Project No. 23-148.00

February 11, 2025

02/11/2025

ADDENDUM NO. 4
TO THE
DRAWINGS AND PROJECT MANUAL
FOR
2024 CY-CREEK HS RENOVATIONS
CYPRESS-FAIRBANKS ISD
CYPRESS, TEXAS

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4.1 GENERAL

A. This addendum modifies the drawings and project manual, dated January 10, 2025, as noted within and shall become part of the Contract Documents.

B. Each holder of proposal documents registered with the Architect will receive a copy of the addendum. Each prime proposer is responsible for distribution of information conveyed by this addendum to its sub-proposers and suppliers.

C. Proposers shall acknowledge receipt of this addendum in the space provided on the proposal form. Failure to do so may subject proposer to disqualification.

VOLUME 2

4.2 SECTION 05 73 00 - DECORATIVE METAL RAILINGS

A. This section, attached hereto, is entirely new and is hereby made a part of this addendum.

4.3 SECTION 07 21 19 – FOAMED-IN-PLACE INSULATION

A. This section, attached hereto, is entirely new and is hereby made a part of this addendum.

4.4 SECTION 07 81 16 – CEMENTITIOUS FIREPROOFING

A. This section, attached hereto, is entirely new and is hereby made a part of this addendum.

4.5 SECTION 08 33 23 - OVERHEAD COILING DOORS

A. This section, attached hereto, is entirely new and is hereby made a part of this addendum.

4.6 SECTION 10 22 39 - FOLDING PANEL PARTITIONS

A. This section, attached hereto, is entirely new and is hereby made a part of this addendum.

4.7 SECTION 12 57 16 - WELDING STATIONS

A. This section, attached hereto, is entirely new and is hereby made a part of this addendum.

4.8 SECTION 41 34 23.33 - SPRAY PAINTING BOOTH

A. This section, attached hereto, is entirely new and is hereby made a part of this addendum.

4.9 REVISED DRAWINGS

A. Sheet No. A7.02, A7.03, A7.10, and T0.00, dated February 11, 2025 and attached hereto is a revised drawing and is hereby made a part of this Addendum.

END OF ADDENDUM NO. 4

SECTION 05 73 00

DECORATIVE METAL RAILINGS

02/11/2025

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Interior stainless steel handrails and related items.

1.2 SUBMITTALS

A. Shop Drawings: Submit in accordance with SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Railing System:
1. System components: Pre-engineered drawings, designed and sealed by Professional Structural Engineer licensed in State of Texas.
2. Attachments to building structure: Designed and sealed by Professional Structural Engineer licensed in State of Texas.

C. Product Data: Manufacturer's product lines of mechanically connected railings.

D. Shop Drawings:
1. Include plans, elevations, sections, details and attachments to other work of each metal fabrication, including setting drawings for anchor bolts and other required anchors.
2. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation and licensed in State of Texas.

E. Samples for Initial Selection: For products involving selection of color, texture, or design.

F. Qualification Data: For professional engineer licensed in State of Texas.

G. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.

1.3 PERFORMANCE REQUIREMENTS

A. Structural Performance of Railings: Provide railings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
1. Handrails:
a. Uniform load of 50 lb/ft. applied in any direction.
b. Concentrated load of 250 lb applied in any direction.
c. Uniform and concentrated loads need not be assumed to act concurrently.

B. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of railing through one source from a single manufacturer.

B. Mock-up Panel: One section of railing system for verification.
1. Approximate size: 60" long x full height
2. Approved mockups may become part of the completed work if undamaged at time of Substantial Completion.
3. Approval of mockups does not constitute approval of deviations from the Contract Documents unless such deviations are specifically approved by Architect in writing.

1.5 PROJECT CONDITIONS

A. Field Measurements: Verify actual locations of walls and other construction contiguous with railings by field measurements before fabrication and indicate measurements on Shop Drawings.

1.6 COORDINATION AND SCHEDULING

A. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

B. Schedule installation so wall attachments are made only to completed walls. Do not support railings temporarily by any means that do not satisfy structural performance requirements.

PART 2 - PRODUCTS

2.1 MATERIALS - METALS

A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.

B. Stainless Steel:
1. Shapes: ASTM A240/A240M, Type 304 or 316.
2. Tube: ASTM A554, Type 304 or 316.

C. Steel:
1. Shapes: ASTM A108

D. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails.
1. Provide cast-stainless steel wall brackets with flange tapped for concealed anchorage with vertical and horizontal adjustment capability
2. Manufacturer and style as selected by Architect.

2.2 FASTENERS

A. Fabricate railings with joints tightly fitted and secured. Furnish fittings to accommodate site assembly and installation.

B. Supply components required for anchorage of railings. Fabricate anchors and related components of same material and finish as railing.

C. Conceal fastenings where possible.

D. Use welds for permanent connections where possible.
1. Grind exposed welds smooth.
2. Tack welds prohibited on exposed surfaces.

E. Accommodate for expansion and contraction of members and building movement without damage to connections or members.

2.3 FABRICATION

A. Components:
1. Handrails: 1-1/2 inch diameter stainless steel round tubing.
2. Mountings: Stainless steel.

B. Fabricate railings in accordance with approved Shop Drawings.

C. Fabricate railings with joints located symmetrically.

D. Fit and shop assemble railings in largest practical sizes for delivery to site.

E. Fabricate railings with joints tightly fitted and secured. Furnish fittings to accommodate site assembly and installation.

F. Supply components required for anchorage of railings. Fabricate anchors and related components of same material and finish as railing.

G. Conceal fastenings where possible.

H. Use welds for permanent connections where possible.
1. Grind exposed welds smooth.
2. Tack welds prohibited on exposed surfaces.

I. Accommodate for expansion and contraction of members and building movement without damage to connections or members.

2.4 FINISHES

A. Stainless Steel: NAAMM AMP 503; No. 6 satin.

2.5 FINISHES, GENERAL

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.

D. Provide exposed fasteners with finish matching appearance, including color and texture, of railings.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine plaster and gypsum board assemblies, where reinforced to receive anchors, to verify that locations of concealed reinforcements have been clearly marked for Installer. Locate reinforcements and mark locations if not already done.

3.2 INSTALLATION, GENERAL

A. Fit exposed connections together to form tight, hairline joints.

B. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
1. Do not weld, cut, or abrade surfaces of railing components that have been coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
2. Install handrails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4" in 12 feet.

C. Corrosion Protection: Coat concealed surfaces of steel that will be in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint, or provide protective gaskets.

D. Adjust railings before anchoring to ensure matching alignment at abutting joints.

E. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

3.3 RAILING CONNECTIONS

A. Nonwelded Connections: Use mechanical joints for permanently connecting railing components. Use wood blocks and padding to prevent damage to railing members and fittings.

B. Expansion Joints: Install expansion joints at locations indicated but not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2" beyond joint on either side, fasten internal sleeve securely to 1 side, and locate joint within 6" of post.

3.4 ANCHORING RAILING ENDS

A. Anchor railing ends to concrete and masonry with round flanges connected to railing ends and anchored to wall construction with anchors and bolts.

B. Anchor railing ends to metal surfaces with flanges bolted to metal surfaces and connected to railing ends using nonwelded connections.

3.5 ATTACHING HANDRAILS TO WALLS

A. Attach handrails to wall with wall brackets. Provide brackets with 1 1/2" clearance from inside face of handrail and finished wall surface.

B. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads.

C. Secure wall brackets to building construction as indicated, or if not indicated, as follows:
1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
2. For hollow masonry anchorage, use toggle bolts.
3. Provide blocking between studs in stud wall construction.

3.6 ADJUSTING AND CLEANING

A. Clean steel and stainless steel by washing thoroughly with clean water and soap and rinsing with clean water.

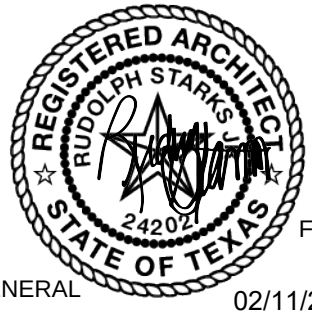
B. Installation Tolerances:
1. Maximum variation from level or from indicated slopes: 1/4 inch in 10 feet, noncumulative.
2. Maximum offset from true alignment of abutting members: 1/16 inch.

3.7 PROTECTION

A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.

B. Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

END OF SECTION



SECTION 07 21 19

FOAMED-IN-PLACE INSULATION

02/11/2025

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Closed cell sprayed polyurethane foam insulation used at miscellaneous voids in thermal building envelope.

B. Related Sections:
1. Section 03 11 19 - Insulating Concrete Forming.
2. Section 06 10 00 - Rough Carpentry.
3. Section 07 21 00 - Building Insulation.
4. Section 07 27 26 - Fluid-Applied Membrane Air Barriers.
5. Section 07 53 00 - Single-ply Membrane Roofing.

1.2 SYSTEMS DESCRIPTION/QUALITY ASSURANCE

A. Contractor must use a total system, encompassing equipment, insulation, thermal barrier as supplied and tested by the manufacturer to meet IBC, IECC, and NFPA requirements. No substitutions may be made for tested systems.

B. Contractor must be licensed and trained by the manufacturer.

C. Manufacturer's qualified technical representative will be required to visit project site to advise Installer of procedures and precautions for installation of insulation materials and to verify installation requirements. Manufacturer's representative shall make inspection of the installation a minimum of three times. Manufacturer's written reports of findings shall be submitted for the Architect review.

1.3 SUBMITTALS

A. General: Submit in accordance with SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

B. Product Data:
1. Submit data that the product meets or exceeds specified requirements.
2. Preparation instructions and recommendations.
3. Storage and handling requirements and recommendations.
4. Installation methods.
5. Product Test Reports: For each product, for tests performed by a qualified testing agency.

C. Certification:
1. Submit current Manufacturer’s Authorized Contractor Certificate.
2. Submit manufacturer's certificate that the product meets or exceed specified requirements.
3. Manufacturer's written certification that product contains no asbestos.
4. Submit the technical data sheet from the manufacturer showing the test results from the ASTM E84 (Surface Burning Characteristics).

D. Samples: Submit samples of each product specified.

E. Mock-Up:
1. A representative surface of not less than 100 square feet shall be sprayed and approved by the manufacturer and Architect prior to proceeding.
2. Finish areas designated by Architect.
3. Do not proceed with remaining work until installation is approved by manufacturer and Architect.
4. Rework mock-up area as required to produce acceptable work.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Materials shall be delivered in original, unopened containers bearing name of manufacturer, product identification, safety information, and expiration date.

B. Store materials off ground, under cover and away from damp surfaces and keep material dry at all times.

C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction. Empty containers shall be removed from site on a daily basis.

1.5 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

B. Ventilate insulation application area in accordance with the Spray Foam Coalition's Guidance on best practices for the installation of Spray Polyurethane Foam.

C. Protect workers as recommended by the Spray Foam Coalition's Guidance on best practices for the installation of Spray Polyurethane Foam.

D. Protect adjacent surfaces, windows, equipment and site areas from damage of overspray.

1.6 WARRANTY

A. Provide limited lifetime warranty. Manufacturer's sole responsibility under this Limited Lifetime Warranty shall be to repair or replace any defective Product.

PART 2 - PRODUCTS

2.1 MATERIALS

A. The following installation contractors are approved on this project as trained and certified by the Air Barrier Association of America (ABAA) and have received Huntsman Building Solutions SPF training and certification.
   A+ Insulation, Houston, TX, 77073, Joey Moss, 936-520-8859, joey@a-plushinsulation.com
   IBP, Houston, TX, 77032, Ryan Reese, 281-323-0083, ryan.reese@installed.net
   Garland Insulation, Houston, TX, 77099, Hayden Drum, 713-896-4608, HDrum@garlandinsulating.com
   1. Allowance will be made for additional installers, provided they submit their name, certification by the manufacturer, experience, and information showing their proficiency to the Architect at least one week prior to the bid. Approval or denial will be issued by addendum.

B. Basis of Design: ASTM C 1029, Type II, provide thicknesses to meet R-values as shown on the drawings, Huntsman Heatlok HFO Pro foamed-in-place insulation as manufactured by huntsman Building Solutions; The Woodlands, TX. (Phone: (888) 224-1533. Web: http://www.huntsmanbuilding solutions.com)
   1. Application with a prescriptive Thermal Barrier: Up to 9-1/4 inches for wall cavities with minimum 1/2 inch gypsum wall board or equivalent 15 minute thermal barrier in accordance with IBC 2603.4.
   2. Interior applications without a thermal or ignition barrier (exposed foam) shall include BLAZELOK TBX intumescent coating. Passes NFPA 285 testing as part of an approved assembly.
   3. Physical Properties:
      a. Density (ASTM D 1622): 2.1 lb/cf.
      b. Thermal Resistance (ASTM C 518): Aged R value at 1 inch (180 days at 76 degrees F) – R-7.4 (sf.h degree F/BTU)
      c. Water Vapor Permeance @ 1.2"(ASTME 96-05): < 1 perms (is a vapor barrier per IBC Section 202 definitions at 1.2")
      d. Air Permeance @ 75 Pa @ 1" (ASTME 2178-03): 0.02 L/sm2
      e. Air Leakage of Air Barrier Assembly (static loading to 600 Pa and gust loading to 1,200 PA) Complies with ABAA requirements (ASTME 2357-05): <0.02L/sm2
      f. Compressive Strength (ASTM D 1621): 28.7 psi (198 kPa).

g. Tensile Strength (ASTM D 1623): 46.2 psi
h. Off Gassing Test (VOC Emissions) (CGSB 51.23-92): Pass (no toxic vapor).
i. Surface Burning Characteristics (ASTM E 84) 4 inches: Class I. Flame Spread Index 20, Smoke Developed Index 400.
j. Closed Cell Content (ASTM D2856) : >90%

C. Equipment used to apply the foam insulation shall have fixed ratio positive displacement pumps and approved by foam manufacturer.

D. Accessories:
1. Joint Cover Membrane: Membrane at Tilt-Wall Joints, Transitions in Substrate, and Connections to Adjacent Elements shall be 40 mil, minimum 9 inches wide, Heatlok® ABS Membrane.
2. Primer: Material recommended by insulation manufacturer where required for adhesion of insulation to substrates.

E. Water Based Intumescent coating: Only at interior applications without a thermal or ignition barrier (exposed foam), provide BLAZELOK™ TBX Intumescent Coating by Huntsman Building Products.
1. Provide intumescent coating only when foam insulation is exposed to the building interior, plenums, attics or crawlspaces, except that no intumescent coating is required if the foam insulation is specifically approved based on large-scale tests such as, but not limited to, NFPA 286 (with the acceptance criteria identified in the International Building Code), FM 4880, UL 1040 or UL 1715. Such testing shall be related to the actual end-use configuration and be performed on the finished manufactured foam plastic assembly in the maximum thickness intended for use.
2. Application: Follow manufacturer's application recommendations.
3. Physical Properties:
a. Approval: Complies with NFPA 101 paragraph 10.2.3.7.2 for use without a prescriptive thermal barrier.
b. Surface Burning Characteristics (ASTM E 84): Class I. Flame Spread Index <25, Smoke Developed Index <50.
c. Expands up to 2000 percent.
d. Flash Point: None
e. Volatility/VOC: < 50 g/L
f. Non-toxic, drain safe, water based, non-fuming.
g. Color: Dull Flat White / Gray. Wait minimum 24 hours prior to top coating with quality latex paint. Verify dryness with moisture meter.

PART 3 - EXECUTION

3.1 INSPECTION

A. The installing contractor shall examine all surfaces and report all unsatisfactory conditions in writing to the Contractor. The work shall not proceed until unsatisfactory conditions are corrected. Commencement of work outlined in this section shall be deemed as acceptance of existing work and conditions.

B. Surfaces to receive spray insulation shall be inspected prior to application to determine if priming/sealing is required to insure bonding and/or to prevent discoloration caused by migratory stains. Prime accordingly.

3.2 PREPARATION

A. Provide masking, drop cloths or other satisfactory coverings for all materials/surfaces which are not to receive insulation so as to prevent damage from overspray.

B. Clips, hangers, fasteners, supports, sleeves and other attachments to spray bases are to be placed by other trades prior to the application of sprayed insulation.

C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

D. Area shall be dried-in before spraying insulation.

3.3 INSTALLATION

A. Installation, clean-up and curing shall be accomplished according to the manufacturer's recommendations and common construction standards.

B. Peel off silicone release paper or film from joint cover membrane. Membrane must be adhered to wall a minimum of 3 inches wide on either side of the joint. Once installed, a pressure must be applied over the whole surface using a hard roller to ensure a perfect adhesion.

C. Apply insulation to substrate in sufficient thickness to achieve the required thermal value.

D. Spray insulation to envelop entire area to be insulated and fill voids.

E. Spray insulation on wall and continue onto deck 4” to seal to deck. Tape area on deck to achieve a straight line.

F. Apply in multiple passes to reach specified R-Value (-0 / +1/4) and not exceed maximum thicknesses recommended by manufacturer. Do not spray into rising foam.

G. Miscellaneous Voids: Apply according to manufacturer's written instructions.

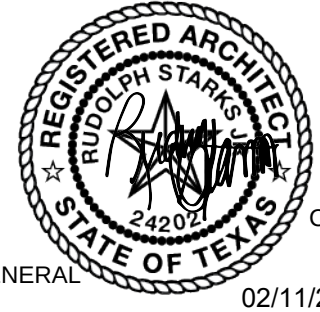
H. Provide natural or mechanical ventilation continuously to properly cure the insulation.

3.4 PROTECTION

A. Protect installed products from damage due to harmful weather exposures, physical abuse, and other causes until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION



SECTION 07 81 16

CEMENTITIOUS FIREPROOFING

PART 1 - GENERAL

02/11/2025

1.1 SUMMARY

A. Section Includes: Direct-to-steel fireproofing sprayed on steel members, floor deck, and roof deck, as scheduled. Material and installation shall conform to the applicable building code requirements of all authorities having jurisdiction.

B. Related Sections:
1. Section 01 45 23 - Testing and Inspection Services.
2. Section 05 12 00 - Structural Steel Framing.
3. Section 05 21 00 - Steel Joists Framing.
4. Section 05 31 00 - Steel Decking.
5. Section 09 21 13 - Plaster Assemblies: plaster fireproofing.
6. Section 09 21 16 - Gypsum Board Assemblies: gypsum wallboard fireproofing.

1.2 SUBMITTALS

A. Fireproofing Design: Submit copies of each UL Design selected for each required fire resistance rating, including an applicator's certification that each UL Design selected will provide the scheduled fire resistance rating in accordance with the referenced building code.

B. Certificates:
1. Provide manufacturer's certification or independent test reports confirming that installed materials meet or exceed performance criteria specified.
2. Provide reports from reputable independent testing agencies, of product proposed for use, which indicate conformance to ASTM E 84 and E 119.
3. Provide manufacturer’s certification that UL Designs selected for the project are not load restricted.

C. Product Data: Submit in accordance with SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES. Submit manufacturer's literature of products furnished, including application instructions.

D. Thickness Schedule: Provide schedule indicating material to be used, building elements to be protected with spray-applied fireproofing, hourly rating, and material thickness provided and appropriate references.

1.3 QUALITY ASSURANCE

A. Applicator: Work shall be performed by a firm acceptable to the cementitious fireproofing material manufacturer.

B. Requirements of Regulatory Agencies:
1. Underwriters' Laboratories, Inc.: Products, execution, and thickness shall conform to approved UL Designs as published in UL Fire Resistance Directory.
2. Testing: Sprayed fireproofing designs shall be as tested and certified to attain specified fire resistance ratings in accordance with ASTM E 119.
3. Local Building Code: Fireproofing material shall have approval of governing code authorities for this building's materials and designs.

C. Pre-installation Conference: Conduct conference at project site. Contractor, fireproofing subcontractor, and independent testing laboratory shall attend a pre-installation conference to review the substrates for acceptability, method of application, applied thicknesses, inspection procedures, and other issues.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to project site in original, unopened packages with legible and intact manufacturers' labels identifying products. Include on labels names of products, manufacturers, and date of manufacture. Also include UL labels for fire-resistance ratings applicable to project.

B. Store materials inside, under cover, above ground and in a manner to keep them dry until ready to use. Remove from project site and discard materials that have been exposed to moisture or have otherwise deteriorated.

1.5 PROJECT CONDITIONS

A. Environmental Conditions: Do not install sprayed-on fireproofing when ambient or substrate temperatures are 40°F. and falling. A minimum air and substrate temperature of 40°F. must be maintained during and for 24-hours after application of the spray-applied fireproofing.

B. Protection:
1. Provide ventilation in area to receive fireproofing. Provide ventilation in poorly ventilated areas to achieve a total air exchange rate of 4 times per hour until the material is substantially dry.
2. Provide temporary enclosures to prevent spray from contaminating air or adjacent property.
3. Protect adjacent surfaces and equipment from damage by overspray, fall-out, and dusting-off of fireproofing.

1.6 SEQUENCING

A. Coordinate installation with other work to avoid cutting and patching of installed fireproofing.
1. Clips, hangers, clamps, sleeves, stops, and other attachments to the substrate shall be installed prior to application of fireproofing.
2. Concrete work on steel floor decking shall be completed prior to application of fireproofing to the underside of the deck.
3. Roofing system, including rigid insulation system on decking, shall be completed prior to application of fireproofing to the underside of the deck.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Sprayed-on Cementitious Fireproofing at concealed locations; product/manufacturer:
Monokote MK-6; Construction Products Div., W.R. Grace & Co.
Cafco 300; Isolatek International
Pyrolite No. 15; Carboline Company - Fireproofing Products Division.

B. Sprayed-on Medium Density Cementitious Fireproofing exposed to abrasion or indirect moisture; product/manufacturer:
Monokote Z-106; Construction Products Div., W.R. Grace & Co.
Cafco 400; Isolatek International
Pyrocrete 239; Carboline Company - Fireproofing Products Division.

C. Sprayed-on High Density Cementitious Fireproofing exposed to impact or direct moisture; product/manufacturer:
Monokote Z-146; Construction Products Div., W.R. Grace & Co.
Cafco M-II; Isolatek International
Pyrocrete 241; Carboline Company - Fireproofing Products Division.

D. Bonding Agent for fireproofing applied to galvanized of primed members; Product/Manufacturer:
Fire Bond; Grace Construction Products Div., or approved equivalent.

2.2 SPRAYED-ON FIREPROOFING MATERIALS

A. General: Provide manufacturer's standard applications of standard products complying with requirements indicated below for material composition and physical properties representative of installed products.

B. Material Composition: Cementitious Fireproofing consisting of factory-mixed, dry formulation mixed with water at project site to form a slurry or mortar for pumping and for dispersal by compressed air introduced at spray nozzle. Cement-aggregate formulation, chloride free, composed of Portland cement, additives, and inorganic aggregates. NOTE: Mineral Fiber fireproofing will not be permitted.

C. Physical Properties of Fireproofing at concealed locations: Minimum values, unless otherwise indicated or higher values required to attain designated fire-resistance ratings, measured per standard test methods referenced with each property listed below:

1. Bond Strength: 150 lbf. per sq. ft. per ASTM E 736.
2. Compressive Strength: 1,440 lbf. per sq. ft. per ASTM E 761.
3. Corrosion Resistance: No evidence of corrosion per ASTM E 937.
4. Deflection: No cracking, spalling, delamination or the like per ASTM E 759.
5. Effect of Impact on Bonding: No cracking, spalling, delamination or the like per ASTM E 760.
6. Air Erosion: Maximum weight loss of 0.0025 grams per sq. ft. in 24 hours per ASTM E 859.
7. Dry Density: 15 pcf for average and individual densities as required for fire-resistance rating indicated, per ASTM E 605.
8. Surface Burning Characteristics: ASTM E 84.
   a. Flame Spread: 0
   b. Smoke Developed: 0

D. Physical Properties of Medium-Density Cementitious Fireproofing: Minimum values, unless otherwise indicated or higher values required to attain designated fire-resistance ratings, measured per standard test methods referenced with each property listed below:
1. Bond Strength: 2000 lbs. per sq. ft. per ASTM E 736.
2. Compressive Strength: 100 lbf. per sq. inch per ASTM E 761.
3. Dry Density: Values for average and individual densities as required to attain fire-resistance rating indicated, per ASTM E 605, but with an average density of not less than 22 pcf.
4. Corrosion Resistance: No evidence of corrosion per ASTM E 937.
5. Deflection: No cracking, spalling, delamination or the like per ASTM E 759.
6. Air Erosion: Maximum weight loss of 0.0025 grams per sq. ft. per ASTM E 859.
7. Combustion Characteristics: Passes ASTM E136.
8. Surface Burning Characteristics:
   a. Flame Spread: 0
   b. Smoke Developed: 0

E. Physical Properties of High-Density Fireproofing: Minimum values, unless otherwise indicated or higher values required to attain designated fire-resistance ratings, measured per standard test methods referenced with each property listed below:
1. Bond Strength: 10,000 lbs. per sq. ft. per ASTM E 736.
2. Compressive Strength: 500 lbf. per sq. inch per ASTM E 761.
3. Dry Density: Values for average and individual densities as required to attain fire-resistance rating indicated, per ASTM E 605, but with an average density of not less than 40 pcf.
4. Corrosion Resistance: No evidence of corrosion per ASTM E 937.
5. Deflection: No cracking, spalling, delamination or the like per ASTM E 759.
6. Air Erosion: Maximum weight loss of 0.0025 grams per sq. ft. per ASTM E 859.
7. Combustion Characteristics: Passes ASTM E136.
8. Surface Burning Characteristics:
   a. Flame Spread: 0
   b. Smoke Developed: 0

F. Water: Clean, potable.

PART 3 - EXECUTION

3.1 PREPARATION

A. Surfaces to receive fireproofing shall be free of mill scale, dirt, oil, grease, dust, loose rust, paint or other foreign substances which may impair proper adhesion of the fireproofing to the substrate.

B. Cleaning shall be accomplished just prior to the application of fireproofing.

C. Do not apply fireproofing to surfaces which cannot be corrected by normal cleaning methods. Correct condition before applying fireproofing..

D. Cover other work subject to damage from fall-out or overspray of fireproofing materials during application. Provide temporary enclosure as required to confine spraying operations, protect the environment, and ensure maintaining adequate ambient conditions for temperature and ventilation.

E. Complete placing of concrete on floor and roof decking prior to application of the fireproofing to the underside of steel deck and supporting beams and joists.

F. On roof decks without a concrete cover, complete all roofing applications and roof mounted equipment installation prior to application of the fireproofing to the underside of roof decking and supporting beams and joists. Prohibit all roof traffic upon commencement of the fireproofing and until the fireproofing material is dry.

G. Commencement of application of fireproofing shall be interpreted as acceptance by the applicator of the suitability of the surface to receive fireproofing material and acceptance of responsibility for failure of bond between fireproofing and steel

3.2 APPLICATION

A. Apply fireproofing in accordance with manufacturer's recommendations for mixing materials, application procedures, and types of equipment used to convey and spray on fireproofing materials; as particular conditions of installation and as required to comply with fire rating requirements and approved UL Designs indicated.

B. Spray apply with as many coats as necessary to obtain required thickness and uniform density.

C. Completely cover members designated to be fireproofed.

D. Install metal lath, as required, to comply with fire-resistance ratings and recommendations of fireproofing manufacturer for conditions of exposure and intended use. Securely attach lath to substrate in position required for support and reinforcement of fireproofing. Use anchorage devices of type recommended by fireproofing manufacturer. Attach lathing accessories where indicated or required.

E. Post appropriate cautionary "Slippery When Wet" signs in all areas in contact with wet fireproofing material. Erect appropriate barriers to prevent entry by non-fireproofing workers into the fireproofing spray and mixing areas and other areas exposed to wet fireproofing material.

3.3 FIELD QUALITY CONTROL

A. Field testing will be performed in accordance with SECTION 01 45 23 - TESTING AND INSPECTION SERVICES.

B. Testing laboratory shall sample and verify the bond strength, thickness and density of the fireproofing in accordance with the provisions of ASTM E 605, ASTM E 736, and Chapter 17 of the applicable building code.

C. Re-testing required as a result of non-conforming work shall be paid for by the Contractor.

3.4 PATCHING

A. Inspect members for complete coverage, correct unacceptable work, and patch. Chip out areas which are defective or do not bond. Clean steel surface and reapply fireproofing.

B. Patch areas damaged or cut by other work. Patch area from which test samples are taken.

3.5 CLEANING, REPAIR, AND PROTECTION

A. Remove equipment. Immediately after completing spraying operations in each containable area of project, remove material over-spray and fall-out from surfaces of other construction and clean exposed surfaces to remove evidence of soiling.

B. Cure exposed cementitious fireproofing materials according to fireproofing manufacturer's recommendations to prevent premature drying.

C. Protect fireproofing, according to advice of fireproofing manufacturer and Installer, from damage resulting from construction operations or other causes so that fireproofing will be without damage or deterioration at time of substantial completion.

D. Coordinate installation of fireproofing with other construction to minimize the need to cut or remove fireproofing. As installation of other construction proceeds, inspect fireproofing and patch any areas where fireproofing was removed or damaged.

E. Repair or replace work that has not been successfully protected.

END OF SECTION

SECTION 08 33 23

OVERHEAD COILING DOORS

02/11/2025

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Coiling doors.

B. Related Sections:
   1. Section 05 50 00 - Metal Fabrications: steel frames for coiling door openings.
   2. Section 08 71 00 - Door Hardware: cylinders.

1.2 REFERENCES

A. ANSI/ICC/NSSA Standard for the Design and Construction of Storm Shelters:
   1. ICC 500 or ANSI/ICC 500: Appropriate year of ICC 500 shall be year referenced in the applicable IBC "Referenced Standards" Chapter.

1.3 SUBMITTALS

A. General: Submit in accordance with SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

B. Shop Drawings: Include installation details and operating procedures.

1.4 QUALITY ASSURANCE

A. Wind Load: Exterior coiling doors shall be constructed to safely resist uniform pressure (velocity pressure) of 22 psf.

B. Labeled Construction: Doors required by schedule to be labeled shall be manufactured in accordance with specifications and procedures for doors tested and rated by Underwriter's Laboratories, Inc. Metal UL classification markers shall be attached to these doors.

PART 2 - PRODUCTS

2.1 COILING DOORS - MOTORIZED

A. Provide face-of-wall mounted coiling door. Product/manufacturer; one of the following:
   ESD10; Cornell/Cookson, LLC.
   610 Series; Overhead Door Corp.
   1. Operation: Motor operator.
      a. Motor:
         1) Provide high starting torque motor, including motor/gearing cover and spring adjustor cover, of the size and design as recommended by door manufacturer, reduction gearing, solenoid brake, limit switches, emergency hand chain with electrical interlock, magnetic relay contactor, overload protection, prewiring to terminal block, stoplock safety bearing to prevent doors from falling in event of motor damage.
         2) 208 V, 3 phase, 60 Hz.
         3) Provide key operated control switch.
         4) Motor operator shall be equipped with monitored, wireless safety edge in conjunction with the door operator control.
   2. Curtains:
      a. Interlocking slats cold roll formed of galvanized steel.
      b. End of alternate slats to be fitted with malleable iron endlocks.
      c. Slat design shall satisfy a windload of 20 psf.
      d. Curtain to be reinforced with bottom bar consisting of two angles of galvanized steel. Install weatherseal on bottom of bars.
   3. Spring Counterbalance:

a. House in steel pipe of diameter and wall thickness to restrict maximum deflection to 0.03" per foot of door width.
b. Springs to be helical torsion type.
c. Spring tension to be adjustable by means of external adjustment wheel.

4. Bracket Plates: ¼" thick min. steel formed to fit contour of end bracket.
5. Guides:
   a. Structural [galvanized steel] [aluminum] [stainless steel] angles of 3/16" min. thickness.
   b. Fit guides head with two flexible weathering strips (both sides). Door shall not rattle in wind.
6. Hoods:
   a. Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head when not concealed in ceiling. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face.
   b. Fabricated of galvanized steel sheet metal no lighter than 24 gage, laterally reinforced.
   c. Provide intermediate hood supports for hoods exceeding 16'-0".
   d. Fit with internal neoprene header weather baffle.
   e. Fit entire length of hood with internal 4” brush seal with aluminum retainer to act as wind baffle. Door shall not rattle in wind.
7. Locks:
   a. Provide cylinder locks on bottom bars less standard cylinder for key operation. Cylinder locking for motor operated doors to include electrical interlock to prevent operation before door is unlocked.
8. Finish:
   a. Galvanized Surfaces:
      1) Base Coat: ASTM A 653 galvanized base coating treated with dual process rinsing agents in preparation for chemical bonding, gray baked-on base coat and gray baked-on polyester finish coat.
      2) Finish Coat: Zirconium treatment followed by baked-on polyester powder coat, with color as selected by Architect; minimum 2.5 mils cured film thickness; ASTM D-3363 pencil hardness: H or better.
   b. Ungalvanized Surfaces: Shop coat of rust inhibiting metallic primer.
9. Weatherstripping: Door to be fully weatherstripped at sill, hood, and at guides.

2.2 COILING DOORS – MANUAL OPERATION

A. Provide face-of-wall mounted coiling door. Product/manufacturer; one of the following:
   ESD10; Cornell/Cookson, LLC.
   610 Series; Overhead Door Corp.

1. Operation: Manual push-up
2. Curtains:
   a. Interlocking slats cold roll formed of galvanized steel.
   b. End of alternate slats to be fitted with malleable iron endlocks.
   c. Slat design shall satisfy a windload of 20 psf.
   d. Curtain to be reinforced with bottom bar consisting of two angles of galvanized steel. Install weatherseal on bottom of bars.
3. Spring Counterbalance:
   a. House in steel pipe of diameter and wall thickness to restrict maximum deflection to 0.03" per foot of door width.
   b. Springs to be helical torsion type.
   c. Spring tension to be adjustable by means of external adjustment wheel.
4. Bracket Plates: ¼" thick min. steel formed to fit contour of end bracket.
5. Guides:
   a. Structural [galvanized steel] [aluminum] [stainless steel] angles of 3/16" min. thickness.
   b. Fit guides head with two flexible weathering strips (both sides). Door shall not rattle in wind.
6. Hoods:
   a. Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head when not concealed in ceiling. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face.
   b. Fabricated of galvanized steel sheet metal no lighter than 24 gage, laterally reinforced.
   c. Provide intermediate hood supports for hoods exceeding 16'-0".
   d. Fit with internal neoprene header weather baffle.
   e. Fit entire length of hood with internal 4” brush seal with aluminum retainer to act as wind baffle. Door shall not rattle in wind.
7. Locks:

a. Provide slide bolts suitable for padlocks for manually operated doors.

8. Finish:
   a. Galvanized Surfaces:
      1) Base Coat: ASTM A 653 galvanized base coating treated with dual process rinsing agents in preparation for chemical bonding, gray baked-on base coat and gray baked-on polyester finish coat.
      2) Finish Coat: Zirconium treatment followed by baked-on polyester powder coat, with color as selected by Architect; minimum 2.5 mils cured film thickness; ASTM D-3363 pencil hardness: H or better.
   b. Ungalvanized Surfaces: Shop coat of rust inhibiting metallic primer.
9. Weatherstripping: Door to be fully weatherstripped at sill, hood, and at guides.

PART 3 - XECUTION

3.1 INSTALLATION

A. Coiling doors shall be installed by skilled mechanics supervised by the manufacturer's authorized representative.

B. Erect the doors, guides, and accessories in a rigid substantial manner, straight and plumb, and with horizontal lines level.

3.2 TESTING AND ADJUSTING

A. Upon completion of installation, put all items through at least ten operating cycles. Make required adjustments and assure that components are in optimum operating condition.

END OF SECTION

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SECTION 10 22 39

FOLDING PANEL PARTITIONS

02/11/2025

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Manually operated, folding panel partition.

B. Related Work:
1. Section 05 50 00 - Metal Fabrications: Steel framing to support partition track.
2. Section 06 10 00 - Rough Carpentry: Wood blocking for partition track.

1.2 SUBMITTALS

A. Shop Drawings:
1. Submit in accordance with SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
2. Submit shop drawings of partition layout. Include details of track, trolleys, and hardware. Indicate loading to be imposed in the supporting structure. Show all anchorage, accessory items, caulking, and finishes.

B. Product Data:
1. Submit data describing partition fabrication and installation, including hardware.
2. Submit finish data.
3. Submit laboratory acoustical performance test report, written by the test facility.

1.3 QUALITY ASSURANCE

A. Flame Spread Rating: Provide partitions with a Class "A" flame-spread rating when tested in accordance with ASTM E 84.

B. Provide demonstration of system as described in Part 3 below.

1.4 WARRANTY

A. Provide written warranty by manufacturer of operable partitions agreeing to repair or replace any components with manufacturing defects.
1. Warranty period: Two (2) years.

PART 2 - PRODUCTS

2.1 PARTITIONS

A. Basis of Design Type: Modernfold "Acoustic-Seal" Paired Panel #932 manually operated, flat panels hinged in pairs, top supported with operable floor seals.
1. Products from the following Manufacturers equal to Basis of Design will be considered:
Kwik-Wall Company
Moderco

B. Sound Transmission Class (STC): STC rating shall be 45 **(50 in rooms with acoustical insulation in walls)** when tested in accordance with ASTM E 90 for test in 14'-0" x 9'-0" opening.

C. Panel Construction:
1. Panels shall be 3.25" thick.
2. Panel Skin: Minimum 21 ga. roll-formed steel wrapping around the panel edge. Panel skins shall be lockformed and welded directly to the frame for unitized construction.
3. Panel Finish: Folding partition manufacturer’s standard fabric wallcovering material.
a. Color: Black.

D. Sound Seals:

1. Vertical: Interlocking sound seals in each panel edge.
2. Horizontal:
   a. Top closure seals shall be continuous multi-finger vinyl.
   b. Provide automatic operable bottom seal. Seal shall automatically drop as panels are positioned.

E. Provide #17 suspension system consisting of a continuous roll formed 11 ga. steel track. Each panel shall be supported by a all-steel 4-wheel ball bearing trolley.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Partitions shall be installed by the manufacturer's authorized factory trained representative and shall achieve the specified sound rating.
   1. Secure ceiling tracks to steel framing.
   2. Erect the partitions in a substantial manner to be straight and plumb.

3.2 ADJUST AND CLEAN

A. Adjust partitions and hardware, and leave in perfect working order. Clean exposed surfaces and leave free of defects.

3.3 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance and user personnel to adjust, operate, and maintain operable panel partitions.

END OF SECTION

SECTION 12 57 16

WELDING STATIONS

02/11/2025

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Welding Stations

1.2 SUBMITTALS

A. General: Submit in accordance with SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Product Data: Include list of optional features, operating characteristics, and dimensions of individual appliances.

C. Operating and Maintenance Manuals: Provide per SECTION 01 78 23 - OPERATION AND MAINTENANCE DATA.

1.3 QUALITY ASSURANCE

A. Engage an experienced installer to perform the work of this Section who has completed installations similar in design and extent to that indicated for this Project, and who has a record of successful in-service performance.

B. Engage a firm experienced in welding workstation assembly similar to that indicated for this project and with a record of successful in-service performance.

C. Provide all products specified in this section through one source and products of a single manufacturer.0

1.4 DELIVERY AND STORAGE

A. Handling and Unloading: Store in original protective packaging and in a dry location.

1.5 COORDINATION

A. Coordinate layout and installation with other work, including light fixtures, fixed equipment and workstations, HVAC equipment, fire-suppression system components and equipment of movement such as overhead cranes.

B. Coordinate location and requirements of service-utility connections.

1.6 JOB SITE CONDITIONS

A. Existing Conditions: Verify dimension at locations to receive welding stations by field measurements.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Manufacturer: IAP Air Products Welding Station as manufactured by IAP-Air Products, Sparta, TN; Phone: 888-372-0050; website www.IAP-irProducts.com or approved equivalent.

2.2 MATERIALS

A. DESCRIPTION
1. Welding station: size as shown by Drawings.
2. Each welding station includes:
   a. Non- powered individual walk-in booth, with open front.
   b. Three-piece construction, 2 side panels, 1 back panel, 14-gauge construction.
   c. Adjustable feet for leveling.

d. Fixed rear shelf 20"D (34"H unpainted).
e. Weld curtain rod.
f. Manufacturer's standard factory applied powder coat finish; IAP Blue.

B. CONSTRUCTION
1. Construct shall be constructed with (3) Panels.
a. Each panel is to be 14-gauge construction with Frame & Brace 1.5", 11 gauge square tubing.
b. Unpainted rear shelf shall be provided as standard, being 20" deep and constructed of 11 gauge metal.
c. Construct booth such that multiple booths can share side panels.
d. Provide booths with all holes pre-installed with Revit Nuts inserted to receive bolts for easy installation.
e. Bolts for booth assembly: 5/16" bolts .
f. Bolt rear shelf with 1/4" x 3/4"L Bolts with washers.

C. ACCESSORIES
1. Fume Arm Mounting Brackets bolted onto the booth to accept fume extraction arm.
2. Light: LED Light Bracket bolted to the booth.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine roughing-in for piping systems to verify actual locations of piping connections before appliance installation. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Confirm electrical connections with required voltage and power requirements before installation of appliances.

3.2 INSTALLATION

A. General: Comply with manufacturer's written instructions.

B. Built-in Appliances: Securely anchor units to supporting cabinets or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and rough openings are completely concealed.

C. Freestanding Appliances: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate appliances.

3.3 CLEANING AND PROTECTION

A. Test each item of appliances to verify proper operation. Make necessary adjustments. Verify that accessories required have been furnished and installed.

B. Remove packing material from appliances and leave units in clean condition, ready for operation.

C. Protection: Protect the completed work from damage.

END OF SECTION

SECTION 41 34 23.33

SPRAY PAINTING BOOTH

02/11/2025

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Paint spray booth and accessories.

B. Related Requirements:
1. Division 23 - Heating Ventilating, and Air Conditioning (HVAC) Work.
2. Division 26 - Electrical Work.

1.2 SUBMITTALS

A. General: Submit in accordance with SECTION 01 33 23 – SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Submit complete shop drawings and catalog data on entire spray booth assembly, including filters and accessories.

C. Show mechanical and electrical requirements.

1.3 QUALITY ASSURANCE

A. Paint Spray Booth: Product of manufacturer with a minimum of 5 years experience specializing in the engineering, design and manufacturing of spray booth systems who issues complete catalog data on such product.

PART 2 - PRODUCTS

2.1 PAINT SPRAY BOOTH

A. Open Faced Arrestor (Dry Filter) Spray Booth, self-supporting, IB-06-07-05-00-S as manufactured by RTT Engineered Solutions, Rockwall, TX. (Phone: 888-452-6684; website www.rttsolutions.com) or approved equivalent.

B. Regulatory Requirements: Booth shall meet and/or exceed all applicable OSHA and NFPA regulations.

C. Dimensions:
1. Exterior: 6’-4”W x 7’-2” H (not including exhaust stack) x 7’-8”L
2. Interior: 6’-0”W x 7’-0”H x 5’-0” L

D. Exhaust airflow system: Provide exhaust system and other mechanical components as part of the Work of this Section in coordination with mechanical work of this Project, and as required for operation and intended use by Owner.
1. 5,250 cfm exhaust air volume based at 1/2" static pressure.
2. A 24" tube axial belt driven exhaust fan, 1 hp electric motor, motor is totally enclosed rated 110v, 1 phase, 60 hz.
3. Exhaust fan package shall meet all NFPA standards for spray booth applications.
4. Non-sparking fan blades.
5. Top discharge.
6. Stackwork: As recommended by manufacturer but not less than the following:
   a. 18" diameter (round).
   b. Total length of exhaust stack shall be as required to accommodate actual roof height with appropriate extra length above roof for venting.
      1) Provide approximately six straight 48" long exhaust stacks.
      2) Provide one straight 48" long exhaust stack with clean out door. .
   c. Damper exhaust cap.
   d. Roof flange to accommodate 1/4" per foot slope.
   e. Fan ring.

E. Filtration: 2-Stage filtration conforming to NESHAP.

F. Provide Control panel and other electrical components as part of the Work of this Section in coordination with electrical work of this Project, and as required for operation and intended use by Owner.

G. Construction:
   1. 18 gage, G90 grade, electro-galvanized sheet steel over heavy-gage steel beam construction.
   2. Panels constructed with flanges for additional strength.
   3. Panel seams sealed with caulk.

2.2 SPRAY BOOTH ACCESSORIES

A. LED Lighting: 2 ga. steel powder-coated white, 4000, lumens; ETSL listed for US with Class 1 Division 2, Group A, B, C, D and Class 2 Division 2, Group F and G ratings.

B. Safety-Valve: Electrically-operated solenoid air valve which prevents use of spray equipment until booth exhaust fan is on.

C. Spray booth accessories shall be furnished by spray booth manufacturer and installed by contractor in accordance with spray booth manufacturer's instructions.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install paint spray booth and accessories in accordance with the manufacturer's instructions and in such a manner as to comply with all applicable codes. This includes the furnishing of all labor and material required to accomplish this, even though not all required items are specifically mentioned or indicated in the Construction Documents.

END OF SECTION

INTERIOR DOORS (CONT.)

DOOR NUMBER	DOOR TYPE	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	FIRE RATING	HW Set	NEW CARD READER	REMARKS
1218A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1220	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1221	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1222	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1225	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1226	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1226.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1226.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1227	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1228	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1228.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1228.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1231	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1232	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1234	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1235	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1241	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1242.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1242.2	FD-2	HM	6'-0"	7'-0"		55.0		
1243	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1244	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1245	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1246	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1247.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1247.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1247A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1247A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1247B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1248	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1250	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1251	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1252	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1253.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	39.0		
1253A	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1253B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1253C	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1253D	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1255.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1255.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1255.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1256	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1257.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1257.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1257A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1257A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1257A.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1258	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1261	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1264	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1265.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1265.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	27.0		
1266.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1266.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1266A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1288.1	EX-OH1	EX	10'-0"	10'-0"		73.0		
1288.2	EX-OH1	EX	10'-0"	10'-0"		73.0		
1288.3	EX-OH1	EX ⚠2	10'-0"	10'-0"		73.0		
1301	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1302.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1302.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	30.0		
1303	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1304	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1305	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
1307	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1311.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1311.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1311.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	30.0		
1311A	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
1312.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1312.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1312.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1313	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
1314	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1315.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1315A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1315A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1315A.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1315B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1315C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1315D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1322.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1322.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1322B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1323	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1324	N1	HM	3'-0"	7'-0"		57.0		SIGN TYPE B
1325	N1	HM	3'-0"	7'-0"		60.0		SIGN TYPE B
1326	N1	HM	3'-0"	7'-0"		57.0		SIGN TYPE B
1327	N1	HM	3'-0"	7'-0"		60.0		SIGN TYPE B
1328	FD-2	HM	6'-0"	7'-0"		63.0		SIGN TYPE A
1369.8	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1369.9	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1404	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1411	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1412	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1414	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1415	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1416.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1416.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1416B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1421	EX-F2	EX	2'-11 5/8"	7'-0"	----	39.0		
1421A	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1421B	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1421C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1421D	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1430.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1430.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1430A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1431.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1431.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1431.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1431A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1432.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1432.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	27.0		
1441	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		

DOOR NUMBER	DOOR TYPE	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	FIRE RATING	HW Set	NEW CARD READER	REMARKS
1441A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1442.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1442.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1442A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1442B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1443	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1443A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1443B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1446.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	33.0		
1446.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	30.0		
1446.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1446B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1447.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
1447.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1447A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1447B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1447C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1461	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1461A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1461B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1462	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1500	EX-F2	EX	2'-11 5/8"	7'-0"	----	39.0		
1500A	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1500B	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1500C	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1500D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1500E	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1515	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1515A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1515A.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1515B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1515C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1517.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	27.0		
1517.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1518	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1519	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1522.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1522.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1522.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1522A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1522B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1522C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1533	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1535	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1535.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1535A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1535B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1535C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1535D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1535E	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1535F	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1545.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1545.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	30.0		
1545A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1546	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1546A	EX-F1	EX	3'-0"	7'-0"	----	74.0		
1546B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1546C.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1546C.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1546D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1548	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1548.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1548A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1548B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1548C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1548D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1549	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1549.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1549.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1550	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1600.1	EX-FD2	EX	6'-0"	6'-10"		8.0		
1611.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1611A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1613.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1613.2	EX-FD2	EX	6'-0"	6'-10"		6.0		
1613A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1613A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1613A.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1614	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1614A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1614A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1614B	15		3'-0"	7'-0"	----	69.0		
1614D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1614F	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1618	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1618A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1619.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1619A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1619A.2	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1620.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
1620.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
1621.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0	2	
1621A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1621B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1622	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1622C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1622D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1626	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1628	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1630	EX-FD2	EX	6'-0"	6'-10"		5.0		
1630A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1632	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1633	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1636	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1640	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1644.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1646	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1648	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1649	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1654.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1654.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1654.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1654A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1654B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		

DOOR NUMBER	DOOR TYPE	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	FIRE RATING	HW Set	NEW CARD READER	REMARKS
1672.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1700.1	EX-FD2	EX	6'-0"	6'-10"		6.0		
1700.2	EX-FD2	EX	6'-0"	6'-10"		6.0		
1700.3	EX-FD2	EX	6'-0"	6'-10"		6.0		
1700.4	EX-FD2	EX	6'-0"	6'-10"		6.0		
1700.5	EX-F2	EX	2'-11 5/8"	7'-0"	----	57.0		
1701	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1702	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1708	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1709	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1710.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1710.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1710B	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1711B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1712	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1714	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1715	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1715A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1715B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1715C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1716	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1717A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1720.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1720.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	4.0		
1720.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1720.4	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1720.5	EX-F2	EX	2'-11 5/8"	7'-0"	----	4.0		
1720.6	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1720.7	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.1		
1720.8	EX-F2	EX	2'-11 5/8"	7'-0"	----	4.0		
1720.9	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.1		
1720A	EX-FD2	EX	6'-0"	6'-10"		74.0		
1720B	EX-FD2	EX	6'-0"	6'-10"		74.0		
1720C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1721.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1721.4	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1721.5	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1721.6	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1721.7	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1721.10	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.1		
1721.11	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.1		
1721.12	EX-F2	EX	2'-11 5/8"	7'-0"	----	4.0		
1721B.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1721B.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	57.0		
1721C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1721D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1725	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1726.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1726.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1731	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1731A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1732	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1732A	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1732B	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1732C	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1732D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1735	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1735.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1735.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1735.3	EX-FD2	EX	6'-0"	6'-10"		74.0		
1735.OH1	EX-OH	EX	12'-0"	8'-11"	----	74.0		
1735.OH2	EX-OH	EX	12'-0"	8'-11"	----	74.0		
1735A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1735E	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1736.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1736.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1736A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1736B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1737.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1737.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	27.0		
1740.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1740.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1740.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1740A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1740B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1740E	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1741	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1741.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1741.OH1	EX-OH	EX	12'-0"	8'-11"	----	74.0		
1741A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1741B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1747	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1750	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751.OH1	EX-OH	EX	12'-0"	8'-11"	----	74.0		
1751A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751E	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751G	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751H	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751J	EX-FD2	EX	6'-0"	6'-10"		74.0		
1751K	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1751L	EX-F2	E

INTERIOR DOORS (CONT.)

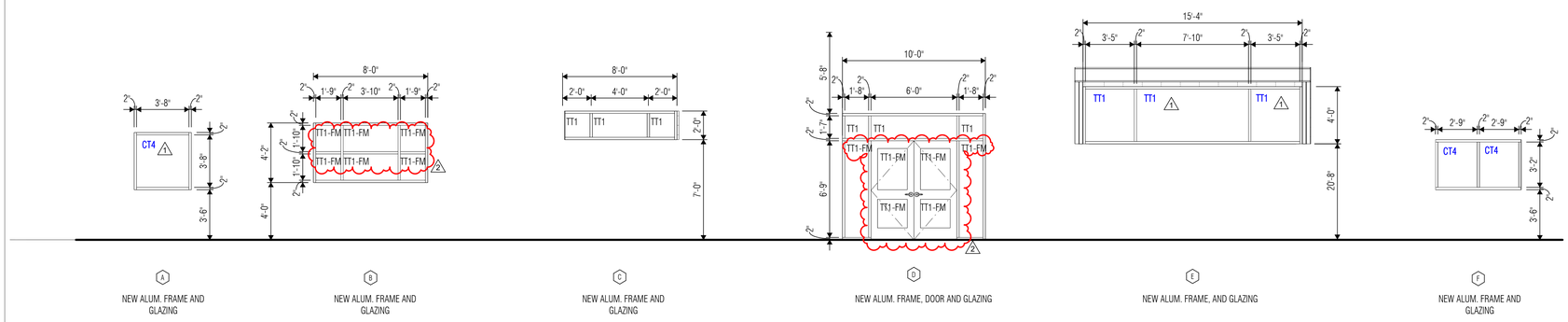
DOOR NUMBER	DOOR TYPE	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	FIRE RATING	HW Set	NEW CARD READER	REMARKS
1763	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1764	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1765	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
1766	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1766A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1767	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1768	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1770	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1770A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1800.1	EX-FD2	EX	6'-0"	6'-10"		9.0		
1800.5	EX-FD2	EX	6'-0"	6'-10"		9.0		
1801	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1802.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1802.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
1805	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1808.1	F1	HM	3'-0"	7'-0"		62.1		KICKPLATE, SIGN TYPE A
1808.2	F1	HM	3'-0"	7'-0"		62.1		KICKPLATE, SIGN TYPE A
1808.0H20	0H2	HM	12'-0"	8'-0"		71.0		
1808.0H21	0H2	HM	12'-0"	8'-0"		71.0		
1808.0H22	0H2	HM ⚠2	12'-0"	8'-0"		71.0		
1808.0H23	0H2	HM	12'-0"	8'-0"		71.0 ⚠1		
1810	N1	HM	3'-0"	6'-10"		64.0		SIGN TYPE B
1811A	F1	HM	3'-0"	7'-0"		69.0		KICKPLATE, SIGN TYPE A
1811B	F1	HM	3'-0"	7'-0"		69.0		KICKPLATE, SIGN TYPE A
1812	F1	HM	3'-0"	7'-0"		66.0		KICKPLATE, SIGN TYPE A
1813	F1	HM	3'-0"	7'-0"		62.0		KICKPLATE, SIGN TYPE A
1814	F1	HM	3'-0"	7'-0"		60.0		KICKPLATE, SIGN TYPE A
1815	SP		3'-0"	7'-0"		75.0		INSULATED COOLER/FREEZER DOOR
1816	SP		3'-0"	7'-0"		75.0		INSULATED COOLER/FREEZER DOOR
1817A	EX-F2	EX	2'-11 5/8"	7'-0"	----	70.0		
1817B	EX-F2	EX	2'-11 5/8"	7'-0"	----	70.0		
1818	F1	HM	3'-0"	7'-0"		63.1		SIGN TYPE A
1819	FD-2	HM	6'-0"	7'-0"		63.0 ⚠1		SIGN TYPE A
1820	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1820A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1820B	EX-FD2	EX	6'-0"	6'-10"		74.0		
1820B.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1820C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1820D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1821	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1822	EX-FD2	EX	6'-0"	6'-10"		65.0		
1822.3	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
1830.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
1830.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
1830A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1830B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1830C	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1830D	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1830E	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1830F	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1830G.15	EX-FD2	EX	6'-0"	6'-10"		74.0		
1830G.18	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1831	F2	HM	4'-0"	6'-10"		56.0		SIGN TYPE B
1832	EX-FD2	EX	6'-0"	6'-10"		74.0		
1833	F2	HM	4'-0"	6'-10"		61.0 ⚠1		SIGN TYPE B
1834.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1834A.5	EX-F2	EX	2'-11 5/8"	7'-0"	----	27.0		
1835	F3	HM-S	4'-0"	7'-0"	----	56.0		SIGN TYPE B
1835A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1835D.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1835E	F2	HM	3'-0"	7'-0"		60.0		SIGN TYPE B
1835F	F3	HM	3'-0"	7'-0"		67.0		SIGN TYPE B
1835G	F3	HM	3'-0"	7'-0"		67.0		SIGN TYPE B
1835H	F3	HM	3'-0"	7'-0"		67.0		SIGN TYPE B
1835J	F3	HM	4'-0"	7'-0"	----	67.0		SIGN TYPE B
1836	EX-SFD	EX	6'-0"	6'-11"	----	58.0		
1836A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836B	EX-FD2	EX	6'-0"	6'-10"		74.0		
1836D	EX-FD2	EX	6'-0"	6'-10"		74.0		
1836E	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836F	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836G	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836H	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836J.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836J.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836K	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1836L	EX-FD2	EX	6'-0"	6'-10"		74.0		
1836M	EX-F2	EX	3'-1"	6'-10"		74.0 ⚠1		
1837	F1	HM	3'-0"	7'-0"		68.0		SIGN TYPE A
1838	F1	HM	3'-0"	7'-0"		68.0		SIGN TYPE A
1839	F1	HM	3'-0"	7'-0"		70.0		SIGN TYPE A
1841	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0	Yes	
1841.9	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1841.03	EX-0H	EX	8'-0 3/8"	8'-0"	----	73.0		
1841.09	EX-SFD	EX	6'-0"	7'-0"	----	77.0		
1841.0H1	EX-0H	EX	8'-0 3/8"	8'-0"	----	73.0		
1841.0H2	EX-0H	EX	8'-0 3/8"	8'-0"	----	73.0		
1842	EX-FD2	EX	6'-0"	6'-10"		74.0		
1842.0H1	EX-0H1	EX	8'-0 3/8"	9'-9 3/8"	----	73.0		
1842.0H2	EX-0H1	EX	8'-0 3/8"	9'-9 3/8"	----	73.0		
1842.0H3	EX-0H1	EX	8'-0 3/8"	9'-9 3/8"	----	73.0 ⚠1		
1844	EX-F2	EX	2'-11 5/8"	7'-0"	----	12.0	Yes	
1844A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1844B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1901	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1901A.1	EX-FD2	EX	6'-0"	6'-10"		6.0		
1901A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1901A.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1901A.4	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
1901A.5	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1901B.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	32.0		
1901B.2	EX-FD2	EX	6'-0"	6'-10"		6.0		
1901C	EX-FD2	EX	6'-0"	6'-10"		6.0		
1905	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1906	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1910.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		PAINT INTERIOR BLACK
1910.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		PAINT INTERIOR BLACK
1910.0H1	EX-0H	EX	8'-0 3/8"	8'-0"	----	71.0		
1910A	EX-FD2	EX	6'-0"	6'-10"		74.0		PAINT BLACK
1910B	EX-F1	HM	3'-0"	7'-0"	----	74.0 ⚠1		PAINT BLACK, SIGN TYPE 'B'
1912	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1912A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1913	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
1914	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1914	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1916	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1916.0H1	EX-0H	EX	12'-0"	8'-11"	----	74.0		
1916.0H2	EX-0H	EX	12'-0"	8'-11"	----	74.0		
1916A	EX-FD2	EX	6'-0"	6'-10"		74.0		
1916B	EX-FD2	EX	6'-0"	6'-10"		74.0		
1918	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1	Yes	
1920.1	F2	HM	3'-0"	7'-0"		57.0		
1920.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1920.0H1	EX-0H	EX	12'-0"	8'-11"	1 HR	74.0		
1920A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1921	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1922	EX-FD2	EX	6'-0"	6'-10"		74.0		
1923	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1925	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
1926	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
13221	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
S1.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S2.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S3.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S4.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S5.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S5.2	EX-FD2	EX	6'-0"	6'-10"		74.0		
S6.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S8.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S9.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S11.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
S11.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	7.0		
S12.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
S12.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
S13.1	EX-FD2	EX	6'-0"	6'-10"		74.0		
S14.1	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
LEVEL TWO								
2101	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2102	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2103	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2105	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2106	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2112	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2114	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2116	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2140.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
2140.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2140.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	39.0		
2140A	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
2140D	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
2141.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2141.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2143	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2144	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2145	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2146	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2147	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2150	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2151	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2152	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2154	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2155	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2157	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2158	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2162	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2201	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2202	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2203	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2204	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2212.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2212.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2212.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2212A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2213	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2214.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2214.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2214A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2215	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2215.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2216	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2217	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2218A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2219	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2220	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2221	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
2222	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2225	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2226.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2226.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2226.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2227	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2228.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2228.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2228.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2230	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2231	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2232	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2234	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2235	EX-FD2	EX	6'-0"	6'-10"		74.0		
2236	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2238	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2239	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2240	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2241	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2243	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2244	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2245	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2246	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2247.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2247.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2247.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2247B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2249	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2250	EX-F2	EX	3'-0"	7'-0"		74.0 ⚠1		
2250A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2251	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2252	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
2253.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	39.0		
2253.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2253A	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
2253C	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
2253D	EX-F2	EX	2'-11 5/8"	7'-0"	----	38.0		
2255.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2255.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2255.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2256	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2257.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2257.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2257.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2258	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2311.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2311.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2311.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2313.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2313.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2313.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2314A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2315	EX-FD2	EX	6'-0"	6'-10"		74.0		
2315.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2315.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2315.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2321	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2322	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2323	EX-F2	EX	3'-0"	7'-0"		74.0		
2324	EX-F2	EX	3'-0"	7'-0"		74.0 ⚠1		
2325	EX-F2	EX	3'-0"	7'-0"		34.0		
2326	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2327	EX-F2	EX	3'-0"	7'-0"		34.0		
2328	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2340	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2341	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2342	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2343	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2344	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2345	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2346	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2347	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2348	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2412	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2414	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2415	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2416	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2417	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2418	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2419	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2420	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2421	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2422.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2422.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2440	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2440A	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2440B	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2440C	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2441	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2443	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2446	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
2447	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2448	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2449	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2450.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2450.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2450A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2450A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2450A.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2450B	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
2451.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2451.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2512	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2514	EX-F2	EX	2'-11 5/8"	7'-0"	----	33.0		
2515A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2516	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2517	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2519	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2528	EX-F2	EX	2'-11 5/8"	7'-0"	----	35.0		
2528A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2543	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2547	EX-FD2	EX	6'-0"	6'-10"		74.0		
2549	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2612.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2612.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2612A	EX-FD2	EX	6'-0"	6'-10"		74.0		
2612B	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2613	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2614.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2614.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2614A.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2614A.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2614A.3	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2614B	EX-FD2	EX	6'-0"	6'-10"		74.0 ⚠1		
2615	EX-F2	EX	2'-11 5/8"	7'-0"	----	34.0		
2616.1	EX-F2	EX	2'-11 5/8"	7'-0"	----	2.0		
2616.2	EX-F2	EX	2'-11 5/8"	7'-0"	----	3.0		
2616.4	EX-FD2	EX	6'-0"	6'-10"		74.0		
2617	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2619	EX-F2	EX	2'-11 5/8"	7'-0"	----	11.0		
2709	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2709A	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2710	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2711	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0		
2712	EX-F2	EX	2'-11 5/8"	7'-0"	----	74.0 ⚠1		
2713.

GLAZING SYSTEM NOTES

1. Overall dimensions of glazing system elevations reflect rough opening dimensions, inclusive of perimeter joints.
2. Provide 3/16" thick heavy wall framing members at all door frames in exterior and interior aluminum Storefront systems.
3. Provide 3/16" thick heavy wall door adapters at all door frame members in exterior and interior aluminum Curtain Wall systems.
4. Door opening dimensions in Curtain Wall systems reflect 1" door adapters at jamb conditions, and 1-3/4" door adapters at head conditions. Adjust dimensions between mullions at door openings in curtain wall systems as required for actual size of door adapters provided. Door sizes as identified in Door Schedule shall be maintained.
5. Refer to **1 / A7.01** for Typical Push/Pull Mounting Heights Detail for aluminum/glass doors

GLASS TYPE LEGEND

TT1	TINTED, TEMPERED, 1" THICK INSULATING GLASS
TT4	TINTED, TEMPERED, 1/4" THICK GLASS
CT4	CLEAR, TEMPERED, 1/4" THICK GLASS
CI2	CLEAR, IMPACT-RESISTANT, 9/16" THICK LAMINATED GLASS
FM	23 MIL IMPACT RESISTANT FILM OVERLAY,
2	FIELD-APPLIED TO GLASS



A NEW ALUM. FRAME AND GLAZING

B NEW ALUM. FRAME AND GLAZING

C NEW ALUM. FRAME AND GLAZING

D NEW ALUM. FRAME, DOOR AND GLAZING

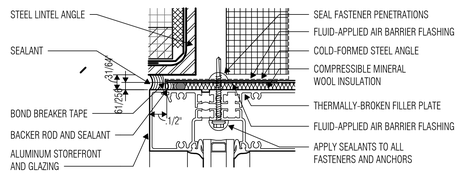
E NEW ALUM. FRAME, AND GLAZING

F NEW ALUM. FRAME AND GLAZING

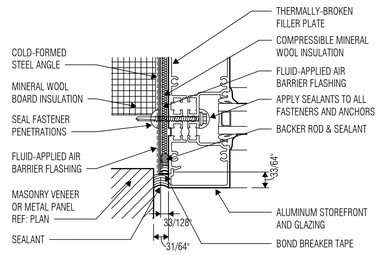
1

GLAZING SYSTEM LEGEND

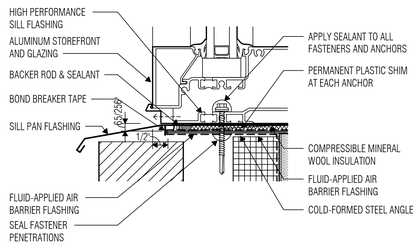
STOREFRONT FRAMING WITH 3/16" THICK 'HEAVY WALL' MATERIAL. TYPICAL AT ALL DOOR FRAME MEMBERS IN STOREFRONT GLAZING SYSTEMS.



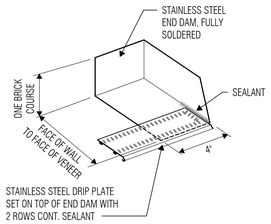
5 DETAIL AT STOREFRONT HEAD FLASHING
SCALE: 6" = 1'-0"



6 DETAIL AT STOREFRONT JAMB FLASHING
SCALE: 6" = 1'-0"



7 DETAIL AT STOREFRONT SILL FLASHING
SCALE: 6" = 1'-0"



8 S.S. END DAM AT DOOR & WINDOW JAMBS
SCALE: 3" = 1'-0"

VLK | ARCHITECTS

ARCHITECT

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CYPRESS-FAIRBANKS ISD
HOUSTON, TEXAS

24-02-5754-R-RFP

2024 Cy-Creek HS Renovation

REGISTERED ARCHITECT — ROBERT STANLEY JOHNSON — 24209 — STATE OF TEXAS

02/11/2025

ISSUED: JANUARY 20, 2025

REVISIONS

Revision No.		Revision Date
1	Addendum 2	02/06/2025
2	Addendum 4	02/11/2025

Director RSJ	Drawn By TQ, BW, DG
Designer BE	Quality Control
Proj. Arch. TQ	

PROJECT NO.

23-148.00

SHEET TITLE

GLAZING ASSEMBLY ELEVATIONS

SHEET NO.

A7.10

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		NOTE #6
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
6. SYMBOL INTENT TO SHOW APPROXIMATE LOCATION OF INTERACTIVE DISPLAY.

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	
SC	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	
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	
LMB ▼	LARGE MESSAGE BOARD, POE+ POWERED	REFERENCE FLOOR PLANS	4"X4"X2 1/8" BACK BOX WITH 1-G MUD RING, 1"C	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

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.
SS	NETWORK SIREN STROBE	CEILING MOUNTED UNO		NOTE #4

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	
MC	CEILING MOUNTED MOTION DETECTOR	CEILING		
MC	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

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL
FAA	FIRE ALARM ANNUNCIATOR PANEL
RPS	APPROXIMATE LOCATION OF EXISTING SYSTEM REMOTE POWER SUPPLY.

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.
4. NOTE TO CONTRACTOR: EXISTING PAINTED SURFACES ARE TO BE REPAINTED IN ARCHITECTS SCOPE OF WORK. CEILING TILE REPLACEMENT IS IN ARCHITECTS SCOPE OF WORK. REFERENCE TECHNOLOGY DEMO NOTES ON T0.00 FOR PROTECTION OF EXISTING SYSTEMS AND DEVICES.

TECH DEMO PLAN GENERAL NOTES

A. CONTRACTOR SHALL HAVE EACH LOW VOLTAGE SYSTEM TESTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION/DEMOLITION. TESTING SHALL INCLUDE THE FUNCTIONALITY OF ALL FIELD DEVICES AND EQUIPMENT. CONTRACTOR SHALL PROVIDE A DEMO AS-BUILD SHOWING WHICH DEVICES ARE NOT FUNCTIONING PROPERLY PRIOR TO CONSTRUCTION.

B. PRIOR TO THE DEMOLITION OF CEILING TILES AND/OR GRIDS, CONTRACTOR SHALL REMOVE ALL DEVICES FROM CEILING TILES AND SHALL BE PROPERLY HUNG FROM STRUCTURE IN A MANNER THAT PROTECTS THE DEVICE AND ALLOWS IT TO FUNCTION PROPERLY DURING CONSTRUCTION.

C. CONTRACTOR SHALL REPLACE CEILING MOUTED DEVICES AFTER THE COMPLETION OF CEILING WORK, IN ITS ORIGINAL LOCATION. DEVICE SHALL BE TESTED AND VERIFIED FOR PROPER FUNCTIONALITY.

D. DEVICES NOT FUNCTIONING PROPERLY AFTER REINSTALLATION THAT WERE NOT NOTED ON THE DEMO AS-BUILD SHALL BE REPLACED BY THE CONTRACTOR AT NOT ADDITIONAL COST TO THE PROJECT OR OWNER.

E. RETURN ALL UNUSED DEVICES TO OWNER.

F. SYSTEMS INCLUDE WIRELESS ACCESS, INTERCOM, FIRE ALARM, VIDEO SURVEILLANCE, ACCESS CONTROL, AND ALL OTHER TECHNOLOGY SYSTEMS.

G. DEVICES SHALL BE REMOVED AND REPLACED BY INDIVIDUALS EMPLOYED BY SYSTEMS CONTRACTORS, AND SHALL BE LICENSED, CERTIFIED AND/OR QUALIFIED TO WORK ON SPECIFIC SYSTEM.

H. 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. LIGHTSPEED SPEAKER, BASE STATION AND ANY OTHER SYSTEM COMPONENTS SHALL BE TAGGED BY CONTRACTOR WITH ROOM NUMBER AND BE REINSTALLED IN THE SAME ROOM IT WAS REMOVED FROM.

RESPONSIBILITY MATRIX

SCOPE ITEM	RESPONSIBILITY			NOTES
COMMUNICATIONS - DIVISION 27	OFOI	CFCI	OFCI	
CATEGORY 6/6A STRUCTURED CABLING SYSTEM (SCS)	✓			
AUDIO DISTRIBUTION SYSTEM - SPECIAL SPACE		✓		SEE NOTE 4.
AUDIO DISTRIBUTION SYSTEM - INSTRUCTIONAL SPACE	✓			
FLAT PANEL DISPLAYS	✓			
FLAT PANEL DISPLAY MOUNTS	✓			
INTERACTIVE DISPLAYS	✓			
INTERACTIVE DISPLAY MOUNTS	✓			
BUILDING INTERCOM/PA, BELL, AND CLOCK SYSTEM		✓		
→NETWORK SWITCHES	✓			
NETWORK EQUIPMENT				
→ MDF/IDF NETWORK EQUIPMENT	✓			
→ VOIP TELEPHONES	✓			
→ WIRELESS ACCESS POINTS	✓			
→ UNINTERRUPTIBLE POWER SUPPLIES (UPS)	✓			
RACEWAY: CONDUIT, BACK BOXES, ETC.		✓		SEE NOTE 1.
LOW VOLTAGE: RACEWAY, SLEEVES		✓		SEE NOTE 1.
STRUCTURED CABLING: RACEWAY, SLEEVES	✓			SEE NOTE 5.
ELECTRICAL POWER		✓		SEE NOTE 1.
LIFE SAFETY AND SECURITY - DIVISION 28	OFOI	CFCI	OFCI	
ACCESS CONTROL SYSTEM(ACS)		✓		
INTRUSION DETECTION SYSTEM		✓		
DOOR ACCESS VIDEO INTERCOM SYSTEM		✓		
VIDEO SURVEILLANCE SYSTEM (VSS)				
→VSS SERVERS		✓		
→VSS CAMERAS		✓		
→VSS PROGRAMMING		✓		
→VSS CABLING	✓			SEE NOTE 2.
FIRE ALARM SMOKE DETECTION WITH VOICE EVACUATION		✓		
RACEWAY: CONDUIT, BACK BOXES, SLEEVES, ETC.		✓		SEE NOTE 1.
ELECTRICAL POWER		✓		SEE NOTE 1.

OFOI - OWNER FURNISHED AND OWNER INSTALLED
CFCI - CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED
OFCI - OWNER FURNISHED AND CONTRACTOR INSTALLED

RESPONSIBILITY MATRIX NOTES:
1. BY DIVISION 26.
2. BY DIVISION 27.
3. BY DIVISION 11.
4. IF SYSTEM REQUIRES NETWORK SWITCH IT SHALL BE OFOI. CONTRACTOR TO COORDINATE WITH OWNER.
5. SLEEVES FOR STRUCTURED CABLING WILL BE OWNER FURNISHED, OWNER INSTALLED. NOT TO BE USED BY ANY OTHER TRADE.

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CYPRESS-FAIRBANKS ISD
HOUSTON, TEXAS

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