOAT LEGS. TRENCH SIZE 12" WIDE X DEPTH TO VARY TO SPECIFIED SLOPE. TRENCH FORMER #TR12-12.806B.FB-F21G. PRE-MANUFACTURED FORMING SYSTEM BY ABT INC TRX SERIES.
GRATE: 12" WIDE PUNCHED LIGHTWEIGHT ALUMINUM PLANKS DESIGNED FOR 8 PERCENT OPEN AREA AND RATED FOR H20 LOADS. DIAGONALLY ORIENTED OPENINGS ON 1-1/2" CENTERS, LIFTOUT TYPE, WITH TOGGLE LOCK ANCHORS. ABT IN #12.806B.FB.
TRAP PRIMER: SERVED BY ELECTRONIC TRAP PRIMER IN GREENHOUSE. REFER TO PLANS.

TYPE: CB-1
DESCRIPTION: CAST IN PLACE CONCRETE CATCH BASIN. 12" X 2'-0" CATCH BASIN SIZE, 304 STAINLESS STEEL TRASH BASKET, 10X10 WIRE CLOTH, NO FLOAT REBAR U-LEGS. PRE-MANUFACTURED FORMING SYSTEM BY ABT INC SERIES #TFX-12 WITH TRASH BUCKET MODEL 1904. BASKET TO BE LOCATED JUST BELOW FINAL DEPTH OF TRENCHDRAIN.
GRATE: 12" WIDE PUNCHED LIGHTWEIGHT ALUMINUM PLANKS DESIGNED FOR 8 PERCENT OPEN AREA AND RATED FOR H20 LOADS. DIAGONALLY ORIENTED OPENINGS ON 1-1/2" CENTERS, LIFTOUT TYPE, WITH TOGGLE LOCK ANCHORS. ABT IN #12.806B.FB.

TYPE: HB-1 - COLD WATER
DESCRIPTION: HOSE BIBB. EXPOSED TYPE, MILD CLIMATE, WALL-MOUNTED FAUCET WITH 3/4" F.P.T. INLET, 3/4" MALE HOSE THREAD OUTLET AND SELF-DRAINING ANTI SIPHON VACUUM BREAKER. CHROME PLATED BRASS FINISH WITH REMOVABLE TEE HANDLE. CHICAGO #952-CP.
ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 12"-18" A.F.F. OR AS DIRECTED BY ARCHITECT/OWNER.

TYPE: WH-1
DESCRIPTION: WALL HYDRANT IN S.S. BOX, 3/4" NON FREEZE, HALF TURN CERAMIC DISC CARTRIDGE, STAINLESS STEEL FINISH WITH ANTI SIPHON VACUUM BREAKER AND LOOSE TEE KEY. INSTALL WITH BOTTOM OF HYDRANT 18" A.F.F. WADE 8601-MT-175.
ROUGH-IN: 3/4" COLD WATER

TYPE: RH-1
DESCRIPTION: ROOF HYDRANT, DRAIN CANISTER BELOW ROOF LINE,3/4" FIP INLET AND 3/4" OUTLET HOSE. 1" SCHEDULE 40 GALVANIZED RISER AND SELF ADJUSTING SOLID BRASS OPERATING ROD. MAPA PRODUCTS #MPH-24-FP.
ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 18"AFF OR AS DIRECTED BY ARCHITECT/OWNER.

TYPE: EDF-1 (T.A.S. COMPLIANT)
DESCRIPTION: WALL HUNG, VANDAL-RESISTANT BI-LEVEL ADA COOLER NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50°F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE ENERGY SAVINGS, VANDAL RESISTANT VANDAL RESISTANT BUBBLER. MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PRODUCT SHALL BE WALL MOUNT. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH. HALSEY TAYLOR #HVR8BL
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BL.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS

TYPE: EDF-2 (T.A.S. COMPLIANT) DRINKING FOUNTAIN WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BOTTLE FILLING STATION AND BI-LEVEL VANDAL-RESISTANT COOLER HIGH EFFICIENCY NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE ANTIMICROBIAL, GREEN COUNTER, HIGH EFFICIENCY, LAMINAR FLOW, REAL DRAIN, SANITARY SENSOR ACTIVATED, VANDAL RESISTANT SMARTFLOW BUBBLER. ELECTRONIC BOTTLE FILLER SENSOR WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PRODUCT SHALL BE WALL MOUNT. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH. HALSEY TAYLOR #HTHB-HVRGRN8BL-NF
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BL.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: ESEW-1 (T.A.S.-COMPLIANT FOR ADULTS)
SERVICE: WELDING 4017, HVAC TRAINING 4025
DESCRIPTION: EMERGENCY COMBINATION DRENCH SHOWER AND HALO FACE AND EYEWASH. FLOOR MOUNTED WITH STAINLESS STEEL BOWL AND SCHEDULE 80, HOT DIP GALVANIZED PIPING. CHROME PLATED RED BRASS STAY-OPEN BALL VALVES, STAINLESS STEEL ACTUATORS, GRAPHICS. TYPE 304 STAINLESS STEEL SHOWER HEAD ACTIVATED BY PULL ROD, INTEGRAL 26 GPM FLOW CONTROL. ABS PLASTIC DUAL STREAM EYE-FACEWASH HEADS ACTIVATED BY TYPE 304 PUSH HANDLE, SELF-ADJUSTING 4.8 GPM REGULATOR. FLOAT OFF COVERS SECURED WITH STAINLESS STEEL BEAD CHAINS. SERIES N9 DUAL-CHECK BACKFLOW PREVENTER. IN-LINE STRAINER TEE. ROTATE DRAIN TEE TO FLOOR DRAIN LOCATION. FIELD PAINT SAFETY YELLOW. BRADLEY #S19-314SPR WITH STRAINER TEE.
FLOW SWITCH: PROVIDE A GEMS FS-200 SERIES FLOW SWITCH, CAPABLE OF MAINTAINING 20 GPM. FLOW SWITCH SHALL BE LOCATED IN EXPOSED SUPPLY PIPING TO EMERGENCY SHOWER/FACE AND EYEWASH AND WIRED TO STROBE LIGHT LOCATED IN ADJACENT HALLWAY, OVER THE DOOR. ELECTRICAL CONTRACTOR TO PROVIDE LIGHT, 24 VOLT TRANSFORMER, AND WIRING
ROUGH-IN: 1-1/4" COLD WATER. COORDINATE FINAL LOCATION/HEIGHT WITH ARCHITECTURAL DRAWINGS.

GENERAL NOTES

ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER (UNLESS NOTED TO BE COLD WATER ONLY) TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON (UNLESS NOTED TO BE AN ACID WASTE FIXTURE). REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.

INSULATION KITS AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE (MCGUIRE OR TRUEBRO). ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION. INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: VU

PLUMBING SCHEDULES

P7.02
of

TECHNOLOGY LEGEND - 27 10 00

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
*# ▼	WALL MOUNTED NETWORK OUTLET D#: NUMBER OF DATA DROPS IN OUTLET AP: WIRELESS ACCESS POINT	+18" AFF, UNLESS OTHERWISE NOTED	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
V# ▽	COMMUNICATIONS OUTLET	FIELD COORDINATE	FIELD COORDINATE	
W ▼	WALL MOUNTED NETWORK OUTLET	+44" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
B ▽	WALL MOUNTED BOX FOR FUTURE USE.	+18" AFF UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
D# ▼	FLOOR MOUNTED NETWORK OUTLET	N/A	COORDINATE WITH ELECTRICAL CONTRACTOR	FINISHED HARDWARE PROVIDED BY DIV 27
⌖ *#	CEILING MOUNTED NETWORK OUTLET AP: WIRELESS ACCESS POINT D#": NETWORK OUTLET	ABOVE CEILING	CEILING BRACKET WITH BISCUIT BLOCK	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. CONDUIT STUB UP AND SLEEVES SHALL HAVE A SOLID UNCUT PLASTIC PROTECTIVE BUSHING.
5. NO CONDUITS SHALL EXCEED FOR 40% MAXIMUM FILL RATIO. CONTRACTOR TO PROVIDE ADDITIONAL CONDUITS REQUIRED.

AUDIO/VIDEO LEGEND - 27 41 16.10

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
WMP ▽	WALL MOUNTED PROJECTOR AUDIO/VISUAL OUTPUT OUTLET	REFERENCE FLOOR PLANS.	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #5
CMP	CEILING MOUNTED PROJECTOR AUDIO/VISUAL OUTPUT OUTLET	CEILING MOUNTED	N/A	NOTE #5
AV-1 ▽	WALL MOUNTED AUDIO/VIDEO INPUT OUTLET	+18" AFF UNO	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	
FSD-1 ▽	WALL MOUNTED FLAT SCREEN DISPLAY AUDIO/VISUAL OUTPUT OUTLET	REFERENCE FLOOR PLAN	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
FSD-2 ▽	WALL MOUNTED FLAT SCREEN DISPLAY AUDIO/VISUAL OUTPUT OUTLET ASSOCIATED WITH AV-1 INPUT OUTLET	REFERENCE FLOOR PLAN	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #5
IVD ▽	INTERACTIVE VIDEO DISPLAY AUDIO/VISUAL OUTPUT OUTLET	REFERENCE FLOOR PLAN	4 11/16"X4 11/16"X2-1/8" BACK BOX WITH DOUBLE GANG RING, TWO(2) 1.25"C	NOTE #5
CP ▽	AV CONTROL PANEL	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
PS	LOCAL INSTRUCTIONAL SPACE PRESENTATION SPEAKER	CEILING	CONTRACTOR PROVIDED CEILING BOX	COORDINATE POWER WITH EC
	STREAMING CAMERA	CEILING UNO	N/A	NOTE #5

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

LOCAL SOUND SYSTEM LEGEND - 27 41 16.20

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
LS *	LOCAL SOUND SYSTEM SPEAKER P: POLE MOUNTED SPEAKER	CEILING MOUNT UNO	CONTRACTOR PROVIDED BACK BOX OR 4"X4"X2 1/8" J BOX WITH COVER, 1"C	
LSC	LOCAL SOUND SYSTEM CONTROL PLATE	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
MI	MICROPHONE INPUT	+18" AFF UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
MA	COMBINATION OUTLET CONSISTING OF ONE (1) MICROPHONE INPUT AND ONE (1) AUXILIARY INPUT	+18" AFF UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
AI	3.5MM STEREO AUDIO AUXILIARY INPUT	+18" AFF UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
H	HANGING MICROPHONE	CEILING MOUNT	N/A	
ABM	AUXILIARY INPUT AND BLUETOOTH MIXER	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
RACK	VENUE SPECIFIC LOCAL SOUND SYSTEM HEAD END RACK	WALL MOUNT UNO	N/A	
WA	WIRELESS ANTENNA	WALL MOUNT UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
ALA	ASSISTED LISTENING ANTENNA	WALL MOUNT UNO	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
SUB	SUBWOOFER	CEILING MOUNT UNO		

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

INTERCOM LEGEND - 27 50 00

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
ICS	INTERCOM COMMUNICATIONS SYSTEM HEAD END UNIT.	FLOOR MOUNTED	COORDINATE WITH EC	COORDINATE POWER WITH EC
S	CEILING MOUNT INTERCOM SPEAKER, LAY-IN CEILING	CEILING	CONTRACTOR PROVIDED	
S2	CEILING MOUNT INTERCOM SPEAKER, HARD CEILING.	CEILING	CONTRACTOR PROVIDED	
S3	WALL MOUNT INTERIOR INTERCOM SPEAKER	REFERENCE FLOOR PLANS	CONTRACTOR PROVIDED	
S4	WALL MOUNT EXTERIOR INTERCOM SPEAKER	+10' AFF UNO	CONTRACTOR PROVIDED	
S5	PENDANT MOUNT INTERCOM SPEAKER	REFERENCE FLOOR PLANS	CONTRACTOR PROVIDED	
S6	SURFACE MOUNT INTERCOM SPEAKER, MOUNT TO STRUCTURE	CEILING	CONTRACTOR PROVIDED	
S7	CEILING MOUNTED EXTERIOR INTERCOM SPEAKER.	CEILING	CONTRACTOR PROVIDED	
# IP	IP BASED SPEAKER. '#' TO BE REPLACED WITH S, S2, S3, S4 INDICATING THE SPECIFIC TYPE OF SPEAKER.	REFERENCE FLOOR PLANS	CONTRACTOR PROVIDED	NOTE #5
VC	WALL MOUNTED VOLUME CONTROL	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
CB	INTERCOM CALL BUTTON	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
C	SINGLE FACE CLOCK	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
C2	DOUBLE FACE CLOCK	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
RPS ▼	REMOTE PROGRAM SOURCE	DESK TOP	COORDINATE WITH EC	NOTE #5
ACS ▼	ADMINISTRATIVE CALL STATION.	DESK TOP	N/A	NOTE #5
LD	LOCKDOWN BUTTON	+48" AFF	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

ACCESS CONTROL LEGEND - 28 10 00 & 28 10 00.05

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
ACP	ACCESS CONTROL SYSTEM, CONTROL PANEL.	+60" AFF TO CENTER	AS REQUIRED	COORDINATE POWER. NOTE #4.
CR *#	ACCESS CONTROL PROXIMITY CARD READER. DEFAULT SYMBOL INDICATES WALL MOUNTED *M - INDICATES MULLION MOUNTED READER	+42" A.F.F.	1-G, 3/4" C	
CR	DOOR MOUNTED ACCESS CONTROL PROXIMITY CARD READER THAT IS INTEGRATED INTO THE DOOR HARDWARE.	+42" AFF	N/A	
DS *#	2-WAY AUDIO/VIDEO INTERCOM DOOR STATION. *DEFAULT INDICATES WALL MOUNTED *M - INDICATES MULLION MOUNTED DEVICE	+42" AFF	*W: 1-G, 3/4" C *M: 3/4"C	COORDINATE POWER. NOTE #4.
DS	DOOR MOUNTED, 2-WAY AUDIO/VIDEO INTERCOM DOOR STATION.	+42" AFF, FIELD COORDINATE		COORDINATE POWER. NOTE #4
MS	2-WAY AUDIO/VIDEO INTERCOM MASTER STATION.	DESK MOUNTED UNO		COORDINATE POWER. NOTE #4
DR	DOOR RELEASE BUTTON	COORDINATE WITH GC	1-G, 3/4" C	
REX	PIR MOTION REQUEST TO EXIT DEVICE			
DP	DOOR PROP ALARM	CEILING MOUNTED UNO	N/A	N/A
DC	DPDT MAGNETIC DOOR CONTACT/DOOR POSITION SENSOR.	FLUSH MOUNTED IN DOOR FRAME	N/A	PROVIDED BY ACS CONTRACTOR.
RFID	VEHICLE RFID TAG READER.		FIELD COORDINATE RACEWAYS AND BACK BOXES	PROVIDE NECESSARY EQUIPMENT FOR A FULLY FUNCTIONAL VEHICLE ENTRY POINT

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

VIDEO SURVEILLANCE LEGEND - 28 20 00

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
	WALL/CORNER MOUNT 4-SENSOR CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
	CEILING MOUNTED 4-SENSOR CAMERA	CEILING		NOTE #5
	2-SENSOR CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	NOTE #5
	1-SENSOR CAMERA	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
VRS	VIDEO RECORDING SERVER			
#MU	VIDEO SURVEILLANCE MAIN UNIT	ABOVE CEILING		NOTE #5
⊦	SYMBOL INDICATED THAT A VIDEO SURVEILLANCE DEVICE IS WALL MOUNTED			

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. THE SYSTEM INTEGRATOR SHALL COORDINATE ALL BOX AND CONDUIT SIZE REQUIREMENTS PRIOR TO ROUGH-IN BY THE PROJECTS ELECTRICAL CONTRACTOR.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

INTRUSION LEGEND - 28 31 00

SYMBOL	DESCRIPTION	ELEVATION	BACK BOX/RACEWAY	NOTES
IDP	INTRUSION DETECTION SYSTEM CONTROL PANEL	+60" AFF	TWO(2) - 1"C TO CONTRACTOR PROVIDED BACK BOX	COORDINATE POWER WITH EC. NOTE #5
KP	INTRUSION DETECTION SYSTEM KEYPAD.	+48" AFF TO TOP	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	
M	CEILING MOUNTED MOTION DETECTOR	CEILING		
M	WALL MOUNTED MOTION DETECTOR LR: LONG RANGE	REFERENCE FLOOR PLAN	N/A	
GB	CEILING MOUNTED GLASS BREAK DETECTOR	CEILING	N/A	
DC	DPDT MAGNETIC DOOR CONTACT/DOOR POSITION SENSOR.	FLUSH MOUNTED IN DOOR FRAME	N/A	DEVICE PROVIDED BY ACS CONTRACTOR.
SDC	SURFACE MOUNT MAGNETIC DOOR CONTACT.	SURFACE MOUNTED ON DOOR FRAME	N/A	
ODC	OVERHEAD DOOR MOUNT MAGNETIC DOOR CONTACT.	SURFACE MOUNTED ON DOOR FRAME	N/A	
DB	DURESS PANIC BUTTON	UNDER DESK UNO	N/A	

NOTES:
1. #-G INDICATES BACK BOX SIZE.
2. #-C INDICATES CONDUIT SIZE.
3. UNO: UNLESS NOTED OTHERWISE
4. REFERENCE DIVISION 28 SPECIFICATION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
5. PROVIDE AND INSTALL ONE (1) CATEGORY CABLE TO CONNECT DEVICE TO NETWORK

FIRE ALARM - 28 46 00

*PROJECT SCOPE INCLUDES EXPANDING THE EXISTING FIRE ALARM SYSTEM TO A VOICE EVACUATION SYSTEM AND EXPANDING THIS SYSTEM TO THE ADDITION/RENOVATION AREAS. FIRE ALARM SYSTEM SHALL BE FULLY OPERATIONAL THROUGHOUT ALL PHASES OF CONSTRUCTION.

*PORTABLE BUILDINGS ARE INCLUDED IN SCOPE.

LEGEND

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL
FAA	FIRE ALARM ANNUNCIATOR PANEL

NOTES:

1. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

2. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

SUBSCRIPTS AND ABBREVIATIONS

TEXT	DESCRIPTION
'WP'	DEVICE SHALL BE WEATHER PROOF AND RATED FOR EXTERIOR CONDITIONS
●	FIELD COORDINATE ELEVATION.
AFF	ABOVE FINISHED FLOOR
'UC'	DEVICE IS TO BE MOUNTED ON THE UNDERSIDE OF THE ELEVATED CANOPY.
'WM'	DEVICE IS TO BE WALL MOUNTED.
'WG'	WIRE GUARD TO BE PROVIDED AND INSTALLED TO PROTECT ASSOCIATED DEVICE.

SUBSCRIPTS LEGEND - EXISTING DEVICES

TEXT	DESCRIPTION
'E'	EXISTING TO REMAIN.
'D'	DEVICE IS EXISTING AND IS TO BE REMOVED. CONTRACTOR TO REMOVE THE DEVICE AND RETURN TO OWNER.
'R'	REMOVE EXISTING DEVICE AND RELOCATE TO A LOCATION INDICATED ON THE DRAWINGS.

NOTES TO CONTRACTOR

1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.

2. SYSTEM INSTALLERS SHALL COORDINATE LOCATIONS AND CONNECTIONS WITH THE PROJECT'S ELECTRICAL CONTRACTOR.

3. CONTRACTOR TO PROVIDE PROPERLY GROUNDED LIGHTING PROTECTION ON ALL CABLING ENTERING AND EXITING THE BUILDING.

TECH DEMO PLAN GENERAL NOTES

A CONTRACTOR SHALL PROVIDE NEW CEILING TILES IN INSTANCES WHERE CEILING DEVICES ARE REMOVED, REPLACED OR ADDED. CONTRACTOR SHALL COORDINATE WITH ARCHITECT ON CORRECT MANUFACTURER AND MODEL PRIOR TO REMOVAL OF EXISTING TILE.

B CONTRACTOR SHALL HAVE EACH LOW VOLTAGE SYSTEM TESTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. SYSTEMS SHALL INCLUDE BUT NOT BE LIMITED TO:
1) FIRE ALARM
2) INTERCOM
3) STRUCTURED CABLING
4) INTRUSION DETECTION
5) ACCESS CONTROL
6) AUDIO VIDEO
7) VIDEO SURVEILLANCE
TESTING SHALL INCLUDE THE FUNCTIONALITY OF ALL FIELD DEVICES AND EQUIPMENT. ANY FAILURES OR ITEMS FOUND NOT TO BE FUNCTIONING TO SPECIFICATION, SHALL BE REPORTED PRIOR TO CONSTRUCTION. ANY ITEMS FOUND TO BE IMPROPERLY OR NON-FUNCTIONING UPON THE COMPLETION OF THE PROJECT, SHALL BE REPLACED AND/OR REPAIRED, BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE PROJECT OR THE OWNER.

C CONTRACTOR SHALL REMOVE ANY DEVICES WHERE CONSTRUCTION OCCURS TO PREVENT POSSIBLE DAMAGE TO THE DEVICE. REMOVAL OF ANY DEVICES WHICH SUPPORT USER CONNECTION OR OTHER SYSTEMS, SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVAL AND/OR TAKING OFF LINE. REMOVAL SHALL CONSIST OF BUT NOT BE LIMITED TO THE FOLLOWING DEVICES AND ASSOCIATED SUPPORT INFRASTRUCTURE:
1) FIRE ALARM DEVICES
2) INTERCOM DEVICES
3) WIRELESS ACCESS POINTS
4) TELEPHONES
5) VIDEO SURVEILLANCE CAMERAS
6) INTRUSION DETECTION DEVICES
7) ACCESS CONTROL DEVICES
8) VIDEO PROJECTION DEVICES
9) VIDEO DISPLAY DEVICES
ANY DEVICES, NOT BEING REINSTALLED, SHALL BE RETURNED TO THE OWNER.

D CONTRACTOR SHALL DOCUMENT THE LOCATION AND ANY ID TAG, MAC ADDRESS, IP ADDRESS, OR BAR CODE OF ANY EXISTING DEVICE THAT IS TO BE REMOVED FROM ITS CURRENT LOCATION. DEVICES THAT ARE TO REMAIN, SHALL BE REINSTALLED IN THE EXACT LOCATION THAT THEY RESIDE IN PRIOR TO CONSTRUCTION, UNLESS NOTED OTHERWISE.

E ANY INDIVIDUAL THAT WILL BE REMOVING. RELOCATING, REINSTALLING, AND/OR TAMPERING WITH ANY EXISTING DEVICES; SHALL BE CERTIFIED BY THE MANUFACTURER OF THE SPECIFIC SYSTEM AND/OR LICENSED AS REQUIRED BY THE STATE TO PERFORM WORK ON THE SYSTEM. THE INDIVIDUAL SHALL BE A FULL-TIME EMPLOYEE OF THE FIRM CONTRACTED TO CONDUCT SUCH WORK ON THE PROJECT AND THAT FIRM SHALL ALSO HOLD ANY CERTIFICATIONS AND/OR LICENSES REQUIRED TO CONDUCT WORK ON THE SPECIFIC SYSTEM.

F ANY INDIVIDUAL/FIRM THAT WILL BE REMOVING, RELOCATING, REINSTALLING, OR TAMPERING WITH IN ANY DEVICES; SHALL BE LICENSED BY THE STATE, AS APPLICABLE, AND CERTIFIED BY THE MANUFACTURER OF THE SYSTEM.

G ALL CABLING ASSOCIATED WITH DEVICES THAT ARE TO BE DEMOLISHED, SHALL BE REMOVED FROM THE DEVICE LOCATION TO THE CABLES POINT OF ORIGIN. NO CABLE SHALL BE ABANDONED IN PLACE.

H ALL EXISTING DEVICES SHOWN ARE EXISTING TO REMAIN. CONTRACTOR TO REMOVE EXISTING DEVICES DURING CONSTRUCTION AND REINSTALL THE DEVICE IN THE SAME LOCATION, UNLESS NOTED OTHERWISE.

I REFERENCE EXISTING DEVICE SUBSCRIPT LEGEND ON THE NOTES AND LEGENDS SHEET.

J TOPCAT LIGHTSPEED LOCAL SOUND SPEAKERS SHALL BE BAGGED AND SUSPENDED IN THE CEILING DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE MANUFACTURER TO NOT VOID THE WARRANTY.

K CONTRACTOR TO COORDINATE WITH CFISD TECHNOLOGY DEPARTMENT PRIOR TO CONSTRUCTION ON WHICH DEVICES ARE TO BE REMOVED BY THE OWNER'S VENDER IN ORDER TO PREVENT VOID OF WARRANTY.

L ALL DEMO DEVICES WITH 'D' SUBSCRIPT SHALL DISCONNECT AND REMOVE EXISTING WIRING DEVICE BACK TO SWITCH. PATCH WALL TO MATCH EXISTING.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

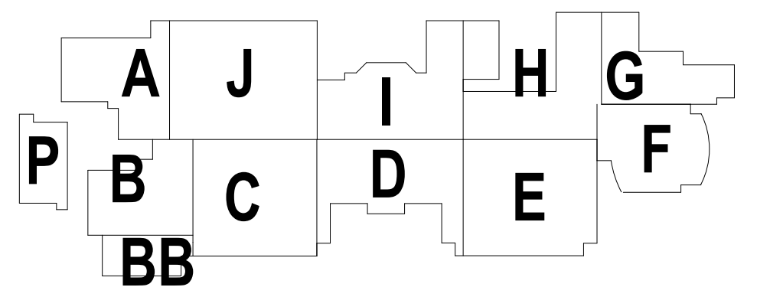
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

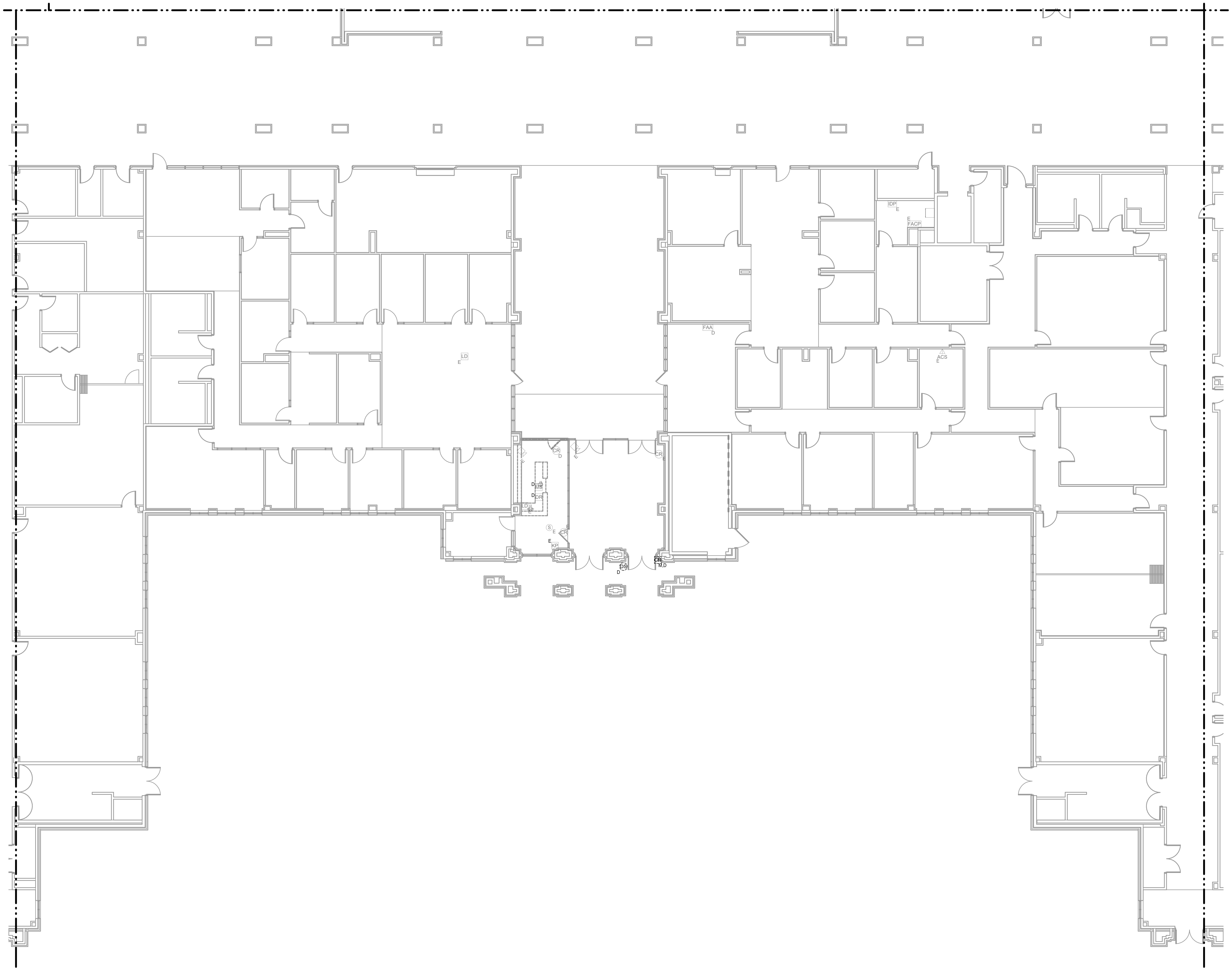


Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

TECHNOLOGY LEGENDS
AND SCHEDULES

T0.00

____ of ____



1 TECHNOLOGY DEMOLITION FLOOR PLAN - LEVEL 1 - AREA D
Scale: 1/8" = 1'-0"

N

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

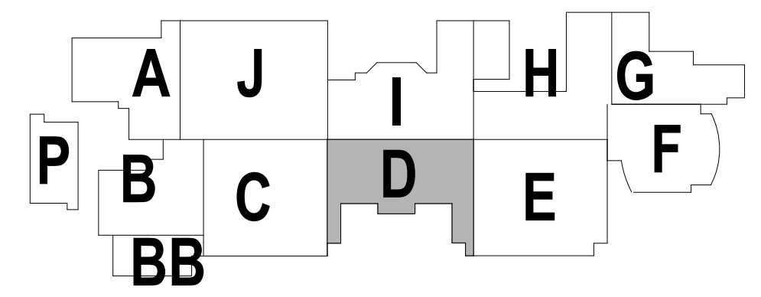
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

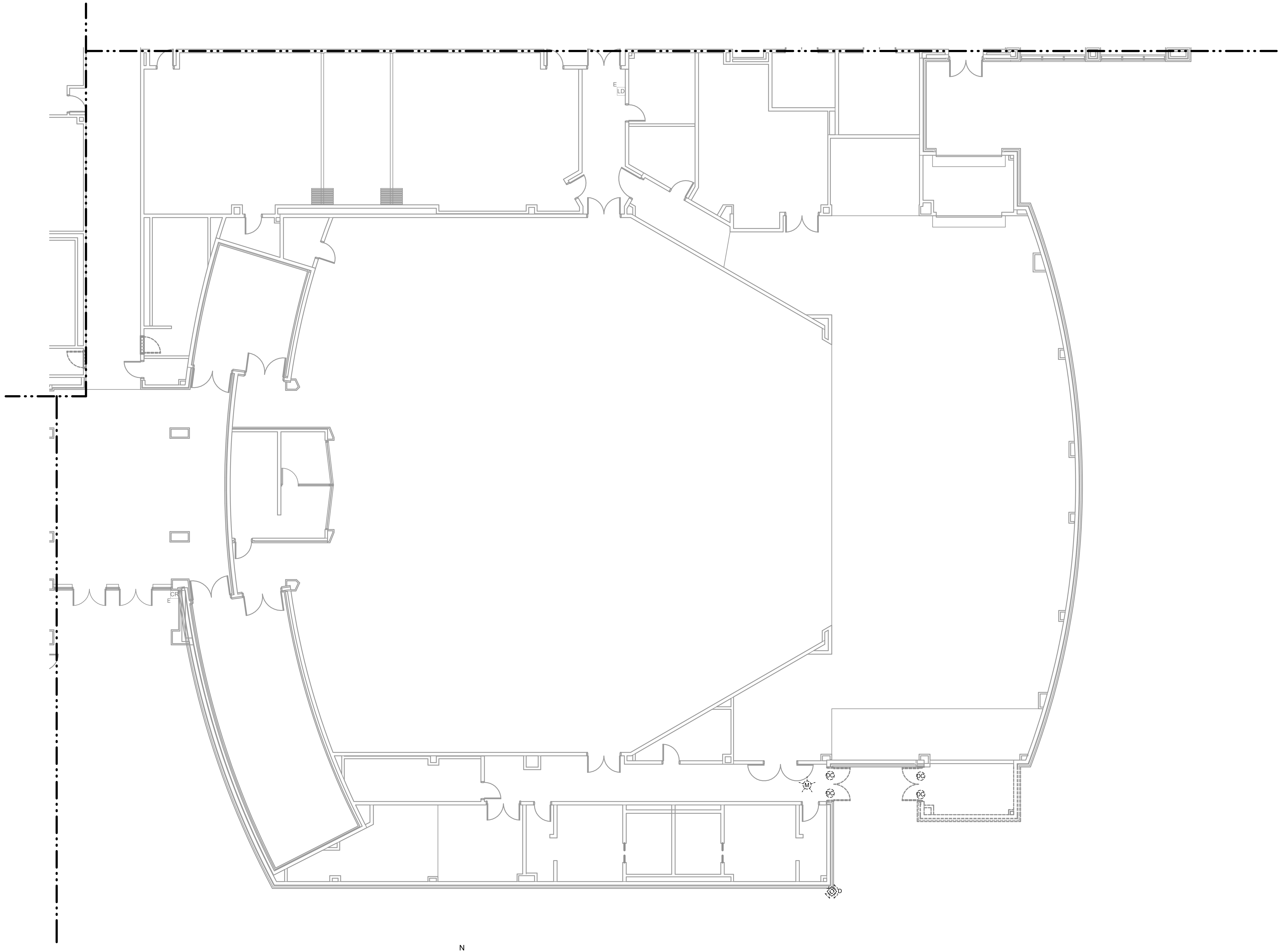
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY
DEMOLITION FIRST
FLOOR PLAN - AREA D

T0.01
of



1 **TECHNOLOGY DEMOLITION FLOOR PLAN - LEVEL 1 - AREA F**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

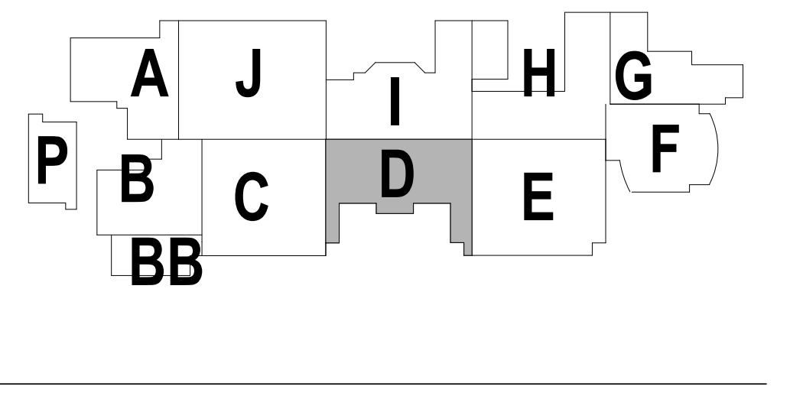
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: NY

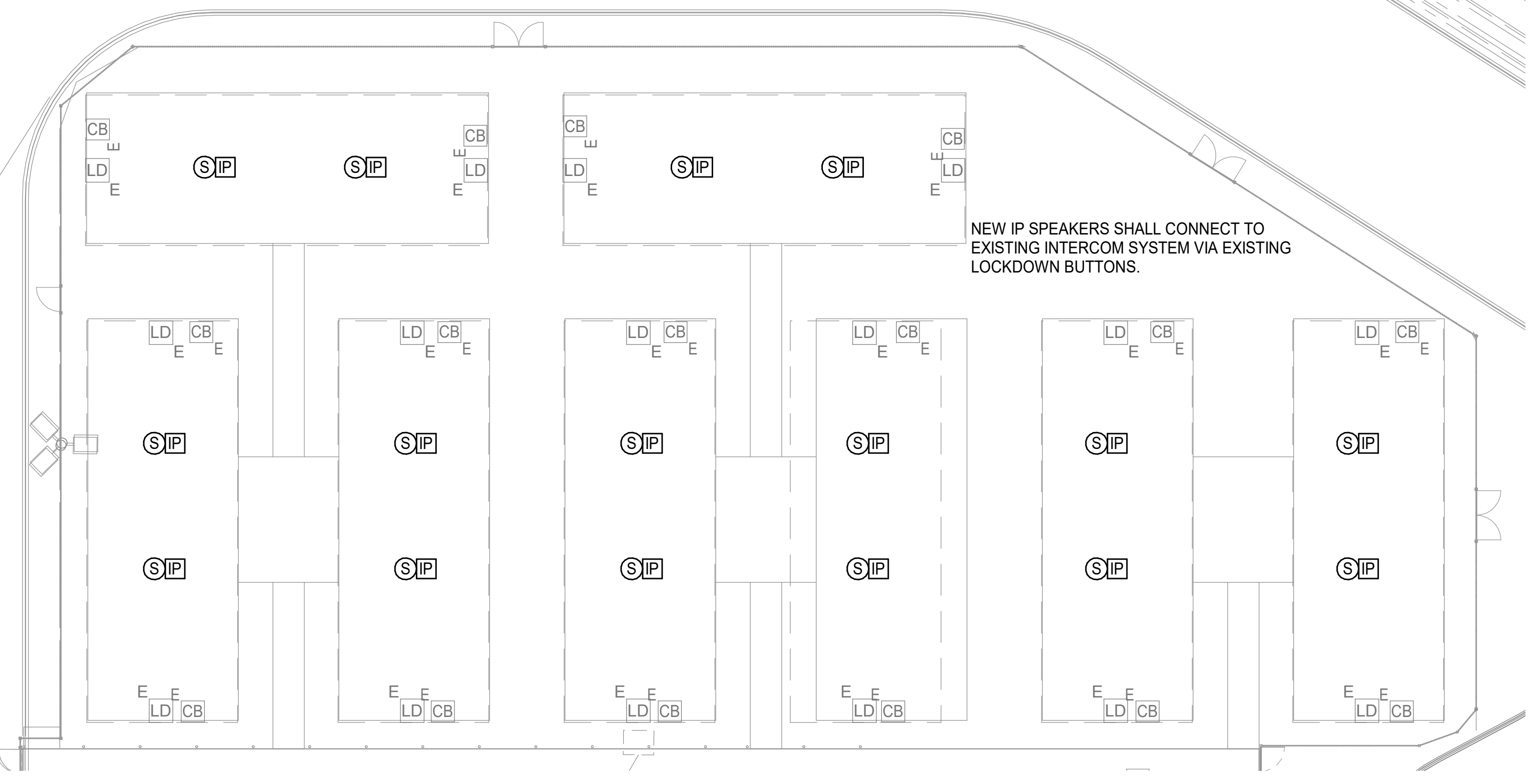
TECHNOLOGY
DEMOLITION FIRST
FLOOR PLAN - AREA F

T0.02

of

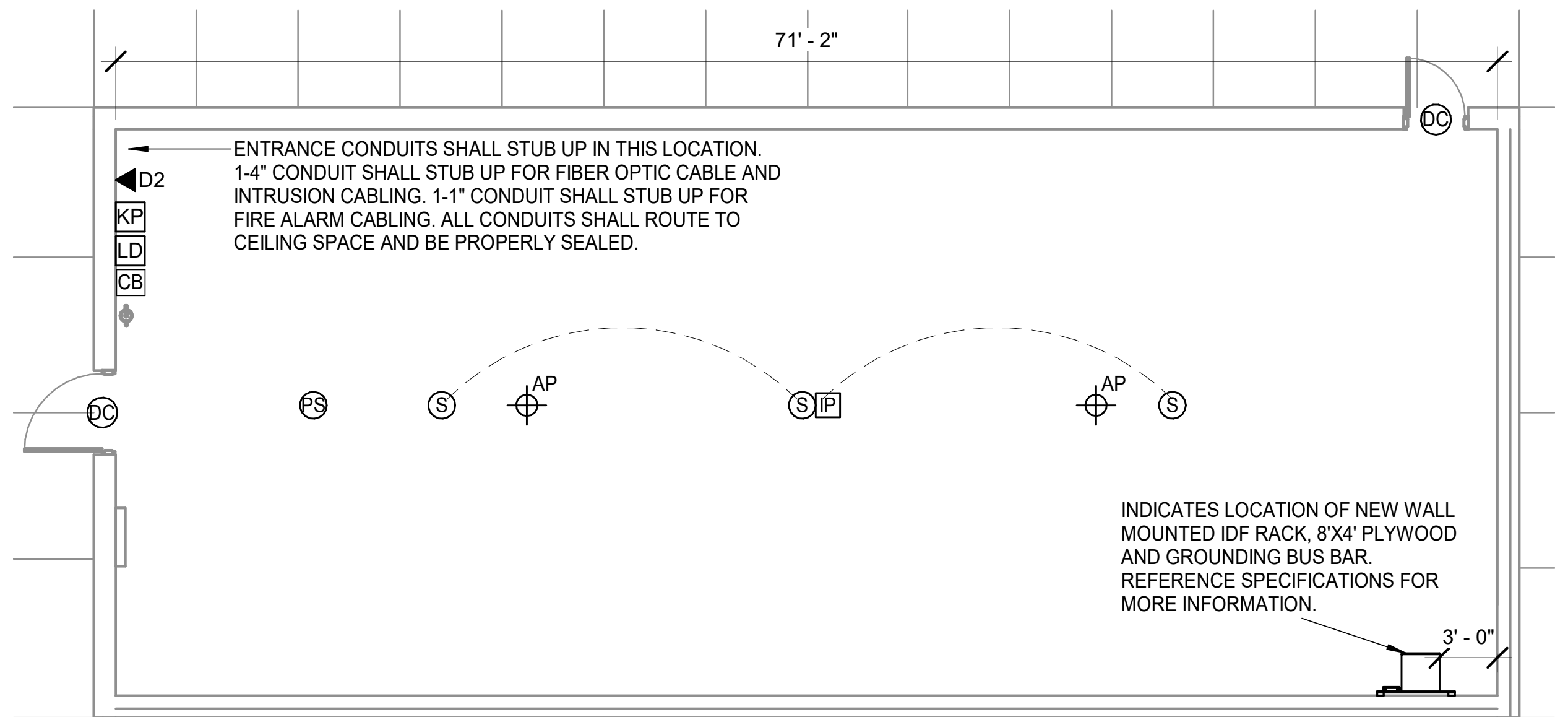
NOTES TO GENERAL CONTRACTOR

GENERAL CONTRACTOR SHALL CONTACT PSLIGHTWAVE 90 DAYS PRIOR TO THE DISTURBANCE OF EXISTING UNDERGROUND FIBER OPTIC PATHWAY. OWNER PS LIGHTWAVE CONTACT IS EMMANUAL MALDONADO, MOBILE: 832-615-8000, EMAIL: EMALDONADO@PSLIGHTWAVE.COM. PLEASE INCLUDE ORION KESTER, ALIA ALANI, AND ERVIN WILLIAMS ON ANY COMMUNICATIONS.
OKESTER@PSLIGHTWAVE.COM
AALANI@PSLIGHTWAVE.COM
EWILLIAMS@PSLIGHTWAVE.COM



NEW IP SPEAKERS SHALL CONNECT TO EXISTING INTERCOM SYSTEM VIA EXISTING LOCKDOWN BUTTONS.

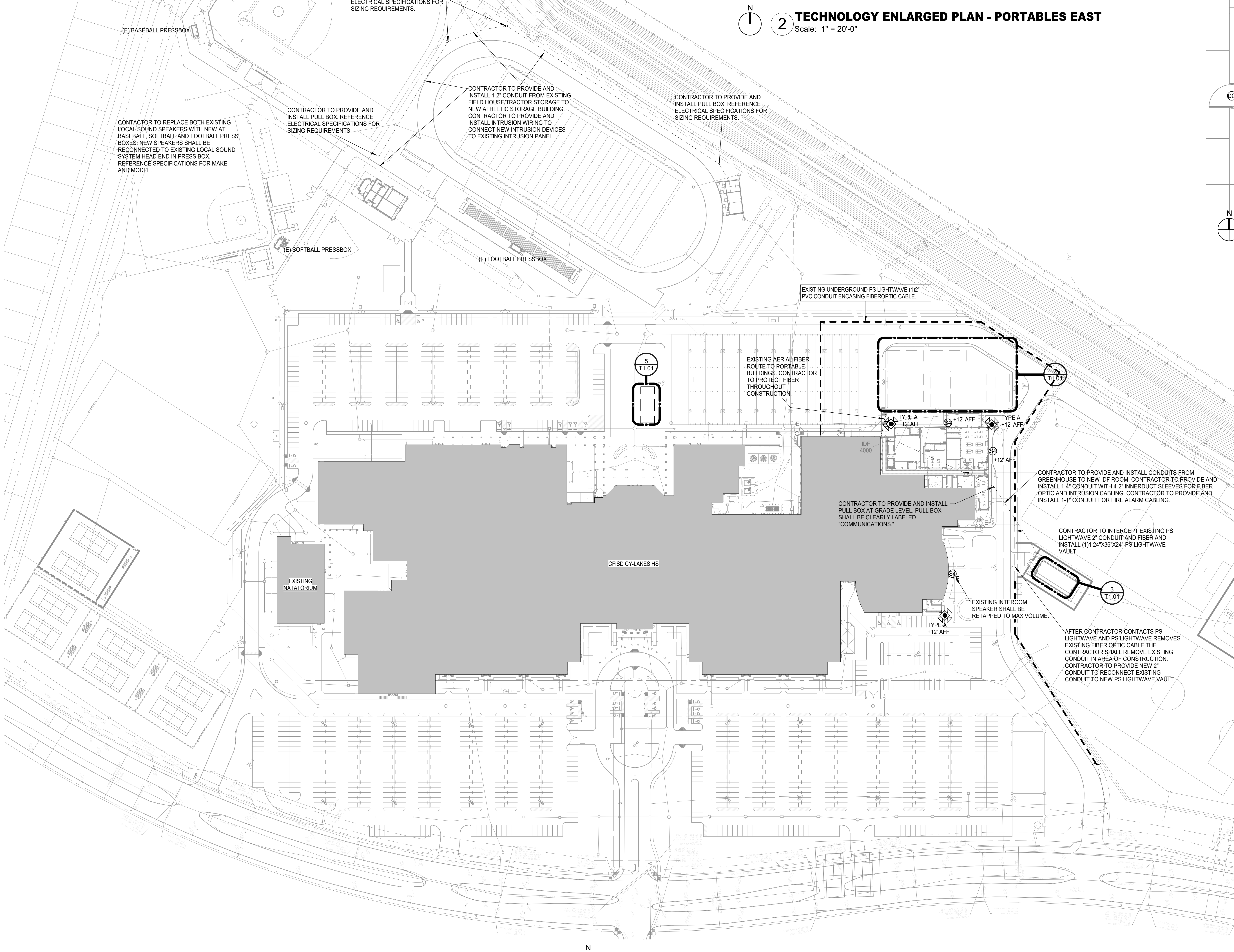
2 TECHNOLOGY ENLARGED PLAN - PORTABLES EAST
Scale: 1" = 20'-0"



ENTRANCE CONDUITS SHALL STUB UP IN THIS LOCATION. 1-4" CONDUIT SHALL STUB UP FOR FIBER OPTIC CABLE AND INTRUSION CABLING. 1-1" CONDUIT SHALL STUB UP FOR FIRE ALARM CABLING. ALL CONDUITS SHALL ROUTE TO CEILING SPACE AND BE PROPERLY SEALED.

INDICATES LOCATION OF NEW WALL MOUNTED IDF RACK, 8'X4' PLYWOOD AND GROUNDING BUS BAR. REFERENCE SPECIFICATIONS FOR MORE INFORMATION.

3 TECHNOLOGY ENLARGED PLAN - NEW GREENHOUSE
Scale: 1/8" = 1'-0"



CONTRACTOR TO PROVIDE AND INSTALL PULL BOX. REFERENCE ELECTRICAL SPECIFICATIONS FOR SIZING REQUIREMENTS.

CONTACTOR TO REPLACE BOTH EXISTING LOCAL SOUND SPEAKERS WITH NEW AT BASEBALL, SOFTBALL AND FOOTBALL PRESS BOXES. NEW SPEAKERS SHALL BE RECONNECTED TO EXISTING LOCAL SOUND SYSTEM HEAD END IN PRESS BOX. REFERENCE SPECIFICATIONS FOR MAKE AND MODEL.

CONTRACTOR TO PROVIDE AND INSTALL PULL BOX. REFERENCE ELECTRICAL SPECIFICATIONS FOR SIZING REQUIREMENTS.

CONTRACTOR TO PROVIDE AND INSTALL 1-2" CONDUIT FROM EXISTING FIELD HOUSE/TRACTOR STORAGE TO NEW ATHLETIC STORAGE BUILDING. CONTRACTOR TO PROVIDE AND INSTALL INTRUSION WIRING TO CONNECT NEW INTRUSION DEVICES TO EXISTING INTRUSION PANEL.

CONTRACTOR TO PROVIDE AND INSTALL PULL BOX. REFERENCE ELECTRICAL SPECIFICATIONS FOR SIZING REQUIREMENTS.

EXISTING UNDERGROUND PS LIGHTWAVE (1)2" PVC CONDUIT ENCASING FIBEROPTIC CABLE.

EXISTING AERIAL FIBER ROUTE TO PORTABLE BUILDINGS. CONTRACTOR TO PROTECT FIBER THROUGHOUT CONSTRUCTION.

CONTRACTOR TO PROVIDE AND INSTALL PULL BOX AT GRADE LEVEL. PULL BOX SHALL BE CLEARLY LABELED "COMMUNICATIONS."

CONTRACTOR TO PROVIDE AND INSTALL CONDUITS FROM GREENHOUSE TO NEW IDF ROOM. CONTRACTOR TO PROVIDE AND INSTALL 1-4" CONDUIT WITH 4-2" INNERDUCT SLEEVES FOR FIBER OPTIC AND INTRUSION CABLING. CONTRACTOR TO PROVIDE AND INSTALL 1-1" CONDUIT FOR FIRE ALARM CABLING.

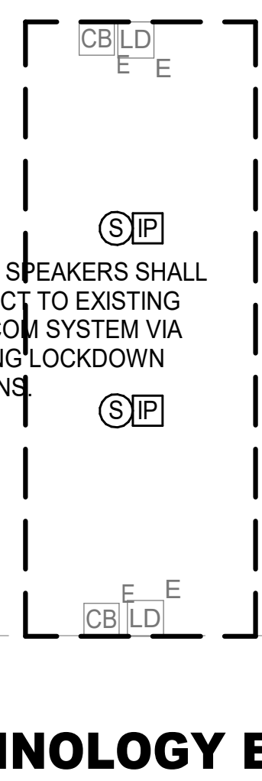
CONTRACTOR TO INTERCEPT EXISTING PS LIGHTWAVE 2" CONDUIT AND FIBER AND INSTALL (1)1 24"X36"X24" PS LIGHTWAVE VAULT

EXISTING INTERCOM SPEAKER SHALL BE RETAPPED TO MAX VOLUME.

AFTER CONTRACTOR CONTACTS PS LIGHTWAVE AND PS LIGHTWAVE REMOVES EXISTING FIBER OPTIC CABLE THE CONTRACTOR SHALL REMOVE EXISTING CONDUIT IN AREA OF CONSTRUCTION. CONTRACTOR TO PROVIDE NEW 2" CONDUIT TO RECONNECT EXISTING CONDUIT TO NEW PS LIGHTWAVE VAULT.

1 TECHNOLOGY SITE PLAN
Scale: 1" = 80'-0"

4 TECHNOLOGY SITE PLAN - ATHLETIC STORAGE BLDG.
Scale: 1/8" = 1'-0"



NEW IP SPEAKERS SHALL CONNECT TO EXISTING INTERCOM SYSTEM VIA EXISTING LOCKDOWN BUTTONS.

5 TECHNOLOGY ENLARGED PLAN - PORTABLES CENTER
Scale: 1" = 20'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
STATE OF TEXAS
BRADLEY KALMANS
80219
LICENSED
PROFESSIONAL ENGINEER
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

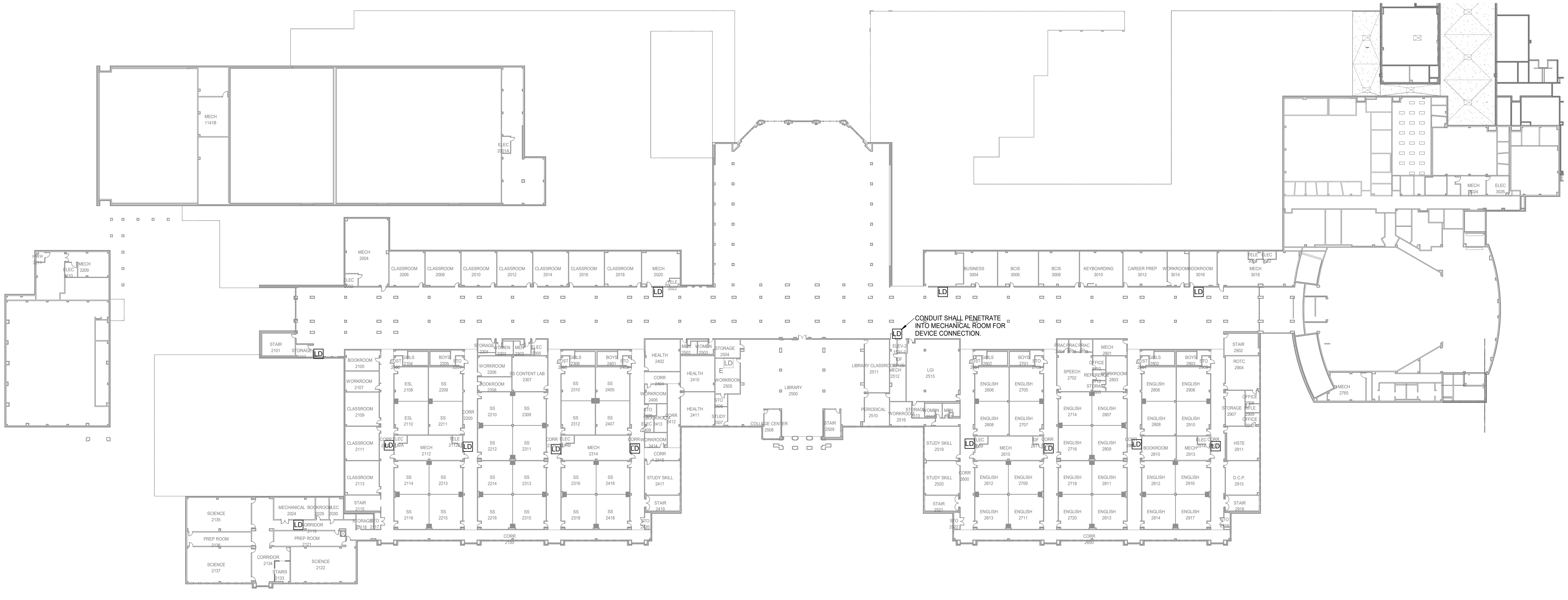
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

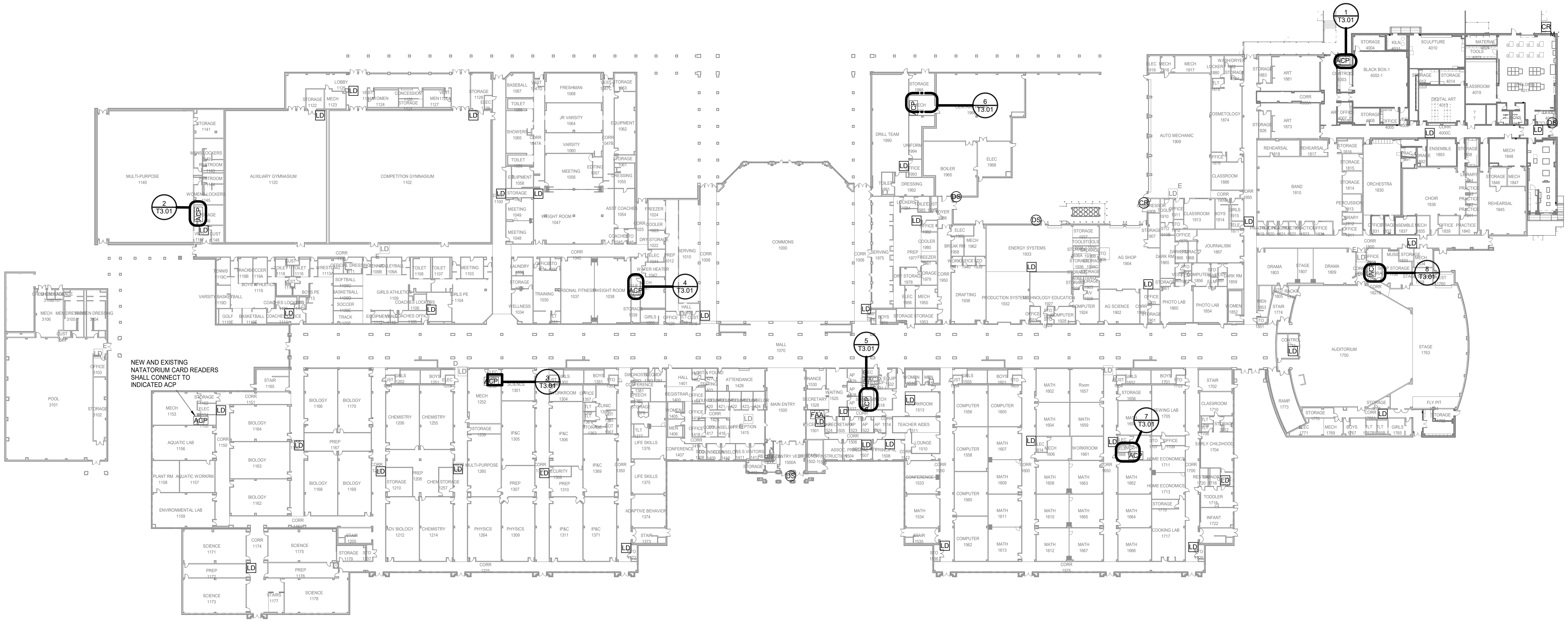
TECHNOLOGY SITE PLAN

T1.01
of



2 TECHNOLOGY COMPOSITE FLOOR PLAN - LEVEL 2

Scale: 1" = 40'-0"



1 TECHNOLOGY COMPOSITE FLOOR PLAN - LEVEL 1

Scale: 1" = 40'-0"

TECHNOLOGY SCOPE

1 PROVIDE ADDITIONAL STAGE STORAGE AT AUDITORIUM

2 PROVIDE BLACK BOX ADDITION.

3 CONSTRUCT NEW WELDING & HVAC TRAINING CENTER.

4 PROVIDE NEW ADDITION FOR TWO NEW ART ROOMS.

5 PROVIDE ORCHESTRA ADDITION OF REHERSAL HALL AND PRACTICE ROOMS.

6 PROVIDE OUTDOOR STORAGE BUILDING - INTRUSION.

7 ADDITIONAL CARD READERS ON EXTERIOR DOORS

8 HARDEN MAIN FRONT DESK

9 ADDITIONAL LOCKDOWN BUTTONS

10 ENHANCED VIDEO INTERCOMS

11 EXISTING FIRE ALARM SYSTEM IS NOTIFIER NFS2-3030 WITHOUT VOICE EVACUATION. VOICE EVACUATION SHALL BE ADDED TO THE EXISTING FIRE ALARM SYSTEM. SYSTEM SHALL ALSO BE EXPANDED TO ADDITION AREAS.

12 EXISTING INTERCOM SYSTEM IS TELECENTER 5. CONTRACTOR TO PROVIDE AND INSTALLNEW GATEWAYS TO UPDATE HEADEND AND CONNECT EXISTING INTERCOM WIRING AND DEVICES.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

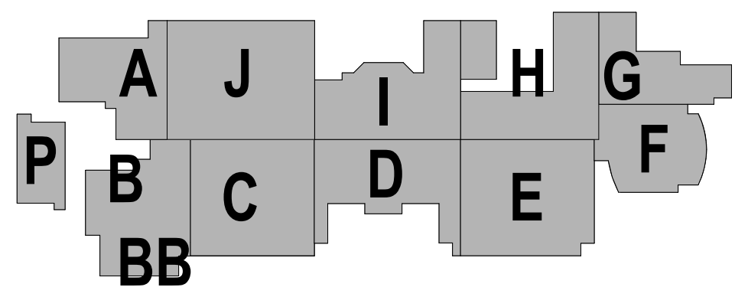
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY
COMPOSITE FLOOR
PLANS

T1.02

of

TECHNOLOGY PLAN GENERAL NOTES

A	COORDINATE ALL FINAL MOUNTING HEIGHTS, FOR WALL MOUNTED DEVICES, PRIOR TO ROUGH-IN. COORDINATE WITH ARCHITECT, OWNER AND ENGINEER.
B	COORDINATE ALL CEILING DEVICE LOCATIONS WITH ARCHITECTURAL DRAWINGS AND INTERIOR DESIGN CONSULTANT(IF APPLICABLE) PRIOR TO ROUGH-IN.
C	REFERENCE TECHNOLOGY SITE PLAN, COMPOSITE PLANS, NOTES & LEGENDS AND DETAILS FOR ADDITIONAL INFORMATION AND DEVICE/OUTLET LOCATIONS.
D	CONTRACTOR TO COORDINATE INTERCOM SPEAKER MOUNTING TYPES WITH ARCHITECTURAL CEILING PLANS PRIOR TO FINAL SPEAKER SELECTION. COORDINATE WITH ENGINEER ON ANY DISCREPANCIES.
E	CONTRACTOR TO COORDINATE ALL DROP LOCATIONS WITH FURNITURE. COORDINATE WITH ARCHITECT AND OWNER FOR MORE INFORMATION.
F	ALL EXISTING LOCKDOWN BUTTONS THAT ARE BEING REUSED SHALL HAVE EXISTING WIRING DEMOLISHED AND REPLACED BY CONTRACTOR. NEW RUNS SHALL BE HOMERUN TO UPDATED HEAD END.
G	REFERENCE SPECIFICATION 27 50 00 FOR LOCKDOWN BUTTON ROUGH IN HEIGHTS. ALSO REFERENCE DETAILS FOR LOCKDOWN BUTTON INSTALLATION INSTRUCTIONS.
H	FINE ARTS ROOMS (BAND, CHOIR, ORCHESTRA, ENSEMBLE) WILL HAVE INTERCOM SPEAKERS CONNECTED TO A SINGLE GATEWAY. PRACTICE ROOMS SHALL BE CONNECTED TO HIGH LOWS. ALL OTHER GATEWAYS CAN BE FILLED ON ALL PORTS FOR CLASSROOMS.

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA A**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

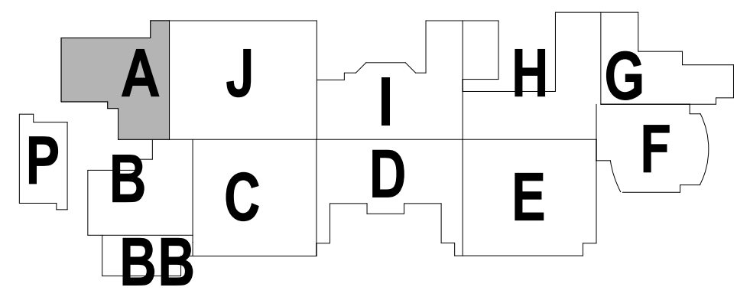
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

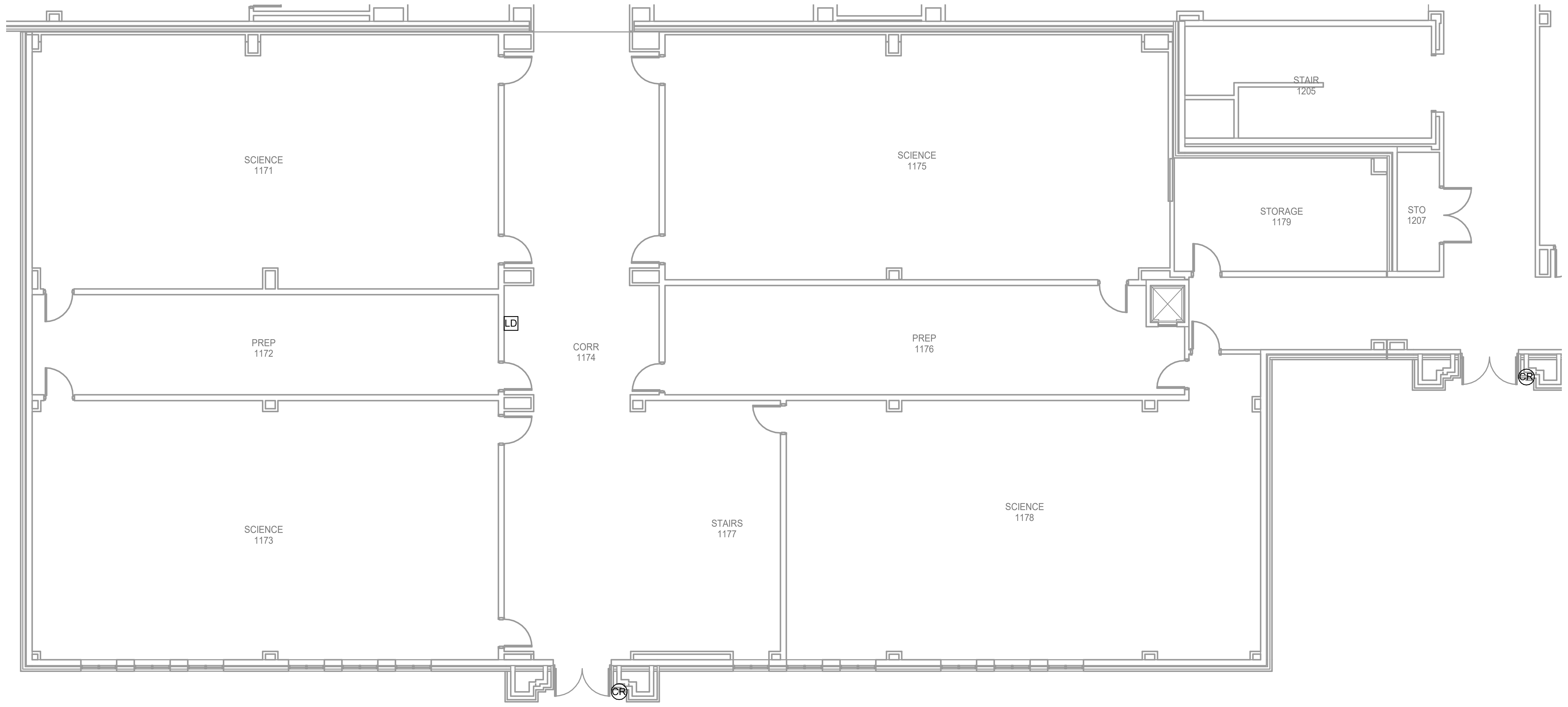


Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA A

T2.01

_____ of _____



2 TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA BB
Scale: 1/8" = 1'-0"

1 TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA B
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

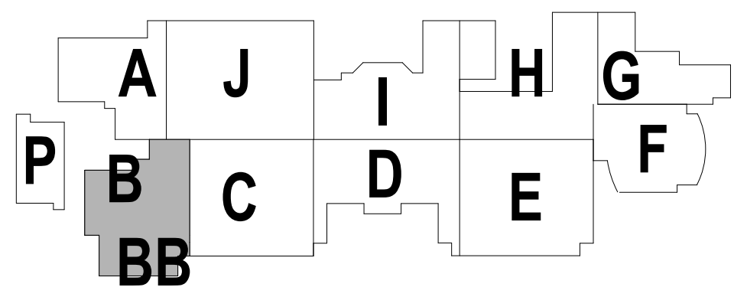
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

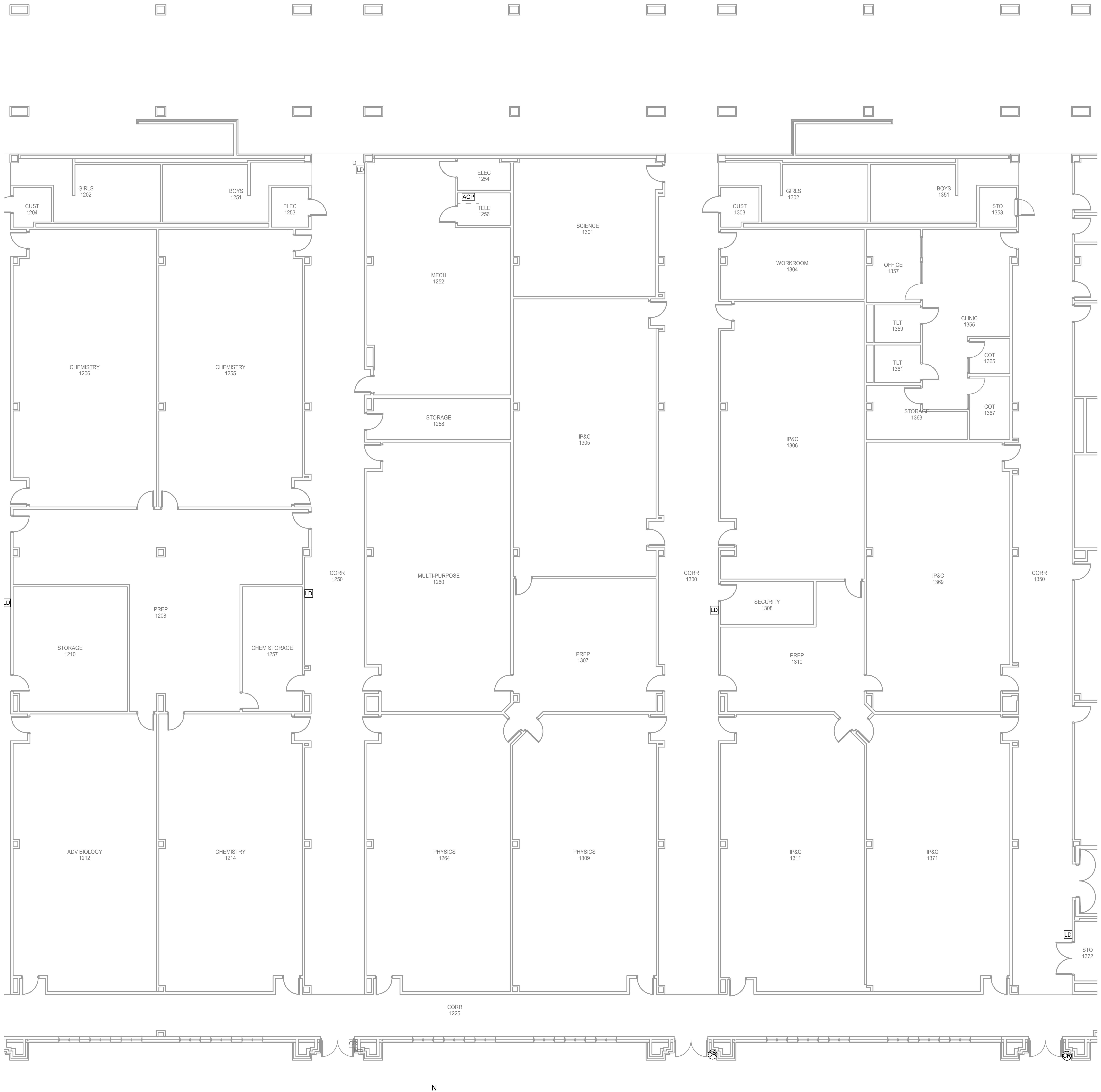


Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

TECHNOLOGY FIRST FLOOR PLAN - AREA B & BB

T2.02

of



N

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA C**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

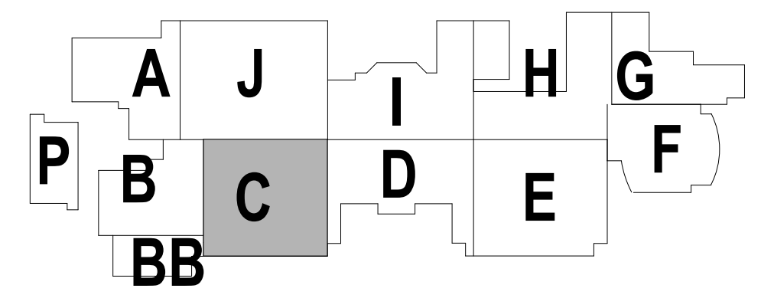
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA C

T2.03

of

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA D**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

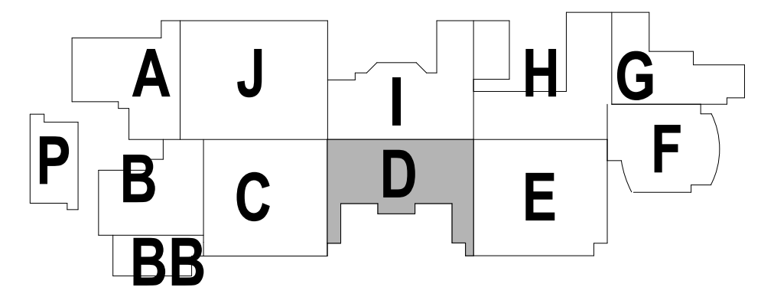
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

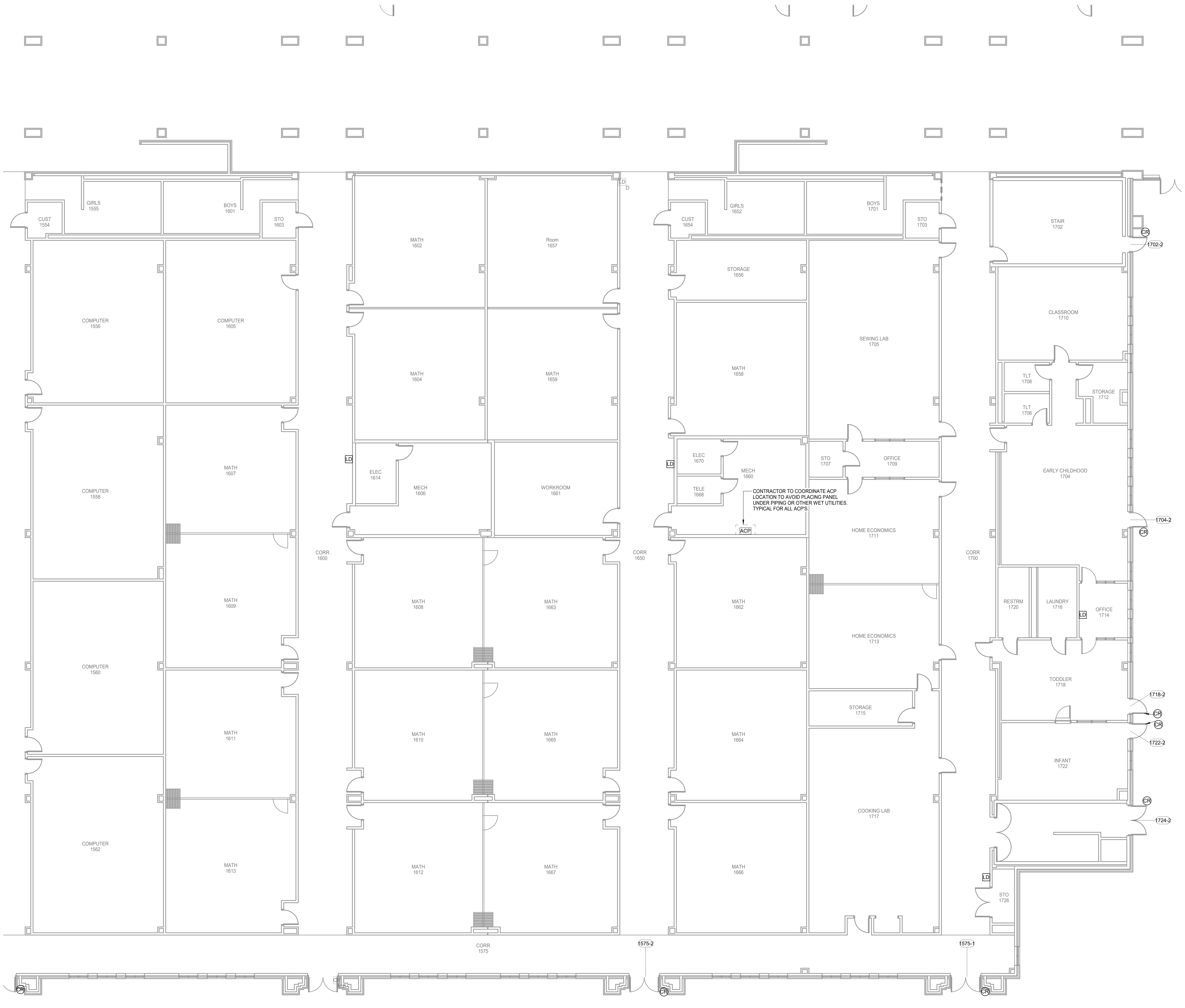
KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA D

T2.04
of



CONTRACTOR TO COORDINATE ACP
LOCATION TO AVOID PLACING PANEL
UNDER PIPING OR OTHER WET UTILITIES.
TYPICAL FOR ALL ACP'S.

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA E**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

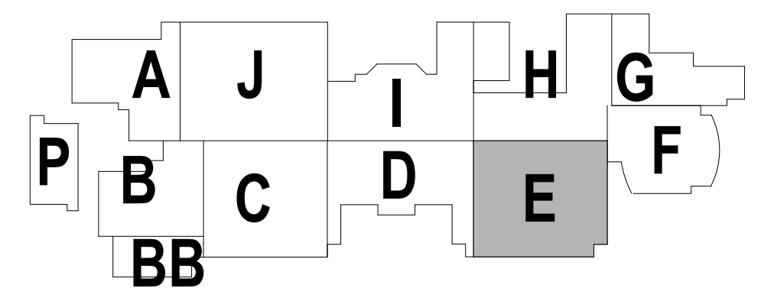
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA E

T2.05
____ of ____

TECHNOLOGY PLAN KEYED NOTES

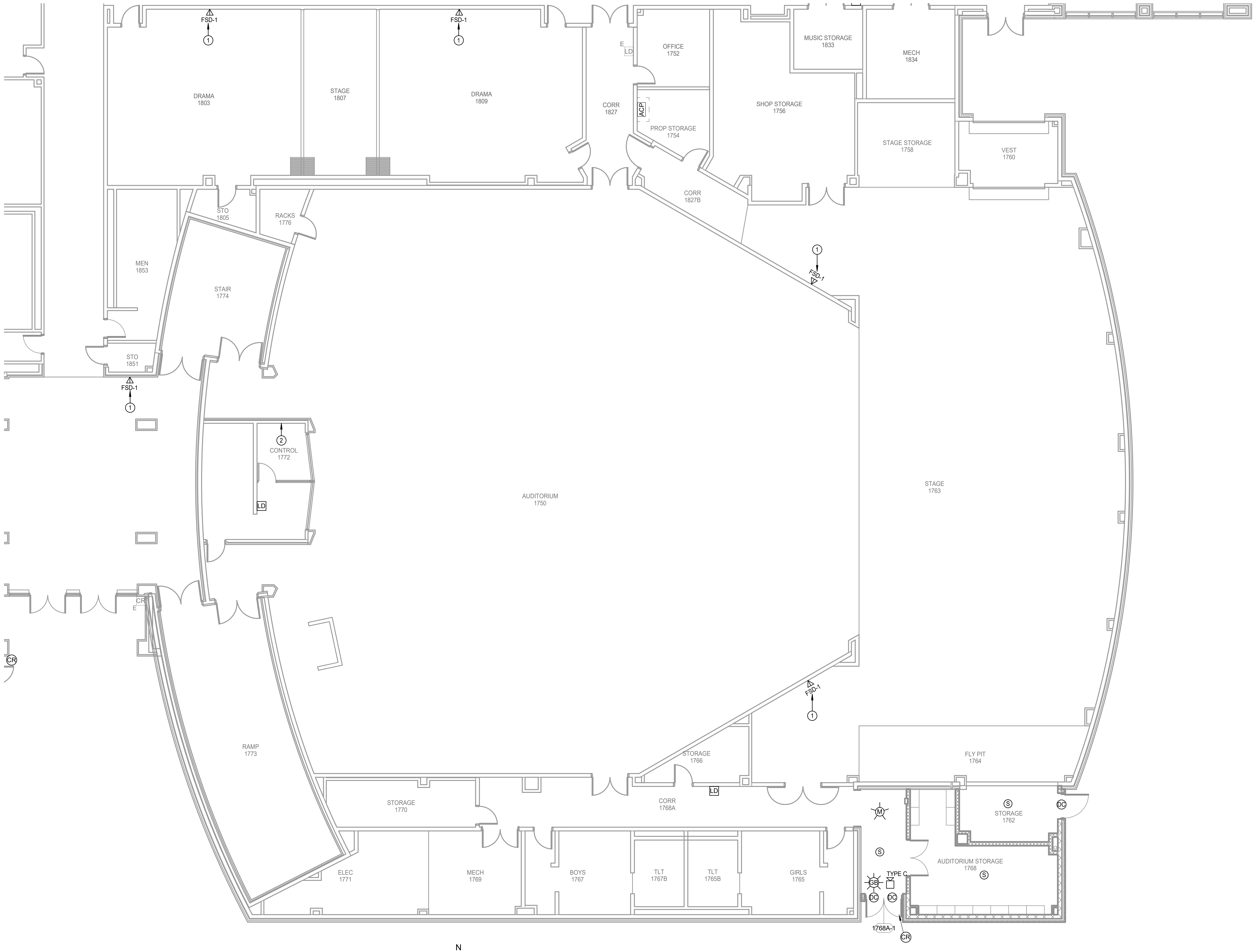
1 CONTRACTOR TO PROVIDE AND INSTALL DATA OUTLET FOR AV CONSULTANT DISPLAY. BACKBOX TO BE MOUNTED AT +60" AFF. REFERENCE AV CONSULTANT DRAWINGS FOR FINAL MOUNTING LOCATION/HEIGHT AND DATA QUANTITIES.

2 PROVIDE A CONTACT CLOSURE TO AUDIO-VIDEO RACKS FOR EMERGENCY MUTING OF AUDIO SYSTEMS IF FIRE OR LOCKDOWN SYSTEMS ARE IN ALARM.

3 ANALOG INTERCOM SPEAKER SHALL BE ZONED TO CORRIDOR.

4 THE DESIGNATED TECHNOLOGY OUTLET IS INTENDED FOR THE BUILDING AUTOMATION SYSTEM (BAS) NETWORK INTERFACE. COORDINATE EXACT MOUNTING LOCATION AND TERMINATIONS WITH THE BAS INSTALLER.

5 DATA OUTLET DEDICATED FOR EMPLOYEE TIME-IN/TIME-OUT TO BE MOUNTED 48"-A.F.F. COORDINATE LOG ACCESS RIGHTS WITH OWNER PRIOR TO PROGRAMMING.



1 TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA F

Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

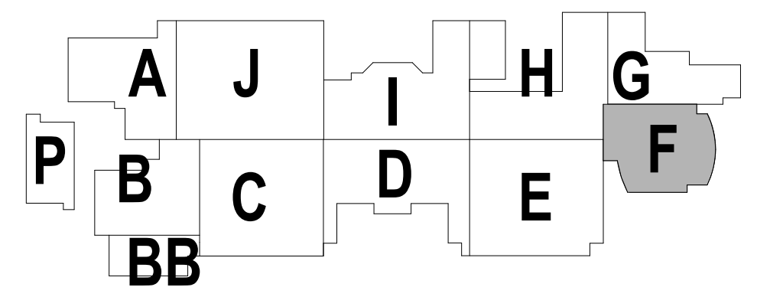
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA F

T2.06

____ of ____

TECHNOLOGY PLAN KEYED NOTES

1 CONTRACTOR TO PROVIDE AND INSTALL DATA OUTLET FOR AV CONSULTANT DISPLAY. BACKBOX TO BE MOUNTED AT +60" AFF. REFERENCE AV CONSULTANT DRAWINGS FOR FINAL MOUNTING LOCATION/HEIGHT AND DATA QUANTITIES.

2 PROVIDE A CONTACT CLOSURE TO AUDIO-VIDEO RACKS FOR EMERGENCY MUTING OF AUDIO SYSTEMS IF FIRE OR LOCKDOWN SYSTEMS ARE IN ALARM.

3 ANALOG INTERCOM SPEAKER SHALL BE ZONED TO CORRIDOR.

4 THE DESIGNATED TECHNOLOGY OUTLET IS INTENDED FOR THE BUILDING AUTOMATION SYSTEM (BAS) NETWORK INTERFACE. COORDINATE EXACT MOUNTING LOCATION AND TERMINATIONS WITH THE BAS INSTALLER.

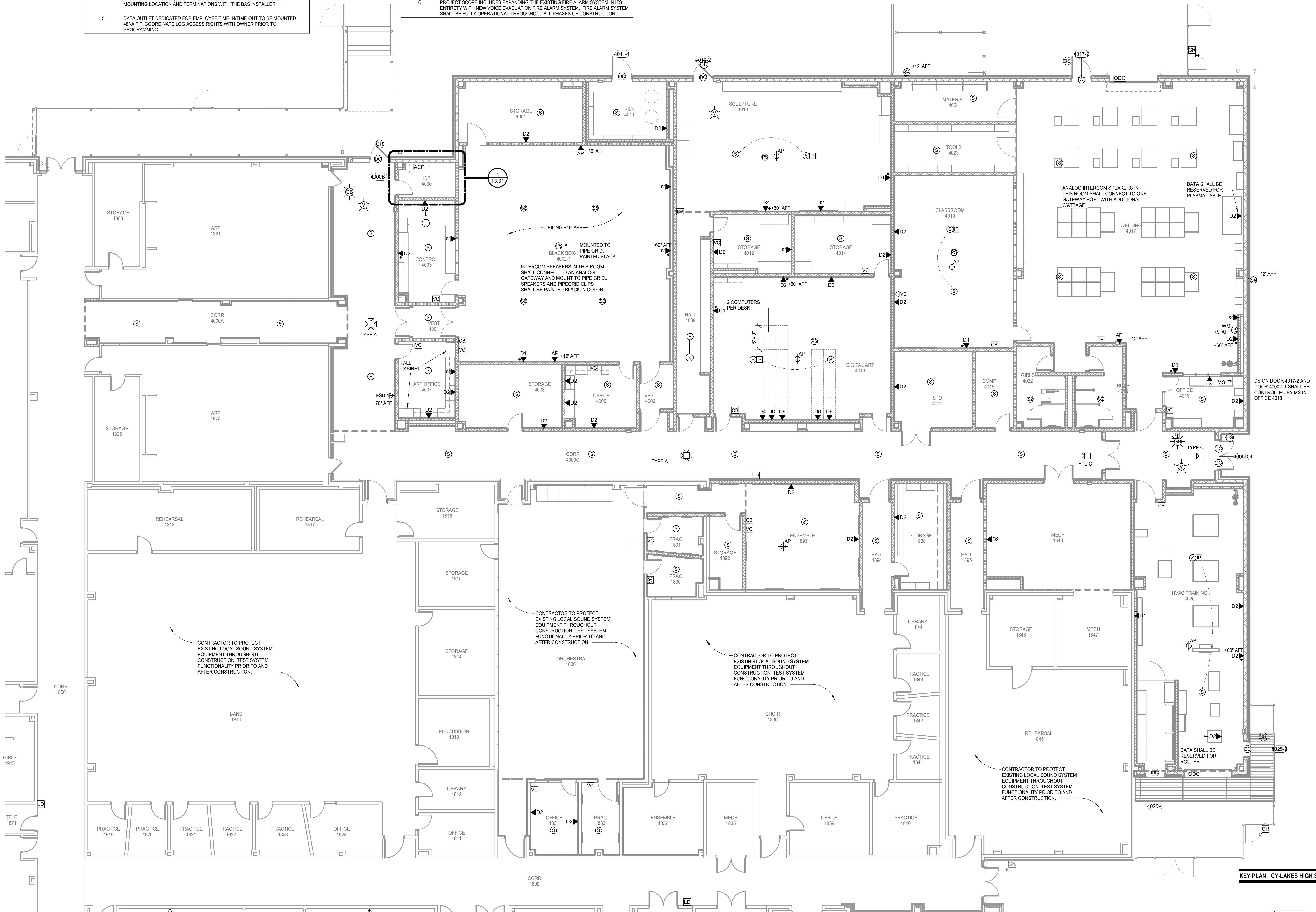
5 DATA OUTLET DEDICATED FOR EMPLOYEE TIME-IN/TIME-OUT TO BE MOUNTED 48"-A.F.F. COORDINATE LOG ACCESS RIGHTS WITH OWNER PRIOR TO PROGRAMMING.

FIRE ALARM

A FIRE ALARM SYSTEM IS A PERFORMANCE BASED PER SPECIFICATIONS 28 46 00. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C PROJECT SCOPE INCLUDES EXPANDING THE EXISTING FIRE ALARM SYSTEM IN ITS ENTIRETY WITH NEW VOICE EVACUATION FIRE ALARM SYSTEM. FIRE ALARM SYSTEM SHALL BE FULLY OPERATIONAL THROUGHOUT ALL PHASES OF CONSTRUCTION.



MOUNTED TO PIPE GRID. PAINTED BLACK

INTERCOM SPEAKERS IN THIS ROOM SHALL CONNECT TO AN ANALOG GATEWAY AND MOUNT TO PIPE GRID.. SPEAKERS AND PIPEGRID CLIPS SHALL BE PAINTED BLACK IN COLOR.

ANALOG INTERCOM SPEAKERS IN THIS ROOM SHALL CONNECT TO ONE GATEWAY PORT WITH ADDITIONAL WATTAGE.

DATA SHALL BE RESERVED FOR PLASMA TABLE

DS ON DOOR 4017-2 AND DOOR 4000D-1 SHALL BE CONTROLLED BY MS IN OFFICE 4018

CONTRACTOR TO PROTECT EXISTING LOCAL SOUND SYSTEM EQUIPMENT THROUGHOUT CONSTRUCTION. TEST SYSTEM FUNCTIONALITY PRIOR TO AND AFTER CONSTRUCTION.

CONTRACTOR TO PROTECT EXISTING LOCAL SOUND SYSTEM EQUIPMENT THROUGHOUT CONSTRUCTION. TEST SYSTEM FUNCTIONALITY PRIOR TO AND AFTER CONSTRUCTION.

CONTRACTOR TO PROTECT EXISTING LOCAL SOUND SYSTEM EQUIPMENT THROUGHOUT CONSTRUCTION. TEST SYSTEM FUNCTIONALITY PRIOR TO AND AFTER CONSTRUCTION.

CONTRACTOR TO PROTECT EXISTING LOCAL SOUND SYSTEM EQUIPMENT THROUGHOUT CONSTRUCTION. TEST SYSTEM FUNCTIONALITY PRIOR TO AND AFTER CONSTRUCTION.

DATA SHALL BE RESERVED FOR ROUTER.

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA G**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064
Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

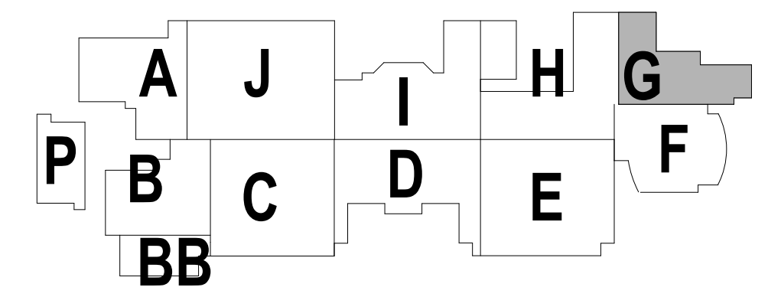
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

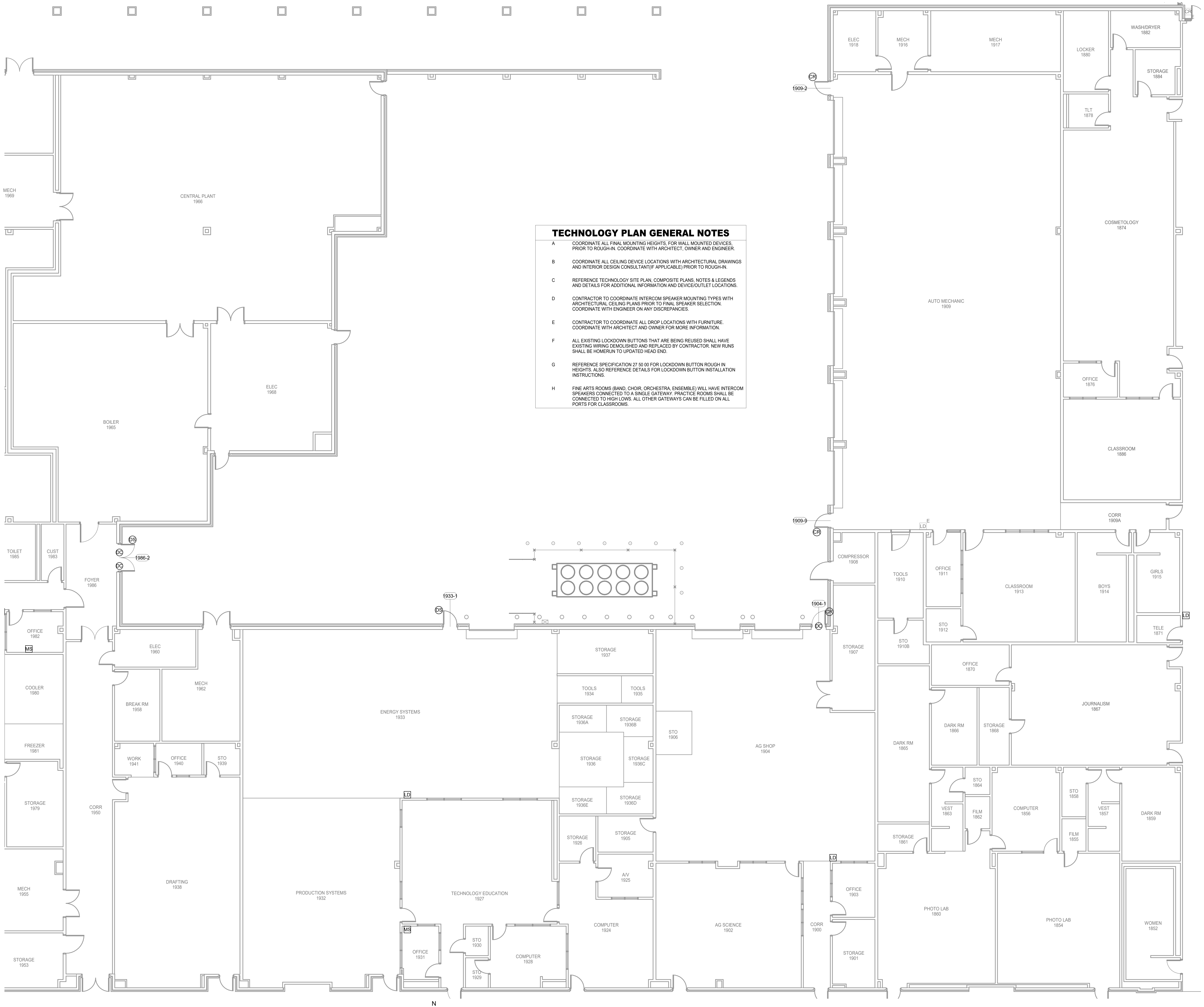


Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY FIRST FLOOR PLAN - AREA G

T2.07

of



TECHNOLOGY PLAN GENERAL NOTES

A	COORDINATE ALL FINAL MOUNTING HEIGHTS, FOR WALL MOUNTED DEVICES, PRIOR TO ROUGH-IN. COORDINATE WITH ARCHITECT, OWNER AND ENGINEER.
B	COORDINATE ALL CEILING DEVICE LOCATIONS WITH ARCHITECTURAL DRAWINGS AND INTERIOR DESIGN CONSULTANT(IF APPLICABLE) PRIOR TO ROUGH-IN.
C	REFERENCE TECHNOLOGY SITE PLAN, COMPOSITE PLANS, NOTES & LEGENDS AND DETAILS FOR ADDITIONAL INFORMATION AND DEVICE/OUTLET LOCATIONS.
D	CONTRACTOR TO COORDINATE INTERCOM SPEAKER MOUNTING TYPES WITH ARCHITECTURAL CEILING PLANS PRIOR TO FINAL SPEAKER SELECTION. COORDINATE WITH ENGINEER ON ANY DISCREPANCIES.
E	CONTRACTOR TO COORDINATE ALL DROP LOCATIONS WITH FURNITURE. COORDINATE WITH ARCHITECT AND OWNER FOR MORE INFORMATION.
F	ALL EXISTING LOCKDOWN BUTTONS THAT ARE BEING REUSED SHALL HAVE EXISTING WIRING DEMOLISHED AND REPLACED BY CONTRACTOR. NEW RUNS SHALL BE HOMERUN TO UPDATED HEAD END.
G	REFERENCE SPECIFICATION 27 50 00 FOR LOCKDOWN BUTTON ROUGH IN HEIGHTS. ALSO REFERENCE DETAILS FOR LOCKDOWN BUTTON INSTALLATION INSTRUCTIONS.
H	FINE ARTS ROOMS (BAND, CHOIR, ORCHESTRA, ENSEMBLE) WILL HAVE INTERCOM SPEAKERS CONNECTED TO A SINGLE GATEWAY. PRACTICE ROOMS SHALL BE CONNECTED TO HIGH LOWS. ALL OTHER GATEWAYS CAN BE FILLED ON ALL PORTS FOR CLASSROOMS.

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA H**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

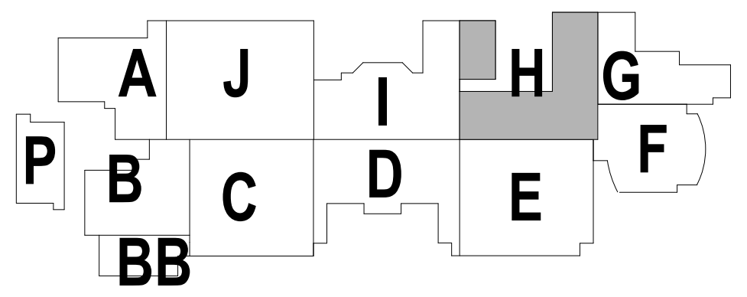
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



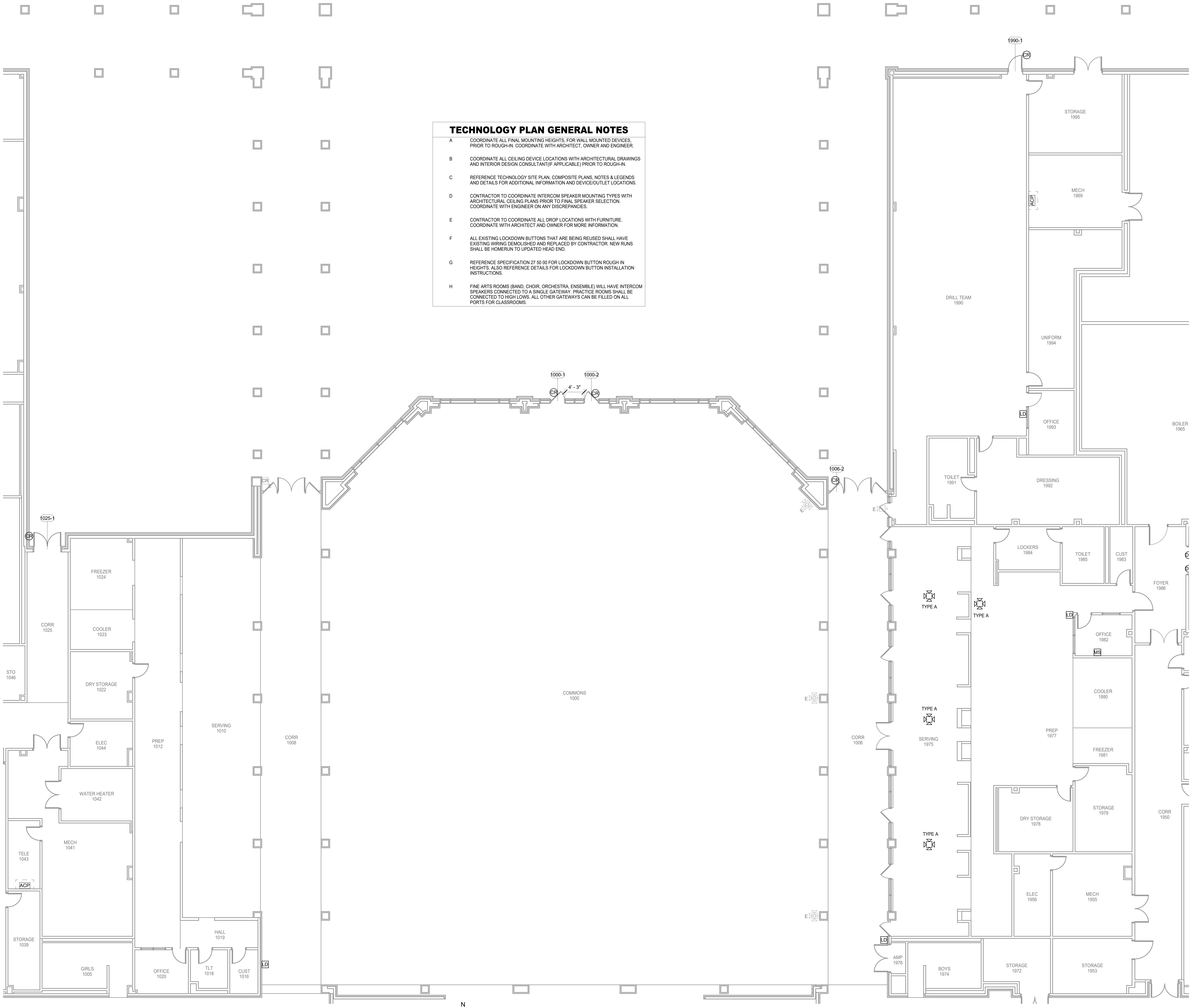
Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA H

T2.08
____ of ____

TECHNOLOGY PLAN GENERAL NOTES

A	COORDINATE ALL FINAL MOUNTING HEIGHTS, FOR WALL MOUNTED DEVICES, PRIOR TO ROUGH-IN. COORDINATE WITH ARCHITECT, OWNER AND ENGINEER.
B	COORDINATE ALL CEILING DEVICE LOCATIONS WITH ARCHITECTURAL DRAWINGS AND INTERIOR DESIGN CONSULTANT(IF APPLICABLE) PRIOR TO ROUGH-IN.
C	REFERENCE TECHNOLOGY SITE PLAN, COMPOSITE PLANS, NOTES & LEGENDS AND DETAILS FOR ADDITIONAL INFORMATION AND DEVICE/OUTLET LOCATIONS.
D	CONTRACTOR TO COORDINATE INTERCOM SPEAKER MOUNTING TYPES WITH ARCHITECTURAL CEILING PLANS PRIOR TO FINAL SPEAKER SELECTION. COORDINATE WITH ENGINEER ON ANY DISCREPANCIES.
E	CONTRACTOR TO COORDINATE ALL DROP LOCATIONS WITH FURNITURE. COORDINATE WITH ARCHITECT AND OWNER FOR MORE INFORMATION.
F	ALL EXISTING LOCKDOWN BUTTONS THAT ARE BEING REUSED SHALL HAVE EXISTING WIRING DEMOLISHED AND REPLACED BY CONTRACTOR. NEW RUNS SHALL BE HOMERUN TO UPDATED HEAD END.
G	REFERENCE SPECIFICATION 27 50 00 FOR LOCKDOWN BUTTON ROUGH IN HEIGHTS. ALSO REFERENCE DETAILS FOR LOCKDOWN BUTTON INSTALLATION INSTRUCTIONS.
H	FINE ARTS ROOMS (BAND, CHOIR, ORCHESTRA, ENSEMBLE) WILL HAVE INTERCOM SPEAKERS CONNECTED TO A SINGLE GATEWAY. PRACTICE ROOMS SHALL BE CONNECTED TO HIGH LOWS. ALL OTHER GATEWAYS CAN BE FILLED ON ALL PORTS FOR CLASSROOMS.



N

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA I**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

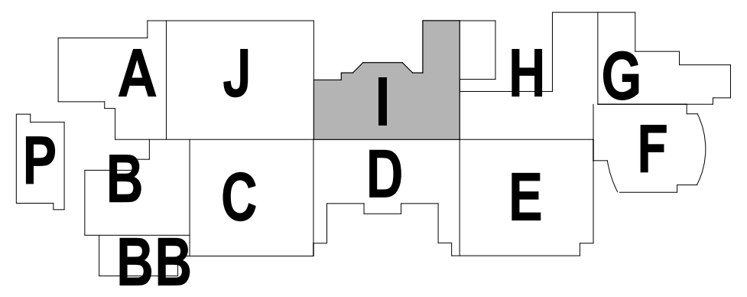
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA I

T2.09
____ of ____

TECHNOLOGY PLAN GENERAL NOTES

A	COORDINATE ALL FINAL MOUNTING HEIGHTS, FOR WALL MOUNTED DEVICES, PRIOR TO ROUGH-IN. COORDINATE WITH ARCHITECT, OWNER AND ENGINEER.
B	COORDINATE ALL CEILING DEVICE LOCATIONS WITH ARCHITECTURAL DRAWINGS AND INTERIOR DESIGN CONSULTANT(IF APPLICABLE) PRIOR TO ROUGH-IN.
C	REFERENCE TECHNOLOGY SITE PLAN, COMPOSITE PLANS, NOTES & LEGENDS AND DETAILS FOR ADDITIONAL INFORMATION AND DEVICE/OUTLET LOCATIONS.
D	CONTRACTOR TO COORDINATE INTERCOM SPEAKER MOUNTING TYPES WITH ARCHITECTURAL CEILING PLANS PRIOR TO FINAL SPEAKER SELECTION. COORDINATE WITH ENGINEER ON ANY DISCREPANCIES.
E	CONTRACTOR TO COORDINATE ALL DROP LOCATIONS WITH FURNITURE. COORDINATE WITH ARCHITECT AND OWNER FOR MORE INFORMATION.
F	ALL EXISTING LOCKDOWN BUTTONS THAT ARE BEING REUSED SHALL HAVE EXISTING WIRING DEMOLISHED AND REPLACED BY CONTRACTOR. NEW RUNS SHALL BE HOMERUN TO UPDATED HEAD END.
G	REFERENCE SPECIFICATION 27 50 00 FOR LOCKDOWN BUTTON ROUGH IN HEIGHTS. ALSO REFERENCE DETAILS FOR LOCKDOWN BUTTON INSTALLATION INSTRUCTIONS.
H	FINE ARTS ROOMS (BAND, CHOIR, ORCHESTRA, ENSEMBLE) WILL HAVE INTERCOM SPEAKERS CONNECTED TO A SINGLE GATEWAY. PRACTICE ROOMS SHALL BE CONNECTED TO HIGH LOWS. ALL OTHER GATEWAYS CAN BE FILLED ON ALL PORTS FOR CLASSROOMS.

N

1 **TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA J**
Scale: 1/8" = 1'-0"

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

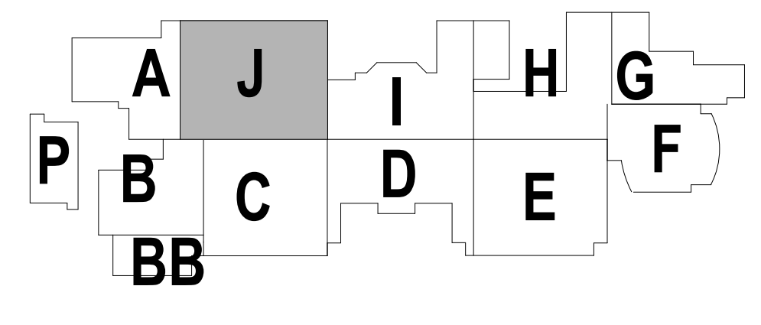
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



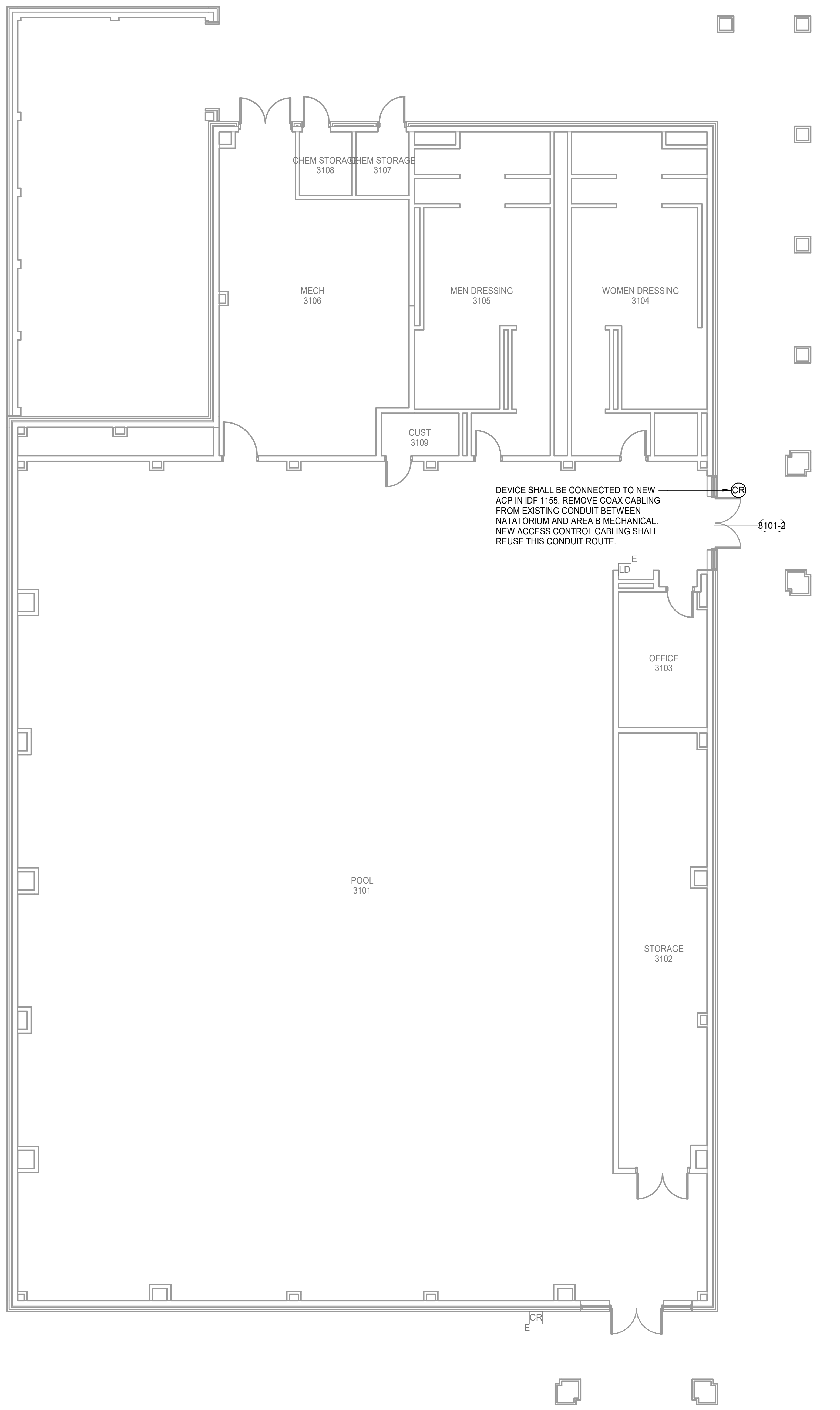
Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY FIRST
FLOOR PLAN - AREA J

T2.10
of

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

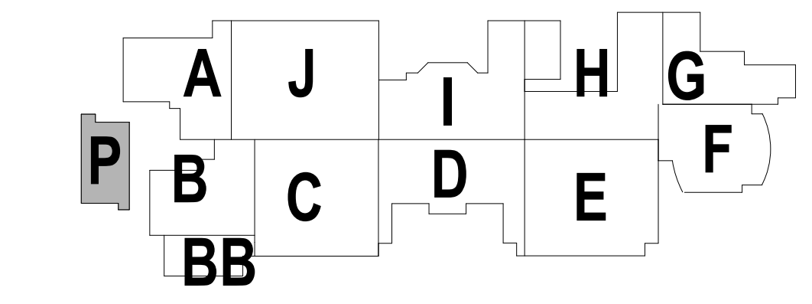


DEVICE SHALL BE CONNECTED TO NEW ACP IN IDF 1155. REMOVE COAX CABLING FROM EXISTING CONDUIT BETWEEN NATATORIUM AND AREA B MECHANICAL. NEW ACCESS CONTROL CABLING SHALL REUSE THIS CONDUIT ROUTE.

N

1 TECHNOLOGY FLOOR PLAN - LEVEL 1 - AREA P
Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

**COLEMAN PARTNERS
ARCHITECTS LLC**
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

**CIVIL ENGINEER
BROOKS AND SPARKS, INC.**
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

**STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.**
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

**MEPT ENGINEER
SALAS O'BRIEN**
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

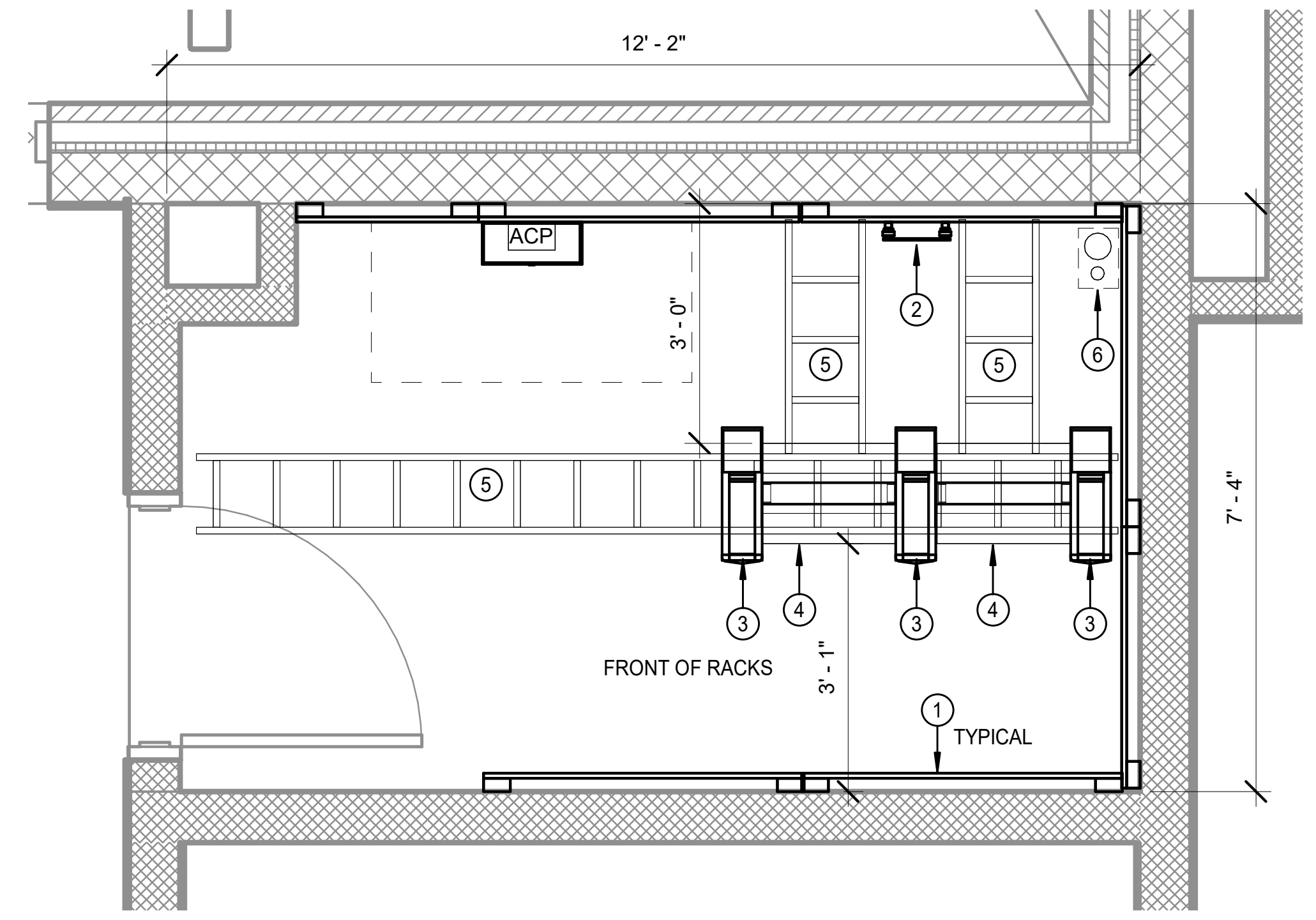
Revisions / Submission

Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

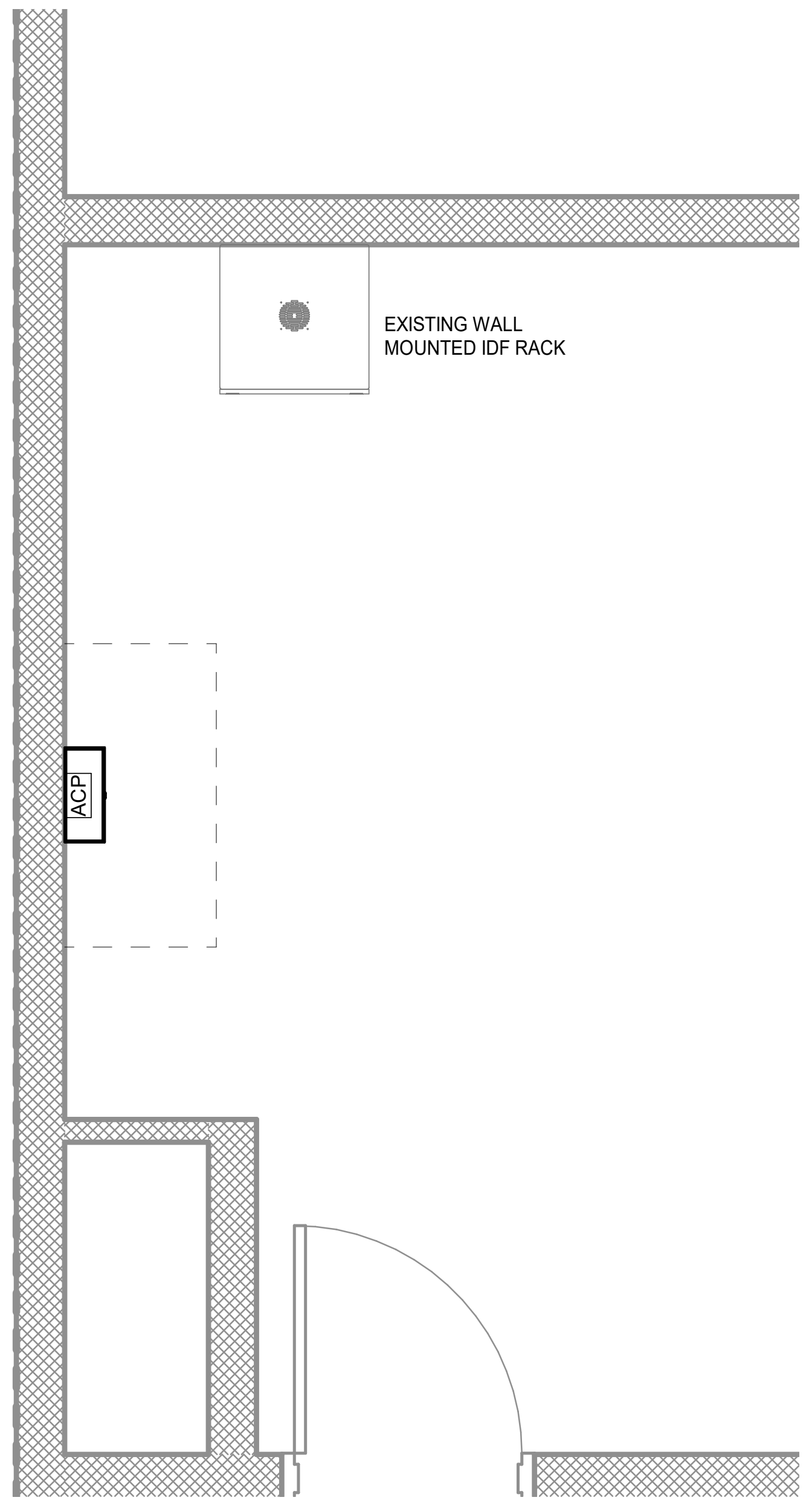
TECHNOLOGY FIRST FLOOR PLAN - AREA P

T2.11

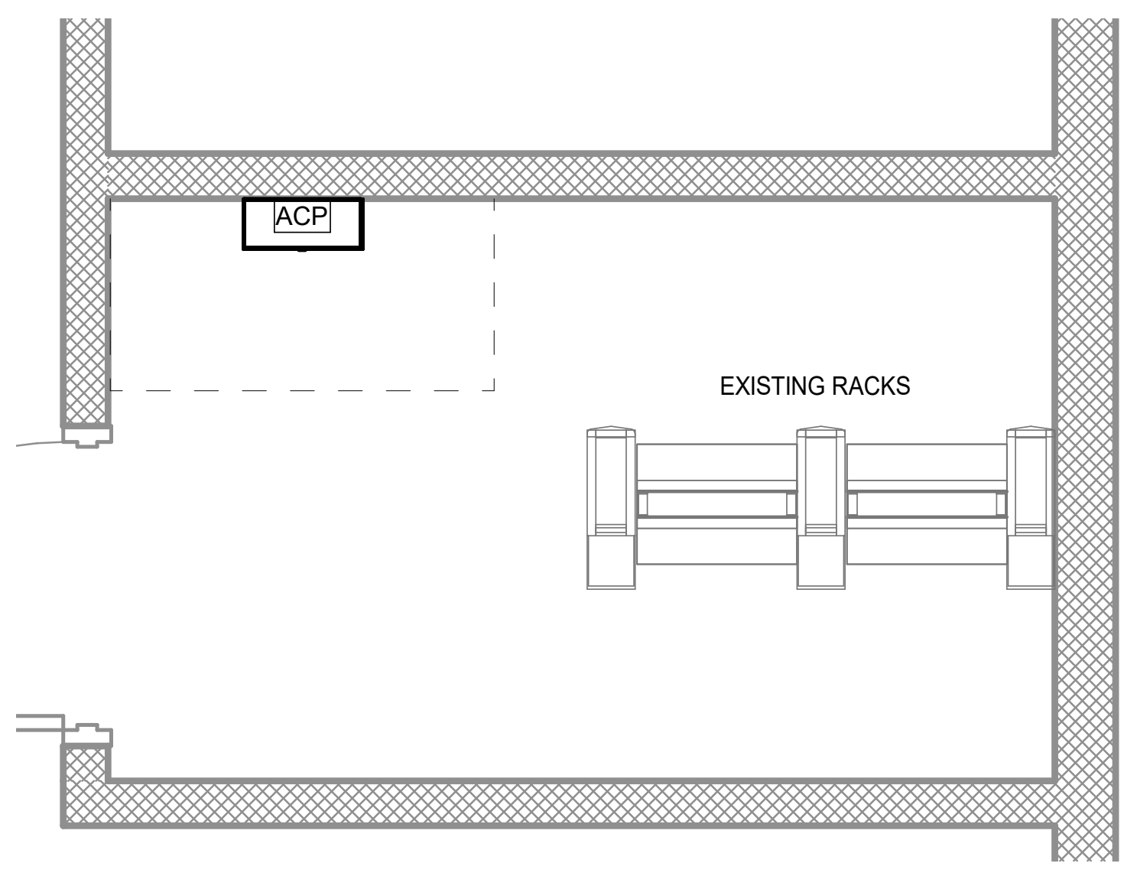
of



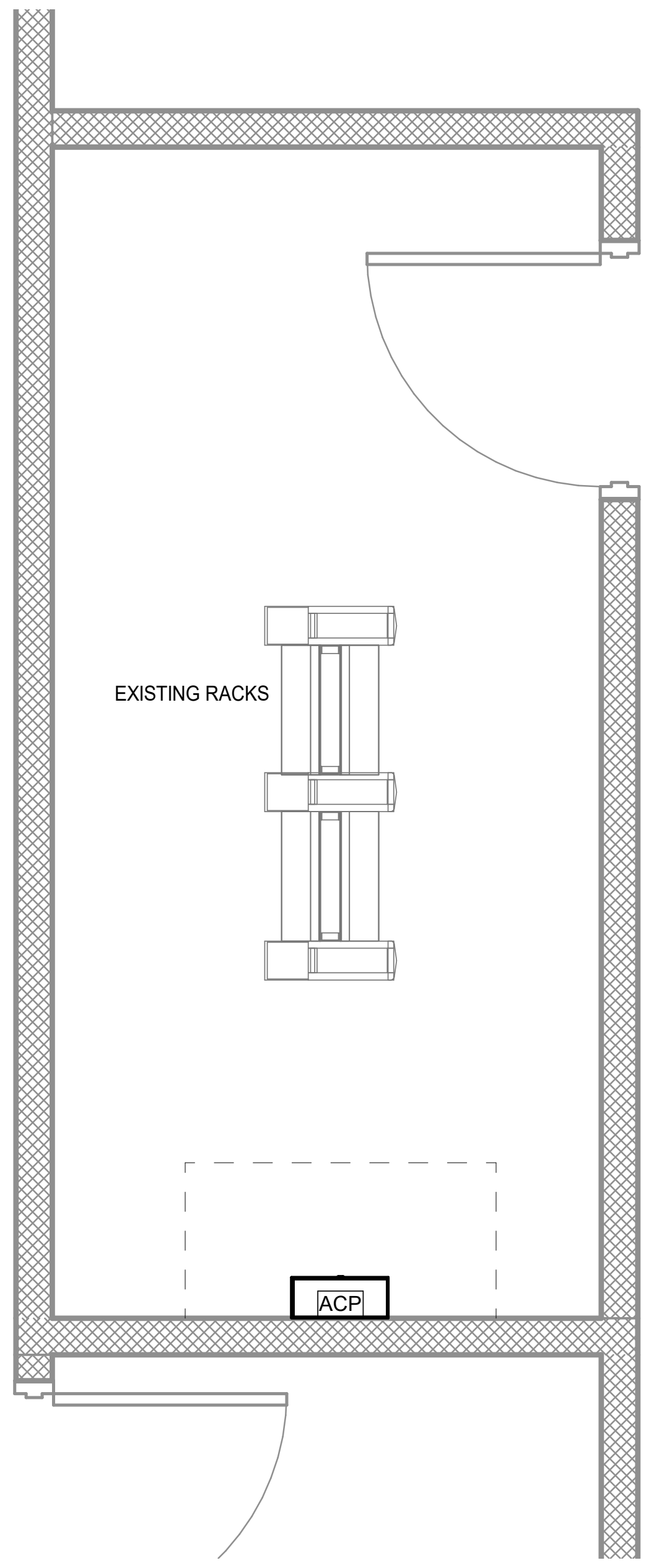
1 TECHNOLOGY ENLARGED PLAN - NEW IDF - IDF 4001
Scale: 1/2" = 1'-0"



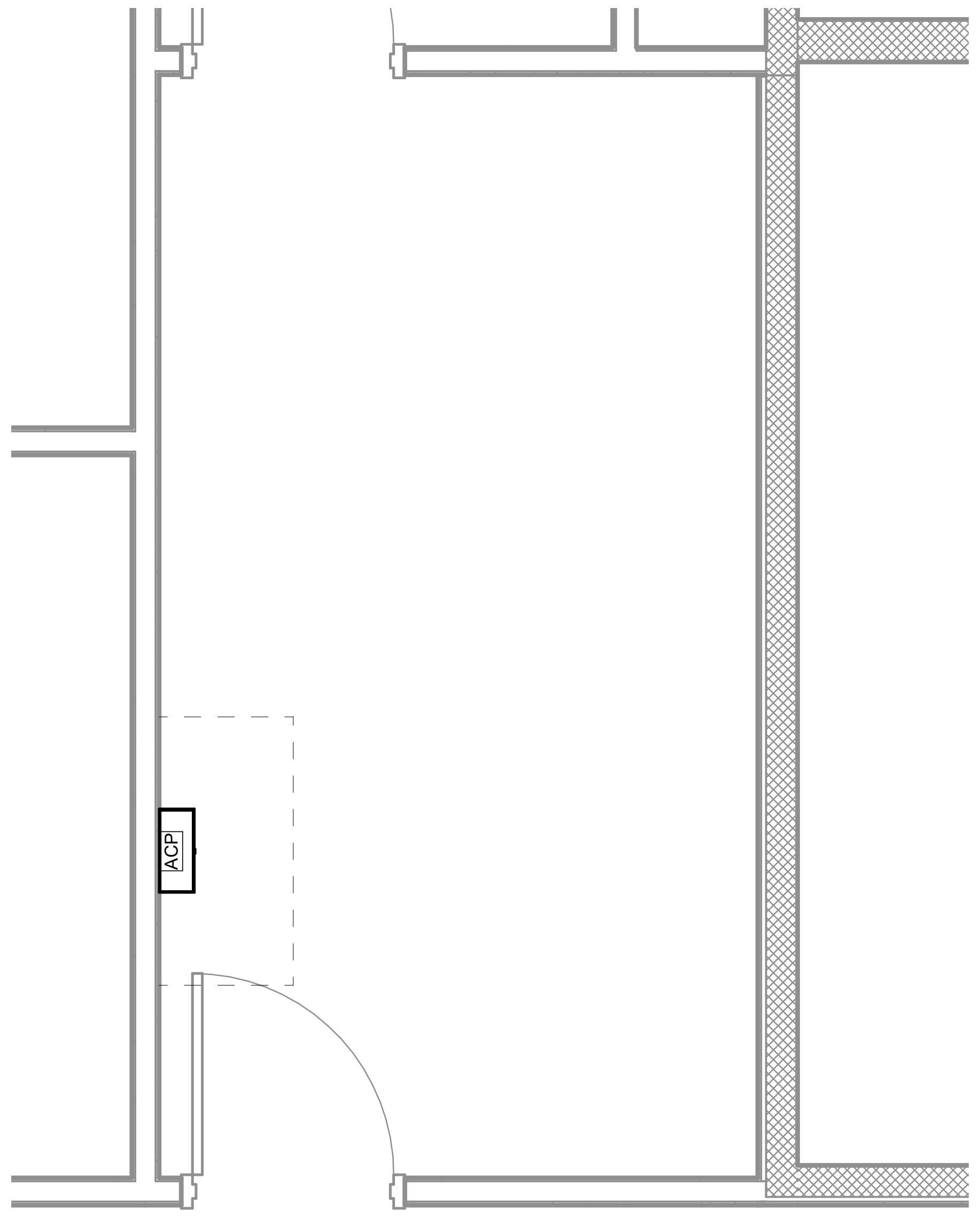
2 TECHNOLOGY ENLARGED PLAN - STORAGE 1146 - EXISTING IDF
Scale: 1/2" = 1'-0"



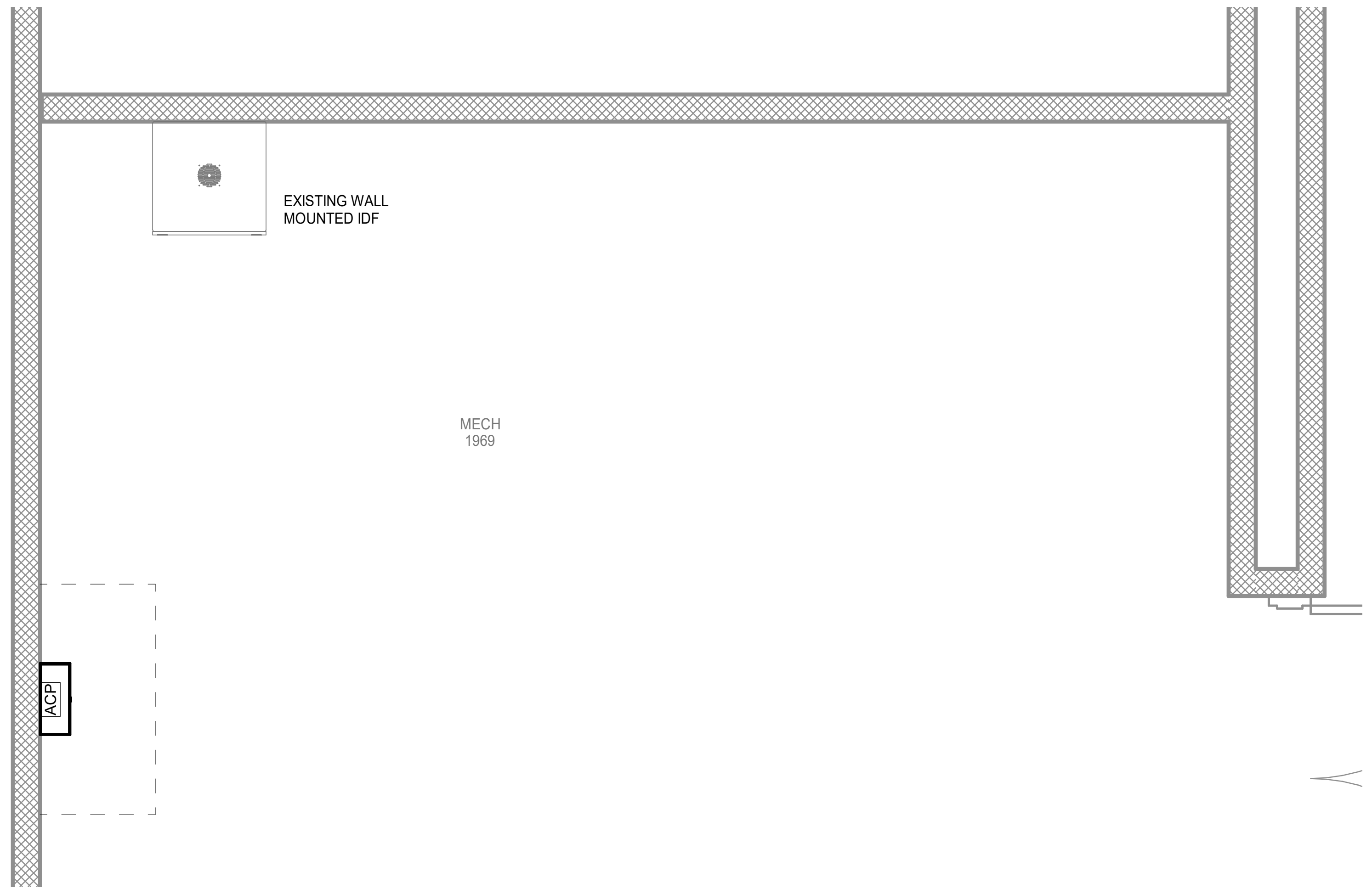
3 TECHNOLOGY ENLARGED PLAN - TELE 1254 - EXISTING IDF
Scale: 1/2" = 1'-0"



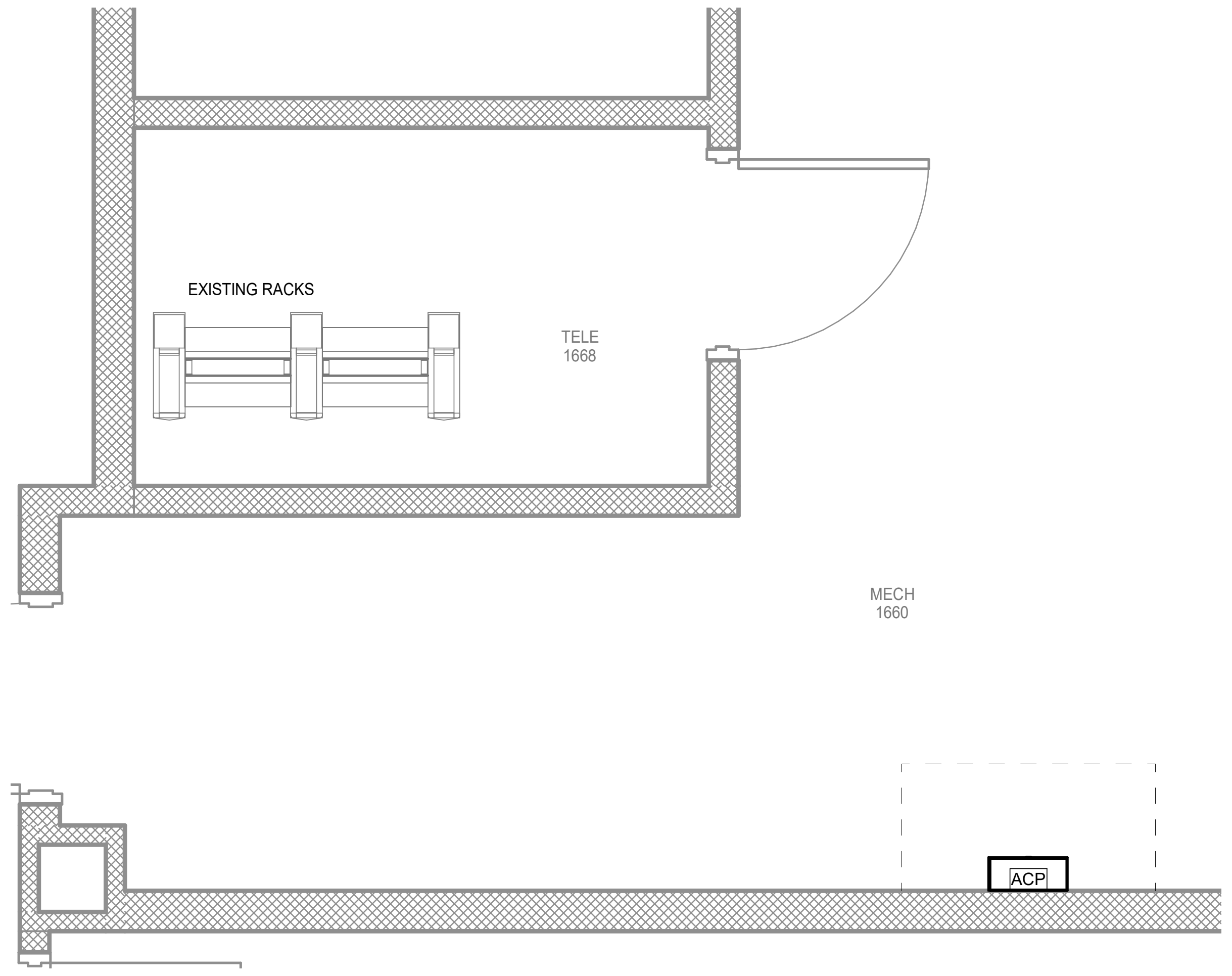
4 TECHNOLOGY ENLARGED PLAN - TELE 1043 - EXISTING IDF
Scale: 1/2" = 1'-0"



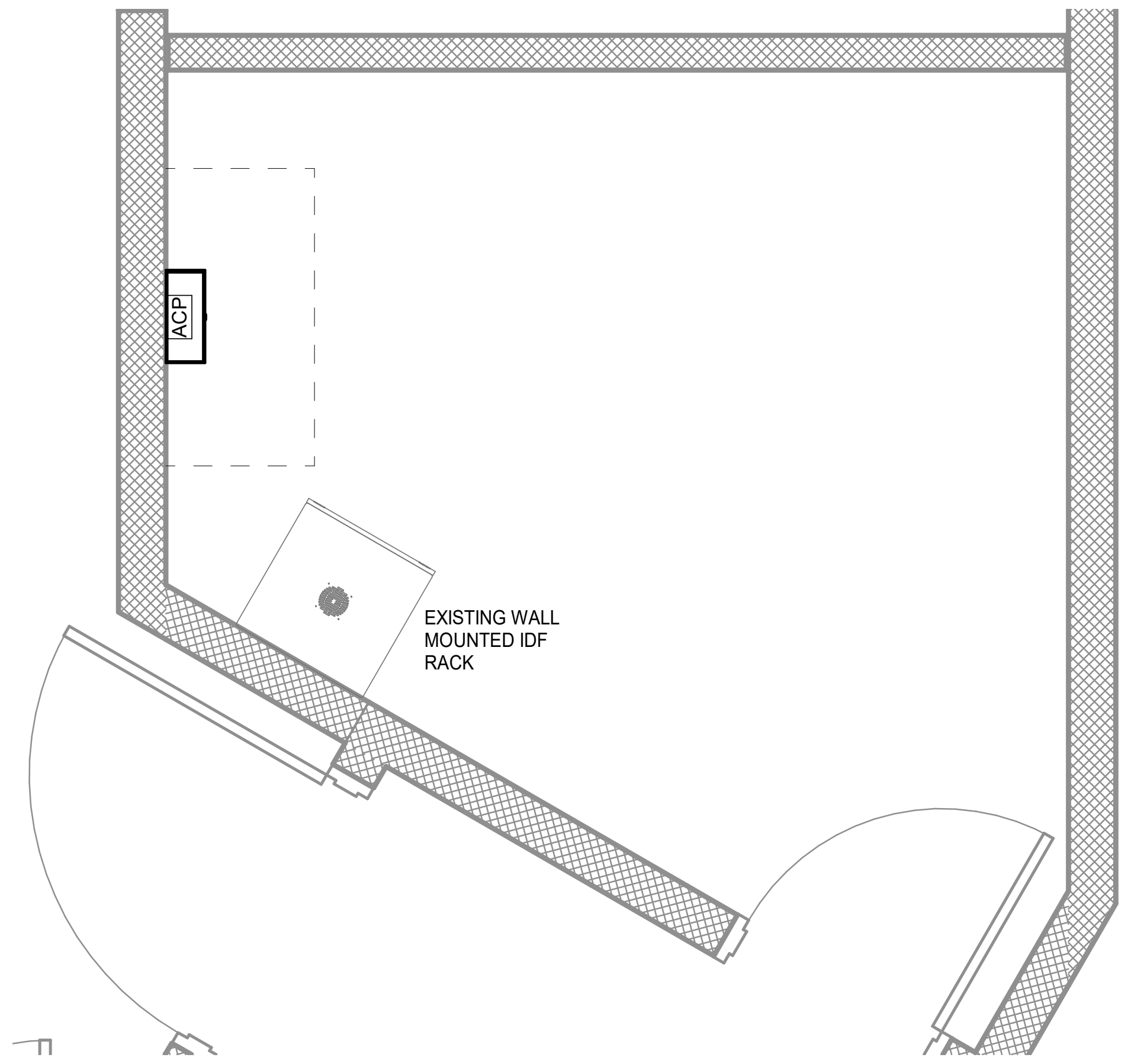
5 TECHNOLOGY ENLARGED PLAN - STORAGE 1519
Scale: 1/2" = 1'-0"



6 TECHNOLOGY ENLARGED PLAN - MECH 1969 - EXISTING IDF
Scale: 1/2" = 1'-0"



7 TECHNOLOGY ENLARGED PLAN - TELE1668 AND MECH 1660
Scale: 1/2" = 1'-0"



8 TECHNOLOGY ENLARGED PLAN - STORAGE 1754 - EXISTING IDF
Scale: 1/2" = 1'-0"

TECH ENLARGED PLAN KEYED NOTES

1	INDICATES THE LOCATION OF A 8' TALL, 3/4" FIRE RATED PLYWOOD CONTRACTOR TO PROVIDE AND INSTALL PLYWOOD AND ALL REQUIRED MOUNTING HARDWARE. PLYWOOD SHALL BE PAINTED WHITE WITH FIRE RATED PAINT. TYPICAL FOR ALL SHOWN ON DRAWING.
2	INDICATES THE LOCATION OF A NEW WALL MOUNTED TELECOMMUNICATION GROUND BUS BAR (TGBB). CABLING CONTRACTOR TO PROVIDE BUS BAR AND ALL REQUIRED MATERIAL TO MOUNT AT THE LOCATION SHOWN. TGBB TO BE MOUNTED AT +93" A.F.F.
3	PROVIDE AND INSTALL ONE (1) 7'X6", FRONT AND REAR MANAGED, VERTICAL CABLE MANAGER (BLACK IN COLOR). CABLE MANAGERS SHALL BE INSTALLED ON EACH END OF THE RACK SYSTEMS AND BETWEEN EACH RACK. CABLE MANAGERS SHALL HAVE A SINGLE, SOLID, FULL HEIGHT HINGED DOOR IN THE FRONT AND WIDE SPACED CABLE RINGS WITH SPIN-OPEN LATCHES IN THE REAR. TYPICAL FOR ALL SHOWN IN THE ENTIRE PROJECT.
4	PROVIDE AND INSTALL ONE (1) 2-POST, FLOOR MOUNTED, 7' RELAY RACK (BLACK IN COLOR). PROVIDE BONDING WASHERS, BOLTS, AND NUTS AT ALL MECHANICALLY CONNECTED LOCATIONS OF THE RACK TO ENSURE THAT ALL PIECES OF THE RACK ARE COMPLETELY BONDED. SCRAPING PAINT FROM RACKS TO MAKE A BOND WILL NOT BE ACCEPTED. ALL RACK MOUNTED COMPONENTS SHALL BE MOUNTED WITH BONDING SCREWS AND THE CONTRACTOR SHALL PROVIDE THE OWNER WITH (50) ADDITIONAL BONDING SCREWS FOR THE INSTALLATION OF OWNER EQUIPMENT. NO DAISY CHAINING GROUNDS FROM RACK TO CABLE TRAY OR TO OTHER RACKS WILL BE ACCEPTED. ALL GROUNDS SHALL BE HOME RUN TO THE TELECOMMUNICATIONS GROUND BUS BAR (TGBB). TYPICAL FOR ALL SHOWN ON THE ENTIRE PROJECT.
5	PROVIDE AND INSTALL A 12" WIDE, UNIVERSAL LADDER TRAY AND ALL REQUIRED MOUNTING HARDWARE. LADDER TRAY SHALL BE BLACK IN COLOR. TYPICAL FOR ALL SHOWN ON ENTIRE PROJECT.
6	INDICATES ENTRANCE LOCATION OF SITE CONDUITS FROM NEW GREENHOUSE BUILDING. REFERENCE TECHNOLOGY SITE PLAN FOR MORE INFORMATION.

TECH ENLARGED PLAN GENERAL NOTES

A	ALL RACK LOCATIONS SHALL BE COORDINATED WITH THE PROJECT'S TECHNOLOGY CONSULTANT AND OWNER PRIOR TO INSTALLATION. NO RACKS AND/OR ASSOCIATED CABLE TRAY SYSTEM SHALL BE PERMANENTLY INSTALLED PRIOR TO DOCUMENTED ACCEPTANCE.
B	PATCH PANEL QUANTITY SHALL BE DETERMINED BY STATION CABLE DROP COUNTS SHOWN ON TECHNOLOGY PLANS AND THE ASSOCIATED PROJECT MATRIX. ENSURE PATCH PANEL QUANTITY IS SUFFICIENT TO SUPPORT THE NUMBER OF PORTS REQUIRED BY TECHNOLOGY PLANS PLUS AN ADDITIONAL 25% FOR FUTURE GROWTH.
C	CONTRACTOR SHALL NOT MOUNT EXCEED MORE THAN A 50% RACK FILL RATIO ON ANY RACK.
D	REFERENCE SPECIFICATIONS FOR MATERIALS AND METHODS
E	ALL RACKS, LADDER TRAYS AND ANY OTHER DEVICES, PART OF THE STRUCTURED CABLING SYSTEM, SHALL BE GROUNDED TO A GROUND BUS BAR LOCATED IN THE TELECOMMUNICATIONS ROOM WITH A #6AWG GROUND CABLE. DAISY CHAINING WILL NOT BE ACCEPTED. ALL ITEMS SHALL HAVE A DEDICATED GROUND CABLE TO BUS BAR. GROUND CABLE SHALL BE GREEN IN COLOR.
F	ALL EXISTING IDF RACKS SHALL BE BONDED TO NEW GROUNDING BUS BARS PROVIDED AND INSTALLED BY THE CONTRACTOR.
G	CONTRACTOR TO PROVIDE ALL REQUIRED HARDWARE TO PROPERLY FURNISH A RACK AND LADDER TRAY SYSTEM.

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

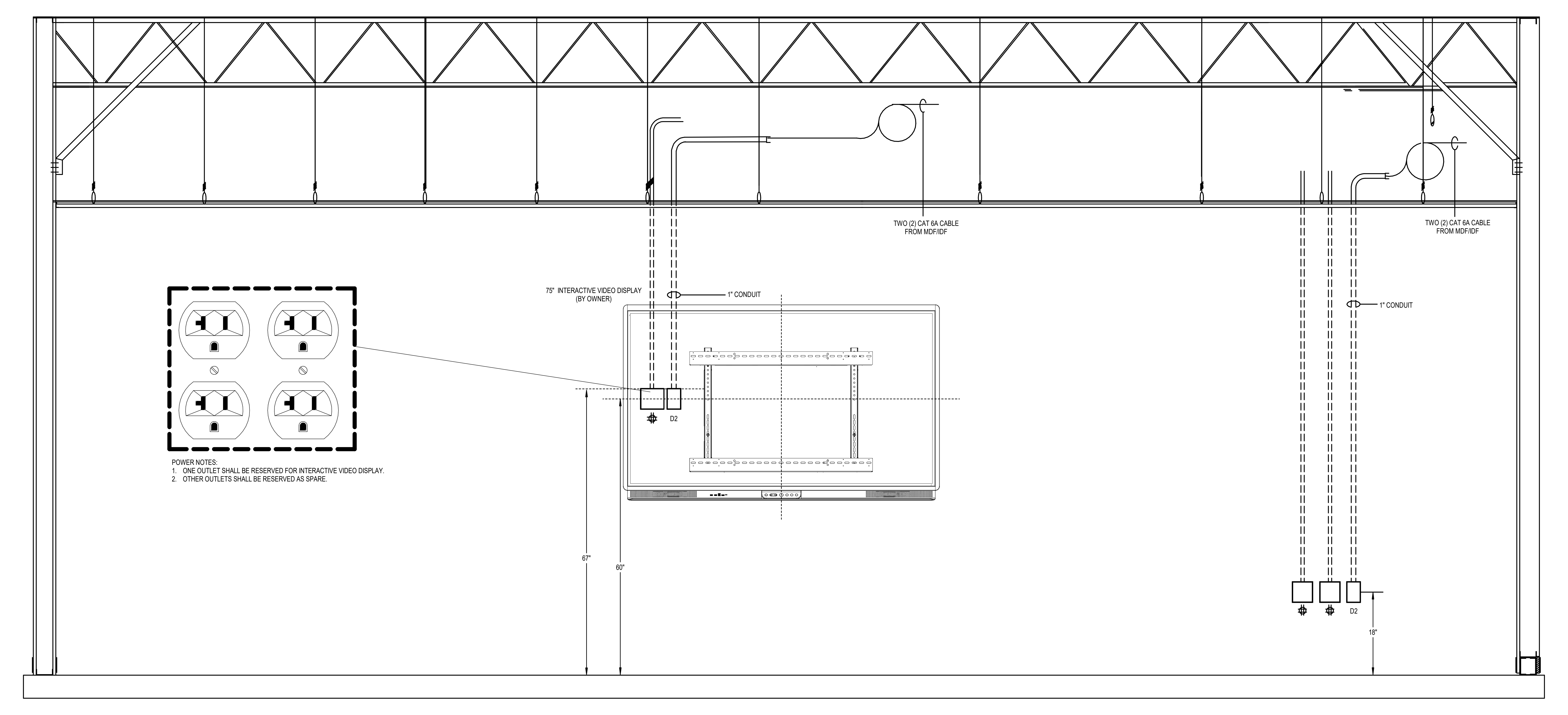
2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY
ENLARGED PLANS

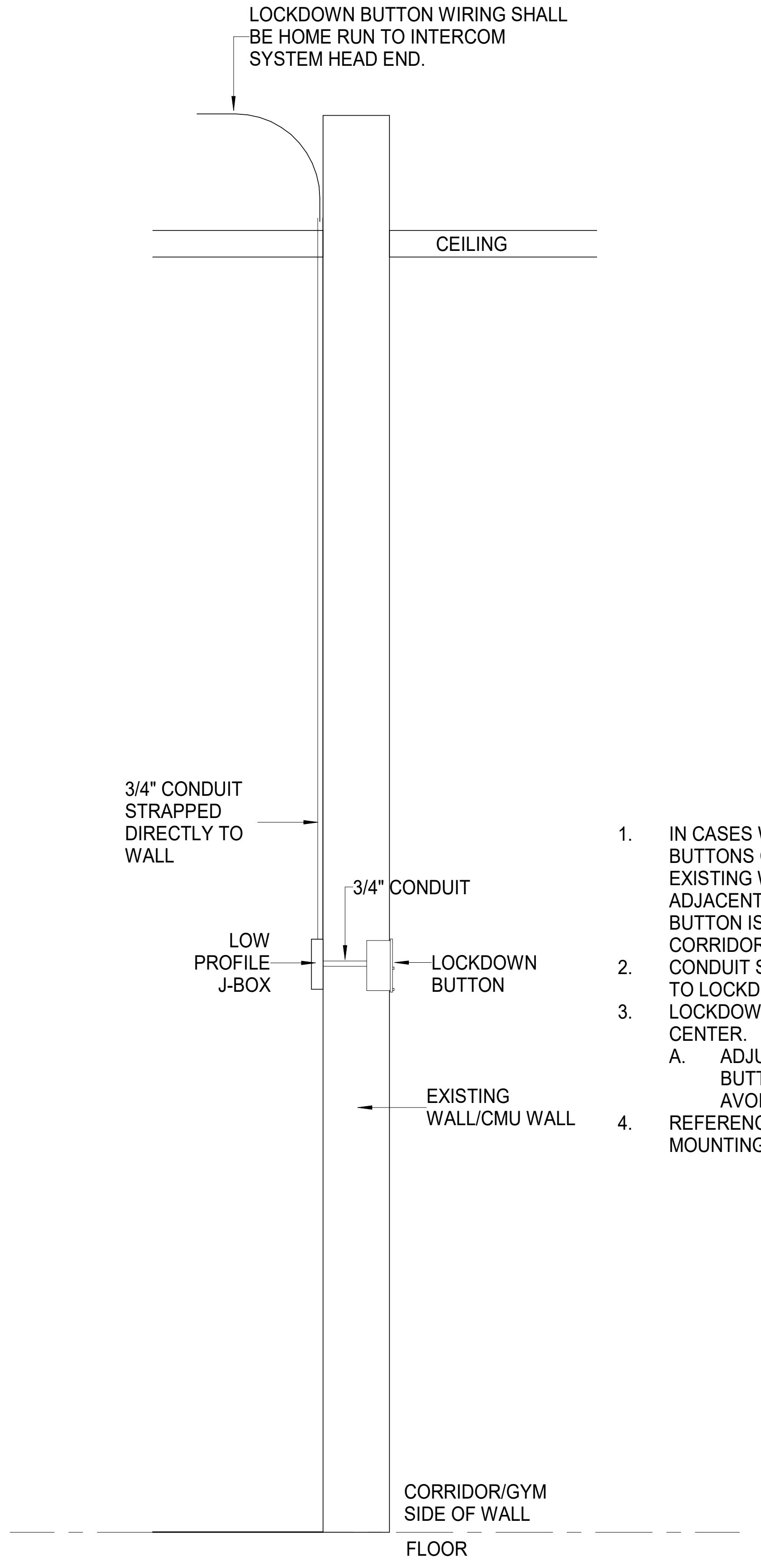
T3.01
of



POWER NOTES:
1. ONE OUTLET SHALL BE RESERVED FOR INTERACTIVE VIDEO DISPLAY.
2. OTHER OUTLETS SHALL BE RESERVED AS SPARE.

1 TECHNOLOGY WALL PRESENTATION

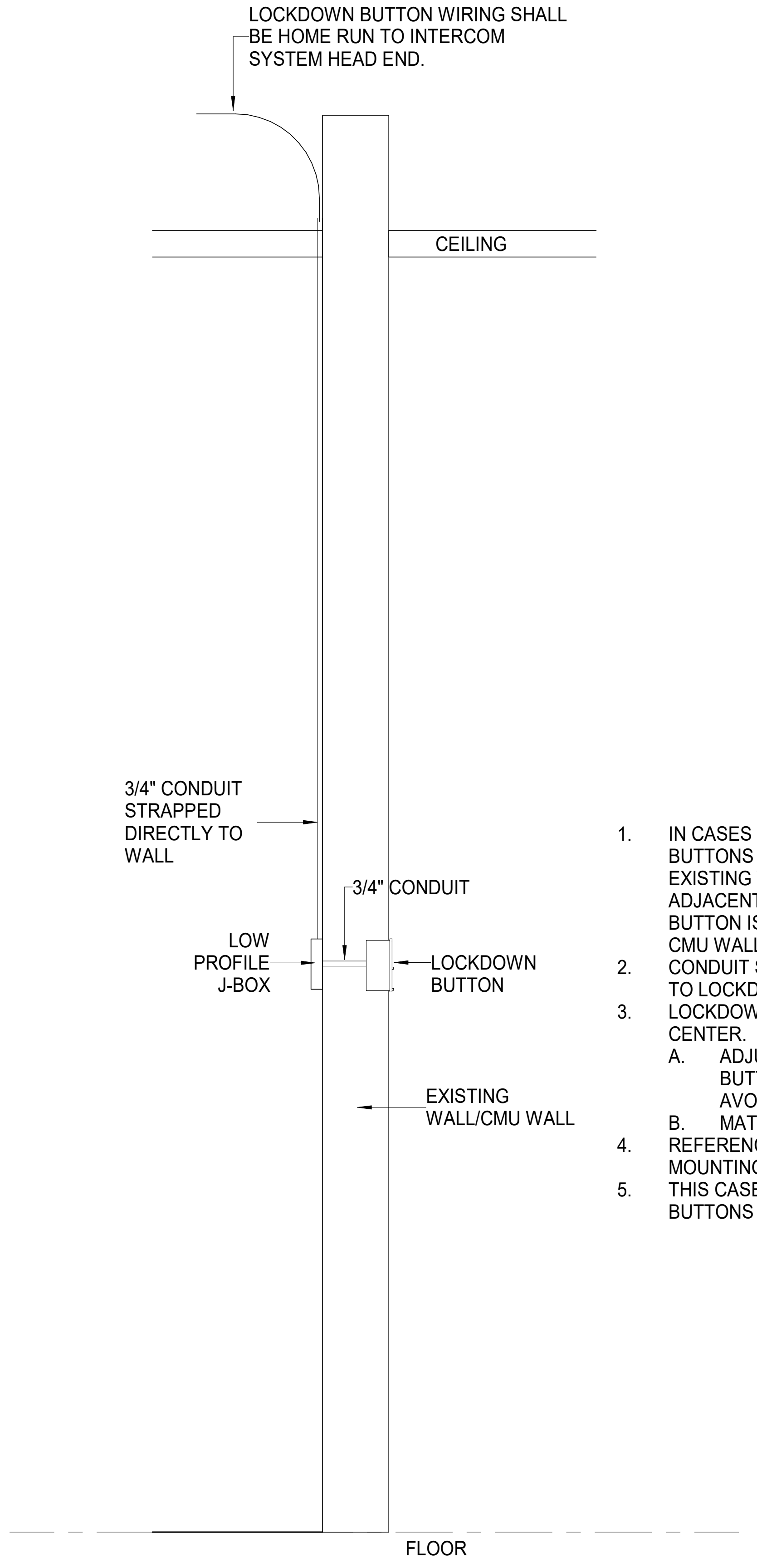
NOT TO SCALE



1. IN CASES WHERE CONDUIT FOR LOCKDOWN BUTTONS CANNOT BE INSTALLED INSIDE OF EXISTING WALLS INSTALL CONDUIT IN ADJACENT SPACES SO THAT NEW LOCKDOWN BUTTON IS INSTALLED AND RECESSED INTO CORRIDOR WALL.
2. CONDUIT SHALL PENETRATE EXISTING WALL TO LOCKDOWN BUTTON SIDE OF WALL.
3. LOCKDOWN SHALL BE MOUNTED +48" AFF TO CENTER.
   A. ADJUST HEIGHT AS NEEDED TO RECESS BUTTON IN CENTER OF CMU BLOCK AVOIDING GROUT LINES.
4. REFERENCE 27 50 00 SPECIFICATIONS FOR LD MOUNTING HEIGHTS.

NOT TO SCALE

2 LD INSTALLATION ON EXISTING WALLS - GYM AND CORR.



1. IN CASES WHERE CONDUIT FOR LOCKDOWN BUTTONS CANNOT BE INSTALLED INSIDE OF EXISTING WALLS INSTALL CONDUIT IN ADJACENT SPACES SO THAT NEW LOCKDOWN BUTTON IS INSTALLED AND RECESSED INTO CMU WALL.
2. CONDUIT SHALL PENETRATE EXISTING WALL TO LOCKDOWN BUTTON SIDE OF WALL.
3. LOCKDOWN SHALL BE MOUNTED +42" AFF TO CENTER.
   A. ADJUST HEIGHT AS NEEDED TO RECESS BUTTON IN CENTER OF CMU BLOCK AVOIDING GROUT LINES.
   B. MATCH LIGHT SWITCH HEIGHT
4. REFERENCE 27 50 00 SPECIFICATIONS FOR LD MOUNTING HEIGHTS.
5. THIS CASE ALSO APPLIES TO LOCKDOWN BUTTONS ADDED IN KITCHENS

3 LD INSTALLATION ON EXISTING WALLS - ADMIN AREAS

NOT TO SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

**COLEMAN PARTNERS
ARCHITECTS LLC**
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

**CIVIL ENGINEER
BROOKS AND SPARKS, INC.**
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

**STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.**
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

**MEPT ENGINEER
SALAS O'BRIEN**
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

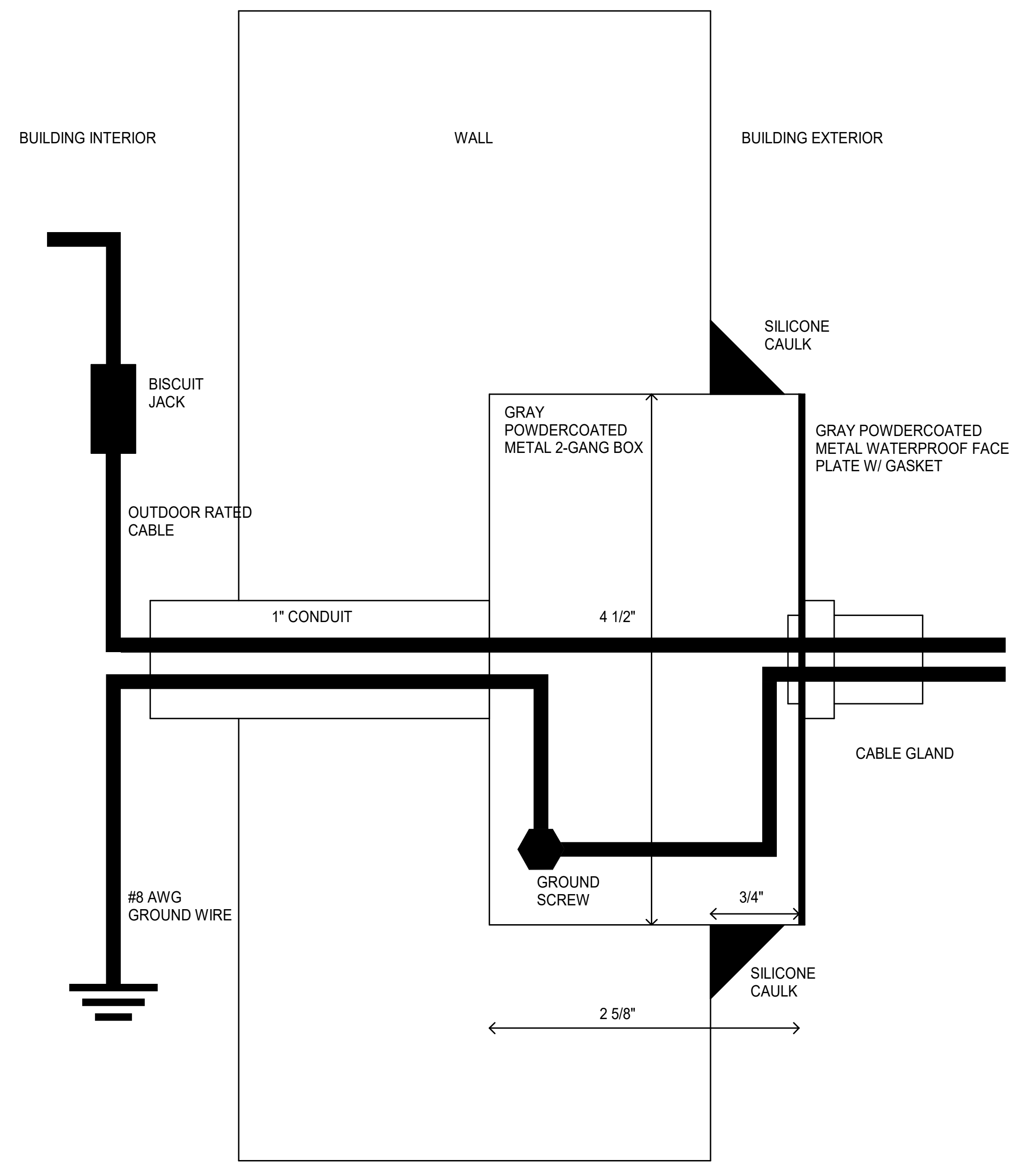
**2024 CY-LAKES HIGH SCHOOL
RENOVATION**
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

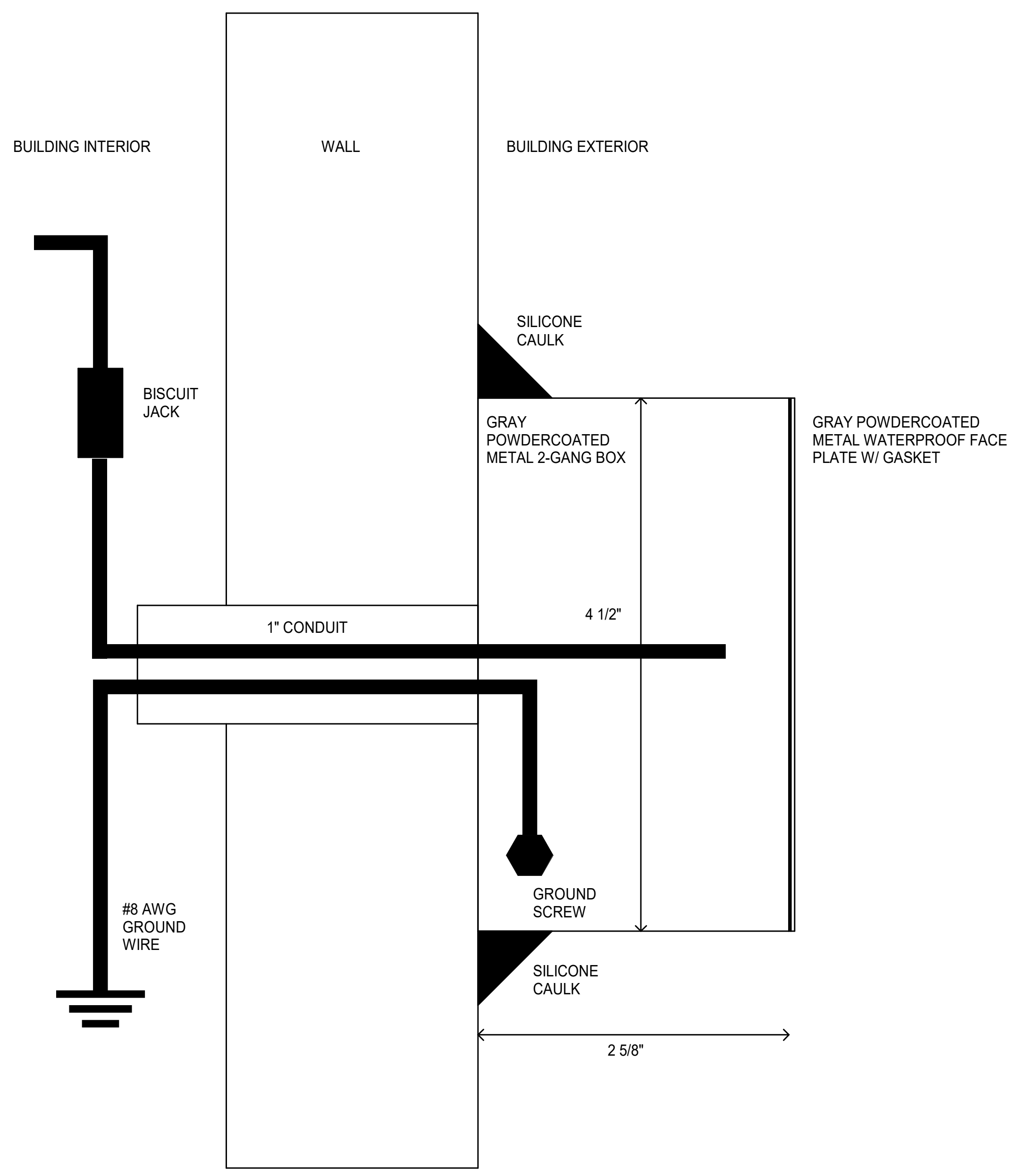
Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY DETAILS

T5.01
of



01 WIRELESS AP BUILDING CABLE PENETRATION FOR NEW BUILD



02 WIRELESS AP BUILDING CABLE PENETRATION FOR RETROFIT

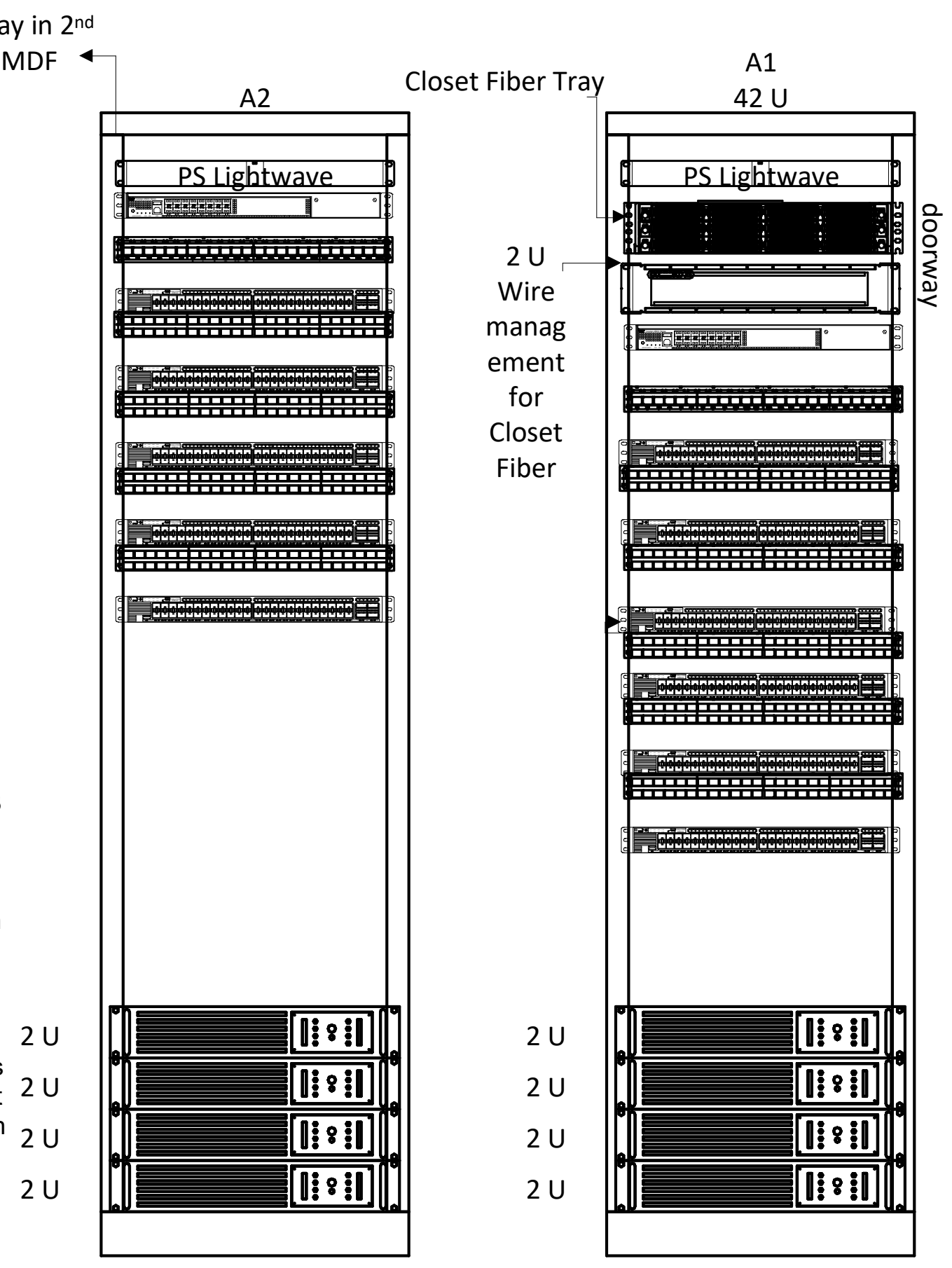
Layout of Switches :
4 U on top (to leave room for PS lightwave tray)
Then on 1st Rack:
1 U then
4 U Fiber IDF Enclosure
1 U then
2 U Fiber Wire Manager
1 U then
9500 Cisco Switch
3 U then ,
24 Patch panel then ,
2 U then Panel

Also, the numbering of Racks go
First rack is A and Second is A2. (Labeling IDF # -1-250)

Top Patch Panel should be a 24 port patch panel, then a 48 port patch panel will follow.

1ft patch cable are required. If we have a copper coming in they should be on a 64 Block behind Racks. Only the ones needed should be run.

Also please be aware J-Hooks should be used every 3ft to 4ft there, so no cable is resting on anything.

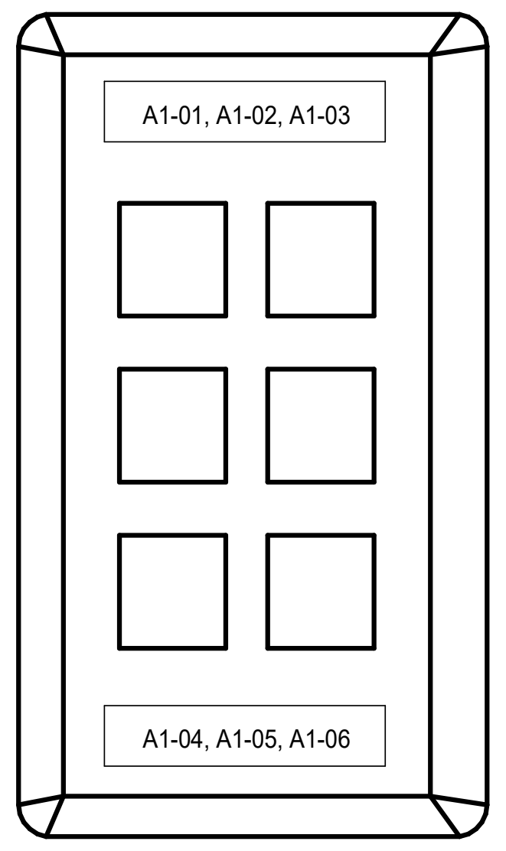


WALL, with Left are right but 1st Rack starts at WALL, making sure not to block doorway

Requirements/Part numbers

2. Patch Panels:
   - Commscope Patch Panel -- 760105429 – M4800 1U-GS
   - Panel--760118323 | M2400-1U-GS
3. UPS-Liebert
   - PS2200RT3120XRW ,Power Pack PSRT3-48VBXR

03 RACK LAYOUT OWNER STANDARD



1. FACEPLATE LABELING SHALL BE MACHINE GENERATED AND SHALL NOT BE LESS THEN 1/4" IN HEIGHT
2. PROVIDE BLANK INSERTS FOR ANY UNUSED PORTS
3. COORDINATE EXACT LABELING SCHEME WITH OWNER AND ENGINEER.
4. FOR EXAMPLE A1-01 REPRESENTS MDF A, RACK 1, PORT 01

04 CABLE LABELING CONVENTION

NOT TO SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

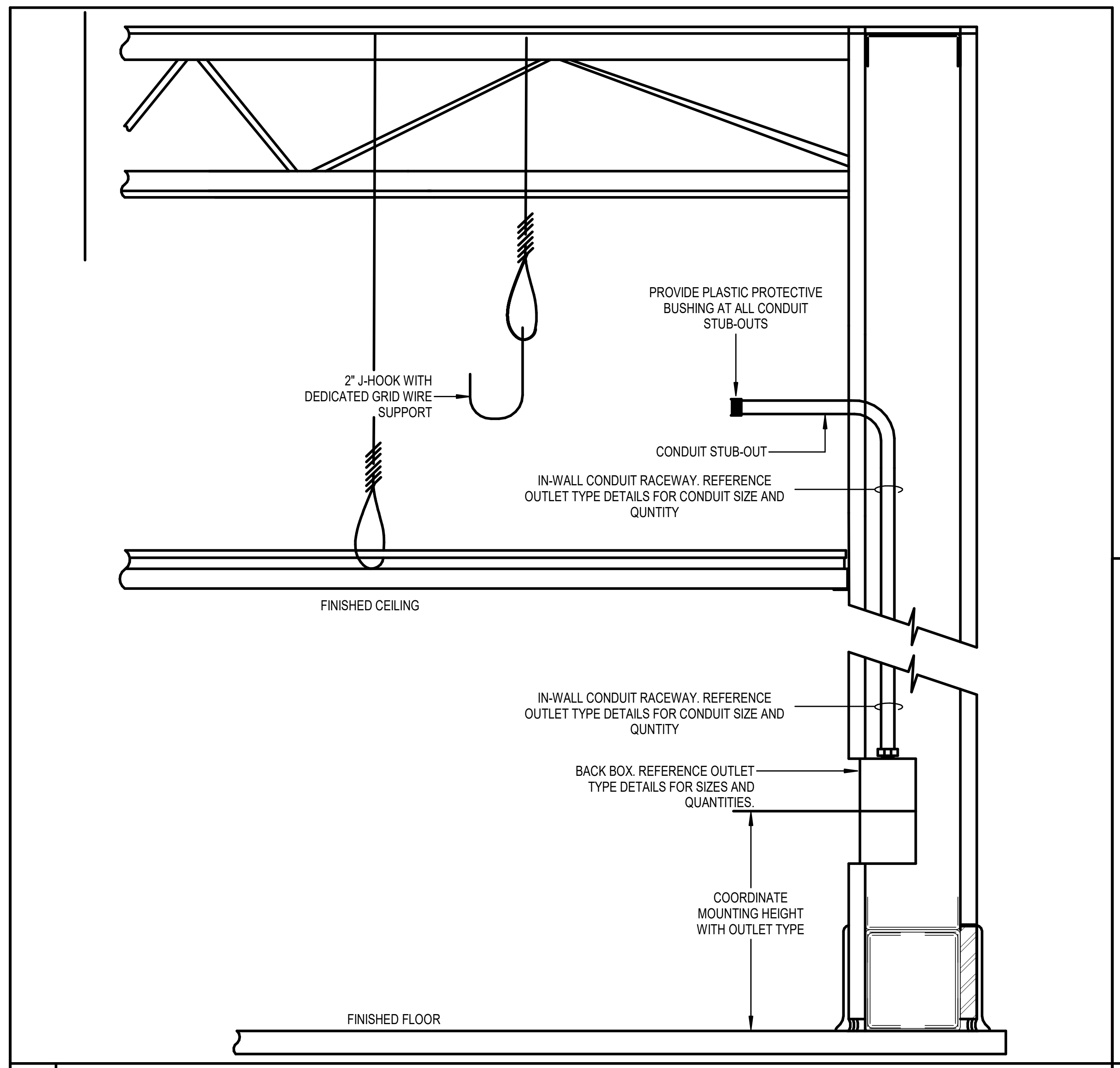
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: NY

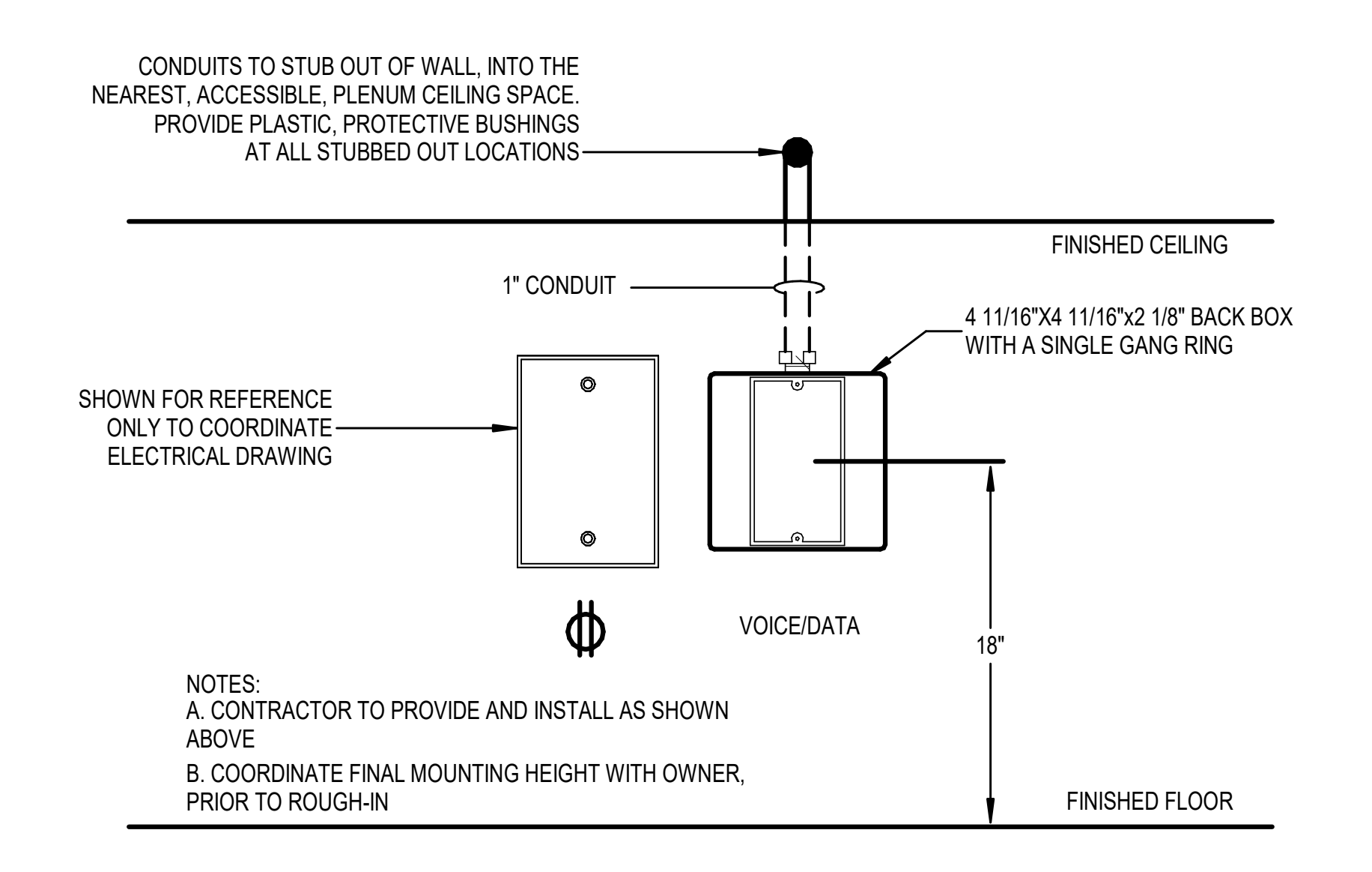
TECHNOLOGY DETAILS

T5.02
of



01 LOW VOLTAGE ELEVATION - IN-WALL RACEWAY

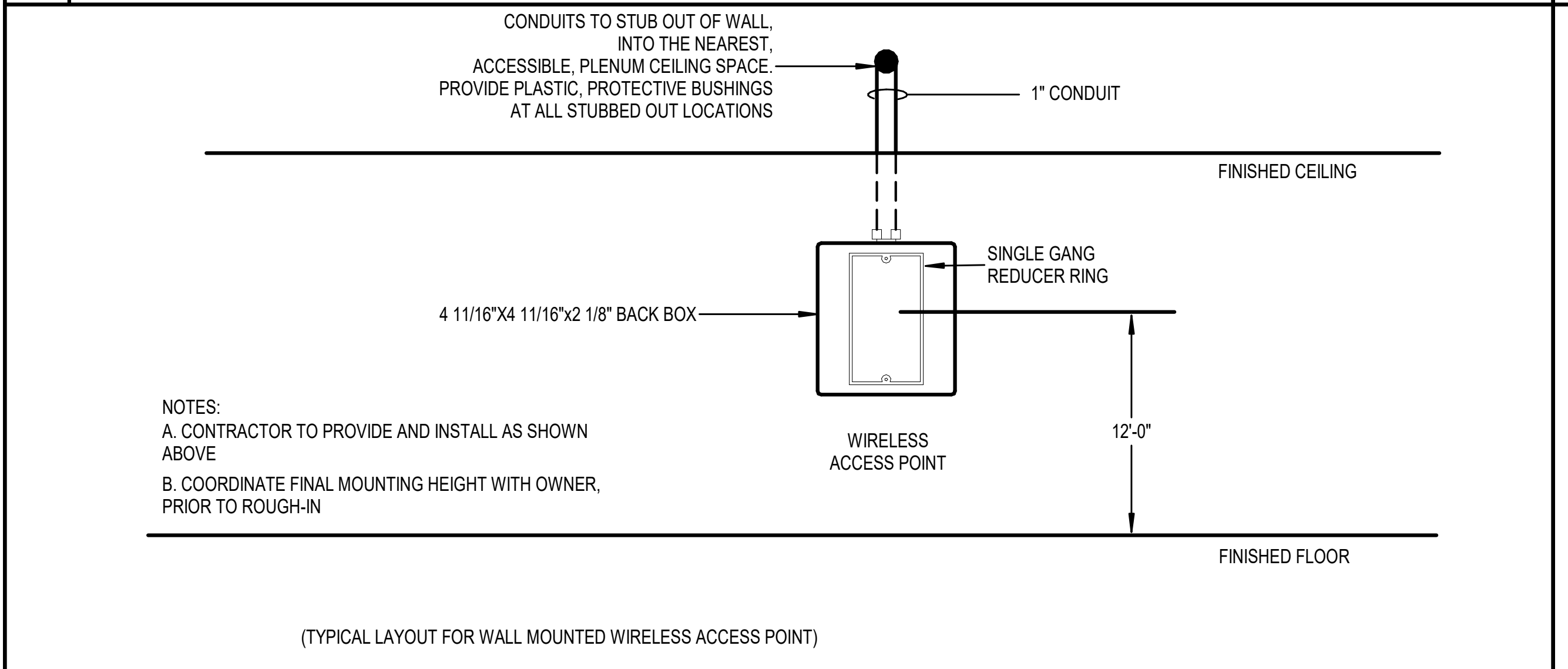
NOT TO SCALE



NOTES:
A. CONTRACTOR TO PROVIDE AND INSTALL AS SHOWN ABOVE
B. COORDINATE FINAL MOUNTING HEIGHT WITH OWNER, PRIOR TO ROUGH-IN

02 RACEWAY DETAIL - TYPICAL VOICE/DATA OUTLET

NOT TO SCALE

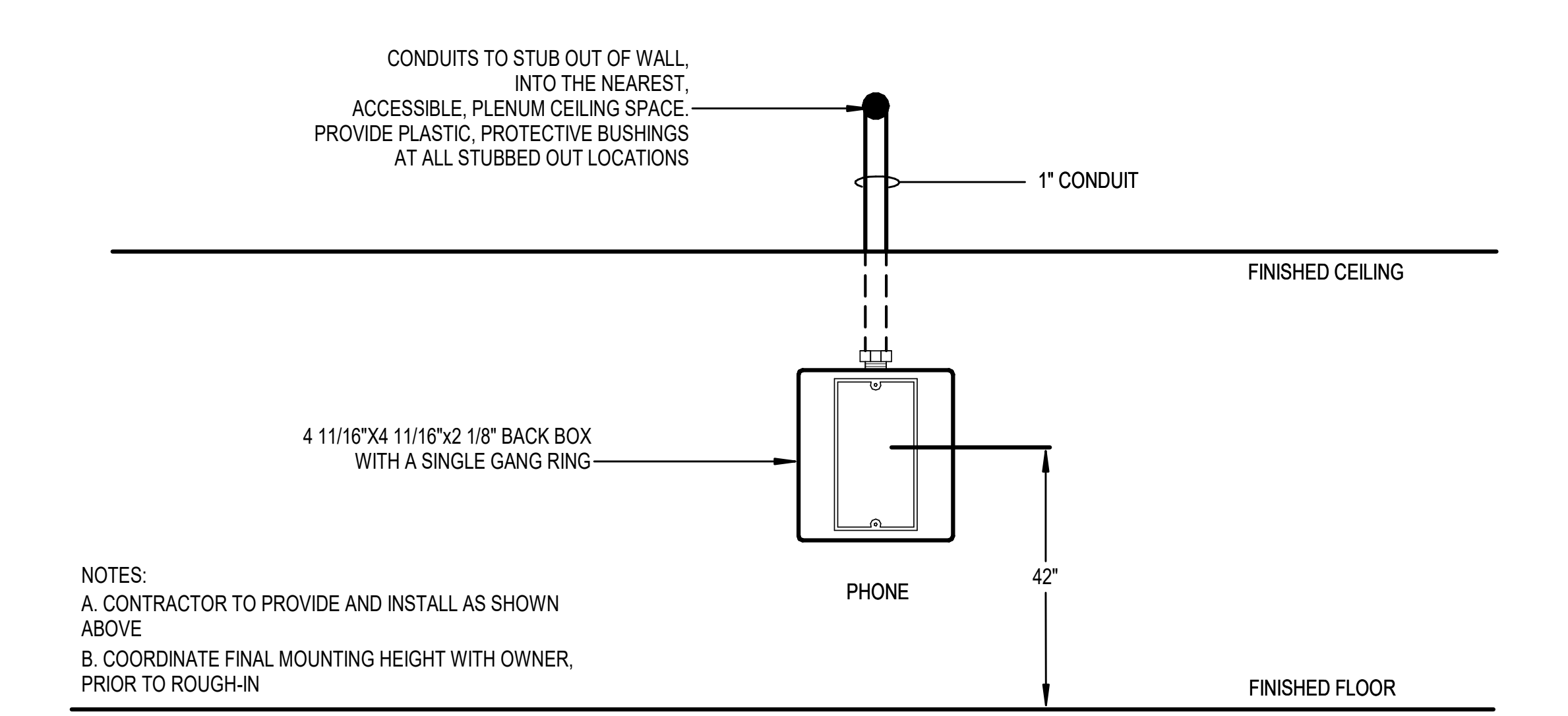


NOTES:
A. CONTRACTOR TO PROVIDE AND INSTALL AS SHOWN ABOVE
B. COORDINATE FINAL MOUNTING HEIGHT WITH OWNER, PRIOR TO ROUGH-IN

(TYPICAL LAYOUT FOR WALL MOUNTED WIRELESS ACCESS POINT)

03 RACEWAY DETAIL - WALL MOUNTED WIRELESS AP

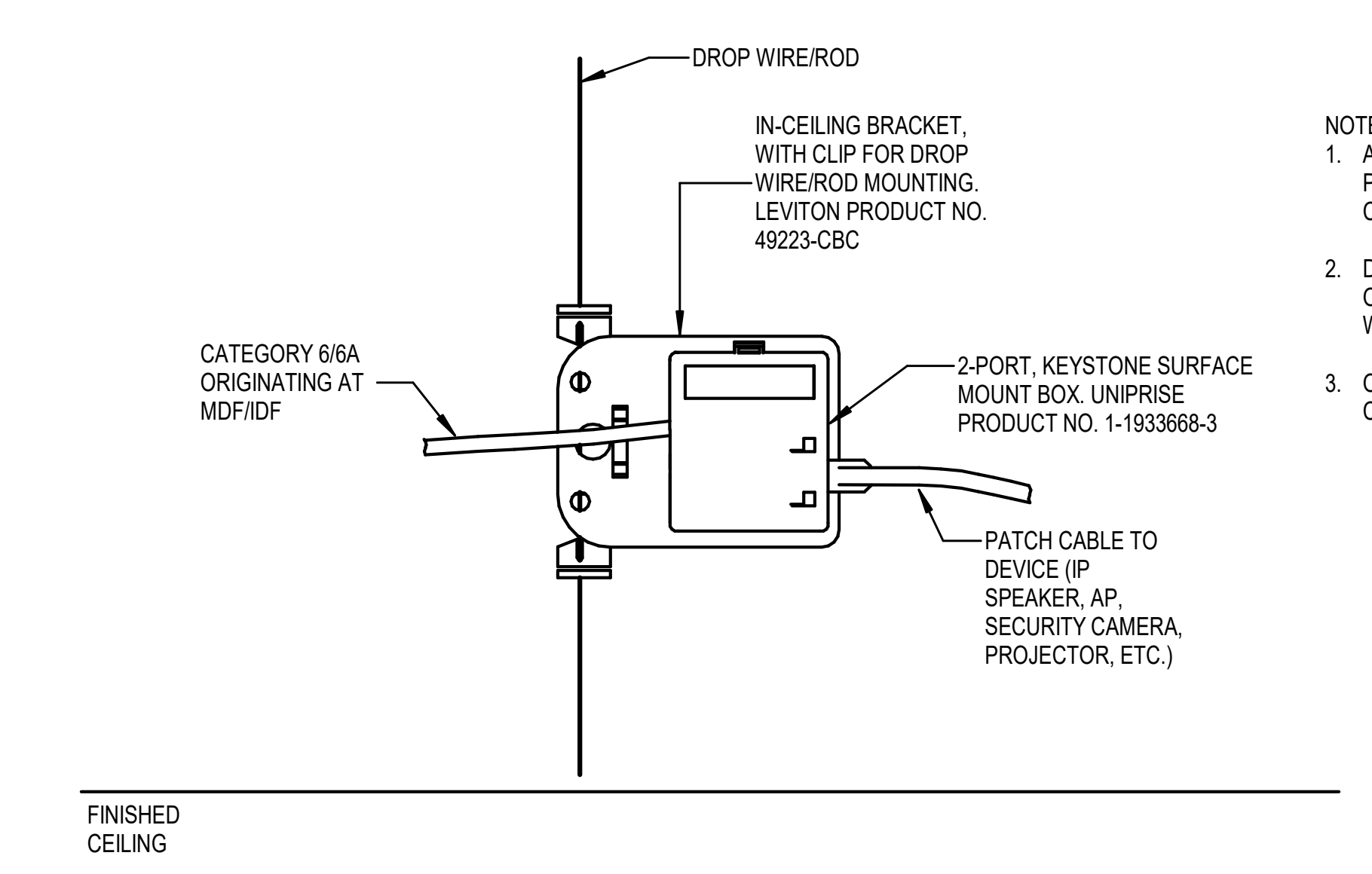
NOT TO SCALE



NOTES:
A. CONTRACTOR TO PROVIDE AND INSTALL AS SHOWN ABOVE
B. COORDINATE FINAL MOUNTING HEIGHT WITH OWNER, PRIOR TO ROUGH-IN

04 RACEWAY DETAIL - WALL MOUNTED TELEPHONE

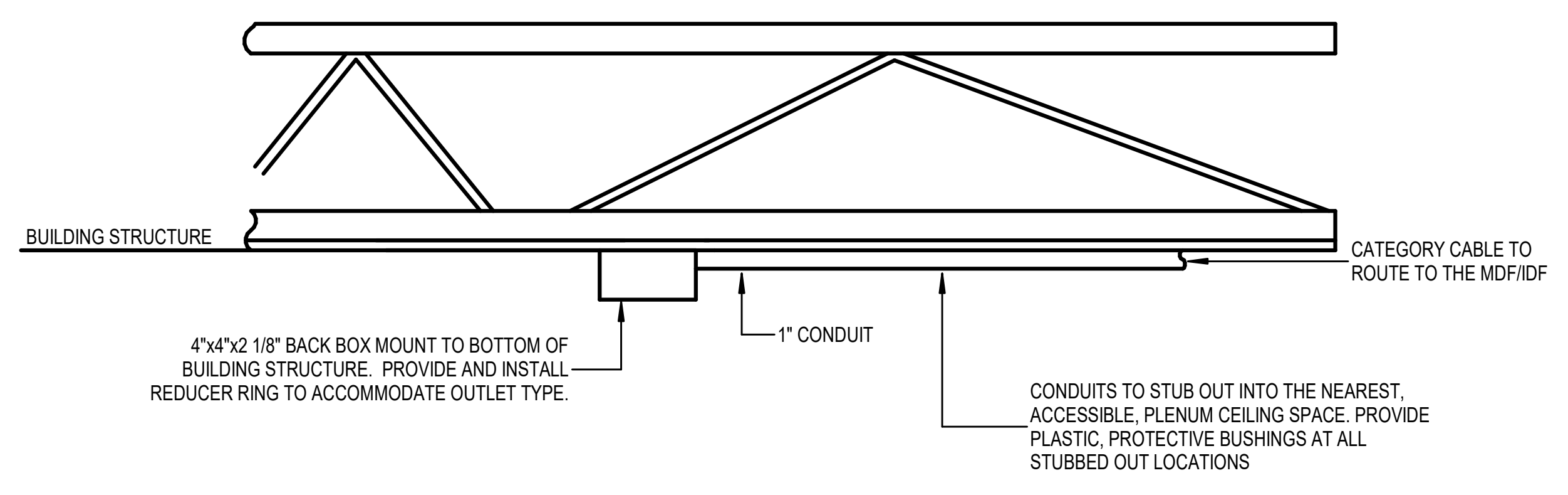
NOT TO SCALE



NOTE:
1. ALL ITEMS SHOWN IN THIS DETAIL SHALL BE PROVIDED AND INSTALLED BY THE STRUCTURED CABLING SYSTEM INSTALLER.
2. DROP WIRE SUPPORT SHALL BE DEDICATED TO THE OUTLET. DO NOT MOUNT TO EXISTING CEILING GRID WIRE.
3. OUTLET SHALL BE LOCATED WITHIN 3' OF THE CEILING AND WITH 5' FROM THE IP DEVICE.

05 ABOVE CEILING STAND ALONE OUTLET

NOT TO SCALE



08 OPEN CEILING STRUCTURAL SURFACE MOUNT OUTLET

NOT TO SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans

BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

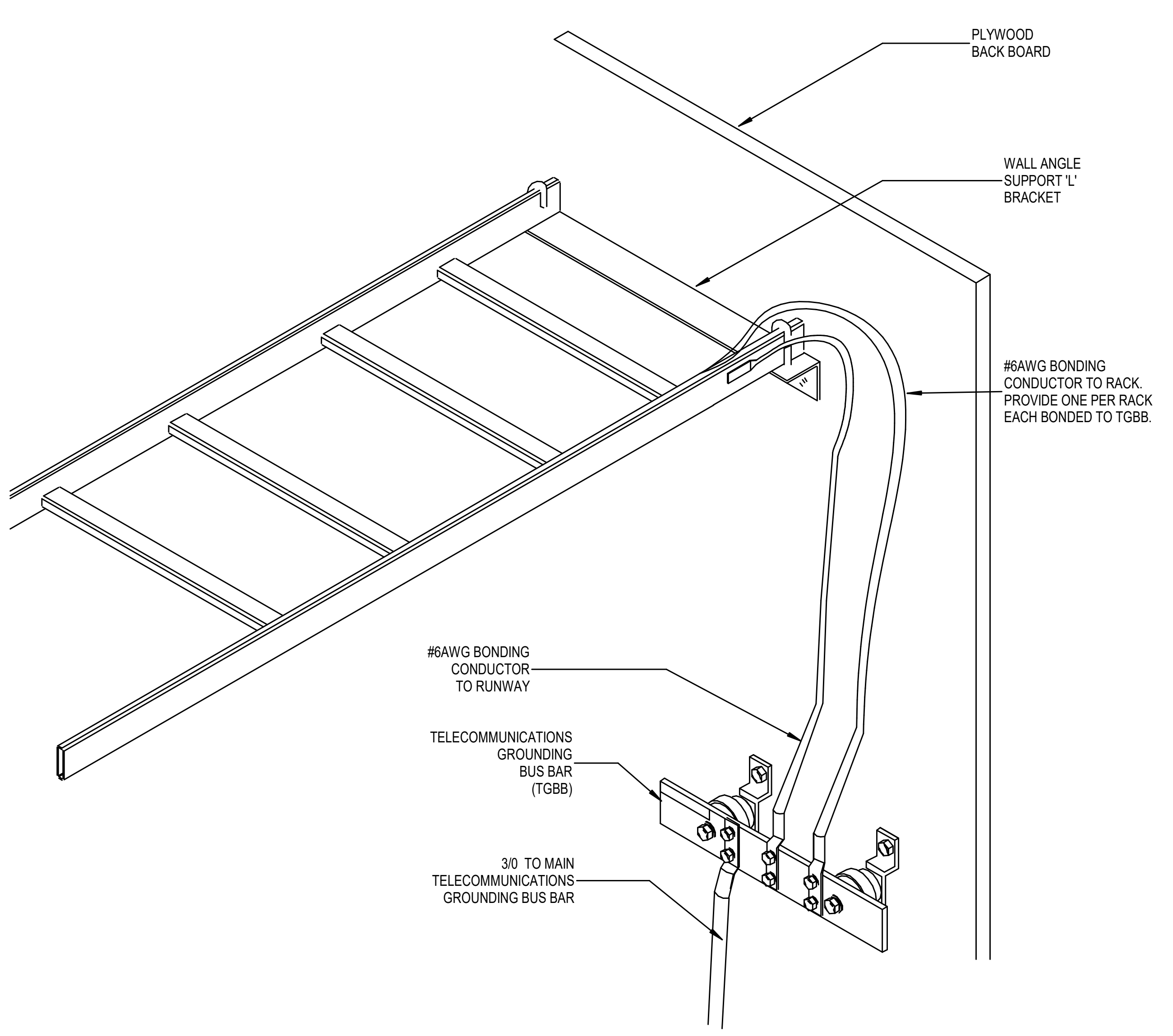
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY DETAILS

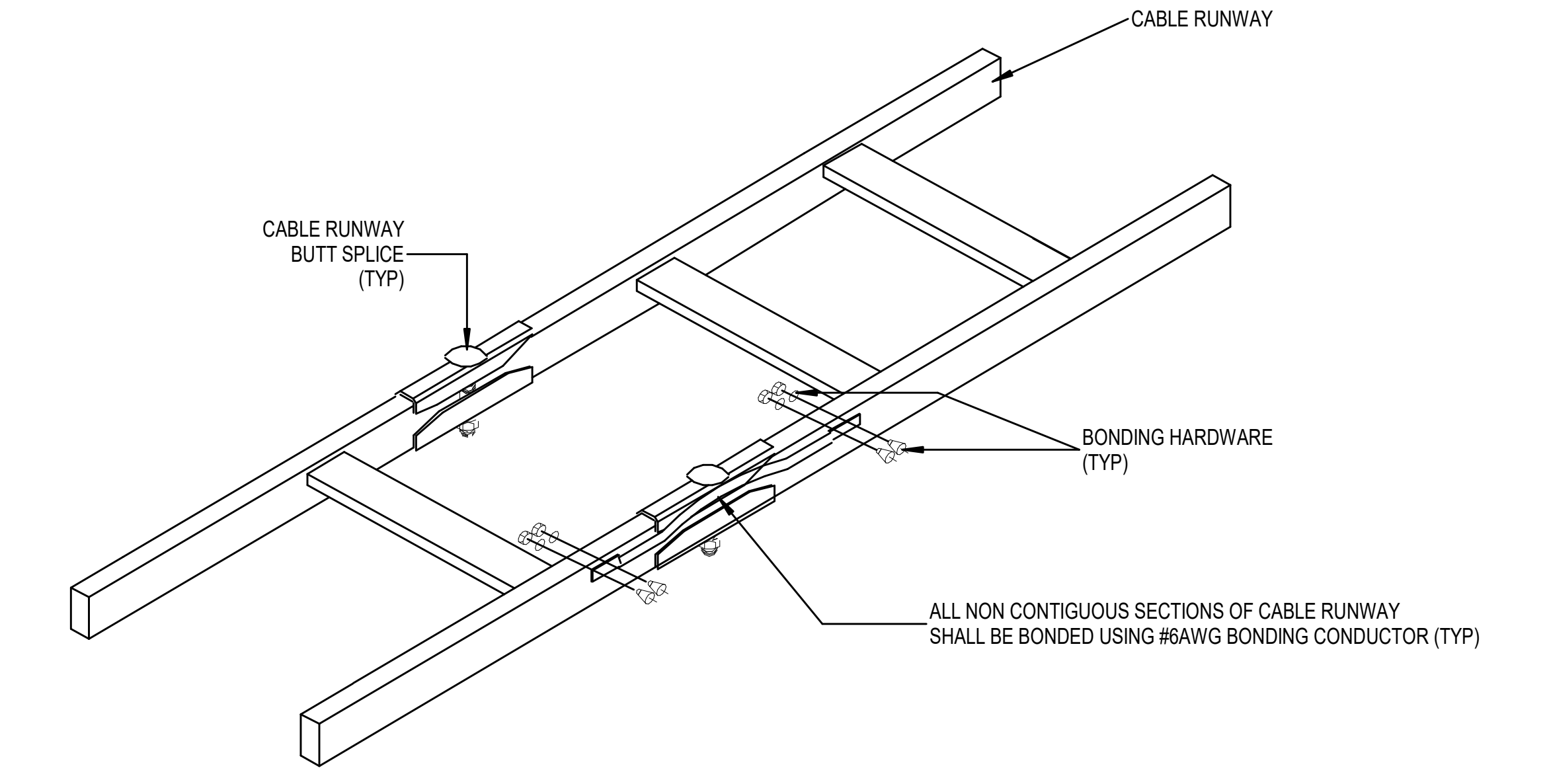
T5.03

of



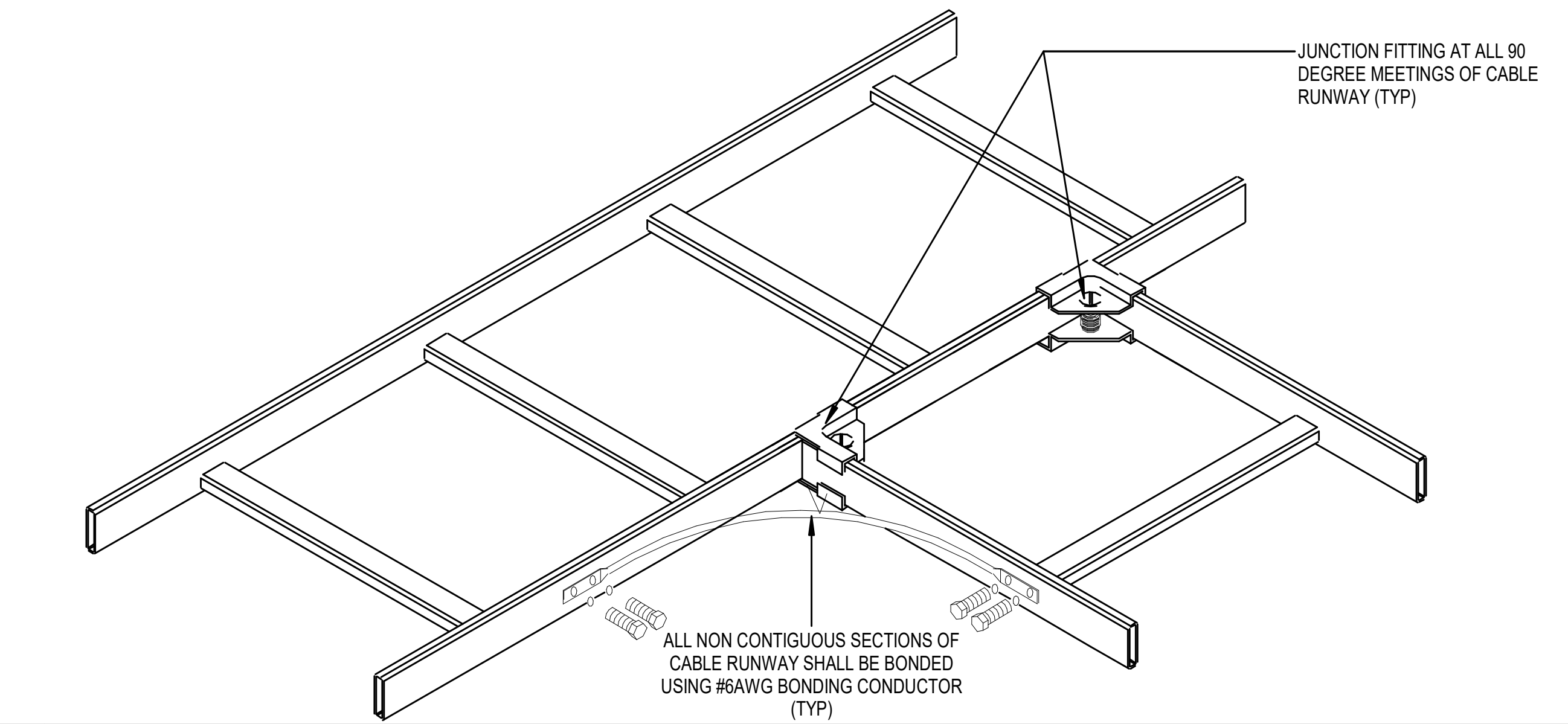
01 CABLE RUNWAY - GROUNDING AND BONDING

NOT TO SCALE



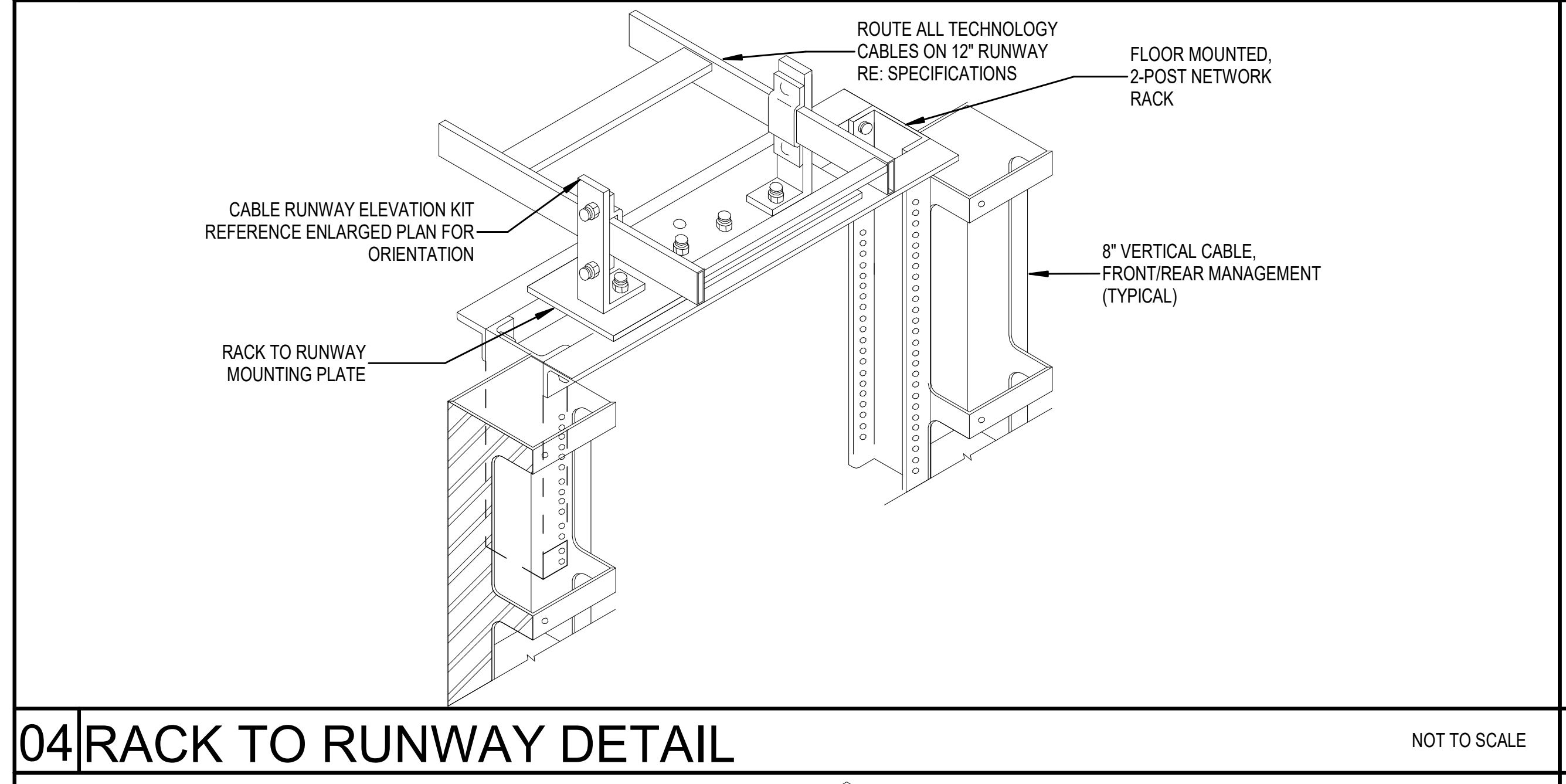
02 CABLE RUNWAY - BONDING AND BUTT SPLICE

NOT TO SCALE



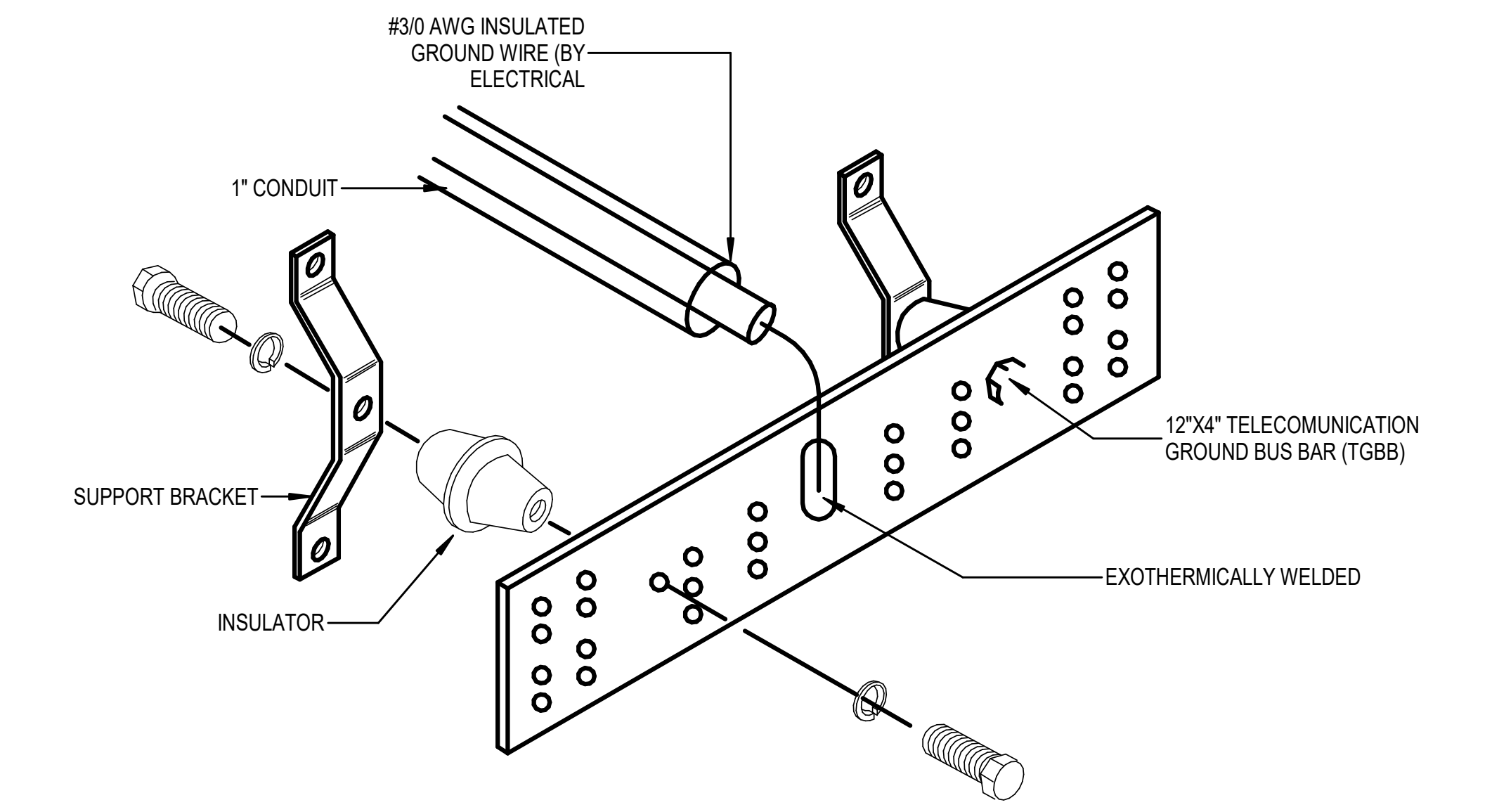
03 CABLE RUNWAY - JUNCTION AND BONDING

NOT TO SCALE



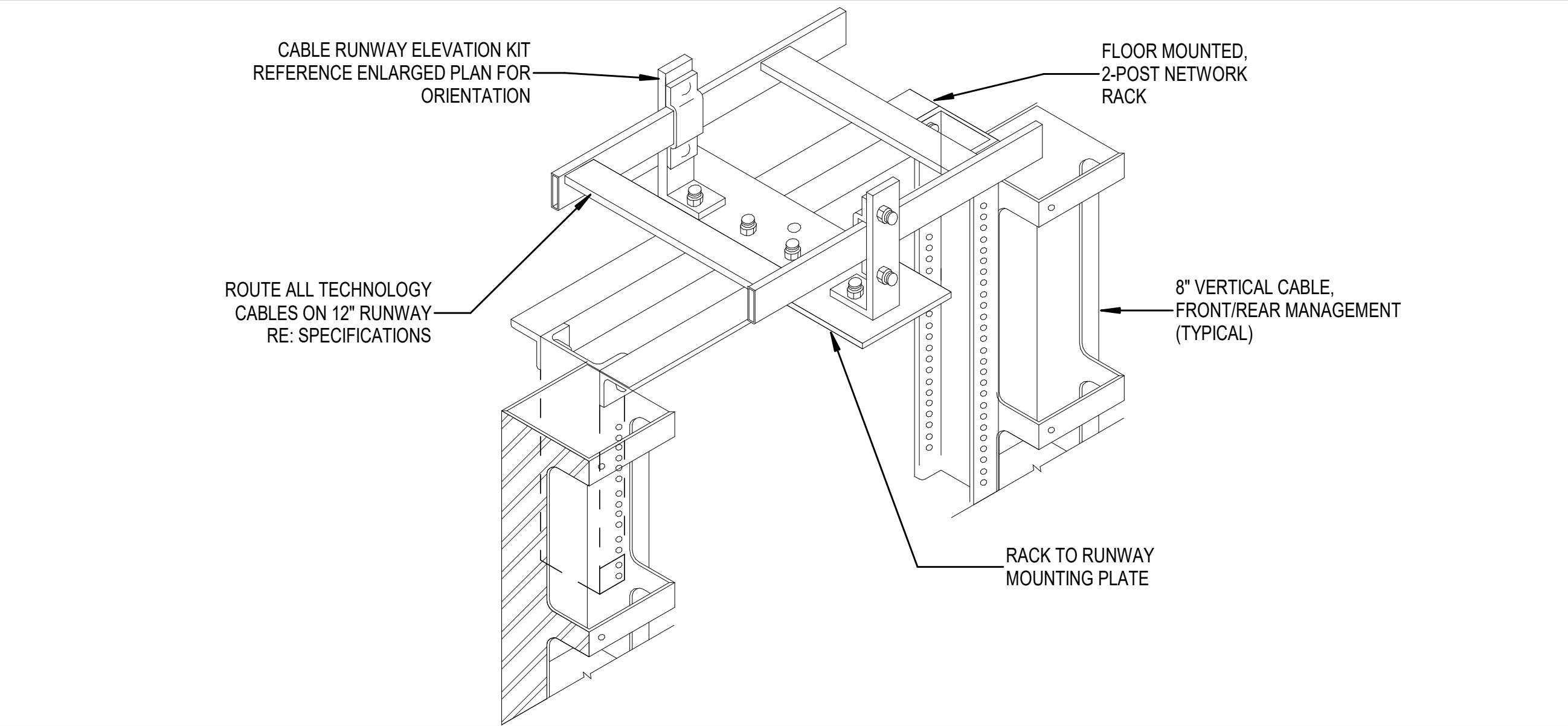
04 RACK TO RUNWAY DETAIL

NOT TO SCALE



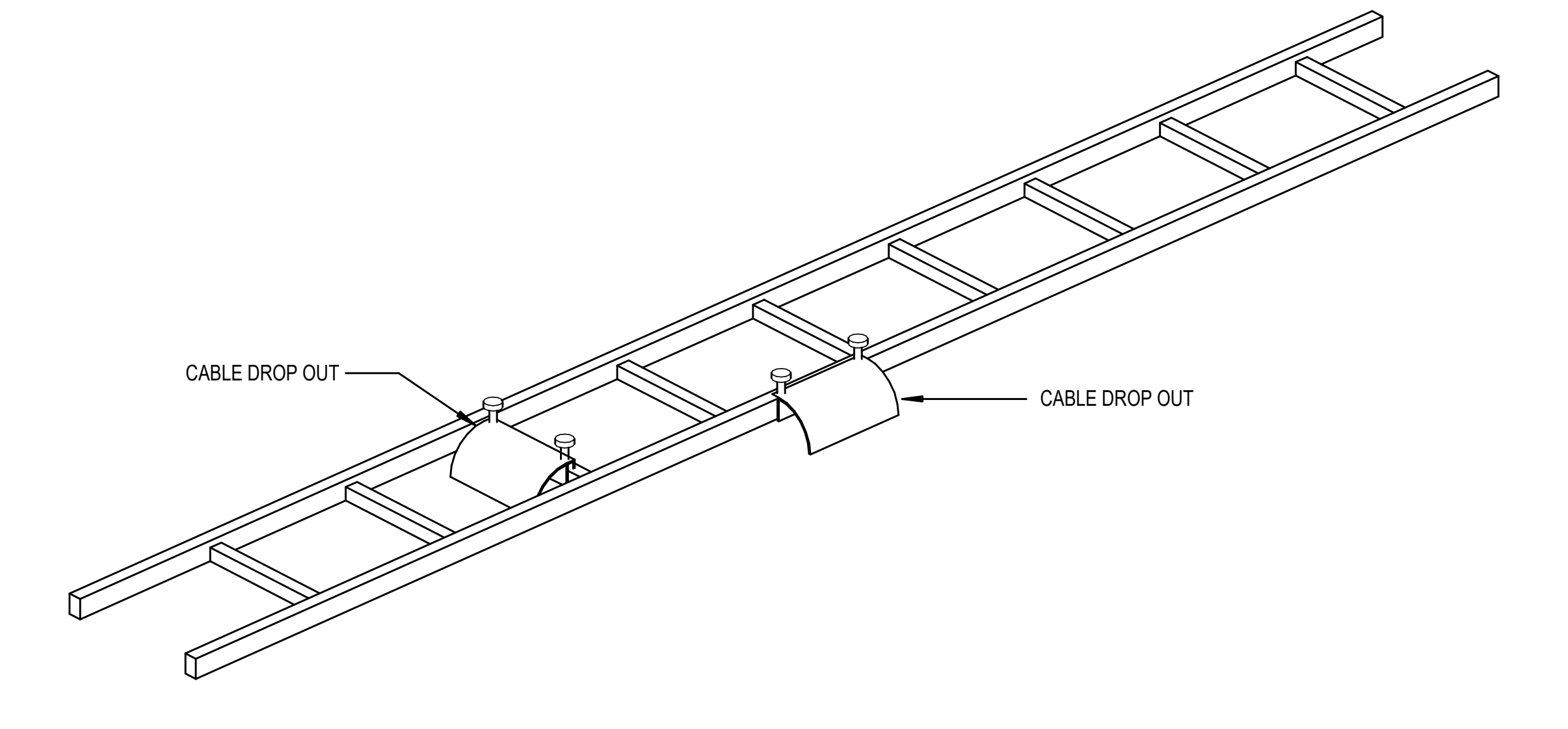
05 TELECOMMUNICATION GROUNDING BUS DETAIL

NOT TO SCALE



06 RACK TO RUNWAY ACROSS DETAIL

NOT TO SCALE



07 CABLE RUNWAY - CABLE DROPOUT

NOT TO SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

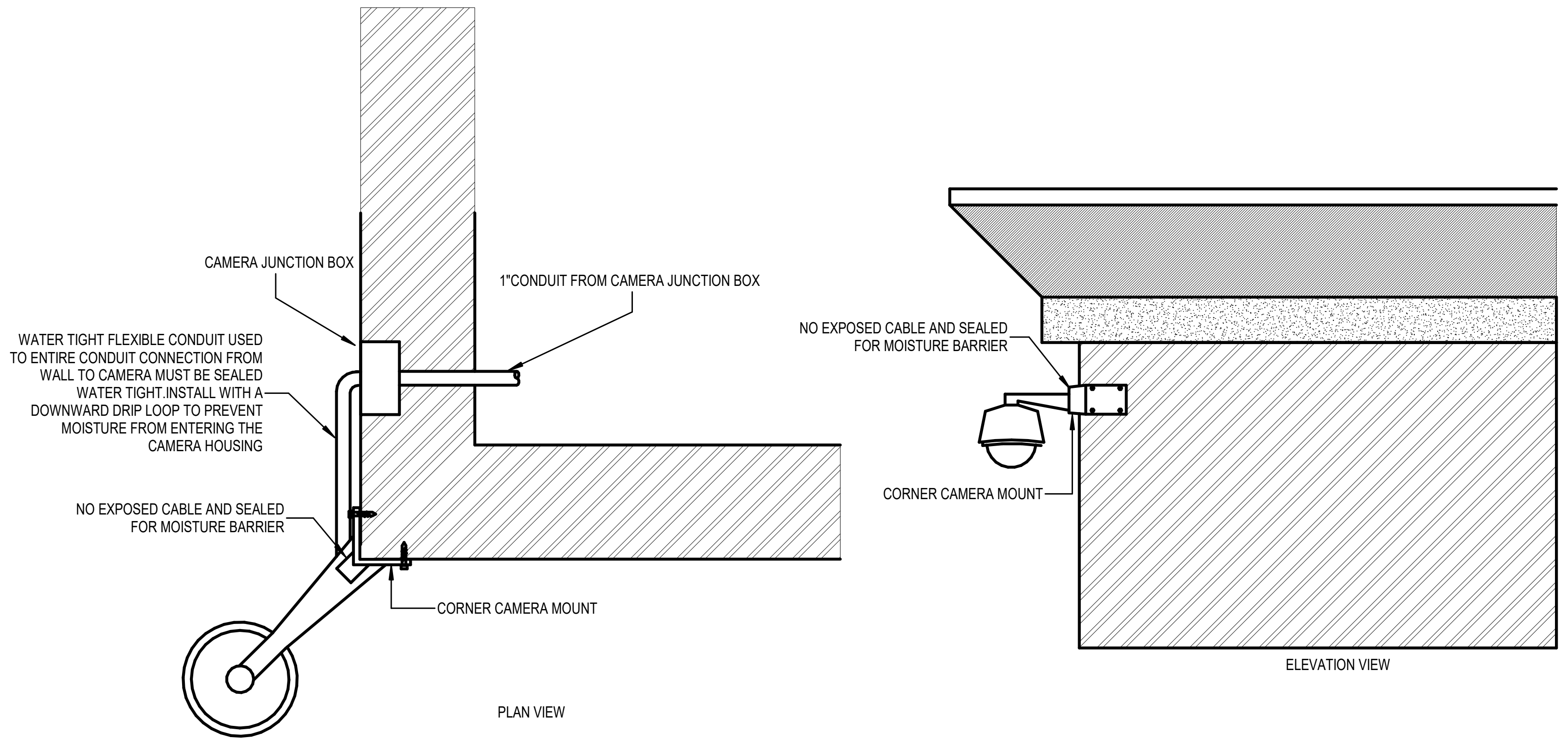
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY DETAILS

T5.04

of

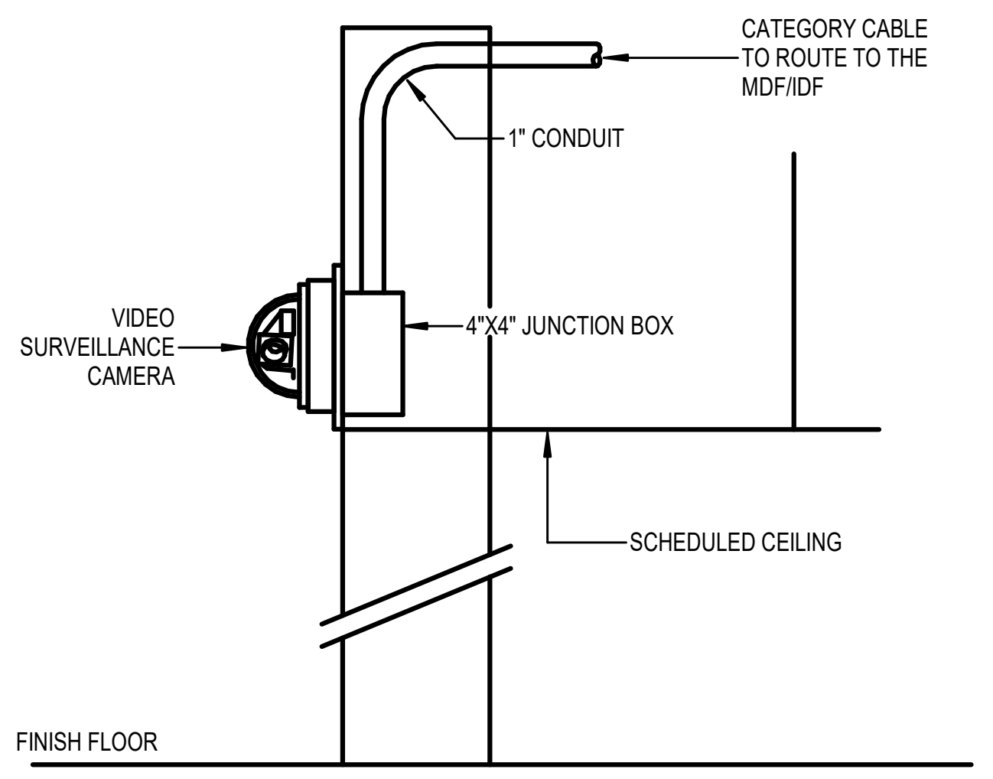


NOTE:

ELECTRICAL CONTRACTOR SHALL PROVIDE 1" CONDUIT WITH PULL STRING TO NEAREST AVAILABLE PLENUM SPACE. SECURITY CONTRACTORS SHALL PROVIDE CABLE FEED-THROUGH MOUNT FOR CAMERA. NO EXPOSED CABLE WILL BE ALLOWED. SECURITY CONTRACTOR TO COORDINATE MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

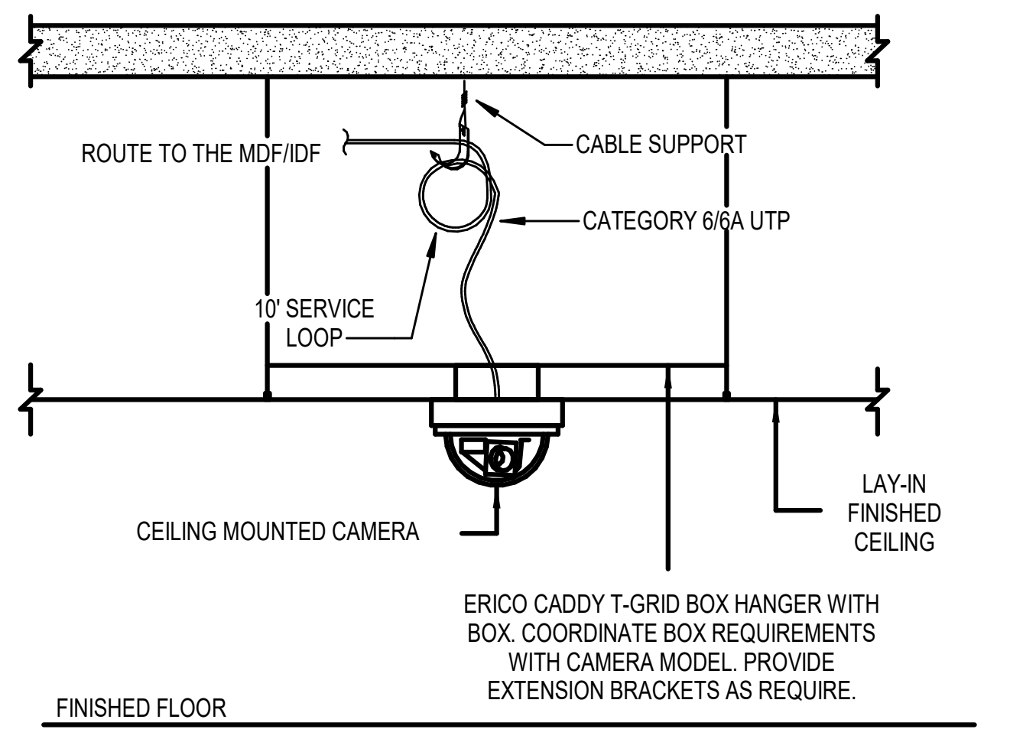
01 CORNER MOUNTING DETAIL

NOT TO SCALE



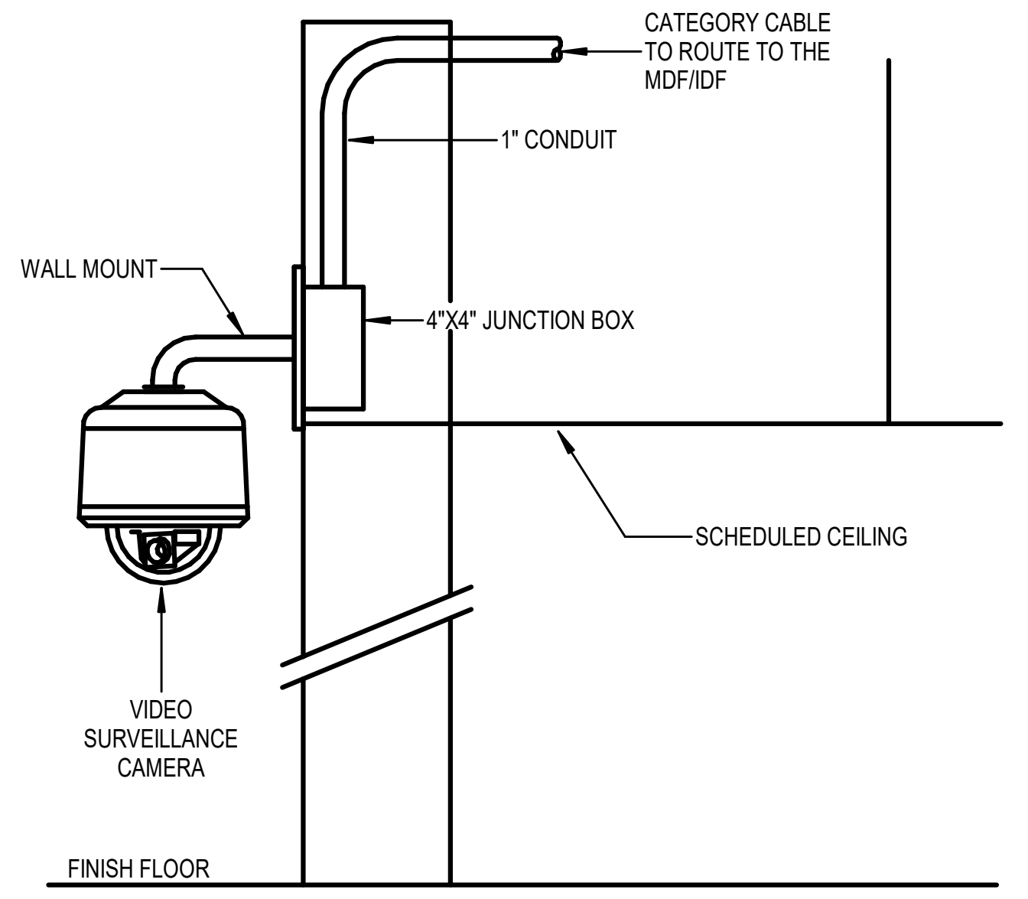
02 INTERIOR WALL MOUNT CAMERA-VERTICAL

NOT TO SCALE



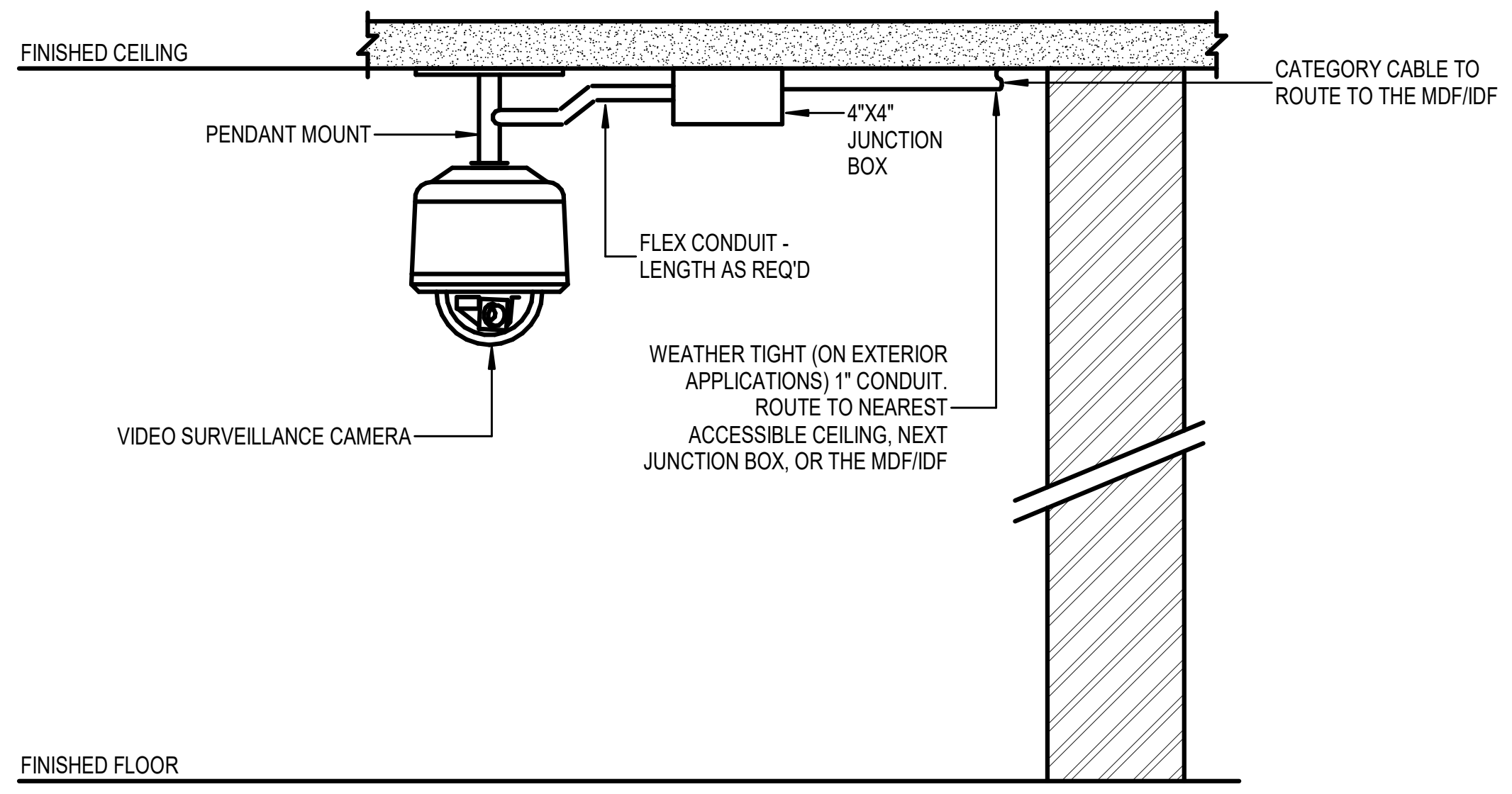
04 INTERIOR LAY-IN CEILING MOUNTED CAMERA

NOT TO SCALE



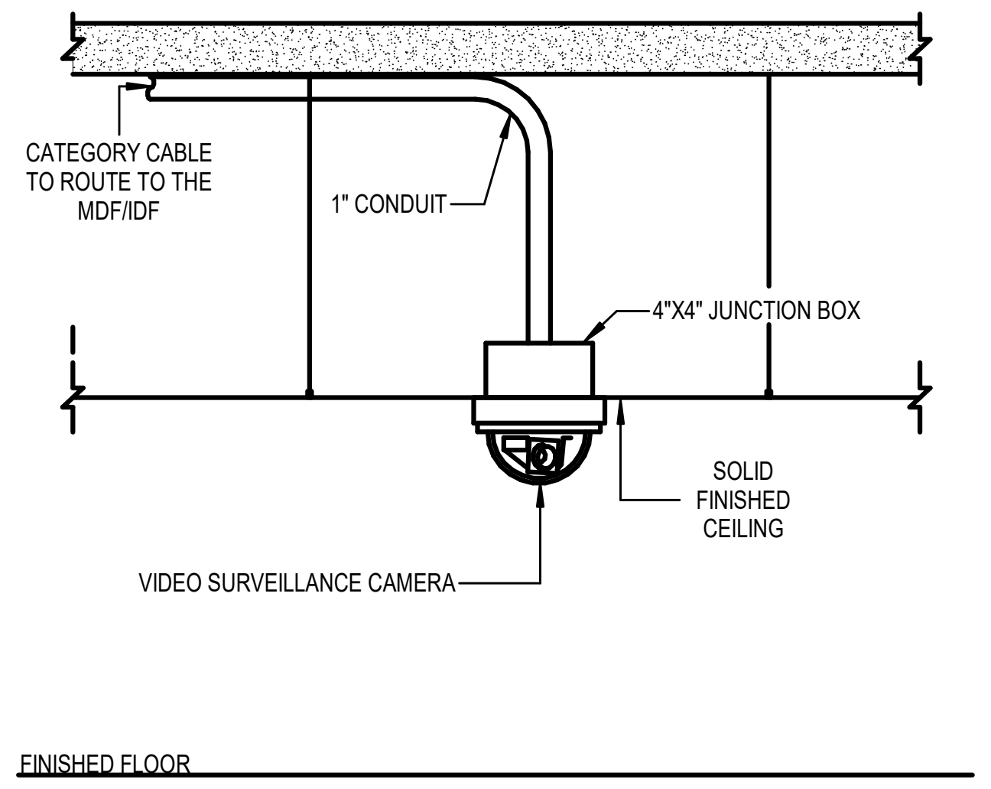
03 INTERIOR WALL MOUNTED DOME CAMERA

NOT TO SCALE



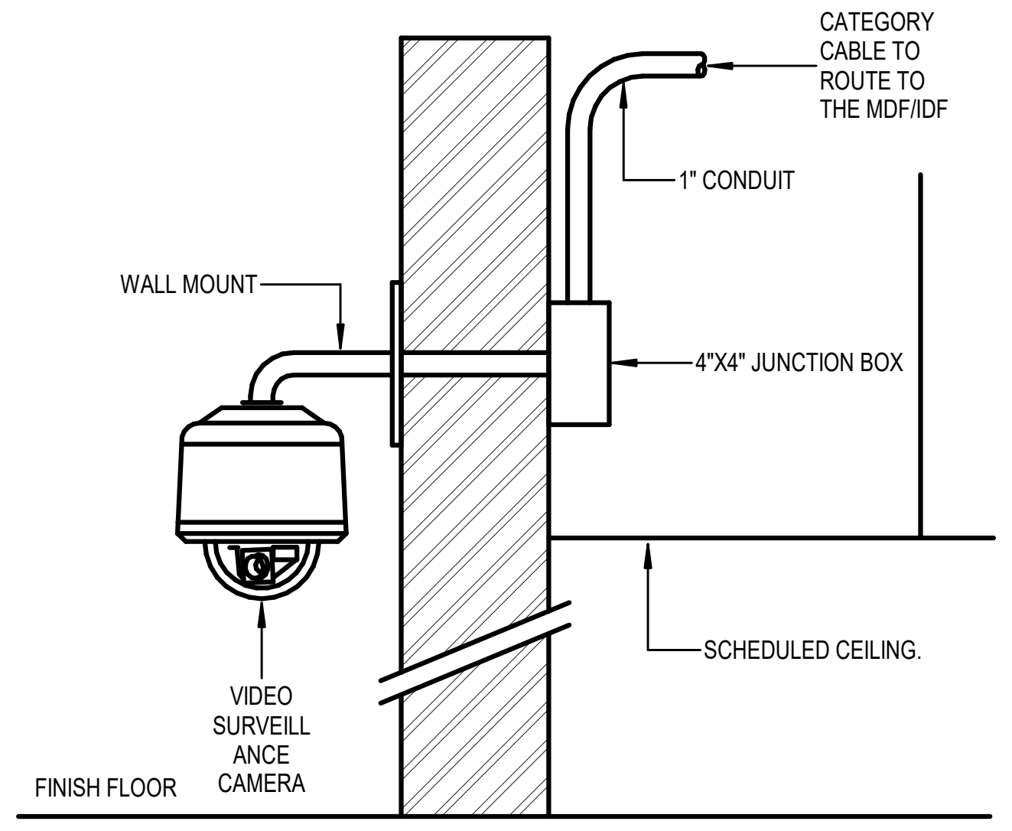
05 EXT./INT. PENDANT MOUNTED DOME CAMERA

NOT TO SCALE



06 EXTERIOR/INTERIOR SOLID CEILING MOUNT CAMERA

NOT TO SCALE



07 EXTERIOR WALL MOUNTED DOME CAMERA

NOT TO SCALE

GENERAL NOTES:

A. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUITS AND BACK BOXES. CONDUITS SHALL ROUTE TO THE NEAREST, ACCESSIBLE PLENUM SPACE.

B. ALL WALL, CORNER, PENDANT, AND UNDER CANOPY MOUNTING HEIGHTS SHALL BE COORDINATED WITH THE OWNER AND SECURITY CONSULTANT PRIOR TO ROUGH-IN.

C. SECURITY CONTRACTOR SHALL PROVIDE CAMERAS, MOUNTING HARDWARE, AND ANY OTHER COMPONENTS AND/OR HARDWARE REQUIRED FOR A COMPLETE INSTALLATION.

D. REFERENCE VIDEO SURVEILLANCE FLOOR PLANS, AND SPECIFICATIONS FOR ADDITIONAL INSTRUCTIONS

E. CABLE FEED-THROUGH MOUNT FOR CAMERA. NO EXPOSED CABLE WILL BE ALLOWED. SECURITY CONTRACTOR TO COORDINATE MOUNTING HEIGHT WITH ELECTRICAL CONTRACTOR PRIOR TO ROUGH-IN.

08 NOTES

NOT TO SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

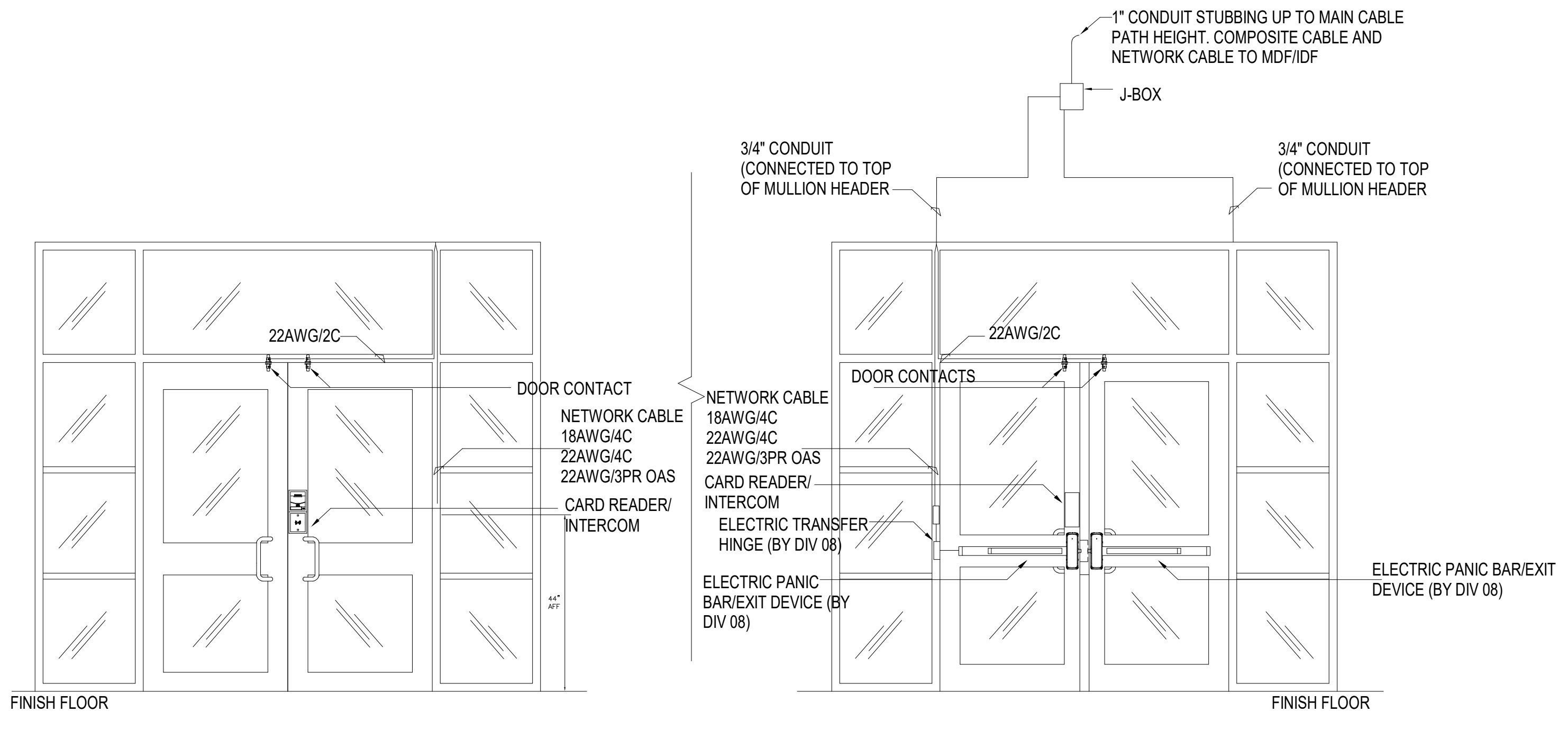
Revisions / Submission

Project Number: 23071
Date: 2024-11-17
Drawn By: NY

TECHNOLOGY DETAILS

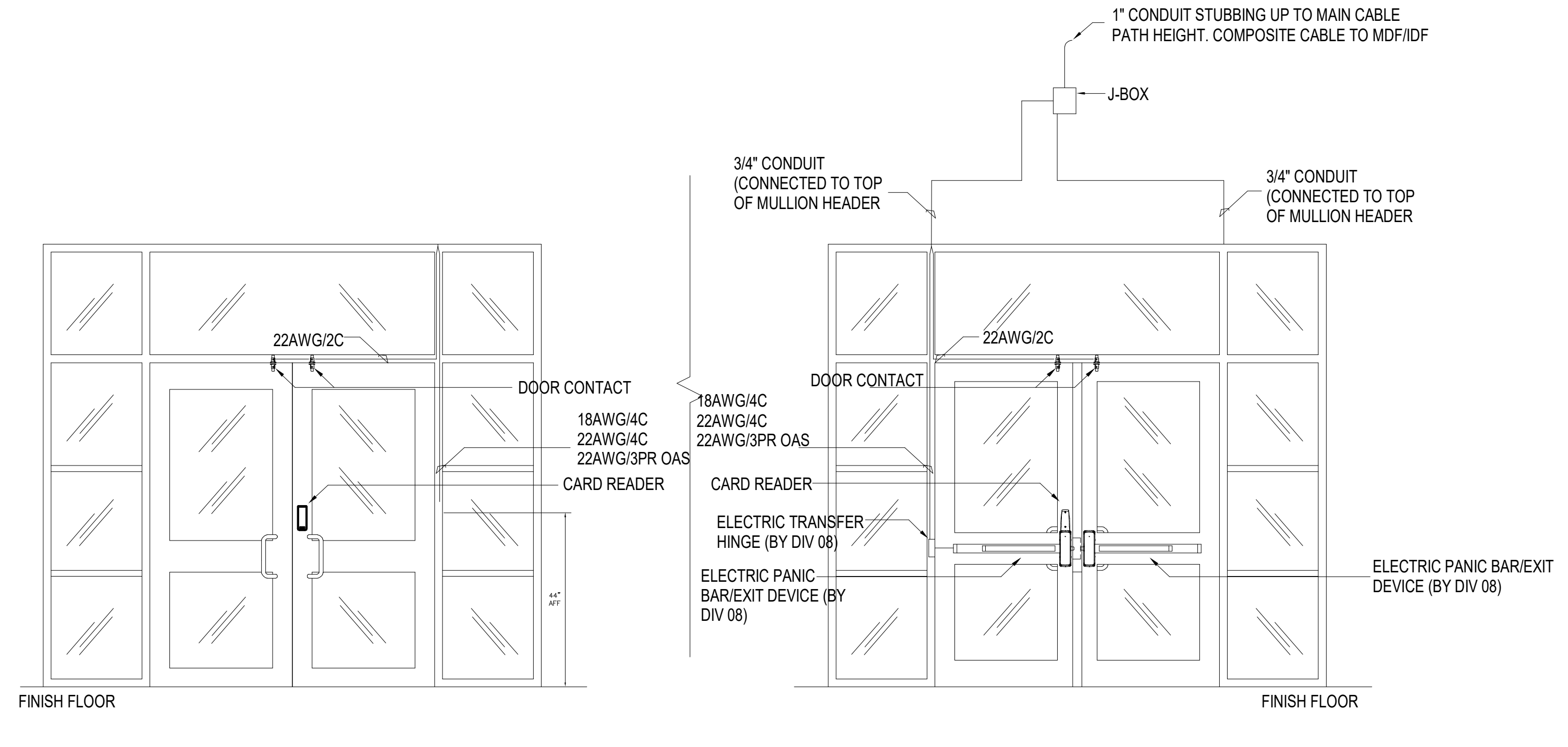
T5.05

of



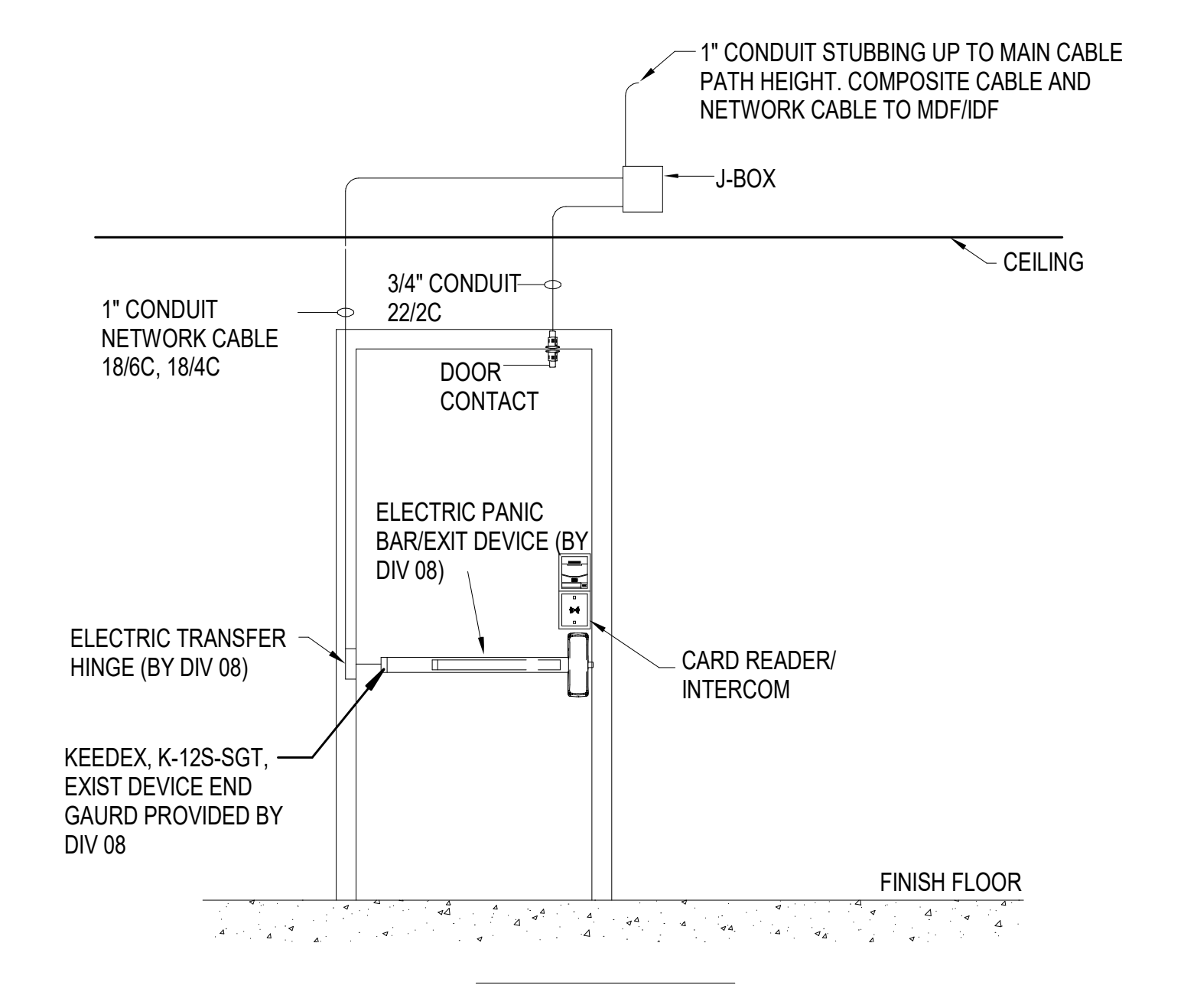
1 DOOR STATION - STORE FRONT

NOT TO SCALE



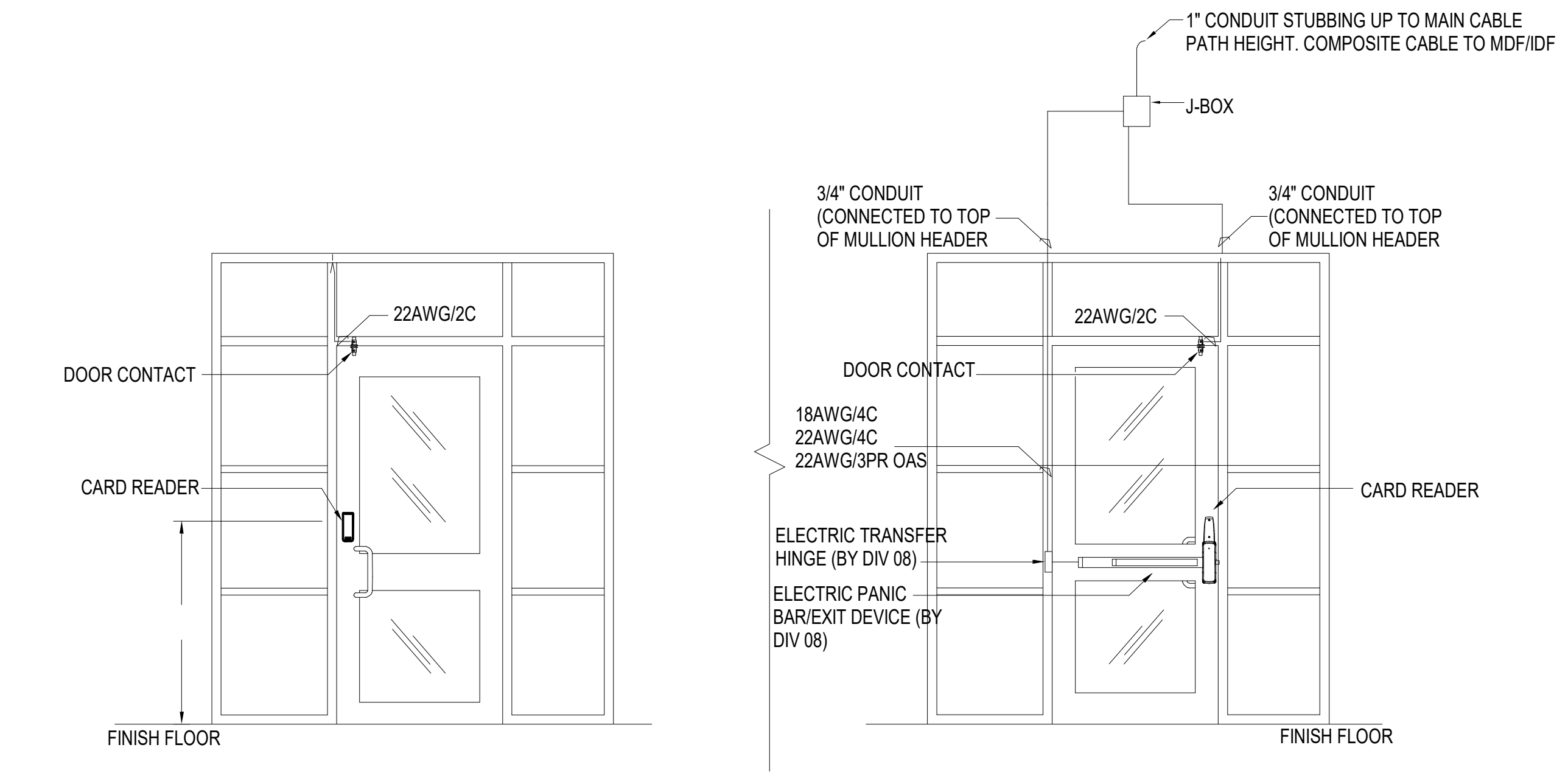
2 DOOR MOUNTED CARD READER - STORE FRONT

NOT TO SCALE



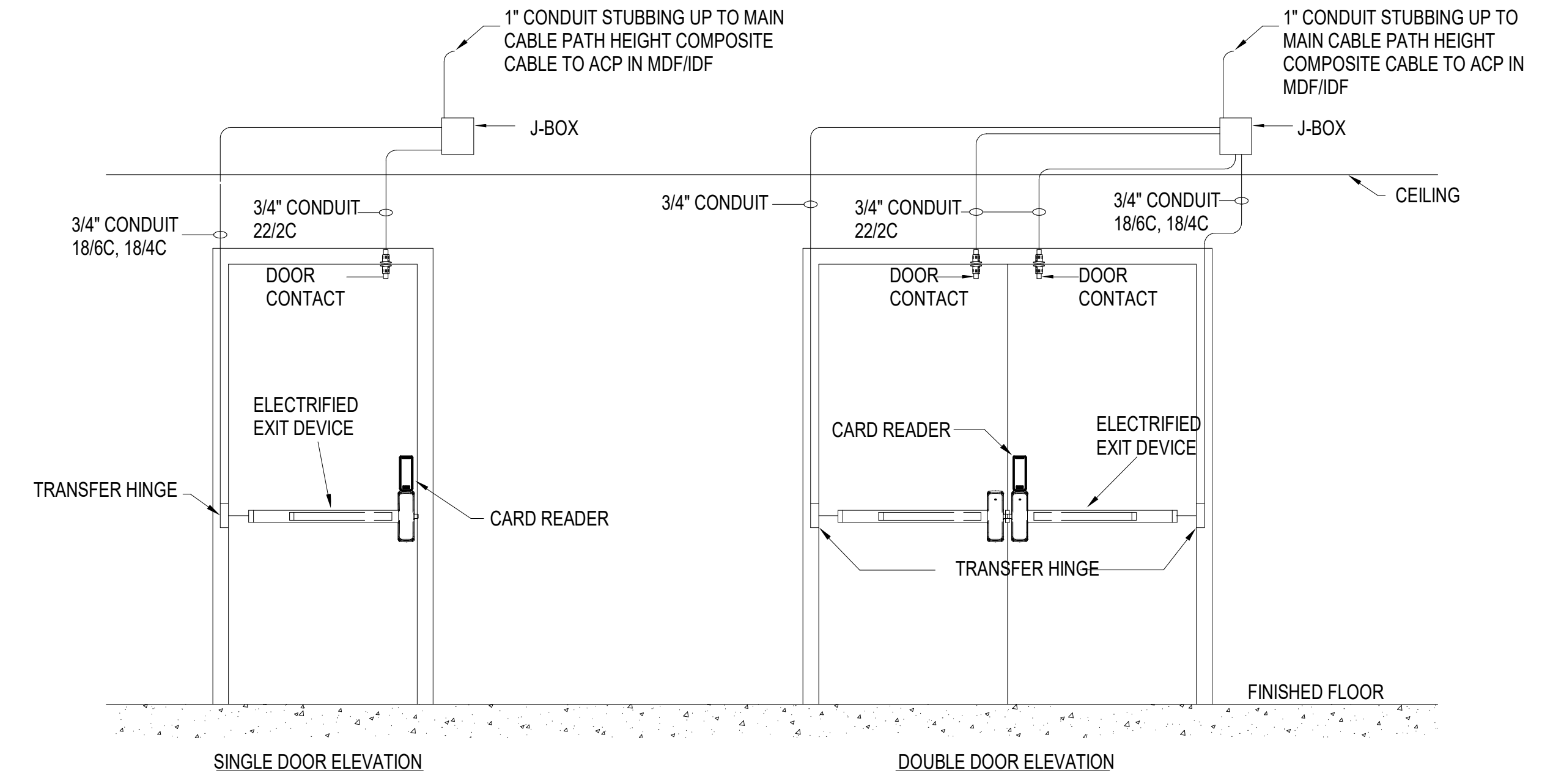
NOT TO SCALE

4 DOOR STATION - KITCHEN DOOR



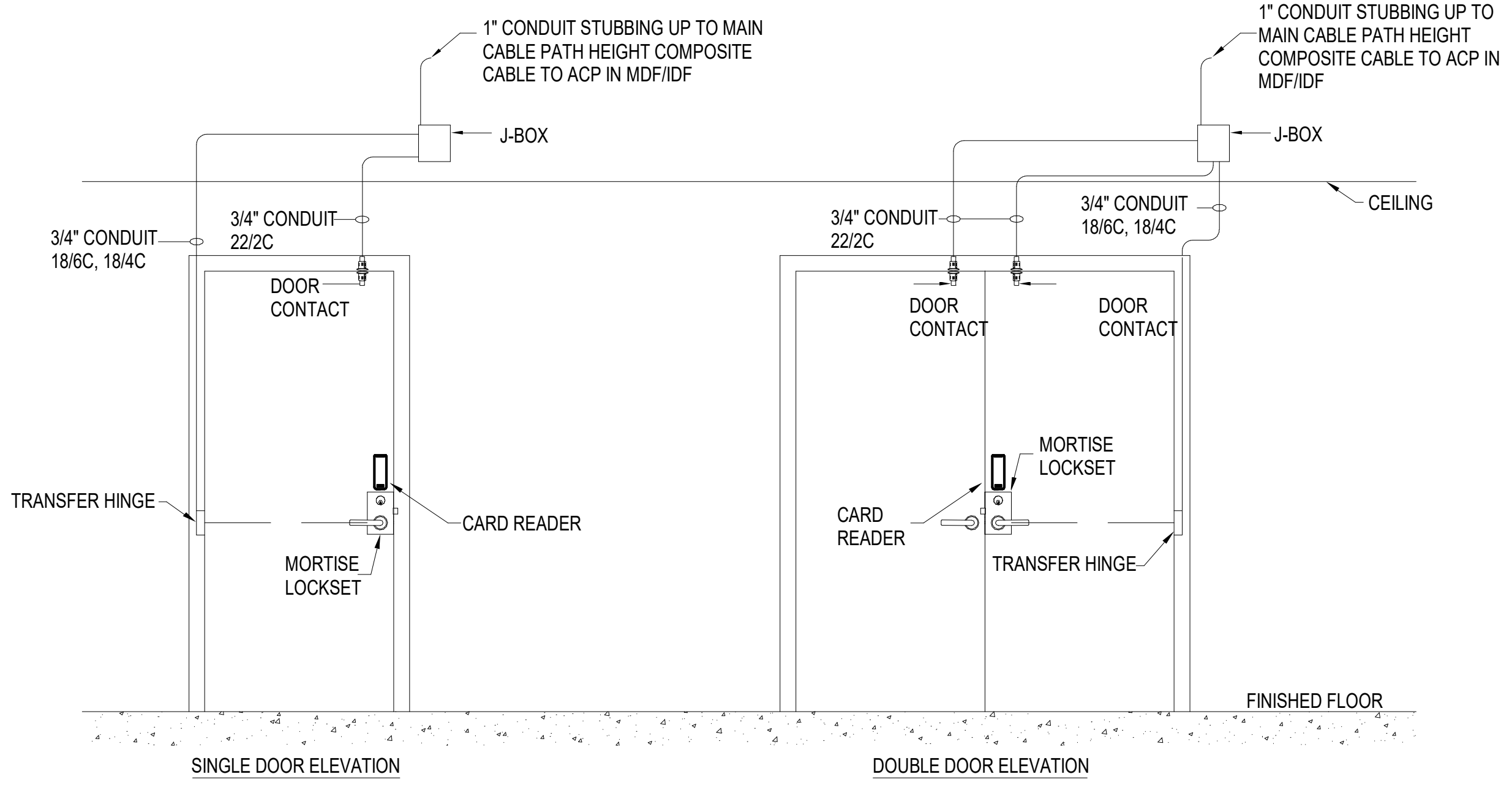
3 DOOR MOUNTED CARD READER - STORE FRONT - SINGLE

NOT TO SCALE



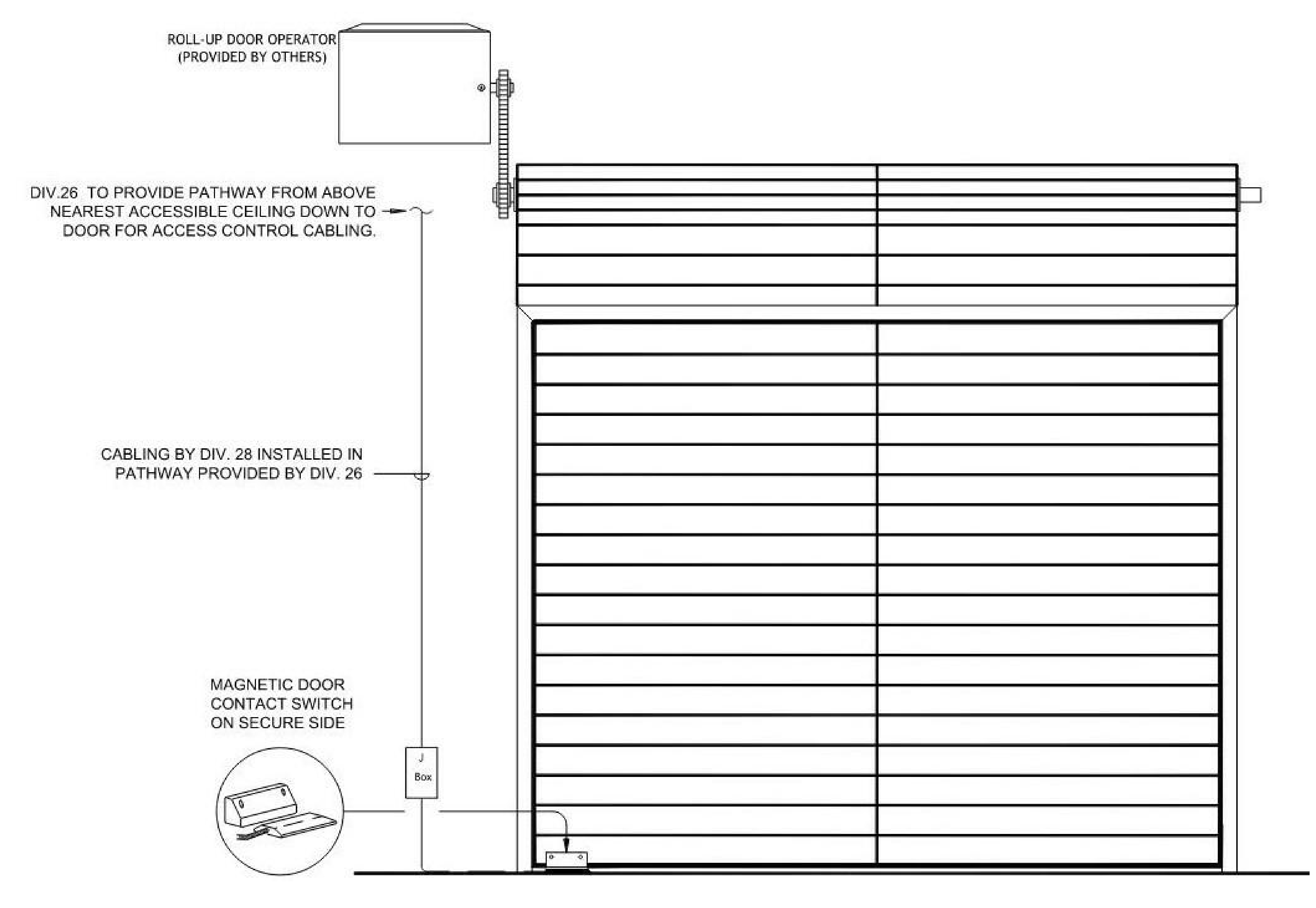
5 CARD READER HOLLOW METAL DOORS

NOT TO SCALE



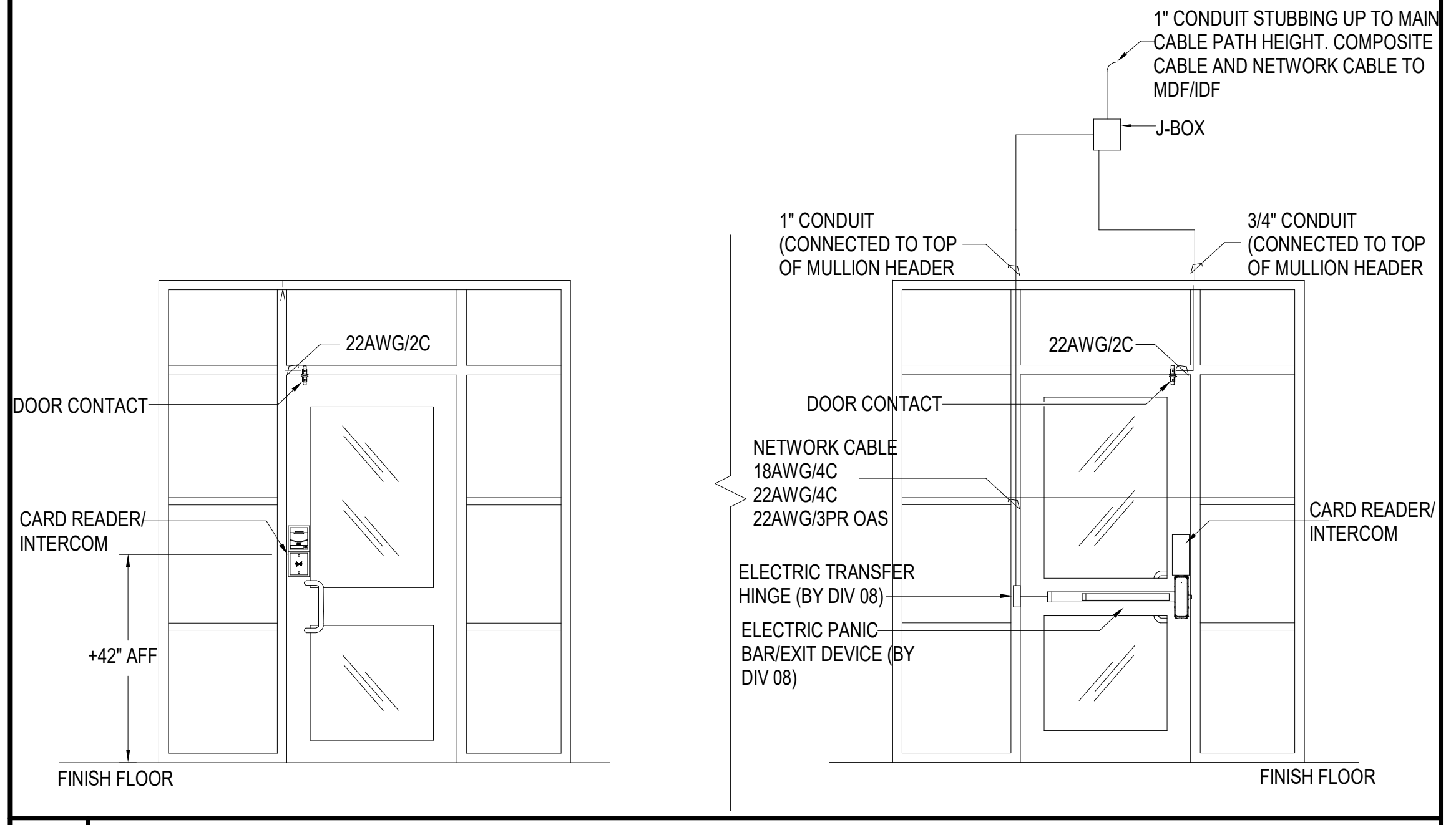
6 CARD READER - MORTISE

NOT TO SCALE



8 ROLLING DOOR DETAIL

NOT TO SCALE



7 DOOR STATION - STORE FRONT SINGLE

NOT TO SCALE

Salas O'Brien
salasobrien.com 281-664-1900
Houston
10930 W. Sam Houston Pkwy North, Suite 900
Houston, TX 77064

Registration: F-4111
Project No: 2024-00197-00

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

COLEMAN PARTNERS
ARCHITECTS LLC
www.cparch.com
3701 KIRBY DR. SUITE 988
HOUSTON, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENTS

Bradley Kalmans
BRADLEY KALMANS
80219
11-17-2024

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

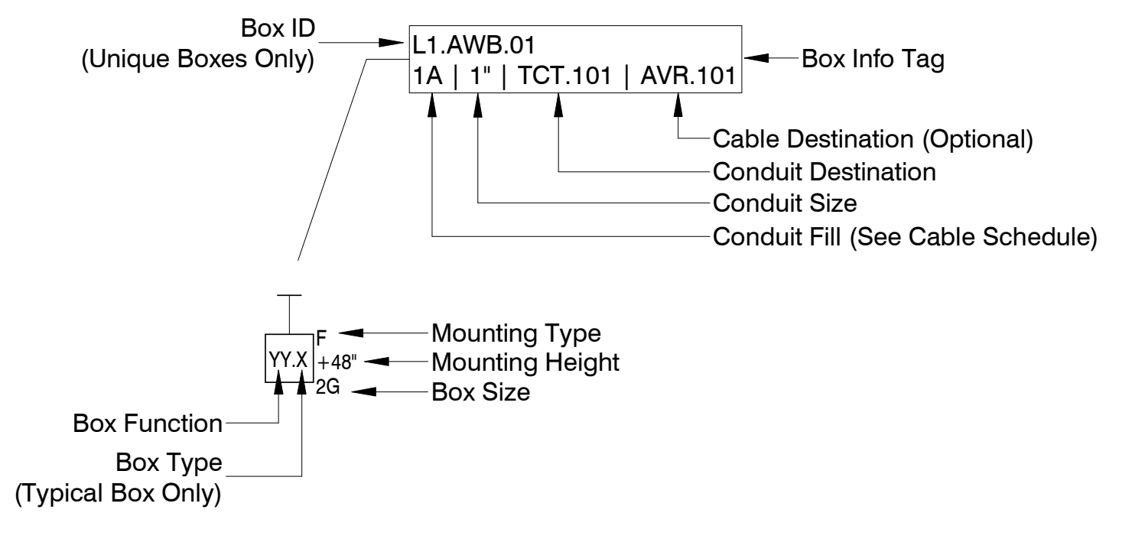
Project Number:	23071
Date:	2024-11-17
Drawn By:	NY

TECHNOLOGY DETAILS

T5.06
of

AV Symbols	Description	
YY Mounting Type Mounting Height Box Size	Unique Wall-Mounted Box (Symbol denotes Junction Box)	Box Function (YY): An Antenna Av Av Connectivity Bt Bluetooth Input Cm Camera C Ceiling Speaker Fb Floorbox Hi HDMI Input Ht HDMI Transmitter iC Intercom iO Input/Output Jb Junction Box P Pendent Speaker Pb Push Button Ctr Pj Projector Pt Poke Thru Sb Subwoofer Sp Loudspeaker Sn Projection Screen Ts Touch Screen Tv Television/Display Ui User Interface Vc Volume Control
YY Box Size	Unique Floor-Mounted Box (Symbol denotes Junction Box)	
YY Mounting Type Box Size	Unique Wall-Mounted Box (Symbol denotes Junction Box)	
YY.X Mounting Type Mounting Height Box Size	Typical Wall-Mounted Box (Symbol denotes Junction Box, Conduit, Cable, and Device)	
YY.X Mounting Type Mounting Height Box Size	Typical Floor/Ceiling-Mounted Box (Symbol denotes Junction Box, Conduit, Cable, and Device)	
YY.x	Typical Ceiling/Pendant Speaker	
TV.Size.Height.Mount	TV Location	Size = Diagonal Size in Inches Height = Mounting Height to Center of TV Mount = TV Mount Type W = Tilting Wall Mount C = Ceiling Mount S = Swing Arm Mount P = Portrait Wall Mount N = Ultra Narrow Bezel Pull-Out Mount

Example & Nomenclature



Mounting Height:
Height shown is from finish floor (AFF) to center of installed box UON.

Mounting Type:

F	= Flush Mount
S	= Surface Mount
SR	= Semi-Recessed Mount
PM	= Pedestal Mount

Box Size:
If a standard trade size, size is given in number of gangs (#G), or inches. If a custom size, "C" is shown. See box schedule(s) for additional information.

Box ID Nomenclature:

Group.(Discipline+BoxStyle).Box#

Group Designators:

L1	Level 1
L2	Level 2
L3	Level 3

Discipline Designators:
A = Audio or AV
V = Video

Box Style:
CB = Ceiling-Mount Box
FB = Floor-Mount Box
JB = Junction Box
PB = Pipe-Mount Box
WB = Wall-Mount Box

Conduit Destination:
AC = Accessible Ceiling
CT = Cable Tray

Cable Destination:
Cable Destination = Conduit Destination if Cable Destination not shown.

1 AV Plan Symbols

1. Field conditions may require audio/video device locations to deviate from the locations illustrated on the drawings. The specific, installed, location of all audio/video devices shall be coordinated with the owner and the audio/visual system designer prior to installation.
2. A minimum of 36" clearance is required at both the front and rear of audio/video equipment racks. Access must be provided to the rear of the equipment racks.
3. All mounting height dimensions are to center of box unless otherwise noted.
4. AV boxes and electrical boxes should not be mounted back to back in the same stud cavity

2 General Notes

1. All systems wiring will be in conduit unless approved by the Consultant or otherwise noted on drawings.
2. There are minimum conduit separations that must be maintained between conduits carrying wire of different signal groups. It is important to note that while different signals may exist in a single box, it is not appropriate to run more than one signal group in a single conduit. Refer to tables below for conduit separation distances.
3. It will be necessary at times for conduits of different signal groups to cross in close proximity. The conduit paths must be designed to cross at 90 degrees to each other.
4. The minimum conduit size shall be 3/4" and the conduit should be sized for max. 40% fill, or less if required by prevailing code.
5. Per TIA 569-E, indoor conduit runs shall have access to a pull box every 100' if there are more than (2) 90-degree bends. Pull boxes shall be placed in a straight section of the conduit.
6. Conduit for Outside Plant (OSP) optical fiber should have pull boxes placed at intervals no greater than 300'.
7. Conduit bend radius will be no less than 6 times the diameter for conduits less than 2"Ø, and no less than 10 times the diameter for conduits greater than 2"Ø.
8. The design will require pull lines to be left in all conduit by the Contractor installing the conduit.
9. The conduit system shall incorporate additional pull boxes as required to match the pull tensions of the wiring to be installed.
10. The installing contractor shall determine from the cable specifications the appropriate pull tensions, and lubricate to ensure that the cable insulation will not be abraded or cut during installation.
11. Signal conduits should be mechanically and electrically connected to the receptacle boxes. These conduits and boxes should connect to the building safety grounding system.
12. PVC conduit may only be used in underground applications. Segments of conduit passing through an electrical or mechanical room shall be rigid. All other conduit to be EMT unless otherwise noted.
13. The tables below define minimum spacing requirements for conduits containing different types and levels of audio, video and communication signals that will be part of the complete systems. It is important that each group be installed in raceways discreet from other group levels.
14. In a situation where there will exist a heavy current demand in adjacent conduits, or where there will be parallel runs >100', there will need to be additional separation between those conduits and the Signal Group A/B/C conduits.
15. Any wiring that is classified within a group can be combined in a raceway carrying other wiring that is in the same group. Common junction boxes/wire raceways that combine different signal groups shall not be used.
16. The different levels of signal grouping are defined as follows:
    Group A - Microphone and other sensitive wiring (0 - 100mV)
    Group B - Line Level wiring (100mV - 10V)
    Group C - Loudspeaker and Control wiring (10V - 70V)

Separations - EMT or Rigid

	Group A	Group B	Group C
Group A	Adjacent	Adjacent	3"
Group B	Adjacent	Adjacent	3"
Group C	3"	3"	Adjacent
Branch Circuits (<30A)	6"	6"	6"
Branch Circuits (30A - 60A)	6"	6"	6"
Branch Circuits (>60A)	12"	12"	12"
Dimmer Controlled Devices	12"	12"	12"
SCR Controlled Devices	12"	12"	12"
208/480V Feeder Circuits	24"	24"	24"
All Others (Plumbing, Heat, Etc.)	12"	12"	12"

Separations - PVC

	Group A	Group B	Group C
Group A	Adjacent	Adjacent	6"
Group B	Adjacent	Adjacent	6"
Group C	6"	6"	Adjacent
Branch Circuits (<30A)	6"	6"	6"
Branch Circuits (30A - 60A)	6"	6"	6"
Branch Circuits (>60A)	12"	12"	12"
Dimmer Controlled Devices	12"	12"	12"
SCR Controlled Devices	12"	12"	12"
208/480V Feeder Circuits	24"	24"	24"
All Others (Plumbing, Heat, Etc.)	12"	12"	12"

3 Conduit Notes

Minimum Cable Lengths Outside of Boxes

Box Function	Box Size Condition	Length Outside of Box
CM	---	2 Feet
xCT	Cable Tray	20 Feet
AVR	Equipment Rack	20 Feet
VR	Equipment Rack	20 Feet
JB	24"x24" or Larger	20 Feet
JB	Less than 24"x24"	4 Feet
Ic	---	2 Feet
Ui	---	2 Feet
iO	---	2 Feet
VC	---	2 Feet
SP	---	2 Feet
TV	---	2 Feet

Refer to Junction Box Schedules for special conditions.

4 AV Minimum Cable Lengths

Scale: 12" = 1'-0"

COMMON ARCHITECTURAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
BOT	BOTTOM
CLG	CEILING
COL	COLUMN
CONT	CONTINUOUS
DIA	DIAMETER
DIM(S)	DIMENSION(S)
DN	DOWN
DWG	DRAWING
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EXIST	EXISTING
EXT	EXTERIOR
FLR	FLOOR
GA	GAUGE
GWB	GYPSUM WALL BOARD
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
INT	INTERIOR
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
NIC	NOT IN CONTRACT
NOM	NOMINAL
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
RCP	REFLECTED CEILING PLAN
REQD	REQUIRED
RM	ROOM
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STL	STEEL
STRUCT	STRUCTURE OR STRUCTURAL
T&G	TONGUE AND GROOVE
TME	TO MATCH EXISTING
TO	TOP OF
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
W/	WITH

Technology Specific Abbreviations

AER	Audio Equipment Rack
AVR	Audio/Video Equipment Rack
BER	Broadcast Equipment Room
CER	Central Equipment Room
CB	Ceiling Box
CT	Cable Tray
FB	Floor Box
Hor	Horizontal
HDSDI	High Definition Serial Digital Interface
IDF	Intermediate Distribution Frame
MDF	Main Distribution Frame
MMF	Multi-Mode Fiber
MTR	Main Telecom Room
OLT	Optical Line Terminal
ONT	Optical Network Terminal
PON	Passive Optical Network
SDI	Serial Digital Interface
SP	Speaker
STC	Sound Transmission Coefficient
SMF	Single-Mode Fiber
TCT	Technical Cable Tray
TR	Telecom Room
TV	Display/Television
V	Vertical
VER	Video Equipment Rack
WAP	Wireless Access Point
WB	Wall Box

Name	Manufacturer	Standard Part Number	Under Ground Wet Part Number	Plenum Part Number	Application	Description	Nominal OD (in)	Nominal OD (mm)	Signal Group
A8	West Penn	HA208	C208		Speaker	1 PR #8 AWG Stranded Twisted Jacketed	0.548	13.92	C
A10	West Penn	HA210	C210	25210	Speaker	1 PR #10 AWG Stranded Twisted Jacketed	0.422	7.11	C
A12	West Penn	227	AQ227	25227B	Speaker	1 PR #12 AWG Stranded Twisted PVC Jacket	0.34	8.64	C
A14	West Penn	226	AQ226	25226B	Speaker	1 PR #14 AWG Stranded Twisted PVC Jacket	0.31	7.87	C
D	Belden	9451	West Penn AQC291	9451P	Line Level Audio	1 Shielded PR #22 AWG Stranded Twisted Green PVC Jacket	0.135	3.43	B
D4	Gepco	GA61804GFC		6604HS	Line Level Audio	4 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.4	10.16	B
D6	Gepco	GA61806GFC	GA618006PEF		Line Level Audio	6 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.475	12.07	B
D8	Gepco	GA61808GFC		6608HS	Line Level Audio	8 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.57	14.48	B
D12	Gepco	GA618012GFC	GA618012PEF	6612HS	Line Level Audio	12 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.635	16.13	B
D16	Gepco	GA618016GFC			Line Level Audio	16 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.71	18.03	B
E	Belden	9451	West Penn AQC291	9451P	Mic Level Audio	1 Shielded PR #22 AWG Stranded Twisted Orange PVC Jacket	0.135	3.43	A
E4	Gepco	GA61804GFC			Mic Level Audio	4 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.4	10.16	A
E6	Gepco	GA61806GFC	GA618006PEF		Mic Level Audio	6 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.475	12.07	A
E8	Gepco	GA61808GFC			Mic Level Audio	8 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.57	14.48	A
E12	Gepco	GA618012GFC	GA618012PEF	6612HS	Mic Level Audio	12 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.635	16.13	A
E16	Gepco	GA618016GFC			Mic Level Audio	16 Shielded PR #22 AWG Stranded Twisted individually Jacketed Polyethylene Jacket CMR	0.71	18.03	A
F	Belden	7810A			Antenna	50 Ohm Coax #10 AWG RG-8	0.403	10.24	B
G	Belden	9311			Antenna	50 Ohm Coax #20 AWG RG-58	0.193	4.9	B
H	Belden	1694A	1829BC	1695A	Digital Video	75 Ohm Precision Video Cable #18 AWG	0.274	6.96	B
HH	Belden	7731A	7731WB	7732A	Digital Video	75 Ohm, Precision Video Cable, #14 AWG	0.4	10.16	B
J	Belden	1855A		1855P	Digital Video	75 Ohm Precision Video Cable #23 AWG	0.159	4.038	B
K	Belden	9116		9116P	MATV	Series 6 #18 AWG MATV CABLE	0.27	6.86	B
L	Belden	9011			MATV	Series 11 #14 AWG MATV CABLE	0.4	10.16	B
M	Gepco	HDP221		HDP221P	Camera Power	(2) 16 AWG Stranded, (2) 22AWG Stranded	0.135	3.423	B
N	Belden	9207	9815	89207	Intercom	1 Pair #20 Stranded Shielded	0.33	8.382	B
P	West Penn	270		25270B	Control	6 Conductor #22 AWG Stranded Jacketed	0.163	4.14	B
Q	West Penn	234	Belden 5302U1	25234B	Control	3 Conductor #18 AWG Stranded Jacketed	0.168	4.27	B
R	Belden	1419A		88102	Control-RS422	2 Pair #24 AWG Stranded Overall Shield	0.248	6.3	B
S	Belden	7804R		7804P	SMPTE 311M	2 Fiber, 2 Conductor 24 AWG, 4 Conductor 20 AWG,Belflex Jacket, CMR	0.357	9.06	B
S3	Belden	7824R		7824P	Triple SMPTE 311M	3 Channel Stadium Cable, 6 Fiber, 6 Conductor 18AWG, 6 Conductor 24 AWG	0.525	13.335	B
T	Belden	1857A	Gepco VT61811PEF		Camera	75 ohm Superflex Triax Video Cable #22 AWG stranded	0.36	9.14	B
U5	Belden	1700A		1701A	CAT5e Data	4 PR #24 AWG BONDED PAIR UTP CAT5e RJ45 Compatible	0.195	4.95	B
U6	Belden	2412	7997A	2413	CAT6 Data	4 PR #23 AWG UTP CAT6 RJ45 Comp.	0.23	5.84	B
U6A	Belden	10GX62F		10GX63F	Cat6A	4 Bonded PR #23 AWG Shielded F/UTP CAT6A	0.295	7.49	B
U6S	Belden	2412F	OSP6U	2413F	CAT6 Data	4 PR #23 AWG Shielded UTP CAT6 RJ45 Comp.	0.29	7.37	B
UH	Belden	2183R		2183P	HDBaseT Cable	4 PR #23 AWG Shielded F/UTP	0.29	7.37	B
W	Belden	B9W039T	B9W202	B9W202	Single Mode Fiber	OS2 Six Strand Singlemode Fiber	0.22	5.59	B
W12	Belden	B9W231		B9W241	Single Mode Fiber	OS2 Twelve Strand Singlemode Fiber Armored Jacket	0.62	15.75	B
W24	Belden	B9W233		B9W242	Single Mode Fiber	OS2 Twenty-Four Strand Singlemode Fiber Armored Jacket	0.57	14.48	B
WA	Belden	B9W240		B9W240	Single Mode Fiber	OS2 Six Strand Singlemode Fiber Armored Jacket	0.506	12.85	B
X	Belden	1696A	Custom TBD		Digital Audio	1 PR #22 AWG Stranded Twisted PVC Jacket	0.235	5.97	B
Y	Belden	B9C039T	B9C202	B9C202	Multi-Mode Fiber	OM3 50/125 Six Strand Multimode Fiber	0.22	5.59	B
YA	Belden	B9C240		B9C240	Multi-Mode Fiber	OM3 50/125 Six Strand Multimode Fiber Armored Jacket	0.506	12.85	B
Z	West Penn	CN-SHRHDMI-xxm			HDMI		0.548	13.92	B
ALT-A10	Belden	5T00UP	8810WB	6T00UP	Speaker	1 PR #10 AWG, Stranded, Twisted, Jacketed	0.356	9.04	C
ALT-A12	Belden	5000UE	5000U1	6000UE	Speaker	1 PR #12 AWG, Stranded, Twisted, PVC Jacket	0.26	6.66	C
ALT-A14	Belden	5100UE	5100U1	6100UE	Speaker	1 PR #14 AWG, Stranded, Twisted, PVC Jacket	0.218	5.54	C
ALT-D	West Penn	(X)454	AQC291	D25454	Line Level Audio	1 Shielded PR #22 AWG, Stranded, Twisted, Green PVC Jacket	0.135	3.43	B
ALT-D	Gepco	61801EZ		61801HS	Line Level Audio	1 Shielded PR #22 AWG, Stranded, Twisted, Green PVC Jacket	0.138	3.51	B
ALT-D4	Belden	1815R	1815WB	1815P	Line Level Audio	4 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.384	9.75	B
ALT-D6	Belden	1816R	1816WB	1816P	Line Level Audio	6 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.462	11.73	B
ALT-D8	Belden	1817R	1817WB	1817P	Line Level Audio	8 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.503	12.78	B
ALT-D12	Belden	1818R	1818WB	1818P	Line Level Audio	12 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.638	16.21	B
ALT-D16	Belden	1819R	6549PA		Line Level Audio	16 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.776	19.71	A
ALT-E	West Penn	(X)454	AQC291	D25454	Mic Level Audio	1 Shielded PR #22 AWG, Stranded, Twisted, Orange PVC Jacket	0.135	3.43	A
ALT-E	Gepco	61801EZ		61801HS	Mic Level Audio	1 Shielded PR #22 AWG, Stranded, Twisted, Orange PVC Jacket	0.138	3.51	A
ALT-E4	Belden	1815R	1815WB	1815P	Mic Level Audio	4 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.384	9.75	A
ALT-E6	Belden	1816R	1816WB	1816P	Mic Level Audio	6 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.462	11.73	A
ALT-E8	Belden	1817R	1817WB	1817P	Mic Level Audio	8 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.503	12.78	A
ALT-E12	Belden	1818R	1818WB	1818P	Mic Level Audio	12 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.638	16.21	A
ALT-E16	Belden	1819R	1819WB		Mic Level Audio	16 Shielded PR #22 AWG, Stranded, Twisted, individually Jacketed, Polyethylene Jacket, CMR	0.776	19.71	A
ALT-M	Belden	7825R		7825P	Camera Control	(2) 16 AWG Stranded, (2) 22AWG Stranded	0.25	6.35	B
ALT-N4	Belden	5543FE		6543FE	Intercom	4 Pair #22 Stranded Shielded	0.246	6.25	B
ALT-P	Belden	5504UE		6504UE	Control	6 Conductor, #22 AWG, Stranded, Jacketed	0.168	4.27	B
ALT-Q	Belden	5301UE		6301UE	Control	3 Conductor, #18 AWG, Stranded, Jacketed	0.167	4.24	B
ALT-Z	Belden	HD200x Series			HDMI	HDMI Compsite Cable	0.548	13.92	B

5 AV Cable Schedule

Scale: 12" = 1'-0"

AV Division of Responsibilities

	Category	Description	Other	27 41 34
1	Power	Provide all AC power circuits, receptacles (except those in the AV Racks), and standard power panels. TP circuits to utilize commercial grade receptacles.	DIV 26	
2	Power	Provide AC power connections and circuits within audio-video equipment racks. Provide an appropriately sized J-box at the top of each rack with power circuit cabling terminating in 24" pigtails. - Label each circuit with circuit number.		X
3	Power	Provide technical power sequencing panel(s). Refer to plans and specifications for quantity and model number(s).	DIV 26	
4	Power	Provide Audio and Video disconnect switches. Refer to plans and specifications for quantity and model number(s).	DIV 26	
5	Conduit & Boxes	Provide all conduit (with measured pull string), gang boxes, pull boxes, wall panel back boxes, pull string and raceways required for the audio and video systems. Clearly label with permanent marker all boxes and conduits listed above.	DIV 26	
6	Conduit & Boxes	Provide all cable tray(s). Refer to plans and specifications for sizes and locations.	DIV 26	
7	Conduit & Boxes	Provide cable hooks and/or wireway as shown in drawings.	DIV 26	
8	Conduit & Boxes	Furnish speaker backcans and floorbox backcans to installing contractor.		X
9	Conduit & Boxes	Install speaker backcans and floorbox backcans (provided by contractor above).	DIV 26	
10	Low Voltage Cabling	Provide low voltage cabling.		X
11	Low Voltage Cabling	Verify all conduit and cable fills for accuracy. Provide to the installing contractor a run list of all wire pulls, including wire numbers.		X
12	Low Voltage Cabling	Terminate all low voltage cables related to the audio systems as shown on drawings AV7.01 thru AV7.49.		X
13	Low Voltage Cabling	Terminate all low voltage cables related to the video systems as shown on drawings AV7.50 thru AV7.99		X
14	Structural	Provide support structure for loudspeaker clusters/arrays weighing less than 500 lbs.		X
15	Structural	Provide support structure for loudspeaker clusters/arrays weighing greater than 500 lbs. Coordinate with 27 41 36 Contractor.	DIV 5	
16	Structural	Install all speakers and speaker clusters.		X
17	Structural	Furnish mounting brackets for wall-mounted TV's to installing contractor.		X
18	Structural	Install mounting brackets and/or backing (provided by contractor above) for wall-mounted TV's. Coordinate exact locations and heights with on-site conditions.		X
19	Millwork	Furnish all millwork at the front-of-house control booth including half-height walls, countertop, and cabinetry. Refer to drawings for exact specifications.	DIV 6	
20	Millwork	Provide and install all loudspeaker grills and/or covers with exceptions noted below. Refer to architectural drawings for extent of grill cloth. Exceptions: Coaxial ceiling speakers with self-contained grills.	DIV 9	
21	Other	Provide choir mics above the choir. Microphone cable shall be non-twisting.		X
22	Other	Provide a contact closure to the audio-video racks for emergency muting of audio system in Fire Alarm Condition (if required by local code authority).	DIV 28	

Terms and Definitions:

Provide = Supply and install equipment
Furnish = Supply to another contractor for installation
Install = Install equipment provided by another contractor

High Voltage = >100V

All cabling originating from a box with an "A" prefix (AWB, AFB, etc.) to be provided and installed by the 27 41 36 contractor.

All cabling originating from a box with a "V" prefix (VWP, VFB, etc.) to be provided and installed by the 27 41 39 contractor.

6 Division of Responsibilities

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

AV - GENERAL NOTES & LEGENDS

AV0.01
of

11/13/2024 11:58:23 AM

All cabling called out in AV Systems Schedules will be provided by 27 41 34.

AV Systems - Typical Junction Box Schedule

Typical Box ID	Device Description	Device Manufacturer	Device Model	Mounting Height	Box Manufacturer	Box Model	Box Description	Flush Mount	NEMA Type	Box Supplied and Installed By:	Panel Supplied and Installed By:	Conduit & Cable (Unless Otherwise Shown on Plan)	Notes
An.1	Wireless Antenna Plate	n/a	n/a	<varies>	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 1G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 1F to local AVR.	
An.2	Wireless + Assistive Listening Antenna Plate	n/a	n/a	<varies>	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 1F,1H to local AVR	
Av.3e	AV Connectivity Panel (Existing Location)	n/a	n/a	2' - 6"	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(2) 1" Conduit stub to accessible ceiling. 2E,2U6S,1UH to local AVR.	
Av.4	AV Connectivity Panel (Booth)	n/a	n/a	1' - 6"	Raco or Equivalent	693	4-Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(2) 1" Conduit stub to accessible ceiling. 2E,2U6S,1UH,1W to local AVR.	
Av.5	AV Connectivity Panel (Black Box)	n/a	n/a	1' - 6"	Raco or Equivalent	694	5-Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(1) 1" & (1) 1-1/4" Conduit stub to accessible ceiling. 2E,4U6S,1UH,1W to local AVR.	
Av.8	AV Connectivity Panel (Console)	n/a	n/a	1' - 6"	Hoffman or Equivalent	ASE8X8X4	Steel junction/pull box with screw cover.	Yes	1	27 05 29	N/A	(2) 1" Conduit stub to accessible ceiling. 2E,2U6S,1UH to local AVR.	
Av.Ds	AV Connectivity Panel (Downstage)	n/a	n/a	1' - 6"	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(2) 1" Conduit stub to accessible ceiling. 2E,2U6S,1UH to local AVR.	
Bt.2	Bluetooth IO Panel	Attero Tech	unD6IO-BT	<varies>	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 1U6 to local AVR.	
Cam.1	Camera Box	n/a	n/a	10' - 0"	Chief	PAC525FW	Medium In-Wall Pre-Installation Backbox w/ Cover	Yes		27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 2U6 to local AVR.	
Cx.A	Wall Video Encoder w/ Dante	n/a	n/a	2' - 6"	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(2) 1" Conduit stub to accessible ceiling. 2E,2U6S,1UH to local AVR.	
Cx.B	Wall Video Encoder w/ Bluetooth	n/a	n/a	1' - 6"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 2U6S,1UH to local AVR.	
Cx.C	Wall Video Encoder w/ Analog	n/a	n/a	1' - 6"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 2U6S,1UH to local AVR.	
Fb.2e	AV Floor Device	n/a	n/a		Ace Backstage	122SLBK X=5/8"	Ace Backstage Full Pocket (#122SLBK X=5/8" With #102BBX Back Box)	Yes	1	27 05 29	27 41 34	(1) 1" & (1) 1-1/4" Conduit stub to accessible ceiling.	
Ic.1	Intercom Outlet Panel	n/a	n/a	<varies>	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 1G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 1N to local AVR.	
Ic.S	Intercom Speaker	Clear-Com	KB701	3' - 9"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 1N to local AVR.	
Mc.1	Single Mic Connectivity Panel	n/a	n/a	1' - 6"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 1G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 1E to local AVR.	
Mc.2	Dual Mic Connectivity Panel	n/a	n/a	2' - 6"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 1G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 2E to local AVR.	
Mc.3	Catwalk Mic Connectivity Panel	n/a	n/a	24' - 0"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 1G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 3E to local AVR.	
Mc..P	Pendant Microphone	Audio-Technica	U853PMU		Motorized Screen	n/a	Single Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	27 41 34	(1) 1" Conduit stub to accessible ceiling. 1E to local AVR.	
Mon.2	Monitor Speaker Connectivity Panel	n/a	n/a	1' - 6"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 2U6S,1UH to local AVR.	
Mxc.01	Mixing Console	Yamaha	DM7		Yamaha	DM7	Digital Mixing Console						
S.4	Front Fill Speaker	Fulcrum Acoustic	RX599	2' - 6"	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(1) 3/4" Conduit (in non-accessible & open ceilings) & 1A14 to adjacent Type S.4	
S.6	Black Box Speaker	Fulcrum Acoustic	CCX896		Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	27 41 34	(1) 3/4" Conduit (in non-accessible & open ceilings) & 1A14 to adjacent Type S.6	
S.8	8" Surface Mounted Loudspeaker	ElectroVoice	EVID-S8.2T	7' - 6"	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(1) 3/4" Conduit (in non-accessible & open ceilings) & 1A14 to adjacent Type S.8	
Scn.2	Ceiling Recessed Projection Screen	Draper	101782		Motorized Screen	n/a	Single Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	27 41 34	(1) 1" Conduit stub to accessible ceiling. 1U6S to local AVR.	
Ts.7	7" Touchscreen	QSC	TSC-70-G3	3' - 9"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 3/4" Conduit stub to accessible ceiling. 1U6 to local AVR.	Device is approx. 7.5" Wide by 4.5" Tall and requires clearance of 4.5" left and right and 3" top and bottom of junction box center line.
Tv.1	Recessed TV Backbox	n/a	n/a	5' - 0"	Chief	PAC525FW	Medium In-Wall Pre-Installation Display Backbox	Yes		27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling.	
Vc.1	Volume Controller	Atlas	AT35D	3' - 9"	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	Yes	1	27 05 29	N/A	(1) 3/4" Conduit stub to accessible ceiling. 1A14 to adjacent Vc.1.	Decora-style auto transformer. 35w at 25v or 70v, 3dB steps. White.
Vp.2	Video Projector	Epson	EB-PU2116B	10' - 0"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 2G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 2U6S,1UH to local AVR	
Wc.1	Intercom Wireless Antenna Plate	n/a	n/a	7' - 6"	Raco or Equivalent	260	4-11/16" square welded steel electrical box, 3.25" depth, with 1G mudring.	Yes	1	27 05 29	N/A	(1) 1" Conduit stub to accessible ceiling. 1F to local AVR.	

See specification 27 41 34, Appendix A for equipment for all complete list of equipment.

All cabling called out in AV Systems Schedules will be provided by 27 41 34.

AV Systems - Ceiling & Pendant Speaker Schedule

Speaker Type	Speaker Description	Speker Manufacturer	Speaker Model	Junction Box Manufacturer	Junction Box Model	Junction Box Description	Junction Box Flush Mount	Junction Box NEMA Type	Junction Box Supplied By	Junction Box Back Box Installed By	Panel Provided & Installed By	Speaker Supplied & Installed By	Type Comments	Notes
C.6	Ceiling Speaker	Sonance	PS-C63RT	1	1	1	Yes	N/A	Integrated	Integrated	N/A	27 41 34	(1) 3/4" Conduit & 1A12 Cable to Adjacent Type Cs	Ceiling Cutout = 8.25" Diameter

AV Systems - Rack Schedule

Rack ID	Sheet Reference	Level	Manufacturer	Model	Description	Rack Dimensions Height	Rack Dimensions Width	Rack Dimensions Depth	Device Supplied By	Device Installed By	Notes
AVR.01		1ST FLOOR	Middle Atlantic Products, Inc.	BGR-4532	EXISTING 45 SPACE (78-3/4"), 32" DEEP, MULTIBAY BGR RACK WITH REAR DOOR, BLACK FINISH	6' - 10 7/8"	1' - 11"	2' - 8"			
AVR.02		1ST FLOOR	Middle Atlantic Products	DWR-24-22LVFD	EXISTING 24 SPACE (42") SECTIONAL WALL RACK, FITS 20" DEEP EQUIPMENT, BLACK FINISH	4' - 1 1/16"	1' - 11 13/32"	1' - 10"	27 41 36	27 41 34	
AVR.03		1ST FLOOR	Middle Atlantic Products	DWR-35-26LVFD	35 SPACE (61 1/4") SECTIONAL WALL RACK, FITS 24" DEEP EQUIPMENT, BLACK FINISH	5' - 8 5/16"	1' - 11 13/32"	2' - 2"	27 41 36	27 41 34	

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

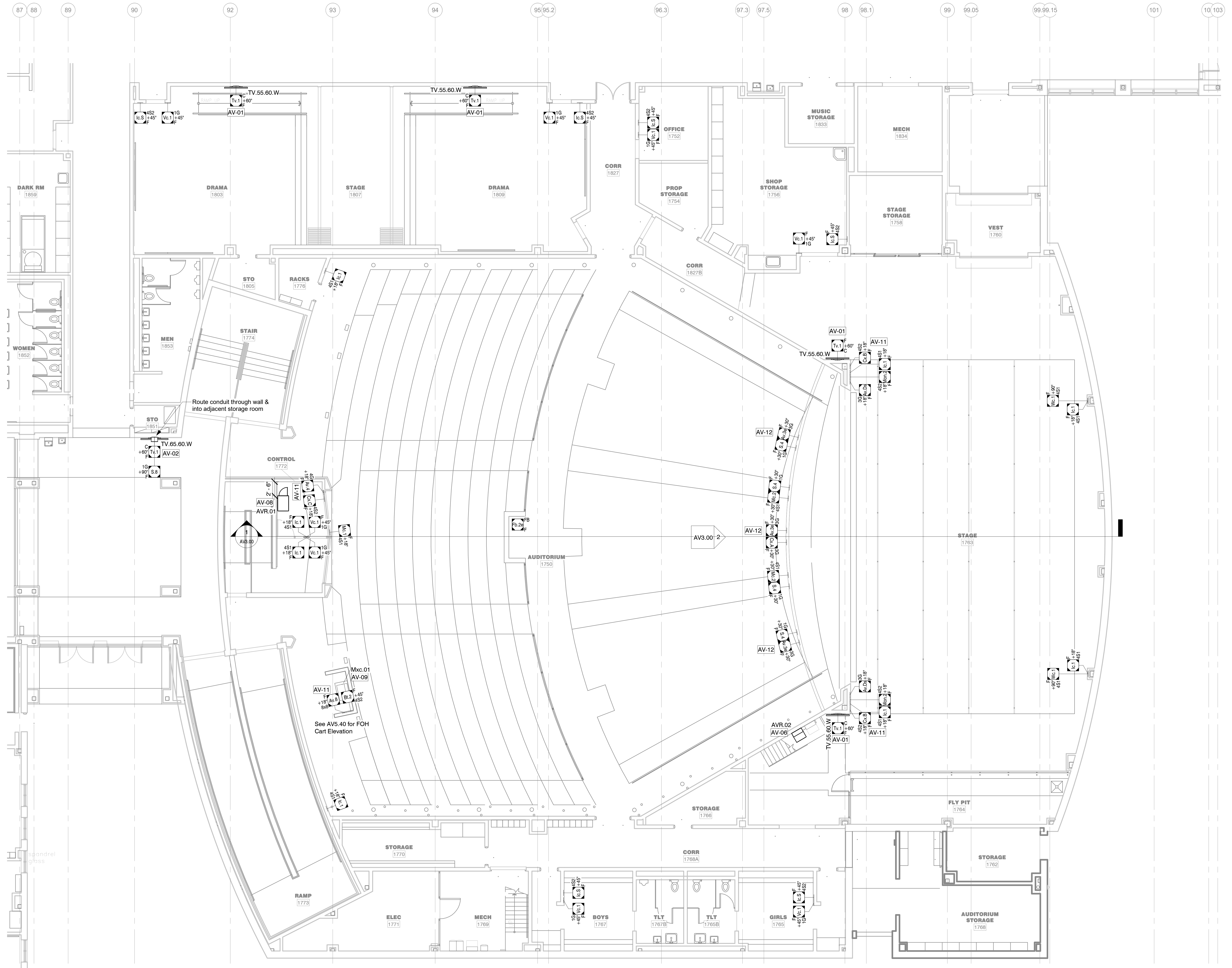
AV - SYSTEMS
SCHEDULES

AV0.02

of

11/13/2024 11:58:27 AM

Keynote Legend	
Key	Keynote
AV-01	TV Backbox. Duplex power outlet, by Div 26, and single data drop, by 271500, installed inside TV Backbox.
AV-02	TV Backbox. Duplex power outlet, by Div 26, and dual data drop, by 271500, installed inside TV Backbox.
AV-06	AV Equipment Rack. Power: 3kW feeds (2) 20A, 120V circuits. Div 26 to terminate circuits to electrical junction box at the top of the AV rack. Electrical junction box and in-rack distribution by 27 41 34. Cooling: AV equipment will generate 3,000 BTU of thermal energy when all systems are in use and 2,000 BTU while operating 24/7. Pathway: All pathways routed to rack should terminate to overhead cable tray. Cable tray shown on DT plans.
AV-08	AV Equipment Rack. Power: 9kW feeds (6) 20A, 120V circuits. Div 26 to terminate circuits to electrical junction box at the top of the AV rack. Electrical junction box and in-rack distribution by 27 41 34. Cooling: AV equipment will generate 9,000 BTU of thermal energy when all systems are in use and 6,000 BTU while operating 24/7. Pathway: All pathways routed to rack should terminate to overhead cable tray. Cable tray shown on DT plans.
AV-09	Audio Console. Two (2) Dedicated 20A, 120V circuit terminated to quad, by Div 26, on wall or on floor under desk.
AV-11	AV Connectivity Wall Plate. Dedicated 20A, 120V circuit terminated to quad, by Div 26, installed adjacent to AV Box.
AV-12	AV Wall Plate. Duplex power outlet, by Div 26, installed adjacent to AV box.



Route conduit through wall & into adjacent storage room

See AV5.40 for FOH Cart Elevation

1 AV - 1ST FLOOR PLAN - AREA 'F'

Scale: 1/8" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

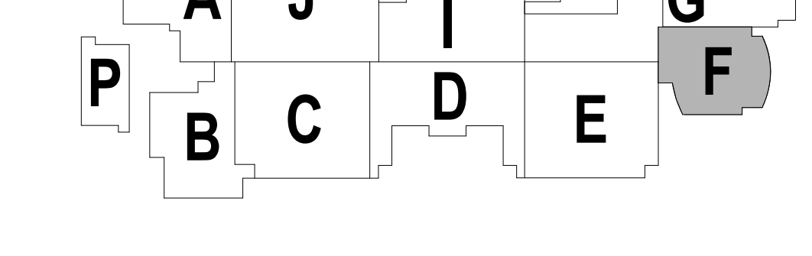
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL
RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - 1ST FLOOR
PLAN - AREA 'F'

AV2.10F

of

Autodesk Docs://23072_CFISD_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

11/13/2024 11:58:28 AM

Keynote Legend	
Key	Keynote
AV-07	AV Equipment Rack. Power: 6kW feeds (4) 20A, 120V circuits. Div 26 to terminate circuits to electrical junction box at the top of the AV rack. Electrical junction box and in-rack distribution by 27 41 34. Cooling: AV equipment will generate 6,000 BTU of thermal energy when all systems are in use and 4,000 BTU while operating 24/7. Pathway: All pathways routed to rack should terminate to overhead cable tray. Cable tray shown on DT plans.
AV-09	Audio Console. Two (2) Dedicated 20A, 120V circuit terminated to quad, by Div 26, on wall or on floor under desk.
AV-11	AV Connectivity Wall Plate. Dedicated 20A, 120V circuit terminated to quad, by Div 26, installed adjacent to AV Box.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com

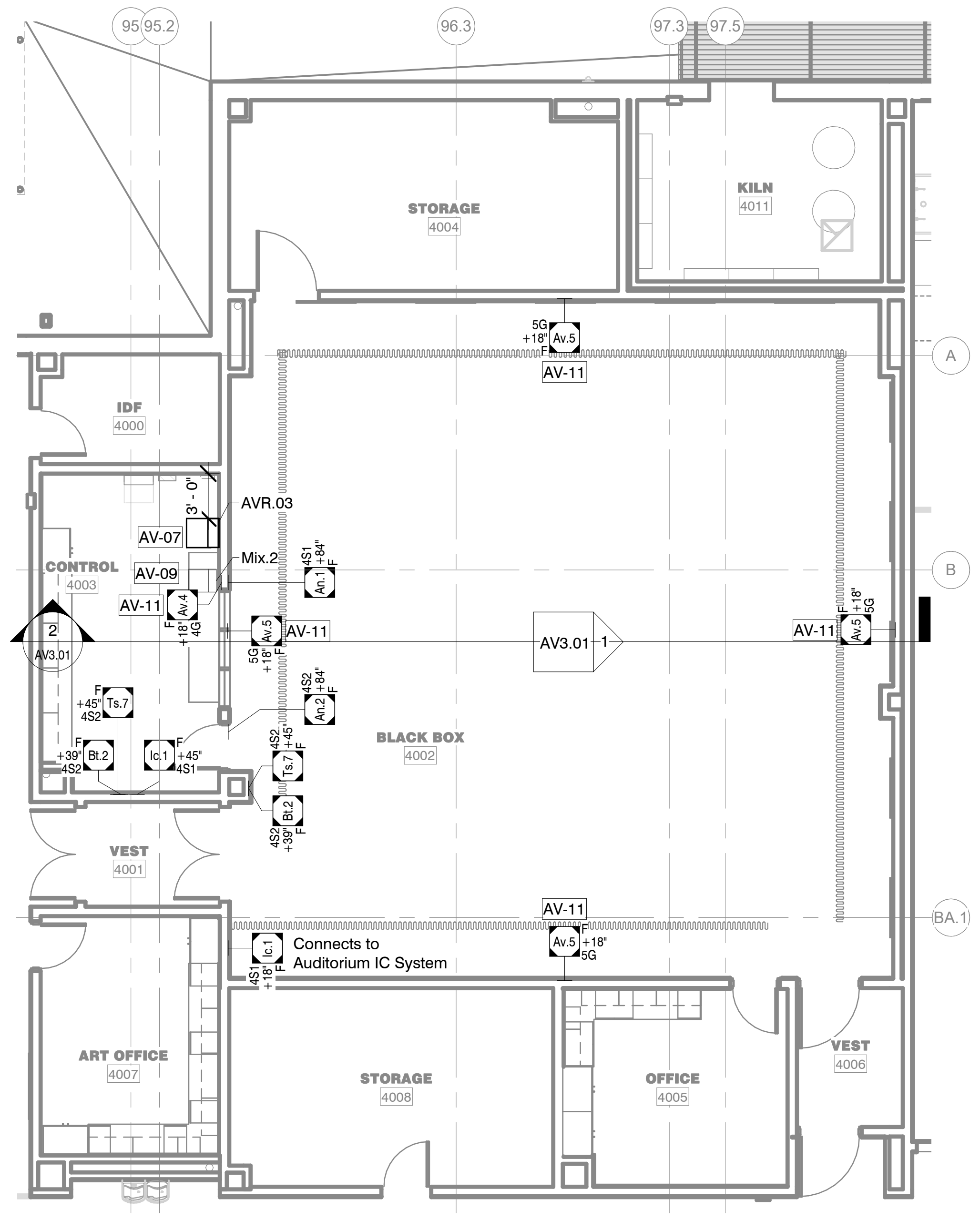
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900



1

AV - 1ST FLOOR PLAN - BLACK BOX

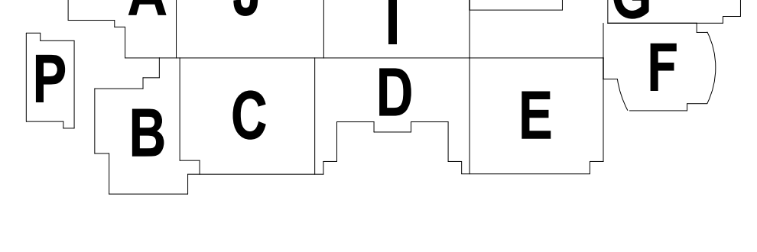
Scale: 1/8" = 1'-0"

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

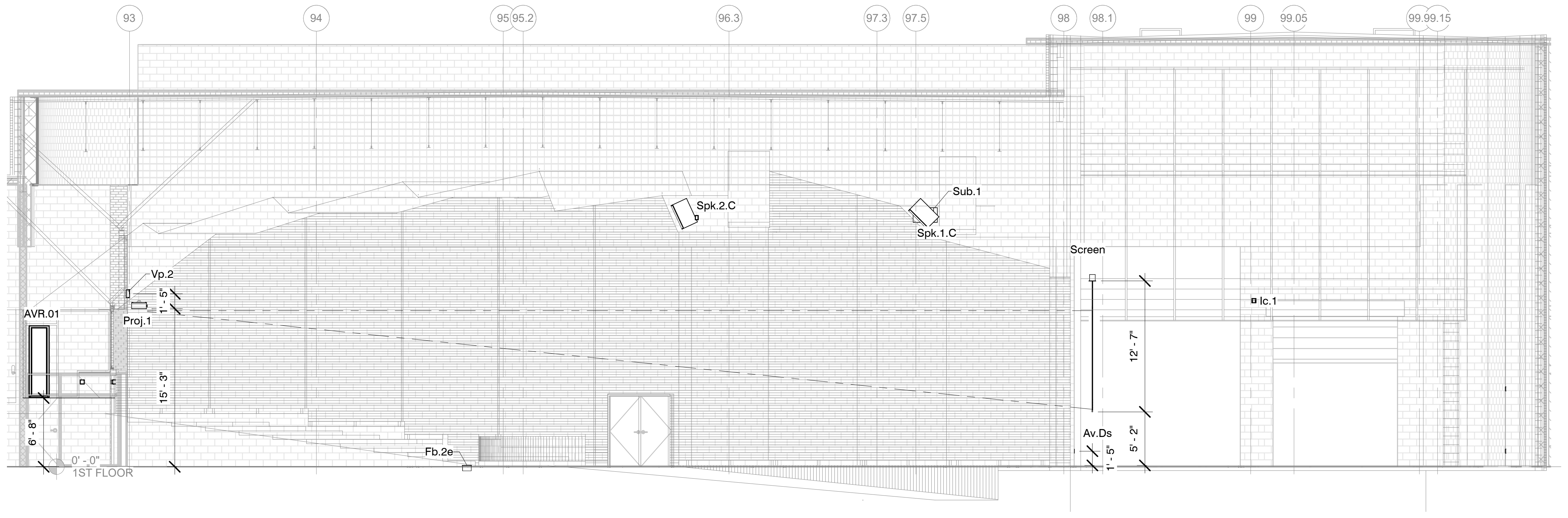
AV - 1ST FLOOR PLAN - BLACK BOX

AV2.10T

of

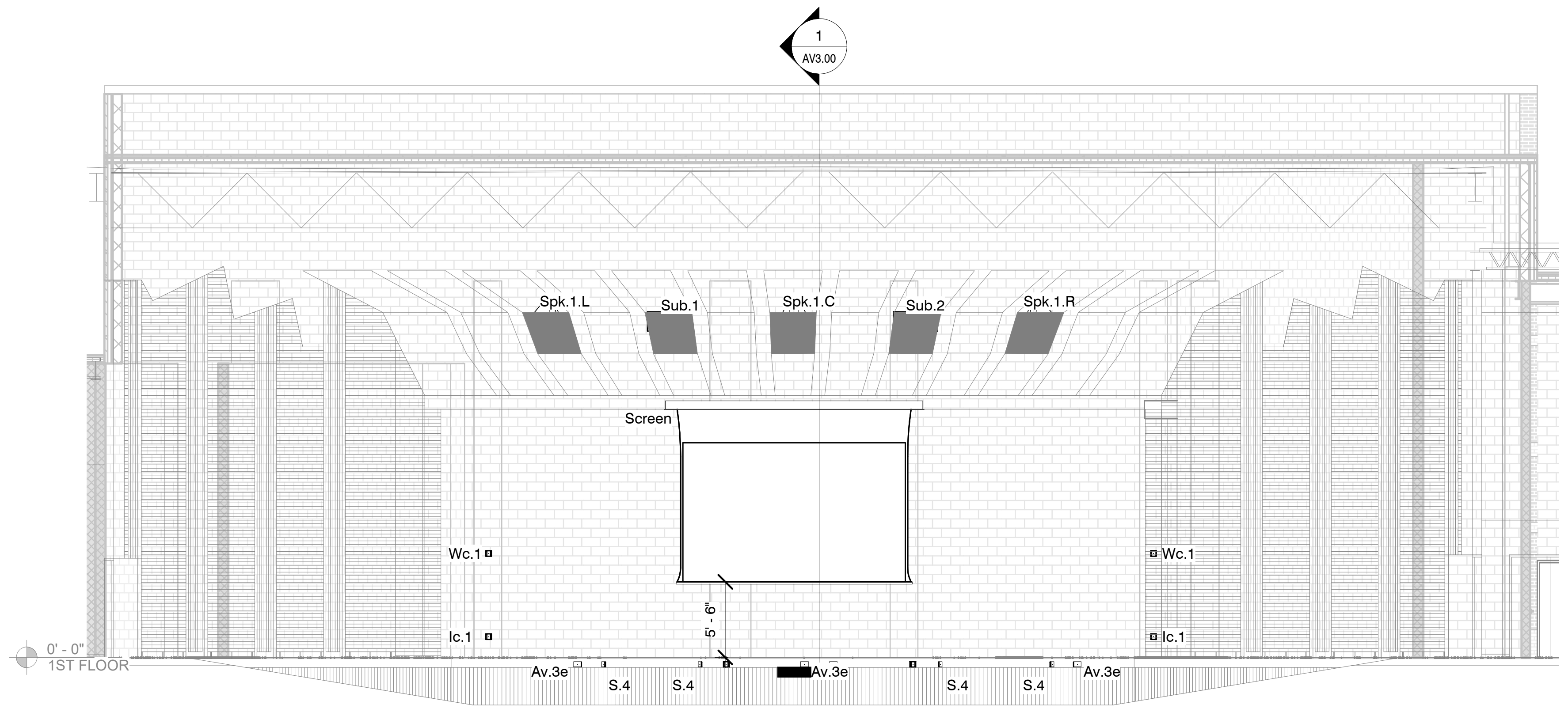
Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

11/13/2024 11:58:30 AM



1 AV - AUDITORIUM - CENTERLINE SECTION

Scale: 1/8" = 1'-0"



2 AV - AUDITORIUM - FRONT ELEVATION

Scale: 1/8" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

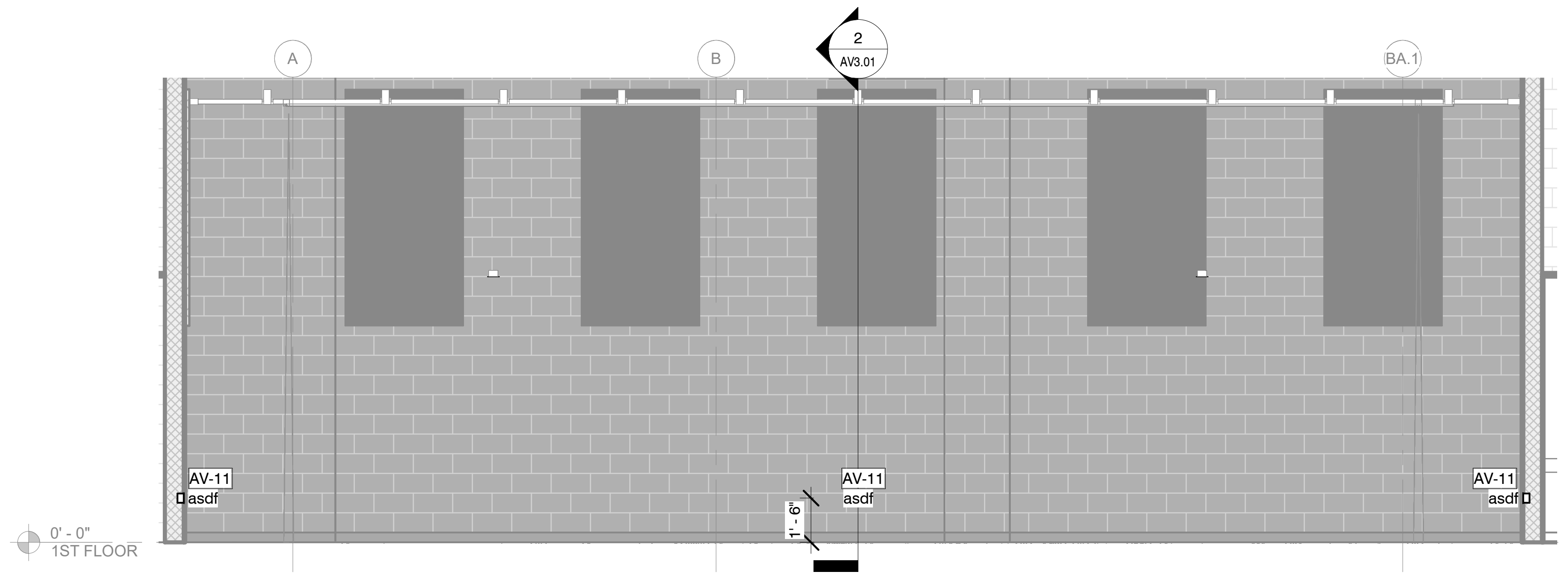
Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - SECTIONS & ELEVATIONS - AUDITORIUM

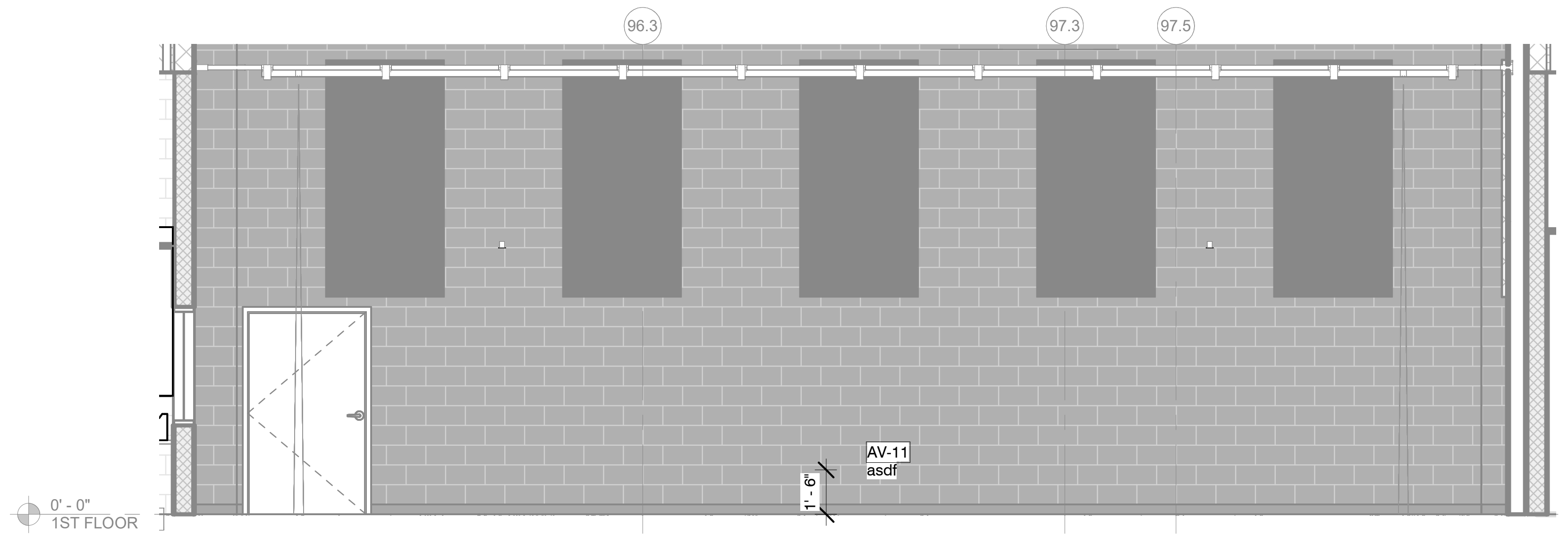
AV3.00

of



1 AV - BLACK BOX - FRONT ELEVATION

Scale: 1/4" = 1'-0"



2 AV - BLACK BOX - CENTERLINE SECTION

Scale: 1/4" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

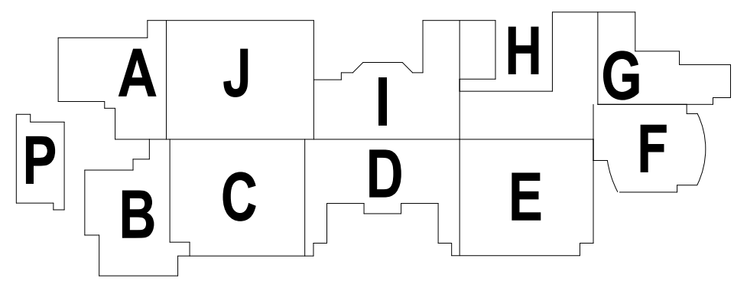
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - SECTIONS &
ELEVATIONS -
BLACK BOX

AV3.01

of

11/13/2024 11:58:36 AM

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

Keynote Legend	
Key	Keynote
AV-22	Ceiling Mounted Projection Screen. Power, by Div 26, hardwired to projection screen motor.
AV-30	Auditorium Loudspeaker. Reuse existing loudspeaker cavity for new loudspeaker.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

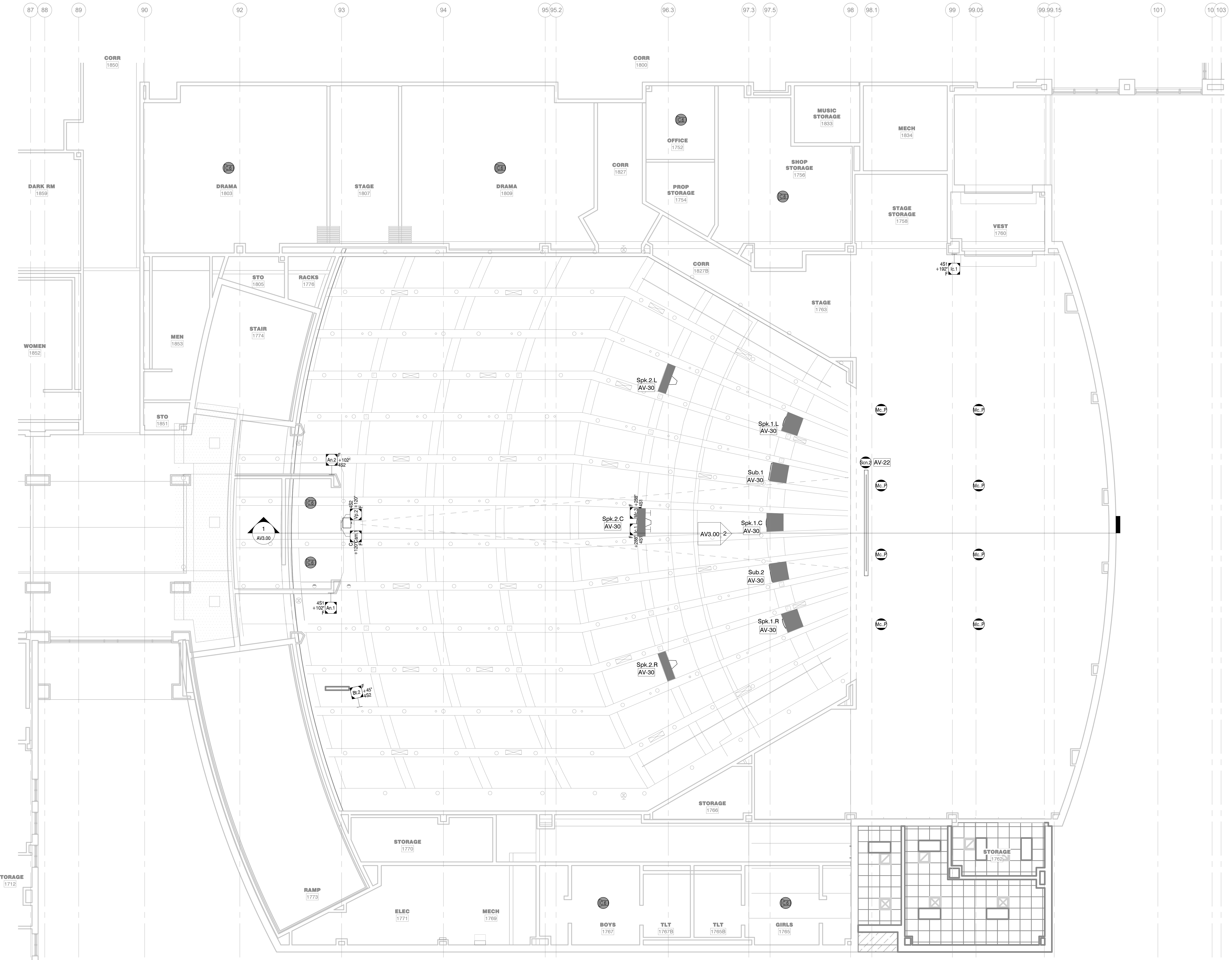
STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

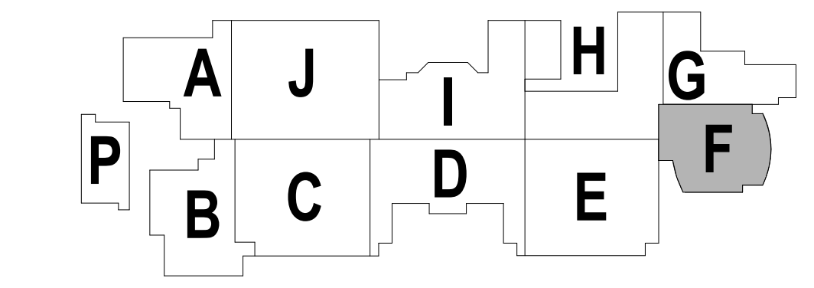
Revisions / Submission



1 AV - 1ST FLOOR REFLECTED CEILING PLAN - AREA 'F'

Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - 1ST FLOOR
REFLECTED CEILING
PLAN - AREA 'F'

AV4.10F

____ of ____

11/13/2024 11:58:40 AM

Key	Keynote

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

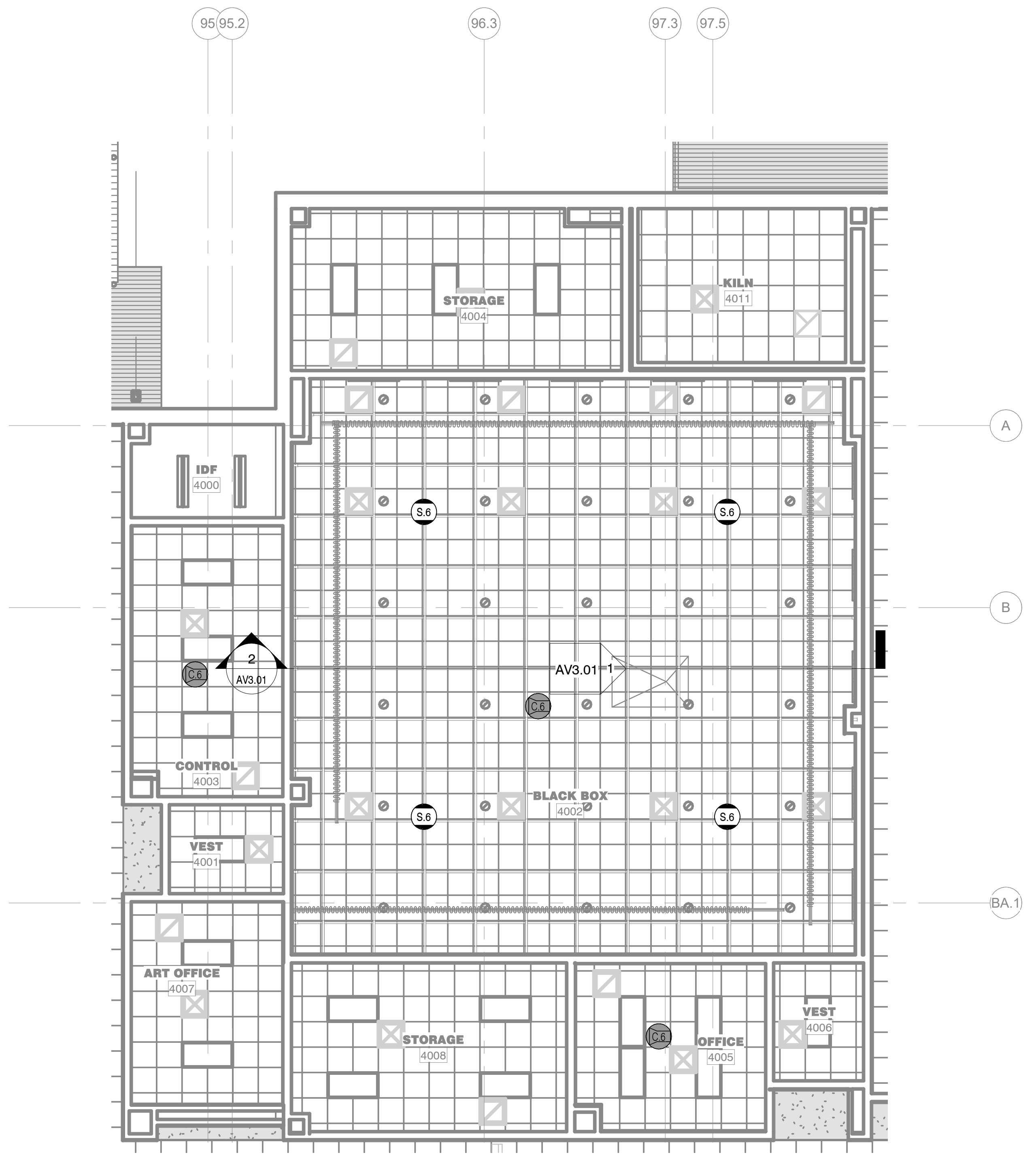
Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900



1 **AV - 1ST FLOOR REFLECTED CEILING PLAN - BLACK BOX**

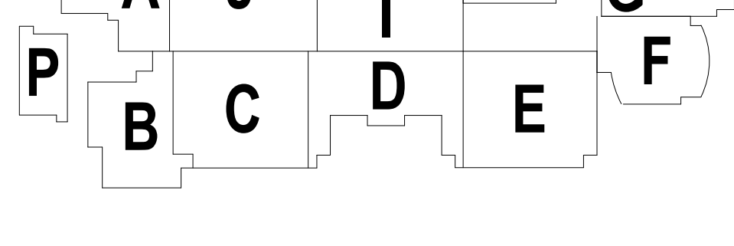
Scale: 1/8" = 1'-0"

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

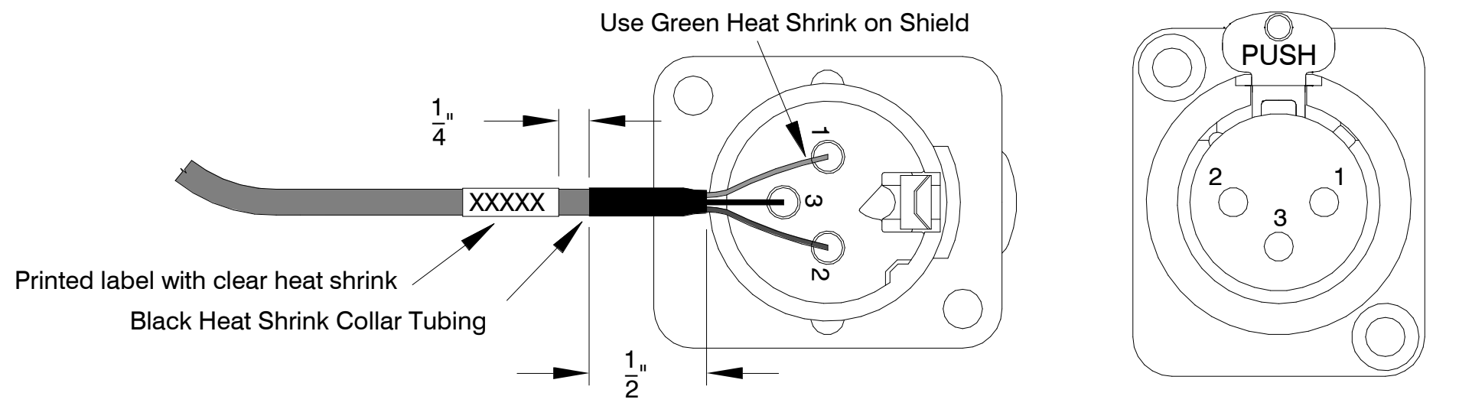
AV - 1ST FLOOR REFLECTED CEILING PLAN - BLACK BOX

AV4.10T

of

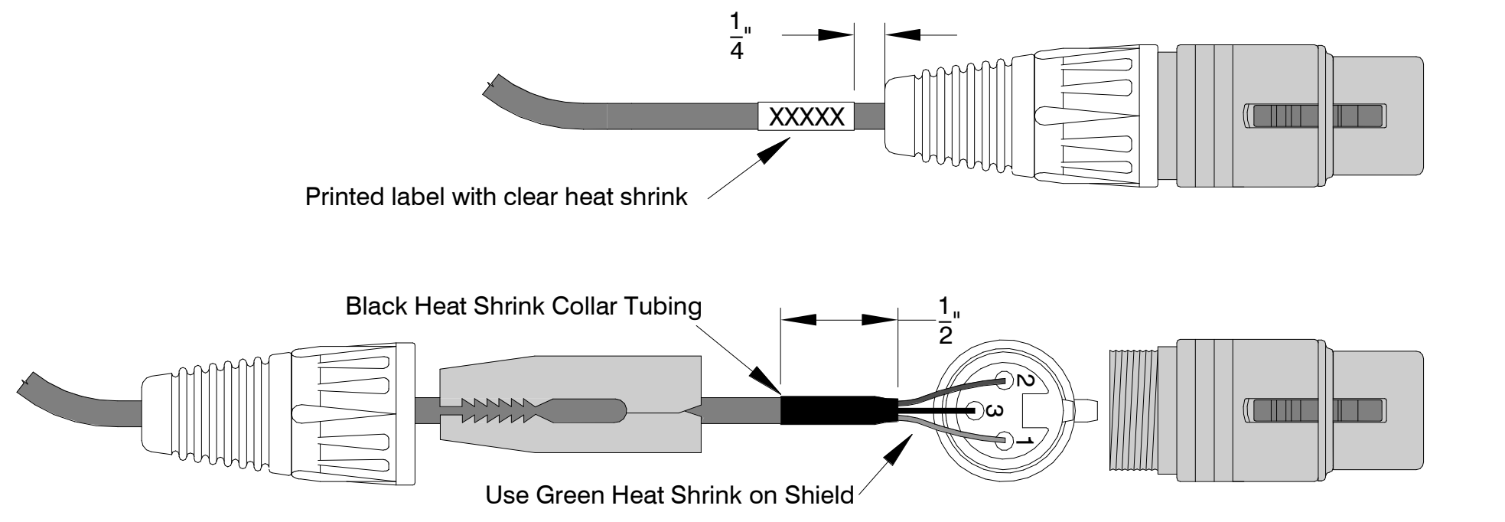
Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

11/13/2024 11:58:40 AM



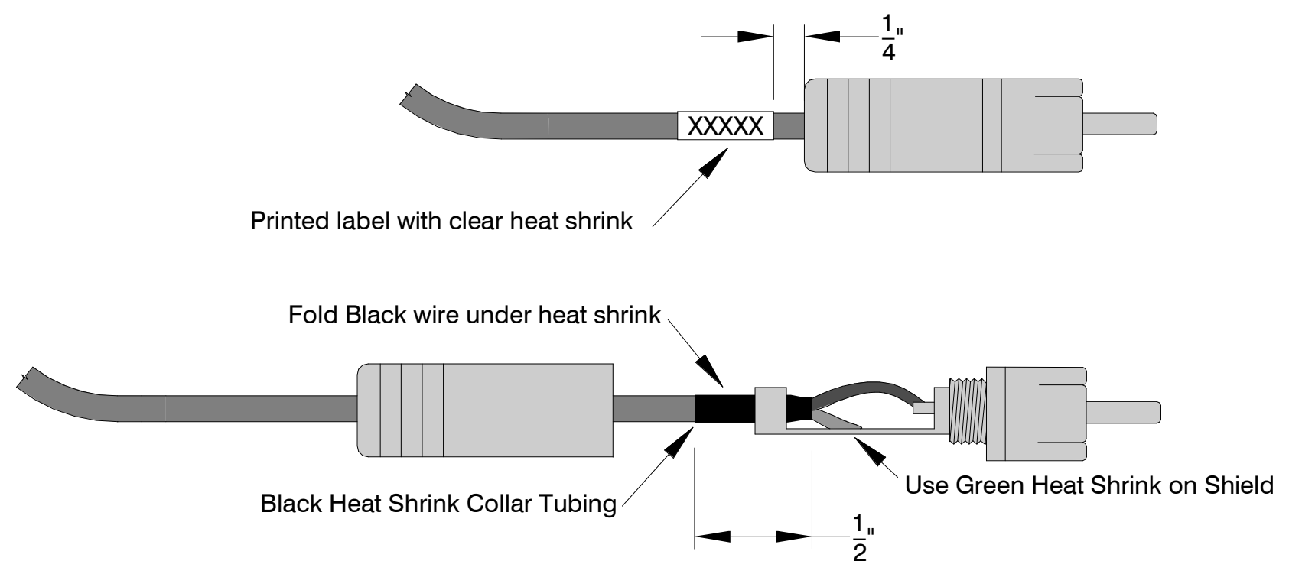
1 XLR FEMALE PANEL MOUNT

Scale: None



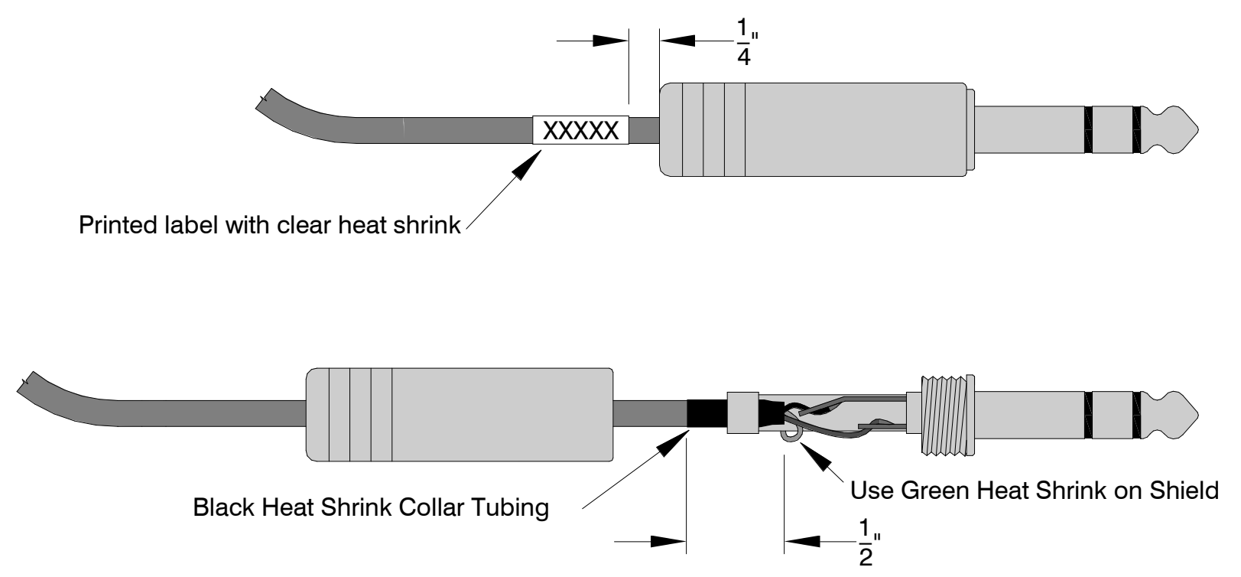
2 XLR FEMALE CABLE MOUNT

Scale: None



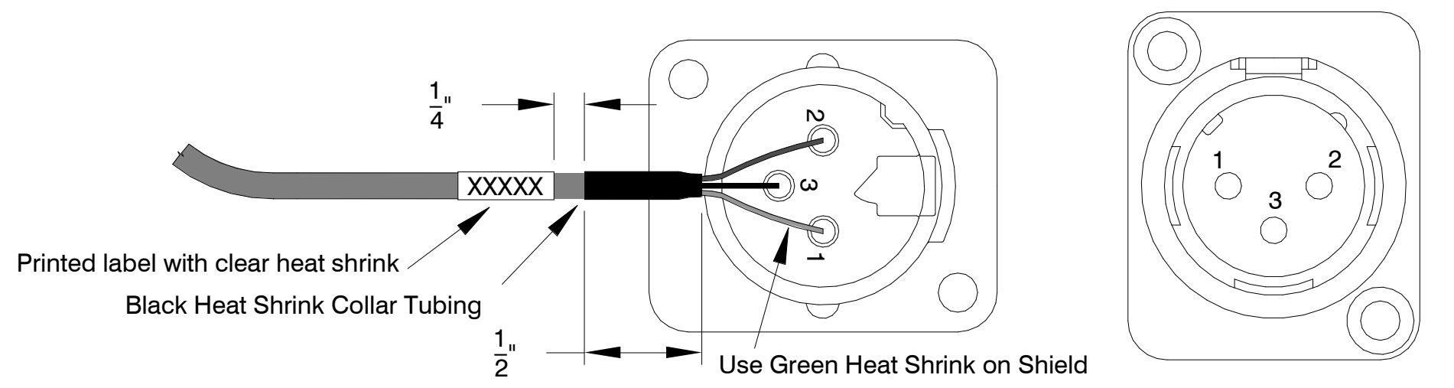
3 RCA MALE CABLE MOUNT

Scale: None



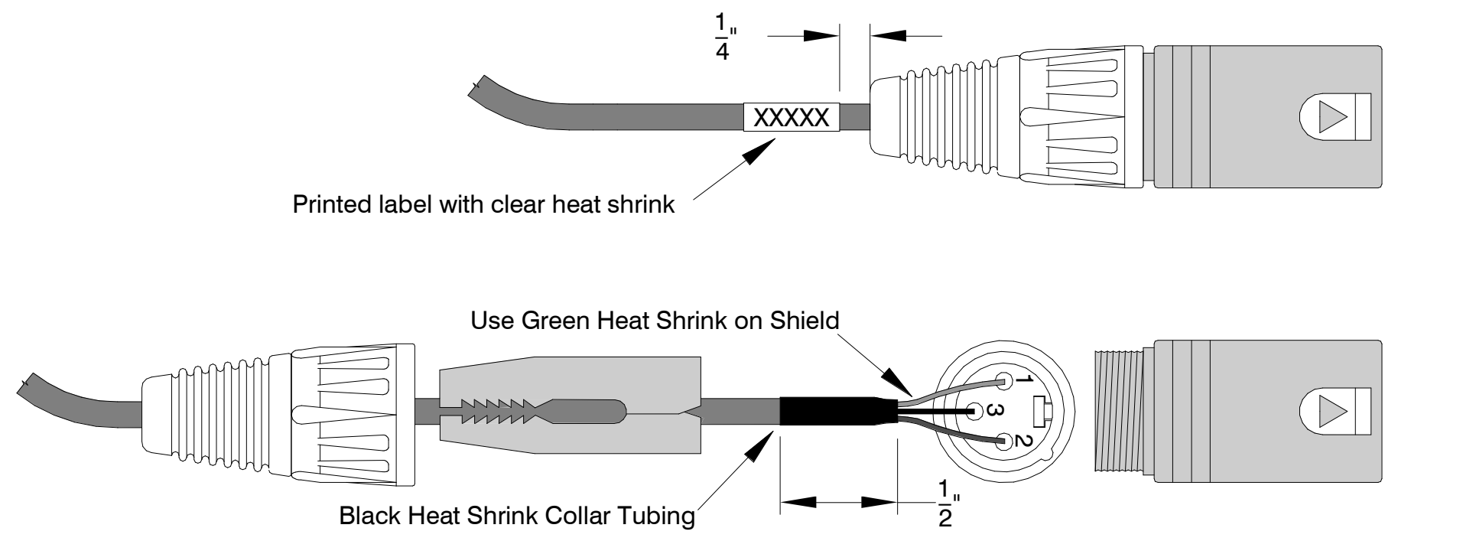
4 1/4" TRS CABLE MOUNT

Scale: None



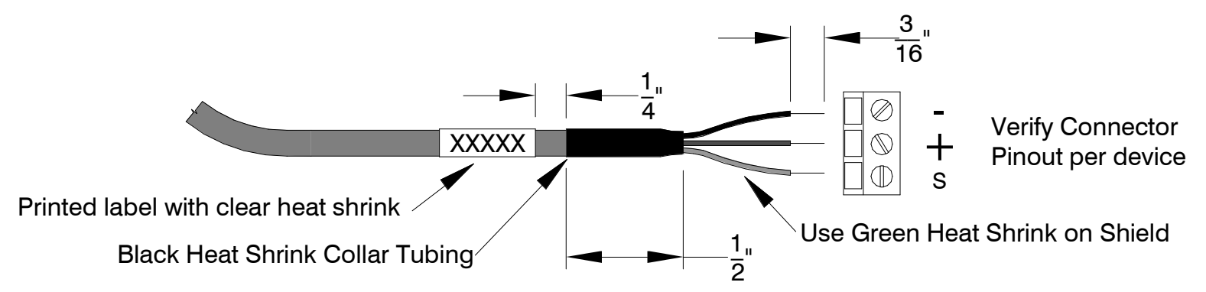
5 XLR MALE PANEL MOUNT

Scale: None



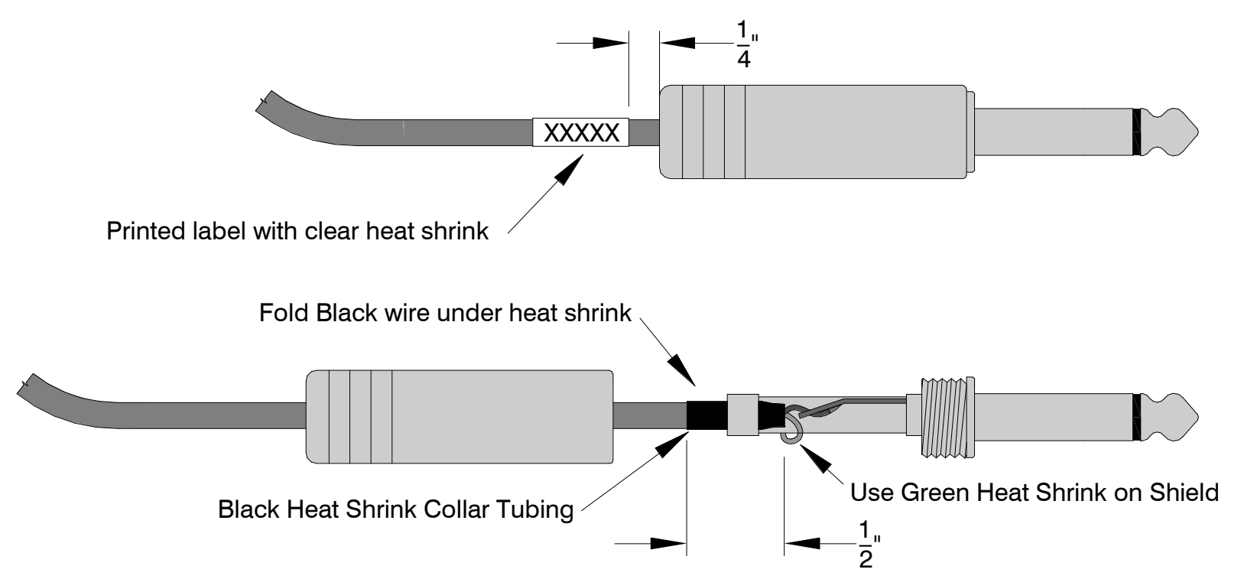
6 XLR MALE CABLE MOUNT

Scale: None



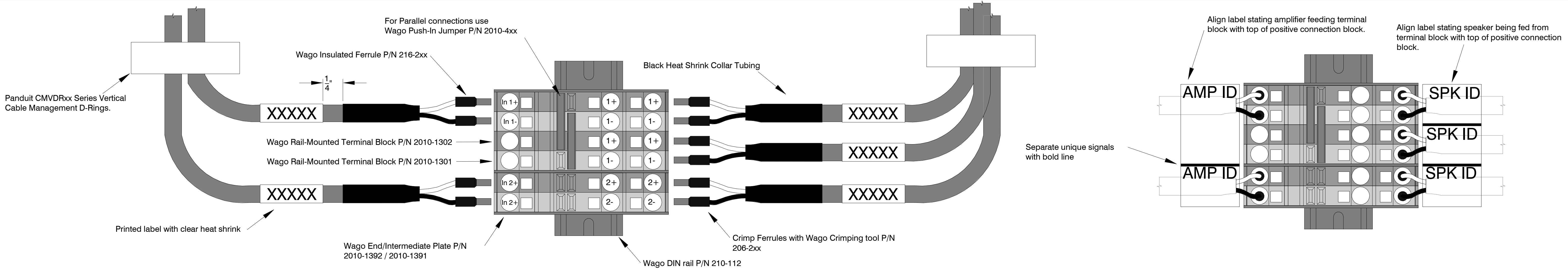
7 PHOENIX CONNECTOR

Scale: None



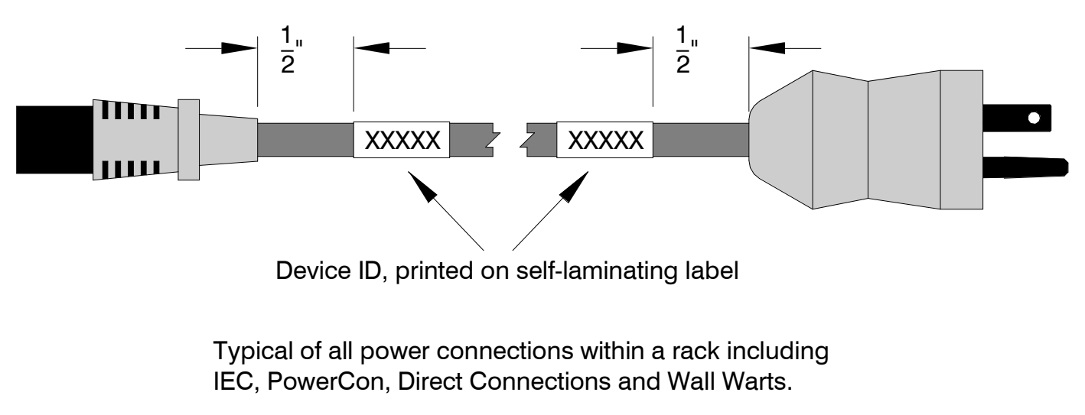
8 1/4" TS CABLE MOUNT

Scale: None



9 SPEAKER LEVEL TERMINAL BLOCKS

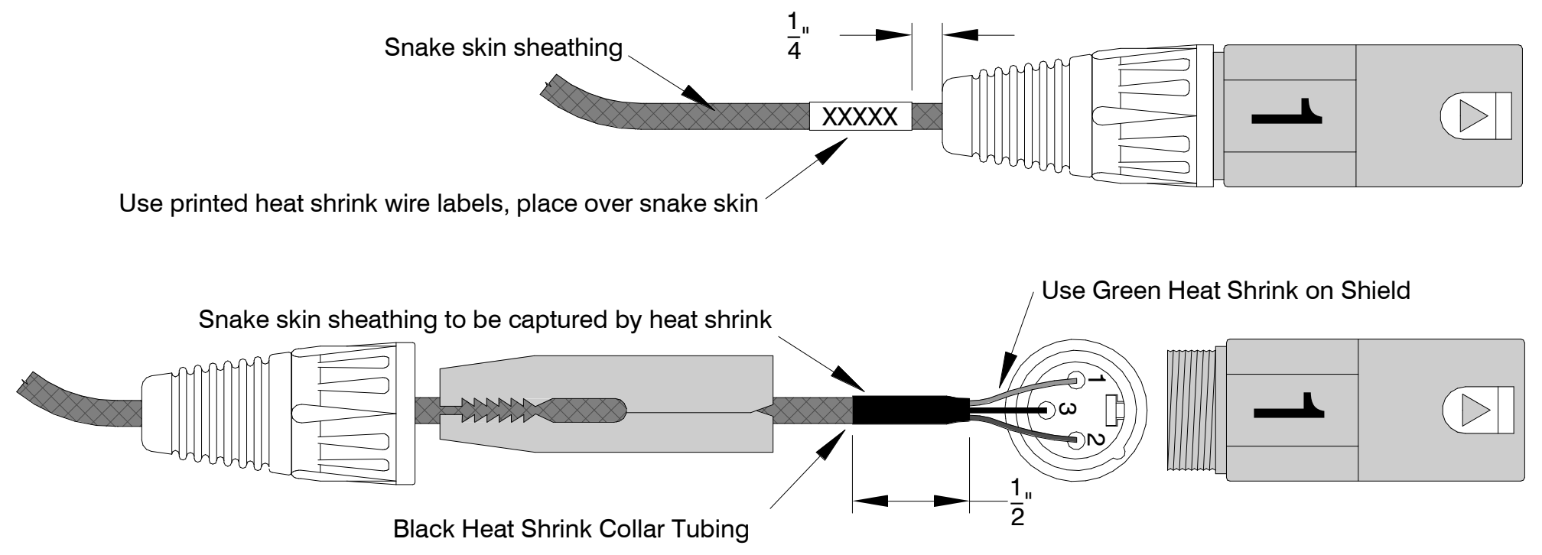
Scale: None



Typical of all power connections within a rack including IEC, PowerCon, Direct Connections and Wall Warts.

10 POWER CONNECTIONS

Scale: None



This detail applies to all mixer and mixing system inputs.

- Inputs originating at wall/floor boxes:
  - Engraved numbered connectors, Whirlwind p/n WI3M-XX-#
    - A new boot color shall be used for every group of 8 inputs.
    - The engraved number shall match the plate number.
  - Black snake skin sheathing.
- Inputs from devices with Stereo Outputs:
  - Engraved connectors, Whirlwind p/n WI3M-BK-#
    - Left Outputs shall be engraved "#L" and have a white boot
    - Right Outputs shall be engraved "#R" and have a red boot
  - Blue snake skin sheathing
- Inputs from Wireless Microphones:
  - Engraved connectors, Whirlwind p/n WI3M-BK-#
    - Outputs shall be numbered and connectors engraved "WXX"
  - White snake skin sheathing

Wires shall have sufficient length to allow patching to any input.

11 FANOUT XLR CONNECTOR

Scale: None

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

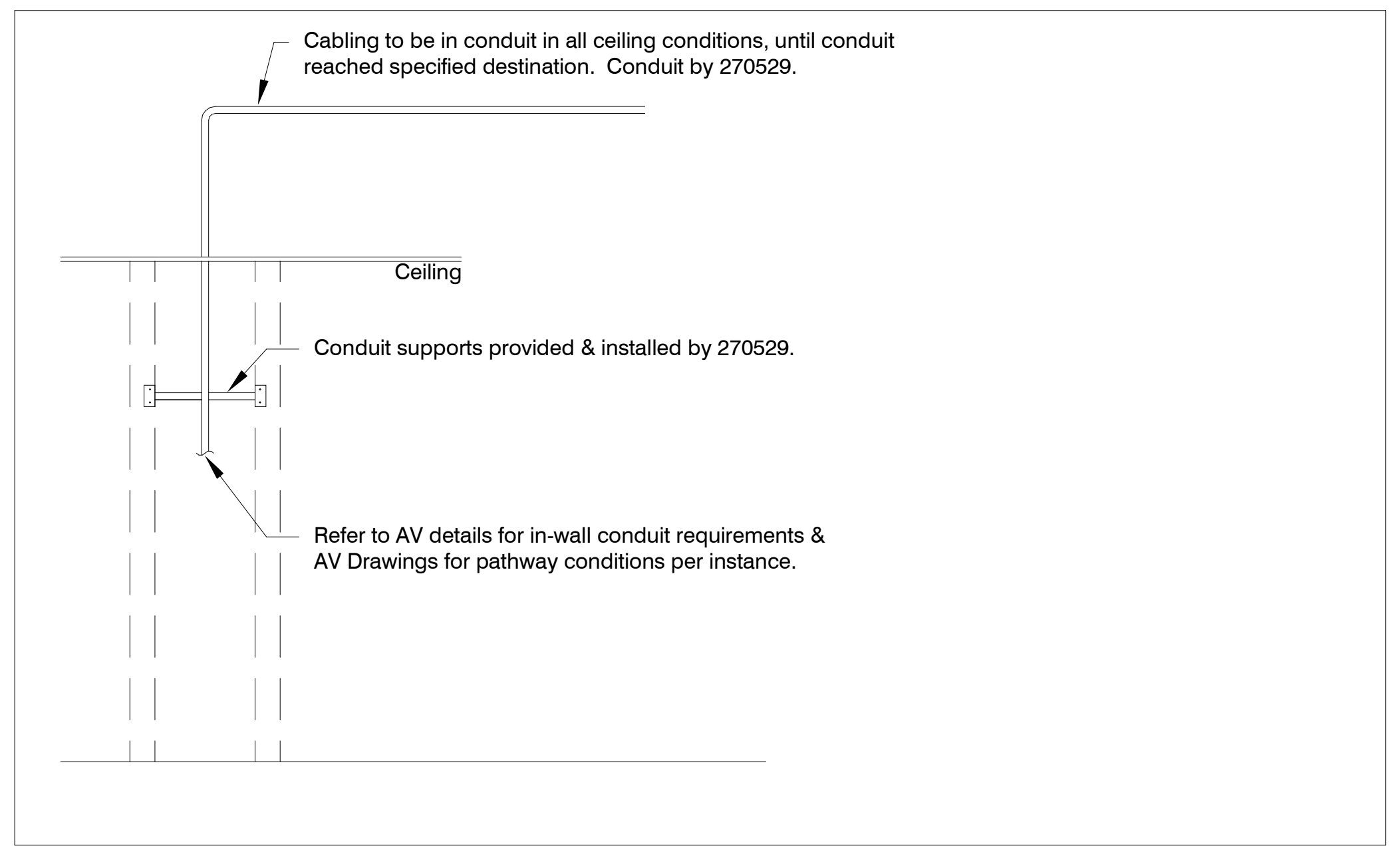
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

AV - CONNECTOR DETAILS

AV5.00

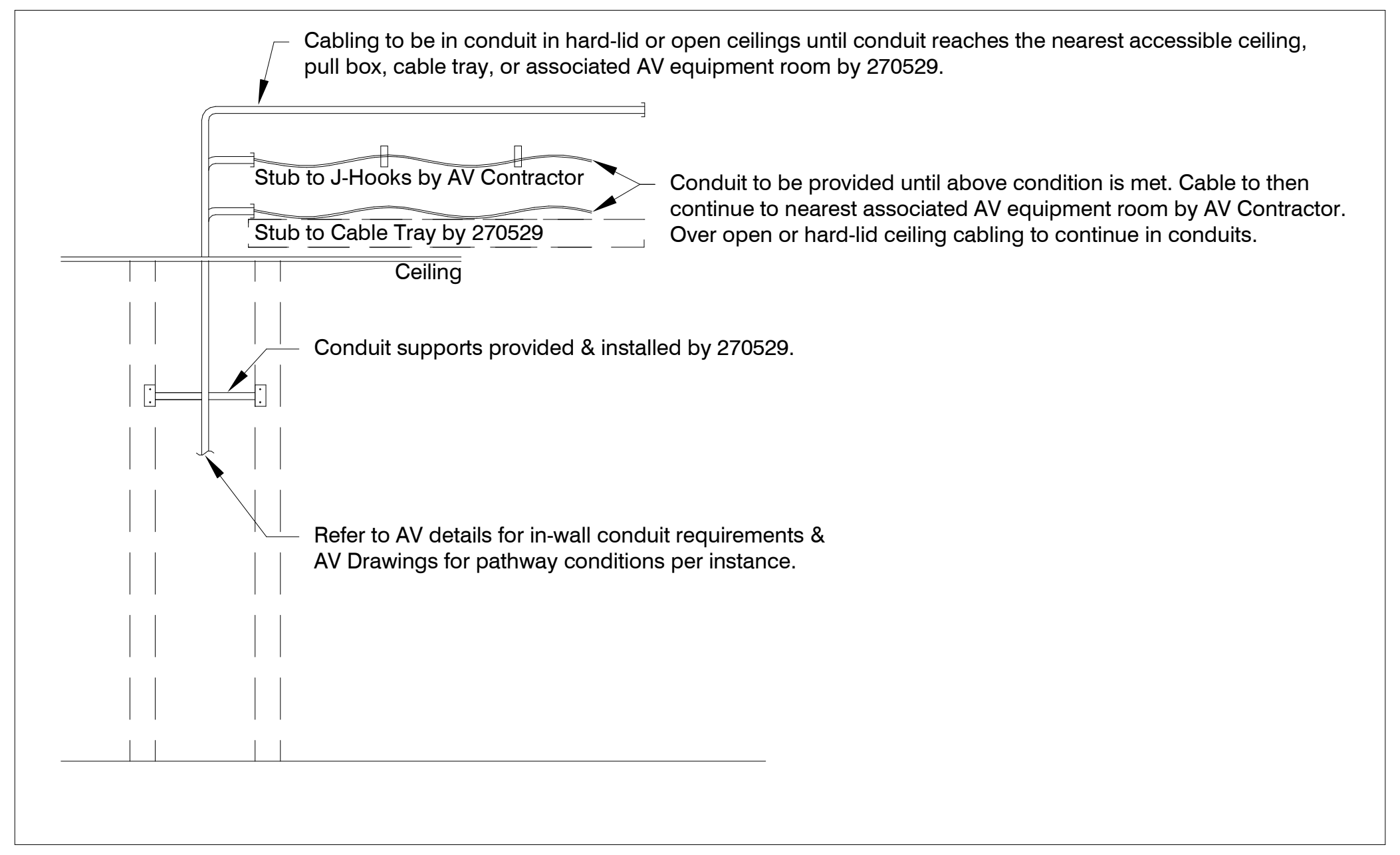
of



1 Overhead - Home Run Conduits

Scale: None

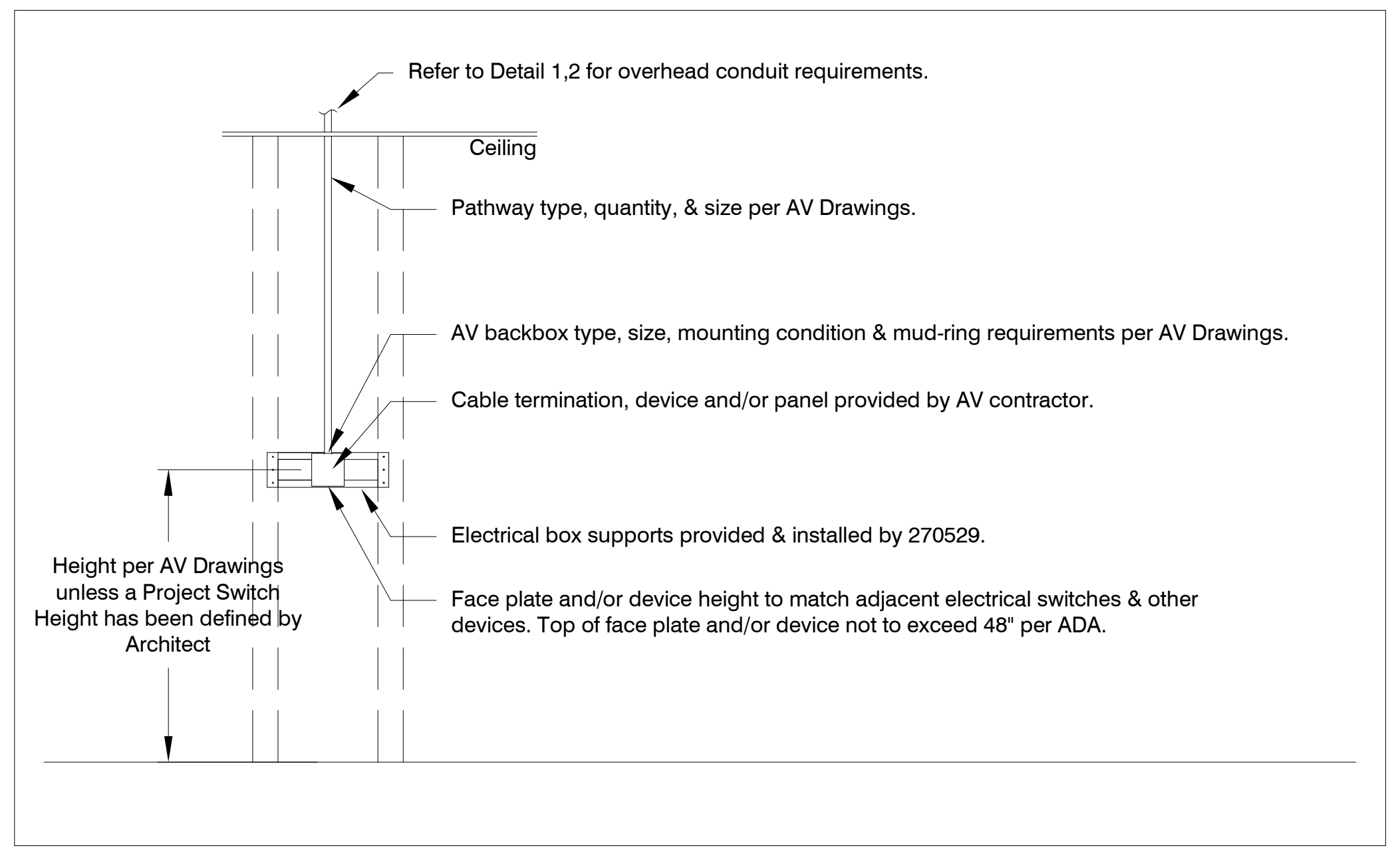
Note: This conduit condition applies to all locations, unless stubs up are specifically noted.



2 Overhead - Conduit Stub Ups

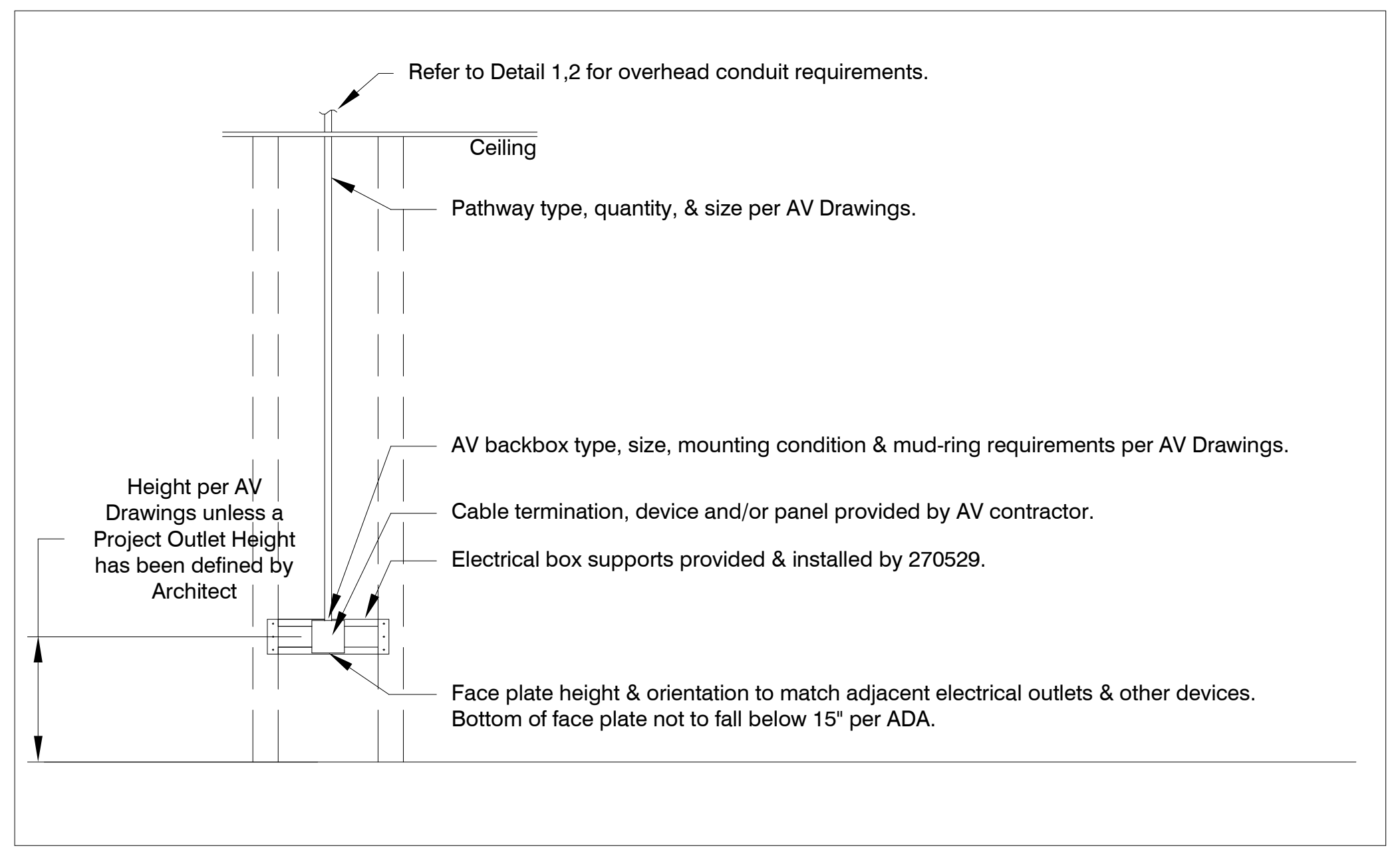
Scale: None

Note: This conduit condition only applies to locations where conduits stubs are called for.



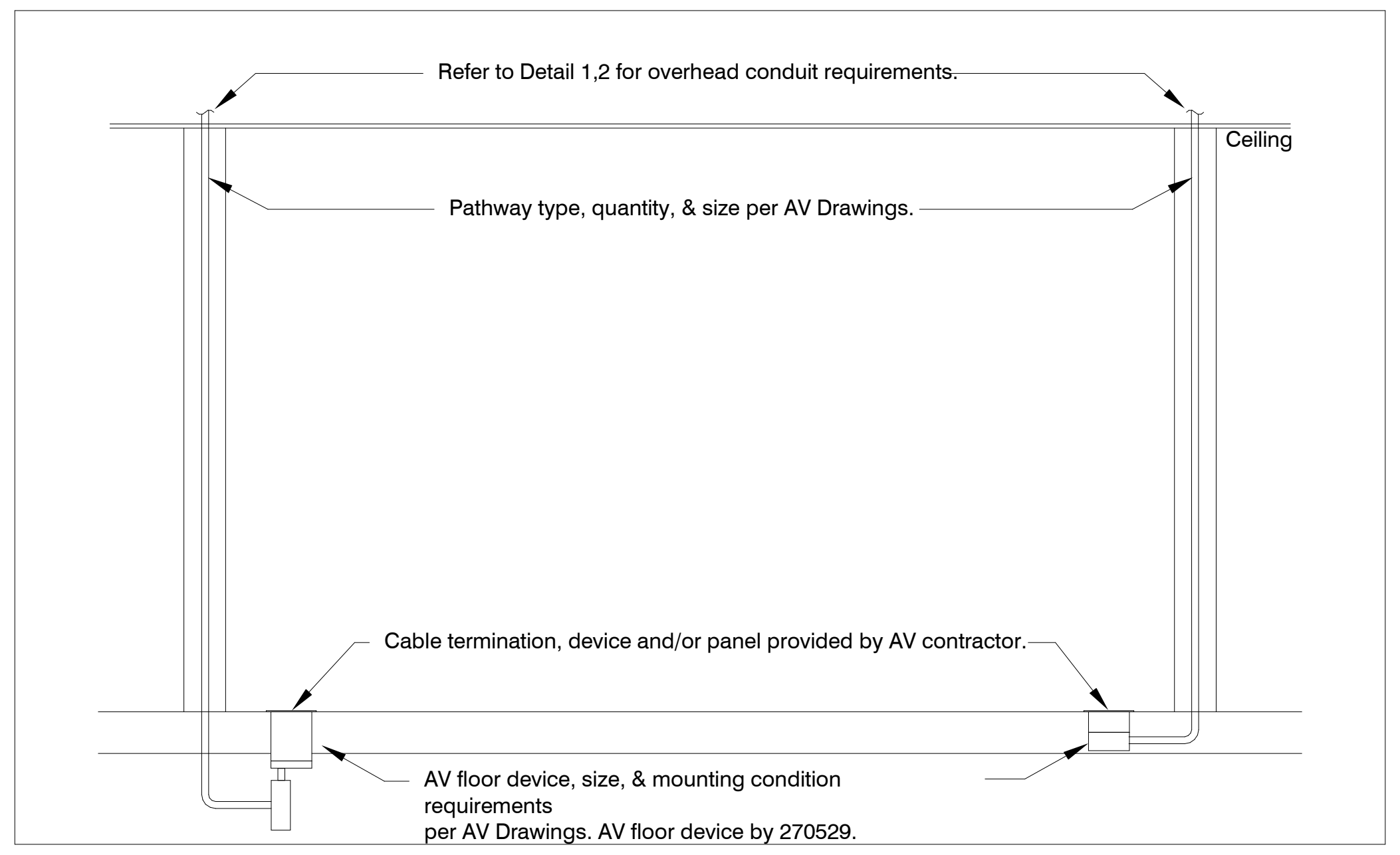
3 Typical Wall-Mounted AV Control Device

Scale: None



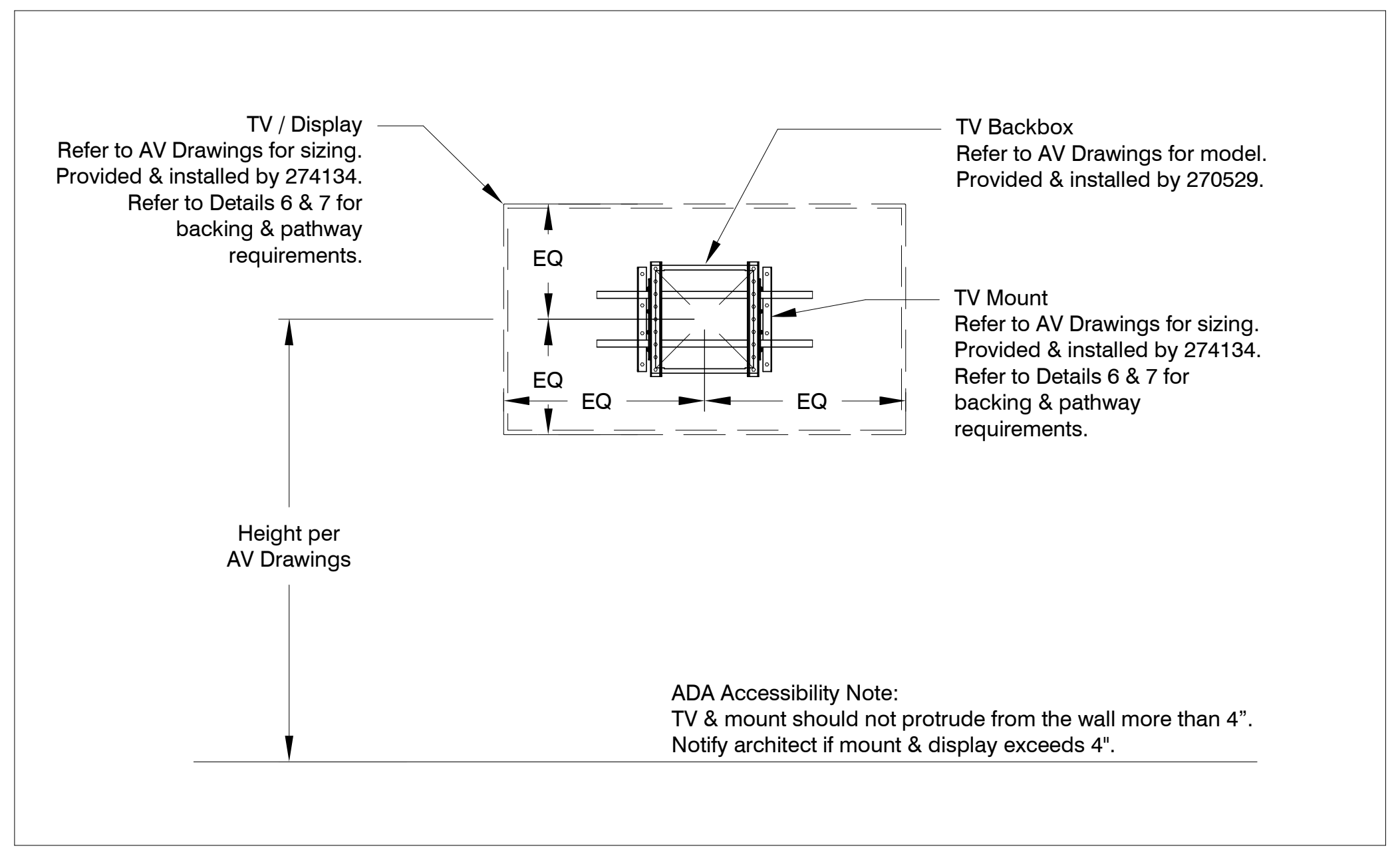
4 Typical Wall-Mounted AV Input Panel

Scale: None



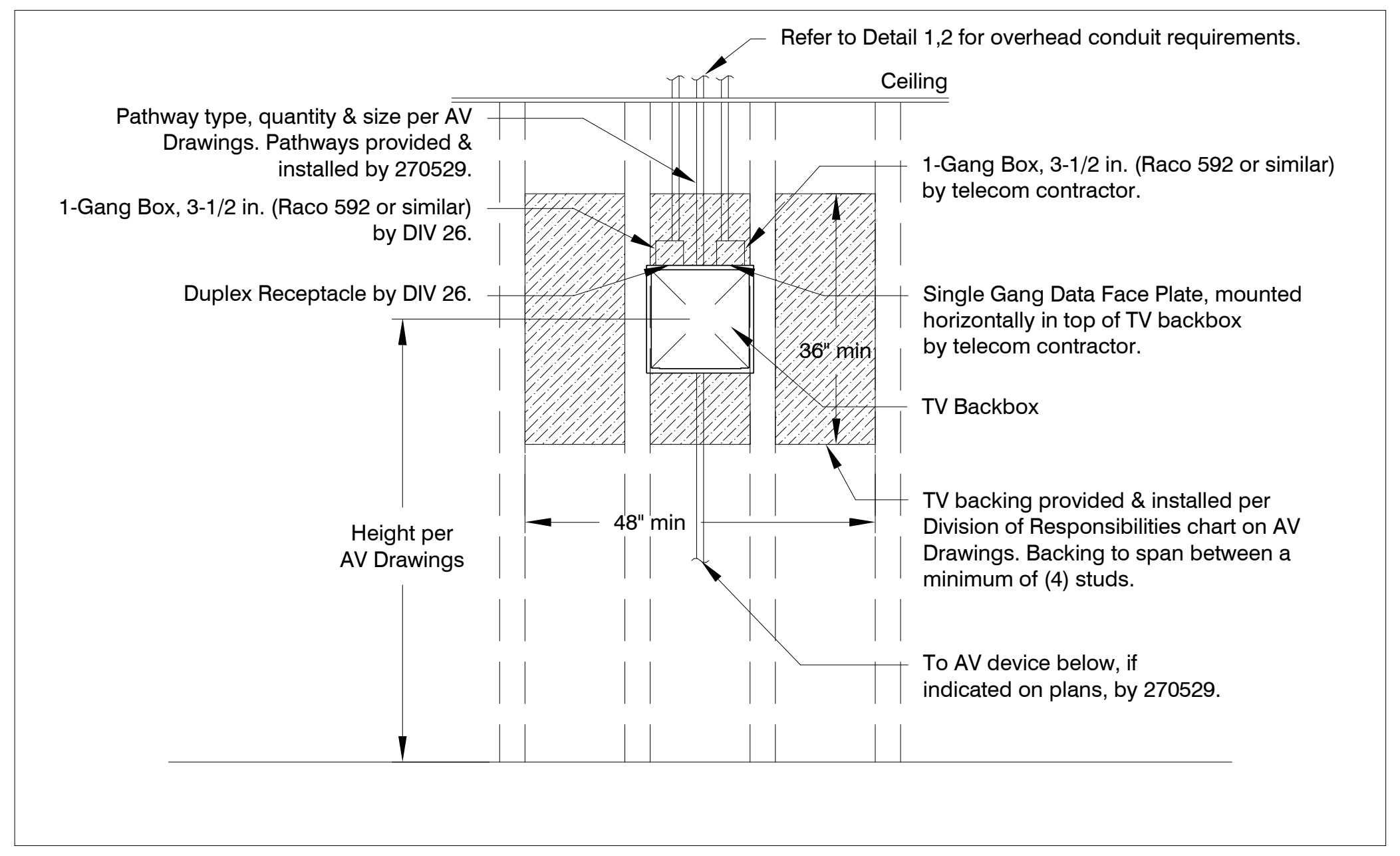
5 Typical Floor-Mounted Devices w/ AV

Scale: None



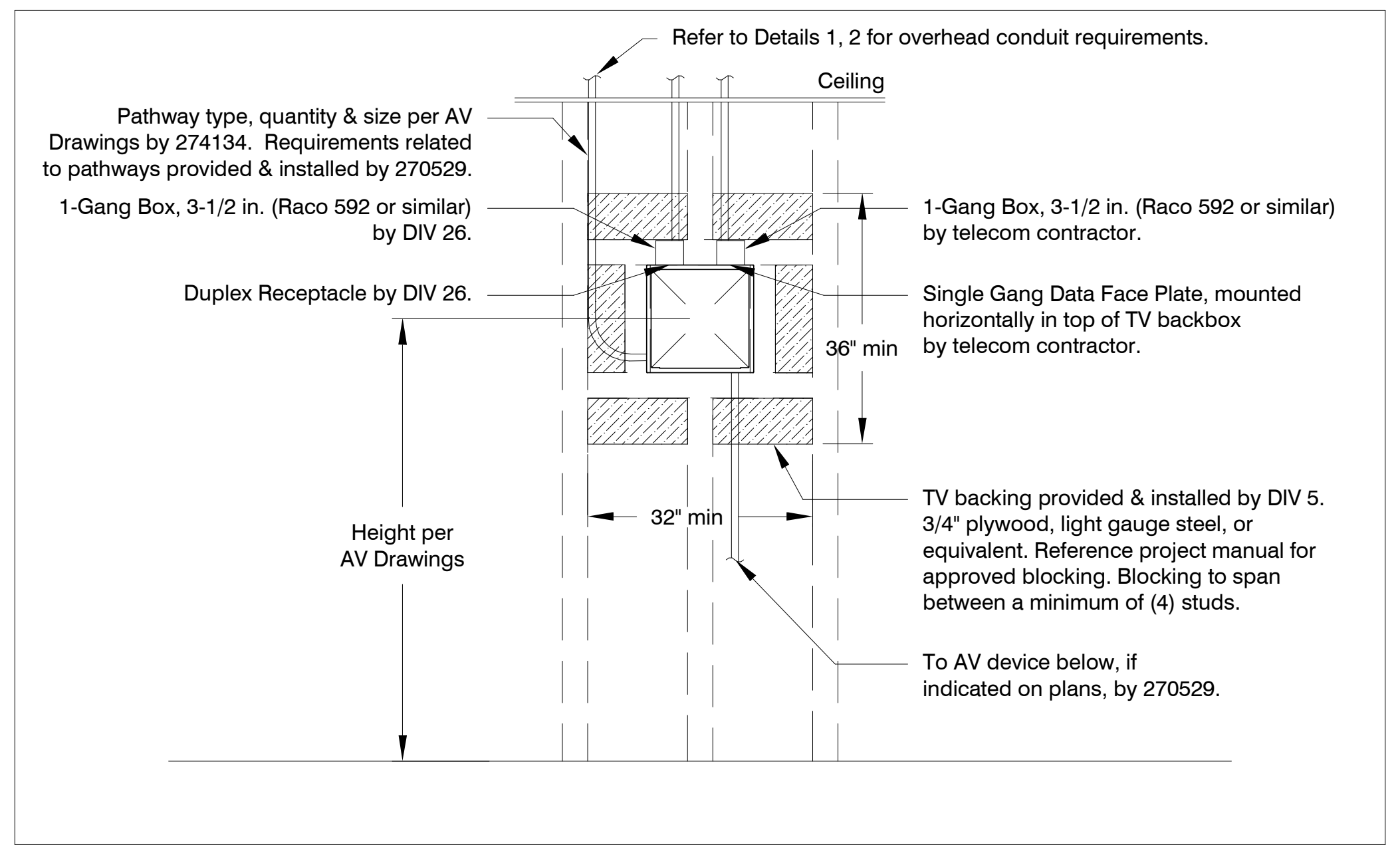
6 Typical TV Mounting Details

Scale: None



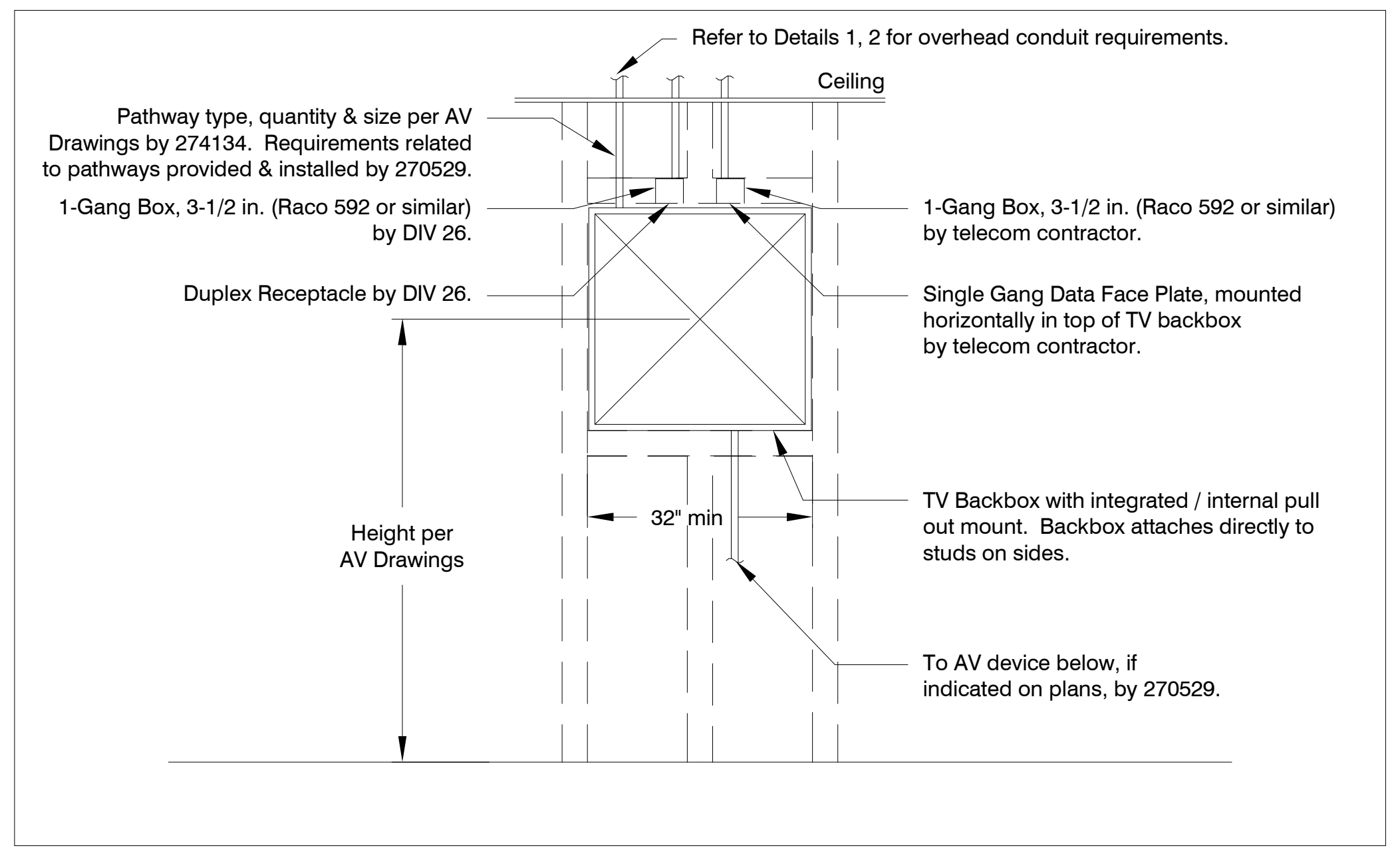
7 Typical TV Backing & Pathways 4-Studs

Scale: None



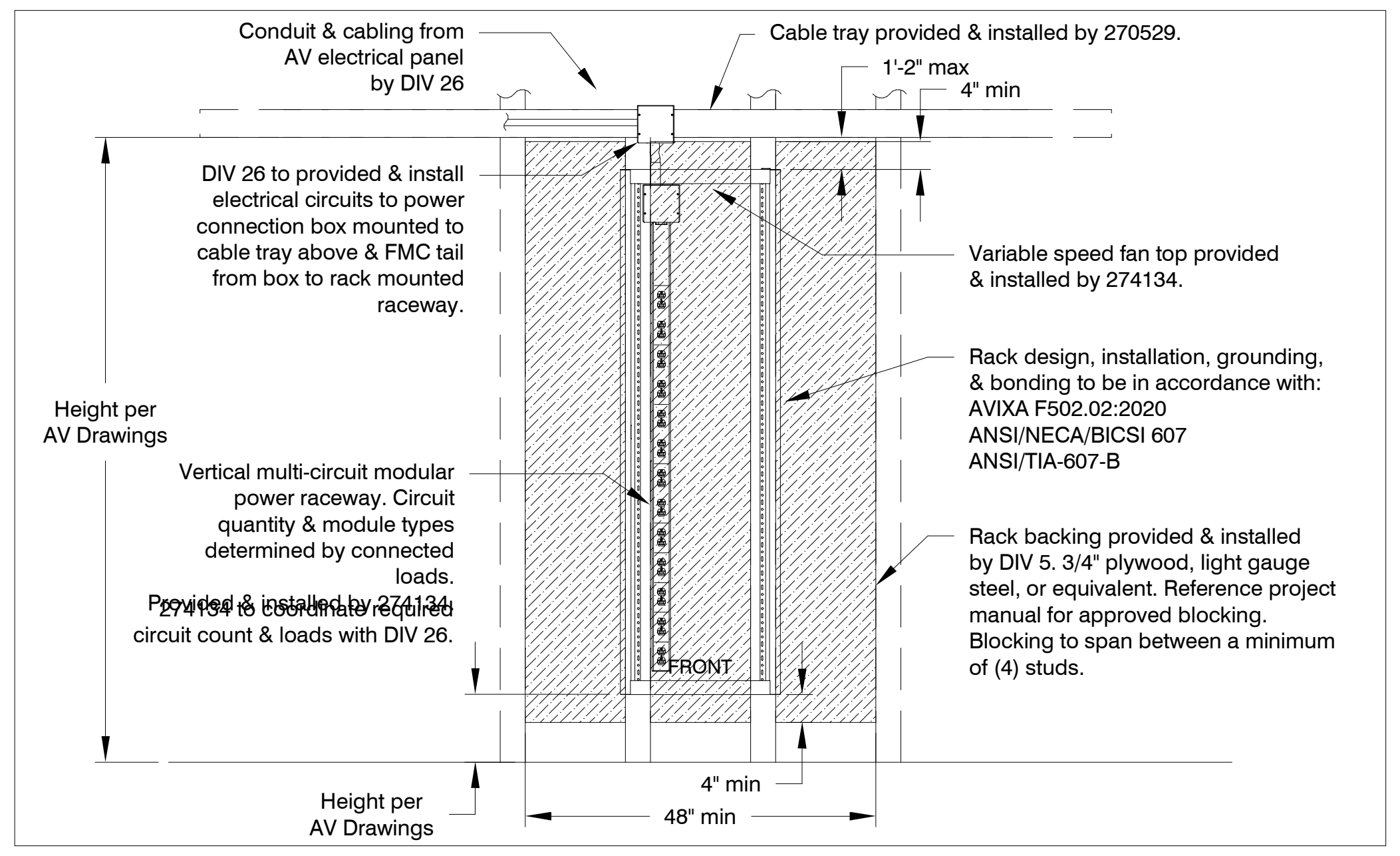
8 Typical TV Backing & Pathways 3-Studs

Scale: None



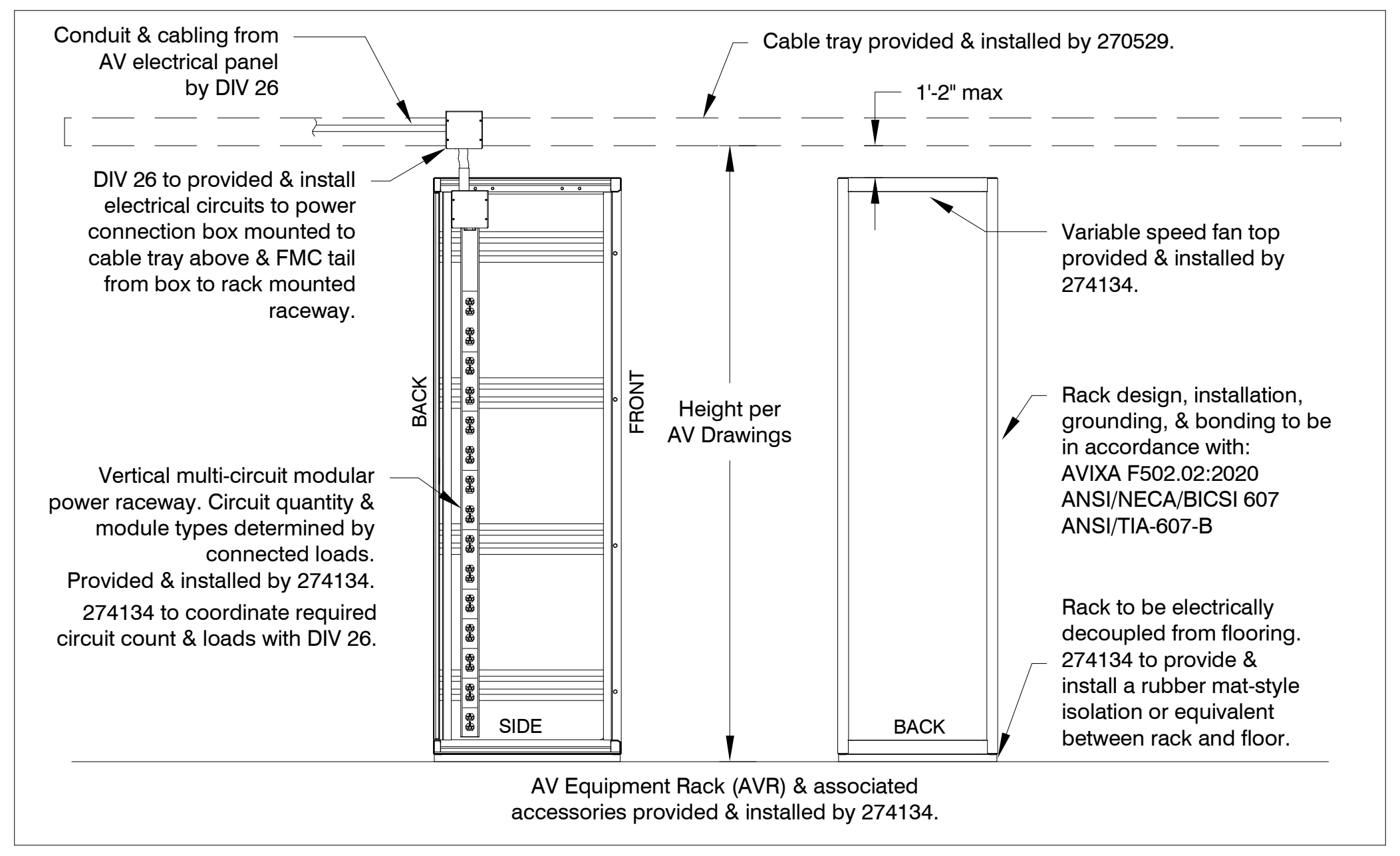
9 Typical TV Backing & Pathways For Recessed Mount

Scale: None



10 Wall-Mounted Rack Detail

Scale: None



11 Floor-Standing AV Rack Details

Scale: None

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

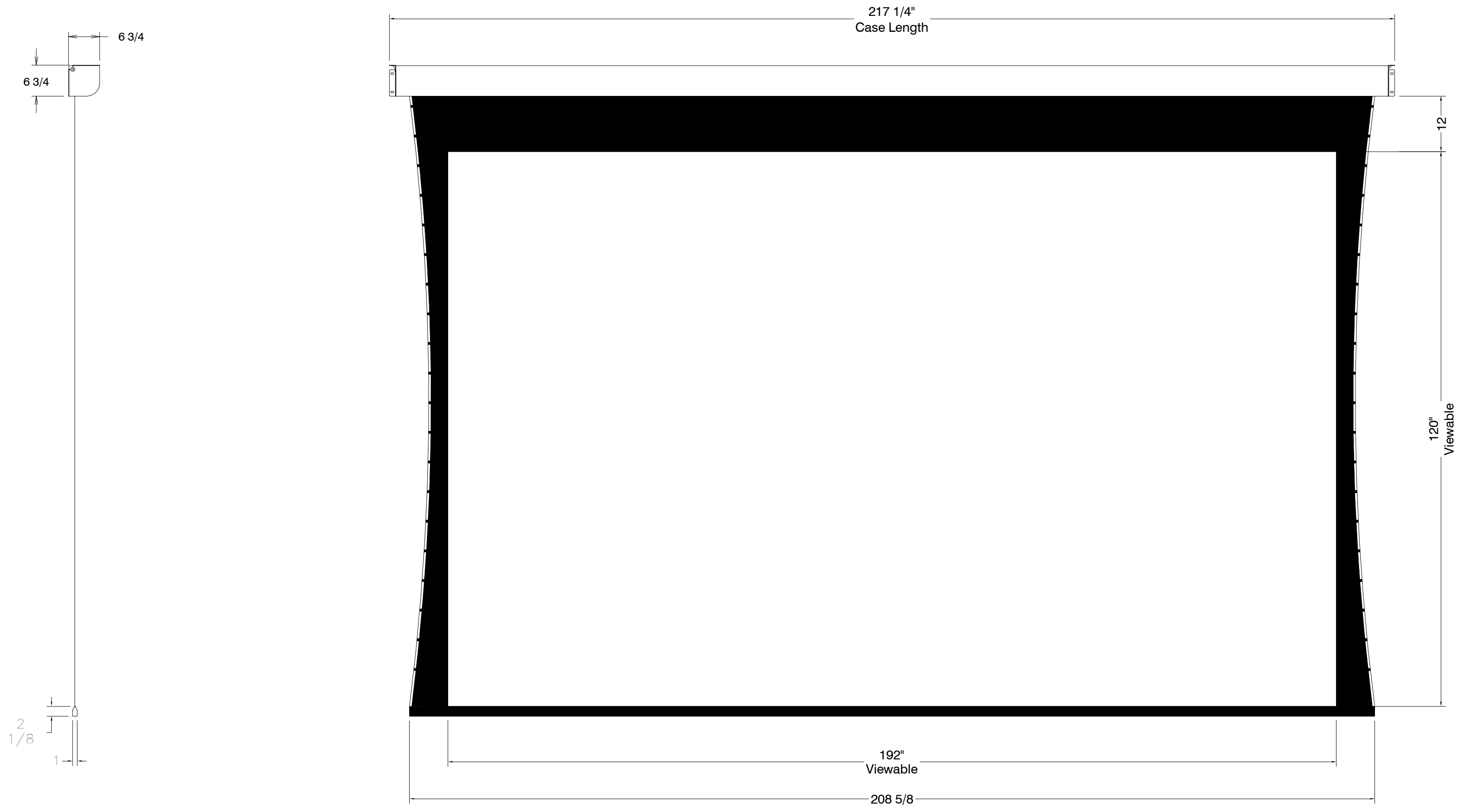
Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

AV - SANDARD DETAILS

AV5.01

of

11/13/2024 11:58:41 AM



1 **Projector Screen Detail**

Scale: None

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

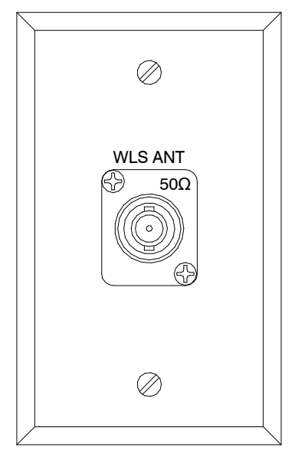
Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

AV - SANDARD DETAILS

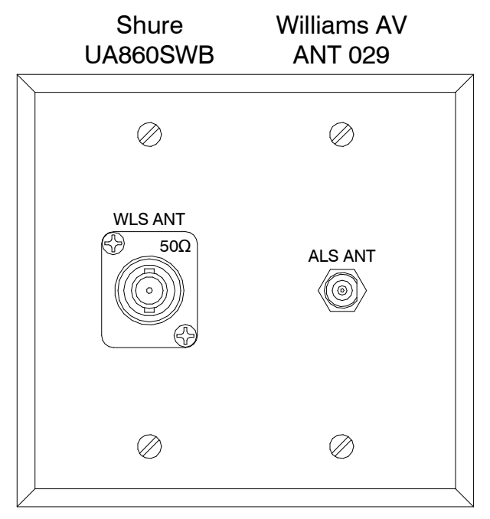
AV5.02

of

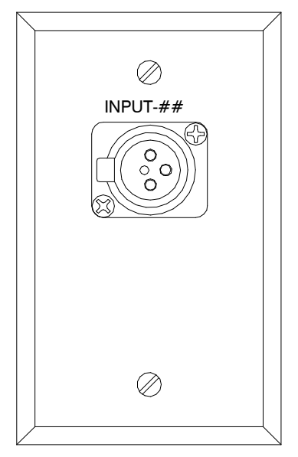
11/13/2024 11:58:41 AM



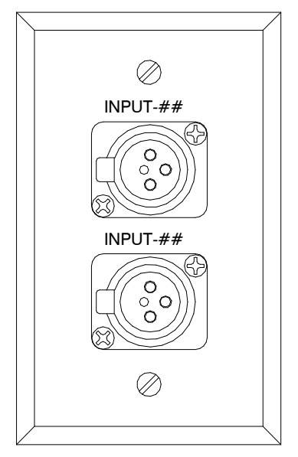
1 **Type An.1**
Scale: 6" = 1'-0"



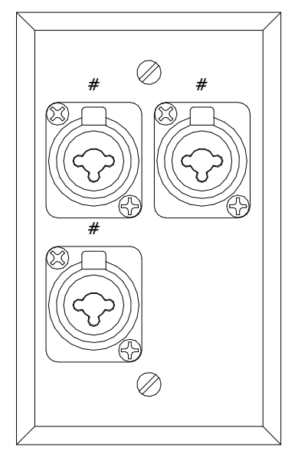
2 **Type An.2**
Scale: 6" = 1'-0"



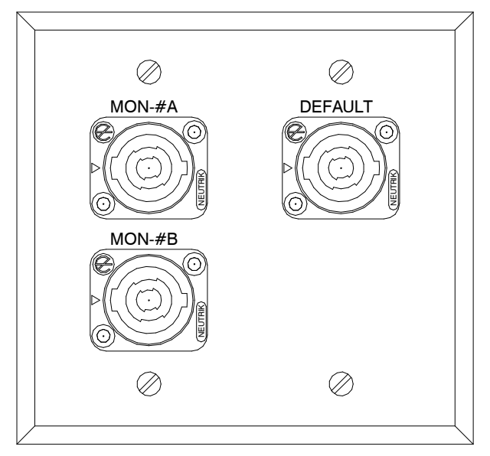
3 **Mc.1**
Scale: 6" = 1'-0"



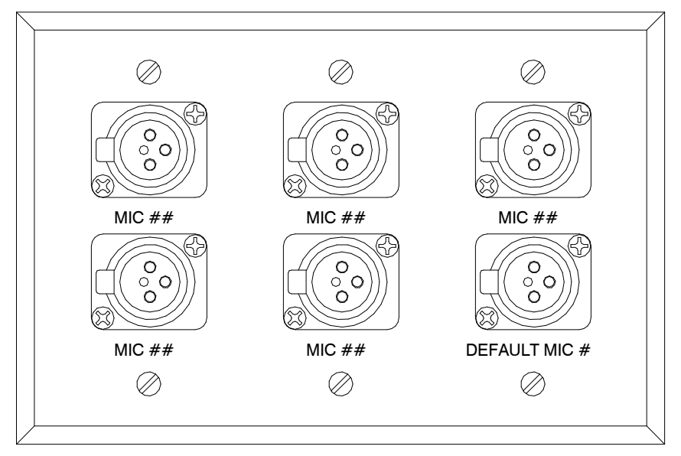
4 **Mc.2**
Scale: 6" = 1'-0"



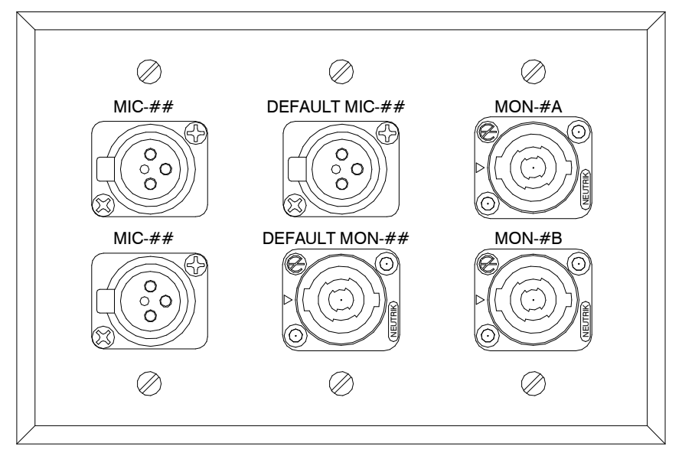
5 **Mc.3**
Scale: 6" = 1'-0"



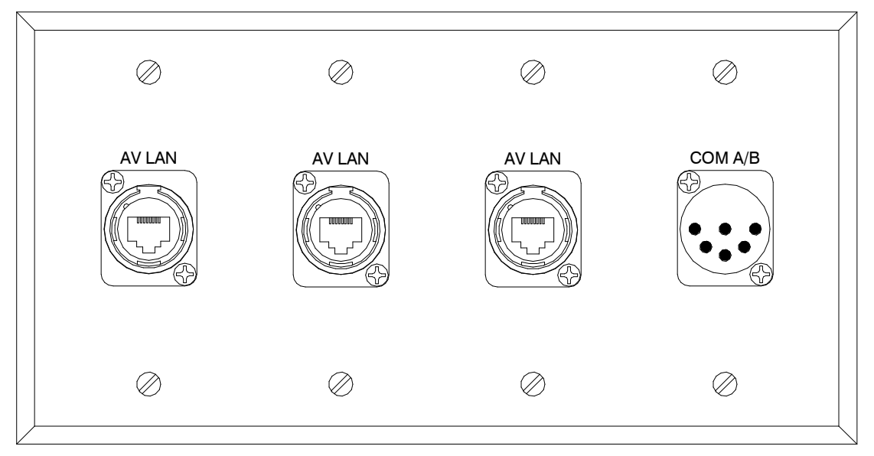
6 **Mon.2**
Scale: 6" = 1'-0"



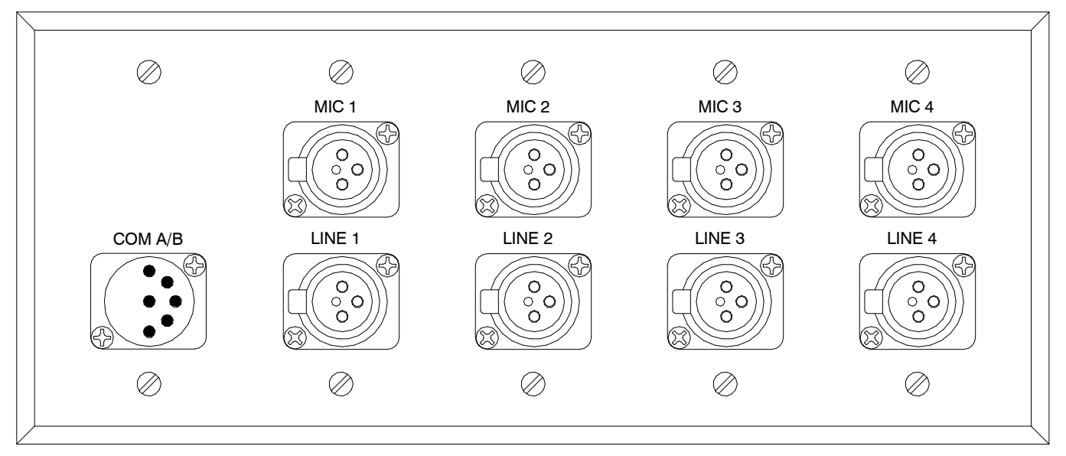
7 **Av.Ds**
Scale: 6" = 1'-0"



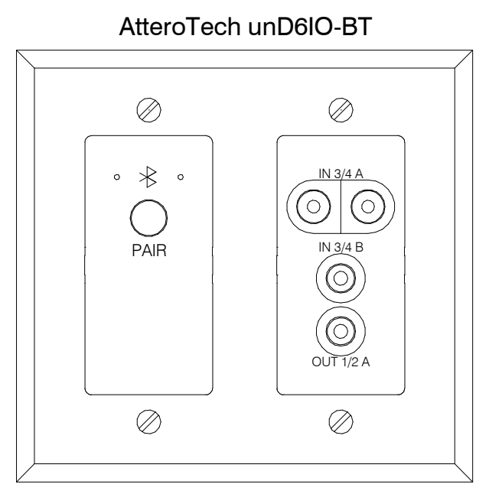
8 **Av.3e**
Scale: 6" = 1'-0"



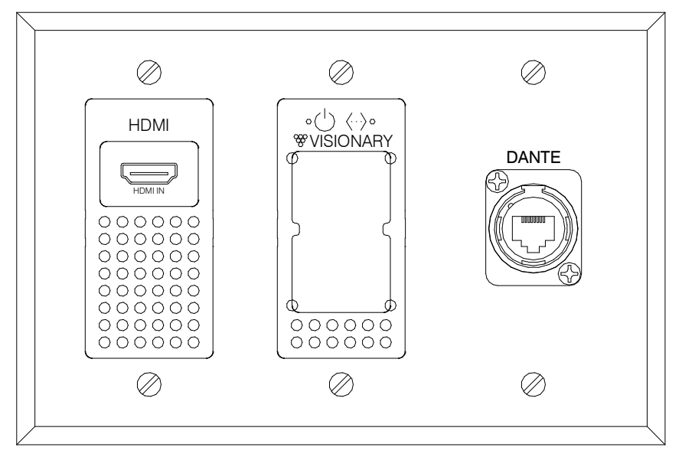
9 **Av.4**
Scale: 6" = 1'-0"



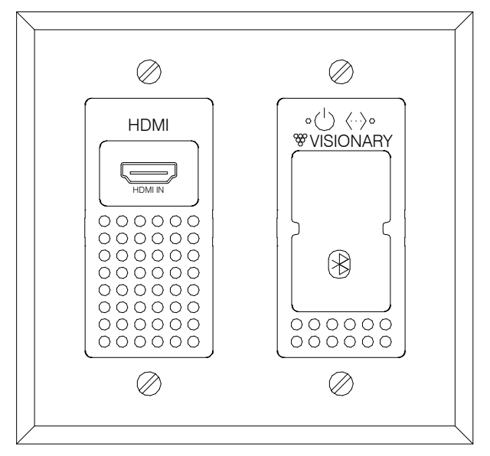
10 **Av.5**
Scale: 6" = 1'-0"



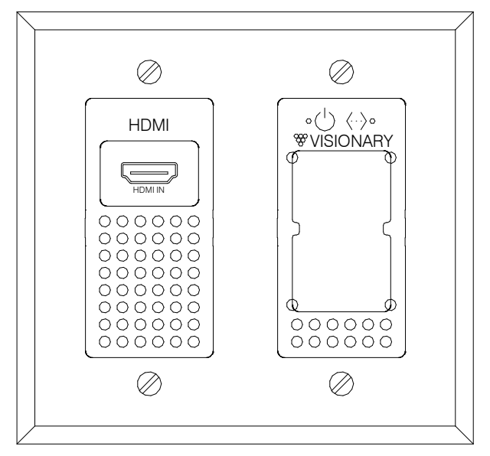
11 **Type Bt.2**
Scale: 6" = 1'-0"



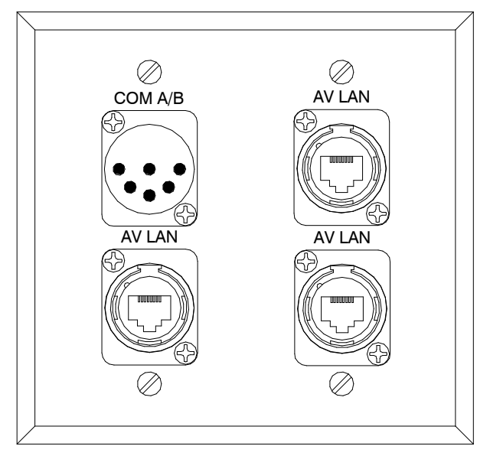
12 **Cx.A**
Scale: 6" = 1'-0"



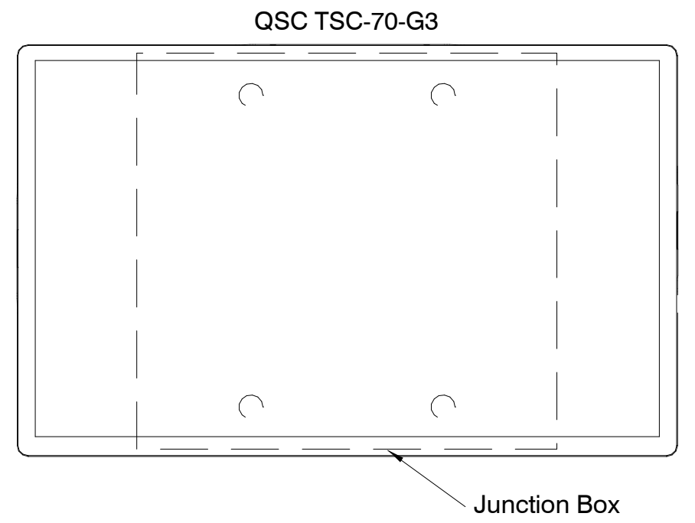
13 **Cx.B**
Scale: 6" = 1'-0"



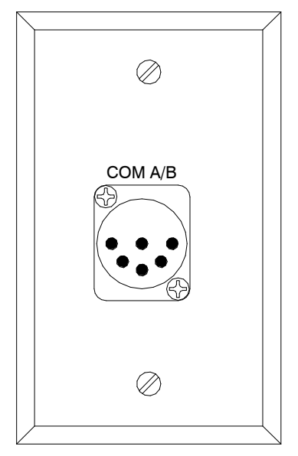
14 **Cx.C**
Scale: 6" = 1'-0"



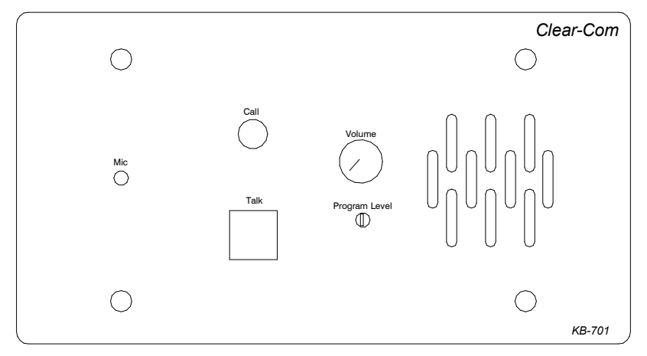
15 **Fb.2e**
Scale: 6" = 1'-0"



16 **Type Ts.7**
Scale: 6" = 1'-0"



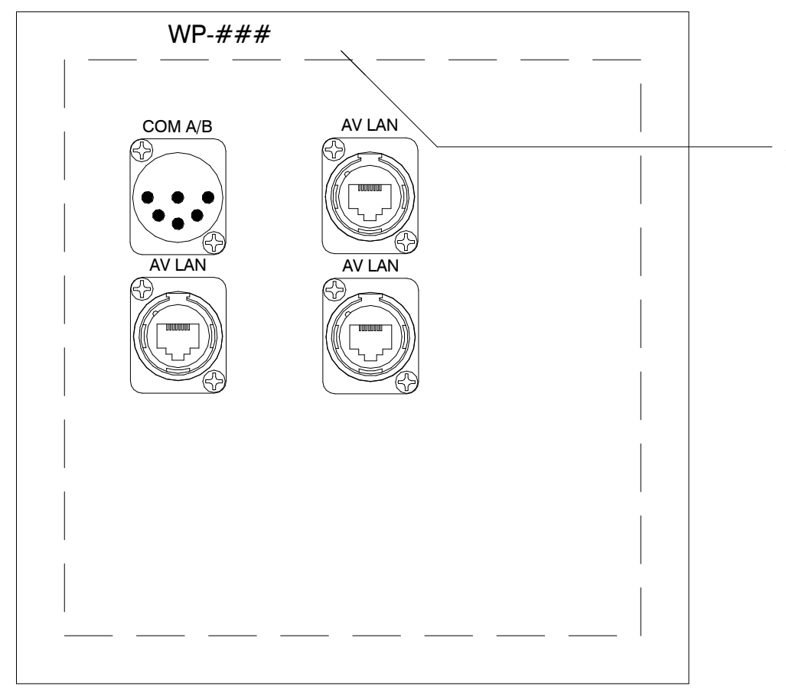
17 **Ic.1**
Scale: 6" = 1'-0"



18 **Type Ic.S**
Scale: 6" = 1'-0"

Typical for all wall boxes:
All flush mounted boxes shall have panels with 1/2" overhang on all sides. Example: a 4"x4" back box will have a 5"x5" panel.

For surface mounted boxes, the panel shall match the dimension of the back box.



ALL plates shall be engraved with unique box number.

19 **Av.8**
Scale: 6" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

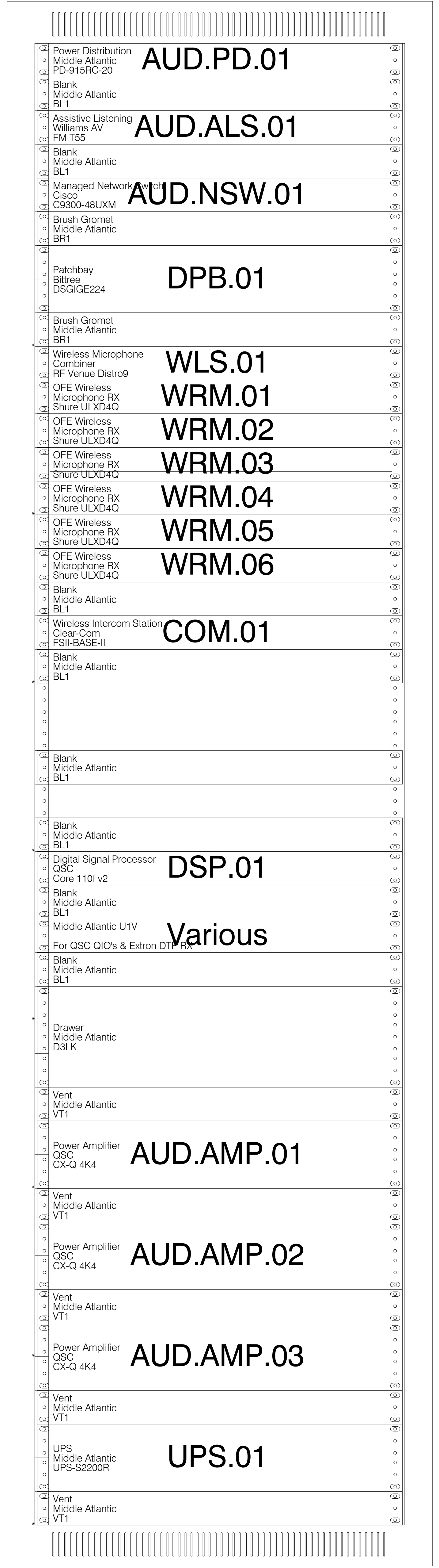
AV - PANEL DETAILS

AV5.20

of

11/13/2024 11:58:42 AM

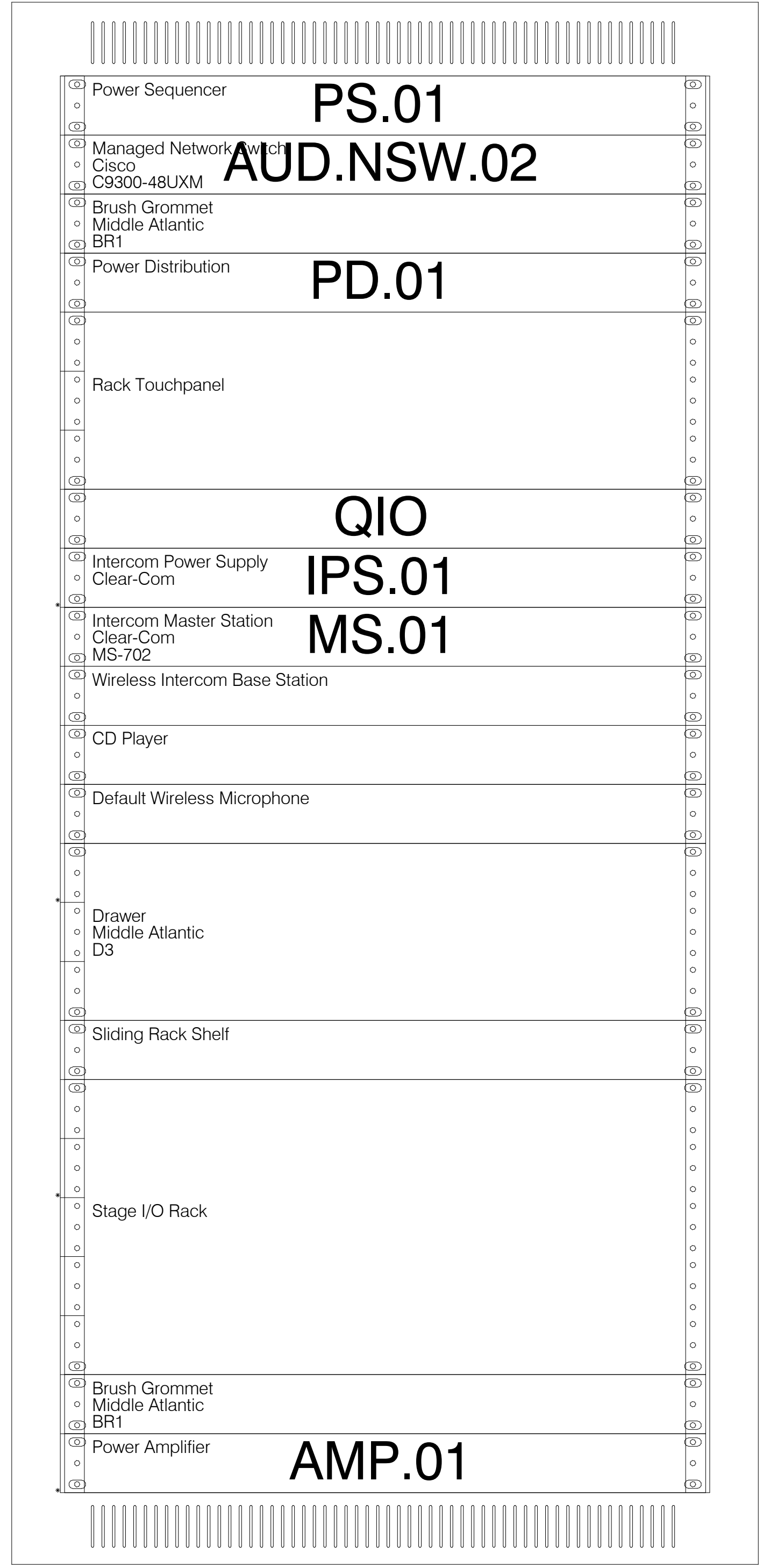
AVR.01



Existing Rack

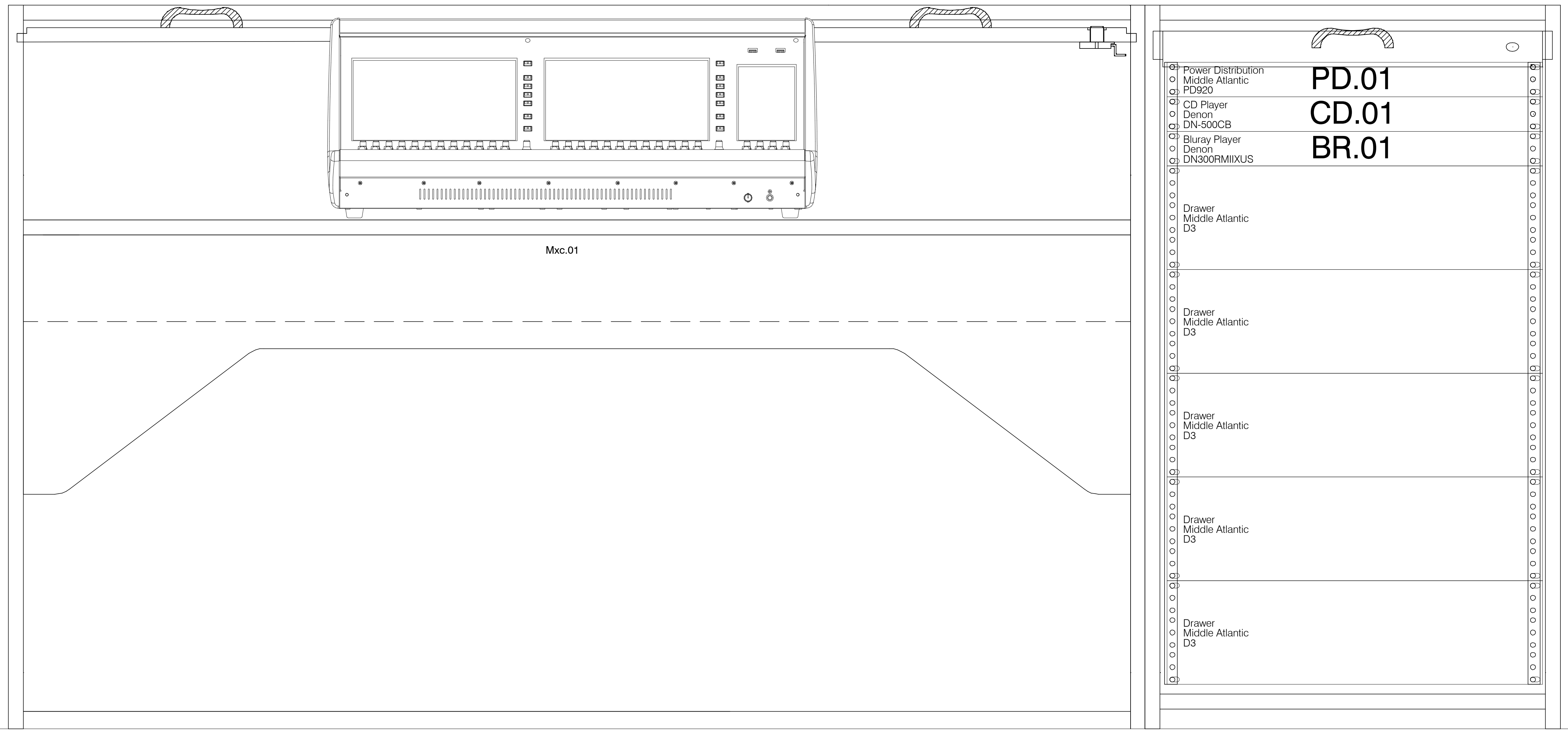
Middle Atlantic Products
BGR-45-32

AVR.02



Existing Rack

Middle Atlantic Products
DWR-24-22



Additional MAP rack components per rack to include, but are not limited, to the following:

- BSPN-45-32 (1 per room)
- LL-VP2110
- LACE-44-OWP
- LL-H4A21
- FWD-LT-UTL-44-45-D
- MPR-#A
- MPR-JB663A
- M-2X20A
- M-30TL-HWA
- M-20A
- FWD-EB#
- FWD-VT#
- D2LK
- DWRSR-ZL

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

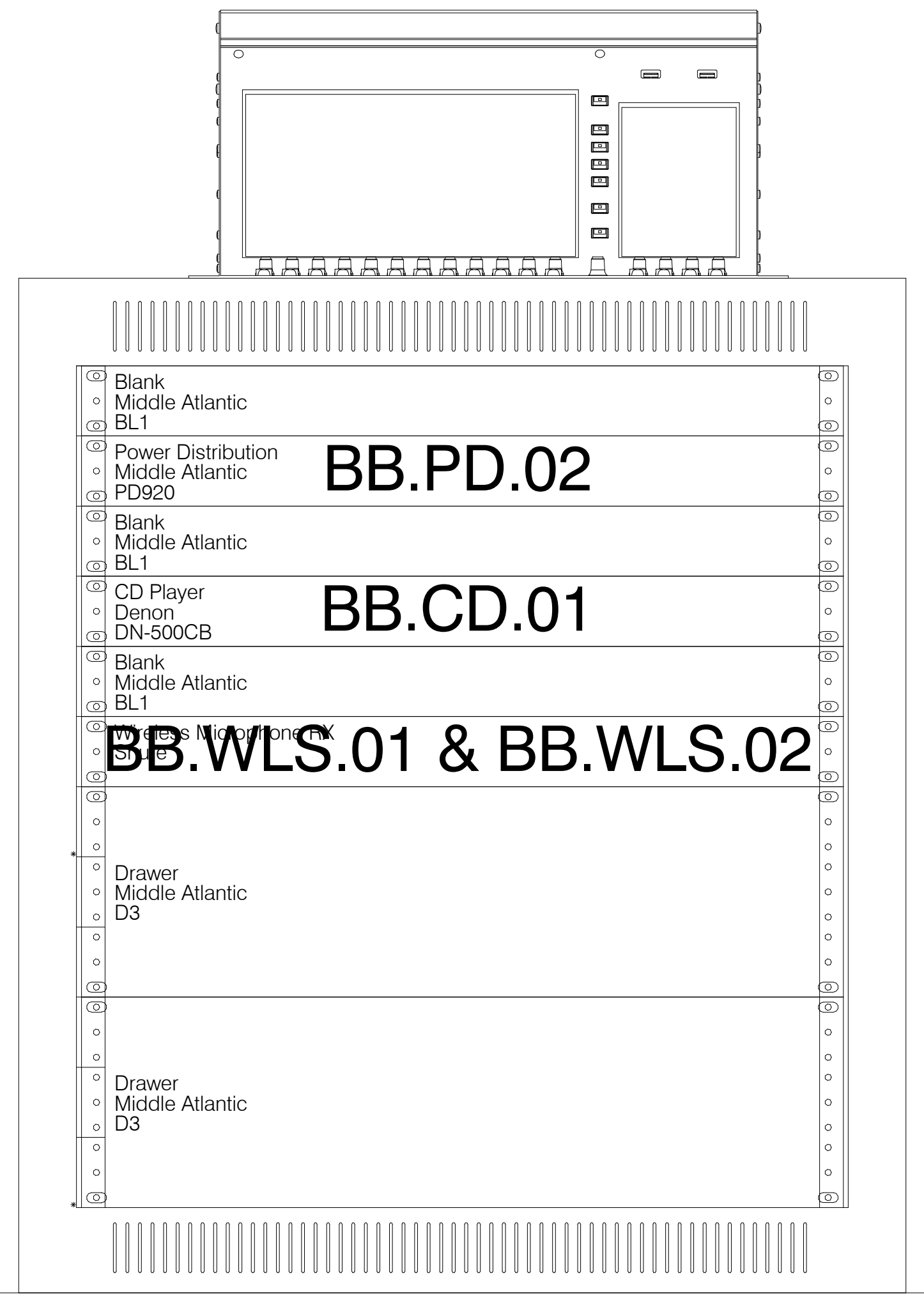
Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - RACK DETAILS

AV5.40

of

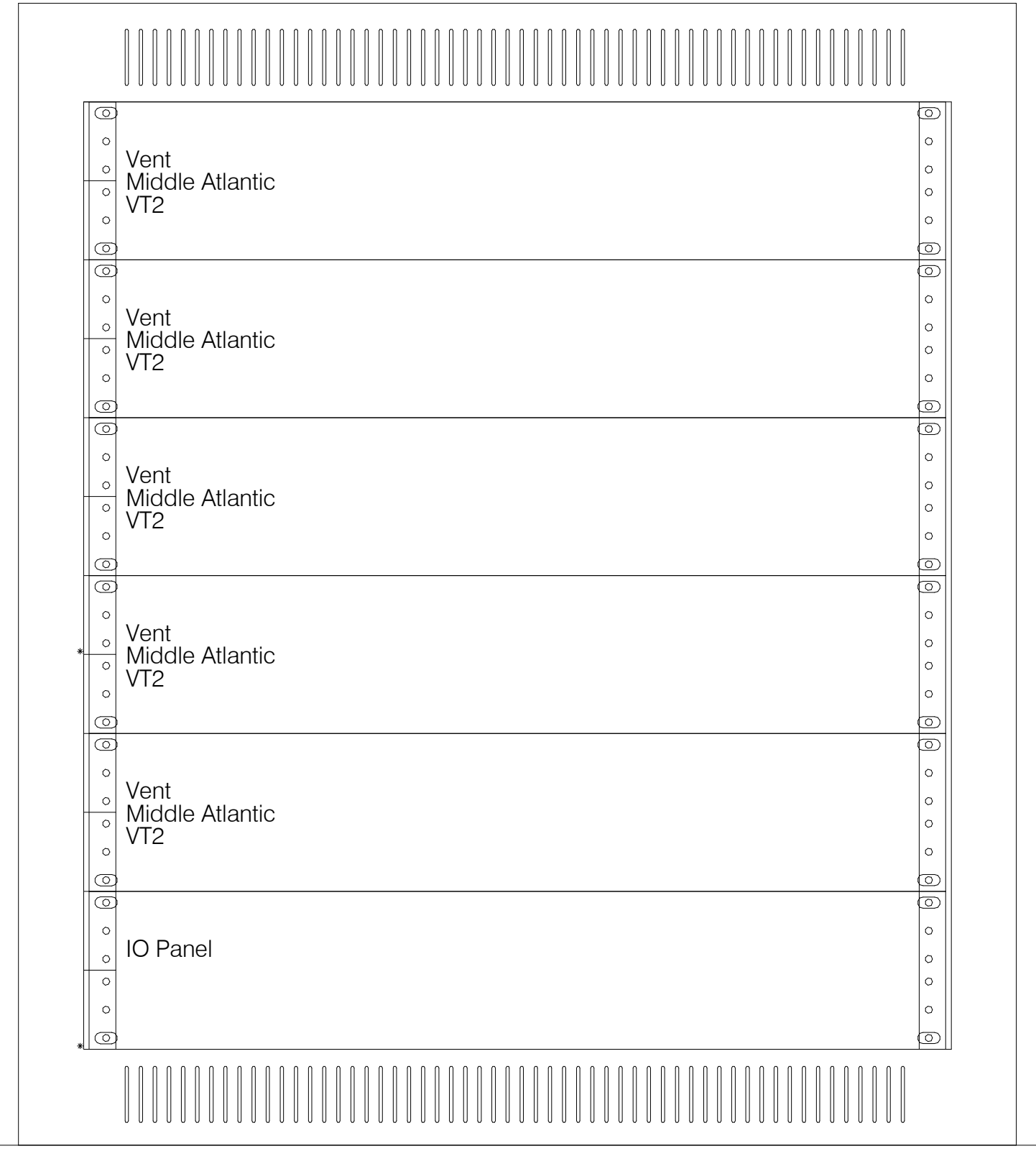
11/13/2024 11:58:42 AM



Rack

Grundorf
T8-TLR1224

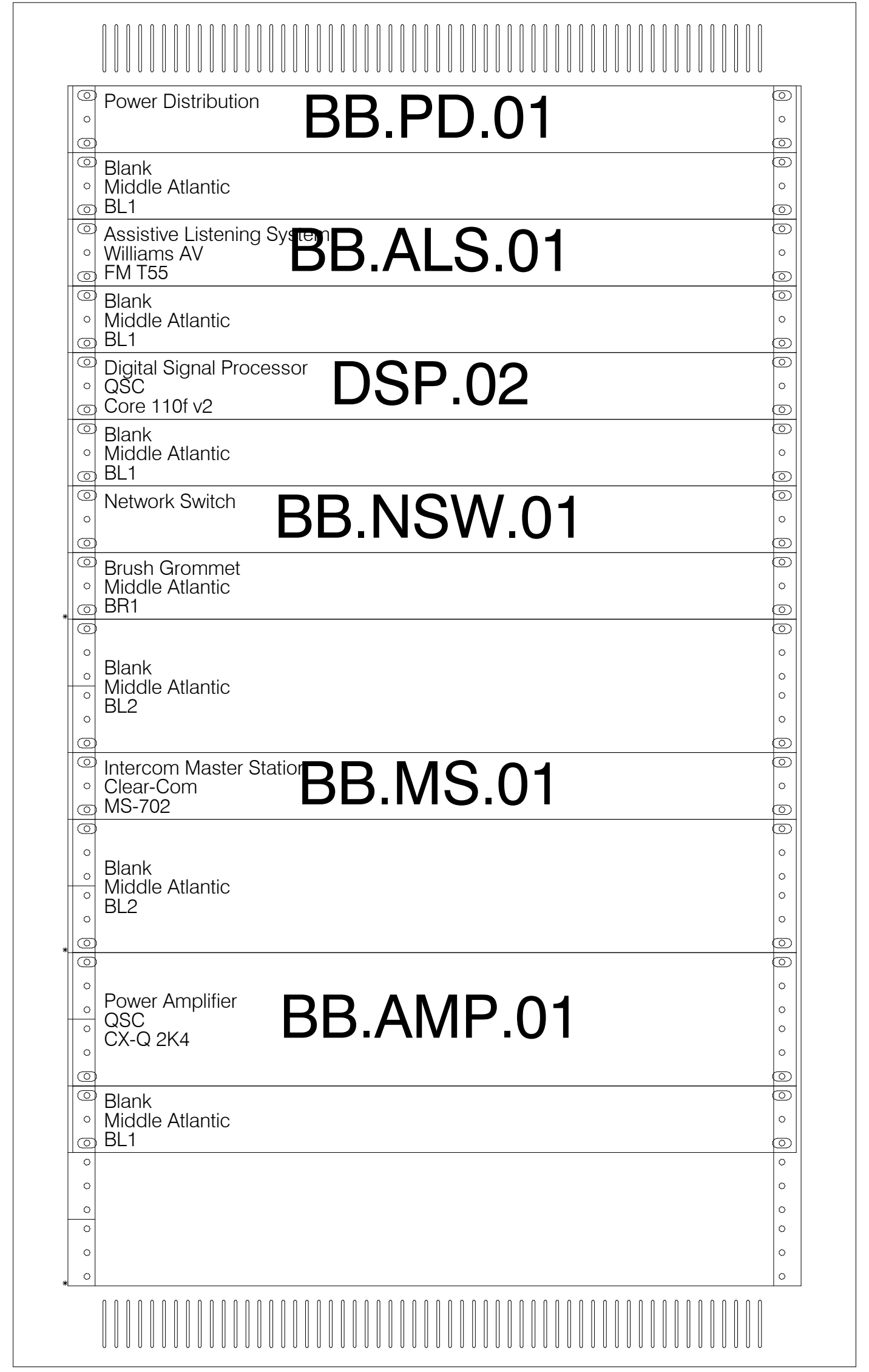
AVR.04



Rack

Grundorf
T8-AR1616

AVR.03



Rack

Middle Atlantic Products
DWR-18-26

Additional MAP rack components per rack to include, but are not limited, to the following:

- BSPN-45-32 (1 per room)
- LL-VP2110
- LACE-44-OWP
- LL-H4A21
- FWD-LT-UTL-44-45-D
- MPR-#A
- MPR-JB663A
- M-2X20A
- M-30TL-HWA
- M-20A
- FWD-EB#
- FWD-VT#
- D2LK
- DWRSR-ZL

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

AV - RACK DETAILS

11/13/2024 11:58:42 AM

1 Auditorium Audio System Schematics

Scale:None

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

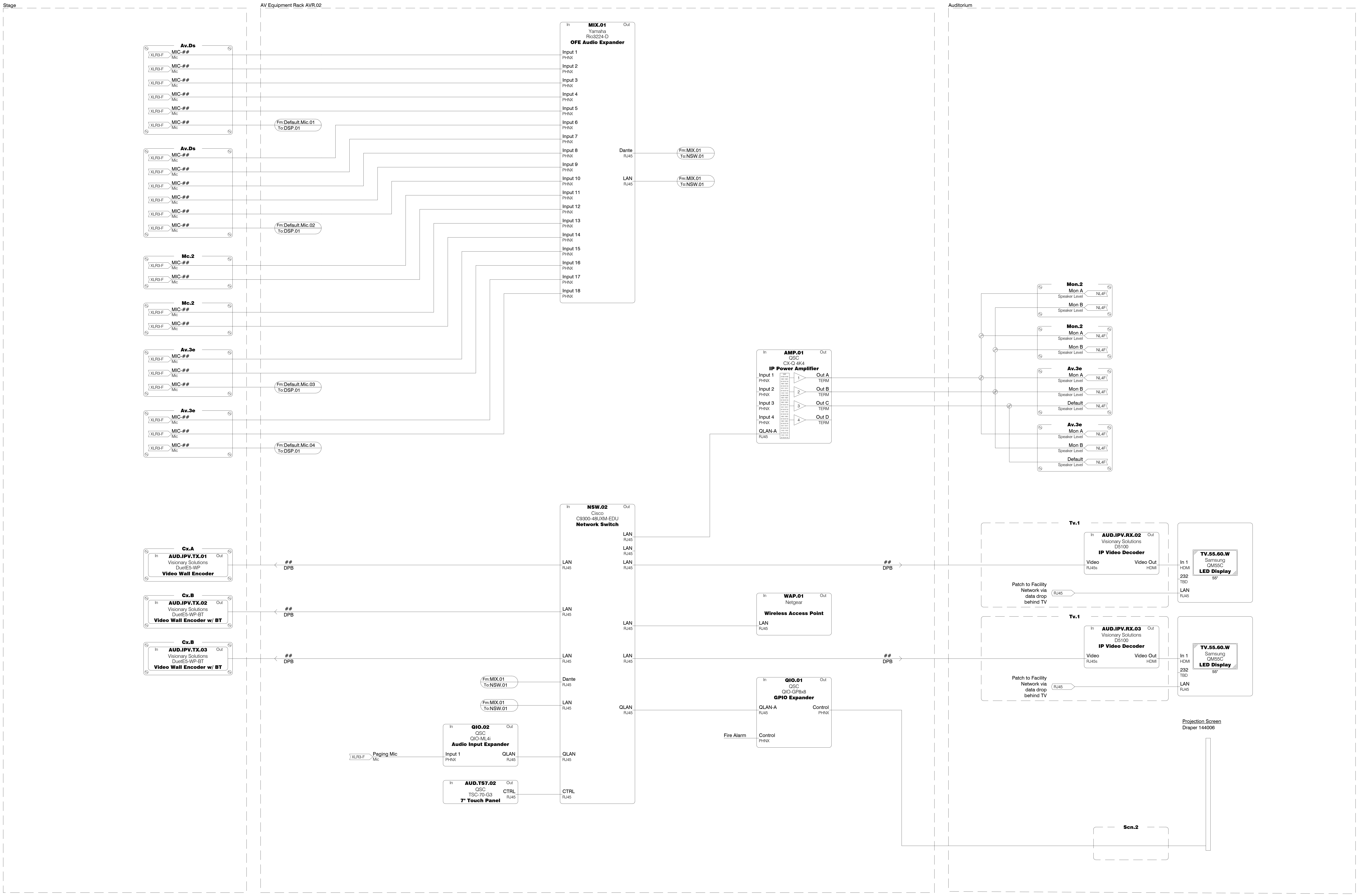
AV - SCHEMATICS

AV7.30

of

11/13/2024 11:58:43 AM

Autodesk Docs://23072_CFISD_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt



1 Auditorium Audio System Schematics

Scale:None

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

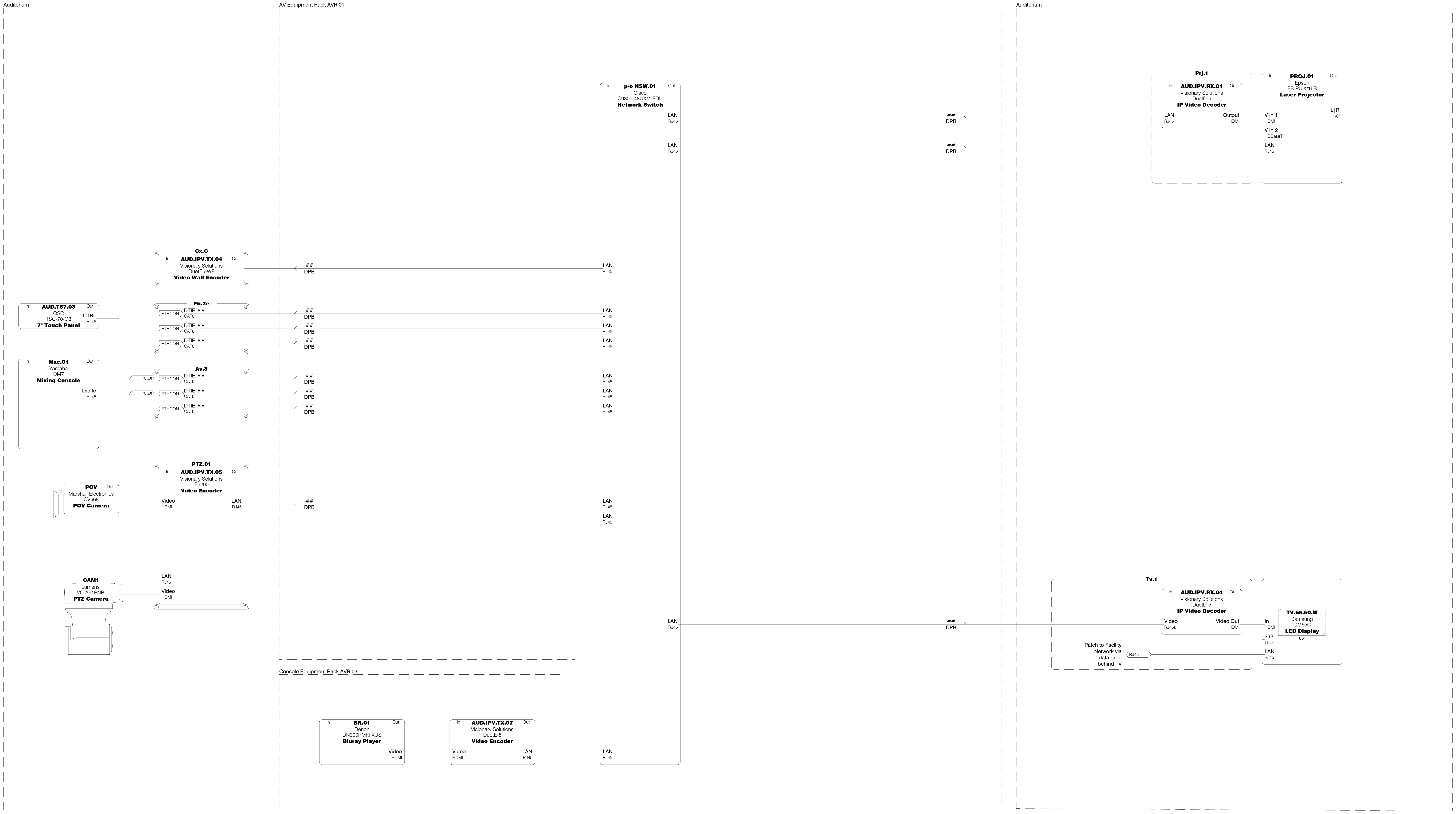
Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - SCHEMATICS

AV7.31

of

11/13/2024 11:58:43 AM



1 **Auditorium Network/Audio/Video System Schematics**

Scale: None

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

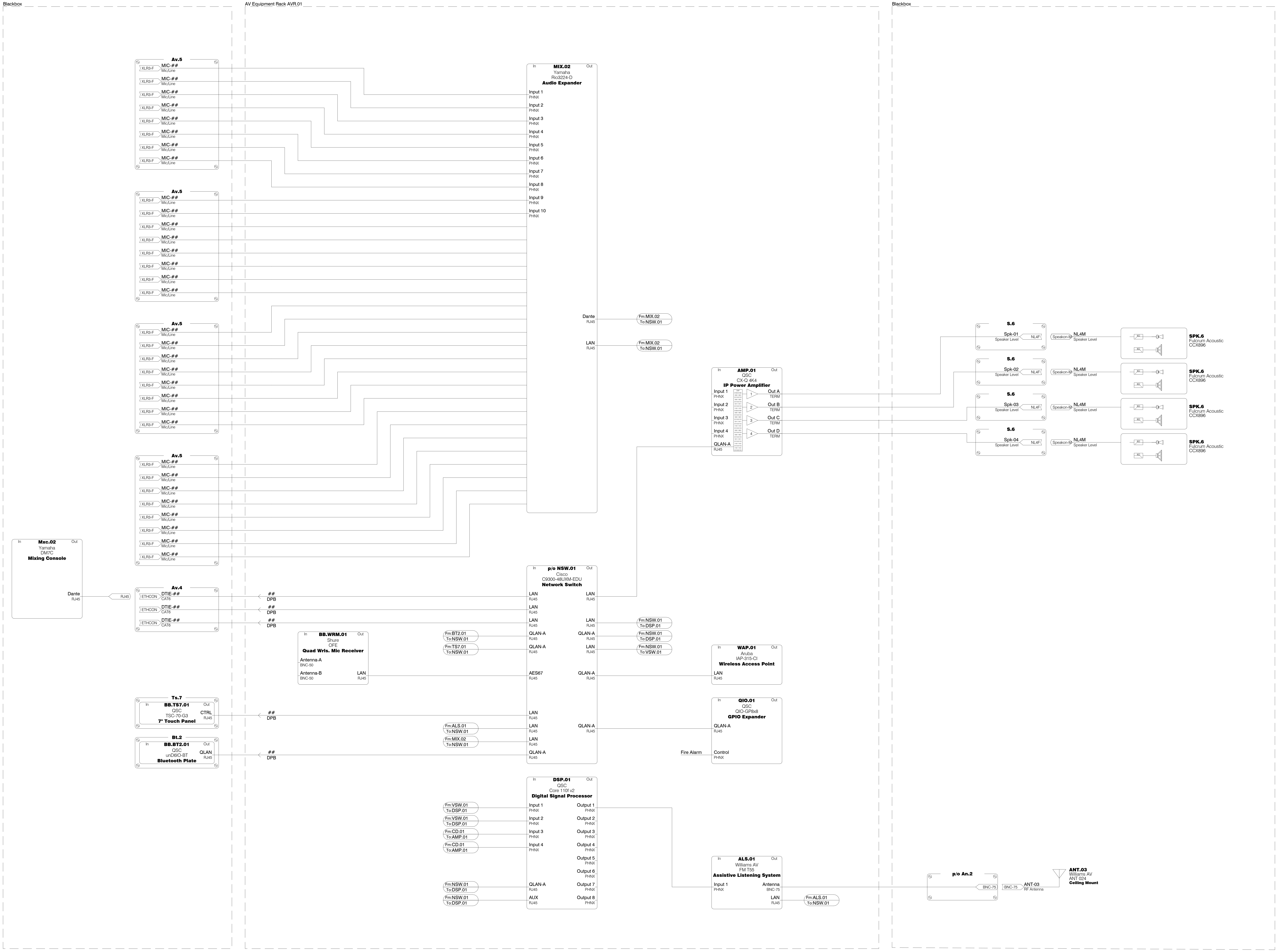
Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - SCHEMATICS

AV7.32

of

11/13/2024 11:58:43 AM



1 **Blackbox System Schematics**

Scale: None

Autodesk Docs://23072_CFISD_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston, TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

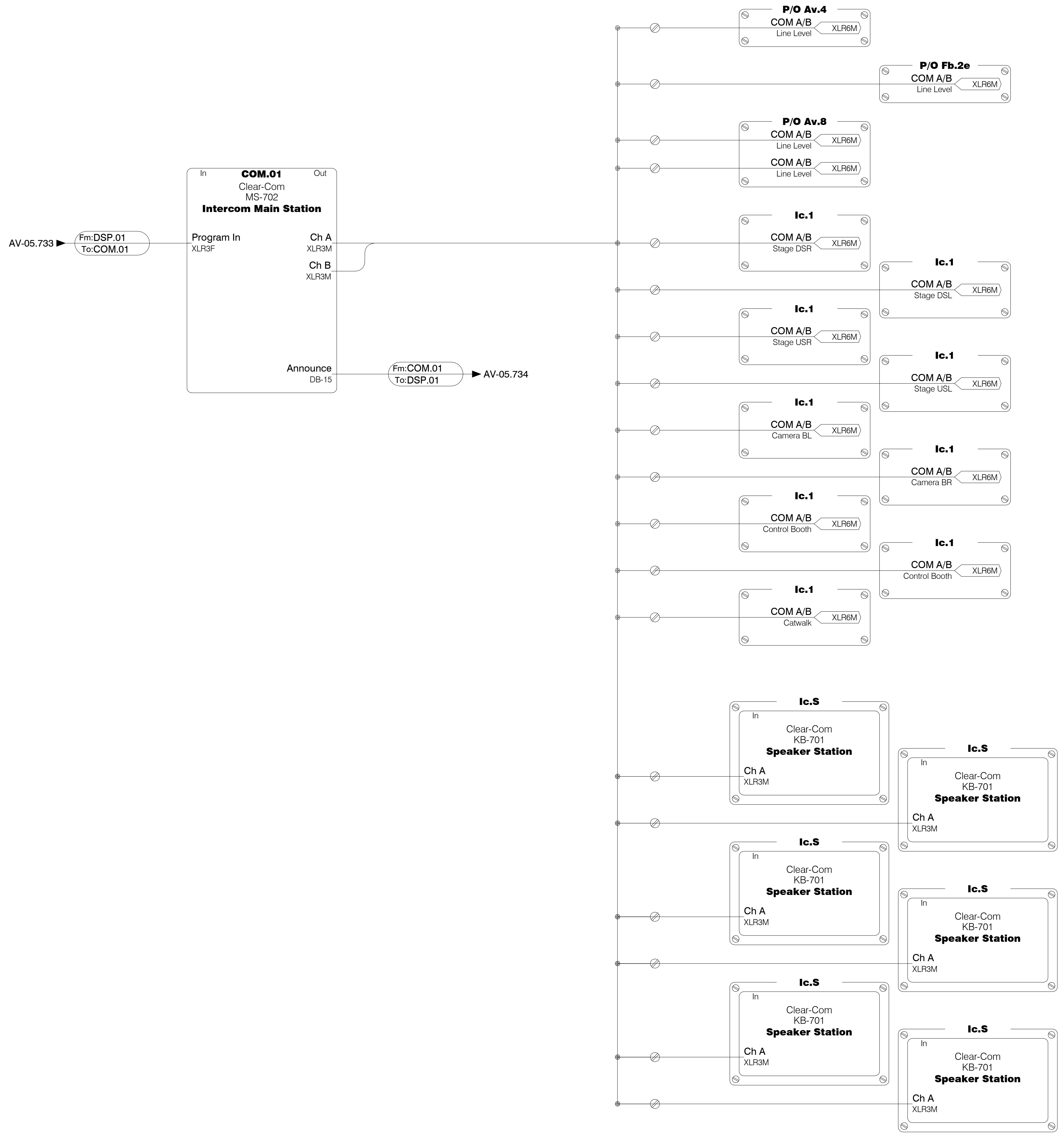
Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

AV - SCHEMATICS

AV7.33

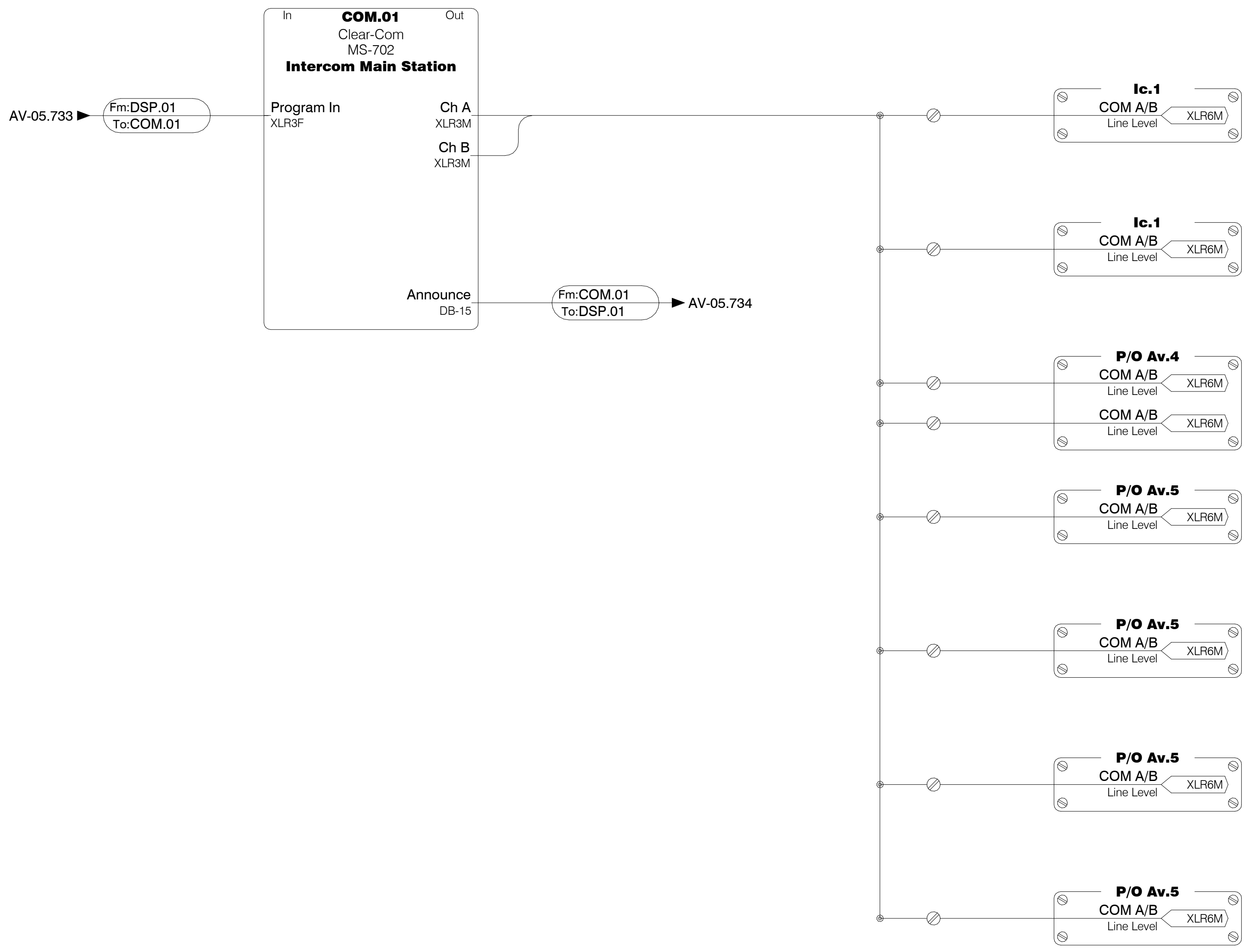
of

11/13/2024 11:58:44 AM



1 **Auditorium Intercom Schematic**

Scale: None



2 **Blackbox Intercom Schematic**

Scale: None

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

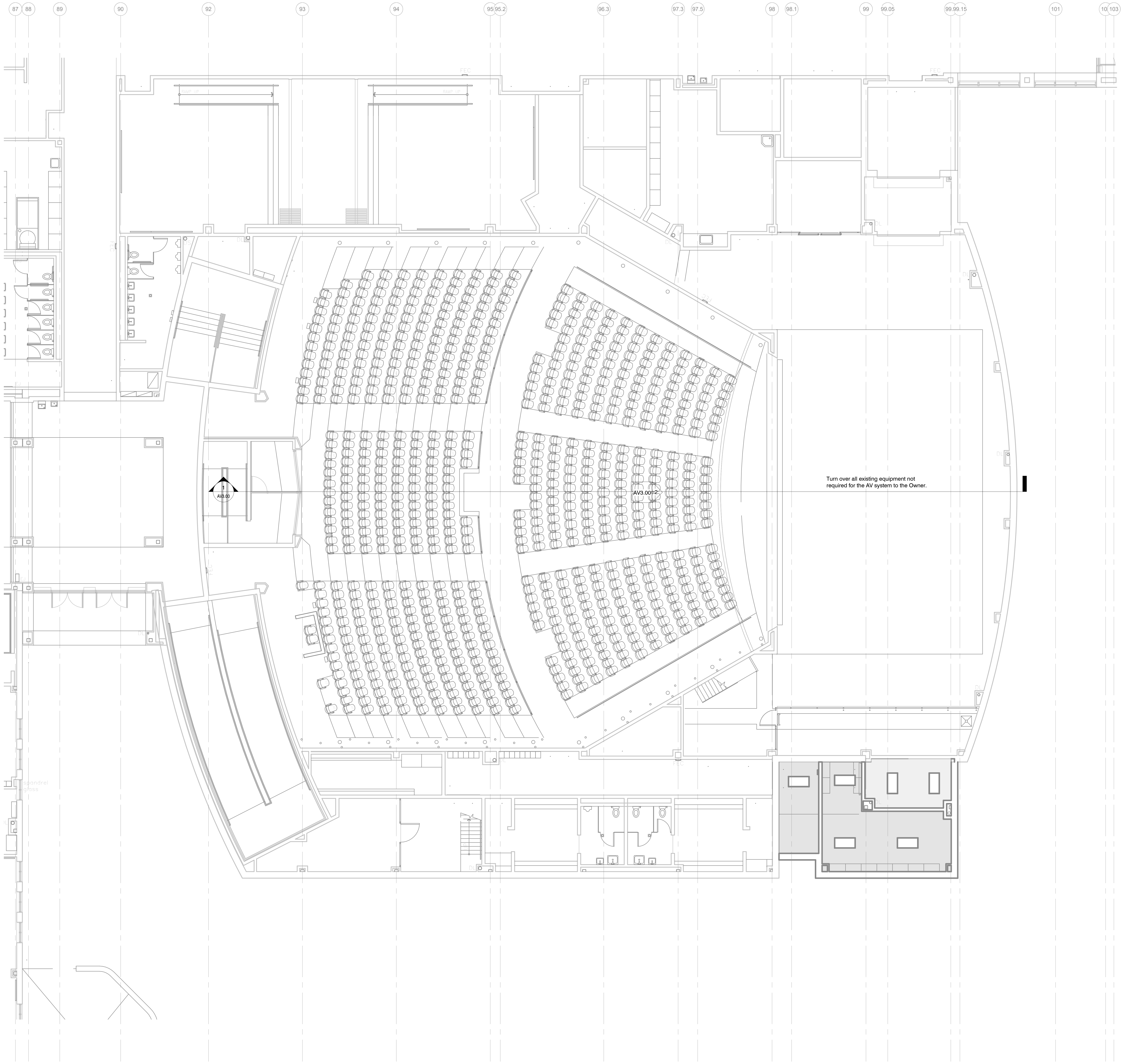
AV - SCHEMATICS

AV7.34

of

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

11/13/2024 11:58:46 AM



Turn over all existing equipment not required for the AV system to the Owner.

1 AV DEMO - 1ST FLOOR PLAN - AREA 'F'

Scale: 1/8" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

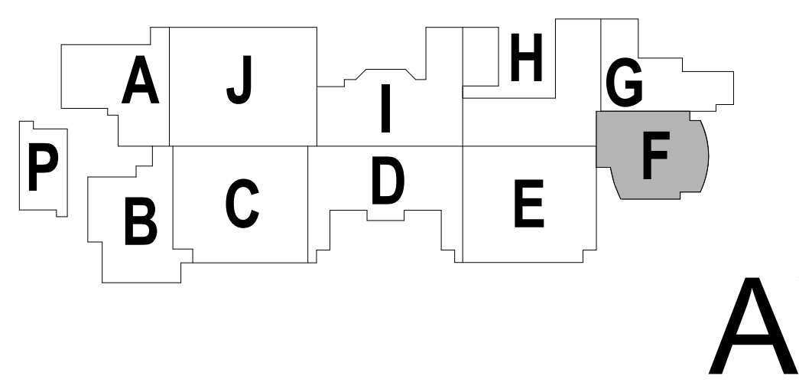
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

AV DEMO - FLOOR
PLAN AREA 'F'

AVD2.10F

____ of ____

1 Symbol Legend

☐ XXX-### FLUSH, PIPE MOUNT, OR SURFACE WALL MOUNT BOX / DEVICE
☐ XXX -### FLUSH FLOOR OR CEILING MOUNTED BOX / DEVICE
▭ XXX -### GRIDIRON JUNCTION BOX / DEVICE

XXX

RFB	RIGGING FLOOR BOX
RWB	RIGGING WALL BOX
RJB	RIGGING JUNCTION BOX
RJBC	RIGGING JUNCTION BOX CONTROL/POWER
RRP	RIGGING RELAY PANEL
RCOS	RIGGING COMPANY SWITCH
RDS	RIGGING DISCONNECT SWITCH
RHV	RIGGING HIGH VOLTAGE WIREWAY
RLV	RIGGING LOW VOLTAGE WIREWAY
RMCC	RIGGING MOTOR CONTROL CENTER
RCP	RIGGING CONTROL PANEL

YY

C	CONTROL WIRING ONLY (<=28V)
P	POWER WIRING ONLY (>28V)
CP	CONTROL AND POWER WIRING WITH DIVIDER

⊖	120V @ 20A WALL DUPLEX OUTLET
⊕	120V @ 20A WALL QUAD OUTLET
⊖	120V @ 20A WALL DUPLEX OUTLET
⊕	120V @ 20A WALL QUAD OUTLET
△	208V @ 30A WALL SIMPLEX OUTLET
▼	NETWORK PORT , 2 RJ45

2 General Notes

1. All 120V, 20A circuits to terminate in NEMA 5-20R duplex UON.
2. All 208V, 20A circuits to terminate in NEMA L6-20R UON.
3. All 208V, 30A circuits to terminate in NEMA L6-30R UON.
4. Leave a minimum 18" service loop at all box locations for control cables UON.
5. Leave a minimum 18" service loop at all box locations for power cables UON.
6. All control and power cables shall be labelled with a unique identifier which shall be noted on all drawings to allow for proper identification by all parties.
7. All control cable terminations shall be completed by the stage rigging contractor in accordance with the device manufacturer's recommendations. All cables shall be cut to proper length and bundled with labels clearly visible to allow for easy identification.
8. All power cable terminations shall be completed by the Division 26 contractor in accordance with device manufacturers' recommendations. All cables shall be cut to proper length and bundled with labels clearly visible in order to allow for easy identification.
9. All mounting height dimensions are to the center of the box UON.

3 Conduit Notes

1. All systems wiring will be in conduit unless approved by the Consultant or otherwise noted on drawings.
2. There are minimum conduit separations that must be maintained between conduits carrying wire of different signal groups. It is important to note that while different signals may exist in a single box, it is not appropriate to run more than one signal group in a single conduit. Refer to tables below for conduit separation distances.
3. It will be necessary at times for conduits of different signal groups to cross in close proximity. The conduit paths must be designed to cross at 90 degrees to each other.
4. The minimum conduit size shall be 3/4" and the conduit should be sized for max. 40% fill, or less if required by prevailing code.
5. Per TIA 569-E, indoor conduit runs shall have access to a pull box every 100' if there are more than (2) 90-degree bends. Pull boxes shall be placed in a straight section of the conduit.
6. Conduit for Outside Plant (OSP) optical fiber should have pull boxes placed at intervals no greater than 300'.
7. Conduit bend radius will be no less than 6 times the diameter for conduits less than 2"Ø, and no less than 10 times the diameter for conduits greater than 2"Ø.
8. The design will require pull lines to be left in all conduit by the Contractor installing the conduit.
9. The conduit system shall incorporate additional pull boxes as required to match the pull tensions of the wiring to be installed.
10. The installing contractor shall determine from the cable specifications the appropriate pull tensions, and lubricate to ensure that the cable insulation will not be abraded or cut during installation.
11. Signal conduits should be mechanically and electrically connected to the receptacle boxes. These conduits and boxes should connect to the building safety grounding system.
12. PVC conduit may only be used in underground applications. Segments of conduit passing through an electrical or mechanical room shall be rigid. All other conduit to be EMT unless otherwise noted.
13. The tables below define minimum spacing requirements for conduits containing different types and levels of audio, video and communication signals that will be part of the complete systems. It is important that each group be installed in raceways discreet from other group levels.
14. In a situation where there will exist a heavy current demand in adjacent conduits, or where there will be parallel runs >100', there will need to be additional separation between those conduits and the Signal Group A/B/C conduits.
15. Any wiring that is classified within a group can be combined in a raceway carrying other wiring that is in the same group. Common junction boxes/wire raceways that combine different signal groups shall not be used.
16. The different levels of signal grouping are defined as follows:
    - Group A - Microphone and other sensitive wiring (0 - 100mV)
    - Group B - Line Level wiring (100mV - 10V)
    - Group C - Loudspeaker and Control wiring (10V - 70V)

COMMON ARCHITECTURAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
BOT	BOTTOM
CLG	CEILING
COL	COLUMN
CONT	CONTINUOUS
DIA	DIAMETER
DIM(S)	DIMENSION(S)
DN	DOWN
DWG	DRAWING
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EXIST	EXISTING
EXT	EXTERIOR
FLR	FLOOR
GA	GAUGE
GWB	GYPSUM WALL BOARD
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
INT	INTERIOR
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
NIC	NOT IN CONTRACT
NOM	NOMINAL
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
RCP	REFLECTED CEILING PLAN
REQD	REQUIRED
RM	ROOM
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STL	STEEL
STRUCT	STRUCTURE OR STRUCTURAL
T&G	TONGUE AND GROOVE
TME	TO MATCH EXISTING
TO	TOP OF
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
W/	WITH

4 Cable Schedule

Rigging Cable/Circuit Schedule

Type	Manufacturer	Part #	Application	Description	Nominal O.D. (in)
A	Belden or Equiv.	89272	Hoist control network, arcnet	1Pr, 20AWG, Twisted, FEP Jacket	0.198
B	AIWC or Equiv.		Motor control	#16 AWG THHN, Stranded	0.100
C	AIWC or Equiv.		Motor control	#14 AWG THHN, Stranded	0.112
D	AIWC or Equiv.		Motor control	#12 AWG THHN, Stranded	0.131
E			120V @ 20A Util Ckt	H,N,G (Wire size by Div 26)	
F			208V, 1Ph @ 20A Util Ckt	H,H,G (Wire size by Div 26)	
G			208V, 1Ph @ 30A Util Ckt	H,H,G (Wire size by Div 26)	
H			120/208V, 3Ph @ 20A Util Ckt	H,H,H,N,G (Wire size by Div 26)	
I			120/208V, 3Ph @ 30A Util Ckt	H,H,H,N,G (Wire size by Div 26)	
J			120/208V, 3Ph @ 50A Util Ckt	H,H,H,N,G (Wire size by Div 26)	
K			120/208V, 3Ph @ 100A Util Ckt	H,H,H,N,G (Wire size by Div 26)	
L			380/460V, 3Ph @ 100A Util Ckt	H,H,H,N,G (Wire size by Div 26)	

5 Division of Responsibilities

Rigging Scope of Work

Note	Description	Other	11 61 33
1	Coordinate with the project structural engineer and verify the load capacities of the building structure where it interfaces with the rigging system		X
2	Perform regular site visits (minimum of one monthly) after steel erection is completed to provide coordination with all other trades that may conflict with the installation and operation of the rigging system.		X
3	Provide regular reports of all site visits to the architect, client, and consultant that document all coordination issues and their resolutions in regards to the rigging system.		X
4	Provide and install all rigging system components.		X
5	Terminate all control distribution cable, which shall be done in accordance with the manufacturer's specification.		X
6	Furnish to the electrical contractor for installation all line level components and their housings.		X
7	Provide a factory trained technician for system commissioning, including inspection, testing, and programming for the complete project.		X
8	Provide shop drawings, as-built drawings, owner training, and operation manuals.		X
9	Provide accessories and minor equipment items needed for a complete system, even if not specifically mentioned herein or in the drawings, without claim for additional payment.		X
10	Assume responsibility for all engineering of systems described herein, including modification of and addition to any details as required in order to fulfill the design intent of the theatrical rigging system documents.		X
11	Provide and terminate all high voltage feeder circuits for the theatrical rigging system.	Division 26	
12	Provide all low voltage control cabling for the theatrical rigging system.		X
13	Provide all conduit, junction boxes, electrical wireways, and cable trays required for the theatrical rigging system power and control systems.	Division 26	
14	Provide sufficient workmen to assist the Division 11 61 33 contractor with system troubleshooting at first system energization.	Division 26	
15	Clean all racks, panels, and boxes of dirt, dust, and debris, re-assemble all equipment, and replace all panels, covers and screws prior to time of completion checkout.	Division 26	

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

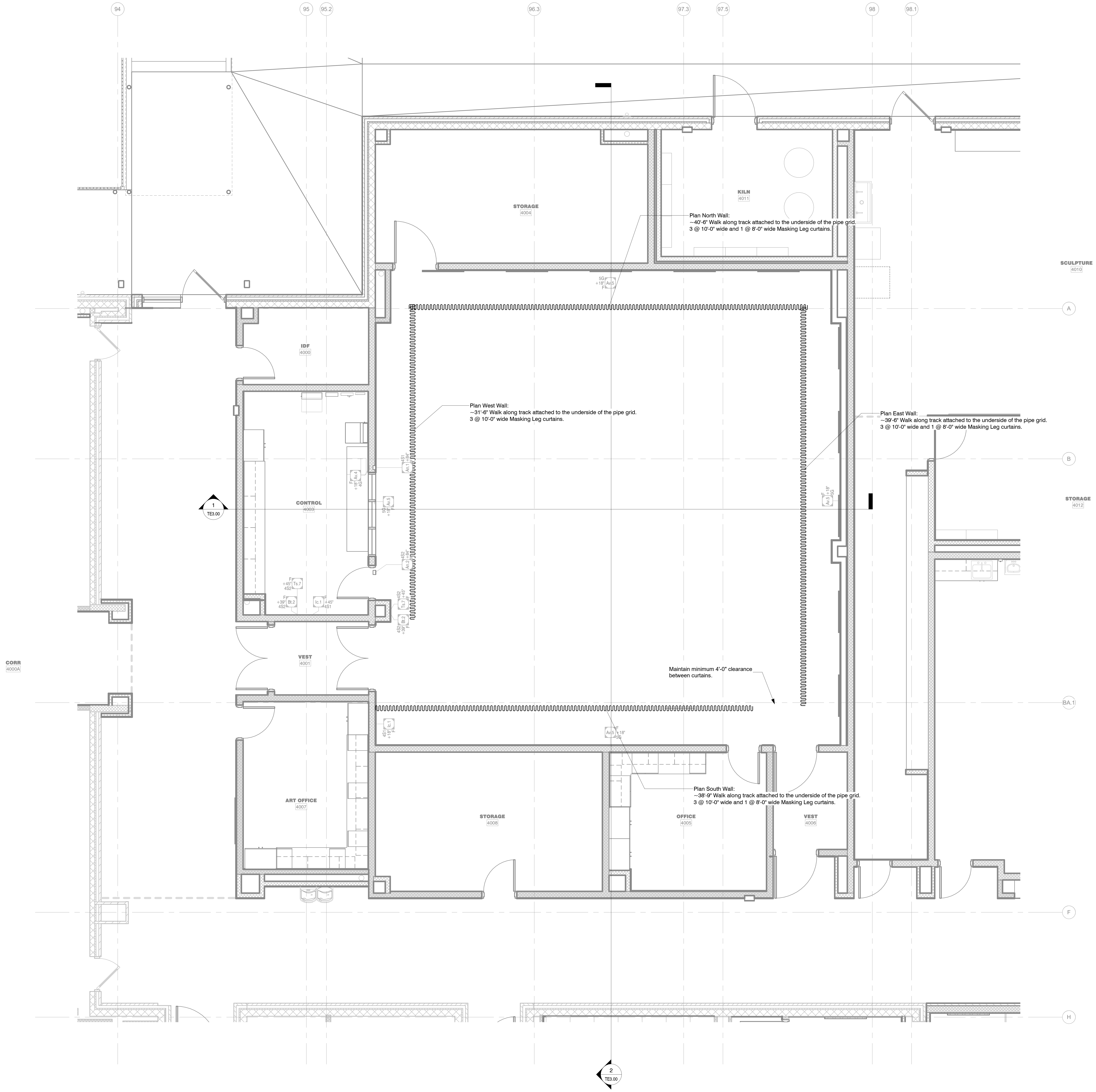
Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

TE - NOTES AND LEGENDS

TE0.00

____ of ____



Plan North Wall:
~40'-6" Walk along track attached to the underside of the pipe grid.
3 @ 10'-0" wide and 1 @ 8'-0" wide Masking Leg curtains.

Plan West Wall:
~31'-6" Walk along track attached to the underside of the pipe grid.
3 @ 10'-0" wide Masking Leg curtains.

Plan East Wall:
~39'-6" Walk along track attached to the underside of the pipe grid.
3 @ 10'-0" wide and 1 @ 8'-0" wide Masking Leg curtains.

Maintain minimum 4'-0" clearance between curtains.

Plan South Wall:
~38'-9" Walk along track attached to the underside of the pipe grid.
3 @ 10'-0" wide and 1 @ 8'-0" wide Masking Leg curtains.

1 TE - 1ST FLOOR PLAN - AREA G

Scale: 1/4" = 1'-0"

General Notes:
- All dimensions and loading shown are for diagrammatic purposes only. Verify all location dimensions with field conditions, and all loading with the structural engineer before construction or installation. Notify consultant of any changes required.
- Interstitial steel shown on this drawing is to be designed by the project structural engineer and provided by the project structural contractor.
- Miscellaneous steel above and beyond what is shown may be required for connection of stage lighting to roof steel. It is the responsibility of the theatrical rigging contractor to provide any miscellaneous steel and to coordinate this with the general contractor.
- Theatrical Rigging contractor to verify the load capacity of the structure with the project structural engineer.

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

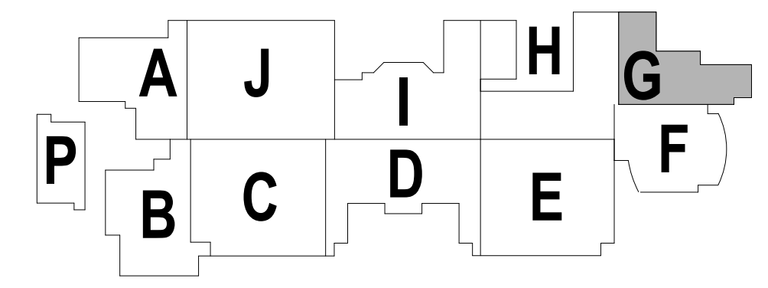
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

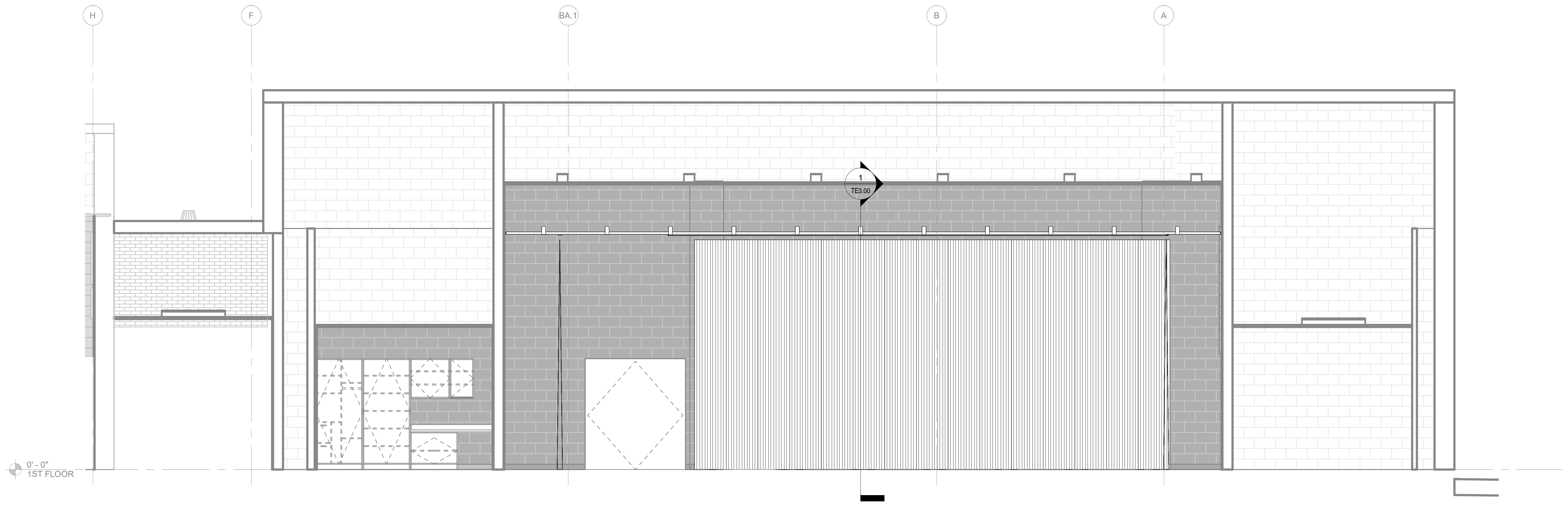


Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

TE - 1ST FLOOR
PLAN - AREA G

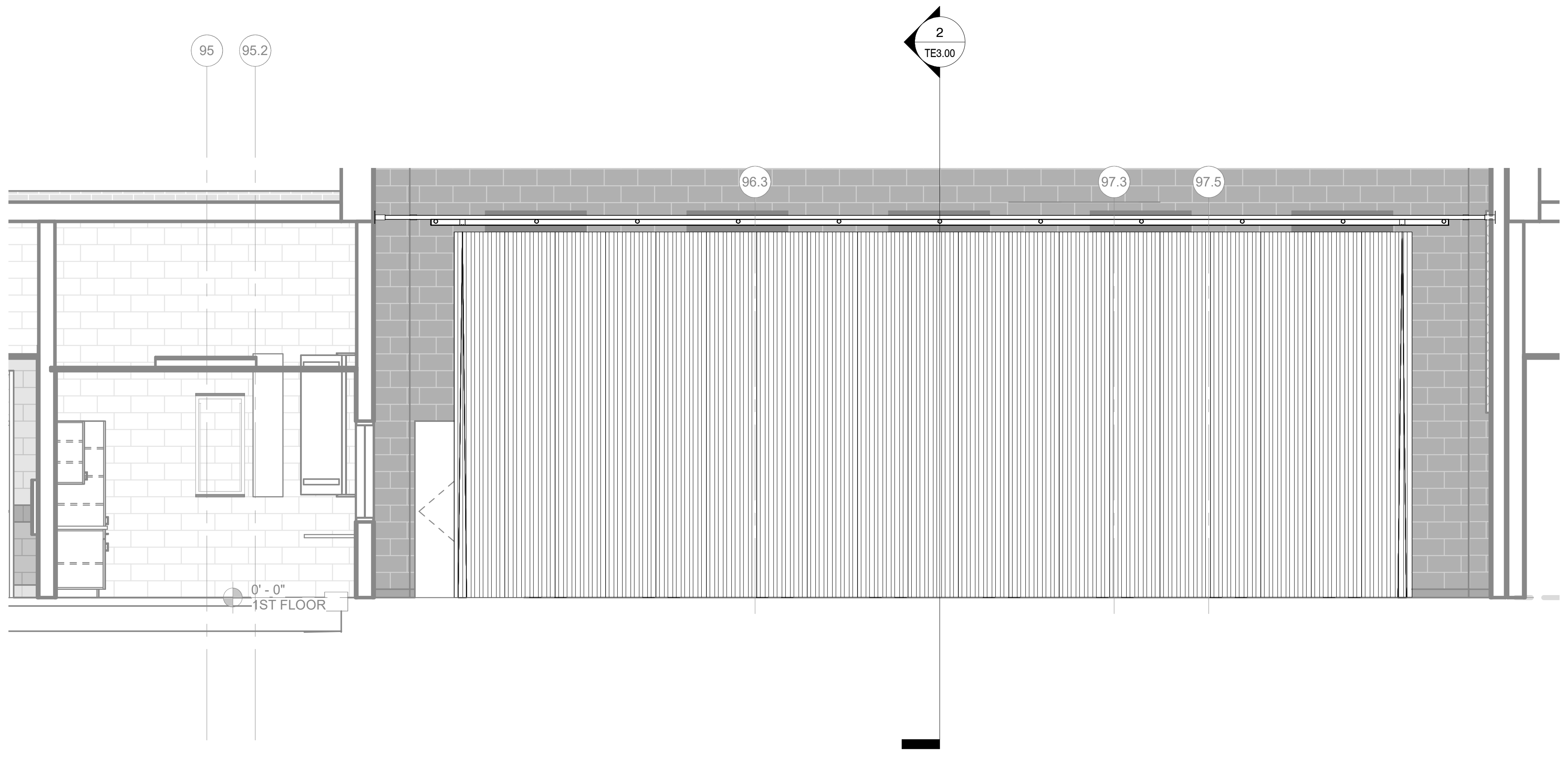
TE2.10G

____ of ____



2 TE - BLACK BOX - TRANSVERSE SECTION

Scale: 1/4" = 1'-0"



1 TE - BLACK BOX - CENTERLINE SECTION

Scale: 1/4" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

TE - SECTIONS & ELEVATION

TE3.00

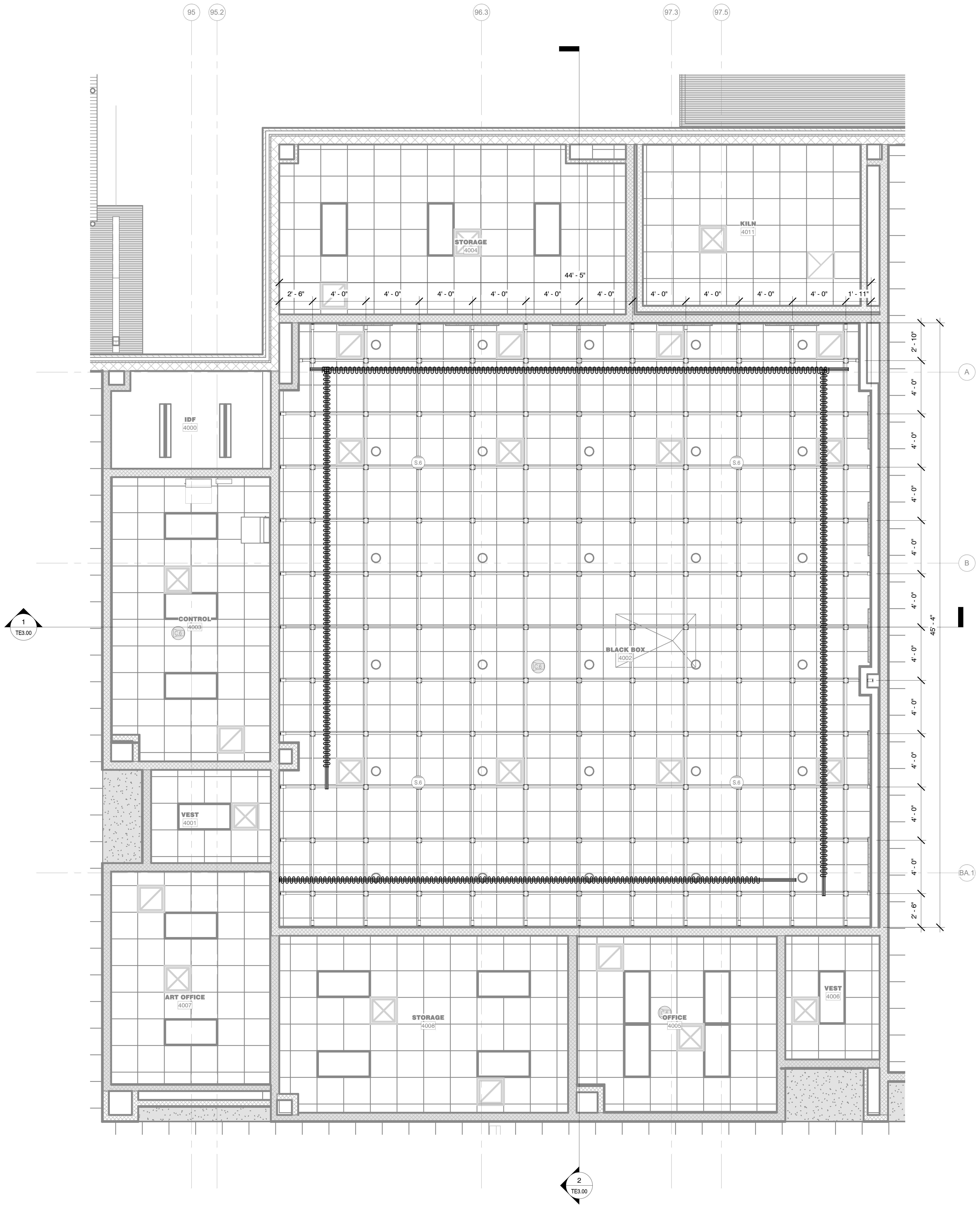
of

11/13/2024 11:58:56 AM

General Notes:
- All dimensions and loading shown are for diagrammatic purposes only. Verify all location dimensions with field conditions, and all loading with the structural engineer before construction or installation. Notify consultant of any changes required.
- Interstitial steel shown on this drawing is to be designed by the project structural engineer and provided by the project structural contractor.
- Miscellaneous steel above and beyond what is shown may be required for connection of stage lighting to roof steel. It is the responsibility of the theatrical rigging contractor to provide any miscellaneous steel and to coordinate this with the general contractor.
- Theatrical Rigging contractor to verify the load capacity of the structure with the project structural engineer.

General Notes:
1. Pipe grid to be mounted 15"-0" AFF.

Structural Notes:
1. Pipe Grid UDL loading to be 12.5lbs per sqft inclusive of self weight.



1 **TE - 1ST FLOOR REFLECTED CEILING PLAN - AREA G**

Scale: 1/4" = 1'-0"

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

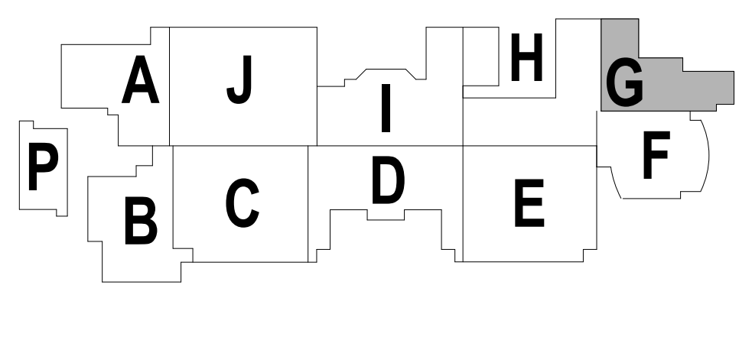
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

TE - 1ST FLOOR
REFLECTED CEILING
PLAN - AREA G

TE4.10G

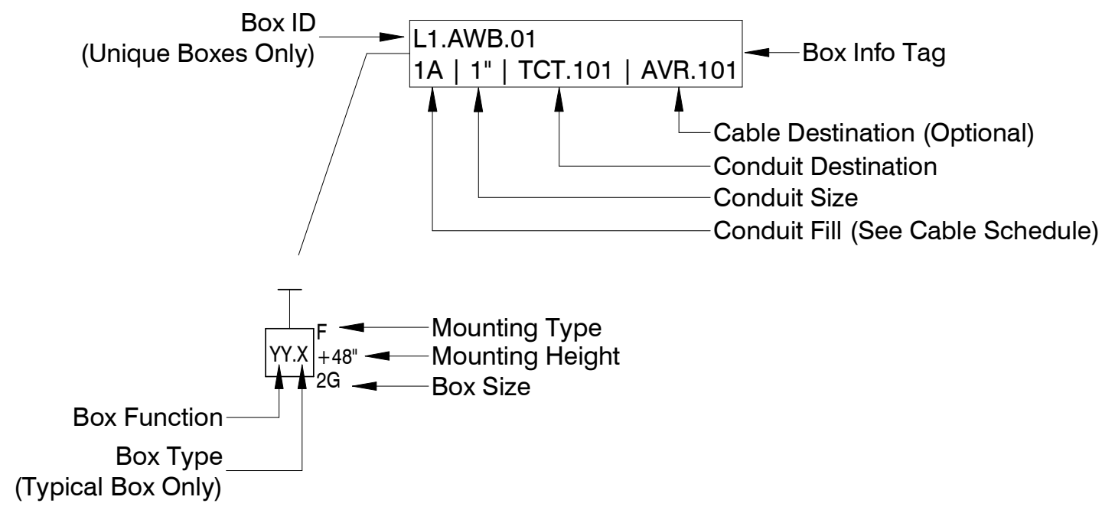
of

TL Symbols	Description
YY Mounting Type Mounting Height Box Size	Unique Wall-Mounted Box (Symbol denotes Junction Box)
YY Box Size	Unique Floor-Mounted Box (Symbol denotes Junction Box)
YY Mounting Type Box Size	Unique Wall-Mounted Box (Symbol denotes Junction Box)
YY.X Mounting Type Mounting Height Box Size	Typical Wall-Mounted Box (Symbol denotes Junction Box, Conduit, Cable, and Device)
YY.X Mounting Type Mounting Height Box Size	Typical Floor/Ceiling-Mounted Box (Symbol denotes Junction Box, Conduit, Cable, and Device)

Box Function (YY):

Es	Entry Station
Fb	Floor Box
iO	Input/Output
Pb	Pipe Mount Box
Ui	User Interface
Wb	Wall Box

Example & Nomenclature



Mounting Height:
Height shown is from finish floor (AFF) to center of installed box UON.

Mounting Type:
F = Flush Mount
S = Surface Mount
SR = Semi-Recessed Mount
PM = Pedestal Mount

Box Size:
If a standard trade size, size is given in number of gangs (#G), or inches. If a custom size, "C" is shown. See box schedule(s) for additional information.

Box ID Nomenclature:

Group.(BoxStyle).Box#

Group Designators:

L1	Level 1
L2	Level 2
L3	Level 3

Box Style:

LFB	Lighting Floor Box
LWP	Lighting Wall Panel
LJB	Lighting Junction Box
LER	Lighting Equipment Rack
LRP	Lighting Relay Panel
LPB	Lighting Pipe Box
LDS	Lighting Distribution Strip
LCS	Lighting Company Switch
LCP	Lighting Ceiling Pocket / Panel
LTS	Lighting Emergency Transfer Switch
LBC	Lighting DMX Emergency Bypass Controller
LDK	Lighting Emergency Bypass Detection Kit

Conduit Destination:
AC = Accessible Ceiling
CT = Cable Tray

Cable Destination:
Cable Destination = Conduit Destination if Cable Destination not shown.

1 TL Plan Symbols

1. All 120V, 20A utility circuits to terminate in a NEMA 5-20R duplex UON.
2. All 208V, 20A utility circuits to terminate in a NEMA L6-20R UON.
3. All 208V, 30A utility circuits to terminate in a NEMA L6-30R UON.
4. All 2.4kw dimmable circuits to terminate in a 20-2P&GF-flush receptacle UON.
5. All 6.0kw dimmable circuits to terminate in a 60-2P&GF-flush receptacle UON.
6. Leave 18" service loop at all LWB, LFB, LPB, LCS, LJB, LDOS and LACR locations for control cables UON.
7. Leave 18" service loop at all LWB, LFB, LPB, LCS and LJB locations for power cables UON.
8. Leave 84" service loop at all LDR locations for control cables UON.
9. All control and power cables shall be labeled with a unique identifier which shall be noted on all drawings to allow for proper identification by all parties concerned.
10. All control cable terminations shall be completed by the theatrical lighting supplier in accordance with the device manufacturer's recommendations. All network connections to be terminated per TIA/EIA 568B standards. All cables shall be cut to proper length and bundled with all labels clearly visible in order to allow for easy identification.
11. All power cable terminations shall be completed by the electrical contractor in accordance with the device manufacturer's recommendations. All cables shall be cut to proper length and bundled with all labels clearly visible in order to allow for easy identification.
12. Each dimmable circuit shall have individual hot and neutral conductors. These shall be sized to meet all applicable national, state and local electrical codes.
13. Each dimmable circuit shall be properly grounded to the circuit distribution device within which it is located. All ground conductors for individual distribution devices shall be sized to meet all applicable national, state and local electrical codes.
14. All mounting height dimensions are to the center of the box UON.

2 General Notes

1. All systems wiring will be in conduit unless approved by the Consultant or otherwise noted on drawings.
2. There are minimum conduit separations that must be maintained between conduits carrying wire of different signal groups. It is important to note that while different signals may exist in a single box, it is not appropriate to run more than one signal group in a single conduit. Refer to tables below for conduit separation distances.
3. It will be necessary at times for conduits of different signal groups to cross in close proximity. The conduit paths must be designed to cross at 90 degrees to each other.
4. The minimum conduit size shall be 3/4" and the conduit should be sized for max. 40% fill, or less if required by prevailing code.
5. Per TIA 569-E, indoor conduit runs shall have access to a pull box every 100' if there are more than (2) 90-degree bends. Pull boxes shall be placed in a straight section of the conduit.
6. Conduit for Outside Plant (OSP) optical fiber should have pull boxes placed at intervals no greater than 300'.
7. Conduit bend radius will be no less than 6 times the diameter for conduits less than 2"Ø, and no less than 10 times the diameter for conduits greater than 2"Ø.
8. The design will require pull lines to be left in all conduit by the Contractor installing the conduit.
9. The conduit system shall incorporate additional pull boxes as required to match the pull tensions of the wiring to be installed.
10. The installing contractor shall determine from the cable specifications the appropriate pull tensions, and lubricate to ensure that the cable insulation will not be abraded or cut during installation.
11. Signal conduits should be mechanically and electrically connected to the receptacle boxes. These conduits and boxes should connect to the building safety grounding system.
12. PVC conduit may only be used in underground applications. Segments of conduit passing through an electrical or mechanical room shall be rigid. All other conduit to be EMT unless otherwise noted.
13. The tables below define minimum spacing requirements for conduits containing different types and levels of audio, video and communication signals that will be part of the complete systems. It is important that each group be installed in raceways discreet from other group levels.
14. In a situation where there will exist a heavy current demand in adjacent conduits, or where there will be parallel runs >100', there will need to be additional separation between those conduits and the Signal Group A/B/C conduits.
15. Any wiring that is classified within a group can be combined in a raceway carrying other wiring that is in the same group. Common junction boxes/wire raceways that combine different signal groups shall not be used.
16. The different levels of signal grouping are defined as follows:
    - Group A - Microphone and other sensitive wiring (0 - 100mV)
    - Group B - Line Level wiring (100mV - 10V)
    - Group C - Loudspeaker and Control wiring (10V - 70V)

Separations - EMT or Rigid

	Group A	Group B	Group C
Group A	Adjacent	Adjacent	3"
Group B	Adjacent	Adjacent	3"
Group C	3"	3"	Adjacent
Branch Circuits (<30A)	6"	6"	6"
Branch Circuits (30A - 60A)	6"	6"	6"
Branch Circuits (>60A)	12"	12"	12"
Dimmer Controlled Devices	12"	12"	12"
SCR Controlled Devices	12"	12"	12"
208/480V Feeder Circuits	24"	24"	24"
All Others (Plumbing, Heat, Etc.)	12"	12"	12"

Separations - PVC

	Group A	Group B	Group C
Group A	Adjacent	Adjacent	6"
Group B	Adjacent	Adjacent	6"
Group C	6"	6"	Adjacent
Branch Circuits (<30A)	6"	6"	6"
Branch Circuits (30A - 60A)	6"	6"	6"
Branch Circuits (>60A)	12"	12"	12"
Dimmer Controlled Devices	12"	12"	12"
SCR Controlled Devices	12"	12"	12"
208/480V Feeder Circuits	24"	24"	24"
All Others (Plumbing, Heat, Etc.)	12"	12"	12"

3 Conduit Notes

Lighting Cable Schedule

Name	Manufacturer	Standard Part Number	Application	Description	Nominal OD (in)	Nominal OD (mm)	Signal Group
A	Belden	1583A	DMX-512 or Network Control	4 PR #24 AWG Solid Twisted Pairs PVC Jacket Unshielded	0.195	4.95	B
B	Belden	1533R	DMX-512 or Network Control	4 PR #24 AWG Solid Twisted Pairs PVC Jacket Overall Sheild with Drain Wire	0.26	6.6	B
C	Belden	9729	DMX-512 Control	2 Shielded PR #24 AWG Stranded Twisted PVC Jacket	0.266	6.76	B
D	Belden	8471	Architectural Control	1 PR #16 AWG Stranded Twisted. PVC Jacket Unshielded	0.274	6.96	B
E	Carol	76812-06	Architectural Control Ground	#14 AWG Stranded Green PVC Jacket Unshielded	0.136	3.45	B
F	Carol	76512-01/03	Architectural Control Power or 0-10VDC Control	2 #16 AWG Stranded PVC Jacket Black/Red Unshielded	0.174	4.42	B
G	Belden	B9C039T	Multi-Mode Fiber	OM3 50/125 Six Strand Multimode Fiber	0.22	5.59	B

4 TL Cable Schedule

Scale: 12" = 1'-0"

TL Scope of Work

	Category	Description	Other	11 61 00
1	Power	Determine the size and quantity of all high voltage cable per appplicable code(s).	DIV 26	X
2	Power	Provide all 120V and 208V dimmable/utility distribution circuits, and all 120V and 120/208V feeder circuits for the theatrical/architectural lighting systems.	DIV 26	
3	Power	Terminate all high voltage cabling.	DIV 26	
4	Power	Provide all conduit, wire, boxes , wireways, cabletrays, power distribution equipment, and transformers required for the theatrical/architectural lighting systems.	DIV 26	
5	Power	Furnish all theatrical lighting connector strips and pipe mount boxes with mounting hardware, floor boxes, wall panels/boxes, gridiron junction boxes, dimmer racks and control electronic racks.		X
6	Power	Install all theatrical lighting connector strips, pipe mount boxes, floor boxes, wall panels/boxes, gridiron junction boxes, dimmer racks and control electronic racks provided by the 11 61 00 contractor.	DIV 26	
7	Control	Verify all low voltage cable types with the 11 61 00 contractor before installation.	DIV 26	
8	Control	Provide all low voltage cables as required.	DIV 26	
9	Control	Provide all low voltage control face panels (eg DMX, RFU, Architectural etc.), control electronics and dimmer modules.		X
10	Control	Terminate all theatrical/architectural lighting system (including fixtures) low voltage control cables in accordance with the manufacturer's specifications. All network connections to be terminated per TIA/EIA 568 B standards.		X
11	Control	Qualify all network circuits for full duplex 100BASE - TX operation. Qualification to take place after all building systems are energized and operational.		X
12	Control	Provide all lighting control consoles and related equipment during the system turn on period.		X
13	Structural	Provide a set of support pipes (if specified) for the theatrical lighting instruments sized for 30 lbs per linear foot above pipe weight.		X
14	Structural	Provide miscellaneous steel as required for support of theatrical/architectural lighting system components. Lighting contractor to detail requirements.	DIV 5	

Terms and Definitions:

Provide = Supply and install equipment
Furnish = Supply to another contractor for installation
Install = Install equipment provided by another contractor

High Voltage = >100V

5 Division of Responsibilities

COMMON ARCHITECTURAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
BOT	BOTTOM
CLG	CEILING
COL	COLUMN
CONT	CONTINUOUS
DIA	DIAMETER
DIM(S)	DIMENSION(S)
DN	DOWN
DWG	DRAWING
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EXIST	EXISTING
EXT	EXTERIOR
FLR	FLOOR
GA	GAUGE
GWB	GYPSUM WALL BOARD
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
INT	INTERIOR
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
NIC	NOT IN CONTRACT
NOM	NOMINAL
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
RCP	REFLECTED CEILING PLAN
REQD	REQUIRED
RM	ROOM
SIM	SIMILAR
SPEC	SPECIFIED OR SPECIFICATION
STL	STEEL
STRUCT	STRUCTURE OR STRUCTURAL
T&G	TONGUE AND GROOVE
TME	TO MATCH EXISTING
TO	TOP OF
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
W/	WITH

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

TL - GENERAL
NOTES & LEGENDS

TL0.00

of

11/13/2024 11:58:57 AM

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

TL Box Schedule

								Box Dimensions					Back Box		Panel		Device		
Box ID	Sheet Reference	Level	Mounting Height	Flush Mount	Manufacturer	Model	Description	Height	Width	Depth	NEMA Type	Custom Panel	Supplied By	Installed By	Supplied By	Installed By	Supplied By	Installed By	Notes
A.LER.01		1ST FLOOR	4' - 0"	No	Middle Atlantic Products	DWR-24-22FD	24 SPACE (42”) SECTIONAL WALL RACK, FITS 20” DEEP EQUIPMENT, BLACK FINISH	4' - 1 1/16"	1' - 11 13/32"	1' - 10"		No					11 61 00	11 61 00	
A.LER.02		1ST FLOOR	4' - 0"	No	Middle Atlantic Products	DWR-24-22FD	24 SPACE (42”) SECTIONAL WALL RACK, FITS 20” DEEP EQUIPMENT, BLACK FINISH	4' - 1 1/16"	1' - 11 13/32"	1' - 10"		No					11 61 00	11 61 00	
A.LER.03		1ST FLOOR	3' - 0"	No	Pathway Connectivity	1105	eDIN small enclosure, surface mount	1' - 1 3/16"	0' - 10 3/16"	0' - 4 1/2"	1	Yes			11 61 00	26 55 61 / 11 61 00			
A.LPB.04		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61 / 11 61 00	
A.LPB.05		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes	11 61 00	26 55 61	11 61 00	11 61 00	N/A	N/A	
A.LPB.06		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes	11 61 00	26 55 61	11 61 00	11 61 00	N/A	N/A	
A.LPB.07		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes	11 61 00	26 55 61	11 61 00	11 61 00	N/A	N/A	
A.LWP.01		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	693	4-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 7 13/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			
A.LWP.02		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	693	4-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 7 13/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			
A.LWP.03		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 5 19/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			
A.LWP.04		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 5 19/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00	N/A	N/A	
A.LWP.05		1ST FLOOR	1' - 6"	No	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	11 61 00			
A.LWP.06		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			
A.LWP.07		1ST FLOOR	6' - 0"	Yes	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 5 19/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			
A.LWP.08		1ST FLOOR	6' - 0"	Yes	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 5 19/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			
A.LWP.09		1ST FLOOR	6' - 0"	Yes	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 5 19/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			
A.LWP.16		1ST FLOOR	3' - 9"	Yes	Hoffman or Equivalent	ASE8X8X4	Steel junction/pull box with screw cover.	0' - 8"	0' - 8"	0' - 4"	1	Yes	Existing	Existing	11 61 00	11 61 00			Custom faceplate w/6 fader s and 4 buttons
A.LWP.17		1ST FLOOR	3' - 9"	Yes	Hoffman or Equivalent	ASE8X8X4	Steel junction/pull box with screw cover.	0' - 8"	0' - 8"	0' - 4"	1	Yes	Existing	Existing	11 61 00	11 61 00			Custom faceplate w/6 fader s and 4 buttons
A.LWP.18		1ST FLOOR	3' - 9"	Yes	Hoffman or Equivalent	ASE8X8X4	Steel junction/pull box with screw cover.	0' - 8"	0' - 8"	0' - 4"	1	Yes	Existing	Existing	11 61 00	11 61 00			Custom faceplate w/6 fader s and 4 buttons
A.LWP.19		1ST FLOOR	3' - 9"	Yes	Hoffman or Equivalent	ASE8X8X4	Steel junction/pull box with screw cover.	0' - 8"	0' - 8"	0' - 4"	1	Yes	Existing	Existing	11 61 00	11 61 00			Custom faceplate w/2 buttons
A.LWP.20		1ST FLOOR	3' - 9"	Yes	Hoffman or Equivalent	ASE8X8X4	Steel junction/pull box with screw cover.	0' - 8"	0' - 8"	0' - 4"	1	Yes	Existing	Existing	11 61 00	11 61 00			Custom faceplate w/2 buttons
A.LWP.21		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			1 button
A.LWP.22		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			3 button
A.LWP.23		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			2 button
A.LWP.24		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			3 button
A.LWP.26		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			1 button
A.LWP.27		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	Existing	Existing	11 61 00	11 61 00			2 button
BB.LER.01		1ST FLOOR	4' - 0"	No	Middle Atlantic Products	DWR-24-22FD	24 SPACE (42”) SECTIONAL WALL RACK, FITS 20” DEEP EQUIPMENT, BLACK FINISH	4' - 1 1/16"	1' - 11 13/32"	1' - 10"		No					11 61 00	11 61 00	
BB.LPB.01		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.02		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.03		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.04		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.05		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.06		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.07		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.08		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.09		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.10		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.11		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.12		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.13		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.14		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.15		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.16		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.17		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.18		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.19		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.20		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.21		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.22		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.23		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.24		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.25		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.26		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.27		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.28		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LPB.29		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9101	Standard surface mount outlet box - 1 outlet.					Yes					11 61 00	26 55 61	
BB.LPB.30		1ST FLOOR		Yes	Electronic Theatre Controls or Equivalent	9102	Standard surface mount outlet box - 2 outlets.					Yes					11 61 00	26 55 61 / 11 61 00	
BB.LWP.01		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	691	2-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 3 25/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	26 55 61 / 11 61 00	N/A	N/A	
BB.LWP.02		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	691	2-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 3 25/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	26 55 61 / 11 61 00	N/A	N/A	
BB.LWP.03		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	691	2-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 3 25/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	26 55 61 / 11 61 00	N/A	N/A	
BB.LWP.04		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	691	2-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 3 25/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	26 55 61 / 11 61 00	N/A	N/A	
BB.LWP.05		1ST FLOOR	1' - 6"	Yes	Raco or Equivalent	691	2-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 3 25/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	26 55 61 / 11 61 00	N/A	N/A	
BB.LWP.06		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	692	3-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 5 19/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	11 61 00	N/A	N/A	
BB.LWP.07		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	690	Single Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 1 31/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	11 61 00	N/A	N/A	
BB.LWP.08		1ST FLOOR	3' - 9"	Yes	Raco or Equivalent	691	2-Gang welded steel electrical box, 2.5" depth.	0' - 3 3/4"	0' - 3 25/32"	0' - 2 1/2"	1	Yes	26 55 61	26 55 61	11 61 00	11 61 00	N/A	N/A	

TL Pull Schedule

		Conduit 1		
Mark	Level	Fill	Size	Destination
A.LER.01	1ST FLOOR			
A.LER.02	1ST FLOOR	1A, 1D, 1E	Existing	A.LER.01
A.LER.03	1ST FLOOR	1A	Existing	A.LER.02
A.LPB.04	1ST FLOOR	1A	Portable Cable	A.LER.02
A.LPB.05	1ST FLOOR	1A	Portable Cable	A.LER.02
A.LPB.06	1ST FLOOR	1A	Portable Cable	A.LER.02
A.LPB.07	1ST FLOOR	1A	Portable Cable	A.LER.02
A.LWP.01	1ST FLOOR	3A	3/4"	A.LER.03
A.LWP.02	1ST FLOOR	3A	Existing	A.LER.02
A.LWP.03	1ST FLOOR	1A	Existing	A.LER.02
A.LWP.04	1ST FLOOR	1A	Existing	A.LER.02
A.LWP.05	1ST FLOOR	1A	3/4"	A.LER.02
A.LWP.06	1ST FLOOR	1A	Existing	A.LER.02 (via A.LWP.03)
A.LWP.07	1ST FLOOR	1A	3/4" or Existing	A.LER.02
A.LWP.08	1ST FLOOR	1A	3/4" or Existing	A.LER.02
A.LWP.09	1ST FLOOR	1A	3/4" or Existing	A.LER.02
A.LWP.16	1ST FLOOR	1D, 1E	Existing	A.LWP.18
A.LWP.17	1ST FLOOR	1D, 1E	Existing	A.LWP.16
A.LWP.18	1ST FLOOR	1D, 1E	Existing	A.LER.01
A.LWP.19	1ST FLOOR	1D, 1E	Existing	A.LWP.17
A.LWP.20	1ST FLOOR	1D, 1E	Existing	A.LER.01
A.LWP.21	1ST FLOOR	1D, 1E	Existing	A.LWP.24
A.LWP.22	1ST FLOOR	1D, 1E	Existing	A.LER.02
A.LWP.23	1ST FLOOR	1D, 1E	Existing	A.LER.02
A.LWP.24	1ST FLOOR	1D, 1E	Existing	A.LER.02
A.LWP.26	1ST FLOOR	1D, 1E	Existing	A.LWP.27
A.LWP.27	1ST FLOOR	1D, 1E	Existing	A.LWP.22
BB.LER.01	1ST FLOOR			
BB.LPB.01	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.02	1ST FLOOR			
BB.LPB.03	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.04	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.05	1ST FLOOR			
BB.LPB.06	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.07	1ST FLOOR			
BB.LPB.08	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.09	1ST FLOOR			
BB.LPB.10	1ST FLOOR			
BB.LPB.11	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.12	1ST FLOOR			
BB.LPB.13	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.14	1ST FLOOR			
BB.LPB.15	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.16	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.17	1ST FLOOR			
BB.LPB.18	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.19	1ST FLOOR			
BB.LPB.20	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.21	1ST FLOOR			
BB.LPB.22	1ST FLOOR			
BB.LPB.23	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.24	1ST FLOOR			
BB.LPB.25	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.26	1ST FLOOR			
BB.LPB.27	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.28	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LPB.29	1ST FLOOR			
BB.LPB.30	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LWP.01	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LWP.02	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LWP.03	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LWP.04	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LWP.05	1ST FLOOR	1A	3/4"	BB.LER.01
BB.LWP.06	1ST FLOOR	1A, 1D, 1E, 1F	3/4"	BB.LER.01
BB.LWP.07	1ST FLOOR	1D, 1E, 1F	3/4"	BB.LWP.08
BB.LWP.08	1ST FLOOR	1D, 1E, 1F	3/4"	BB.LER.01

TL Electrical Equipment Schedule

					Dimensions				
Mark	Level	Manufacturer	Model	Description	Height	Width	Depth	Device Installed By	Device Provided By
BB.LBC.01	1ST FLOOR	Electronic Theatre Controls, Inc.	DMX Bypass Detection Kit	Wall-Mounted Detection Kit					
BB.LDK.01	1ST FLOOR	Electronic Theatre Controls, Inc.	Emergency Bypass Detection Kit	Wall-Mounted Detection Kit					
BB.LRP.01	1ST FLOOR	Electronic Theatre Controls	Unison Echo Relay Panel	The Unison Echo Relay Panel is a control-oriented power center built with today and tomorrow’s lighting loads in mind. It offers 24-relay poles with integral branch breakers, power-usage reporting and sophisticated control inputs. With built in station, sensor, DMX, and timeclock controls with optional Ethernet connectivity, 0-10V and line voltage dimming, DALI output and Contact inputs, the Echo Relay Panel integration opportuities are limitless.	5' - 8"	1' - 2 1/4"	0' - 4 1/4"		
A.LDR.02	1ST FLOOR	ETC	SR3-48	Sensor3 48-module dimming rack.	6' - 11 3/32"	1' - 2 19/32"	1' - 10 13/16"		
A.LDR.01	1ST FLOOR	ETC	SR3-48	Sensor3 48-module dimming rack.	6' - 11 3/32"	1' - 2 19/32"	1' - 10 13/16"		
A.LRP.01	1ST FLOOR	Electronic Theatre Controls	Unison Echo Relay Panel	The Unison Echo Relay Panel is a control-oriented power center built with today and tomorrow’s lighting loads in mind. It offers 24-relay poles with integral branch breakers, power-usage reporting and sophisticated control inputs. With built in station, sensor, DMX, and timeclock controls with optional Ethernet connectivity, 0-10V and line voltage dimming, DALI output and Contact inputs, the Echo Relay Panel integration opportuities are limitless.	5' - 8"	1' - 2 1/4"	0' - 4 1/4"		
A.LDR.03	1ST FLOOR	ETC	SR3-12	Sensor3 12-module wall mounted dimming rack. 120V 3-phase input, up to 24x20A 120V load circuits.	2' - 1 13/16"	1' - 2 19/32"	1' - 1 5/16"		
A.LBK.01	1ST FLOOR	Electronic Theatre Controls, Inc.	Emergency Bypass Detection Kit	Wall-Mounted Detection Kit					
A.LBC.01	1ST FLOOR	Electronic Theatre Controls, Inc.	DMX Bypass Detection Kit	Wall-Mounted Detection Kit					

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

TL - SCHEDULES

TL0.01
of

11/13/2024 11:58:59 AM

DIMMER RACK A.LDR-01:

RACK DIM #	RACK SLOT #	PHASE	DISTRO CKT #	POSITION	DISTRIBUTION DEVICE	MODULE TYPE
1	1	A	1	FOH Electric Catwalk	PB-1, PB-7	D20E
2			2	"	"	
3	17	B	3	"	"	D20E
4			4	"	"	
5	33	C	5	"	PB-2, PB-8	D20E
6			6	"	"	
7	2	A	7	"	"	D20E
8			8	"	"	
9	18	B	9	"	PB-3, PB-9	D20E
10			10	"	"	
11	34	C	11	"	"	D20E
12			12	"	"	
13	3	A	13	"	PB-4, PB-10	D20E
14			14	"	"	
15	19	B	15	"	"	D20E
16			16	"	"	
17	35	C	17	"	PB-5, PB-11	D20E
18			18	"	"	
19	4	A	19	"	"	D20E
20			20	"	"	
21	20	B	21	"	PB-6, PB-12	D20E
22			22	"	"	
23	36	C	23	"	"	D20E
24			24	"	"	
25	5	A	25	1st Electric	Pigtails	D20E
26			26	"	"	
27	21	B	27	"	"	D20E
28			28	"	"	
29	37	C	29	"	"	D20E
30			30	"	"	
31	6	A	31	"	"	D20E
32			32	"	"	
33	22	B	33	"	"	D20E
34			34	"	"	
35	38	C	35	"	"	D20E
36			36	"	"	
37	7	A	37	"	"	D20E
38			38	2nd Electric	Pigtails	
39	23	B	39	"	"	D20E
40			40	"	"	
41	39	C	41	"	"	D20E
42			42	"	"	
43	8	A	43	"	"	D20E
44			44	"	"	
45	24	B	45	"	"	D20E
46			46	"	"	
47	40	C	47	"	"	D20E
48			48	"	"	
49	9	A	49	"	"	D20E
50			50	"	"	
51	25	B	51	3rd Electric	Pigtails	D20E
52			52	"	"	
53	41	C	53	"	"	D20E
54			54	"	"	
55	10	A	55	"	"	D20E
56			56	"	"	
57	26	B	57	"	"	D20E
58			58	"	"	
59	42	C	59	"	"	D20E
60			60	"	"	
61	11	A	61	"	"	D20E
62			62	"	"	
63	27	B	63	"	"	D20E
64			64	4th Electric	Pigtails	
65	43	C	65	"	"	D20E
66			66	"	"	
67	12	A	67	"	"	D20E
68			68	"	"	
69	28	B	69	"	"	D20E
70			70	"	"	
71	44	C	71	"	"	D20E
72			72	"	"	
73	13	A	73	"	"	D20E
74			74	DSL & DSR Pipe Boxes	DSL & DSR Pipe Boxes	
75	29	B	75	"	"	R20AF
76			76	"	"	
77	45	C	77	"	"	D20E
78			78	MSL & MSR Pipe Boxes	MSL & MSR Pipe Boxes	
79	14	A	79	"	"	R20AF
80			80	"	"	
81	30	B	81	"	"	D20E
82			82	USL & USR Pipe Boxes	USL & USR Pipe Boxes	
83	46	C	83	"	"	R20AF
84			84	"	"	
85	15	A	85	"	"	D20E
86			86	1st Electric	Repeated Pigtails	
87	31	B	87	"	"	R20AF
88			88	"	"	
89	47	C	89	"	"	D20E
90			90	"	"	
91	16	A	91	"	"	R20AF
92			92	"	"	
93	32	B	93	"	"	D20E
94			94	"	"	
95	48	C	95	"	"	R20AF
96			96	"	"	

DIMMER RACK A.LDR-02:

RACK DIM #	RACK SLOT #	PHASE	DISTRO CKT #	POSITION	DISTRIBUTION DEVICE	MODULE TYPE
1	1	A	97	1st Electric	Repeated Pigtails	D20E
2			98	2nd Electric	Repeated Pigtails	
3	17	B	99	"	"	R20AF
4			100	"	"	
5	33	C	101	"	"	D20E
6			102	"	"	
7	2	A	103	"	"	R20AF
8			104	"	"	
9	18	B	105	"	"	D20E
10			106	"	"	
11	34	C	107	"	"	R20AF
12			108	"	"	
13	3	A	109	"	"	D20E
14			110	3rd Electric	Repeated Pigtails	
15	19	B	111	"	"	R20AF
16			112	"	"	
17	35	C	113	"	"	D20DHR
18			114	"	"	
19	4	A	115	"	"	R20AF
20			116	"	"	
21	20	B	117	"	"	D20E
22			118	"	"	
23	36	C	119	"	"	R20AF
24			120	"	"	
25	5	A	121	"	"	D20E
26			122	4th Electric	Repeated Pigtails	
27	21	B	123	"	"	R20AF
28			124	"	"	
29	37	C	125	"	"	D20E
30			126	"	"	
31	6	A	127	"	"	R20AF
32			128	"	"	
33	22	B	129	"	"	D20E
34			130	"	"	
35	38	C	131	"	"	R20AF
36			132	"	"	
37	7	A	133	"	"	D20E
38			134	"	Cyc Pigtails	
39	23	B	135	"	"	D20E
40			136	"	"	
41	39	C	137	"	"	D20DHR
42			138	"	"	
43	8	A	139	"	"	D20E
44			140	"	"	
45	24	B	141	"	"	D20E
46			142	"	"	
47	40	C	143	"	"	D20DHR
48			144	"	"	
49	9	A	145	"	"	D20DHR
50			146	DSC Wall	DSC Wallbox	
51	25	B	147	"	"	R20AF
52			148	DSL & DSR Walls	DSL & DSR Wallboxes	
53	41	C	149	"	"	D20DHR
54			150	"	"	
55	10	A	151	"	"	R20AF
56			152	USL & USR Walls	USL & USR Wallboxes	
57	26	B	153	"	"	R20AF
58			154	"	"	
59	42	C	155	"	"	R20AF
60			156	New LED Houselights	New LED Houselights	
61	11	A	157	"	"	R20AF
62			158	"	"	
63	27	B	159	"	"	R20AF
64			160	"	"	
65	43	C	161	"	"	R20AF
66			162	"	"	
67	12	A	163	"	"	R20AF
68			164	"	"	
69	28	B	165	"	"	R20AF
70			166	"	"	
71	44	C	167	"	"	R20AF
72			168	"	"	
73	13	A	169	"	"	R20AF
74			170	"	"	
75	29	B	171	"	"	R20AF
76			172	"	"	
77	45	C	173	"	"	R20AF
78			174	"	"	
79	14	A	175	"	"	R20AF
80			176	"	"	
81	30	B	177	"	"	R20AF
82			178	"	"	
83	46	C	179	"	"	R20AF
84			180	"	"	
85	15	A	181	"	"	R20AF
86			182	"	"	
87	31	B	183	"	"	R20AF
88			184	"	"	
89	47	C	185	"	"	R20AF
90			186	"	"	
91	16	A	187	In-Ground	LED Houselights	R20AF
92			188	"	"	
93	32	B	189	Aislelights?	Houselights	D20DHR
94			190	"	"	
95	48	C	191	Edgelights?	Houselights	D20E
96			192			

DIMMER RACK A.LDR-03:

RACK DIM #	RACK SLOT #	PHASE	DISTRO CKT #	POSITION	DISTRIBUTION DEVICE	MODULE TYPE
1	1	A	193	TBD	TBD	D20DHR
2			194	"	"	
3	5	B	195	"	"	D20DHR
4			196	"	"	
5	9	C	197	"	"	D20DHR
6			198	"	"	
7	2	A	199	FOH Electric Catwalk	HL-PB-1, PB-4	D20DHR
8			200	"	HL-PB-2, PB-5	
9	6	B	201	"	HL-PB-3, PB-7	D20DHR
10			202	"	HL-PB-6, PB-10	
11	10	C	203	"	HL-PB-8, PB-11	D20DHR
12			204	"	HL-PB-9, PB-12	
13	3	A	205	TBD	TBD	D20DHR
14			206	"	"	
15	7	B	207	"	"	D20DHR
16			208	"	"	
17	11	C	209	"	"	D20DHR
18			210	"	"	
19	4	A	211	"	"	D20DHR
20			212	"	"	
21	8	B	213	"	"	D20DHR
22			214	"	"	
23	12	C	215	"	"	D20DHR
24			216	"	"	

Relay Panel: A.LRP.01

Location	Amperage	Relay #		Relay #	Amperage	Location
Catwalk HID Left	20A	1		2	20A	Catwalk HID Right
Catwalk HID Ghost	20A	3		4	20A	1E Worklights
2E Worklights	20A	5		6	20A	3E Worklights
Rear Stage Wall	20A	7		8	20A	Lock Rail Index Lights
Load Rail Index Lights	20A	9		10	20A	4E Worklights
Catwalk Worklights	20A	11		12	20A	SL & Loading Gallery...
SR & Corridor...	20A	13		14	20A	Loading Dock Door...
Fly Pit	20A	15		16	20A	
	20A	17		18	20A	
	20A	19		20	20A	
	20A	21		22	20A	
	20A	23		24	20A	

Relay Panel: BB.LRP.01

Location	Amperage	Relay #		Relay #	Amperage	Location
BB.LPB.01 & BB.LPB.02	20A	1		2	20A	BB.LPB.03 & BB.LPB.04
BB.LPB.05 & BB.LPB.06	20A	3		4	20A	BB.LPB.07 & BB.LPB.08
BB.LPB.09 & BB.LPB.10	20A	5		6	20A	BB.LPB.11 & BB.LPB.12
BB.LPB.13 & BB,LPB.14	20A	7		8	20A	BB,LPB.15 & BB.LPB.16
BB.LPB.17 & BB.LPB.18	20A	9		10	20A	BB.LPB.19 & BB.LPB.20
BB.LPB.21 & BB.LPB.22	20A	11		12	20A	BB.LPB.23 & BB.LPB 24
BB.LPB.25 & BB.LPB.26	20A	13		14	20A	BB.LPB.27 & BB.LPB.28
BB.LPB.29 & BB.LPB.30	20A	15		16	20A	BB.LWP.02
BB.LWP.03	20A	17		18	20A	BB.LWP.04
BB.LWP.05	20A	19		20	20A	
	20A	21		22	20A	
	20A	23		24	20A	

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

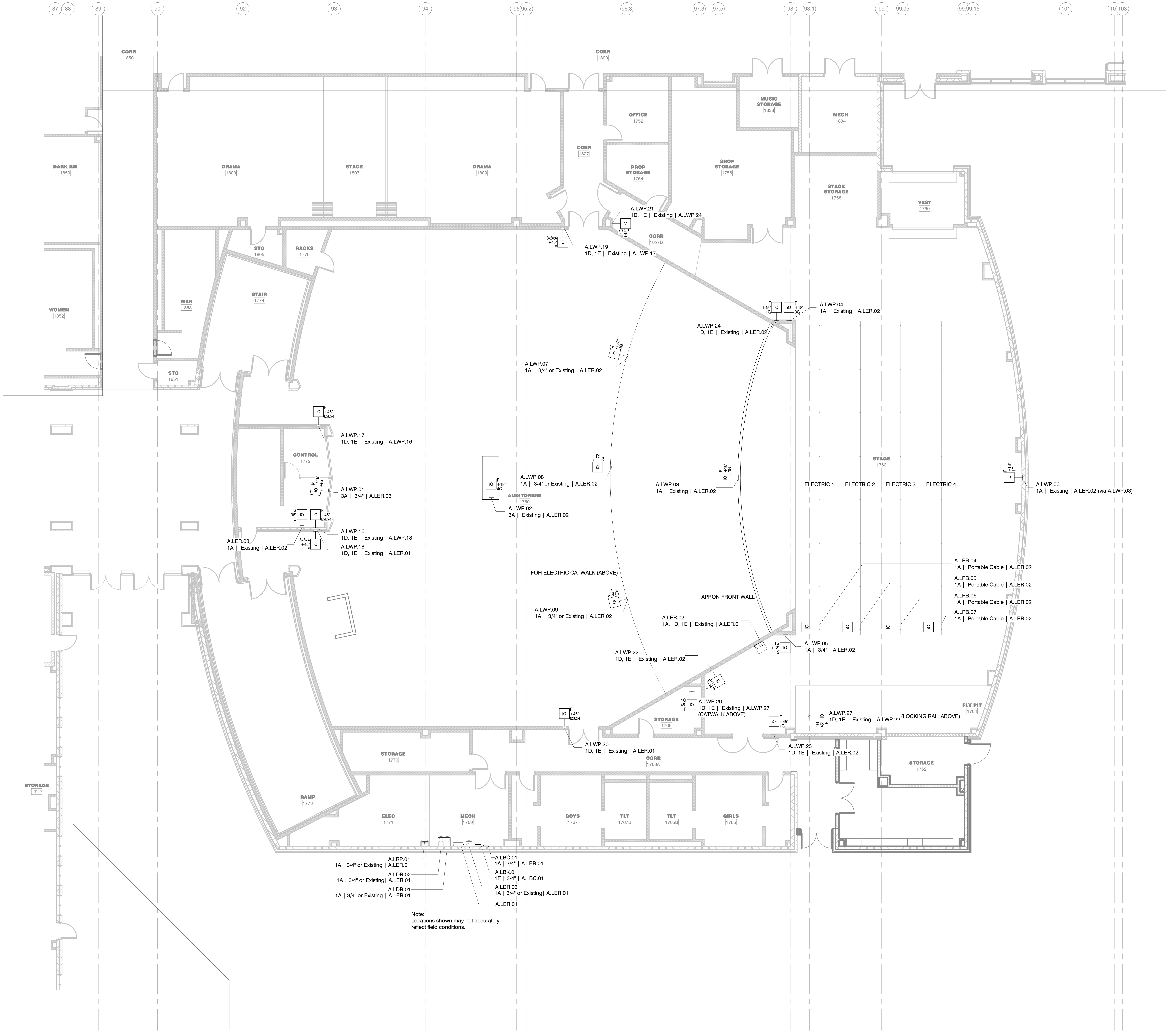
TL - SCHEDULES

TL0.02

of

General Notes:
- All power conduit and fill shown on the "TL" series drawings are for diagrammatic purposes only. Refer to project electrical drawings for sizing and fill requirements.
- Refer to sheet TL0.00 for cable schedule.
- All dimensions and loading shown are for diagrammatic purposes only. Verify all location dimensions with field conditions, and all loading with the Structural Engineer before construction or installation. Notify Consultant of any changes required.
- Interstitial steel shown on this drawing is to be designed by the project Structural Engineer and provided by the project Structural Contractor.
- Miscellaneous steel above and beyond what is shown may be required for connection of stage lighting to roof steel. It is the responsibility of the Theatrical Lighting Contractor to provide any miscellaneous steel and to coordinate this with the General Contractor.
- Theatrical Lighting Contractor to verify the load capacity of the structure with the project Structural Engineer.
- All power conduit and wire sizing to be determined by EE per NEC and all applicable local codes.
- All cable runs for Type A cable shall not exceed 295 feet.

Drawing Notes:
1. A.LPB.04 thru 07 are portable cable to respective existing junction boxes located at loading rail gallery where it transitions to type "A" cable to A.LER.02.
2. Any existing equipment that is not required for the renovation to be salvaged by contractor/electrical contractor/theatrical lighting contractor and coordinated with owner as to wether it should be turned over or disposed of properly.

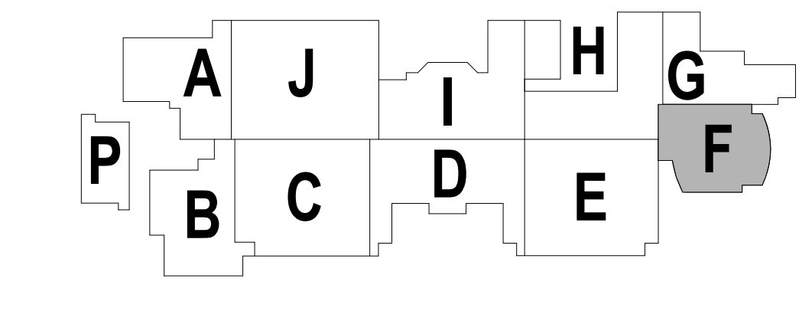


Note:
Locations shown may not accurately reflect field conditions.

1 TL - 1ST FLOOR PLAN - AREA 'F'

Scale: 1/8" = 1'-0"

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING



NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

TL - 1ST FLOOR PLAN - AREA F

TL2.10F

of

11/13/2024 11:59:07 AM

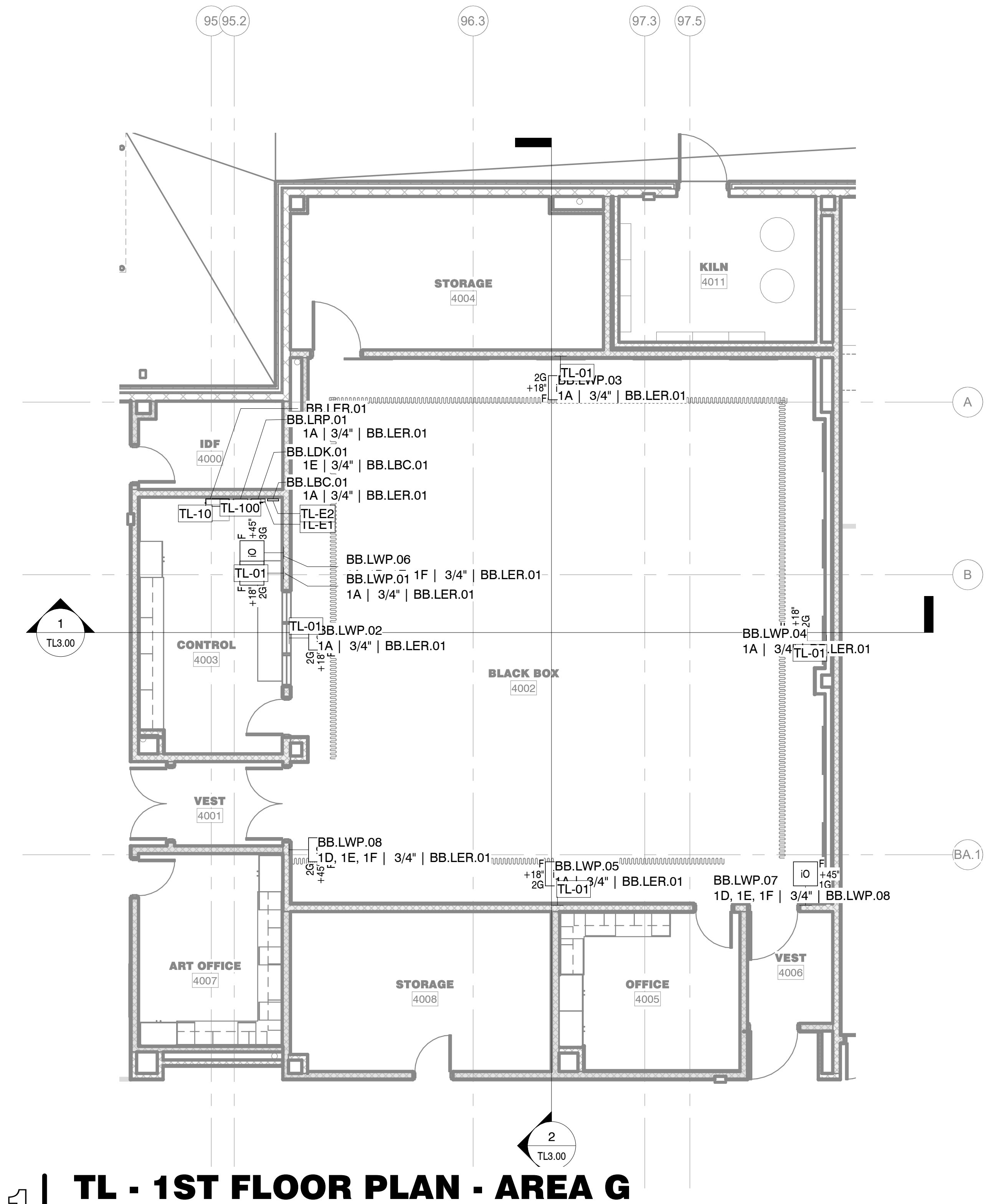
Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

Keynote Legend

Key	Keynote
TL-01	(1) Dedicated 20A, 120V circuit fed from Lighting Relay Panel.
TL-10	(1) Dedicated 20A, 120V circuit fed from closest electric panel.
TL-100	120/208V 3-phase feed, 100A per leg, 4W+G standard power.
TL-E1	4-Wire 20A Max. sense feed to engineer specified NORMAL power source.
TL-E2	(1) 20A, 120V circuit to engineer specified EMERGENCY power source.

General Notes:

- All power conduit and fill shown on the "TL" series drawings are for diagrammatic purposes only. Refer to project electrical drawings for sizing and fill requirements.
- Refer to sheet TL0.00 for cable schedule.
- All dimensions and loading shown are for diagrammatic purposes only. Verify all location dimensions with field conditions, and all loading with the Structural Engineer before construction or installation. Notify Consultant of any changes required.
- Interstitial steel shown on this drawing is to be designed by the project Structural Engineer and provided by the project Structural Contractor.
- Miscellaneous steel above and beyond what is shown may be required for connection of stage lighting to roof steel. It is the responsibility of the Theatrical Lighting Contractor to provide any miscellaneous steel and to coordinate this with the General Contractor.
- Theatrical Lighting Contractor to verify the load capacity of the structure with the project Structural Engineer.
- All power conduit and wire sizing to be determined by EE per NEC and all applicable local codes.
- All cable runs for Type A cable shall not exceed 295 feet.



1 TL - 1ST FLOOR PLAN - AREA G

Scale: 1/8" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

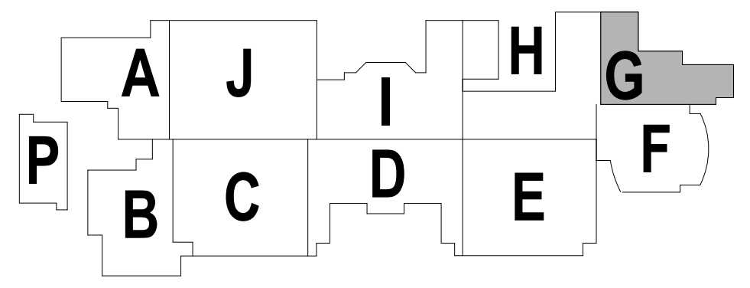
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

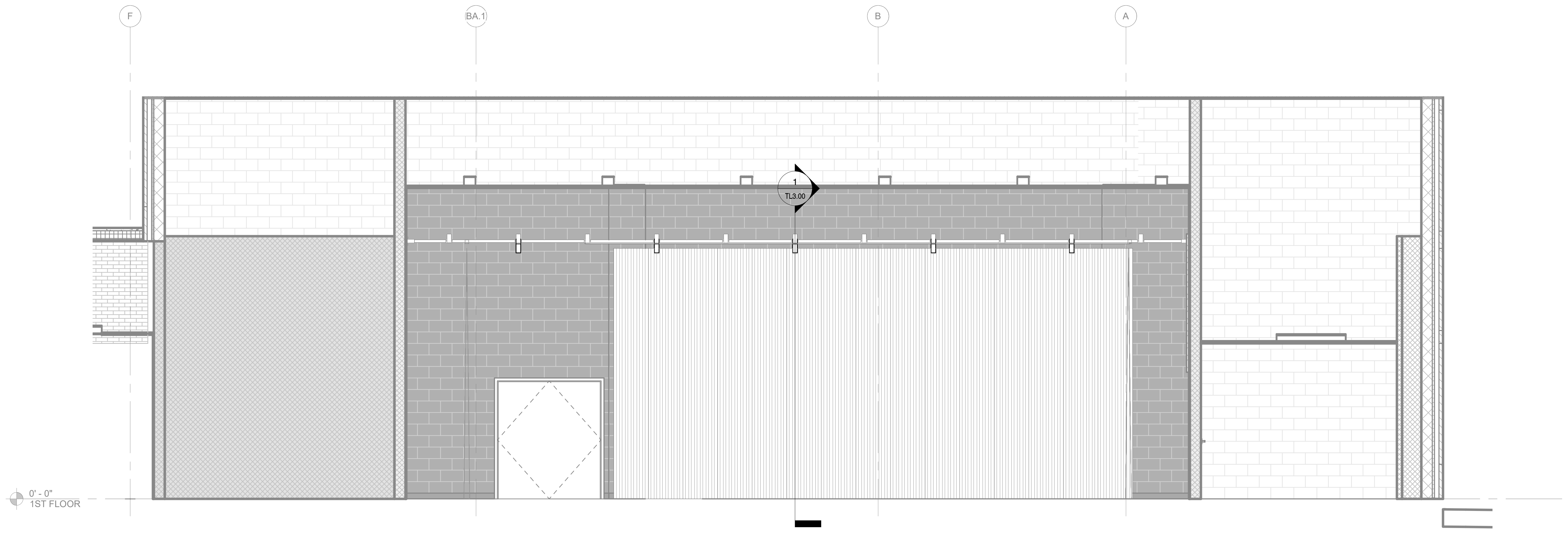


Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

TL - 1ST FLOOR PLAN - AREA G

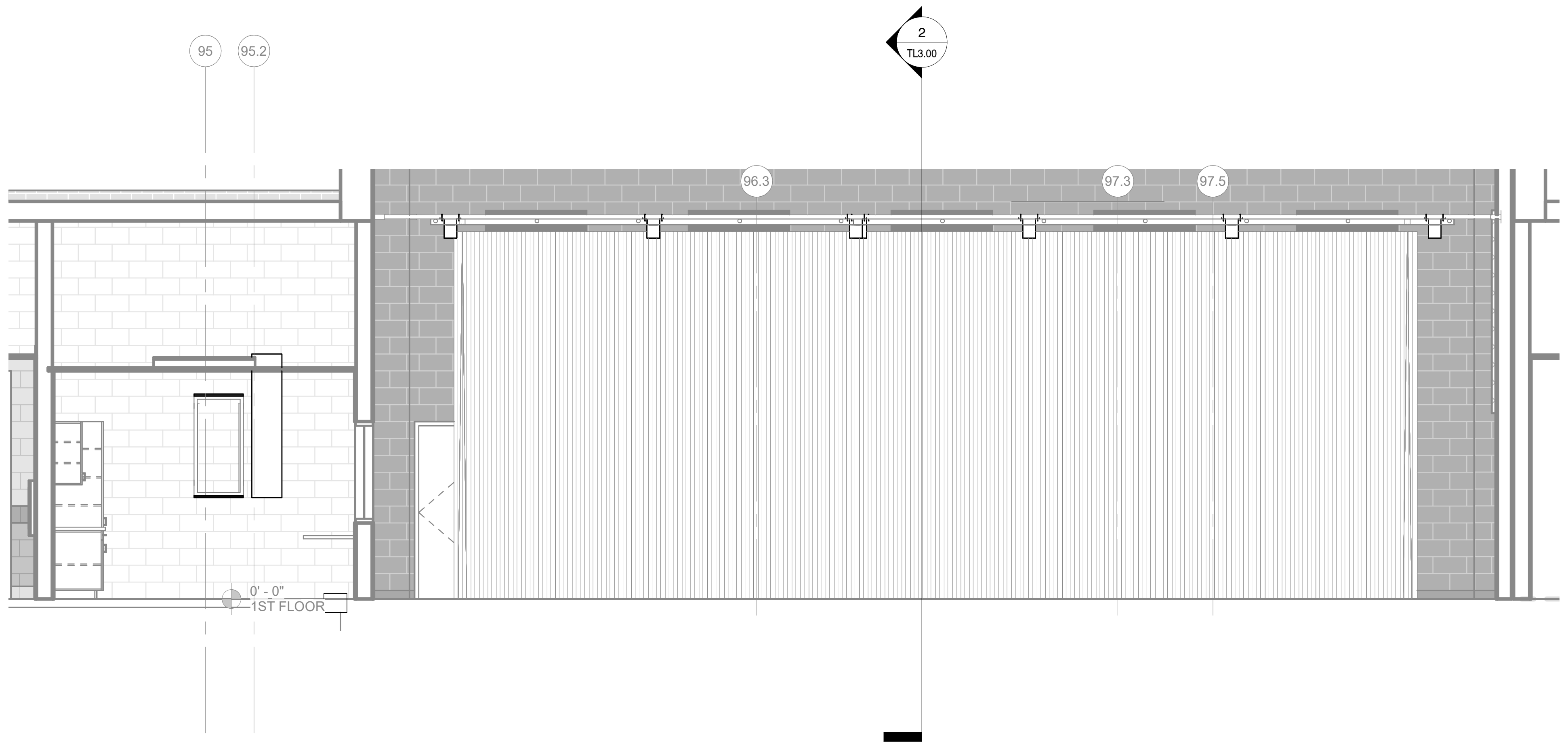
TL2.10G

of



2 TL - BLACK BOX - TRANSVERSE SECTION

Scale: 1/4" = 1'-0"



1 TL - BLACK BOX - CENTERLINE SECTION

Scale: 1/4" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

TL - SECTIONS & ELEVATIONS

TL3.00
of

11/13/2024 11:59:16 AM

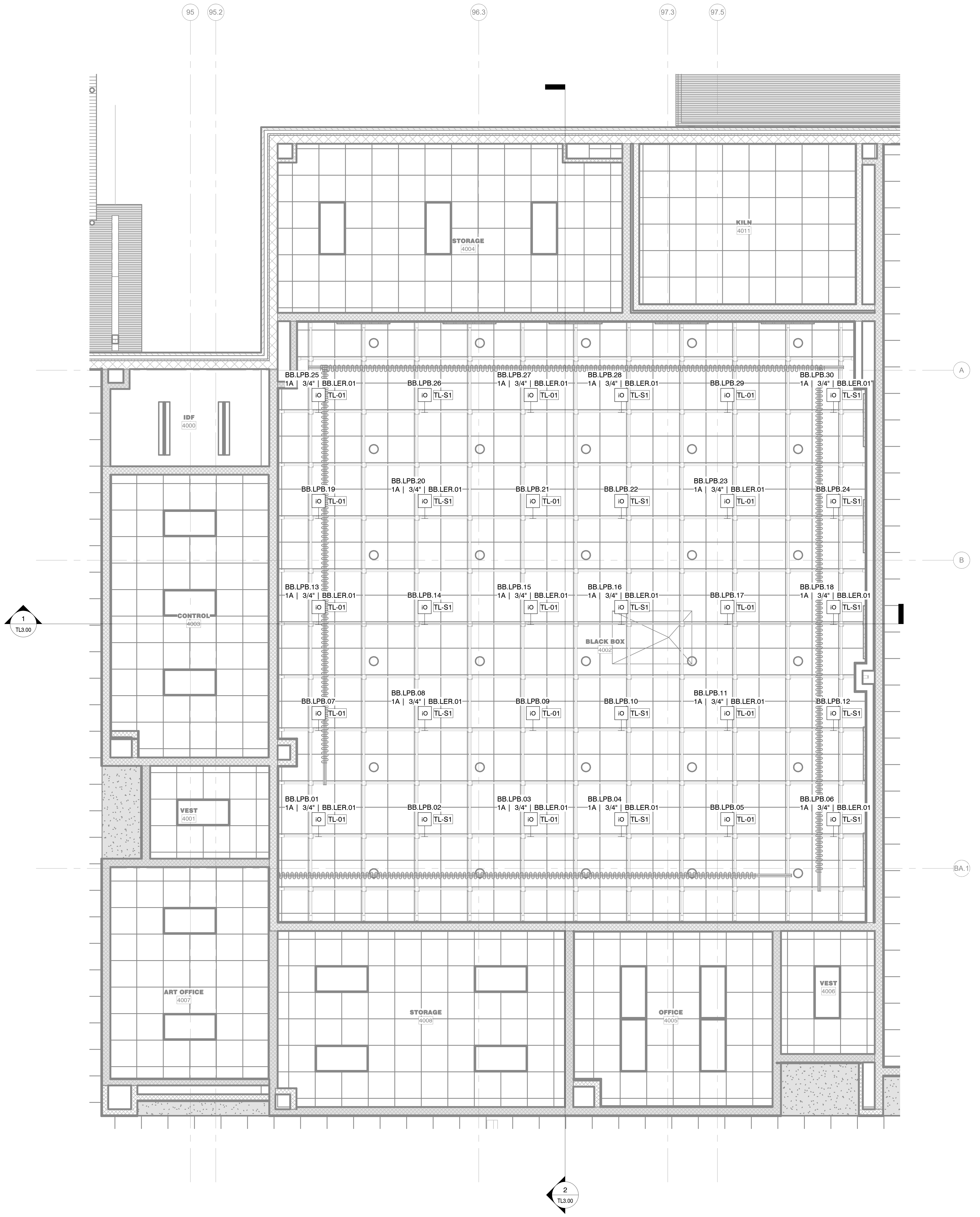
Autodesk Docs://23072_CFISD_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

Keynote Legend

Key	Keynote
TL-01	(1) Dedicated 20A, 120V circuit fed from Lighting Relay Panel.
TL-S1	(1) Shared 20A, 120V circuit fed from Lighting Relay Panel. See panel schedule.

General Notes:

- All power conduit and fill shown on the "TL" series drawings are for diagrammatic purposes only. Refer to project electrical drawings for sizing and fill requirements.
- Refer to sheet TL0.00 for cable schedule.
- All dimensions and loading shown are for diagrammatic purposes only. Verify all location dimensions with field conditions, and all loading with the Structural Engineer before construction or installation. Notify Consultant of any changes required.
- Interstitial steel shown on this drawing is to be designed by the project Structural Engineer and provided by the project Structural Contractor.
- Miscellaneous steel above and beyond what is shown may be required for connection of stage lighting to roof steel. It is the responsibility of the Theatrical Lighting Contractor to provide any miscellaneous steel and to coordinate this with the General Contractor.
- Theatrical Lighting Contractor to verify the load capacity of the structure with the project Structural Engineer.
- All power conduit and wire sizing to be determined by EE per NEC and all applicable local codes.
- All cable runs for Type A cable shall not exceed 295 feet.



1 TL - 1ST FLOOR REFLECTED CEILING PLAN - AREA G

Scale: 1/4" = 1'-0"

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

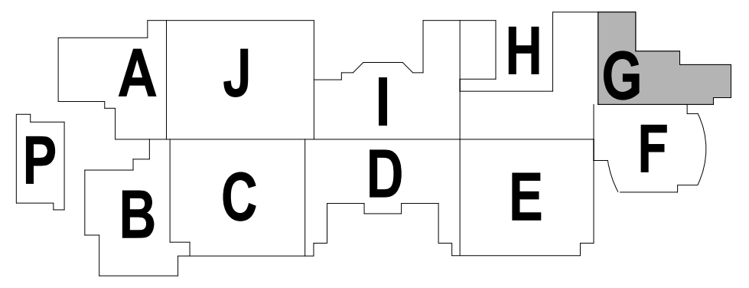
MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

KEY PLAN: CY-LAKES HIGH SCHOOL BUILDING

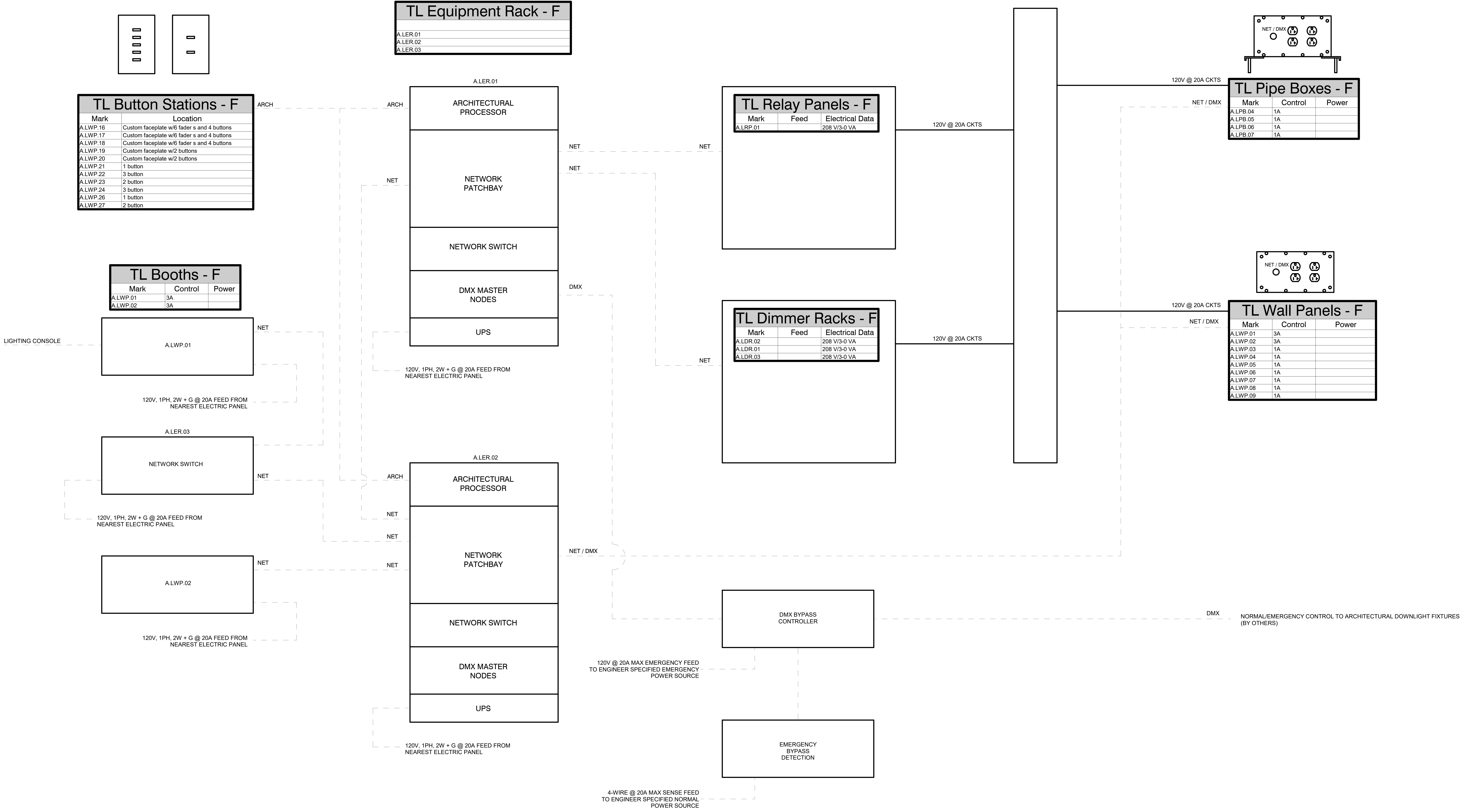


Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

TL - 1ST FLOOR
REFLECTED CEILING
PLAN - AREA G

TL4.10G

of



TL Button Stations - F

Mark	Location
A.LWP.16	Custom faceplate w/6 fader s and 4 buttons
A.LWP.17	Custom faceplate w/6 fader s and 4 buttons
A.LWP.18	Custom faceplate w/6 fader s and 4 buttons
A.LWP.19	Custom faceplate w/2 buttons
A.LWP.20	Custom faceplate w/2 buttons
A.LWP.21	1 button
A.LWP.22	3 button
A.LWP.23	2 button
A.LWP.24	3 button
A.LWP.26	1 button
A.LWP.27	2 button

TL Booths - F

Mark	Control	Power
A.LWP.01	3A	
A.LWP.02	3A	

TL Equipment Rack - F

A.LER.01
A.LER.02
A.LER.03

TL Relay Panels - F

Mark	Feed	Electrical Data
A.LRP.01		208 V/3-0 VA

TL Dimmer Racks - F

Mark	Feed	Electrical Data
A.LDR.02		208 V/3-0 VA
A.LDR.01		208 V/3-0 VA
A.LDR.03		208 V/3-0 VA

TL Pipe Boxes - F

Mark	Control	Power
A.LPB.04	1A	
A.LPB.05	1A	
A.LPB.06	1A	
A.LPB.07	1A	

TL Wall Panels - F

Mark	Control	Power
A.LWP.01	3A	
A.LWP.02	3A	
A.LWP.03	1A	
A.LWP.04	1A	
A.LWP.05	1A	
A.LWP.06	1A	
A.LWP.07	1A	
A.LWP.08	1A	
A.LWP.09	1A	

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

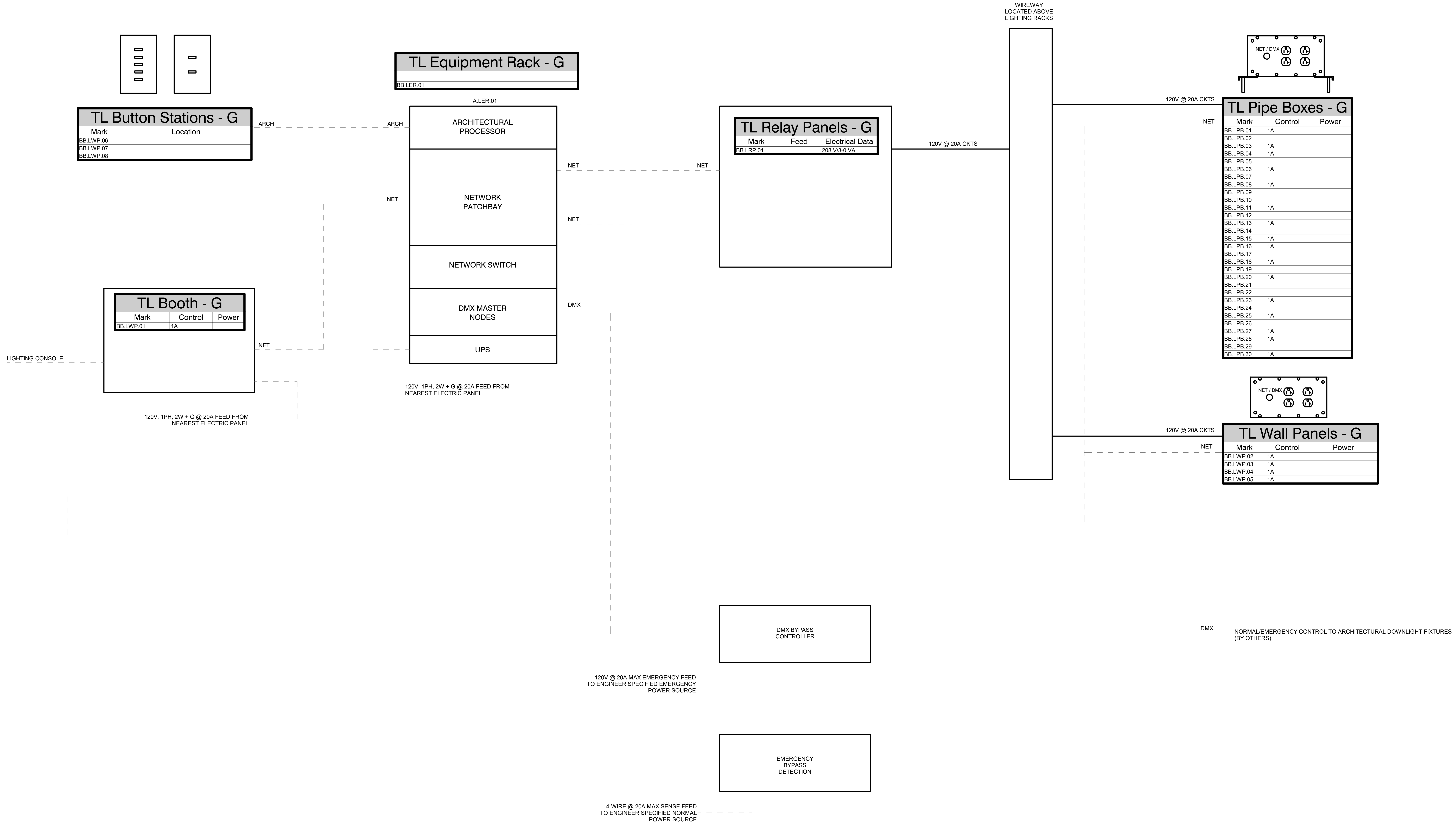
5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number: 23071
Date: 11-17-2024
Drawn by: TAC

TL - SCHEMATIC - AREA F

11/13/2024 11:59:17 AM



TL Button Stations - G

Mark	Location
BB.LWP.06	
BB.LWP.07	
BB.LWP.08	

TL Equipment Rack - G

BB.LER.01

TL Booth - G

Mark	Control	Power
BB.LWP.01	1A	

TL Relay Panels - G

Mark	Feed	Electrical Data
BB.LRP.01		208 V/3-0 VA

TL Pipe Boxes - G

Mark	Control	Power
BB.LPB.01	1A	
BB.LPB.02		
BB.LPB.03	1A	
BB.LPB.04	1A	
BB.LPB.05		
BB.LPB.06	1A	
BB.LPB.07		
BB.LPB.08	1A	
BB.LPB.09		
BB.LPB.10		
BB.LPB.11	1A	
BB.LPB.12		
BB.LPB.13	1A	
BB.LPB.14		
BB.LPB.15	1A	
BB.LPB.16	1A	
BB.LPB.17		
BB.LPB.18	1A	
BB.LPB.19		
BB.LPB.20	1A	
BB.LPB.21		
BB.LPB.22		
BB.LPB.23	1A	
BB.LPB.24		
BB.LPB.25	1A	
BB.LPB.26		
BB.LPB.27	1A	
BB.LPB.28	1A	
BB.LPB.29		
BB.LPB.30	1A	

TL Wall Panels - G

Mark	Control	Power
BB.LWP.02	1A	
BB.LWP.03	1A	
BB.LWP.04	1A	
BB.LWP.05	1A	

Autodesk Docs://23072_CFSID_Phase_6_r22/CFISD-CY-LAKES HS_AVTL_R22.rvt

NATEX
CORPORATION
ARCHITECTS
www.natexarchitects.com
447 Heights Boulevard
Houston, TX 77007
Phone: 713-975-9525
Fax: 713-780-7824

Coleman Partners
ARCHITECTS
cparch.com
3701 Kirby Drive, Suite 830
Houston,TX 77098
tel 832.947.1038 fax 225.214.5365

CONSTRUCTION DOCUMENT

CIVIL ENGINEER
BROOKS AND SPARKS, INC.
21020 PARK ROW
KATY, TX 77449
tel: 281.578.9595

STRUCTURAL ENGINEER
DALLY + ASSOCIATES, INC.
9800 RICHMOND AVE.
SUITE 460
HOUSTON, TX 77042
tel: 713.337.8881

MEPT ENGINEER
SALAS O'BRIEN
10930 W. SAM HOUSTON PKWY. N.
SUITE 900
HOUSTON, TX 77064
tel: 281.664.1900

2024 CY-LAKES HIGH SCHOOL RENOVATION

5750 GREENHOUSE RD., KATY, TX 77449
CFISD PROJECT NO. 24-02-5749-R-RFP

Revisions / Submission

Project Number:	23071
Date:	11-17-2024
Drawn by:	TAC

TL - SCHEMATIC - AREA G

TL7.00G

of