

DATE: December 12, 2022

DEPARTMENT OF GENERAL SERVICES  
BUREAU OF CAPITAL PROJECT DESIGN MANAGEMENT  
1800 HERR STREETS  
HARRISBURG, PENNSYLVANIA

**ADDENDUM NO. 5**

**on**

**PROJECT NO. DGS C-0969-0017 PHASE 001**

**PROJECT TITLE - Hollidaysburg Veteran's Home - Construction of New Community Living Center**

**PROFESSIONAL:**

Hord Coplan Macht, Inc.

700 E. Pratt Street, Suite 1200

Baltimore, MD, 21202

**If you submitted a bid prior to this Addendum being issued, your bid has been discarded and you must re-submit your bid(s) prior to the bid opening date and time.**

Refer to attached for addendum information.

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**ADDENDUM NO. 5**

on

**PROJECT NO. DGS C-0969-0017 PHASE 001  
CONSTRUCTION OF NEW COMMUNITY LIVING CENTER – HOLLIDAYSBURG VETERAN’S HOME –  
DUNCANSVILLE, BLAIR COUNTY, PA  
HORD COPLAN MACHT, INC., 700 E. PRATT STREET, SUITE 1200, BALTIMORE, MD 21202**

**CLARIFICATIONS – ALL CONTRACTS**

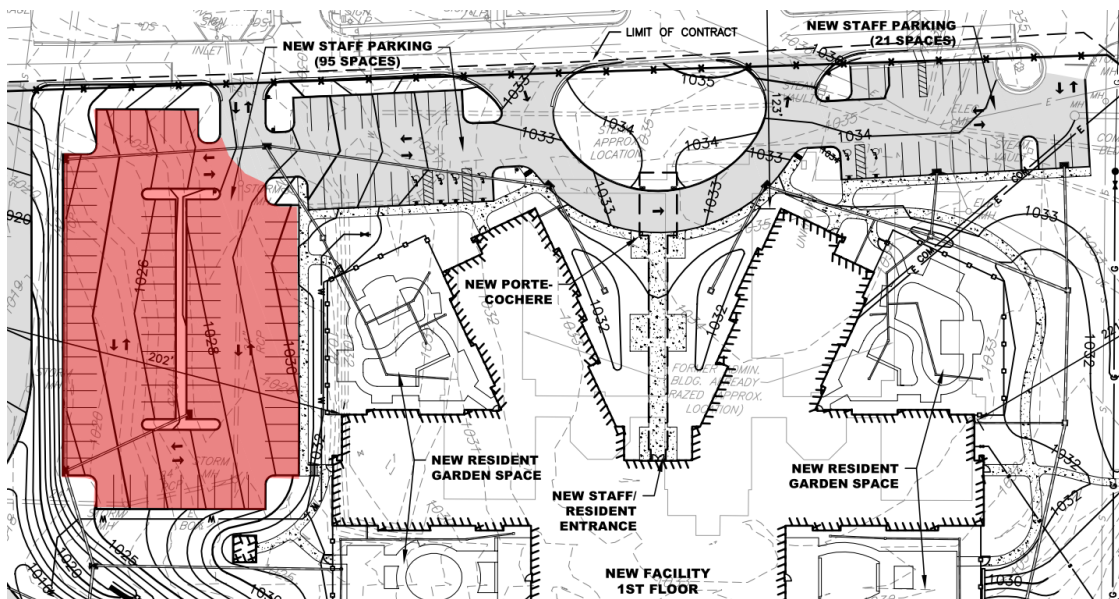
Item 1 – There are no Demolition drawings.

Item 2 – The drawings are in two (2) Volumnes. Volume One (1) contains the Civil, Landscape, Strcutrural, Architectural and Food Service Drawings. Volume Two (2) contains all the Mechanical, Fire Protection, plumbing, fire alarm, Electrical, Telecom, Audio Visual, and Security Drawings. Both sets of drawings are on e-Builder.

Item 3 – See Sheet G-002, General Project Information, upper left-hand corner, shows the Base Bids Key Plan, attached is the sheet with Base Bids Informatiuen added from specification section 01 03 00, Base Bid Information. This graphically shows the extents of Base Bid 1, Base Bid 2, and Base Bid 3. Also, the extent of sidewalks for the site are shown here as well.

Item 4 – Site furniture in the courtyards is in Base Bid 1 and Base Bid 2. See Sheet G-002, Base Bid Key Plan for what portions of the courtyards are in Base Bid 1 and Base Bid 2.

Item 5 – Clarification, South Parking Lot Base Bid 2, extent of area shown below:



Item 6 – Decorative fencing at courtyards is in Base Bid 1.

Item 7 - The foundation/footer drain shown on various Architectural and Civil drawings is to be provided and installed by the Plumbing Contractor.

Item 8 – Rigid inclusions are not required under the canopies and shade structures in Base Bids 2 and 3.

Item 9 – Mirror M2 shown on Architectural drawings, Toilet Accessories, is electrical and is provided and installed by the Electrical Contractor. Unity Lighted Mirror by Electric Mirror.

Item 10 – Emergency Power Generators, indicated in Base Bids 1 and 2 are provided and installed by the Electrical Contractor.

Item 11 – No Maintenance Materials are to be provided to the owner at the end of the project.

#### GENERAL CHANGES – ALL CONTRACTS

Item 1 - Revised Specification Section 01 03 00, Base Bid Descriptions, is attached.

Item 2 – The facility natural gas piping is shown on the Plumbing drawings and the specifications are in Division 23 specifications. Natural Gas piping is to be included in the Plumbing Contractors Bid, not the HVAC Contractors Bid.

#### SPECIFICATIONS CLARIFICATIONS – CONTRACT NO. DGS 0969-0017 PHASE 1.1

Item 1 - Page 10 56 26-3: Flooring requirements are listed under 2.3.C, Flooring.

Item 2 - Page 10 56 26-3: Surface mounted tracks are listed under 2.3.D, Tracks.

Item 3 - Section 05 70 00 is for the rooftop mechanical screening. Basis of design system includes the supporting framing.

Item 4 – Section 31 66 13, rigid inclusions are not required under the slab on grade.

Item 5 - Section 31 32 23: All work associated with specification section 313223 "Proof Drilling and Grouting of Karst Features" will be paid for from the unit price allowances detailed in specification section 010250.

Item 6 – On Drawings A-600 and A-601, Door Schedule, single wood doors noted as type 'FP' should be 'F'. There are only 8 doors with 'FP' and they are for the Resident Isolation Rooms.

Item 7 – Section 12 24 13, Motorized shades are in Veteran's Hall A123 only. All other windows are manual.

#### SPECIFICATION CHANGES – CONTRACT NO. DGS 0969-0017 PHASE 1.1

Item 1 – Page 10 56 26-3: Item 2.3.E, Carriages, all carriages are to be mobile.

Item 2 – Page 10 56 26-5: Remove 2.8.B, Aisle Lights.

Item 3 – Page 11 40 00 / Part 2-6, Item #10, Track Shelving Section and Item #11, Track Shelving Section have been added to the attached / revised section section 11 40 00, Food Service.

Item 4 – Page 11 40 00 / Part 2 -17, Item #65, Exhaust Hoods, revise as follows:

1. Kitchen Equipment Contractor shall furnish hoods, make up air and exhaust fans as part of the food service equipment scope.
2. Kitchen Equipment Contractor shall deliver the Hoods, Exhaust & MUA Fans and roof curbs to the General Contractor at the jobsite. Installation of the hoods, roof curbs and fans are by the Mechanical Contractor including any cranes, rigging, operators, etc.

Item 5 – Add Specification Section 05 40 00, Cold-Formed Metal Framing.

Item 6 - Add Specification Section 08 34 84, Fire Rated Elevator Smoke Containment System.

Item 7 – Page 09 51 13 – 5: Change 2.5.C.1, Structural Classification to Intermediate-Duty System.

Item 8 – Page 31 32 23 – 10, remove 8.1.A, Mobilization – Each.

Item 9 – Delete Section 08 83 00, Mirrors.

#### SPECIFICATION CLARIFICATIONS – CONTRACT NO. DGS 0969-0017 PHASE 1.3

Item 1 - Clarification, for pumped drain piping, materials listed in 22 14 13 are acceptable.

Item 2 – Plumbing contractor supplies and installs the water treatment system shown on drawing P-301 and P-503 detail.

#### SPECIFICATION CHANGES – CONTRACT NO. DGS 0969-0017 PHASE 1.3

Item 1 – It is acceptable to substitute the agent from HFC-227 (FM200) to FK-5-1-12.

#### SPECIFICATION CHANGES – CONTRACT NO. DGS 0969-0017 PHASE 1.4

Item 1 - Add Specification Section 28 46 21.11, Addressable Fire-Alarm Systems, copy attached.

#### DRAWING CLARIFICATIONS – CONTRACT NO. DGS 0969-0017 PHASE 1.1

Item 1 - Sheet S-102 and S-211, For the rising footing / wall along both lines I & M, footing steps are covered by typical detail 9/S-400.

Item 2 – Clarification, on drawing L-200 the covered seating area (New Employee Shelter), dining tables, chairs and shade structure are in Base Bid 1.

Item 3 – Sheet C-401, the new trash compactor is Owner Furnished.

Item 4 – Cubicle Curtains (CC-1), locations are shown on Reflected Ceiling Plans.

Item 5 – Furniture Plans A-173 through A-175d, all furniture and equipment are NIC, except Toilet Accessories.

Item 6 – Interior Signage, is not part of the project.



Item 7 – Manufactured Fireplaces are specified in section 10 31 00 and are therefore part of the Prime General Contractor.

Item 8 – Televisions are NIC.

Item 9 – Wall Type below ISF4 and ISF5 is OM4A.

Item 10 – USPS Drop Boxes, total of 3, are to be provided and installed by the main bank of elevators; one on each floor.

Item 11 – Projection Screens are in Veteran's Hall, See Reflected Ceiling Plans.

#### DRAWING CHANGES – CONTRACT NO. DGS 0969-0017 PHASE 1.1

Item 1 – Sheets A-600 & A-601, Door Schedule, see attached drawings for changes addressed below:

- a. Doors: 1S-1, 1S-2, 1S-3, 1S-4, 2S-5, 2S-6, 2S-7 & 2S-8 (Storefronts SF3, SF4, SF5, SF6 on A-610) are Aluminum.
- b. Doors: A-114A & D-219, have aluminum doors.
- c. Door Schedule at Level 2 immediately above \*G1 has been removed from the schedule.
- d. Security Room 207 there is a borrowed lite (3G/A-408), the door and frame is aluminum.
- e. Security glass is not required in security office at Veterans Entrance.
- f. Doors B160, B164, these two doors are access panels to the exhaust shaft on floors 2 and 3 in area B, have been deleted from schedule.
- g. Frame and door type for door A126 (Barber) have been added.

Item 2 – Add the following to the Finish Material Legend, Sheet A-620, GA-1: Greenwall Accent; Manufacturer: Greenmood – Style: Reindeer Moss, Color: Medium 70.

Item 3 - Acrovyn Wall Coverings WC-3 and WC-4 on Finish Material Legend:

- Level 3 finishes should replicate level 2.
- Provide accent wall covering (digital print on impact wall protection, include purchase of royalty free image) at feature wall adjacent to nurse stations in these areas:
  - WC-1: 2A (second floor) and 3A (third floor)
  - WC-2: 2B (second floor) and 3B (third floor)
  - WC-3: 2C (second floor) and 3C (third floor)
  - WC-4: 2D (second floor) and 3D (fourth floor)

Item 4 – Electric Fireplaces are in the following rooms: Canteen Seating A114B, Living Rooms A243, B242, C243, D243, A343, B343, C343, and D343.

Item 5 – Drawing C-601, The gas main, meter, and service line path changed near the northwest parking lot and north edge of the site. The COMM BLDG (shown as existing) changed during its construction this fall, and the associated manhole, transformer, and duct banks changed as well. It is likely that the GC will need to add at least 2 bollards between the gas meter and the parking lot due to the meter's proximity to vehicle traffic.

Item 6 - Sheets L-000 & L-400, Five trees shifted to accommodate utility location changes.

Item 7 – SF14, change from Storefront to Curtainwall.

Item 8 – Sheets A-101a, A-403, and A-612, attached, for elevation of frame on ISF1.

Item 9 – Sheets A-102d, A-409, and A-612, attached, for ISF number and elevation of door S200B.

Item 10 – Sheets A-411 and A-412, attached, for references to Toilet Accessories Schedule.

Item 11 – Sheet S-211, The intersection of Column Lines J1 and 8.5, Footing F40 the designation for the pier at J.1/8.5 would be P28. The same as the piers at J.7/8.5, K.3/8.5, and K.9/8.5.

#### DRAWING CLARIFICATIONS – CONTRACT NO. DGS 0969-0017 PHASE 1.3

Item 1 - Plumbing Drawings: Clarification, regarding pipe sizes, they are shown them on the risers only.

Item 2 - Clarification, all grease waste piping cast iron.

Item 3 - Sink in room 205 on drawing P-208 & a sink in room 247, should be included in the project.

Item 4 - Include sanitary piping for 205 (L-3). Staff Lounge sinks are L-5

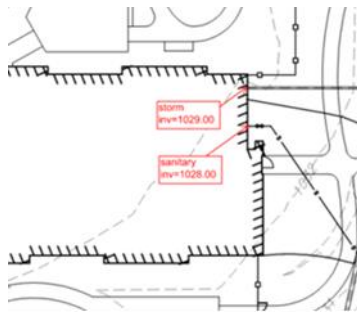
Item 5 - The “sim” next to the call outs (example Rooms 206 on P-208) means the call out is similar to the detail shown. We did not do separate ¼ scales for all rooms. The call out on P306 shows a janitors closet of similar configuration to 206 on P208.

Item 6 - Drawing P-210 has a note # 15 at room A352, however there is no # 15 in the plan notes. Note 15 indicates 3” san. Note was copied from P206.

#### DRAWING CHANGES – CONTRACT NO. DGS 0969-0017 PHASE 1.3

Item 1 - Drawing P-200, Foundation Drain, marked "6" ST" should be “6” corrugated PE pipe. Main header drain was upsized on the foundation drain tile to 6, from what is I the geotechnical report. Everything else is 4”.

Item 2 - Sanitary Sewer Invert, for the 6" sanitary sewer lateral where it exits area C, elevation shown below.



Item 3 - Above ground sanitary waste & vent piping: The specifications for the underground sanitary waste & vent piping are for extra heavy hub and spigot cast iron piping, only, however the aboveground specification allows for PVC SCH 40 piping. PVC piping will be permitted aboveground for sanitary waste & vent piping.

Item 4 – See attached SK P304a for note revisions.

Item 5 – See attached sheets P-406, P-407, P-410, and P-411 for Riser Diagram changes / clarifications.

Attachments: Spec Sections:  
01 03 00, Base Bid Descriptions

05 40 00, Cold-Formed Metal Framing  
08 34 84, Fire Rated Elevator Smoke Containment System.  
11 40 00, Food Service  
28 46 21.11, Addressable Fire-Alarm System

Drawings:

G-002, General Project Information  
C-601, Utility Plan  
L-000, Overall Key Plan  
L-400, Overall Planting Plan  
A-101a, Partial Floor Plan Level 1 Area A  
A-102d, Partial Floor Plan Level 2, Area D  
A-403, Interior Enlarged Plans and Elevations  
A-409, Interior Corridor Elevations  
A-411, Enlarged Toilet Plans & Elevations  
A-412, Enlarged Toilet Plans & Elevations  
A-600, Door Schedule  
A-601, Door Schedule & Details  
A-612, Interior Storefront Schedule & Details  
Sketch P-304a  
P-406, Water Riser Diagram Area D  
P-407, Water Riser Diagram Area D  
P-410, Sanitary Riser Diagram Area C  
P-411, Sanitary Riser Diagram Area D

**SECTION 01 03 00**  
**BASE BID DESCRIPTIONS**

**PART 1 – GENERAL**

**1.1 STIPULATIONS**

- A. The specifications sections “General Conditions of the Construction Contract”, “Special Conditions”, and “Division 1 - General Requirements” form a part of this Section by this reference thereto, and shall have the same force and effect as if printed herewith in full.

**1.2 SECTION INCLUDES**

- A. This Section includes identification of each Base Bid and description of the changes to be associated with each Base Bid.

**1.3 DESCRIPTION OF SEPARATE BASE BIDS**

**A. GENERAL CONSTRUCTION CONTRACT (DGS C- 0969-0017 PHASE 1.1)**

**1. Base Bid No. 1:**

- a. Shall include all the work indicated on the Contract Drawings and described in the Contract Specifications except that work specifically called out as being part of another Base Bid. Clarification against Base Bids 2 and 3:
  - 1. Courtyards: Initial 50% of Paving and Landscaping (excludes Shade Structures in Base Bid 3)
  - 2. First Emergency Power Generator and all related electrical systems in building to support both emergency power generators.
  - 3. New Trees across the site: Initial 25% of trees on site, not including the riparian buffer area (all part of Base Bid 1).
  - 4. Flags at Veteran’s Plaza part of Base Bid 1.

**2. Base Bid No. 2:**

- a. Same as Base Bid No. 1, except add
  - 1. Veteran’s Plaza (East Side, First Floor): Paving and Landscaping
  - 2. Main Entrance Canopy (North Entrance, First Floor)
  - 3. South Parking Lot
  - 4. Veteran’s Entrance (West Entrance, Second Floor): Landscaping
  - 5. Courtyards: Remaining 50% of Paving and Landscaping (excludes Shade Structures in Base Bid 3)
  - 6. Second Emergency Power Generator
  - 7. New Trees across the site: additional 25% of trees on site, not including the riparian buffer area.

**3. Base Bid No. 3:**

- a. Same as Base Bid No. 2, except add
  - 1. Veterans Plaza (East Side, First Floor): Canopy
  - 2. Veterans Entrance (West Side, Second Floor): Drop-Off Canopy and Covered Walk to Veterans Entrance.
  - 3. Shade Structures in Courtyards, total of four (4).
  - 4. New Trees across the site: additional 50% of trees on site, not including the riparian buffer area.

B. HVAC CONSTRUCTION CONTRACT (DGS C-0969-0017 PHASE 1.2)

1. Base Bid No. 1:
  - a. Shall include all the work indicated on the Contract Drawings and described in the Contract Specifications except that work specifically called out as being part of another Base Bid.
2. Base Bid No. 2:
  - a. **Same as Base Bid No. 1, except add**
    1. **No additional scope.**
3. Base Bid No. 3:
  - a. **Same as Base Bid No. 2, except add**
    1. **No additional scope.**

C. PLUMBING CONSTRUCTION CONTRACT (DGS C-0969-0017 PHASE 1.3)

1. Base Bid No. 1:
  - a. Shall include all the work indicated on the Contract Drawings and described in the Contract Specifications except that work specifically called out as being part of another Base Bid.
2. Base Bid No. 2:
  - a. **Same as Base Bid No. 1, except add**
    1. **Main Entrance Canopy (North Entrance, First Floor) any plumbing items in canopy.**
3. Base Bid No. 3:
  - a. **Same as Base Bid No. 2, except add**
    1. **Veterans Plaza (East Side, First Floor): Any Plumbing items in Canopy.**
    2. **Veterans Entrance (West Side, Second Floor): Any Plumbing items in Drop-Off Canopy and Covered Walk to Veterans Entrance.**

D. ELECTRICAL CONSTRUCTION CONTRACT (DGS C-0969-0017 PHASE 1.4)

1. Base Bid No. 1:
  - a. Shall include all the work indicated on the Contract Drawings and described in the Contract Specifications except that work specifically called out as being part of another Base Bid.
2. Base Bid No. 2:
  - a. **Same as Base Bid No. 1, except add**
    1. **Veteran's Plaza (East Side, First Floor): Paving and Landscaping. Any electrical power and lighting items in Veteran's Plaza.**
    2. **Main Entrance Canopy (North Entrance, First Floor), Any electrical power and lighting items in canopy.**
    3. **South Parking Lot: Any electrical power and lighting items at parking lot.**
    4. **Second Emergency Power Generator**

3. Base Bid No. 3:

**a. Same as Base Bid No. 2, except add**

- 1. Veterans Plaza (East Side, First Floor): Any electrical power and lighting items in Canopy**
- 2. Veterans Entrance (West Side, Second Floor): Any electrical power and lighting items in Drop-Off Canopy and Covered Walk to Veterans Entrance.**
- 3. Shade Structures in Courtyards, total of four (4): Any electrical power, lighting, data, and cable items in shade structures.**

**PART 2 – PRODUCTS (Not Used)**

**PART 3 – EXECUTION (Not Used)**

**END OF SECTION**

**SECTION 05 40 00**  
**COLD-FORMED METAL FRAMING**

**PART 1 - GENERAL**

**1.1 STIPULATIONS**

- A. The specifications sections "General Conditions to the Construction Contract", "Special Conditions" and "Division 01 – General Requirements" form a part of this Section by this reference thereto and shall have the same force and effect as if printed herewith in full.

**1.2 SUMMARY**

- A. Section Includes:
  - 1. Load-bearing wall framing.
  - 2. Exterior non-load-bearing wall framing.
- B. Related Requirements:
  - 1. Section 05 50 00 "Metal Fabrications" for masonry shelf angles and connections.
  - 2. Section 09 21 16.23 "Gypsum Board Shaft Wall Assemblies" for interior non-load-bearing, metal-stud-framed, shaft-wall assemblies.
  - 3. Section 09 22 16 "Non-Structural Metal Framing" for interior non-load-bearing, metal-stud framing and ceiling-suspension assemblies.

**1.3 PREINSTALLATION MEETINGS**

- A. Preinstallation Conference: Conduct conference at Project site.

**1.4 ACTION SUBMITTALS**

- A. Product Data: For each type of cold-formed steel framing product and accessory.
- B. Shop Drawings:
  - 1. Include layout, spacings, sizes, thicknesses, and types of cold-formed steel framing; fabrication; and fastening and anchorage details, including mechanical fasteners.
  - 2. Indicate reinforcing channels, opening framing, supplemental framing, strapping, bracing, bridging, splices, accessories, connection details, and attachment to adjoining work.
- C. Delegated-Design Submittal: For cold-formed steel framing.
  - 1. Structural Calculations: Submit calculations signed and sealed by a professional engineer as defined in Section 01 40 00 "Quality Requirements" for review which include:
    - a. Design Criteria.
    - b. Structural analysis for each unique framing application.

- c. Selection of framing components and accessories and verification of connections.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For professional engineer and testing agency.
- B. Welding certificates.
- C. Product Test Reports: For each listed product, for tests performed by a qualified testing agency.
  - 1. Steel sheet.
  - 2. Expansion anchors.
  - 3. Power-actuated anchors.
  - 4. Mechanical fasteners.
  - 5. Vertical deflection clips.
  - 6. Horizontal drift deflection clips
  - 7. Miscellaneous structural clips and accessories.
- D. Research Reports: For non-standard cold-formed steel framing, from ICC-ES.

## 1.6 QUALITY ASSURANCE

- A. Engineering Responsibility: Preparation of Shop Drawings, design calculations, and other structural data by a qualified professional engineer.
- B. Professional Engineer Qualifications: A professional engineer as defined in Section 01 40 00 "Quality Requirements" and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of cold-formed metal framing that are similar to those indicated for this Project in material, design, and extent.
- C. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated.
- D. Product Tests: Mill certificates or data from a qualified independent testing agency indicating steel sheet complies with requirements, including base-metal thickness, yield strength, tensile strength, total elongation, chemical requirements, and metallic-coating thickness.
- E. Welding Qualifications: Qualify procedures and personnel according to the following:
  - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
  - 2. AWS D1.3/D1.3M, "Structural Welding Code - Sheet Steel."
- F. Fire-Test-Response Characteristics: Where indicated, provide cold-formed metal framing identical to that of assemblies tested for fire resistance per ASTM E 119 by a testing and inspecting agency acceptable to authorities having jurisdiction.
- G. AISI Specifications and Standards: Comply with AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" and its "Standard for Cold-Formed Steel Framing - General Provisions."
  - 1. Comply with AISI's "Standard for Cold-Formed Steel Framing - Header Design."



## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Protect cold-formed steel framing from corrosion, moisture staining, deformation, and other damage during delivery, storage, and handling.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following, or equal approved by Professional:
  - 1. ClarkDietrich Building Systems.
  - 2. Marino\WARE.
  - 3. Steel Network, Inc. (The).

### 2.2 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 40 00 "Quality Requirements," to design cold-formed steel framing.
- B. Structural Performance: Provide cold-formed steel framing capable of withstanding design loads within limits and under conditions indicated.
  - 1. Design Loads: As indicated.
  - 2. Deflection Limits: Design framing systems to withstand design loads without deflections greater than the following:
    - a. Exterior Load-Bearing Wall Framing: Horizontal deflection of 1/600 of the wall height.
    - b. Interior Load-Bearing Wall Framing: Horizontal deflection of 1/360 of the wall height under a horizontal load of 5 lbf/sq. ft.
    - c. Exterior Non-Load-Bearing Framing: Horizontal deflection of 1/600 of the wall height.
  - 3. Design framing systems to provide for movement of framing members located outside the insulated building envelope without damage or overstressing, sheathing failure, connection failure, undue strain on fasteners and anchors, or other detrimental effects when subject to a maximum ambient temperature change of 120 deg F.
  - 4. Design framing system to maintain clearances at openings, to allow for construction tolerances, and to accommodate live load deflection of primary building structure as follows:
    - a. Upward and downward movement of 3/4 inch.
  - 5. Design exterior non-load-bearing wall framing to accommodate horizontal deflection without regard for contribution of sheathing materials.
- C. Cold-Formed Steel Framing Design Standards:
  - 1. Wall Studs: AISI S211.
  - 2. Headers: AISI S212.
  - 3. Lateral Design: AISI S213.

- D. AISI Specifications and Standards: Unless more stringent requirements are indicated, comply with AISI S100 and AISI S200.

## 2.3 COLD-FORMED STEEL FRAMING, GENERAL

- A. Steel Sheet: ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of grade and coating weight as follows:
  - 1. Grade: As required by structural performance.
  - 2. Coating: G60, A60, AZ50, or GF30.
- B. Steel Sheet for Vertical Deflection Clips: ASTM A 653/A 653M, structural steel, zinc coated, of grade and coating as follows:
  - 1. Grade: As required by structural performance.
  - 2. Coating: G60.

## 2.4 EXTERIOR NON-LOAD-BEARING WALL FRAMING

- A. Steel Studs: Manufacturer's standard C-shaped steel studs, of web depths indicated, punched, with stiffened flanges, and as follows:
  - 1. Minimum Base-Metal Thickness: As required by structural performance.
  - 2. Flange Width: 1-5/8 inches.
- B. Steel Track: Manufacturer's standard U-shaped steel track, of web depths indicated, unpunched, with unstiffened flanges, and matching minimum base-metal thickness of steel studs.
- C. Vertical Deflection Clips: Manufacturer's standard bypass clips, capable of accommodating upward and downward vertical displacement of primary structure through positive mechanical attachment to stud web.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following, or equal approved by Professional:
    - a. ClarkDietrich Building Systems, Inc.
    - b. MarinoWARE.
    - c. Steel Network, Inc. (The).

## 2.5 FRAMING ACCESSORIES

- A. Fabricate steel-framing accessories from steel sheet, ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of same grade and coating weight used for framing members.
- B. Provide accessories of manufacturer's standard thickness and configuration, unless otherwise indicated, as follows:
  - 1. Supplementary framing.
  - 2. Bracing, bridging, and solid blocking.
  - 3. Web stiffeners.
  - 4. Anchor clips.

5. End clips.
6. Foundation clips.
7. Gusset plates.
8. Stud kickers and knee braces.
9. Joist hangers and end closures.
10. Hole reinforcing plates.
11. Backer plates.

## 2.6 ANCHORS, CLIPS, AND FASTENERS

- A. Steel Shapes and Clips: ASTM A 36/A 36M, zinc coated by hot-dip process according to ASTM A 123/A 123M.
- B. Anchor Bolts: ASTM F 1554, Grade 36, threaded carbon-steel hex-headed bolts and carbon-steel nuts; and flat, hardened-steel washers; zinc coated by hot-dip process according to ASTM A 153/A 153M, Class C.
- C. Expansion Anchors: Fabricated from corrosion-resistant materials, with allowable load or strength design capacities calculated according to ICC-ES AC193 and ACI 318 greater than or equal to the design load, as determined by testing per ASTM E 488 conducted by a qualified testing agency.
- D. Power-Actuated Anchors: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with allowable load capacities calculated according to ICC-ES AC70, greater than or equal to the design load, as determined by testing per ASTM E 1190 conducted by a qualified testing agency.
- E. Mechanical Fasteners: ASTM C 1513, corrosion-resistant-coated, self-drilling, self-tapping, steel drill screws.
  1. Head Type: Low-profile head beneath sheathing, manufacturer's standard elsewhere.
- F. Welding Electrodes: Comply with AWS standards.

## 2.7 MISCELLANEOUS MATERIALS

- A. Galvanizing Repair Paint: ASTM A 780.
- B. Nonmetallic, Nonshrink Grout: Premixed, nonmetallic, noncorrosive, nonstaining grout containing selected silica sands, portland cement, shrinkage-compensating agents, and plasticizing and water-reducing agents, complying with ASTM C 1107/C 1107M, with fluid consistency and 30-minute working time.
- C. Shims: Load bearing, high-density multimonomer plastic, and nonleaching; or of cold-formed steel of same grade and coating as framing members supported by shims.
- D. Sealer Gaskets: Closed-cell neoprene foam, 1/4 inch thick, selected from manufacturer's standard widths to match width of bottom track or rim track members.

## 2.8 FABRICATION

- A. Fabricate cold-formed steel framing and accessories plumb, square, and true to line, and with connections securely fastened, according to referenced AISI's specifications and standards, manufacturer's written instructions, and requirements in this Section.
  - 1. Fabricate framing assemblies using jigs or templates.
  - 2. Cut framing members by sawing or shearing; do not torch cut.
  - 3. Fasten cold-formed steel framing members by welding, screw fastening, clinch fastening, pneumatic pin fastening, or riveting as standard with fabricator. Wire tying of framing members is not permitted.
    - a. Comply with AWS D1.3/D1.3M requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
    - b. Locate mechanical fasteners and install according to Shop Drawings, with screw penetrating joined members by no fewer than three exposed screw threads.
  - 4. Fasten other materials to cold-formed steel framing by welding, bolting, pneumatic pin fastening, or screw fastening, according to Shop Drawings.
- B. Reinforce, stiffen, and brace framing assemblies to withstand handling, delivery, and erection stresses. Lift fabricated assemblies to prevent damage or permanent distortion.
- C. Fabrication Tolerances: Fabricate assemblies level, plumb, and true to line to a maximum allowable tolerance variation of 1/8 inch in 10 feet and as follows:
  - 1. Spacing: Space individual framing members no more than plus or minus 1/8 inch from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.
  - 2. Squareness: Fabricate each cold-formed steel framing assembly to a maximum out-of-square tolerance of 1/8 inch.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine supporting substrates and abutting structural framing for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Before sprayed fire-resistive materials are applied, attach continuous angles, supplementary framing, or tracks to structural members indicated to receive sprayed fire-resistive materials.
- B. After applying sprayed fire-resistive materials, remove only as much of these materials as needed to complete installation of cold-formed framing without reducing thickness of fire-resistive materials below that are required to obtain fire-resistance rating indicated. Protect remaining fire-resistive materials from damage.

- C. Install load bearing shims or grout between the underside of load-bearing wall bottom track and the top of foundation wall or slab at locations with a gap larger than 1/4 inch to ensure a uniform bearing surface on supporting concrete or masonry construction.
- D. Install sealer gaskets at the underside of wall bottom track or rim track and at the top of foundation wall or slab at stud or joist locations.

### 3.3 INSTALLATION, GENERAL

- A. Cold-formed steel framing may be shop or field fabricated for installation, or it may be field assembled.
- B. Install cold-formed steel framing according to AISI S200 and to manufacturer's written instructions unless more stringent requirements are indicated.
- C. Install shop- or field-fabricated, cold-formed framing and securely anchor to supporting structure.
  - 1. Screw, bolt, or weld wall panels at horizontal and vertical junctures to produce flush, even, true-to-line joints with maximum variation in plane and true position between fabricated panels not exceeding 1/16 inch.
- D. Install cold-formed steel framing and accessories plumb, square, and true to line, and with connections securely fastened.
  - 1. Cut framing members by sawing or shearing; do not torch cut.
  - 2. Fasten cold-formed steel framing members by welding, screw fastening, clinch fastening, or riveting. Wire tying of framing members is not permitted.
    - a. Comply with AWS D1.3/D1.3M requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
    - b. Locate mechanical fasteners and install according to Shop Drawings, and complying with requirements for spacing, edge distances, and screw penetration.
- E. Install framing members in one-piece lengths unless splice connections are indicated for track or tension members.
- F. Install temporary bracing and supports to secure framing and support loads comparable in intensity to those for which structure was designed. Maintain braces and supports in place, undisturbed, until entire integrated supporting structure has been completed and permanent connections to framing are secured.
- G. Do not bridge building expansion joints with cold-formed steel framing. Independently frame both sides of joints.
- H. Install insulation, specified in Section 07 21 00 "Thermal Insulation," in built-up exterior framing members, such as headers, sills, boxed joists, and multiple studs at openings, that are inaccessible on completion of framing work.
- I. Fasten hole reinforcing plate over web penetrations that exceed size of manufacturer's approved or standard punched openings.
- J. Erection Tolerances: Install cold-formed steel framing level, plumb, and true to line to a maximum allowable tolerance variation of 1/8 inch in 10 feet and as follows:

1. Space individual framing members no more than plus or minus 1/8 inch from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.

### 3.4 EXTERIOR NON-LOAD-BEARING WALL INSTALLATION

- A. Install continuous tracks sized to match studs. Align tracks accurately and securely anchor to supporting structure as indicated.
- B. Fasten both flanges of studs to top and bottom track unless otherwise indicated. Space studs as follows:
  1. Stud Spacing: As indicated, not to exceed requirements of sheathing.
- C. Set studs plumb, except as needed for diagonal bracing or required for nonplumb walls or warped surfaces and similar requirements.
- D. Isolate non-load-bearing steel framing from building structure to prevent transfer of vertical loads while providing lateral support.
  1. Install single deep-leg deflection tracks and anchor to building structure.
  2. Connect vertical deflection clips to bypassing studs and anchor to building structure.
  3. Connect drift clips to cold-formed metal framing and anchor to building structure.
- E. Install horizontal bridging in wall studs, spaced vertically in rows indicated on Shop Drawings but not more than 48 inches apart. Fasten at each stud intersection.
  1. Top Bridging for Single Deflection Track: Install row of horizontal bridging within 12 inches of single deflection track. Install a combination of bridging and stud or stud-track solid blocking of width and thickness matching studs, secured to stud webs or flanges.
  2. Bridging: Provide one of the following bridging types:
    - a. Bridging: Cold-rolled steel channel, welded or mechanically fastened to webs of punched studs.
    - b. Bridging: Combination of flat, taut, steel sheet straps of width and thickness indicated and stud-track solid blocking of width and thickness to match studs. Fasten flat straps to stud flanges and secure solid blocking to stud webs or flanges.
- F. Install miscellaneous framing and connections, including stud kickers, web stiffeners, clip angles, continuous angles, anchors, and fasteners, to provide a complete and stable wall-framing system.

### 3.5 FIELD QUALITY CONTROL

- A. Testing: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Field and shop welds will be subject to testing and inspecting.
- C. Testing agency will report test results promptly and in writing to Contractor and Architect.

- D. Remove and replace work where test results indicate that it does not comply with specified requirements.
- E. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

### 3.6 REPAIRS AND PROTECTION

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on fabricated and installed cold-formed steel framing with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that cold-formed steel framing is without damage or deterioration at time of Substantial Completion.

**END OF SECTION 05 40 00**

**SECTION 08 34 84**  
**FIRE RATED ELEVATOR SMOKE CONTAINMENT SYSTEM**

**PART 1 - GENERAL**

**1.01 STIPULATIONS**

- A. The specifications sections "General Conditions to the Construction Contract", "Special Conditions" and "Division 01 – General Requirements" form a part of this Section by this reference thereto and shall have the same force and effect as if printed herewith in full.

**1.02 SUMMARY**

- A. Section Includes: Fire protective smoke containment curtain system designed to provide a tight-fitting, smoke- and draft-control assembly as well as fire protection.
- B. Products Supplied But Not Installed Under This Section:
  - 1. Group Control Panel unit.
  - 2. Emergency Up Buttons
- C. Related Sections:
  - 1. 09 22 16–Non-Load Bearing Wall Framing: Metal backing in housing mounting area.
  - 2. 09 91 23–Paints: Field painting of specified components; repainting of existing field painted elevator door frames.
  - 3. Division 28 for Detection and Alarm: Provision of smoke detectors.
  - 4. 14 24 00–Hydraulic Elevators.
  - 5. Division 26 Sections for 120VAC and control circuit power including conduit, boxes, conductors, wiring devices, and emergency power.

**1.03 REFERENCES**

- A. ASTM E84-10 test report with calculated smoke development (CSD) of 2 and a smoke developed index (SDI) of 0 and a calculated flame spread (CFS) of 0.
- B. ICC Evaluation Service – Acceptance Criteria for Smoke-Containment Systems Used With Fire-Resistive Elevator Hoist way Doors and Frames – AC-77.
- C. NFPA Codes and Standards:
  - 1. 70 – National Electrical Code.
  - 2. 105 – Recommended Practice for the Installation of Smoke-Control Door Assemblies.
- D. UL Minimum Performance Standards and Label Requirements
  - 1. UL 10D Classified Fire Protective Curtains
  - 2. UL Oversized Certificate Labeled
  - 3. UL 864 –Classified Control Units for Fire Protective Signaling Systems.
  - 4. UL 1784 – Air Leakage Tests for Door Assemblies.
  - 5. Impact test required by independent testing laboratory
  - 6. Gravity fail-safe design. No battery back-up will be required for deployment
  - 7. Certified to ISO 9001 1994 for the design, manufacturing, installation, and commissioning of Automatic Smoke Barriers and Partitions.
  - 8. UL follow up service report required
- E. OSHPD Anchorage Pre-Approved OPM-0554-19



- F. California Department of Forestry and Fire Protection and Office of the State Fire Marshal Listing

#### 1.04 SUBMITTALS

- A. Product Data: For each type of product
  - 1. Shop Drawings: Show fabrication and installation details for automatic smoke curtains. Include plans, sections details, attachments to other work and the following:
    - a. Operating clearances
    - b. Requirements for supporting automatic smoke curtains, track, equipment.
    - c. Locations of equipment components, switches, motors and controls. Differentiate between manufacturer-installed and field installed wiring
  - 2. Quality Assurance/Control Submittals:
    - a. Qualifications:
      - 1) Proof of manufacturer qualifications.
      - 2) Proof of Installer qualifications.
    - b. Certifications: Copy of specified items.
    - c. Manufacturer's installation instructions and testing procedures

#### 1.05 CLOSEOUT SUBMITTALS

- A. Closeout Submittals; submit following items:
  - 1. Operation and Maintenance Manual
  - 2. Manufacturer's Warranties

#### 1.06 QUALITY ASSURANCE

- A. Overall Standards:
  - 1. Manufacturer shall maintain a quality control program in accordance with ICC-ES Acceptance Criteria 77.
- B. Qualifications:
  - 1. Manufacturer Qualifications: Minimum seven years' experience in producing smoke containment systems of the type specified.
  - 2. Installer Qualifications: Factory trained by manufacturer.
- C. Certifications:
  - 1. ICC-ESR#-4761
  - 2. California Department of Forestry and Fire Protection and Office of the State Fire Marshal Listing.
  - 3. UL Testing Laboratory Label.
  - 4. UL-10D One Hour Fire Protective Curtain Listing Label.
  - 5. OSHPD Anchorage Pre-Approval OPM-0554-19
- D. Pre-Installation Meeting:
  - 1. Schedule and convene a pre-installation meeting prior to commencement of field operations with representatives of the following in attendance: Owner, Architect, General Contractor, smoke containment system sub-contractor, painting sub-contractor, and electrical sub-contractor.
  - 2. Review substrate conditions, requirements of related work, installation instructions, storage and handling procedures, and protection measures.
  - 3. Keep minutes of meeting including responsibilities of various parties and deviations from specifications and installation instructions.

## 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Reference Section 01 6600–Product Storage and Handling Requirements.
- B. Follow manufacturer's instructions.

## 1.08 WARRANTY

- A. Provide manufacturer's standard one year warranty.
- B. Maintenance and Testing:
  - 1. Perform minimum annual maintenance and testing on each smoke containment system as required by the manufacturer's warranty, code agency evaluation reports, and as required by local authority having jurisdiction.
  - 2. Provide test documentation.

# PART 2 - PRODUCTS

## 2.01 MANUFACTURER

- A. Basis-of-Design Product: Subject to compliance with requirements, provide DSI Smoke and Fire Curtains; Model DSI-600 Fire Rated Elevator Containment System or comparable product by one of the following, or equal approved by Professional:
  - 1. U. S. Smoke & Fire
  - 2. Door Systems.
  - 3. Maxson Associates.
  - 4. Fire Curtain Technologies.
  - 5. Cornell.
- A. Label each smoke containment system with following information:
  - 1. Manufacturer's name.
  - 2. Maximum leakage rating at specified pressure and temperature conditions.
  - 3. Label of quality control agency.

## 2.02 PERFORMANCE REQUIREMENTS

- A. Air Leakage: Not to exceed 3 cfm (0.001416 m<sup>3</sup>/s) per sf of door opening.
- B. Fire Rating: UL-10D One hour fire rated and labeled.

## 2.03 COMPONENTS

- A. The curtain head box shall be manufactured from 18 gage galvanized steel. The enclosure shall be rated at the same temperature as the curtain fabric.
- B. Removable cover plates shall be incorporated to allow access to the curtain rollers.
- C. Standard head box sizes shall be 7 ½" x 7 ½" for single rollers (maximum width of 16 feet) and 12 ½" x 8 ½" for multiple rollers (over 16 feet wide). Larger head boxes may be required where the curtain drop is in excess of 9'-10" feet.
- D. Side guide rails shall be 2" deep x 4" wide, primed steel finish.

- E. A weighted bottom bar shall be provided to prevent deflection and ensure correct operation under gravity.
- F. The roller shall be constructed from an octagonal tube which will incorporate a 24v D.C. motor and gearbox and a sealed heavy duty ball bearing assembly.
- G. A motor control circuit housed in a steel enclosure shall be mounted onto the motor end of the head box.
- H. Provide each motorized curtain with back Electromagnetic force-controlled speed of descent of no less than 6 inches per second and no more than 24 inches per second.
- I. The fabric curtain shall be manufactured from VG455 woven glass fiber cloth. The woven glass fiber fabric shall have a nominal weight of no less than 455g/square meter and shall be UL listed for at least one hour fire rating. Curtain includes a grab strap for egress per ICC ES requirements

## 2.04 OPERATION

- A. The smoke and fire curtain shall deploy upon a signal from the fire alarm system in an emergency situation.
- B. The system must be proven to “fail safe” to the operational position on total loss of primary and auxiliary power. The system must contain a housed battery system at the Group Control Panels.
- C. Under normal operating conditions the curtains would be held in the retracted position via the motors operating at low voltage. The manufacture must be able to confirm that the motor windings are suitable for this type of operation.
- D. Upon activation of the fire alarm the control panel will remove the supply voltage and the curtain shall descend under the power of gravity in a controlled manner. A dynamic braking system housed in the motor control circuit shall control the speed of the descent of the curtain. The descent shall be electronically synchronized on overlapping curtains with a bottom bar.
- E. To retract the curtain the control panel shall supply 24v to the motor control circuits and motors will drive the curtains to the upper position. As the bottom bar or stopping bar hits the curtain head box a current limiting circuit will step back the voltage and current and hold the bottom bar in the retracted position.
- F. Limit switches are not to be used to control the upper position of the curtain.
- G. An optional braking system is available at the manufacture stage to allow a two stage descent during gravity deployment. Should the main power fail to the group control panel, the supply is automatically switched to the integral standby battery. The curtain remains in the retracted position for 1 hour (fully retracted loaded system). The curtain will remain fully operational until the battery low voltage cut off facility reads a voltage of 21v; the curtains will then safely descend under the power of gravity to the operational position.
- H. Group Control Panel: Provide Group Control Panel (GCP) capable of controlling up to 5 no. 24v motor assemblies. During normal operation, the GCP will provide a 24v AC supply to the curtain motor holding them in the retracted position. Should smoke be detected, the fire alarm contact in the GCP will be opened by the fire alarm control system, the GCP will remove the 24v supply to the curtain motors and the curtains will descend under the power of gravity in a controlled manner.

- I. Open on fire- configured to be gravity fail safe
- J. Test Facility- key switch required
- K. All push to exit buttons must contain internal battery back-up power supply for fail safe operation for ICC ES requirements.
- L. Weight of bottom to be 1.5 pounds per linear foot for curtain to lift with less than 15lbs of force for secondary means of egress for compliance with ICC ES requirements.

### **PART 3 - EXECUTION**

#### **3.01 EXAMINATION**

- A. Examine substrates upon which work will be installed.
  - 1. Verify related work performed under other sections is complete and in accordance with Shop Drawings.
  - 2. Verify wall surfaces and elevator door frames are acceptable for installation of smoke containment system components.

#### **3.02 INSTALLATION**

- A. Install smoke containment system components in accordance with manufacturer's installation instructions.

#### **3.03 FIELD QUALITY CONTROL**

- A. Field Test: Follow manufacturer's cycle test procedures.
  - 1. Notify Owner's Representative, local Fire Marshal, alarm sub-contractor and [elevator sub-contractor] [elevator service company] minimum one week in advance of scheduled testing.
  - 2. Complete maintenance service record.

#### **3.04 DEMONSTRATION**

- A. Demonstrate required testing and maintenance procedures to Owner's Representative.
- B. Maintenance and Testing:
  - 1. Perform minimum annual maintenance and testing on each smoke containment system as required by the manufacturer's warranty, code agency evaluation reports, and as required by local authority having jurisdiction.
  - 2. Retain permanent record of tests.
- C. Qualified Door Systems Inspector assesses unit(s) after exposure to a fire event.

#### **3.01 MAINTENANCE**

- A. Engage a Door Systems authorized service representative to test, adjust and maintain the system once per annum as required per NFPA 101 and NFPA 80.

**END OF SECTION 08 34 84**

**SECTION 114000  
FOOD SERVICE EQUIPMENT**

**PART 1 – GENERAL SPECIFICATIONS**

**1.00 SCOPE OF WORK AND RELATED WORK:**

A. Scope of Work: The Kitchen Equipment Contractor is to furnish all labor, materials, equipment, and services necessary to furnish and deliver all Food Service Equipment specified in Section 114000 into the building or buildings, uncrate, assemble, hang, set in place, level, and completely install unless otherwise noted, exclusive of final utility connections which are by Divisions 22, 23 and 26. The K.E.C. shall provide start-up and testing of all equipment furnished by K.E.C.  
(See Section 3.2 - START UP AND TESTING)

B. Related work to be furnished by Other Trades:

1. All plumbing, electrical, mechanical and ventilation work required along with the food service equipment including roughing in of utilities required as indicated on the Food Service Consultant Design Drawings and the Contract documents along with the final connections from the rough ins to the equipment, utility service to rough ins and all utility connections shall be by Divisions 22 and 26.
2. All fittings, hoses, valves, check valves, stops, traps, direct and indirect wastes with tailpieces, strainers, etc. required for equipment in this section will be furnished and installed by Division 22 unless specifically called for otherwise under any item.
3. All fittings, wire, disconnect switches, safety switches, convenience boxes, outlets, materials and connections will be furnished and installed by Division 26 unless specifically called for otherwise.
4. All interconnections between the building components and equipment along with materials needed for such will be by Divisions 22 and 26 unless specifically called for otherwise under any item. The Kitchen Equipment Contractor shall furnish any technical support required for these interconnections from the factories, etc.
5. Any starters, valves, faucets, tailpieces, etc. furnished loose with the equipment will be installed by Divisions 22 and 26.
6. Any sleeves or conduit required for soda lines, cash registers, refrigeration, beer lines and carbonation lines will be furnished and installed by Division 26.
7. Any electrical and plumbing interconnections to and between compressors, blower coils, controls, lights, etc. along with final connections will be furnished and installed by Divisions 22 and 26 unless stated otherwise.
8. Any ventilating fans and all duct work required for a complete operation system as well as any access panels required for fire protection nozzles in the ductwork will be furnished by Division 23 unless specifically noted otherwise. If the Exhaust & MUA Fans are furnished by the K.E.C., they will be furnished loose along with the roof curbs to the General Contractor for installation by the General Contractor.  
NOTE: General Contractor and/or HVAC Contractor shall provide proper air handling balancing by an Authorized Balancing Company between the Exhaust/MUA Fans and Room Air System to ensure negative balance at the Exhaust Hood. Coordinate with K.E.C.
9. All penetrations/sleeves, in walls, floors or ceilings including roof pitch pockets needed for equipment as well as any access panels for any food service equipment not furnished by the food service equipment vendor will be furnished by the General Contractor unless specifically noted otherwise.

**1.01 DEFINITIONS:**

A. All references to the terms "Kitchen Equipment Contractor" or "K.E.C." in

these specifications and/or on the drawings shall be defined as meaning the Kitchen Equipment Contractor/Supplier.

B. All references to the term "Owner" in these specifications and/or drawings shall be defined as meaning the Owner or Owner's representative.

- C. All references to the term "Consultant" or "Food Service Equipment Consultant" in these specifications and/or drawings shall be defined as meaning DRAFTING & DESIGN, LLC and its authorized representatives.

#### 1.02 QUALIFICATIONS:

A. Qualification of Supplier:

1. Commercial Food Service Equipment Suppliers shall comply with the following qualifications.
  - a. List of projects successfully completed of comparable scope if requested.
  - b. Must have manufacturer's authorization to distribute and install specified equipment.
  - c. Provide an experienced staff of foodservice equipment installers.
  - d. Prepare/provide professional roughing in drawings and brochure books if required.
  - e. Must have access to fabrication companies meeting N.S.F. requirements that is familiar with and regularly produce Food Service Equipment.
  - f. Must have access to a stock of repair and replacement parts along with factory authorized service companies.

B. Qualification of Fabricators:

1. Any fabricator to be used shall be a N.S.F. approved company and must have trained personnel and facilities to comply with these specifications and any details attached.
2. All custom fabricated equipment shall bear the N.S.F. (National Sanitation Foundation) seal of approval.
3. One fabricator must be used per project and all equipment must be fabricated at the same shop.

C. Qualifications of Manufacturers:

1. All manufacturers shall be routinely engaged in the production of items to be furnished and have demonstrated the capability to regularly furnish similar equipment that performs the functions specified within. All equipment to be the latest in design that complies with these specifications.

D. Discrepancies:

1. Any discrepancies with contract documents should be brought to the attention of the Consultant in writing for clarification prior to ordering or fabricating of any items.

#### 1.03 PLANS AND SPECIFICATIONS:

- A. These documents (plans & specifications) have been prepared for the use in procuring, installation, erection and start up of all the equipment in these specifications and contract. These plans and specifications are to be considered as mutually explanatory and work required by one, but not the other, will be performed as though required by both. When there is any discrepancy between drawings and specifications, drawings will govern. Any discrepancies are to be clarified from the Consultant before bidding.

#### 1.04 SUBMITTAL REQUIREMENTS:

- A. The submittals for this project are to be submitted within four (4) weeks or within the time frame described by the General Contractor or Owner

- to meet the project's time frame. Assemble and submit all shop drawings, rough in drawings, brochures, color samples/charts, etc. in order to submit a complete package. No reviews of incomplete submittals will be performed.
- B. Should there are any delays to this project due to non-submittal of the complete package by the K.E.C., the K.E.C. will be responsible for all costs associated with this delay.
  - C. Mark each submittal with the Project Name, date, contractor and any other information needed to properly identify the submittals.
1. **PLAN & ROUGH-IN DRAWINGS:**
    - a. Submit an electronic set of drawings for the food service equipment professionally prepared from the architectural dimensioned plans at a minimum scale of 1/4" = 1' - 0". Consultants Dimensioned Design Rough-in drawings may be used only with permission. The K.E.C. shall double check all utility information to verify accuracies. It is the responsibility of the K.E.C. to verify all quantities, utilities, etc.
    - b. Submit an Equipment Layout Plan with arrangement of all specified items identified on a schedule listing item number, description, quantity, manufacturer, model number.
    - c. Submit Plumbing and Electrical drawings showing dimensioned locations, sizes, elevations, and capacities of all utility services required for each item of equipment in relation to finished walls, columns, and heights above finished floor.
    - d. Submit a special condition plan showing exact dimensions and details of all masonry bases, floor depressions, critical partition locations and heights, wall openings, reinforcing for wall and/or ceiling mounted equipment, and conduit locations for soda, beer, and refrigeration lines. In addition, on this plan, show ventilation dimensioned locations for all duct openings for ventilators and dish machines identifying size, C.F.M.'s required for exhaust and supply, static pressures, and connection heights.
  2. **EQUIPMENT BROCHURES:**
    - a. Submit an electronic copy of manufacturer's brochures along with information sheets indicating item numbers, quantities, model numbers, all utility information and accessories per the specifications. Include any deviations from standard information. These brochure books must be approved before procurement. Include any manufacturer's schematic drawings for mechanical and electrical services for any equipment that may require technical support.
  3. **SHOP DRAWINGS:**
    - a. For manufactured equipment that requires shop drawings for approvals, such as walk in cooler/freezers, ventilator, and utility distribution systems, refrigeration systems and custom fabrication, submit an electronic set for review and approvals.
  4. **OPERATIONAL AND MAINTENANCE MANUALS:**
    1. Submit four (4) hardbound sets for all standard equipment that is mechanically operated.
    2. Include operating, maintenance and cleaning instructions, parts listing recommended parts inventory listing and purchase source, copies of all warranties, schematics, etc. from manufacturer.
    3. Manuals shall be marked with the project name, project number, name of contractor, date, and any other appropriate information. There should

be information sheets in front of each item of maintenance manuals marked with the item numbers for proper identification.

4. Include in the front of each manual, include a list of all manufacturers representatives of the food service equipment and the factory authorized service agency for each piece of equipment along with addresses, Telephone numbers and contacts.

5. SAMPLES:

1. If requested, samples of materials, products, and fabrication methods, shall be submitted for approvals at no extra cost, before proceeding with the work.

6. RESUBMISSION PROCEDURES:

- a. Drawings: Revise all drawings as noted, indicate all revisions on the drawings including any requested by the Consultant. Resubmit under conditions as previously outlined above.
- b. Product Data: Resubmit new brochures, etc. as noted. Indicate any revisions on the data. Resubmit under conditions as previously outlined above.
- c. Make all re-submittals with two working weeks, ten (10) days from date K.E.C. received marked up submittals.

7. APPROVALS OF SUBMITTALS:

- a. After K.E.C. has received approved packages, furnish as many prints and /or copies as requested for various trades, the Owner, the Architect and the Consultant.
- b. The approval of drawings are general and in no way relieves the K.E.C. of the responsibility of proper fitting, finishes, quantities, and erection of the work in strict accordance with the contract requirements, nor does it relieve the K.E.C. of the responsibility of furnishing materials and workmanship not indicated on approved drawings but required for the completion of the work.
- c. Approvals by the Consultant and/or Owner of the submittals by the K.E.C. does not waive the responsibility of the K.E.C. to furnish each item of equipment in complete accordance with the specifications and drawings including accessories, finishes, etc. Discrepancies between Contract Documents and furnished equipment shall be corrected even after approvals and installation of said equipment at no additional cost to the Owner.

1.05 PRODUCT STORAGE, DELIVERY AND HANDLING:

A. Storage:

All equipment to be stored in a protected area free from weather and job hazards.

B. Delivery:

All equipment to be delivered to the job site only after the building is weather proof and vandal safe. Equipment that is installed prior to interior finishes being completed, i.e., ventilators, walk in cooler & freezers should be protected to avoid any damaging of finishes, etc.

C. Handling:

All equipment to have the factory wrapping, crating and protective coatings remain on them until installation at the job site. Even at this time, all protective coatings, such as coatings on griddles, fryers, etc. are to remain until the final cleaning to ensure against rust and



contamination.

D. Damages:

K.E.C. has all responsibility for any damages or loss incurred prior to final acceptance by the Consultant/Owner. Any items that may be damaged or lost shall immediately be replaced or repaired to new status to the complete satisfaction by the Owner and at no additional cost to the Owner.

1.06 JURISDICTION TRADE AGREEMENTS AND RESTRICTIONS:

- A. Include the work specified, shown or reasonably inferable as part of food service equipment. Portions of this work may be subcontracted to those qualified to do such work, as may be necessary because of jurisdictional trade agreements and restrictions.

1.07 REGULATIONS AND CODES:

- A. Except as otherwise indicated, each item of equipment shall comply with the latest current edition of the following standards as applicable to the manufacture, fabrication, and installation of the work in this section.
1. N.S.F. Standards: Comply with National Sanitation Foundation Standards and criteria and provide N.S.F. "Seal of Approval" on each manufactured item and custom fabricated work.
  2. UL Standards: For electrical components and assemblies, provide either UL labeled products or, where no labeling service is available provide a complete index of the components used as selected from the UL "Recognized Component Index".
  3. A.N.S.I Standards: gas burning equipment must comply with ANSI Z21-Series Standards. Comply with ANSI B57.1 for compressed gas cylinder connections and with applicable standards of the Compressed Gas Association for water connection air gaps and vacuum breakers.
  4. A.G.A.: All gas fired equipment shall be A.G.A. approved, equipped to operate on the type gas available at the job site and shall contain 100% automatic safety shut-off devices.
  5. N.F.P.A. Standards: Comply with N.F.P.A. Bulletin 96 for Exhaust systems and with N.F.P.A. Bulletins 17 and 96 for fire extinguishing systems.
  6. A.S.M.E.: Comply with A.S.M.E. boiler code requirements for steam generating and steam heated equipment. Provide A.S.M.E. inspection, stamps, and certification of registration with National Board.
  7. National electric Code: Comply with NEC Volume 5 for electrical wiring and devices included with food service equipment.
  8. All authorities having jurisdiction over this type of equipment and/or installation.
  9. Where specifications and/or drawings require mechanical, electrical or refrigeration work to be performed, such work shall be done in strict conformance to other portions of the Base Building Specifications which sets forth standards for this type of work.
  10. Where there exists two standards or codes for one type of work, the stricter method shall govern.

1.08 WARRANTIES:

- A. Provide in writing a warranty for all equipment and fabrication against defects and workmanship for a period of one (1) year from date of acceptance including parts and labor.
- B. Refrigeration system compressors shall be warranted for five (5) years

by the manufacturer. Free Refrigeration service, including parts and labor shall be furnished for one (1) year from date of acceptance.

1.09 JOB SITE CONDITIONS:

- A. K.E.C. shall visit the job site to field check actual wall dimensions and roughing ins and shall be responsible for fabricating and installing the equipment in accordance with the available space and utility services as they exist on the job site.
- B. K.E.C. shall verify all door openings, passageways, elevators, etc. to ensure that all equipment can be moved to its proper location within the building and if necessary, check the possibility of holding wall erection, placement of doorjamb, windows, etc. with the General Contractor for the purpose of moving the equipment into its proper location.  
Any removal and/or rebuilding of any of the building in order to properly place the equipment, or if caused by incorrect information of the K.E.C.'s drawings, shall be done at the expense of the K.E.C. at no additional cost to the Owner.
- C. K.E.C. to notify the Consultant and Owner prior to fabrication of equipment of any discrepancies between plans and specification and actual job site conditions.
- D. K.E.C. to physically check the location of all utility rough ins at the job site before the finished walls, floors, etc. are in place. Report any discrepancies in writing to the Consultant and Owner.
- E. Changes required after fabrication has started to ensure equipment accurately fitting the space as it exists and conforming to actual field dimensions on the job shall be made at no additional costs to the owner.
- F. If special hoisting equipment and/or operators/riggers are required for installation, the cost for this should be included as part of the bid for this work.

1.10 CHANGES IN THE WORK:

- A. The owner reserves the right to require reasonable modifications to be made in the routing of work and relocation of equipment. This specifically refers to conditions where interference occurs or where more desirable accessibility can be obtained or whose materials cannot be installed because of structural or mechanical conditions encountered. Such changes shall be made at no additional cost to the Owner.

1.11 PATENTS:

- A. Hold harmless and save the Owner and its officers, consultants, and employees from liability of any nature or kind, including costs and expenses for or on account of any copyrighted, patented, or non-patented invention, process, trademark, design, device, material, article, or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract Documents.
- B. If the Contractor has information that the process or article specified is an infringement of a patent, they are responsible for such loss unless he promptly notifies the Owner in writing. The contract price shall include all royalties or costs associated from the use of any and all of the above which are, in any way, involved in the contract.

1.12 CONTRACTOR'S WARRANTY:

- A. The K.E.C. represents and warrants that they are financially solvent and that they are experienced and competent to perform the types of work or to

furnish the plans, materials, supplies and/or equipment, to be so performed or furnished by them.

- B. K.E.C. must be familiar with all Federal, State, municipal and department law, ordinances, orders, and regulations, which may, in any way, affect the work of those employed therein. K.E.C. is responsible for any cost for any any permits required to perform their work.
- C. K.E.C. is responsible for reviewing all Contract Documents, specifications, addenda, if any and the job site to ensure that all conditions, etc. are satisfactory to ensure the quality, quantity and installation of all equipment.

1.13 SUBSTITUTIONS:

- A. N/A.
- B. N/A
- C. N/A
- D. N/A
- E. N/A.
- F. N/A
- G. N/A

1.14 DESIGN/MODEL CHANGE - DISCONTINUED ITEMS:

- A. All equipment specified and provided shall be of latest design.
- B. K.E.C. is to notify Consultant in writing of any discontinued items and suggest or request an alternate of equal performance, including all accessories, at no additional costs to the Owner.

PRODUCTS

2.00 GENERAL:

- A. All equipment and internal component parts shall be new and unused. All items of standard manufactured equipment shall be current models at the time of delivery. All parts subject to wear, breakage, or distortion shall be accessible for adjustment, replacement, and repair.
- B. All oil holes, grease fittings, and filler caps shall be accessible without the use of tools and means shall be provided to ensure adequate lubrication for all moving parts.
- C. All equipment shall be designed to provide safe and convenient operation with any covers or other safety devices provided for any items of equipment presenting safety hazards. These safety features shall not present any substantial interference to the operation of the equipment and shall allow easy access to the guarded parts.
- D. When trim is required in lieu of rejection of items of equipment, it shall be the K.E.C.'s responsibility to provide same at no additional costs. Trim is not to be a substitute for accuracy.

2.1 FABRICATION OF METAL WORK:

- A. Metal and Gauges: Except as otherwise indicated, fabricate exposed metalwork of stainless steel; and fabricate the following components from gauge of metal indicated, and fabricate other components from not less than 20 gauge metal:
  - 1. Table Tops & Counter Tops: 14 gauge S/S, Type 302, No. 4 finish.
  - 2. Shelves: 16 gauge S/S (18 gauge if less than 12" wide)
  - 3. Front Drawer/Door Panels: 18 gauge S/S (double pan type)
  - 4. Single Pan Doors and Drawer Fronts: 16 gauge S/S
  - 5. Enclosed Base Cabinets & Wall Cabinets: 18 gauge S/S
  - 6. Sinks, Drain boards and Compartment Covers: 14 gauge S/S
  - 7. Exhaust Hoods: as specified
  - 8. Pan Type Insets and Trays: 16 gauge S/S
  - 9. Removable Covers/Panels, Skirts and Enclosure Panels: 18 gauge S/S
  - 10. Closure and Trim Strips over 4" wide: 18 gauge S/S
  - 11. Hardware Reinforcements: 12 gauge

12. Gusset Plate: 10 gauge
  13. Legs – 1-5/8" dia. S/S tubing, Type 304, No. 4 finish
  14. Cross bracing – 1-1/2" dia. S/S tubing, Type 304, No. 4 finish.
- B. Work Surface Fabrication: Fabricate metal work surfaces by forming and welding to provide seamless construction, using welding rods matching sheet metal, grinding and polishing. Where necessary for disassembly, provide with waterproof gasket, draw type joints with concealed bolting.
  - C. Reinforce work surfaces 30" O.C. both ways with galvanized or stainless concealed structural members. Reinforce edges which are not self-reinforced by forming.
  - D. Sound deaden the underside of metal work surfaces, including sinks and similar units, with a coating of sound deadening material. Hold coating back 3" from sanitary edges for cleaning.
  - E. Structural Framing: Except as otherwise indicated, provide framing of minimum 1" pipe size, round pipe or tube members with mitered and welded joints and gusset plates, ground smooth and polished. Provide 14-gauge, stainless steel tube for exposed framing and galvanized steel pipe for concealed framing in areas exposed to customer's view; in non-customer's views, provide either stainless steel tube or enamel finished steel pipe for exposed framing, and either galvanized or enamel finished steel pipe for concealed framing (where permitted by NSF standards, and at fabricator's option).
  - F. Casework: At fabricator's option, and unless otherwise indicated, provide either box-type face framing or open channel type (complying with NSF requirements in either case).
  - G. Enclosure: Except as otherwise indicated, provide each unit of casework, (base, wall, overhead and free standing) with a complete enclosure metal cabinet, including fronts, backs, tops, bottoms and sides.
  - H. Door and Drawer Fronts: Except as single pan construction is indicated, provide double pan type, not less than 5/8" thick, with seams on inside face. Weld hardware reinforcements inside of inner pan. Sound deadened by either coating both pans on concealed face, or by inserting mineral wool insulation between the pans.
  - I. Shelves: Except as otherwise indicated, provide adjustable standards for positioning and supporting of shelves in casework. Turn back edge of shelf units up 2" and hem. Turn other edges down to form an open channel. Reinforce shelf units to support 40 lbs. per square foot loading, plus 100% impact loading.
  - J. Drawer bodies: Except as otherwise indicated, draw form drawer bodies from a single piece of metal to provide seamless construction. Flange top edge to protect slides from spillage.
  - K. Closed Base: Where casework is indicated to be located on a raised floor base, prepare casework for support without legs, and for anchorage and sealant application, as required for a completely enclosed and concealed base.
  - L. Support from floor: Equip floor supported, mobile units with casters and equip items indicated as "roll-in" or "roll-out" units with the manufacturer's standard, single directional rollers. Otherwise, and except for closed base units, provide pipe or tube legs with adjustable, stainless steel bullet feet for floor supported items of fabricated metal work. Provide a 2" adjustment of feet with concealed threads.

## 2.2 EXHAUST HOODS:

- A. Comply with NFPA No. 96 and all applicable appendixes.
- B. Installation: Install in a secure and sanitary manner.
- C. Grease Removal: Provide type indicated (removable filters if not otherwise specified) with drip channel gutters, drains and removable, stainless steel collection basins.
- D. Light Fixtures: Provide fluorescent fixtures (or otherwise as specified) outside the hood with sealed safety lenses flush with the inside of the hood with stainless steel exposed conduit for wiring.
- E. Fire Extinguishing System(s): Provide as specified. System shall comply with NFPA No. 12 including all appendixes. Furnish completely with automatic gas and/or electrical shut-offs and support accessories as required for complete safety against fire. Comply fully with all applicable standards of applicable agencies and associations.

### 2.3 PLASTIC LAMINATE CASEWORK:

- A. General: Fabricate plastic laminate casework in the types and styles indicated, with hardware and accessories. Provide exposed and semi-exposed surfaces and edges (self-edged) with plastic laminate covering on particle board, plywood or metal as specified. Plastic laminate shall be as specified by the Architect and/or the Owner as indicated. Paint plywood or hardboard for all concealed panels or as otherwise indicated.
- B. Provide adjustable standards for positioning and support of shelves.
- C. Comply with applicable standards of the Architectural Woodwork Institute for not less than (Custom Grade) casework. Additionally, comply with the Woodwork Institute of California for "Custom Grade" casework.

### 2.4 REFRIGERATION EQUIPMENT:

- A. General: Provide either single or multiple compressor units, as recommended by the manufacturer for size and variations between connected evaporator loads as indicated. Provide units of capacities indicated; arrange to respond to multiple evaporator thermostats and defrosting timers. Indicate coils, receivers, compressors, motors, motor starters, mounting bases or stands, housings, vibration isolation units, fans, dryers, valves, piping, insulation, gauges, winter controls equipment and completely automatic control system.
- B. Refrigerants: Pre-charge units with type or types recommended by the manufacturer for services indicated, with quick-disconnect type of connections ready to receive refrigerant piping runs to evaporators and, where remote, to condensers unless specified otherwise.
- C. Condensers: Provide air, water and/or combination air/water cooled condensers as specified, ready for piping connections with condenser water piping and drain or return. Locate units with compressors complete with refrigerant piping installed at the factory. Maximum incoming water temperature is 75 degrees F to 0 degrees condensers, located with the compressors, complete with refrigerant piping installed at the factory. Locate units as shown – if exterior, with weather housings and protective enclosures. The minimum outdoor operating ambient temperature for design of units is –10 degrees F to 0 degrees F. Maximum ambient condition for load on the air cooled condenser is 95 degrees F with 75% relative humidity in basically still air.

## EXECUTION

### 3.0 INSPECTION AND PREPARATION:

- A. Rough-In Work: The K.E.C. must examine roughed-in mechanical and electrical service, installation of floors, walls, columns and ceilings and conditions under which the work is to be installed, and must verify dimensions of services and substrates before fabricating the work. Notify the Contractor in writing of unsatisfactory conditions for proper installation of food service equipment. Do not proceed with fabrication and installation until unsatisfactory dimensions and conditions are corrected in a manner acceptable to the K.E.C. The K.E.C. must field verify all measurements at the building prior to fabrication of custom equipment.

### 3.1 INSTALLATION:

- A. The K.E.C. shall coordinate delivery schedule with the General Contractor to ensure adequate openings in the building for access for equipment.
- B. Equipment shall be uncrated, fully assembled and set level in position for final connections. Parts shipped loose but required for connections be properly tagged and shall be accompanied by the necessary instructions.
- C. Provide a competent, experienced installer to supervise installation and coordinate final connections with the other trades.
- D. The General Contractor is responsible for installation of wall backing at all locations of any wall mounted/fastened equipment. The K.E.C. is to coordinate with General Contractor regarding the heights, etc.

3.2 START UP AND TESTING:

- A. Delay startup of food service equipment until service lines have been tested, balanced, and adjusted for pressure, voltage, and similar considerations; and until water and steam lines have been cleaned and treated for sanitation.
- B. Before testing, lubricate each equipment item in accordance with manufacturer's recommendations.
- C. Supply a trained person(s) to start up all equipment, test and make adjustments as necessary, resulting in all equipment, including controls and safety devices, performing in accordance with manufacturer's specifications.
- D. Repair or replace any equipment found defective in its operation, including equipment which are below capacity or operating with excessive noise or vibration unless equipment was damaged by others. Proof of this damage is required by K.E.C.

3.3 DEMONSTRATION:

- A. Instruct the Owners operating personnel in the proper operation and maintenance procedures for each item of operational food service equipment that has daily usage of controls. Equipment that does not have any controls, i.e., worktables, sinks, etc. does not require demonstrations except for instructions on proper cleaning. The fire suppression system is demonstrated to the Owner at the time of testing for the Fire Marshal or proper authority. Instructions as to what to do in case of a fire are required for the Operating personnel. The Owner shall dictate which equipment is to be demonstrated.
- B. Such instructions shall be provided at the convenience of the Owner and the operating staff; however, no instructions shall be considered valid unless the equipment is completely operational for the purpose of demonstrating or instructing.
- C. Assemble, tag and label all keys from equipment and turn over to the Owner for their use.

3.4 WARRANTY SERVICE:

- A. Properly explain the procedures for reporting service calls in case of malfunctioning equipment; person(s) to call, information required before calling in a service problem, etc.

3.5 CLEANING AND ADJUSTMENTS:

- A. Upon completion of the installation and testing, clean and sanitize all food service equipment, and leave in a condition ready for use by the operating staff.
- B. Remove all protective coverings, and thoroughly clean equipment both internally and externally.
- C. Make any final adjustments required for proper operation of the equipment.
- D. Remove any abrasions, dents, and other damages and restore any finishes marred during installation. Polish stainless-steel surfaces and touch up any painted surfaces with original paint to match.
- E. Remove all refuse, rubbish, scrap materials, and debris caused by the work of this Section, and leave the site in a neat, orderly, and broom clean condition.

3.6 CODE CONFORMANCE:

- A. All equipment and installations shall conform to all applicable codes, including but not limited to, the County, State and local authorities, including Health Department. All equipment indicated in the drawings are subject to final approval by code authorities and shall be required to conform to codes at no change in price. It is the responsibility of the K.E.C. to conform to all code requirements.

**End of Part 1 – Section 114000**

**SECTION 114000  
FOOD SERVICE EQUIPMENT**

**PART 2 – ITEMIZED SPECIFICATIONS**

**Scope of Work:** The Kitchen Equipment Contractor (K.E.C.) is to furnish all labor, materials, equipment and services necessary to furnish and deliver all Food Service Equipment specified in Section 114000 into the building or buildings, uncrate, assemble, hang, set in place, level, and completely install unless otherwise noted, exclusive of final utility connections which are by Divisions 22 and 26 as outlined in Part 1. The K.E.C. shall provide start-up and testing of all equipment furnished by K.E.C. along with demonstrations of equipment to the Owner. If the Exhaust & MUA Fans are furnished by the K.E.C., they will be furnished loose along with the roof curbs to the General Contractor for installation by the General Contractor. All cranes, operators, riggings, etc. to be furnished by the General Contractor as required. K.E.C. shall visit the job site to field check actual wall dimensions and rough-ins and shall be responsible for fabricating and installing the equipment in accordance with the available space and utility services as they exist on the job site. K.E.C. shall verify all door openings, passageways, elevators, etc. to ensure that all equipment can be moved to its proper location within the building and if necessary, check the possibility of holding wall erection, placement of doorjambes, windows, etc. with the General Contractor for the purpose of moving the equipment into its proper location.

**Related work to be furnished by Other Trades:** All plumbing, electrical, mechanical and ventilation work including ductwork connections, penetrations to walls, floors or ceilings required for the food service equipment including roughing in of utilities required as indicated on the Food Service Consultant Design Drawings and the Contract documents along with the final connections from the rough ins to the equipment, utility service to rough ins and all utility connections shall be by Divisions 22 and 26. All interconnections between the building components and equipment along with materials needed for such will be by Divisions 22 and 26 unless specifically called for otherwise under any item. The Kitchen Equipment Contractor shall furnish any technical support required for these interconnections from the factories, etc.

**K.E.C. INSTALLATION NOTES:**

1. All Storage Floor Shelving Units shall be assembled by the Kitchen Equipment Contractor with the bottom shelf at 10 inches above finished floor and the remainder spaced equally unless stated otherwise.
2. All Wall Shelves shall be installed with BOTTOM shelf work surface at 60 inches above finished floor with TOP shelf (if applicable) at 14 inches above work surface of BOTTOM shelf unless otherwise noted.
3. All Wall Shelves with Utensil Rails shall be installed with shelf work surface at 66 inches above finished floor.
4. All Wall Mounted Pot Racks shall be installed with BOTTOM rail at 60 inches above finished floor unless otherwise noted.
5. All Wall Mounted Dish Sorting Shelves shall be installed with BOTTOM EDGE of shelf at 60 inches above finished floor unless otherwise noted.

**(NIKEC – NOT IN KITCHEN EQUIPMENT CONTRACT – FURNISHED/INSTALLED BY OTHERS)**

**(BY OWNER – NOT IN KITCHEN EQUIPMENT CONTRACT – FURNISHED/INSTALLED BY OWNER)**

ITEM # 1                      WALK-IN COOLER/FREEZER ASSEMBLY

Quantity:                      One (1)  
Manufacturer:                      Custom  
Model:                              BALLY or equal as approved by the Professional

One (1) Model BALLY Quote No: 220433-1-0-HND Indoor Structure  
SEE SHEET QK-400 FOR DESIGN INTENT SHOP DRAWINGS  
Bally Prefabricated Exterior Dimensions: 25'-5¾" Length x 21'-2" Width x 8'-6" Height 3  
Compartments. With Floor in Pit Ceiling: Multi Span -Self-Supporting.  
Panel Thickness: 4" Exterior Vertical Used (7'-10") with 4" Partition, 4" Floor, 4" Ceiling.

Details and specifications for Quote No: 220433-1-0-HND Comments: Quoting Bally standard sizes. Floor to be covered with epoxy once box is installed.

Base Finish: Vertical and Ceiling Panels: Embossed Galvalume (26 GA) Base Finish Interior Floor: Galvanized (16 GA).

Special Finishes: Interior Verticals - Embossed White (190 Series) Interior Ceiling -

Embossed White (190 Series) Exposed Ext. Verticals - Stucco Aluminum.

Doors/Openings: 3 36" x 78" Hinged Door In a 46" x 94" Panel.

Doors accessories:

3 Mod 75LC Multi-Monitor Alarm (Options below)

3 Mod 75LC Multi-Monitor(Opt)IP1 Push Button(Add) 3 Mod 75LC Multi-Monitor(Opt)MC1F Mag.Contact(Add)

3 Super Door 36" Wide and Under, 48" High 1/8" D.T. Kickplate Int. & Ext.

3 Door Window (14 x 14) Norfab - 4" Door

3 Strip Curtain (36" Door and Under)

Accessories and Extras:

35 L/F Vinyl Rub Rail (Grey Color)

21 L/F Self Supporting Std. Angle (4")

7 48" LED KEIL 48x754-CL-N Light - 40° F to 100° F(Range)

2 Bally Standard Pressure Relief Port (< 400 sq/ft)

536 S/F 1/2" Plywood Foamed in Panel

138 S/F 1/8" Aluminum Diamond Tread (Wainscot) - 48" High Exposed Exterior.

56 S/F Emboss Galvalume (Closure Metal)

A. Extra lights to be shipped loose for field installation by K.E.C. with wiring by Electrical Contractor.

B. Provide matching trim strips from the sides and tops of assembly to building walls. K.E.C. to verify all dimensions.

C. All electrical conduits to be run above walk in ceiling panels by Electrical Contractor.

D. Evaporator coil drain lines shall be run to floor drain with "P" trap on exterior of assembly by Plumbing Contractor in accordance with all codes and regulations.

E. Black "Armaflex" insulation to be applied to all exposed drain lines and fittings inside of assemblies by K.E.C. Refrigeration Contractor (after heat tape is applied on freezer drain lines).

F. Spiral heat tape to be furnished and installed (for continuous 24 hour operation) on evaporator coil drain line inside of freezer compartment prior to installation of insulation by Electrical Contractor. (And on any exterior drain lines outside of building if applicable)

G. All openings and conduits are to be sealed to prevent infiltration of warm, humid air into compartments.

H. Provide manufacturers shop drawings for review and approval.

## ITEM # 2 EVAPORATOR COIL FOR COOLER

Quantity: One (1)

Manufacturer: Custom

Model: BALLY or equal as approved by the Professional

One (1) Model BALLY Quote No: 220433-1-0-HND

BLP211MA-S1D-SV+ 115/1/60

SmartVap+ Air Defrost with EEV Installed

1. Refrigeration Systems shall be pre-assembled remote with condensing units supplied with all "in-Line" parts and controls including refrigeration lines, sight glass, drier, vibration eliminator, time clock (for all low temperature units).

2. All Outdoor Remote Condensers shall be supplied with base and weather cover and low ambient protection which shall consist of crankcase heaters, thermostat with solenoid valve (pump down) and head pressure control as low ambient protection for outdoor protection.

3. A qualified technician shall be required on site to accomplish installation, check-out and start-



up procedures.

4. The KEC shall furnish & install the evaporator coils in the walk-in cooler/freezers.

5. The KEC shall furnish & install refrigeration lines.

6. The KEC shall be responsible installing/lifting, etc. the condensers to the roof or on grade as stated or if an indoor installation, install where shown on plans.

7. The General Contractor shall provide all roof curbs, pitch pockets, concrete pads, and sleeved openings in walls, floors and ceilings as required providing unobstructed access from the Walk-In Cooler/Freezer Assemblies to the Remote Condensing Units at their final locations. Coordinate with the General Contractor.

ITEM # 3 REMOTE CONDENSER UNIT FOR COOLER, OUTDOORS

Quantity: One (1)

Manufacturer: Custom

Model: BALLY or equal as approved by the Professional

One (1) Model BALLY Quote No: 220433-1-0-HND  
BEZA 010 H8 HS2DB (208-230/1/60) w/ smart speed  
Scroll Unit 12000 BTU

1. Refrigeration Systems shall be pre-assembled remote with condensing units supplied with all "in-Line" parts and controls including refrigeration lines, sight glass, drier, vibration eliminator, time clock (for all low temperature units).

2. All Outdoor Remote Condensers shall be supplied with base and weather cover and low ambient protection which shall consist of crankcase heaters, thermostat with solenoid valve (pump down) and head pressure control as low ambient protection for outdoor protection.

3. A qualified technician shall be required on site to accomplish installation, check-out and start-up procedures.

4. The KEC shall furnish & install the evaporator coils in the walk-in cooler/freezers.

5. The KEC shall furnish & install refrigeration lines.

6. The KEC shall be responsible installing/lifting, etc. the condensers to the roof or on grade as stated or if an indoor installation, install where shown on plans.

7. The General Contractor shall provide all roof curbs, pitch pockets, concrete pads, and sleeved openings in walls, floors and ceilings as required providing unobstructed access from the Walk-In Cooler/Freezer Assemblies to the Remote Condensing Units at their final locations. Coordinate with the General Contractor.

ITEM # 4 EVAPORATOR COILS FOR FREEZER

Quantity: Two (2)

Manufacturer: Custom

Model: BALLY or equal as approved by the Professional

Two (2) Model BALLY Quote No: 220433-1-0-HND  
BLP211LE-S2D SV+ 208-230/1/60  
SmartVap+ Electric Defrost with EEV Installed

1. Refrigeration Systems shall be pre-assembled remote with condensing units supplied with all "in-Line" parts and controls including refrigeration lines, sight glass, drier, vibration eliminator, time clock (for all low temperature units).

2. All Outdoor Remote Condensers shall be supplied with base and weather cover and low ambient protection which shall consist of crankcase heaters, thermostat with solenoid valve (pump down) and head pressure control as low ambient protection for outdoor protection.

3. A qualified technician shall be required on site to accomplish installation, check-out and start-up procedures.

4. The KEC shall furnish & install the evaporator coils in the walk-in cooler/freezers.

5. The KEC shall furnish & install refrigeration lines.
6. The KEC shall be responsible installing/lifting, etc. the condensers to the roof or on grade as stated or if an indoor installation, install where shown on plans.
7. The General Contractor shall provide all roof curbs, pitch pockets, concrete pads, and sleeved openings in walls, floors and ceilings as required providing unobstructed access from the Walk-In Cooler/Freezer Assemblies to the Remote Condensing Units at their final locations. Coordinate with the General Contractor.

ITEM # 5                      REMOTE CONDENSER UNIT FOR FREEZER, OUTDOORS

Quantity:                      Two (2)  
 Manufacturer:                Custom  
 Model:                         BALLY or equal as approved by the Professional

Two (2) Model BALLY Quote No: 220433-1-0-HND  
 BEZA 025 L8 HS2D (208-230/1/60) w/ smart speed  
 Includes defrost contactor for 1 Evap.

1. Refrigeration Systems shall be pre-assembled remote with condensing units supplied with all "in-Line" parts and controls including refrigeration lines, sight glass, drier, vibration eliminator, time clock (for all low temperature units).
2. All Outdoor Remote Condensers shall be supplied with base and weather cover and low ambient protection which shall consist of crankcase heaters, thermostat with solenoid valve (pump down) and head pressure control as low ambient protection for outdoor protection.
3. A qualified technician shall be required on site to accomplish installation, check-out and start-up procedures.
4. The KEC shall furnish & install the evaporator coils in the walk-in cooler/freezers.
5. The KEC shall furnish & install refrigeration lines.
6. The KEC shall be responsible installing/lifting, etc. the condensers to the roof or on grade as stated or if an indoor installation, install where shown on plans.
7. The General Contractor shall provide all roof curbs, pitch pockets, concrete pads, and sleeved openings in walls, floors and ceilings as required providing unobstructed access from the Walk-In Cooler/Freezer Assemblies to the Remote Condensing Units at their final locations. Coordinate with the General Contractor.

ITEM # 6                      SHELVING, WITH METAL FRAME    <By Owner>

Quantity:                      Fourty-Five (45)  
 Manufacturer:                Metro or equal as approved by the Professional  
 Model:                         MQ2454G

Fourty-Five (45) Model MQ2454G MetroMax® Q Shelf, 54"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF (THESE MAKE UP NINE (9) MOBILE SHELVING UNITS WITH FIVE SHELVES EACH)  
 Thirty-Six (36) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection  
 Eighteen (18) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed(for use with all MetroMax posts & shelves)  
 Eighteen (18) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)

ITEM # 7                      SHELIVING, WITH METAL FRAME   <By Owner>

Quantity:                      Thirty-Five (35)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                        MQ2442G

Thirty-Five (35) Model MQ2442G MetroMax® Q Shelf, 42"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 800 lb. capacity per shelf, NSF (THESE MAKE UP TWELVE (12) MOBILE SHELIVING UNITS WITH FIVE SHELVES EACH)  
Twenty-Eight (28) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection  
Fourteen (14) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed(for use with all MetroMax posts & shelves)  
Fourteen (14) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)  
(10) Model MQ2448G MetroMax® Q Shelf, 48"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 800 lb. capacity per shelf, NSF  
Eight (8) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection  
Four (4) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed(for use with all MetroMax posts & shelves)  
Four (4) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)  
Five (5) Model MQ2454G MetroMax® Q Shelf, 54"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF  
Four (4) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection  
Two (2) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed(for use with all MetroMax posts & shelves)  
Two (2) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)  
(10) Model MQ2460G MetroMax® Q Shelf, 60"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF  
Eight (8) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection  
Four (4) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed(for use with all MetroMax posts & shelves)  
Four (4) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)

ITEM # 8                      MOBILE DUNNAGE RACK   <By Owner>

Quantity:                      Three (3)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                        MHP55S

Three (3) Model MHP55S Dunnage Rack, mobile, 24" x 48" (2) swivel & swivel/brake casters, 800 lb capacity, non-marking polyurethane tread, 1" square tubing, removable mat 5/16"D wire, designed only for 5HP & 5HPB casters, comes assembled with the special posts, stainless steel, NSF

**ITEM # 9**                      **BUSSING UTILITY TRANSPORT CART, METAL**    <By Owner>

**Quantity:**                      Two (2)  
**Manufacturer:**              Lakeside Manufacturing or equal as approved by the Professional  
**Model:**                        243

Two (2) Model 243 Utility Cart, 2-shelf with 36"W x 22"D x 40-5/8"H, shelf size 33"W x 21"D, stainless steel tubular U-frame, 20 gauge stainless steel shelves with reinforced edges, 500 lb. capacity, 21-1/2" shelf clearance, push handle on each short side, 5" non-marking cushion thread swivel casters, NSF (ships fully assembled), Made in USA  
Two (2) Casters, Lake-Glide, 5" (2 brake)  
Two (2) Round corner bumpers (set of 4)

**ITEM # 10**                      **TRACK SHELVING SECTION**

**Quantity:**                      One (1)  
**Manufacturer:**              Metro  
**Model:**                        TTS10NA

One (1) Model TTS10NA Super Erecta®, MetroMax® Q™ Top-Track Track Set, 10 ft., includes: necessary sections of track for assembling track runs (only (1) track set is required between stationary units), NSF  
One (1) Model TTS9NA Super Erecta®, MetroMax® Q™ Top-Track Track Set, 9 ft., includes: necessary sections of track for assembling track runs (only (1) track set is required between stationary units), NSF  
One (1) Model BTEQ3 qwikTRAK™ High Density Storage System, stationary end unit kit, for use with MetroMax® Q™ storage systems, includes: (8) 74"H polymer posts & hardware to connect stationary end units to track & anchor track to floor, NSF (shelves sold separately)  
One (1) Model BTAQ3 MetroMax® Q Stationary Intermediate Unit Kit, for MetroMax® Q storage systems, includes: (4) 74"H corrosion resistant epoxy coated steel posts with Microban® antimicrobial product protection, NSF  
Thirty-Nine (39) Model MQ2454G MetroMax® Q Shelf, 54"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF  
(15 FOR END UNITS & INTERMEDIATE AT 5 TIER EACH, 24 FOR MOBILE UNITS AT 4 TIER EACH)  
Six (6) Model BTMQ3 MetroMax® Q qwikTRAK® Mobile Unit Kit (1) kit needed per mobile unit, includes: (4) corrosion proof casters (4) bumpers & (4) 74"H corrosion resistant epoxy coated steel posts with Microban® antimicrobial product protection (shelves sold separately), NSF

**ITEM # 11**                      **TRACK SHELVING SECTION**

**Quantity:**                      One (1)  
**Manufacturer:**              Metro  
**Model:**                        TTS9NA

**One (1) Model TTS9NA Super Erecta®, MetroMax® Q™ Top-Track Track Set, 9 ft., includes: necessary sections of track for assembling track runs (only (1) track set is required between stationary units), NSF**

**One (1) Model BTEQ3 qwikTRAK™ High Density Storage System, stationary end unit kit, for use with MetroMax® Q™ storage systems, includes: (8) 74"H polymer posts & hardware to connect stationary end units to track & anchor track to floor, NSF (shelves sold separately)**

**Twenty-Two (22) Model MQ2454G MetroMax® Q Shelf, 54"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF**

**(10 FOR END UNITS AT 5 TIER EACH, 12 FOR MOBILE UNITS AT 4 TIER EACH)**

**Three (3) Model BTMQ3 MetroMax® Q qwikTRAK® Mobile Unit Kit (1) kit needed per mobile unit, includes: (4) corrosion proof casters (4) bumpers & (4) 74"H corrosion resistant epoxy coated steel posts with Microban® antimicrobial product protection (shelves sold separately), NSF**

ITEM # 12                      SPARE NO.    <Spare No.>

ITEM # 13                      CAN RACK    <By Owner>

Quantity:                      Three (3)  
Manufacturer:                New Age or equal as approved by the Professional  
Model:                        1256CK

Three (3) Model 1256CK Can Storage Rack, mobile design with casters, sloped glides for automatic can retrieval, aluminum construction, holds 216-#10 or 297-#5 cans, (4) 6" plate casters, (2) swivel with brakes, (2) rigid, NSF, Made in USA

Three (3) Lifetime warranty against rust & corrosion, 5 year workmanship and material defects warranty, standard

ITEM # 14                      MOBILE DUNNAGE RACK    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                        MHP55S

One (1) Model MHP55S Dunnage Rack, mobile, 24" x 48" (2) swivel & swivel/brake casters, 800 lb capacity, non-marking polyurethane tread, 1" square tubing, removable mat 5/16"D wire, designed only for 5HP & 5HPB casters, comes assembled with the special posts, stainless steel, NSF

One (1) Model MHP53S Dunnage Rack, mobile, 24" x 36" (2) swivel & swivel/brake casters, 800 lb capacity, non-marking polyurethane tread, 1" square tubing, removable mat 5/16"D wire, designed only for 5HP & 5HPB casters, comes assembled with the special posts, stainless steel, NSF

ITEM # 15                      SHELIVING, WITH METAL FRAME    <By Owner>

Quantity:                      Thirty-Five (35)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                        MQ2454G

Thirty-Five (35) Model MQ2454G MetroMax® Q Shelf, 54"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF (THESE MAKE UP SEVEN (7) MOBILE SHELVING UNITS WITH FIVE SHELVES EACH)  
 Twenty-Eight (28) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection  
 Fourteen (14) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed(for use with all MetroMax posts & shelves)  
 Fourteen (14) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)

ITEM # 16                      WORK TABLE, STAINLESS STEEL TOP    <By Owner>

Quantity:                      One (1)  
 Manufacturer:                Eagle Group or equal as approved by the Professional  
 Model:                         T3096SE

One (1) Model T3096SE Spec-Master® Series Work Table, 96"W x 30"D, 14/300 series stainless steel top, rolled edge on front & back, adjustable 18/300 series stainless steel undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF

ITEM # 17                      SHELVING, WALL MOUNTED

Quantity:                      One (1)  
 Manufacturer:                Eagle Group or equal as approved by the Professional  
 Model:                         WS1296-14/3

One (1) Model WS1296-14/3 Shelf, wall-mounted, 96"W x 12"D, rolled frontedge, 1-1/2"H up-turn on sides & rear, includes stainless steel mounting brackets stud welded to shelf, 14/304 stainless steel construction, NSF

ITEM # 18                      SOILED LINEN CART - NIKEC    <By Owner>

ITEM # 19                      LINEN DRYER - NIKEC    <By Owner>

ITEM # 20                      LINEN WASHER - NIKEC    <By Owner>

ITEM # 21                      LAUNDRY TUB & FAUCET - NIKEC    <By Owner>

ITEM # 22                      MOP SINK

Quantity:                      One (1)  
 Manufacturer:                Eagle Group or equal as approved by the Professional  
 Model:                         F1916-12

One (1) Model F1916-12 Mop Sink, floor mount, 24-5/8"L x 21-1/2" W x 19-1/2"H overall, 20" wide x 16" front-to-back x 12" deep bowl, 16 gauge top with "V" edge, full skirt, 2" NPS drain with stainless steel removable strainer plate, 304 stainless steel construction, NSF  
 One (1) Model 321561 Mop Holder, 24"W, holds (4) mops  
 One (1) Model 312690 Service Faucet, with vacuum breaker, 8" OC, 1/2" NPT female inlets  
 One (1) Model 503097 Splash Kit, 3" radius on front of splashes, left, right & rear splash, 16/304 stainless steel, hardware included, NSF (fits F1916 models)

ITEM # 23 MOP SERVICE FAUCET INCLUDED WITH ITEM 22 <Included>

ITEM # 24 MOP BROOM HOLDER

Quantity: One (1)  
 Manufacturer: Eagle Group or equal as approved by the Professional  
 Model: US0824-16/3-X

One (1) Model US0824-16/3-X Utility Shelf with Mop Hanger, 24"W x 8"D, includes mop hangers & hooks for clothes, 16/304 stainless steel construction (FLYER)

ITEM # 25 EYEWASH STATIONS - NIKEC <By G/C>

QUANTITIES AND LOCATIONS TO BE DETERMINED BY ARCHITECT.

ITEM # 26 HAND SINK

Quantity: (10)  
 Manufacturer: Eagle Group or equal as approved by the Professional  
 Model: HSA-10-FKP

(10) Model HSA-10-FKP Hand Sink, wall mount, 13-1/2" wide x 9-3/4" front-to-back x 6-3/4" deep bowl, 304 stainless steel construction, splash mount gooseneck spout, single knee pedal, skirt, basket drain, deep-drawn seamless design-positive drain, inverted "V" edge, NSF  
 (10) Model -MG MicroGard™ antimicrobial finish on bowl only- add suffix "-MG" to end of hand sink model number

ITEM # 27 SOAP & TOWEL DISPENSERS - NIKEC <By Owner>

ITEM # 28 THREE (3) COMPARTMENT SINK

Quantity: One (1)  
 Manufacturer: Eagle Group or equal as approved by the Professional  
 Model: FN2860-3-30-14/3

One (1) Model FN2860-3-30-14/3 Spec-Master® FN Series Sink, three compartment, 126"W x 35"D, 14/304 stainless steel top, coved corners, 20" wide x 28" front-to-back x 14" deep compartments, 30" drainboards on left & right, 9-1/2"H backsplash with 1" upturn & tile edge, (2) sets of 8" OC splash mount faucet holes, rolled edges on front & sides, includes 3-1/2" basket drains, stainless steel crossbracing on all sides, stainless steel legs & adjustable bullet feet, NSF  
 Three (3) Model 341190 Twist Handle Drain, with overflow, 2" NPS connection & overflow

Three (3) Model -OF Holes (3) for twist handle drain with overflow drain (drain not included), 3 compartment 412, 414 & 314 sinks  
Three (3) Model -TB Twist bracket, per drain

ITEM # 29 PRE-RINSE FAUCET ASSEMBLY, WITH ADD ON FAUCET

Quantity: One (1)  
Manufacturer: T&S Brass or equal as approved by the Professional  
Model: B-0133-18CRBJST

One (1) Model B-0133-18CRBJST EasyInstall Pre-Rinse Unit, 8" wall mount, add on faucet 18" swing nozzle with stream regulator (B-0107-J), quarter-turn cerama cartridges with check valves, lever handles, 44" flexible stainless steel hose, 1.07 GPM, installation kit, 6" wall bracket, accessory fitting tee, 1/2" NPT female inlet, low lead, NSF  
One (1) 3 year limited warranty, standard

ITEM # 30 WALL / SPLASH MOUNT FAUCET

Quantity: One (1)  
Manufacturer: T&S Brass or equal as approved by the Professional  
Model: B-0291

One (1) Model B-0291 Kettle & Pot Sink Faucet, Big-Flo, wall mounted 8" centers, 3/4" IPS model LL street EL inlets with locknuts, 18" swing nozzle, 175°F four arm handles, 1-1/4" dia. holes required in backsplash  
Two (2) Model B-0427 Supply Nipple, 3/4" x 2-1/2"  
One (1) Order in quantities of (2) per faucet

ITEM # 31 POT RACK

Quantity: One (1)  
Manufacturer: Eagle Group or equal as approved by the Professional  
Model: WM60PR

One (1) Model WM60PR Pot Rack, wall mount, 60"W x 12"D x 16"H, double-bar design, constructed of 3/16" x 2" stainless steel flat bar, includes (10) double-pronged pot hooks, NSF

ITEM # 32 POT RACK

Quantity: One (1)  
Manufacturer: Eagle Group or equal as approved by the Professional  
Model: WM36PR

One (1) Model WM36PR Pot Rack, wall mount, 36"W x 12"D x 16"H, double-bar design, constructed of 3/16" x 2" stainless steel flat bar, includes (6) double-pronged pot hooks, NSF

ITEM # 33 SHELVING, WITH METAL FRAME <By Owner>

Quantity: (10)  
Manufacturer: Metro or equal as approved by the Professional  
Model: MQ2454G



(10) Model MQ2454G MetroMax® Q Shelf, 54"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF  
 (THESE MAKE UP TWO (2) MOBILE SHELVING UNITS WITH FIVE SHELVES EACH)  
 Eight (8) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection  
 Four (4) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed (for use with all MetroMax posts & shelves)  
 Four (4) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)

ITEM # 34                      HOSE REEL

Quantity:                      One (1)  
 Manufacturer:                T&S Brass or equal as approved by the Professional  
 Model:                         B-1432-01

One (1) Model B-1432-01 Hose Reel Assembly, open, 3/8" x 35 ft. hose, 3" concealed mixing faucet, Eterna cartridges, lever handles with color coded indexes, continuous pressure vacuum breaker, 36" flexible water hose connector with stainless steel quick disconnect, high flow blue spray valve, with ratcheting system, 2-3/8" wall bracket, epoxy coated metal hose reel, 3/8" NPT  
 One (1) 1 year limited warranty, standard  
 One (1) 1 year limited warranty for hose, standard  
 One (1) 2 year limited warranty for hose reel, standard

ITEM # 35                      SPARE NO.    <Spare No.>

ITEM # 36                      RACK DOLLY    <By Owner>

Quantity:                      Eight (8)  
 Manufacturer:                Metro or equal as approved by the Professional  
 Model:                         DH2020N

Eight (8) Model DH2020N Dish Rack Dolly, platform design, single stack, designed for 20" x 20" racks, tubular steel handle, 5" Heavy duty, non-marking, resilient tread swivel casters, bumper corners, all aluminum construction, with handle

ITEM # 37                      CLEAN DISHTABLE

Quantity:                      One (1)  
 Manufacturer:                Eagle Group or equal as approved by the Professional  
 Model:                         CDTR-72-14/3

One (1) Model CDTR-72-14/3 Spec-Master® Clean Dishtable, straight design, 72"W x 30"D x 43-1/2"H overall, left-to-right operation, 14/304 stainless steel top, 8"H backsplash, raised rolled edges on front & side, stainless steel legs & crossbracing, adjustable metal feet, NSF  
 One (1) Model E120 Table limit switch provision (switch by others)

ITEM # 38                      DISH CART / DOLLY    <By Owner>

Quantity:                      Four (4)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         PCD11A

Four (4) Model PCD11A Poker Chip Dish Dolly, 26-5/8"W x 26-5/8"D x 31-15/16"H, adjustable, dish size 4-1/4" to 11-3/4", removable dividers & towers, two-handed access, recessed handles, 5"Dia. swivel casters with neoprene wheels (2 with brakes), chip-resistant polymer shell with Microban® antimicrobial protection, aesthetic blue, vinyl dust/water splash cover, NSF

ITEM # 39                      DISHTABLE SORTING SHELF

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         605382

One (1) Model 605382 Slanted Rack Shelf, solid, wall mount, 63"W x 19-3/4"D x 21-3/8"H, stainless steel wall brackets, stainless steel drip tube (left side), 16/304 stainless steel construction

ITEM # 40                      DISHWASHER, CONVEYOR TYPE, VENTLESS

Quantity:                      One (1)  
Manufacturer:                Hobart or equal as approved by the Professional  
Model:                         CLPS66ENVL+BUILDUP

One (1) Model CLPS66ENVL+BUILDUP Ventless Conveyor Dishwasher, heat pump energy recovery operation, 22" power scrapper, single tank, (202) racks/hour, Opti-Rinse™ system, insulated hinged cabinet-style doors with door interlock switches, door actuated drain closure, pressure reducing valve, self-aligning wash manifolds, stainless steel anti-clogging wash arms, removable pump intake screen, stainless steel self-draining pump & impeller, (1) scrap screen & basket, 19-1/2"H chamber accommodates (6) sheet pans, 0.62 gallon/rack, stainless steel enclosure panels, NSF rated pot and pan mode, programmable microprocessor controls with low temperature, dirty water, and de-lime notification, 30kW stainless booster heater, 9kW wash tank heater, 4 HP compressor, 1/6 HP drive, 2 HP wash, 2 HP power scrapper, 1/6 HP heat pump fan, ENERGY STAR® (heat pump ships separately) (LEFT TO RIGHT OPERATION)

Provide 480 volt - 3 phase connections.

Dishwasher, 480v-3p, 26.3 amps,

Booster heater, 480v-3p, 40.1 amps.

ITEM # 41                      DISHTABLE, SOILED "L" SHAPED

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         SDTLL-84-14/3

One (1) Model SDTLL-84-14/3 Spec-Master® Soiled Dishtable, island design with dish landing shelf, 72" machine to corner, 60" corner to end, 30" working depth, 43-1/2"H overall, left-to-right operation, 14/304 stainless steel top, 60"W x 12"D dish landing shelf with rolled front edge, 8"H backsplash, 20" x 20" x 5" deep pre-rinse sink with basket drain, (1) deck mount faucet hole for pre-rinse, includes scrap block, raised rolled edges on front & side, stainless steel legs & side bracing, adjustable feet, NSF

(PROVIDE SHOP DRAWING FOR REVIEW AND APPROVAL)

Four (4) Model E100 Additional Top length, NSF construction, per linear foot - APPROX. 8'-2"

One (1) Model 606295 Double Sided Sorting Shelf, tubular, table mount (1" OD tubular uprights) & end wall mount, 60"W x 30.875"D x 33.375"H, use for soiled dishtables with landing shelf or with center island design, 1.625"dia. tubing, 16/304 stainless steel construction

(SORTING SHELF TO MATCH LENGTH OF DISHTABLE - APPROX. 8'-2")

One (1) Model 606434 Pre-rinse Basket, 17-1/2"W x 19-1/2"L x 2"H, with slide bar, for dishtables, 304 type stainless steel

One (1) Model SCRAP TROUGH Scrap Trough, 5"W x 2"D, 1-1/2" center drain opening, removable basket with handles, stainless steel construction

(PROVIDE CUTOUT/INSTALL PER MANUFACTURER'S RECOMMENDATIONS FOR WASTE COLLECTOR, ITEM 43 AS SHOWN ON PLANS)

ITEM # 42                      PRE-RINSE FAUCET ASSEMBLY, WITH ADD ON FAUCET

Quantity:                      One (1)

Manufacturer:                T&S Brass or equal as approved by the Professional

Model:                        B-0113-ADF10-BR

One (1) Model B-0113-ADF10-BR EasyInstall Pre-Rinse Unit, single hole deck mount, 10" add-on faucet, 1.15 GPM spray valve (B-0107) with brush attachment, 44" flexible stainless steel hose, 36" flexible supply lines, supply hose-stops-elbows, wall bracket, quarter-turn Eterna cartridges, low lead, 2019 DOE PRSV - Class II

ITEM # 43                      WASTE COLLECTOR

Quantity:                      One (1)

Manufacturer:                InSinkErator or equal as approved by the Professional

Model:                        PRS

One (1) Model PRS PowerRinse® Standard (Model PRS™) - Complete Waste Collection System Package. Requires only 1 GPM (3.79 LPM) of fresh water per hour. Pre-rinse and scrapping system with 30 GPM (113.56 LPM) recirculated water flow capability, dry start protection, and adjustable run time. Pre-plumbed and pre-wired base assembly with control, solenoid and pump; integrated air gap; stainless steel mounting tray, base assembly, cover, pump housing, 1/4" pump inlet screen, and pump impeller; 1/4" perforated scrap basket with four ergonomic handles; flanged feet; check valves; 2" drain discharge; 1/2" NPT water inlets.

One (1) Model PRS-2 208/220-240v/60/1-ph

One (1) Model COVER Cover, stainless steel, maximizes workspace for scrapping and pre-soaking problem dishes with baked-on or difficult to remove food (15426)

ITEM # 44                      TRASH CONTAINERS - NIKEC   <By Owner>

ITEM # 45                      RECYCLING CONTAINERS - NIKEC   <By Owner>

ITEM # 46                      WORK TABLE, STAINLESS STEEL TOP   <By Owner>

Quantity:                      Three (3)

Manufacturer:                Eagle Group or equal as approved by the Professional

Model:                        T3696SEM

Three (3) Model T3696SEM Spec-Master® Marine Series Work Table, 96"W x 36"D, 14/300 series stainless steel top, box marine edge on all sides, adjustable 18/300 series stainless steel undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF

Six (6) Model 502946 Drawer Assembly, 20" x 20" x 5", 430 type stainless steel housing & frame, removable drawer pan, NSF approved removable slides, hemmed safety pull handle

Three (3) Model CA6-SB Table Casters, set of (6), 4" diameter, (3) swivel & (3) swivel/brake, 115 lbs. capacity per caster, zinc with resilient tread, NSF

ITEM # 47                      BLIXER    <By Owner>

Quantity:                      Two (2)

Manufacturer:                Robot Coupe or equal as approved by the Professional

Model:                         BLIXER10

Two (2) Model BLIXER10 Blixer® Commercial Blender/Mixer, vertical, 11.5 liter capacity, stainless steel bowl with handle, (3) blade adjustable stainless steel Blixer® assembly, pulse switch, two speed 1800 & 3600 RPM, 11.0 amps, 4-1/2 HP, 208-240v/60/3-ph, NEMA L15-20P, cETLus, ETL-Sanitation

Two (2) 1 year parts & labor warranty

ITEM # 48                      PLANETARY MIXER    <By Owner>

Quantity:                      One (1)

Manufacturer:                Hobart or equal as approved by the Professional

Model:                         HL200-1STD

One (1) Model HL200-1STD 100-120/50/60/1; Bench type mixer; with bowl, beater, whip & spiral dough arm, US/EXP configuration - Legacy Planetary Mixer, Bench, 20 quart, (3) fixed speeds plus stir speed, gear-driven transmission, 15-minute SmartTimer™, #12 taper hub, manual bowl lift, stainless steel bowl, aluminum "B" beater, stainless steel "D" wire whip, aluminum "ED" spiral dough arm, stainless steel bowl guard, 1/2 hp, cord with plug

One (1) Standard warranty - 1-Year parts, labor & travel time during normal working hours within the USA

ITEM # 49                      WORK TABLE, STAINLESS STEEL TOP

Quantity:                      One (1)

Manufacturer:                Eagle Group or equal as approved by the Professional

Model:                         T3696SEM

One (1) Model T3696SEM Spec-Master® Marine Series Work Table, 96"W x 36"D, 14/300 series stainless steel top, box marine edge on all sides, adjustable 18/300 series stainless steel undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF

(KITCHEN EQUIPMENT CONTRACTOR SHALL PROVIDE HOLES IN UNDERSHELF WHERE REQUIRED FOR DRAIN LINES TO EXTEND TO FLOOR SINK)

Two (2) Model E23 Sink, 16" x 20" x 14" bowl, for 30"W tables, complete with faucet & basket drain (specify location)

Two (2) Model 300721 Lever Handle Drain, 2" IPS connection

One (1) Model 300692 Bullet Feet, stainless steel, each

ITEM # 50                      DECK MOUNT FAUCET

Quantity:                      One (1)  
Manufacturer:                T&S Brass or equal as approved by the Professional  
Model:                         B-1123

One (1) Model B-1123 Faucet, 12" swing nozzle, deck mounted, quarter-turn Eterna cartridges, lever handles, low lead, ADA Compliant

ITEM # 51                      FOOD PROCESSOR, BENCHTOP / COUNTERTOP    <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Robot Coupe or equal as approved by the Professional  
Model:                         R301UB

Two (2) Model R301UB D Series Cutter/Mixer, 3.7 liter stainless steel bowl with handle & see-thru lid, includes: (1) "S" blade with smooth edges, on/off & pulse switch, single speed, 1725 RPM, 120v/60/1-ph, 12.0 amps, 1-1/2 HP, NEMA 5-15P, cETLus, ETL-Sanitation  
Two (2) 1 year parts & labor warranty

ITEM # 52                      ELECTRIC FOOD CUTTER    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Hobart or equal as approved by the Professional  
Model:                         84145-1

One (1) Model 84145-1 Food Cutter with #12 attachment hub, 14" diameter stainless steel bowl 22 RPM, double stainless steel knives 1725 RPM, bowl cover with safety interlock, push/pull on/off switch, one-piece burnished aluminum housing, 3" legs, 115v/60/1-ph, 1/2 HP  
One (1) Standard warranty - 1-Year parts, labor & travel time during normal working hours within the USA

ITEM # 53                      SPARE NO.    <Spare No.>

ITEM # 54                      SPARE NO.    <Spare No.>

ITEM # 55                      WORK TABLE, STAINLESS STEEL TOP    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         T3696SEM

One (1) Model T3696SEM Spec-Master® Marine Series Work Table, 96"W x 36"D, 14/300 series stainless steel top, box marine edge on all sides, adjustable 18/300 series stainless steel undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF  
One (1) Model TM96APR Pot Rack, table mount, 88"W x 20"D, triple-bar design with tubular table supports, constructed of 3/16" x 2" aluminum flat bar, includes (24) double-pronged pot hooks, for 96"W table, NSF  
One (1) Model 502946 Drawer Assembly, 20" x 20" x 5", 430 type stainless steel housing & frame, removable drawer pan, NSF approved removable slides, hemmed safety pull handle  
One (1) Model 300692 Bullet Feet, stainless steel, each

ITEM # 56                      SPARE NO.    <Spare No.>

ITEM # 57                      MEGA SANDWICH / SALAD PREPARATION REFRIGERATOR    <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                         D60N24M-D

Two (2) Model D60N24M-D Designer Line Mighty Top Sandwich Unit, 60"W, two-section, (24) 1/6 size x 4" deep pans with 8" cutting board, (4) drawers, accommodates (1) 12 x 20 x 6 pan per drawer (supplied by others), stainless steel top, front, sides & interior, electronic control with digital display, hi-low alarm, 6" adjustable legs, rear mounted self-contained refrigeration, automatic hot gas condensate evaporator, R290 Hydrocarbon Refrigerant, 1/3 HP  
Two (2) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part  
Two (2) 115v/60/1-ph, 5.8 amps, cord, NEMA 5-15P, standard  
Two (2) Stainless steel finished back  
Two (2) Model 50301 Casters, swivel, with brakes (3" diameter rubber tires) set of 4 (3-3/4" height)

ITEM # 58                      WORK TABLE, STAINLESS STEEL TOP

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         T3696SEM

One (1) Model T3696SEM Spec-Master® Marine Series Work Table, 96"W x 36"D, 14/300 series stainless steel top, box marine edge on all sides, adjustable 18/300 series stainless steel undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF  
One (1) Model TM96APR Pot Rack, table mount, 88"W x 20"D, triple-bar design with tubular table supports, constructed of 3/16" x 2" aluminum flat bar, includes (24) double-pronged pot hooks, for 96"W table, NSF  
One (1) Model E23 Sink, 16" x 20" x 14" bowl, for 30"W tables, complete with faucet & basket drain (specify location)  
One (1) Model 300721 Lever Handle Drain, 2" IPS connection  
One (1) Model 300692 Bullet Feet, stainless steel, each

ITEM # 59                      DECK MOUNT FAUCET

Quantity:                      One (1)  
Manufacturer:                T&S Brass or equal as approved by the Professional  
Model:                         B-1123

One (1) Model B-1123 Faucet, 12" swing nozzle, deck mounted, quarter-turn Eterna cartridges, lever handles, low lead, ADA Compliant

ITEM # 60                      SPARE NO.    <Spare No.>

ITEM # 61                      SPARE NO.    <Spare No.>

ITEM # 62                      SPARE NO.   <Spare No.>

ITEM # 63                      FOOD SLICER, ELECTRIC   <By Owner>

Quantity:                      One (1)  
Manufacturer:                Hobart or equal as approved by the Professional  
Model:                         EDGE13A-11

One (1) Model EDGE13A-11 Centerline by Hobart Edge Series Slicer, automatic, single speed, single stroke length, med duty, angle feed, 13" chrome plated carbon steel knife, carriage & gauge interlocks, no volt release, poly-v belt drive system, anodized aluminum carriage & knife cover, top mounted sharpener, anodized aluminum finish, 120v/60/1-ph, 4.0 mp, 1/2 hp, cETLus, NEMA 5-15P, NSF (NET)  
One (1) Standard warranty - 1-Year parts, labor & travel time during normal working hours within the USA

ITEM # 64                      REACH-IN FREEZER   <By Owner>

Quantity:                      One (1)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                         2FNHD

One (1) Model 2FNHD Freezer, reach-in, two-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, standard depth, half-height solid doors, cylinder locks, electronic control with digital display, unit can be adjusted to operate as low as -10°F, hi-low alarm, electric condensate evaporator, R290 Hydrocarbon refrigerant, 1/2 HP, cETLus, NSF, Made in USA, ENERGY STAR®  
One (1) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part  
One (1) 115v/60/1-ph, 9.0 amps, cord, NEMA 5-15P, standard  
One (1) Left Door hinged on left & right door hinged on right, standard  
One (1) 5" Casters, standard

ITEM # 65                      EXHAUST HOOD

Quantity:                      One (1)  
Manufacturer:                Captive-Aire or equal as approved by the Professional

- 1. Kitchen Equipment Contractor shall furnish hoods, make up air and exhaust fans as part of the food service equipment scope.**
- 2. Kitchen Equipment Contractor shall deliver the Hoods, Exhaust & MUA Fans and roof curbs to the General Contractor at the jobsite. Installation of the hoods, roof curbs and fans are by the Mechanical Contractor including any cranes, rigging, operators, etc.**
3. U.L. listed, NSF approved, incandescent light fixtures equally spaced per section, pre-wired to common junction box. (1) One set of bulbs furnished and installed by K.E.C.
4. Stainless steel closure panels from top of hood to finished ceiling by K.E.C. (K.E.C. to verify height)
5. Surface fire protection system nozzles and piping to be installed at factory when fabricated with all exposed pipes and fittings in chrome plating or stainless steel.
6. Hood to have stainless steel hanger brackets welded to top of hood sections as required.
7. Full length make up air plenum along front of hood.
8. Provide Air Conditioned & Heated MUA Fan to provide tempered make up air.
9. All ductwork to be furnished and installed in accordance with all codes & regulations by the

Mechanical Contractor and is not in the Kitchen Equipment Contract.  
10. See Sheets QK-500 through QK-509 of the Contract Food Service Drawings.  
11. Provide manufacturers shop drawings for review and approval.

ITEM # 66 FIRE SUPPRESSION SYSTEM

Quantity: One (1)  
Manufacturer: Captive-Aire or equal as approved by the Professional  
Model: TANK

One (1) Model TANK Ansul Fire Suppression System;

1. Surface nozzles, hood and duct protection nozzles to be in Ventilator, Item# 65.
  2. Manual pull station and micro switch with one set of normally open and one set of normally closed contact points.
  3. All exposed piping, fittings, control center and storage tanks to be chrome plated or stainless steel.
  4. Six month and twelve month inspections, servicing, and replacement of components as per NFPA-96 latest edition.
  5. All components and labor necessary for a complete system in accordance with NFPA-96 latest edition, OSHA, and all applicable codes.
  6. System shall include One (1) gas solenoid valve(electric or mechanical as required) which shall be installed per local codes by Plumbing Contractor and interwired by Electrical Contractor if applicable. If a second gas valve is required by Codes, this is to be included in the Kitchen Equipment Contract.
  7. Final installation and final testing by factory authorized Ansul agency.
  8. This Authorized and Certified Fire Suppression System Contractor shall provide and install all electrical control interlocks required per NFPA 17A, NFPA 96 and all local codes, standards and regulations associated with fire suppression system installation. Wiring shall include necessary control interlocks from fire system micro switch to; exhaust and make up air fan motor control panel(s), electrical gas solenoid By Pass valve(s), commercial building fire alarm system, electrical disconnects and or shunt trip breaker controls as required per local jurisdiction having authority.
  9. Electrical Division 16 to provide and install necessary shunt trip breakers or disconnects, fire alarm system modules, devises and or programming, and all required power circuitry associated with cooking equipment and fan units.
- A. A pre-engineered, fixed pipe, automatic wet chemical agent fire suppression system for protection of all hazard areas associated with cooking operations, including exhaust hoods, plenums, ductwork, and cooking appliances.
- B. Exhaust hood fire system components to be factory installed.
- C. Cylinder and Valve Assembly
1. The cylinders shall have a tin-nickel alloy plated brass valve with pressure gauge.
  2. Wet chemical agent shall be contained in one or more stored pressure DOT/TC rated steel cylinder and valve assemblies.
  3. Each cylinder is factory-filled with liquid fire suppressant and pressurized to 200 PSIG at 70°F.
- D. Distribution Nozzles
1. Nozzles shall be located to protect the exhaust ducts, plenums, and all cooking appliances requiring protection.
  2. All nozzles shall be equipped with a metal blow off cap. The cap prevents contamination from entering the pipe network and is designed to pop-off upon system discharge, allowing



agent to flow to the protected hazard area.

3. All nozzles shall incorporate a stamped part number to easily identify nozzle type.

E. Distribution System

1. The distribution system shall consist of Copper, Schedule 40 black iron, chrome-plated or stainless-steel pipe and fittings. All exposed piping and fittings must be chrome-plated or stainless steel.
2. Fittings shall be minimum class 150. Galvanized fittings shall not be used.

F. Suppression System

1. The system control equipment shall be capable of all functions associated with automatically and manually discharging the wet chemical agent from all cylinder and valve assemblies, including automatic shutdown of the heat source or fuel and electrical power to all protected areas upon system discharge.
2. Liquid Fire Suppressant shall be Aqueous Potassium Carbonate (APC).
3. All mechanical components of the actuator kit shall be enclosed.
4. The actuator kit shall be capable of automatic or manual activation means.
5. Supervisory Pressure Switch added to monitor operating system pressure.
6. For manual activation, an electrically operated manual release shall be used to actuate the system manually.
7. For automatic activation, the system will be activated by a Firestat (heat) detector.
8. Electrical Division to provide shunt trip breakers at main power panel, or disconnects, as designated by the Electrical Engineer; interconnection provided at hood control panel for the signal to shut down all electricity in and under the exhaust hood. Shunt trips/disconnects to accomplish shut off of electricity in the event of fire system activation by others.
9. Printed circuit board with microprocessor-based controller that provides all the necessary monitoring, timing, and supervision functions required for the reliable operation of the fire system.
10. Independent supervised loops incorporate redundancy and fault detection.
11. Real-time cloud-based monitoring connection provided with system by ownership.
12. Primary power supply, with battery backup for power loss.
13. All wiring must be in accordance to NFPA 70 and the Authority Having Jurisdiction (AHJ).
14. Electric gas valve provided for equipment below exhaust hood. Coordinate size and installation with Plumbing Division.
15. All wiring is to be in accordance with the applicable manufacturer's instructions for the fire alarm control panel, gas shut-off valve, manual reset relay, and contractor supplied shut-off devices.

ITEM # 67                      FRYER BATTERY, GAS

Quantity:                      One (1)

Manufacturer:                Pitco Frialator or equal as approved by the Professional

Model:                         SG14RS-4FD

One (1) Model SG14RS-4FD Solstice™ Prepackaged Fryer System with Solstice™ Filter Drawer System, High Power, gas, (4) 50 lb. oil capacity full tanks, millivolt control, stainless steel tank, front & sides, under-fryer drawer filtration, total 488,000 BTU (-FFFF), NSF, CE, CSA Flame, CSA Star, AuGA

One (1) 1 year parts and labor warranty from the date of installation up to a maximum of 15 months from the date of manufacture (with appropriate documentation), standard  
 One (1) Natural gas  
 One (1) Millivolt Thermostat, standard  
 One (1) 115v/60/1-ph, 7.0 amps  
 One (1) Contact factory for cord information  
 One (1) Model P6072145 Basket, (2) oblong/twin size, 13-1/2" x 6-1/2" x 5-3/4" deep, long handle, regular mesh (shipped std (n/c) with models "T" SG14, SG14R, SSH55, SE14, SE14X, SE14B, SG14T, 35+, 45+, fryer batteries shipped with (1) per fryer  
 One (1) Model PP10613 Filter Paper, envelope, heavy duty, 18-1/2" x 20-1/2", 100 per pack  
 One (1) Model PP10733 Filter powder, (120) 2 oz. packets (8 oz. by volume)  
 One (1) Filter flush hose, each  
 One (1) Model PP10056 Fryer Cleaning Brush, high temperature  
 One (1) Model B7490701 Crumb Scoop, designed to fit between gas fryer tubes for removal of heavy sediment  
 One (1) Model PP10725 Skimmer- used for removing food particles from surface oil  
 One (1) Model B3901504 Casters, 9" adjustable swivel non-lock rear & lock front casters, for battery of (4) Solstice gas and electric fryers, batteries and retherms  
 One (1) Model B8003109 Gas Connector Hose, 1-1/4" connection, 48" long, with quick disconnect couplings, restraining device & thermal shut-off, for multiple units 575,000 BTU

ITEM # 68 GRIDDLE, GAS, COUNTERTOP

Quantity: Two (2)  
 Manufacturer: Magikitch'n or equal as approved by the Professional  
 Model: MKG-48-E

Two (2) Model MKG-48-E Griddle, countertop, gas, 47-3/4" W x 24" D cooking surface, 1" thick polished griddle plate, electric thermostat with matchless ignition, grease chute and box, front grease trough, 3" side splash, stainless steel, 4" removable legs, 120,000 BTU, 115v/50/60/1-ph, 0.88 amps, 6' cord, NEMA 5-15P, CSA, NSF  
 Two (2) 1 year limited parts and labor warranty, standard  
 Two (2) Natural gas, specify elevation if over 2000 feet  
 Two (2) Service shelf, 8" deep  
 Two (2) 48" x 3/4" Flexible gas hose with quick disconnect, restraining device & shut-off (Dormont)

ITEM # 69 SPARE NO. <Spare No.>

ITEM # 70 EQUIPMENT STAND, FOR ITEM 68 <By Owner>

Quantity: Two (2)  
 Manufacturer: Eagle Group or equal as approved by the Professional  
 Model: T3048SGS

Two (2) Model T3048SGS Griddle/Equipment Stand, 48-3/8"W x 30-3/8"D x 25-1/4"H, 16/300 stainless steel top, 1-1/4"H up-turn on sides & rear, open base with stainless steel adjustable undershelf, 1000 lbs weight capacity, Uni-Lok® gusset system, (4) stainless steel legs with adjustable white metal feet, NSF  
 Two (2) Model 307106 Cutting Board, equipment-mounted, 48"W x 8"D, 1-1/4" thick laminated hardwood, 1" diameter stainless steel tubular supports integrally welded to adjustable stainless steel sleeve assembly, NSF

Two (2) Model CAH4-SB Table Casters, set of (4), 5" diameter, (2) swivel & (2) swivel/brake, 200 lbs. capacity per caster, zinc with resilient tread, NSF

ITEM # 71                      HD RANGE, 36", 4 OPEN BURNERS

Quantity:                      One (1)  
Manufacturer:                Jade Range or equal as approved by the Professional  
Model:                         JTRH-4-36

One (1) Model JTRH-4-36 Titan™ Heavy Duty Range, gas, 36", (4) 35,000 BTU open burners, infinite controls, standard oven, (2) chrome plated racks, stainless steel oven liner, 6" plate shelf, front, sides, stub back & bottom, 6" adjustable legs, 175,000 BTU, CSAus, NSF  
One (1) NOTE: All units are fully welded with heavy duty construction, stainless steel sides, front and top are standard  
One (1) NOTE: Stainless steel tray bed (burner box), deflectors, tray guides and drip tray/grease can standard  
One (1) Two years part & labor warranty - Includes Five year warranty parts on oven door (parts only) & Ten year warranty on range frame (parts only), standard  
One (1) Natural gas, specify if elevation over 2000 ft.  
One (1) 3/4" Rear connection, standard  
One (1) 3/4" Gas regulator supplied with range  
One (1) Cap & stainless steel manifold cover, left  
One (1) Cap & stainless steel manifold cover, right  
One (1) Model S-36 Titan™ 36" Single Deck High Shelf, stainless steel  
Three (3) Shelf deflector (coved bottom/Michigan-style), per ft  
One (1) Set of four casters (2 with brakes)  
One (1) 48" Long x 3/4" flex hose with quick disconnect

ITEM # 72                      CONVECTION OVEN, GAS

Quantity:                      One (1)  
Manufacturer:                Blodgett or equal as approved by the Professional  
Model:                         ZEPH-200-G DBL

One (1) Model ZEPH-200-G DBL Zephair Convection Oven, gas, double-deck, bakery depth, capacity (5) 18" x 26" pans per compartment, (SSI-M) solid state infinite controls with 60 min. manual timer, two speed fan, flue connector, dependent glass doors, interior light, stainless steel front, sides and top, 6" stainless steel legs, 120,000 BTU, ETL, CE, NSF  
One (1) 2 year parts, 2 year labor and 1 additional year door warranty (parts only), standard  
One (1) Natural gas  
Two (2) 115v/60/1-ph, 6.0 amps, 2-wire with ground, cord & plug, 1/2 hp (per deck), standard  
One (1) Model SSI-D Top Oven: Solid State infinite with digital timer, standard  
One (1) Model SSI-D Bottom Oven: Solid State infinite with digital timer, standard  
One (1) Draft diverter, stainless steel, standard  
One (1) 6" plate casters (set)  
One (1) NOTE: DO NOT deduct cost of standard legs  
One (1) 48" flexible gas hose with quick disconnect & restraining device

ITEM # 73                      STAINLESS STEEL WALL PANELS UNDER HOOD

Quantity:                      One (1)  
Manufacturer:                Custom or equal as approved by the Professional  
Model:                         CUSTOM

One (1) Model CUSTOM Provide Stainless Steel Wall Cladding behind Exhaust Hood from floor tile base to up behind hood, approx. 24'-0" long. To be furnished and installed by the Kitchen Equipment Contractor. Provide all cut-outs as required for utilities with s/s escutcheons plates around any plumbing or gas lines. Provide outlet cut-outs sized so that outlet cover plates cover the cut-outs.  
Provide shop drawings for review and approvals.

ITEM # 74                      REACH-IN REFRIGERATOR    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                         2RN

One (1) Model 2RN Refrigerator, reach-in, two-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, standard depth, full-height solid doors, cylinder locks, electronic control with digital display, hi-low alarm, unit comes standard with expansion valve, electric condensate evaporator, R290 Hydrocarbon Refrigerant, 1/3 HP, cETLus, NSF, Made in USA, ENERGY STAR®  
One (1) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part  
One (1) 115v/60/1-ph, 6.9 amps, cord, NEMA 5-15P, standard  
One (1) Left Door hinged on left & right door hinged on right, standard  
One (1) 5" Casters, standard

ITEM # 75                      SPARE NO.    <Spare No.>

ITEM # 76                      SPARE NO.    <Spare No.>

ITEM # 77                      PLANETARY MIXER    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Hobart or equal as approved by the Professional  
Model:                         HL600-1STD

One (1) Model HL600-1STD 200-240/50/60/3/1 Mixer; with bowl, beater, "D" whip, & spiral dough arm; US/EXP configuration - Legacy Planetary Mixer, 2.7 HP, 60 quart, (4) fixed speeds, gear-driven transmission, 20-Minute SmartTimer™, #12 attach hub, power bowl lift, stainless steel bowl, stainless steel bowl guard, "B" beater, "D" wire whip, "ED" dough hook  
One (1) Standard warranty: 1-Year parts, labor & travel time during normal working hours within the USA

ITEM # 78                      WORK TABLE, BAKERS TOP    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                        MT3096ST-BS

One (1) Model MT3096ST-BS Work Table, baker's top, 96"W x 30"D, 1-3/4" thick hardwood top, 4"H splash on sides & rear, stainless steel gussets, stainless steel crossrails & tubular legs, adjustable stainless steel bullet feet, NSF  
One (1) Model 300692 Bullet Feet, stainless steel, each

ITEM # 79                      INGREDIENT BIN    <By Owner>

Quantity:                      Four (4)  
Manufacturer:                Cambro or equal as approved by the Professional  
Model:                        IBS27148

Four (4) Model IBS27148 Ingredient Bin, mobile, 27 gallon capacity, 1-pc seamless polyethylene bin, 2-pc sliding polycarbonate lid, S-hook on front (scoop NOT included), (4) 3" heavy duty casters (2 front swivel, 2 fixed), white with clear cover, NSF  
Four (4) Model SCP12CW135 Camwear® Scoop, 12 oz., polycarbonate, clear, NSF  
Four (4) Model SCP24CW135 Camwear® Scoop, 24 oz., polycarbonate, clear, NSF

ITEM # 80                      SHELVING, WALL MOUNTED

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                        WS1296-14/3

One (1) Model WS1296-14/3 Shelf, wall-mounted, 96"W x 12"D, rolled frontedge, 1-1/2"H up-turn on sides & rear, includes stainless steel mounting brackets stud welded to shelf, 14/304 stainless steel construction, NSF  
One (1) Change shelf width to 15", replace 12 in model number with 15

ITEM # 81                      BLAST CHILLER FREEZER, ROLL-IN

Quantity:                      One (1)  
Manufacturer:                Infrico USA or equal as approved by the Professional  
Model:                        IBC-ABT201 CBI

One (1) Model IBC-ABT201 CBI Blast Chiller & Shock Freezer, roll-in, self-contained, 280 lb chilling/154 lb freezing capacity, single speed cart, compatible with (20) 12"x20"/18"x26" pans (not included), Interactive control panel with USB connection, 300 series stainless steel exterior & interior, chilling temperature range +194° F to +37° F in less than 90 minutes, freezing temperature range +194° F to - 0° F in less than 4 hours, loading ramp, stainless steel interior & exterior, (Compressor 4 HP, 220v/60/3-ph, 21 amps), (Controllers: 115v/60/1, 9.0 amps), cord only, HAACP Compliant, CE, cETLus, ETL-Sanitation  
One (1) Standard warranty: 2 year parts & labor warranty, standard  
One (1) Compressor warranty: Additional 4 year compressor warranty, standard  
One (1) 220v/60/3-ph, 21.0 amps, cord only, standard

ITEM # 82                      BUN / SHEET PAN RACK    <By Owner>

Quantity:                      Eight (8)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                        RT115N

Eight (8) Model RT115N Pan Rack, mobile, end load, single section, 20-3/8"W x 64-1/8"H, 28"D, open sides, with slides for (11) 18" x 26" or (22) 14" x 18" pans, slides on 5" centers, riveted tubular aluminum frame, 5" swivel casters (2) with brake, KD, NSF

ITEM # 83                      ROLL-IN REFRIGERATOR    <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                        D2RIN

Two (2) Model D2RIN Designer Line Refrigerator, roll-in, two-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, standard depth cabinet, full-height solid doors, cylinder locks, electronic control with digital display, hi-low alarm, unit comes standard with expansion valve, removable stainless steel ramps, R290 Hydrocarbon Refrigerant, 1/2 HP, cETLus, NSF, Made in USA

Two (2) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part

Two (2) 115v/60/1-ph, 9.4 amps, cord & plug, standard

Two (2) Left Door hinged on left & right door hinged on right, standard

ITEM # 84                      EXHAUST HOOD

Quantity:                      One (1)  
Manufacturer:                Captive-Aire or equal as approved by the Professional

**1. Kitchen Equipment Contractor shall furnish hoods, make up air and exhaust fans as part of the food service equipment scope.**

**2. Kitchen Equipment Contractor shall deliver the Hoods, Exhaust & MUA Fans and roof curbs to the General Contractor at the jobsite. Installation of the hoods, roof curbs and fans are by the Mechanical Contractor including any cranes, rigging, operators, etc.**

3. U.L. listed, NSF approved, incandescent light fixtures equally spaced per section, pre-wired to common junction box. (1) One set of bulbs furnished and installed by K.E.C.

4. Stainless steel closure panels from top of hood to finished ceiling by K.E.C. (K.E.C. to verify height)

5. Surface fire protection system nozzles and piping to be installed at factory when fabricated with all exposed pipes and fittings in chrome plating or stainless steel.

6. Hood to have stainless steel hanger brackets welded to top of hood sections as required.

7. Full length make up air plenum along front of hood.

8. Provide Air Conditioned & Heated MUA Fan to provide tempered make up air.

9. All ductwork to be furnished and installed in accordance with all codes & regulations by the Mechanical Contractor and is not in the Kitchen Equipment Contract.

10. See Sheets QK-500 through QK-509 of the Contract Food Service Drawings.

11. Provide manufacturers shop drawings for review and approval.

ITEM # 85                      FIRE SUPPRESSION SYSTEM

Quantity:                      One (1)  
Manufacturer:                Captive-Aire or equal as approved by the Professional

Model: TANK

One (1) Model TANK Ansul Fire Suppression System;

1. Surface nozzles, hood and duct protection nozzles to be in Ventilator, Item# 84.
2. Manual pull station and micro switch with one set of normally open and one set of normally closed contact points.
3. All exposed piping, fittings, control center and storage tanks to be chrome plated or stainless steel.
4. Six month and twelve month inspections, servicing, and replacement of components as per NFPA-96 latest edition.
5. All components and labor necessary for a complete system in accordance with NFPA-96 latest edition, OSHA, and all applicable codes.
6. System shall include One (1) gas solenoid valve(electric or mechanical as required) which shall be installed per local codes by Plumbing Contractor and interwired by Electrical Contractor if applicable. If a second gas valve is required by Codes, this is to be included in the Kitchen Equipment Contract.
7. Final installation and final testing by factory authorized Ansul agency.
8. This Authorized and Certified Fire Suppression System Contractor shall provide and install all electrical control interlocks required per NFPA 17A, NFPA 96 and all local codes, standards and regulations associated with fire suppression system installation. Wiring shall include necessary control interlocks from fire system micro switch to; exhaust and make up air fan motor control panel(s), electrical gas solenoid By Pass valve(s), commercial building fire alarm system, electrical disconnects and or shunt trip breaker controls as required per local jurisdiction having authority.
9. Electrical Division 16 to provide and install necessary shunt trip breakers or disconnects, fire alarm system modules, devices and or programming, and all required power circuitry associated with cooking equipment and fan units.

- A. A pre-engineered, fixed pipe, automatic wet chemical agent fire suppression system for protection of all hazard areas associated with cooking operations, including exhaust hoods, plenums, ductwork, and cooking appliances.
- B. Exhaust hood fire system components to be factory installed.
- C. Cylinder and Valve Assembly
  - a. The cylinders shall have a tin-nickel alloy plated brass valve with pressure gauge.
  - b. Wet chemical agent shall be contained in one or more stored pressure DOT/TC rated steel cylinder and valve assemblies.
  - c. Each cylinder is factory-filled with liquid fire suppressant and pressurized to 200 PSIG at 70°F.
- D. Distribution Nozzles
  - a. Nozzles shall be located to protect the exhaust ducts, plenums, and all cooking appliances requiring protection.
  - b. All nozzles shall be equipped with a metal blow off cap. The cap prevents contamination from entering the pipe network and is designed to pop-off upon system discharge, allowing agent to flow to the protected hazard area.
  - c. All nozzles shall incorporate a stamped part number to easily identify nozzle type.
- E. Distribution System
  - a. The distribution system shall consist of Copper, Schedule 40 black iron, chrome-plated or stainless-steel pipe and fittings. All exposed piping and fittings must be chrome-plated or stainless steel.
  - b. Fittings shall be minimum class 150. Galvanized fittings shall not be used.
- F. Suppression System

- a. The system control equipment shall be capable of all functions associated with automatically and manually discharging the wet chemical agent from all cylinder and valve assemblies, including automatic shutdown of the heat source or fuel and electrical power to all protected areas upon system discharge.
- b. Liquid Fire Suppressant shall be Aqueous Potassium Carbonate (APC).
- c. All mechanical components of the actuator kit shall be enclosed.
- d. The actuator kit shall be capable of automatic or manual activation means.
- e. Supervisory Pressure Switch added to monitor operating system pressure.
- f. For manual activation, an electrically operated manual release shall be used to actuate the system manually.
- g. For automatic activation, the system will be activated by a Firestat (heat) detector.
- h. Electrical Division to provide shunt trip breakers at main power panel, or disconnects, as designated by the Electrical Engineer; interconnection provided at hood control panel for the signal to shut down all electricity in and under the exhaust hood. Shunt trips/disconnects to accomplish shut off of electricity in the event of fire system activation by others.
- i. Printed circuit board with microprocessor-based controller that provides all the necessary monitoring, timing, and supervision functions required for the reliable operation of the fire system.
- j. Independent supervised loops incorporate redundancy and fault detection.
- k. Real-time cloud-based monitoring connection provided with system by ownership.
- l. Primary power supply, with battery backup for power loss.
- m. All wiring must be in accordance to NFPA 70 and the Authority Having Jurisdiction (AHJ).
- n. Electric gas valve provided for equipment below exhaust hood. Coordinate size and installation with Plumbing Division.
- o. All wiring is to be in accordance with the applicable manufacturer's instructions for the fire alarm control panel, gas shut-off valve, manual reset relay, and contractor supplied shut-off devices.

ITEM # 86                      KETTLE, GAS, TILTING

Quantity:                      One (1)  
 Manufacturer:                Vulcan or equal as approved by the Professional  
 Model:                         K40GLT

One (1) Model K40GLT Tilting Kettle, Gas, 40-gallon true working capacity, 2/3 jacketed, 316 series stainless steel liner with ellipsoidal bottom, manual tilt, faucet bracket on tilting console, stainless steel construction, tri-leg base, 100,000 BTU  
 One (1) 1 year limited parts & labor warranty, standard  
 One (1) Natural gas (specify elevation if over 2,000 ft.)  
 One (1) 110-120v/50/60/1-ph, 5.0amps, cord, standard  
 One (1) Motorized Power Tilt  
 One (1) NOTE: This unit includes: embossed gallon/liter markings, 316 stainless steel liner & heavy bar rim standard  
 One (1) Model CATCH CAN Catch can with bail handle & 4' drain hose for DOV  
 One (1) Model CLEANUP KIT Clean-up Kit, includes draw-off brush, clean-up brush with 36" handle & paddle scraper with 40" handle  
 One (1) Model SSTWHIP 48 Stainless steel whip, 48"



One (1) Model SGLTS 18NZLJ SINGLE Pantry Deck Mount Faucet, 18" double jointed swivel spout, includes 4" & 12" riser, NSF & Lead Reduction Compliant (Note: water connection required)  
One (1) Model 3/4QD HOSE-4 3/4" x 4' long gas flex hose & quick disconnect with restraining device

ITEM # 87 FLOOR TROUGH

Quantity: One (1)  
Manufacturer: IMC/Teddy or equal as approved by the Professional  
Model: ASFT-2436-SG

One (1) Model ASFT-2436-SG ASFT Anti-Spill Floor Trough, 36"W x 24"D, 6" deep receptacle, (1) 4" OD tailpiece, stainless steel beehive strainer, 14/304 stainless steel, brushed satin finish, (SG) subway grating, NSF, Made in USA

ITEM # 88 TILTING SKILLET BRAISING PAN, GAS

Quantity: One (1)  
Manufacturer: Vulcan or equal as approved by the Professional  
Model: VG40

One (1) Model VG40 Braising Pan, Gas, 40-gallon capacity, 46" wide open base, manual tilt, 9" deep stainless steel pan with gallon markings, pouring lip & removable strainer, spring assist cover with drip edge, pan holder, solid state control, includes L faucet bracket, electric ignition, 12" stainless steel legs with adjustable flanged feet, 120,000 BTU, CSA Flame, CSA Star, UL EPH Classified  
One (1) 1 year limited parts & labor warranty, standard  
One (1) Natural gas (specify elevation if over 2,000 ft.)  
One (1) NOTE: Elevation kits are field installed  
One (1) 120v/60/1-ph, 9.0 amps, cord & plug, standard  
One (1) Model SGLTS 12NZL SINGLE Pantry Deck-Mount Faucet, 12" swivel spout, includes 4" & 12" riser, NSF & Lead Reduction Compliant (Note: water connection required)  
One (1) Model 20X4 DRNPAN Drain pan & hose assembly  
One (1) Model 3/4QD HOSE-4 3/4" x 4' long gas flex hose & quick disconnect with restraining device

ITEM # 89 FLOOR TROUGH

Quantity: One (1)  
Manufacturer: IMC/Teddy or equal as approved by the Professional  
Model: ASFT-2424-SG

One (1) Model ASFT-2424-SG ASFT Anti-Spill Floor Trough, 24"W x 24"D, 6" deep receptacle, (1) 4" OD tailpiece, stainless steel beehive strainer, 14/304 stainless steel, brushed satin finish, (SG) subway grating, NSF, Made in USA

ITEM # 90 CONVECTION STEAMER, GAS

Quantity: One (1)  
Manufacturer: Vulcan or equal as approved by the Professional  
Model: C24GA10

One (1) Model C24GA10 Convection Steamer, Gas, 2 compartments on 24" cabinet base, (10) 12" x 20" x 2-1/2" deep total pan capacity, high output stainless steel steam generator with Timed Smart Drain & PowerFlush, staged water fill, professional controls with 60 minute timer, buzzer for each compartment, & constant steam feature, split water line, stainless steel interior, exterior, frame & flanged feet, electric ignition, 125,000 BTU, CSA Flame, CSA Star, UL EPH Classified

One (1) 1 year limited parts & labor warranty, standard

One (1) Natural gas (specify elevation if over 2,000 ft.)

One (1) Model 3/4QD HOSE-4 3/4" x 4' long gas flex hose & quick disconnect with restraining device

One (1) 120v/60/1-ph with ground, 300w, 2.0 amps, cord & plug, standard

ITEM # 91 CONVECTION OVEN, GAS

Quantity: One (1)  
 Manufacturer: Blodgett or equal as approved by the Professional  
 Model: ZEPH-200-G DBL

One (1) Model ZEPH-200-G DBL Zephaire Convection Oven, gas, double-deck, bakery depth, capacity (5) 18" x 26" pans per compartment, (SSI-M) solid state infinite controls with 60 min. manual timer, two speed fan, flue connector, dependent glass doors, interior light, stainless steel front, sides and top, 6" stainless steel legs, 120,000 BTU, ETL, CE, NSF

One (1) 2 year parts, 2 year labor and 1 additional year door warranty (parts only), standard

One (1) Natural gas

Two (2) 115v/60/1-ph, 6.0 amps, 2-wire with ground, cord & plug, 1/2 hp (per deck), standard

One (1) Model SSI-D Top Oven: Solid State infinite with digital timer, standard

One (1) Model SSI-D Bottom Oven: Solid State infinite with digital timer, standard

One (1) Draft diverter, stainless steel, standard

One (1) 6" plate casters (set)

One (1) NOTE: DO NOT deduct cost of standard legs

One (1) 48" flexible gas hose with quick disconnect & restraining device

ITEM # 92 COMBI OVEN, GAS

Quantity: One (1)  
 Manufacturer: RATIONAL or equal as approved by the Professional  
 Model: ICC 20-FULL NG 208/240V 1 PH (LM200GG)

One (1) Model ICC 20-FULL NG 208/240V 1 PH (LM200GG) (CG2GRRRA.0000280 - NG - 208/240V) iCombi Classic® 20-Full Size Combi Oven, natural gas, (20) 18" x 26" sheet pan or (40) 12" x 20" steam pan or (20) 2/1 GN pan capacity, mobile oven rack & (10) stainless steel grids included, digital color display screen with push button control, (3) manual operating modes: steam, convection & combination, temperature range 85° to 572°F, (100) program slots, core temperature probe, retractable hand shower, 5-speed fan, (4) automatic cleaning programs, integrated care system, Ethernet interface, includes (1) bucket of Active Green Cleaner & (1) bucket of Care Tabs, 305,500 BTU, 208/240v/60/1-ph, 2.2 kW, 15 Amp Breaker, 6 ft. cord, IPX5, cCSAus, NSF

One (1) NOTE: All discounts subject to approval by manufacturer

One (1) 2 years parts and labor, 5 years steam generator warranty

One (1) Model CAP Chef Assistance Program, a RATIONAL certified Chef conducts 4 hours/location specialized application training with personnel, no charge

One (1) Model 1900.1154US Water Filtration Single Cartridge System, for any iVario, single Combi model, or XS or half-size Combi-Duos, includes: (1) single head with pressure gauge, R95H filter & filter installation kit

One (1) NOTE: The RATIONAL Water Filtration Systems helps provide consistent high quality water to your RATIONAL cooking systems. The patented carbon block technology reduces the effects of sediment, chloramines and chlorine while providing the required flow rates

One (1) Model 60.76.318 External Core Temperature Probe, USB connection, 20-half and full size

One (1) Model 60.22.440 Mobile Oven Rack, type 20-full size Pro/Classic, (12 L-rails) 24" x 20" sheet pan capacity, (24) 4" hotel pan capacity, 4-3/8" spacing, retractable handle, (Grids Shelves not needed)

ITEM # 93 STAINLESS STEEL WALL PANELS UNDER HOOD

Quantity: One (1)

Manufacturer: Custom or equal as approved by the Professional

Model: CUSTOM

One (1) Model CUSTOM Provide Stainless Steel Wall Cladding behind Exhaust Hood from floor tile base to up behind hood, approx. 21'-0" long. To be furnished and installed by the Kitchen Equipment Contractor. Provide all cut-outs as required for utilities with s/s escutcheons plates around any plumbing or gas lines. Provide outlet cut-outs sized so that outlet cover plates cover the cut-outs.

Provide shop drawings for review and approvals.

ITEM # 94 SPARE NO. <Spare No.>

ITEM # 95 WORK TABLE, STAINLESS STEEL TOP <By Owner>

Quantity: One (1)

Manufacturer: Eagle Group or equal as approved by the Professional

Model: T3696SEM

One (1) Model T3696SEM Spec-Master® Marine Series Work Table, 96"W x 36"D, 14/300 series stainless steel top, box marine edge on all sides, adjustable 18/300 series stainless steel undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF

One (1) Model TM96APR Pot Rack, table mount, 88"W x 20"D, triple-bar design with tubular table supports, constructed of 3/16" x 2" aluminum flat bar, includes (24) double-pronged pot hooks, for 96"W table, NSF

One (1) Model 502946 Drawer Assembly, 20" x 20" x 5", 430 type stainless steel housing & frame, removable drawer pan, NSF approved removable slides, hemmed safety pull handle

One (1) Model 300692 Bullet Feet, stainless steel, each

ITEM # 96 WORK TABLE, STAINLESS STEEL TOP

Quantity: One (1)

Manufacturer: Eagle Group or equal as approved by the Professional

Model: T3696SEM

One (1) Model T3696SEM Spec-Master® Marine Series Work Table, 96"W x 36"D, 14/300 series stainless steel top, box marine edge on all sides, adjustable 18/300 series stainless steel

undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF

One (1) Model TM96APR Pot Rack, table mount, 88"W x 20"D, triple-bar design with tubular table supports, constructed of 3/16" x 2" aluminum flat bar, includes (24) double-pronged pot hooks, for 96"W table, NSF

One (1) Model E23 Sink, 16" x 20" x 14" bowl, for 30"W tables, complete with faucet & basket drain (specify location)

One (1) Model 300721 Lever Handle Drain, 2" IPS connection

One (1) Model 300692 Bullet Feet, stainless steel, each

ITEM # 97                      DECK MOUNT FAUCET

Quantity:                      One (1)

Manufacturer:                T&S Brass or equal as approved by the Professional

Model:                        B-1123

One (1) Model B-1123 Faucet, 12" swing nozzle, deck mounted, quarter-turn Eterna cartridges, lever handles, low lead, ADA Compliant

ITEM # 98                      WORK TABLE, STAINLESS STEEL TOP   <By Owner>

Quantity:                      One (1)

Manufacturer:                Eagle Group or equal as approved by the Professional

Model:                        T3696SEM

One (1) Model T3696SEM Spec-Master® Marine Series Work Table, 96"W x 36"D, 14/300 series stainless steel top, box marine edge on all sides, adjustable 18/300 series stainless steel undershelf with marine edge, Uni-Lok® gusset system, (6) stainless steel legs & adjustable bullet feet, NSF

Two (2) Model 502946 Drawer Assembly, 20" x 20" x 5", 430 type stainless steel housing & frame, removable drawer pan, NSF approved removable slides, hemmed safety pull handle

One (1) Model CA6-SB Table Casters, set of (6), 4" diameter, (3) swivel & (3) swivel/brake, 115 lbs. capacity per caster, zinc with resilient tread, NSF

ITEM # 99                      MOBILE REFRIGERATOR CABINET   <By Owner>

Quantity:                      Eight (8)

Manufacturer:                Metro or equal as approved by the Professional

Model:                        C5R9-SB

Eight (8) Model C5R9-SB C5™ R-Series Refrigeration Armour™ heavy-duty insulated mobile refrigerator, full height, adjustable bottom load slides 3.3" OC (adjustable on 1.65" increments), all-in-one refrigeration cassette with R134a refrigerant & automatic defrost (13) 18" x 26" or (26) 12" x 20" x 2-1/2" pan capacity, 304 stainless steel, foamed-in-place polyurethane insulation, operating temperature range 33°F to 40°F (factory pre-set at 35°F), 6" casters, 120V/60/1, 5.0 amps, NEMA 5-15P, cULus, NSF

ITEM # 100                    MOBILE HEATED CABINET   <By Owner>

Quantity:                      Eight (8)

Manufacturer:                Metro or equal as approved by the Professional

Model:                        TC90S

Eight (8) Model TC90S Half-Height Heated Cabinet, Reach-in, One-Section, stainless steel interior, aluminum exterior, standard depth cabinet, narrow full-height doors, with exterior dial-type thermometer, without bumper, pan capacity (9) 12-3/4 x 20-3/4, 120v/60/1-ph, 950 watts, NEMA 5-15P, cULus, NSF

ITEM # 101 ICE MAKER, CUBE-STYLE

Quantity: One (1)  
Manufacturer: Hoshizaki or equal as approved by the Professional  
Model: KM-660MAJ

One (1) Model KM-660MAJ Ice Maker, Cube-Style, 22"W, air-cooled, self-contained condenser, production capacity up to 665 lb/24 hours at 70°/50° (617 lb AHRI certified at 90°/70°), stainless steel finish, crescent cube Style, R-404A refrigerant, 115v/60/1-ph, 15.2 amps, NSF, UL  
One (1) Warranty: 3-Year parts & labor on entire machine  
One (1) Warranty: 5-Year parts & labor on evaporator  
One (1) Warranty: 5-Year parts on compressor & air-cooled condenser  
One (1) Model B-900SF Ice Bin, 52"W, top-hinged front-opening door, 900-lb ice storage capacity, for top-mounted ice makers, stainless steel exterior, painted legs included, protected with H-GUARD Plus Antimicrobial Agent, ETL, ETL-Sanitation  
One (1) Warranty: 3-Year parts & labor for bin  
One (1) Model HS-2035 Top Kit, 22", ABS  
One (1) Model HS-2033 Top Kit, 8", ABS  
One (1) Model SP-5429 Bin Door Catch (purchase as a service part)  
One (1) Model LP-6 LEG Leg Package, (4) x 6" stainless steel legs

ITEM # 102 WATER FILTRATION SYSTEM, FOR ICE MACHINES

Quantity: One (1)  
Manufacturer: Everpure or equal as approved by the Professional  
Model: EV932421

One (1) Model EV932421 Insurice® Water Filtration System, Insurice® Single PF-i2000<sup>2</sup>, Single, (1) EC210 Prefilter, (1) i2000<sup>2</sup> Micro-Pure® II Precoat primary filtration cartridge, reduces chlorine, taste & odor, inhibits scale, outlet pressure gauge, flushing valve, 9,000 gallons, 1.67 gpm, 0.5 micron, 3/4" inlet, 3/8" outlet, NSF 42 & 53 (EV932421)

ITEM # 103 ICE BIN INCLUDED WITH ITEM 101 <Included>

ITEM # 104 FLOOR TROUGH

Quantity: One (1)  
Manufacturer: IMC/Teddy or equal as approved by the Professional  
Model: CFT-1260-PFG

One (1) Model CFT-1260-PFG CFT Floor Trough, 60"W x 12"D, 4" deep receptacle, (1) 4" OD tailpiece, stainless steel beehive strainer, 16/304 stainless steel construction, brushed satin finish, (PFG) pultruded fiberglass grating, grey, NSF, Made in USA  
One (1) Model BSX Beehive strainer for box drain

ITEM # 105                      SPARE NO.    <Spare No.>

ITEM # 106                      SPARE NO.    <Spare No.>

ITEM # 107                      SPARE NO.    <Spare No.>

ITEM # 108                      HOSE REEL

Quantity:                      One (1)

Manufacturer:                T&S Brass or equal as approved by the Professional

Model:                        B-7212-U01WS2E

One (1) Model B-7212-U01WS2E Hose Reel Assembly, open, 3/8" x 15 ft. hose with high flow blue spray valve with swivel (EB-0107), 8" wall mount mixing faucet, quarter-turn Eterna compression cartridges with spring checks, lever handles with color coated indexes, (2) 1/2" NPT in-line check valves, continuous pressure vacuum breaker, 3/8" NPT x 36" flexible water hose connector with stainless steel quick disconnect, ratcheting system, multi-fit bracket & adjustable hose bumper, (2) 2-3/8" wall brackets, EasyInstall 16" & rigid 40" risers, stainless steel hose reel, polished chrome-plated brass faucet body, 1/2" NPT female inlets

One (1) 1 year limited warranty, standard

One (1) 1 year limited warranty for hose, standard

One (1) 2 year limited warranty for hose reel, standard

One (1) Model MV-2516-24 Water Gun, rear trigger, 5/16" orifice, without coupling, stainless steel, blue rubber cover

ITEM # 109                      SPARE NO.    <Spare No.>

ITEM # 110                      REACH-IN REFRIGERATOR    <By Owner>

Quantity:                      One (1)

Manufacturer:                Continental Refrigerator or equal as approved by the Professional

Model:                        D2REN

One (1) Model D2REN Designer Line Wide Refrigerator, reach-in, 57"W, two-section, self-contained refrigeration, aluminum exterior & interior, stainless steel front, standard depth cabinet, wide full-height stainless steel doors, cylinder locks, electronic control with digital display, hi-low alarm, unit comes standard with expansion valve, 6" stainless steel legs, R290 Hydrocarbon Refrigerant, 1/3 HP, cETLus, NSF, Made in USA, ENERGY STAR®

One (1) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part

One (1) 115v/60/1-ph, 6.9 amps, cord, NEMA 5-15P, standard

One (1) Both doors hinged on left

One (1) Model 50205-4 Casters, swivel, with brakes (4" diameter rubber tires) set of 4 (5" height)

ITEM # 111                      WORK TABLE, STAINLESS STEEL TOP

Quantity:                      One (1)

Manufacturer:                Eagle Group or equal as approved by the Professional

Model:                        T30108STEM-BS

One (1) Model T30108STEM-BS Spec-Master® Marine Series Work Table, 108"W x 30"D, 4-1/2"H backsplash, 14/300 series stainless steel top, box marine edge on front & sides, Uni-Lok®

gusset system, stainless steel crossrails on side & rear, (6) stainless steel legs & adjustable bullet feet, NSF

ITEM # 112                      SHELVING, WALL MOUNTED

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                        WS1596-14/3

One (1) Model WS1596-14/3 Shelf, wall-mounted, 96"W x 12"D, rolled frontedge, 1-1/2"H up-turn on sides & rear, includes stainless steel mounting brackets stud welded to shelf, 14/304 stainless steel construction, NSF

One (1) Change shelf width to 15", replace 12 in model number with 15

ITEM # 113                      SHELVING, WITH METAL FRAME    <By Owner>

Quantity:                      Five (5)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                        MQ2454G

Five (5) Model MQ2454G MetroMax® Q Shelf, 54"W x 24"D, removable open grid polymer shelf mats on an epoxy coated steel frame with quick adjust corner releases, (4) wedge connectors, Microban® antimicrobial product protection, 600 lb. capacity per shelf, NSF

(THESE MAKE UP ONE (1) MOBILE SHELVING UNIT WITH FIVE SHELVES EACH)

Four (4) Model MX86UP Polymer trilobal post (compatible with MetroMax® i, MetroMax® 4, MetroMax® Q), 85-3/16"H, for use with stem casters, adjusts at 1" increments, corrosion proof all polymer construction with built in Microban® antimicrobial product protection

Two (2) Model 5MPXGSA Stainless Steel Cart-Washable Stem Caster, swivel, flat polyurethane wheel tread, 300 lb. capacity. NSF listed (for use with all MetroMax posts & shelves)

Two (2) Model 5MPBXGSA Stainless Steel Cart-Washable Stem Caster, brake, flat polyurethane wheel tread, 300 lb. capacity, NSF (for use with all MetroMax posts & shelves)

ITEM # 114                      BEVERAGE COUNTER

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                        BEV30144SEM-10BS/R

One (1) Model BEV30144SEM-10BS/R Spec-Master® Marine Series Beverage Counter, 144"W x 30"D, 14/304 stainless steel top, 10"H backsplash with NEMA 5-20R receptacle (120v/1-ph, 20A), box marine edge on front & sides, sink on right with deck mount faucet, urn trough on left with louvered insert & 1-1/2" drain, (4) hinged doors on front, 8" OC rack slides for (6) glass racks, Uni-Lok® gusset system, includes Z-clip wall mounting brakcet, stainless steel cabinet, legs, & adjustable bullet feet, NSF

(PROVIDE CUTOUT/REINFORCEMENT FOR ITEM 118 - ICE/WATER STATION WHERE SHOWN ON PLAN)

ITEM # 115                      FAUCET INCLUDED WITH ITEM 114    <Included>

ITEM # 116                    MILK DISPENSER   <By Owner>

Quantity:                    One (1)  
Manufacturer:              Silver King or equal as approved by the Professional  
Model:                      SKMAJ2-C4

One (1) Model SKMAJ2-C4 Majestic Series Milk Dispenser, refrigerated, double spring-loaded valve, 12 gallon capacity, (accommodates 3, 5, or 6 gallon bags), includes (2) platforms, (2) crates, stainless steel interior & exterior with galvanized bottom, bottom-mounted self-contained refrigeration, 134A, 1/10 HP, 115v/60/1-ph, 1.4 amps, cord & NEMA 5-15P, cETLus, ETL-Sanitation

One (1) 1 year parts & labor warranty, 5 year compressor (part only) warranty, 90 days replacement parts, standard

ITEM # 117                    JUICE DISPENSER - NIKEC   <By Owner>

ITEM # 118                    ICE & WATER DISPENSER

Quantity:                    One (1)  
Manufacturer:              Randell or equal as approved by the Professional  
Model:                      9515

One (1) Model 9515 Drop-In Ice & Water Unit, 21-7/8"W x 15-1/2"D, 43 lb. insulated ice chest, stainless steel top & coved corner interior, removable stainless steel cover, glass filler with drain trough, Made in USA

One (1) Model DIFILPTI Pitcher Filler, in lieu of glass filler

One (1) Everpure Model EV927560 QL2 Water Filtration System, QL2-OCS<sup>2</sup>, Single, (1) OCS<sup>2</sup> Precoat primary filtration cartridge, reduces chlorine, taste and odor, (1) self-contained scale inhibitor feed, 1,500 gallons, 0.5 gpm, 0.5 micron, 3/8" inlet, 3/8" outlet, NSF 42 & 53 (EV927560)

ITEM # 119                    TEA BREWER   <By Owner>

ITEM # 120                    COFFEE URN/BREWER   <By Owner>

ITEM # 121                    SPARE NO.   <Spare No.>

ITEM # 122                    SPARE NO.   <Spare No.>

ITEM # 123                    FLATWARE & TRAY CART   <By Owner>

Quantity:                    One (1)  
Manufacturer:              Low Temp Industries or equal as approved by the Professional  
Model:                      36-RTE/RTS

One (1) Model 36-RTE/RTS SpecLine Tray Stand, step down, 36-3/8"W x 30"D x 36"H, 14ga stainless steel top, specify base, 5" casters all with brakes, UL, cUL, UL EPH

One (1) Molded fiberglass

One (1) Standard color

One (1) (LL) Silverware wells (4" cut-out complete with nylon cylinders)



One (1) (AA) Line up lock  
One (1) 5" Casters (standard)

ITEM # 124                      HOT FOOD SERVING COUNTER / TABLE    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Low Temp Industries or equal as approved by the Professional  
Model:                        84-EFS5-CPA

One (1) Model 84-EFS5-CPA SpecLine Hot Food Serving Counter, 84-3/8"W x 30"D x 36"H, (5) 12" x 20" hot wells, wet & dry operation, individual digital controls, 14ga stainless steel top, specify base, rear storage openings, (6) 5" locking swivel casters, UL, cUL, UL EPH Classified  
One (1) 120v/60/1-ph, 31.3 amps, 3755 watts, NEMA 5-30P - Base unit voltage subject to change based on options  
One (1) Molded fiberglass  
One (1) Standard color  
One (1) (AA) Line up lock  
One (1) (A) Solid tray slide with (2) inverted "V" ridges on surface, stainless steel  
One (1) (GCG) Sloped front protector, glass clips, glass top shelf  
One (1) Tempered glass  
One (1) (U) Infrared heat lamp strip with lights  
One (1) (Y) Hinged door  
One (1) 5" Casters (standard)

ITEM # 125                      SERVING COUNTER, COLD FOOD    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Low Temp Industries or equal as approved by the Professional  
Model:                        84-CFMA

One (1) Model 84-CFMA SpecLine TempestAir Cold Serving Counter, 84-3/8"W x 30"D x 36"H, 14ga stainless steel top with (1) 64"W x 20"D x 9" deep stainless steel cold well, accommodates (5) full size 6" deep food pans, forced air refrigeration with (2) fans, specify base, rear storage opening, 5" casters all with brakes, 1/3 HP, UL, cUL, UL EPH  
One (1) 120v/60/1-ph, 8.5 amps, NEMA 5-15P - Base unit voltage subject to change based on options  
One (1) Molded fiberglass  
One (1) Standard color  
One (1) (AA) Line up lock  
One (1) (A) Solid tray slide with (2) inverted "V" ridges on surface, stainless steel  
One (1) (GCG) Sloped front protector, glass clips, glass top shelf  
One (1) Tempered glass  
One (1) (Y) Hinged door  
One (1) 5" Casters (standard)

ITEM # 126                      SERVING COUNTER, UTILITY    <By Owner>

Quantity:                      One (1)  
Manufacturer:                Low Temp Industries or equal as approved by the Professional  
Model:                        84-ST

One (1) Model 84-ST SpecLine Solid Utility Food Table, 14ga stainless steel top, 84-3/8"W x 30"D x 36"H, specify base, rear storage openings, 5" casters all with brakes, UL, cUL, UL EPH

One (1) Molded fiberglass  
 One (1) Standard color  
 One (1) (AA) Line up lock  
 One (1) (A) Solid tray slide with (2) inverted "V" ridges on surface, stainless steel  
 One (1) (GCG) Sloped front protector, glass clips, glass top shelf  
 One (1) Tempered glass  
 One (1) (Y) Hinged door  
 One (1) 5" Casters (standard)

ITEM # 127                      SPARE NO.    <Spare No.>

ITEM # 128                      SPARE NO.    <Spare No.>

ITEM # 129                      MOBILE REFRIGERATOR CABINET    <By Owner>

Quantity:                      One (1)  
 Manufacturer:                Metro or equal as approved by the Professional  
 Model:                         C5R9-SB

One (1) Model C5R9-SB C5™ R-Series Refrigeration Armour™ heavy-duty insulated mobile refrigerator, full height, adjustable bottom load slides 3.3" OC (adjustable on 1.65" increments), all-in-one refrigeration cassette with R134a refrigerant & automatic defrost (13) 18" x 26" or (26) 12" x 20" x 2-1/2" pan capacity, 304 stainless steel, foamed-in-place polyurethane insulation, operating temperature range 33°F to 40°F (factory pre-set at 35°F), 6" casters, 120V/60/1, 5.0 amps, NEMA 5-15P, cULus, NSF

ITEM # 130                      MOBILE HEATED CABINET    <By Owner>

Quantity:                      One (1)  
 Manufacturer:                Metro or equal as approved by the Professional  
 Model:                         TC90S

One (1) Model TC90S Half-Height Heated Cabinet, Reach-in, One-Section, stainless steel interior, aluminum exterior, standard depth cabinet, narrow full-height doors, with exterior dial-type thermometer, without bumper, pan capacity (9) 12-3/4 x 20-3/4, 120v/60/1-ph, 950 watts, NEMA 5-15P, cULus, NSF

ITEM # 131-199                      SPARE NO.    <Spare No.>

ITEM # 200                      WIRE SHELIVING    <By Owner>

Quantity:                      Sixty (60)  
 Manufacturer:                Metro or equal as approved by the Professional  
 Model:                         1448NK3

Sixty (60) Model 1448NK3 Super Erecta® Shelf, wire, 48"W x 14"D, Metroseal™ Green epoxy-coated corrosion-resistant finish with Microban® antimicrobial protection, plastic split sleeves are included in each carton, NSF  
 (THESE MAKE UP TWELVE (12) SHELIVING UNITS WITH FIVE SHELVES EACH)

Fourty-Eight (48) Model 86PK3 Super Erecta® SiteSelect™ Post, 86-1/2"H, adjustable leveling bolt, posts are grooved at 1" increments & numbered at 2" increments, double grooved every 8", Metroseal 3 Green epoxy coated corrosion-resistant finish with Microban® antimicrobial protection

Fourty (40) Model 2436NK3 Super Erecta® Shelf, wire, 36"W x 24"D, Metroseal™ Green epoxy-coated corrosion-resistant finish with Microban® antimicrobial protection, plastic split sleeves are included in each carton, NSF

(THESE MAKE UP EIGHT (8) SHELVING UNITS WITH FIVE SHELVES EACH)

Thirty-Two (32) Model 86PK3 Super Erecta® SiteSelect™ Post, 86-1/2"H, adjustable leveling bolt, posts are grooved at 1" increments & numbered at 2" increments, double grooved every 8", Metroseal 3 Green epoxy coated corrosion-resistant finish with Microban® antimicrobial protection

ITEM # 201                      DISH CART / DOLLY    <By Owner>

Quantity:                      Four (4)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                        PCD11A

Four (4) Model PCD11A Poker Chip Dish Dolly, 26-5/8"W x 26-5/8"D x 31-15/16"H, adjustable, dish size 4-1/4" to 11-3/4", removable dividers & towers, two-handed access, recessed handles, 5"Dia. swivel casters with neoprene wheels (2 with brakes), chip-resistant polymer shell with Microban® antimicrobial protection, aesthetic blue, vinyl dust/water splash cover, NSF

ITEM # 202.1                REACH-IN FREEZER    <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                        1FESNHD

Two (2) Model 1FESNHD Extra-Wide Freezer, reach-in, 28-1/2"W, one-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, shallow depth, half-height solid doors, cylinder locks, electronic control with digital display, unit can be adjusted to operate as low as -10°F, hi-low alarm, unit comes standard with expansion valve, electric condensate evaporator, R290 Hydrocarbon refrigerant, 1/2 HP, cETLus, NSF, Made in USA

Two (2) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part

Two (2) 115v/60/1-ph, 7.6 amps, cord, NEMA 5-15P, standard

Two (2) Door hinged on right, standard

Two (2) 5" Casters, standard

ITEM # 202.2                REACH-IN FREEZER    <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                        1FESNHD

Two (2) Model 1FESNHD Extra-Wide Freezer, reach-in, 28-1/2"W, one-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, shallow depth, half-height solid doors, cylinder locks, electronic control with digital display, unit can be adjusted to operate as low as -10°F, hi-low alarm, unit comes standard with expansion valve, electric condensate evaporator, R290 Hydrocarbon refrigerant, 1/2 HP, cETLus, NSF, Made in USA

Two (2) Standard warranty (for the United States & Canada Only): 3 year parts and labor;  
additional 4 year compressor part  
Two (2) 115v/60/1-ph, 7.6 amps, cord, NEMA 5-15P, standard  
Two (2) Door hinged on left  
Two (2) 5" Casters, standard

ITEM # 203 MOBILE REFRIGERATOR CABINET <By Owner>

Quantity: Four (4)  
Manufacturer: Metro or equal as approved by the Professional  
Model: C5R9-SB

Four (4) Model C5R9-SB C5™ R-Series Refrigeration Armour™ heavy-duty insulated mobile refrigerator, full height, adjustable bottom load slides 3.3" OC (adjustable on 1.65" increments), all-in-one refrigeration cassette with R134a refrigerant & automatic defrost (13) 18" x 26" or (26) 12" x 20" x 2-1/2" pan capacity, 304 stainless steel, foamed-in-place polyurethane insulation, operating temperature range 33°F to 40°F (factory pre-set at 35°F), 6" casters, 120V/60/1, 5.0 amps, NEMA 5-15P, cULus, NSF

ITEM # 204 MOBILE HEATED CABINET <By Owner>

Quantity: Four (4)  
Manufacturer: Metro or equal as approved by the Professional  
Model: TC90S

Four (4) Model TC90S Half-Height Heated Cabinet, Reach-in, One-Section, stainless steel interior, aluminum exterior, standard depth cabinet, narrow full-height doors, with exterior dial-type thermometer, without bumper, pan capacity (9) 12-3/4 x 20-3/4, 120v/60/1-ph, 950 watts, NEMA 5-15P, cULus, NSF

ITEM # 205 HAND SINK

Quantity: Six (6)  
Manufacturer: Eagle Group or equal as approved by the Professional  
Model: HSA-10-FKP

Six (6) Model HSA-10-FKP Hand Sink, wall mount, 13-1/2" wide x 9-3/4" front-to-back x 6-3/4" deep bowl, 304 stainless steel construction, splash mount gooseneck spout, single knee pedal, skirt, basket drain, deep-drawn seamless design-positive drain, inverted "V" edge, NSF  
Six (6) Model -MG MicroGard™ antimicrobial finish on bowl only- add suffix "-MG" to end of hand sink model number  
Six (6) Model -LRS Left & right side splashes

ITEM # 206 SOAP & TOWEL DISPENSERS - NIKEC <By Owner>

ITEM # 207 HOT FOOD SERVING COUNTER / TABLE <By Owner>

Quantity: Four (4)  
Manufacturer: Eagle Group or equal as approved by the Professional  
Model: SPHT5CB-208

Four (4) Model SPHT5CB-208 Spec-Master® Sealed Well Hot Food Table, electric, 22 gauge stainless steel sliding doors with recessed handle, 79"W x 32-1/4"D x 35-1/2"H, wet or dry operation, (5) 12" x 20" stainless steel sealed wells, individual infinite controls, drain manifold with valve, includes removable poly cutting board, stainless steel dish shelf, 430 stainless steel construction, end panel push bar on right, 4" swivel casters (2 with brakes), 3750 watts, 208v/60/1-ph, 17.2 amps, NEMA 6-30P, NSF, cULus  
Four (4) Model 421505 Flex-Master® Overshelf, for 5-well unit, 79"W x 15"D, posts sold separately, (require (2) pairs of posts) NSF

ITEM # 208                      SPARE NO.    <Spare No.>

ITEM # 209                      WIRE SHELVING    <By Owner>

Quantity:                      (10)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         2454NK3

(10) Model 2454NK3 Super Erecta® Shelf, wire, 54"W x 24"D, Metroseal™ Green epoxy-coated corrosion-resistant finish with Microban® antimicrobial protection, plastic split sleeves are included in each carton, NSF  
(THESE MAKE UP TWO (2) SHELVING UNITS WITH FIVE SHELVES EACH)  
Eight (8) Model 86PK3 Super Erecta® SiteSelect™ Post, 86-1/2"H, adjustable leveling bolt, posts are grooved at 1" increments & numbered at 2" increments, double grooved every 8", Metroseal 3 Green epoxy coated corrosion-resistant finish with Microban® antimicrobial protection

ITEM # 210.1                   SOILED DISHTABLE

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         UDT-4L-14/3

One (1) Model UDT-4L-14/3 Spec-Master® Undercounter Dishtable, dishwasher on left, 48"W x 27-1/2"D x 43-1/2"H overall, 14/304 stainless steel top, 20" x 20" x 5" pre-rinse sink includes basket drain with removable crumb cup, 8"H backsplash, single deck mount faucet hole for pre-rinse, raised rolled rims on front & sides, accommodates 24" (front-to-back) undercounter dishwasher, stainless steel legs & crossrails with adjustable metal feet, adjustable metal feet, NSF  
One (1) Model 606434 Pre-rinse Basket, 17-1/2"W x 19-1/2"L x 2"H, with slide bar, for dishtables, 304 type stainless steel  
One (1) Model 606641 Slanted Rack Shelf, solid, wall mount, 21"W x 19-3/4"D x 21-3/8"H, stainless steel wall brackets, stainless steel drip tube (right side), 16/304 stainless steel construction

ITEM # 210.2                   SOILED DISHTABLE

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         UDT-4R-14/3

One (1) Model UDT-4R-14/3 Spec-Master® Soiled Dishtable, undercounter, dishwasher on right, 48"W x 27-1/2"D x 43-1/2"H overall, 14/304 stainless steel top, 20" x 20" x 5" pre-rinse sink

includes basket drain with removable crumb cup, 8"H backsplash, single deck mount faucet hole for pre-rinse, raised rolled rims on front & sides, accommodates 24" (front-to-back) undercounter dishwasher, stainless steel legs & crossrails with adjustable metal feet, adjustable metal feet, NSF

One (1) Model 606434 Pre-rinse Basket, 17-1/2"W x 19-1/2"L x 2"H, with slide bar, for dishtables, 304 type stainless steel

One (1) Model 606641 Slanted Rack Shelf, solid, wall mount, 21"W x 19-3/4"D x 21-3/8"H, stainless steel wall brackets, stainless steel drip tube (right side), 16/304 stainless steel construction

ITEM # 211                      PRE-RINSE FAUCET ASSEMBLY

Quantity:                      Two (2)  
Manufacturer:                T&S Brass or equal as approved by the Professional  
Model:                         B-0113-BR

Two (2) Model B-0113-BR EasyInstall Pre-Rinse Unit, spring action gooseneck & hole base faucet, 1.15 GPM spray valve (B-0107), 44" flexible stainless steel hose, 24" riser, 18" flexible supply lines, 6" wall bracket, quarter-turn Eterna cartridges, low lead, 2019 DOE PRSV - Class II

ITEM # 212                      DISHWASHER, UNDERCOUNTER

Quantity:                      Two (2)  
Manufacturer:                Hobart or equal as approved by the Professional  
Model:                         CUH-1

Two (2) Model CUH-1 Centerline Dishwasher, undercounter, 22 11/16"W x 24"D x 32 5/16"H, high temperature sanitizing, (24) racks/hr, fresh water rinse, .84 gal/rack, delime notification and cycle, service diagnostics with error notifications, soft start, detergent & rinse aid pumps, 208-240v/60/1-ph, 24.2-27.5 amps, ships with (1) peg rack and (1) combo rack, cULus, NSF (Pricing options available, please contact your local rep for more information) (NET price shown)

Two (2) Standard warranty - 1-Year parts, labor & travel time during normal working hours within the USA

Two (2) Model PWRCORD-30A240V1P Power Cord Kit, 208-240v/60/1-ph, NEMA 6-30P plug included (net)

Four (4) Model DISHRAK-PEG20 Peg rack

Four (4) Model DISHRAK-COM20 Combination rack

ITEM # 213                      (2) DISH SORT WALL SHELF INCLUDED WITH ITEM 210    <Included>

ITEM # 214                      RACK DOLLY    <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         DH2020N

Two (2) Model DH2020N Dish Rack Dolly, platform design, single stack, designed for 20" x 20" racks, tubular steel handle, 5" Heavy duty, non-marking, resilient tread swivel casters, bumper corners, all aluminum construction, with handle

ITEM # 215                      SPARE NO.    <Spare No.>

ITEM # 216                      SPARE NO.    <Spare No.>

ITEM # 217                      MILLWORK BEVERAGE COUNTER - NIKEC    <By G/C>

ITEM # 218                      DROP-IN DUMP SINK

Quantity:                      Four (4)  
Manufacturer:                BK Resources or equal as approved by the Professional  
Model:                         DDI-1014524S-P-G

Four (4) Model DDI-1014524S-P-G Deep Drawn Drop-In Sink, one compartment, 12-5/8"W x 18-1/2"D x 10-1/2"H overall size, (1) 10" wide x 14" front-to-back x 5" deep compartment, includes deck mount faucet (BKD-5G-G), 6"H splashes on sides & rear, includes basket drain (BKDR-4), 18/304 stainless steel construction, lead free, NSF

ITEM # 219                      (4) COFFEE BREWERS - NIKEC    <By Vendor>

ITEM # 220                      (4) MILK COOLERS - NIKEC    <By Vendor>

ITEM # 221                      (4) JUICE DISPENSERS - NIKEC    <By Vendor>

ITEM # 222                      NUGGET ICE MAKER/WATER & ICE DISPENSER

Quantity:                      Four (4)  
Manufacturer:                Manitowoc or equal as approved by the Professional  
Model:                         RNK0320AZ

Four (4) Model RNK0320AZ Ice Maker, nugget-style, air-cooled, self-contained condenser, 22"W x 23-5/8"D x 26"H, production capacity up to 308 lb/24 hours at 70°/50° (236 lb AHRI certified at 90°/70°), bite size nugget, high-load stainless steel bearings, stainless steel finish, 1/2 HP, R-404A, ETL-Sanitation, cETLus

Four (4) Model WARRANTY-RF/RFS/RNS 3 year parts & labor (Machine), 5 parts & 3 years labor (Compressor), standard

Four (4) (-251) 230v/50/1-ph, CE

Four (4) Model AR-10000-P Arctic Pure® Plus Primary Water Filter Assembly, includes head, shroud, hardware, mounting assembly, & (1) filter cartridge, 15,000 gallon capacity, 0-600 lbs./ice per day

Four (4) Model WARRANTY-ARCPURE 3 year parts & labor warranty on cap, housing, hardware, & mounting assembly (does not refer to filter cartridge), standard

Four (4) Model S-150-2704811 Ice Dispenser with Water Valve, countertop, 23"W x 31-1/8"D x 34-7/8"H, 150 lb. ice storage capacity, Rocking Chute™ ice dispensing, lever activated, includes: lighted merchandiser with "ice" graphics, leg kit and drain kit, stainless steel exterior, cUL, UL, NSF (apply Multiplex discount to this item)

Four (4) 1 year parts & labor warranty, standard

Four (4) 120v/60/1-ph, standard

Four (4) Model SL26-020000245 Bin Adapter, required for 22" cuber or nugget ice machine on an S-150 ice dispenser (apply Multiplex discount to this item)

Four (4) NOTE: Agitator and ice level management kit required for use with nugget ice machines on S-Dispensers

Four (4) Model K00488 Dispenser Thermostat Kit, reduces ice machine overfill & condensation problems, for use with nugget machines mounted to soda dispensers

ITEM # 223                      DROP-IN HAND SINK

Quantity:                      Four (4)  
Manufacturer:                BK Resources or equal as approved by the Professional  
Model:                         DDI-1014524S-P-G

Four (4) Model DDI-1014524S-P-G Deep Drawn Drop-In Sink, one compartment, 12-5/8"W x 18-1/2"D x 10-1/2"H overall size, (1) 10" wide x 14" front-to-back x 5" deep compartment, includes deck mount faucet (BKD-5G-G), 6"H splashes on sides & rear, includes basket drain (BKDR-4), 18/304 stainless steel construction, lead free, NSF

ITEM # 224                      UNDERCOUNTER REFRIGERATOR    <By Owner>

Quantity:                      Four (4)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                         SW32N-U

Four (4) Model SW32N-U Undercounter Refrigerator, 32"W, 9.0 cu ft capacity, one-section, (1) field rehingeable door, stainless steel front, top & end panels, aluminum interior, 1-3/8" diameter plate casters, front breathing, rear-mounted self-contained refrigeration, R290 Hydrocarbon refrigerant, 1/5 hp, cETLus, Made in USA, ENERGY STAR®  
Four (4) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part  
Four (4) 115v/60/1-ph, 2.46 amps, cord, NEMA 5-15P, standard  
Four (4) Door hinged on right, standard  
Four (4) Cylinder lock (per door/drawer)

ITEM # 225                      RACK DOLLY    <By Owner>

Quantity:                      Eight (8)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         DH2020N

Eight (8) Model DH2020N Dish Rack Dolly, platform design, single stack, designed for 20" x 20" racks, tubular steel handle, 5" Heavy duty, non-marking, resilient tread swivel casters, bumper corners, all aluminum construction, with handle

ITEM # 300                      WIRE SHELVING    <By Owner>

Quantity:                      Twenty (20)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         1436NK3

Twenty (20) Model 1436NK3 Super Erecta® Shelf, wire, 36"W x 14"D, Metroseal™ Green epoxy-coated corrosion-resistant finish with Microban® antimicrobial protection, plastic split sleeves are included in each carton, NSF  
(THESE MAKE UP FOUR (4) SHELVING UNITS WITH FIVE SHELVES EACH)  
Sixteen (16) Model 86PK3 Super Erecta® SiteSelect™ Post, 86-1/2"H, adjustable leveling bolt, posts are grooved at 1" increments & numbered at 2" increments, double grooved every 8",



Metroseal 3 Green epoxy coated corrosion-resistant finish with Microban® antimicrobial protection

Sixty (60) Model 1448NK3 Super Erecta® Shelf, wire, 48"W x 14"D, Metroseal™ Green epoxy-coated corrosion-resistant finish with Microban® antimicrobial protection, plastic split sleeves are included in each carton, NSF

(THESE MAKE UP TWELVE (12) SHELVING UNITS WITH FIVE SHELVES EACH)

Forty-Eight (48) Model 86PK3 Super Erecta® SiteSelect™ Post, 86-1/2"H, adjustable leveling bolt, posts are grooved at 1" increments & numbered at 2" increments, double grooved every 8", Metroseal 3 Green epoxy coated corrosion-resistant finish with Microban® antimicrobial protection

Forty (40) Model 2436NK3 Super Erecta® Shelf, wire, 36"W x 24"D, Metroseal™ Green epoxy-coated corrosion-resistant finish with Microban® antimicrobial protection, plastic split sleeves are included in each carton, NSF

(THESE MAKE UP EIGHT (8) SHELVING UNITS WITH FIVE SHELVES EACH)

Thirty-Two (32) Model 86PK3 Super Erecta® SiteSelect™ Post, 86-1/2"H, adjustable leveling bolt, posts are grooved at 1" increments & numbered at 2" increments, double grooved every 8", Metroseal 3 Green epoxy coated corrosion-resistant finish with Microban® antimicrobial protection

ITEM # 301                      RACK DOLLY   <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         DH2020N

Two (2) Model DH2020N Dish Rack Dolly, platform design, single stack, designed for 20" x 20" racks, tubular steel handle, 5" Heavy duty, non-marking, resilient tread swivel casters, bumper corners, all aluminum construction, with handle

ITEM # 302.1                REACH-IN FREEZER   <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                         1FESNHD

Two (2) Model 1FESNHD Extra-Wide Freezer, reach-in, 28-1/2"W, one-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, shallow depth, half-height solid doors, cylinder locks, electronic control with digital display, unit can be adjusted to operate as low as -10°F, hi-low alarm, unit comes standard with expansion valve, electric condensate evaporator, R290 Hydrocarbon refrigerant, 1/2 HP, cETLus, NSF, Made in USA

Two (2) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part

Two (2) 115v/60/1-ph, 7.6 amps, cord, NEMA 5-15P, standard

Two (2) Door hinged on right, standard

Two (2) 5" Casters, standard

ITEM # 302.2                REACH-IN FREEZER   <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                         1FESNHD

Two (2) Model 1FESNHD Extra-Wide Freezer, reach-in, 28-1/2"W, one-section, self-contained refrigeration, stainless steel front, aluminum interior & ends, shallow depth, half-height solid doors, cylinder locks, electronic control with digital display, unit can be adjusted to operate as low as -10°F, hi-low alarm, unit comes standard with expansion valve, electric condensate evaporator, R290 Hydrocarbon refrigerant, 1/2 HP, cETLus, NSF, Made in USA  
 Two (2) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part  
 Two (2) 115v/60/1-ph, 7.6 amps, cord, NEMA 5-15P, standard  
 Two (2) Door hinged on left  
 Two (2) 5" Casters, standard

ITEM # 303 MOBILE REFRIGERATOR CABINET <By Owner>

Quantity: Four (4)  
 Manufacturer: Metro or equal as approved by the Professional  
 Model: C5R9-SB

Four (4) Model C5R9-SB C5™ R-Series Refrigeration Armour™ heavy-duty insulated mobile refrigerator, full height, adjustable bottom load slides 3.3" OC (adjustable on 1.65" increments), all-in-one refrigeration cassette with R134a refrigerant & automatic defrost (13) 18" x 26" or (26) 12" x 20" x 2-1/2" pan capacity, 304 stainless steel, foamed-in-place polyurethane insulation, operating temperature range 33°F to 40°F (factory pre-set at 35°F), 6" casters, 120V/60/1, 5.0 amps, NEMA 5-15P, cULus, NSF

ITEM # 304 MOBILE HEATED CABINET <By Owner>

Quantity: Four (4)  
 Manufacturer: Metro or equal as approved by the Professional  
 Model: TC90S

Four (4) Model TC90S Half-Height Heated Cabinet, Reach-in, One-Section, stainless steel interior, aluminum exterior, standard depth cabinet, narrow full-height doors, with exterior dial-type thermometer, without bumper, pan capacity (9) 12-3/4 x 20-3/4, 120v/60/1-ph, 950 watts, NEMA 5-15P, cULus, NSF

ITEM # 305 HAND SINK

Quantity: Six (6)  
 Manufacturer: Eagle Group or equal as approved by the Professional  
 Model: HSA-10-FKP

Six (6) Model HSA-10-FKP Hand Sink, wall mount, 13-1/2" wide x 9-3/4" front-to-back x 6-3/4" deep bowl, 304 stainless steel construction, splash mount gooseneck spout, single knee pedal, skirt, basket drain, deep-drawn seamless design-positive drain, inverted "V" edge, NSF  
 Six (6) Model -MG MicroGard™ antimicrobial finish on bowl only- add suffix "-MG" to end of hand sink model number  
 Six (6) Model -LRS Left & right side splashes

ITEM # 306 SOAP & TOWEL DISPENSERS <By Owner>

ITEM # 307                      HOT FOOD SERVING COUNTER / TABLE    <By Owner>

Quantity:                      Four (4)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         SPHT5CB-208

Four (4) Model SPHT5CB-208 Spec-Master® Sealed Well Hot Food Table, electric, 22 gauge stainless steel sliding doors with recessed handle, 79"W x 32-1/4"D x 35-1/2"H, wet or dry operation, (5) 12" x 20" stainless steel sealed wells, individual infinite controls, drain manifold with valve, includes removable poly cutting board, stainless steel dish shelf, 430 stainless steel construction, end panel push bar on right, 4" swivel casters (2 with brakes), 3750 watts, 208v/60/1-ph, 17.2 amps, NEMA 6-30P, NSF, cULus  
Four (4) Model 421505 Flex-Master® Overshelf, for 5-well unit, 79"W x 15"D, posts sold separately, (require (2) pairs of posts) NSF

ITEM # 308                      SPARE NO.    <Spare No.>

ITEM # 309                      SPARE NO.    <Spare No.>

ITEM # 310.1                    SOILED DISHTABLE

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         UDT-4L-14/3

One (1) Model UDT-4L-14/3 Spec-Master® Undercounter Dishtable, dishwasher on left, 48"W x 27-1/2"D x 43-1/2"H overall, 14/304 stainless steel top, 20" x 20" x 5" pre-rinse sink includes basket drain with removable crumb cup, 8"H backsplash, single deck mount faucet hole for pre-rinse, raised rolled rims on front & sides, accommodates 24" (front-to-back) undercounter dishwasher, stainless steel legs & crossrails with adjustable metal feet, adjustable metal feet, NSF  
One (1) Model 606434 Pre-rinse Basket, 17-1/2"W x 19-1/2"L x 2"H, with slide bar, for dishtables, 304 type stainless steel  
One (1) Model 606641 Slanted Rack Shelf, solid, wall mount, 21"W x 19-3/4"D x 21-3/8"H, stainless steel wall brackets, stainless steel drip tube (right side), 16/304 stainless steel construction

ITEM # 310.2                    SOILED DISHTABLE

Quantity:                      One (1)  
Manufacturer:                Eagle Group or equal as approved by the Professional  
Model:                         UDT-4R-14/3

One (1) Model UDT-4R-14/3 Spec-Master® Soiled Dishtable, undercounter, dishwasher on right, 48"W x 27-1/2"D x 43-1/2"H overall, 14/304 stainless steel top, 20" x 20" x 5" pre-rinse sink includes basket drain with removable crumb cup, 8"H backsplash, single deck mount faucet hole for pre-rinse, raised rolled rims on front & sides, accommodates 24" (front-to-back) undercounter dishwasher, stainless steel legs & crossrails with adjustable metal feet, adjustable metal feet, NSF  
One (1) Model 606434 Pre-rinse Basket, 17-1/2"W x 19-1/2"L x 2"H, with slide bar, for dishtables, 304 type stainless steel

One (1) Model 606641 Slanted Rack Shelf, solid, wall mount, 21"W x 19-3/4"D x 21-3/8"H, stainless steel wall brackets, stainless steel drip tube (right side), 16/304 stainless steel construction

ITEM # 311                      PRE-RINSE FAUCET ASSEMBLY

Quantity:                      Two (2)  
Manufacturer:                T&S Brass or equal as approved by the Professional  
Model:                         B-0113-BR

Two (2) Model B-0113-BR EasyInstall Pre-Rinse Unit, spring action gooseneck & hole base faucet, 1.15 GPM spray valve (B-0107), 44" flexible stainless steel hose, 24" riser, 18" flexible supply lines, 6" wall bracket, quarter-turn Eterna cartridges, low lead, 2019 DOE PRSV - Class II

ITEM # 312                      DISHWASHER, UNDERCOUNTER

Quantity:                      Two (2)  
Manufacturer:                Hobart or equal as approved by the Professional  
Model:                         CUH-1

Two (2) Model CUH-1 Centerline Dishwasher, undercounter, 22 11/16"W x 24"D x 32 5/16"H, high temperature sanitizing, (24) racks/hr, fresh water rinse, .84 gal/rack, delime notification and cycle, service diagnostics with error notifications, soft start, detergent & rinse aid pumps, 208-240v/60/1-ph, 24.2-27.5 amps, ships with (1) peg rack and (1) combo rack, cULus, NSF (Pricing options available, please contact your local rep for more information) (NET price shown)

Two (2) Standard warranty - 1-Year parts, labor & travel time during normal working hours within the USA

Two (2) Model PWRCORD-30A240V1P Power Cord Kit, 208-240v/60/1-ph, NEMA 6-30P plug included (net)

Four (4) Model DISHRAK-PEG20 Peg rack

Four (4) Model DISHRAK-COM20 Combination rack

ITEM # 313                      (2) DISH SORT WALL SHELF INCLUDED WITH ITEM 210    <Included>

ITEM # 314                      RACK DOLLY    <By Owner>

Quantity:                      Two (2)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         DH2020N

Two (2) Model DH2020N Dish Rack Dolly, platform design, single stack, designed for 20" x 20" racks, tubular steel handle, 5" Heavy duty, non-marking, resilient tread swivel casters, bumper corners, all aluminum construction, with handle

ITEM # 315                      SPARE NO.    <Spare No.>

ITEM # 316                      SPARE NO.    <Spare No.>

ITEM # 317 (4) MILLWORK BEVERAGE COUNTERS - NIKEC <By G/C>

ITEM # 318 DROP-IN DUMP SINK

Quantity: Four (4)  
Manufacturer: BK Resources or equal as approved by the Professional  
Model: DDI-1014524S-P-G

Four (4) Model DDI-1014524S-P-G Deep Drawn Drop-In Sink, one compartment, 12-5/8"W x 18-1/2"D x 10-1/2"H overall size, (1) 10" wide x 14" front-to-back x 5" deep compartment, includes deck mount faucet (BKD-5G-G), 6"H splashes on sides & rear, includes basket drain (BKDR-4), 18/304 stainless steel construction, lead free, NSF

ITEM # 319 (4) COFFEE BREWERS - NIKEC <By Vendor>

ITEM # 320 (4) MILK COOLERS - NIKEC <By Vendor>

ITEM # 321 (4) JUICE DISPENSERS - NIKEC <By Vendor>

ITEM # 322 NUGGET ICE MAKER/ICE-WATER DISPENSER

Quantity: Four (4)  
Manufacturer: Manitowoc or equal as approved by the Professional  
Model: RNK0320AZ

Four (4) Model RNK0320AZ Ice Maker, nugget-style, air-cooled, self-contained condenser, 22"W x 23-5/8"D x 26"H, production capacity up to 308 lb/24 hours at 70°/50° (236 lb AHRI certified at 90°/70°), bite size nugget, high-load stainless steel bearings, stainless steel finish, 1/2 HP, R-404A, ETL-Sanitation, cETLus

Four (4) Model WARRANTY-RF/RFS/RNS 3 year parts & labor (Machine), 5 parts & 3 years labor (Compressor), standard

Four (4) (-251) 230v/50/1-ph, CE

Four (4) Model AR-10000-P Arctic Pure® Plus Primary Water Filter Assembly, includes head, shroud, hardware, mounting assembly, & (1) filter cartridge, 15,000 gallon capacity, 0-600 lbs./ice per day

Four (4) Model WARRANTY-ARCPURE 3 year parts & labor warranty on cap, housing, hardware, & mounting assembly (does not refer to filter cartridge), standard

Four (4) Model S-150-2704811 Ice Dispenser with Water Valve, countertop, 23"W x 31-1/8"D x 34-7/8"H, 150 lb. ice storage capacity, Rocking Chute™ ice dispensing, lever activated, includes: lighted merchandiser with "ice" graphics, leg kit and drain kit, stainless steel exterior, cUL, UL, NSF (apply Multiplex discount to this item)

Four (4) 1 year parts & labor warranty, standard

Four (4) 120v/60/1-ph, standard

Four (4) Model SL26-020000245 Bin Adapter, required for 22" cuber or nugget ice machine on an S-150 ice dispenser (apply Multiplex discount to this item)

Four (4) NOTE: Agitator and ice level management kit required for use with nugget ice machines on S-Dispensers

Four (4) Model K00488 Dispenser Thermostat Kit, reduces ice machine overfill & condensation problems, for use with nugget machines mounted to soda dispensers

ITEM # 323                      DROP-IN HAND SINK

Quantity:                      Four (4)  
Manufacturer:                BK Resources or equal as approved by the Professional  
Model:                         DDI-1014524S-P-G

Four (4) Model DDI-1014524S-P-G Deep Drawn Drop-In Sink, one compartment, 12-5/8"W x 18-1/2"D x 10-1/2"H overall size, (1) 10" wide x 14" front-to-back x 5" deep compartment, includes deck mount faucet (BKD-5G-G), 6"H splashes on sides & rear, includes basket drain (BKDR-4), 18/304 stainless steel construction, lead free, NSF

ITEM # 324                      UNDERCOUNTER REFRIGERATOR    <By Owner>

Quantity:                      Four (4)  
Manufacturer:                Continental Refrigerator or equal as approved by the Professional  
Model:                         SW32N-U

Four (4) Model SW32N-U Undercounter Refrigerator, 32"W, 9.0 cu ft capacity, one-section, (1) field rehingeable door, stainless steel front, top & end panels, aluminum interior, 1-3/8" diameter plate casters, front breathing, rear-mounted self-contained refrigeration, R290 Hydrocarbon refrigerant, 1/5 hp, cETLus, Made in USA, ENERGY STAR®  
Four (4) Standard warranty (for the United States & Canada Only): 3 year parts and labor; additional 4 year compressor part  
Four (4) 115v/60/1-ph, 2.46 amps, cord, NEMA 5-15P, standard  
Four (4) Door hinged on right, standard  
Four (4) Cylinder lock (per door/drawer)

ITEM # 325                      RACK DOLLY    <By Owner>

Quantity:                      Eight (8)  
Manufacturer:                Metro or equal as approved by the Professional  
Model:                         DH2020N

Eight (8) Model DH2020N Dish Rack Dolly, platform design, single stack, designed for 20" x 20" racks, tubular steel handle, 5" Heavy duty, non-marking, resilient tread swivel casters, bumper corners, all aluminum construction, with handle

**End of Section 114000**

## SECTION 284621.11

### ADDRESSABLE FIRE-ALARM SYSTEMS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, and Section 260000 "General Requirements for Electrical," apply to this Section.

##### 1.2 SUMMARY

###### A. Section Includes:

1. Addressable fire-alarm system.
2. Fire-alarm control panel (FACP).
3. Manual fire-alarm boxes.
4. System smoke detectors.
5. Duct smoke detectors.
6. Carbon monoxide detectors.
7. Heat detectors.
8. Fire-alarm notification appliances.
9. Fire-alarm graphic annunciator panel.
10. Fire-alarm addressable interface devices.
11. Digital alarm communicator transmitters (DACTs).

###### B. Related Requirements:

1. Division 08 "Openings."
2. Section 260519 "Low-Voltage Electrical Power Conductors and Cables" or Section 260523 "Control Voltage Electrical Power Cables" for cables and conductors for fire-alarm systems.

##### 1.3 DEFINITIONS

- A. CI: Circuit Integrity Cable
- B. DACT: Digital Alarm Communicator Transmitter.
- C. EAP: Elevator Annunciator Panel
- D. EMT: Electrical Metallic Tubing.
- E. FAAP: Fire Alarm Annunciator Panel.
- F. FACP: Fire Alarm Control Panel.
- G. NAC: Notification Appliance Circuit
- H. VECP: Voice Evacuation Control Panel.
- I. Mode: The terms "Active Mode," "Off Mode," and "Standby Mode" are used as defined in the 2007 Energy Independence and Security Act (EISA).

- J. NICET: National Institute for Certification in Engineering Technologies.
- K. PC: Personal computer.
- L. Voltage Class: For specified circuits and equipment, voltage classes are defined as follows:
  - 1. Control Voltage: Listed and labeled for use in remote-control, signaling, and power-limited circuits supplied by a Class 2 or Class 3 power supply having rated output not greater than 150 V and 5 A, allowing use of alternate wiring methods complying with NFPA 70, Article 725.
  - 2. Low Voltage: Listed and labeled for use in circuits supplied by a Class 1 or other power supply having rated output not greater than 1000 V, requiring use of wiring methods complying with NFPA 70, Article 300, Part I.
- M. Class A Wiring: Circuits arranged and electrically supervised so a single break or single ground fault condition will be indicated by a trouble signal at the fire alarm control panel (FACP) and the circuit will continue to be capable of operation for its intended service in the faulted condition no matter where the break or ground fault condition occurs.

#### 1.4 ACTION SUBMITTALS

- A. Approved Permit Submittal: Submittals must be approved by authorities having jurisdiction prior to submitting them to Architect.
- B. Product Data: For each type of product, including furnished options and accessories.
  - 1. Include construction details, material descriptions, dimensions, profiles, and finishes.
  - 2. Include rated capacities, operating characteristics, and electrical characteristics.
- C. Shop Drawings: For fire-alarm system.
  - 1. Comply with recommendations and requirements in "Documentation" section of "Fundamentals" chapter in NFPA 72.
  - 2. Include plans, elevations, sections, and details, including details of attachments to other Work.
  - 3. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and locations. Indicate conductor sizes, indicate termination locations and requirements, and distinguish between factory and field wiring.
  - 4. Special Systems drawings as required by Section 260000. In addition to the requirements of Section 260000, the drawings shall indicate the candela ratings for each strobe. Strobes shall provide proper candela levels for each space in strict accordance with ADA requirements.
  - 5. Graphic Annunciator panel details as required by authorities having jurisdiction.
  - 6. Detail assembly and support requirements.
  - 7. Include voltage drop calculations for notification-appliance circuits.
  - 8. Include battery-size calculations.
  - 9. Include input/output matrix.
  - 10. Include written statement from manufacturer that equipment and components have been tested as a system and comply with requirements in this Section and in NFPA 72.
  - 11. Include performance parameters and installation details for each detector.
  - 12. Verify that each duct detector is listed for complete range of air velocity, temperature, and humidity possible when air-handling system is operating.
  - 13. Provide program report showing that air-sampling detector pipe layout balances pneumatically within airflow range of air-sampling detector.



14. Provide control wiring diagrams for fire-alarm interface to HVAC; coordinate location of duct smoke detectors and access to them.
    - a. Show critical dimensions that relate to placement and support of sampling tubes, detector housing, and remote status and alarm indicators.
    - b. Show field wiring and equipment required for HVAC unit shutdown on alarm.
    - c. Locate detectors in accordance with manufacturer's written instructions.
    - d. Show air-sampling detector pipe routing.
  15. Include voice/alarm signaling-service equipment rack or console layout, grounding schematic, amplifier power calculation, and single-line connection diagram.
  16. Include floor plans to indicate final outlet locations showing address of each addressable device. Show size and route of cable and conduits and point-to-point wiring diagrams.
- D. Delegated Design Submittal: For notification appliances and smoke and heat detectors, in addition to submittals listed above, indicate compliance with performance requirements and design criteria, including analysis data signed and sealed by qualified professional engineer responsible for their preparation.
1. Drawings showing location of each notification appliance and smoke and heat detector, ratings of each, and installation details as needed to comply with listing conditions of device.
  2. Design Calculations: Calculate requirements for selecting spacing and sensitivity of detection, complying with NFPA 72. Calculate spacing and intensities for strobe signals and sound-pressure levels for audible appliances.
  3. Indicate audible appliances required to produce square wave signal per NFPA 72.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals.
1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following and deliver copies to authorities having jurisdiction:
    - a. Comply with "Records" section of "Inspection, Testing and Maintenance" chapter in NFPA 72.
    - b. Provide "Fire-Alarm and Emergency Communications System Record of Completion Documents" in accordance with "Completion Documents" Article in "Documentation" section of "Fundamentals" chapter in NFPA 72.
    - c. Complete wiring diagrams showing connections between devices and equipment. Each conductor must be numbered at every junction point with indication of origination and termination points.
    - d. Riser diagram.
    - e. Device addresses.
    - f. Air-sampling system sample port locations and modeling program report showing layout meets performance criteria.
    - g. Record copy of site-specific software.
    - h. Provide "Inspection and Testing Form" in accordance with "Inspection, Testing and Maintenance" chapter in NFPA 72, and include the following:
      - 1) Equipment tested.
      - 2) Frequency of testing of installed components.
      - 3) Frequency of inspection of installed components.
      - 4) Requirements and recommendations related to results of maintenance.

5) Manufacturer's user training manuals.

- i. Manufacturer's required maintenance related to system warranty requirements.
- j. Abbreviated operating instructions for mounting at FACP and each annunciator unit.

B. Software and Firmware Operational Documentation:

- 1. Software operating and upgrade manuals.
- 2. Program Software Backup: On USB media.
- 3. Device address list.
- 4. Printout of software application and graphic screens.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Extra Stock Material: Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

- 1. Lamps for Remote Indicating Lamp Units: Quantity equal to 10 percent of amount installed, but no fewer than one unit.
- 2. Lamps for Strobe Units: Quantity equal to 10 percent of amount installed, but no fewer than one unit.
- 3. Smoke Detectors: Quantity equal to 10 percent of amount of each type installed, but no fewer than one unit of each type.
- 4. Detector Bases: Quantity equal to two percent of amount of each type installed, but no fewer than one unit of each type.
- 5. Keys and Tools: One extra set for access to locked or tamper proofed components.
- 6. Audible and Visual Notification Appliances: One of each type installed.
- 7. Fuses: Two of each type installed in system. Provide in box or cabinet with compartments marked with fuse types and sizes.

1.7 QUALITY ASSURANCE

A. Installer Qualifications:

- 1. The system shall be installed under the supervision of the manufacturer's representative who has been trained and certified by the factory. Provide documentation to support this training. The manufacturer's representative must have a satisfactory record of performance, together with sufficient stock of replacement parts, as demonstrated by at least five systems of the same type, similar size and duty.
- 2. Personnel must be trained and certified by manufacturer for installation of units required for this Project.
- 3. Installation must be by personnel certified by NICET as fire-alarm Level IV technician.
- 4. Obtain certification by NRTL in accordance with NFPA 72.
- 5. Licensed or certified by authorities having jurisdiction.

B. Code Compliance:

- 1. Provide a Fire Alarm and Signaling System conforming to the requirements of the latest edition of the following publications:
  - a. International Code Council, Inc. (ICC) Codes :
    - 1) International Building Code (IBC) – 2015 edition

- 2) International Fire Code (IFC)
- 3) International Mechanical Code (IMC)
- b. National Fire Protection Association (NFPA):
  - 1) NFPA 13, "Sprinkler Systems"
  - 2) NFPA 20, "Centrifugal Fire Pumps"
  - 3) NFPA 70, "National Electrical Code" – 2017 edition
  - 4) NFPA 72, "National Fire Alarm and Signaling Code"
  - 5) NFPA 90A, "Standard for the Installation of Air Conditioning and Ventilating Systems"
  - 6) NFPA 101, "Life Safety Code"
  - 7) NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment, 2012 Edition
  - 8) NFPA 1221, "Emergency Services Communications Systems"
- c. American National Standards:
  - 1) ANSI Standards: ANSI/ASME A17.1, "Safety Code for Elevators and Escalators"
  - 2) ANSI/NECA Standard 305-2001, "Standard for Fire Alarm System Job Practices"
- d. Underwriters Laboratories:
  - 1) UL-864 Control Units for Fire Protective Signaling Systems (9th Edition)
  - 2) UL-2572 Control Units for Mass Notification System
  - 3) UL-268 Smoke Detector for Fire Protective Signaling Systems
  - 4) UL-217 Smoke Detectors for Single and Multiple Station
  - 5) UL-521 Heat Detectors for Fire Protective Signaling Systems
  - 6) UL-464 Audible Signaling Appliances
  - 7) UL-1971 Visual Signaling Appliances
  - 8) UL-38 Manually Actuated Signaling Boxes
  - 9) UL-1481 Power Supplies for Fire Protective Signaling Systems
  - 10) Fire Protection Equipment Directory - latest edition.
- e. National Electrical Manufacturers Association (NEMA)
- f. Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)
2. Factory Mutual (FM) Compliance: Provide fire alarm systems and components that are Factory Mutual approved.
3. Compliance with Local Requirements: Comply with the applicable building code, local ordinances, and regulations, and the requirements of the Authority Having Jurisdiction (AHJ).
4. Single-Source Responsibility: Obtain fire alarm components from a single source who assumes responsibility for compatibility for system components.

## 1.8 COORDINATION WITH OTHER TRADES

- A. Coordinate the installation of Fire Alarm equipment, and the interface of the Fire Alarm system with work specified under the following Specification Sections:
  1. Division 08 Section, Openings

2. Division 14 Section, Conveying Equipment
3. Division 21 Section, Fire Suppression
4. Section 230923 – Direct Digital Control (DDC) System for HVAC
5. Section 230993.11 - Sequence of Operations for HVAC DDC
6. Section 275223 - Nurse Call-Code Blue Systems

#### 1.9 UL CERTIFICATION

- A. Provide the services and equipment of a fire alarm service company listed by Underwriters Laboratories, Inc., in its directory as being capable of furnishing the signaling systems specified herein. The fire alarm service company shall be authorized to, and shall issue a certificate for the equipment described herein as its representation that such equipment all connected wiring and devices which form the specified system together with installation and maintenance service are in compliance with requirements established by Underwriters Laboratories, Inc. A UL certificate shall be issued to the Owner with a copy in the Operations and Maintenance Manual.

#### 1.10 INSPECTIONS AND SERVICE CONTRACT

- A. Include in the contract, the services of the fire alarm supplier to provide maintenance of the system during the warranty period. Maintenance shall include a minimum of four (4) site inspections (quarterly) to review the system and components. Review shall include checking system battery backup, initiating device sensitivity, lamp test and all other maintenance procedures as required or recommended by NFPA-72 or by the fire alarm system manufacturer. Written reports shall be submitted to the Owner stating the results of the tests, corrective measures taken for any defects found and list of items or components replaced.
- B. At the end of the warranty period, offer the Owner a service contract covering the complete system for an additional twelve (12) months.

#### 1.11 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace fire-alarm system equipment and components that fail because of defects in materials or workmanship within specified warranty period.
  1. Warranty Period: Five years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 ADDRESSABLE FIRE-ALARM SYSTEM

- A. Description:
  1. Noncoded, UL-certified addressable system, with multiplexed signal transmission and voice-and-strobe notification for evacuation.
- B. Performance Criteria:
  1. Regulatory Requirements:
    - a. Fire-Alarm Components, Devices, and Accessories: Listed and labeled by a NRTL in accordance with NFPA 70 for use with selected fire-alarm system and marked for intended location and application.
  2. General Characteristics:

- a. Automatic sensitivity control of certain smoke detectors.
- b. Fire-alarm signal initiation must be by one or more of the following devices and systems:
  - 1) Manual stations.
  - 2) Heat detectors.
  - 3) Smoke detectors.
  - 4) Duct smoke detectors.
  - 5) Carbon monoxide detectors.
  - 6) Automatic sprinkler system water flow.
  - 7) Fire standpipe system.
  - 8) Fire pump running.
- c. Refer to Fire Alarm System Function Matrix on drawings for Alarm and Supervisory functions.
- d. Supervisory signal initiation must be by one or more of the following devices and actions:
  - 1) Valve supervisory switch.
  - 2) Alert and Action signals of air-sampling detector system.
  - 3) Elevator shunt-trip supervision.
  - 4) Fire pump is running.
  - 5) Fire pump has lost power.
  - 6) Power to fire pump has phase reversal.
  - 7) Zones or individual devices have been disabled.
  - 8) FACP has lost communication with network.
- e. System trouble signal initiation must be by one or more of the following devices and actions:
  - 1) Open circuits, shorts, and grounds in designated circuits.
  - 2) Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
  - 3) Loss of communication with addressable sensor, input module, relay, control module, remote annunciator, printer interface, or Ethernet module.
  - 4) Loss of primary power at FACP.
  - 5) Ground or single break in internal circuits of FACP.
  - 6) Abnormal ac voltage at FACP.
  - 7) Break in standby battery circuitry.
  - 8) Failure of battery charging.
  - 9) Abnormal position of switch at FACP or annunciator.
  - 10) Voice signal amplifier failure.
  - 11) Hose cabinet door open.
- f. Network Communications:
  - 1) Provide network communications for fire-alarm system in accordance with fire-alarm manufacturer's written instructions.
  - 2) Provide network communications pathway per manufacturer's written instructions and requirements in NFPA 72 and NFPA 70.
  - 3) Provide integration gateway using BACnet for connection to building automation system.
- g. System Printer:

- 1) Printer must be listed and labeled as integral part of fire-alarm system.

h. Document Storage Box:

- 1) Description: Enclosure to accommodate standard 8-1/2-by-11 inch manuals and loose document records. Legend sheet will be permanently attached to door for system required documentation, key contacts, and system information. Provide two key ring holders with location to mount standard business cards for key contact personnel.
- 2) Material and Finish: 18-gauge cold-rolled steel; four mounting holes.
- 3) Color: Red powder-coat epoxy finish.
- 4) Labeling: Permanently screened with 1 inch high lettering "SYSTEM RECORD DOCUMENTS" with white indelible ink.
- 5) Security: Locked with 3/4 inch barrel lock. Provide solid 12 inch stainless steel piano hinge.

i. Elevator Interfaces:

- 1) Provide interface to the building elevator(s) in strict accordance with all requirements and recommendations of ANSI Standard ANSI/ASME A17.1, "Safety Code for Elevators and Escalators," latest edition, NFPA-72, "The National Fire Alarm Code" and requirements of the local Elevator Inspector.
- 2) Provide interface connections between fire alarm system and elevator for:
  - 1) Elevator recall – primary and alternate floor.
  - 2) Illuminate recall indicator in each elevator cab.
  - 3) Power shut down via shunt trip circuit breakers for elevator power, controls, cab lighting, etc.
- 3) Provide all interface modules, relays, wiring, connections, etc.
- 4) Derive 120 volt control power for interfaces from elevator control disconnect in elevator machine room. All control wiring for elevator shunt trip functions shall be supervised by the fire alarm system in accordance with NFPA-72, section 6.16.4.4. and other applicable requirements. Provide delay between activation of heat detector and initiation of shunt trip equal to time that it takes the elevator cab to travel from the top of the hoistway to the lowest recall level, per NFPA-72 Annex A, paragraph A6.16.4.4.

## 2.2 FIRE-ALARM CONTROL PANEL (FACP)

- A. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- B. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  1. Simplex/Grinnell
  2. Honeywell International (Notifier)
  3. Honeywell International (Silent Knight).
  4. Siemens Industry, Inc. (Building Technologies Division).
- C. Description: Field-programmable, microprocessor-based, modular, power-limited design with electronic modules.

D. Performance Criteria:

1. Regulatory Requirements: Comply with NFPA 72 and UL 864.
2. General Characteristics:
  - a. System software and programs must be held in nonvolatile flash, electrically erasable, programmable, read-only memory, retaining information through failure of primary and secondary power supplies.
  - b. Include real-time clock for time annotation of events on event recorder and printer.
  - c. Provide communication between FACP and remote circuit interface panels, annunciators, and displays.
  - d. FACP must be listed for connection to central-station signaling system service.
  - e. Provide nonvolatile memory for system database, logic, and operating system and event history. System must require no manual input to initialize in the event of complete power down condition. FACP must provide minimum 500-event history log.
  - f. Addressable Initiation Device Circuits: FACP must indicate which communication zones have been silenced and must provide selective silencing of alarm notification appliance by building communication zone.
    - 1) Addressable Control Circuits for Operation of Notification Appliances and Mechanical Equipment: FACP must be listed for releasing service.
  - g. Fire-Alarm Annunciator: Arranged for interface between human operator at FACP and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and programming and control menu.
    - 1) Annunciator and Display: LCD, 80 characters, minimum.
    - 2) Keypad: Arranged to permit entry and execution of programming, display, and control commands.
  - h. Alphanumeric Display and System Controls: Arranged for interface between human operator at FACP and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and programming and control menu.
    - 1) Annunciator and Display: LCD, three line(s) of 80 characters, minimum.
    - 2) Keypad: Arranged to permit entry and execution of programming, display, and control commands and to indicate control commands to be entered into system for control of smoke-detector sensitivity and other parameters.
  - i. System circuits shall be configured as follows: Addressable analog loops shall be wired as Class A. Each addressable analog loop shall be circuited so that device loading does not exceed 80% of loop capacity in order to leave for space for future devices. Notification Appliance Circuits shall be wired for Class A operation. Where it is necessary to interface conventional initiating devices provide intelligent input modules to supervise Class B zone wiring.
  - j. Initiating-Device, Notification-Appliance, and Signaling-Line Circuits:
    - 1) Pathway Class Designations: NFPA 72, Class A.
    - 2) Pathway Survivability: Level 0.
    - 3) Install no more than 256 addressable devices on each signaling-line circuit.

- 4) Install fault circuit isolators to comply with circuit performance requirements of NFPA 72 or with manufacturer's written instructions, whichever is more conservative.
- k. Serial Interfaces:
- 1) One dedicated RS 485 port for central-station operation using point ID DACT.
  - 2) One RS 485 port for remote annunciators, Ethernet module, or multi-interface module (printer port).
  - 3) One USB and RS 232 port for PC configuration.
  - 4) One RS 232 port for voice evacuation interface.
  - 5) Provide interface to tie into existing campus Simplex fire alarm system for monitoring of building fire alarm system.
- l. Smoke-Alarm Verification:
- 1) Initiate audible and visible indication of "alarm-verification" signal at FACP.
  - 2) Activate approved "alarm-verification" sequence at FACP and detector.
  - 3) Record events by system printer.
  - 4) Sound general alarm if alarm is verified.
  - 5) Cancel FACP indication and system reset if alarm is not verified.
- m. Notification-Appliance Circuit:
- 1) Audible appliances must sound in three-pulse temporal pattern, as defined in NFPA 72.
  - 2) Where notification appliances provide signals to sleeping areas, alarm signal must be 520 Hz square wave with intensity 15 dB above average ambient sound level or 5 dB above maximum sound level, or at least 75 dB(A-weighted), whichever is greater, measured at pillow.
  - 3) Visual alarm appliances must flash in synchronization where multiple appliances are in same field of view, as defined in NFPA 72.
- n. Elevator Recall: Initiate by one of the following alarm-initiating devices:
- 1) Elevator lobby detectors except lobby detector on designated floor.
  - 2) Smoke detectors in elevator control room.
  - 3) Smoke detectors in elevator hoistway.
- o. Elevator controller must be programmed to move cars to alternate recall floor if lobby detectors located on designated recall floors are activated.
- p. Water-flow alarm connected to sprinkler in elevator shaft and elevator machine room must shut down elevators associated with location without time delay.
- 1) Water-flow switch associated with sprinkler in elevator pit may have delay to allow elevators to move to designated floor.
- q. Remote Smoke-Detector Sensitivity Adjustment: Controls must select specific addressable smoke detectors for adjustment, display their current status and sensitivity settings, and change those settings. Allow controls to be used to program repetitive, time-scheduled, and automated changes in sensitivity of specific detector groups. Record sensitivity adjustments and sensitivity-adjustment schedule changes in system memory and print out final adjusted values on system printer.



- r. Voice/Alarm Signaling Service: Central emergency communication system with redundant microphones, preamplifiers, amplifiers, and tone generators provided in separate cabinet located in fire command center.
- s. Indicate number of alarm channels for automatic, simultaneous transmission of different announcements to different zones or for manual transmission of announcements by use of central-control microphone. Amplifiers must comply with UL 1711.
  - 1) Allow application of, and evacuation signal to, indicated number of zones and simultaneously allow voice paging to other zones selectively or in combination.
  - 2) Programmable tone and message sequence selection.
  - 3) Standard digitally recorded messages for "Evacuation" and "All Clear."
  - 4) Generate tones to be sequenced with audio messages of type recommended by NFPA 72 and that are compatible with tone patterns of notification-appliance circuits of FACP.
- t. Status Annunciator: Indicate status of various voice/alarm speaker zones and status of firefighters' two-way telephone communication zones.
- u. Preamplifiers, amplifiers, and tone generators must automatically transfer to backup units, on primary equipment failure.
- v. Printout of Events: On receipt of signal, print alarm, supervisory, and trouble events. Identify zone, device, and function. Include type of signal (alarm, supervisory, or trouble) and date and time of occurrence. Differentiate alarm signals from other printed indications. Also, print system reset event, including same information for device, location, date, and time. Commands initiate printing of list of existing alarm, supervisory, and trouble conditions in system and historical log of events.
- w. Primary Power: 24 V(dc) obtained from 120 V(ac) service and power-supply module. Initiating devices, notification appliances, signaling lines, trouble signals, supervisory signals, and supervisory and DACT must be powered by 24 V(dc) source.
- x. Alarm current draw of entire fire-alarm system must not exceed 80 percent of power-supply module rating.
- y. Secondary Power: 24 V(dc) supply system with batteries, automatic battery charger, and automatic transfer switch.
- z. Batteries: Sealed, valve-regulated, lead calcium type.

E. Accessories:

- 1. Instructions: Computer printout or typewritten instruction card mounted behind plastic or glass cover in stainless steel or aluminum frame. Include interpretation and describe appropriate response for displays and signals. Briefly describe functional operation of system under normal, alarm, and trouble conditions.

- F. Fire Alarm Control Panel shall be enclosed in a surface mounted cabinet, or multiple cabinets as required to house all control panel components. Provide a separate enclosure directly adjacent to Fire Alarm Control Panel to house a complete set of system as-built drawings and documentation. All fire alarm system cabinets shall be keyed alike.

## 2.3 AUDIO PAGING AND EMERGENCY EVACUATION SUBSYSTEM:

- A. Provide an Audio Paging and Emergency Evacuation subsystem to provide spoken voice type evacuation signals throughout the building.

- B. The Audio Paging and Emergency Evacuation subsystem which shall provide fully digitized and multiplexed audio voice evacuation signals. Up to 32 minutes of pre-recorded audio shall be transmittable over one of 8 audio channels over a single pair of wires. The system shall not require mechanical potentiometers to make adjustment of audio levels within the system, as these devices are prone to require re-adjustment over time, and may fail under uncontrolled field conditions.
- C. One amplifier shall be supplied per speaker circuit to enhance system survivability. The system shall be arranged to provide signals for total evacuation of the building. Provide a minimum of two separate speakers circuits throughout the building. Speakers shall be alternately circuited across the two circuits, so that no area is left without a signal upon failure of one circuit or amplifier.
- D. Integrated Audio System:
  - 1. The Fire Alarm System shall incorporate a true digital integrated audio system into the network, multiplexing 8 independent audio channels over a single pair of wires. The system shall include distributed audio amplifiers, one for each speaker circuit, for system survivability.
  - 2. The system shall provide a local temporal back up tone at each amplifier to allow evacuation signals to be broadcast in the protected premises in the event of a loss of data communication from the Fire Alarm Control Panel or Voice Evacuation Control Panel.
  - 3. A digital message unit shall be provided which provides up to 32 minutes of pre-recorded emergency messaging. The message contained in the fully digital message unit shall be recordable in the field on a computer.
- E. Voice Evacuation Control Panel (Audio Source Unit 3-ASU):
  - 1. The Fire Detection and Alarm System shall be provided with a fully integrated Audio Paging and Emergency Evacuation subsystem. The Voice Evacuation Control Panel shall include a paging microphone, digital message playback unit, and 8 fully digitized and multiplexed audio channels. Four dedicated page mode control switches shall provide the emergency operator with instantaneous one touch paging to safely control the staged evacuation of building occupants. Automatic programming shall dynamically group the most frequently targeted paging zones.
  - 2. The "All Call" switch will direct the manual page to all areas served by the Audio Paging and Emergency Evacuation subsystem.
  - 3. The Page to Evac switch will direct the manual page to those building areas automatically receiving the Evacuation Signal.
  - 4. The Page to Alert switch will direct the manual page to those building areas automatically receiving the Alert Signal.
  - 5. The All-Call Minus switch will direct the manual page to those building areas which are programmed to receive the auxiliary and general channel connections such as stairwells and elevator cabs.
  - 6. The system shall have paging control switches and LEDs to support specific zone selection. The zone control / displays shall confirm amplifier selection and annunciate amplifier and amplifier circuit trouble.
  - 7. The system shall automatically deliver a pre-announce tone of 1000 Hz for three seconds when the emergency operator presses the microphone talk key. A "ready to page" LED shall flash during the pre-announce and turn steady when the system is ready for the user's page delivery.
  - 8. The system shall include a page deactivation timer which activates for 3 seconds when the emergency user release the microphone talk key. Should the user subsequently press the microphone key during the deactivation period a page can be delivered immediately. Should the timer complete its cycle the system shall automatically restore emergency

signaling and any subsequent paging will be preceded by the pre-announce tone. A VU display shall display voice level to the emergency operator.

9. Mount the Voice Evacuation Control Panel in a flush mounted cabinet adjacent to the Fire Alarm Annunciator where indicated on the drawings. Provide power from the circuits serving the Fire Alarm Control Panel.

F. Audio Amplifiers:

1. Each audio power amplifier shall have integral audio signal de-multiplexers, allowing the amplifier to select any one of eight digitized audio channels. The channel selection shall be directed by the system software. Up to 8 multiple and different audio signals must be able to be broadcast simultaneously from the same system network node.
2. Each amplifier output shall include a dedicated, supervised 25/70 Vrms speaker circuit which is suitable for connection of emergency speaker appliances. Each amplifier shall also include a notification appliance circuit rated at 24Vdc @ 3.5A for connection of visible (strobe) appliances. This circuit shall be fully programmable and it shall be possible to define the circuit for the support of audible, visible, or ancillary devices.
3. Standby Audio amplifiers shall be provided that automatically sense the failure of a primary amplifier, and automatically program themselves to select and de-multiplex the same audio information channel of the failed primary amplifier, and fully replace the function of the failed amplifier.
4. In the event of a total loss of audio data communications, all amplifiers will default to the local "EVAC" tone generator channel. If the Fire Alarm Control Panel has an alarm condition, then all amplifiers will sound the EVAC signal on their connected speaker circuits.
5. In the event of a loss of the fully digitized, multiplexed audio connection, the audio amplifiers shall automatically default to an internally generated alarm tone which shall be operated at a 3-3-3 temporal pattern.
6. The audio amplifiers shall automatically detect a short circuit condition on the connected speaker circuit wiring, and shall inhibit themselves from driving into that short circuit condition.

G. Voice Evacuation System Notification Appliances:

1. Notification appliances for voice evacuation shall be speakers, as specified below in section "Fire Alarm Notification Appliances."

## 2.4 MANUAL FIRE-ALARM BOXES

- A. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- B. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  1. Simplex/Grinnell
  2. Honeywell International (Notifier)
  3. Honeywell International (Silent Knight).
  4. Siemens Industry, Inc. (Building Technologies Division).
- C. General Requirements for Manual Fire-Alarm Boxes: Comply with UL 38. Boxes must be finished in red with molded, raised-letter operating instructions in contrasting color; must show visible indication of operation; and must be mounted on recessed outlet box. If indicated as surface mounted, provide manufacturer's surface back box.

1. Double-action mechanism requiring two actions to initiate alarm, pull-lever type; with integral addressable module arranged to communicate manual-station status (normal, alarm, or trouble) to FACP.
2. Station Reset: Key.
3. Weatherproof Protective Shield: Factory-fabricated, clear plastic enclosure hinged at top to permit lifting for access to initiate alarm.
4. Able to perform at up to 90 percent relative humidity at 90 deg F.
5. Material: Manual stations made of Lexan polycarbonate.
6. Able to be used in indoor areas.
7. Each pull station shall be identified with the following sign: "IN CASE OF FIRE SOUND ALARM AND CALL FIRE DEPARTMENT".

## 2.5 SYSTEM SMOKE DETECTORS

### A. Photoelectric Smoke Detectors:

1. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
2. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  - a. Simplex/Grinnell
  - b. Honeywell International (Notifier).
  - c. Honeywell International (Silent Knight).
  - d. Siemens Industry, Inc. (Building Technologies Division).
3. Performance Criteria:
  - a. Regulatory Requirements:
    - 1) NFPA 72.
    - 2) UL 268.
  - b. General Characteristics:
    - 1) Detectors must be four-wire type.
    - 2) Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to FACP.
    - 3) Base Mounting: Detector and associated electronic components must be mounted in twist-lock module that connects to fixed base. Provide terminals in fixed base for connection to building wiring.
    - 4) Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
    - 5) Integral Visual-Indicating Light: LED type, indicating detector has operated and power-on status.
    - 6) Detector address must be accessible from FACP and must be able to identify detector's location within system and its sensitivity setting.
    - 7) Operator at FACP, having designated access level, must be able to manually access the following for each detector:
      - a) Primary status.
      - b) Device type.
      - c) Present average value.

- d) Present sensitivity selected.
- e) Sensor range (normal, dirty, etc.).
- 8) Detector must have functional humidity range within 10 to 90 percent relative humidity.
- 9) Color: White.
- 10) Remote Control: Unless otherwise indicated, detectors must be digital-addressable type, individually monitored at FACP for calibration, sensitivity, and alarm condition and individually adjustable for sensitivity by FACP.
- 11) Multiple levels of detection sensitivity for each sensor.
- 12) Sensitivity levels based on time of day.

## 2.6 DUCT SMOKE DETECTORS

- A. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- B. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  - 1. Simplex/Grinnell
  - 2. Honeywell International (Notifier)
  - 3. Honeywell International (Silent Knight).
  - 4. Siemens Industry, Inc. (Building Technologies Division).
- C. Description: Photoelectric-type, duct-mounted smoke detector.
- D. Performance Criteria:
  - 1. Regulatory Requirements:
    - a. NFPA 72.
    - b. UL 268A.
  - 2. General Characteristics:
    - a. Detectors must be four-wire type.
    - b. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to FACP.
    - c. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
    - d. Integral Visual-Indicating Light: LED type, indicating detector has operated and power-on status.
    - e. Detector address must be accessible from FACP and must be able to identify detector's location within system and its sensitivity setting.
    - f. Operator at FACP, having designated access level, must be able to manually access the following for each detector:
      - 1) Primary status.
      - 2) Device type.
      - 3) Present average value.
      - 4) Present sensitivity selected.
      - 5) Sensor range (normal, dirty, etc.).

- g. Weatherproof Duct Housing Enclosure: NEMA 250, Type 4X; NRTL listed for use with supplied detector for smoke detection in HVAC system ducts.
- h. Each sensor must have multiple levels of detection sensitivity.
- i. Sampling Tubes: Design and dimensions as recommended by manufacturer for specific duct size, air velocity, and installation conditions where applied.
- j. Relay Fan Shutdown: Fully programmable relay rated to interrupt fan motor-control circuit.

## 2.7 CARBON MONOXIDE DETECTORS

- A. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- B. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  - 1. Simplex/Grinnell
  - 2. Honeywell International (Notifier)
  - 3. Honeywell International (Silent Knight).
  - 4. Siemens Industry, Inc. (Building Technologies Division).
- C. Description: Carbon monoxide detector listed for connection to fire-alarm system.
- D. Performance Criteria:
  - 1. Regulatory Requirements:
    - a. NFPA 72
    - b. NFPA 720.
    - c. UL 2075.
  - 2. General Characteristics:
    - a. Mounting: Adapter plate for outlet box mounting.
    - b. Testable by introducing test carbon monoxide into sensing cell.
    - c. Detector must provide alarm contacts and trouble contacts.
    - d. Detector must send trouble alarm when nearing end-of-life, power supply problems, or internal faults.
    - e. Locate, mount, and wire in accordance with manufacturer's written instructions.
    - f. Provide means for addressable connection to fire-alarm system.
    - g. Test button simulates alarm condition.

## 2.8 HEAT DETECTORS

- A. Fixed-Temperature-Type Heat Detectors:
  - 1. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
  - 2. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
    - a. Simplex/Grinnell
    - b. Honeywell International (Notifier).

- c. Honeywell International (Silent Knight).
  - d. Siemens Industry, Inc. (Building Technologies Division).
3. Performance Criteria:
- a. Regulatory Requirements:
    - 1) NFPA 72.
    - 2) UL 521.
  - b. General Characteristics:
    - 1) Actuated by temperature that exceeds fixed temperature of 135 deg F.
    - 2) Mounting: Twist-lock base interchangeable with smoke-detector bases.
    - 3) Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to FACP.
    - 4) Detector must have functional humidity range of 10 to 90 percent.
    - 5) Color: White.

## 2.9 FIRE-ALARM NOTIFICATION APPLIANCES

### A. Fire-Alarm Voice/Tone Notification Appliances:

- 1. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- 2. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  - a. Simplex/Grinnell
  - b. Honeywell International (Notifier).
  - c. Honeywell International (Silent Knight).
  - d. Siemens Industry, Inc. (Building Technologies Division).
- 3. Description: Notification appliances capable of outputting voice evacuation messages.
- 4. Performance Criteria:
  - a. Regulatory Requirements:
    - 1) NFPA 72.
    - 2) UL 1480.
  - b. General Characteristics:
    - 1) Speakers for Voice Notification: Locate speakers for voice notification to provide intelligibility requirements of "Notification Appliances" and "Emergency Communications Systems" chapters in NFPA 72.
    - 2) High-Range Units: Rated 2 to 15 W.
    - 3) Low-Range Units: Rated 1 to 2 W.
    - 4) Mounting: Flush.
    - 5) Matching Transformers: Tap range matched to acoustical environment of speaker location.

- 6) Combination Devices: Factory-integrated audible and visible devices in single-mounting assembly, equipped for mounting as indicated, and with screw terminals for system connections.
- 7) Fire alarm systems must have permanently installed audible and visible alarms in hearing/visually impaired residential units complying with NFPA 72, except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 must have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance.

B. Fire-Alarm Visible Notification Appliances:

1. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
2. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  - a. Simplex/Grinnell
  - b. Honeywell International (Notifier).
  - c. Honeywell International (Silent Knight).
  - d. Siemens Industry, Inc. (Building Technologies Division).
3. Performance Criteria:
  - a. Regulatory Requirements:
    - 1) NFPA 72.
    - 2) UL 1971.
  - b. General Characteristics:
    - 1) Rated Light Output:
      - a) 15/30/75/110 cd, selectable in field.
    - 2) Clear or nominal white polycarbonate lens mounted on aluminum faceplate.
    - 3) Mounting: Wall mounted unless otherwise indicated.
    - 4) For units with guards to prevent physical damage, light output ratings must be determined with guards in place.
    - 5) Flashing must be in temporal pattern, synchronized with other units.
    - 6) Strobe Leads: Factory connected to screw terminals.
    - 7) Mounting Faceplate: Factory finished, white.

2.10 DOOR HOLDING APPLIANCES

- A. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- B. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  1. Simplex/Grinnell



2. Honeywell International (Notifier)
3. Honeywell International (Silent Knight).
4. Siemens Industry, Inc. (Building Technologies Division).

- C. Door Holders shall have a holding force of 25 pounds. The housing shall be finished in zinc. Wall mounted units shall mount to single gang flush mounted boxes. Floor mounted units shall be utilized where shown on the drawings, or where wall mounted units are not applicable as specifically approved by the Architect. The Magnetic Door Holders shall operate at 24 VDC and shall receive all required power from the Fire Alarm Control Panel. Provide EST 1500 series door holders in configuration to suit the specific requirements of each installation.
- D. Door Closer/Holder Hardware Sets shall be provided where indicated on the drawings, or where a magnetic door holder is not suitable due to door installation requirements. Door closer holder hardware sets shall consist of a hydraulic door closer mechanism with electric solenoid holding mechanism, which shall automatically release and close the indicated door. The door closer/holder devices shall have cast iron cylinders and two separately adjustable, non-critical closing speed valves plus adjustable back-check as standard equipment. The arm shall be connected to the track with a low friction roller assembly. Units shall operate at 24 VDC and shall be suitable for concealed wiring. Door closer/holders shall provide for holding doors in an open position at any of the following positions: 85, 90, 95, 100 degrees. The position shall be selectable by track location. The door closer/holder shall hold the door in an open position during normal operation and shall automatically release the door upon loss of signal from the Fire Alarm Control Panel (FACP). Door closer/holder hardware sets shall be as manufactured by Von Duprin or approved equal, and shall be certified compatible with the Fire Alarm System. Exact configuration shall be suitable for the door installation on which the equipment is to be installed.

#### 2.11 SPRINKLER FLOW SWITCHES

- A. Sprinkler flow switches shall be furnished under Division 25.
- B. Provide the necessary intelligent monitoring modules for addressing the devices. Make all final connections between the switch and the intelligent monitoring module.

#### 2.12 SPRINKLER VALVE POSITION (TAMPER) SWITCHES

- A. Sprinkler valve position (tamper) switches shall be furnished under Division 25.
- B. Provide the necessary intelligent monitoring modules for addressing the devices. Make all final connections between the switch and the intelligent monitoring module.

#### 2.13 SYSTEM EVENT AND STATUS PRINTER

- A. The event and status printer shall be a 9 pin, impact, dot-matrix printer with a minimum print speed of 200 characters per second at 10 characters per inch. Printer parameters shall be set up with a menu drive program in the printer. The serial cable connecting the Fire Alarm Control Panel to the Printer shall be supervised. The serial printer shall support short haul modems or Fiber-Optics modules. The printers shall list the time, date, type, and user defined message for each event printed. It shall be possible to support multiple printers per CPU. It shall be possible to define which event types are sent to the printer(s) including alarm, supervisory, trouble, monitor, and service groups.
- B. The printer shall be powered from 115 VAC and shall use standard 91/2" x 11" fan fold paper.

- C. Provide a local desktop style uninterruptible power supply (UPS) unit to supply power to the printer. UPS shall be sized to operate the printer in normal use for 24 hours. UPS unit shall be APC, Best or approved equal.
- D. Provide metal stand, with integral paper rack, for printer.

#### 2.14 FIRE-ALARM GRAPHIC ANNUNCIATOR PANEL

- A. Manufacturer: Honeywell International (Notifier) shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- B. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:

- 1. Harrington Signal, Inc.
- 2. Mircom Technologies, Ltd.
- 3. Potter Electric Signal Company, LLC.
- 4. Siemens Industry, Inc. (Building Technologies Division).
- 5. The H.R. Kirkland Company, Inc.
- 6. Tyco International (Johnson Controls - Autocall).
- 7. United Technologies Corporation (UTC Climate, Controls & Security - Edwards).
- 8. Valcom, Inc. (Keltron Corporation).

#### C. Performance Criteria:

##### 1. Regulatory Requirements:

- a. NFPA 72.

##### 2. General Characteristics:

- a. Graphic Annunciator Panel: Enclosure shall be flush mounted where indicated on the drawings. All graphic information shall be white photo-emulsion factory-applied to 1/4" smoke color Plexiglas face at the time of manufacture. The annunciator face shall be protected by a 1/10" clear Plexiglas enclosed by an architectural color as selected by Architect anodized extruded aluminum frame.
- b. The annunciator shall include a trouble Sonalert.
- c. The graphic annunciator shall provide an outline of the entire building (plan, elevation or isometric view as appropriate to the facility and approved by the Authority Having Jurisdiction), with major corridors, stairways, elevator shafts and lobbies, building primary and secondary entrances and exits and major architectural features shown. Provide indication for location of sprinkler system Fire Department Siamese connection, standpipes and standpipe control valves; fire pump. Indicate location of Electric Service and emergency generators. The building outline shall be oriented to the viewing direction. Provide north arrow and a "You Are Here" indicator. The building shall be divided into zones, generally as follows:

- First Floor Area A
- First Floor Area B
- Second Floor Area A
- Second Floor Area B
- Second Floor Area C
- Second Floor Area D
- Third Floor Area A

- Third Floor Area B
  - Third Floor Area C
  - Third Floor Area D
- d. Backlit LED indicators shall be provided within each zone for alarm (red) and trouble (yellow) for each of the following:
- 1) Manual pull stations
  - 2) Automatic detectors
  - 3) Sprinkler flow
  - 4) Duct smoke detector
  - 5) Carbon Monoxide Detector (blue LED/supervisory only)
  - 6) Sprinkler valve position (yellow LED/supervisory only)
  - 7) Kitchen hood fire suppression system
- e. Provide backlit LED indicator(s) for each elevator or group of elevators to indicate activation of the following:
- 1) Elevator Top of Shaft smoke detector
  - 2) Elevator Shaft heat detector
  - 3) Elevator Control Room smoke detector
  - 4) Elevator Control Room heat detector
  - 5) Elevator Pit smoke detector
- f. Provide an LCD display unit, set flush in the face of the annunciator panel, to mimic the display at the Fire Alarm Control Panel.
- g. Backlit LED indicators shall be provided on the annunciator for the following functions:
- 1) System power on (green)
  - 2) System alarm (red)
  - 3) System trouble (yellow)
  - 4) Supervisory condition (yellow)
  - 5) Emergency generator running (green) for each generator
  - 6) Emergency generator fault (yellow) for each generator
  - 7) Fire pump controller power available (green)
  - 8) Fire pump running (green)
  - 9) Fire pump controller power loss (yellow)
  - 10) Fire pump controller phase reversal (yellow)
- h. Key operated switches shall be provided on the face of the annunciator for the following controls:
- 1) Trouble silence
  - 2) Fire pump start
  - 3) Provide a remote key operated start switch for each emergency generator. Activation of this switch shall cause the emergency generator to start regardless of status of utility power.
- i. Provide guarded pushbuttons on the graphic annunciator for shut-down of building HVAC systems in accordance with NFPA-90A, paragraph 4.2. Activation of the pushbutton shall cause the building air handling systems to be shut down. Refer to schedules of air handling systems and equipment on the Mechanical Drawings to determine which systems or equipment are to be shut-down. Provide one switch per air handling system for shut-down of building air handling equipment.
- j. The graphic annunciator shall be UL listed.

- k. Provide Quality Engraving and Design QED Series graphic annunciator with custom graphics and controls as specified herein.
- l. The annunciator shall be a minimum of 24" x 30". Provide larger or multiple panel annunciators where required to provide all specified or required indications.
- m. The graphic annunciator panel shall be approved by the Authority Having Jurisdiction prior to fabrication. Make submission of annunciator to the Authority Having Jurisdiction for their review and approval. All costs for review by the AHJ shall be included in the bid.
- n. Do not begin fabrication of the annunciator until the annunciator has been approved by the Authority Having Jurisdiction, and by the Engineer.

## 2.15 FIRE-ALARM ADDRESSABLE INTERFACE DEVICES

- A. Manufacturer: Edwards System Technology (EST), A UTC Fire and Security Company shall form the project Basis of Design and shall constitute the type and quality of equipment to be furnished.
- B. Alternative Manufacturers: Substitutions by one of the following manufacturers may be considered, subject to compliance with all requirements specified herein:
  - 1. Simplex/Grinnell
  - 2. Honeywell International (Notifier)
  - 3. Honeywell International (Silent Knight).
  - 4. Siemens Industry, Inc. (Building Technologies Division).
- C. Performance Criteria:
  - 1. Regulatory Requirements:
    - a. NFPA 72.
  - 2. General Characteristics:
    - a. Include address-setting means on module.
    - b. Store internal identifying code for control panel use to identify module type.
    - c. Listed for controlling HVAC fan motor controllers.
    - d. Monitor Module: Microelectronic module providing system address for alarm-initiating devices for wired applications with normally open contacts.
    - e. Integral Relay: Capable of providing direct signal to circuit-breaker shunt trip for power shutdown.
      - 1) Allow control panel to switch relay contacts on command.
      - 2) Have minimum of two normally open and two normally closed contacts available for field wiring.
  - f. Control Module:
    - 1) Operate notification devices.
    - 2) Operate solenoids for use in sprinkler service.

## 2.16 DIGITAL ALARM COMMUNICATOR TRANSMITTERS (DACTs)

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Bosch Security Systems, Inc.
2. Potter Electric Signal Company, LLC.
3. United Technologies Corporation (UTC Climate, Controls & Security - Edwards).

B. Performance Criteria:

1. Regulatory Requirements:

- a. NFPA 72.

2. General Characteristics:

- a. DACT must be acceptable to remote central station and must be listed for fire-alarm use.
- b. Functional Performance: Unit must receive alarm, supervisory, or trouble signal from FACP and automatically capture two telephone line(s) and dial preset number for remote central station. When contact is made with central station(s), signals must be transmitted. If service on either line is interrupted for longer than 45 seconds, transmitter must initiate local trouble signal and transmit signal indicating loss of telephone line to remote alarm receiving station over remaining line. Transmitter must automatically report telephone service restoration to central station. If service is lost on both telephone lines, transmitter must initiate local trouble signal.
- c. Local functions and display at DACT must include the following:
  - 1) Verification that both telephone lines are available.
  - 2) Programming device.
  - 3) LED display.
  - 4) Manual test report function and manual transmission clear indication.
  - 5) Communications failure with central station or FACP.
- d. Digital data transmission must include the following:
  - 1) Address of alarm-initiating device.
  - 2) Address of supervisory signal.
  - 3) Address of trouble-initiating device.
  - 4) Loss of ac supply.
  - 5) Loss of power.
  - 6) Low battery.
  - 7) Abnormal test signal.
  - 8) Communication bus failure.
- e. Secondary Power: Integral rechargeable battery and automatic charger.
- f. Self-Test: Conducted automatically every 24 hours with report transmitted to central station.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine areas and conditions for compliance with requirements for ventilation, temperature, humidity, and other conditions affecting performance of the Work.

1. Verify that manufacturer's written instructions for environmental conditions have been permanently established in spaces where equipment and wiring are installed, before installation begins.
- B. Examine roughing-in for electrical connections to verify actual locations of connections before installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Preinstallation Testing: Perform verification of functionality of installed components of existing system prior to starting work. Document equipment or components not functioning as designed.
- B. Protection of In-Place Conditions: Protect devices during construction unless devices are placed in service to protect facility during construction.

### 3.3 INSTALLATION OF EQUIPMENT

- A. Comply with NECA 305, NFPA 72, NFPA 101, and requirements of authorities having jurisdiction for installation and testing of fire-alarm equipment. Install electrical wiring to comply with requirements in NFPA 70 including, but not limited to, Article 760, "Fire Alarm Systems."
  1. Devices placed in service before other trades have completed cleanup must be replaced.
  2. Devices installed, but not yet placed, in service must be protected from construction dust, debris, dirt, moisture, and damage in accordance with manufacturer's written storage instructions.
- B. Install wall-mounted equipment, with tops of cabinets not more than 78 inch above finished floor.
- C. Manual Fire-Alarm Boxes:
  1. Install manual fire-alarm box in normal path of egress within 60 inch of exit doorway.
  2. Mount manual fire-alarm box on background of contrasting color.
  3. Operable part of manual fire-alarm box must be between 42 and 48 inch above floor level. Devices must be mounted at same height unless otherwise indicated.
- D. Smoke- and Heat-Detector Spacing:
  1. Comply with "Smoke-Sensing Fire Detectors" section in "Initiating Devices" chapter in NFPA 72, for smoke-detector spacing.
  2. Comply with "Heat-Sensing Fire Detectors" section in "Initiating Devices" chapter in NFPA 72, for heat-detector spacing.
  3. Smooth ceiling spacing must not exceed 30 ft.
  4. Spacing of detectors for irregular areas, for irregular ceiling construction, and for high ceiling areas must be determined in accordance with Annex A in NFPA 72.
  5. HVAC: Locate detectors not closer than 36 inch from air-supply diffuser or return-air opening.
  6. Lighting Fixtures: Locate detectors not closer than 12 inch from lighting fixture and not directly above pendant mounted or indirect lighting.
- E. Install cover on each smoke detector that is not placed in service during construction. Cover must remain in place except during system testing. Remove cover prior to system turnover.

- F. Duct Smoke Detectors: Comply with NFPA 72 and NFPA 90A. Install sampling tubes so they extend full width of duct. Tubes more than 36 inch long must be supported at both ends.
  - 1. Do not install smoke detector in duct smoke-detector housing during construction. Install detector only during system testing and prior to system turnover.
- G. Elevator Shafts: Coordinate temperature rating and location with sprinkler rating and location. Do not install smoke detectors in sprinklered elevator shafts.
- H. Single-Station Smoke Detectors: Where more than one smoke alarm is installed within dwelling or suite, they must be connected so that operation of smoke alarm causes alarm in smoke alarms to sound.
- I. Remote Status and Alarm Indicators: Install in visible location near each smoke detector, sprinkler water-flow switch, and valve-tamper switch that is not readily visible from normal viewing position.
- J. Visible Alarm-Indicating Devices: Install adjacent to each alarm bell or alarm horn and at least 6 inch below ceiling. Install devices at same height unless otherwise indicated.
- K. Device Location-Indicating Lights: Locate in public space near device they monitor.

### 3.4 ELECTRICAL CONNECTIONS

- A. Connect wiring in accordance with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
- B. Ground equipment in accordance with Section 260526 "Grounding and Bonding for Electrical Systems."
- C. Install electrical devices furnished by manufacturer, but not factory mounted, in accordance with NFPA 70 and NECA 1.
- D. Install nameplate for each electrical connection, indicating electrical equipment designation and circuit number feeding connection.
  - 1. Nameplate must be laminated acrylic or melamine plastic signs, as specified in Section 260553 "Identification for Electrical Systems."
  - 2. Nameplate must be laminated acrylic or melamine plastic signs with black background and engraved white letters at least 1/2 inch high.

### 3.5 CONTROL CONNECTIONS

- A. Install control and electrical power wiring to field-mounted control devices.
- B. Connect control wiring in accordance with Section 260523 "Control-Voltage Electrical Power Cables."
- C. Install nameplate for each control connection, indicating field control panel designation and I/O control designation feeding connection.

### 3.6 WIRING INSTALLATION

- A. Pathways must be installed in EMT.

- B. Install all fire alarm and detection system wiring in metal raceway as specified in Division 26 Section "Basic Electrical Materials and Methods." No wiring other than that directly associated with the fire alarm or auxiliary functions shall be permitted in the fire alarm conduits. Low voltage fire alarm system wiring shall be metal clad cable type FPLP with red colored armor specifically designed and manufactured for fire alarm use. Provide plenum rated cables specifically designed and manufactured for fire alarm use where required. Cables may be run exposed above lay-in ceilings. Wiring shall be UL listed as suitable for use in air handling plenums. Wiring shall be fastened with approved nylon wire ties to the building structure. Cables shall not lay on or be attached to any temperature control tubing, mechanical piping or ductwork, other conduits or on the ceiling. Cables that penetrate or run within masonry walls and all runs where exposed in unfinished rooms or spaces shall be run in 3/4" conduit or other raceway system as specified in Section 26 05 00 - Basic Electrical Materials and Methods. All 120 volt wiring shall be run in conduit.
- C. All wiring between fire alarm equipment panels in non-rated spaces shall be type CI cable.
- D. Exposed EMT must be painted red enamel.
- E. Paint all junctions boxes and covers serving fire alarm circuits RED, and stencil covers with wording "Fire Alarm."
- F. Color Coding: Color-code fire alarm conductors differently from the normal building power wiring. Use separate color codes for alarm initiating circuits, supervisory circuits, audible alarm indicating circuits and visual alarm indicating circuits. All conductors in conduit containing more than one wire shall be labeled on each end with "E-Z Markers" or equivalent.
- G. Minimum wire size: No. 18 AWG solid copper for initiation and annunciator circuits: No. 14 AWG solid copper for indicating circuits: No. 12 AWG solid copper for 120 volt circuits.
- H. Splices and Cable Taps: Wiring splices are to be avoided to the extent possible. Transposing or changing color coding of wires shall not be permitted. Where splices are required, use numbered terminal strips in junction, pull or outlet boxes, cabinets, or equipment enclosures where any circuit tap is made.
- I. Wiring Within Enclosures: Install conductors parallel with or at right angles to the sides and back of the enclosure. Bundle, lace, and train the conductors to terminal points with no excess. Connect conductors that are terminated, spliced, or interrupted in any enclosure associated with the fire alarm system to terminal blocks. Mark each terminal according to the wiring diagrams of the system. Make all connections with approved crimp-on terminal spade lugs, pressure-type terminal blocks, or plug connectors. All controls, function switches, and other panel devices shall be clearly labeled on all equipment panels.
- J. Risers: Install at least 2 vertical cable risers to serve the fire alarm system. Fire alarm risers shall be installed in rigid conduit, no matter which wiring method is specified above for device connections. Separate risers in close proximity to each other with a minimum one-hour-rated wall, so the loss of one riser does not prevent the receipt or transmission of signal from other floors or zones.

### 3.7 CONNECTIONS

- A. For fire-protection systems related to doors in fire-rated walls and partitions and to doors in smoke partitions, comply with requirements in Division 08. Connect hardware and devices to fire-alarm system.



1. Verify that hardware and devices are listed for use with installed fire-alarm system before making connections.
- B. Make addressable connections with supervised interface device to the following devices and systems. Install interface device less than 36 inch from device controlled. Make addressable confirmation connection when such feedback is available at device or system being controlled.
  1. Smoke dampers in air ducts of designated HVAC duct systems.
  2. Magnetically held-open doors.
  3. Electronically locked doors and access gates.
  4. Alarm-initiating connection to elevator recall system and components.
  5. Alarm-initiating connection to activate emergency lighting control.
  6. Alarm-initiating connection to activate emergency shutoffs for gas and fuel supplies.
  7. Supervisory connections at valve supervisory switches.
  8. Supervisory connections at elevator shunt-trip breaker.
  9. Data communication circuits for connection to building management system.
  10. Data communication circuits for connection to mass notification system.
  11. Supervisory connections at fire-extinguisher locations.
  12. Supervisory connections at fire-pump power failure including dead-phase or phase-reversal condition.
  13. Supervisory connections at fire-pump engine control panel.

### 3.8 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Division 27.
- B. Install framed instructions in location visible from FACP.

### 3.9 GROUNDING

- A. Ground FACP and associated circuits in accordance with Section 260526 "Grounding and Bonding for Electrical Systems."
- B. Ground shielded cables at control panel location only. Insulate shield at device location.

### 3.10 FIELD QUALITY CONTROL

- A. Field tests shall be witnessed by authorities having jurisdiction.
- B. Adminstrant for Tests and Inspections:
  1. Engage factory-authorized service representative to administer and perform tests and inspections on components, assemblies, and equipment installations, including connections.
- C. Tests and Inspections:
  1. Visual Inspection: Conduct visual inspection prior to testing.
    - a. Inspection must be based on completed record Drawings and system documentation that is required by "Completion Documents, Preparation" table in "Documentation" section of "Fundamentals" chapter in NFPA 72.

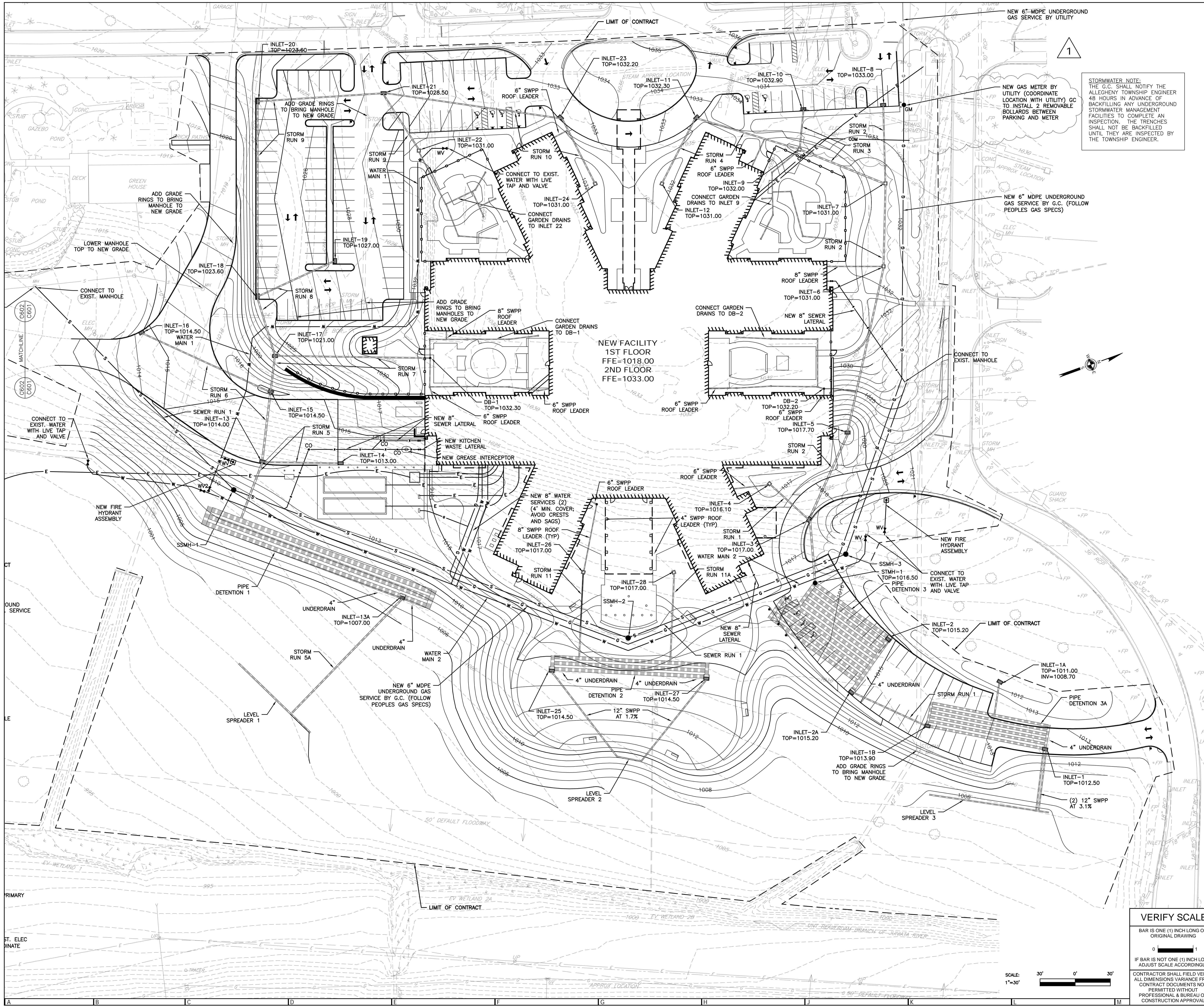
- b. Comply with "Visual Inspection Frequencies" table in "Inspection" section of "Inspection, Testing and Maintenance" chapter in NFPA 72; retain "Initial/Reacceptance" column and list only installed components.
  - 2. System Testing: Comply with "Test Methods" table in "Testing" section of "Inspection, Testing and Maintenance" chapter in NFPA 72.
  - 3. Test audible appliances for public operating mode in accordance with manufacturer's written instructions. Perform test using portable sound-level meter complying with Type 2 requirements in ASA S1.4 Part 1/IEC 61672-1.
  - 4. Test audible appliances for private operating mode in accordance with manufacturer's written instructions.
  - 5. Test visible appliances for public operating mode in accordance with manufacturer's written instructions.
  - 6. Factory-authorized service representative must prepare "Fire Alarm System Record of Completion" in "Documentation" section of "Fundamentals" chapter in NFPA 72 and "Inspection and Testing Form" in "Records" section of "Inspection, Testing and Maintenance" chapter in NFPA 72.
- D. Reacceptance Testing: Perform reacceptance testing to verify proper operation of added or replaced devices and appliances.
  - E. Fire-alarm system will be considered defective if it does not pass tests and inspections.
  - F. Prepare test and inspection reports.
  - G. Maintenance Test and Inspection: Perform tests and inspections listed for weekly, monthly, quarterly, and semiannual periods. Use forms developed for initial tests and inspections.
  - H. Annual Test and Inspection: One year after date of Substantial Completion, test fire-alarm system complying with visual and testing inspection requirements in NFPA 72. Use forms developed for initial tests and inspections.
- 3.11 DEMONSTRATION
- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain fire-alarm system. Provide video recording of training to Owner.
- 3.12 MAINTENANCE
- A. Maintenance Service: Beginning at Substantial Completion, maintenance service must include 12 months' full maintenance by skilled employees of manufacturer's designated service organization. Include preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper operation. Parts and supplies must be manufacturer's authorized replacement parts and supplies.
    - 1. Include visual inspections in accordance with "Visual Inspection Frequencies" table in "Testing" paragraph of "Inspection, Testing and Maintenance" chapter in NFPA 72.
    - 2. Perform tests in "Test Methods" table in "Testing" paragraph of "Inspection, Testing and Maintenance" chapter in NFPA 72.
    - 3. Perform tests per "Testing Frequencies" table in "Testing" paragraph of "Inspection, Testing and Maintenance" chapter in NFPA 72.
    - 4. Upgrade Notice: At least 30 days to allow Owner to schedule access to system and to upgrade computer equipment if necessary.

END OF SECTION










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1	12/9/22	ADDENDUM #5
no.	date	revision



PROFESSIONAL  
CERTIFICATION  
I CERTIFY THAT THESE  
DOCUMENTS WERE  
PREPARED OR  
APPROVED BY ME, AND  
THAT I AM A DULY  
LICENSED ENGINEER  
UNDER THE LAWS OF THE  
STATE OF PENNSYLVANIA.  
LICENSE NUMBER: PE080357  
EXPIRATION DATE: 09/30/2025

**Hord Coplan Macht, Inc.**  
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Baltimore, MD 21202

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF GENERAL SERVICES  
HARRISBURG, PENNSYLVANIA

Project Number D.G.S. C-0969-0017-001

CONSTRUCTION OF NEW COMMUNITY LIVING  
CENTER, HOLLIDAYSBURG VETERAN'S HOME  
DUNCANSVILLE, BLAIR COUNTY, PA

Utility Plan		
Drawn by A Long	Date 10-07-2022	Drawing No. <b>C-601</b>
Checked by B Smith	Scale 1"=30'	

**VERIFY SCALE**  
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ADJUST SCALE ACCORDINGLY  
CONTRACTOR SHALL FIELD VERIFY  
ALL DIMENSIONS VARIANCE FROM  
CONTRACT DOCUMENTS NOT  
PERMITTED WITHOUT  
PROFESSIONAL & BUREAU OF  
CONSTRUCTION APPROVAL

SCALE: 1"=30'  
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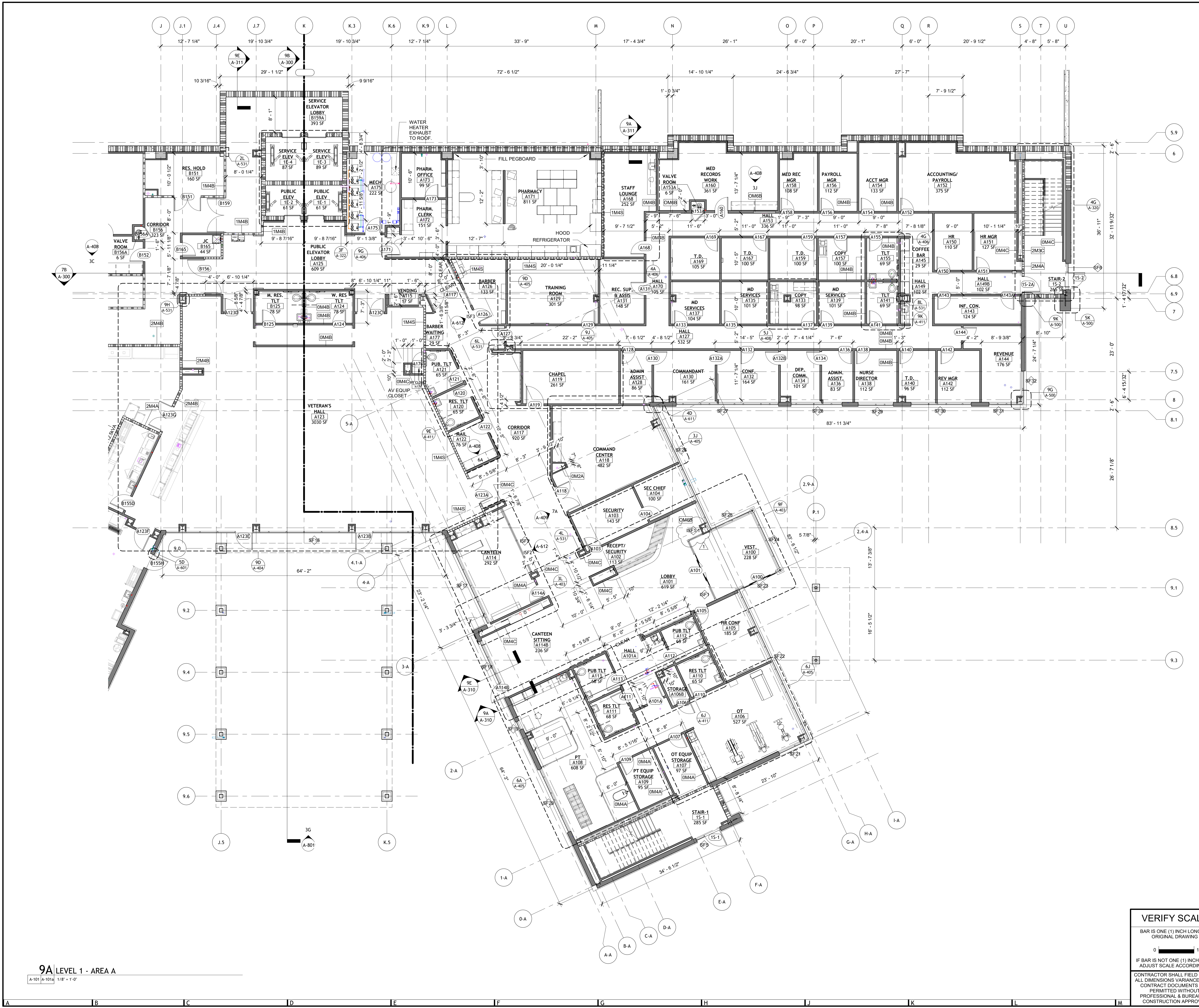












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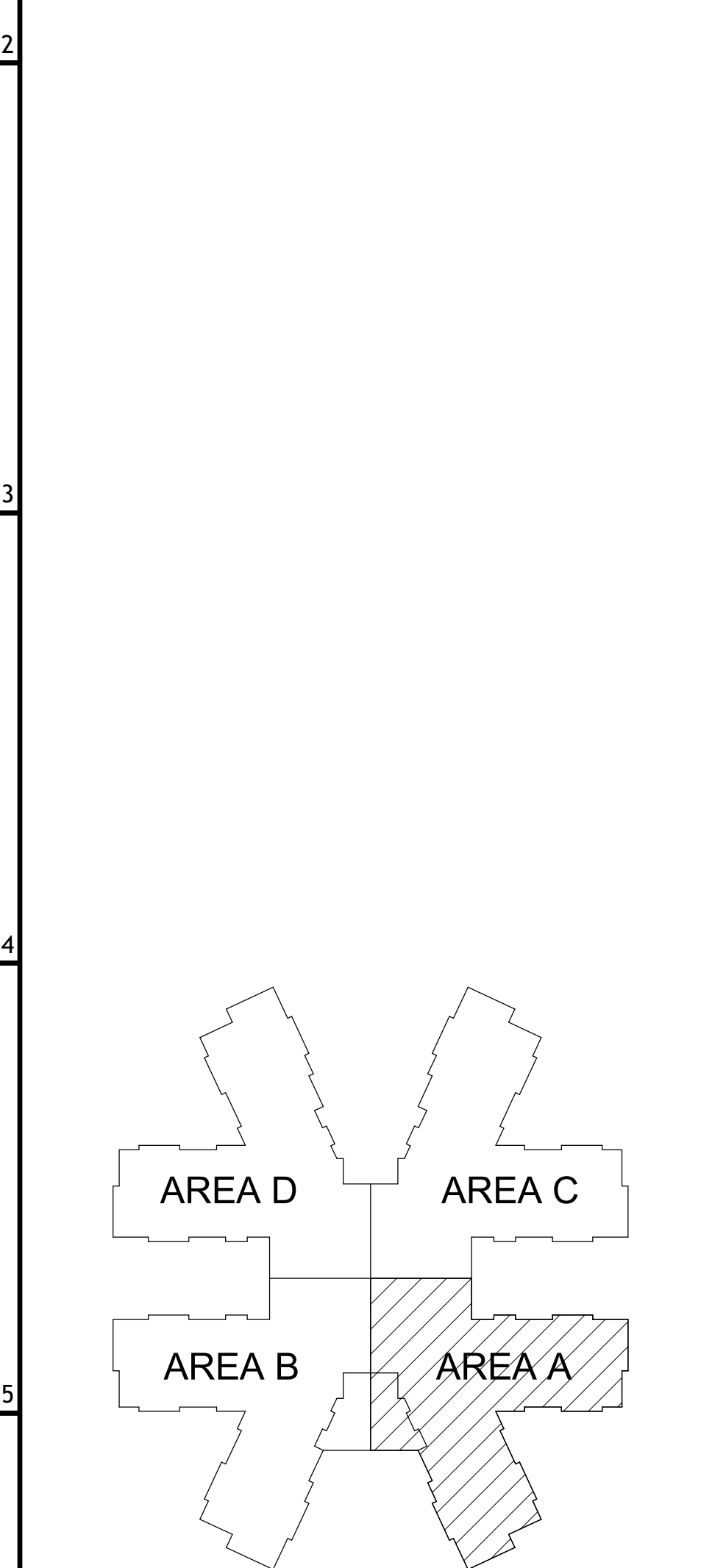
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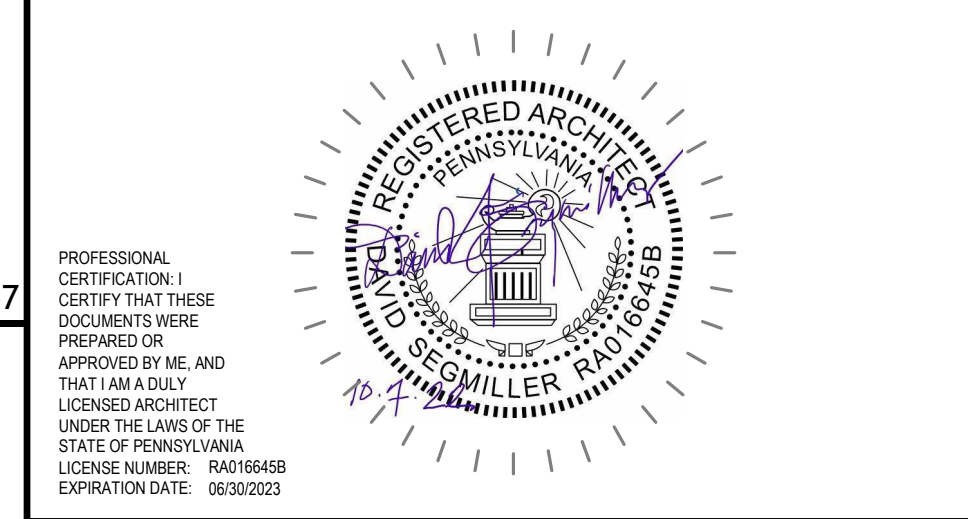
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no.	date	revision
1	12.09.2022	ADDENDUM 5



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**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF GENERAL SERVICES**  
HARRISBURG, PENNSYLVANIA

Project Number **D.G.S. C-0969-0017-001**

**CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLLIDAYSBURG VETERANS' HOME**  
DUNCANSVILLE, BLAIR COUNTY, PA

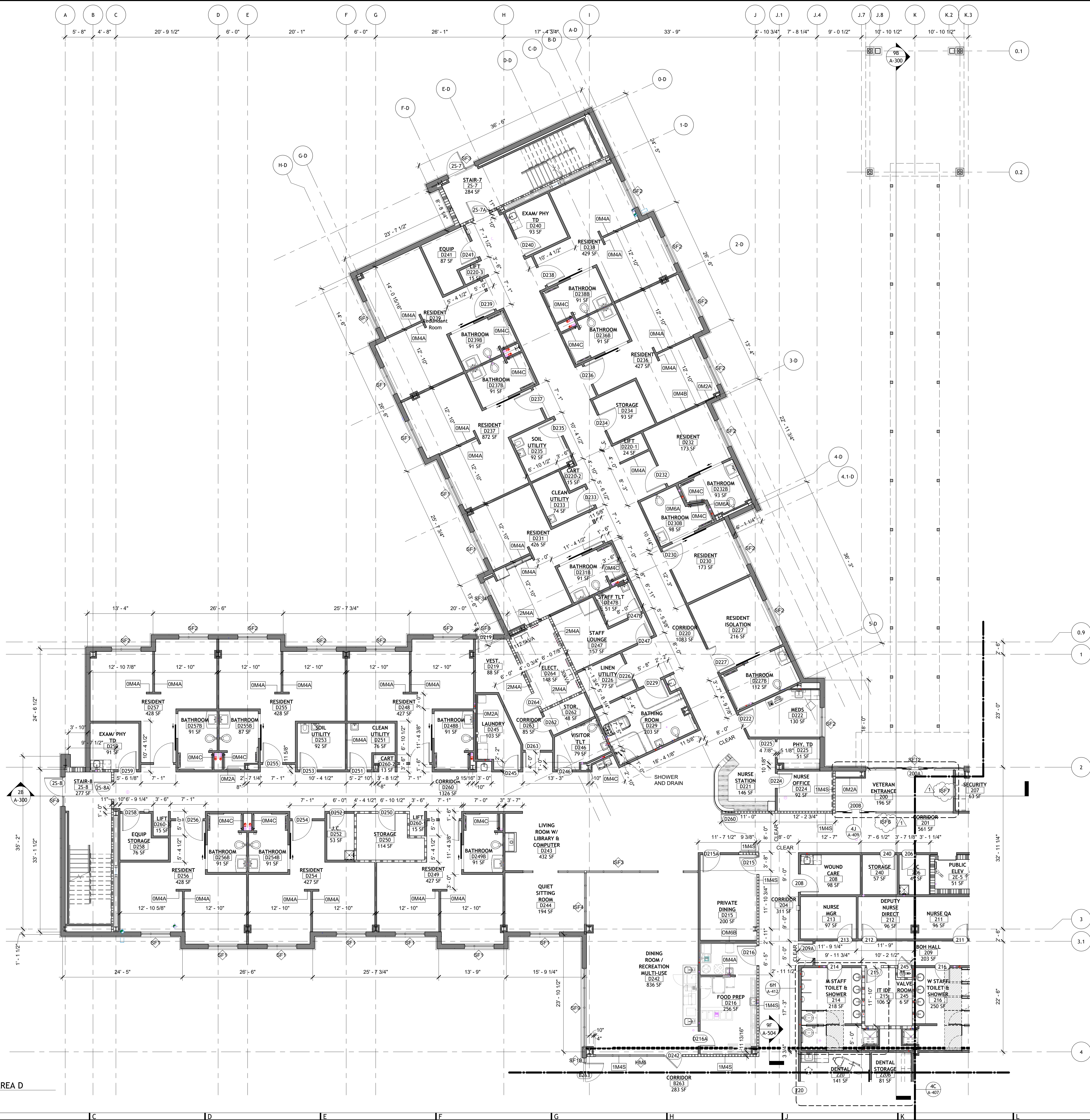
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Drawn by **Author** Date **10-07-2022** Drawing No. **A-101a**  
Checked by **Checker** Scale **1/8" = 1'-0"**

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IF BAR IS NOT ONE (1) INCH LONG ADJUST SCALE ACCORDINGLY  
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL

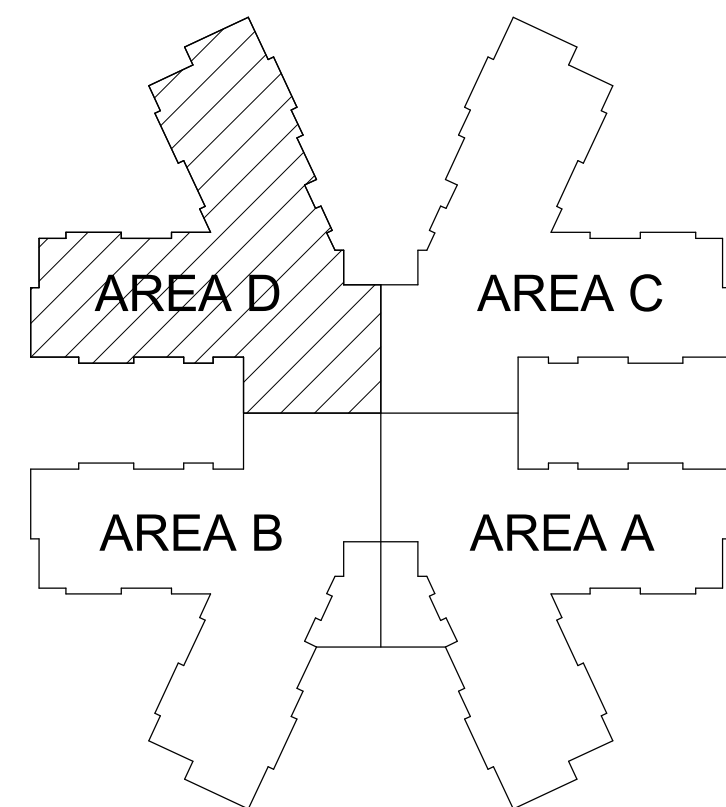
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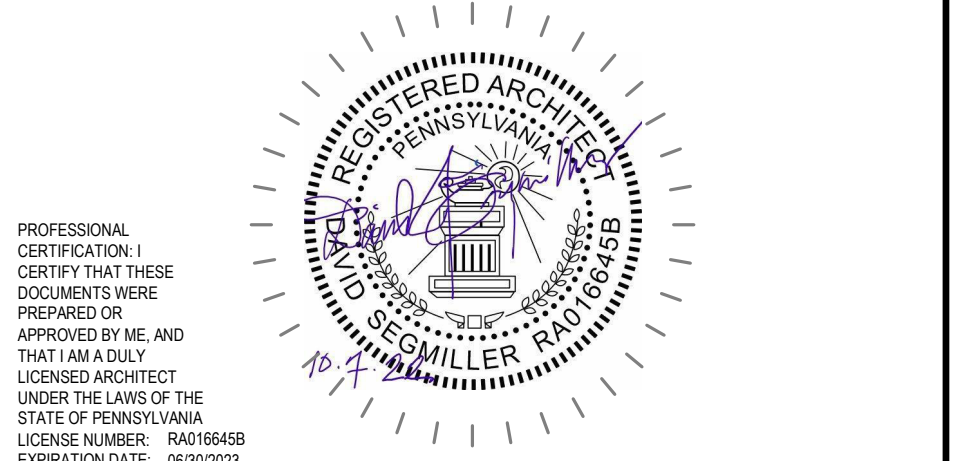


9A LEVEL 2 - AREA D  
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1	<b>ARCHITECT</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530
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	<b>INTERIOR DESIGN</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530
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	<b>CIVIL ENGINEERS</b> Keller Engineers, Inc. 420 Allegheny St. p. 814.696.7430 Holidaysburg, PA 16648 f. 000.000.0000



1	12.09.2022	ADDENDUM 5
no.	date	revision



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**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF GENERAL SERVICES**  
HARRISBURG, PENNSYLVANIA

Project Number **D.G.S. C-0969-0017-001**

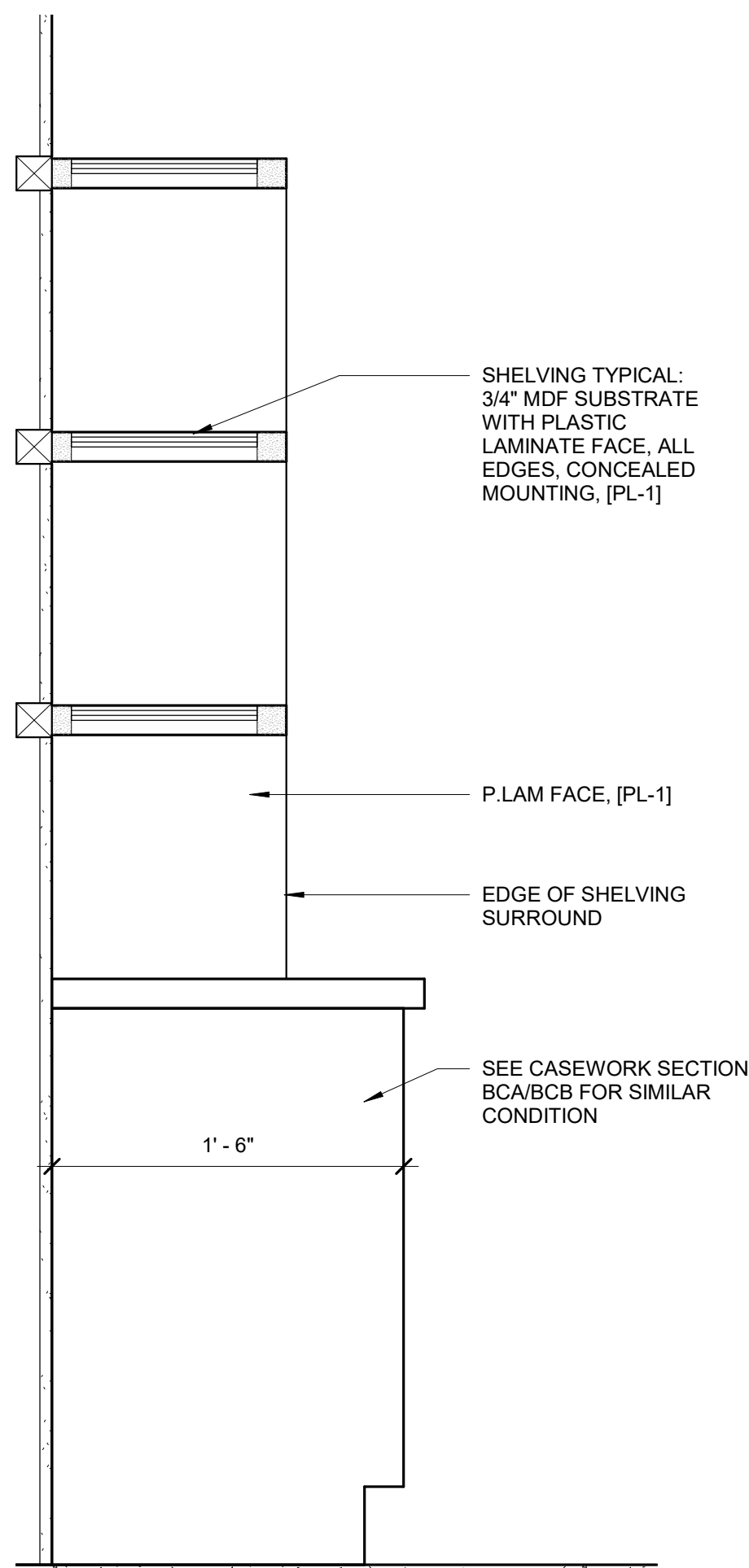
**CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLLIDAYSBURG VETERANS' HOME**  
DUNCANSVILLE, BLAIR COUNTY, PA

**PARTIAL FLOOR PLAN LEVEL 2 AREA D**

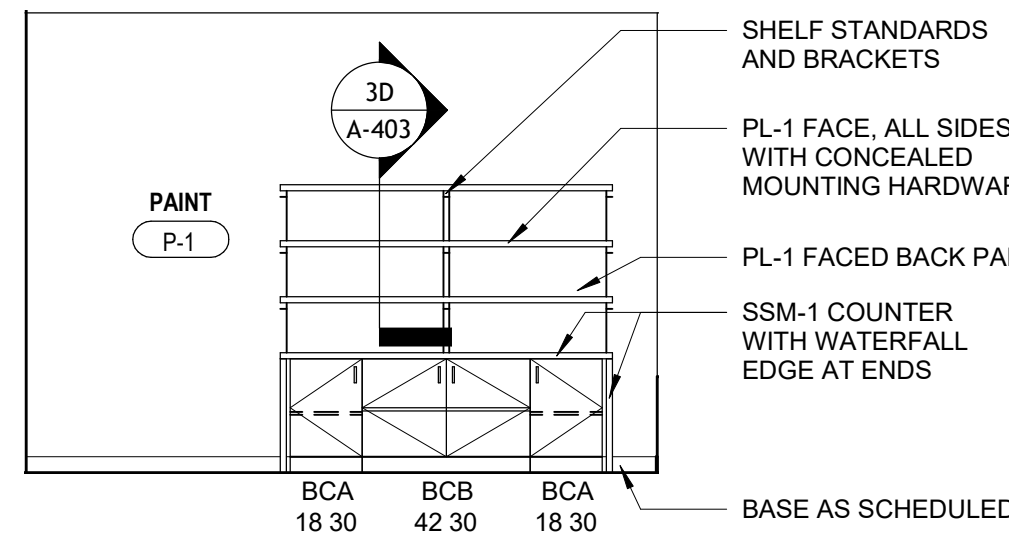
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Author	10-07-2022	A-102d
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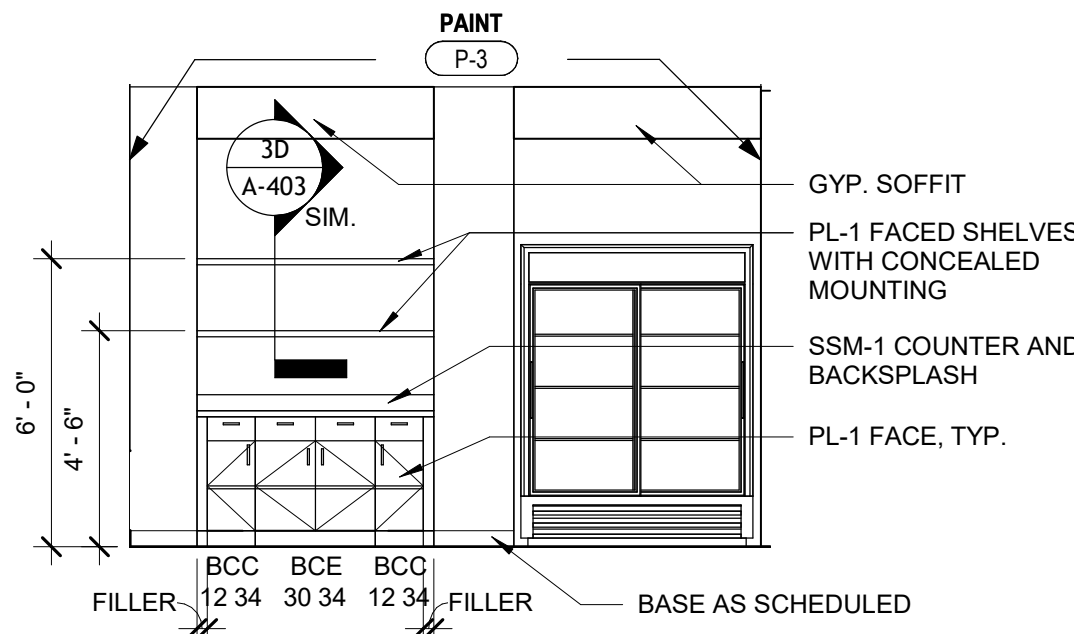




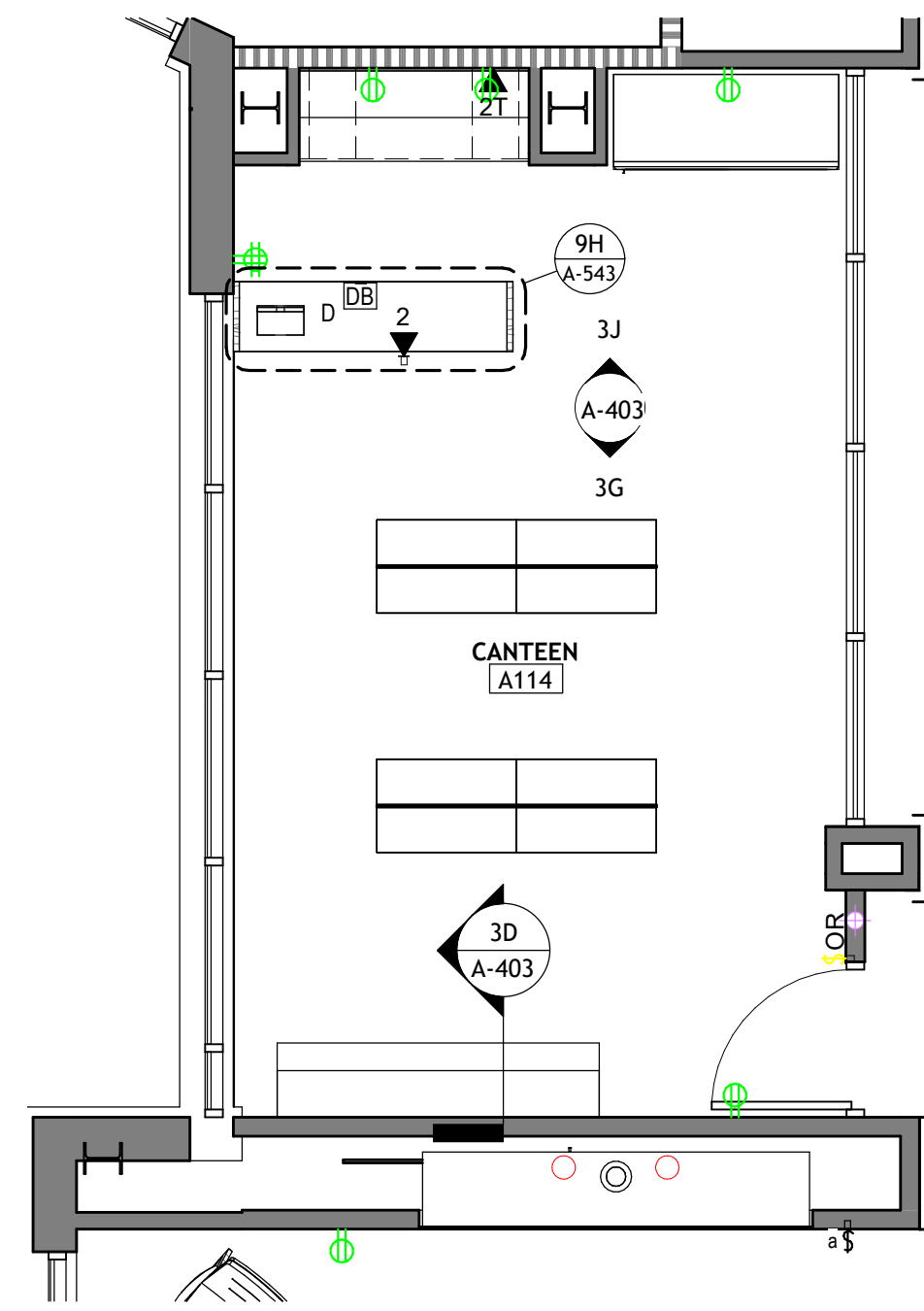
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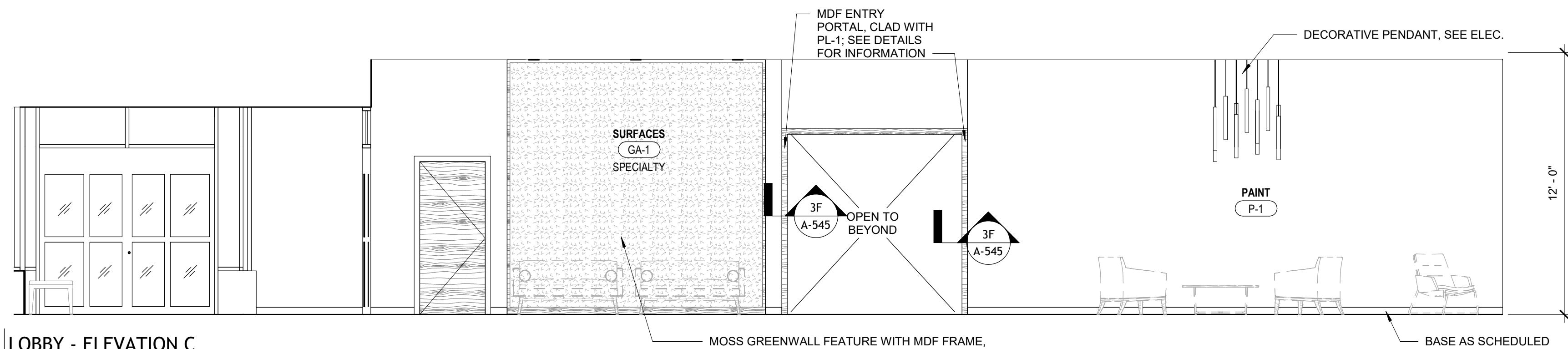
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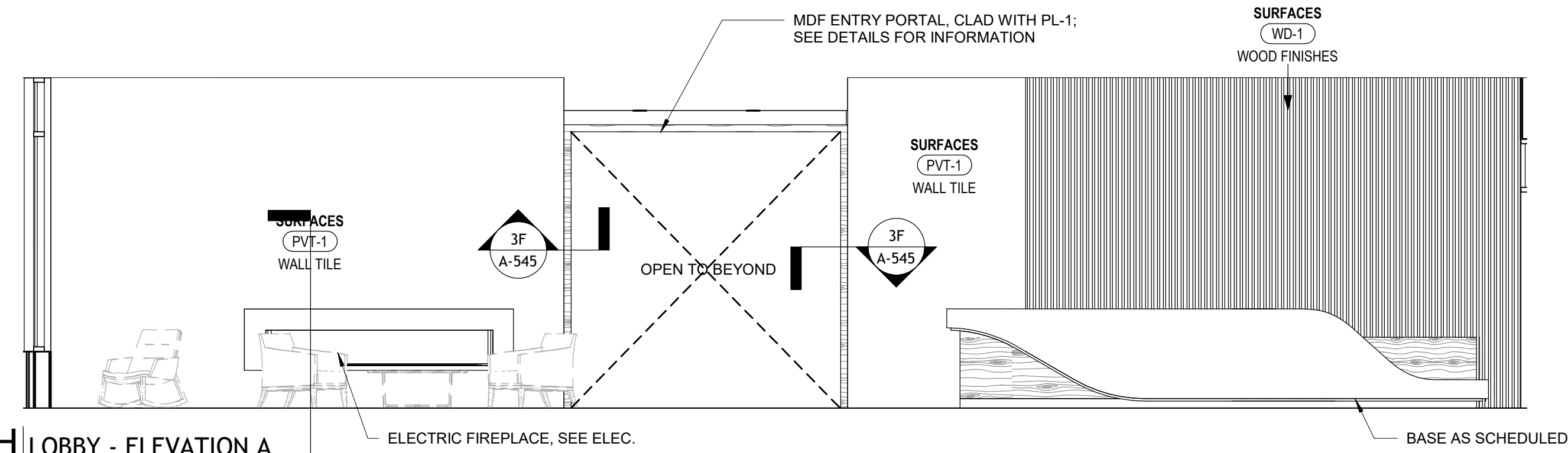
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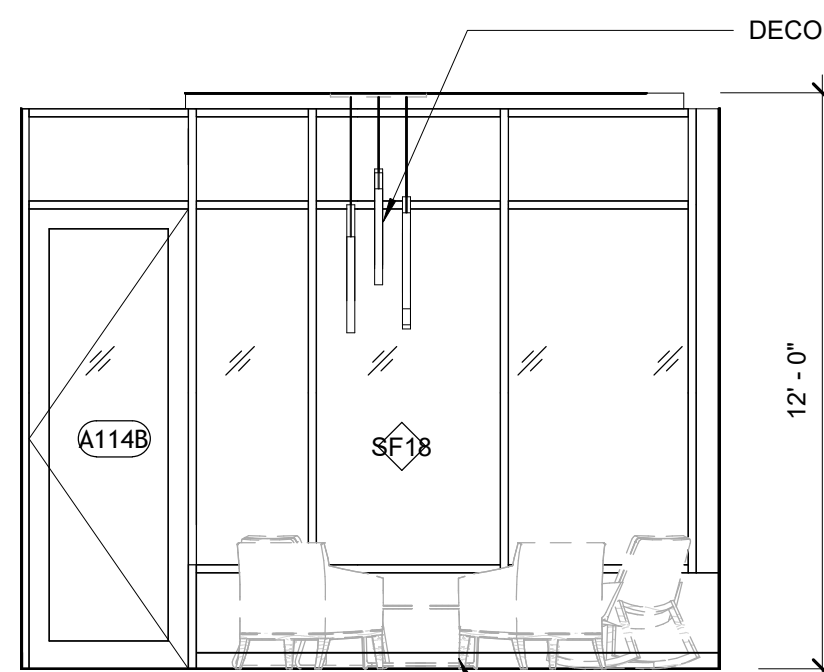
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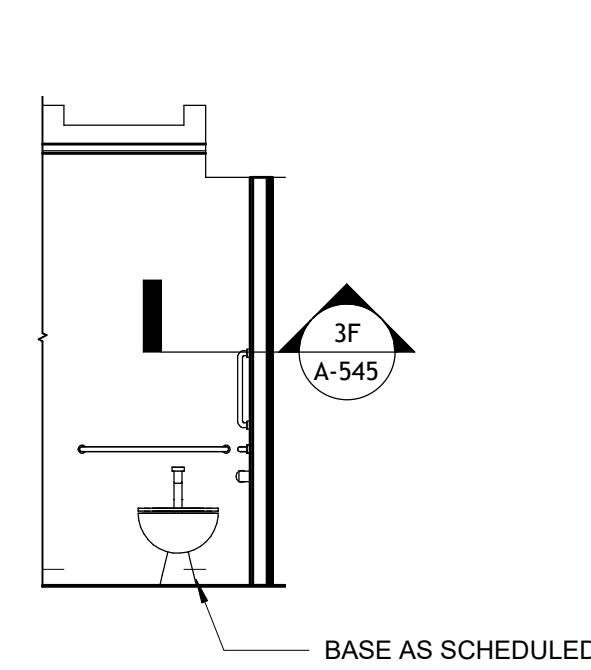
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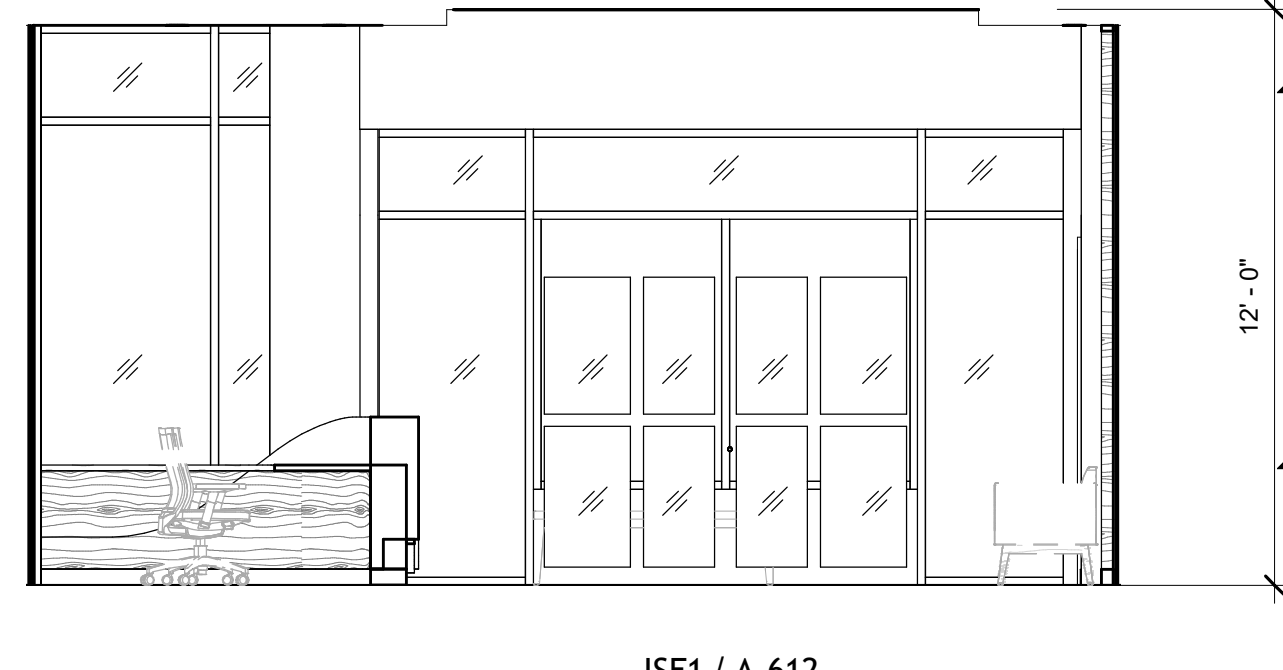
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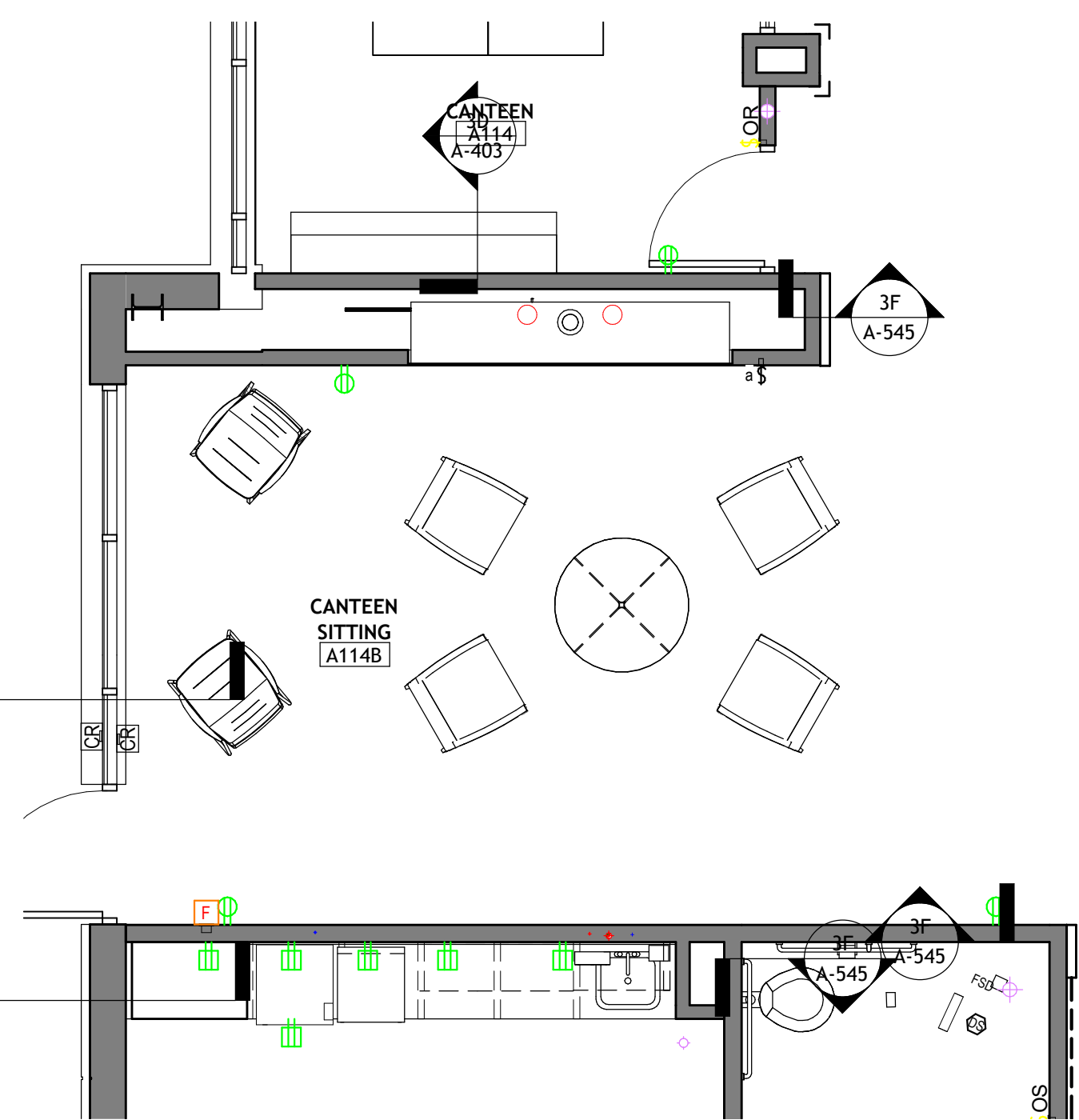
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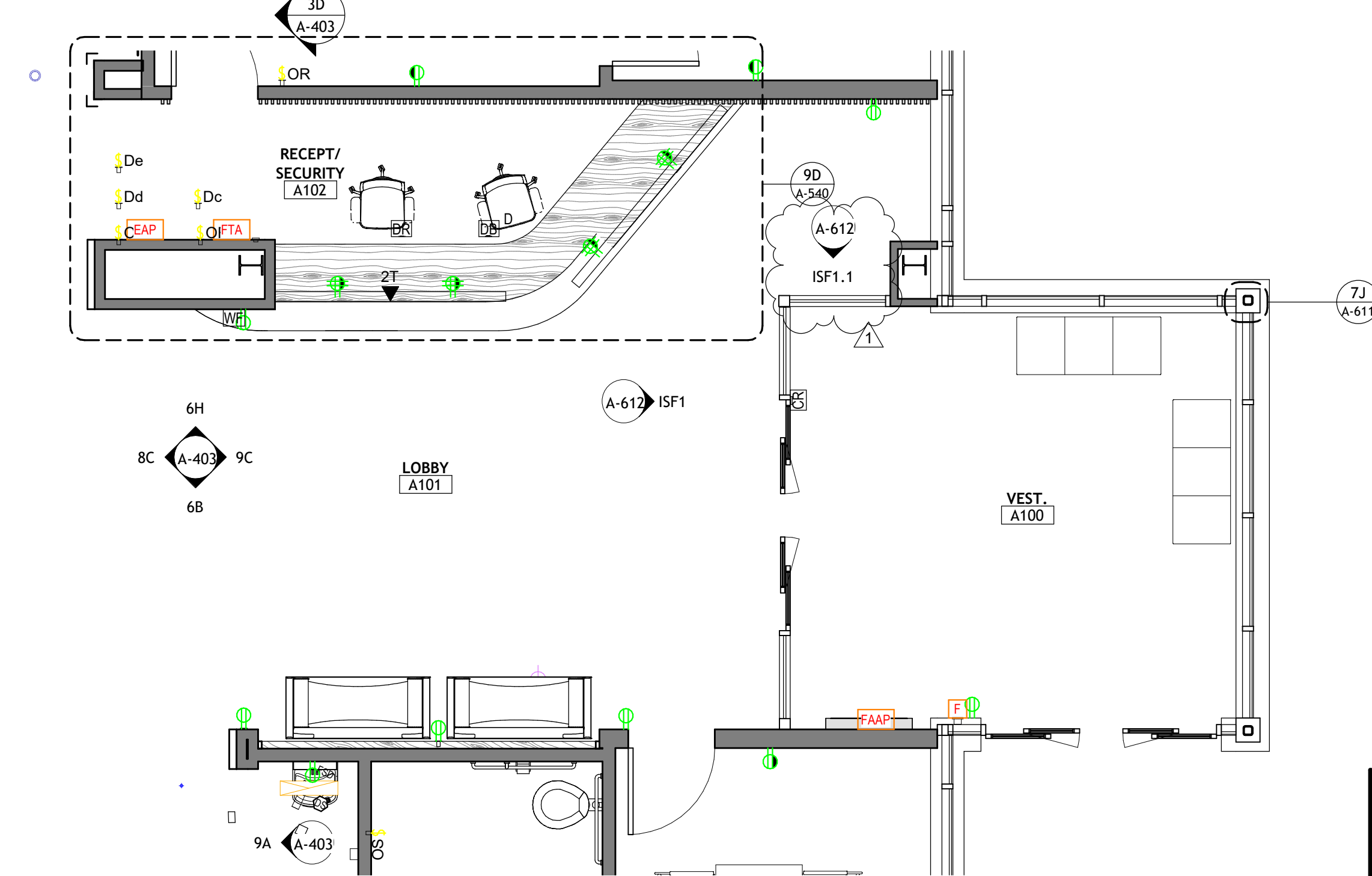
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9C Lobby - Elevation B  
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9F Enlarged Plan - Lobby  
A-101a | A-403 | 1/4" = 1'-0"



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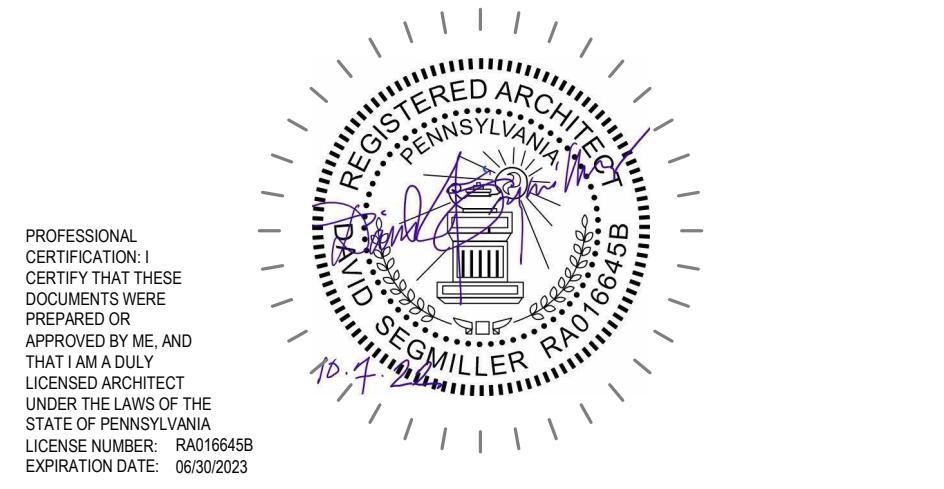
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1	12.09.2022	ADDENDUM 5
no.	date	revision



Hord Coplan Macht, Inc.  
700 E. Pratt St, Suite 1200  
Baltimore, MD 21202

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF GENERAL SERVICES  
HARRISBURG, PENNSYLVANIA

Project Number D.G.S. C-0969-0017-001

CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLLIDAYSBURG VETERANS' HOME  
DUNCANSVILLE, BLAIR COUNTY, PA

INTERIOR ENLARGED PLANS AND ELEVATIONS

Drawn by Author Date 10-07-2022 Drawing No. A-403

Checked by Checker Scale As indicated



9

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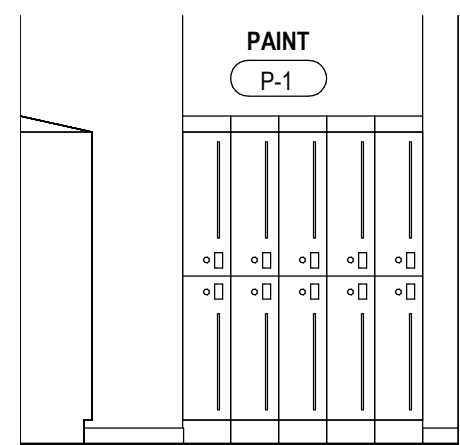
CONTRACTOR SHALL FIELD VERIFY  
ALL DIMENSIONS VARIANCE FROM  
CONTRACT DOCUMENTS NOT  
PERMITTED WITHOUT  
PROFESSIONAL & BUREAU OF  
CONSTRUCTION APPROVAL

Drawn by Author	Date 10-07-2022	Drawing No. <b>A-409</b>
Checked by Checker	Scale 1/4" = 1'-0"	

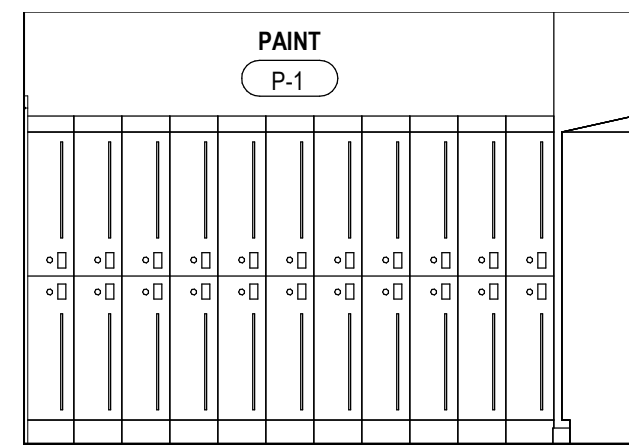


TOILET ACCESSORIES SCHEDULE		
MARK	DESCRIPTION	MOUNTING REQUIREMENTS
G1	SWING UP GRAB BAR WITH TOILET PAPER HOLDER	34" A.F.F. TO CENTERLINE U.N.O.
G2	SWING UP GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G5	30" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G6	36" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G7	42" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G9	18" VERTICAL GRAB BAR	40" A.F.F. TO BOTTOM U.N.O.
M1	24" x 36" MIRROR WITH FRAME	42" A.F.F. TO BOTTOM OF FRAME
M2	36" x 36" LIGHTED MIRROR	42" A.F.F. TO BOTTOM OF FRAME
RH	ROBE HOOK	4'-6" A.F.F. TO BOTTOM U.N.O.
SC	SHOWER CURTAIN ROD	6'-2" A.F.F. T.O. ROD, U.N.O.
TA1	SOAP DISPENSER	
TA2	PAPER TOWEL DISPENSER	
TA3	TOILET PAPER HOLDER	
TB1	18" TOWEL BAR	48" A.F.F. TO CENTERLINE, U.N.O.
TB1	FRENCH DRAIN, 36" x 48"	
G3	12" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G4	27" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.

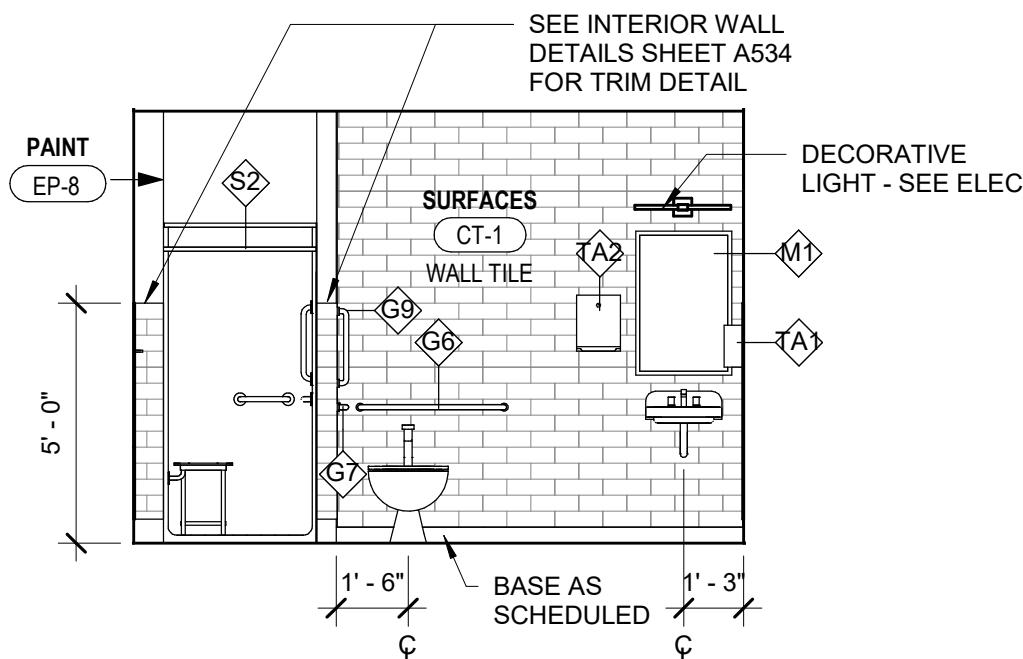
<b>ARCHITECT</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>LANDSCAPE ARCHITECTURE</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>INTERIOR DESIGN</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>STRUCTURAL ENGINEER</b> Hope Furrer Associates 700 East Beaver Ave., Suite 3 p. 814.234.8191 x 1106 State College, PA 16801 f. 000.000.0000		
<b>MECHANICAL &amp; ELECTRICAL ENGINEER</b> BALA Consulting Engineers 443 South Gulph Rd p. 610.674.0905 King of Prussia, PA 19406 f. 000.000.0000		
<b>PLUMBING ENGINEER</b> VETERAN DESIGN & CONSTRUCTION, Inc. 5523 Research Park Drive, Suite 110 p. 443.543.5081 Baltimore, MD 21228 f. 000.000.0000		
<b>CIVIL ENGINEERS</b> Keller Engineers, Inc. 420 Allegheny St. p. 814.696.7430 Holidaysburg, PA 16648 f. 000.000.0000		



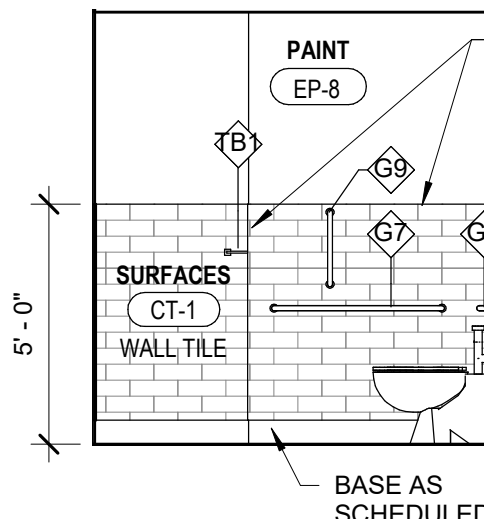
1G M & F LOCKERS SOUTH  
A-411 A-411 1/4" = 1'-0"



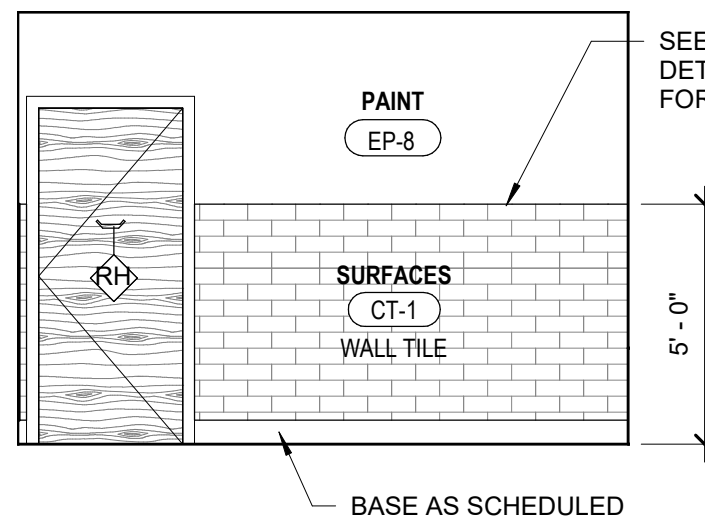
1J M & F LOCKERS EAST  
A-411 A-411 1/4" = 1'-0"



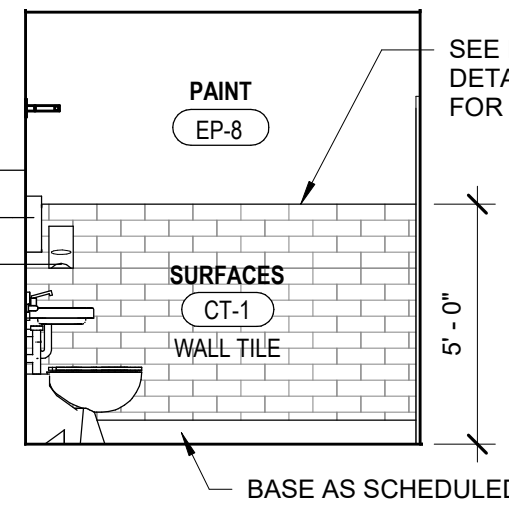
3C LOCKER TOILET - ELEVATION D  
A-411 A-411 1/4" = 1'-0"



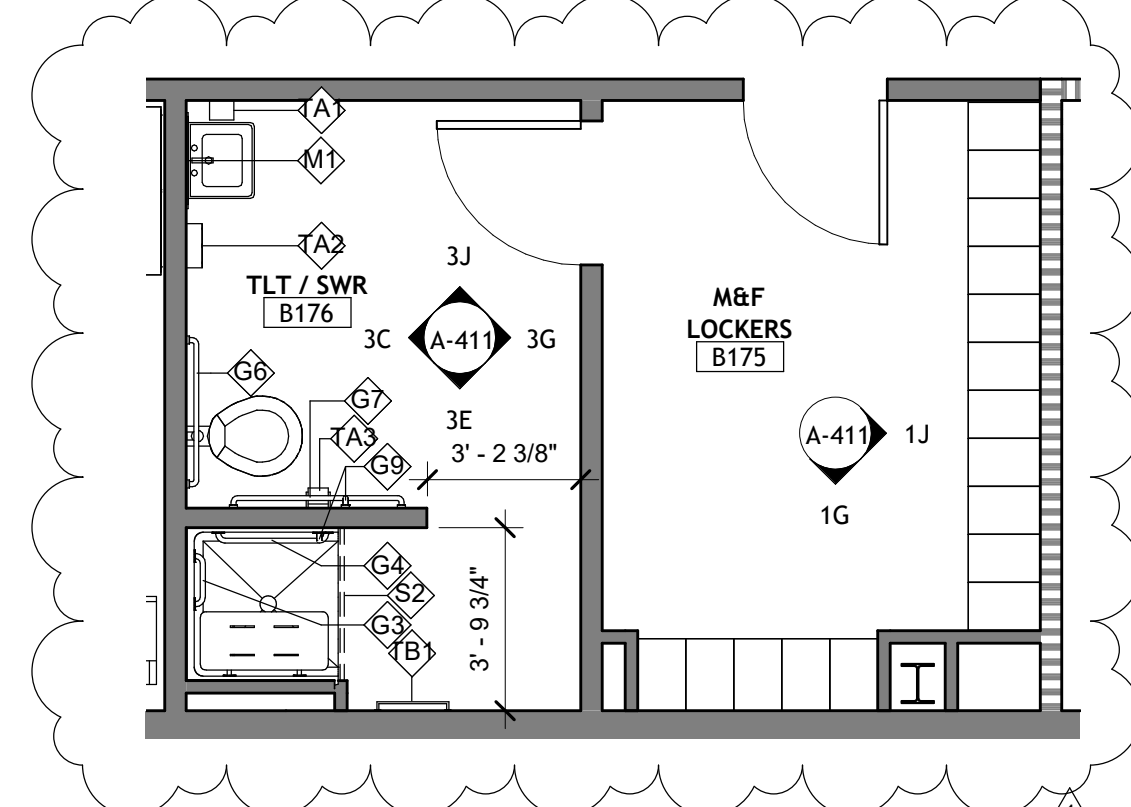
3E LOCKER TOILET - ELEVATION C  
A-411 A-411 1/4" = 1'-0"



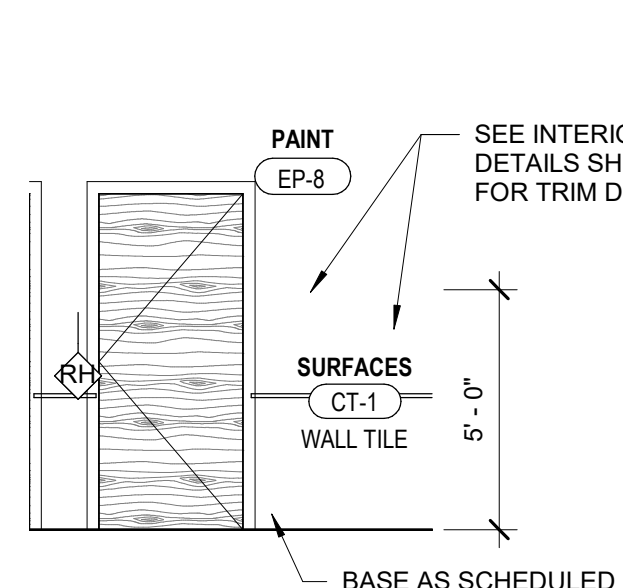
3G LOCKER TOILET - ELEVATION B  
A-411 A-411 1/4" = 1'-0"



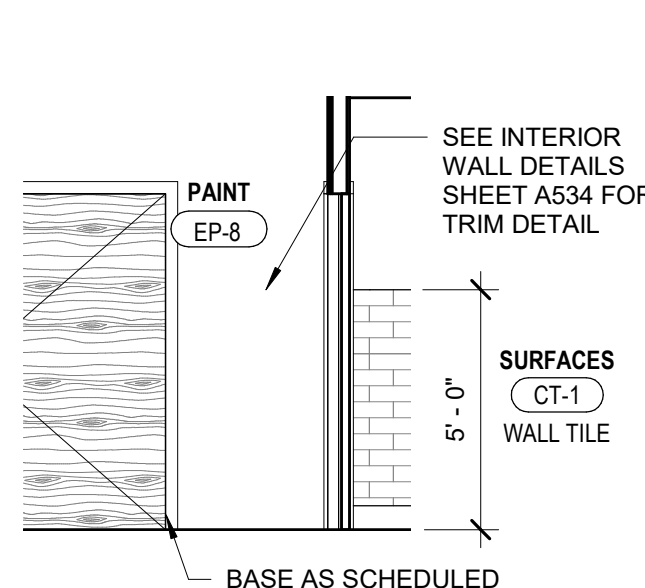
3J LOCKER TOILET - ELEVATION A  
A-411 A-411 1/4" = 1'-0"



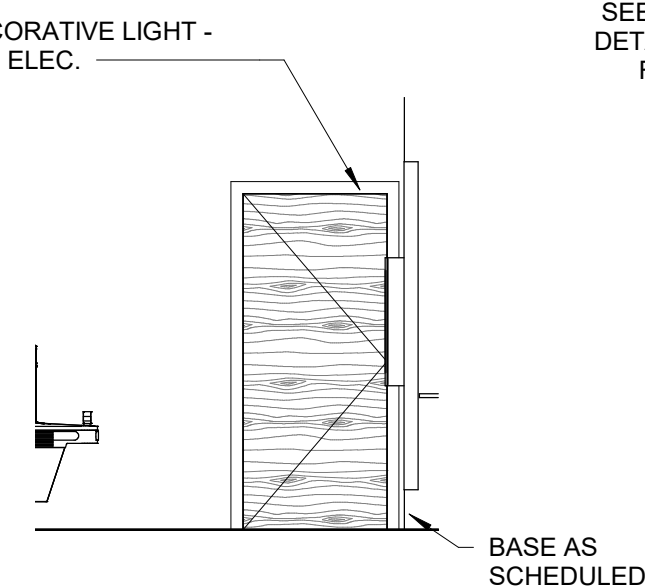
3K ENLARGED TOILET PLAN - BACK OF HOUSE LOCKERS  
A-101b A-411 1/4" = 1'-0"



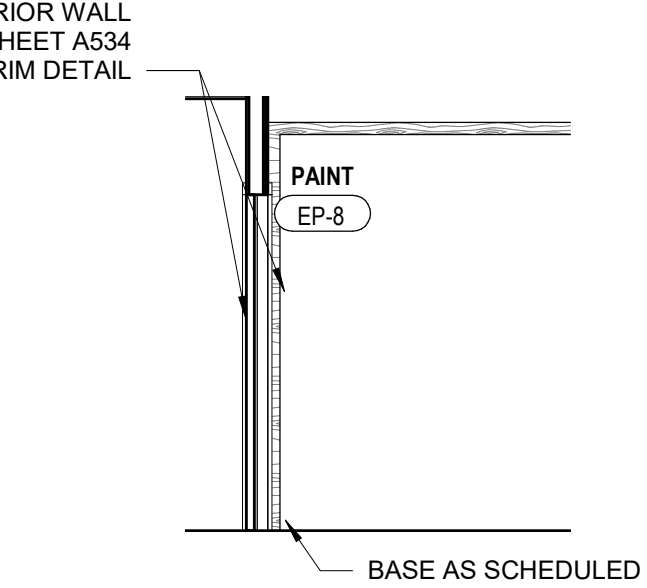
6C LOBBY TOILET - ELEVATION D  
A-405 A-411 1/4" = 1'-0"



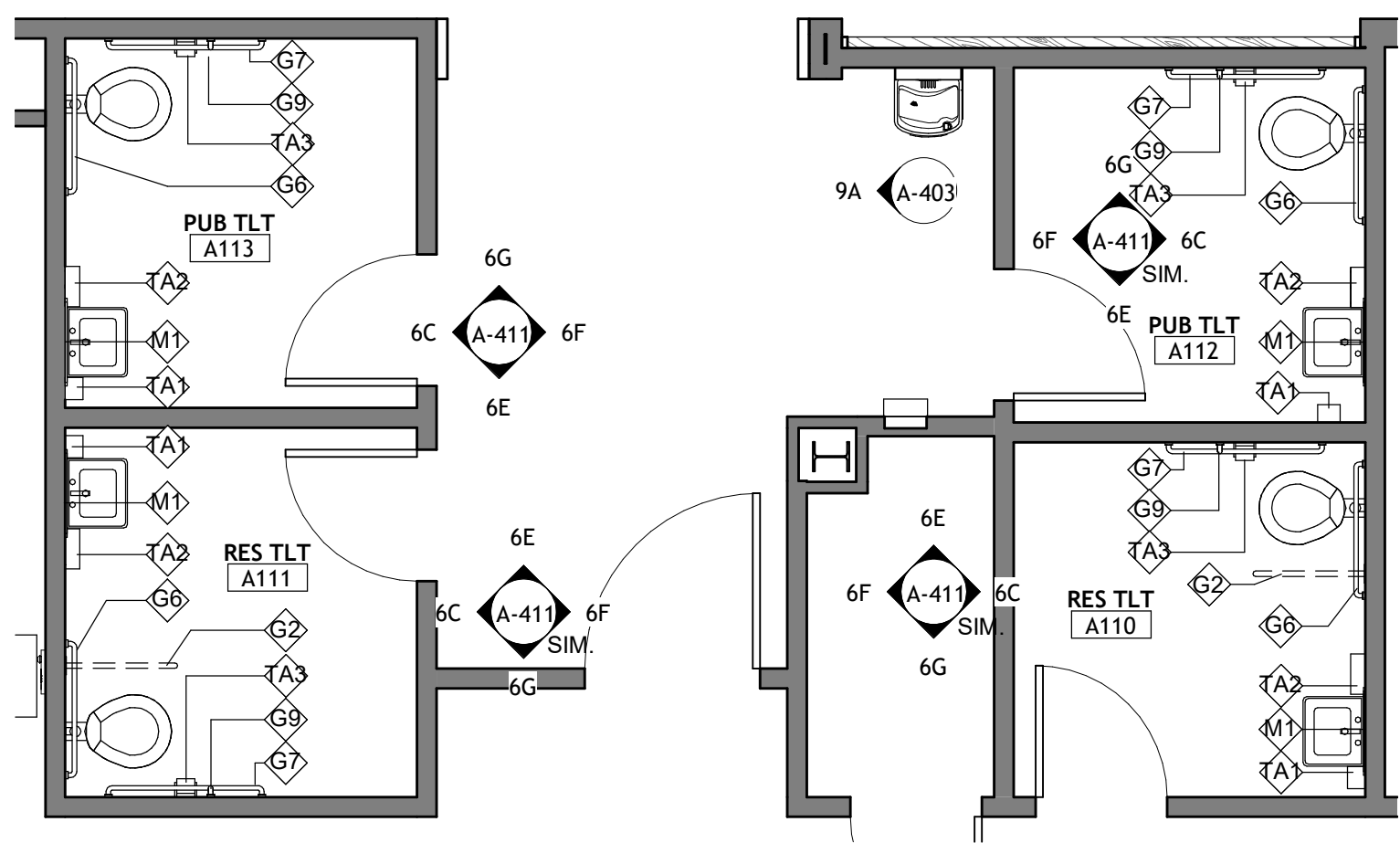
6E LOBBY TOILET - ELEVATION C  
A-405 A-411 1/4" = 1'-0"



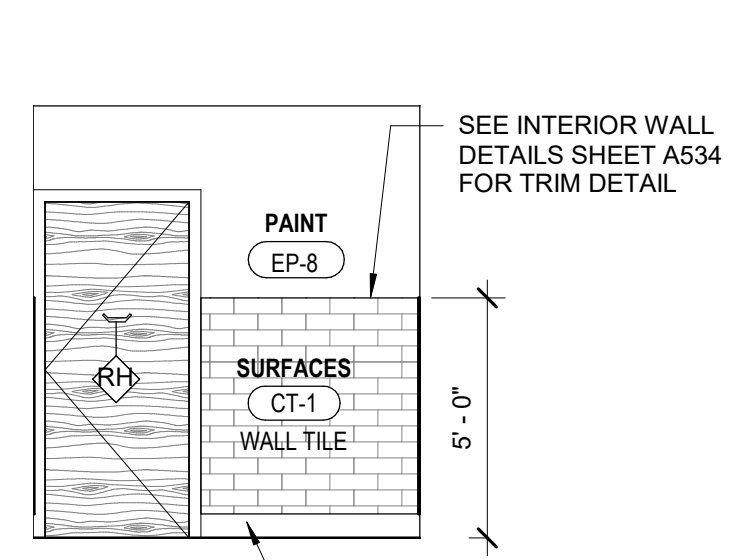
6F LOBBY TOILET - ELEVATION B  
A-405 A-411 1/4" = 1'-0"



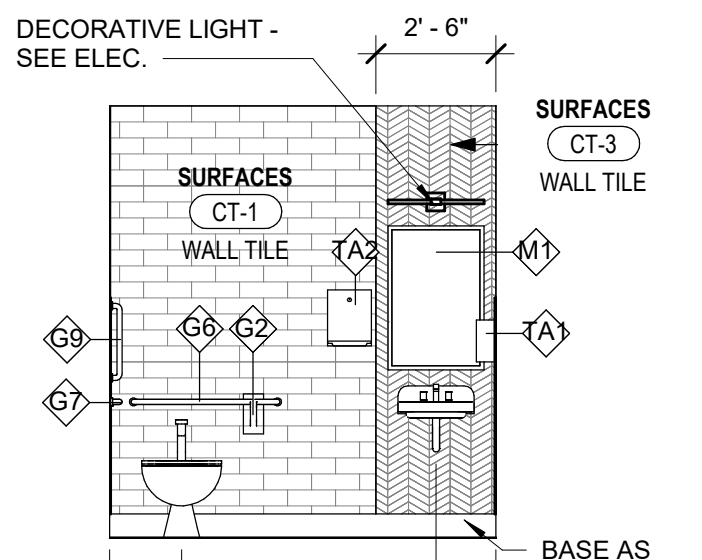
6G LOBBY TOILET - ELEVATION A  
A-405 A-411 1/4" = 1'-0"



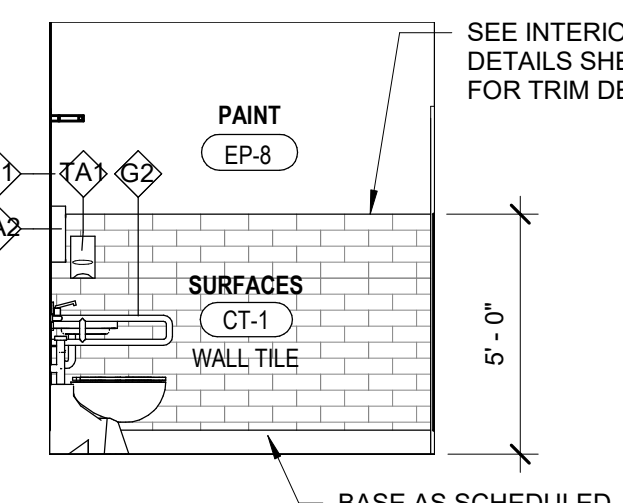
6J ENLARGED TOILET PLANS - LOBBY  
A-101a A-411 1/4" = 1'-0"



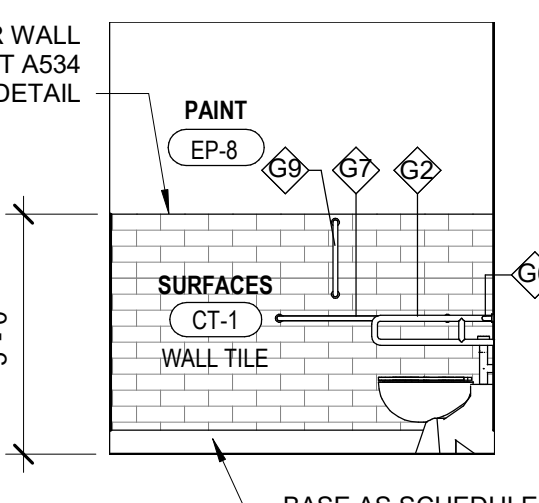
8A LEVEL 1 CORRIDOR TOILET - ELEVATION D  
A-404 A-411 1/4" = 1'-0"



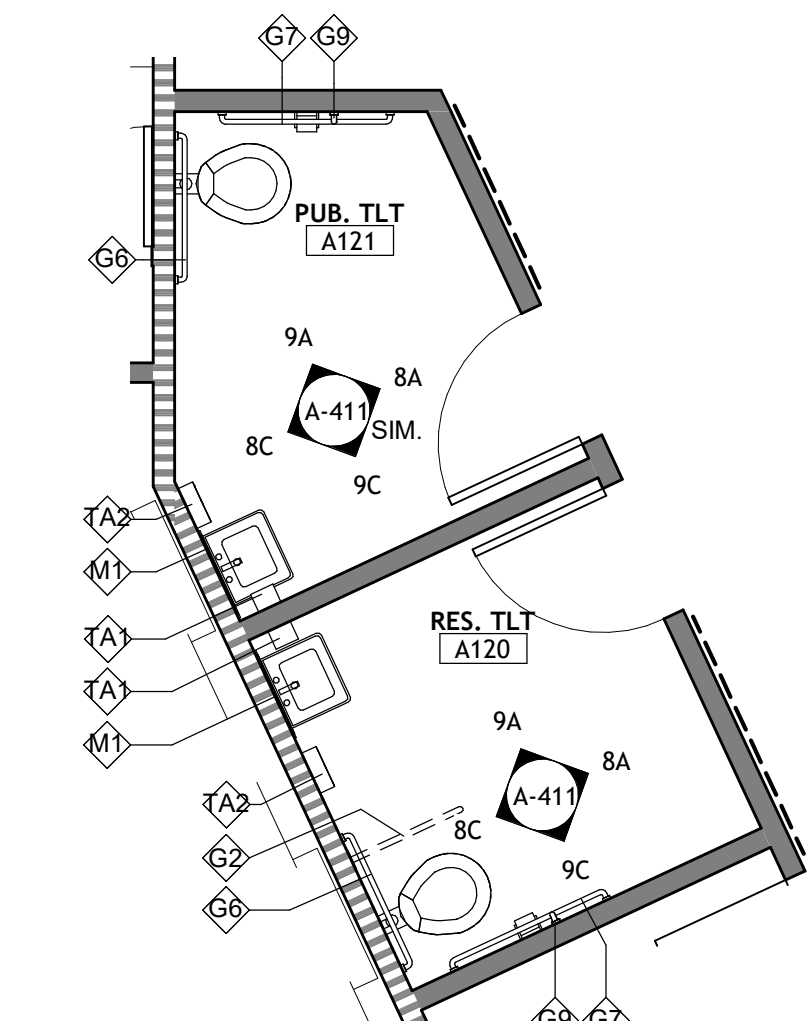
8C LEVEL 1 CORRIDOR TOILET - ELEVATION C  
A-404 A-411 1/4" = 1'-0"



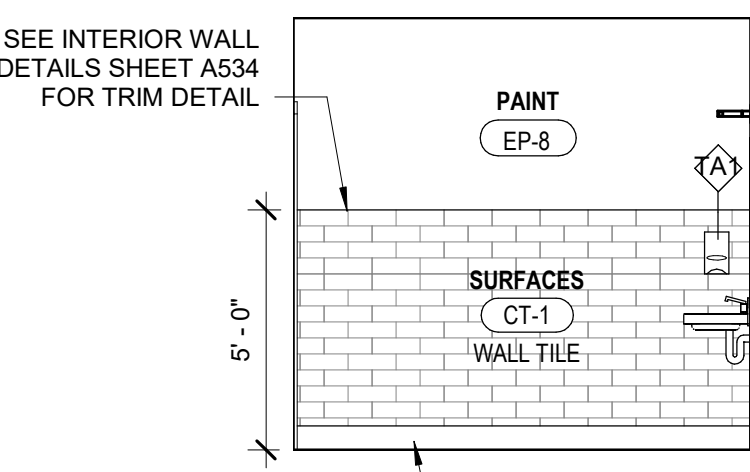
9A LEVEL 1 CORRIDOR TOILET - ELEVATION B  
A-404 A-411 1/4" = 1'-0"



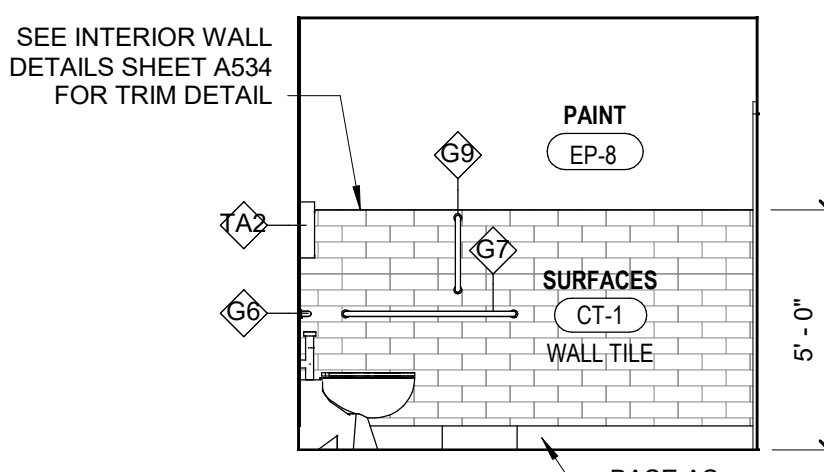
9C LEVEL 1 CORRIDOR TOILET - ELEVATION A  
A-404 A-411 1/4" = 1'-0"



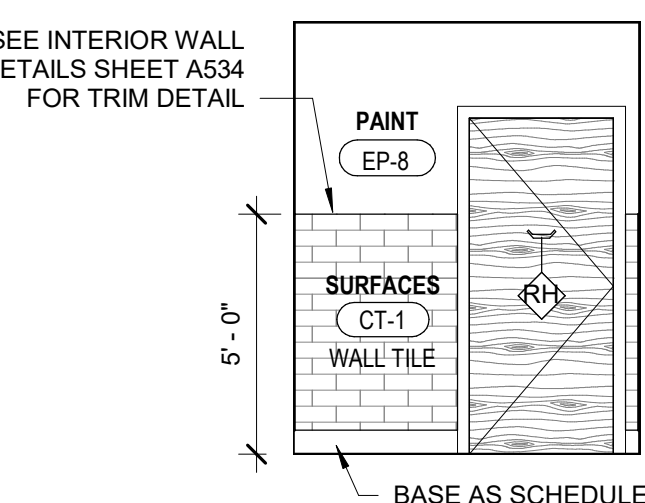
9E ENLARGED TOILET PLANS - LEVEL 1 CORRIDOR  
A-101a A-411 1/4" = 1'-0"



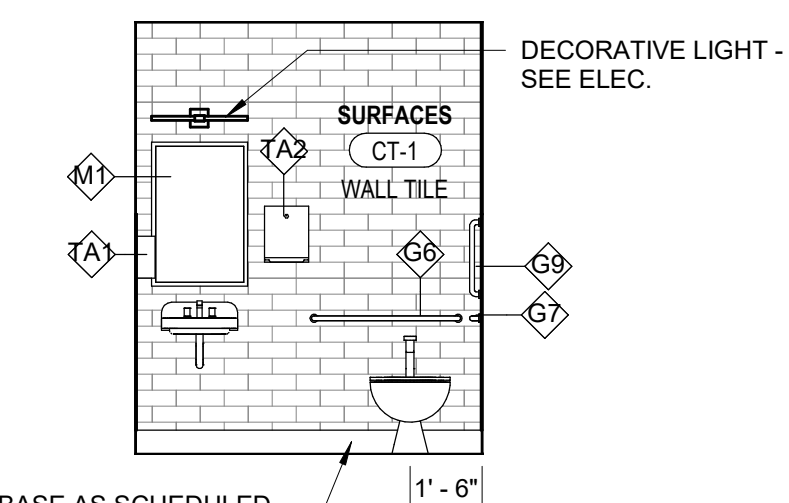
8G LEVEL 1 STAFF TOILET - ELEVATION D  
A-411 A-411 1/4" = 1'-0"



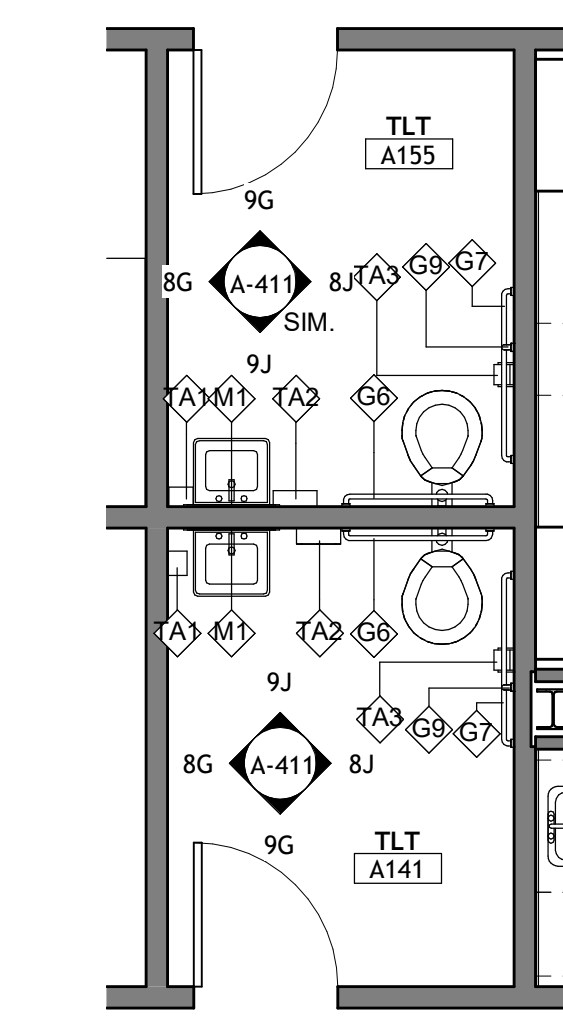
8J LEVEL 1 STAFF TOILET - ELEVATION C  
A-411 A-411 1/4" = 1'-0"



9G LEVEL 1 STAFF TOILET - ELEVATION B  
A-406 A-411 1/4" = 1'-0"



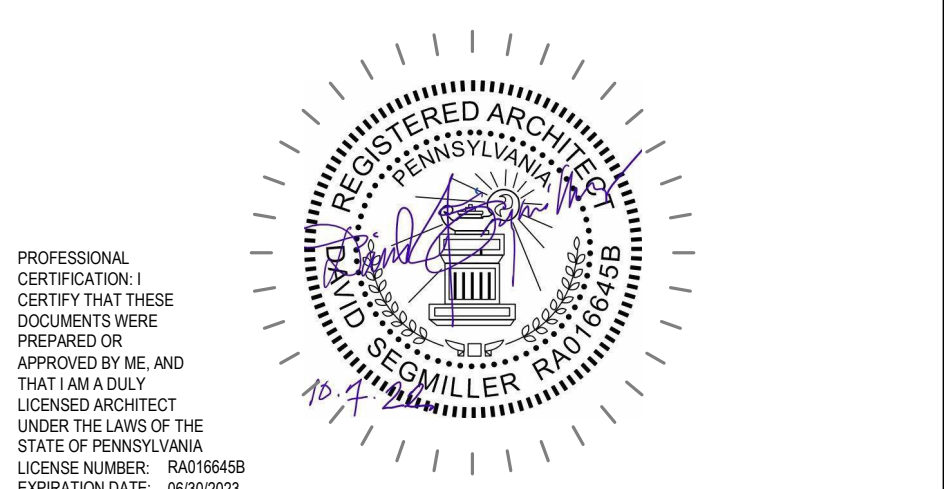
9J LEVEL 1 STAFF TOILET - ELEVATION A  
A-406 A-411 1/4" = 1'-0"



9K ENLARGED TOILET PLAN - LEVEL 1 STAFF  
A-101a A-411 1/4" = 1'-0"

VERIFY SCALE	
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING	
0 1	
IF BAR IS NOT ONE (1) INCH LONG ADJUST SCALE ACCORDINGLY	
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL	

no.	date	revision
1	12.09.2022	ADDENDUM 5



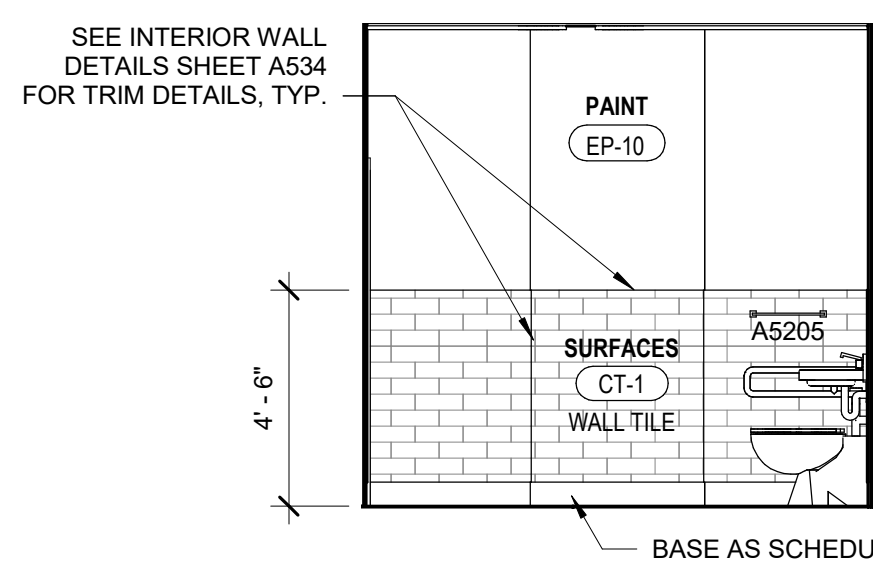
<b>Hord Coplan Macht, Inc.</b> 700 E. Pratt St., Suite 1200 Baltimore, MD 21202	
<b>COMMONWEALTH OF PENNSYLVANIA</b> <b>DEPARTMENT OF GENERAL SERVICES</b> HARRISBURG, PENNSYLVANIA	
Project Number	D.G.S. C-0969-0017-001

<b>CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLLIDAYSBURG VETERANS' HOME</b> DUNCANSVILLE, BLAIR COUNTY, PA		
<b>ENLARGED TOILET PLANS &amp; ELEVATIONS</b>		
Drawn by Author	Date 10-07-2022	Drawing No. <b>A-411</b>
Checked by Checker	Scale As indicated	

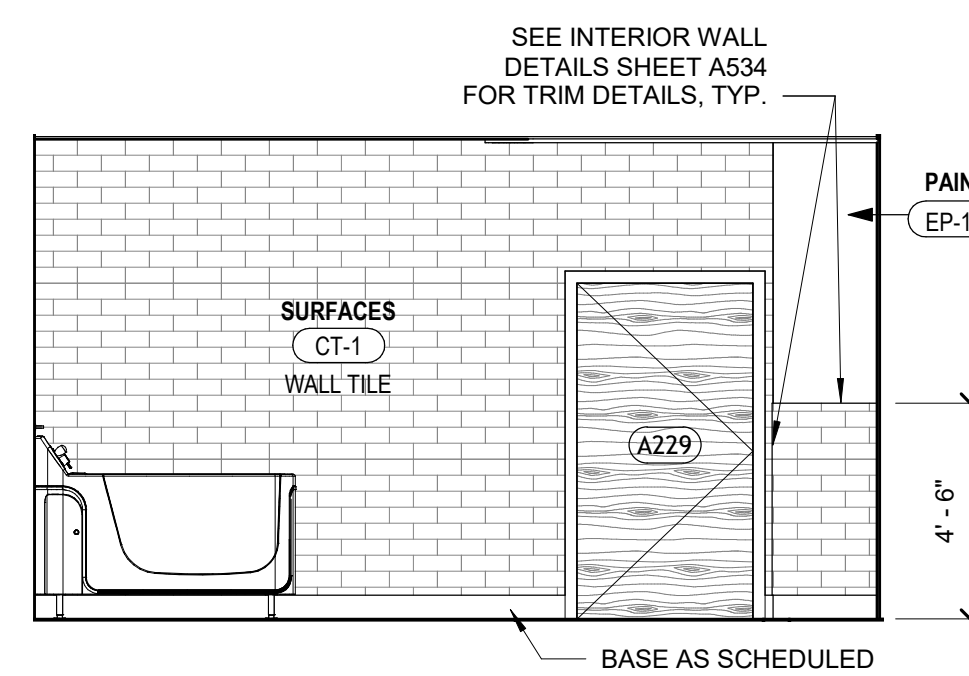


TOILET ACCESSORIES SCHEDULE		
MARK	DESCRIPTION	MOUNTING REQUIREMENTS
G1	SWING UP GRAB BAR WITH TOILET PAPER HOLDER	34" A.F.F. TO CENTERLINE U.N.O.
G2	SWING UP GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G5	30" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G6	36" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G7	42" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G9	18" VERTICAL GRAB BAR	40" A.F.F. TO BOTTOM U.N.O.
M1	24" x 36" MIRROR WITH FRAME	42" A.F.F. TO BOTTOM OF FRAME
M2	36" x 36" LIGHTED MIRROR	42" A.F.F. TO BOTTOM OF FRAME
RH	ROBE HOOK	4'-6" A.F.F. TO BOTTOM U.N.O.
S2	SHOWER CURTAIN ROD	6'-2" A.F.F. T.O. ROD, U.N.O.
TA1	SOAP DISPENSER	
TA2	PAPER TOWEL DISPENSER	
TA3	TOILET PAPER HOLDER	
TB1	18" TOWEL BAR	48" A.F.F. TO CENTERLINE, U.N.O.
TD1	TRENCH DRAIN 36"x 4"	
G3	12" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.
G4	27" GRAB BAR	34" A.F.F. TO CENTERLINE U.N.O.

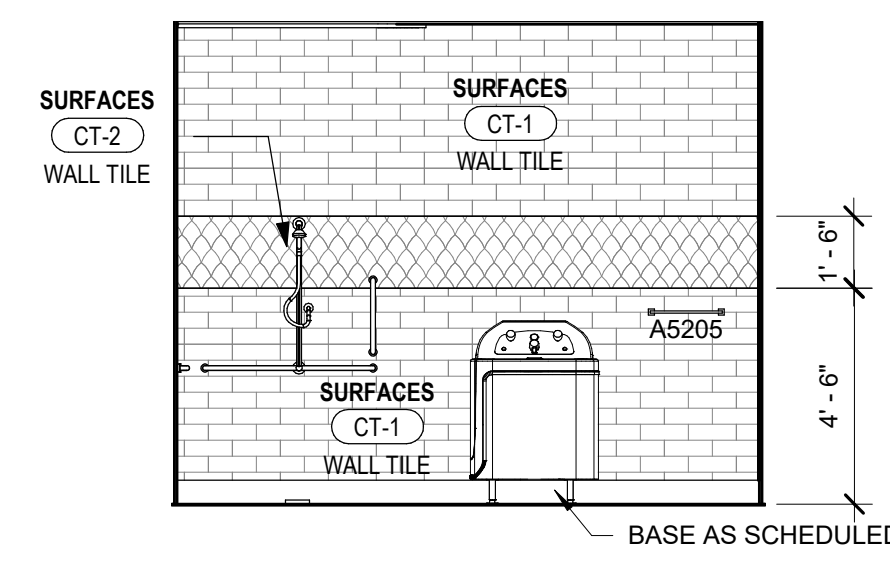
<b>ARCHITECT</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>LANDSCAPE ARCHITECTURE</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>INTERIOR DESIGN</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>STRUCTURAL ENGINEER</b> Hope Furrer Associates 700 East Beaver Ave., Suite 3 p. 814.234.8191 x 1106 State College, PA 16801 f. 000.000.0000		
<b>MECHANICAL &amp; ELECTRICAL ENGINEER</b> BALA Consulting Engineers 443 South Gulph Rd p. 610.674.0905 King of Prussia, PA 19406 f. 000.000.0000		
<b>PLUMBING ENGINEER</b> VETERAN DESIGN & CONSTRUCTION, Inc. 5523 Research Park Drive, Suite 110 p. 443.543.5081 Baltimore, MD 21228 f. 000.000.0000		
<b>CIVIL ENGINEERS</b> Keller Engineers, Inc. 420 Allegheny St. p. 814.696.7430 Holidaysburg, PA 16648 f. 000.000.0000		



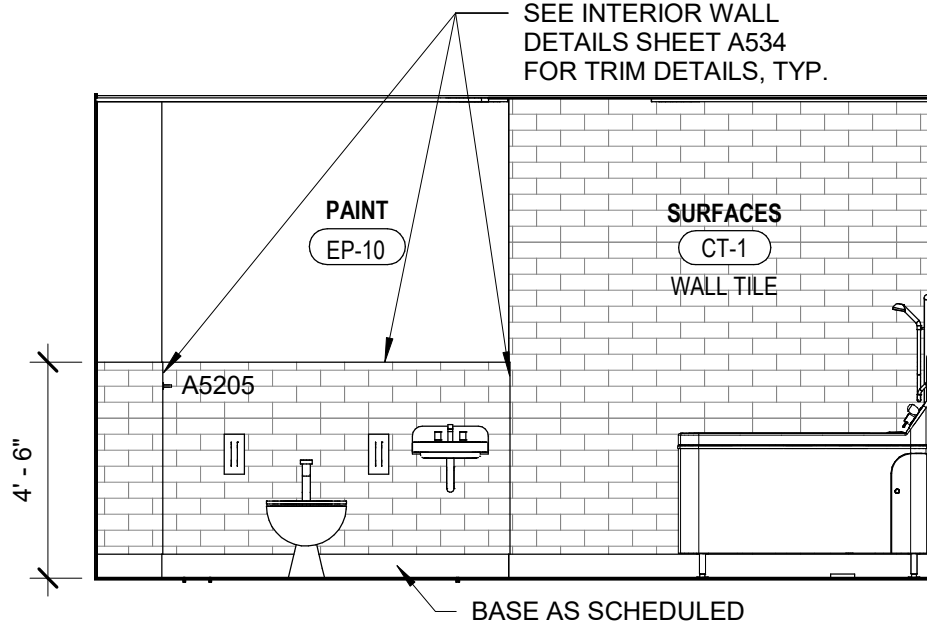
2E BATHING ROOM - ELEVATION D  
A-412 A-412 1/4" = 1'-0"



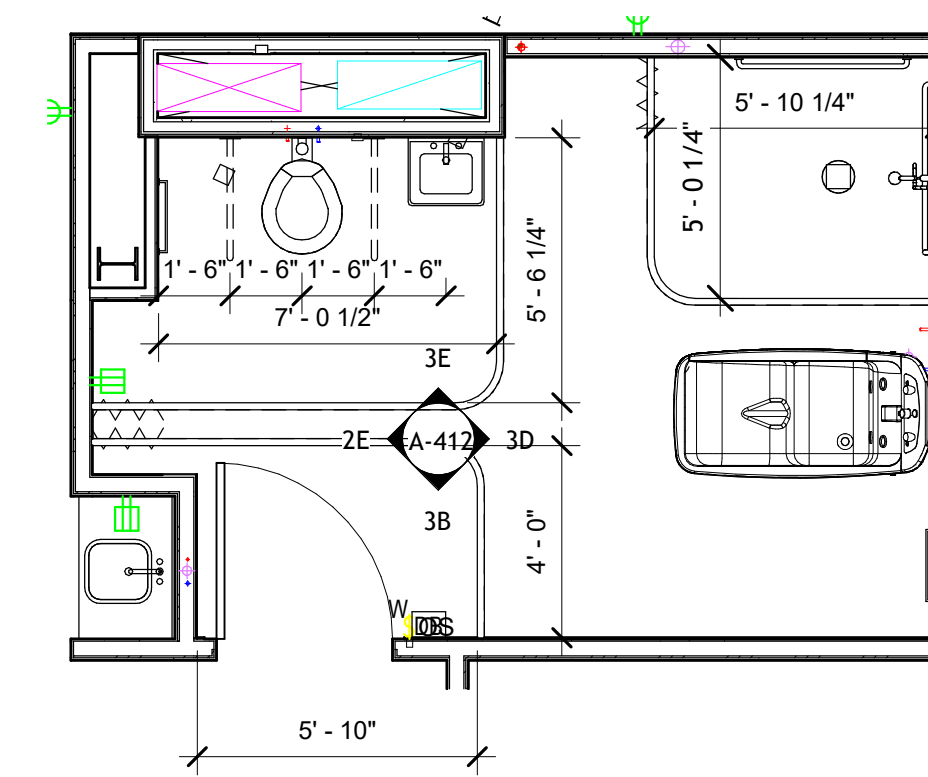
3B BATHING ROOM - ELEVATION C  
A-407 A-412 1/4" = 1'-0"



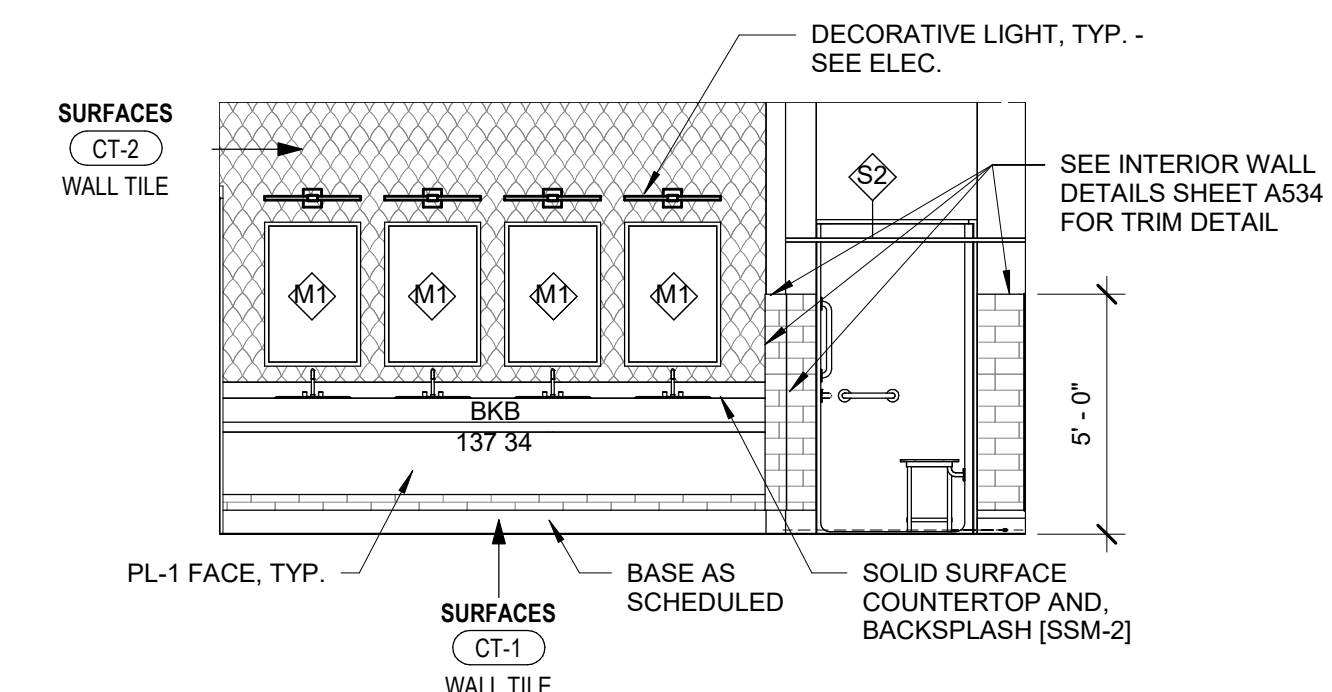
3D BATHING ROOM - ELEVATION B  
A-412 A-412 1/4" = 1'-0"



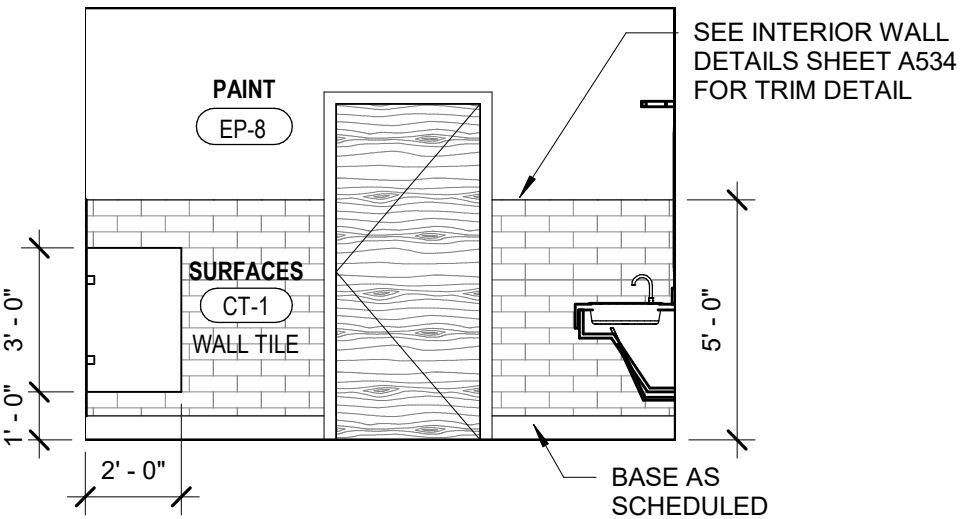
3E BATHING ROOM - ELEVATION A  
A-407 A-412 1/4" = 1'-0"



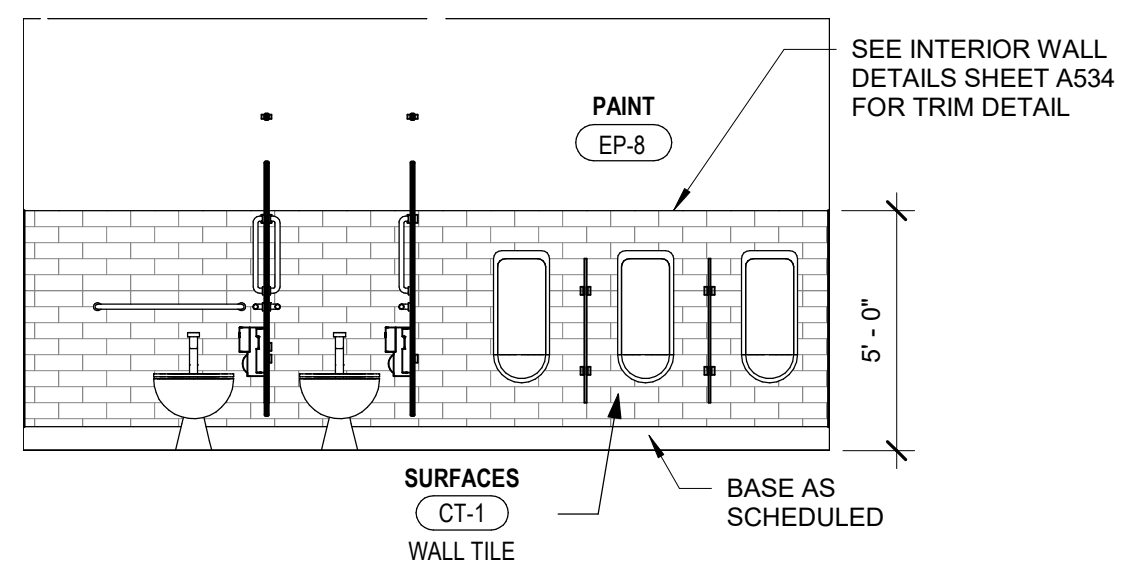
3H ENLARGED PLAN - BATHING ROOM - TYPICAL  
A-102d A-412 1/4" = 1'-0"



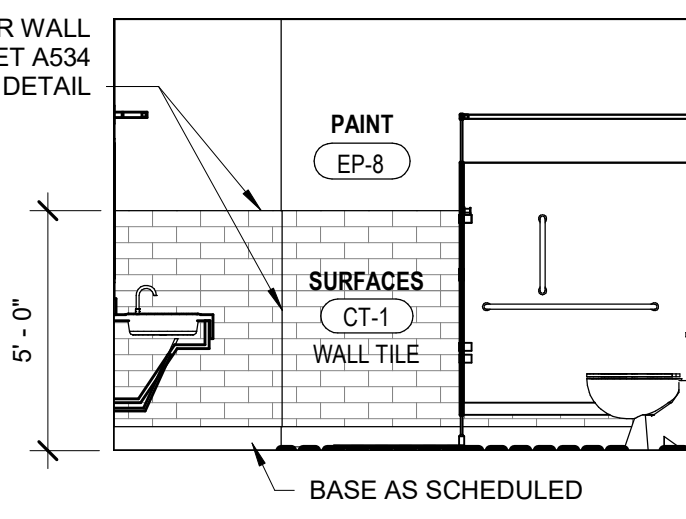
5E MEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION D  
A-407 A-412 1/4" = 1'-0"



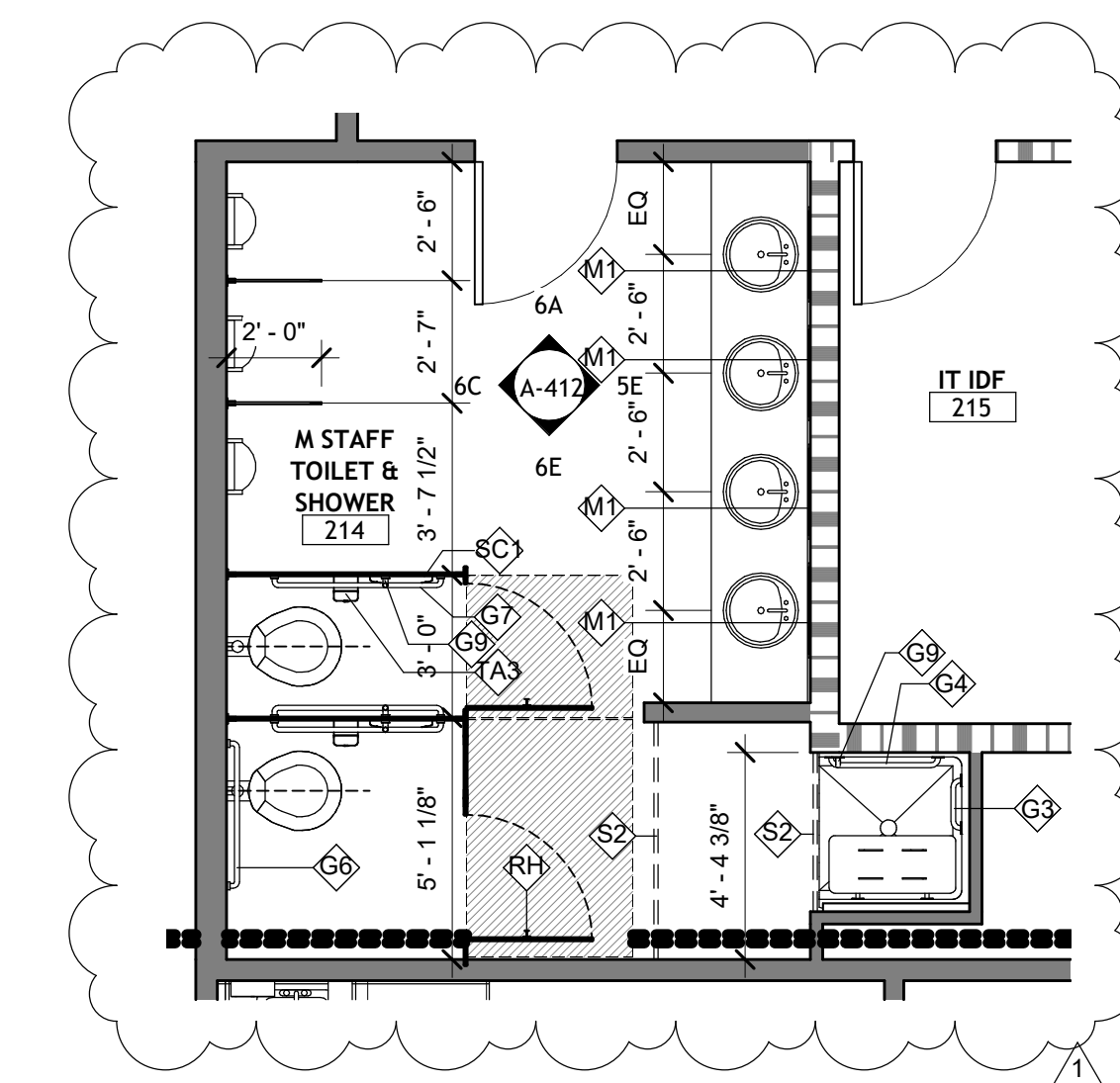
6A MEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION C  
A-412 A-412 1/4" = 1'-0"



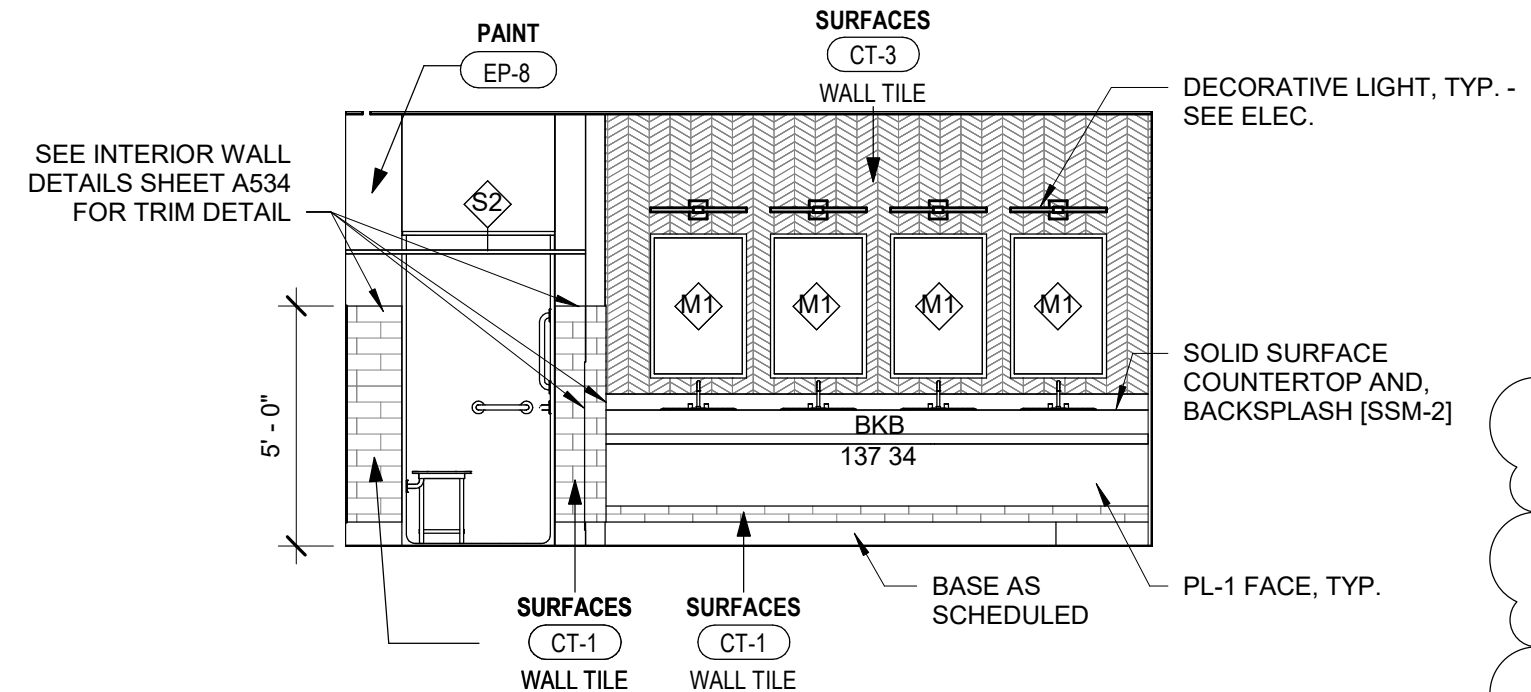
6C MEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION B  
A-407 A-412 1/4" = 1'-0"



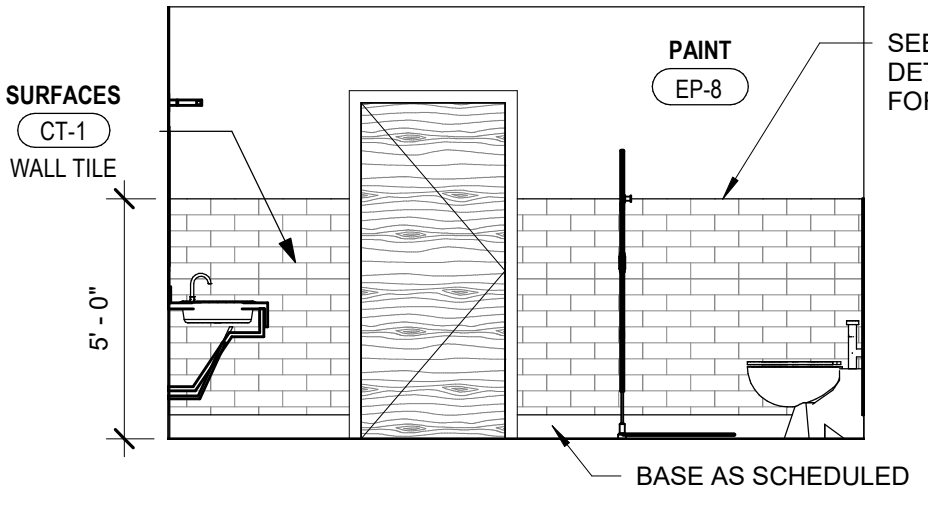
6E MEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION A  
A-412 A-412 1/4" = 1'-0"



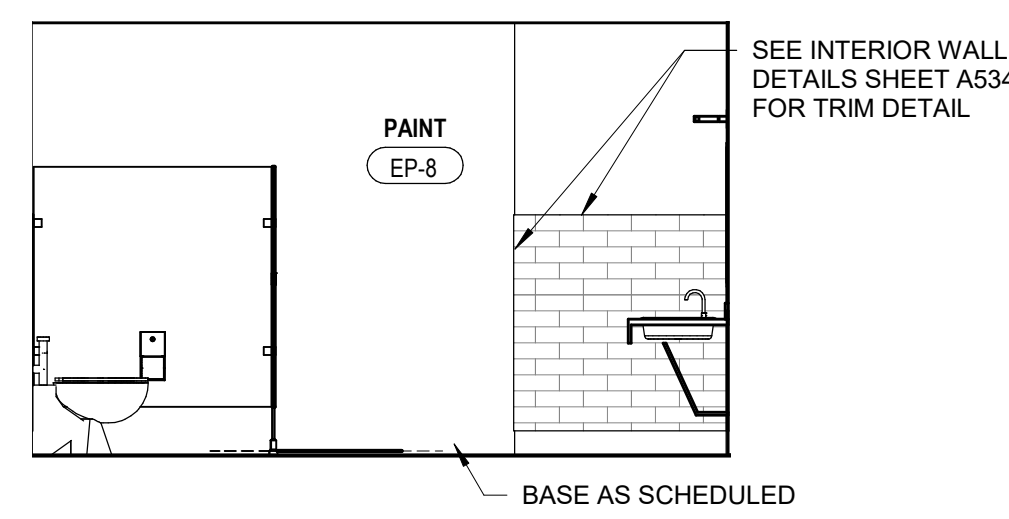
6H ENLARGED MENS STAFF TOILETS & SHOWER 2ND & 3RD FLOOR  
A-102d A-412 1/4" = 1'-0"



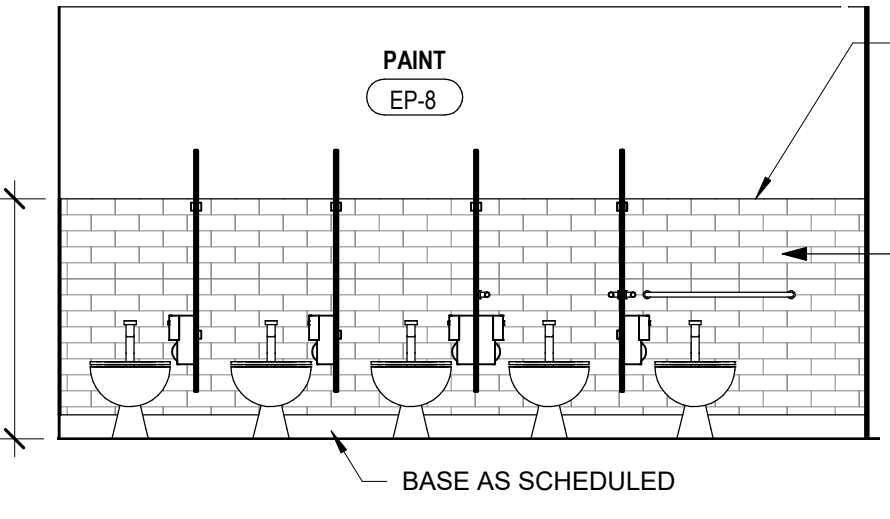
8E WOMEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION C  
A-412 A-412 1/4" = 1'-0"



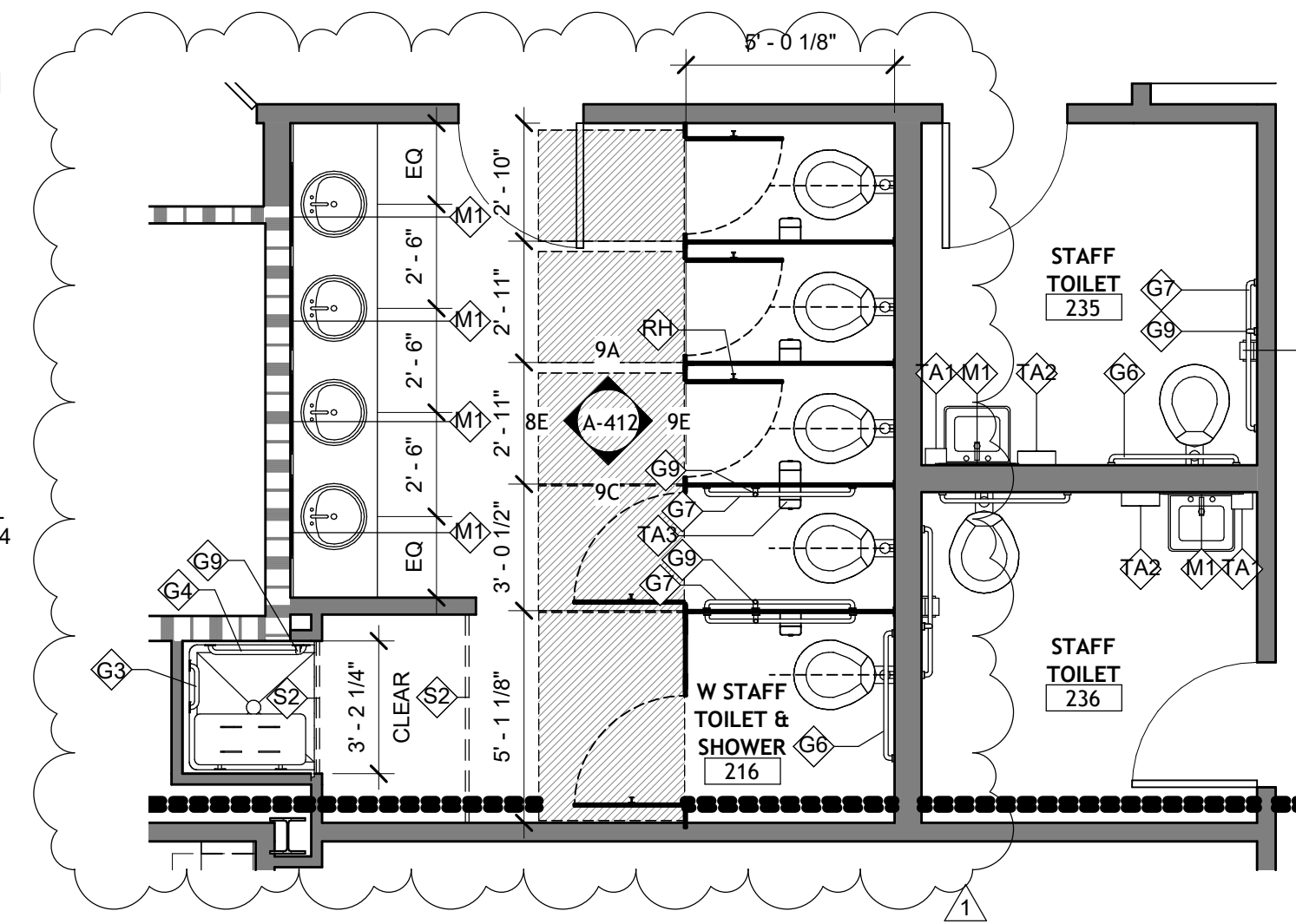
9A WOMEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION D  
A-412 A-412 1/4" = 1'-0"



9C WOMEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION B  
A-412 A-412 1/4" = 1'-0"

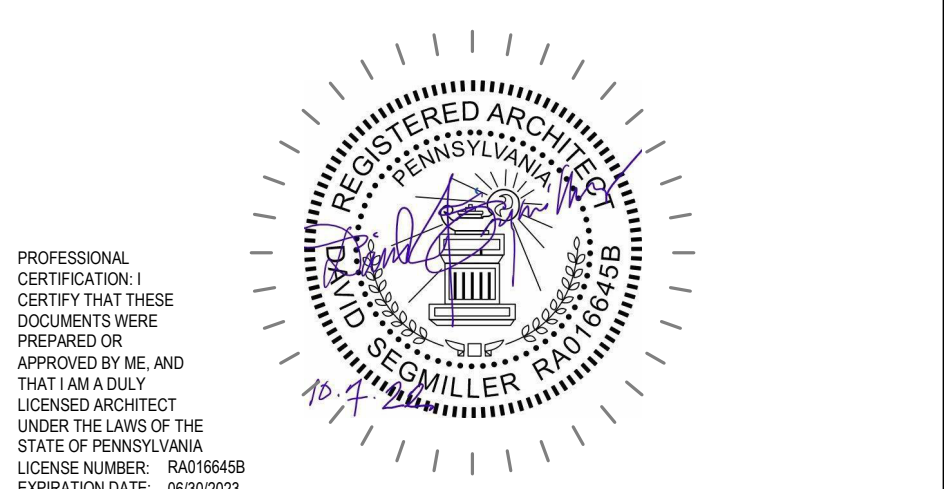


9E WOMEN'S STAFF TOILETS 2ND & 3RD FLOOR - ELEVATION A  
A-412 A-412 1/4" = 1'-0"



9H ENLARGED WOMENS STAFF TOILETS & SHOWER 2ND & 3RD FLOOR  
A-102d A-412 1/4" = 1'-0"

1	12.09.2022	ADDENDUM 5
no.	date	revision



<b>Hord Coplan Macht, Inc.</b> 700 E. Pratt St., Suite 1200 Baltimore, MD 21202	
<b>COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES</b> HARRISBURG, PENNSYLVANIA	
Project Number	D.G.S. C-0969-0017-001

<b>CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLLIDAYSBURG VETERANS' HOME</b> DUNCANSVILLE, BLAIR COUNTY, PA		
<b>ENLARGED TOILET PLANS &amp; ELEVATIONS</b>		
Drawn by Author	Date 10-07-2022	Drawing No. <b>A-412</b>
Checked by Checker	Scale As indicated	

**VERIFY SCALE**  
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING  
0 1  
IF BAR IS NOT ONE (1) INCH LONG ADJUST SCALE ACCORDINGLY  
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL



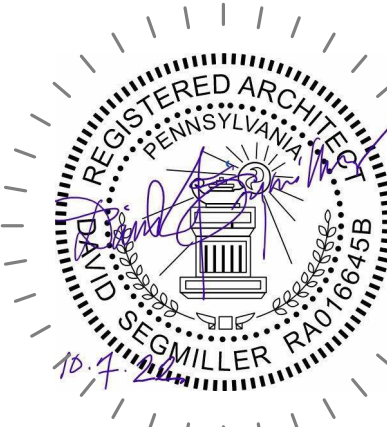
DOOR SCHEDULE - HOLLIDAYSBURG												
		DOOR			FRAME				FIRE RATING			
MARK	ROOM NAME	WIDTH	HEIGHT	SINGLE/PAIR	TYPE	MATERIAL	THICKNESS	MATERIAL	PROFILE	TYPE		COMMENTS
LEVEL 1												
1S-1	STAIR-1	3'-9"	9'-5"	S	F	AL	0'-2"	AL			-	10 Mag Locks w Card Reader
1S-2	STAIR-2	3'-9"	9'-7"	S	F	AL	0'-2"	AL			-	06 Mag Locks w Card Reader
1S-2A	STAIR-2	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	04	90 MIN.	10 Mag Locks w Card Reader
1S-3	STAIR-3	3'-9"	9'-5"	S	F	AL	0'-2"	AL			-	10 Mag Locks w Card Reader
1S-3A	STAIR-3	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	1	90 MIN.	04
1S-4	STAIR-4	3'-9"	9'-7"	S	F	AL	0'-2"	AL			-	07 Card Reader & Intercom
1S-4A	STAIR-4	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04
A100	VEST.	6'-0"	7'-7 1/2"	S			0'-2"				-	48 Direct battery back-up required
A101	VEST.	6'-0"	7'-7 1/2"	S			0'-2"				-	56 Auto openers with sensor w/ direct battery back-up
A101A	HALL	4'-0"	7'-0"	S	NL	WD	0'-2"	HM	A		47	
A103	SECURITY	3'-0"	7'-0"	S	F	WD	0'-2"	HM	A	1	27	Auto openers with sensors with card access
A104	SEC CHIEF	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	1	45	Auto openers with sensor
A105	HR CONF	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
A106B	STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		66	
A107	OT EQUIP STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		24	
A109	PT EQUIP STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		24	
A110	RES TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		34	
A111	RES TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		32	
A112	PUB TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		32	
A113	PUB TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		32	
A114A	CORRIDOR	3'-0"	7'-0"	S	FG	AL	0'-2"	AL	A		39	
A14B	CANTEN SITTING	3'-3"	9'-7 1/2"	S	FG	AL	0'-2"	AL	A		08	Card Reader with Power Assist
A117	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	64 Power Operator
A118	COMMAND CENTER	6'-0"	7'-0"	P	FP	WD	0'-1 3/4"	HM	A		52	
A119	CORRIDOR	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A		34	
A120	RES. TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		34	
A121	PUB. TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		32	
A122	MAIL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		43	
A123A	VETERANS HALL	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A		20 MIN.	38
A123B	VETERANS HALL	9'-10"	9'-7"	S	FG	AL	0'-2"	AL	A		07	Card Reader with Power Assist
A123C	VETERANS HALL	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A		20 MIN.	38
A123D	VETERANS HALL	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A		20 MIN.	38
A123E	VETERANS HALL	3'-10"	9'-7"	S	FG	AL	0'-2"	AL	A		08	Card Reader with Power Assist
A123F	FOOD SERVICE	6'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		43	
A123G	VETERANS HALL	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		90 MIN.	54
A124	W. RES TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		34	
A126	BARBER	3'-0"	7'-0"	S	FG	WD	0'-1 3/4"	HM	A		27	
A127	CORRIDOR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		43	Card Reader
A128	ADMIN ASSIST	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A129	TRAINING ROOM	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
A130	COMMANDANT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A131	REC. SUP. & ASSIS	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		29	
A132	CONF.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A132A	CONF.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A132B	CONF.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		46	
A133	MD SERVICES	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A134	DEF. COMM.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A135	MD SERVICES	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A136	ADMIN ASSIST.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A137	COPY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
A138	NURSE DIRECTOR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A139	MD SERVICES	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A140	T.D.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A141	TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		32	
A142	REV MGR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A143	HR. CON.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A143A	INT. CON.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
A144	REVENUE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A150	HR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A151	HR MGR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A152	ACCOUNTING PAYROLL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
A153A	VALVE ROOM	2'-8"	7'-0"	S	FP	WD	0'-2"	HM	A		05	
A154	ACCT MGR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A155	TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		32	
A156	PAYROLL MGR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A157	COPY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
A158	MED REC MGR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A159	T.D.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A160	MED RECORDS WORK	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		25	
A167	T.D.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A168	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
A169	T.D.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45	
A171	PHARM. CLERK	4'-0"	7'-0"	P	FP	WD	0'-1 3/4"	HM	B		28	Video Intercom
A173	PHARM. OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		46	
A175	MECH.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		61	
A176	VETERANS HALL	2'-6"	7'-0"	S	FP	WD	0'-2"	HM	A		41	
B125	M. RES. TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		34	
B151	RES. HOLD	6'-0"	7'-0"	P	FP	WD	0'-1 3/4"	HM	A		45 MIN.	51
B152	OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		22	Card Reader
B152A	MDP	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		22	
B152B	IT STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45 MIN.	22
B155	FOOD SERVICE	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		20 MIN.	13 Power Operator
B155A	FOOD SERVICES STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		90 MIN.	29
B156B	FOOD SERVICE OFFICES	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		29	
B155C	CAN WASH	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		26	
B155D	VETERANS HALL	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A		29	
B155E	TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		32	
B155F	LAUNDRY & MOP SINK	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
B155G	DRY STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45 MIN.	25
B155H	FOOD SERVICE	3'-6"	9'-5"	S	HM	0'-2"	HM	1	1		09	Proximity Sensors w/ mag locks
B156	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	60 Power Operator
B156A	VALVE ROOM	2'-8"	7'-0"	S	FP	WD	0'-2"	HM	A		05	Card Reader
B157	BIG STOR	6'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		45 MIN.	55
B158	CHEM STOR	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		45 MIN.	54
B159	CORRIDOR	7'-8"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A	4	20 MIN.	12 Power Operator
B161	WATER ROOM	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		1HR Smoke	53
B161A	WATER ROOM	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	1	20 MIN.	63 Proximity Sensors w/ mag locks
B162	HOUSE KEEPING	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	20
B163	RECEIVING OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	24
B164A	LOADING DOCK	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		45 MIN.	55
B165	JC	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		24	Power Operator
B166	ELECTRICAL	3'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		90 MIN.	42
B168	ELECTRICAL	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	41
B170	MAINT. & DURABLE MED. EQUIP & MAINT LOCKER	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		45 MIN.	54
B171	LAUNDRY HOLD	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		45 MIN.	54
B172	TRASH	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A		45 MIN.	54
B173	TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	32
B175	CORRIDOR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	29
B176	M&F LOCKERS	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	32
B178	SECURITY STOR	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A		45 MIN.	20
LEVEL 2												
"G1	COURTYARD 1	5'-0"	8'-0"	S			0'-1"					62 Exterior Gate
"G2	COURTYARD 2	5'-0"	8'-0"	S			0'-1"					62 Exterior Gate
"G3	COURTYARD 3	5'-0"	8'-0"	S			0'-1"					62 Exterior Gate
"G4	COURTYARD 4	5'-0"	8'-0"	S			0'-1"					62 Exterior Gate
2S-1	STAIR-1	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04 Touch Pad & Card Reader
2S-2	STAIR-2	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04 Touch Pad & Card Reader
2S-3	STAIR-3	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04 Touch Pad & Card Reader
2S-4	STAIR-4	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04 Touch Pad & Card Reader
2S-5	STAIR-5	3'-9"	7'-5"	S	F	AL	0'-2"	AL			-	10 Mag Locks w Card Reader
2S-5A	STAIR-5	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04 Touch Pad & Card Reader
2S-6	STAIR-6	3'-9"	7'-7"	S	F	AL	0'-2"	AL			-	10 Mag Locks w Card Reader
2S-6A	STAIR-6	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		90 MIN.	04 Touch Pad & Card Reader
2S-7	STAIR-7	3'-9"	7'-5"	S	F	AL	0'-2"	AL			-	10 Mag Locks w Card Reader
2S-7A	STAIR-7	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04
2S-8	STAIR-8	3'-9"	7'-7"	S	F	AL	0'-2"	AL			-	10
2S-8A	STAIR-8	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A		90 MIN.	04
200A	VETERAN ENTRANCE	7'-10"	7'-7 1/2"	S			0'-2"				-	48 Direct battery back-up required
200B	VETERAN ENTRANCE	6'-0"	7'-7 1/2"	S			0'-2"				-	56 Direct battery back-up required
205	LACTATION/QUIET ROOM	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		31	
206	JC	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		24	
207	CORRIDOR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		27	
208	WOUND CARE	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A		27	
209	BOH HALL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		60	Card Reader
2												

DOOR SCHEDULE - HOLLIDAYSBURG													
MARK	ROOM NAME	WIDTH	HEIGHT	SINGLE/PAIR	DOOR			FRAME		FIRE RATING	HW	COMMENTS	
					TYPE	MATERIAL	THICKNESS	MATERIAL	PROFILE				TYPE
215	IT IDF	3'-0"	7'-0"	S	FP	WD	0'-1 3/4"	HM	A	45 MIN.	17	Card Reader	
216	W STAFF TOILET & SHOWER	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	44		
217	TO OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	57		
218	TO OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	57		
219	RECREATIONAL THERAPY	3'-0"	7'-0"	S	FG	WD	0'-2"	HM	A	-	29		
220	DENTAL	3'-0"	7'-0"	S	FG	WD	0'-2"	HM	A	-	57		
220B	DENTAL STORAGE	4'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A	45 MIN.	50	Card Reader with Power Operators	
221	BOH HALL	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A	45 MIN.	50	Card Reader with Power Operators	
221A	BOH HALL	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A	45 MIN.	50	Card Reader with Power Operators	
222	STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	24		
223	STAFF TOILET	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	30		
224	JC	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	24		
225	NURSE ED OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	45		
226	NURSE INFECT CONTROL	3'-0"	7'-0"	S	FP	WD	0'-1 3/4"	HM	A	45 MIN.	45		
227	STRETCHER	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	20 MIN.	49		
228	BOH HALL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	45		
229	HOUSE KEEPING	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	24		
230	O2	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	20 MIN.	49		
231	O2	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	20 MIN.	49		
232	O2	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	20 MIN.	49		
235	STAFF TOILET	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	30		
236	STAFF TOILET	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	30		
240	STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	24		
245	VALUABLE ROOM	3'-0"	7'-0"	S	FG	WD	0'-2"	HM	A	05	00	Card Reader	
246	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	40		
A218A	FOOD PREP	4'-0"	7'-0"	S	NL	WD	0'-2"	HM	A	-	26		
A219	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	14	Card Readers	
A219A	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
A222	MEDS	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	17	Card Reader	
A224	NURSE STATION	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	58		
A225	PHY. TD	3'-0"	7'-0"	S	CO	AL	0'-2 1/2"	HM	E	-	58	Cased Opening - No Door	
A226	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	22		
A229	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	30		
A233	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
A234	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	22		
A235	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
A240	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
A241	EQUIP	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
A242	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM	B	20 MIN.	19		
A245	LAUNDRY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	41		
A246	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	34		
A247	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
A247B	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	32		
A250	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	22		
A251	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
A252	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	20		
A253	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
A258	EQUIP. STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
A259	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
A261	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	11	Card Reader with Power Operators
A264	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	90 MIN.	41	Panic HW	
B218	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	40		
B218A	DINING ROOM / RECREATION MULTI-USE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	26		
B219	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	14	Card Readers	
B219A	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
B222	MEDS	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	17	Card Reader	
B224	NURSE OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	58		
B225	PHY. TD	3'-0"	7'-0"	S	CO	AL	0'-2 1/2"	HM	E	-	58	Cased Opening - No Door	
B226	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	22		
B229	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	30		
B233	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
B234	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	22		
B235	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
B240	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
B241	EQUIP	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
B242	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM	B	20 MIN.	19		
B245	LAUNDRY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	41		
B246	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	34		
B247	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
B247B	STAFF TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	32		
B250	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	22		
B251	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
B252	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	20		
B253	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
B258	EQUIP. STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
B259	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
B260	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	11	Card Reader with Power Operators
B263	COURTYARD 1	3'-10"	9'-4"	S	FG	AL	0'-2"	AL	A	-	19	Mag Locks w/ Card Reader	
B264	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	90 MIN.	41	Panic HW	
B215	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	14	14	Card Readers	
C215A	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20 MIN.	40		
C216	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	40		
C216A	FOOD PREP	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	26		
C219	VEST	3'-0"	7'-0"	S	FG	AL	0'-2"	AL	A	-	19	Mag Locks w/ Card Reader	
C222	MEDS	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	17	Card Reader	
C224	NURSE STATION	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	58		
C225	PHY. TD	3'-0"	7'-0"	S	CO	AL	0'-2 1/2"	HM	E	-	58	Cased Opening - No Door	
C226	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	24		
C229	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	30		
C233	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
C234	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	22		
C235	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
C240	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
C241	EQUIP	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
C242	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM	B	20 MIN.	19		
C245	LAUNDRY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	41		
C246	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	22		
C247	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
C247B	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	32		
C250	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	22		
C251	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
C252	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	20		
C253	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
C258	EQUIP. STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
C259	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
C260	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	11	Card Reader with Power Operators
C262	STOR.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	24		
C263	CORRIDOR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	65		
C264	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	90 MIN.	41	Panic HW	
C265	COURTYARD 4	3'-10"	9'-6"	S	FG	AL	0'-2"	AL	A	-	19	Mag Locks w/ Card Reader	
D215	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	14	Card Readers	
D215A	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
D216	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	40		
D216A	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	-	26		
D219	VEST	3'-0"	7'-0"	S	FG	AL	0'-2"	AL	A	-	19		
D222	MEDS	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	17	Card Reader	
D224	NURSE OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	58		
D225	PHY. TD	3'-0"	7'-0"	S	CO	AL	0'-2 1/2"	HM	E	-	58	Cased Opening - No Door	
D226	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
D229	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	30		
D233	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
D234	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	22		
D235	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
D240	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	26		
D241	EQUIP	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
D242	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM	B	20 MIN.	19		
D245	LAUNDRY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	22		
D246	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	34		
D247	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
D247B	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	32		
D250	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	22		
D251	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		
D252	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	20		
D253	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	-	20		

DOOR SCHEDULE - HOLLIDAYSBURG													
MARK	ROOM NAME	WIDTH	HEIGHT	SINGLE/PAIR	DOOR			FRAME		FIRE RATING	JHW	COMMENTS	
					TYPE	MATERIAL	THICKNESS	MATERIAL	PROFILE				TYPE
D262	STOR.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	24		
D263	CORRIDOR	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	65		
D264	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	90 MIN.	41	Panic HW	
LEVEL 3													
35-1	STAIR-1	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
35-2	STAIR-2	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
35-3	STAIR-3	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
35-4	STAIR-4	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
35-5	STAIR-5	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
35-6	STAIR-6	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
35-7	STAIR-7	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
35-8	STAIR-8	3'-6"	7'-0"	S	NL	HM	0'-2"	HM	A	90 MIN.	04	Touch Pad & Card Reader	
305	LACTATION/ QUIET ROOM	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	31		
306	JC	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	24		
307	STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	24		
308	WOUND CARE	4'-0"	7'-0"	S	NL	WD	0'-2"	HM	A	-	27		
309	BOH HALL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	05	Card Reader	
309A	BOH HALL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
310	BOH HALL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	45		
311	NURSE QA	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	45		
312	DEPUTY NURSE DIRECT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	45		
313	BOH HALL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	45		
314	W STAFF TOILET & SHOWER	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	44		
315	IT DF	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	17		
316	W STAFF TOILET & SHOWER	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	44		
317	TO OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	57		
318	TO OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	57		
319	RECREATIONAL THERAPY	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	-	27		
320	STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	24		
321A	BOH HALL	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A	45 MIN.	50	Card Reader with Power Operators	
321B	BOH HALL	6'-0"	7'-0"	P	NL	HM	0'-1 3/4"	HM	A	45 MIN.	50	Card Reader with Power Operators	
322	STORAGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	24		
323	STAFF TOILET	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	32			
324	JC	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	24		
325	NURSE ED OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	45		
326	NURSE INFECT CONTROL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	45		
327	STRETCHER	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	20 MIN.	49		
329	HOUSE KEEPING	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	24		
330	O2	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	20 MIN.	49		
331	O2	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	20 MIN.	49		
333	DIETARY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	45		
334	O2	6'-0"	7'-0"	P	NL	WD	0'-1 3/4"	HM	A	49			
335	STAFF TOILET	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	30		
336	STAFF TOILET	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	30		
345	VALVE ROOM	2'-8"	7'-0"	S	FP	WD	0'-2"	HM	A	05		Card Reader	
A318	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	40		
A318A	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	26			
A319	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	14	Card Readers	
A319A	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20 MIN.	16		
A322	MEDS	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	17		Card Reader, Cased Opening - No Door	
A323	PHY. TD	3'-0"	7'-0"	S	CO	WD	0'-2"	HM	E	-	58		
A324	NURSE OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	22			
A326	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
A329	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	30			
A333	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
A334	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	22			
A335	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
A340	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	26			
A341	EQUIP.	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
A342	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM7	A	20 MIN.	16		
A345	LAUNDRY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	41		
A346	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	34		
A347	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
A347B	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	32		
A350	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	22		
A351	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
A352	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20			
A353	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
A358	EQUIP. STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
A359	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	26			
A360	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	11	Card Reader with Power Operators
A364	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	90 MIN.	41	Panic HW	
B318	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	40		
B318A	FOOD PREP	4'-0"	7'-0"	S	NL	WD	0'-2"	HM	A	26			
B319	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	14	Card Readers	
B319A	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	26			
B324	MEDS	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	17		Card Reader, Cased Opening - No Door	
B323	PHY. TD	3'-0"	7'-0"	S	CO	WD	0'-2"	HM	E	-	58		
B324	NURSE OFFICE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	22			
B326	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
B329	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	30			
B333	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
B334	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	22			
B335	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
B340	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	26			
B341	EQUIP.	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
B342	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM7	A	20 MIN.	16		
B345	LAUNDRY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	41		
B346	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	34		
B347	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
B347B	STAFF TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	32		
B350	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	22		
B351	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
B352	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20			
B353	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
B358	EQUIP. STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
B359	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	26			
B360	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	11	Card Reader with Power Operators
B364	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	90 MIN.	41	Panic HW	
C315	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	14		Card Readers	
C315A	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	26			
C316	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	40		
C316A	DINING ROOM / RECREATION MULTI-USE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	26		
C316B	FOOD PREP	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20 MIN.	36		
C322	NURSE OFFICE	3'-0"	7'-0"	S	FP	WD	0'-1 3/4"	HM	A	58			
C323	PHY. TD	3'-0"	7'-0"	S	CO	WD	0'-2"	HM	E	-	58		
C324	MEDS	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	22		Card Reader, Cased Opening - No Door	
C325	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
C329	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	30			
C333	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
C334	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	22			
C335	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
C340	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	26			
C341	EQUIP.	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
C342	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM7	A	20 MIN.	16		
C345	LAUNDRY	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	41		
C346	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	34		
C347	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	27		
C347B	STAFF TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	32		
C350	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A	45 MIN.	22		
C351	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
C352	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	20			
C353	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
C358	EQUIP. STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A	20			
C359	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A	26			
C360	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B	4	20 MIN.	11	Card Reader with Power Operators
C362	STOR.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	-	23		
C364	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A	90 MIN.	41	Panic HW	
Doors B160 and B164 were removed from schedule. Panels are access panels.													

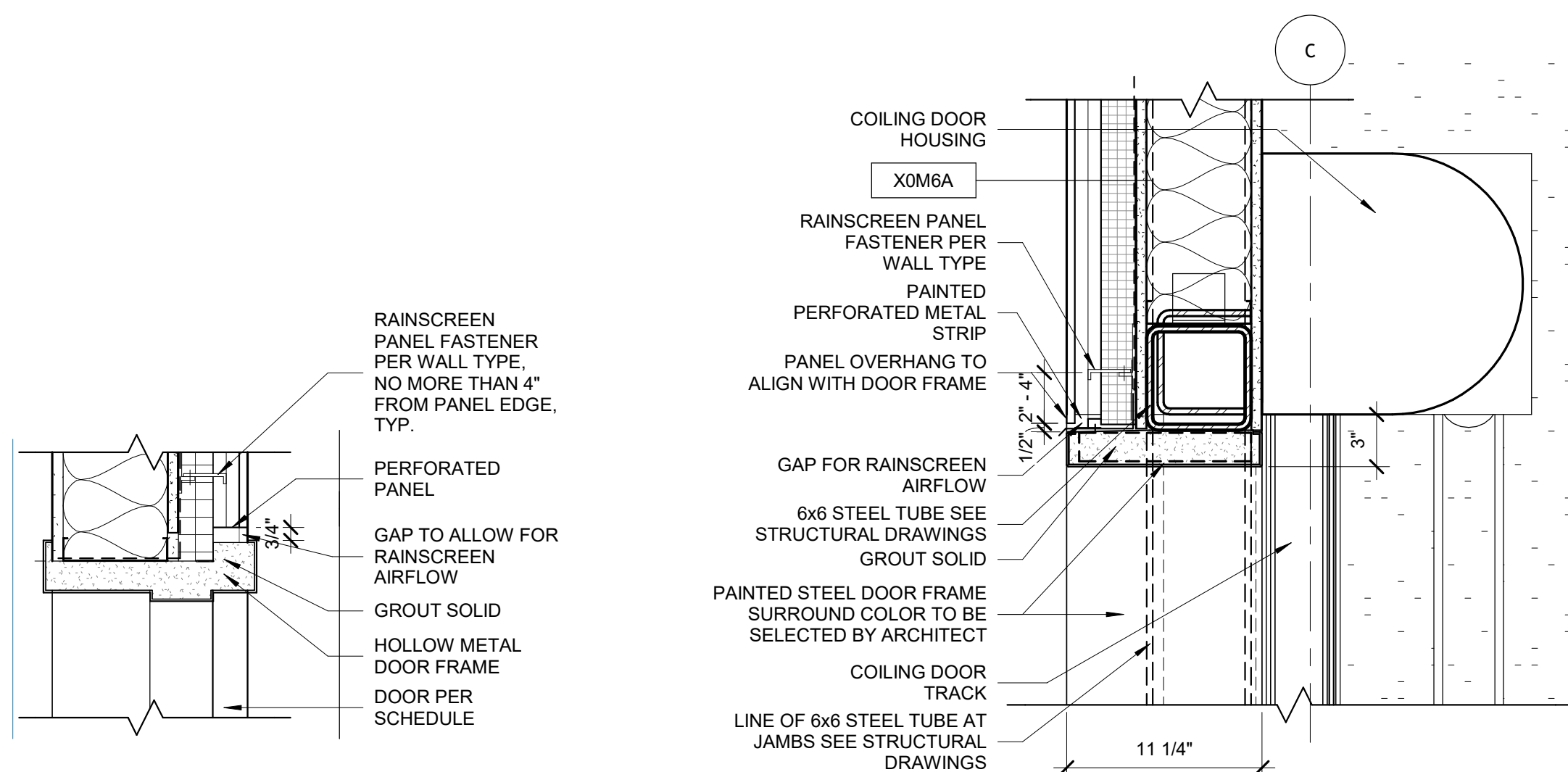
1	<b>ARCHITECT</b> <b>Hord Coplan Macht, Inc.</b> 700 E. Pratt St. Suite 1200 p. 410. 837. 7311	Baltimore, MD 21202 f. 410.837.6530
	<b>LANDSCAPE ARCHITECTURE</b> <b>Hord Coplan Macht, Inc.</b> 700 E. Pratt St. Suite 1200 p. 410. 837. 7311	Baltimore, MD 21202 f. 410.837.6530
	<b>INTERIOR DESIGN</b> <b>Hord Coplan Macht, Inc.</b> 700 E. Pratt St. Suite 1200 p. 410. 837. 7311	Baltimore, MD 21202 f. 410.837.6530
	<b>STRUCTURAL ENGINEER</b> <b>Hope Furrer Associates</b> 700 East Beaver Ave, Suite 3 p. 814.234.8191 x 1106	State College, PA 16801 f. 000.000.0000
	<b>MECHANICAL &amp; ELECTRICAL ENGINEER</b> <b>BALA Consulting Engineers</b> 443 South Gough Rd p. 610.674.0905	King of Prussia, PA 19406 f. 000.000.0000
	<b>PLUMBING ENGINEER</b> <b>VETERAN DESIGN &amp; CONSTRUCTION, Inc.</b> 5523 Research Park Drive, Suite 110 p. 413.543.5081	Baltimore, MD 21228 f. 000.000.0000
	<b>CIVIL ENGINEERS</b> <b>Keller Engineers, Inc.</b> 420 Allegheny St. p. 814.696.7430	Hollidaysburg, PA 16648 f. 000.000.0000
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PROFESSIONAL  
CERTIFICATION I  
CERTIFY THAT THESE  
DOCUMENTS WERE  
PREPARED OR  
APPROVED BY ME, AND  
THAT I AM A DULY  
LICENSED ARCHITECT  
UNDER THE LAWS OF THE  
STATE OF PENNSYLVANIA  
LICENSE NUMBER: PA0166408  
EXPIRATION DATE: 06/30/2023



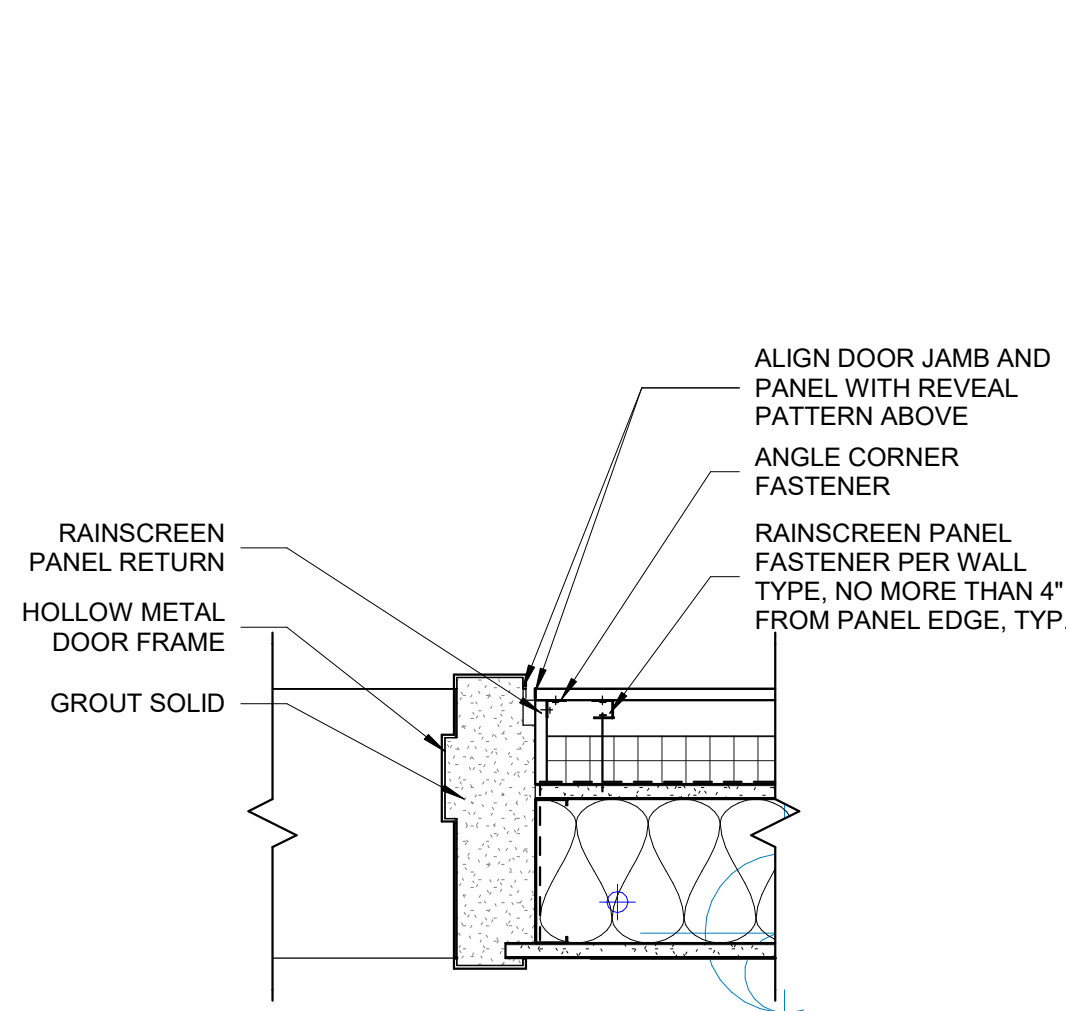
**Hord Coplan Macht, Inc.**  
700 E. Pratt St. Suite 1200  
Baltimore, MD 21202



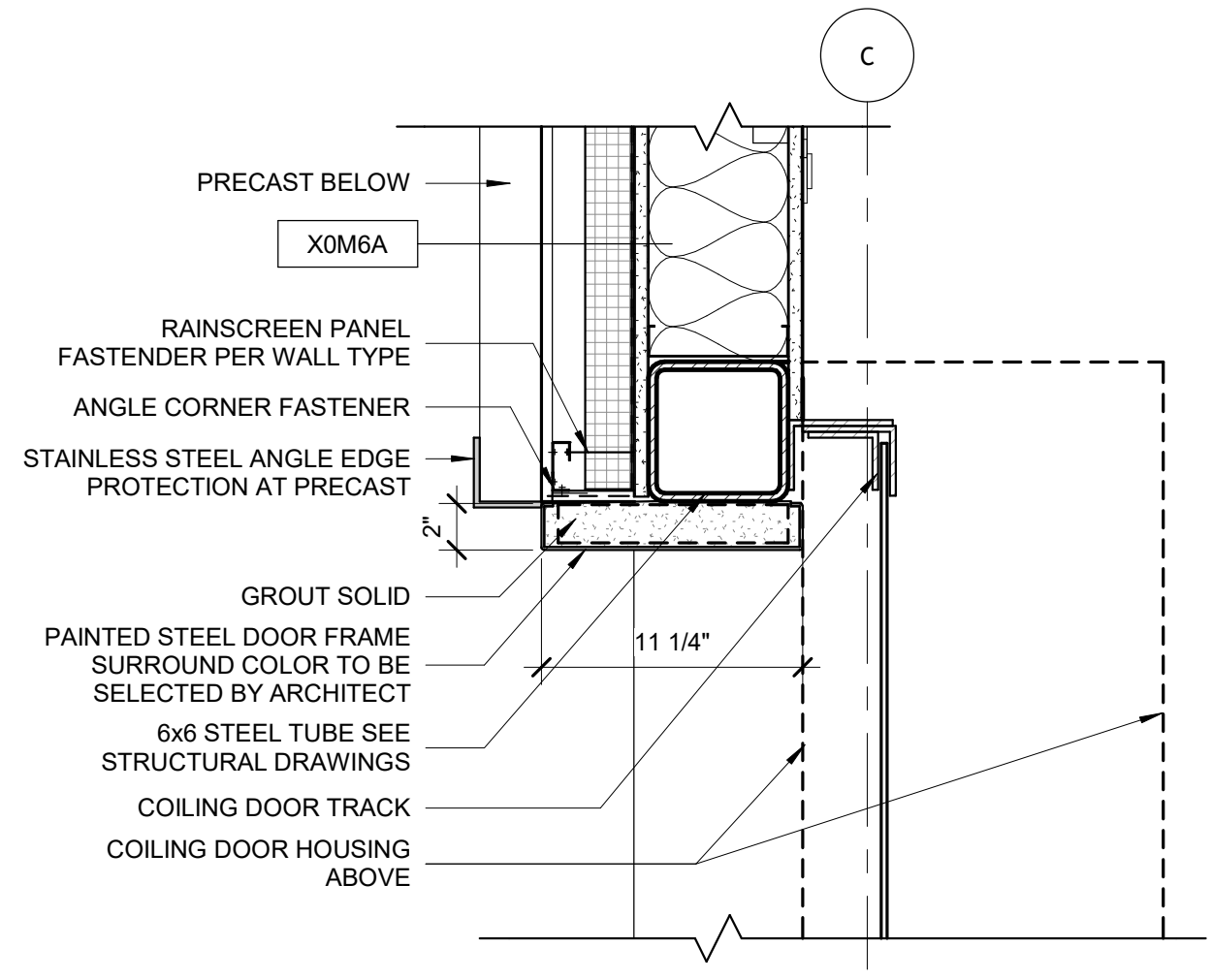


2D DOOR HEAD @ RAIN SCREEN  
A-111N A-601 1 1/2" x 1'-0"

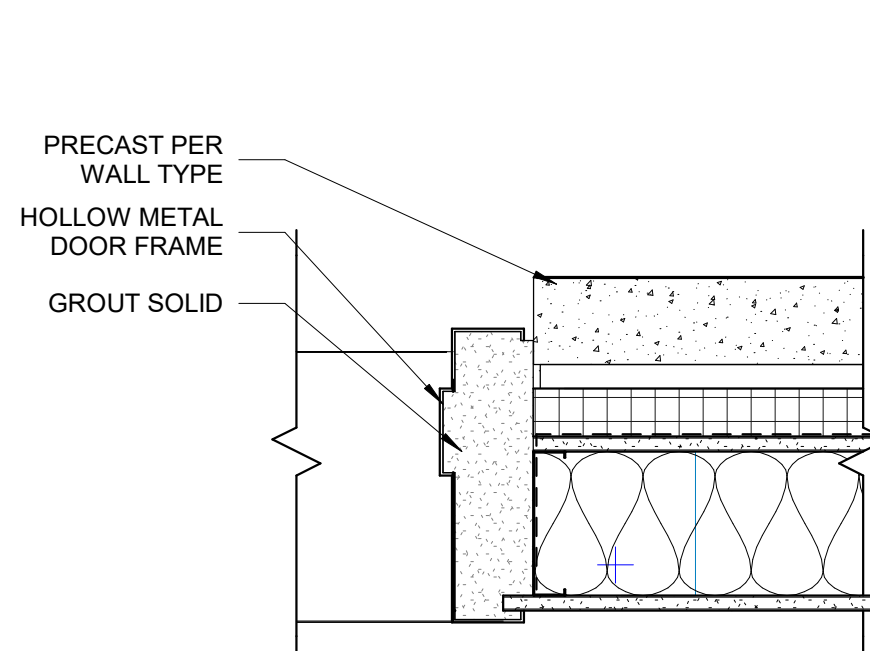
2F DETAIL @ COILING DOOR HEAD  
A-322 A-601 1 1/2" x 1'-0"



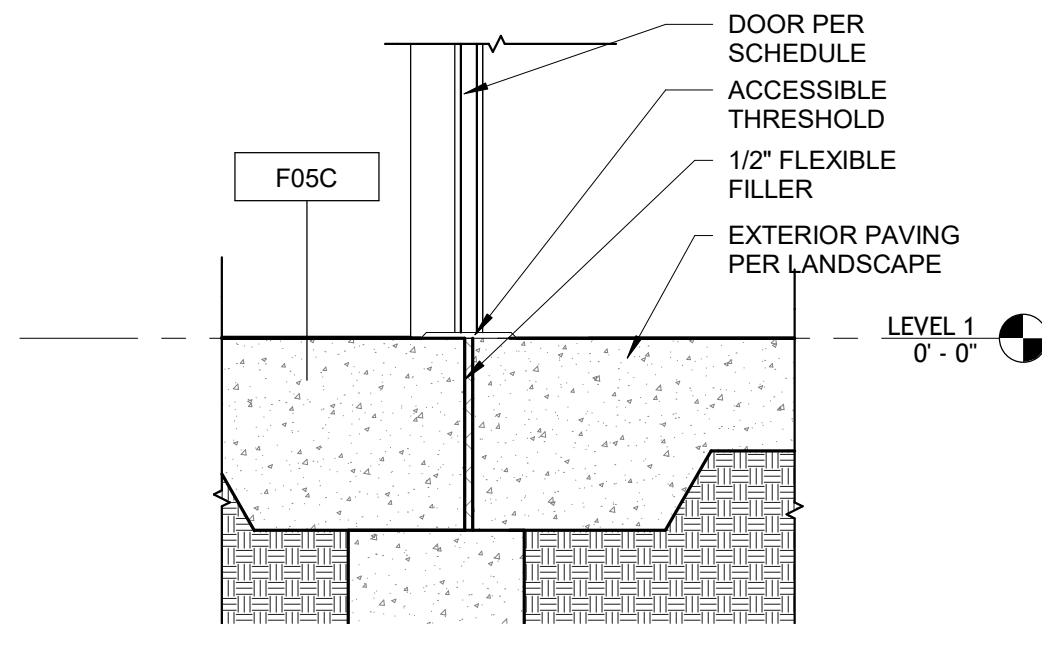
4D DOOR JAMB @ RAIN SCREEN  
A-601 1 1/2" x 1'-0"



4F DETAIL AT COILING DOOR JAMB  
A-101N A-601 1 1/2" x 1'-0"

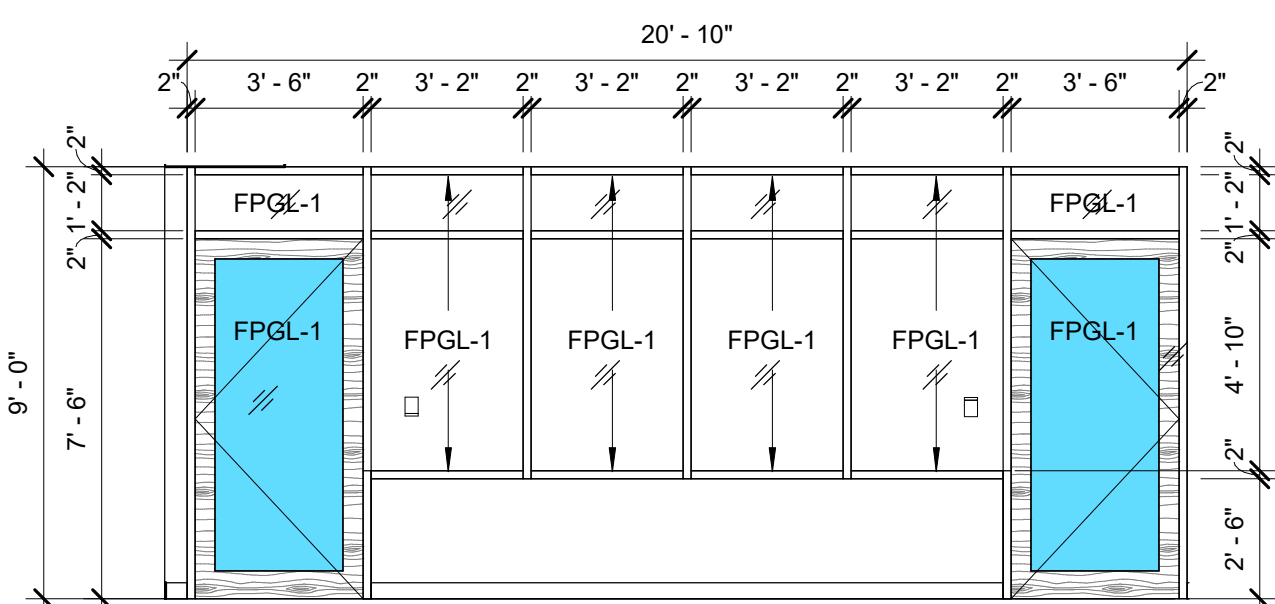


5D DOOR JAMB @ PRECAST  
A-101N A-601 1 1/2" x 1'-0"

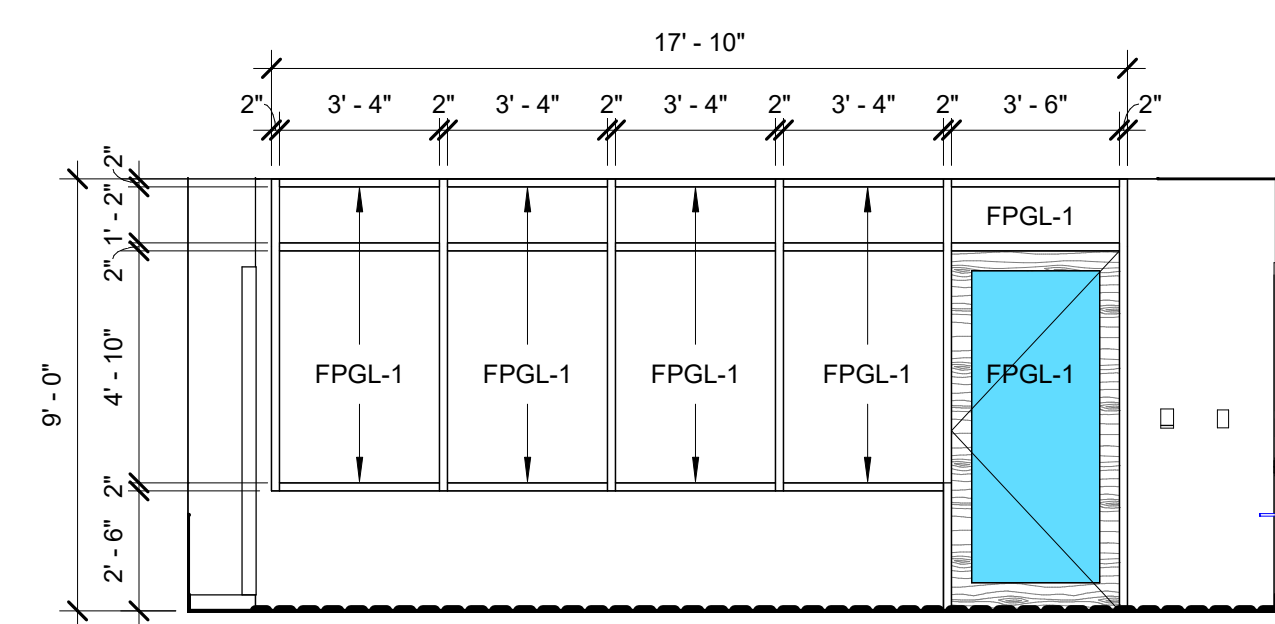


5F EXTERIOR DOOR TRANSITION  
A-312 A-601 1" x 1'-0"

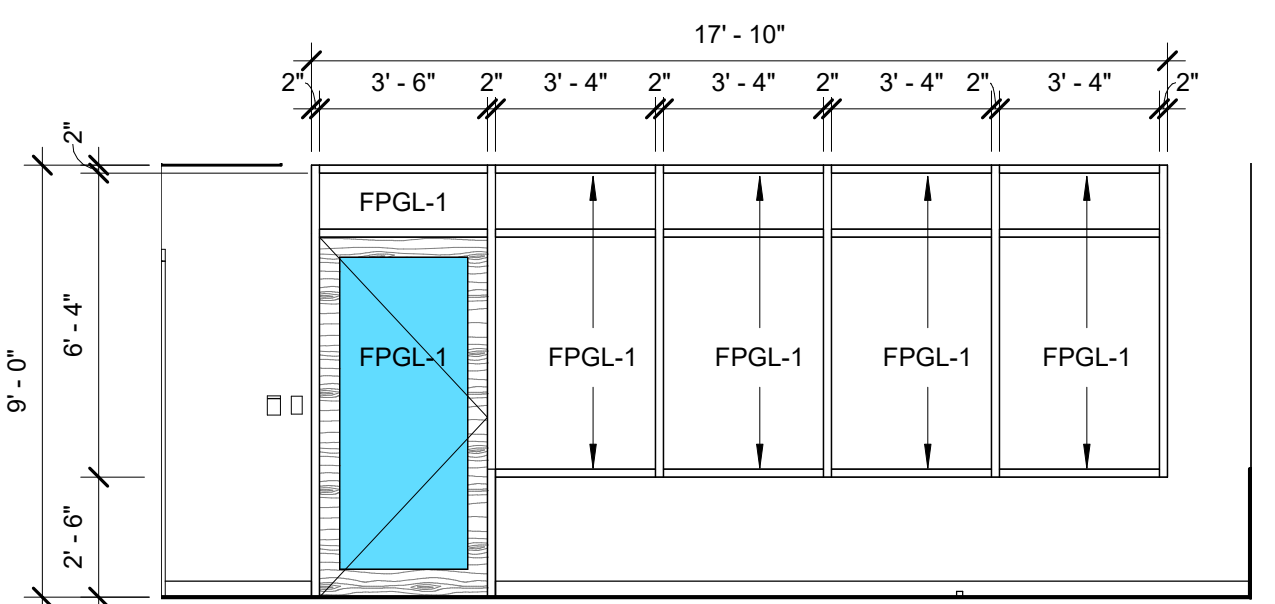
GLAZING LEGEND	
GL-1	CLEAR TEMPERED GLASS
GL-2	TINTED TEMPERED GLASS
IG-1	TINTED INSULATED GLASS
IG-2	TINTED INSULATED TEMPERED GLASS
IG-3	INSULATED SPANDREL GLASS
FPGL-1	FIRE PROTECTED GLASS



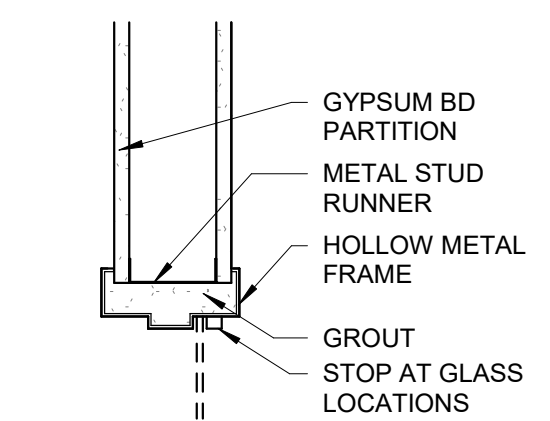
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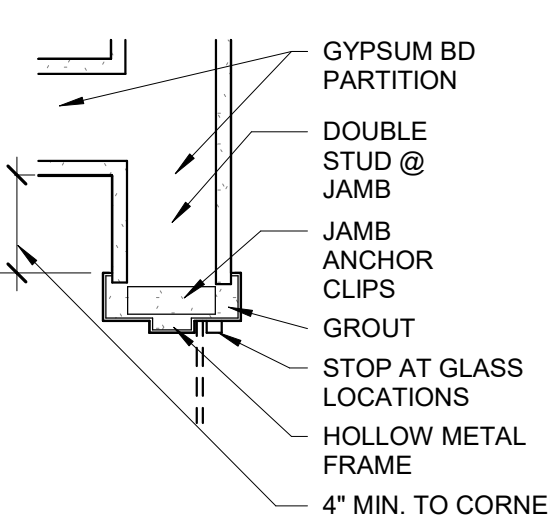
HM6



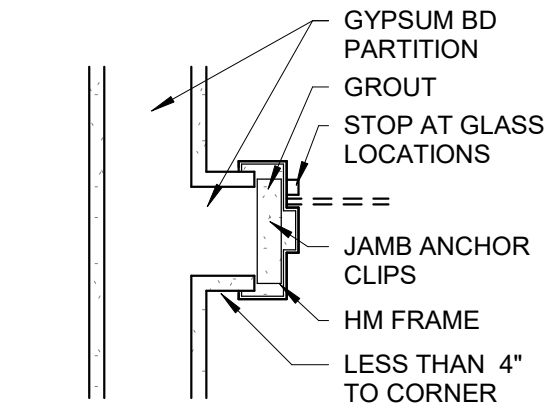
HM7



1 HEAD



2 JAMB

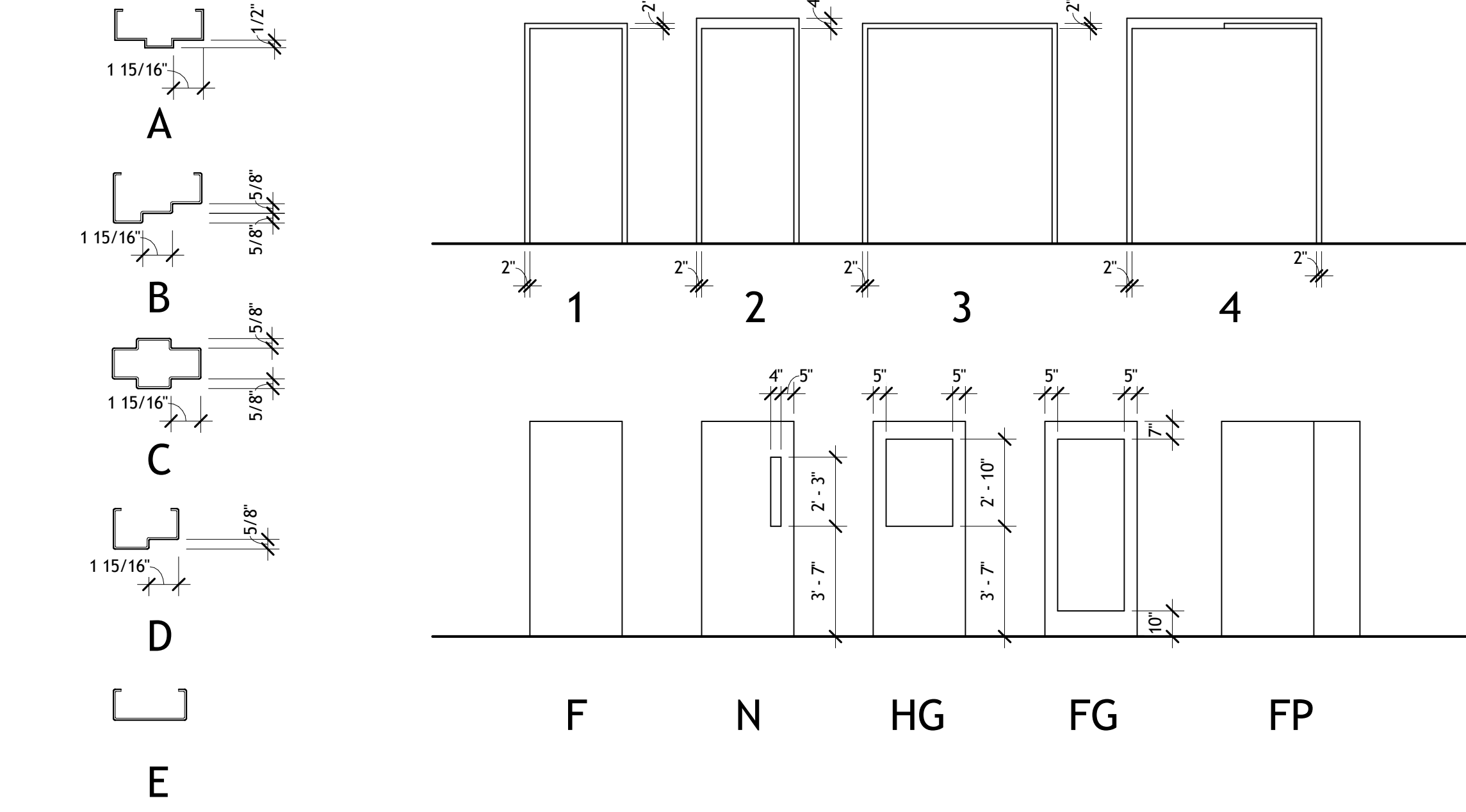


3 JAMB

## DOOR HEAD AND JAMB DETAILS

DOOR SCHEDULE - HOLLIDAYSBURG CONTINUED													
MARK	ROOM NAME	WIDTH	HEIGHT	SINGLE/PAIR	DOOR			FRAME			FIRE RATING	HW	COMMENTS
					TYPE	MATERIAL	THICKNESS	MATERIAL	PROFILE	TYPE			
LEVEL 3													
D315	PRIVATE DINING	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	14	Card Readers
D315A	PRIVATE DINING	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			26	
D316	FOOD PREP	4'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	40	
D316A	DINING ROOM / RECREATION MULTI-USE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	26	
D316B	FOOD PREP	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		20 MIN.	36	
D322	MEDS	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	17	Card Reader
D323	PHY. TD	3'-0"	7'-0"	S	CO		0'-2" - 8"	HM	E				Cased Opening - No Door
D324	NURSE STATION	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	58	
D326	LINEN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			22	
D329	BATHING ROOM	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A			30	
D333	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			20	
D334	STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			22	
D335	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			20	
D340	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A			26	
D341	EQUIP	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			20	
D342	DINING ROOM / RECREATION MULTI-USE	3'-6"	7'-6"	S	FG	WD	0'-2"	HM7	A		20 MIN.	16	
D345	HALL	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	41	
D346	VISITOR TLT	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	34	
D347	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	27	
D347B	STAFF LOUNGE	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	33	
D350	STORAGE	3'-6"	7'-0"	S	FP	WD	0'-2"	HM	A		45 MIN.	22	
D351	CLEAN UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			20	
D352	J.C.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A			20	
D353	SOIL UTILITY	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			20	
D358	EQUIP STORAGE	3'-6"	7'-0"	S	FG	WD	0'-2"	HM	A			20	
D359	EXAM/PHY TD	3'-8"	7'-0"	S	FG	WD	0'-2"	HM	A			26	
D360	CORRIDOR	7'-8"	7'-0"	P	NL	WD	0'-1 3/4"	HM	B		20 MIN.	11	Card Reader with Power Operators
D362	STOR.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		-	23	
D364	ELECT.	3'-0"	7'-0"	S	FP	WD	0'-2"	HM	A		90 MIN.	41	Panic HW

DOOR SCHEDULE - UNIT DOORS													
ROOM NAME	WIDTH	HEIGHT	SINGLE/PAIR	DOOR			FRAME			FIRE RATING	HARDWARE	COMMENTS	
				TYPE	MATERIAL	THICKNESS	MATERIAL	PROFILE	TYPE				
BATHROOM	5'-0"	7'-0"	S	F	WD	0'-1 3/4"	HM	E	3		03	SLIDING DOOR	
RESIDENT	4'-0"	7'-0"	S	F	WD	0'-2"	HM	A	1		01		
RESIDENT ISOLATION	5'-0"	7'-0"	P	FP	WD	0'-1 3/4"	HM	A	1	-	02	UNEVEN PAIR BARIATRIC ROOM	



## FRAME PROFILES

## FRAME AND DOOR TYPES

1/2 MAX. SLOPE CARPET CONC. OR VINYL TILE FLOORING (T1) RESILIENT REDUCER STRIP	1/4" H, 5" W, ADA COMPLIANT ALUMINUM THRESHOLD; THERMALLY BROKEN AT EXT. DOORS (T4)	VINYL PLANK OR VCT CARPET (T7) METAL TRANSITION STRIP 1/4" MAX. LEVEL CHANGE
1/2 MAX. SLOPE 5" 1/2" H, 5" W, ADA COMPLIANT ALUM. THRESHOLD; THERMALLY BROKEN AT EXT. DOORS (T2)	VCT CONCRETE (T5) RESILIENT REDUCER STRIP	1/2" H, 5" W, ADA COMPLIANT ALUM. THRESHOLD; THERMALLY BROKEN AT EXT. DOORS (T8)
CERAMIC TILE VINYL PLANK (T3) METAL TRANSITION STRIP; 1/2" MAX. LEVEL CHANGE	CERAMIC TILE CARPET (T6) METAL TRANSITION STRIP; 1/4" MAX. LEVEL CHANGE	CARPET CONCRETE (T9) 1/4" H, 5" W, ADA COMPLIANT ALUM. THRESHOLD; THERMALLY BROKEN AT EXT. DOORS

## THRESHOLD - TYPICAL DETAILS (SC03)

## VERIFY SCALE

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

0 1

IF BAR IS NOT ONE (1) INCH LONG ADJUST SCALE ACCORDINGLY

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL

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f. 000.000.0000

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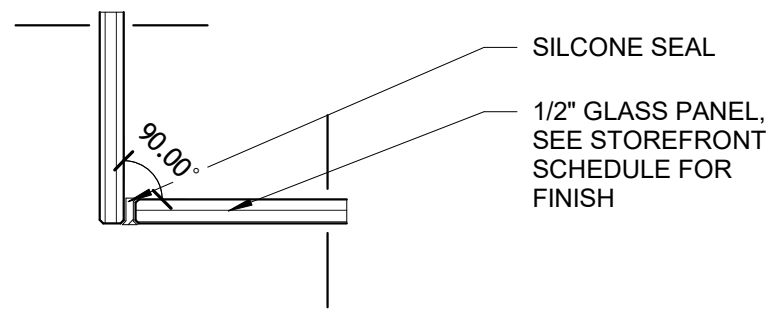
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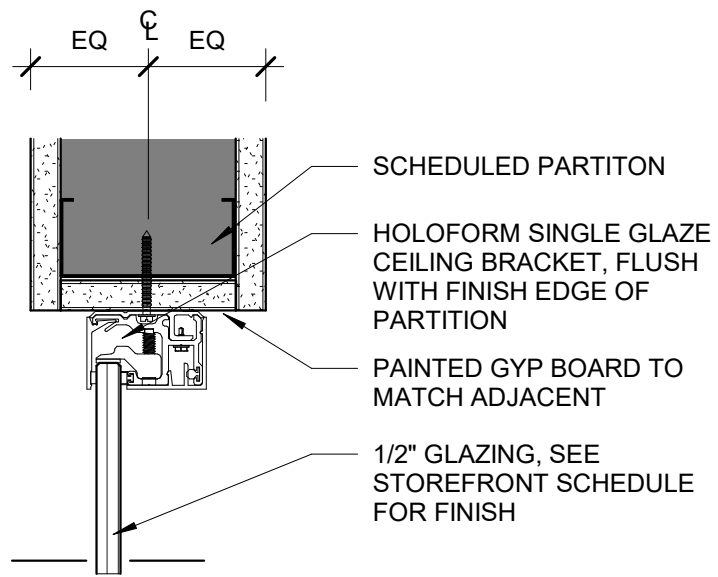
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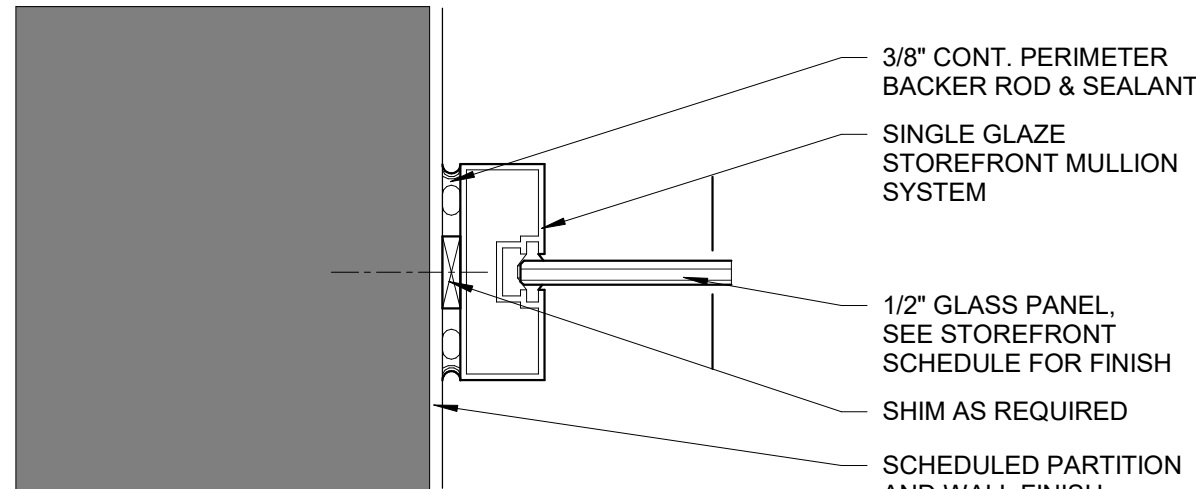




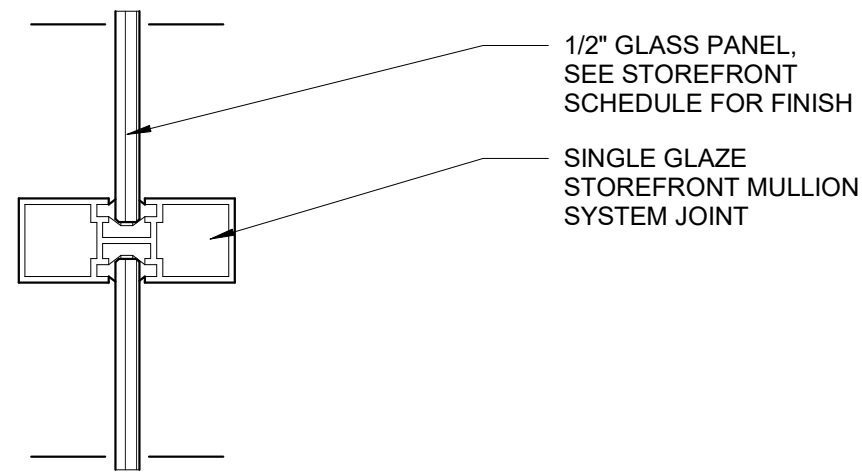
3A INTERIOR DETAIL - BUTT GLAZED CORNER



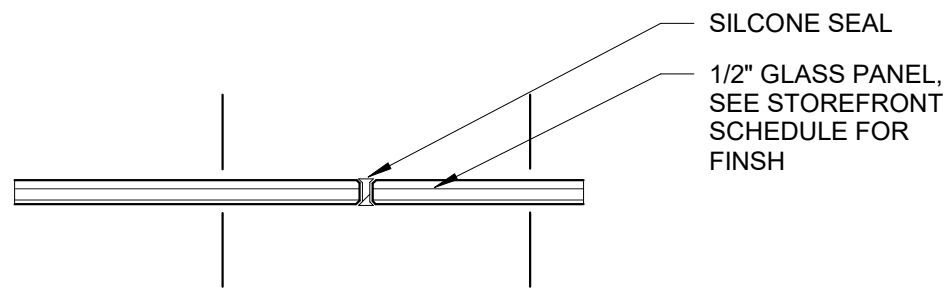
3C INTERIOR DETAIL - BUTT GLAZED HEADER



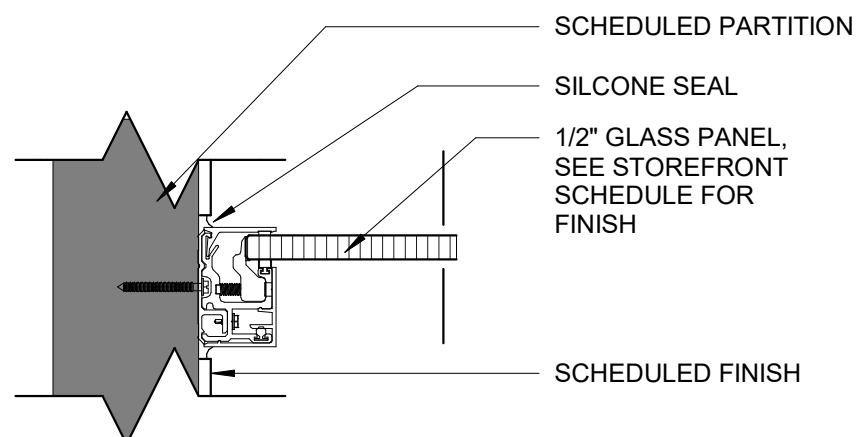
3F INTERIOR DETAIL - STOREFRONT JAMB



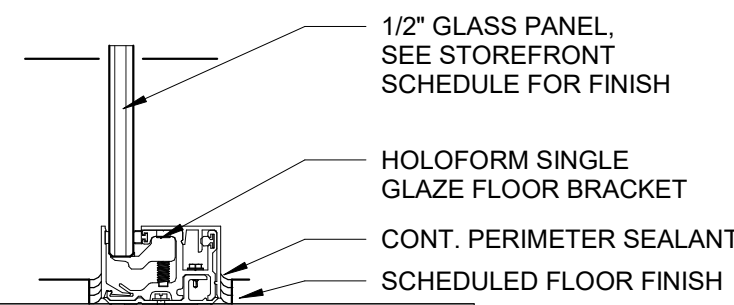
3J INTERIOR DETAIL - STOREFRONT MULLION



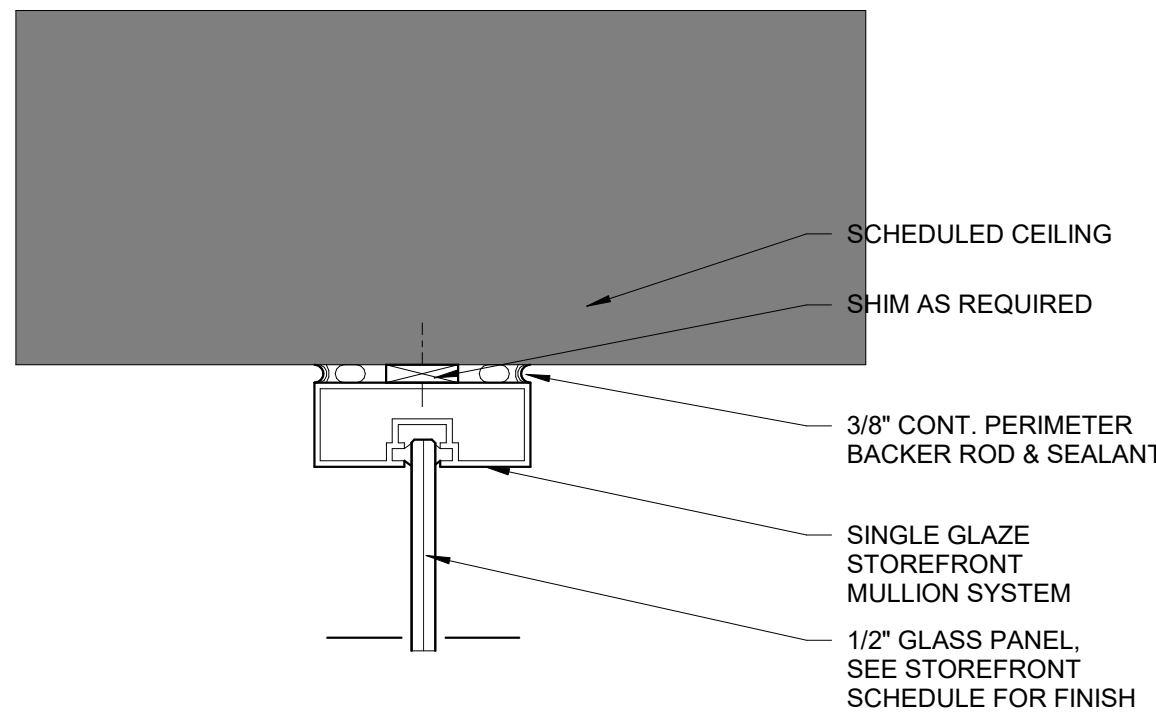
4A INTERIOR DETAIL - BUTT GLAZED MULLION



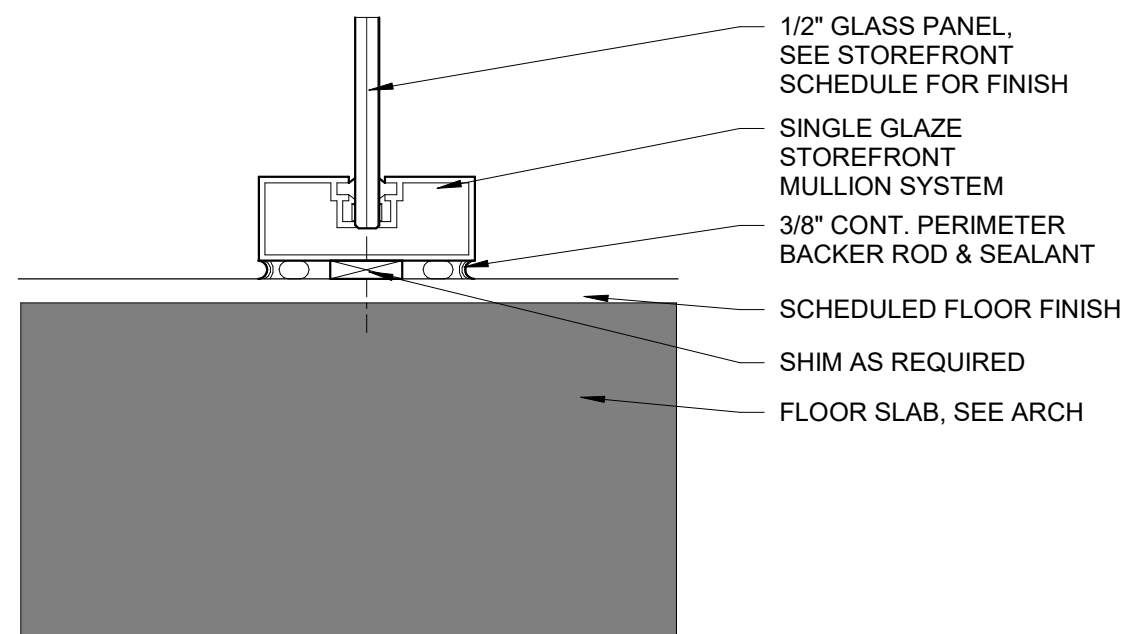
5A INTERIOR DETAIL - BUTT GLAZED JAMB



5C INTERIOR DETAIL - BUTT GLAZED SILL



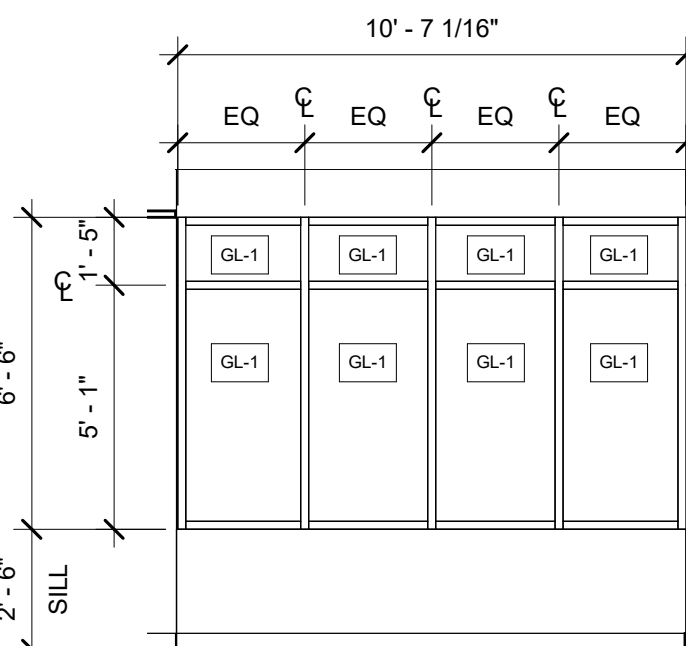
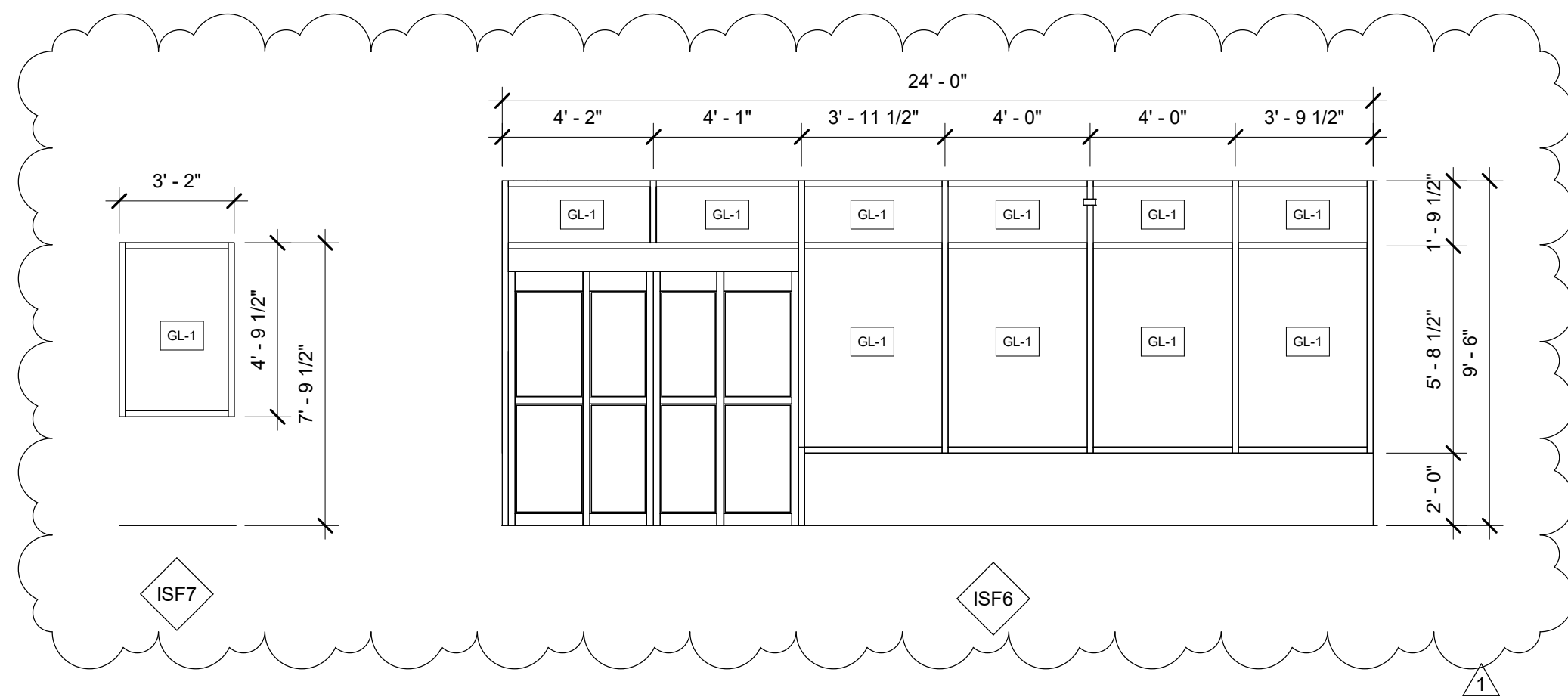
5F INTERIOR DETAIL - STOREFRONT HEAD



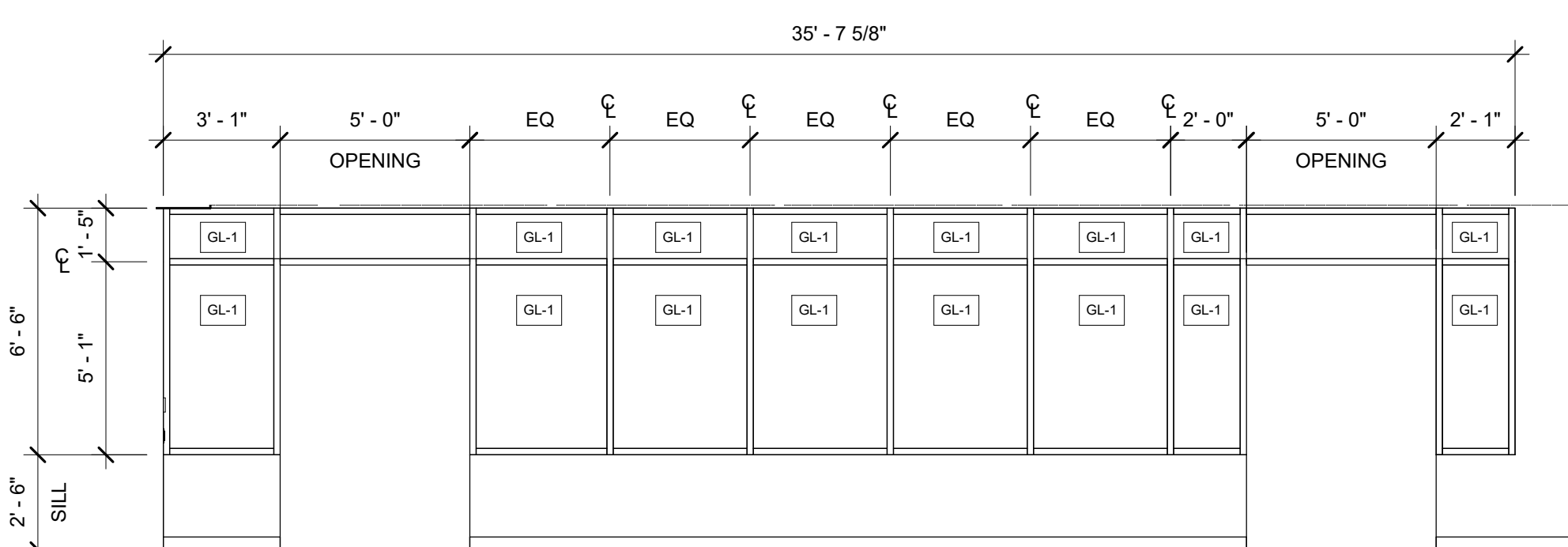
5J INTERIOR DETAIL - STOREFRONT SILL

GLAZING LEGEND

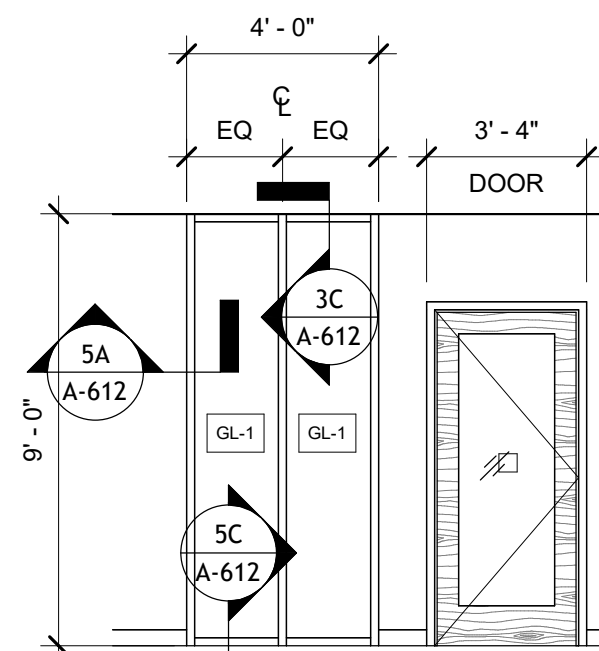
GL-1	CLEAR TEMPERED GLASS
GL-2	TINTED TEMPERED GLASS
IG-1	TINTED INSULATED GLASS
IG-2	TINTED INSULATED TEMPERED GLASS
IG-3	INSULATED SPANDREL GLASS
FPGL-1	FIRE PROTECTED GLASS



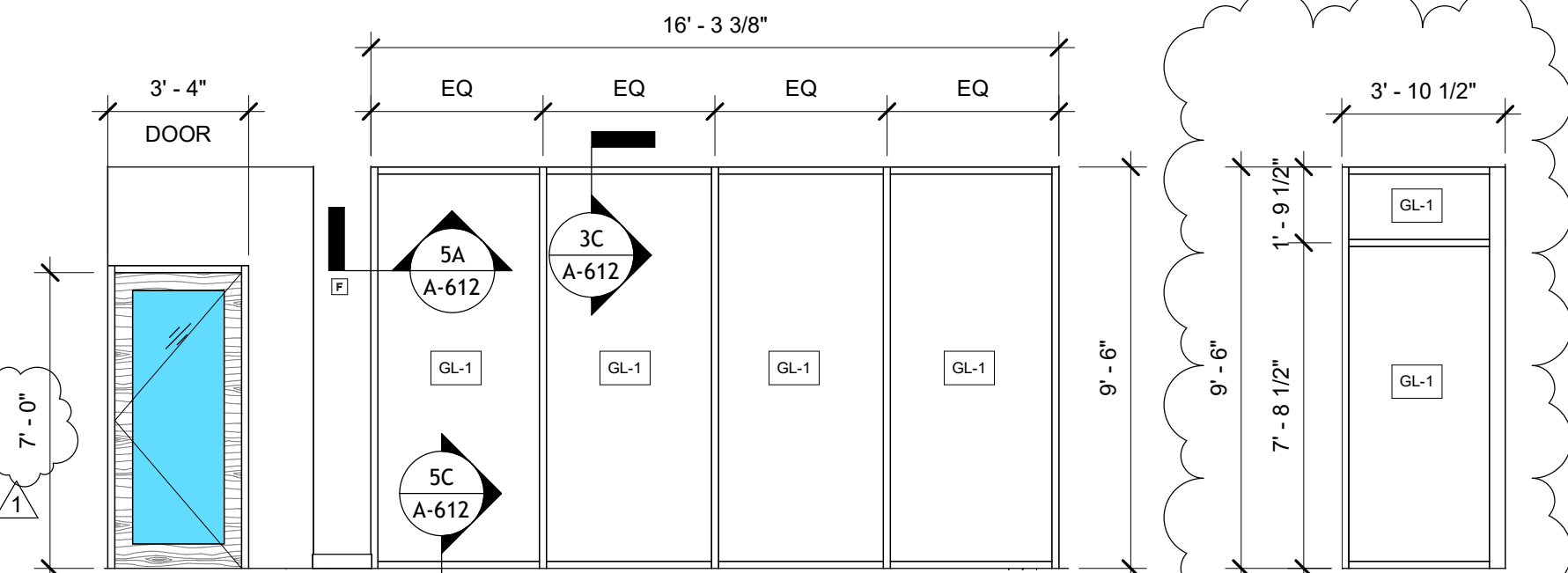
ISF5



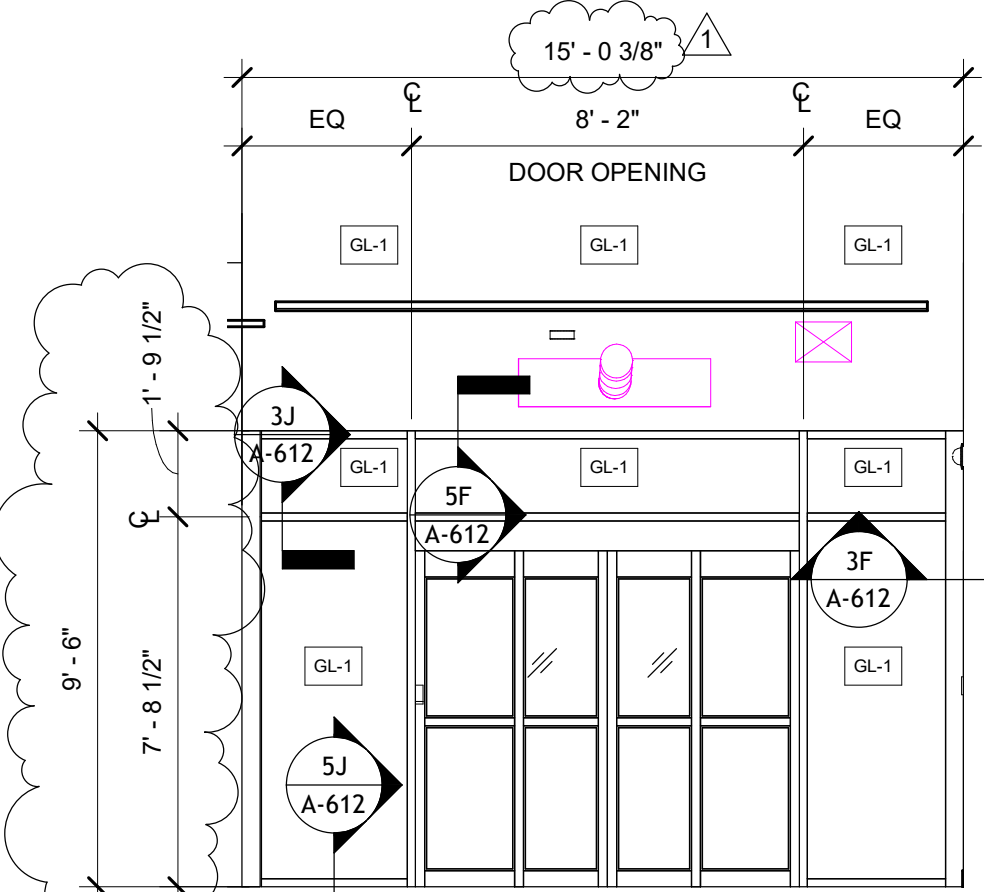
ISF4



ISF3



ISF2



ISF1

VERIFY SCALE

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Drawn by  
Author  
Checked by  
Checker  
Date  
10-07-2022  
Scale  
As indicated  
Drawing No.  
**A-612**

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Baltimore, MD 21202

**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF GENERAL SERVICES**  
HARRISBURG, PENNSYLVANIA

Project Number  
**D.G.S. C-0969-0017-001**

**CONSTRUCTION OF NEW COMMUNITY LIVING**  
**CENTER, HOLLIDAYSBURG VETERANS' HOME**  
DUNCANSVILLE, BLAIR COUNTY, PA

**INTERIOR STOREFRONT SCHEDULE AND DETAILS**

PLAN NOTES

- 1

4" SANITARY AND 3" VENT RISER.
- 2

2" SANITARY UP.
- 3

3" SANITARY UP.
- 4

4" SANITARY UP.
- 5

1 1/2" VENT DOWN.
- 6

1/2" CW AND HW DOWN TO FIXTURE.
- 7

1" CW DOWN TO FIXTURE.
- 8

CW, HW AND HWR UP TO LEVEL 3.
- 9

CW AND HW UP TO LEVEL 3.
- 10

CW AND HW FROM LEVEL 1.
- 11

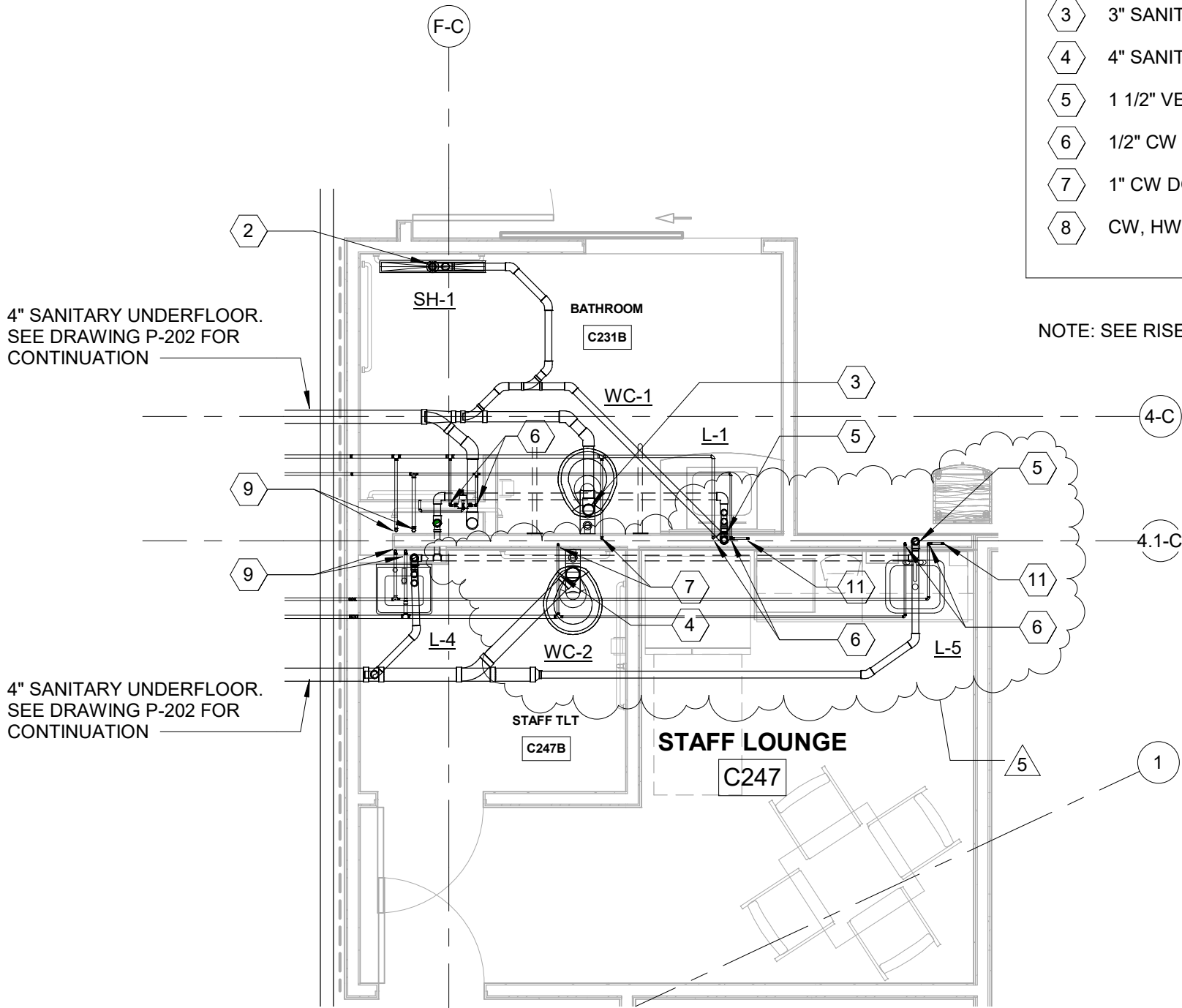
HWR CONNECTED PRIOR TO DROP TO FIXTURE AND UP TO LEVEL 3.
- 12

1/2" CW DOWN TO FIXTURE.
- 13

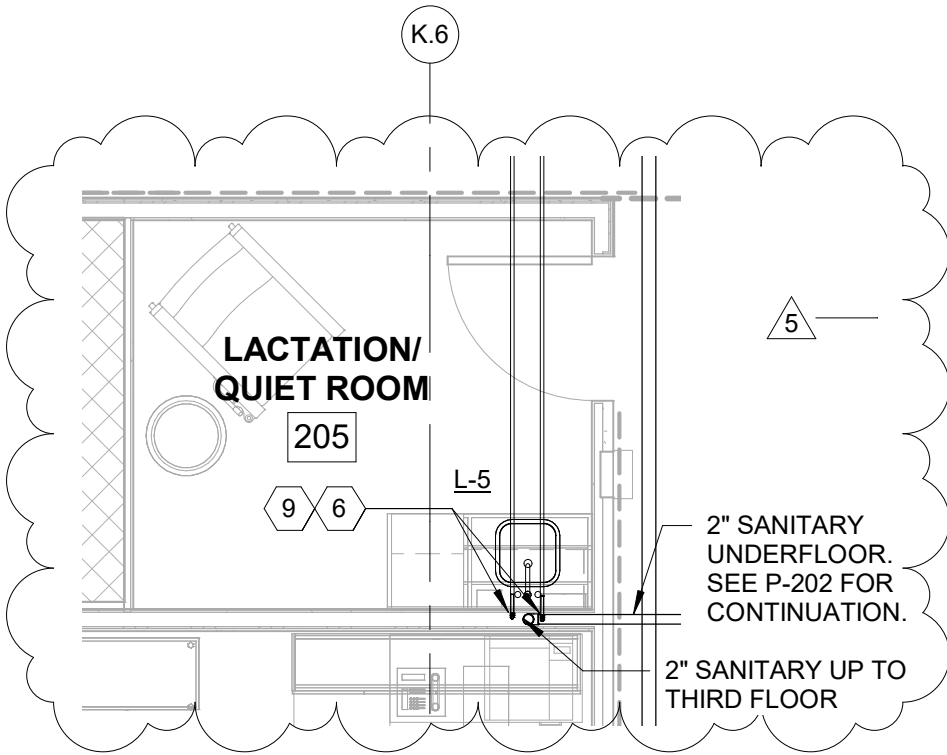
1/2" CW FROM LEVEL 1.
- 14

3" SANITARY UP TO FLOOR DRAIN.

NOTE: SEE RISER DIAGRAMS ON SHEETS P-410 AND P-406 FOR MORE INFORMATION.



1 PART PLAN - LEVEL 02 BACK TO BACK BATHROOM/STAFF TOILET ROOM - PLUMBING  
1/4" = 1'-0"



2 PART PLAN - LEVEL 02 QUIET ROOM - PLUMBING  
1/4" = 1'-0"

CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLLIDAYSBURG  
VETERANS' HOME

DUNCANSVILLE, BLAIR COUNTY, PA

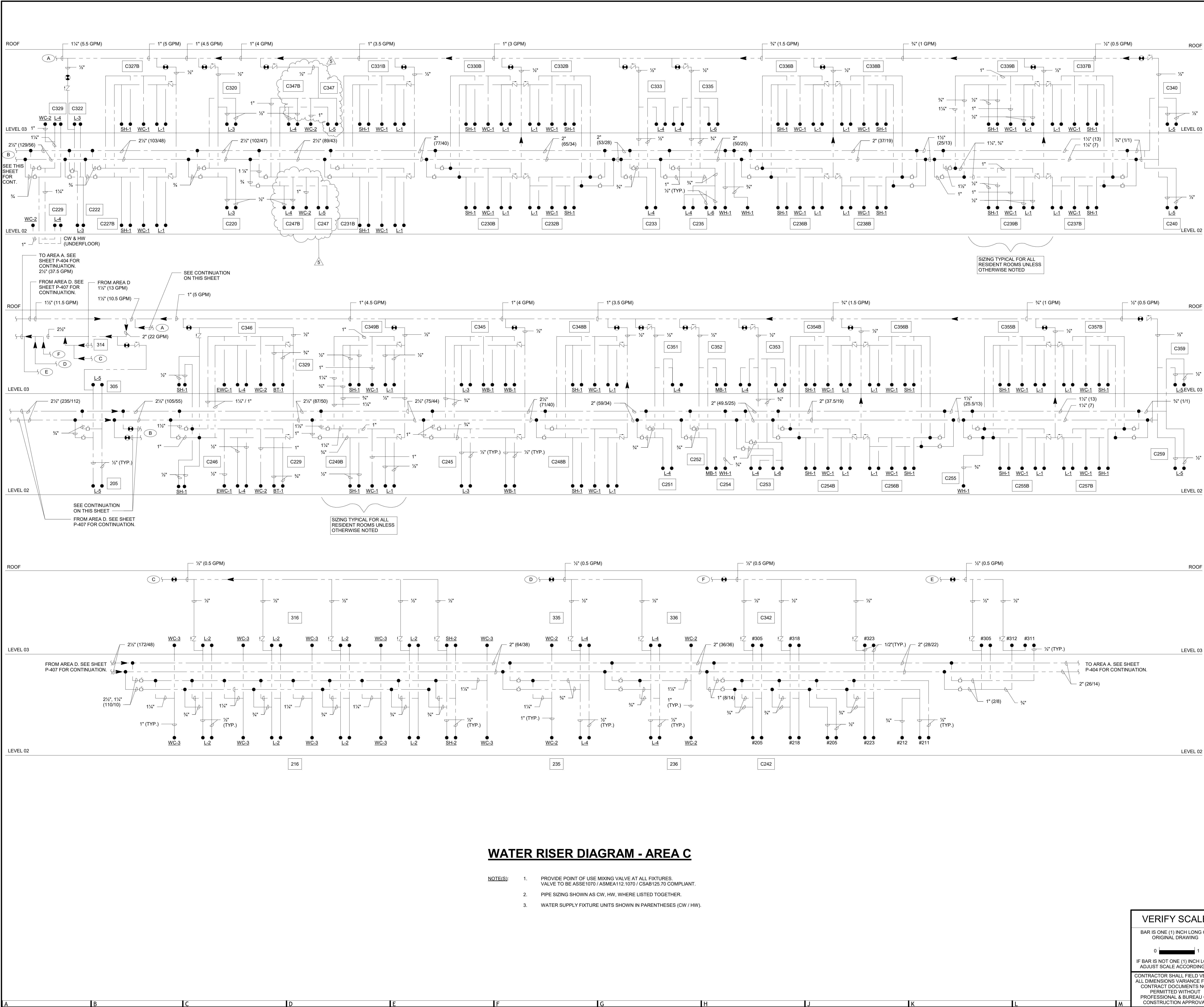
OWNER:

MECHANICAL & PLUMBING CONSULTANT:

Veteran Design and Construction Inc  
5523 Research Park Dr. Suite 110  
Catonsville MD 21238

SK - P304a  
RFI -  
DATE ISSUED: 12/09/22  
PROJECT NUMBER: DS21212





**WATER RISER DIAGRAM - AREA C**

- NOTE(S):**
1. PROVIDE POINT OF USE MIXING VALVE AT ALL FIXTURES. VALVE TO BE ASSE1070 / ASME A112.1070 / CSAB125.70 COMPLIANT.
  2. PIPE SIZING SHOWN AS CW, HW, WHERE LISTED TOGETHER.
  3. WATER SUPPLY FIXTURE UNITS SHOWN IN PARENTHESES (CW / HW).

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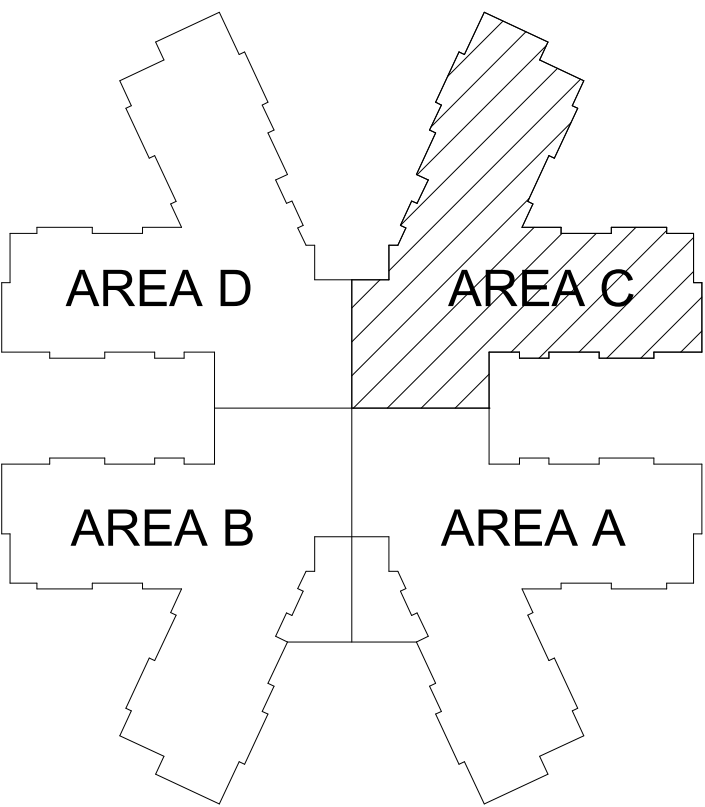
**INTERIOR DESIGN**  
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f. 410.837.6530

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f. 000.000.0000

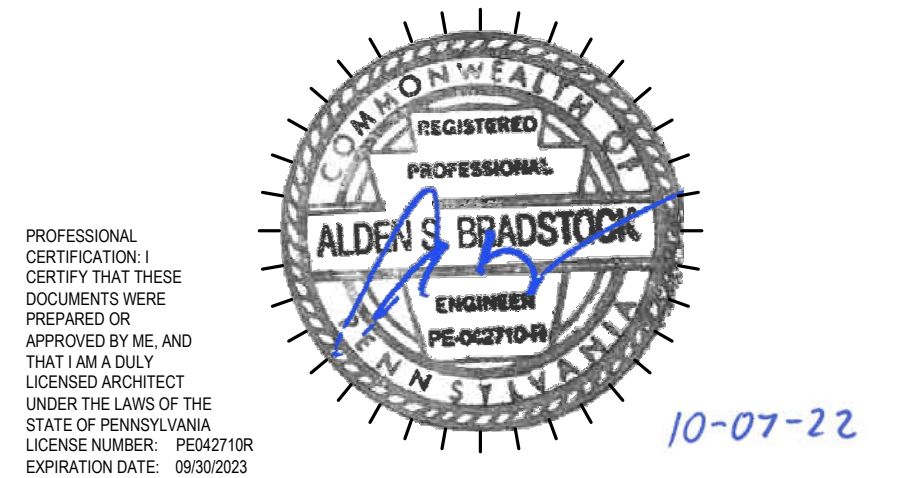
**MECHANICAL & ELECTRICAL ENGINEER**  
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**PLUMBING ENGINEER**  
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no.	date	revision
5	12.09.2022	Addendum 5



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**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF GENERAL SERVICES**  
HARRISBURG, PENNSYLVANIA

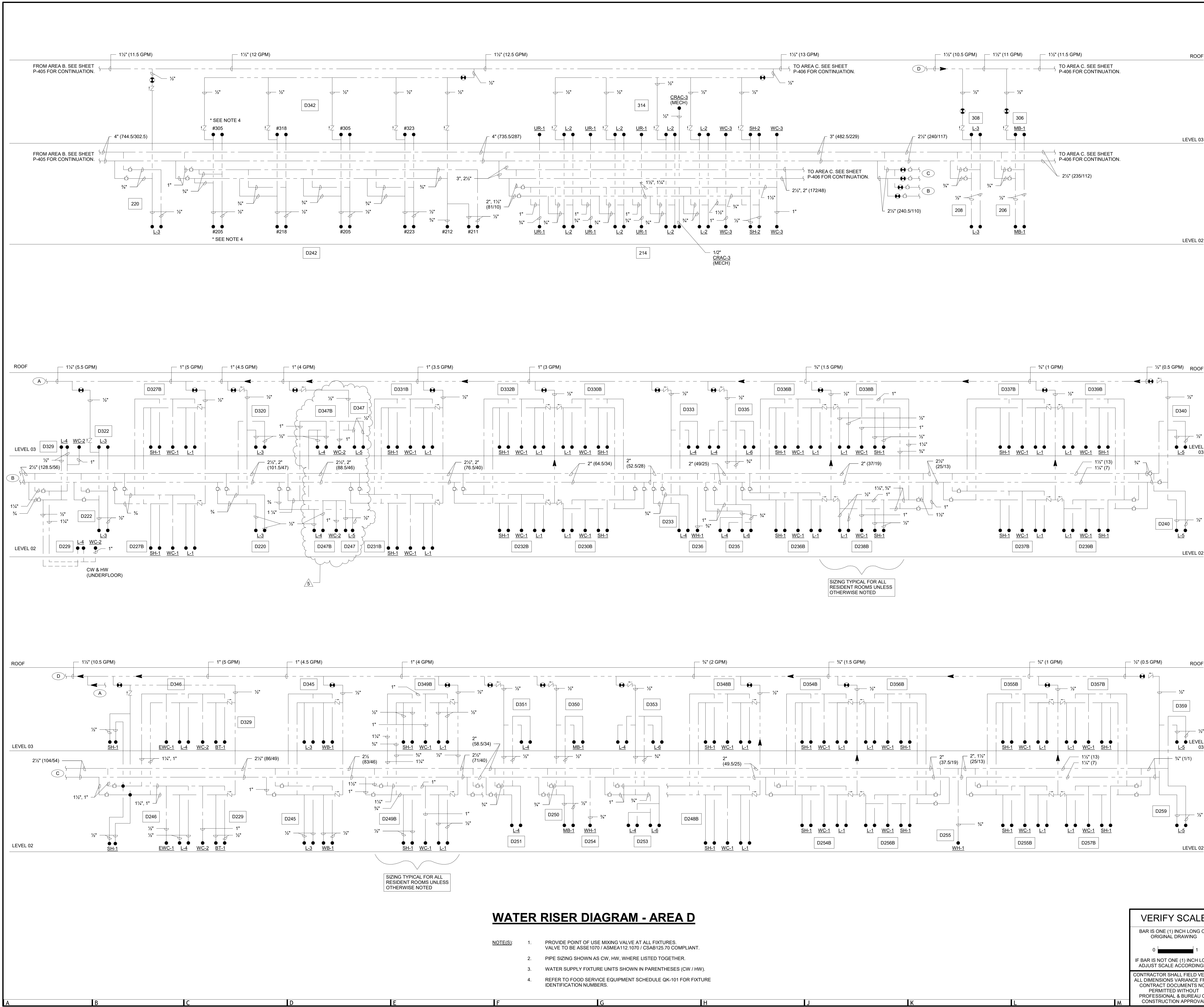
Project Number **DS21212**

**CONSTRUCTION OF NEW COMMUNITY LIVING  
CENTER, HOLLIDAYSBURG VETERANS' HOME**  
DUNCANVILLE, BLAIR COUNTY, PA

**WATER RISER DIAGRAM - AREA C**

Drawn by **Author** Date **10-07-2022** Drawing No. **P-406**  
Checked by **Checker** Scale **12" = 1'-0"**





## WATER RISER DIAGRAM - AREA D

- NOTE(S):
- PROVIDE POINT OF USE MIXING VALVE AT ALL FIXTURES. VALVE TO BE ASSE1070 / ASMEA112.1070 / CSAB125.70 COMPLIANT.
  - PIPE SIZING SHOWN AS CW, HW, WHERE LISTED TOGETHER.
  - WATER SUPPLY FIXTURE UNITS SHOWN IN PARENTHESES (CW / HW).
  - REFER TO FOOD SERVICE EQUIPMENT SCHEDULE QK-101 FOR FIXTURE IDENTIFICATION NUMBERS.

**ARCHITECT**  
Hord Coplan Macht, Inc.  
700 E. Pratt St., Suite 1200  
Baltimore, MD 21202  
p. 410.837.7311 f. 410.837.6530

**LANDSCAPE ARCHITECTURE**  
Hord Coplan Macht, Inc.  
700 E. Pratt St., Suite 1200  
Baltimore, MD 21202  
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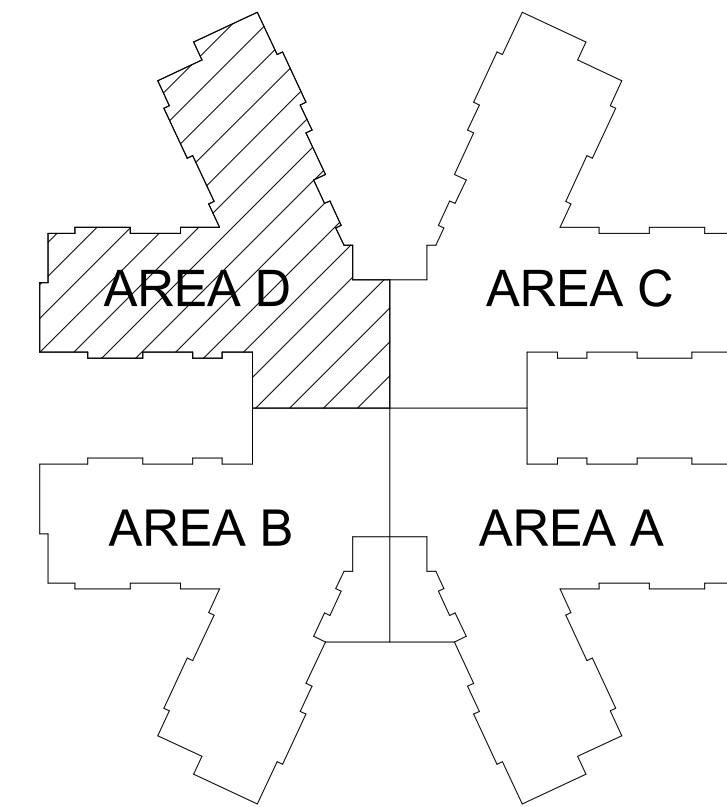
**INTERIOR DESIGN**  
Hord Coplan Macht, Inc.  
700 E. Pratt St., Suite 1200  
Baltimore, MD 21202  
p. 410.837.7311 f. 410.837.6530

**STRUCTURAL ENGINEER**  
Hope Furrer Associates  
700 East Beaver Ave., Suite 3  
State College, PA 16801  
p. 814.234.8191 x. 1106 f. 000.000.0000

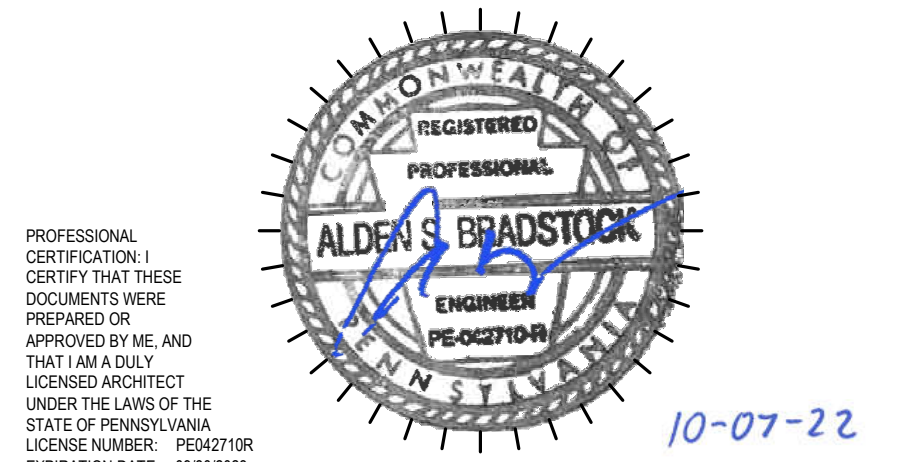
**MECHANICAL & ELECTRICAL ENGINEER**  
BALA Consulting Engineers  
443 South Gulph Rd.  
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**PLUMBING ENGINEER**  
VETERAN DESIGN & CONSTRUCTION, Inc.  
5523 Research Park Drive, Suite 110  
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no.	date	revision
5	12.09.2022	Addendum 5



**Hord Coplan Macht, Inc.**  
700 E. Pratt St., Suite 1200  
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**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF GENERAL SERVICES**  
HARRISBURG, PENNSYLVANIA

Project Number  
DS21212

**CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLLIDAYSBURG VETERANS' HOME**  
DUNCANSVILLE, BLAIR COUNTY, PA

**WATER RISER DIAGRAM - AREA D**

## VERIFY SCALE

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

0 1

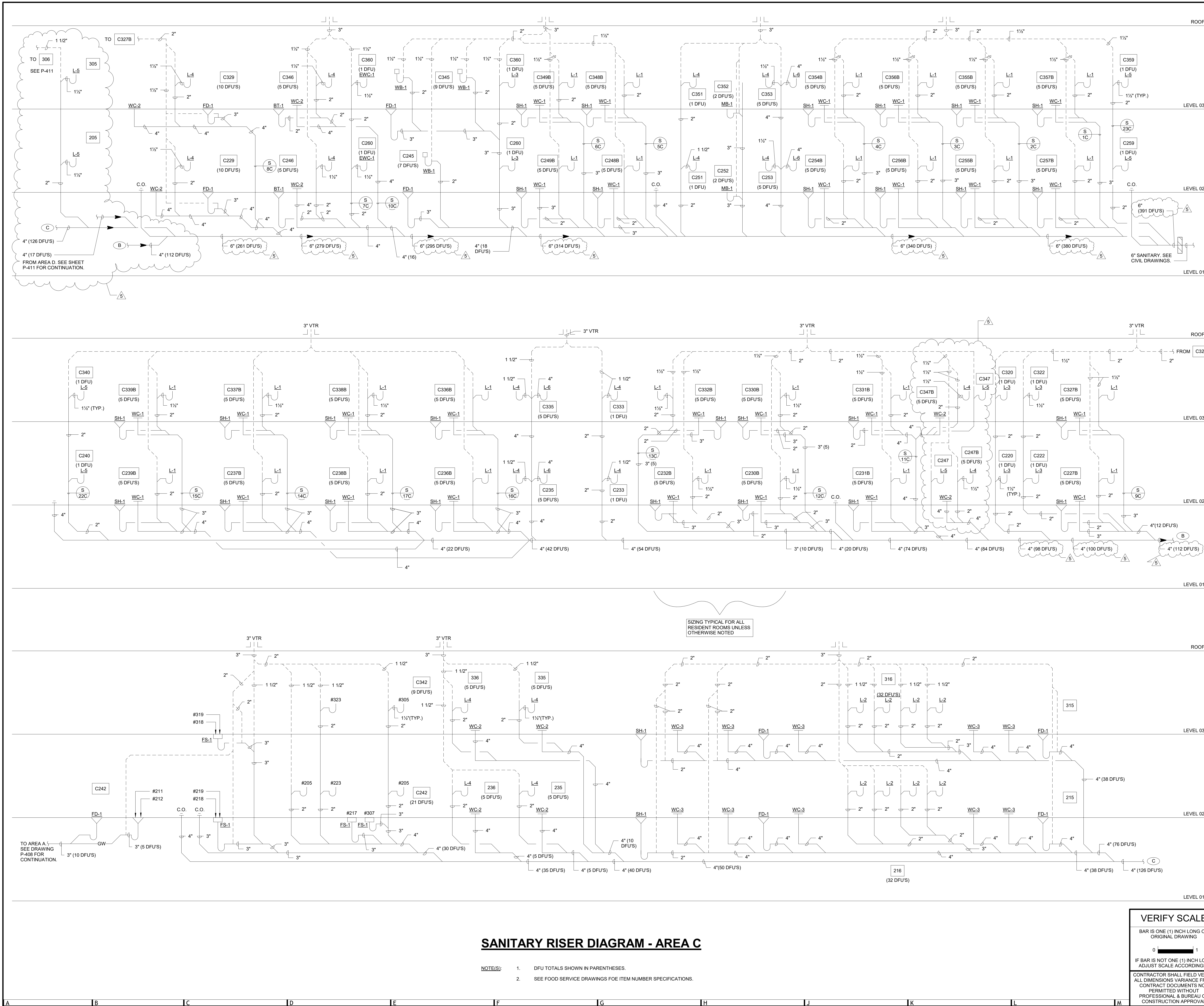
IF BAR IS NOT ONE (1) INCH LONG ADJUST SCALE ACCORDINGLY

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL

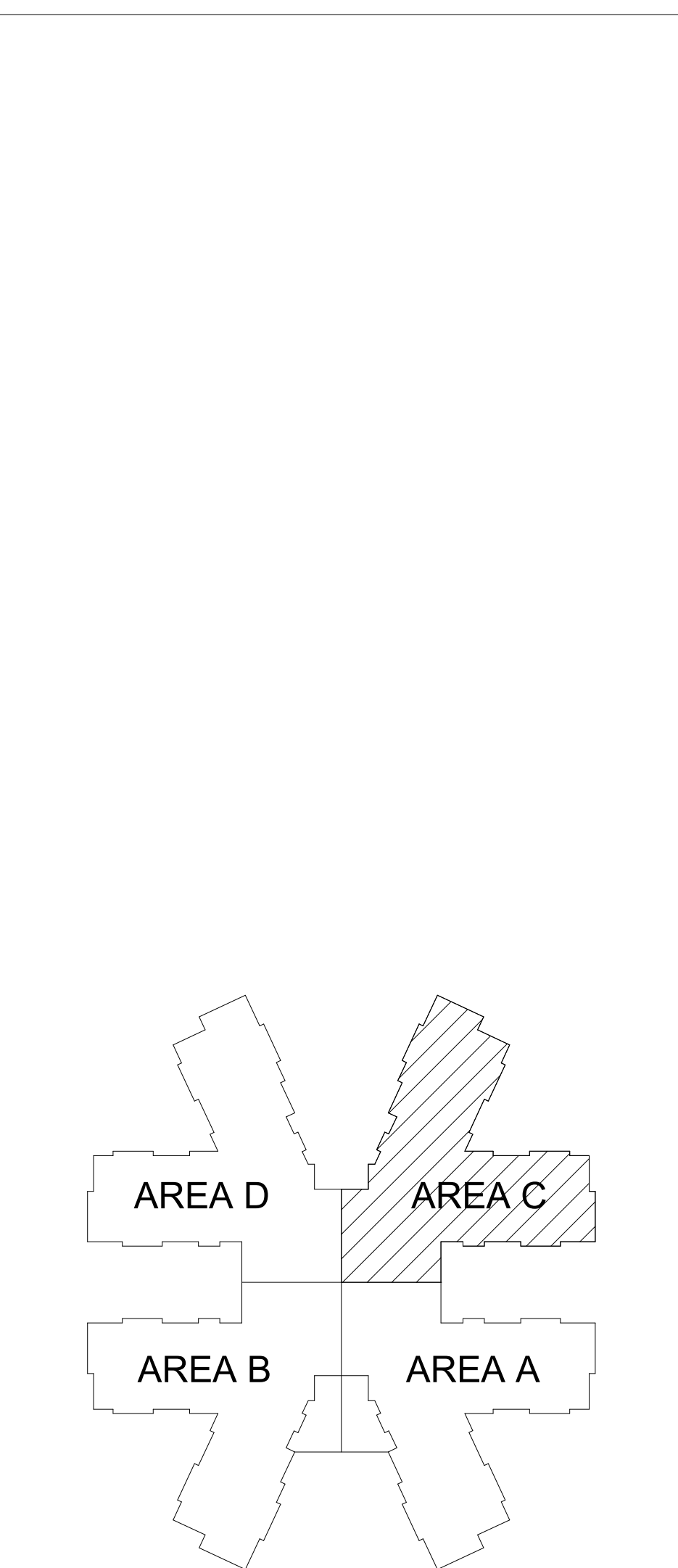
Drawn by  
Author  
Date  
10-07-2022  
Drawing No.  
P-407  
Checked by  
Checker  
Scale  
12" = 1'-0"

10/20/2022 10:01 AM  
BM 80/02/028 Hollidaysburg Veterans Home/VOC, Central, Hollidaysburg  
Veterans Home, PTP, 523.14  
© Hord Coplan Macht, Inc.

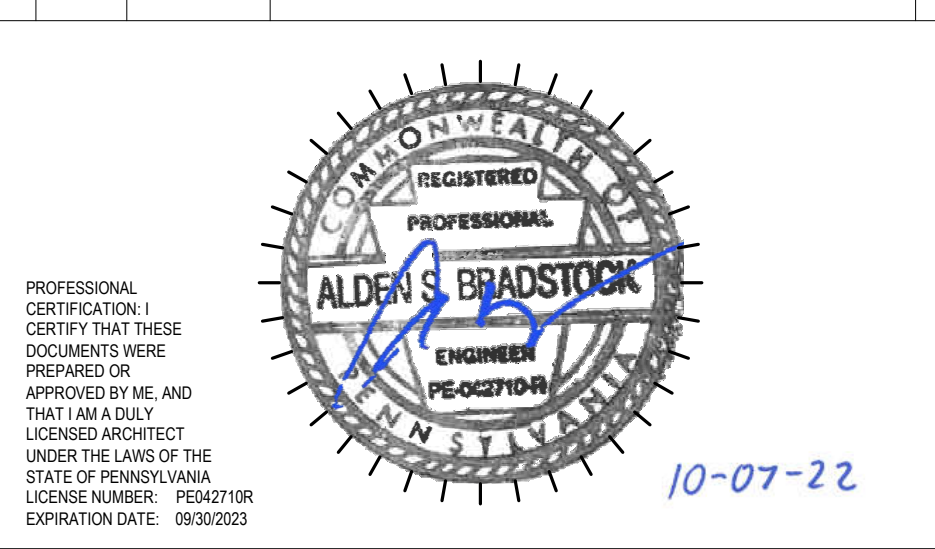




<b>ARCHITECT</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>LANDSCAPE ARCHITECTURE</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>INTERIOR DESIGN</b> Hord Coplan Macht, Inc. 700 E. Pratt St., Suite 1200 p. 410.837.7311 Baltimore, MD 21202 f. 410.837.6530		
<b>STRUCTURAL ENGINEER</b> Hope Furrer Associates 700 East Beaver Ave., Suite 3 p. 814.234.8191 x 1106 State College, PA 16801 f. 000.000.0000		
<b>MECHANICAL &amp; ELECTRICAL ENGINEER</b> BALA Consulting Engineers 443 South Gulph Rd. p. 610.674.6905 King of Prussia, PA 19406 f. 000.000.0000		
<b>PLUMBING ENGINEER</b> VETERAN DESIGN & CONSTRUCTION, Inc. 5523 Research Park Drive, Suite 110 p. 443.543.5081 Baltimore, MD 21228 f. 000.000.0000		
<b>CIVIL ENGINEERS</b> Keller Engineers, Inc. 420 Allegheny St. p. 814.696.7430 Holidaysburg, PA 16648 f. 000.000.0000		



5	12.09.2022	Addendum 5
no.	date	revision



**Hord Coplan Macht, Inc.**  
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**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF GENERAL SERVICES**  
HARRISBURG, PENNSYLVANIA

Project Number **D.G.S. C-0969-0017-001**

**CONSTRUCTION OF NEW COMMUNITY LIVING  
CENTER, HOLLIDAYSBURG VETERANS' HOME**  
DUNCANSVILLE, BLAIR COUNTY, PA

**SANITARY RISER DIAGRAM - AREA C**

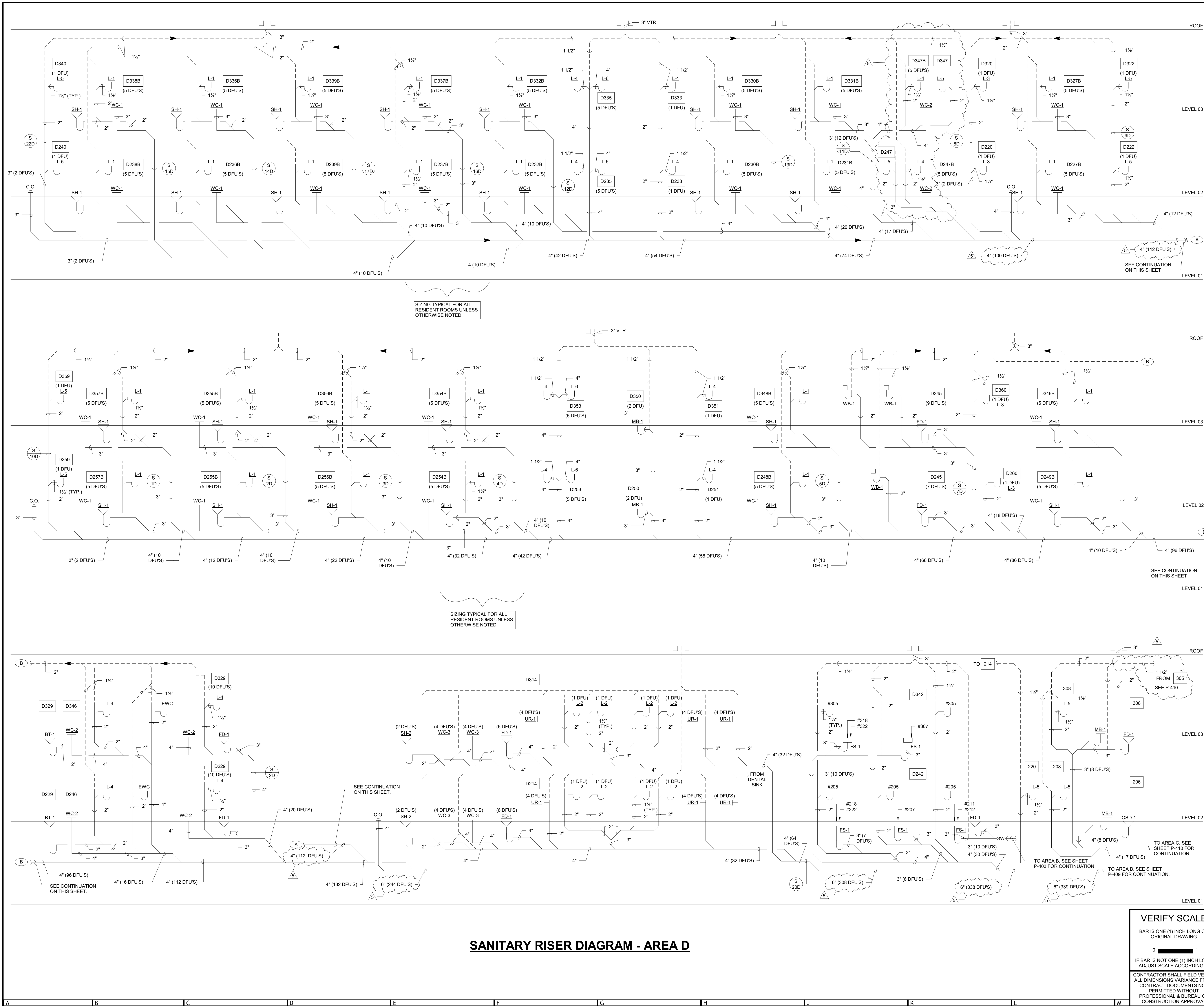
Drawn by	Date	Drawing No.
Author	10-07-2022	<b>P-410</b>
Checked by	Scale	
Checker	12" = 1'-0"	

### SANITARY RISER DIAGRAM - AREA C

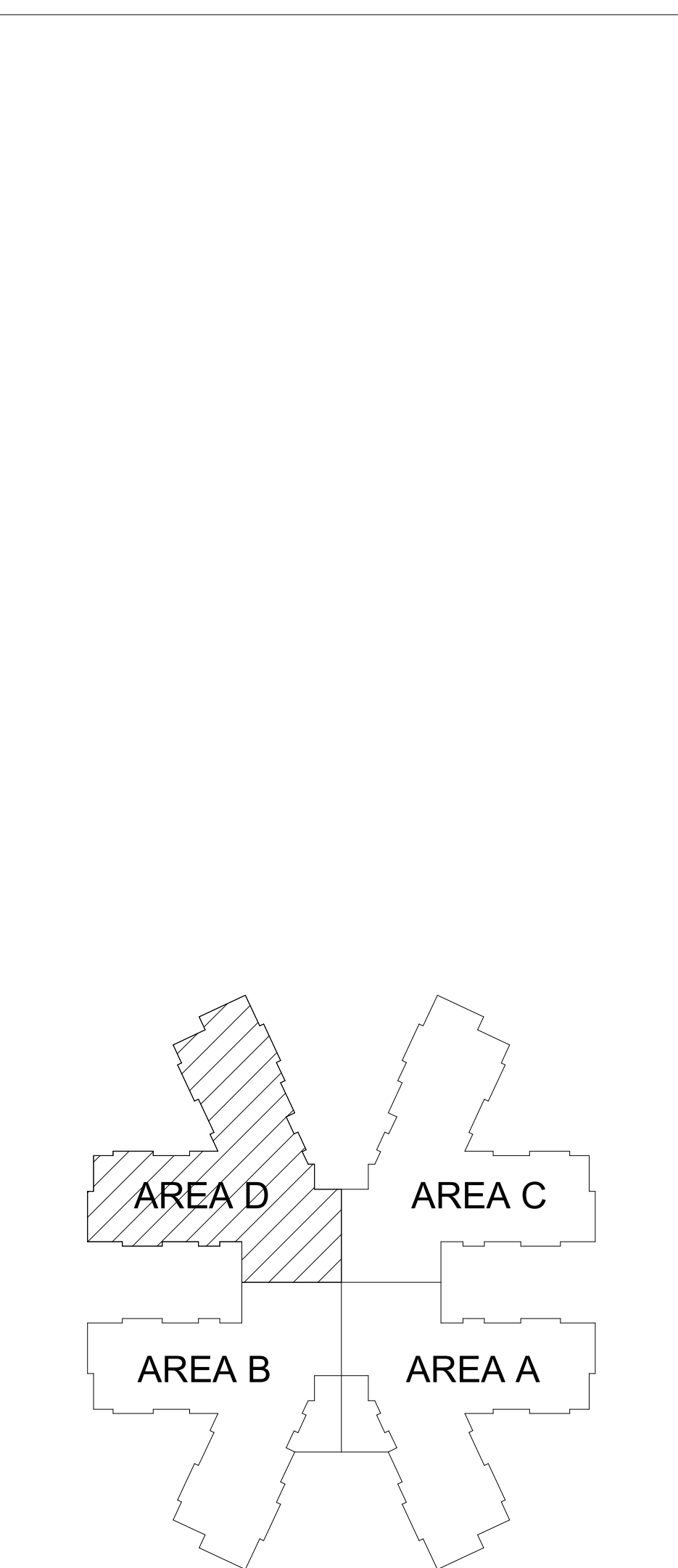
- NOTE(S):
1. DFU TOTALS SHOWN IN PARENTHESES.
  2. SEE FOOD SERVICE DRAWINGS FOR ITEM NUMBER SPECIFICATIONS.

**VERIFY SCALE**  
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING  
0 1  
IF BAR IS NOT ONE (1) INCH LONG ADJUST SCALE ACCORDINGLY  
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL

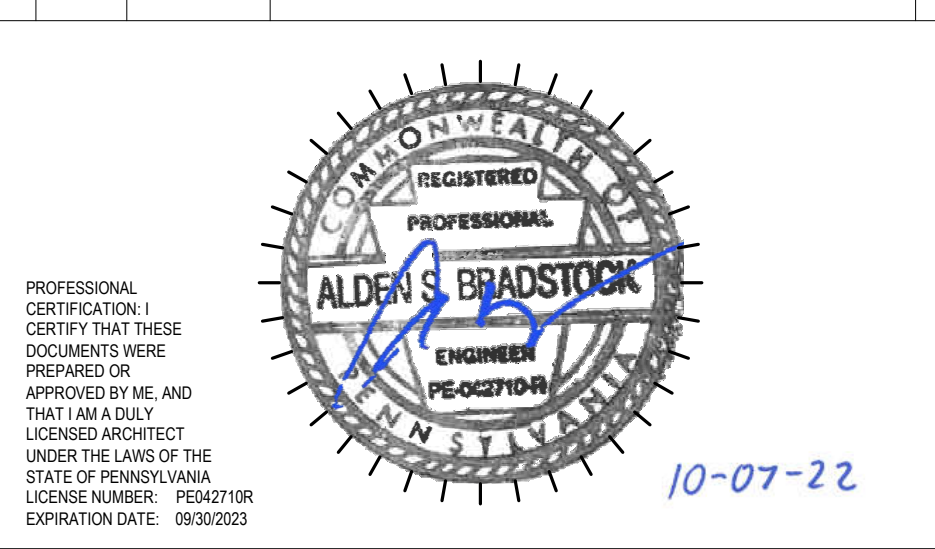




ARCHITECT	Hord Coplan Macht, Inc. 700 E. Pratt St, Suite 1200 p. 410.837.7311		Baltimore, MD 21202 f. 410.837.6530
LANDSCAPE ARCHITECTURE	Hord Coplan Macht, Inc. 700 E. Pratt St, Suite 1200 p. 410.837.7311		Baltimore, MD 21202 f. 410.837.6530
INTERIOR DESIGN	Hord Coplan Macht, Inc. 700 E. Pratt St, Suite 1200 p. 410.837.7311		Baltimore, MD 21202 f. 410.837.6530
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PLUMBING ENGINEER	VETERAN DESIGN & CONSTRUCTION, Inc. 5523 Research Park Drive, Suite 110 p. 443.543.5081		Baltimore, MD 21228 f. 000.000.0000
CIVIL ENGINEERS	Keller Engineers, Inc. 420 Allegheny St. p. 814.696.7430		Holidaysburg, PA 16648 f. 000.000.0000



5	12.09.2022	Addendum 5
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**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF GENERAL SERVICES**  
HARRISBURG, PENNSYLVANIA

Project Number **DS21212**

**CONSTRUCTION OF NEW COMMUNITY LIVING CENTER, HOLIDAYSBURG VETERANS' HOME**  
DUNCANVILLE, BLAIR COUNTY, PA

**SANITARY RISER DIAGRAM - AREA D**

Drawn by	Date	Drawing No.
Author	10-07-2022	<b>P-411</b>
Checked by	Scale	
Checker	12" = 1'-0"	

10/2022/10/21/21  
BIM 80/02/028 Holidaysburg Veterans Home/VOC, Central, Holidaysburg  
Veterans Home, P-411, 1/1

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