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To: Prospective Bidders  
From: Wold Architects and Engineers  
Date: July 30, 2014  
Comm. No: 133024

Subject: **Addendum No. 3** for Bidding Documents for the: **Courthouse Renovations Phase I & II**

**BIDS DUE AUGUST 19, 2014 AT 1:30 P.M.**

**\*\*\*NOTE CHANGE OF BID DATE\*\*\***

This addendum forms a part of the Contract Documents dated July 3, 2014. Acknowledge receipt of this Addendum on the space provided on the Bid Form. Failure to do so may result in disqualification of Bid.

This Addendum consists of five (5) typed sheets and the following attachments:

Specification Section 09 72 00 Wallcovering; Sheets A0.10, A1.11, A3.01, A3.02, A4.11, AD1.11, M0.01, M0.11, M1.01, M1.11, M2.11, MP1.11, E1.1, E3.0, E3.1, E6.0, E7.0; Details of Construction 42002, 42004, 42015, 42016, 42017, 42018, 42020, 42021, 42022, 42023, 42024, 42109, 43005, 43006, 43007, 43105.

**PROJECT MANUAL**

**1. SECTION 00 11 13 ADVERTISEMENT FOR BIDS**

- A. At the final paragraph revise Phase 1 substantial completion date to "January 5, 2015" and Phase 2 substantial completion date to "May 15, 2015."

**2. SECTION 00 41 13 BID FORM**

- A. At item number 2 revise Phase 1 substantial completion date to "January 5, 2015" and Phase 2 substantial completion date to "May 15, 2015."

**3. SECTION 01 11 00 SUMMARY OF WORK**

- A. Revise substantial completion date at item 1.05.B.1.a to "January 5, 2015."
- B. Revise substantial completion date at item 1.05.B.1.b to "January 19, 2015."
- C. Revise substantial completion date at item 1.05.B.2.a to "May 15, 2015."
- D. Revise items listed under 1.06.B.1 to read as follows:
  - "a. VAT
  - b. Carpet and VAT underneath
  - c. Flooring mastic"

**4. SECTION 08 10 00 STEEL DOORS AND FRAMES**

- A. Add item 2.07.B to read "Perforated metal panels of same material, construction, and finish as specified for adjoining hollow metal frames. Perforations to be 1/4" round on 5/16" centers with 60% open area."

**5. SECTION 08 71 00 FINISH HARDWARE**

- A. Add the following to item 2.01.C.1 "Note that Owner requires a Best Premium keyway system to match existing installation in building."
- B. Revise Section 2.05 Keying to the following:
  - "A. Acceptable manufacturers and respective catalog numbers:  
Best Keystone 600 Locking and Coring System                      No Substitution

Minnesota  
Illinois  
Michigan  
Colorado  
Iowa

- B. All locks and cylinders shall accommodate Best interchangeable cores.
  - C. Cores and keys shall be provided by owner.
  - D. The owner shall install the cores. At the contractor's request, the owner shall install a limited number of temporary cores during construction with the appropriate cost charged to the contractor.
  - E. The contractor must request all owner keys 24 hours in advance of using them. The contractor will be charged for any keys that are not returned to the owner when the project is completed. The charge will be equal to the cost of replacing any locks and keys relevant to the key code for those locks and keys."
- C. Revise Hardware Set #16 to the following;
- |                  |             |
|------------------|-------------|
| HINGE            | AS REQUIRED |
| IC CYLINDERS (2) | AS REQUIRED |
| PANIC HARDWARE   | CD9927 L DT |
| CLOSER (2)       | 4111 SHCUSH |
| KICK PLATES (2)  |             |
- D. Add Hardware Set #18
- |                   |   |
|-------------------|---|
| HINGE             | AS REQUIRED                             |
| POWER TRANSFER    | EPT2                                    |
| EU STOREROOM LOCK | 9KW-DEU                                 |
| CLOSER            | 4111 SCUSH                              |
| KICK PLATE        |   |
| CARD READER       | BY SECURITY SUPPLIER                    |
| POWER SUPPLY      | PS902 900-2RS                           |
| ELEVATION DRAWING |   |
| WIRE DIAGRAM      | POINT TO POINT                          |
| DRIP              | R201 (REESE, PEMKO, OR NATIONAL GUARD)  |
| WEATHERSTRIP      | 755A (REESE, PEMKO, OR NATIONAL GUARD)  |
| SWEEP             | 964C (REESE, PEMKO, OR NATIONAL GUARD)  |
| THRESHOLD         | S205A (REESE, PEMKO, OR NATIONAL GUARD) |

**6. SECTION 09 65 00 RESILIENT FLOORING**

- A. Add the following to 2.09.C "Cove base typ. unless noted otherwise."
- B. Add item 2.11.H to read "Stair Nosing at carpet tile install: Johnsonite Slim Line Nosing SLN-XX-B. Color: Charcoal – 20."
- C. Add item 3.10.C to read "Provide non-slip strips at existing stairs and ramp in Receiving area."

**7. SECTION 09 72 00 WALLCOVERING**

- A. Reissued this Addendum.

**PRIOR APPROVALS**

The following schedule amends designated specification sections to list additional acceptable manufacturers. Use of any product by any of these manufacturers will be permitted only if after review of shop drawings or detailed product data per Section 01 33 00, Architect determines that proposed materials or equipment are equivalent in performance, construction and appearance to product(s) specified.

Where anticipated product substitutions would alter the design or space requirements indicated on the Drawings, pay for cost of design and construction revisions including the cost of associated work by other contractors.

For complete requirements, see Specification Section 01 25 00 – Substitutions and Product Options.

<u>Section No.</u>	<u>Item</u>	<u>Type</u>	<u>Acceptable Manufacturer</u>
23 21 13	2.06.F	Buffer Tank	American Wheatly HVAC Products Design Tanks
23 37 13	2.01.A	Diff., Reg., & Grilles	Raymon-Donco
23 81 26	2.01.A	Split System A/C	LG

## DRAWINGS

### 1. SHEET A0.10 – PHASING PLAN

A. Refer to attached Sheet A0.10 for revised Phasing Plan General Notes and Phasing Schedule dates.

### 2. SHEET A1.11 – MAIN LEVEL FLOOR PLAN – AREA 'A'

A. Refer to attached Sheet A1.11 for the following revisions;

1. Additional of fire extinguisher locations noted as FE on plans.
2. Revision of "granite" panels, base and cap to "marble" panels, base and cap at various locations.
3. Removal of Keynote #15 from the floor plan and Floor Plan Keynotes.
4. Addition of dimensions for clarification.
5. Clarifications to the Floor Plan Keynotes.
6. Clarifications to Room Finish Schedule.
7. Clarifications to Room Finish Schedule Remarks.
8. Clarifications to Door/Opening Schedule and Door Schedule Remarks.

### 3. SHEET A3.01 – DOOR & FRAME TYPES AND ELEVATIONS, ENLARGED PLANS

A. Refer to attached Sheet A3.01 for the following revisions;

1. Addition of detail and elevation callouts at casework rail at Enlarged Magistrate Plan 8.
2. Clarification to notes at Ramp Section 13.
3. Clarification to notes at Elevations 9, 11, and 12.
4. Clarification to Floor Pattern 16.
5. Clarifications made to Enlarged Toilet Plan 7.
6. Revision of Tile Pattern Detail 6 title.

### 4. SHEET A3.02 – INTERIOR ELEVATIONS

A. Refer to attached Sheet A3.02 for revisions to noted materials and Material Key.

### 5. SHEET A4.11 – MAIN LEVEL REFLECTED CEILING PLAN & MATERIAL FINISH SCHEDULE

A. Refer to attached Sheet A4.11 for the following revisions;

1. Printing fixed to show correct hatch at all gyp bd soffits – note that soffit locations/sizes have not be revised so areas are not bubbled on plan.
2. Ceiling tags added at toilet vestibule areas.
3. Plan 2 "Basement Level Reflected Ceiling Plan" added with key note to provide additional structural reinforcement and ceiling patching clarifications.

### 6. SHEET AD1.11 – MAIN LEVEL DEMOLITION PLAN

A. Refer to attached Sheet AD1.11 for revisions to Demolition Plan Key Notes and additional Key Notes added to Phase 1 area of plan.

### 7. SHEET M0.01 – BASEMENT MECHANICAL DEMOLITION PLAN

A. Refer to attached Sheet M0.01 for revised condensate drain piping demolition.

8. **SHEET M0.11 – MAIN LEVEL MECHANICAL DEMOLITION PLAN**  
A. Refer to attached Sheet M0.11 for revised condensate drain piping demolition.
9. **SHEET M1.01 – BASEMENT HYDRONIC PIPING, BOILER ROOM, AND BAS PLAN**  
A. Refer to attached Sheet M1.01 for revised condensate drain pipe routing.
10. **SHEET M1.11 – MAIN LEVEL HYDRONIC PIPING AND BAS PLAN**  
A. Refer to attached Sheet M1.11 for revised condensate drain pipe routing in Attorney/Client Room (A153).
11. **SHEET M2.11 – MAIN LEVEL HVAC PLAN**  
A. Refer to attached Sheet M2.11 for revised manual volume damper locations.
12. **SHEET MP1.11 – MECHANICAL ROOM PLANS**  
A. Refer to attached Sheet MP1.11 for revised manual volume damper locations.
13. **SHEET E1.1 – MAIN LEVEL ELECTRICAL DEMOLITION PLAN**  
A. Refer to attached Sheet E1.1 for revisions this Addendum.
14. **SHEET E3.0 – LOWE LEVEL ELECTRICAL POWER PLAN**  
A. Refer to attached Sheet E3.0 for revisions this Addendum.
15. **SHEET E3.1 – MAIN LEVEL ELECTRICAL POWER PLAN**  
A. Refer to attached Sheet E3.1 for revisions this Addendum.
16. **SHEET E6.0 – ELECTRICAL RISER DIAGRAM AND DETAILS**  
A. Refer to attached Sheet E6.0 for revisions this Addendum.
17. **SHEET E7.0 – ELECTRICAL SCHEDULES**  
A. Refer to attached Sheet E7.0 for revisions this Addendum.

#### DETAILS

1. **DETAIL OF CONSTRUCTION 42002**  
A. Detail reissued this Addendum.
2. **DETAIL OF CONSTRUCTION 42004**  
A. Detail reissued this Addendum.
3. **DETAIL OF CONSTRUCTION 42007**  
A. Revise note that reads “extruded aluminum trim” to read “1/4” routed reveal, sand smooth and paint black to match existing installation, typ.”
4. **DETAIL OF CONSTRUCTION 42008**  
A. Revise note that reads “extruded aluminum trim” to read “1/4” routed reveal, sand smooth and paint black to match existing installation, typ.”
5. **DETAIL OF CONSTRUCTION 42009**  
A. Add note to read “See enlarged plan for grommet locations.”
6. **DETAIL OF CONSTRUCTION 42010**  
A. At Detail 1, revise note that reads “extruded aluminum trim” to read “1/4” routed reveal, sand smooth and paint black to match existing installation, typ.”  
B. At Detail 2, revise note that reads “extruded aluminum trim” to read “1/4” routed reveal, sand smooth and paint black to match existing installation, typ.”



7. **DETAIL OF CONSTRUCTION 42012**  
A. Revise note that reads "extruded aluminum trim" to read "1/4" routed reveal, sand smooth and paint black to match existing installation, typ."
8. **DETAIL OF CONSTRUCTION 42013**  
A. Revise note that reads "extruded aluminum trim" to read "1/4" routed reveal, sand smooth and paint black to match existing installation, typ."
9. **DETAIL OF CONSTRUCTION 42014**  
A. Revise note that reads "extruded aluminum trim" to read "1/4" routed reveal, sand smooth and paint black to match existing installation, typ."
10. **DETAIL OF CONSTRUCTION 42015**  
A. Detail reissued this Addendum.
11. **DETAIL OF CONSTRUCTION 42016**  
A. Detail reissued this Addendum.
12. **DETAIL OF CONSTRUCTION 42017**  
A. Detail reissued this Addendum.
13. **DETAIL OF CONSTRUCTION 42018**  
A. Detail reissued this Addendum.
14. **DETAIL OF CONSTRUCTION 42020**  
A. Detail reissued this Addendum.
15. **DETAIL OF CONSTRUCTION 42021**  
A. Detail reissued this Addendum.
16. **DETAIL OF CONSTRUCTION 42022**  
A. Detail reissued this Addendum.
17. **DETAIL OF CONSTRUCTION 42023**  
A. Detail reissued this Addendum.
18. **DETAIL OF CONSTRUCTION 42024**  
A. Detail issued this Addendum.
19. **DETAIL OF CONSTRUCTION 42104**  
A. Revise dimension at wainscot from "1 5/8" to "1 1/2".
20. **DETAIL OF CONSTRUCTION 42109**  
A. Detail reissued this Addendum.
21. **DETAIL OF CONSTRUCTION 42110**  
A. At Detail 1 remove note that reads "Note:At sim condition..."
22. **DETAIL OF CONSTRUCTION 43005**  
A. Detail reissued this Addendum.
23. **DETAIL OF CONSTRUCTION 43006**  
A. Detail issued this Addendum.
24. **DETAIL OF CONSTRUCTION 43007**  
A. Detail issued this Addendum.
25. **DETAIL OF CONSTRUCTION 43105**  
A. Detail reissued this Addendum.
26. **DETAIL OF CONSTRUCTION 61001**  
A. Add note pointing to stair nose that reads "rubber stair nosing, typ."

**END OF ADDENDUM #2**

## SECTION 09 72 00

### WALLCOVERING

#### PART 1: GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings, Details of Construction and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to work specified in this section.

##### 1.02 SUMMARY

- A. Section includes:
  - 1. Vinyl wallcovering where shown on Drawings or in schedules.
  - 2. *High impact wall covering where shown on Drawings or in schedules.*
  - 3. *High impact wall panels where shown on Drawings or in schedules.*
- B. Related work specified in other sections:
  - 1. Section 09 91 00: Priming of gypsum board and plaster.

##### 1.03 SUBMITTALS

- A. Submit copy of fabric manufacturer's maintenance recommendations for care and cleaning of fabric. Submit per Section 01 78 23.
- B. Submit 12" x 12" sample of each type and color of vinyl wall covering and *high impact wallcovering* to be used on this project, with the maintenance recommendations.
- C. Letter from wall fabric manufacturer approving installer to hang fabric.
- D. *Shop drawings for high impact wallcovering showing locations, extent, trim, and installation details.*

##### 1.05 PRODUCT HANDLING

- A. Deliver and store in manufacturer's original, unopened containers with legible and intact labels indicating brand names, colors, patterns, fire hazard classification and quality designations. Do not open containers or remove markings until materials are inspected and accepted by Architect.
- B. Store fabric materials flat. Store in work spaces for no less than 48 hours before installation.

##### 1.06 TEMPERATURE OF WORK SPACES

- A. Insure minimum of 70 degrees F. and maximum of 90 degrees F., 72 hours before, during application and 48 hours after application and minimum of 55 degrees F. thereafter.

##### 1.07 QUALITY ASSURANCE

- A. *Installer qualifications: engage installer who has no less than three years experience in installation of product types specified.*
- B. *Provide Manufacturer color match products.*
- C. *Single Source Responsibility: Provide all component of each wallcovering system from same company.*

## **PART 2: PRODUCTS**

### **2.01 APPROVED MANUFACTURERS**

- A. Manufacturers listed in this specification are approved under the following conditions:
  - 1. A manufacturer listed in both the specification and the Material Finish/Color Schedule, on Architectural Drawings is not required to submit a pre-bid approval.
  - 2. Manufacturers listed in this specification, but not in the Material Finish/Color Schedule, S on Architectural Drawings shall submit color samples for pre-bid approval by addendum. Refer to Section 01 25 00.
  - 3. When no colors are listed in the Material Finish/Color Schedule, on Architectural Drawings, any manufacturer listed in this specification are not required to submit a pre-bid approval.

### **2.02 VINYL WALLCOVERING**

- A. General: First quality with each pattern and color from same run.
- B. Vinyl:
  - 1. Manufacturer/Pattern: Bolta Kimono Texture
  - 2. Physical Properties
    - a. Material: Type II, 20 ounce
    - b. Width: 54 inches
    - c. Fire Resistance: This pattern meets the CFFA Quality Standard for Vinyl Coated Fabric Wallcovering. This material has been tested for fire hazard classification in accordance with ASTM E-84 Tunnel Test.
    - d. Colors: See Material Finish/Color Schedule, on Architectural Drawings.

### **2.04 ADHESIVES**

- A. Heavy bodied, water soluble paste containing mildew inhibitor and manufactured expressly for use with *vinyl* wall covering furnished.
- B. *Construction grade adhesive as supplied by manufacturer for high impact wallcovering and panels.*

### **2.05 EXTRA STOCK**

- A. Provide in clearly marked, wrapped rolls one percent (1%) of each color and type of vinyl and ~~fabric~~ *high impact* wall covering used on this project for maintenance stock.

### **2.06 HIGH IMPACT WALLCOVERING**

- A. *Provide Acrovyn 4000 engineered PETG rigid sheet high impact wallcovering in .060" thickness.*
- B. *Color: As selected by Architect from Manufacturer's full Chameleon colorway (including both woodgrains and metals) in suede texture.*
- C. *Metal trim in aluminum finish standard for all joints/transitions.*
- D. *Wallcovering to be furnished as a complete packaged system.*

### **2.06 HIGH IMPACT WALL PANELS**

- A. *Provide Acrovyn 4000 engineered PETG beveled edge wall panels.*
- B. *Color: As selected by Architect from Manufacturer's full Chameleon colorway (including both woodgrains and metals) in suede texture.*
- C. *Metal trim in aluminum finish standard for all joints/transitions as detailed.*

- D. All edges to be factory finished to match face of panel.*
- E. Fabricate wall panels to comply with requirements for design, dimensions, details, finish, and sizes. Field verify all dimensions.*
- F. Wall Panels to be furnished as a complete packaged system.*

### **PART 3: EXECUTION**

#### **3.01 SUB-SURFACE PREPARATION**

- A. Do not start work until sub-surfaces have been corrected for roughness or unevenness and are thoroughly dry.

#### **3.02 FABRIC APPLICATION**

- A. Use rolls in consecutive numerical sequence of manufacturer.
- B. Locate seams at least 4" from inside and outside corners. No horizontal seams will be allowed. Butt joint tightly without gaps and overlaps.
- C. Remove excessive adhesive from each seam as it is made and before proceeding to next. Clean with sponge dampened with plain warm water and wipe with dry cloth insuring all adhesive residue is removed.
- D. Leave installation clean and free of blisters, wrinkles, gaps or other defects.

#### **3.03 HIGH IMPACT WALLCOVERING INSTALLATION**

- A. Install the work of this section in strict accordance with the manufacturer's recommendations using approved adhesive.*
- B. Immediately upon completion of installation, clean wall covering and accessories in accordance with manufacturer's recommended cleaning method.*

#### **3.04 HIGH IMPACT WALL PANEL INSTALLATION**

- A. Adhesive mount panels per manufacturers printed instructions. Avoid field cutting – all edges to be factory finished.*
- B. Immediately upon completion of installation, clean wall covering and accessories in accordance with manufacturer's recommended cleaning method.*

#### **3.05 DEMONSTRATION**

- A. Engage factory-authorized representative to train Owner's personnel on wallcovering repair, seam maintenance and cleaning techniques. Refer to Section 01 79 00 Demonstration and Testing.

**END OF SECTION 09 72 00**



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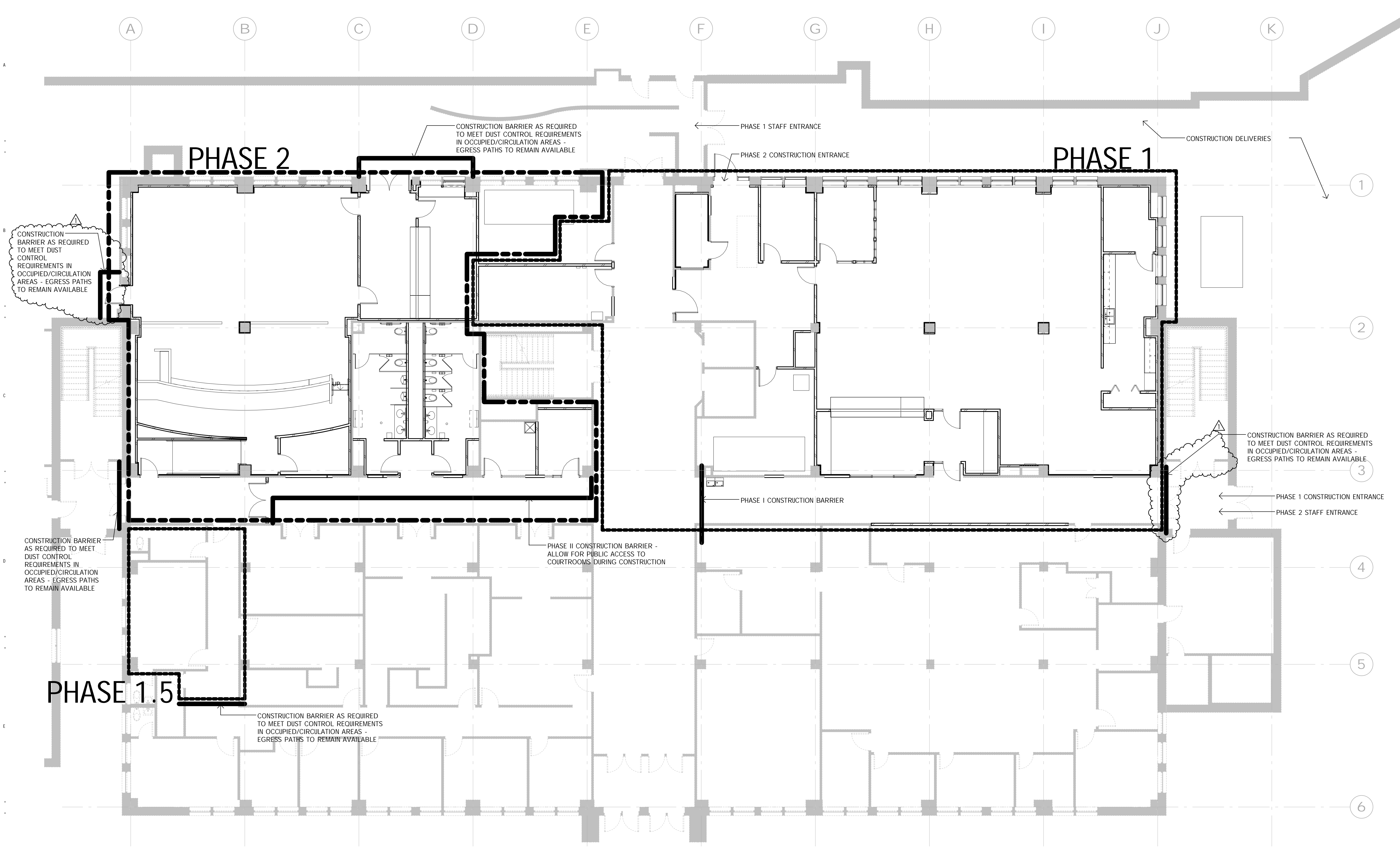
PHASING PLAN GENERAL NOTES:

1. ALL EGRESS PATHS ARE TO BE MAINTAINED AND REMAIN AVAILABLE FOR USE DURING CONSTRUCTION.
2. ALL CONSTRUCTION ACTIVITIES THAT CAUSE EXCESSIVE NOISE (SAWCUTTING, JACK HAMMERING, HILT GUIN, ETC. TO BE COMPLETED BEFORE 8:30AM OR AFTER 3:30PM.
3. PARKING FOR CONTRACTORS AVAILABLE IN PARKING LOT AT 5TH AND RIPLEY.
4. ALL MECHANICAL/ELECTRICAL WORK IN BOILER ROOM TO BE COMPLETED IN PHASE 1. ALL HEATING AND COOLING SYSTEMS TO BE FULLY OPERATIONAL AT END OF PHASE 1.
5. ALL WORK PERFORMED OUTSIDE THE CONSTRUCTION BARRICADE SHOWN ON THE DRAWINGS INCLUDING ALL WORK IN CORRIDORS AND LOBBIES SHALL BE PERFORMED OUTSIDE OF NORMAL BUSINESS HOURS AND SHALL BE SCHEDULED IN ADVANCE WITH OWNER EXCEPT WHERE SPECIFIED OTHERWISE. SEE ALSO, REQUIREMENTS OF SPECIFICATION SECTION 01 56 00.
6. ALL MECHANICAL/ELECTRICAL WORK ASSOCIATED WITH RELOCATION OF THE EXISTING AIR HANDLING EQUIPMENT SHALL BE COMPLETED IN PHASE 1.5, INCLUDING ALL ASSOCIATED TEMPERATURE CONTROL WORK.

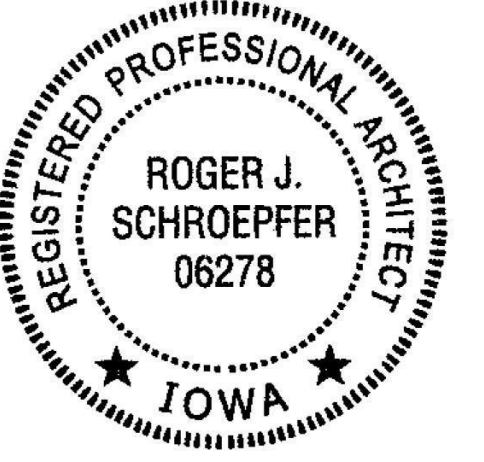
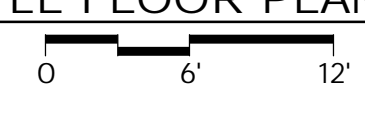
PHASING SCHEDULE:

- PHASE 1:**  
12/29/2014 PUNCHLIST  
1/5/2015 SUBSTANTIAL COMPLETION  
1/12/2015 FINAL COMPLETION
- PHASE 1.5:**  
1/5/2015 RELOCATE EXISTING ASU & HYDRONIC PIPING CONNECTIONS  
1/9/2015 RELOCATED ASU EQUIPMENT OPERATIONAL  
1/12/2015 PHASE 1 FURNITURE INSTALL (BY OWNER)  
1/26/2015 OCCUPY PHASE 1
- PHASE 2:**  
1/26/2015 OWNER ABATEMENT OF VAPORABASTIC IN PHASE 2 AREAS  
2/2/2015 BEGIN CONSTRUCTION  
5/15/2015 SUBSTANTIAL COMPLETION  
5/18/2015 PUNCHLIST  
6/26/2015 FINAL COMPLETION/PROJECT CLOSEOUT

IL



1 MAIN LEVEL FLOOR PLAN - PHASING PLAN  
1/8" = 1'-0"

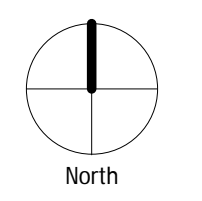


I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed ARCHITECT

under the laws of the State of IOWA  
Roger J. Schroepfer  
Registration Number 06278 Date 7/3/2014

Description	Revisions	Date	Num
ADDENDUM #3		7/30/2014	1

Comm: 133024  
Date: 7/3/2014  
Drawn: KBE  
Check: KBE



PHASING PLAN

Scale: 1/8" = 1'-0"

A0.10

A



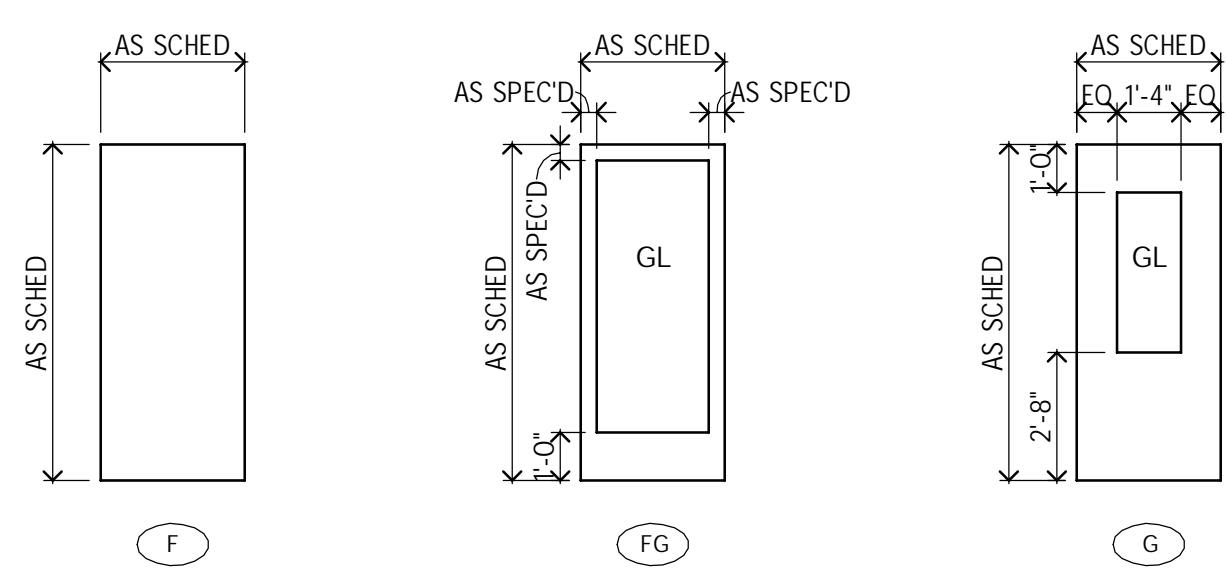




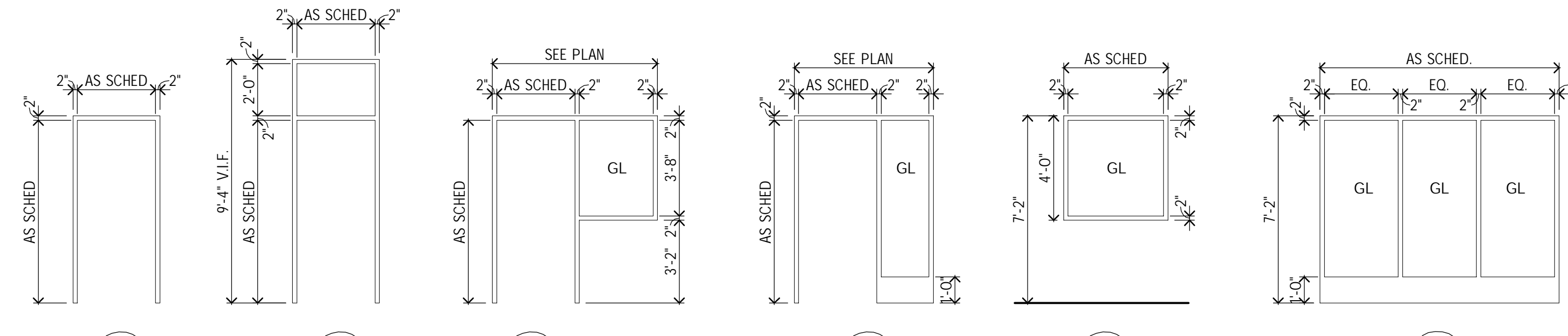
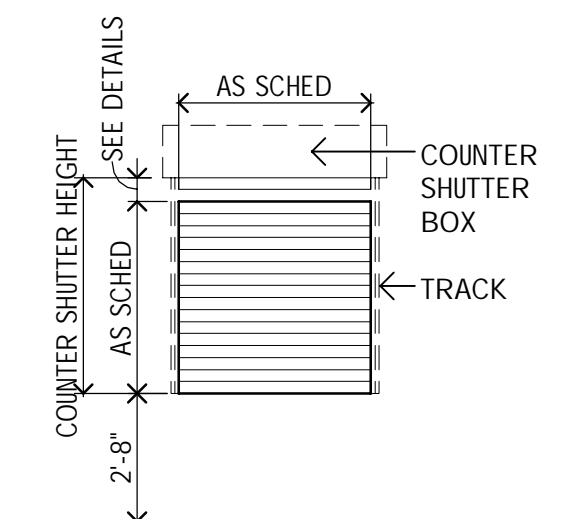


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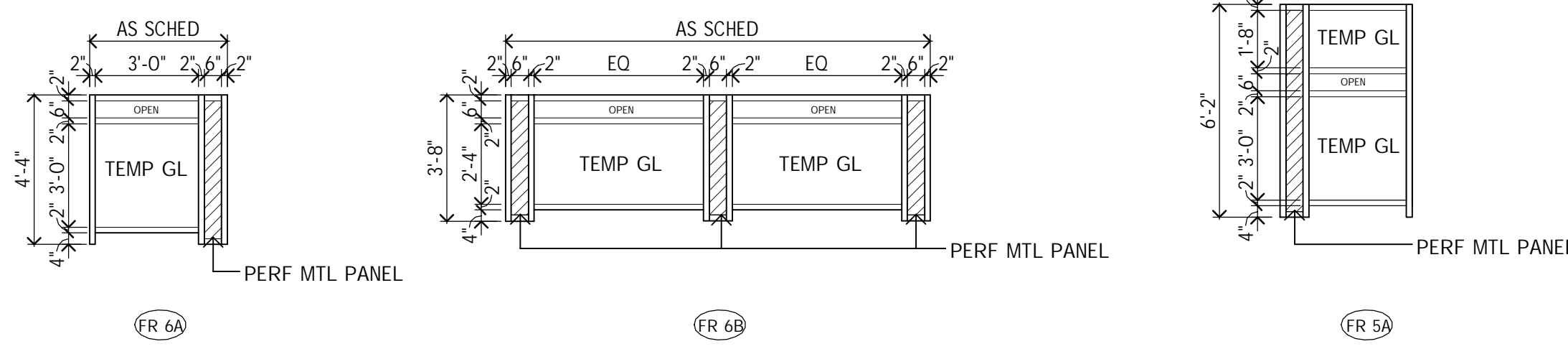
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fax: 847 241 6105  
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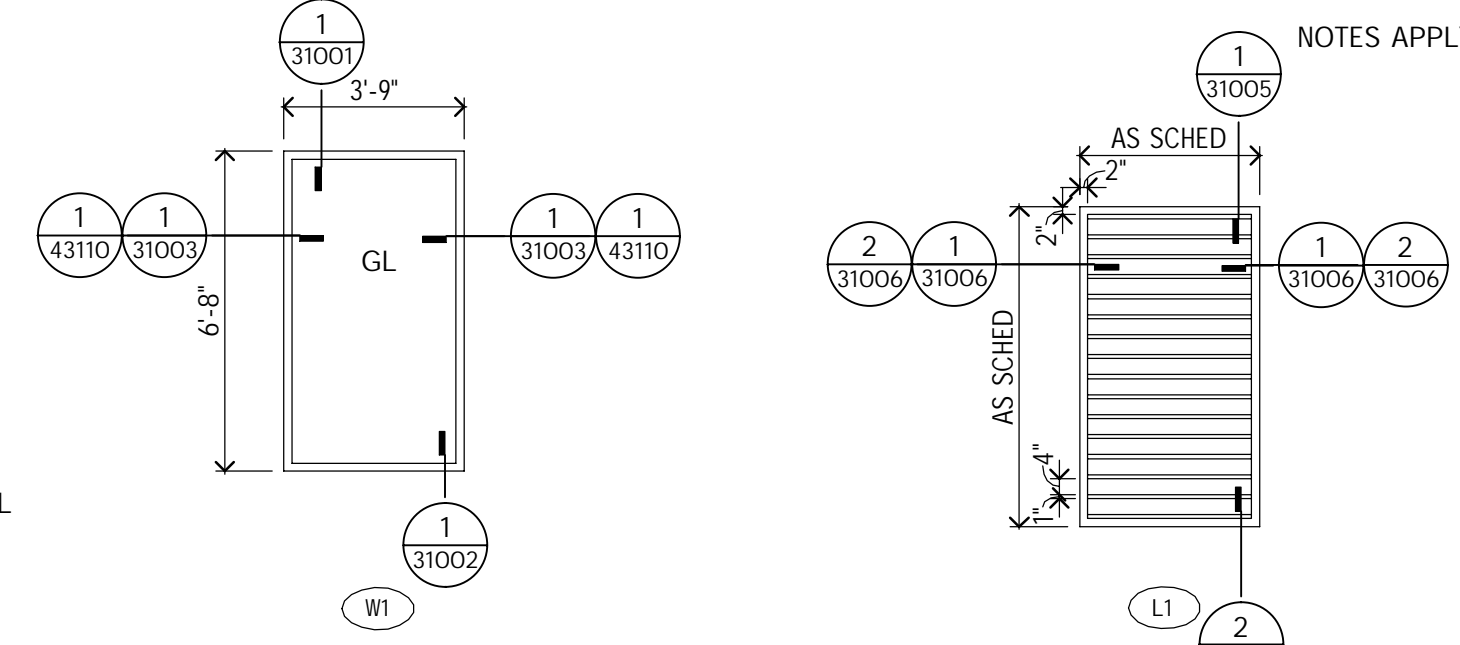
DOOR TYPES



FRAME TYPES



FRAME TYPES

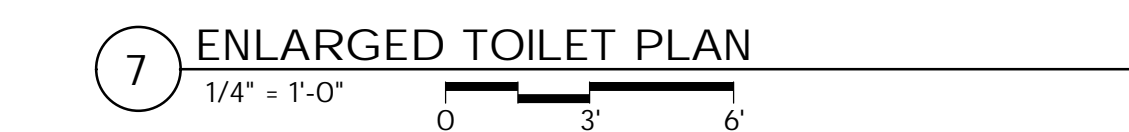


WINDOW TYPES

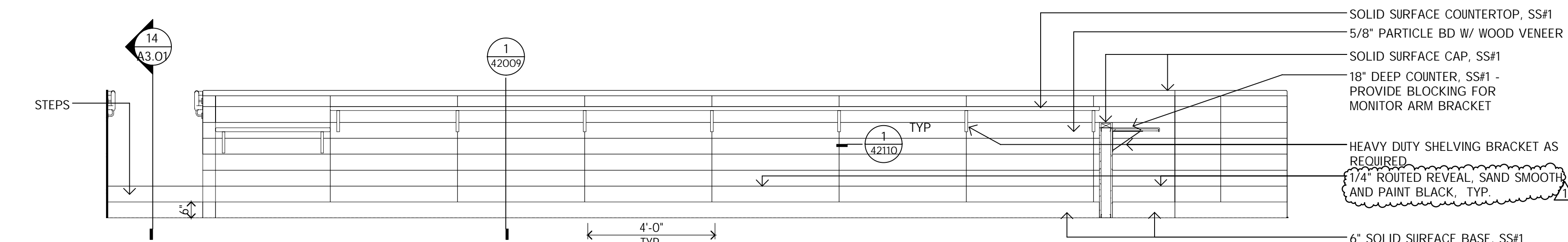
LOUVER TYPES



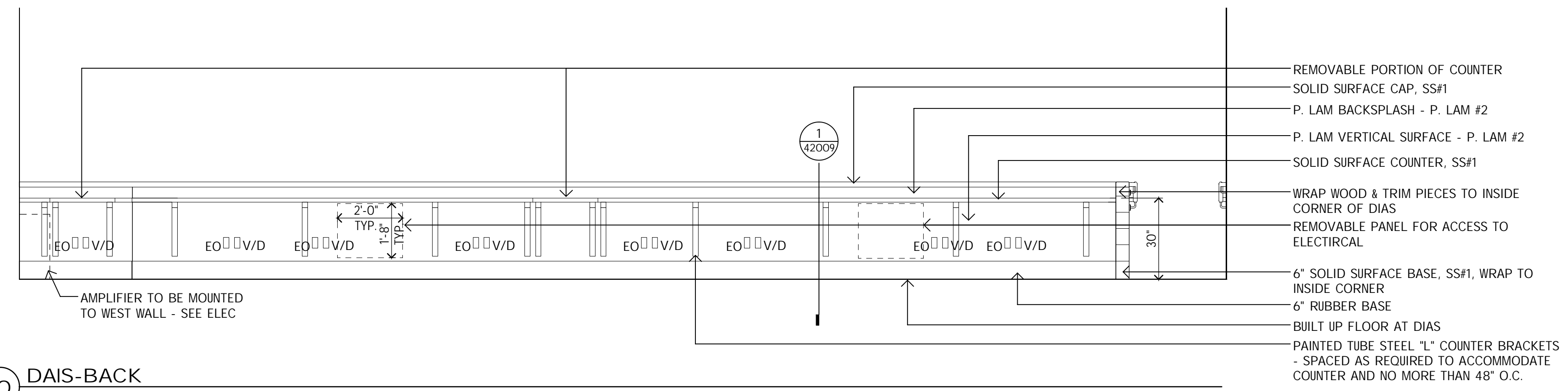
6 TILE PATTERN @ NEW GYP WALLS, TYP.  
1/4" = 1'-0"



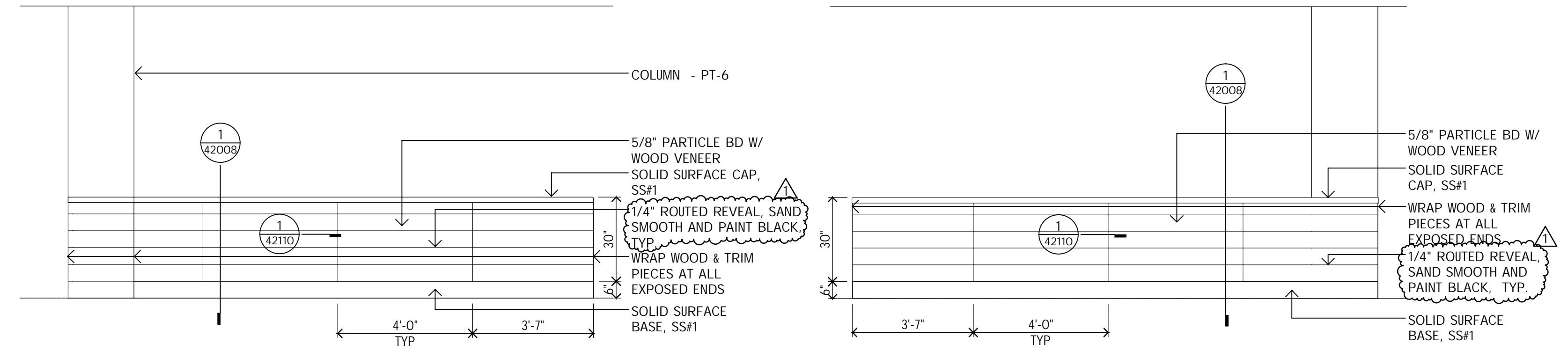
7 ENLARGED TOILET PLAN  
1/4" = 1'-0"



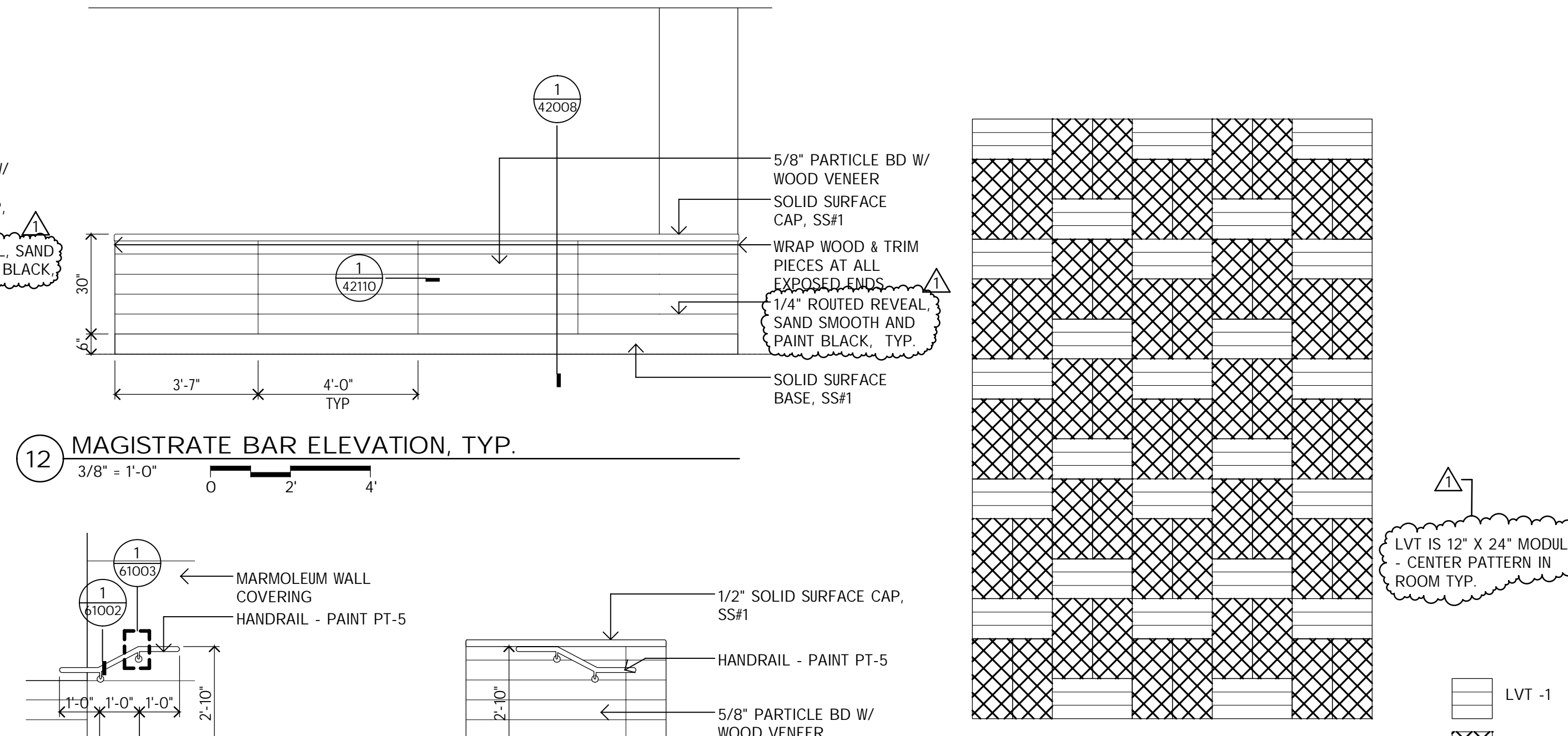
9 ELEVATION @ DAIS  
3/8" = 1'-0"



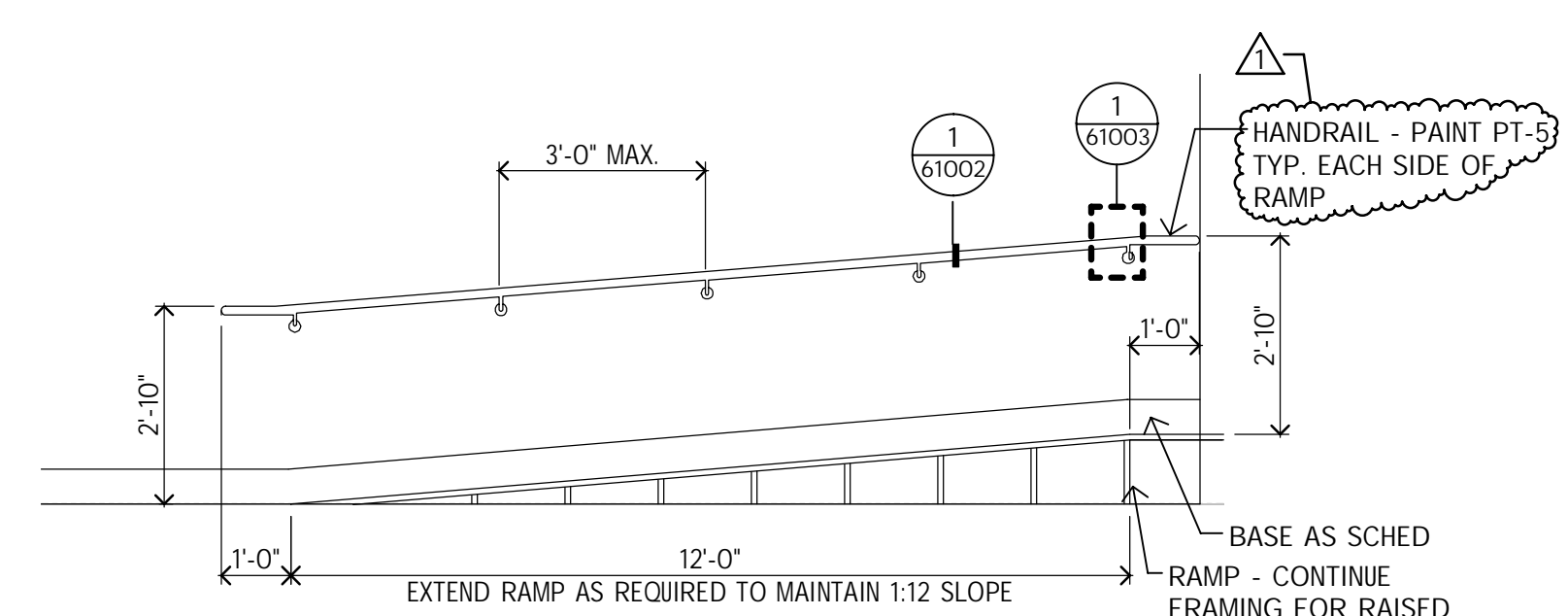
10 DAIS-BACK  
3/8" = 1'-0"



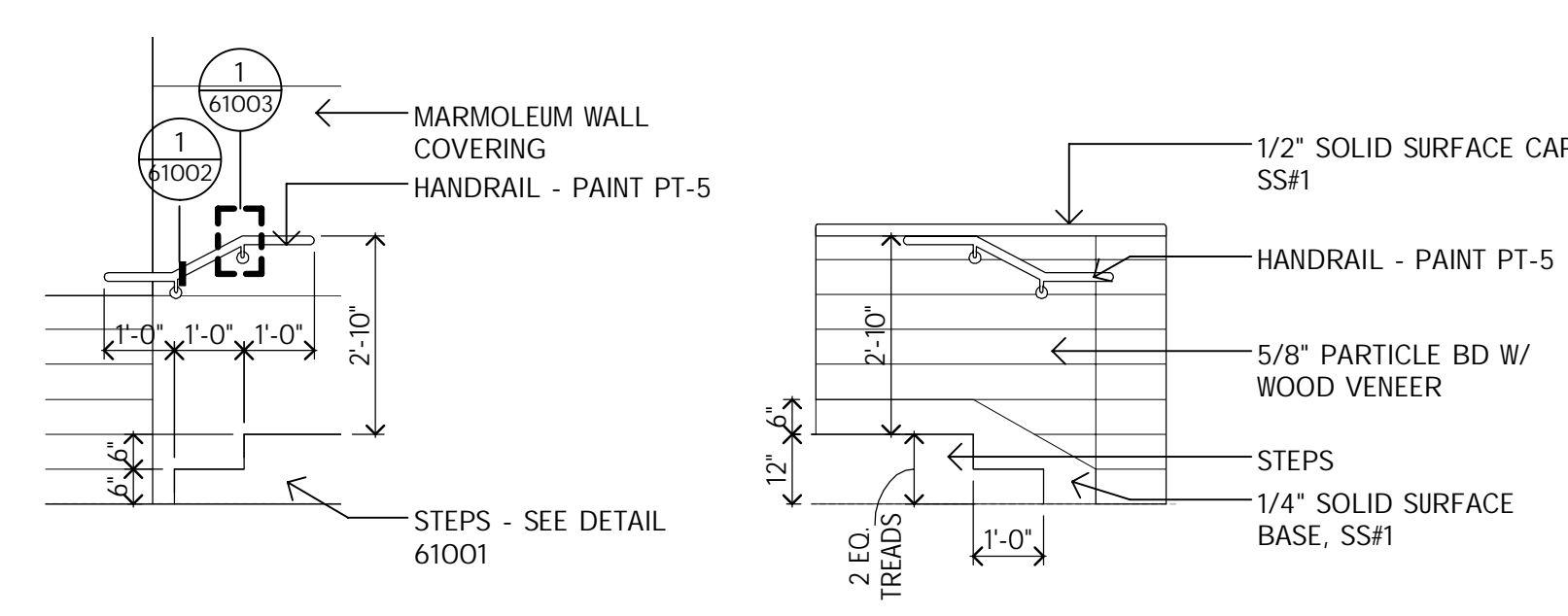
11 MAGISTRATE BAR ELEVATION, TYP.  
3/8" = 1'-0"



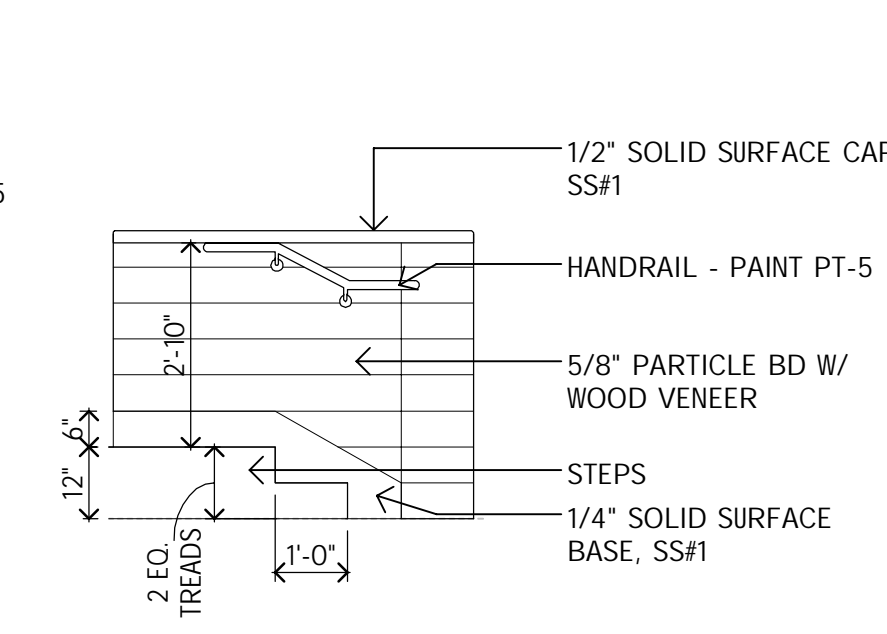
12 MAGISTRATE BAR ELEVATION, TYP.  
3/8" = 1'-0"



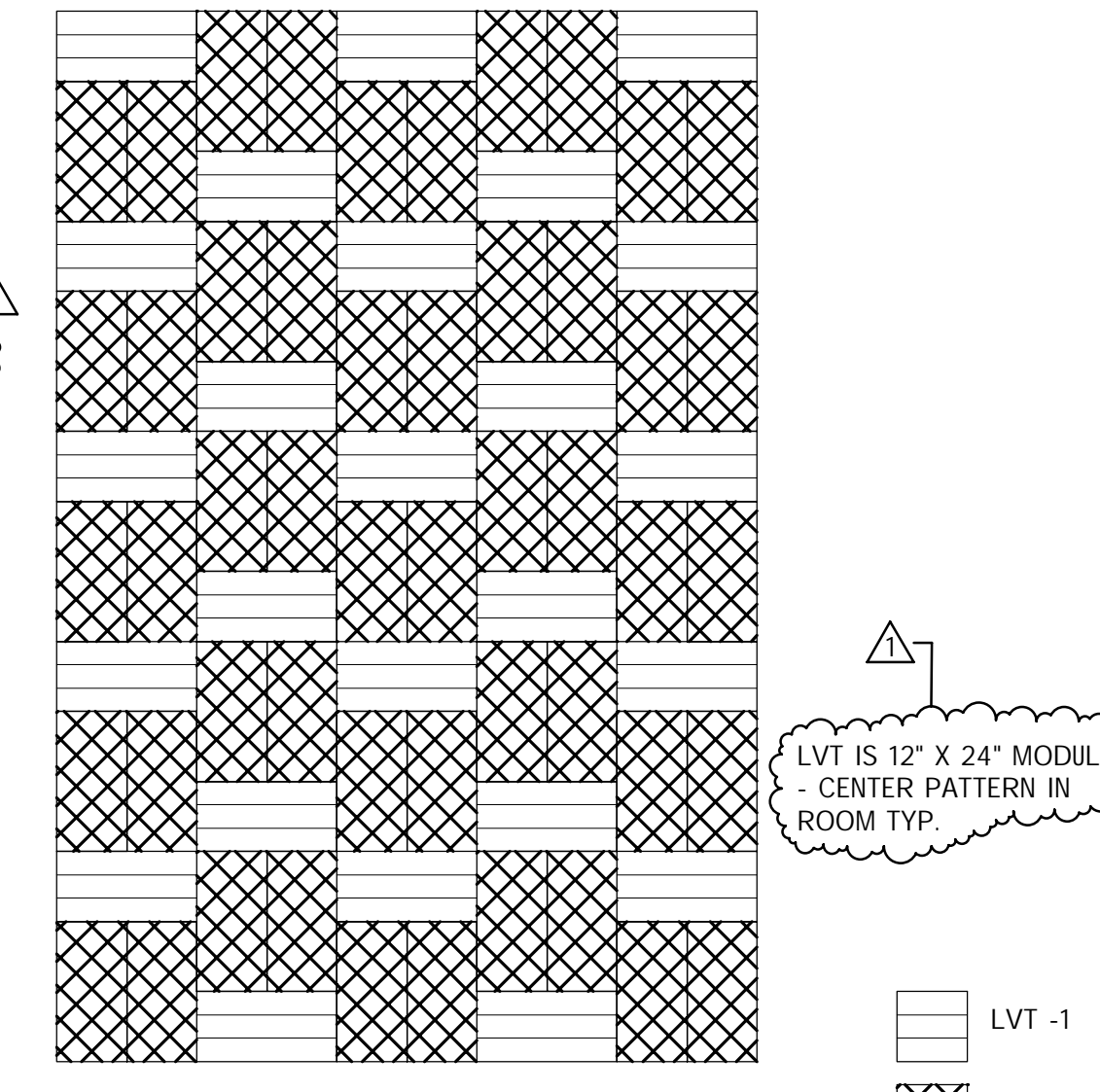
13 SECTION @ RAMP  
3/8" = 1'-0"



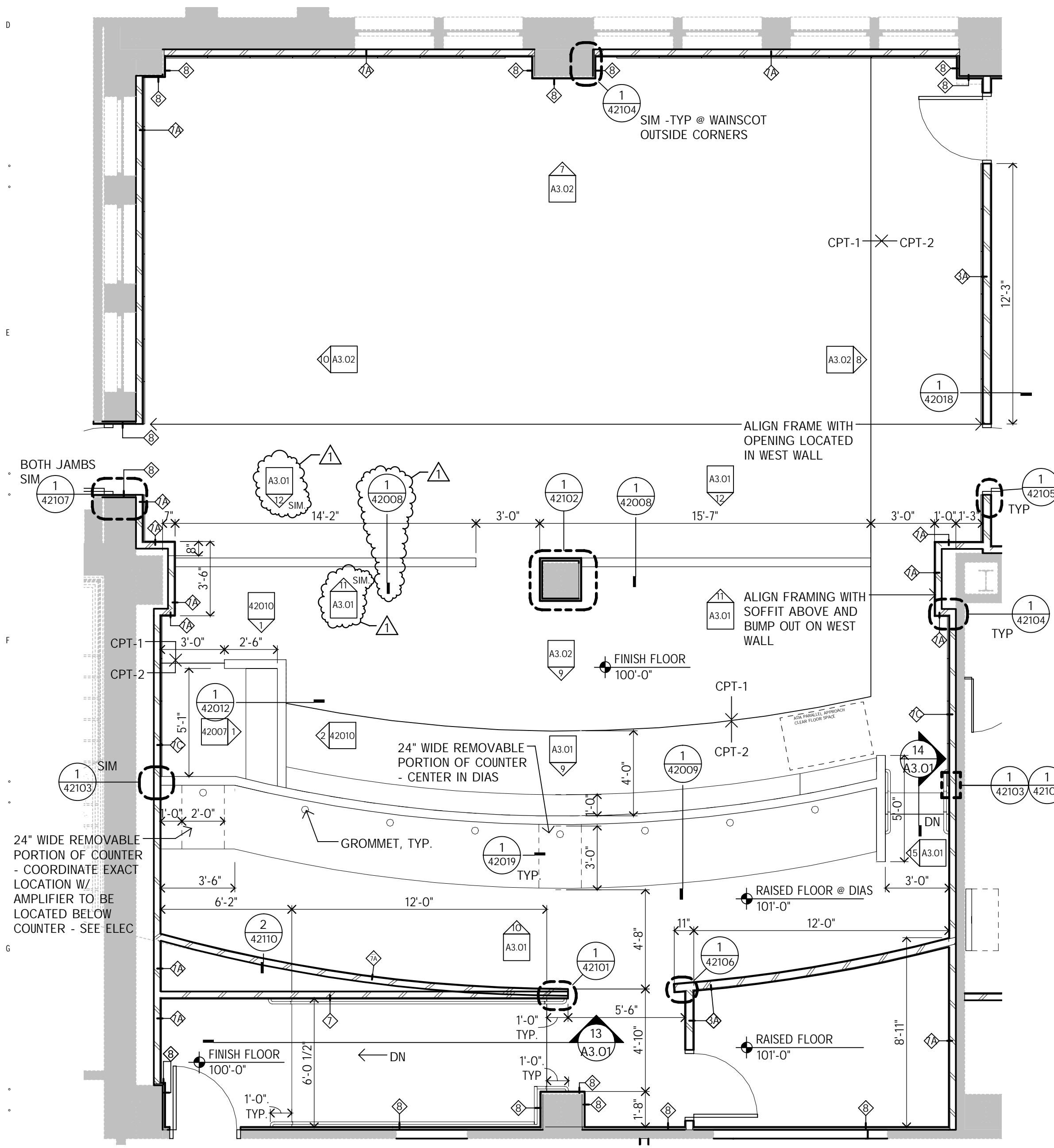
14 SECTION @ STAIRS  
3/8" = 1'-0"



15 ELEVATION @ DAIS END WALL  
3/8" = 1'-0"



16 TYPICAL FLOOR PATTERN AT LVT  
3/8" = 1'-0"



8 ENLARGED MAGISTRATE COURTROOM PLAN  
1/4" = 1'-0"



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed ARCHITECT under the laws of the State of IOWA.  
Roger J. Schroeffer  
Registration Number 06278 Date 7/3/2014

Description	Revisions	Date	Num
ADDENDUM #3		7/30/2014	1

Comm: 133024  
Date: 7/3/2014  
Drawn: AA  
Check: KBE

DOOR & FRAME TYPES  
AND ELEVATIONS,  
ENLARGED PLANS

Scale: As Indicated









RCP GENERAL NOTES

- FOR WALLS THAT PENETRATE CEILINGS SEE WALL TYPES SHOWN ON THE FLOOR PLAN.
- SPRINKLER HEADS ARE NOT SHOWN. LOCATE ALL SPRINKLER HEADS IN THE CENTER OF CEILING TILES.
- FOR DIFFUSER AND RETURN GRILL SIZES, SEE MECHANICAL PLANS.
- FOR LIGHT FIXTURE TYPES, SEE ELECTRICAL LIGHTING PLANS.
- CEILING HEIGHTS INDICATED ON PLAN (E.G. 9'-0") ARE FROM FINISHED FLOOR OF LEVEL OF PLAN SHOWN OR INDICATED AS 109'-0".
- ACOUSTICAL TILE CEILING GRID IS TO BE CENTERED IN RECTANGULAR ROOM OR CENTERED BETWEEN LONGEST WALLS OF IRREGULARLY SHAPED ROOMS UNLESS OTHERWISE NOTED.
- VERIFY GYP. BD. CONTROL JOINT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
- CONTRACTOR RESPONSIBLE FOR ADDITIONAL REMOVABLE AND REPLACEMENT OF CEILINGS IN PORTIONS OF THE BUILDING NOT SHOWN ON THE RCP DUE TO MECHANICAL AND ELECTRICAL WORK. COORDINATE EXTENTS OF WORK WITH MECH AND ELEC SHEETS. AT AREAS OF ACT CEILING TILE AND GRID SHOULD BE REMOVED AND REPLACED WITH CARE - TILES DAMAGED DUE TO NEW WORK TO BE REPLACED BY CONTRACTOR. AT AREAS OF PLASTER, CEILINGS NEED TO BE CUT, PATCH, AND REPAINTED TO MATCH EXISTING. CONTRACTOR TO FIELD VERIFY EXISTING CEILING CONDITIONS.

RCP LEGEND

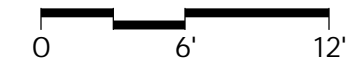
- CANLIGHT
- 1 X 4 LIGHT FIXTURE
- 4' STRIP LIGHT FIXTURE
- 8' STRIP LIGHT FIXTURE
- 2 X 2 LIGHT FIXTURE (IN CEILING GRID)
- 2 X 4 LIGHT FIXTURE (IN CEILING GRID)
- CEILING MOUNTED LIGHT FIXTURE
- SPEAKER
- AIR DIFFUSER (IN CEILING GRID)
- RETURN AIR GRILLE (IN CEILING GRID)
- EXHAUST GRILLE
- ACCESS PANEL
- PTD. GYPSUM BOARD CEILING / SOFFIT

RCP KEY NOTES:

- PROTECT EXISTING CEILING TO REMAIN
- REMOVE EXISTING CEILING TILE AND GRID AS REQUIRED FOR NEW WORK IN THIS AREA. COORDINATE EXTENTS WITH MECH, ELEC AND STRUCTURAL REINFORCEMENT DRAWINGS. SALVAGE TILE AND GRID FOR REINSTALLATION. REPLACE ANY TILES OR GRID THAT IS DAMAGED DURING NEW WORK. SEE ALSO GENERAL NOTE #5 ABOVE.
- SEE STRUCTURAL REINFORCEMENT DETAILS IN PROJECT MANUAL 1 FOR STRUCTURAL WORK TO BE COMPLETED IN THIS AREA. ADJUST EXISTING CONDUIT RIMS AS NECESSARY FOR STEEL REINFORCEMENT INSTALLATION.
- EXISTING METAL CEILING THIS ROOM TO REMAIN

1 MAIN LEVEL REFLECTED CEILING PLAN

1/8" = 1'-0"



2 BASEMENT LEVEL REFLECTED CEILING PLAN

1/16" = 1'-0"



MATERIAL FINISH COLOR SCHEDULE

Item	Manufacturer	Color/ Finish
06 46 00 Standing and Running Trim	Sherwin Williams	Color: 500 Medium Red to match doors
Hardwood Paneling - Stained	Sherwin Williams	Color: 500 Medium Red to match doors
Hardwood Door Frames - Stained	Sherwin Williams	Color: 500 Medium Red to match doors
06 40 00 Cast Plastic Fabrications	Formica	Color: Maroon Granite
Solid Surface - SS #1	Formica	Color: Night Nitel
Solid Surface - SS #2	Formica	Color: Night Nitel
08 14 00 Wood Doors	Gratham	Color: 500 Medium Red
Prefinished Stained Wood Door	Gratham	Color: 500 Medium Red
08 33 13 Ceiling Doors	As Specified	Color: Stainless Steel
Ceiling Shutter	As Specified	Color: Stainless Steel
08 51 13 Aluminum Windows	EFCO	Color: Clear
Aluminum Window Sill	EFCO	Color: Clear
Aluminum Window And Accessories	EFCO	Color: Clear
Sealant Window	As Specified	Color: To match sample supplied by Architect
08 91 00 Louvers	As Specified	Custom color to match the existing windows
Prefinished Aluminum	As Specified	Custom color to match the existing windows
09 24 00 Portland Cement Plaster	Sis	Color: To match existing
Stucco Finish Coat Color	As Specified	Sand Float
Stucco Finish Coat Texture	As Specified	Sand Float
09 30 00 Tile	Stonepeak	Color: Neigroby
Porcelain Wall Tile - Field P Tile #1	Stonepeak	Color: Greenway
Porcelain Wall Tile - Accent P Tile #2	Tec	Color: Light Pewter - 027
Great Porcelain Wall Tile	Tec	Color: Light Pewter - 027
09 65 00 Resilient Flooring	Palcoff	Stratified "Plaster" 00550
LVT 1	Palcoff	Stratified "Plaster" 00550
LVT 2	Palcoff	Stratified "Plaster" 00550
ESD	Johnsontite	Color: As chosen by Architect from Manufacturer's full color list
Rubber Base #1	Johnsontite	Color: Charcoal - 70
Rubber Base #2	Johnsontite	Color: Charcoal - 70
Rubber Transition Strips	Johnsontite	Color: Harbor - 72

MATERIAL FINISH COLOR SCHEDULE

Item	Manufacturer	Color/ Finish
09 46 20 Epoxy Terrazzo	United Polymers	Color: To match existing
Metal	As Specified	Color: As required to match existing
Aggregate - White Installation	As Specified	Color: As required to match existing
Aggregate - Gray Installation	As Specified	Color: As required to match existing
09 48 00 Carpet	Interface	Pattern/Color: Raw Factory 101056
Carpet 1 - CPT 1	Interface	Pattern/Color: Redesign "Flanner" 102070
Carpet 2 - CPT 2	Interface	Color: Harbor - 72
Transition Strips	Johnsontite	Color: Harbor - 72
09 72 00 Wall Covering	Botta	Pattern/Color: Kinoro Texture BB-KT-22 "Warm Gray"
Wing Wall Covering VNC 1	Botta	Pattern/Color: Kinoro Texture BB-KT-04 "3500"
Wing Wall Covering VNC 2	Botta	Pattern/Color: Kinoro Texture BB-KT-04 "3500"
09 83 13 Acoustic Wall Panels	Gulford of Maine	Fabric/Color: Sand 2008 "8x8" 010
Fabric	Gulford of Maine	Fabric/Color: Sand 2008 "8x8" 010
09 91 00 Paint	Gibson Professional	Color: Dark Slate Blue #508G
PT 1-Exterior HM doors and frames	Gibson Professional	Color: Black
PT 2-Exterior Misc. Metals, Match Existing Equipment	Gibson Professional	Color: Black
PT 3-Exterior Roofing Equipment	Gibson Professional	Color: Black
PT 4-Interior HM Doors	Gibson Professional	Color: Dark Slate Blue #508G
PT 5-Interior Misc. Metals	Gibson Professional	Color: Dark Slate Blue #508G
PT 6-Walls	Gibson Professional	Color: Moving House #507Y
PT 7-Soffits (w/ Break Room A109 only)	Gibson Professional	Color: Main Street USA #300Y
PT 8-Ceilings and Soffits	Gibson Professional	Color: Moving House #507Y
Stain 1-Wood Paneling	Sherwin Williams	Color: 500 Medium Red to match wood doors
10 21 13 Solid Plastic Toilet Partitions	Comtec	Color: Charcoal Gray 5-214
Toilet Partitions	Comtec	Color: Charcoal Gray 5-214
12 32 10 Plastic Laminate Casework	Pandem - Plonite	Color: Sunset #P334 - Ashwood Texture
Fiberglass Reinforced Laminate - FR 1	Nevarner	Color: Golden Iron #M2001T
Plastic Laminate VNC Surface - P-Lam 1	Nevarner	Color: Sovereign Cherry #M3051
Plastic Laminate VNC Surface - P-Lam 2	Nevarner	Color: Black Lodestone L2001T
Plastic Laminate VNC Surface - P-Lam 3	LSI	Color: As selected from Manufacturer's standard color list
PVC Cling	LSI	Color: As selected from Manufacturer's standard color list
Wax Pads	LSI	Color: Brushed Nickel



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed ARCHITECT

under the laws of the State of IOWA  
 Roger J. Schroeppfer  
 Registration Number 06278 Date 7/3/2014

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ADDENDUM #3		7/30/2014	1

Comm: 133024  
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MAIN LEVEL REFLECTED CEILING PLAN & MATERIAL FINISH SCHEDULE

Scale: As indicated



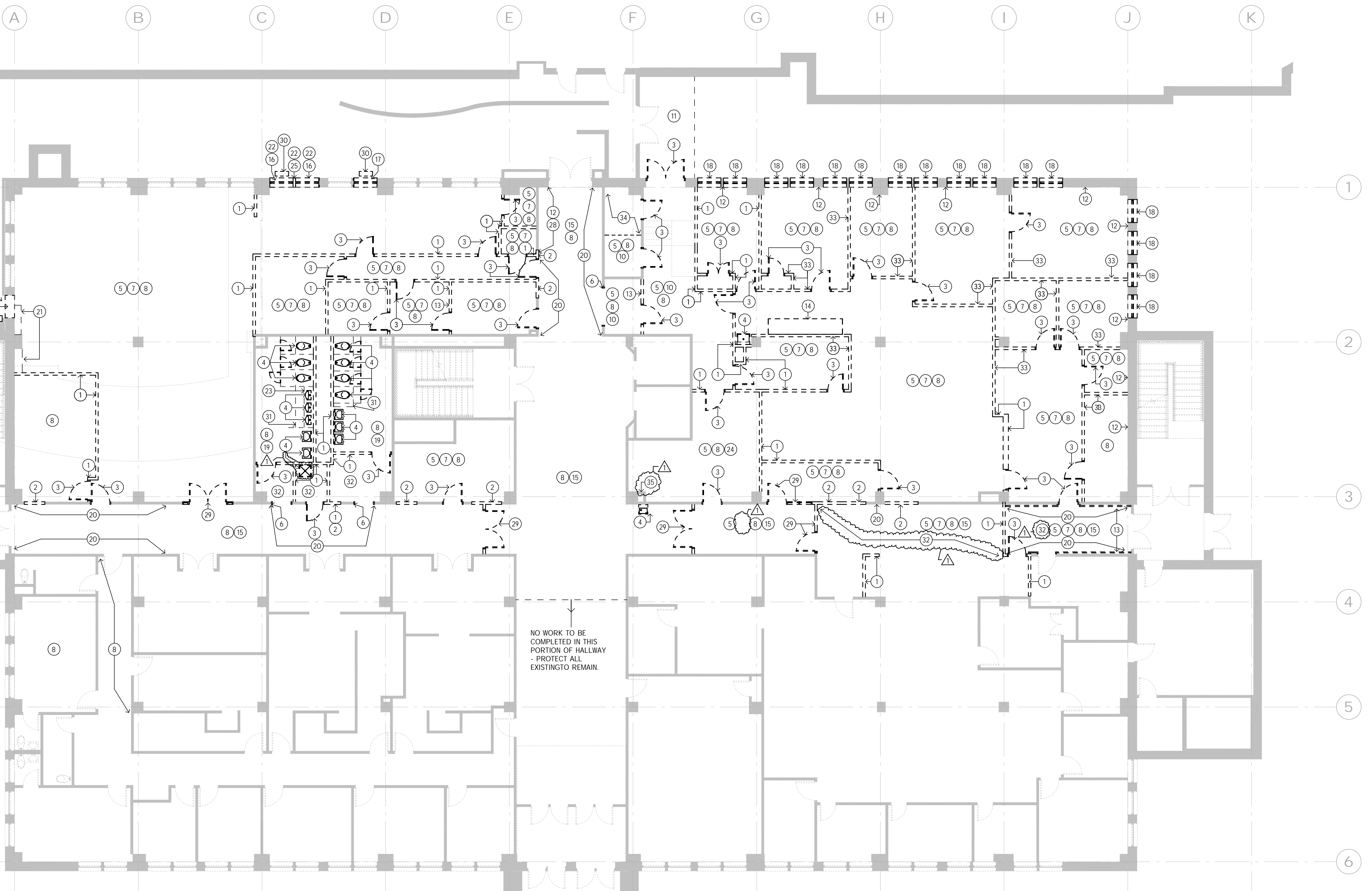


DEMOLITION LEGEND

- WALL TO REMAIN
- - - WALL TO BE REMOVED
- DOOR TO REMAIN
- DOOR, FRAME, AND HARDWARE TO BE REMOVED UNLESS NOTED OTHERWISE
- DESIGNATED ITEM TO REMAIN
- - - DESIGNATED ITEM TO BE REMOVED

DEMOLITION PLAN KEY NOTES:

- 1 REMOVE STRUCTURAL CLAY TILE/PLASTER WALL (FULL HEIGHT) TO EXTENTS SHOWN. COORDINATE EXTENTS W/ NEW WORK TO BE COMPLETED.
- 2 SAWCUT CLAY TILE WALL W/ MARBLE PANEL FINISH FOR INSTALLATION OF NEW OPENING. REMOVE MARBLE BASE, PANEL, & CAP IN FULL LENGTHS AS REQUIRED TO SAW CUT TILE WALL. SALVAGE MARBLE STORE FOR REUSE. INFILL ANY VOIDS LEFT BY SAWCUTTING TO PROVIDE A FLUSH/LEVEL SURFACE. DO NOT OVERCUT CORNERS.
- 3 REMOVE EXISTING DOOR, FRAME AND HARDWARE, INCLUDING SIDELIGHTS AND TRANSOMS AS OCCUR.
- 4 PLUMBING FIXTURE(S) TO BE REMOVED - SEE MECH.
- 5 REMOVE EXISTING VINYL BASE
- 6 REMOVE EXISTING DOOR FRAME
- 7 EXISTING GYP FLOORING AND MASTIC TO BE REMOVED BY OWNER'S SEPARATE ABATEMENT CONTRACTOR PRIOR TO CONSTRUCTION - SEE ALSO PHASING PLAN.
- 8 REMOVE EXISTING CEILING (ACT, GLUE UP, OR PLASTER AS OCCURS) IN THIS ROOM - INCLUDING ALL SOFFITS AS OCCUR.
- 9 REMOVE EXISTING FLOOR GRATE - SEE MECH.
- 10 EXISTING VCT FLOORING AND MASTIC TO BE REMOVED BY OWNER'S SEPARATE ABATEMENT CONTRACTOR PRIOR TO CONSTRUCTION - SEE ALSO PHASING PLAN.
- 11 REMOVE EXISTING EXTERIOR PLASTER SOFFIT - SEE MECH AND PLUMBING.
- 12 REMOVE VWC FULL HEIGHT THIS EXTERIOR WALL, INCLUDING AROUND ANY COLUMNS, WINDOWS, OR OTHER PROTRUSIONS.
- 13 REMOVE WOOD PARTITION WALL (FULL HEIGHT) TO EXTENTS SHOWN.
- 14 REMOVE EXISTING CASEWORK INCLUDING BUT NOT LIMITED TO UPPER AND LOWER CABINETS, COUNTERTOPS, SHELVING, AND ASSOCIATED MOUNTING/SUPPORT BRACING.
- 15 REMOVE EXISTING VWC ABOVE MARBLE WALL PANELS.
- 16 REMOVE EXISTING WINDOW, FRAME & SILL. DO NOT DAMAGE OR REMOVE EXISTING ADJACENT ALUMINUM WALL PANELS OR EXISTING DRIP CAP AT WINDOW HEAD TO REMAIN. REMOVE INTERIOR WELDED ALUMINUM FRAMING SYSTEM - SEE EXHIBIT DRAWINGS.
- 17 REMOVE EXISTING WINDOW, FRAME & SILL FOR INSTALLATION OF NEW TRANSACTION WINDOW. PROTECT GRANITE BASE BELOW TO REMAIN. DO NOT DAMAGE OR REMOVE EXISTING ADJACENT ALUMINUM WALL PANELS OR EXISTING DRIP CAP AT WINDOW HEAD TO REMAIN. REMOVE INTERIOR WELDED ALUMINUM FRAMING SYSTEM - SEE EXHIBIT DRAWINGS.
- 18 REMOVE WINDOW, FRAME & INTERIOR SILL FOR INSTALLATION OF NEW WINDOW. PROTECT EXTERIOR GRANITE BASE AND SILL TO REMAIN. EXISTING INTERIOR WELDED ALUMINUM FRAMING SYSTEM TO REMAIN - SEE EXHIBIT DRAWINGS.
- 19 REMOVE ALL TOILET ACCESSORIES, INCLUDING BUT NOT LIMITED TO TOILET PARTITIONS, MIRRORS, ALL WALL MOUNTED EQUIPMENT, ETC.
- 20 REMOVE MARBLE BASE, PANEL, & CAP IN FULL LENGTHS. SALVAGE & STORE FOR REUSE. COORDINATE EXTENTS WITH FLOOR PLAN AND ELEVATIONS.
- 21 REMOVE PLYWOOD CONSTRUCTION HORIZONTAL PIPE CHASE - SEE ALSO MECH.
- 22 SAWCUT GRANITE 30 INCH TALL GRANITE BASE FOR INSTALLATION OF NEW OPENING. INFILL ANY VOIDS LEFT BY SAWCUTTING TO PROVIDE A FLUSH/LEVEL SURFACE. DO NOT OVERCUT CORNERS. CUT AT PANEL SEAMS AS IS POSSIBLE - REMOVE SEAM SEALANT AS OCCURS. SALVAGE GRANITE PIECES FOR REUSE.
- 23 REMOVE 6" CONCRETE TERRAZZO BASE BELOW FIXTURES.
- 24 EXISTING VAT AND MASTIC AND MASTIC TO BE REMOVED BY OWNER'S SEPARATE ABATEMENT CONTRACTOR PRIOR TO CONSTRUCTION - SEE ALSO PHASING PLAN.
- 25 REMOVE BUILT-OUT ALUMINUM MILLION BETWEEN WINDOWS. SAWCUT AT HEIGHT OF EXISTING DRIP CAP AT WINDOW HEAD. DRIP CAP TO REMAIN.
- 26 SAWCUT EXISTING GYP BD WALL FOR INSTALLATION OF NEW OPENING. INFILL ANY VOIDS LEFT BY SAWCUTTING TO PROVIDE A FLUSH/LEVEL SURFACE. DO NOT OVERCUT CORNERS.
- 27 REMOVE 48 INCH TALL PORTION OF PIPE CHASE, INCLUDING SOLID SURFACE CAP AND VINYL BASE ENTIRE LENGTH. DO NOT OVERCUT INTO ADJACENT PIPE CHASE OR REMOVE VWC ON ADJACENT CHASE.
- 28 REMOVE MARBLE BASE IN FULL LENGTHS. SALVAGE & STORE FOR REUSE. COORDINATE EXTENTS WITH FLOOR PLAN AND ELEVATIONS.
- 29 REMOVE EXISTING STOREFRONT INCLUDING DOORS, FRAME, HARDWARE, SIDELIGHTS AND TRANSOMS AS OCCUR.
- 30 SEE MECH FOR REMOVAL OF FLOOR VENTS.
- 31 REMOVE/GRIND DOWN EXISTING TERRAZZO FLOORING TO FIRST DIVIDER STRIP PAST PLUMBING FIXTURES. DO NOT REMOVE TERRAZZO UNDER LAVS.
- 32 REMOVE/GRIND DOWN EXISTING TERRAZZO IN THIS AREA TO EXTENTS REQUIRED FOR INSTALLATION OF NEW EPOXY TERRAZZO FLOORING/PATCHING.
- 33 REMOVE GYP BD FRAMED WALL (FULL HEIGHT) TO EXTENTS SHOWN. COORDINATE EXTENTS WITH NEW WORK TO BE COMPLETED.
- 34 REMOVE EXISTING FRAMED GYP BD PLATFORM DOWN TO CONCRETE SLAB.
- 35 REMOVE PORTION OF CLAY TILE WALL AS REQUIRED TO ACCOMMODATE PLUMBING WORK FOR NEW FIXTURE - SEE MECH.



NO WORK TO BE COMPLETED IN THIS PORTION OF HALLWAY - PROTECT ALL EXISTING TO REMAIN.

1 MAIN LEVEL DEMOLITION PLAN - AREA 'A'  
1/8" = 1'-0"

IL

A



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed ARCHITECT

under the laws of the State of IOWA  
Roger J. Schroepfer  
Registration Number 06278 Date 7/3/2014

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ADDENDUM #3	7/30/2014	1

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Drawn: KBE  
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MAIN LEVEL  
DEMOLITION PLAN



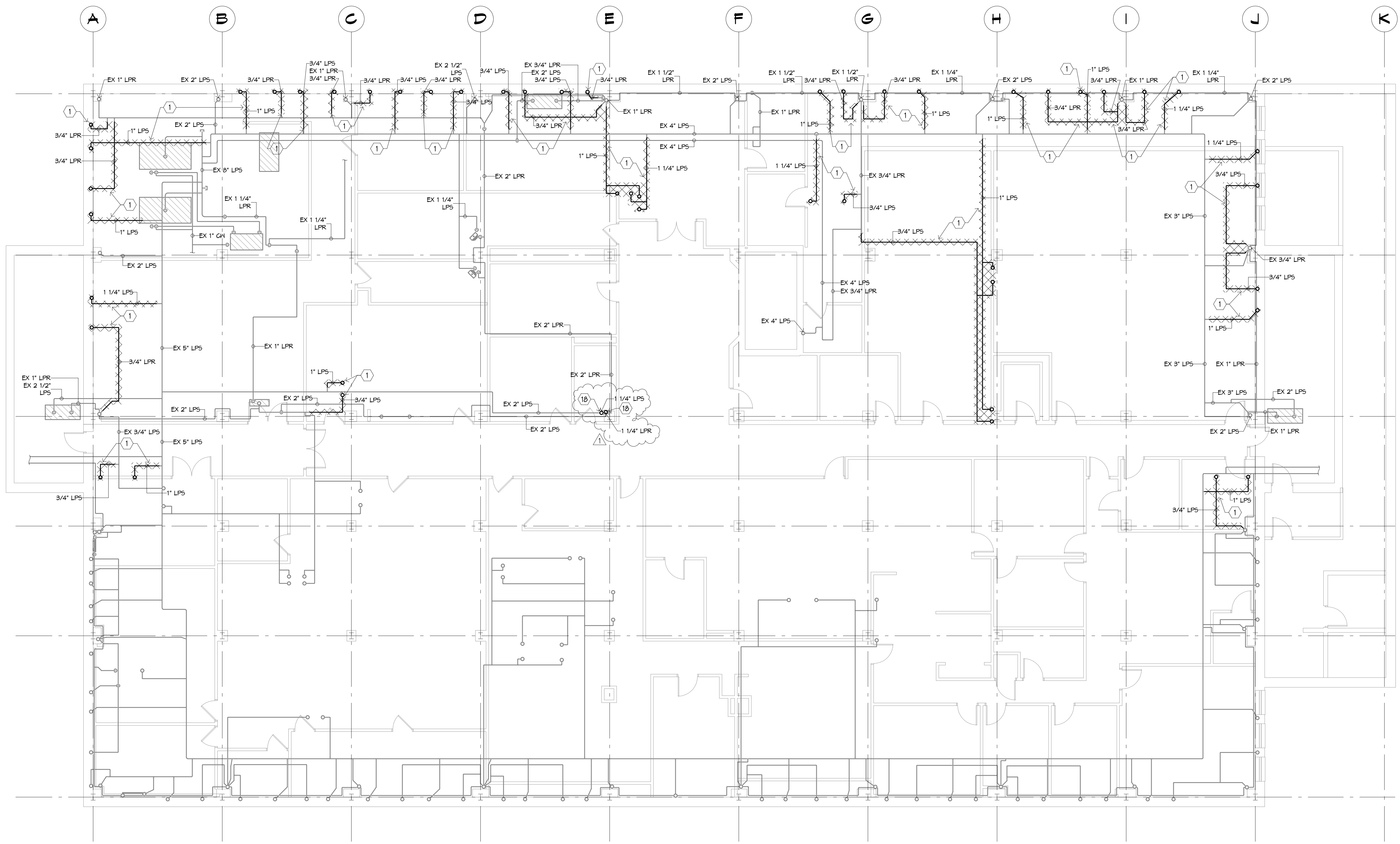


**MECHANICAL DEMOLITION KEYED NOTES:**

- 1 PHASE 1 & 2: REMOVE EXISTING FINNED TUBE RADIATOR/CABINET UNIT HEATER AND ALL ASSOCIATED EQUIPMENT INCLUDING PIPING, HANGERS, SUPPORTS, AND CONTROLS. FIELD VERIFY EXACT LOCATIONS. WHERE PIPING IS UNACCESSIBLE IN BASEMENT CEILING, CAP PIPE BENEATH FLOOR. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 2 PHASE 1: REMOVE EXISTING ASU AND ALL ASSOCIATED EQUIPMENT INCLUDING SUPPLY AND RETURN DUCTWORK, PIPING, DIFFUSERS/GRILLES, DAMPERS, HANGERS, SUPPORTS, AND CONTROLS. CAP CONDENSATE DRAINS BENEATH FLOOR. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 3 PHASE 1: REMOVE EXISTING OUTSIDE AIR DUCT TO THE EXTENT SHOWN AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS. CAP DUCT AT MAIN. MECH. RESPONSIBLE FOR WALL PATCHING NOT COVER BY OTHERS.
- 4 PHASE 1: REMOVE EXISTING CONDENSING UNIT AND ALL ASSOCIATED EQUIPMENT INCLUDING PIPING, HANGERS, SUPPORTS, AND CONTROLS. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 5 PHASE 1: REMOVE EXISTING ASU AND ALL ASSOCIATED EQUIPMENT INCLUDING DUCTWORK, PIPING, DIFFUSERS/GRILLES, DAMPERS, HANGERS, SUPPORTS AND CONTROLS. CAP AND ABANDON ASSOCIATED OUTSIDE AIR DUCT ABOVE FINISHED CEILING IN CORRIDOR. MECH. RESPONSIBLE FOR WALL PATCHING NOT COVER BY OTHERS.
- 6 PHASE 1: REMOVE EXISTING OUTSIDE AIR DUCT TO THE EXTENT SHOWN AND CAP AT WALL OPENING.
- 7 PHASE 1: REMOVE EXISTING 40"x10" RETURN DUCT BRANCH AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS LOCATED IN AREAS COVERED IN PHASE 1. BACK TO MAIN AND CAP AT MAIN. REFER TO PHASING PLAN FOR MORE INFORMATION.  
PHASE 2: REMOVE EXISTING RETURN DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS LOCATED IN AREAS COVERED IN PHASE 2. REFER TO PHASING PLAN FOR MORE INFORMATION.
- 8 PHASE 1.5: REMOVE EXISTING 62"x16" RETURN DUCT AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS LOCATED WITHIN THE EXTENT OF PHASE 1. REFER TO PHASING PLAN FOR MORE INFORMATION.  
PHASE 2: REMOVE REMAINING RETURN DUCT AND ALL ASSOCIATED EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. MECH. RESPONSIBLE FOR WALL PATCHING NOT COVER BY OTHERS.
- 9 PHASE 1.5: REMOVE EXISTING RETURN DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. MECH. RESPONSIBLE FOR WALL PATCHING NOT COVER BY OTHERS.
- 10 PHASE 1.5: REMOVE EXISTING OUTSIDE AIR DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. MECH. RESPONSIBLE FOR WALL PATCHING NOT COVER BY OTHERS.
- 11 PHASE 2: REMOVE ALL EXISTING DUCTWORK AND EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS ASSOCIATED WITH ASU-10.
- 12 PHASE 2: REMOVE EXISTING 20"x8" FLOOR-MOUNTED SUPPLY GRILL AND CAP DUCT BENEATH FLOOR. FIELD VERIFY EXACT SIZES AND BALANCE THE REMAINING SUPPLY GRILLS FOR PROPER AIRFLOW. PATCH FLOOR TO MATCH EXISTING.
- 13 PHASE 1.5: REMOVE EXISTING ASU-10 AND ALL ASSOCIATED EQUIPMENT INCLUDING DUCTWORK, DAMPERS, HANGERS, SUPPORTS, AND CONTROLS LOCATED IN EXISTING MECHANICAL ROOM. CAP CONDENSATE DRAIN BENEATH FLOOR. REMOVE ASSOCIATED REFRIGERANT PIPING TO THE EXTENT SHOWN AND ABANDON ABOVE NEW CEILING. SHUT OFF AND ABANDON ASSOCIATED CONDENSING UNIT ON ROOF. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 14 PHASE 1.5: REMOVE EXISTING UNIT HEATER AND ALL ASSOCIATED PIPING, HANGERS, SUPPORTS, AND CONTROLS. CAP PIPING AT MAIN. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 15 PHASE 1.5: DISCONNECT EXISTING ASU AND RELOCATE TO NEW MECH. ROOM. REMOVE ALL ASSOCIATED EQUIPMENT INCLUDING DUCTWORK, DAMPERS, HANGERS, SUPPORTS AND CONTROLS TO THE EXTENT SHOWN. CAP CONDENSATE DRAIN BENEATH FLOOR. REMOVE ASSOCIATED REFRIGERANT PIPING TO THE EXTENT SHOWN AND DISCONNECT ABOVE NEW CEILING FOR RECONNECTION. MECH. RESPONSIBLE FOR FLOOR/WALL PATCHING NOT COVER BY OTHERS.
- 16 PHASE 2: REMOVE EXISTING 18"x18" EXHAUST GRILL AND ASSOCIATED DUCT BRANCH TO THE EXTENT SHOWN. CAP DUCT AT MAIN IF NEW DUCT IS IN DIFFERENT LOCATION. MECH. RESPONSIBLE FOR WALL PATCHING NOT COVER BY OTHERS.
- 17 PHASE 2: REMOVE EXISTING EXHAUST DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING GRILLES, DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. CAP DUCTWORK AS SHOWN. MECH. RESPONSIBLE FOR WALL PATCHING NOT COVER BY OTHERS.
- 18 REMOVE EXISTING 1" LPS 4 1/4" LPS PIPING TO ACCOMMODATE NEW WORK. CAP PIPING BENEATH FLOOR. MECH. RESPONSIBLE FOR FLOOR/WALL PATCHING NOT COVER BY OTHERS.

**HYDRONIC PLAN GENERAL NOTES:**

1. THE CONTRACTOR SHALL PERFORM A SITE OBSERVATION SURVEY TO DETERMINE LIMITATIONS AND/OR CONFLICTS RELATIVE TO THE EXECUTION OF WORK PRIOR TO BID. VERIFY EXACT DETAIL OF INSTALLATION REQUIRED TO PROVIDE SYSTEMS SHOWN WITHIN THE SPACE INTENDED.
2. ALL EXISTING SERVICES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE INDICATED ON THE PLANS. COORDINATE DISRUPTION OF SERVICES WITH OWNER TO PROVIDE ACCEPTABLE THE FOR DOWNTIME.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DEGRADATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
4. THE CONTRACTOR SHALL REMOVE ALL EXISTING CEILING TILES AND GRIDS AS REQUIRED FOR INSTALLATION OF NEW WORK. ANY DAMAGED TILES AND/OR GRIDS SHALL BE REPLACED WITH NEW TO MATCH AT THE CONTRACTORS EXPENSE.
5. ALL DUCTWORK, DIFFUSERS, AND PIPING SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
6. PATCH AND REPAIR OPENINGS THROUGH WALLS AND FLOORS WHERE SYSTEMS WERE REMOVED TO MATCH EXISTING AND TO MAINTAIN RATINGS (AS APPLICABLE). FINISHES SHALL BE WORK OF ANOTHER TRADE.
7. DIFFUSER AND REGISTER LOCATIONS SHALL BE COORDINATED WITH LIGHT FIXTURE LOCATIONS AND SHALL BE IN ACCORDANCE WITH CEILING PATTERNS AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS.
8. ALL RISES AND DROPS IN PIPING AND DUCTWORK ARE NOT NECESSARILY SHOWN. LAYOUT ROUTING AND COORDINATE WORK WITH OTHER TRADES BEFORE CONSTRUCTION.
9. DIFFUSER DUCT RINGOUTS AND FLEXIBLE DUCT CONNECTIONS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
10. LOCATE ALL DAMPERS, FLEXIBLE DUCTS, VALVES, AND OTHER PIPING COMPONENTS ABOVE ACCESSIBLE CEILING.
11. CONCRETE CURBS WILL BE PROVIDED BY ANOTHER TRADE. COORDINATE EXACT SIZE AND LOCATION.
12. REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
13. ALL SUPPLY AND RETURN DUCT CONNECTIONS AT THE AIR HANDLING UNIT SHALL BE PROVIDED WITH 1" THICK INTERNAL LINING FOR A DISTANCE OF 20'-0" TO/FROM SUCH EQUIPMENT. PROVIDE ACCESS PANELS IN LINED DUCT TO FACILITATE CLEANING OF DUCT INTERIOR.
14. ALL DUCT CONNECTIONS TO AIR HANDLING UNITS TO BE FLEXIBLE CONNECTIONS.
15. COORDINATE TEMPERATURE SENSOR LOCATIONS WITH OTHER TRADES AND BUILDING ELEMENTS. ADJUST THE EXACT LOCATIONS AS REQUIRED TO AVOID CONFLICTS.
16. ROUTE ALL AIR HANDLING UNIT AND PLENUM DRAIN PIPING TO NEARBY FLOOR DRAINS. FIELD VERIFY EXACT ROUTING TO AVOID TRIP HAZARD FOR BUILDING OCCUPANTS.
17. TRANSFER DUCTS SHALL HAVE 1" INTERNAL SOUND ATTENUATING LINER.
18. THE VARIABLE AIR VOLUME CONTROL BOX SHALL BE LOCATED IN A POSITION TO ENSURE ACCESSIBILITY.
19. COORDINATE LOCATIONS OF ANY ACCESS PANELS REQUIRED IN WALLS OR CEILING WITH GENERAL CONTRACTOR.
20. ROUTE DUCTS BETWEEN JOISTS AND THROUGH JOIST WEBS WHERE REQUIRED TO COORDINATE WITH THE INSTALLATION OF OTHER TRADES AND TO MAINTAIN CEILING HEIGHTS.
21. ALL SUPPLY AND RETURN DUCTWORK ROUTED IN CONCEALED SPACES AND ABOVE CEILING SHALL BE EXTERNALLY INSULATED. INSULATE RELIEF AND EXHAUST DUCTWORK AS SPECIFIED.



**1 BASEMENT MECHANICAL DEMOLITION PLAN**  
1/8" = 1'-0"

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa

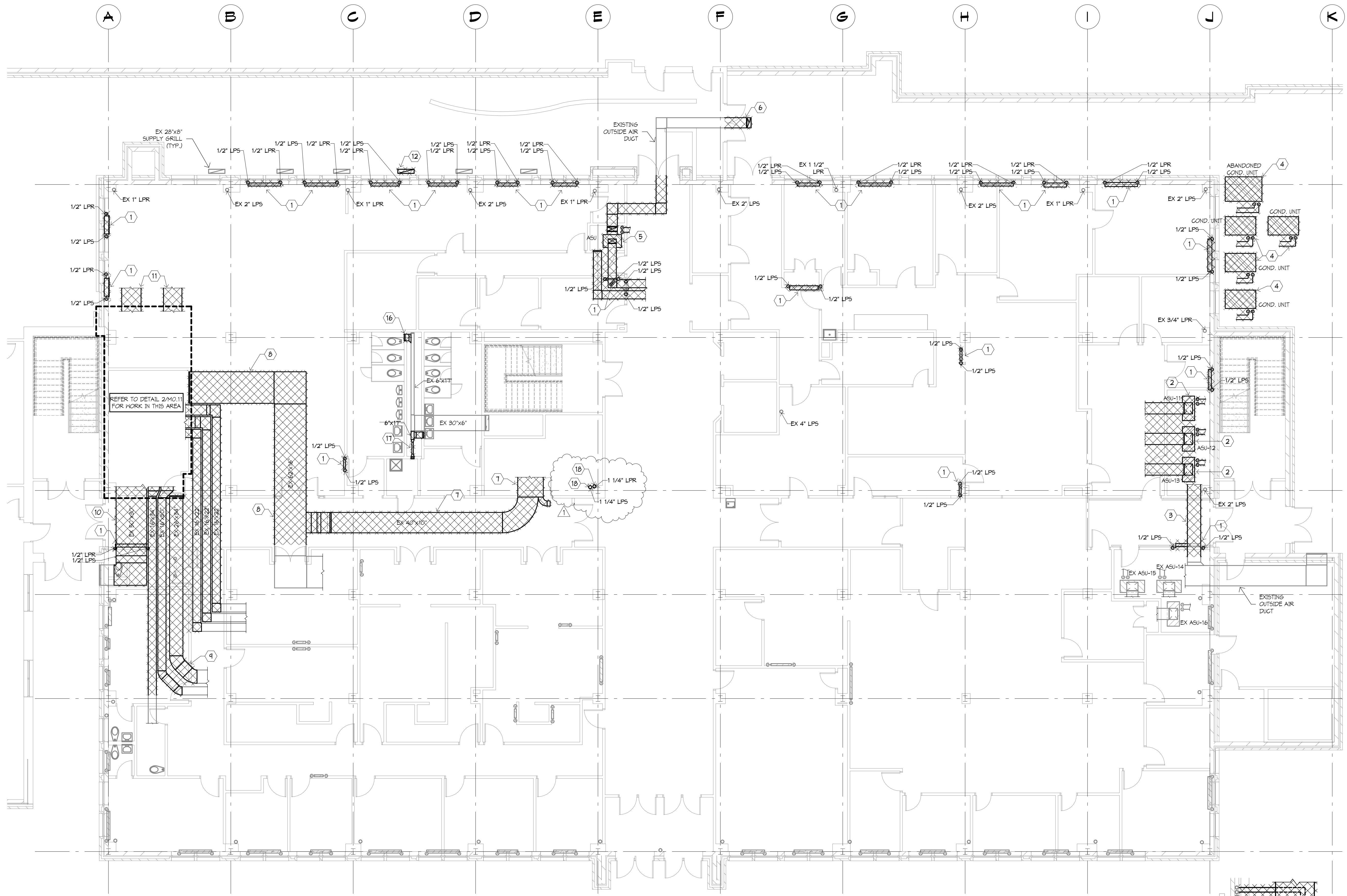
Matthew T. Verdun  
Registration Number 18643 Date 01/03/14

Description	Revisions	Date	Rev
APPENDUM #3		1/30/2014	1

Comm: 133024  
Date: 01/03/14  
Drawn: MVB  
Check: MVB

**BASEMENT  
MECHANICAL  
DEMOLITION PLAN**

Scale: 1/8" = 1'-0"



**MECHANICAL DEMOLITION KEYED NOTES:**

- 1 PHASE 1 & 2: REMOVE EXISTING FINNED TUBE RADIATOR/CABINET UNIT HEATER AND ALL ASSOCIATED EQUIPMENT INCLUDING SUPPLY AND RETURN DUCTWORK, PIPING, DIFFUSERS/GRILLES, DAMPERS, HANGERS, SUPPORTS, AND CONTROLS. FIELD VERIFY EXACT LOCATIONS. WHERE PIPING IS INACCESSIBLE IN BASEMENT CEILING, CAP PIPING BENEATH FLOOR. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 2 PHASE 1: REMOVE EXISTING ASU AND ALL ASSOCIATED EQUIPMENT INCLUDING DUCTWORK, PIPING, DIFFUSERS/GRILLES, DAMPERS, HANGERS, SUPPORTS, AND CONTROLS. CAP AND ABANDON ASSOCIATED OUTSIDE AIR DUCT ABOVE FINISHED CEILING IN CORRIDOR. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 3 PHASE 1: REMOVE EXISTING OUTSIDE AIR DUCT TO THE EXTENT SHOWN AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS. CAP DUCT AT MAIN. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 4 PHASE 1: REMOVE EXISTING CONDENSING UNIT AND ALL ASSOCIATED EQUIPMENT INCLUDING PIPING, HANGERS, SUPPORTS, AND CONTROLS. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 5 PHASE 1: REMOVE EXISTING ASU AND ALL ASSOCIATED EQUIPMENT INCLUDING DUCTWORK, PIPING, DIFFUSERS/GRILLES, DAMPERS, HANGERS, SUPPORTS, AND CONTROLS. CAP AND ABANDON ASSOCIATED OUTSIDE AIR DUCT ABOVE FINISHED CEILING IN CORRIDOR. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 6 PHASE 1: REMOVE EXISTING OUTSIDE AIR DUCT TO THE EXTENT SHOWN AND CAP AT MAIN OPENING.
- 7 PHASE 1: REMOVE EXISTING 40"x10" RETURN DUCT BRANCH AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS LOCATED IN AREAS COVERED IN PHASE 1. BACK TO MAIN AND CAP AT MAIN. REFER TO PHASING PLAN FOR MORE INFORMATION.  
PHASE 2: REMOVE EXISTING RETURN DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS LOCATED IN AREAS COVERED IN PHASE 2. REFER TO PHASING PLAN FOR MORE INFORMATION.
- 8 PHASE 1: REMOVE EXISTING 60"x16" RETURN DUCT AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS LOCATED WITHIN THE EXTENT OF PHASE 1. REFER TO PHASING PLAN FOR MORE INFORMATION.  
PHASE 2: REMOVE REMAINING RETURN DUCT AND ALL ASSOCIATED EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 9 PHASE 1: REMOVE EXISTING RETURN DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 10 PHASE 1: REMOVE EXISTING OUTSIDE AIR DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 11 PHASE 2: REMOVE ALL EXISTING DUCTWORK AND EQUIPMENT INCLUDING DIFFUSERS/GRILLES, DAMPERS, HANGERS, AND SUPPORTS ASSOCIATED WITH ASU-10.
- 12 PHASE 2: REMOVE EXISTING 20"x8" FLOOR-MOUNTED SUPPLY GRILL AND CAP DUCT BENEATH FLOOR. FIELD VERIFY EXACT SIZES AND BALANCE THE REMAINING SUPPLY GRILLS FOR PROPER AIRFLOW. PATCH FLOOR TO MATCH EXISTING.
- 13 PHASE 1: REMOVE EXISTING ASU-10 AND ALL ASSOCIATED EQUIPMENT INCLUDING DUCTWORK, DAMPERS, HANGERS, SUPPORTS, AND CONTROLS LOCATED IN EXISTING MECHANICAL ROOM. CAP CONDENSATE DRAIN BENEATH FLOOR. REMOVE ASSOCIATED REFRIGERANT PIPING TO THE EXTENT SHOWN AND ABANDON ABOVE NEW CEILING. SHUT OFF AND ABANDON ASSOCIATED CONDENSING UNIT ON ROOF. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 14 PHASE 1: REMOVE EXISTING UNIT HEATER AND ALL ASSOCIATED EQUIPMENT INCLUDING PIPING, HANGERS, SUPPORTS, AND CONTROLS. CAP PIPING AT MAIN. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 15 PHASE 1: DISCONNECT EXISTING ASU AND RELOCATE TO NEW HIGH ROOM. REMOVE ALL ASSOCIATED EQUIPMENT INCLUDING DUCTWORK, DAMPERS, HANGERS, SUPPORTS AND CONTROLS TO THE EXTENT SHOWN. CAP CONDENSATE DRAIN BENEATH FLOOR. REMOVE ASSOCIATED REFRIGERANT PIPING TO THE EXTENT SHOWN AND DISCONNECT ABOVE NEW CEILING FOR RECONNECTION. MECH. RESPONSIBLE FOR FLOOR/WALL PATCHING NOT COVER BY OTHERS.
- 16 PHASE 2: REMOVE EXISTING 18"x18" EXHAUST GRILL AND ASSOCIATED DUCT BRANCH TO THE EXTENT SHOWN. CAP DUCT AT MAIN IF NEW DUCT IS IN DIFFERENT LOCATION. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 17 PHASE 2: REMOVE EXISTING EXHAUST DUCTWORK AND ALL ASSOCIATED EQUIPMENT INCLUDING GRILLES, DAMPERS, HANGERS, AND SUPPORTS TO THE EXTENT SHOWN. CAP DUCTWORK AS SHOWN. MECH. RESPONSIBLE FOR WALL/FLOOR PATCHING NOT COVER BY OTHERS.
- 18 REMOVE EXISTING 1 1/4" LPS 4 LRP PIPING TO ACCOMMODATE NEW WORK. CAP PIPING BENEATH FLOOR. MECH. RESPONSIBLE FOR FLOOR/WALL PATCHING NOT COVER BY OTHERS.

**HYDRONIC PLAN GENERAL NOTES:**

1. THE CONTRACTOR SHALL PERFORM A SITE OBSERVATION SURVEY TO DETERMINE LIMITATIONS AND/OR CONFLICTS RELATIVE TO THE EXECUTION OF HIS WORK PRIOR TO BID. VERIFY EXACT DETAIL OF INSTALLATION REQUIRED TO PROVIDE SYSTEMS SHOWN WITHIN THE SPACE INTENDED.
2. ALL EXISTING SERVICES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE INDICATED ON THE PLANS. COORDINATE DISRUPTION OF SERVICES WITH OWNER TO PROVIDE ACCEPTABLE THE FOR DOWNTIME.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DEGRADATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
4. THE CONTRACTOR SHALL REMOVE ALL EXISTING CEILING TILES AND GRIDS AS REQUIRED FOR INSTALLATION OF NEW WORK. ANY DAMAGED TILES AND/OR GRIDS SHALL BE REPLACED WITH NEW TO MATCH AT THE CONTRACTORS EXPENSE.
5. ALL DUCTWORK, DIFFUSERS, AND PIPING SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
6. PATCH AND REPAIR OPENINGS THROUGH WALLS AND FLOORS WHERE SYSTEMS WERE REMOVED TO MATCH EXISTING AND TO MAINTAIN RATINGS (AS APPLICABLE). FINISHES SHALL BE WORK OF ANOTHER TRADE.
7. DIFFUSER AND REGISTER LOCATIONS SHALL BE MAINTAINED WITH LIGHT FIXTURE LOCATIONS AND SHALL BE IN ACCORDANCE WITH CEILING PATTERNS AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS.
8. ALL RISES AND DROPS IN PIPING AND DUCTWORK ARE NOT NECESSARILY SHOWN. LAYOUT ROUTING AND COORDINATE WORK WITH OTHER TRADES BEFORE CONSTRUCTION.
9. DIFFUSER DUCT RUNOUTS AND FLEXIBLE DUCT CONNECTIONS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
10. LOCATE ALL DAMPERS, FLEXIBLE DUCTS, VALVES, AND OTHER PIPING COMPONENTS ABOVE ACCESSIBLE CEILING.
11. CONCRETE CURBS WILL BE PROVIDED BY ANOTHER TRADE. COORDINATE EXACT SIZE AND LOCATION.
12. REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURERS' GUIDELINES.
13. ALL SUPPLY AND RETURN DUCT CONNECTIONS AT THE AIR HANDLING UNIT SHALL BE PROVIDED WITH 1" THICK INTERNAL LINING FOR A DISTANCE OF 20'-0" FROM SUCH EQUIPMENT. PROVIDE ACCESS PANELS IN LINED DUCT TO FACILITATE CLEANING OF DUCT INTERIOR.
14. ALL DUCT CONNECTIONS TO AIR HANDLING UNITS TO BE FLEXIBLE CONNECTIONS.
15. COORDINATE TEMPERATURE SENSOR LOCATIONS WITH OTHER TRADES AND BUILDING ELEMENTS. ADJUST THE EXACT LOCATIONS AS REQUIRED TO AVOID CONFLICTS.
16. ROUTE ALL AIR HANDLING UNIT AND PLUMBING DRAIN PIPING TO NEARBY FLOOR DRAINS. FIELD VERIFY EXACT ROUTING TO AVOID TRIP HAZARD FOR BUILDING OCCUPANTS.
17. TRANSFER DUCTS SHALL HAVE 1" INTERNAL SOUND ATTENUATING LINER.
18. THE VARIABLE AIR VOLUME CONTROL BOX SHALL BE LOCATED IN A POSITION TO ENSURE ACCESSIBILITY.
19. COORDINATE LOCATIONS OF ANY ACCESS PANELS REQUIRED IN WALLS OR CEILING WITH GENERAL CONTRACTOR.
20. ROUTE DUCTS BETWEEN JOISTS AND THROUGH JOIST WEBS WHERE REQUIRED TO COORDINATE WITH THE INSTALLATION OF OTHER TRADES AND TO MAINTAIN CEILING HEIGHTS.
21. ALL SUPPLY AND RETURN DUCTWORK ROUTED IN CONCEALED SPACES AND ABOVE CEILING SHALL BE EXTERNALLY INSULATED, INSULATE RELIEF AND EXHAUST DUCTWORK AS SPECIFIED.

**1 MAIN LEVEL MECHANICAL DEMOLITION PLAN**  
1/8" = 1'-0"

**2 MECHANICAL ROOM DEMOLITION PLAN**  
1/4" = 1'-0"

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa

Registration Number: Matthew T. Verdun 18643 Date: 01/03/14

Description	Revisions	Date	Rev
APPENDUM #3		1/30/2014	1

Comm: 133024  
Date: 01/03/14  
Drawn: MTB  
Check: MTB

**MAIN LEVEL  
MECHANICAL  
DEMOLITION PLAN**

Scale: As indicated



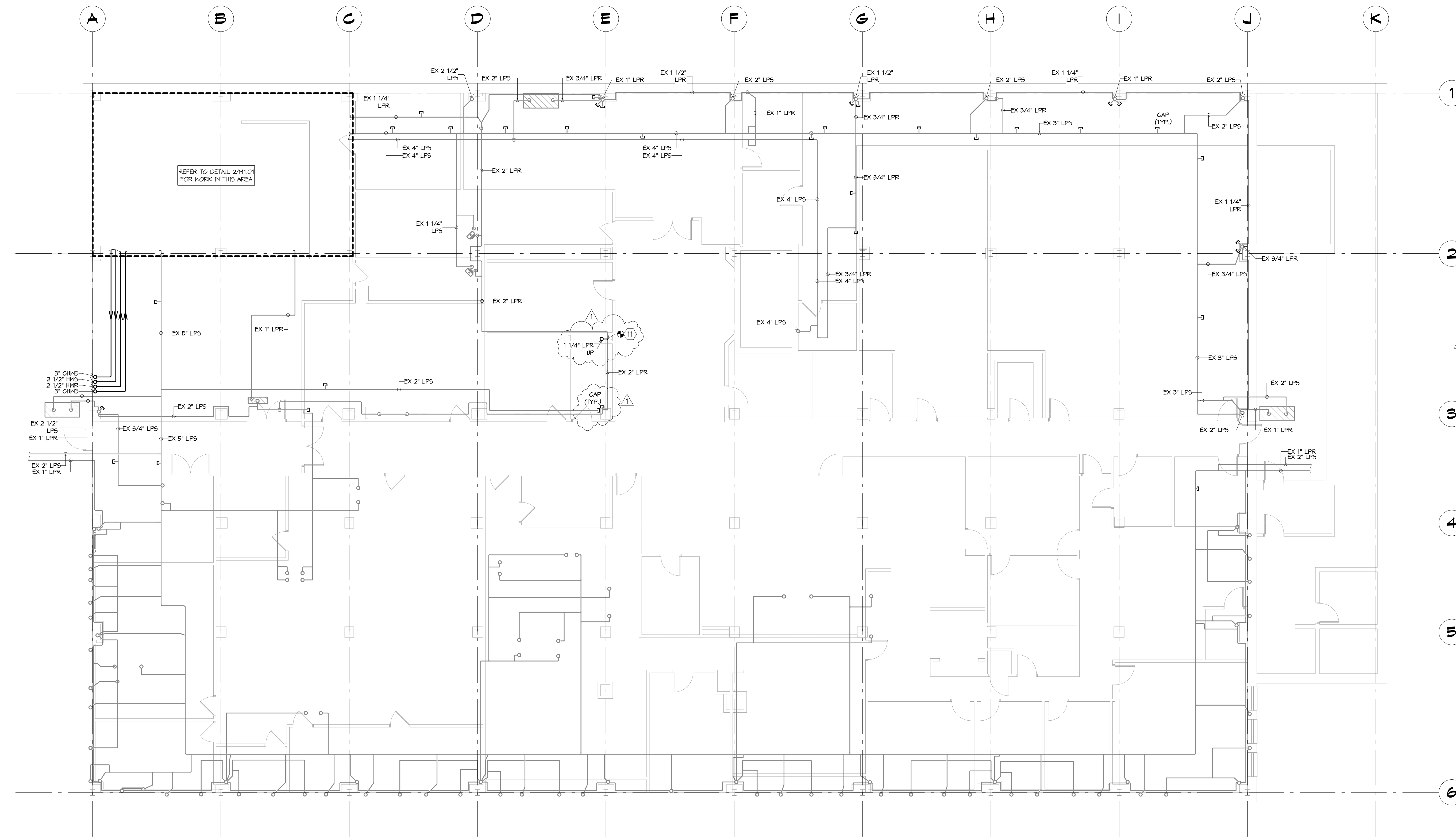


**HYDRONIC PLAN KEYED NOTES:**

1. PHASE 1: CONNECT TO EXISTING 4" LPS GAPPED CONNECTION ON STEAM HEADER. ROUTE PIPING TO NEW HEAT EXCHANGER. REFER TO DETAIL 5/19/02.
2. PHASE 1: CONNECT NEW STEAM CONDENSATE DRAIN TO EXISTING STEAM CONDENSATE PIPING AT LOCATION. REFER TO DETAIL 5/19/02.
3. PHASE 1: CAP & VALVE NEW HWS PIPING FOR ACCESSIBILITY DURING PHASE 3.
4. PHASE 1: CAP & VALVE NEW HWS, CHWS, & CHWR PIPING FOR ACCESSIBILITY DURING PHASE 3.
5. PHASE 1: CAP & VALVE NEW HWS PIPING FOR ACCESSIBILITY DURING PHASE 4.
6. PHASE 1: ROUTE NEW CHWS, CHWR, HWS, & HWR PIPING TO THE EXTENT OF EXISTING DUCTWORK ROUTES ALONG CORRIDOR AND TERMINATE FOR CONNECTION DURING PHASE 1.5. REFER TO M011 FOR LOCATION OF DUCTWORK. FIELD VERIFY EXACT TERMINATION POINTS.  
PHASE 1.5: ROUTE NEW CHWS, CHWR, HWS, & HWR PIPING TO CHASE IN MAGISTRATE AND CONNECT TO NEW CHWS, CHWR, HWS, & HWR RESPECTIVELY FROM BASEMENT. ROUTE PIPING AS HIGH AS POSSIBLE TO ALLOW CLEARANCE FOR REFRIGERANT PIPING. REFER TO PHASING PLAN FOR MORE INFORMATION.
7. PHASE 1: ROUTE NEW CHWS, CHWR & HWR PIPING TO THE EXTENT OF NEW MECHANICAL ROOM AND CAP & VALVE FOR CONNECTION DURING PHASE 2. REFER TO PHASING PLAN FOR MORE INFORMATION.
8. PHASE 1.5: CAP & VALVE NEW HWS PIPING FOR ACCESSIBILITY DURING PHASE 2.
9. PHASE 1.5: ROUTE NEW REFRIGERANT PIPING BELOW NEW CHWS, CHWR, HWS, & HWR FOR ACCESSIBILITY DURING PHASE 4.
10. PHASE 1.5: CONNECT TO EXISTING REFRIGERANT PIPING ABOVE CEILING AND ROUTE TO NEW MECHANICAL ROOM FOR CONNECTION TO RESPECTIVE AIR SUPPLY UNITS. ROUTE PIPING ALONG WEST WALL AS MUCH AS POSSIBLE TO AVOID CONFLICT WITH DUCTWORK IN AND AROUND NEW MECHANICAL ROOM.
11. CONNECT NEW 1 1/4" LFR PIPE TO EXISTING 2" LFR PIPING IN CHASE.
12. CONNECT NEW 1 1/4" LFR PIPE TO EXISTING 1 1/4" LFR ABANDONED ABOVE CEILING AND ROUTE TO CHASE AS INDICATED.

**HYDRONIC PLAN GENERAL NOTES:**

1. THE CONTRACTOR SHALL PERFORM A SITE OBSERVATION SURVEY TO DETERMINE LIMITATIONS AND/OR CONFLICTS RELATIVE TO THE EXECUTION OF HIS WORK PRIOR TO BID. VERIFY EXACT DETAIL OF INSTALLATION REQUIRED TO PROVIDE SYSTEMS SHOWN WITHIN THE SPACE INTENDED.
2. ALL EXISTING SERVICES SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE INDICATED ON THE PLANS. COORDINATE DISRUPTION OF SERVICES WITH OWNER TO PROVIDE ACCEPTABLE TIME FOR DOWNTIME.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DETERIORATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
4. THE CONTRACTOR SHALL REMOVE ALL EXISTING CEILING TILES AND GRIDS AS REQUIRED FOR INSTALLATION OF NEW WORK. ANY DAMAGED TILES AND/OR GRIDS SHALL BE REPLACED WITH NEW TO MATCH AT THE CONTRACTOR'S EXPENSE.
5. ALL DUCTWORK, DIFFUSERS, AND PIPING SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
6. PATCH AND REPAIR OPENINGS THROUGH WALLS AND FLOORS WHERE SYSTEMS WERE REMOVED TO MATCH EXISTING AND TO MAINTAIN RATINGS (AS APPLICABLE). FINISHES SHALL BE WORK OF ANOTHER TRADE.
7. DIFFUSER AND REGISTER LOCATIONS SHALL BE COORDINATED WITH LIGHT FIXTURE LOCATIONS AND SHALL BE IN ACCORDANCE WITH CEILING PATTERNS AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS.
8. ALL RISERS AND DROPS IN PIPING AND DUCTWORK ARE NOT NECESSARILY SHOWN. LAYOUT ROUTING AND COORDINATE WORK WITH OTHER TRADES BEFORE CONSTRUCTION.
9. DIFFUSER DUCT RUNOUTS AND FLEXIBLE DUCT CONNECTIONS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
10. LOCATE ALL DAMPERS, FLEXIBLE DUCTS, VALVES, AND OTHER PIPING COMPONENTS ABOVE ACCESSIBLE CEILING.
11. CONCRETE CURBS WILL BE PROVIDED BY ANOTHER TRADE. COORDINATE EXACT SIZE AND LOCATION.
12. REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
13. ALL SUPPLY AND RETURN DUCT CONNECTIONS AT THE AIR HANDLING UNIT SHALL BE PROVIDED WITH 1" THICK INTERNAL LINING FOR A DISTANCE OF 20'-0" TO/FROM SUCH EQUIPMENT. PROVIDE ACCESS PANELS IN LINED DUCT TO FACILITATE CLEANING OF DUCT INTERIOR.
14. ALL DUCT CONNECTIONS TO AIR HANDLING UNITS TO BE FLEXIBLE CONNECTIONS.
15. COORDINATE TEMPERATURE SENSOR LOCATIONS WITH OTHER TRADES AND BUILDING ELEMENTS. ADJUST THE EXACT LOCATIONS AS REQUIRED TO AVOID CONFLICTS.
16. ROUTE ALL AIR HANDLING UNIT AND PLENUM DRAIN PIPING TO NEARBY FLOOR DRAINS. FIELD VERIFY EXACT ROUTING TO AVOID TRIP HAZARD FOR BUILDING OCCUPANTS.
17. TRANSFER DUCTS SHALL HAVE 1" INTERNAL SOUND ATTENUATING LINER.
18. THE VARIABLE AIR VOLUME CONTROL BOX SHALL BE LOCATED IN A POSITION TO ENSURE ACCESSIBILITY.
19. COORDINATE LOCATIONS OF ANY ACCESS PANELS REQUIRED IN WALLS OR CEILING WITH GENERAL CONTRACTOR.
20. ROUTE DUCTS BETWEEN JOISTS AND THROUGH JOIST KEEBS WHERE REQUIRED TO COORDINATE WITH THE INSTALLATION OF OTHER TRADES AND TO MAINTAIN CEILING HEIGHTS.
21. ALL SUPPLY AND RETURN DUCTWORK ROUTED IN CONCEALED SPACES AND ABOVE CEILING SHALL BE EXTERNALLY INSULATED. INSULATE RELIEF AND EXHAUST DUCTWORK AS SPECIFIED.



**1 BASEMENT HYDRONIC PLAN**  
1/8" = 1'-0"

UNIT NO.	SERVES	LOCATION	MANUFACTURER	SERIES	MODEL NUMBER	TYPE	DESIGN GPM	DESIGN HEAD	50% FLOW HEAD	SHUTOFF HEAD	IMP. SIZE	EFF.	SVC. SIZE	DISCH. SIZE	RPM	MOTOR H.P.	VOLTS	PHASE	VFD	REMARKS
P-1	BUILDING HEATING WATER	BOILER ROOM	BELL & GOSSETT	SER. 80	2X2KX8B	INLINE	68.3	51.2'	62.0'	63.0'	1.75"	58.1%	2"	2"	1,150	3.0	208	3	YES	1, 2, 3
P-2	BUILDING HEATING WATER	BOILER ROOM	BELL & GOSSETT	SER. 80	2X2KX8B	INLINE	68.3	51.2'	62.0'	63.0'	1.75"	58.1%	2"	2"	1,150	3.0	208	3	YES	1, 2, 3
P-3	BUILDING CHILLED WATER	BOILER ROOM	BELL & GOSSETT	SER. 80	2X2KX8B	INLINE	134.1	12.0'	88.0'	91.0'	4.125"	59.8%	2"	2"	1,150	5.0	208	3	YES	1, 2, 3
P-4	BUILDING CHILLED WATER	BOILER ROOM	BELL & GOSSETT	SER. 80	2X2KX8B	INLINE	134.1	12.0'	88.0'	91.0'	4.125"	59.8%	2"	2"	1,150	5.0	208	3	YES	1, 2, 3

- NOTES:  
1. PROVIDE WITH SUCTION DIFFUSER WITH START-UP STRAINER AND TRIPLE DUTY VALVE.  
2. TEMPERATURE CONTROL CONTRACTOR TO PROVIDE VARIABLE FREQUENCY DRIVE. INSTALLATION BY ELECTRICAL CONTRACTOR.  
ALL VARIABLE FREQUENCY DRIVES FOR THE ENTIRE PROJECT SHALL BE BY THE SAME MANUFACTURER.  
3. ELECTRICAL CONTRACTOR TO PROVIDE MOTOR STARTER AND DISCONNECT SWITCH.

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	TANK TYPE	AVERAGE WATER TEMP.	MINIMUM PRECHARGE PRESS. (PSIG)	MAXIMUM OPER. PRESSURE (PSIG)	TANK VOLUME (GALLONS)	ACCEPTANCE VOLUME (GALLONS)	TANK HEIGHT	TANK DIA.	REMARKS
ET-1	BUILDING HEATING WATER	BELL & GOSSETT	D-15V	DIAPHRAGM	140F	14.0	30.0	5.0	2.4	18	12	1
ET-2	BUILDING CHILLED WATER	BELL & GOSSETT	D-40V	DIAPHRAGM	42F	14.0	15.0	21.1	11.3	24	16	1

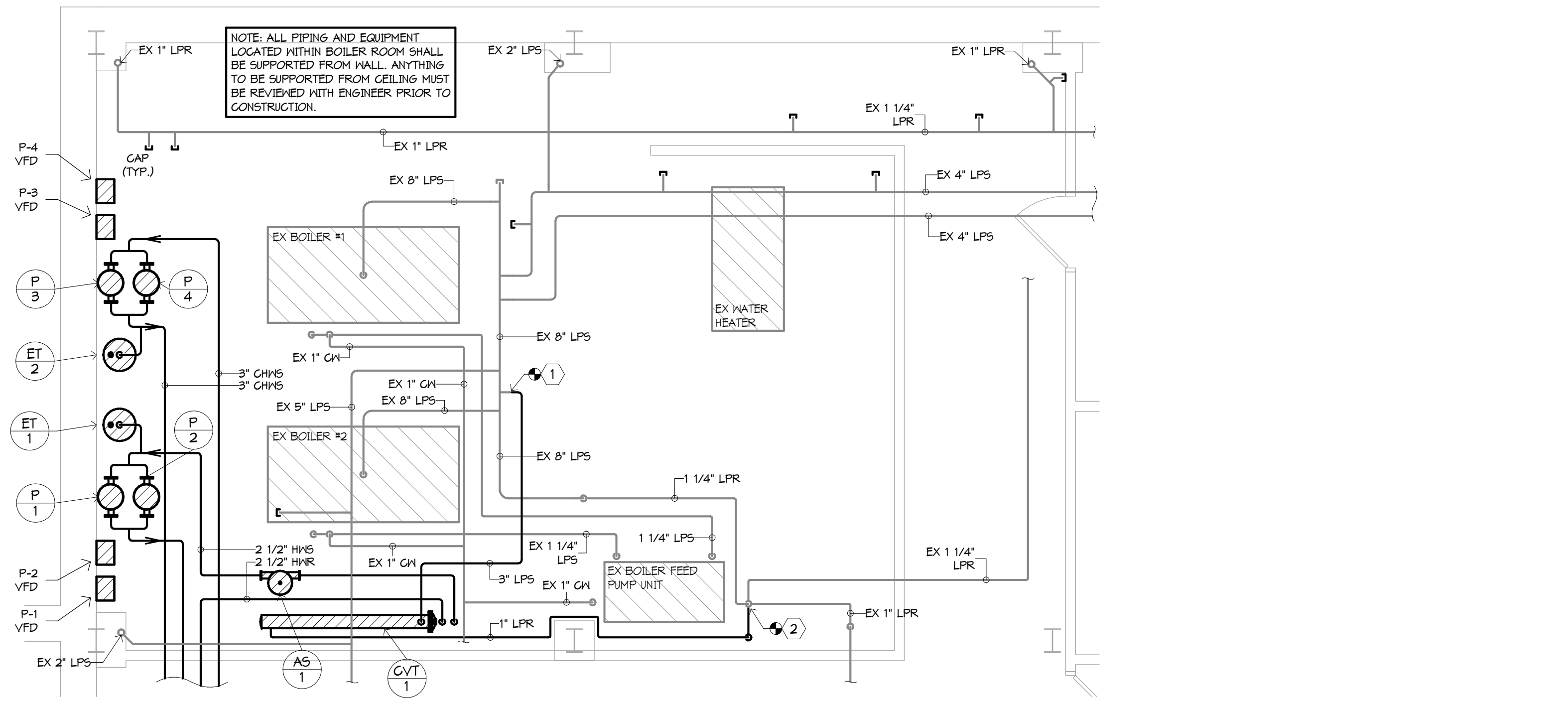
- NOTES:  
1. PROVIDE AUTOMATIC AIR VENT PIPED TO NEAREST FLOOR DRAIN.

UNIT NO.	SERVES	MANUFACTURER	MODEL NO.	TUBE SIDE	EXT. LVT	GPM	STEAM TEMP.	SHELL SIDE	STEAM PRESS.	WHR	HEATING SURFACE	NO. PASSES	LENGTH X DIA.	MAX PRESS. DROP	SCALE FACTOR	REMARKS
CVT-1	BUILDING HEATING WATER	BELL & GOSSETT	SUB1-2	120°F	160°F	68.1	212°F	10.0 PSI	-	-	31.5 SQ. FT.	2	84"X6.625"	3.0	0.0005	1

- NOTES:  
1. THIS UNIT IS SIZED FOR FUTURE EXPANSION OF THE HOT WATER SYSTEM WITH TOTAL CAPACITY OF 1350 MBH.

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	MAX. GPM	INLET/OUTLET SIZE	BLOWDOWN SIZE	REMARKS
AS-1	BUILDING HEATING WATER	BELL & GOSSETT	R-25	40	2 1/2"	-	1, 2
AS-2	BUILDING CHILLED WATER	BELL & GOSSETT	R-38	110	3"	-	1, 2

- NOTES:  
1. PROVIDE AUTOMATIC AIR VENT PIPED TO NEAREST FLOOR DRAIN.  
2. UNIT TO BE PROVIDED WITH STRAINER.



**2 BOILER ROOM PLAN**  
1/4" = 1'-0"

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa

Matthew T. Verdun  
Registration Number 18643 Date 01/03/14

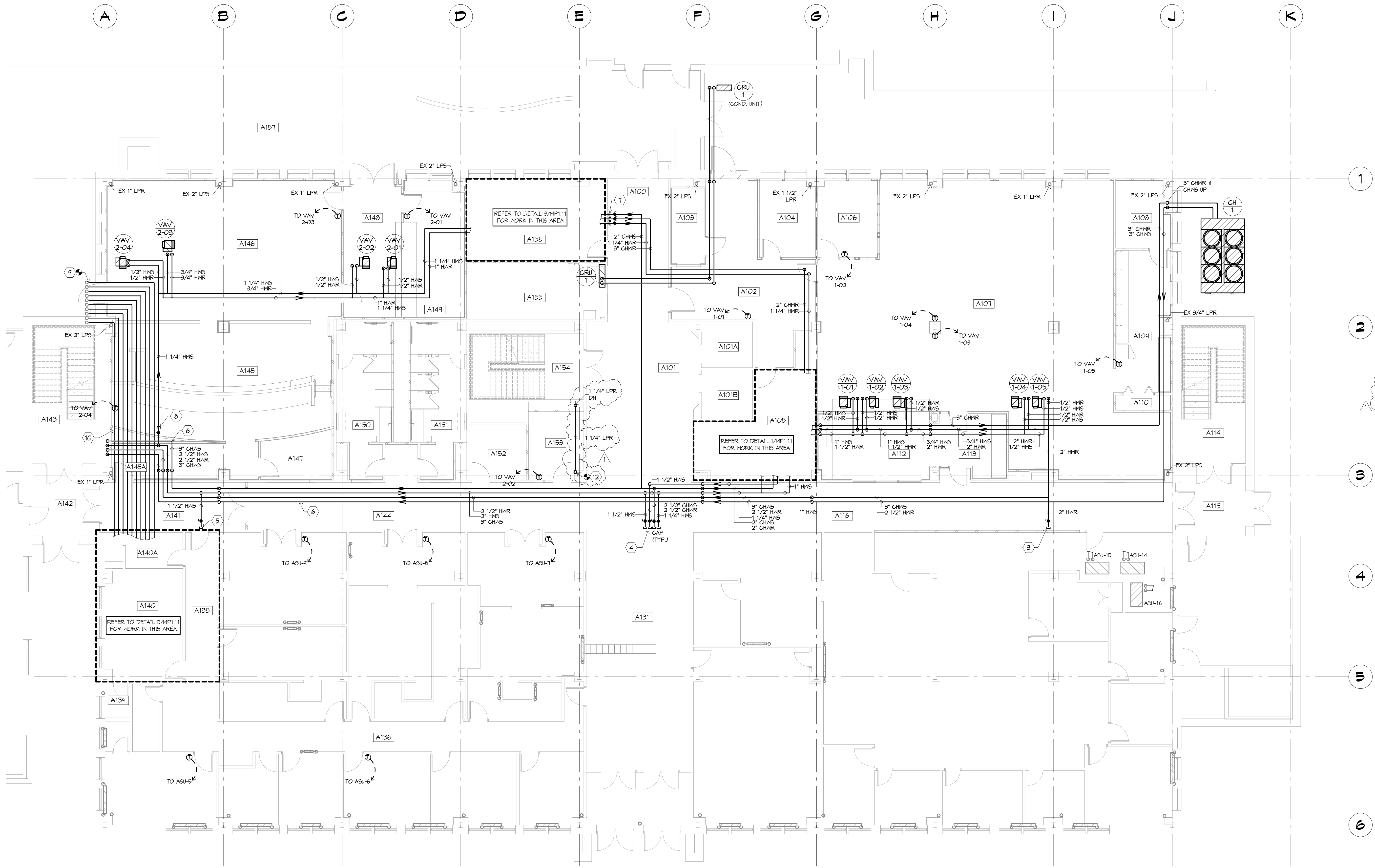
Description	Revisions	Date	Rev
ADDENDUM #3		1/30/2014	1

Drawn: 133024  
Date: 01/03/14  
Checked: MTB  
North

**BASEMENT  
HYDRONIC PIPING,  
BOILER ROOM, AND  
BAS PLAN**

Scale: As indicated

**M1.01**



**HYDRONIC PLAN KEYED NOTES:**

1. PHASE 1: CONNECT TO EXISTING 4" LPS GAPPED CONNECTION ON STEAM HEADER. ROUTE PIPING TO NEW HEAT EXCHANGER. REFER TO DETAIL 5/MS-02.
2. PHASE 1: CONNECT NEW STEAM CONDENSATE DRAIN TO EXISTING STEAM CONDENSATE PIPING AT LOCATION. REFER TO DETAIL 5/MS-02.
3. PHASE 1: CAP & VALVE NEW HRS PIPING FOR ACCESSIBILITY DURING PHASE 3.
4. PHASE 1: CAP & VALVE NEW HRS, CHVR, & HVR PIPING FOR ACCESSIBILITY DURING PHASE 3.
5. PHASE 1: CAP & VALVE NEW HRS PIPING FOR ACCESSIBILITY DURING PHASE 4.
6. PHASE 1: ROUTE NEW CHVR, CHVR, HRS, & HVR PIPING TO THE EXTENT OF EXISTING DUCTWORK ROUTED ABOVE CORRIDOR AND TERMINATE FOR CONNECTION DURING PHASE 1B. REFER TO M011 FOR LOCATION OF DUCTWORK. FIELD VERIFY EXACT TERMINATION POINTS.  
PHASE 1B: ROUTE NEW CHVR, CHVR, HRS, & HVR PIPING TO CHASE IN MAGISTRATE AND CONNECT TO NEW CHVR, CHVR, HRS, & HVR RESPECTIVELY FROM BASEMENT. ROUTE PIPING AS HIGH AS POSSIBLE TO ALLOW CLEARANCE FOR REFRIGERANT PIPING. REFER TO PHASING PLAN FOR MORE INFORMATION.
7. PHASE 1: ROUTE NEW CHVR, CHVR & HVR PIPING TO THE EXTENT OF NEW MECHANICAL ROOM AND CAP & VALVE FOR CONNECTION DURING PHASE 2.
8. PHASE 1B: ROUTE NEW REFRIGERANT PIPING BELOW NEW CHVR, CHVR, HRS, & HVR FOR ACCESSIBILITY DURING PHASE 4.
9. PHASE 1B: CONNECT TO EXISTING REFRIGERANT PIPING ABOVE CEILING AND ROUTE TO NEW MECHANICAL ROOM FOR CONNECTION TO RESPECTIVE AIR SUPPLY UNITS. ROUTE PIPING ALONG WEST WALL AS HIGH AS POSSIBLE TO AVOID CONFLICT WITH DUCTWORK IN AND AROUND NEW MECHANICAL ROOM.
10. CONNECT NEW 1 1/4" LFR PIPE TO EXISTING 2" LFR PIPING IN CHASE.
11. CONNECT NEW 1 1/4" LFR PIPE TO EXISTING 1 1/4" LFR ABANDONED ABOVE CEILING AND ROUTE TO CHASE AS INDICATED.
12. CONNECT NEW 1 1/4" LFR PIPE TO EXISTING 2" LFR PIPING IN CHASE.

**HYDRONIC PLAN GENERAL NOTES:**

1. THE CONTRACTOR SHALL PERFORM A SITE OBSERVATION SURVEY TO DETERMINE LIMITATIONS AND/OR CONFLICTS RELATIVE TO THE EXECUTION OF HIS WORK. PRIOR TO BID, VERIFY EXACT DETAIL OF INSTALLATION REQUIRED TO PROVIDE SYSTEMS SHOWN WITHIN THE SPACE INTENDED.
2. ALL EXISTING SERVICES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE INDICATED ON THE PLANS. COORDINATE DISRUPTION OF SERVICES WITH OWNER TO PROVIDE ACCEPTABLE TIME FOR DOWNTIME.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DETERIORATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
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5. ALL DUCTWORK, DIFFUSERS, AND PIPING SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
6. PATCH AND REPAIR OPENINGS THROUGH WALLS AND FLOORS WHERE SYSTEMS WERE REMOVED TO MATCH EXISTING AND TO MAINTAIN RATINGS (AS APPLICABLE). FINISHES SHALL BE WORK OF ANOTHER TRADE.
7. DIFFUSER AND REGISTER LOCATIONS SHALL BE COORDINATED WITH LIGHT FIXTURE LOCATIONS AND SHALL BE IN ACCORDANCE WITH CEILING PATTERNS AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS.
8. ALL RISERS AND DROPS IN PIPING AND DUCTWORK ARE NOT NECESSARILY SHOWN. LAYOUT ROUTING AND COORDINATE WORK WITH OTHER TRADES BEFORE CONSTRUCTION.
9. DIFFUSER DUCT RUNOUTS AND FLEXIBLE DUCT CONNECTIONS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
10. LOCATE ALL DAMPERS, FLEXIBLE DUCTS, VALVES, AND OTHER PIPING COMPONENTS ABOVE ACCESSIBLE CEILING.
11. CONCRETE CURBS WILL BE PROVIDED BY ANOTHER TRADE. COORDINATE EXACT SIZE AND LOCATION.
12. REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
13. ALL SUPPLY AND RETURN DUCT CONNECTIONS AT THE AIR HANDLING UNIT SHALL BE PROVIDED WITH 1" THICK INTERNAL LINING FOR A DISTANCE OF 20'-0" TO/FROM SUCH EQUIPMENT. PROVIDE ACCESS PANELS IN LINED DUCT TO FACILITATE CLEANING OF DUCT INTERIOR.
14. ALL DUCT CONNECTIONS TO AIR HANDLING UNITS TO BE FLEXIBLE CONNECTIONS.
15. COORDINATE TEMPERATURE SENSOR LOCATIONS WITH OTHER TRADES AND BUILDING ELEMENTS. ADJUST THE EXACT LOCATIONS AS REQUIRED TO AVOID CONFLICTS.
16. ROUTE ALL AIR HANDLING UNIT AND PLENUM DRAIN PIPING TO NEARBY FLOOR DRAINS. FIELD VERIFY EXACT ROUTING TO AVOID TRIP HAZARD FOR BUILDING OCCUPANTS.
17. TRANSFER DUCTS SHALL HAVE 1" INTERNAL SOUND ATTENUATING LINER.
18. THE VARIABLE AIR VOLUME CONTROL BOX SHALL BE LOCATED IN A POSITION TO ENSURE ACCESSIBILITY.
19. COORDINATE LOCATIONS OF ANY ACCESS PANELS REQUIRED IN WALLS OR CEILING WITH GENERAL CONTRACTOR.
20. ROUTE DUCTS BETWEEN JOISTS AND THROUGH JOIST KEEBS WHERE REQUIRED TO COORDINATE WITH THE INSTALLATION OF OTHER TRADES AND TO MAINTAIN CEILING HEIGHTS.
21. ALL SUPPLY AND RETURN DUCTWORK ROUTED IN CONCEALED SPACES AND ABOVE CEILING SHALL BE EXTERNALLY INSULATED. INSULATE RELIEF AND EXHAUST DUCTWORK AS SPECIFIED.

**1 MAIN LEVEL HYDRONIC PLAN - AREA 'A'**  
1/8" = 1'-0"

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	CAPACITY (TONS)	EVAPORATOR LMT (°F)	CONDENSER LMT (°F)	AMBIENT AIR TEMP (°F)	REFIG TYPE	COMPRESSORS NUMBER	TYPE	ELECTRICAL DATA TOTAL VOLTS	PHASE	MCA	EER	REMARKS	
GH-1	BUILDING CHILLED WATER	TRANE	CGAN070A2	70.0	54.0°F	42.0°F	114.7	6.2	2	SCROLL	78.50	208	3	315.80	4.6	1, 2, 3, 4, 5, 6

- NOTES:  
 1. UNIT SHALL BE SELECTED AS HIGH EFFICIENCY PERFORMANCE CONFIGURATION.  
 2. UNIT SHALL BE SELECTED AS AN AMINE RATED PRESSURE VESSEL.  
 3. EVAPORATOR SHALL BE CONFIGURED AS 1-PASS INSULATED ARRANGEMENT.  
 4. UNIT SHALL HAVE A SINGLE POINT POWER CONNECTION.  
 5. PROVIDE WITH BAGNET COMMUNICATIONS INTERFACE.  
 6. PROVIDE WITH VIBRATION ISOLATION AND SOUND REDUCTION OPTIONS AS SPECIFIED IN PROJECT MANUAL SECTION 23 04 26.

UNIT NO.	SERVES	MANUFAC.	COOLING CAPACITY (BTU/H)	MODEL NUMBER	CFM (MED.)	MCA	VOLTS	PHASE	MODEL NUMBER	REFRIG. TYPE	MCA	VOLTS	PHASE	REMARKS
GRU-1	DP (A155)	DAIKIN	22,500	HTS-SE24NA	470	1.0	208	1	HTS-SE24NA	R410A	11.1	208	1	1, 2

- NOTES:  
 1. PROVIDE WITH FACTORY OPTIONAL LOW AMBIENT WIND Baffle KIT.  
 2. SECURE CONDENSING UNIT TO 1 1/2" HIGH RAILS.

UNIT NO.	SERVES	MANUFACTURER	MODEL NO.	MAX CFM	MIN CFM	MAX CFM	MIN CFM	MAX PRES. DROP IN/OUT (IN. WG.)	INLET SIZE	OUTLET SIZE	REHEAT COIL DATA	CONTROL	REMARKS					
1-01	(A101), (A102), (A103), (A104), (A105), (A106)	TRANE	TC9F	1,600	480	1,600	800	.45	16"	55°F	14°F	32.3	1.7	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
1-02	OFFICE (A106)	TRANE	TC9F	190	60	190	100	.45	6"	55°F	80°F	5.2	0.3	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
1-03	(A107), (A112), (A113)	TRANE	TC9F	1,945	590	1,945	980	.45	16"	55°F	12°F	35.1	1.8	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
1-04	CLERKS DEPARTMENT NORTH (A107)	TRANE	TC9F	1,220	370	1,220	610	.45	16"	55°F	17°F	21.3	1.5	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
1-05	(A108), (A109)	TRANE	TC9F	875	270	875	440	.45	10"	55°F	15°F	14.1	1.0	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
2-01	(A148), (A149)	TRANE	TC9F	840	280	840	300	.45	8"	55°F	12°F	10.5	0.6	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
2-02	(A141), (A144), (A147), (A150), (A151), (A152), (A153), (A156)	TRANE	TC9F	1,140	350	1,140	570	.45	10"	55°F	12°F	20.5	1.1	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
2-03	(A146) MAGISTRATE GALLERY	TRANE	TC9F	1,960	590	1,960	980	.45	16"	55°F	12°F	36.0	2.1	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6
2-04	(A145) MAGISTRATE	TRANE	TC9F	1,100	330	1,100	550	.45	10"	55°F	12°F	20.2	1.2	160°F	120°F	5.0 MAX	2-WAY	1, 2, 3, 4, 5, 6

- NOTES:  
 1. ALL COILS SELECTED AT 160 ENTERING WATER TEMPERATURE AND 120 LEAVING WATER TEMPERATURE.  
 2. ALL COILS SHALL HAVE TYPE B COIL CONNECTIONS. REFER TO DETAIL 14/M-01.  
 3. HEATING COIL CAPACITIES ARE SELECTED AT THE MAXIMUM CFM.  
 4. PROVIDE FOR MULTIPLE ROW COILS AS REQUIRED TO MEET COIL DATA. (UPSIDE BOX SIZE IF REQUIRED TO NOT EXCEED THE MAXIMUM PRESSURE DROP AS SCHEDULED.)  
 5. COIL CONNECTIONS AND CONTROL BOX FOR EACH VAV TERMINAL SHALL BE PROVIDED IN LOCATION INDICATED ON THE HVAC FLOOR PLAN DRAWINGS.  
 6. PROVIDE EQUIVALENT OVAL SIZE CONNECTIONS TO ACCOMMODATE SPECIFIC MANUFACTURER'S BOX SIZES.

UNIT NO.	SERVES	MANUFACTURER	MODEL NUMBER	TANK TYPE	ACCEPTANCE VOLUME (GALLONS)	TANK HEIGHT	TANK DIA.	CONN. SIZE	REMARKS
BT-1	CHILLED WATER LOOP	TAGO	ETHOR00F03	INT. Baffle	300	82"	36"	3"	1, 2

- NOTES:  
 1. PROVIDE AUTOMATIC AIR VENT PIPED TO NEAREST FLOOR DRAIN.  
 2. PROVIDE INSULATION PER PROJECT MANUAL SECTION 23 01 00.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Iowa

Matthew T. Verdun  
18643 Date: 01/03/14

Description	Revisions	Date	Rev
APPENDUM #3		1/30/2014	1

Comm: 133024  
Date: 01/03/14  
Drawn: MFB  
Check: MTW

**MAIN LEVEL  
HYDRONIC PIPING  
AND BAS PLAN**

Scale: 1/8" = 1'-0"

**M1.11**



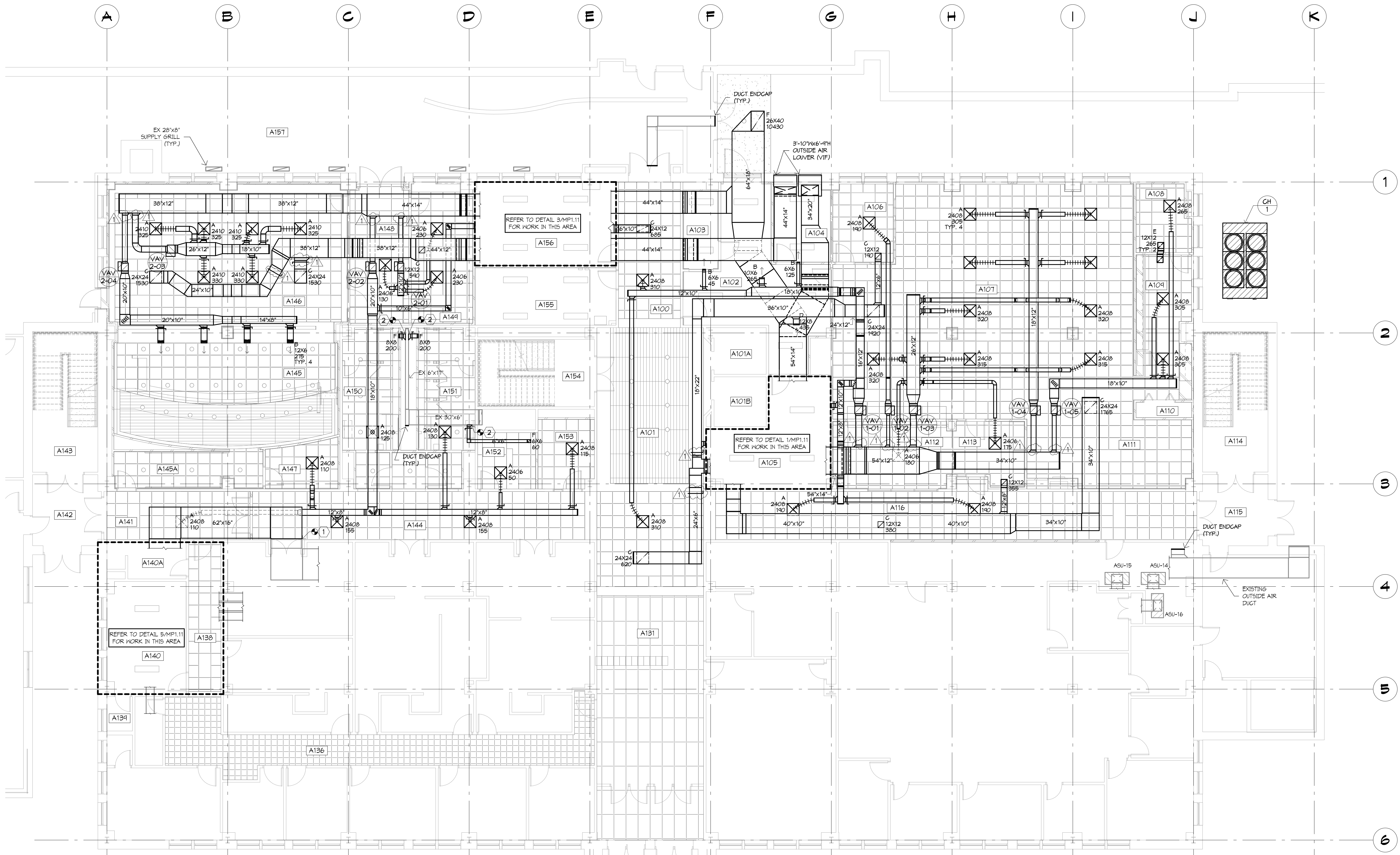


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- HVAC PLAN KEYED NOTES:**
- PHASE I, II: CONNECT NEW RETURN DUCT TO EXISTING RETURN DUCT IN CORRIDOR AND ROUTE TO NEW MECHANICAL ROOM. ROUTE DUCTWORK AS HIGH AS POSSIBLE.
  - CONNECT TO EXISTING EXHAUST DUCT AND BALANCE FOR PROPER FLOW.

- HVAC PLAN GENERAL NOTES:**
- THE CONTRACTOR SHALL PERFORM A SITE OBSERVATION SURVEY TO DETERMINE LIMITATIONS AND/OR CONFLICTS RELATIVE TO THE EXECUTION OF HIS WORK. PRIOR TO BID, VERIFY EXACT DETAIL OF INSTALLATION REQUIRED TO PROVIDE SYSTEMS SHOWN WITHIN THE SPACE INTENDED.
  - ALL EXISTING SERVICES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE INDICATED ON THE PLANS. COORDINATE DISRUPTION OF SERVICES WITH OWNER TO PROVIDE ACCEPTABLE TIME FOR DOWNTIME.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DETERIORATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
  - THE CONTRACTOR SHALL REMOVE ALL EXISTING CEILING TILES AND GRIDS AS REQUIRED FOR INSTALLATION OF NEW WORK. ANY DAMAGED TILES AND/OR GRIDS SHALL BE REPLACED WITH NEW TO MATCH AT THE CONTRACTORS EXPENSE.
  - ALL DUCTWORK, DIFFUSERS, AND PIPING SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
  - PATCH AND REPAIR OPENINGS THROUGH WALLS AND FLOORS WHERE SYSTEMS WERE REMOVED TO MATCH EXISTING AND TO MAINTAIN RATINGS (AS APPLICABLE). FINISHES SHALL BE WORK OF ANOTHER TRADE.
  - DIFFUSER AND REGISTER LOCATIONS SHALL BE COORDINATED WITH LIGHT FIXTURE LOCATIONS AND SHALL BE IN ACCORDANCE WITH CEILING PATTERNS AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS.
  - ALL RISERS AND DROPS IN PIPING AND DUCTWORK ARE NOT NECESSARILY SHOWN. LAYOUT ROUTING AND COORDINATE WORK WITH OTHER TRADES BEFORE CONSTRUCTION.
  - DIFFUSER DUCT RUNOUTS AND FLEXIBLE DUCT CONNECTIONS SHALL BE THE SAME SIZE AS THE DIFFUSER NECK.
  - LOCATE ALL DAMPERS, FLEXIBLE DUCTS, VALVES, AND OTHER PIPING COMPONENTS ABOVE ACCESSIBLE CEILING.
  - CONCRETE CURBS WILL BE PROVIDED BY ANOTHER TRADE. COORDINATE EXACT SIZE AND LOCATION.
  - REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURERS GUIDELINES.
  - ALL SUPPLY AND RETURN DUCT CONNECTIONS AT THE AIR HANDLING UNIT SHALL BE PROVIDED WITH 1" THICK INTERNAL LINING FOR A DISTANCE OF 20'-0" TO/FROM SUCH EQUIPMENT. PROVIDE ACCESS PANELS IN LINED DUCT TO FACILITATE CLEANING OF DUCT INTERIOR.
  - ALL DUCT CONNECTIONS TO AIR HANDLING UNITS TO BE FLEXIBLE CONNECTIONS.
  - COORDINATE TEMPERATURE SENSOR LOCATIONS WITH OTHER TRADES AND BUILDING ELEMENTS. ADJUST THE EXACT LOCATIONS AS REQUIRED TO AVOID CONFLICTS.
  - ROUTE ALL AIR HANDLING UNIT AND PLENUM DRAIN PIPING TO NEARBY FLOOR DRAINS. FIELD VERIFY EXACT ROUTING TO AVOID TRIP HAZARD FOR BUILDING OCCUPANTS.
  - TRANSFER DUCTS SHALL HAVE 1" INTERNAL SOUND ATTENUATING LINER.
  - THE VARIABLE AIR VOLUME CONTROL BOX SHALL BE LOCATED IN A POSITION TO ENSURE ACCESSIBILITY.
  - COORDINATE LOCATIONS OF ANY ACCESS PANELS REQUIRED IN WALLS/CEILING WITH GENERAL CONTRACTOR.
  - ROUTE DUCTS BETWEEN JOISTS AND THROUGH JOIST KEEBS WHERE REQUIRED TO COORDINATE WITH THE INSTALLATION OF OTHER TRADES AND TO MAINTAIN CEILING HEIGHTS.
  - ALL SUPPLY AND RETURN DUCTWORK ROUTED IN CONCEALED SPACES AND ABOVE CEILING SHALL BE EXTERNALLY INSULATED, INSULATE RELIEF AND EXHAUST DUCTWORK AS SPECIFIED.



**1 MAIN LEVEL HVAC PLAN**  
1/8" = 1'-0"

**AIR HANDLING UNIT SCHEDULE**

UNIT NO.	SERVICES	MANUFACTURER	MODEL NUMBER	UNIT TYPE	CFM	OUTDOOR AIR				SUPPLY FAN DATA				RETURN FAN DATA				COOLING COIL DATA				HEATING COIL DATA				FILTERS		VARIABLE FREQUENCY DRIVE?	REMARKS																		
						COIL CONTROL RANGE FOR MIN.	MAX.	FAN SIZE	CFM	EXT. S.P.	TOTAL S.P.	RPM	BHP	HP	VOLTS	PHASE	FAN SIZE	CFM	EXT. S.P.	TOTAL S.P.	RPM	BHP	HP	VOLTS	PHASE	COIL TYPE	PIPING TYPE			COIL ROWS	ENT. AIR (DB/MB)	LVG. AIR (DB/MB)	SENS. MBH	TOTAL MBH	TOTAL GPM	CONTROL VALVE	COIL TYPE	PIPING TYPE	COIL ROWS	ENT. AIR (DB/MB)	LVG. AIR (DB/MB)	TOTAL MBH	TOTAL GPM	CONTROL VALVE	PRE TYPE	FINAL TYPE	
AHU-1	COURTHOUSE PHASE I	TRANE	GSAAC12JA	DRAWN-THRU	5,830	380	625	5,830	22.25	5,830	2,207	3.45	1,620	4.58	1.50	208	3	207	5,830	15"	0.81	1,604	1.87	3.00	208	3	CHX	E	4	76.0°F/65.5°F	55.0°F/54.0°F	132.4	162.1	28.41	2WAY	N/A	E	2	63.5°F	40.0°F	168.4	8.45	2WAY	-	MERV 13	YES	1, 2, 3, 4, 5, 6, 7, 8, 9
AHU-2	COURTHOUSE PHASE II	TRANE	GSAAC12JA	DRAWN-THRU	4,790	300	1,058	4,790	18.25	4,790	2,207	3.95	2,124	3.94	5.00	208	3	18,25	4,790	15"	0.84	1,694	1.41	2.00	208	3	CHX	E	6	78.0°F/65.5°F	55.0°F/54.0°F	115.2	160.2	28.62	2WAY	N/A	E	2	54.5°F	40.0°F	183.4	9.28	2WAY	-	MERV 13	YES	1, 2, 3, 4, 5, 6, 7, 8, 9

- SMOKE DETECTORS ARE PROVIDED BY THE ELECTRICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- REFER TO DETAIL 13R93.01 FOR HEATING AND COOLING COIL PIPING SCHEMATICS. PROVIDE A SEPARATE CONTROL VALVE FOR EACH COIL SECTION OF AIR HANDLING UNITS WITH MULTIPLE COILS.
- REFER TO SECTIONS OF UNITS ON SHEET MPE1.11 FOR AIR HANDLING UNIT COMPONENTS.
- SELECT HEATING COILS FOR ENTERING WATER TEMPERATURE OF 160°F, LEAVING WATER TEMPERATURE IS 120°F.
- SELECT COOLING COILS FOR ENTERING WATER TEMPERATURE OF 42°F, LEAVING WATER TEMPERATURE IS 54°F. CHILLED WATER CONTAINS 35% PROPYLENE GLYCOL.
- TEMPERATURE CONTROL CONTRACTOR TO PROVIDE VARIABLE FREQUENCY DRIVE, INSTALLATION BY ELECTRICAL CONTRACTOR. ALL VARIABLE FREQUENCY DRIVES FOR THE ENTIRE PROJECT SHALL BE BY THE SAME MANUFACTURER.
- TEMPERATURE CONTROL CONTRACTOR TO PROVIDE CONTROL VALVES AS INDICATED ON SCHEDULE, INSTALLATION BY MECH. CONTRACTOR.
- PROVIDE COOLING COIL DRAIN TRAP PER DETAIL 15M30.01. SIZE PIPE PER MANUFACTURERS RECOMMENDATIONS. ROUTE TO NEARBY FLOOR DRAIN.
- PROVIDE UNISUIT RACK TO MOUNT VARIABLE FREQUENCY DRIVE NEAR AIR HANDLING UNIT. RACK SHALL BE LARGE ENOUGH TO MOUNT DISCONNECT SWITCH PROVIDED BY ELECTRICAL. COORDINATE RACK LOCATION WITH ACCESS REQUIREMENTS OF AIR HANDLING UNIT.

**GRILLES, REGISTERS, AND DIFFUSERS SCHEDULE**

TYPE	SERVICE	MANUFACTURER & MODEL NUMBER	DESCRIPTION	REMARKS
A	SUPPLY AIR DIFFUSER (LAY-IN CEILING MOUNT)	TTUS OHN1 (BORDER TYPE 3)	STEEL SUPPLY AIR DIFFUSER OF THE SIZE INDICATED ON THE PLANS WITH ROUND INLET NECK, STEEL SQUARE PLAQUE FACE PANEL, FLUSH FACE, HEAVY GAUGE STEEL BACK PAN, AND FACTORY BAKED WHITE ENAMEL FINISH. PATTERN ADJUSTERS SHALL BE LOCATED IN THE DIFFUSER NECK, NOT ATTACHED TO SQUARE PLAQUE FACE.	-
B	SUPPLY AIR GRILLE (SURFACE MOUNT)	TTUS MODEL 2TDR5 (BORDER TYPE 1)	ALL STEEL SUPPLY REGISTER OF THE SIZE INDICATED ON THE PLANS. PROVIDE WITH DOUBLE DEFLECTION VERTICAL AIRFOIL BLADES AT A FIXED 45° PATTERN AT 3/4" SPACINGS, OPPOSED BLADE DAMPER, AND FACTORY BAKED WHITE ENAMEL FINISH.	-
C	RETURN AIR GRILLE (LAY-IN CEILING MOUNT)	TTUS MODEL 3BORL (BORDER TYPE 3)	ALL STEEL RETURN REGISTER OF THE SIZE INDICATED ON THE PLANS. PROVIDE WITH DOUBLE DEFLECTION HORIZONTAL BLADES AT A FIXED 95° PATTERN AT 3/4" SPACINGS, OPPOSED BLADE DAMPER, AND FACTORY BAKED WHITE ENAMEL FINISH.	-
D	RETURN AIR GRILLE (SURFACE MOUNT)	TTUS MODEL 3BORL (BORDER TYPE 1)	SAME AS TYPE 'C' EXCEPT BORDER TYPE 1.	-
E	TRANSFER GRILLE (LAY-IN CEILING MOUNT)	TTUS MODEL 3BORL (BORDER TYPE 3)	ALL STEEL TRANSFER GRILLE OF THE SIZE INDICATED ON THE PLANS. PROVIDE WITH SINGLE DEFLECTION HORIZONTAL BLADES AT A FIXED 95° PATTERN AT 3/4" SPACINGS AND FACTORY BAKED WHITE ENAMEL FINISH.	-
F	EXHAUST GRILLE	TTUS MODEL 3BORL	ALL STEEL EXHAUST GRILLE OF THE SIZE INDICATED ON THE PLANS. PROVIDE WITH SINGLE DEFLECTION HORIZONTAL BLADES AT A FIXED 95° PATTERN AT 3/4" SPACINGS, OPPOSED BLADE DAMPER, AND FACTORY BAKED WHITE ENAMEL FINISH.	-

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa

Matthew T. Verdun  
Registration Number 18643 Date 01/03/14

Description	Revisions	Date	Run
APPENDUM #3		1/30/2014	1

Client: 133024  
Date: 01/03/14  
Drawn: MVB  
Check: MVB

**MAIN LEVEL HVAC PLAN**

Scale: 1/8" = 1'-0"

**M2.11**



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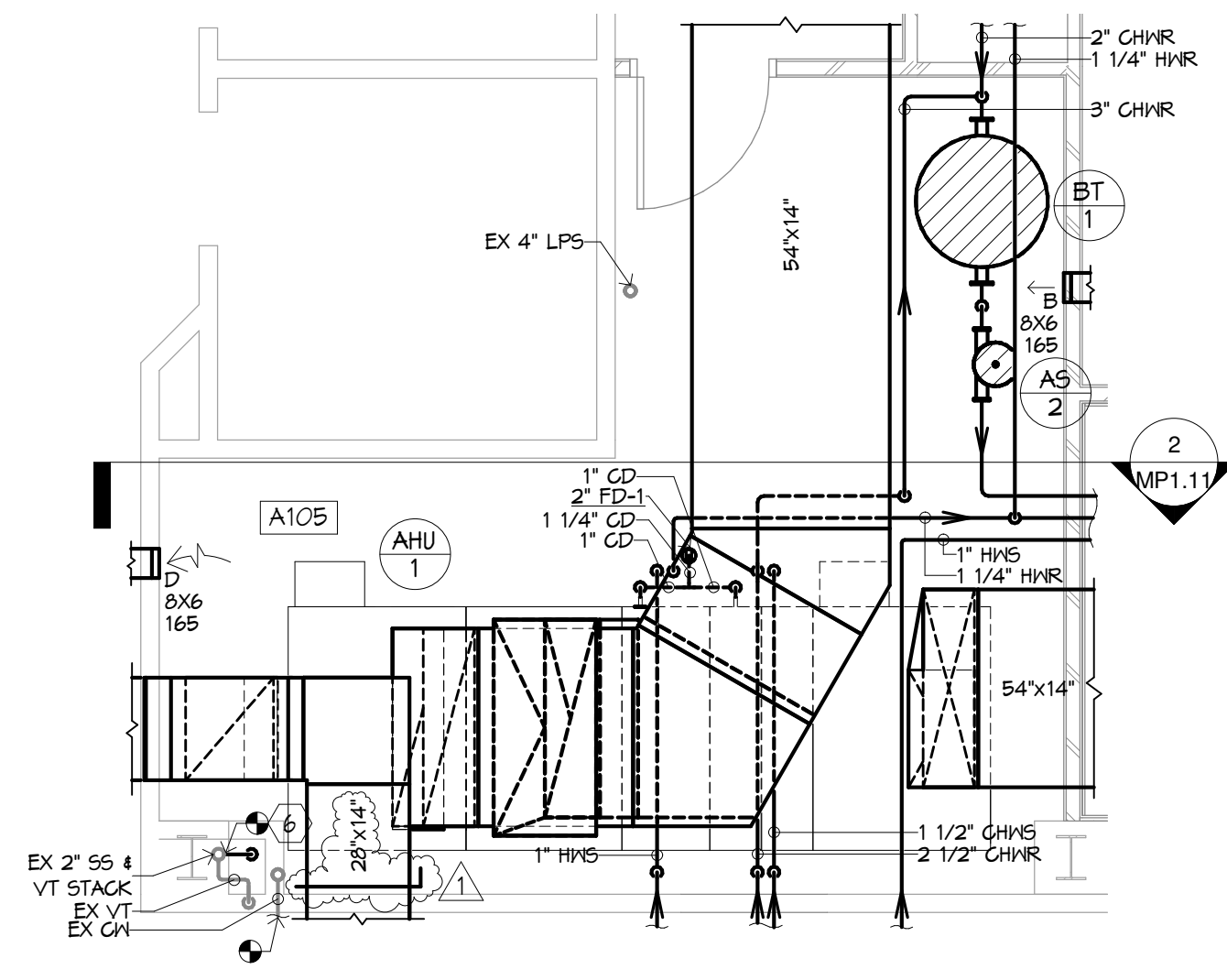
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**MECHANICAL PLAN KEYED NOTES:**

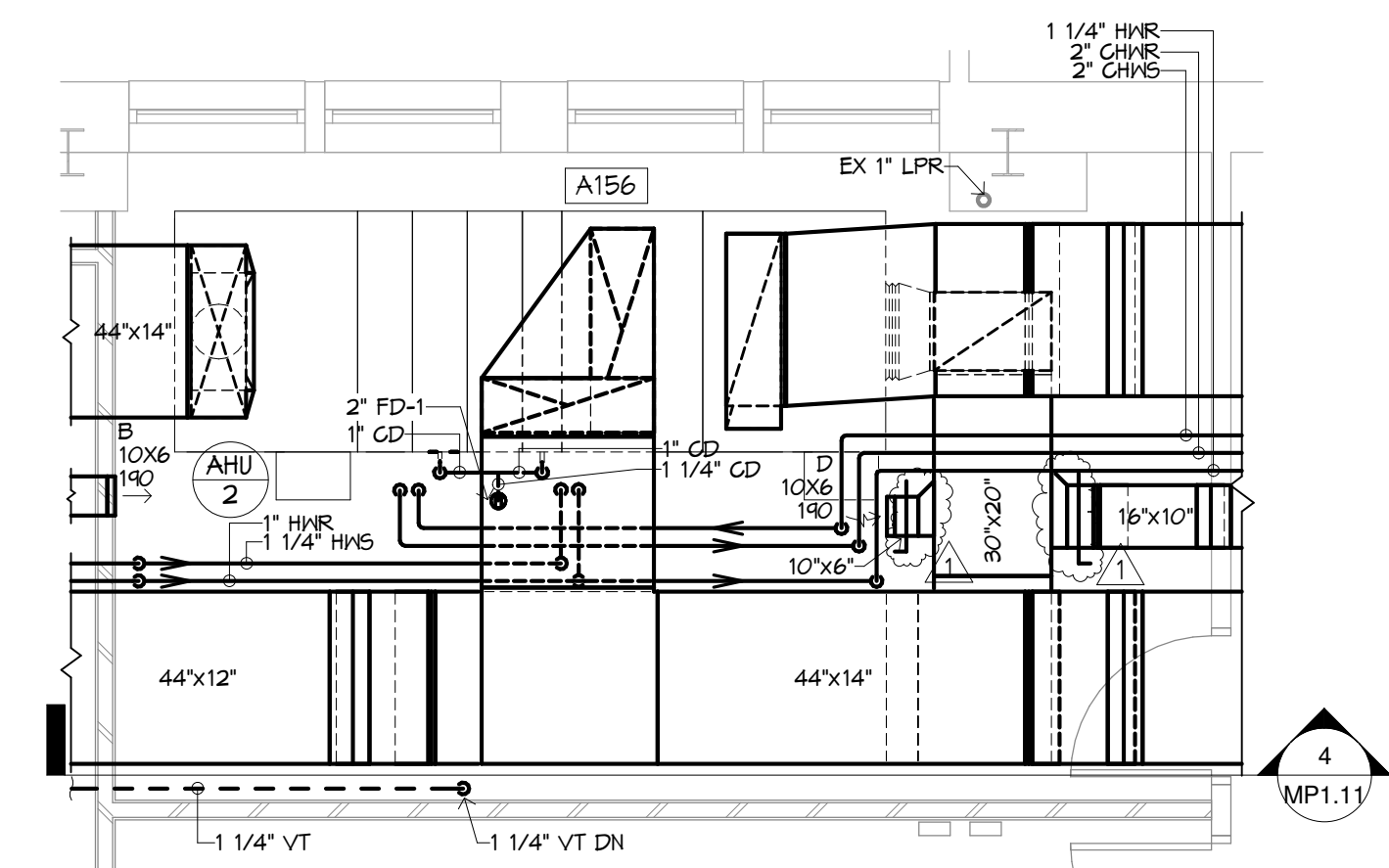
- EQUIP ASU WITH MOTORIZED RETURN DAMPER OF SIZE INDICATED ON PLAN.
- ROUTE REFRIGERANT PIPING TO RESPECTIVE ASU.
- CONNECT NEW SUPPLY DUCT TO RESPECTIVE EXISTING SUPPLY DUCT. FIELD VERIFY EXACT DUCT SIZE AND CONNECTION POINT.
- CONNECT NEW RETURN DUCT TO EXISTING RETURN DUCT. FIELD VERIFY EXACT DUCT SIZE AND CONNECTION POINT.
- CONNECT NEW OUTSIDE AIR DUCT TO EXISTING OUTSIDE AIR DUCT. FIELD VERIFY EXACT DUCT SIZE AND CONNECTION POINT.
- CONNECT NEW 1 1/4" V.T. PIPE TO EXISTING 2" V.T. STACK IN CHASE.

**MECHANICAL PLAN GENERAL NOTES:**

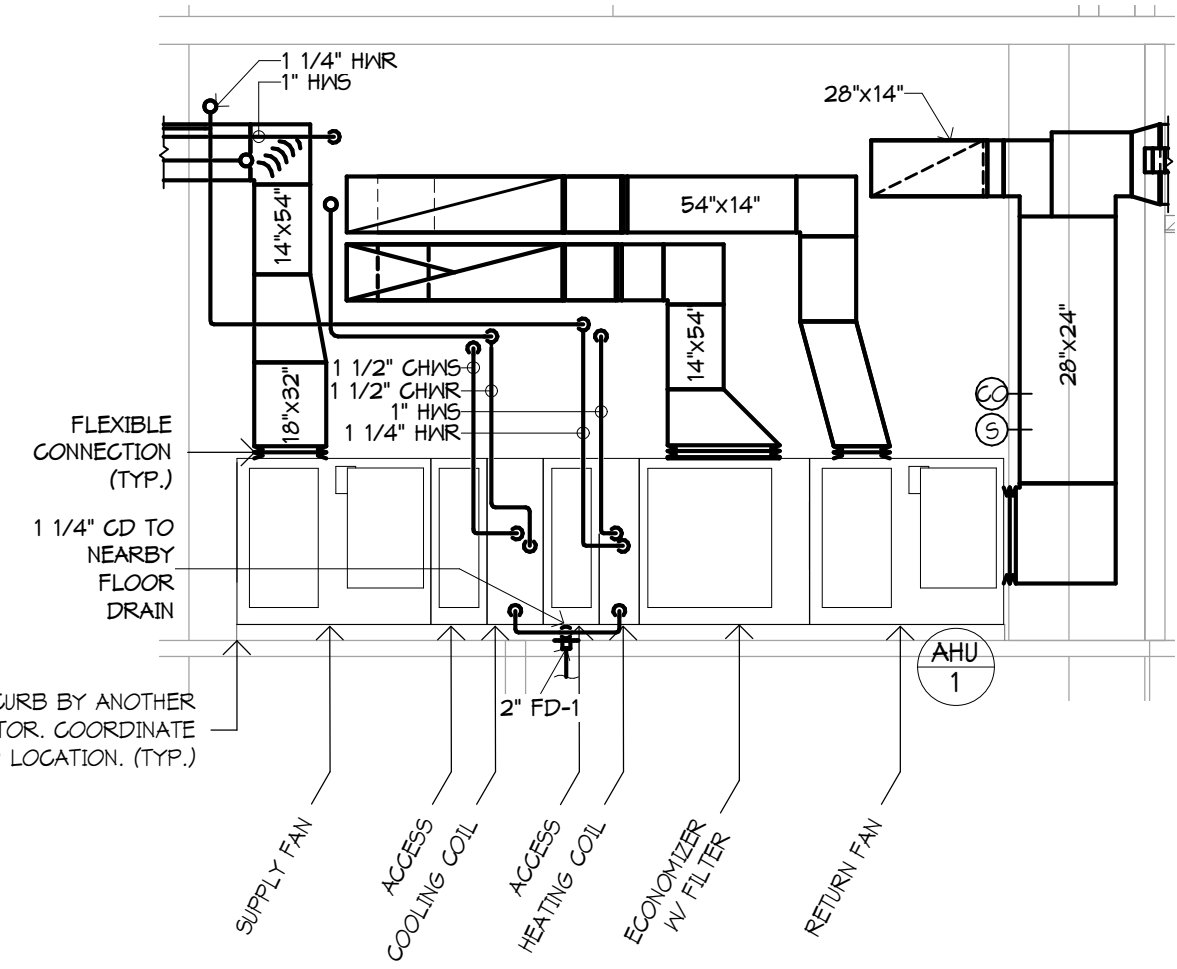
- THE CONTRACTOR SHALL PERFORM A SITE OBSERVATION SURVEY TO DETERMINE LIMITATIONS AND/OR CONFLICTS RELATIVE TO THE EXECUTION OF HIS WORK PRIOR TO BID. VERIFY EXACT DETAIL OF INSTALLATION REQUIRED TO PROVIDE SYSTEMS SHOWN WITHIN THE SPACE INTENDED.
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- REFRIGERANT PIPING SHALL BE SIZED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- ALL SUPPLY AND RETURN DUCT CONNECTIONS AT THE AIR HANDLING UNIT SHALL BE PROVIDED WITH 1" THICK INTERNAL LINING FOR A DISTANCE OF 20'-0" TO/FROM SUCH EQUIPMENT. PROVIDE ACCESS PANELS IN LINED DUCT TO FACILITATE CLEANING OF DUCT INTERIOR.
- DUCT CONNECTIONS TO AIR HANDLING UNITS TO BE FLEXIBLE CONNECTIONS.
- COORDINATE TEMPERATURE SENSOR LOCATIONS WITH OTHER TRADES AND BUILDING ELEMENTS. ADJUST THE EXACT LOCATIONS AS REQUIRED TO AVOID CONFLICTS.
- ROUTE ALL AIR HANDLING UNIT AND PLENUM DRAIN PIPING TO NEARBY FLOOR DRAINS. FIELD VERIFY EXACT ROUTING TO AVOID TRIP HAZARD FOR BUILDING OCCUPANTS.
- TRANSFER DUCTS SHALL HAVE 1" INTERNAL SOUND ATTENUATING LINER.
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- ALL SUPPLY AND RETURN DUCTWORK ROUTED IN CONCEALED SPACES AND ABOVE CEILINGS SHALL BE EXTERNALLY INSULATED. INSULATE RELIEF AND EXHAUST DUCTWORK AS SPECIFIED.
- ALL REFRIGERANT GASES SHALL BE RECLAIMED IN ACCORDANCE WITH APPLICABLE STANDARDS PRIOR TO DEMOLITION. PROVIDE NEW REFRIGERANT CHARGES TO EXISTING SYSTEMS UPON COMPLETION OF NEW WORK.



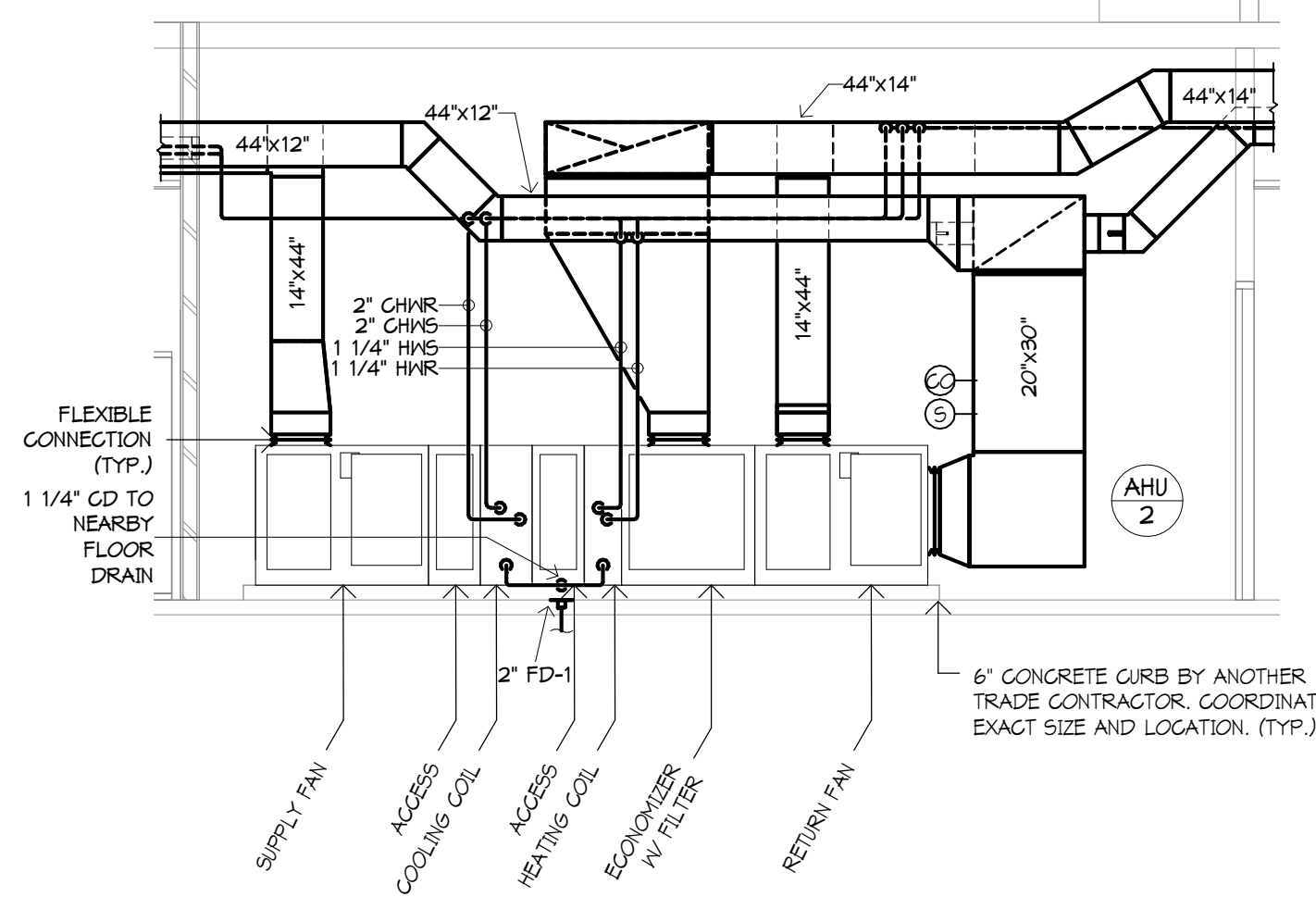
**1 MECHANICAL ROOM PLAN**  
1/4" = 1'-0"



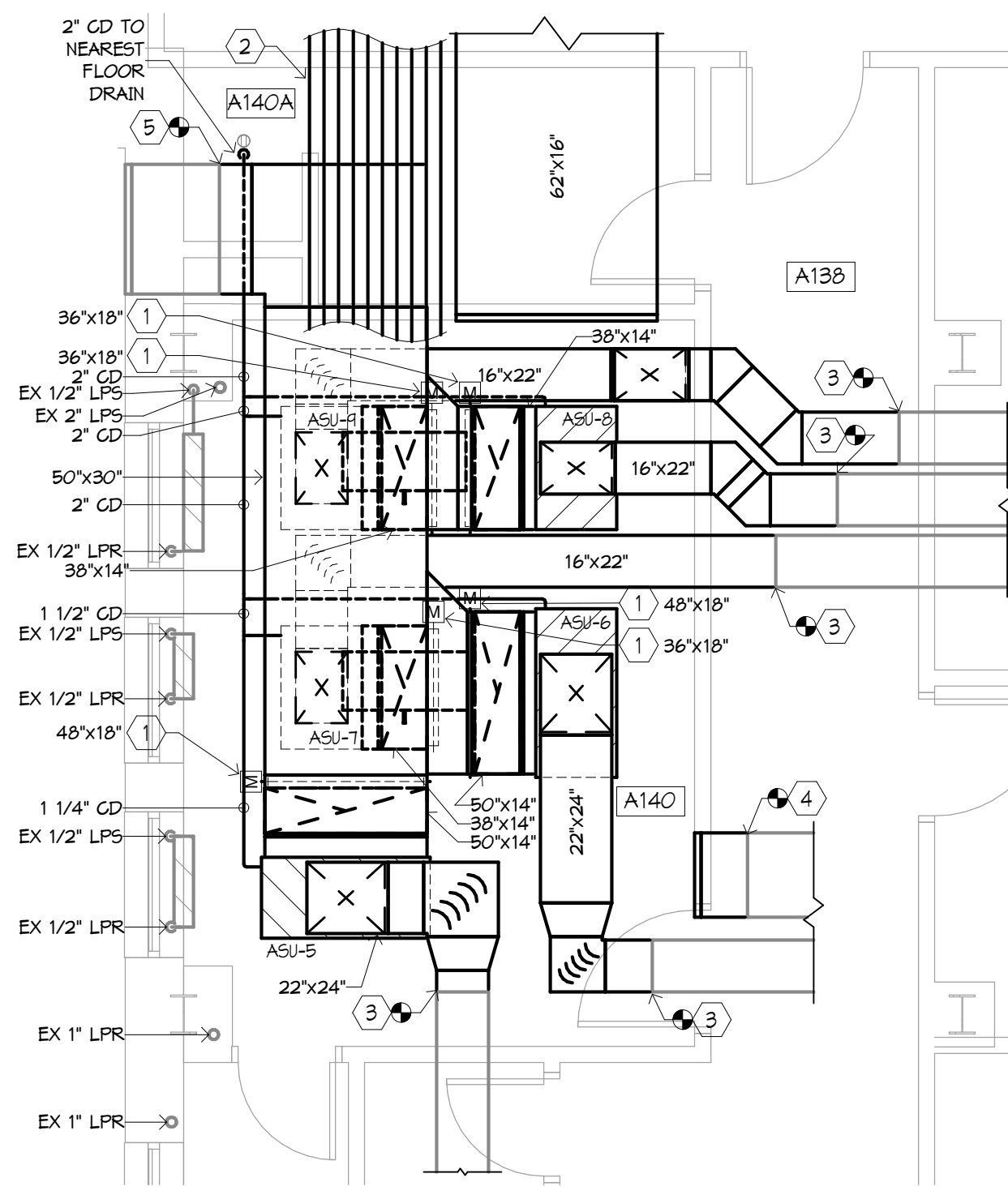
**3 MECHANICAL ROOM PLAN**  
1/4" = 1'-0"



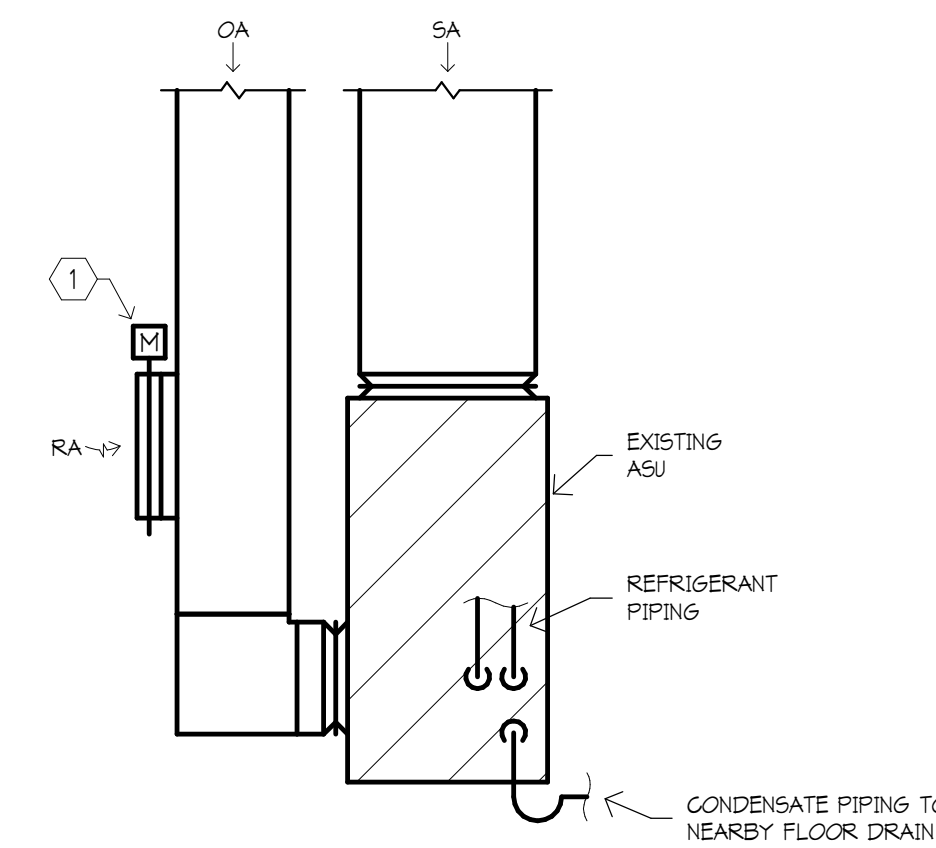
**2 AHU-1 SECTION**  
1/4" = 1'-0"



**4 AHU-2 SECTION**  
1/4" = 1'-0"



**5 MECHANICAL ROOM PLAN**  
1/4" = 1'-0"



**6 TYPICAL EXISTING ASU SECTION**  
NOT TO SCALE

**MECHANICAL AND PLUMBING LINETYPES**

---	DOMESTIC COLD WATER PIPING
---	DOMESTIC HOT WATER PIPING
---	VENT PIPING
---	SANITARY WASTE ABOVE GROUND PIPING
---	CONDENSATE DRAIN PIPING
---	BUILDING HEATING WATER SUPPLY PIPING
---	BUILDING HEATING WATER RETURN PIPING
---	LOW PRESSURE STEAM PIPING
---	LOW PRESSURE CONDENSATE RETURN PIPING
---	BUILDING CHILLED WATER SUPPLY PIPING
---	BUILDING CHILLED WATER RETURN PIPING
---	BUILDING CHILLER CONDENSER WATER SUPPLY PIPING
---	BUILDING CHILLER CONDENSER WATER RETURN PIPING
---	DX REFRIGERATION SYSTEM LIQUID PIPING
---	DX REFRIGERATION SYSTEM SUCTON PIPING
---	DX REFRIGERATION SYSTEM HOT GAS PIPING
---	BULK FEED PIPING
---	NEW FIRE PROTECTION PIPING (WET-PIPE SYSTEM)

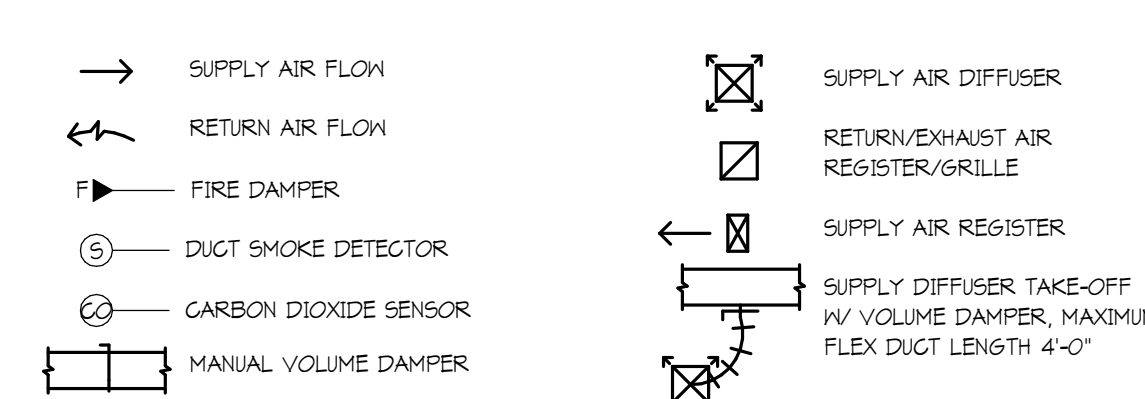
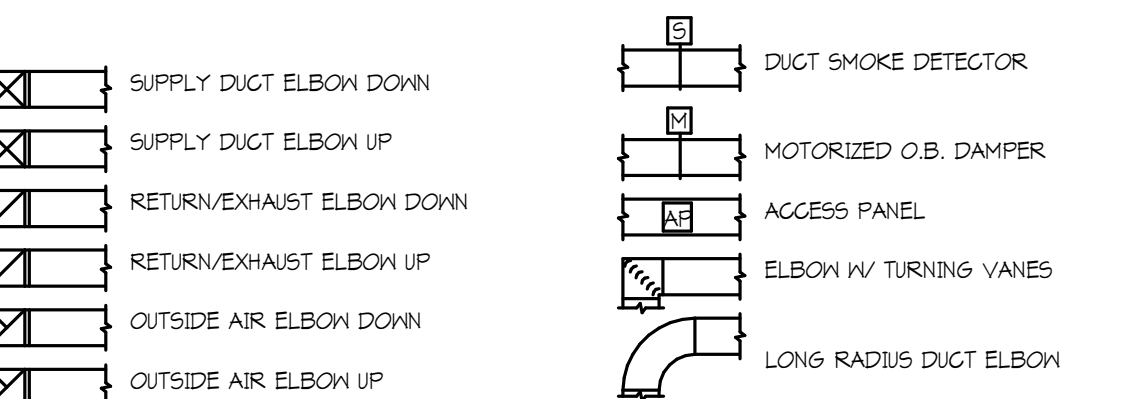
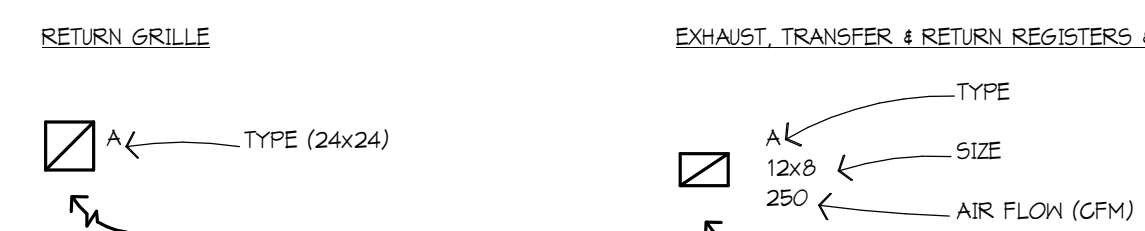
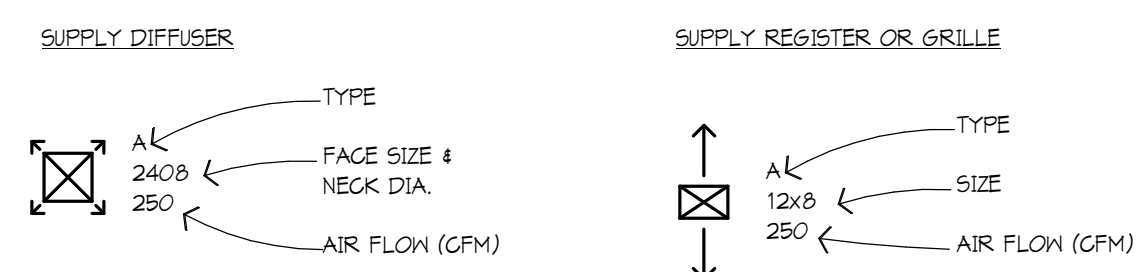
**MECHANICAL AND PLUMBING ABBREVIATIONS**

AD	AREA DRAIN	GR	GRILLE
AFF	ABOVE FINISHED FLOOR	HB	HOSE BIBB
AHAP	AS HIGH AS POSSIBLE	HG	HARD COLD WATER
BPF	BELOW FINISHED FLOOR	HP	HORSE POWER
BLDG	BUILDING	HW	HOT WATER
BSMT	BASEMENT	IN	INVERT
BTNN	BETWEEN	KW	KILOWATT
CB	CATCH BASIN	LAT	LEAVING AIR TEMPERATURE
CFM	CUBIC FEET/MINUTE	LMT	LEAVING WATER TEMPERATURE
CHW	CHILLING WATER	MAX	MAXIMUM
CHWS	CHILLED WATER SUPPLY	1000 BTU	1000 BTU
CHWR	CHILLED WATER RETURN	MECH	MECHANICAL
CLG	CELLING	MH	MANHOLE
CO	CLEANOUT	MIN	MINIMUM
CONCR	CONCRETE	NTS	NOT TO SCALE
CONTR	CONTRACTOR	OA	OUTSIDE AIR
GW	GOLD WATER	OBD	OPPOSED BLADE DAMPER
DB	DRY BULB	ORD	OVERFLOW ROOF DRAIN
DEG	DEGREE	P-F	PLUMBING FIXTURE NUMBER
DIA	DIAMETER	P-R	PRESSURE AND THERMOSTATIC
DIFF	DIFFUSER	PRD	PRESSURE DROP
EAT	ENTERING AIR TEMPERATURE	PLB6	PLUMBING
ER	SQUARE FEET RADIATION	QUAN	QUANTITY
EFF	EFFICIENCY	RA	RETURN AIR
EL	ELBOW	RD	ROOF DRAIN
ELG	ELECTRICAL	REG	REGISTER
ELEV	ELEVATION	REQD	REQUIRED
ENT	ENTERING WATER TEMPERATURE	RPM	REVOLUTIONS/MINUTE
ENH	EXHAUST	SA	SUPPLY AIR
EXIST	EXISTING	SGW	SOFT GOLD WATER
F	DEGREES FAHRENHEIT	SHT	SHEET
F AT	FLOAT AND THERMOSTATIC	SP	STATIC PRESSURE
FD	FLOOR DRAIN	TD	TEMPERATURE DIFFERENCE
FI	FIRE HYDRANT	TR	VENT THROUGH ROOF
FLR	FULL LOAD AMPS	VK	VENT KEEB
FLR	FLOOR	W	WALL HYDRANT
FTR	FINNED TUBE RADIATION		
GEN	GENERAL		
GPM	GALLONS/MINUTE		

**MECHANICAL AND PLUMBING SYMBOLS**

	PRESSURE GAGE		TWO WAY TEMPERATURE CONTROL VALVE
	AIR VENT		THREE WAY TEMPERATURE CONTROL VALVE
	FLOW MEASURING DEVICE		UNION
	STRAINER		THERMOMETER
	PIPING GUIDE		BALL VALVE
	PIPING ANCHOR		BUTTERFLY VALVE
	EXPANSION JOINT		GATE VALVE
	FLEXIBLE CONNECTION		CHECK VALVE
	DIRECTION OF FLOW		GLOBE VALVE
	CONCENTRIC REDUCER		PRESSURE OR PRESSURE/TEMPERATURE RELIEF VALVE
	ECCENTRIC REDUCER		ANGLE VALVE
	STEAM TRAP ASSEMBLY		PRESSURE REDUCING VALVE
	ELBOW DOWN		SOLENOID VALVE
	ELBOW UP		WALL HYDRANT
	TEE CONNECTION DOWN		HOSE BIBB
	TEE CONNECTION UP		LUBRICATED PLUG GAS COCK
	PIPING CONNECTION		BALANCING VALVE
	FINNED TUBE RADIATION		FLOOR CLEANOUT
	FLOOR DRAIN		CLEANOUT
	SHOCK ABSORBER		CONNECT TO EXISTING

**AIR DEVICE TAGS:**



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa

Matthew T. Verdun 01/03/14

Description	Revisions	Date	Rev
APPENDIX #3		1/30/2014	1

Comm: 133024  
Date: 01/03/14  
Drawn: MVB  
Check: MVB

**MECHANICAL ROOM PLANS**

Scale: As indicated

**MP1.11**





**GENERAL NOTES**

- A. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASES OF DEMOLITION AND CONSTRUCTION. COORDINATE WITH GENERAL CONSTRUCTION.
- B. DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AND LIGHTING FIXTURES IN DEMOLITION AREAS UNLESS NOTED OTHERWISE.
- C. DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED. WALLS TO BE DEMOLISHED ARE SHOWN DASHED. DISCONNECT AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO LAST REMAINING DEVICE. FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF CIRCUITS TO ANY EXISTING DEVICES TO REMAIN. COORDINATE AND VERIFY REQUIREMENTS WITH NEW WORK IN AREA.
- D. FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
- E. FURNISH AND INSTALL CONDUIT AND/OR COMMUNICATIONS/ DATA WIRING AS NECESSARY FOR CONTINUITY OF ANY WIRING ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY COMMUNICATIONS DATA EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
- F. DISCONNECT AND REMOVE LIGHT SWITCHES IN DEMOLITION AREAS AS NECESSARY TO ACCOMMODATE NEW DOOR CONFIGURATIONS.
- G. DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES AND BACK BOXES AS NECESSARY WHERE NEW HALL CONSTRUCTION WILL INTERSECT AN EXISTING HALL. FURNISH AND INSTALL CONDUIT AND WIRE AS REQUIRED FOR CONTINUITY OF CIRCUITS.
- H. FURNISH AND INSTALL BLANK COVER PLATES OVER ALL EXISTING UNUSED OPENINGS.

**KEYED SHEET NOTES**

1. DEMOLISH ALL LIGHTING, POWER, AND SYSTEMS IN THE ROOMS OUTLINED UNLESS NOTED OTHERWISE. ALL CONDUIT AND WIRING ARE TO DEMOLISHED BACK TO SOURCE.
2. NO ELECTRICAL WORK IN THIS AREA. MAINTAIN CONNECTIONS AS REQUIRED.
3. EXISTING TELEPHONE ROOM TO BE USED AS PHASE I MECHANICAL ROOM. EQUIPMENT IN USE TO BE RELOCATED TO IDF A114 BY COUNTY. PROTECT CABLES IDENTIFIED BY COUNTY TO REMAIN. DEMOLISH ALL OTHER DEVICES, EQUIPMENT, CABLING, PANELS, ETC THIS ROOM.
4. EXISTING BALANCE STATION TO REMAIN. PROTECT AND MAINTAIN ELECTRICAL CONNECTIONS TO STATION. EXISTING IDF ROOM TO BE EXPANDED. PROTECT AND MAINTAIN EXISTING RACK AND CABLING. PROVIDE PROTECTION FROM DUST AND DEBRIS DURING DEMOLITION AND CONSTRUCTION. REPLACE LIGHTING. RELOCATE RACK AS REQUIRED TO ACCOMMODATE CONSTRUCTION OF CHASE HALL.
5. EXISTING VIDEO EQUIPMENT RACK AND ASSOCIATED CABLING TO BE RELOCATED BY COUNTY TO IDF A114. DEMOLISH ASSOCIATED POWER AND RACKWAY.
6. EXISTING TELECOMMUNICATIONS RACK AND ASSOCIATED CABLING TO BE RELOCATED BY STATE TO IDF A114. DEMOLISH ASSOCIATED POWER AND RACKWAY.
7. EXISTING PANEL FEEDING TO REMAIN. DEMOLISH EXISTING COVER FOR NEW FLUSH COVER.
8. EXISTING PANEL FEEDING MECHANICAL EQUIPMENT. MAINTAIN IN PLACE UNTIL MECHANICAL EQUIPMENT HAS BEEN RELOCATED TO PHASE II MECHANICAL ROOM. THEN DEMOLISH PANEL, BRANCH CIRCUITS, AND FEEDER BACK TO SOURCE.
9. PROVIDE TEMPORARY HALL MOUNTED FLUORESCENT STRIPS (TYPE T1) IN CORRIDOR UNTIL CEILING CONSTRUCTION IS COMPLETE. CONNECT TO EXISTING EMERGENCY CIRCUITS. COORDINATE EXACT LOCATIONS WITH ARCHITECTS AND OTHER DISCIPLINES.
10. MAINTAIN EGRESS LIGHTING AND EXIT SIGNAGE IN CORRIDOR AS REQUIRED DURING CONSTRUCTION.
11. DISCONNECT EXISTING MECHANICAL UNIT AND DEMOLISH ASSOCIATED FEEDER BACK TO SOURCE. RELEASE OVERCURRENT PROTECTION AS "SPARE".
12. DEMOLISH LIGHTING AND CONTROLS IN THIS AREA.
13. DISCONNECT ELECTRICAL AT MECHANICAL UNITS TO BE REMOVED. DEMOLISH ASSOCIATED FEEDERS BACK TO SOURCE. REFEED FROM NEW PANEL AS SHOWN ON MOTOR SCHEDULE. FIELD VERIFY OCPD AND REQUIRED FEEDER SIZE.
14. DEMOLISH EXISTING PANELBOARD AND FEEDER BACK TO SOURCE.
15. DEMOLISH EXISTING PULLBOX. INTERCEPT CONDUITS AND WIRES FEEDING 2ND FLOOR LOADS AND EXTEND AS REQUIRED. ASSUME 400A FEEDER AND (3) 20A/1P CIRCUITS. MINIMIZE DOWNTIME TO LOADS. COORDINATE SCHEDULING WITH COUNTY.
16. DEMOLISH EXISTING PANEL AND FEEDER BACK TO SOURCE. INTERCEPT AND EXTEND IN-RISE BRANCH CIRCUITS. ASSUME (30) 20A/1P CIRCUITS NEED RELOCATED.



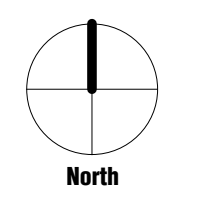
**F1 MAIN LEVEL DEMOLITION PLAN**  
1/8" = 1'-0"

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed PROFESSIONAL ENGINEER

under the laws of the State of IOWA  
*Bradley R. Johansen*  
Bradley R. JOHANSEN  
Registration Number 18475 Date 7/3/14

Description	Revisions	Date	Rev
APPENDUM #3		7/30/14	1

Comm: 133024  
Date: 7/3/14  
Drawn: A. NELSON  
Check: B. JOHANSEN



**MAIN LEVEL  
ELECTRICAL  
DEMOLITION PLAN**

Scale: 1/8" = 1'-0"

**E1.1**

IA

E

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**GENERAL NOTES**

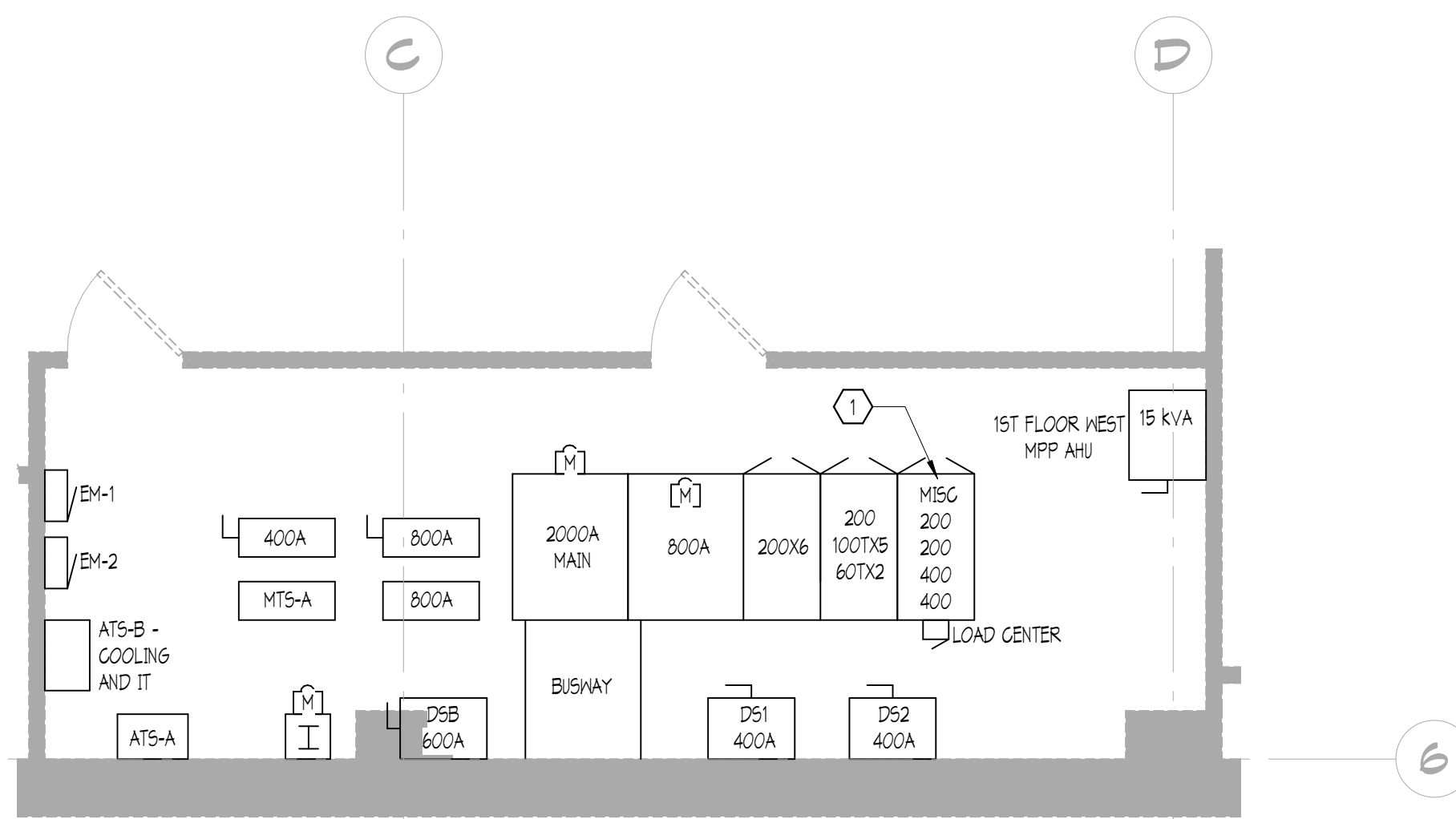
- VERIFY LOCATIONS AND ROUGH-IN REQUIREMENTS OF ALL OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN.
- CIRCUIT WIRING IS NOT SHOWN EXCEPT FOR SWITCHING INTENT OF FIXTURES AND CONTROL OF DEVICES.
- ALL WALLS AND FLOOR MOUNTED BACK BOXES AND JUNCTION BOXES SHALL BE MOUNTED RECESSED.
- 6FGC RECEPTACLES SHALL BE WIRED TO PROTECT ONLY THE DEVICES IN THAT OUTLET BOX. DOWNSTREAM DEVICES SHALL NOT BE PROTECTED BY 6FGC.
- CIRCUIT NUMBERS SHOWN ARE FOR SCHEMATIC PURPOSES AND ARE FOR DISTINGUISHING CIRCUITS. RECORD AS-BUILT CIRCUITING IN A TYPED AND DATED PANELBOARD SCHEDULE.

**POWER KEYED SHEET NOTES**

- ROUTE (1) 4" G FROM MER TO MAIN LEVEL IDF FOR USE BY COUNTY.
- POKE THROUGHS FROM COURTROOM ABOVE, BASEMENT CEILING IS PLASTER AND LATH. PROVIDE CLEAN ACCESS TO POKE-THROUGH ABOVE. PROVIDE J-HOOKS AS REQUIRED TO ALLOW CABLE ACCESS FROM CONDUITS AT NOTE 3 TO POKE-THROUGHS AT NOTE 2.
- PROVIDE CONDUIT STUB-UP TO WALL SPACE ABOVE. REFER TO SHEET E41 FOR MORE INFORMATION.
- EXISTING NOTIFIER PANEL. CONNECT ALL FIRE ALARM DEVICES TO THIS EQUIPMENT.
- FEED ALL NEW EMERGENCY LIGHTING CIRCUITS FROM PANEL EM-B1 OR NEAREST AVAILABLE NON-SPS EMERGENCY PANEL.



**F1 LOWER LEVEL POWER PLAN**  
1/8" = 1'-0"



**H2 LOWER LEVEL ELECTRICAL ROOM**  
1/4" = 1'-0"

- KEYED NOTES - ELECTRICAL ROOM**
- REMOVE SPARE FUSED DISCONNECTS AS REQUIRED TO ACCOMMODATE (2) NEW 400A FUSED SWITCHES. SWITCHES SHALL FEED CHILLER AND PANEL B1. AND BE COMPATIBLE WITH EXISTING SQUARE D FARM-02 DISTRIBUTION SECTION.

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under the laws of the State of IOWA  
*Bradley R. Johannsen*  
BRADLEY R. JOHANNSEN  
Registration Number 18475 Date 7/3/14

Description	Revisions	Date	Rev
ADDENDUM #3		7/30/14	1

Comm: 133024  
Date: 7/3/14  
Drawn: A. NELSON  
Check: B. JOHANNSEN

**LOWER LEVEL  
ELECTRICAL POWER  
PLAN**

Scale: As indicated

**E3.0**



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**GENERAL NOTES**

- A. VERIFY LOCATIONS AND ROUGH-IN REQUIREMENTS OF ALL OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN.
- B. CIRCUIT NUMBER IS NOT SHOWN EXCEPT FOR SWITCHING INTENT OF FIXTURES AND CONTROL OF DEVICES.
- C. ALL WALLS AND FLOOR MOUNTED BACK BOXES AND JUNCTION BOXES SHALL BE MOUNTED RECESSED.
- D. GFCI RECEPTACLES SHALL BE WIRED TO PROTECT ONLY THE DEVICES IN THAT OUTLET BOX. DOWNSTREAM DEVICES SHALL NOT BE PROTECTED BY GFCI.
- E. CIRCUIT NUMBERS SHOWN ARE FOR SCHEMATIC PURPOSES AND ARE FOR DISTINGUISHING CIRCUITS. RECORD AS-BUILT CIRCUITING IN A TYPED AND DATED PANELBOARD SCHEDULE. COORDINATE ALL FINAL LOCATIONS AND ELEVATIONS FOR OUTLETS IN FURNITURE SYSTEMS.

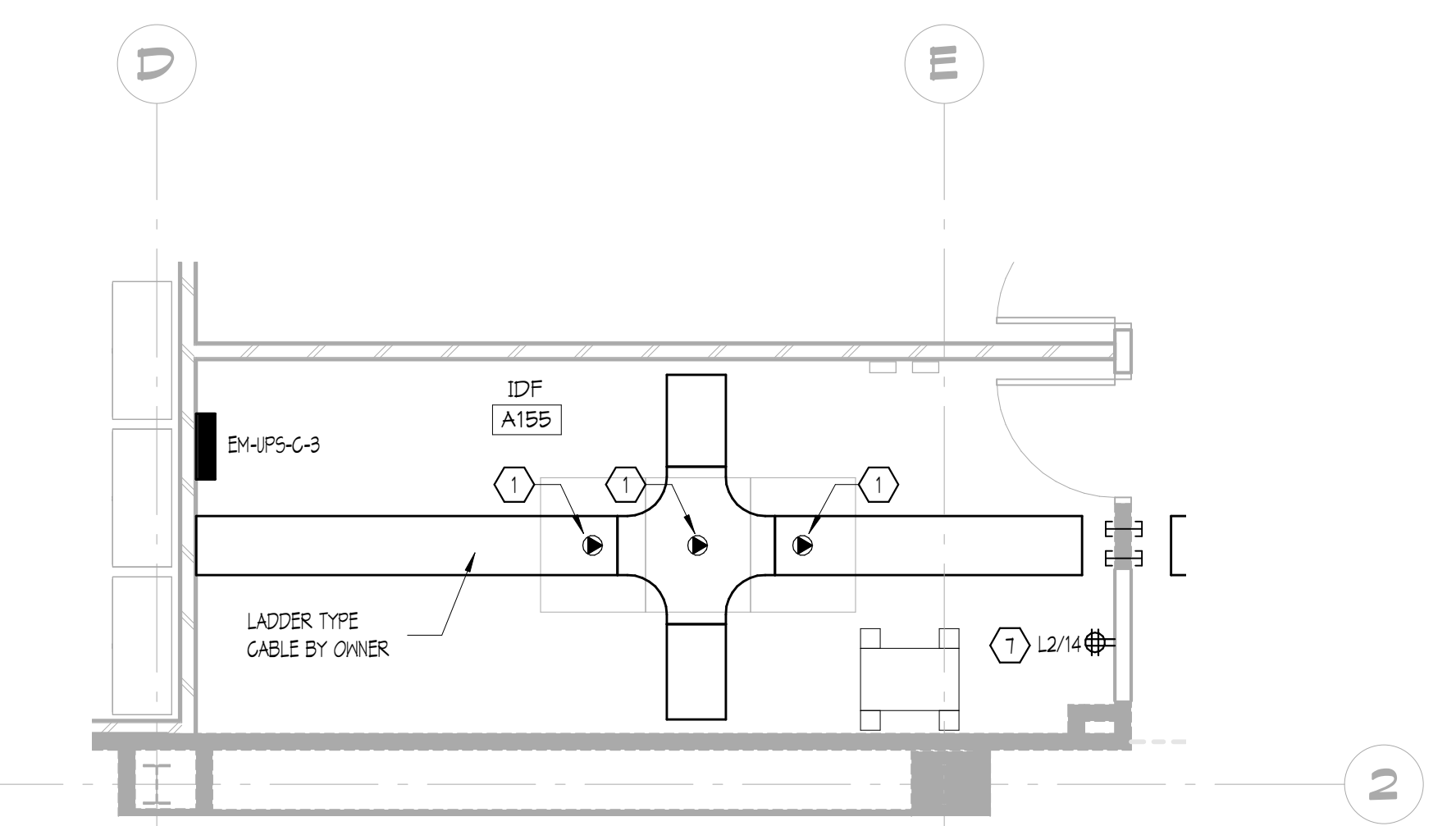
**KEYED SHEET NOTES**

1. PROVIDE AN AFG AP8661 SWITCHED RACK POWER DISTRIBUTION UNIT FOR EACH RACK (5 TOTAL). PROVIDE A 20A/1P BREAKER IN PANEL EM-IPS-C-3 FOR EACH UNIT. CONNECT TO OUTLET ON UNDERSIDE OF CABLE TRAY.
2. PROVIDE 1 1/2" C. FOR POWER CABLEING TO PRE-WIRED FURNITURE.
3. PROVIDE (2) 1 1/2" C. FOR POWER CABLEING TO PRE-WIRED FURNITURE.
4. CONNECT EACH OUTLET LABELED "UPS" TO EM-IPS-C-2. TYPICAL LOCATION OF UPS SHOWN ON DRAWING "F1" ON SHEET E3.00.
5. ROUTE ALL DMS POWER CABLEING THROUGH PARTIAL HEIGHT WALL TO BEST TYPICAL.
6. DUAL-CHANNEL FLOOR BOX. SEE DETAIL H6 ON SHEET E6.00 FOR MORE INFORMATION.
7. POWER FOR ACCESS CONTROL SYSTEM. PROVIDE CONNECTIONS AS REQUIRED.
8. RELOCATED AIR HANDLING UNITS. SEE DEMOLITION PLANS, FEED AS REQUIRED FROM NEW PANEL B1 IN STORAGE ROOM BELOW.
9. PROVIDE CONDUIT AND JUNCTION BOX FOR COLLING DOOR CONTROLS.
10. PROVIDE 120V POWER CONNECTIONS FOR AMPLIFIER AND FM TRANSMITTER.

IA



**F1 MAIN LEVEL POWER PLAN**  
1/8" = 1'-0"



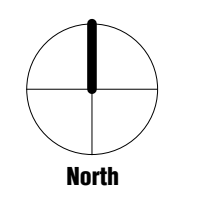
**H3 ENLARGED POWER PLAN - IDF**  
1/4" = 1'-0"

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under the laws of the State of IOWA  
*Bradley R. Johansen*  
BRADLEY R. JOHANSEN  
Registration Number 18475 Date 1/3/14

Description	Revisions	Date	Run
ADDENDUM #3		1/30/14	1

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Check: B. JOHANSEN

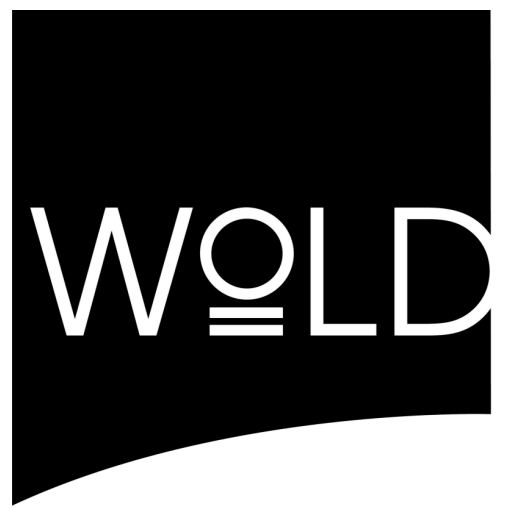


**MAIN LEVEL  
ELECTRICAL POWER  
PLAN**

Scale: As indicated

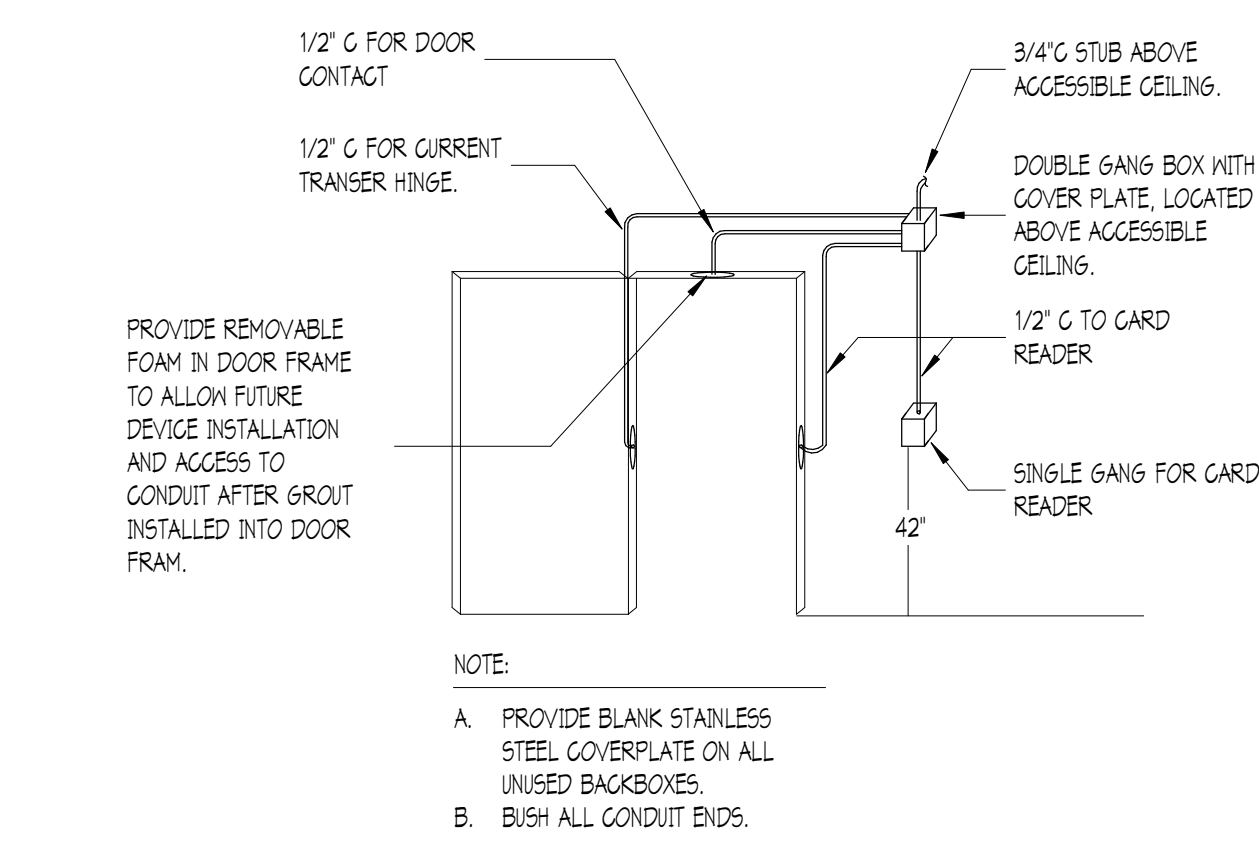
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E

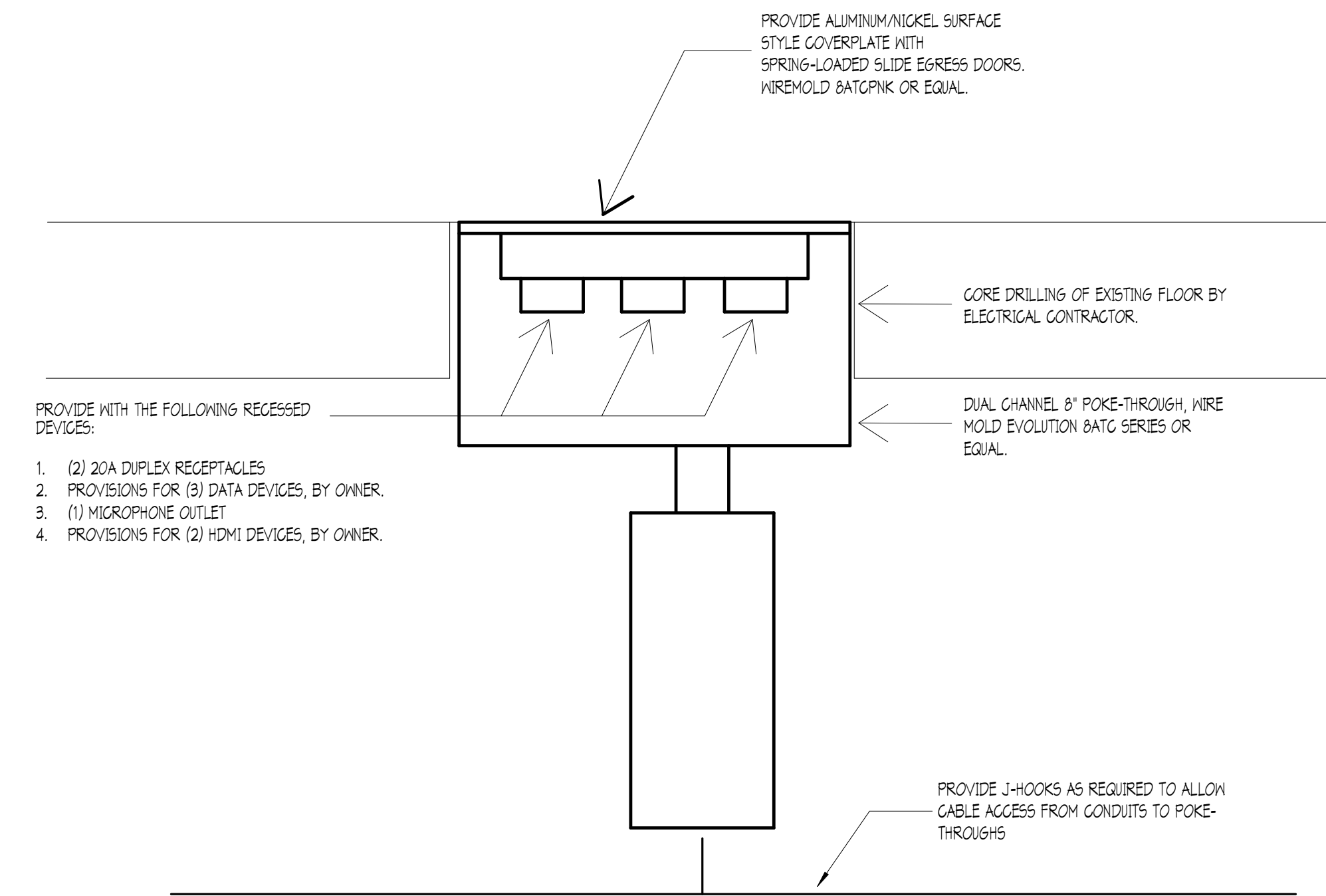


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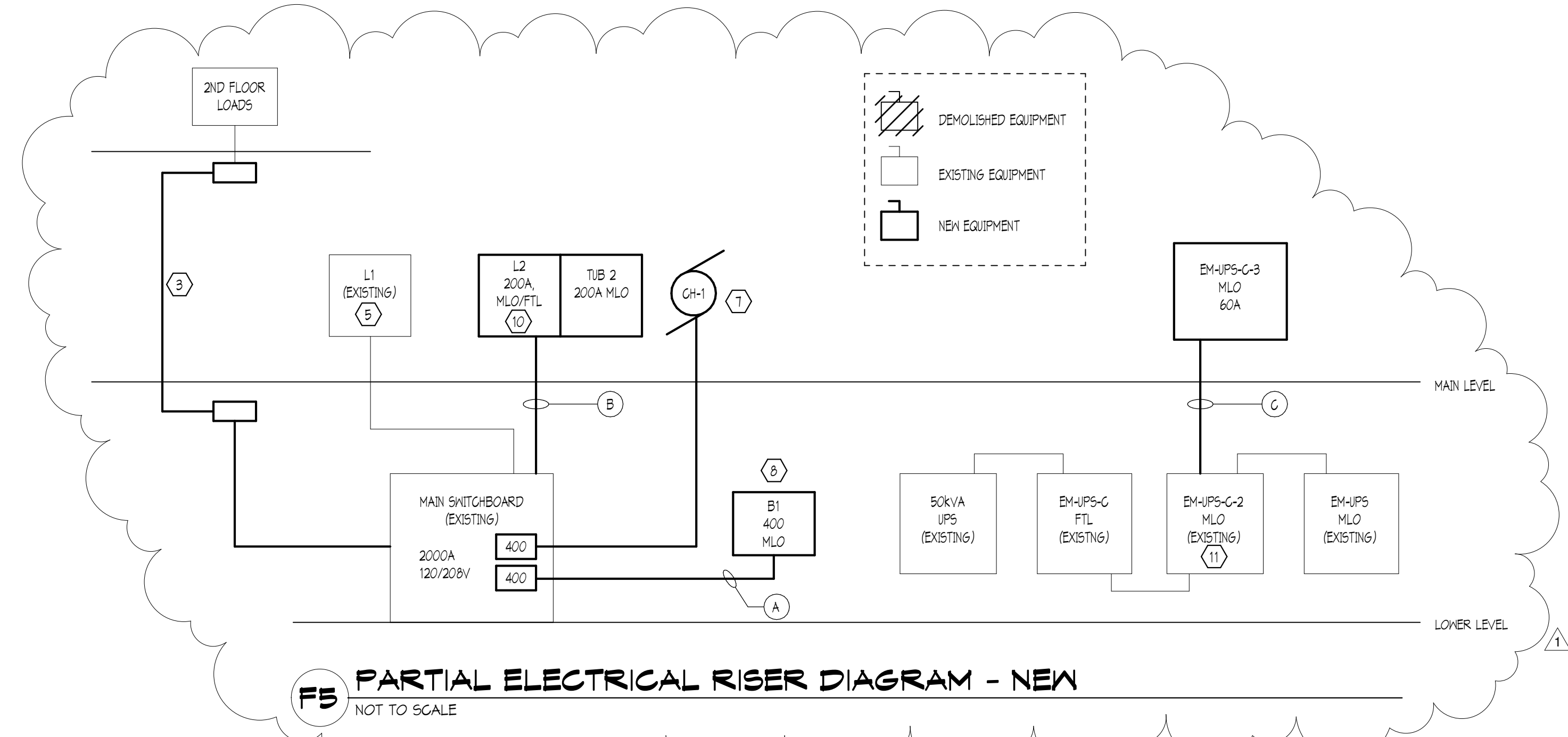


**CS SECURITY DOOR DETAIL**  
NOT TO SCALE



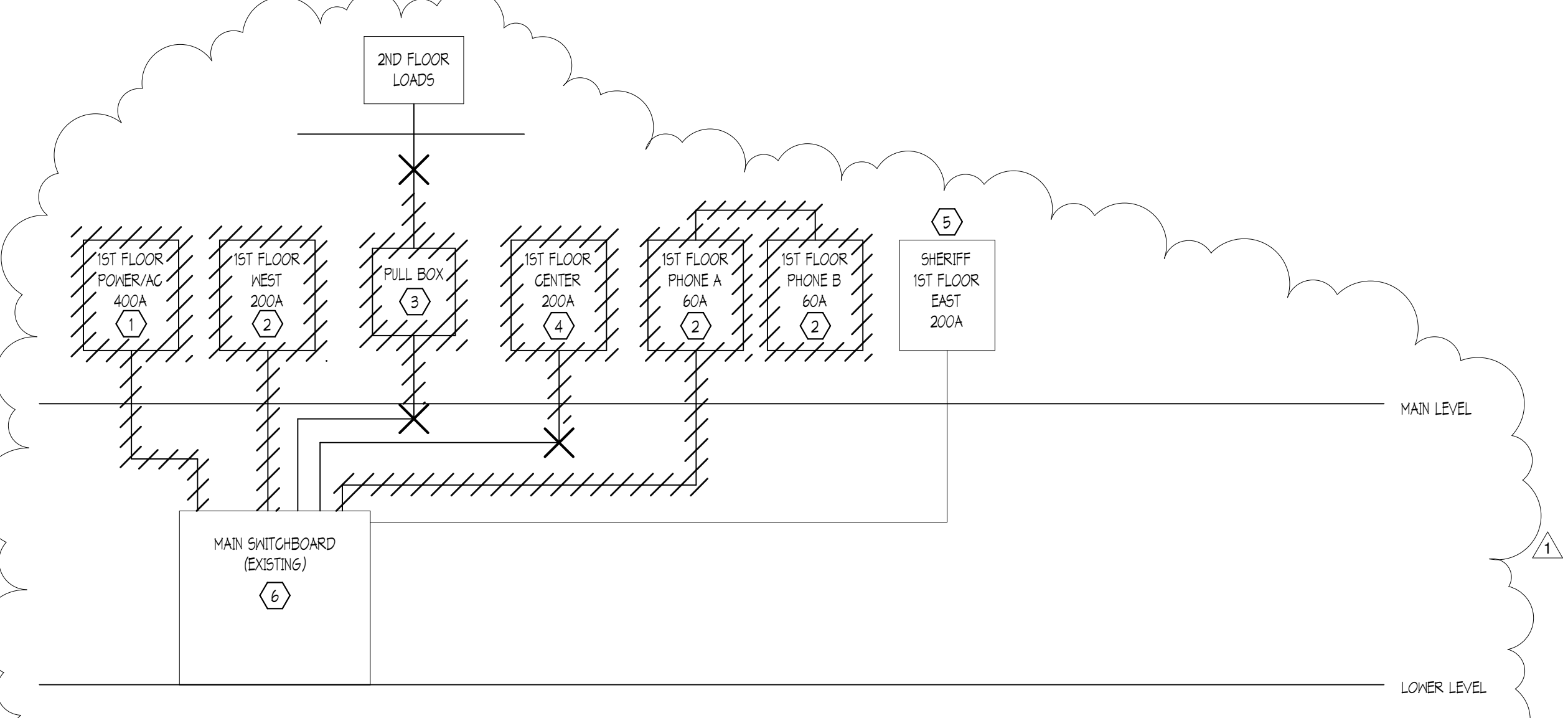
**C7 POKE-THROUGH DETAIL**  
NOT TO SCALE

FEEDER SCHEDULE												
FEEDER INFORMATION	LOAD	CONDUIT INFORMATION			WIRING SYSTEM FOR VOLTAGE	PHASE, NEUTRAL AND GND WIRE INFORMATION					WIRE INFORMATION	
		SETS OF CONDUIT	SIZE	TYPE		PHASE WIRE QUANTITY	NEUTRAL WIRE SIZE	NEUTRAL 5 OR D	GND WIRE SIZE	WIRE TYPE	WIRE INCL	
A	400A	1	3-1/2"	EMT		4	500	500	5	2	CU	THHN
B	200A	1	2"	EMT		4	3/0	3/0	5	6	CU	THHN
C	60A	1	1-1/4"	EMT		4	4	4	5	10	CU	THHN



**F5 PARTIAL ELECTRICAL RISER DIAGRAM - NEW**  
NOT TO SCALE

- KEYED SHEET NOTES**
- EXISTING PANEL FEEDING MECHANICAL PANEL EQUIPMENT. MAINTAIN IN PLACE UNTIL NEW PANEL, B1 IS INSTALLED AND MECHANICAL EQUIPMENT HAS BEEN RELOCATED TO IT; THEN DEMOLISH PANEL, FEEDER, AND ALL ASSOCIATED BRANCH CIRCUITS BACK TO SOURCE.
  - DEMOLISH EXISTING PANEL, FEEDER, AND ALL ASSOCIATED BRANCH CIRCUITS BACK TO SOURCE.
  - DEMOLISH EXISTING PULLBOX. INTERCEPT CONDUITS AND WIRES FEEDING 2ND FLOOR LOADS AND EXTEND AS REQUIRED. ASSUME 400A FEEDER AND (3) 20AMP BRANCH CIRCUITS. MINIMIZE DOWNTIME TO LOADS. COORDINATE SCHEDULING WITH COUNTY.
  - DEMOLISH EXISTING PANEL AND FEEDER BACK TO SOURCE. INTERCEPT AND EXTEND IN-RACE BRANCH CIRCUITS TO NEW PANEL L2. DEMOLISH ABANDONED CIRCUITS. ASSUME (30) 20AMP CIRCUITS NEED RELOCATED.
  - EXISTING SHERIFFS PANEL TO REMAIN. DEMOLISH EXISTING COVER AND REPLACE WITH NEW FLUSH COVER. MAINTAIN FEEDER. PROVIDE NEW BRANCH CIRCUIT BREAKERS AS REQUIRED. RELABEL PANEL AS "L1". VERIFY WHICH SWITCH IN MAIN SWITCHBOARD FEEDS PANEL AND RELABEL ACCORDINGLY.
  - RELABEL ABANDONED SWITCHES AS SPARES. REMOVE EXISTING SPARE DISCONNECTS AS REQUIRED TO ACCOMMODATE NEW DISCONNECTS.
  - FEED CHILLER FROM NEW 400A FIXED DISCONNECT. SEE DETAIL H2/E3.0. SEE MOTOR SCHEDULE FOR FEEDER SIZE.
  - PROVIDE PANEL B1. FEED NEW 400A FIXED DISCONNECT. SEE DETAIL H2/E3.0.
  - NOT USED.
  - PROVIDE PANEL L2. FEED FROM FUSED DISCONNECT SWITCH ABANDONED BY DEMOLISHED PANEL IN EXISTING CLERK'S AREA. PROVIDE NEW FEEDER AS SHOWN. EXTEND CIRCUITS FROM DEMOLISHED PANEL "1ST FLOOR CENTER" AS REQUIRED.
  - PROVIDE NEW 60A/3P BREAKER IN EXISTING PANEL TO FEED NEW EM-IPS-G-3.



**H5 PARTIAL ELECTRICAL RISER DIAGRAM - DEMOLITION**  
NOT TO SCALE

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*Bryley R. Johannsen*  
BRYLEY R. JOHANNSEN  
Registration Number 18475 Date 1/3/14

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Date: 1/3/14  
Drawn: A. NELSON  
Check: B. JOHANNSEN

**ELECTRICAL RISER  
DIAGRAM AND  
DETAILS**

Scale: As indicated

**E6.0**

IA

E



LOAD INFORMATION		WIRE QUANTITY AND SIZE										STARTER				DISCONNECT				CTRLS BY	NOTES	MTR					
MTR	DESCRIPTION	LOC	LOAD UNIT	VOLTAGE	PANEL	SET(S)	SIZE	TYPE	PH	PHASE	NEUT	COND	TYPE	NSUL	SUPPLIED	INSTALLED	TYPE	SIZE	LOC	SUPPLIED	INSTALLED	TYPE	LOC	CTRLS BY	NOTES	MTR	
AHU-1	AIR HANDLING UNIT	A105	53.2	MCA	208/3	B-1	1	3/4"	EMT	3	6 AWG	10 AWG	CJ	THHN	MFR	MFR	VFD	MTR	ELEC	ELEC	NFS	60A	MTR	MECH	6.7, 8	AHU-1	
AHU-2	AIR HANDLING UNIT	A156	37.3	MCA	208/3	B-1	1	3/4"	EMT	3	6 AWG	10 AWG	CJ	THHN	MFR	MFR	VFD	MTR	ELEC	ELEC	NFS	60A	MTR	MECH	6.7, 8	AHU-2	
EX-AHU	EXISTING AIR HANDLING UNIT	A140				B-1	SEE NOTES	EMT	3	SEE NOTES	SEE NOTES	CJ	THHN	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	MECH	1.4	EX-AHU	
EX-AHU	EXISTING AIR HANDLING UNIT	A140				B-1	SEE NOTES	EMT	3	SEE NOTES	SEE NOTES	CJ	THHN	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	MECH	1.4	EX-AHU	
EX-AHU	EXISTING AIR HANDLING UNIT	A140				B-1	SEE NOTES	EMT	3	SEE NOTES	SEE NOTES	CJ	THHN	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	MECH	2.4	EX-AHU	
EX-AHU	EXISTING AIR HANDLING UNIT	A140				B-1	SEE NOTES	EMT	3	SEE NOTES	SEE NOTES	CJ	THHN	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	SEE NOTES	MECH	3.4	EX-AHU	
CH-1	CHILLER	EXTIOR	316	MCA	208/3	EX-MSB	1	2 1/2"	EMT	3	400 KCMIL	2 AWG	CJ	THHN	MFR	MFR		MTR	ELEC	ELEC	NFS	400A	MTR	MECH	5	CH-1	
CRU-1A	COMPUTER ROOM UNIT (INDOOR)	A155	1	MCA	208/1	L2	1	3/4"	EMT	2	12 AWG	12 AWG	CJ	THHN						ELEC	ELEC	NMS	15A	MTR	MECH		CRU-1A
CRU-1B	COMPUTER ROOM UNIT (EXTERIOR)	CANDOPY	17.1	MCA	208/1	L2	1	3/4"	EMT	2	12 AWG	12 AWG	CJ	THHN						ELEC	ELEC	NMS	20A	MTR	MECH		CRU-1B
R-1	HOT WATER PUMP	BOLDR	3	HP	208/3	B-1	1	3/4"	EMT	3	12 AWG	12 AWG	CJ	THHN	MECH	MECH	VFD	MTR	ELEC	ELEC	NFS	30A	MTR	MECH		R-1	
P-2	HOT WATER PUMP	BOLDR	3	HP	208/3	B-1	1	3/4"	EMT	3	12 AWG	12 AWG	CJ	THHN	MECH	MECH	VFD	MTR	ELEC	ELEC	NFS	30A	MTR	MECH		P-2	
P-3	CHILLED WATER PUMP	BOLDR	5	HP	208/3	B-1	1	3/4"	EMT	3	12 AWG	12 AWG	CJ	THHN	MECH	MECH	VFD	MTR	ELEC	ELEC	NFS	30A	MTR	MECH		P-3	
P-4	CHILLED WATER PUMP	BOLDR	5	HP	208/3	B-1	1	3/4"	EMT	3	12 AWG	12 AWG	CJ	THHN	MECH	MECH	VFD	MTR	ELEC	ELEC	NFS	30A	MTR	MECH		P-4	
OOD-1	OVERHEAD COILING DOOR	A149	1/3	HP	120/1	L2	1	3/4"	EMT	2	12 AWG	12 AWG	CJ	THHN	NONE	NONE		MTR	ELEC	ELEC	NMS	15A	MTR	MECH	9	OOD-1	

GENERAL NOTES:  
A. ALL FUSE SIZES/BREAKER TRIPS ARE ESTIMATED. CONTRACTOR TO FIELD VERIFY INSTALLED MOTOR REQUIREMENTS.  
KEYWORD NOTES:  
1. PROVIDE NEW FEEDER AND OVERCURRENT PROTECTION, ASSUME 30A, FIELD VERIFY EXACT SIZE.  
2. PROVIDE NEW FEEDER AND OVERCURRENT PROTECTION, ASSUME 60A, FIELD VERIFY EXACT SIZE.  
3. PROVIDE NEW FEEDER AND OVERCURRENT PROTECTION, ASSUME 100A, FIELD VERIFY EXACT SIZE.  
4. RELOCATE STARTERS, DISCONNECTS, SMOKE DETECTORS, ETC AS REQUIRED.  
5. FEED FROM MSB/40A FUSED DISCONNECT IN EXISTING MSB.  
6. SUPPLY AND CONNECT DUCT SMOKE DETECTORS ON BOTH SUPPLY AND RETURN, INSTALLATION BY MECHANICAL.  
7. PROVIDE ADDITIONAL 120V CONNECTION TO INTEGRAL RECEPTACLE FEED FROM NEAREST SERVICE OUTLET BRANCH CIRCUIT.  
8. INSTALL VFD SUPPLIED BY MECHANICAL.  
9. PROVIDE CONDUIT AND BOX ROUGH-IN FOR CONTROLS.

PANELBOARD SCHEDULE																		
NAME	EX-MSB-C-3	VOLTAGE			120/208V 3P/4W													
FED FROM	EX-MSB-C-2	BUS	60 A	MLO														
LOCATION	A155 EP	SHORT CIRCUIT BRACNG	22 KAIC	FULLY RATED PANELBOARD														
MOUNTING	SURFACE	LUG & NEUT BUS REQMT	SURFACE	SINGLE NEUTRAL BUS														
Qty	Description	LT	KW	RH	CCB	A	B	C	Qty	Description	LT	KW	RH	CCB	A	B	C	
1	FDU-1ST FLOOR	P	2	3	20/3	0.7			2	FUTURE 2ND FLR								
3	\					0.7			4	\								
7	FDU-1ST FLOOR	P	2	3	20/3	0.7			8	FUTURE 2ND FLR								
9	\					0.7			10	\								
13	FDU-1ST FLOOR	P	2	3	20/3	0.7			14	FUTURE 3RD FLR								
15	\					0.7			16	\								
19	SPARE		20	1/					20	FUTURE 3RD FLR								
21	SPARE		20	1/					22	\								
23	SPARE		20	1/					24	\								
25	\								26	\								
27	\								28	\								
29	\								30	\								

Panelboard Notes:

POWER DISTRIBUTION PANELBOARD																		
NAME	B-1	VOLTAGE			120/208V 3P/4W													
FED FROM	EX-MSB	BUS	60 A	MLO														
LOCATION	LOWER LEVEL STORAGE	SHORT CIRCUIT BRACNG	22 KAIC	FULLY RATED PANELBOARD														
MOUNTING	SURFACE	LUG & NEUT BUS REQMT	SURFACE	SINGLE NEUTRAL BUS														
Qty	Description	LT	KW	RH	CCB	A	B	C	Qty	Description	LT	KW	RH	CCB	A	B	C	
1	R-1	M	3.8	3	30/3	20 A	RK-1	1	1									
2	\								3	\								
4	P-2	M	3.8	3	30/3	20 A	RK-1	1	1									
5	\								6	\								
7	P-3	M	6.0	3	30/3	25 A	RK-1	2	2									
8	\								9	\								
10	P-4	M	6.0	3	30/3	25 A	RK-1	2	2									
11	\								12	\								
13	EX-AHU	M	6.0	3	30/3	30 A	RK-1	2	2									
14	\								15	\								
16	EX-AHU	M	6.0	3	30/3	30 A	RK-1	2	2									
17	\								18	\								
19	EX-AHU	M	11.0	3	60/3	60 A	RK-1	4	4									
21	\								22	\								
23	EX-AHU	M	11.0	3	60/3	60 A	RK-1	4	4									
24	\								25	\								
26	EX-AHU	M	19.0	3	100/3	100 A	RK-1	6	6									
27	\								28	\								
28	AHU-1	M	19.2	3	100/3	80 A	RK-1	6	6									
29	\								30	\								
31	AHU-2	M	13.4	3	60/3	60 A	RK-1	4	4									
32	\								33	\								
33	\								34	SPARE		3	30/3	0	0	0	0	0
35	\								36	\								
37	SPARE		3	30/3	0	0	0	0	38	\								
39	\								40	SPARE		3	60/3	0	0	0	0	0
41	\								42	\								

Panelboard Notes:  
<-FIELD VERIFY DISCONNECT SIZE PRIOR TO ORDERING EQUIPMENT

LUMINAIRE FIXTURE SCHEDULE												
ID	FIXTURE TYPE	MOUNTING	VOLTS	LAMPS		CONTROL MEDIA (LENS, LOUVERS, ETC.)	FIXTURE DESCRIPTION	MANUFACTURERS' SERIES NUMBERS	SPARE	NOTES		
				QTY	WATTS							
A	2/4 RECESSED 2-LAMP T5 FLUORESCENT ZERO PLENUM	RECESSED IN GRID CEILING	120	2	28	FO28T5 4100K	POST-PAINTED MATTE WHITE STATIC TROFFER ZERO PLENUM INBOARD-OUTBOARD SWITCHING MASTER/SLAVE CONFIGURATION (2) 2-LAMP BALLASTS PER SWITCHING PAIR	COLUMBIA ZPT-24-2-28-G-LSRS-EP-U CORELITE Z1 SERIES H.E. WILLIAMS SP SERIES MARK ARCHITECTURAL NOL SERIES	0			
A1	2/4 RECESSED 2-LAMP T5 FLUORESCENT ZERO PLENUM	RECESSED IN GRID CEILING	120	2	28	FO28T5 4100K	POST-PAINTED MATTE WHITE STATIC TROFFER ZERO PLENUM (1) 2-LAMP BALLAST	COLUMBIA ZPT-24-2-28-G-LSRS-EP-U CORELITE Z1 SERIES H.E. WILLIAMS SP SERIES MARK ARCHITECTURAL NOL SERIES	0			
C	1/4 RECESSED 2-LAMP T5 FLUORESCENT ZERO PLENUM	RECESSED IN GRID CEILING	120	2	28	FO28T5 4100K	POST-PAINTED MATTE WHITE STATIC TROFFER ZERO PLENUM (1) 2-LAMP BALLAST	COLUMBIA ZPT-14-2-28-G-LSRS-EP-U CORELITE Z1 SERIES H.E. WILLIAMS SP SERIES MARK ARCHITECTURAL NOL SERIES	0			
D	LED 6" DOWNLIGHT	RECESSED	120	1	28	LED 4000K	HEAT SINK AND 50K RATED LIFE 1000 LUMEN OUTPUT DIMMABLE WHITE TRIM FULL 5 YEAR WARRANTY	PRESCOLITE D6LED-60BLED4-40K-8-FL35 LITHONIA REALITY LED SERIES JUNO LIGHTING L6 SERIES OR APPROVED EQUAL	0			
D1	LED 2" DOWNLIGHT	RECESSED	120	1	28	LED 4000K	HEAT SINK AND 50K RATED LIFE 900 LUMEN OUTPUT DIMMABLE ALUMINUM TRIM FULL 5 YEAR WARRANTY 25 DEGREE BEAM SPREAD	PRESCOLITE D2LED-20LED-6L-40K-8-MD25	0			
D2	LED 2" DOWNLIGHT	RECESSED	120	1	28	LED 4000K	HEAT SINK AND 50K RATED LIFE 900 LUMEN OUTPUT DIMMABLE ALUMINUM TRIM FULL 5 YEAR WARRANTY 45 DEGREE BEAM SPREAD	PRESCOLITE D2LED-20LED-6L-40K-8-FL45	0			
D3	LED 6" EXTERIOR DOWNLIGHT	RECESSED	120	1	28	LED 4000K	CLEAR WET LENS	HEAT SINK AND 50K RATED LIFE 900 LUMEN OUTPUT ALUMINUM TRIM FULL 5 YEAR WARRANTY	LITHONIA DOM6 LED-40K-120-LED61	0		
E1	EXT SIGN SINGLE FACE	UNIVERSAL	120	LED	LED	LED	RED OPTICAL DIFFUSER	MATTE WHITE CAST ALUMINUM HOUSING BLACK STENCIL FACE W/ RED BACKGROUND INVISIBLE ARROW KNOCKOUTS SELF-DIAGNOSTIC	LITHONIA LE-S-1 SERIES DUAL-LITE SEMBRA SERIES MCPHILBEN 55 SERIES SURE-LITES CX SERIES EXTROXN-400 SERIES LIGHTOLIER LD SERIES LIGHTALARM XLED SERIES	0		
F	INDUSTRIAL 4-FOOT FIXTURE 2-LAMP T5 FLUORESCENT	CHAIN HUNG	120	2	28	FO28T5 4100K	4"-DEEP 14"-WIDE STEEL REFLECTOR 10-15% UPLIGHT	POST-PAINTED MATTE WHITE END PLATES/REFLECTOR ALIGNERS AS REQD TWIST LOCK SOCKET, SPRING-LOADED LATCH WIRE GUARD	LITHONIA AFP-2-28-MVOLT DAY-BRITE SF SERIES METALUX MPB SERIES COLUMBIA KL-BIN SERIES H.E. WILLIAMS 82 SERIES	0		
F1	STRIP LIGHT 4-FOOT FIXTURE 1-LAMP T5 FLUORESCENT	SEE ARCH DETAILS	120	1	28	FO28T5 4100K	NO REFLECTOR	POST-PAINTED MATTE WHITE END PLATES/REFLECTOR ALIGNERS AS REQD TWIST LOCK SOCKET, SPRING-LOADED LATCH	H.E. WILLIAMS 73-4-1-28T5-UNV LITHONIA Z SERIES METALUX SM SERIES	0		
G	PERIMETER RECESSED LENGTH PER PLAN 1-LAMP T5 FLUORESCENT	SURFACE	120	1	28	FO28T5 4100K	CONTINUOUS PARABOLIC LOUVER	POST-PAINTED MATTE WHITE END PLATES/REFLECTOR ALIGNERS AS REQD TWIST LOCK SOCKET, SPRING-LOADED LATCH	LIGHTOLIER P87-1 SERIES MARK ARCHITECTURAL MP SERIES OR APPROVED EQUAL BY DAYBRITE, NEORAY, FOCAL ALEVA, OR LITE CONTROL	0		
T	TEMPORARY STRIP LIGHT FOR PUBLIC CORRIDOR	WALL	120	2	32	FO32T8 4100K	NO REFLECTOR	TYPICAL STRIP, MAY USE NEW OR EXISTING FIXTURE. CONTRACTOR TO MAINTAIN POSSESSION ON FIXTURE AT COMPLETION OF PROJECT		0		

GENERAL NOTES:  
A. Locations on drawings of industrial-type fixtures are approximate to show general intent. Verify all locations and heights with other disciplines prior to clear all equipment and piping.  
B. Fixture quantities are per cross section unless otherwise noted.  
C. spare requirements

FOOTNOTES:  
\* Fixtures added in Addendum #3.

PANELBOARD SCHEDULE												
NAME	EXISTING L1	VOLTAGE			120/208V 3P/4W							
FED FROM	EXISTING MSB	BUS	100 A	MLO								
LOCATION	A107	SHORT CIRCUIT BRACNG	22 KAIC	FULLY RATED PANELBOARD								
MOUNTING	FLUSH	LUG & NE										



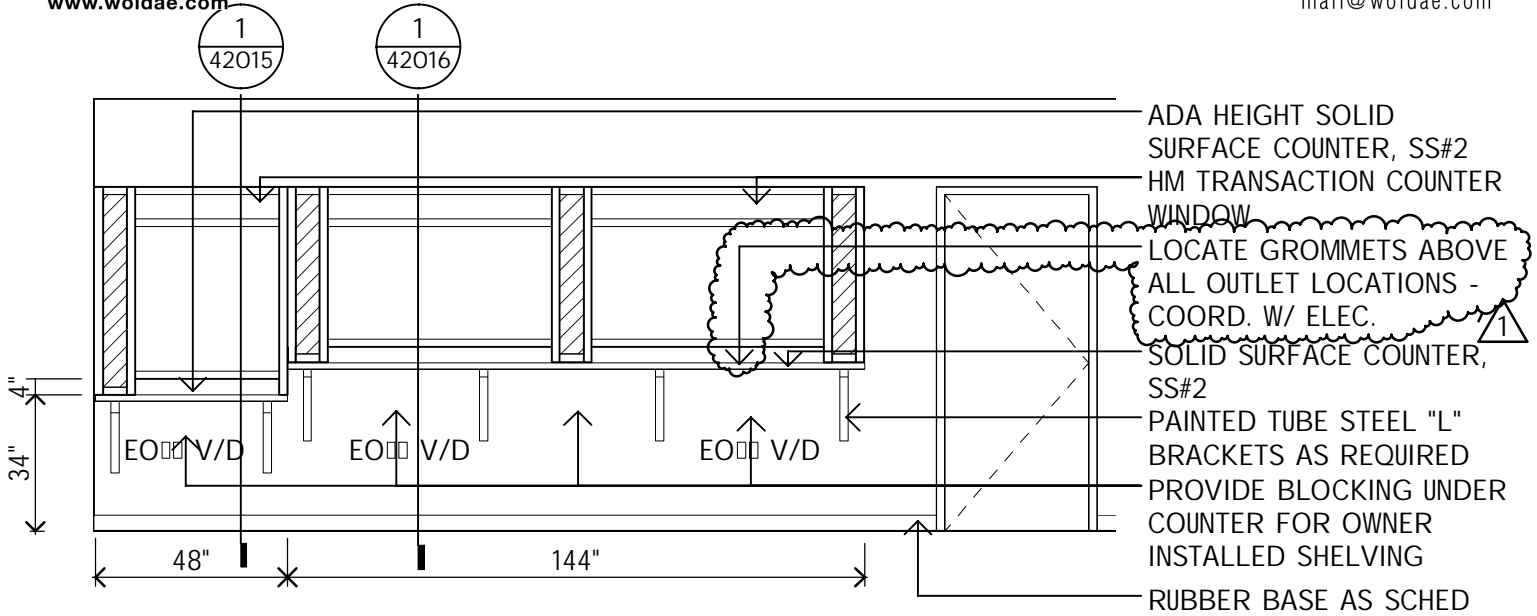


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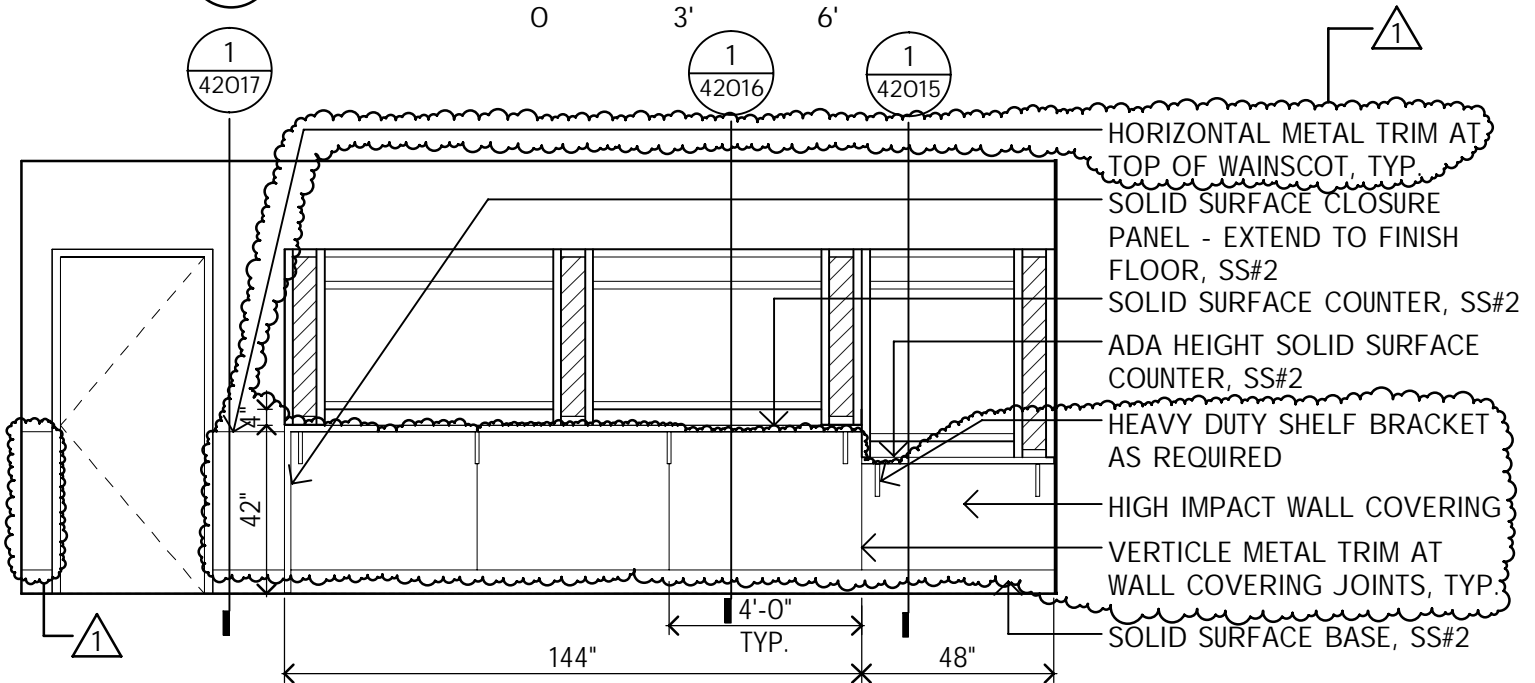
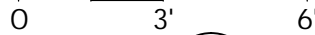
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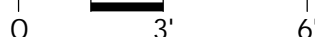
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1 CASEWORK @ CLERKS CASHIER-EAST  
1/4" = 1'-0"



2 CASEWORK @ CLERKS CASHIER-WEST  
1/4" = 1'-0"



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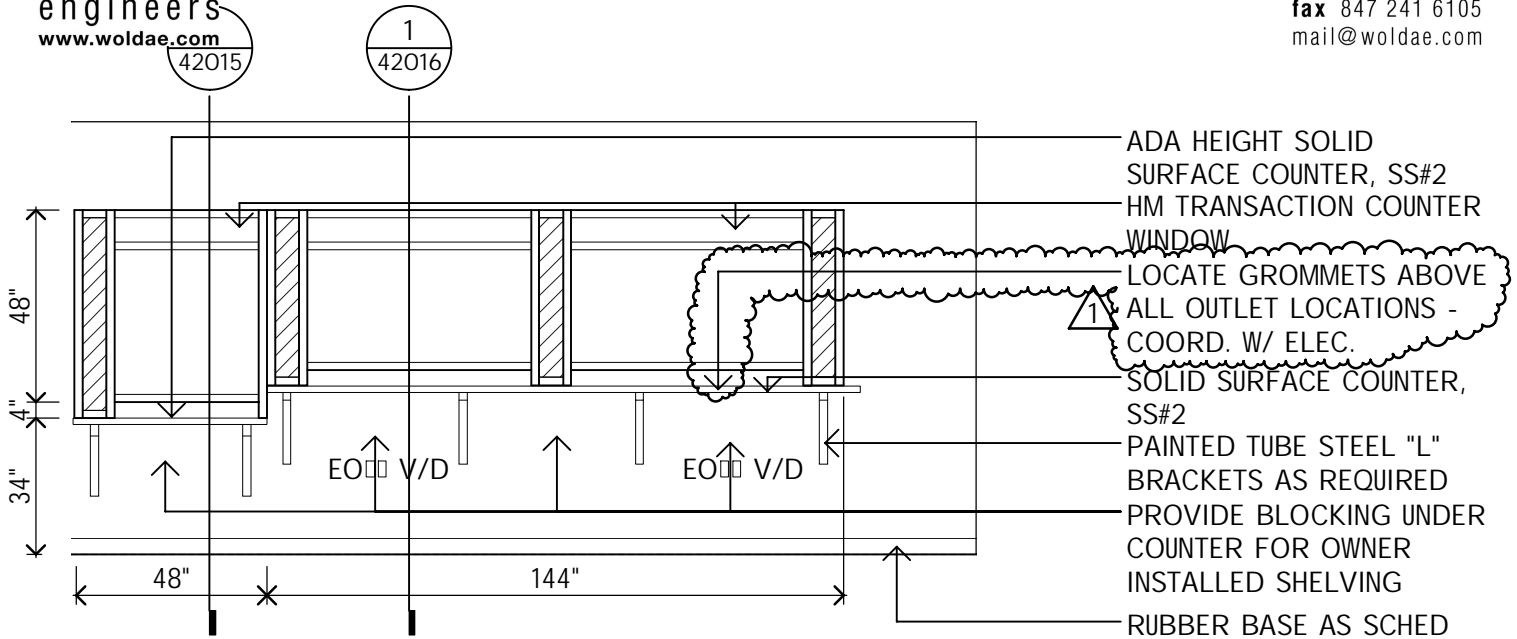
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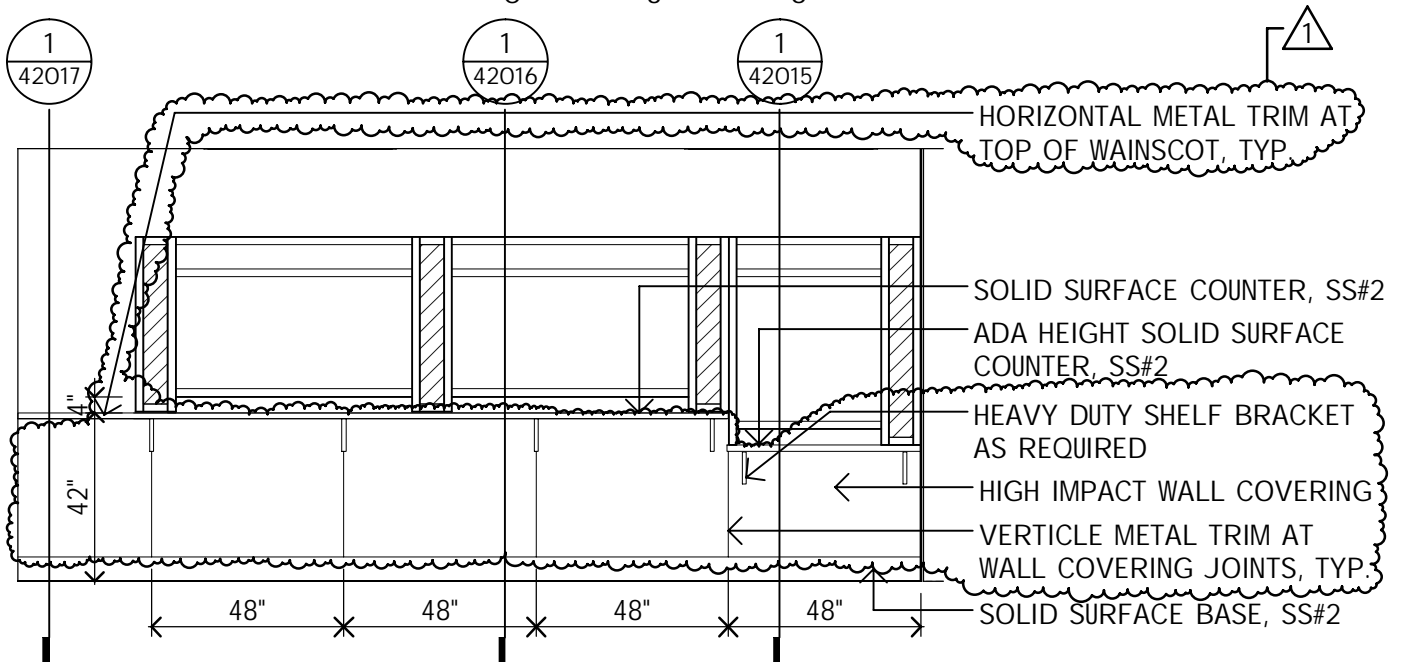
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1 CASEWORK @ CLERKS WAITING-NORTH  
1/4" = 1'-0"



2 CASEWORK @ CLERKS WAITING-SOUTH  
1/4" = 1'-0"

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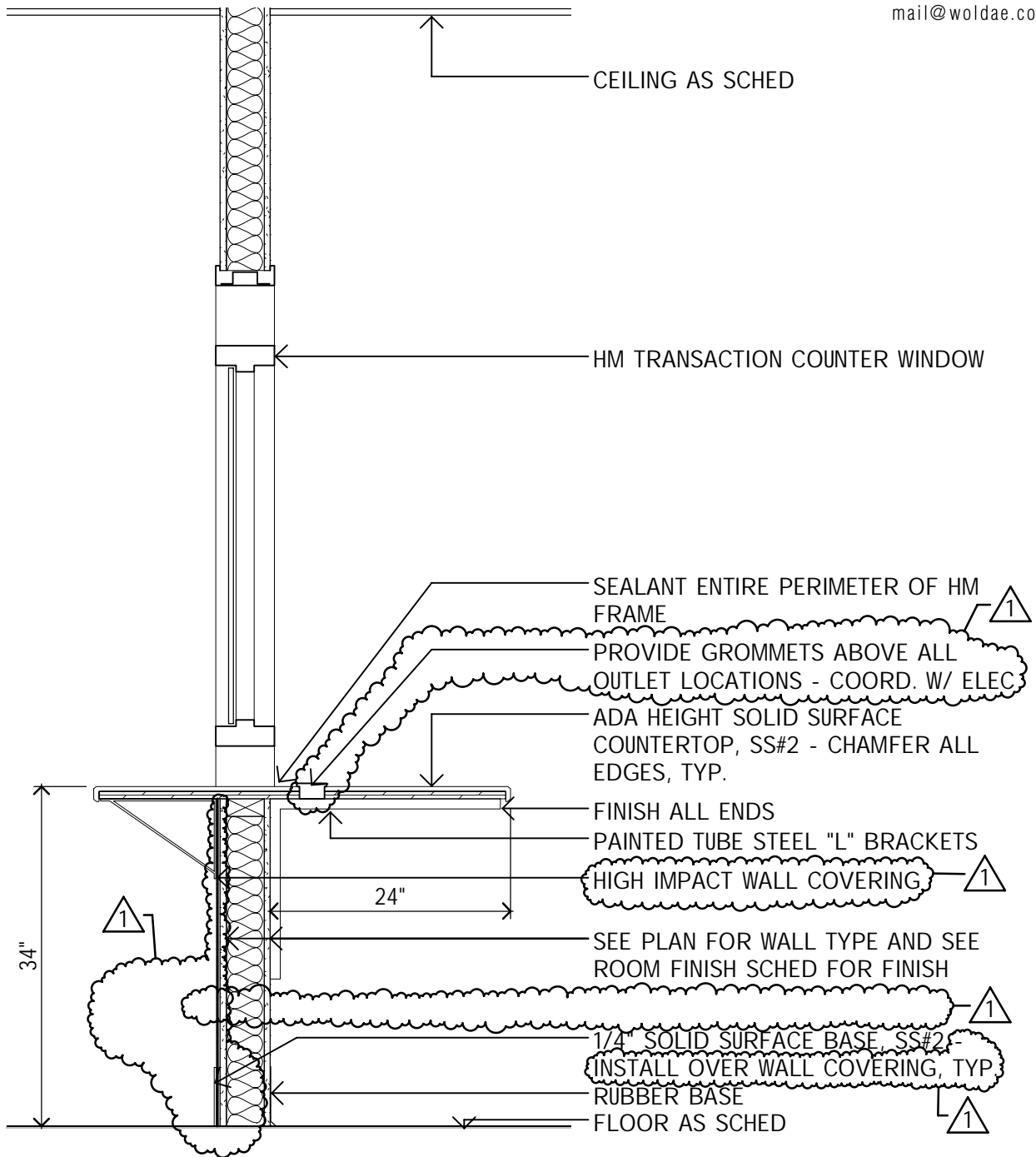
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1 SECTION @ ADA CLERKS CASHIER  
3/4" = 1'-0"  
0 1' 2'

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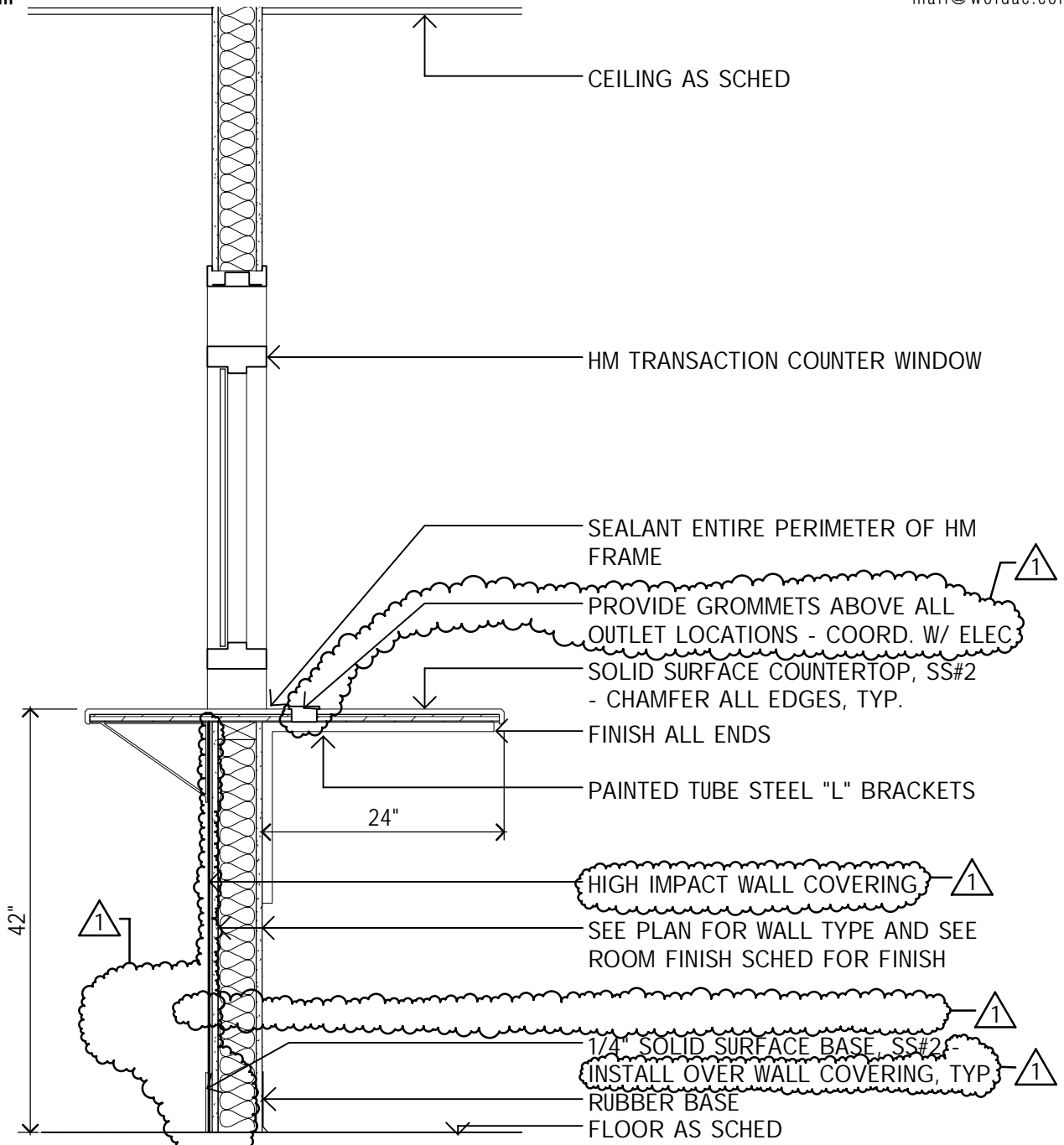
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1 SECTION @ CLERKS CASHIER  
3/4" = 1'-0"  
0 1' 2'

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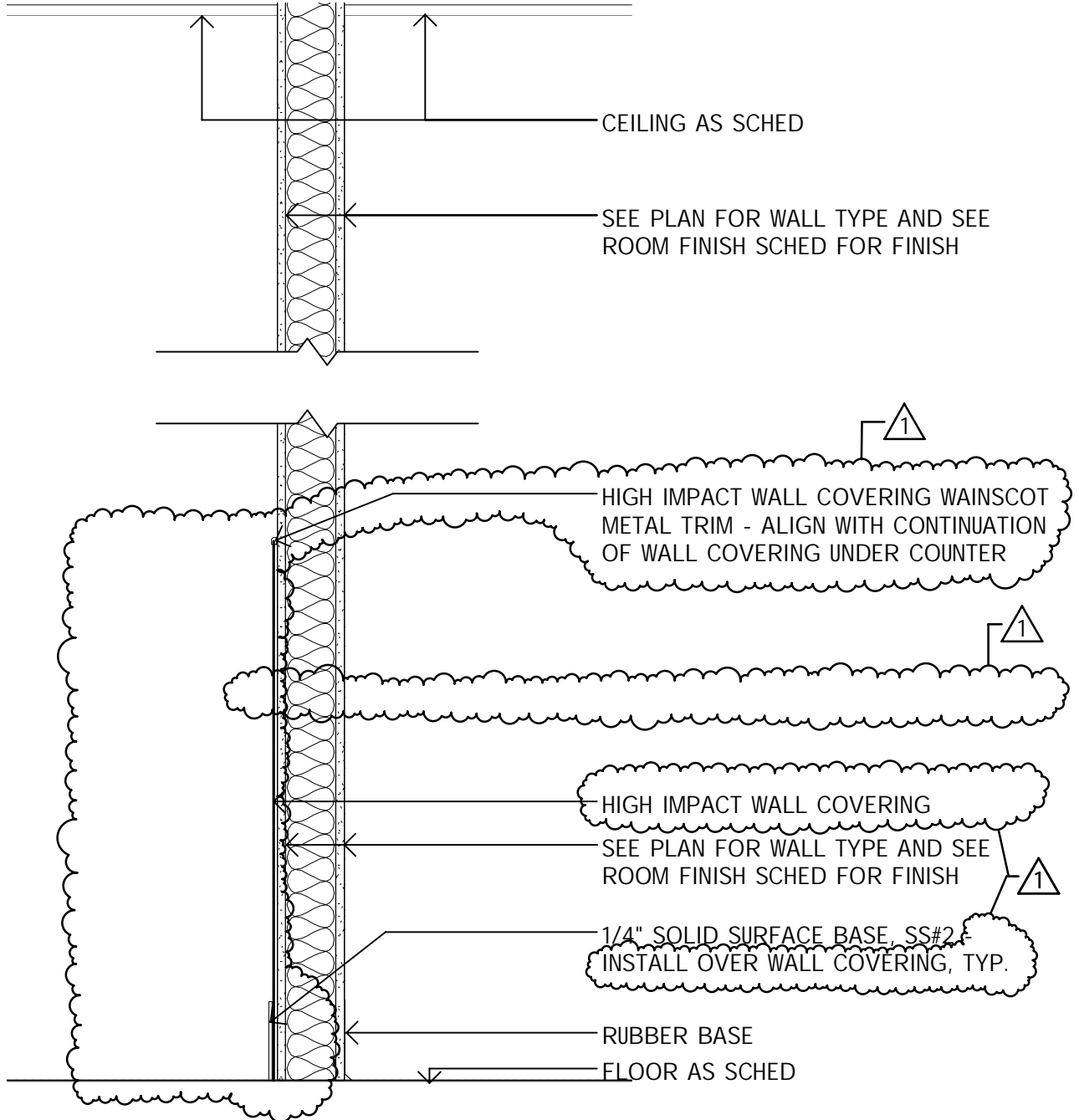
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1 SECTION @ CLERKS CASHIER



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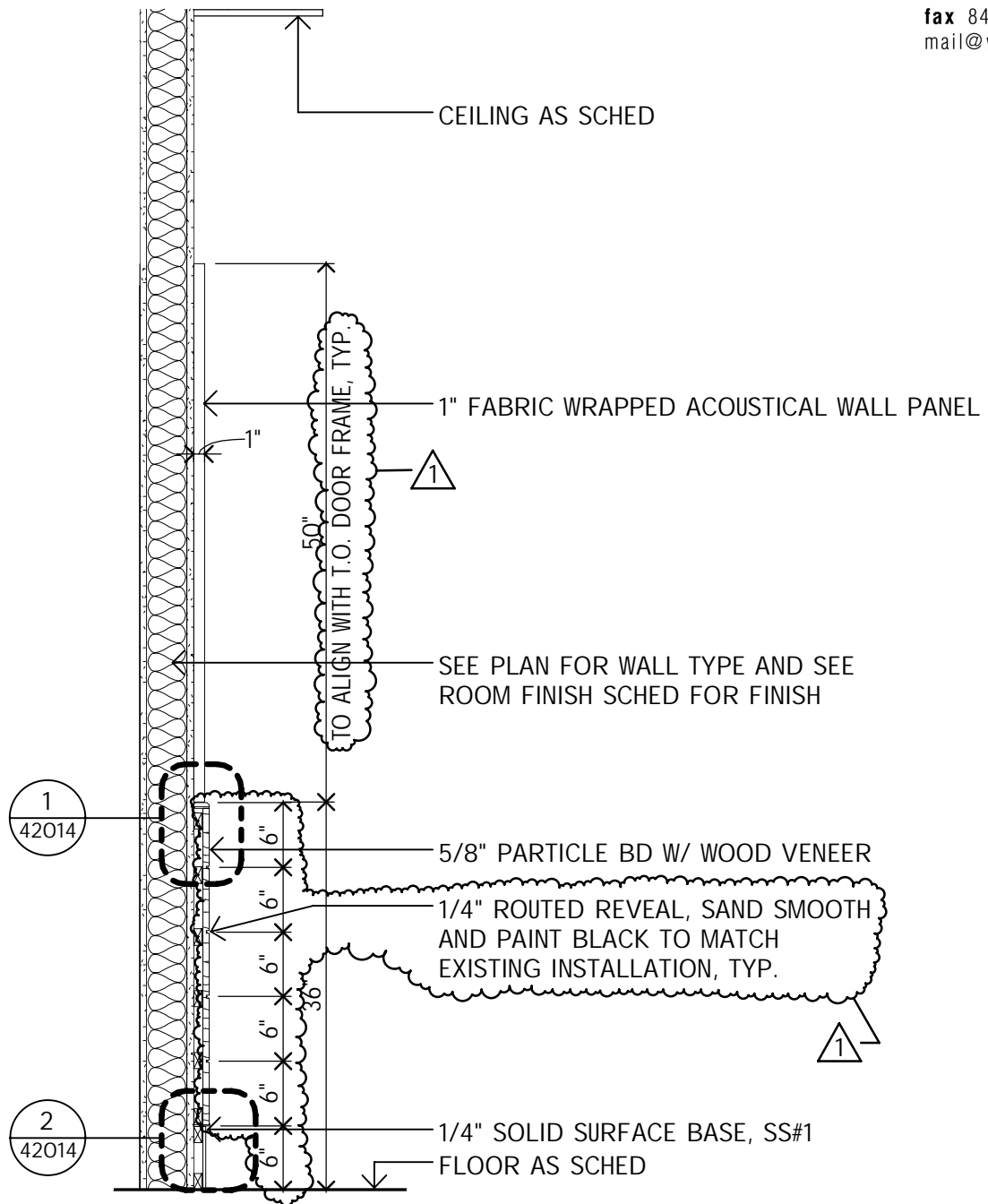
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1 SECTION @ MAGISTRATE WAINSCOT  
3/4" = 1'-0"  
0 1' 2'

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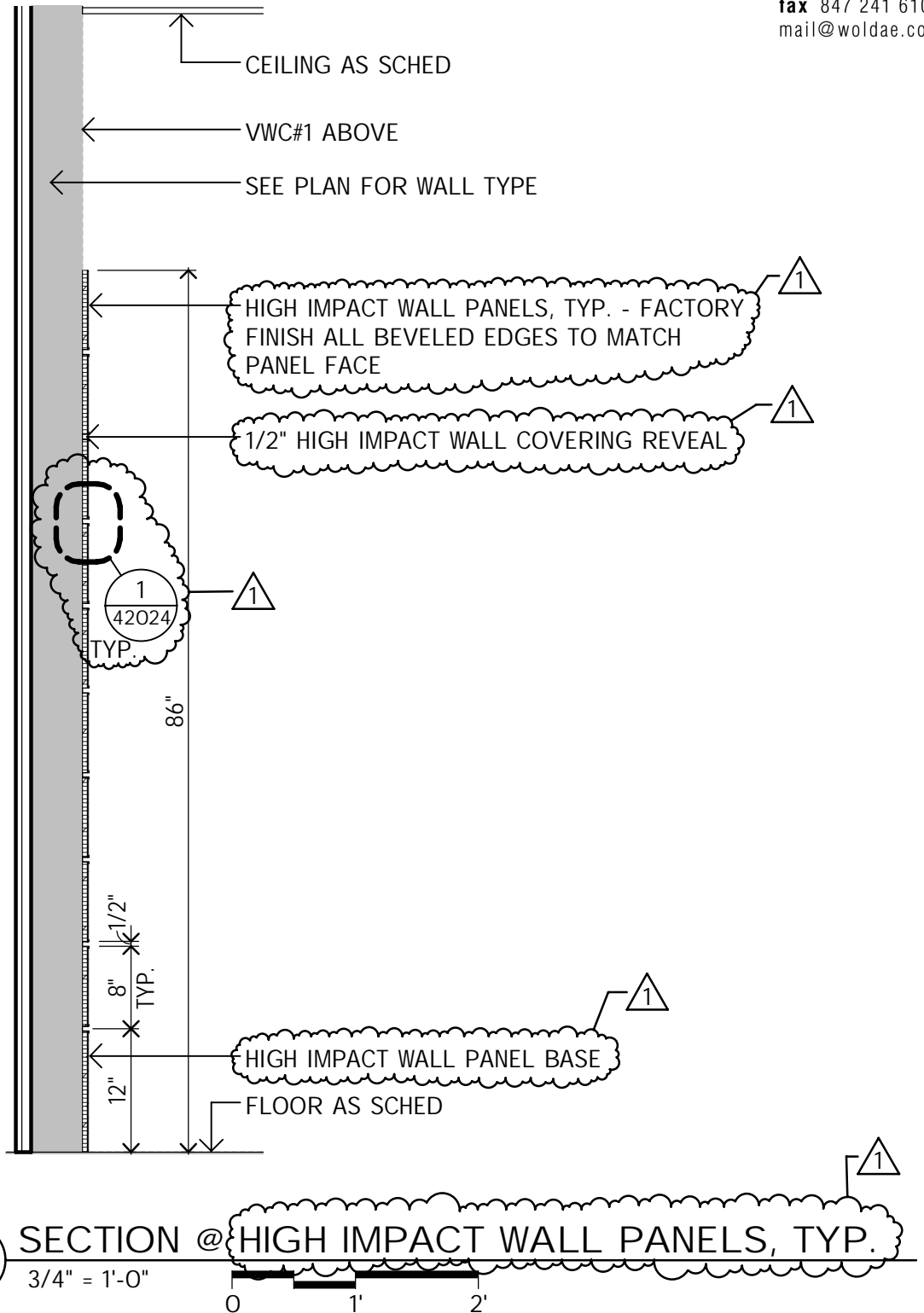
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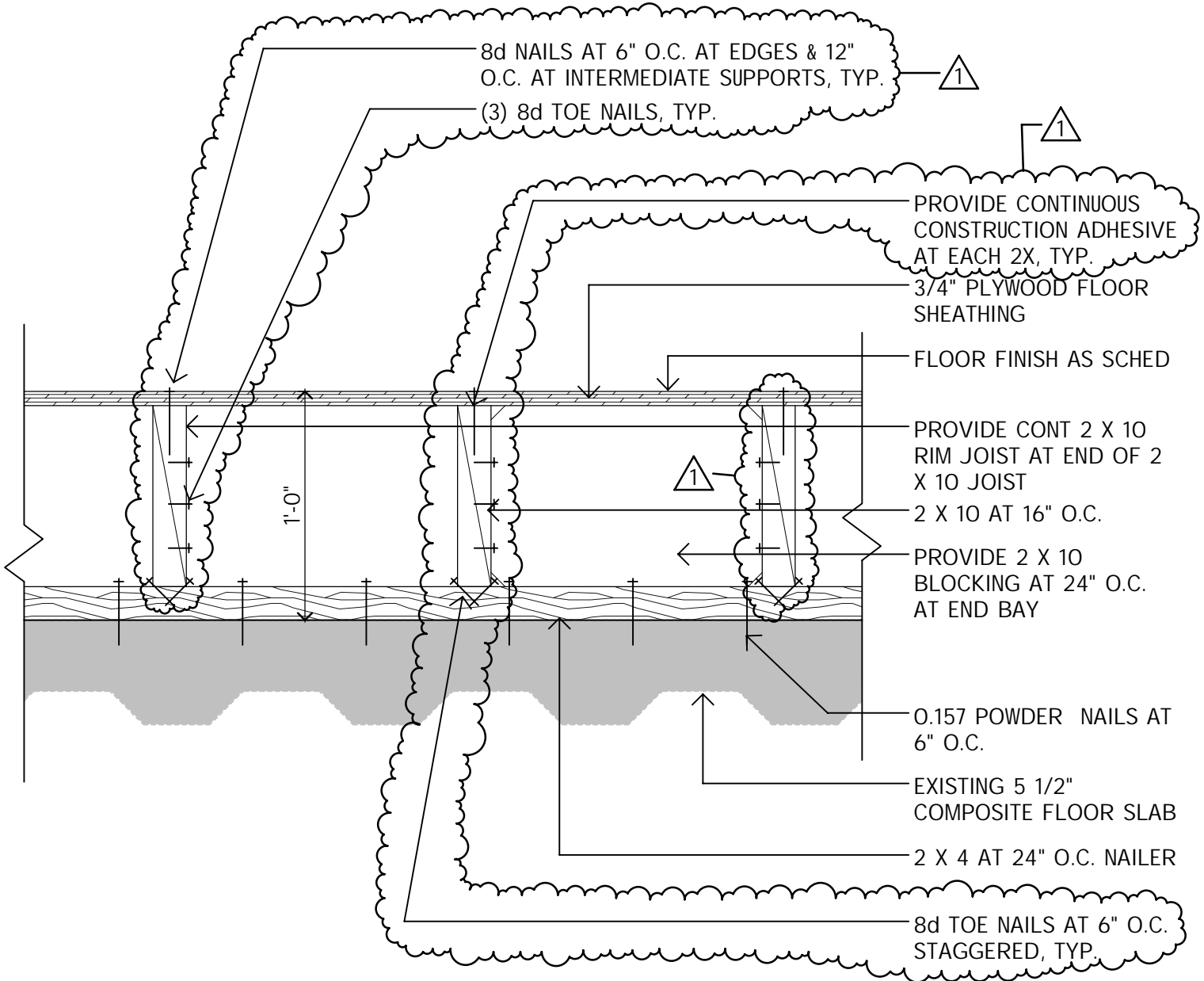
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**1** TYP SECTION @ RAISED FLOOR  
 1 1/2" = 1'-0"  
 0 6" 1'

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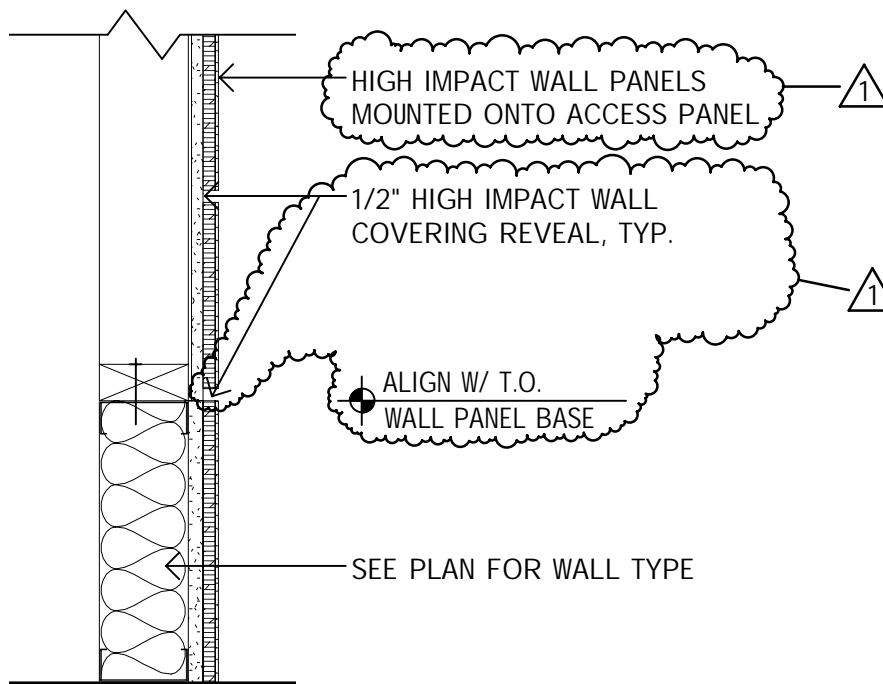
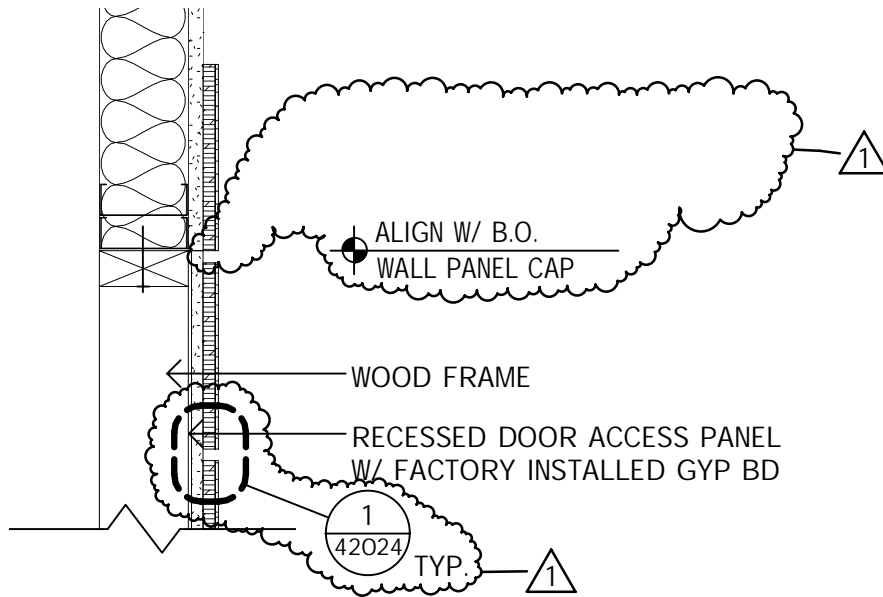
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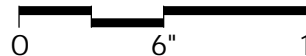
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1 DETAIL @ ACCESS PANEL  
1 1/2" = 1'-0"



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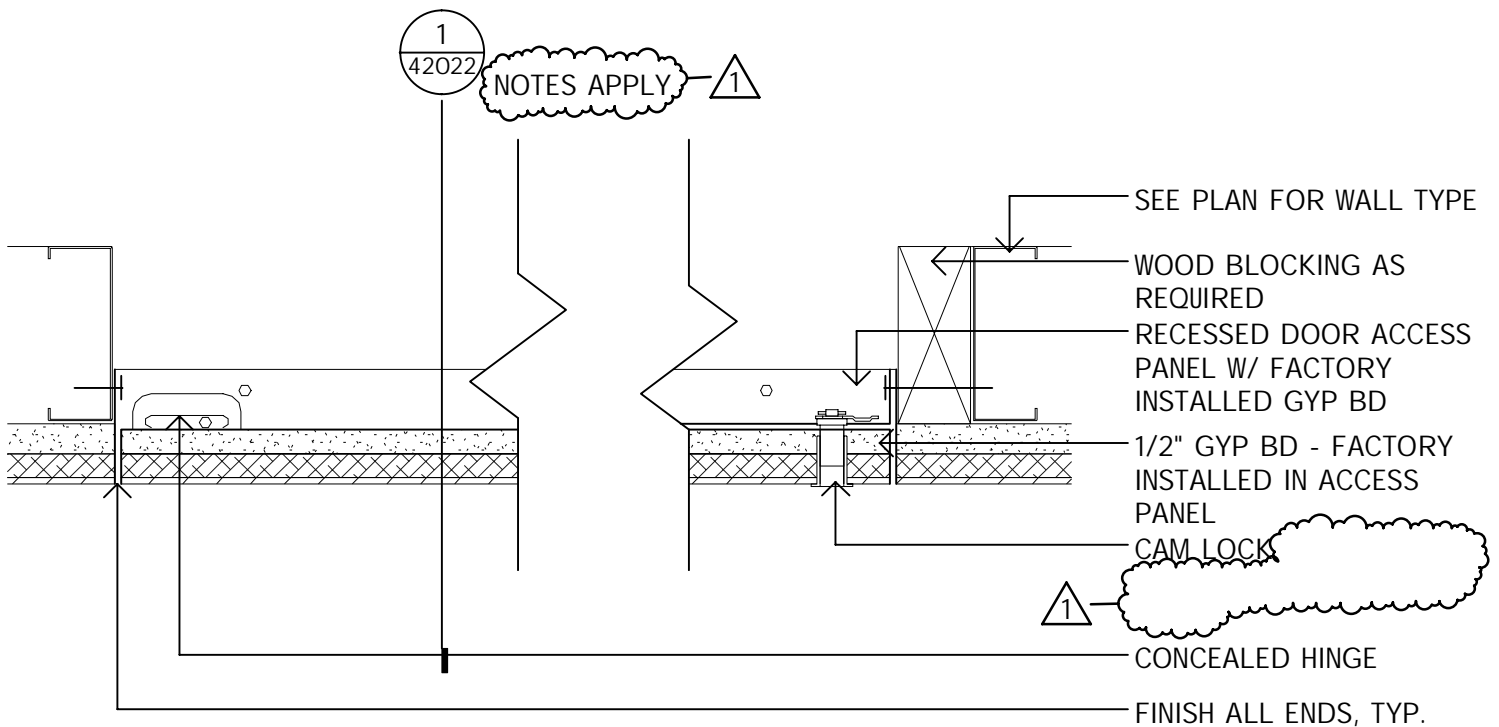


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1 PLAN DETAIL @ ACCESS PANEL  
3" = 1'-0"  
0 3" 6"

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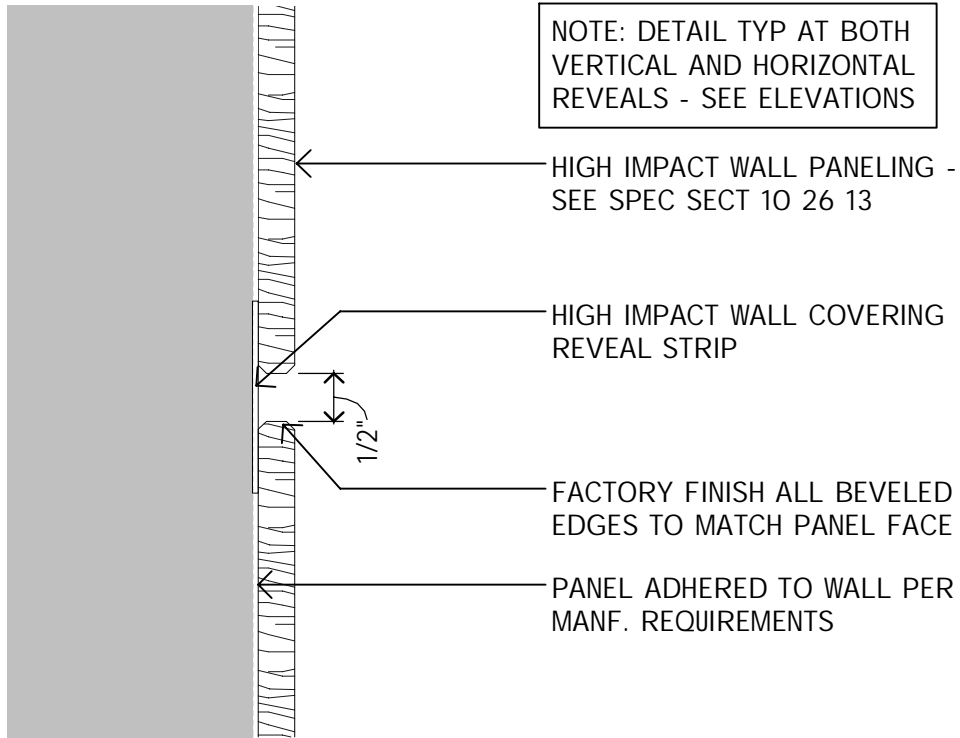
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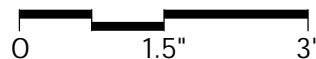
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DETAIL AT WALL PANEL REVEAL, TYP.

6" = 1'-0"



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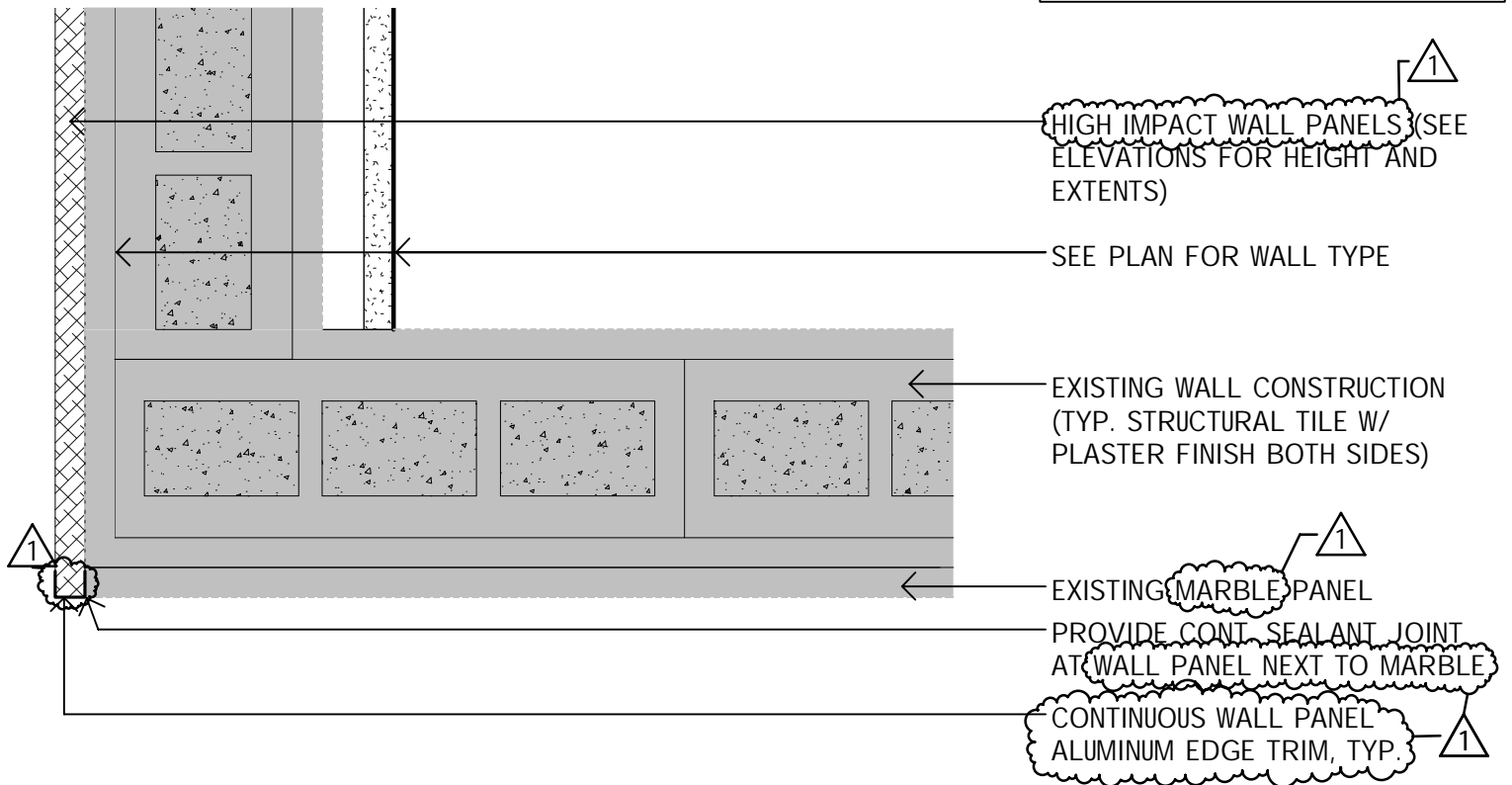
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NOTE: AT SIM CONDITION  
MIRROR DETAIL.



1 PLAN DETAIL @ CORRIDOR MARBLE/WALL PANEL TRANSITION  
3" = 1'-0"  
0 3" 6"

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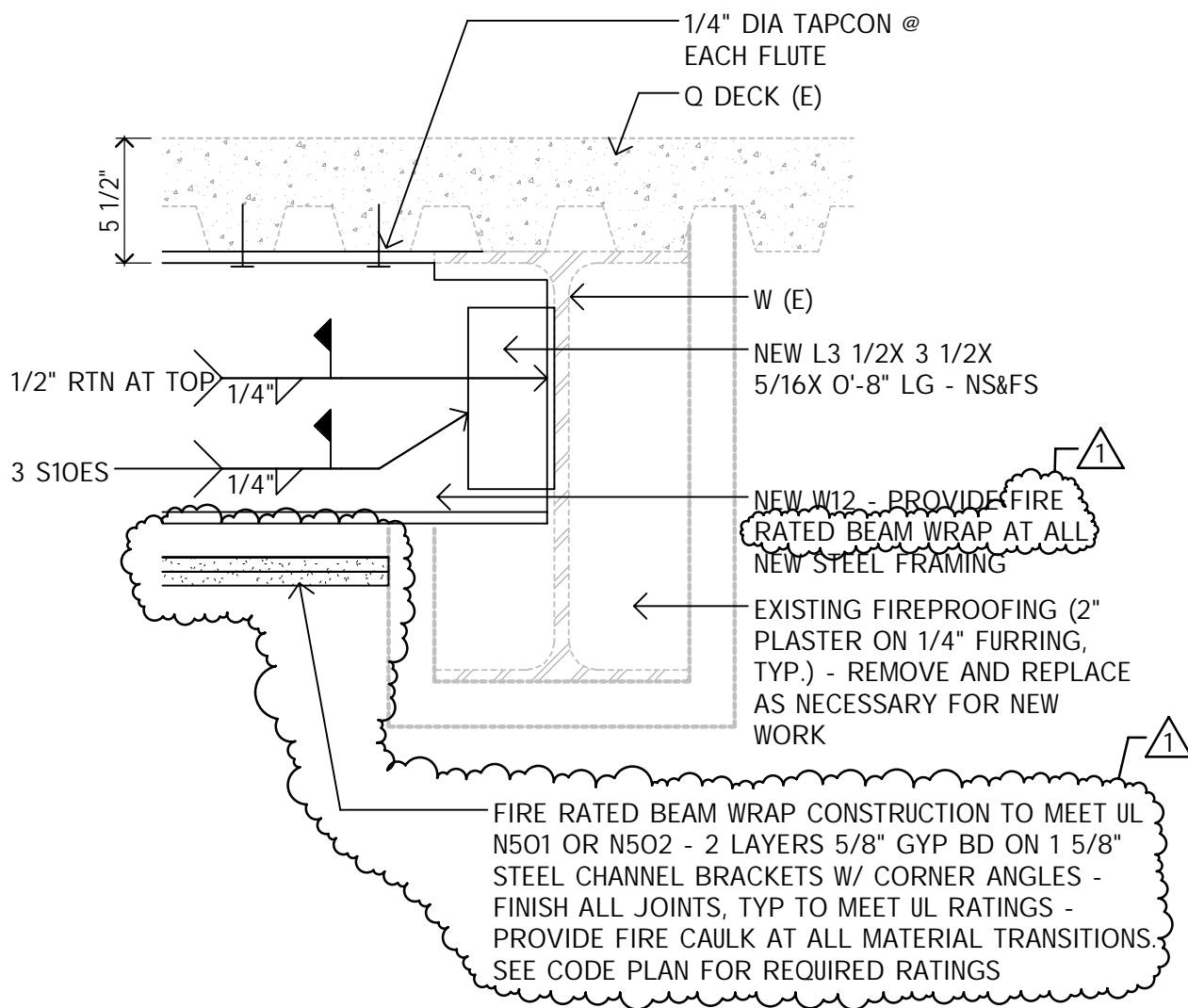
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1 SECTION 1-1  
1 1/2" = 1'-0"  
0 6" 1'

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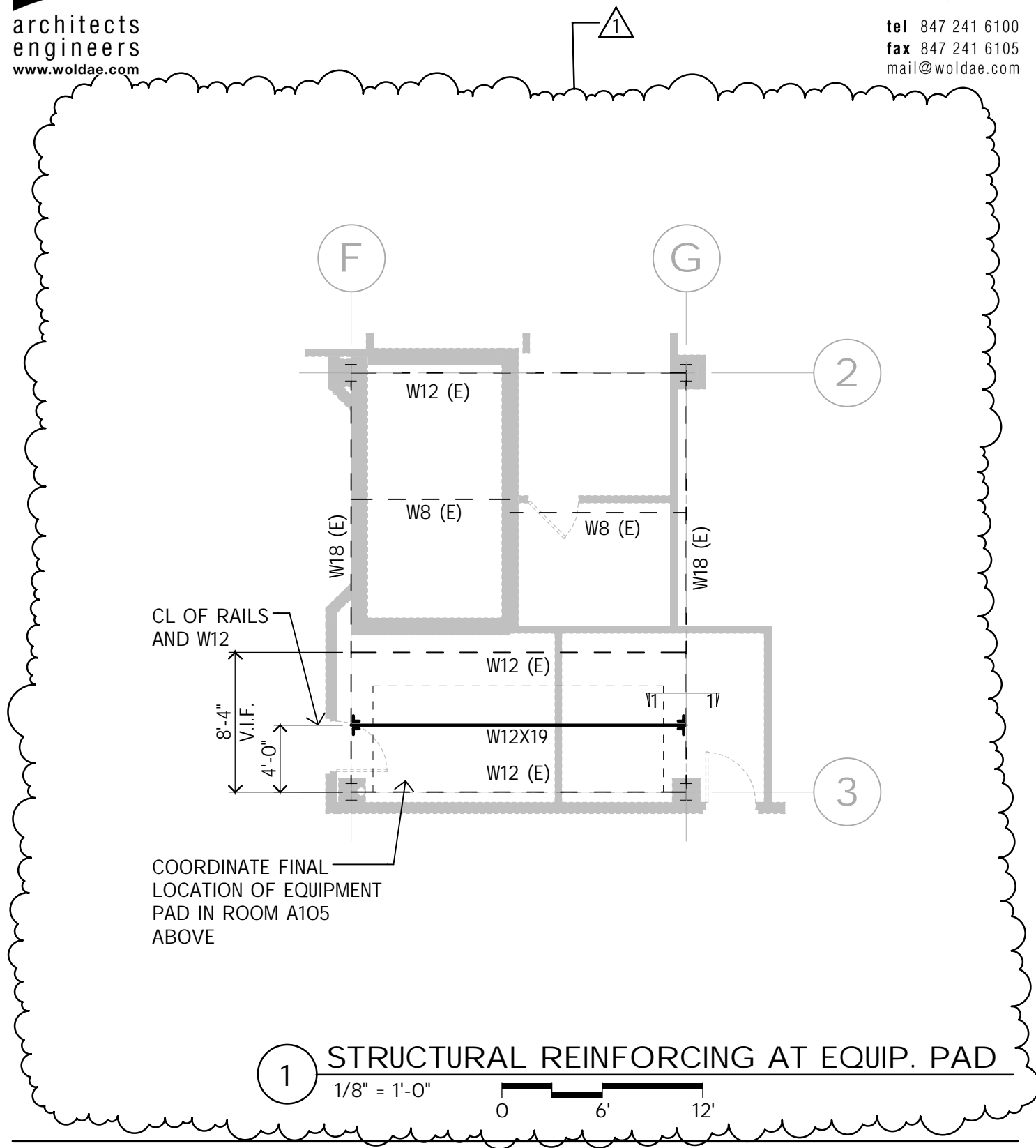
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43005



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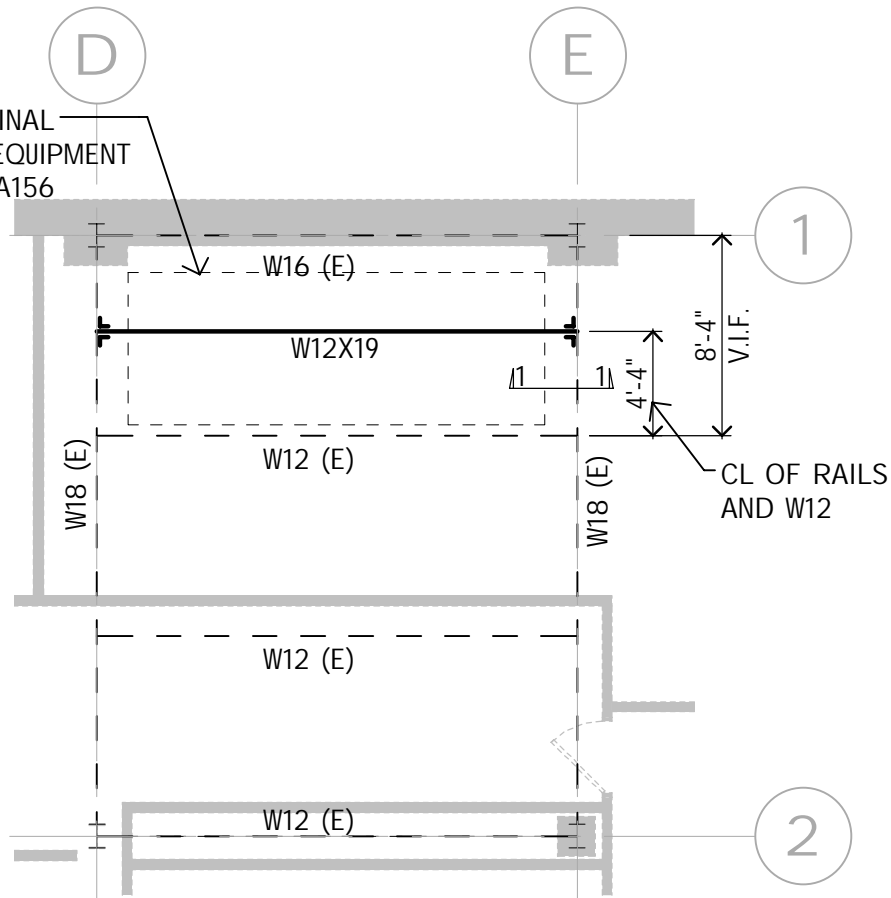
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REVISIONS: **1** ADDENDUM #3

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43006

COORDINATE FINAL  
LOCATION OF EQUIPMENT  
PAD IN ROOM A156  
ABOVE



**1** STRUCTURAL REINFORCING AT EQUIP. PAD  
1/8" = 1'-0"  
0 6' 12'

PROJECT: Courthouse Remodel Phase I&II

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COMMISSION NO: 133024

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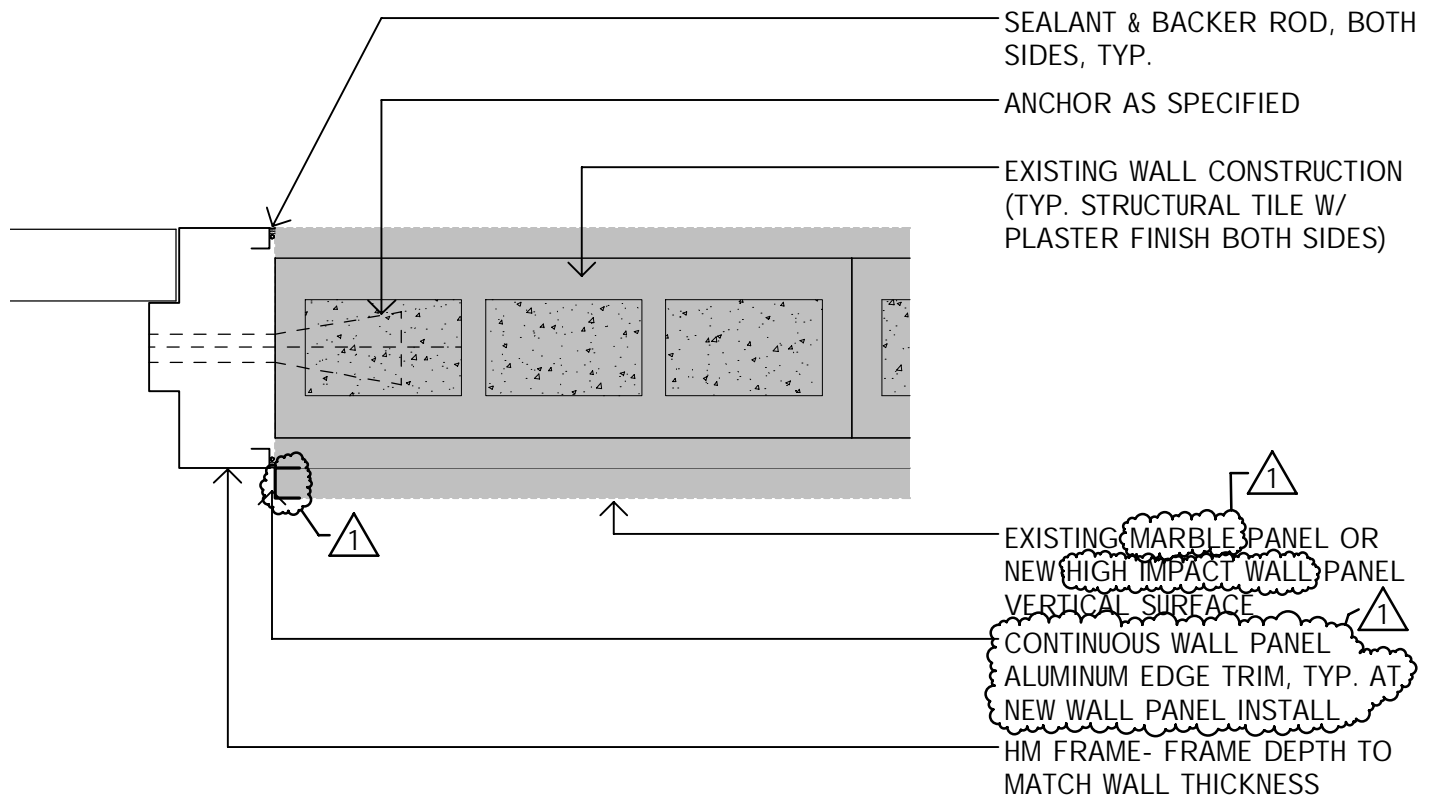


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1 JAMB @ EXISTING GRANITE PANEL  
3" = 1'-0"  
0 3" 6"

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DATE: 7/3/2014

COMMISSION NO: 133024

REVISIONS: 1 ADDENDUM #3

REV. DATE: 7/30/2014

43105