

**DOCUMENT 00 90 00  
ADDENDUM**

**ADDENDUM NO. [2]                      Date: January 5, 2022**

**RE:                      SCHOOL DISTRICT OF ABBOTSFORD  
ABBOTSFORD SCHOOL DISTRICT FEMA ADDITION  
510 WEST HEMLOCK STREET  
ABBOTSFORD, WISCONSIN 54405  
HSR PROJECT NO. 21027**

**FROM:**                HSR Associates, Inc  
100 Milwaukee Street  
La Crosse, WI 54603  
(608) 784-1830

**To:**                    Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated December 2021. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [3] pages, [1] document, [2] specification sections, and [12] 30 x 42 drawings.

**CHANGES TO PRIOR ADDENDA:**

1. Sheet C1.0 DEMOLITION PLAN see changes listed below.
2. Sheet A101 FLOOR PLANS see changes listed below.
3. Sheet A200 EXTERIOR ELEVATIONS see changes listed below.
4. Sheet A300 SECTIONS see changes listed below.
5. Sheet S810 FRAMING DETAILS see changes listed below.
6. Sheet P001 PLUMBING GENERAL NOTES see changes listed below.

**CHANGES TO BIDDING REQUIREMENTS AND CONDITIONS OF THE CONTRACT:**

7. Document 00 73 00 Supplementary Conditions revised document attached.
  - a. Added sub-article 8.3.1.1 to clarify wording regarding delayed deliveries and temporary utilities.

**CHANGES TO SPECIFICATIONS:**

8. Section 07 42 13.19 Insulated Metal Wall Panels revised document attached.
  - a. Revised 2.02.A.2&3 to make the specification match the drawing.
9. Section 11 66 23 Gymnasium Equipment revised document attached.
  - a. Revised 2.04 A.5.a to include IPI by Bison as a listed manufacturer.
  - b. Revised 2.06 A.5.b to include IPI by Bison as a listed manufacturer.
10. Section 23 09 93 Sequence of Operations changes listed below.
  - a. 3.09 EXHAUST FAN CONTROL 23 34 23
    - i. EF-2 shall be controlled from AHU-1 Schedule.

11. Section 26 09 17 Programmable Lighting Controls changes listed below.

a. Replace Products section with the following:

**“PART 2: PRODUCTS**

**2.01 MANUFACTURER**

- A.** Lighting Control and Design
- B.** Nex-Lite
- C.** Watt Stopper
- D.** Hubbell Lighting Automation
- E.** Lithonia, Synergy Lighting Control
- F.** ILC- Intelligent Lighting Controls
- G.** Leviton
- H.** Substitutions: Under provisions of Section 01 63 00.”

**CHANGES TO DRAWINGS**

12. Sheet C1.0 DEMOLITION PLAN revised 30 x 42 sheet attached hereto.

- a. Revised key notes 11 & 25.
- b. See clouded changes on plan.

13. Sheet C6.1 DEMOLITION PLAN revised 30 x 42 sheet attached hereto.

- a. See clouded note regarding bollard cover.

14. Sheet A101 FLOOR PLANS revised 30 x 42 sheet attached hereto.

- a. Relocated door F115.2.

15. Sheet A200 EXTERIOR ELEVATIONS revised 30 x 42 sheet attached hereto.

- a. Change dimension of louver and relocated door.

16. Sheet A300 SECTIONS revised 30 x 42 sheet attached hereto.

- a. Relocated mechanical equipment at the roof.
- b. Added wall type callouts in building section #2.

17. Sheet A600 WALL TYPES revised 30 x 42 sheet attached hereto.

- a. Added masonry anchor note to wall types A1 and A2.

18. Sheet S810 FRAMING DETAILS revised 30 x 42 sheet attached hereto.

- a. Revised clouded note in Detail 5/S810.

19. Sheet P001 PLUMBING GENERAL NOTES revised 30 x 42 sheet attached hereto.

- a. Updated Plumbing Fixture Schedule with mounting heights and water closed model numbers.
- b. Updated Fixture Unit Summary fixture counts.

20. Sheet P101 FLOOR PLAN revised 30 x 42 sheet attached hereto.

- a. Revised sink designation from S-1 to S2.
- b. Added note regarding Cyclone roof penetrations.
- c. Added note regarding coordination with underground LP supplier.

21. Sheet M100 FIRST FLOOR REMODEL PLAN revised 30 x 42 sheet attached hereto.

- a. Added FEMA Rated wall shroud for pipe penetrations at Storage F103.
- b. Added EF-2 fan serving Mechanical F115 mop basin.

22. Sheet M200 ENLARGED UPPER LEVEL PLAN revised 30 x 42 sheet attached hereto.

- a. Added louver L-9, with gravity backdraft damper and 8"x8" duct from EF-2 below.
- b. Revised size of L-1.

23. Sheet M601 HVAC SCHEDULES revised 30 x 42 sheet attached hereto.

- a. Louver Schedule: Revised L-1 size, added L-9.
- b. Exhaust Fan Schedule: Added EF-2.

**PRIOR APPROVALS**

- 24. Section 23 21 16 HYDRONIC SPECIALTIES
  - a. 2.09 WATER FILTERS
    - i. Harmsco HIF
- 25. Section 23 23 00 REFRIGERANT PIPING SYSTEM
  - a. 2.02 FITTINGS
    - i. Nibco ACR
- 26. Section 23 37 50 METAL LOUVERS: STATIONARY
  - a. 2.01 LOUVERS
    - i. Pottorff
- 27. Section 23 52 16 CONDENSING BOILERS
  - a. 2.01 MODULAR BOILER-BURNER UNITS
    - i. Camus

**END OF DOCUMENT 00 90 00**

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**SECTION 00 73 00**  
**SUPPLEMENTARY CONDITIONS**

Addendum #2 Version

**GENERAL**

**APPLICATION**

The following amendments modify, delete and add to AIA document A201-2017 General Conditions. Where any article, paragraph or subparagraph in the general conditions is supplemented by one of the following paragraphs, the provisions of such article, paragraph or subparagraph shall remain in effect and the supplemental provisions shall be considered as added thereto. Where any article, paragraph or subparagraph of the general conditions is not supplemented, amended, voided or superseded by any of the following paragraphs, the provisions of such article, paragraph or subparagraph not so amended, voided or superseded shall remain in effect.

**DOCUMENTS INCLUDED IN THE SUPPLEMENTARY CONDITIONS:**

Document 00 73 16 Insurance Requirements  
Document 00 73 17 Bond Requirements  
Document 00 73 43 Wage Rates Requirements  
Document 00 73 46 Wage Determination Schedule  
Document 00 73 73 Statutory Requirements

**ARTICLE 1**

**1.1.3**

Add the following sentence to the end of the existing sub-article:  
"The word 'provide' shall also be understood to require 'furnish and install'."

**1.1.4**

Add the following sentence to the end of the existing sub-article:  
"A detailed description of the Project can be found in Document 00 11 13."

**1.2.3**

After 1.2.3, insert the following new sub-articles:

**"1.2.4** Where a number is listed in the Project Manual (as for gauges, weights, temperatures, amount of time, etc.) the number shall be interpreted as that or better."

**"1.2.5** Whenever the words 'approved', 'satisfactory', 'directed', 'submitted', 'inspected', or similar words or phrases are used in the product specification sections, it shall be assumed that the words 'Architect/Engineer or Architect/Engineer's representative' follows the verb as the object of the clause, such as 'approved by the Architect/Engineer or Architect/Engineer's representative'."

**ARTICLE 2**

**2.1.2**

After 2.1.2, insert the following new sub-article:  
**"2.1.3** Refer to Document 00 22 13 for a detailed description of the Owner."

**ARTICLE 3**

**3.3.3**

After 3.3.3, insert the following new sub-article:  
**"3.3.4** Refer to Section 01 40 00 for detailed quality control requirements."

**3.5.1**

Add the following sentence to the end of the existing sub-article:  
"Refer to Article 12 to see the time frame for correcting defective Work."

After 3.5.1, insert the following new sub-article:

**"3.5.1.1** Where the Contract Documents require Work better than that required by statute, the Contract Documents shall govern."

**3.7.1**

Add the following sentence to the end of the existing sub-article:

"Contractor shall provide permits for driveway/curb-cuts, and cost for relocation of light poles and tree."

**3.7.4**

In 3.7.4, change "~~14 days after first observance~~" to "10 days after first observance"

**3.8.3**

After 3.8.3, insert the following new sub-article:

**"3.8.4** Refer to Section 01 21 00 for detailed description of allowances."

**3.12.6**

After 3.12.6, insert the following new sub-articles:

**".1** Contractor shall use a verification stamp with signature and date to signify Contractor's approval of Shop Drawings."

**".2** Refer to Sections 01 30 00, 01 40 00 and 01 60 00 for detailed submittal information."

**3.14.2**

After 3.14.2, insert the following new sub-article:

**"3.14.3** Refer to Section 01 70 00 for detailed cutting and patching requirements."

**ARTICLE 4**

**4.1.1**

Add the following sentence to the end of the existing sub-article:

"Wherever the term 'Architect' appears, it shall be changed to 'Architect/Engineer (AE)'."

After 4.1.1, insert the following new sub-article:

**".1** Refer to Document 00 21 13 for a detailed description of the AE and any applicable consultants."

**ARTICLE 5**

**5.2.1**

Delete the first sentence of the existing sub-article:

~~"Unless otherwise stated in Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design."~~

Replace with:

"The successful bidder, within 10 calendar days from notification of selection for award of contract, shall furnish in writing to the Owner through the Architect a listing of major subcontractors and suppliers, their addresses, phone numbers, and the portions of the work which they will perform."

**ARTICLE 7**

**7.2.1**

After sub-article 7.2.1, insert the following new sub-article:

**"7.2.2** Refer to Section 01 20 00 and 7.3.4 below for detailed change order procedures."

**7.3.3.2**

Delete the text of existing sub-article:

~~"Unit prices stated in the Contract Documents or subsequently agreed upon;"~~

Replace with:

"Unit prices stated in the Contract Documents including Section 01 22 00 or subsequently agreed upon;"

**7.3.4**

In the first sentence of 7.3.4, change "~~a reasonable amount~~" to "an allowance for overhead and profit in accordance with percentage fee stated in Subparagraph 7.3.11 below."

**7.3.10**

After 7.3.10, insert the following new sub-article:

**"7.3.11** In Subparagraphs 7.3.3 and 7.3.4 the percentage fee allowance for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedule:

- .1 for the Contractor, for Work performed by the Contractor's own forces, 10 percent of the cost.
- .2 for the Contractor, for Work performed by the Contractor's Subcontractor, 7 percent of the amount due the Subcontractor.
- .3 for each Subcontractor or Sub-subcontractor involved, for Work performed by that Subcontractor's or Sub-subcontractor's own forces, 7 percent of the cost.
- .4 for each Subcontractor, for Work performed by the Subcontractor's Sub-subcontractor, 5 percent of the amount due the Sub-subcontractor.
- .5 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in manner prescribed above. Where major cost items are subcontracts, they shall be itemized also. In no case will a change involving over \$500.00 be approved without such itemization."

#### 7.4

After 7.4, insert the following new sub-article:

##### **"7.5 Bulletins**

A Bulletin is a written document prepared by the Architect/Engineer as a statement of changes in the scope of Work which may or may not change the Contract Amount or Time. The Contractor shall return the executed Bulletin to the Architect/Engineer on or before the date stated in the Bulletin stating Contractor's agreement to change the Scope of Work and any proposed adjustment to the Contract Amount and the Contract Time. All Bulletin items shall subsequently be recorded on a Change Order."

Sub-Article added in Addendum #2

#### **ARTICLE 8**

##### **8.3.1**

After 8.3.1, insert the following new sub-article:

".1 The wording in sub-article 8.3.1 "unusual delay in deliveries", will be interpreted by the Architect in relation to the current commercial environment which includes unusually-lengthened and volatile lead times and supply shortages of various products. In this commercial environment, the Contractor shall take any needed measures to comply with the project's substantial completion requirements and any intermediate schedule targets the Contractor may apply to the Contractor's own work. Sub-article 8.3.1 does not permit the contractor to request increases to the contract sum due to delayed deliveries within the Contractor's scope. Requests for increases to the contract sum for temporary heating or cooling due to delayed deliveries within the Contractor's scope will not be accepted by the Owner."

#### **ARTICLE 9**

##### **9.2**

After 9.2, insert the following new sub-article:

**"9.2.1** Refer to Section 01 20 00 for detailed schedule of values requirements."

##### **9.3.1**

Delete the first sentence of the existing sub-article:

~~"At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work."~~

Replace with:

Submission of Applications for Payment shall follow sub-article 9.6 of the Supplementary Conditions.

##### **9.6.8**

After 9.6.8, insert the following new sub-article:

**"9.6.9** Based upon Applications for Payment submitted to the Architect by the Contractor, the Owner shall make progress payment on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

- .1 The period covered by each Application for Payment shall be on the 25th day of the month.
- .2 Provided an Application for Payment is received by the Architect not later than the 25th day of a month, the Owner shall make payment to the Contractor not later than the 25th day of the following month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than 60 days after the Architect receives the Application for Payment.
- .3 Each Application for Payment shall be based upon the Schedule of Values submitted by the Contractor in accordance with the Contract Documents. The Schedule of Values shall allocate the entire Contract Sum among the various portions of the Work and be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.
- .4 Applications for Payment shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.
- .5 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
  - .6 The progress payment amount determined in accordance with Paragraph 9.6.9.5 shall be further modified per Paragraph 9.6.9.6.1 of the Supplementary Conditions.
    - .6.1 Upon Substantial Completion of the Work, retainage to remain at 5% of Contract Sum until the Contract is closed out. This amount MAY be reduced to a lower percentage or lump sum if agreed to by Owner, Contractor and A/E.
  - .7 Reduction or limitation of retainage, if any, shall be per Paragraph 9.6 of the Supplementary Conditions."

**9.8.5**

After 9.8.5, insert the following new sub-article:

"**9.8.6** Failure to reach final completion within 60 days from total Substantial Completion of the Project shall be cause to terminate the Contract and the Contractor's surety shall be notified accordingly."

**9.10.1**

After 9.10.1, insert the following new sub-articles:

".1 Upon completion of the Final Inspection if the Work is not acceptable and the Contract not fully performed, the AE will notify the Contractor, in writing, of all unfinished Work and fix the time within which the Contractor shall complete the items listed. Upon notification by the Contractor that the list of uncompleted items is complete, the AE will make a follow-up inspection trip."

".2 Time spent by the AE to follow-up on such unfinished Work to determine that the Contractor has fully performed the Contract shall be paid for by the Contractor on the basis of the AE's regular hourly rate schedule for supplementary services and reimbursable expenses as stated in the AE's agreement for services with the Owner."

".3 Payment for all such additional services required of the AE will be deducted from the balance due the Contractor, duly noted on the final Certificate for Payment and paid by the Owner directly to the AE."

**9.10.5**

After 9.10.5, insert the following new sub-article:

"**9.10.6** Refer to Section 01 78 00 for detailed Contract closeout procedures."

**ARTICLE 11**

**11.1.1**

After 11.1.1, insert the following new sub-article:

".1 Refer to Supplementary Conditions for requirements and coverages for bonds and insurance."

**11.2.1**

After 11.2.1, insert the following new sub-article:

".1 The Contractor shall provide and maintain Property Insurance to cover the deductible of the Owner's property insurance in the amount of \$1,000 of loss on any claim, or provide evidence satisfactory to the Owner that the Contractor shall pay for all such losses not covered by the Owner against the same peril as described for the Owner's Property Insurance."

Added in Addendum #2

**ARTICLE 12**

**12.2.2.1**

In 12.2.2.1, change the words "~~one-year~~" in the first sentence to "two years".

**12.2.2.2**

In 12.2.2.2, change the words "~~one-year~~" in the first sentence to "two-year".

**12.2.2.3**

In 12.2.2.3, change the words "~~one-year~~" in the first sentence to "two-year".

**END OF SECTION**

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**SECTION 07 42 13.19**  
**INSULATED METAL WALL PANELS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Factory-assembled metal panel system for walls, with trim, vertical supports (hat channel, etc.), related flashings and accessory components.

**1.02 RELATED REQUIREMENTS**

- A. Applicable provisions of Division 1 shall govern the work of this section.
- B. Section 03 45 00 - Precast Architectural Concrete: Structural Substrate

**1.03 REFERENCE STANDARDS**

- A. ASTM D1621 - Standard Test Method for Compressive Properties Of Rigid Cellular Plastics; 2016.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide manufacturer documentation on tested structural, thermal, and fire resistance capabilities of assembled panel.
- C. Shop Drawings: Indicate dimensions, panel profile and layout, spans, joints, construction details, and methods of anchorage.
- D. Samples for Selection: Submit 4" x 4" color samples for selection.
- E. Samples: Submit two samples of panel, 12 by 12 inch in size illustrating finish color, sheen, and texture.
- F. Design and Performance Data: Indicate panel profile and dimensions.
- G. Manufacturer's Installation Instructions: Indicate special handling criteria, installation sequence, and cleaning procedures.
- H. Warranty Documentation for Installation of Building Rainscreen Assembly: Submit installer warranty and ensure that forms have been completed in Owner's name and registered with installer.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this Section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this Section with minimum 5 years experience.

**1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.
- B. Store pre-finished material off ground with weather protection to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- C. Prevent contact with materials that could cause discoloration or staining.

**1.07 WARRANTY**

- A. Correct defective work within a twenty year period after Date of Substantial Completion for degradation of panel finish, including color fading caused by exposure to weather.
- B. Correct defective work within a two year period after Date of Substantial Completion, including defects in water tightness and integrity of seals for insulated metal wall panels.

## **PART 2 PRODUCTS**

### **2.01 PANEL SYSTEM**

- A. Metal Panel System: Factory-assembled metal panel system, with trim, related flashings and accessory components.
  - 1. Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.
  - 2. Accommodate tolerances of building structural framing.
- B. Performance Requirements:
  - 1. Thermal Performance: Provide thermal resistance through entire system; R-value of 14 deg F hr sq ft/Btu, minimum.
  - 2. Structural Performance: Design and size to withstand all dead loads and wind loads caused by positive and negative wind pressure acting normal to plane of panel.
    - a. Verify structural performance in accordance with ASTM E330/E330M, using test pressure 1.5 times design wind pressure, with 10 seconds duration of maximum load.
  - 3. Movement: Accommodate the movement caused by the following without damage to system, components, or deterioration of seals:
    - a. Normal movement between system components.
    - b. Seasonal temperature cycling.
    - c. Deflection of structural support framing,

### **2.02 PANELS AND TRIM**

- A. Wall Panels: Exterior and interior metal sheet skin, factory-assembled, with foamed in place insulation; exterior and interior sheet interlocking at edges, filled with sealant. Hidden fasteners.
  - 1. Panel Width: 42 inch.
  - 2. Profile: As indicated; horizontal panels. — Revised in Addendum #2
  - 3. Panel Thickness: 2 inch.
  - 4. Exterior Sheet: Pre-finished galvanized steel, 22 gauge, 0.0299 inch minimum base metal thickness; match wall panels at building.
  - 5. Exterior Finish: Polyvinylidene fluoride (PVDF) coating; color as selected from manufacturer's standard range.
  - 6. Interior Finish: Silicone polyester coating; color as selected from manufacturer's standard range.
- B. Trim, Closure Pieces, Expansion Joints, Caps, Flashings, Fascias, and Infills: Same material, thickness and finish as exterior sheets; factory-fabricated to required profiles; fabricated in longest practicable lengths.
  - 1. Exposed Fasteners: Not permitted except for pop rivets at trim.
  - 2. Profiles: To suit system.

### **2.03 PANEL MATERIALS**

- A. Foamed-in-Place Insulation: Polyisocyanurate type.
  - 1. Compressive Strength: 19 psi, when tested in accordance with ASTM D1621.
- B. Panel Sealants: Manufacturer's recommended type compatible with product materials and exterior performance.

### **2.04 ACCESSORIES**

- A. Fasteners: Manufacturer's standard.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that structural substrate is ready to receive panel system.

### **3.02 INSTALLATION**

- A. Install panel system on walls in accordance with manufacturer's instructions.



- B. Permanently fasten panel system to structural supports; aligned, level, and plumb, within specified tolerances.
- C. Locate panel joints over supports.
- D. Use concealed fasteners unless otherwise approved by Architect.
- E. Seal and place gaskets to prevent weather penetration. Maintain neat appearance.

**3.03 CLEANING**

- A. Remove site cuttings from finish surfaces.
- B. Clean and wash prefinished surfaces with mild soap and water; rinse with clean water.

**END OF SECTION**

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**SECTION 11 66 23**  
**GYMNASIUM EQUIPMENT**

Addendum #2 Version

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Basketball backboards, goals, and support framing.
- B. Gym/Wrestling mat lifter
- C. Floor sleeves for net and goal posts.
- D. Volleyball nets and posts.
- E. Mounting hardware and adapters between work of this section and substates.

**1.02 RELATED REQUIREMENTS**

- A. Section 03 30 00 - Cast-in-Place Concrete: Concrete floor slab to receive floor sleeves and anchors.
- B. Section 03 41 00 - Precast Structural Concrete: Substrate for ceiling mounted items
- C. Section 03 45 00 - Precast Architectural Concrete: Substrate for wall mounted items
- D. Section 09 65 66 - Resilient Athletic Flooring: Gymnasium flooring.
- E. Division 26 - Equipment Wiring

**1.03 REFERENCE STANDARDS**

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2016.
- B. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2015 (Errata 2016).
- C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- D. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's data showing configuration, sizes, materials, finishes, hardware, and accessories; include:
  - 1. Electrical characteristics and connection locations.
  - 2. Fire rating certifications.
  - 3. Manufacturer's installation instructions.
- C. Shop Drawings: For custom fabricated equipment indicate, in large scale detail, construction methods; method of attachment or installation; type and gauge of metal, hardware, and fittings; plan front elevation; elevations and dimensions; minimum one cross section; utility requirements as to types, sizes, and locations.
- D. Samples: Submit samples of backboard pad coverings in manufacturer's available range of colors.
- E. Operating and maintenance data for each operating equipment item.
- F. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified with minimum 3 years of experience.

## **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver products to project site in manufacturer's original packaging with factory original labels attached.
- B. Store products indoors and elevated above floor; prevent warping, twisting, or sagging.
- C. Store products in accordance with manufacturer's instructions; protect from extremes of weather, temperature, moisture, and other damage.

## **1.07 PROJECT CONDITIONS**

- A. Coordinate size of access and route to place of installation.
- B. Coordinate equipment installation with size, location, and installation of service utilities.

## **1.08 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Provide manufacturer's standard warranty.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Gymnasium Equipment:
  - 1. Draper, Inc: [www.draperinc.com/#sle](http://www.draperinc.com/#sle).
  - 2. IPI by Bison, Inc: [www.ipibybison.com/#sle](http://www.ipibybison.com/#sle).
  - 3. Performance Sports Systems: [www.perfsports.com](http://www.perfsports.com).
  - 4. Porter Athletic Equipment Company: [www.porterathletic.com](http://www.porterathletic.com).
  - 5. Schelde North America: [www.sheldesports.com](http://www.sheldesports.com)
  - 6. Spalding: [www.spaldingequipment.com](http://www.spaldingequipment.com)
  - 7. Jaypro Sports Equipment: [www.jaypro.com](http://www.jaypro.com)
  - 8. AALCO Athletic Equipment: [www.aalcomfg.com](http://www.aalcomfg.com)
  - 9. ADP Lemco: [www.adplemco.com](http://www.adplemco.com)
  - 10. N.G.E. Inc.: [www.mathoist.com](http://www.mathoist.com)
  - 11. Substitutions: See Section 01 60 00 - Product Requirements.

### **2.02 GENERAL REQUIREMENTS**

- A. See drawings for sizes and locations, unless noted otherwise.
- B. Where mounting dimensions or sizes are not indicated, comply with applicable requirements of the following:
  - 1. National Federation of State High School Associations (NFHS) sports rules.
- C. Provide mounting plates, brackets, and anchors of sufficient size and strength to securely attach equipment to building structure; comply with requirements of Contract Documents.
- D. Hardware: Heavy duty steel hardware, as recommended by manufacturer.
- E. Electrical Wiring and Components: Comply with NFPA 70; provide UL-listed equipment.
- F. Structural Steel Fabrications: Welded in accordance with AWS D1.1/D1.1M, using certified welders.

### **2.03 CONTROLLER**

- A. Manufacturer's standard wall mounted touch pad controller with capacity to control all items specified.
  - 1. Basis of Design: Wall mounted Draper EZ Pad Plus.
    - a. Controller to control all operable gym equipment identified in drawings.
    - b. Controller to permit multiple passwords.

### **2.04 BASKETBALL**

- A. Wall-Mounted Backstop Assemblies: Wall-mounted steel frame assembly capable of mounting both rectangular and fan-shaped backboards.
  - 1. Framing: Stationary framing.

2. Height Adjuster: Raises or lowers assembly by 2 feet to adjust goal height.
  3. Framing Color: As selected from manufacturer's standard selection.
  4. Basis of Design: Draper, EZ-Fold SW with manual height adjuster 503092.
  5. Manufacturers:
    - a. IPI by Bison, Inc. ——— Added in Addendum #2
    - b. PSS Performance Sports Systems
    - c. Spalding Equipment
    - d. Jaypro Sports Equipment
    - e. Porter
    - f. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Ceiling-Suspended Backstop Assemblies: Capable of mounting both rectangular and fan-shaped backboards.
1. Framing: Center strut; forward folding framing.
  2. Folding Control System: Electric hoist; folds backstop with 115 volt/1/2 hp 11 amp actuator; integral limit switches provide automatic shut-off in both positions; provide safety catch with automatic reset. Each unit has its own separate switch and motor. Mounting height to approximately 25 feet
  3. Height Adjuster-Side Court Assemblies Only: To raise/lower assembly by 2 feet to adjust goal height. Manual operation
  4. Framing Color: As selected from manufacturer's standard selection.
  5. Basis of Design: Draper EZ Fold TF-20 with manual height adjuster 503092.
  6. Manufacturers:
    - a. PSS Performance Sports Systems
    - b. Spalding Equipment
    - c. Jaypro Sports Equipment
    - d. Porter
    - e. Substitutions: See Section 01 60 00 - Product Requirements.
- C. Backboards: Tempered glass, rectangular shaped.
1. Frame: Brushed aluminum edge, steel mounting.
  2. Dimensions: 42 inches high by 72 inches wide
  3. Provide safety padding for bottom edge of backboard. Color as selected by A/E
  4. Provide mounting kit.
  5. Basis of Design: Draper Model EZ-Fold 503136 with Padding 5032XX kit.
  6. Manufacturers:
    - a. PSS Performance Sports Systems
    - b. Spalding Equipment
    - c. Jaypro Sports Equipment
    - d. Porter
    - e. Substitutions: See Section 01 60 00 - Product Requirements.
- D. Goals: Steel rim, mounted to backboard, with attached nylon anti-whip net; complete with mounting hardware.
1. Net Attachment Device: Tube-tie.
  2. Breakaway mechanism, adjustable.
  3. Finish: Powder coat orange.
  4. Basis of Design: Draper, Breakaway Basketball Goal 503576
  5. Manufacturers:
    - a. Draper Inc.
    - b. PSS Performance Sports Systems
    - c. Spalding Equipment
    - d. Jaypro Sports Equipment
    - e. Porter
    - f. Substitutions: See Section 01 60 00 - Product Requirements.

## 2.05 WRESTLING MAT LIFT

- A. Stationary Mat Lift
  - 1. Hoist shall consist of structural integrity for a double mat lift.
  - 2. Motor as required by manufacturer's standard model.
  - 3. Housing shall enclose gear drive, motor shaft and related equipment.
  - 4. Type: Wall mount
  - 5. Accessories: Include all accessories and attachment to mount lift to the wall.
  - 6. Basis of Design Draper: Double Mat Lifter – 502061.
  - 7. Manufacturers:
    - a. Porter
    - b. MatHoist
  - 8. Substitutions: See Section 01 60 00 - Product Requirements

## 2.06 VOLLEYBALL EQUIPMENT (PROVIDE 1 COMPLETE SYSTEM)

- A. Floor Sleeves for Posts: Metal sleeve, with latch cover, cast into concrete subfloor to hold poles for nets and goals; installed flush with finish floor surface.
  - 1. Latch Cover: Brass, round; tamper resistant lock with key.
  - 2. Sleeve: Aluminum.
  - 3. Depth of Sleeve: 9 inches from floor surface to bottom, including latch cover.
  - 4. Basis of Design: Collegiate 4000 manufactured by Schelde North America.  
www.scheldesports.com
  - 5. Manufacturers:
    - a. Draper Inc.
    - b. IPI by Bison, Inc. — Added in Addendum #2
    - c. PSS Performance Sports Systems
    - d. Spalding Equipment
    - e. Jaypro Sports Equipment
    - f. Porter
    - g. Substitutions: See Section 01 60 00 - Product Requirements.
  - 6. Each package shall include protective pads, net, and one pair of net antennas with sideline markers.
- B. Judges Stand: (One) RS400 Free Standing with safety pads by Schelde North America

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Take field measurements to ensure proper fitting of work. If taking field measurements before fabrication will delay work, allow for adjustments within recommended tolerances.
- B. Inspect areas and conditions before installation, and notify Architect in writing of unsatisfactory or detrimental conditions.
- C. Do not proceed with this work until conditions have been corrected; commencing installation constitutes acceptance of work site conditions.
- D. Verify that electrical services are correctly located and have proper characteristics.

### 3.02 INSTALLATION

- A. Install in accordance with Contract Documents and manufacturer's instructions.
- B. Coordinate installation of inserts and anchors that must be built in to flooring or subflooring.
- C. Install equipment rigid, straight, plumb, and level.
- D. Secure equipment with manufacturer's recommended anchoring devices.
- E. Install wall padding securely, with edges tight to wall and without wrinkles in fabric covering.
- F. Separate dissimilar metals to prevent electrolytic corrosion.

### **3.03 ADJUSTING**

- A. Verify proper placement of equipment.
- B. Verify proper placement of equipment anchors and sleeves, and use actual movable equipment to be anchored if available.
- C. Adjust operating equipment for proper operation; remove and replace equipment causing noise or vibration; lubricate equipment as recommended by manufacturer.

### **3.04 PROTECTION**

- A. Remove masking or protective covering from finished surfaces.
- B. Clean equipment in accordance with manufacturer's recommendations.
- C. Protect installed products until Date of Substantial Completion.
- D. Replace damaged products before Date of Substantial Completion.

**END OF SECTION**

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Consultant:



**Point of Beginning**  
Civil Engineering  
Land Surveying  
Landscape Architecture  
4941 Kitching Court  
Stevens Point, WI 54481  
715.344.9999 (Ph) 715.344.9922 (F)

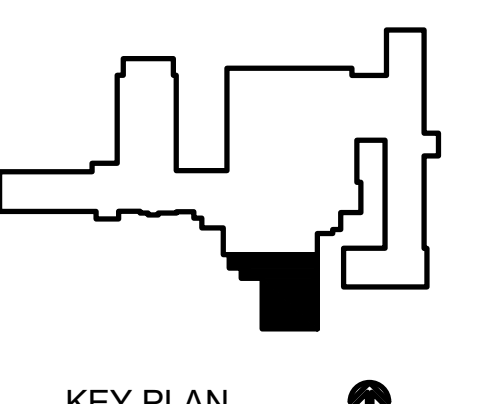
Project Title: **ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION**  
Project Location: **510 WEST HEMLOCK STREET  
ABBOTSFORD, WISCONSIN**  
Sheet Title: **DEMOLITION PLAN**

HSR Project Number: **21027**

Project Date: **DECEMBER 2021**

Drawn By: **MAJ**

Key Plan:



KEY PLAN

**REVIEW SET -  
NOT FOR  
CONSTRUCTION**

Revisions:

No.	Description	Date
ADDENDUM #2		01/04/22
ADDENDUM #1		12/22/21
BID DOCUMENTS		12/09/21

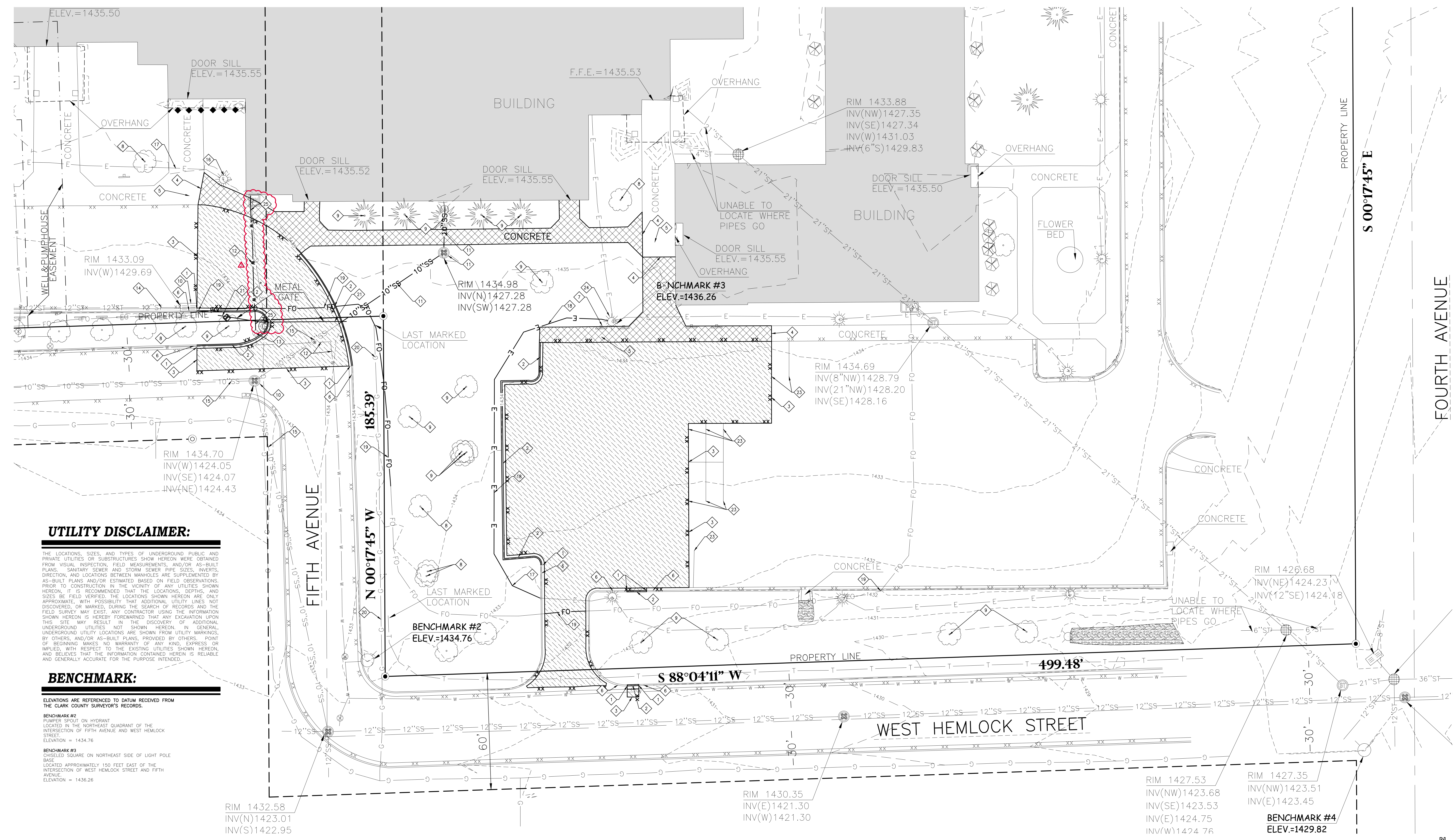
Graphic Scale: See Plan

Last Update: **12/22/2021**

**C1.0**

**CIVIL SHEET INDEX:**

- C1.0 - DEMOLITION PLAN
- C2.0 - LAYOUT PLAN
- C3.0 - GRADING PLAN
- C4.0 - EROSION CONTROL PLAN
- C5.0 - UTILITY PLAN
- C6.1 - CONSTRUCTION DETAILS
- C6.1 - CONSTRUCTION DETAILS
- L1.0 - LANDSCAPE PLAN



**UTILITY DISCLAIMER:**

THE LOCATIONS, SIZES, AND TYPES OF UNDERGROUND PUBLIC AND PRIVATE UTILITIES OR SUBSTRUCTURES SHOWN HEREON WERE OBTAINED FROM VISUAL INSPECTION, FIELD MEASUREMENTS, AND/OR AS-BUILT PLANS. SANITARY SEWER PIPE, SIZES, INVERTS, DIRECTION, AND LOCATIONS BETWEEN MANHOLES ARE SUPPLEMENTED BY AS-BUILT PLANS AND/OR ESTIMATED BASED ON FIELD OBSERVATIONS. PRIOR TO CONSTRUCTION IN THE VICINITY OF ANY UTILITIES SHOWN HEREON, IT IS RECOMMENDED THAT THE LOCATIONS, DEPTHS, AND SIZES BE FIELD VERIFIED. THE LOCATIONS SHOWN HEREON ARE ONLY APPROXIMATE, WITH POSSIBILITY THAT ADDITIONAL UTILITIES NOT DISCOVERED OR MARKED DURING THE SEARCH OF RECORDS AND THE FIELD SURVEY MAY EXIST. ANY CONTRACTOR USING THE INFORMATION SHOWN HEREON IS HEREBY FOREWARNED THAT ANY EXCAVATION UPON THIS SITE MAY RESULT IN THE DISCOVERY OF ADDITIONAL UNDERGROUND UTILITIES NOT SHOWN HEREON. IN GENERAL, UNDERGROUND UTILITY LOCATIONS ARE SHOWN FROM UTILITY MARKINGS; BY OTHERS, AND/OR AS-BUILT PLANS, PROVIDED BY OTHERS. POINT OF BEGINNING MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE EXISTING UTILITIES SHOWN HEREON, AND BELIEVES THAT THE INFORMATION CONTAINED HEREIN IS RELIABLE AND GENERALLY ACCURATE FOR THE PURPOSE INTENDED.

**BENCHMARK:**

ELEVATIONS ARE REFERENCED TO DATUM RECEIVED FROM THE CLARK COUNTY SURVEYOR'S RECORDS.

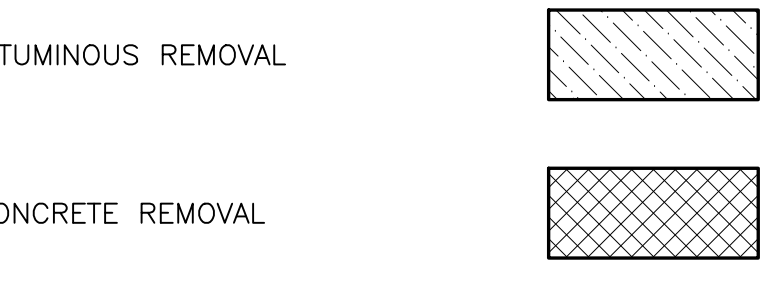
**BENCHMARK #2**  
PUMPER SPOUT ON HYDRANT LOCATED IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF FIFTH AVENUE AND WEST HEMLOCK STREET.  
ELEVATION = 1434.76

**BENCHMARK #3**  
CIRCLED SQUARE ON NORTHEAST SIDE OF LIGHT POLE BASE LOCATED APPROXIMATELY 150 FEET EAST OF THE INTERSECTION OF WEST HEMLOCK STREET AND FIFTH AVENUE.  
ELEVATION = 1436.26

**GENERAL NOTES:**

- CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
- ALL DEMOLITION MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER EXCEPT FOR THOSE ITEMS NOTED TO BE SALVAGED, WHICH SHOULD BE TURNED OVER TO THE OWNER.
- INSTALL AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES FOR PERIMETER PROTECTION PRIOR TO THE START OF DEMOLITION/CONSTRUCTION, IN ACCORDANCE WITH THE LOCAL AND STATE GOVERNING AUTHORITIES.
- BIDDERS SHALL VISIT THE SITE AND REVIEW EXISTING CONDITIONS PRIOR TO THE BID DATE.
- COORDINATE WITH THE OWNER AND LOCAL UTILITY COMPANIES TO LOCATE ANY EXISTING UTILITIES ON SITE PRIOR TO THE START OF WORK.
- ANY EXISTING UTILITIES NOT SHOWN ON THIS DOCUMENT WHICH NEED TO BE REMOVED, RELOCATED, AND/OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE GRADING CONTRACTOR AND INCLUDED IN THE BASE BID CONTRACT.
- STRIP TOPSOIL WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE PROJECT MANUAL SPECIFICATIONS.
- IF STRIPPED TOPSOIL IS STOCKPILED ON SITE, SILT FENCE SHALL BE INSTALLED AROUND THE BASE OF THE STOCKPILE TO PREVENT SEDIMENT TRANSPORT.
- PRIOR TO PERFORMING WORK WITHIN PUBLIC RIGHT OF WAYS, NOTIFY AND COORDINATE WORK WITH THE LOCAL MUNICIPALITY.
- MAINTAIN TRAFFIC CIRCULATION TO ALL RETAIL AND COMMERCIAL BUILDINGS SHOWN ON THIS DOCUMENT. COORDINATE ALL WORK WITH SAID BUSINESSES.

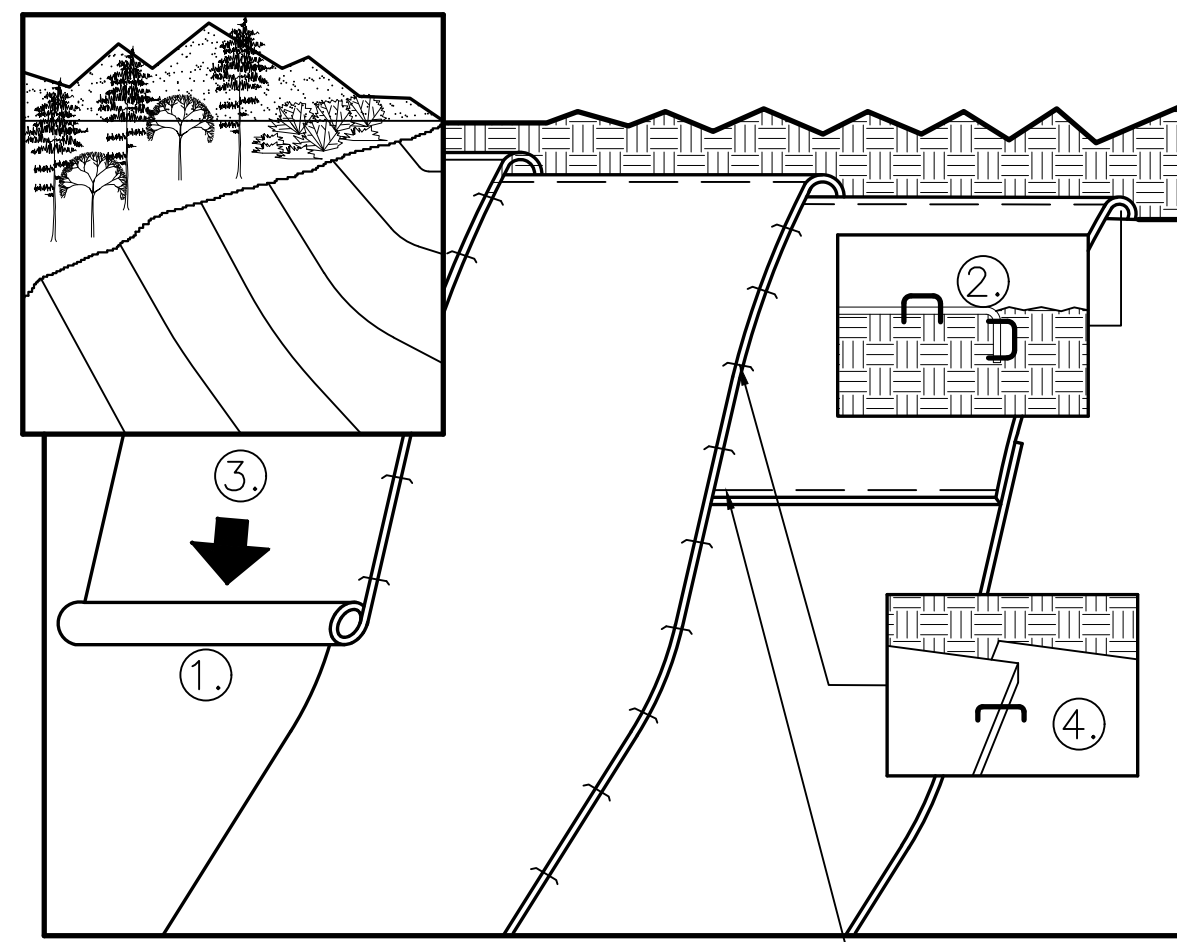
**DEMOLITION HATCH PATTERNS:**



**KEYNOTES:**

- SAWCUT EXISTING CONCRETE CURBING
- REMOVE EXISTING CONCRETE CURBING
- SAWCUT EXISTING BITUMINOUS PAVEMENT
- SAWCUT EXISTING CONCRETE WALK
- MAINTAIN EXISTING CONCRETE WALK
- MAINTAIN EXISTING CONCRETE CURBING
- REMOVE/SALVAGE EXISTING SIGN
- MAINTAIN EXISTING TREE/VEGETATION
- CLEAR & GRUB EXISTING TREE
- MAINTAIN EXISTING STORM SEWER STRUCTURE
- EXISTING SANITARY SEWER STRUCTURE AND PIPE TO BE REMOVED AND RELOCATED
- MAINTAIN EXISTING WATER SERVICE
- MAINTAIN EXISTING WATER VALVES
- MAINTAIN EXISTING STORM SEWER PIPE
- MAINTAIN EXISTING SANITARY SEWER PIPE
- MAINTAIN EXISTING POWER/LIGHT POLE
- MAINTAIN EXISTING ELECTRICAL LINE
- RELOCATE EXISTING ELECTRICAL LINE
- CUT AND REMOVE ABANDONED FIBER OPTIC LINE AS REQUIRED FOR SITE AND BUILDING CONSTRUCTION
- VERIFY ABANDONED EXISTING UNDERGROUND GAS LINE LOCATION (REMOVE OR RELOCATE AS REQUIRED)
- REMOVE EXISTING GATE
- REMOVE PARKING LOT STRIPING
- MAINTAIN PARKING LOT STRIPING
- REMOVE, SALVAGE, AND REINSTALL SITE LIGHTING AS REQUIRED FOR BUILDING CONSTRUCTION
- REMOVE ABANDONED WATER SERVICE BACK TO VALVE

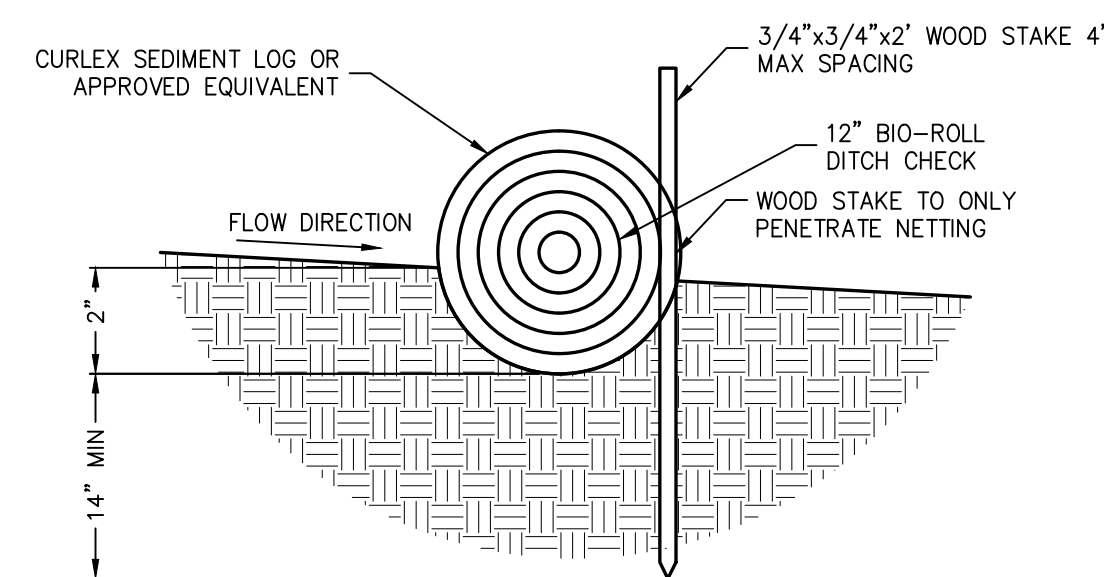




- NOTES:
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
  2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
  3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.

EROSION CONTROL BLANKET

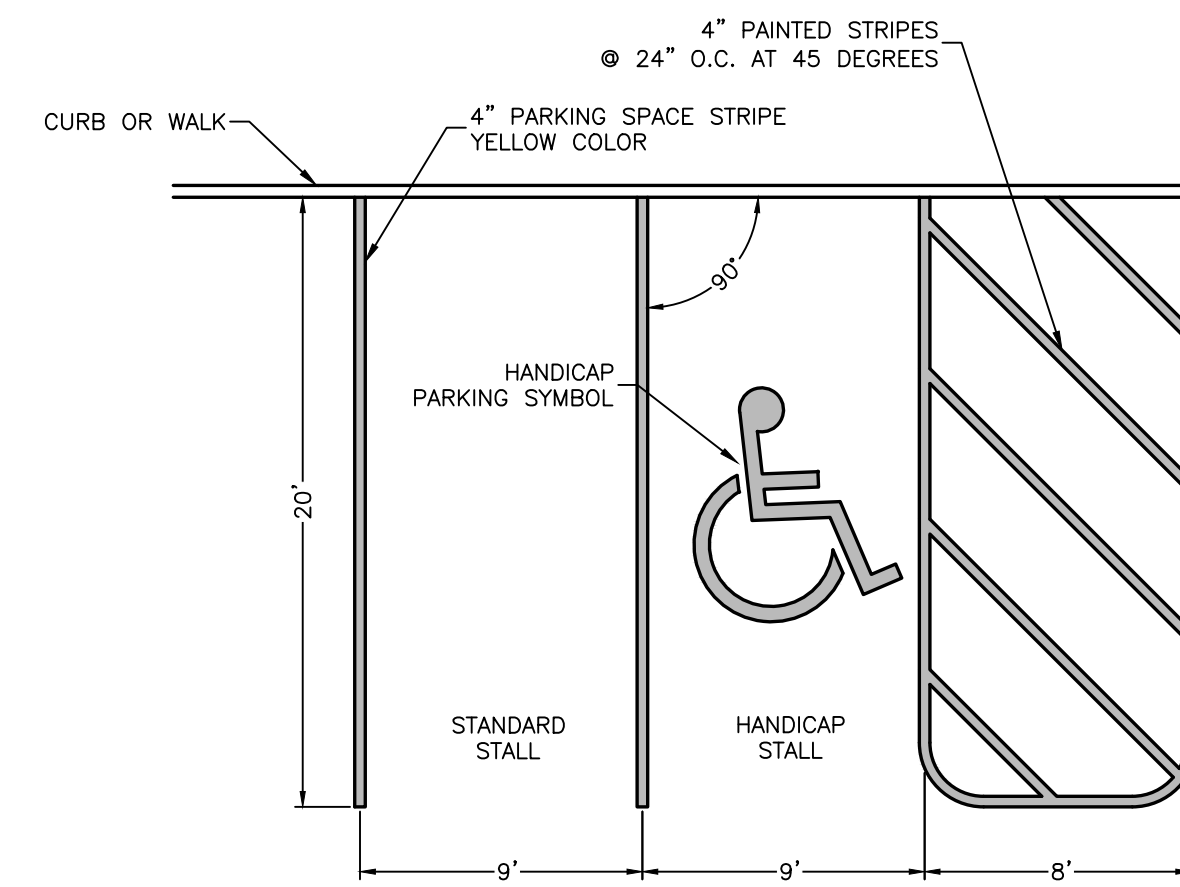
1  
C6.1



- NOTES:
1. USE "WDNR T.S. 1065" TEMPORARY DITCH CHECK AND INSTALL ACCORDING TO CURRENT WDNR SPECIFICATIONS.
  2. INSPECT DITCH CHECK FOR DEFICIENCIES PRIOR TO FORECASTED RAIN EVENTS, DAILY DURING EXTENDED RAIN EVENTS, AFTER RAIN EVENTS, AND AT 1-WEEK INTERVALS.
  3. TURN ENDS OF DITCH CHECK UPSLOPE TO PREVENT WATER FROM FLOWING AROUND END.
  4. REMOVE SEDIMENT BEHIND DITCH CHECK BEFORE SEDIMENT LEVELS REACHES THE HALFWAY POINT BETWEEN THE GROUND SURFACE AND TOP OF THE DITCH CHECK.

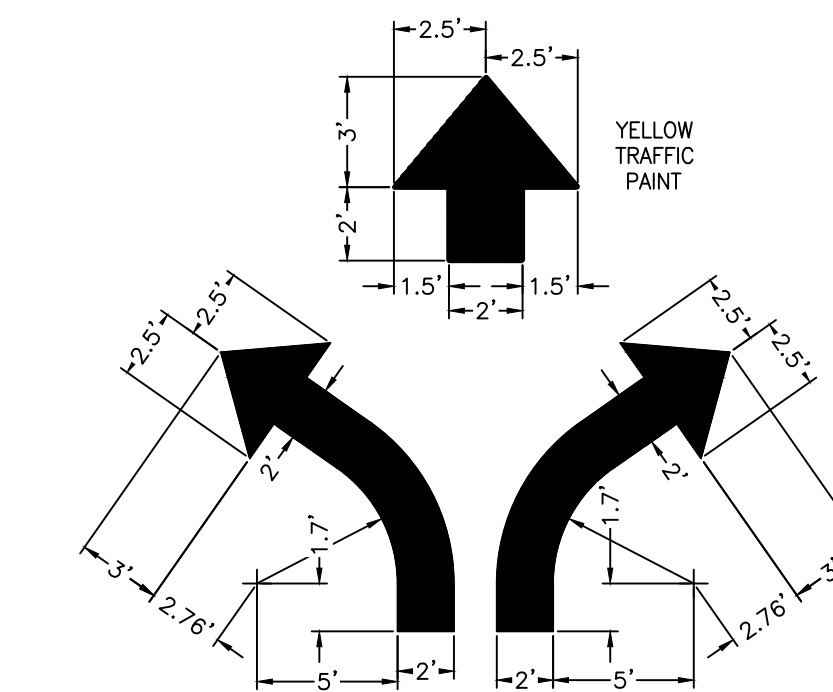
TEMPORARY DITCH CHECK

2  
C6.1



PARKING LOT STRIPING

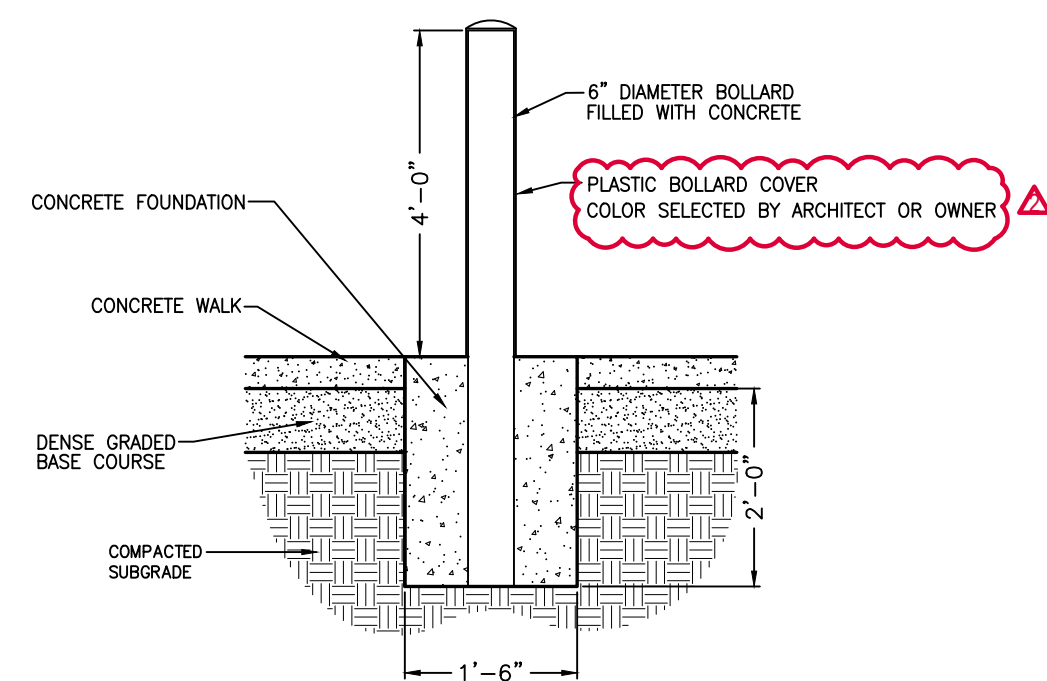
3  
C6.1



- NOTES:
1. DIRECTIONAL ARROWS SHALL BE EPOXY, COLORED TO MATCH EXISTING
  2. DIRECTIONAL ARROWS SHALL MATCH DIMENSIONS FROM WisDOT SDD 15C07-15c

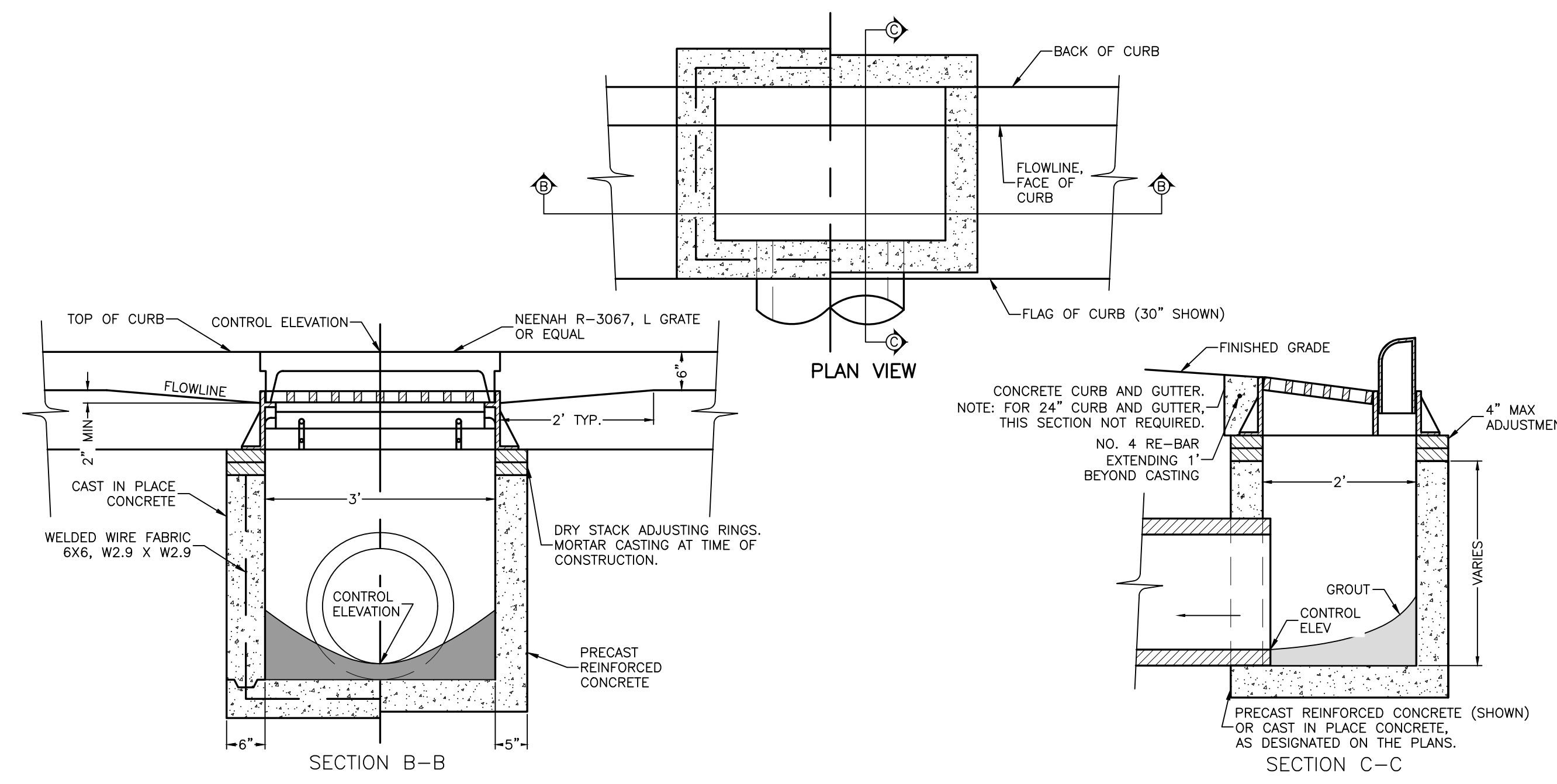
DIRECTIONAL ARROW STRIPING

4  
C6.1



CONCRETE BOLLARD

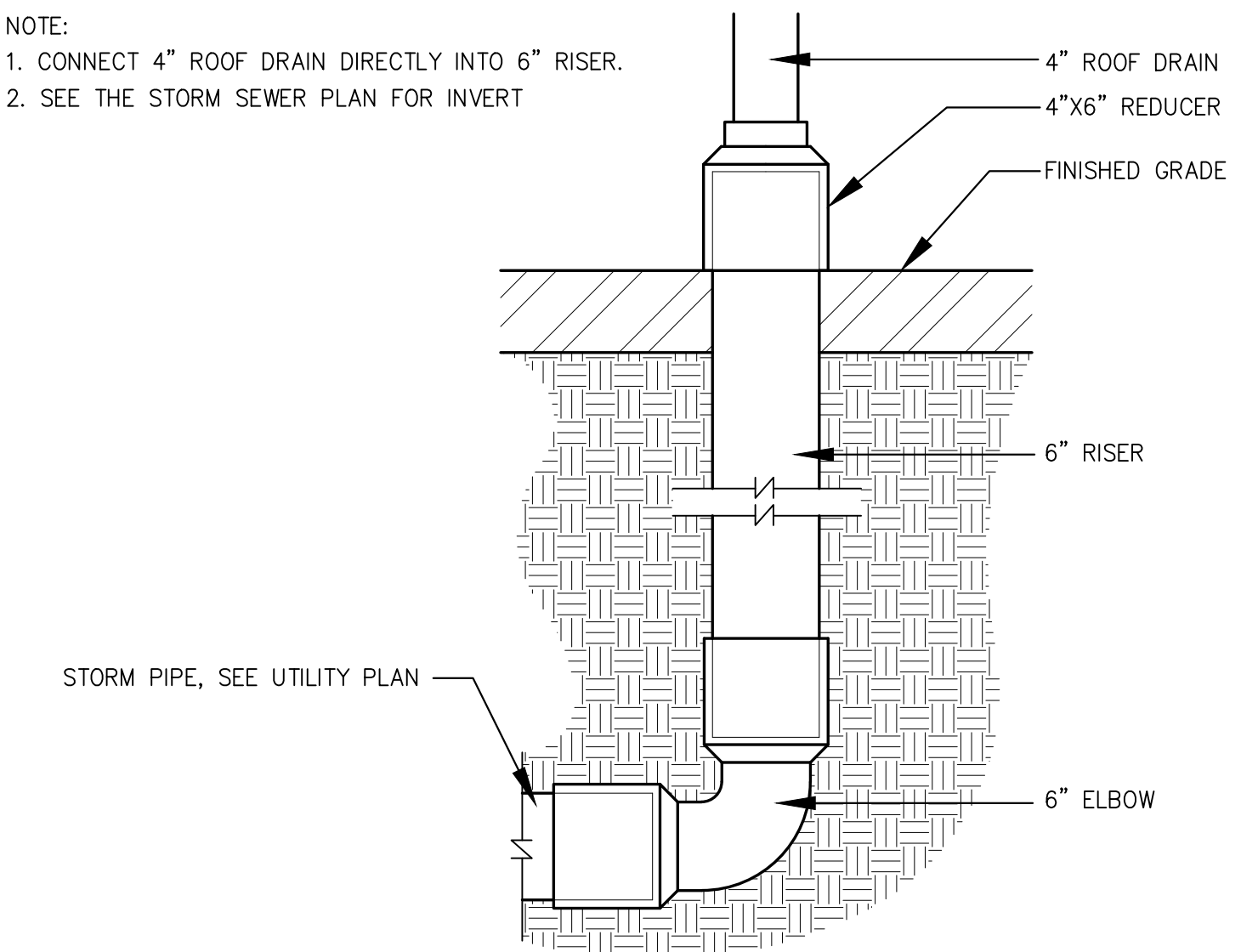
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C6.1



CURB INLET

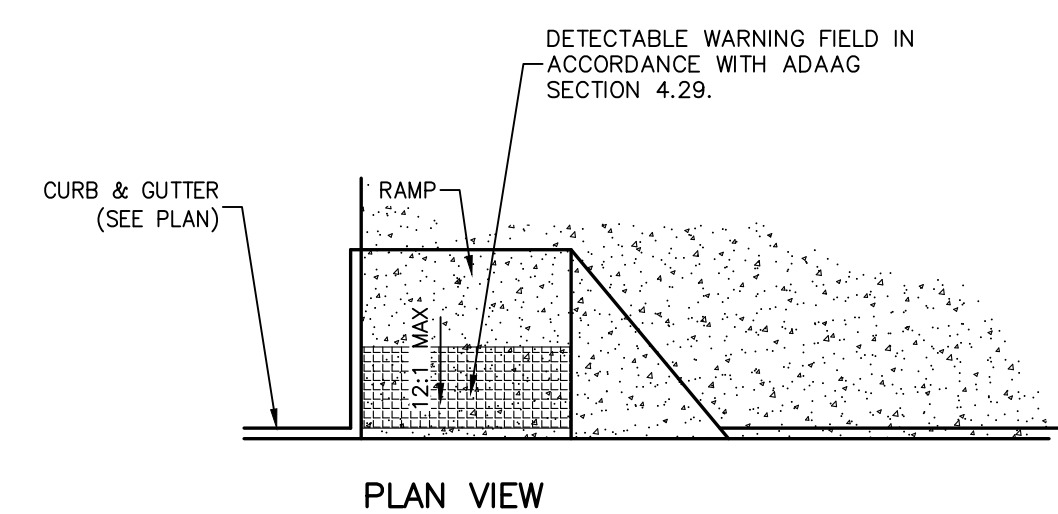
6  
C6.1

- NOTE:
1. CONNECT 4" ROOF DRAIN DIRECTLY INTO 6" RISER.
  2. SEE THE STORM SEWER PLAN FOR INVERT



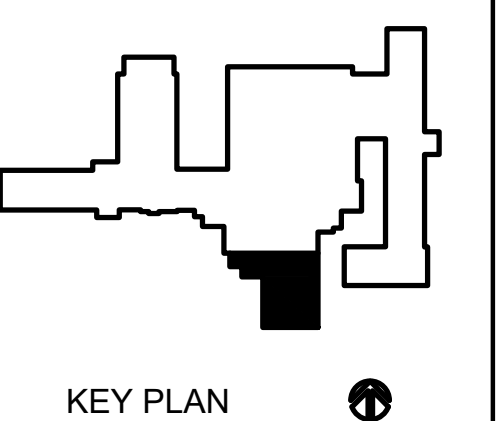
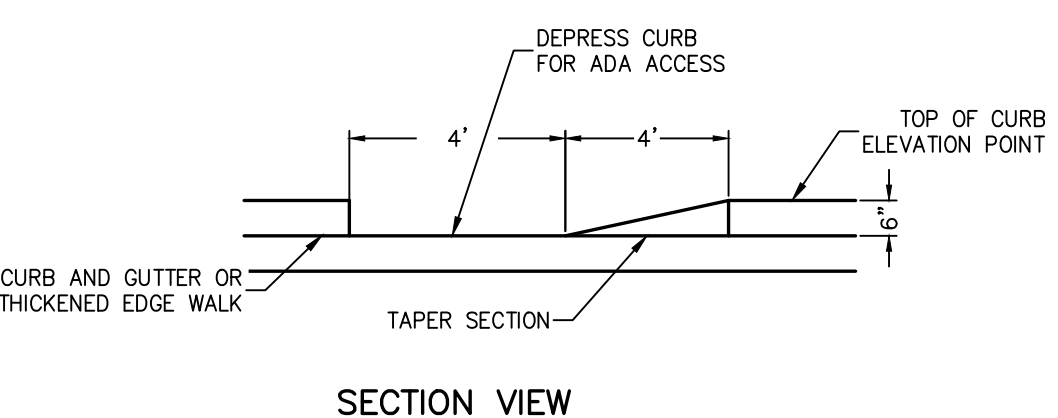
ROOF DRAIN CONNECTION

7  
C6.1



ACCESSIBLE CURB RAMP

8  
C6.1



KEY PLAN

**REVIEW SET -  
NOT FOR  
CONSTRUCTION**

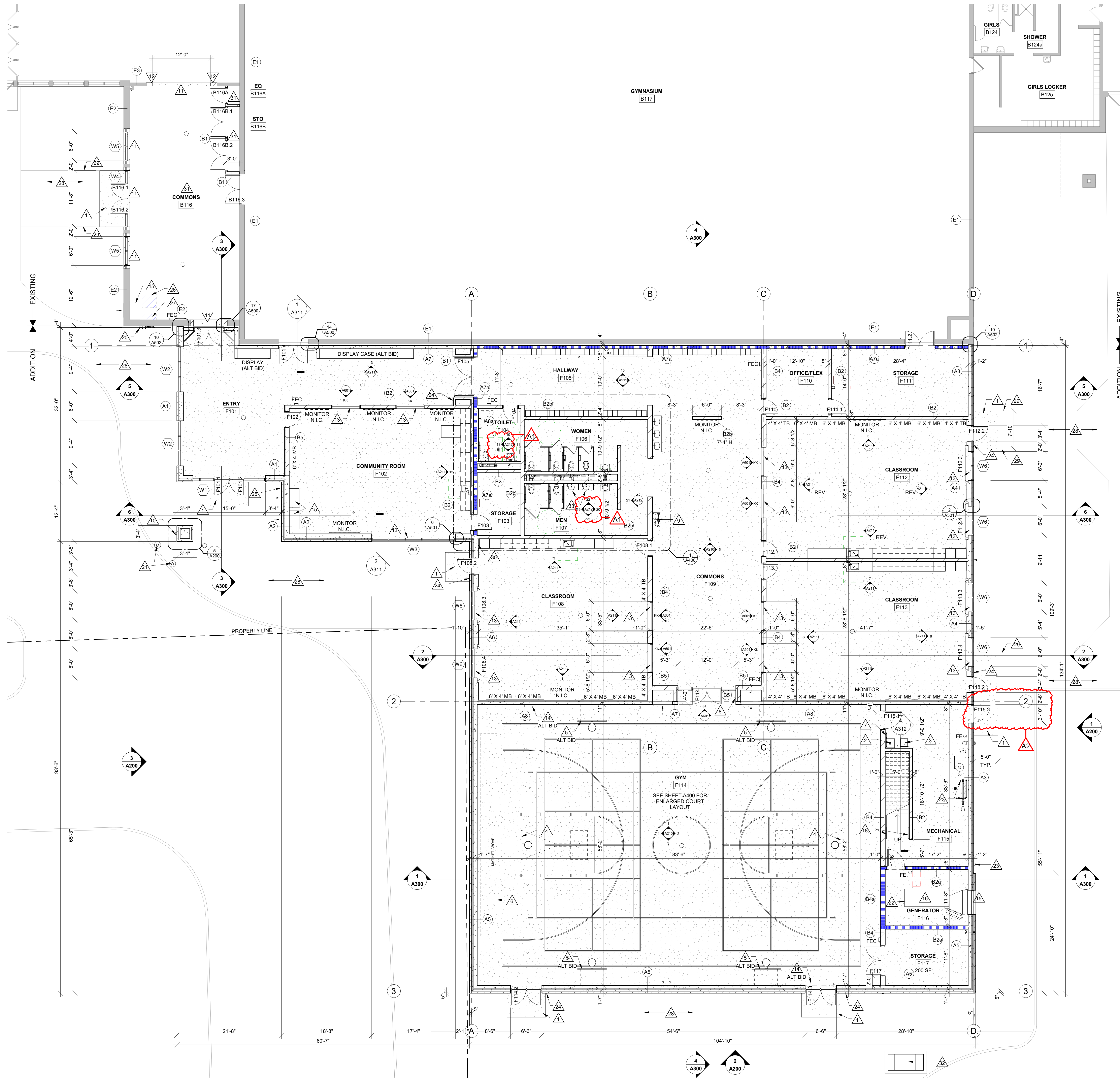
No.	Description	Date
ADDENDUM #2		01/04/22
ADDENDUM #1		12/22/21
SD DOCUMENTS		12/08/21

Graphic Scale: See Plan

Last Update:  
**12/22/2021**

**C6.1**

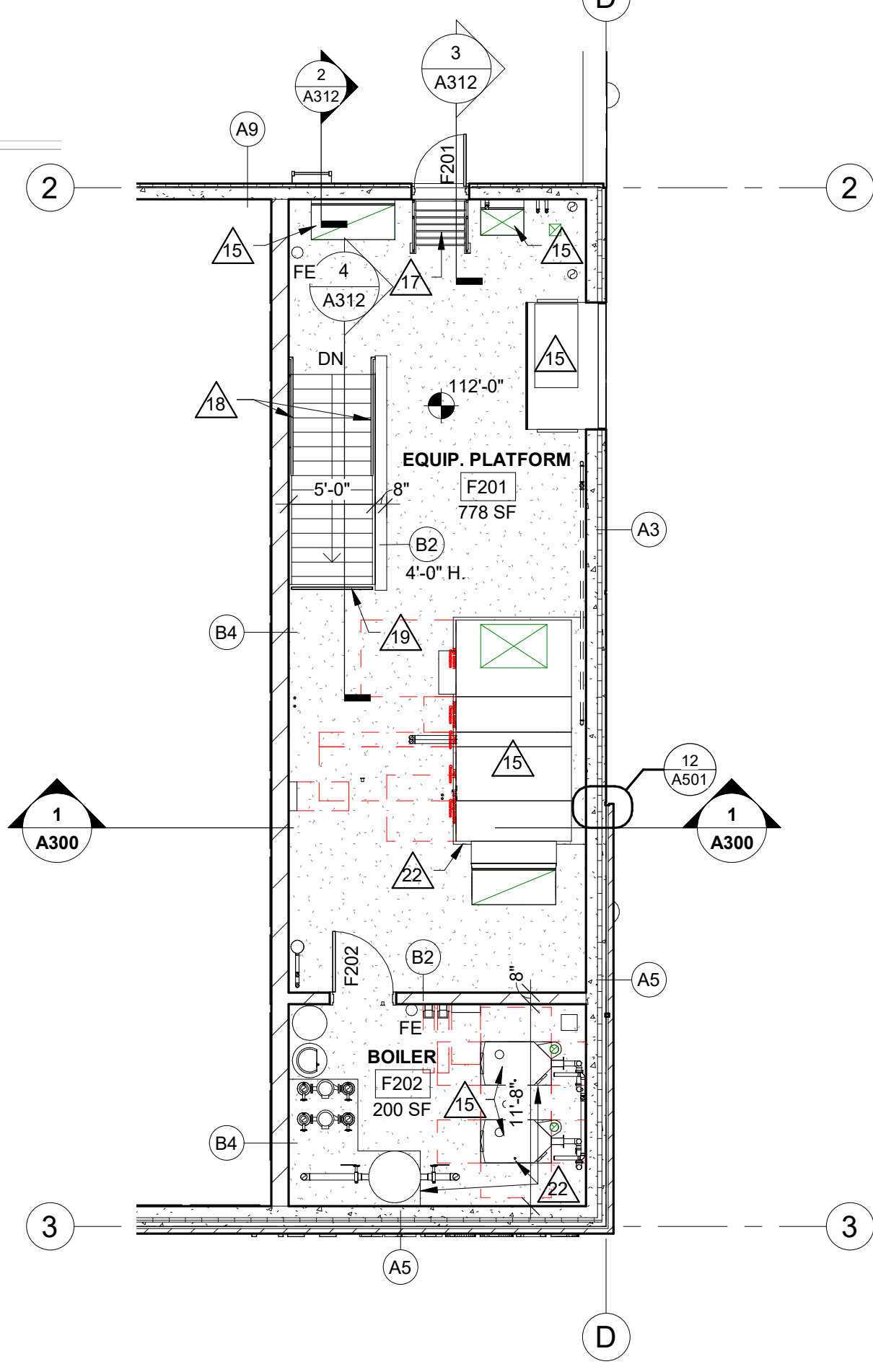




- PLAN GENERAL NOTES:**
- REFER TO OVERALL PLANS FOR FIRE RATINGS LOCATIONS AND ACCESSIBILITY ROUTES.
  - SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS.
  - LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED AND INSTALLED BY THE OWNER.
  - FIXED EQUIPMENT IS SHOWN ON THIS PLAN FOR COORDINATION. SEE SHEETS A400 FOR ALL EQUIPMENT NOTES.
  - UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE SLOPED 1/8" MIN. 1/16" TO 1/2" TO FLOOR DRAINS - TO "CENTER" IF NO FLOOR DRAINS.
  - PAINT ALL EXPOSED STEEL UNITS.
  - EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE.
  - INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/IO TILE AND AT DOOR JAMBS AS DETAILED. NO BULLNOSE AT WINDOW JAMBS.
  - SEE A401 FOR WALL CONTROL JOINT DETAILS. SEE PLANS AND ELEVATIONS FOR CJ LOCATIONS. CJ = CONTROL JOINTS.
  - SEE A401 FOR TYPICAL HEAD FLASHING AND THROUGH-WALL FLASHING ISOMETRIC DETAILS.
  - SEE STRUCTURAL FOR SLAB CONTROL JOINTS.
  - GENERAL CONTRACTOR TO PROVIDE CONCRETE EQUIPMENT PADS/CURBS AS REQUIRED FOR MECHANICAL/ELECTRICAL EQUIPMENT. VERIFY SIZE, PROFILE & LOCATION WITH MECHANICAL/ELECTRICAL.
  - VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL/PLUMB AND ELEC OPENINGS - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENING SHALL BE SEALED AFTER UTILITY INSTALLATION.

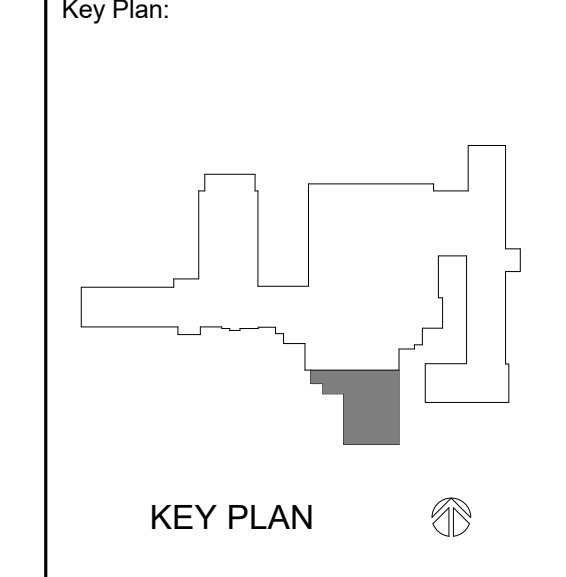
- PLAN LEGEND:**
- (A) SYMBOL INDICATES WALL TYPE - SEE SHEET A400 FOR WALL TYPE DETAILS.
  - (A) SYMBOL INDICATES WINDOW TYPE - SEE SHEET A400 FOR WINDOW FRAME ELEVATIONS.
  - (A) SYMBOL INDICATES CONSTRUCTION NOTE THIS SHEET
- 2 HOUR WALL

- KEY NOTES PLAN**
- CONC. STPOOP - SEE STRUCT.
  - MOB. BASIN - SEE PLUMBING
  - UTILITY SINK - SEE PLUMBING
  - FORWARD FOLDING BASKETBALL BACKSTOP - SEE SHEET A400
  - WALL MOUNT BASKETBALL BACKSTOP (ALT BID) - SEE SHEET A400
  - WALL MOUNT MAT LIFT - SEE SHEET A400
  - MOP AND BROOM HOLDER (MBH) - SEE ACCESSORIES SCHEDULE SHEET A400
  - GYM CONTROL PANEL - SEE ELECTRICAL
  - ELECTRIC WATER COOLER - SEE PLUMBING
  - OPEN FACE ALUM DOWNSPOUT. TIE INTO STORM SEWER - SEE CIVIL
  - PATCH CONC. SLAB AT REMOVED MASONRY WALL
  - BULLNOSE CMU AT NEW OPENING JAMBS
  - WINDOW BLINDS - SEE ID SHEETS
  - SCOREBOARD (ALT BID)
  - MECHANICAL EQUIPMENT DUCTWORK - SEE MECHANICAL
  - GENERATOR - SEE ELECTRICAL
  - 90" GALVANIZED STL SHIPS LADDER - 36" WIDE
  - 1 1/4" DIA (NOM) BLACK SCHEDULE 40 STEEL HANDRAIL
  - 1 1/4" DIA (NOM) BLACK SCHEDULE 40 STEEL REMOVABLE GUARDRAIL
  - EXISTING GAS METER TO REMAIN - SEE PLUMBING
  - BOLLARD - SEE CIVIL
  - CONC. HOUSEKEEPING PAD - COORDINATE W/ MECHANICAL
  - PLUMBING EQUIPMENT - SEE PLUMBING
  - TORNADO SAFE ROOM SIGN - SEE 1/A401
  - TORNADO SAFE ROOM LOCATION SIGN - SEE 2/A401
  - APPLY FLOOR LEVELING COMPOUND (AT REMOVED FLOOR DRAIN) AND PREP FOR NEW FLOORING FINISH
  - PATCH CONC. SLAB AT REMOVED PLUMBING SERVICE - SEE PLUMBING
  - CONC. PLAZA/SIDEWALK - SEE CIVIL
  - CONC. SIEWAGE AND STPOOP TO ALIGN
  - INCREASE DEPTH OF WALL FURRING FOR PLUMBING CHASE
  - NEW FLOOR FINISH THIS ROOM - SEE ID SHEETS
  - APPROXIMATE LOCATION OF NEW UNDERGROUND LP STORAGE TANK - SEE PLUMBING
  - SLOPE FLOOR SLAB TO URINALS. COORDINATE CONC, PLUMBING AND TILE



**1 FIRST FLOOR PLAN**  
1/8" = 1'-0"

**2 EQ. PLATFORM PLAN**  
1/8" = 1'-0"



**BID DOCUMENTS**

No.	Description	Date
A1	ADDENDUM 1	12.22.2021
A2	ADDENDUM 2	01.05.2022

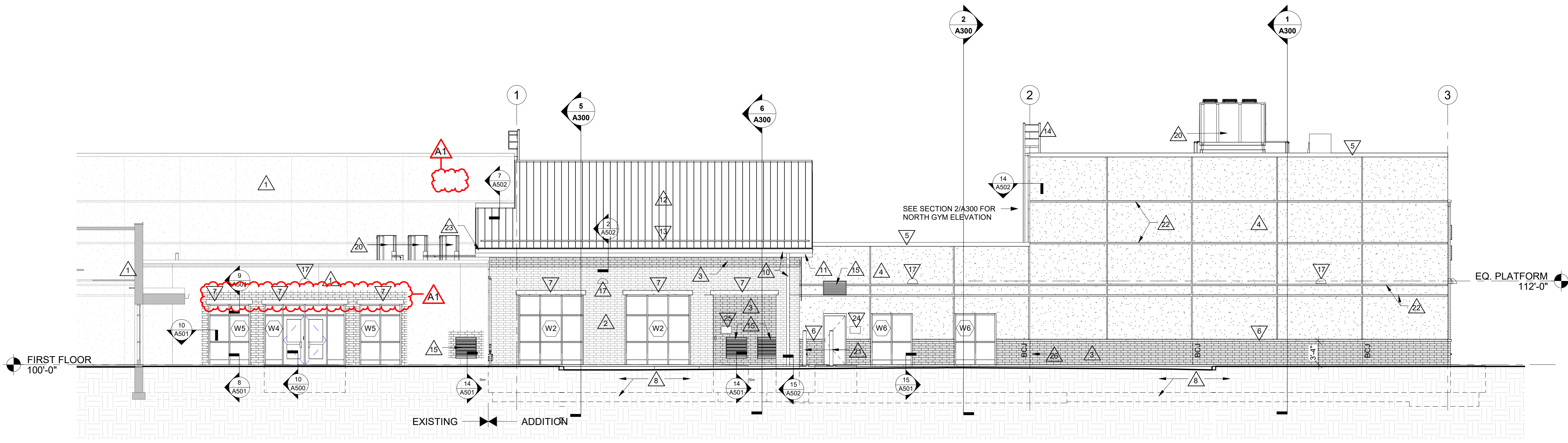
Graphic Scale: 0' 2' 4' 8' 12'

Last Update: **1/5/2022 9:15:51 AM**





Consultant:



**3 WEST ELEVATION**  
1/8" = 1'-0"

**ELEVATION GENERAL NOTES:**

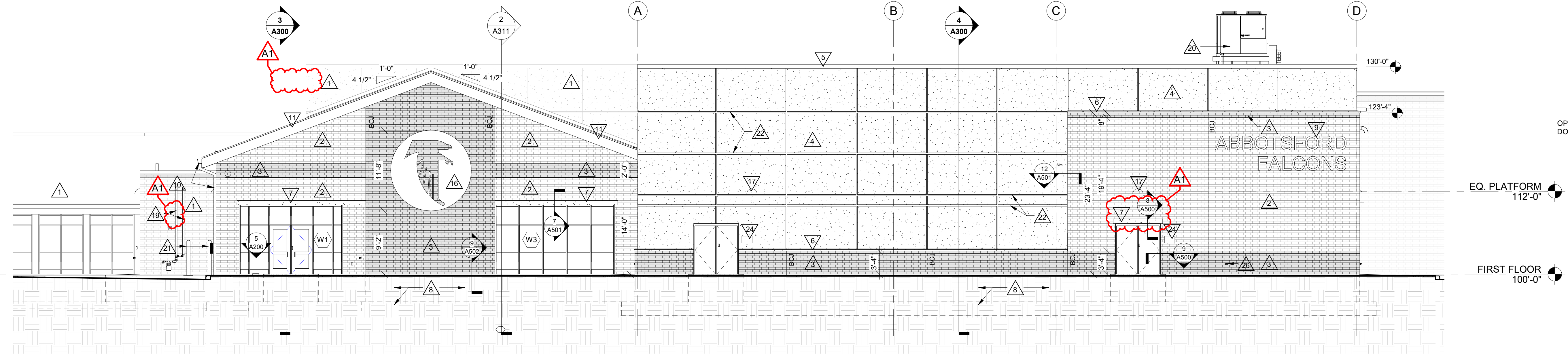
- SEE DETAILS A501 FOR CONTROL JOINT (CJ) AND BRICK CONTROL JOINT (BCJ) INFORMATION.
- BRICK COURSING: 1/3 RUNNING BOND TYPICAL.

**ELEVATION LEGEND:**

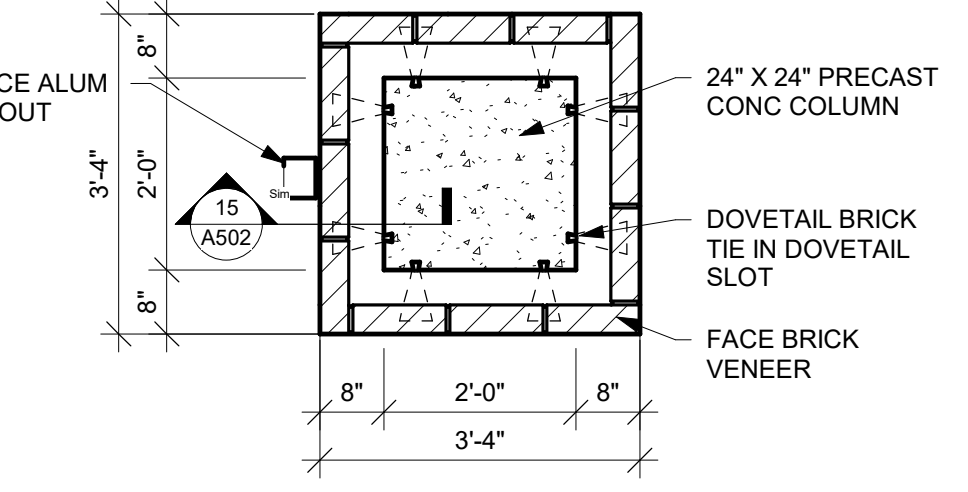
- KEYNOTE TAG
- WINDOW TAG - SEE SHEET A601 FOR FRAME ELEVATIONS
- BCJ: BRICK VENEER CONTROL JOINT - SEE DETAILS A501
- FACE BRICK - COLOR A
- FACE BRICK - COLOR B
- PRECAST CONC PANEL

**KEY NOTES ELEVATION**

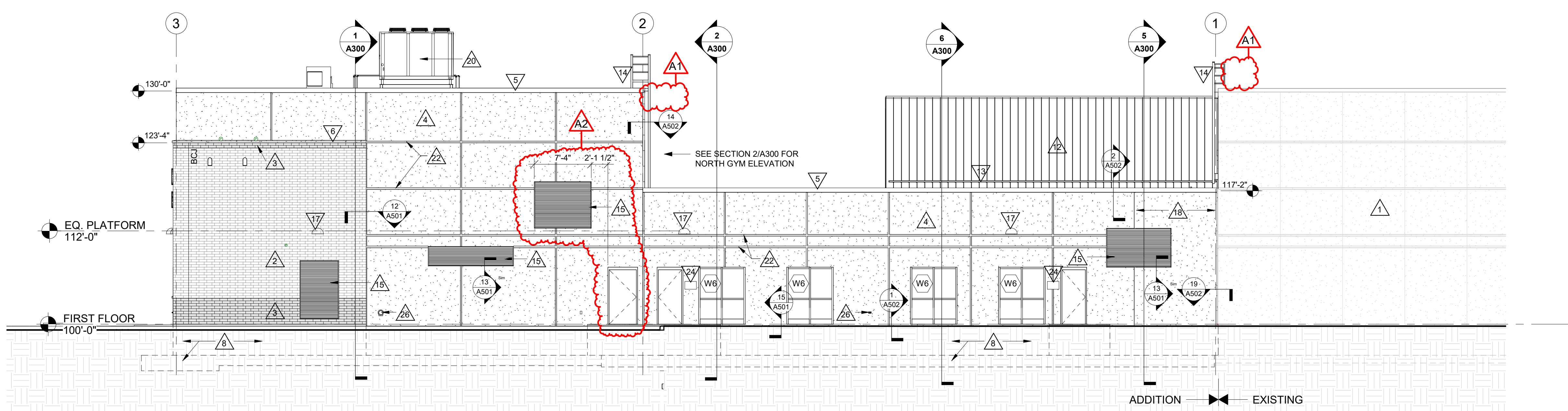
- EXISTING BUILDING
- FACE BRICK VENEER - COLOR A
- FACE BRICK VENEER - COLOR B
- PRECAST CONCRETE WALL PANEL
- REFINISHED METAL WALL CAP
- CAST STONE CAP
- CAST STONE
- CONCRETE FOUNDATION AND FOOTING - SEE STRUCTURAL
- 24" ALUM LETTER BUILDING SIGNAGE
- ALUM GUTTER AND OPEN-FACED DOWNSPOUT
- REFINISHED METAL FASCIA
- STANDING SEAM METAL ROOFING
- STANDING SEAM MOUNTED SNOW GUARD
- ROOF ACCESS LADDER
- MECHANICAL LOUVER - SEE MECHANICAL
- SIGNAGE - SEE 4/A200
- LIGHT FIXTURE - SEE ELECTRICAL
- REDUCE DEPTH OF OUTER WYTHE ON THIS PRECAST CONC PANEL BY TYPICAL REVEAL DEPTH
- EXPOSED GAS PIPE (PAINT) - SEE PLUMBING
- MECHANICAL EQUIPMENT - SEE MECHANICAL
- BOLLARD - SEE CIVIL
- PRECAST CONC PANEL REVEALS - MATCH SIZE AND ALIGN W/ EXISTING GYM BUILDING
- DRAIN GUTTER ONTO EXISTING ROOF BELOW
- TORNADO SAFE ROOM SIGN - SEE 1/A601
- TORNADO SAFE ROOM LOCATION SIGN - SEE 2/A601
- PLUMBING FIXTURE - SEE PLUMBING



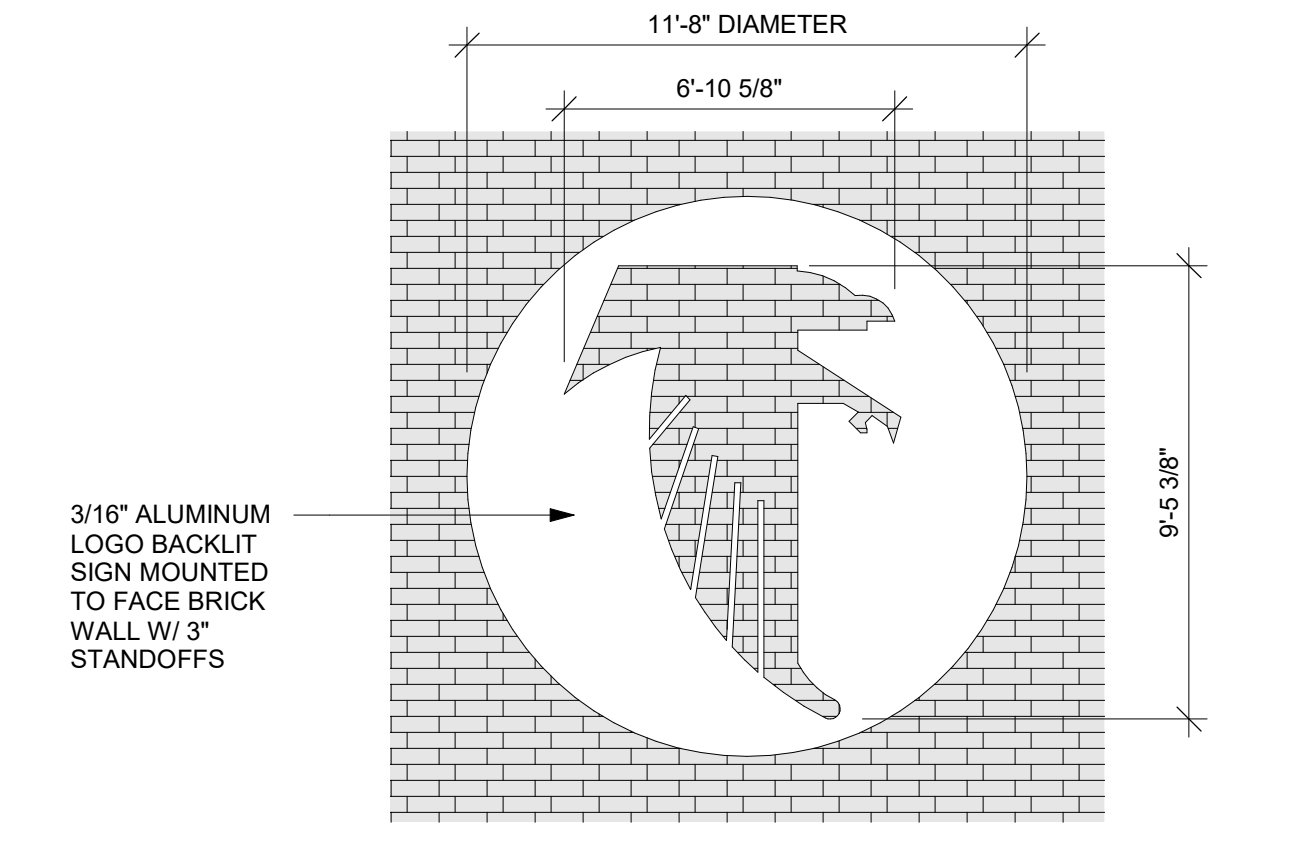
**2 SOUTH ELEVATION**  
1/8" = 1'-0"



**5 COLUMN DETAIL**  
1/2" = 1'-0"



**1 EAST ELEVATION**  
1/8" = 1'-0"



**4 SOUTH ELEVATION SIGN**  
1/4" = 1'-0" ALTERNATE BID

Project Title: **ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION**  
Project Location: **510 WEST HEMLOCK STREET  
ABBOTSFORD, WISCONSIN**  
Sheet Title: **EXTERIOR ELEVATIONS**

Project Number: **21027**  
Project Date: **DECEMBER 2021**  
Drawn By: **DJH**

Key Plan:

**BID DOCUMENTS**

No.	Description	Date
A1	ADDENDUM 1	12.22.2021
A2	ADDENDUM 2	01.05.2022

Graphic Scale: **VARIES**  
Last Update: **1/5/2022 1:44:41 PM**

**A200**





Consultant:

Project Title: **ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION**  
Project Location: 510 WEST HEMLOCK STREET  
ABBOTSFORD, WISCONSIN  
Sheet Title: **SECTIONS**

HSR Project Number: **21027**  
Project Date: **DECEMBER 2021**  
Drawn By: **DJH**

Key Plan:

**BID DOCUMENTS**

No.	Description	Date
A1	ADDENDUM 1	12.22.2021
A2	ADDENDUM 2	01.05.2022

Graphic Scale: 0 2' 4' 8' 12'

Last Update: **1/5/2022 9:16:04 AM**

**A300**

**BLDG SECTION GENERAL NOTES:**

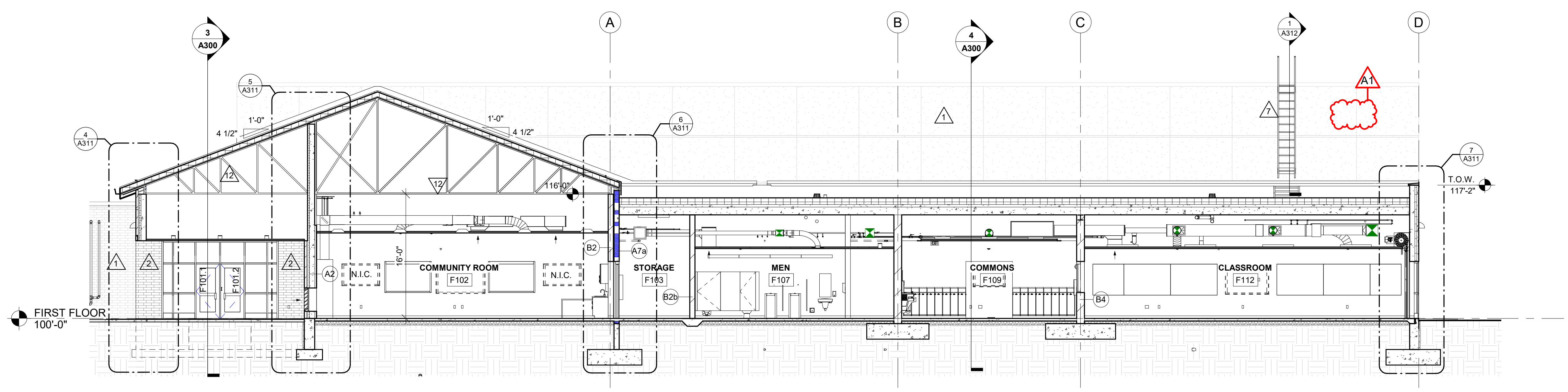
A. SEE DETAILS A501 FOR CONTROL JOINT (CJ) AND BRICK CONTROL JOINT (BCJ) INFORMATION.  
B. BRICK COURSING - RUNNING BOND TYPICAL.

**BUILDING SECTION LEGEND:**

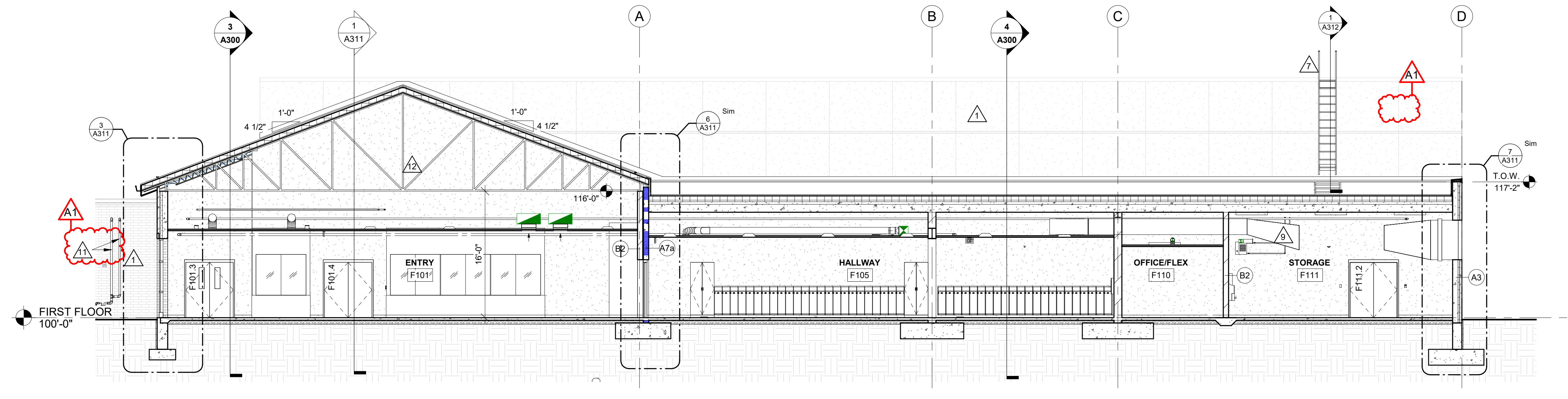
- KEYNOTE TAG
- WINDOW TAG - SEE SHEET A601 FOR FRAME ELEVATIONS
- BCJ BRICK VENEER CONTROL JOINT - SEE DETAILS A601
- FACE BRICK - COLOR A
- FACE BRICK - COLOR B
- PRECAST CONC PANEL

**KEY NOTES BLDG SECTIONS**

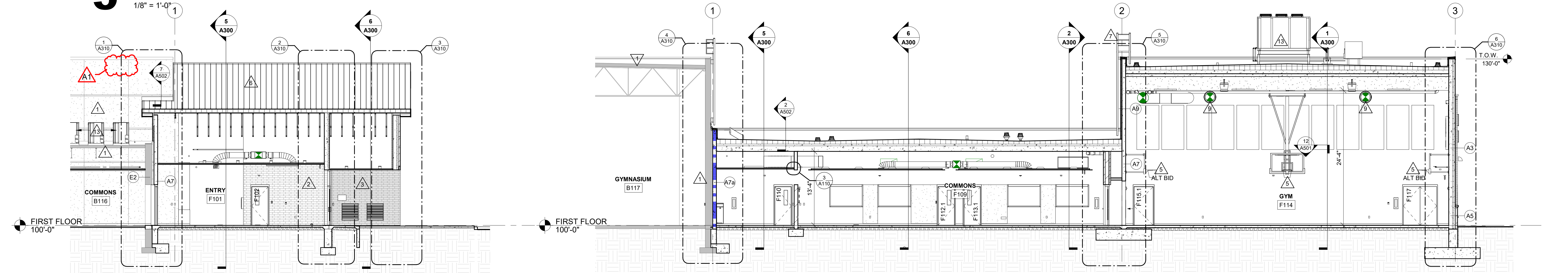
- 1 EXISTING BUILDING
- 2 FACE BRICK VENEER - COLOR A
- 3 FACE BRICK VENEER - COLOR B
- 4 PREFINISHED METAL WALL CAP
- 5 GYMNASIUM EQUIPMENT - SEE SHEET A400
- 6 STANDING SEAM METAL ROOFING
- 7 ROOF ACCESS LADDER
- 8 INSULATED METAL PANELS
- 9 DUCTWORK - SEE MECHANICAL
- 10 EXPOSED PLUMBING PIPING (PAINT) - SEE PLUMBING
- 11 EXPOSED GAS PIPE (PAINT) - SEE PLUMBING
- 12 LIGHT GAUGE STEEL TRUSSES - SEE STRUCTURAL
- 13 MECHANICAL EQUIPMENT - SEE MECHANICAL



**6 BUILDING SECTION**  
1/8" = 1'-0"

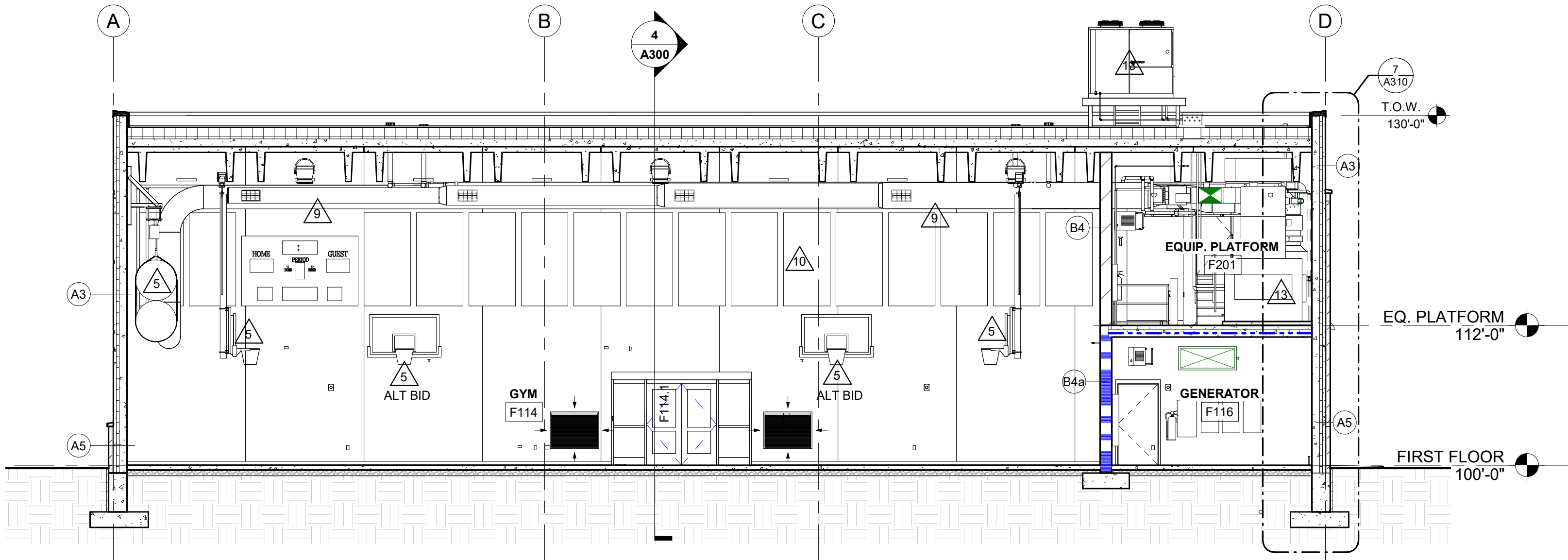


**5 BUILDING SECTION**  
1/8" = 1'-0"

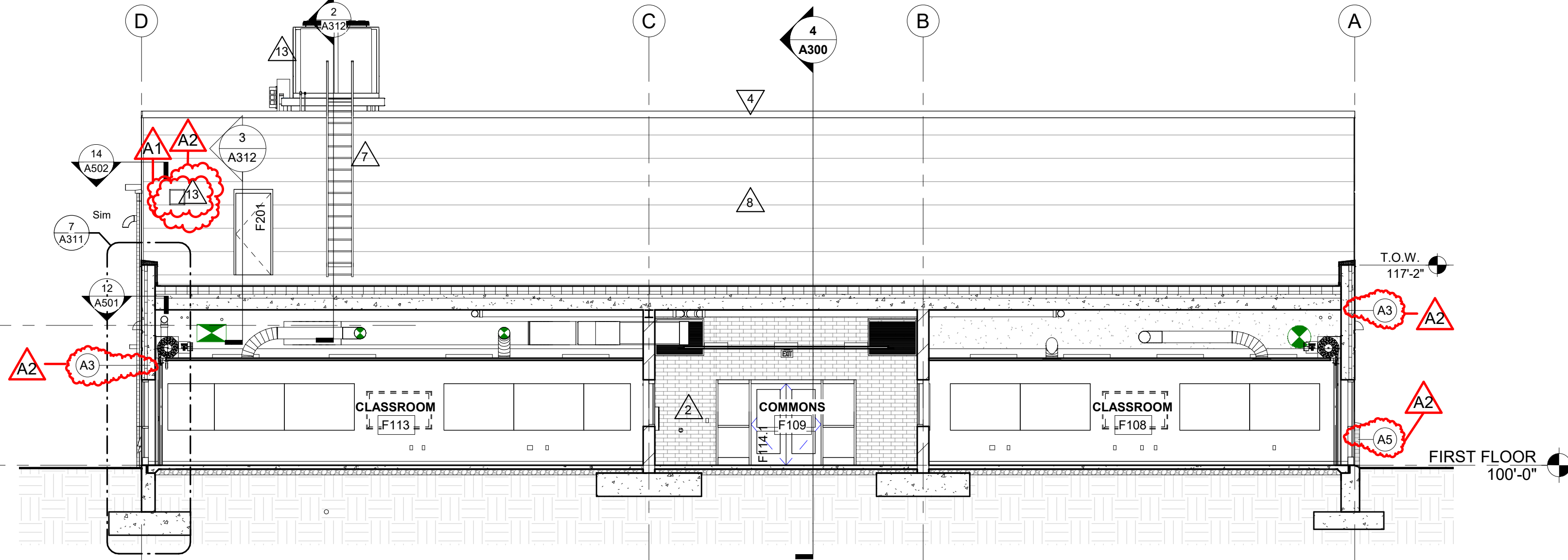


**3 BUILDING SECTION**  
1/8" = 1'-0"

**4 BUILDING SECTION**  
1/8" = 1'-0"



**1 BUILDING SECTION**  
1/8" = 1'-0"

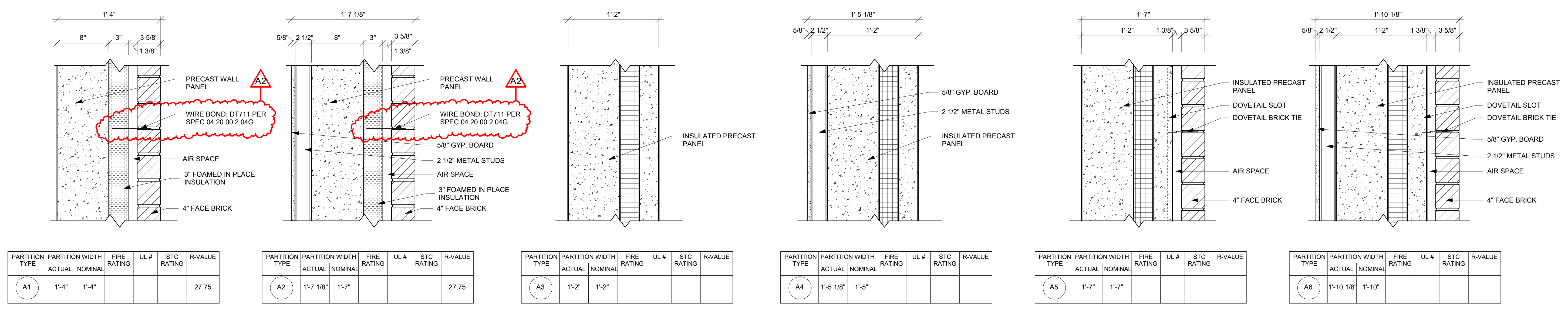


**2 BUILDING SECTION**  
1/8" = 1'-0"



**WALL TYPE GENERAL NOTES:**

- REFER TO MASTER COLOR SCHEDULE AND INTERIOR DESIGN SHEETS FOR ADDITIONAL WALL FINISHES.
- WHERE INTERIOR DESIGN SHEETS INDICATE WALL TILE, INSTALL BACKER BOARD AT WET AND NON-WET LOCATIONS AS LISTED IN 09 21 16
- NON RATED WALLS, INCLUDING BULKHEADS SHALL HAVE FRAMING EXTENDED TO DECK ABOVE. GYP BOARD SHALL EXTEND TO 4" ABOVE CEILING UNLESS NOTED OTHERWISE. COLUMN FURRING MAY STOP 4" ABOVE CEILING.
- WHERE FIRE RATED WALLS ARE INDICATED BY WALL TYPE, USE UL OR EQUIVALENT APPROVED RATING SYSTEM INCLUDING TOP OF WALL AND PENETRATIONS.



PARTITION TYPE	PARTITION WIDTH ACTUAL	PARTITION WIDTH NOMINAL	FIRE RATING	UL #	STC RATING	R-VALUE
A1	1'-4"	1'-4"				27.75
A2	1'-7 1/8"	1'-7"				27.75
A3	1'-2"	1'-2"				
A4	1'-5 1/8"	1'-5"				
A5	1'-7"	1'-7"				
A6	1'-10 1/8"	1'-10"				

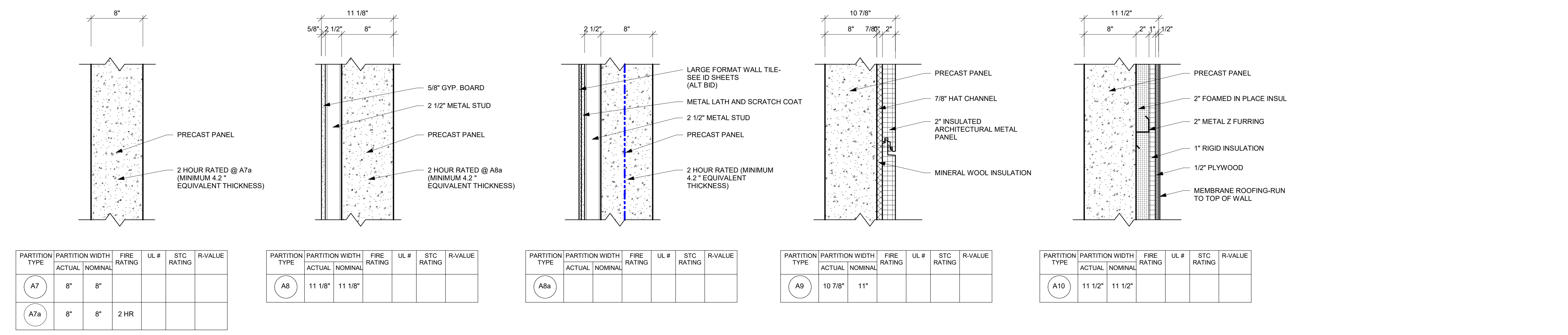
**1 RATED CMU WALL TABLE:**

1 HOUR	MINIMUM 2.8 EQUIVALENT WALL THICKNESS
2 HOUR	MINIMUM 4.2 EQUIVALENT WALL THICKNESS

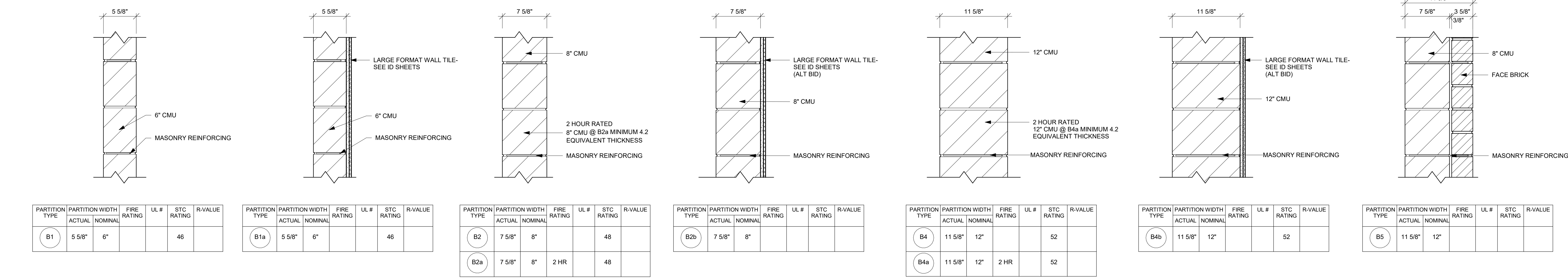
**WALL ASSEMBLY R-VALUE COMPONENT TABLE:**

COMPONENT	R-VALUE
FILM (INSIDE)	.68
5/8" GYP BOARD	.52
6" MTL STUD	..
8" CMU	1.11
CONCRETE	.08 PER INCH (above grade), .11 PER INCH (foundation)
1/2 GYP SHEAT	.69
FILM (OUTSIDE)	.17
RIGID FOAM	5 PER INCH
FOAMED IN PLACE	7 PER INCH
DEAD AIR	.85
BRICK	.44
STONE	.44
MTL PANEL	.62

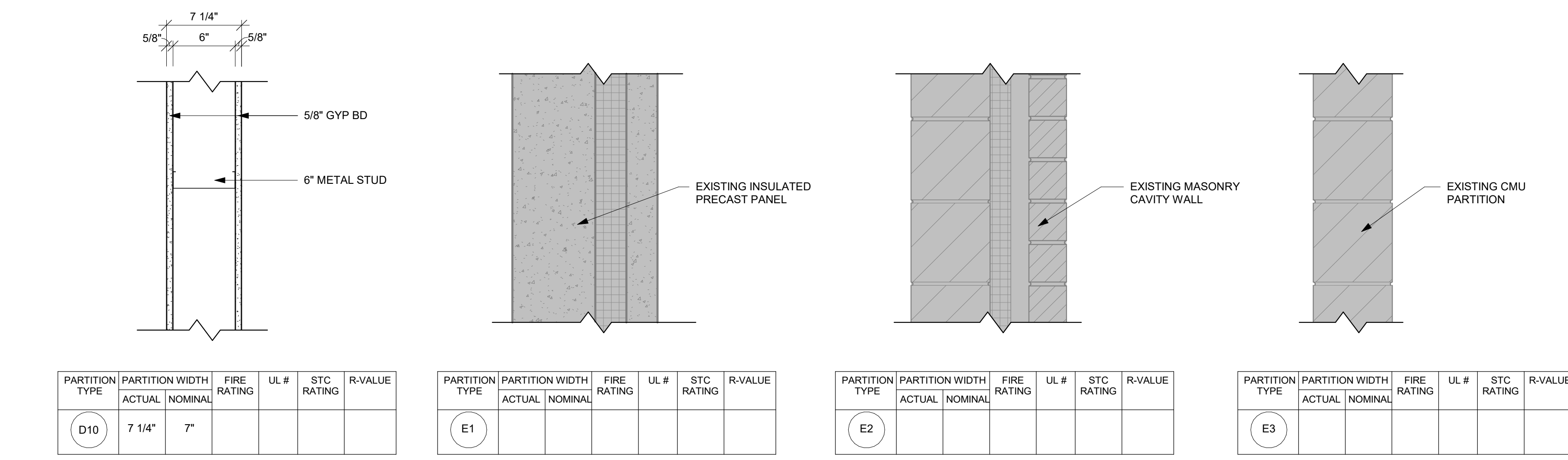
SEE WALL TYPE FOR TOTAL WALL R-VALUE



PARTITION TYPE	PARTITION WIDTH ACTUAL	PARTITION WIDTH NOMINAL	FIRE RATING	UL #	STC RATING	R-VALUE
A7	8"	8"				
A7a	8"	8"	2 HR			
A8	11 1/8"	11 1/8"				
A8a						
A9	10 7/8"	11"				
A10	11 1/2"	11 1/2"				



PARTITION TYPE	PARTITION WIDTH ACTUAL	PARTITION WIDTH NOMINAL	FIRE RATING	UL #	STC RATING	R-VALUE
B1	5 5/8"	6"				46
B1a	5 5/8"	6"				46
B2	7 5/8"	8"				48
B2a	7 5/8"	8"	2 HR			48
B2b	7 5/8"	8"				
B4	11 5/8"	12"				52
B4a	11 5/8"	12"	2 HR			52
B4b	11 5/8"	12"				52
B5	11 5/8"	12"				



PARTITION TYPE	PARTITION WIDTH ACTUAL	PARTITION WIDTH NOMINAL	FIRE RATING	UL #	STC RATING	R-VALUE
D10	7 1/4"	7"				
E1						
E2						
E3						



Revisions:	No.	Description	Date
	ADDENDUM #1		12/22/21
	ADDENDUM #2		1/5/22

Graphic Scale: **VARIES**  
Last Update: **1/5/2022 9:43:36 AM**

**CONTROL JOINTS TO BE PLACED:**

- 1) MAXIMUM OF 6'-0" FROM CORNER ALONG ONE OF THE TWO ORTHOGONAL WALLS
- 2) MAXIMUM OF 24'-0" INCLUDING DISTANCE BETWEEN JOINTS AROUND CORNER
- 3) AS OTHERWISE DETAILED ON ARCHITECTURAL DRAWINGS

**FULL-DEPTH NEOPRENE JOINT INSERT CONCRETE SASH BLOCK**

**MASONRY WALL**  
VERTICAL REINFORCEMENT FULL HEIGHT  
OPEN END MASONRY UNIT  
MASONRY LINTEL  
BREAK FACE SHELL AND GROUT SOLID, FULL HEIGHT OF WALLS  
DOWELS IN GROUTED BOND BEAM TO MATCH AND LAP LINTEL REINFORCEMENT PER SPECS. 24"x24" MINIMUM (BEND AS REQUIRED)

**MASONRY BOND BEAM CORNER REINFORCEMENT PLAN DETAIL**  
CORNER BARS SAME SIZE AND SPACING AS HORIZONTAL REINFORCEMENT, LAP BARS AS FOLLOWS:  
#4 - 24"  
#5 - 30"  
#6 - 36"

**TYPICAL BEAM AT EMBEDDED PLATE**  
EMBEDMENT PLATE DESIGN CRITERIA  
UNLESS MOMENT PROVIDED ON PLAN OR IN DETAILS, DESIGN FOR MOMENT BASED ON #5'S  
MINIMUM PLATE WIDTH = 9"  
CENTER PLATE ON INFRAMING BEAM  
TOP OF PLATE AT TOP OF BEAM  
PLATE HEIGHT MINIMUM = BEAM DEPTH

LOAD TYPE	CASE 1 LOAD (KIPS)	CASE 2 LOAD (KIPS)	CASE 3 LOAD (KIPS)
DL	44	16	16
LL	N/A	N/A	N/A
LR	18	12	12
SL	20	27	42
WL	48	N/A	N/A
WL	22	N/A	N/A

**NON-LOAD BEARING MASONRY WALL AT PRECAST PLANK**  
NOTE: THIS DETAIL APPLIES AT 12'-0" OC (MAX) FOR 8" WALLS FOR WALLS WHERE INTERSECTING SUPPORT WALLS EXCEED A SPACING OF 30 TIMES THE NOMINAL WALL THICKNESS OR WHERE NOTED ON PLANS

**LINTEL BEARING DETAIL (STEEL BEAM LINTELS)**  
ELEVATION A-A  
8" BEARING MIN.  
CMU WALL - SEE PLAN FOR SIZE AND REINFORCEMENT  
REINFORCE ADJACENT CELL - TYP, FULL HEIGHT (#)  
ADJUSTABLE MASONRY ANCHORS AT 16" PER LINTEL SCHEDULE "6"  
WIDE FLANGE BEAM, SEE PLAN  
1/2" HEADED WELDED STUDS (OMIT WHERE LINTEL TO BE PROVIDED AT NEW OPENING IN EXISTING WALL AT 24" PER LINTEL SCHEDULE, TYP "6")  
WELD PLATE TO BEAM PER LINTEL SCHEDULE "6"  
BISTEEL, SEE PLAN  
BOTTOM FLANGE PLATE AS SHOWN ON PLAN OR SCHEDULE  
1/2" BEARING PLATE, WIDTH OF PLATE TO BE 1/2" LESS THAN CMU WALL WIDTH - TYP.  
(2) 5/8" DIA ANCHOR BOLTS (12" MIN EMBED) ALT: USE 3/4" DIA THREADED STUDS ON TOP SIDE OF PLATE AND 3/4" DIA X 6" THWS ON UNDERSIDE  
CONT. (2)#6 VERTICAL TO UNDERSIDE OF BEARING PLATE @ ALL CELLS BENEATH BEARING PLATE, GROUT SOLID, (#)  
ELEVATION A-A  
NOTE: (#6) ALSO REQUIRED AT STEEL BEAMS SUPPORTING MASONRY WHERE END OF BEAM IS SUPPORTED BY A COLUMN

**1 KEYED CMU CONTROL JOINT (NEOPRENE INSERT, REBAR ADJACENT TO CJ)**  
SCALE: NONE

**2 MASONRY WALL INTERSECTION AT MASONRY LINTEL**  
SCALE: 3/4" = 1'-0"

**3 MASONRY BOND BEAM CORNER REINFORCEMENT PLAN DETAIL**  
SCALE: 3/4" = 1'-0"

**4 TYPICAL BEAM AT EMBEDDED PLATE**  
SCALE: 3/4" = 1'-0"

**5 NON-LOAD BEARING MASONRY WALL AT PRECAST PLANK**  
SCALE: 3/4" = 1'-0"

**6 LINTEL BEARING DETAIL (STEEL BEAM LINTELS)**  
SCALE: 3/4" = 1'-0"

**7 PRECAST PLANK HANGER**  
SCALE: 1" = 1'-0"

**8 PRECAST BEARING ON STEEL BEAM**  
SCALE: 3/4" = 1'-0"

**9 SECTION**  
SCALE: 3/4" = 1'-0"

**10 PRECAST PLANK ON PRECAST WALL DETAIL**  
SCALE: 3/4" = 1'-0"

**11 PRECAST PLANK PARALLEL TO PRECAST WALL DETAIL**  
SCALE: 3/4" = 1'-0"

**17 DOUBLE TEE BEARING AT PRECAST WALL**  
SCALE: 3/4" = 1'-0"

**12 JAMB DETAIL**  
SCALE: NONE

**13 HEAD DETAIL**  
SCALE: NONE

**14 PRECAST PLANK DETAIL AT NON-BEARING PRECAST WALL (SLOTTED INSERT)**  
SCALE: 3/4" = 1'-0"

**15 PRECAST PLANK DETAIL AT PRECAST BEARING WALL**  
SCALE: 3/4" = 1'-0"

**16 PRECAST BEARING AT MASONRY WALL (WALL CONTINUES)**  
SCALE: 3/4" = 1'-0"

**17 DOUBLE TEE BEARING AT PRECAST WALL**  
SCALE: 3/4" = 1'-0"

**18 DOUBLE TEE BEARING AT PRECAST WALL**  
SCALE: 3/4" = 1'-0"

**19 DOUBLE TEE PARALLEL TO PRECAST WALL**  
SCALE: 3/4" = 1'-0"

**20 SECTION**  
SCALE: 1 1/2" = 1'-0"

**21 BRICK LINTEL SUPPORT AT PRECAST**  
SCALE: 1 1/2" = 1'-0"

**25 ELEVATION**  
SCALE: 1/2" = 1'-0"

**26 ELEVATION**  
SCALE: 1/2" = 1'-0"

**22 CONCENTRATED LOAD AT JOIST**  
SCALE: 1" = 1'-0"

**23 TYPICAL ROOF DECK OPENING**  
SCALE: 1" = 1'-0"

**24 METAL DECK FASTENING DETAIL**  
SCALE: 1" = 1'-0"

**25 ELEVATION**  
SCALE: 1/2" = 1'-0"

**26 ELEVATION**  
SCALE: 1/2" = 1'-0"



Consultant:

Project Title: ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION

Project Location: 510 W HEMLOCK ST.  
ABBOTSFORD, WI 54405

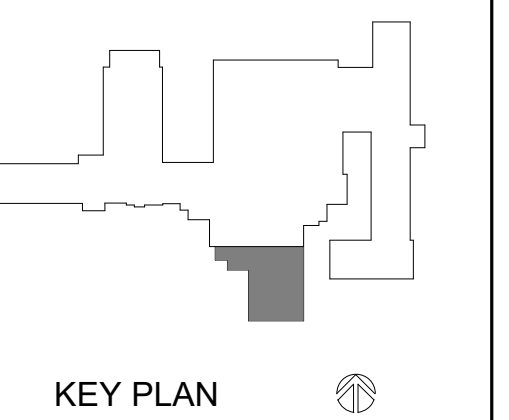
Sheet Title: PLUMBING GENERAL NOTES

HSR Project Number: 21027

Project Date: DECEMBER 2021

Drawn By: RGJ

Key Plan:



KEY PLAN

BID  
DOCUMENTS

No.	Description	Date
A1	Addendum #1	12/22/2021
A2	Addendum #2	01/04/2021

Graphic Scale:

Last Update: 1/4/2022 2:25:40 PM

P001

### PLUMBING AND PIPING SYMBOLS

CW	-----	DOMESTIC COLD WATER
HW	-----	DOMESTIC HOT WATER
CHW	-----	DOMESTIC HOT WATER-CIRCULATING
G	-----	NATURAL GAS
LP	-----	PROPANE GAS
V	-----	SANITARY VENT
SS	-----	SANITARY SEWER
SD	-----	STORM DRAINAGE
OSD	-----	STORM DRAINAGE-OVERFLOW
		ITEM TO BE DEMOLISHED
		POINT WHERE NEW CONNECTS TO EXISTING

**HOT WATER NOTE:**  
HOT WATER DISTRIBUTION PIPING MAXIMUM ALLOWABLE PIPE LENGTH FROM A HEAT SOURCE TO A PUBLIC LAVATORY OR OTHER FIXTURES AND APPLIANCES IS TO BE AS LISTED IN TABLE C404.5.1 OF THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC).

### PLUMBING SHEET INDEX

FP100	FIRE PROTECTION
P001	PLUMBING GENERAL NOTES
P100	UNDERFLOOR PLAN
P101	FLOOR PLAN
P200	DWV RISER DIAGRAMS AND DETAILS
P201	WATER RISER DIAGRAMS AND DETAILS
P202	STORM ISOMETRIC

### ABBREVIATIONS:

A	COMPRESSED AIR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BT	BATHTUB
CB	CATCH BASIN
CO	CLEANOUT
CS	COLD SOFT WATER
CW	COLD WATER
CWH	COLD WATER HARD
CWV	CLEAR WATER VENT
CWW	CLEAR WATER WASTE
DCV	DOUBLE DETECTOR CHECK VALVE
DI	DEIONIZED WATER
DSN	DOWNSPOUT NOZZLE
DW	DISHWASHER
E	EXISTING
EC	ELECTRICAL CONTRACTOR
ESEW	EMERGENCY SHOWEREYEWASH
EWC	ELECTRIC WATER COOLER
F	FIRE PROTECTION WATER SERVICE
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FFA	FROM FLOOR ABOVE
FFB	FROM FLOOR BELOW
FR	FIRE PROTECTION CONTRACTOR
G	NATURAL GAS
GC	GENERAL CONTRACTOR
HB	HOSE BIBB
HC	HVAC CONTRACTOR
HD	HUB DRAIN
HW	HOT WATER
HWR	HOT WATER RECIRCULATION
HYD	WALL HYDRANT
IE	INVERT ELEVATION
L	LAVATORY
LT	LAUNDRY TUB
MB	MOP BASIN
MH	MANHOLE
NC	NEW CONNECTION
NPC	NON-POTABLE COLD WATER
NPCS	NON-POTABLE COLD SOFT WATER
NPH	NON-POTABLE HOT WATER
NPR	NON-POTABLE HOT RECIRCULATION
OST	STORM-OVERFLOW
PC	PLUMBING CONTRACTOR
PRV	PRESSURE REGULATING VALVE
RPBP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
S	SINK
SAN	SANITARY
SH	SHOWER
SPR	SPRINKLER PIPING
ST	STORM-PRIMARY
T	TEMPERED WATER
TFA	TO FLOOR ABOVE
TFB	TO FLOOR BELOW
TMV	THERMOSTATIC MIXING VALVE
UR	URINAL
V	VENT
VTR	VENT THRU ROOF
W	DOMESTIC WATER SERVICE
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WF	WASH FOUNTAIN
WM	WASHING MACHINE WALL BOX
WHA	WATER HAMMER ARRESTER
WHR	WATER HEATER
WS	WATER SOFTENER
YCO	YARD CLEANOUT

- ### GENERAL PLUMBING NOTES:
- BUILDING SYSTEMS MUST REMAIN OPERATIONAL, UNLESS OTHERWISE PERMITTED BY OWNER. COORDINATE AS REQUIRED.
  - PATCH ALL HOLES THROUGH FLOORS WITH NON-SHRINK GROUT.
  - ALL WORK TO BE SCHEDULED AS DIRECTED BY OWNER. COORDINATE AS REQUIRED.
  - PORTIONS OF THE BUILDING WILL BE CONTINUOUSLY OCCUPIED DURING THE CONSTRUCTION PERIOD. AVOID INTERFERENCE WITH BUILDING FUNCTION. COORDINATE TIMING OF CONSTRUCTION WORK WITH THE OWNER.
  - THIS PLAN HAS BEEN PRODUCED UTILIZING THE EXISTING PLANS AND IS NOT INTENDED TO BE ALL-INCLUSIVE.
  - VISIT THE BUILDING SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING CONDITIONS AFFECTING THE WORK.
  - VERIFY ALL MEASUREMENTS, PIPE SIZES, PIPE LOCATIONS, ELEVATIONS, ETC. AT SITE.
  - REVIEW, COORDINATE, AND SCHEDULE INSTALLATION OF WORK WITH OTHER TRADES.
  - INSTALL ALL WORK SUBSTANTIALLY AS SHOWN ON THE DRAWINGS. DEVIATIONS FROM LOCATIONS OF PIPING INDICATED ON THE DRAWINGS MAY HAVE TO BE MADE AT NO ADDITIONAL COST TO THE OWNER IN ORDER TO CLEAR THE WORK OF THE OTHER TRADES. HOWEVER, ALL SUCH DEVIATIONS SHALL BE PREVIOUSLY APPROVED BY THE OWNER'S REPRESENTATIVE.
  - REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES, STRUCTURAL DIMENSIONS AND LAYOUT.
  - IT IS THE INTENT OF THESE DRAWINGS THAT EACH AFFECTED SYSTEM BE COMPLETE, WORKING, TESTED, AND OPERATIONAL.
  - CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID OPENING. THE ENGINEER RESERVES THE RIGHT TO FINAL DECISION.
  - INCLUDE ALL PLUMBING RELATED CUTTING, PATCHING AND/OR REMOVAL AND REPLACEMENT OF EXISTING WALLS, FLOORS & CEILINGS UNLESS OTHERWISE INDICATED.
  - ALL FIXTURE WATER SUPPLY FLOW RATES SHALL CONFORM TO SPS 384.20(3).
  - DOMESTIC WATER PIPE SIZING SHALL CONFORM TO SPS 382.40(7), FRICTION LOSS METHOD AND MAXIMUM FLOW VELOCITY OF 8 FPS.
  - BACKFLOW PROTECTION SHALL BE PROVIDED TO ALL FIXTURES, CONFORMING TO SPS 382.41(3).
  - EACH FIXTURE SHALL BE VALVED, CONFORMING TO SPS 382.40(4)(c).
  - TERMINATE WATER AND SANITARY LATERAL 3" BEYOND EXTERIOR FACE OF FOUNDATION WALL. CONTINUATION SHALL BE UNDER A SEPARATE CONTRACT.
  - UNLESS NOTED OTHERWISE ALL WASTE AND DRAIN PIPING 3" AND LARGER SHALL BE INSTALLED AT A SLOPE OF 1/8" PER FOOT AND WASTE AND DRAIN PIPING 2" AND SMALLER AT 1/4" PER FOOT.
  - FIXTURE VENTS SHALL CONNECT TO OTHER BRANCH VENTS A MINIMUM OF 30" ABOVE THE FLOOR, CONFORMING TO SPS 382.31(15)(b).
  - THE INSTALLATION OF PVC DWV PIPING IN BUILDING SHALL CONFORM TO SPS 384.40(14), WHEN APPLICABLE.
  - WASTE STACK BASE CONNECTIONS SHALL BE MADE USING LONG SWEET FITTINGS.
  - CLEANOUTS SHALL CONFORM TO SPS 382.35(6) TABLE 62.35.
  - ALL WATER CLOSETS SHALL BE WATER CONSERVING TYPE, USING A MAXIMUM OF 1.6 GALLONS PER FLUSH CONFORMING TO SPS 384.20(3).
  - ALL LINE VALVES WHICH SERVE TWO OR MORE PLUMBING FIXTURES SHALL HAVE A FLOW OPENING NOT LESS THAN ONE NOMINAL PIPE SIZE SMALLER THAN THE NOMINAL SIZE OF THE PIPING CONNECTING TO THE VALVE, CONFORMING TO SPS 384.30(9)(3).
  - CUTTING, NOTCHING OR BORING OF METAL STUD WALL SYSTEM IS NOT PERMITTED UNLESS APPROVED BY THE MANUFACTURER AND THE STRUCTURAL INTEGRITY HAS NOT BEEN REDUCED TO UNACCEPTABLE LEVELS.
  - WHEN PIPING PASSES THROUGH SMOKE SEPARATION ASSEMBLIES, DRAFT STOPPING, CONSISTING OF MINERAL WOOL OR FIREGLASS INSULATION, SHALL BE PACKED AROUND PIPING PENETRATING FACE OF ASSEMBLY.
  - PLASTIC PIPE MAY PENETRATE REQUIRED FIRE-RESISTIVE RATED FLOORS, WALLS, CEILINGS AND FIRE RATED ASSEMBLIES PROTECTED WITH AN APPROVED FIRE-STOP SYSTEM HAVING AN F-RATING NOT LESS THAN THE HOURLY RATING OF THE ASSEMBLY BEING PENETRATED. SEE SECTION 04-09.
  - CORE DRILL OPENINGS IN EXISTING FLOOR/WALL, AS REQUIRED, SIZE OF OPENINGS SHALL NOT EXCEED 1" LARGER THAN THE O.D. OF THE PIPING PENETRATING THE ASSEMBLY. COORDINATE WITH DRAFT/FIRE STOPPING REQUIREMENTS.
  - IDENTIFY PIPING LOCATED ABOVE CEILINGS PRIOR TO CEILING GRID INSTALLATION.

### PLUMBING FIXTURE SCHEDULE

FIXTURE SYMBOL	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL DESCRIPTION	TRIM MANUFACTURER	MODEL NO.	REMARKS
EWC-1	ELECTRIC WATER COOLER	ELKAY	LZSTLGBWSSK	GALVANIZED STEEL			
HB-1	HOSE BIBB	JR SMITH	5572	STAINLESS STEEL			
L-1	LAVATORY - WALL HUNG - ADA	KOHLER BRENHAM	K-1997-1W/SHROUD K-1998	WHITE VITREOUS CHINA	CHICAGO FAUCET CO SLOAN	962-CP SF2400	MOUNT AT 31" AFF. JUVENILE HEIGHT IN ROOMS F106 AND F107. MOUNT AT STANDARD ADA HEIGHT IN ROOM F104.
LT-1	UTILITY SINK	MUSTEE	18F	MOLDED STONE	ELKAY	LK2000CF	
MB-1	JANITOR SINK	MUSTEE	63M	MOLDED STONE	CHICAGO FAUCET CO	C897CP	
S-1	SINK - SINGLE	ELKAY	DRKAD22055C	STAINLESS STEEL	ELKAY	LK1000	
S-2	HAND SINK	ELKAY	LRAD191855-MR2 W/ LK99 BASKET STRAINER	STAINLESS STEEL	DELTA	K-710LF-HD	
S-3	WASH FOUNTAIN	BRADLEY	FL-3L	STAINLESS STEEL			
UR-1	URINAL	KOHLER BRENHAM	K-4920-T-0	WHITE VITREOUS CHINA	SLOAN	186 ESS-0.125	MOUNT AT 31" AFF. JUVENILE HEIGHT
WC-1	WATER CLOSET - WALL HUNG	KOHLER BRENHAM	K-84325-0	WHITE VITREOUS CHINA	SLOAN	111 ESS-1.28	
WC-1A	WATER CLOSET - WALL HUNG	KOHLER BRENHAM	K-84325-0	WHITE VITREOUS CHINA	SLOAN	111 ESS-1.28	MOUNT AT ADA HEIGHT
WC-2	WATER CLOSET - FLOOR MOUNT - FLUSH VALVE	KOHLER BRENHAM	K-4920-T-0	WHITE VITREOUS CHINA	SLOAN	111 ESS-1.28	

### FIXTURE UNIT SUMMARY

FIXTURE SYMBOL	FIXTURE DESCRIPTION	COUNT	PIPE SIZE				FIXTURE UNITS			
			WASTE	VENT	CW	HW	DFU	CW/FU	HW/FU	
EWC-1	ELECTRIC WATER COOLER	1	2"	1 1/2"	1/2"			0.5	0.25	0
FD-1	FLOOR DRAIN - ROUND	4	3"	2"				12	0	0
FD-2	FLOOR DRAIN - SQUARE	3	3"	2"				9	0	0
HB-1	HOSE BIBB	8		1/2"				0	9	0
HYD-1	EXTERIOR WALL HYDRANT	4		3/4"				0	16	0
L-1	LAVATORY - WALL HUNG - ADA	3	2"	1 1/2"	1/2"	1/2"	3	1.5	1.5	
LT-1	UTILITY SINK	1	2"	1 1/2"	1/2"	1/2"	1	1	1	
MB-1	JANITOR SINK	1	3"	2"	3/4"	3/4"	4	2.25	2.25	
ORD-1	OVERFLOW ROOF DRAIN	8						0	0	0
RD-1	PRIMARY ROOF DRAIN	8	4"					0	0	0
S-1	SINK - SINGLE	3	2"	1 1/2"	1/2"	1/2"	3	3	3	3
S-2	HAND SINK	1	2"	1 1/2"	1/2"	1/2"	1	1	1	
S-3	WASH FOUNTAIN	1	2"	1 1/2"	1/2"	1/2"	1	1	1	
UR-1	URINAL	2	2"	1 1/2"	3/4"			4	8	0
WC-1	WATER CLOSET - WALL HUNG	3	4"	2"	1"			18	19.5	0
WC-1A	WATER CLOSET - WALL HUNG	2	4"	2"	1"			12	13	0
WC-2	WATER CLOSET - FLOOR MOUNT - FLUSH VALVE	2	4"	2"	1"			12	13	0
Grand total:		50						80.5	88.5	9.75

Project Title: ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION

Project Location: 510 W HEMLOCK ST.  
ABBOTSFORD, WI 54405

Sheet Title: PLUMBING GENERAL NOTES

HSR Project Number: 21027

Project Date: DECEMBER 2021

Drawn By: RGJ

Key Plan:

KEY PLAN

BID  
DOCUMENTS

No.	Description	Date
A1	Addendum #1	12/22/2021
A2	Addendum #2	01/04/2021

Graphic Scale:

Last Update: 1/4/2022 2:25:40 PM

P001





Consultant:

Project Title: **ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION**

Project Location: **510 W HEIMLOCK ST.  
ABBOTSFORD, WI 54405**

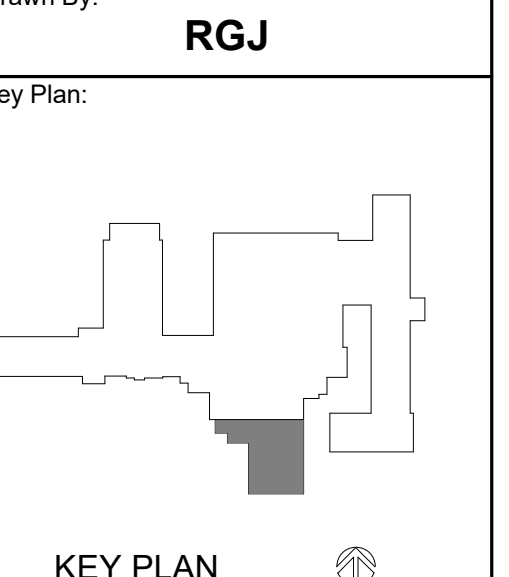
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HSR Project Number: **21027**

Project Date: **DECEMBER 2021**

Drawn By: **RGJ**

Key Plan:



KEY PLAN

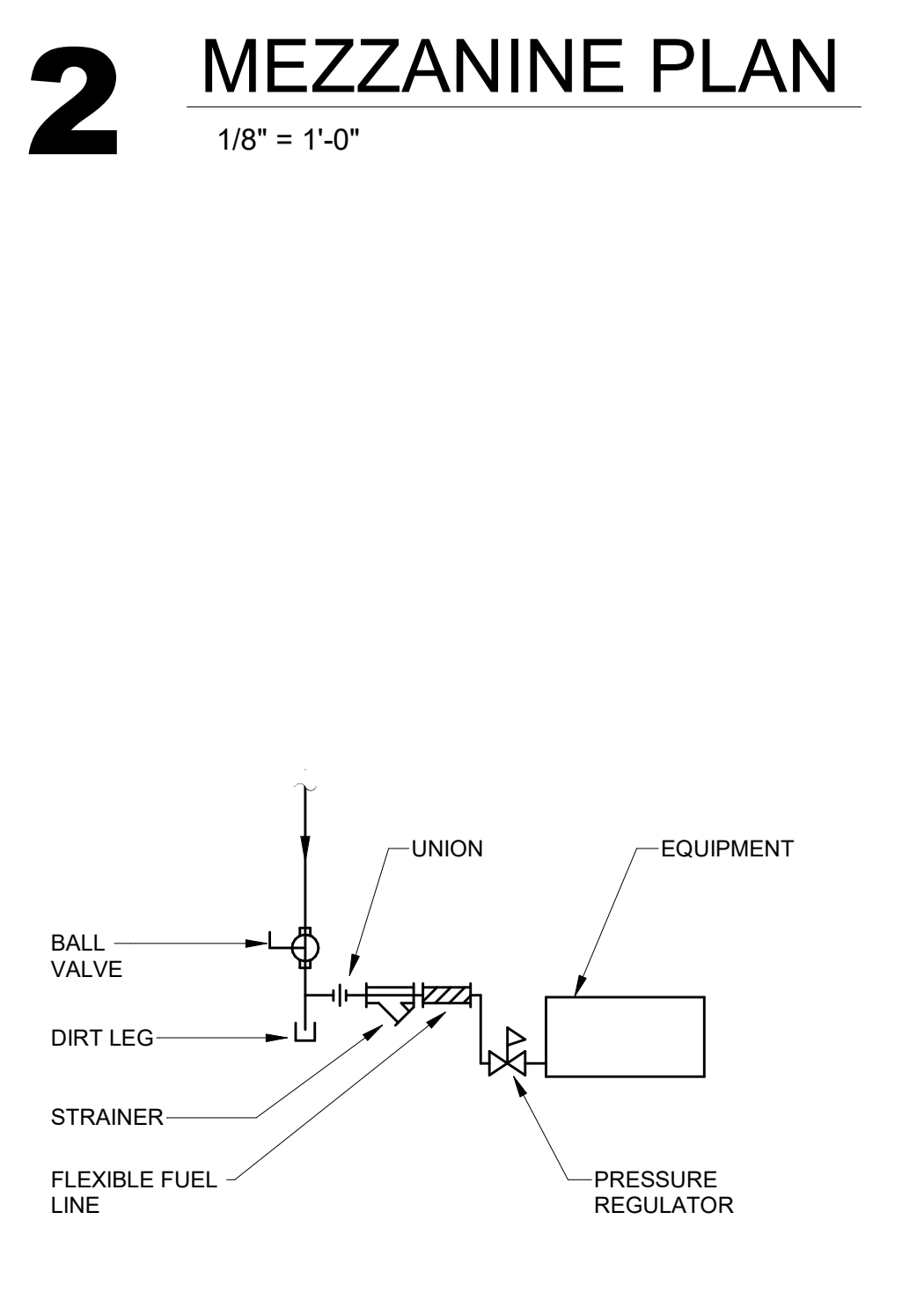
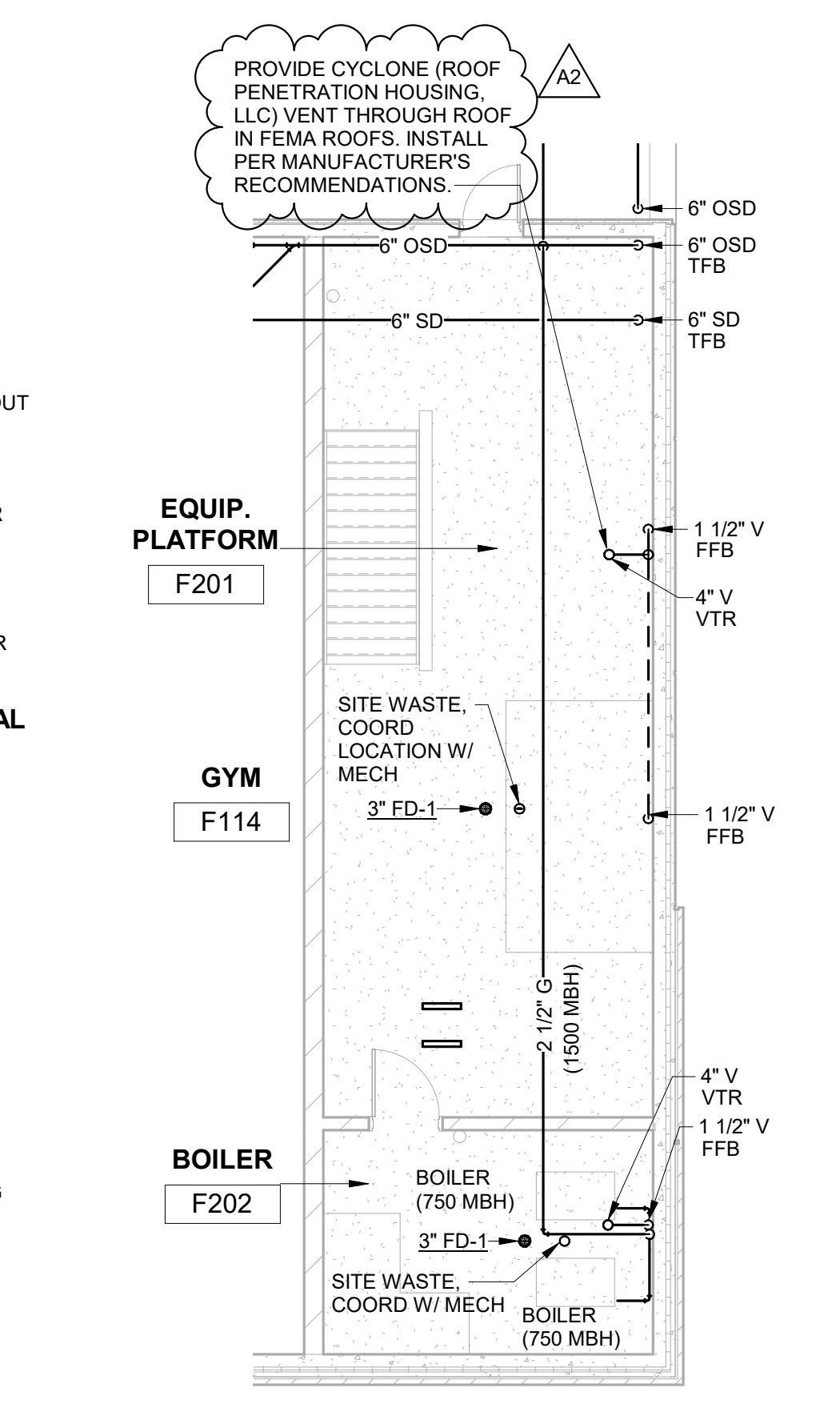
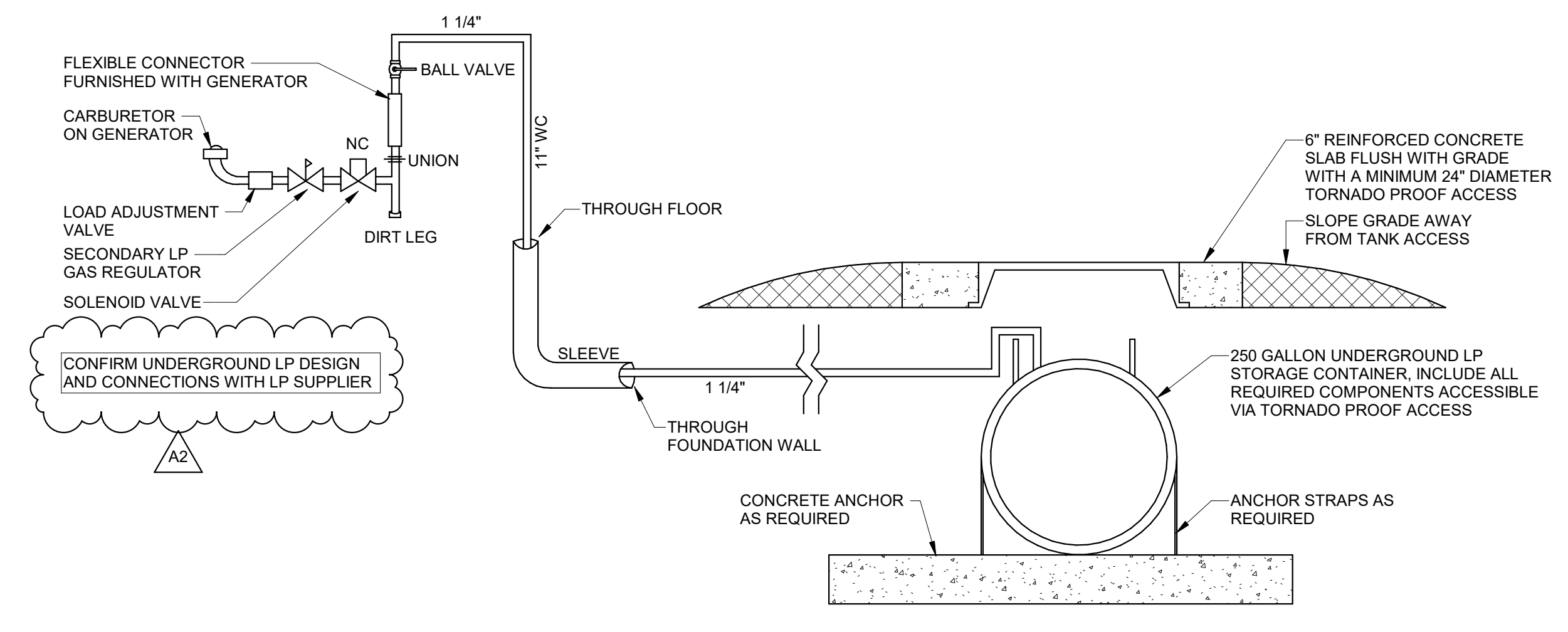
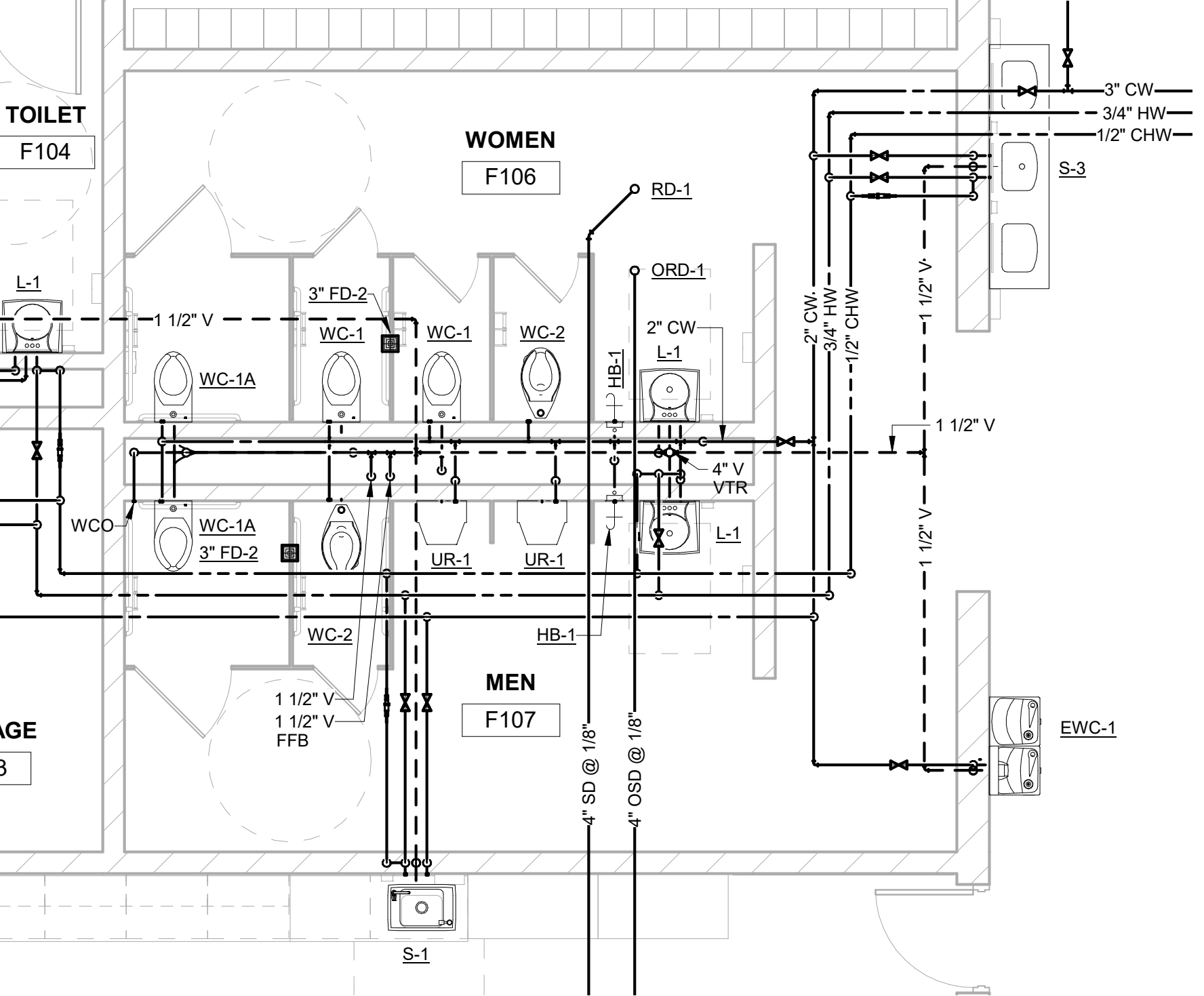
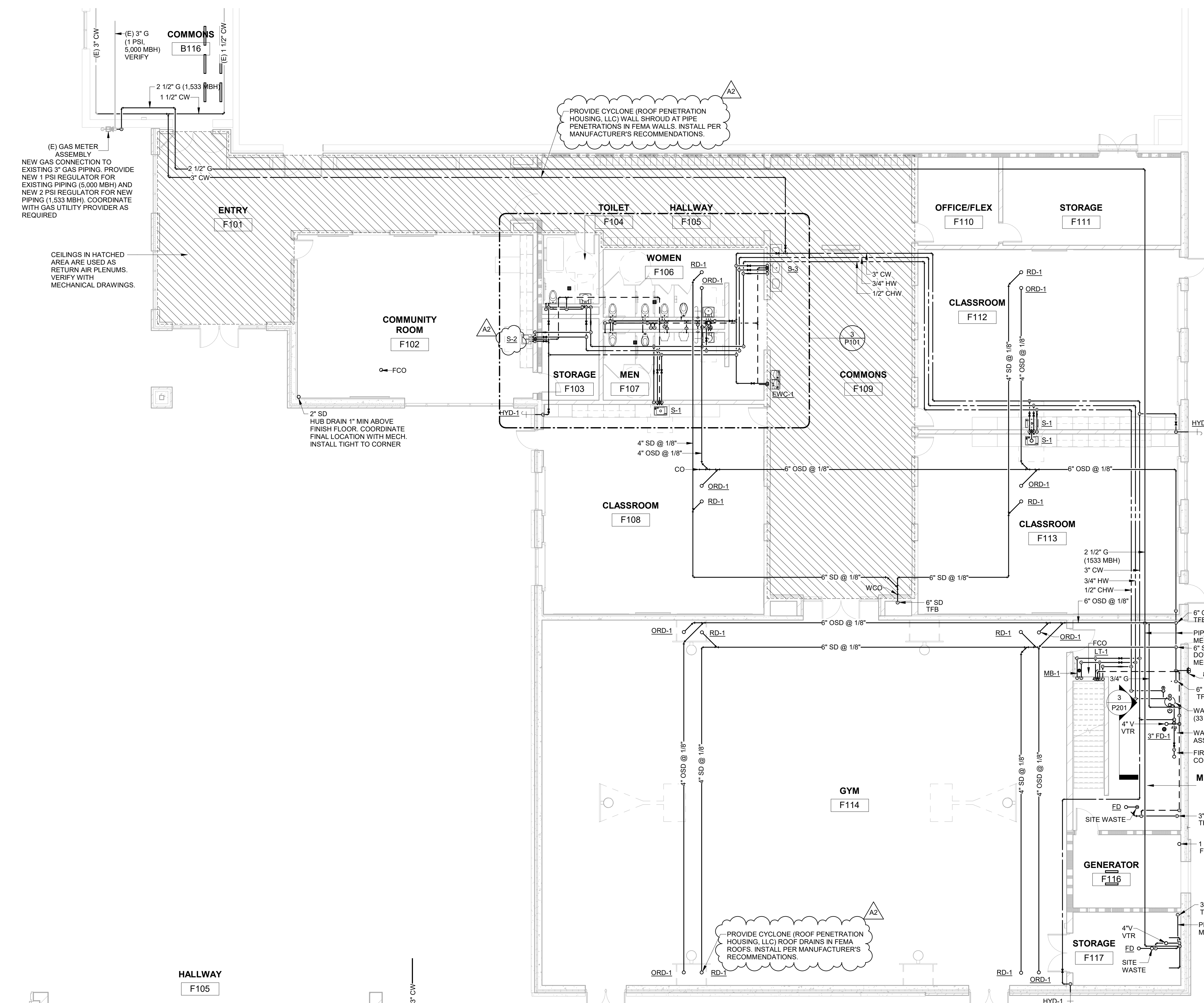
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DOCUMENTS**

No.	Description	Date
A2	Addendum #2	01/04/2021

Graphic Scale:  
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Last Update:  
**1/4/2022 4:17:59 PM**

**P101**



**3** FIRST FLOOR PLAN - ENLARGED  
1/4" = 1'-0"

**1** FIRST FLOOR PLAN  
1/8" = 1'-0"

**4** GAS PIPING SCHEMATIC  
1/8" = 1'-0"

**2** MEZZANINE PLAN  
1/8" = 1'-0"

**5** GAS PIPING DETAIL  
3/16" = 1'-0"

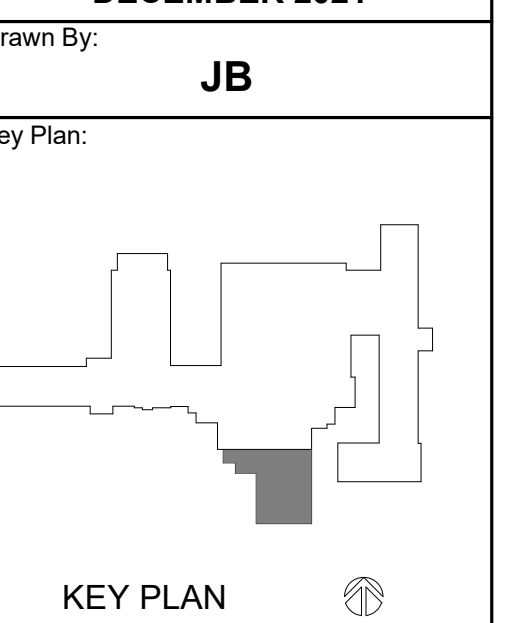


Consultant:

Project Title: **ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION**  
Project Location: 510 WEST HEIMLOCK STREET  
ABBOTSFORD, WISCONSIN  
Sheet Title: **FIRST FLOOR REMODEL PLAN**

HSR Project Number: **21027**  
Project Date: **DECEMBER 2021**  
Drawn By: **JB**

Key Plan:



KEY PLAN

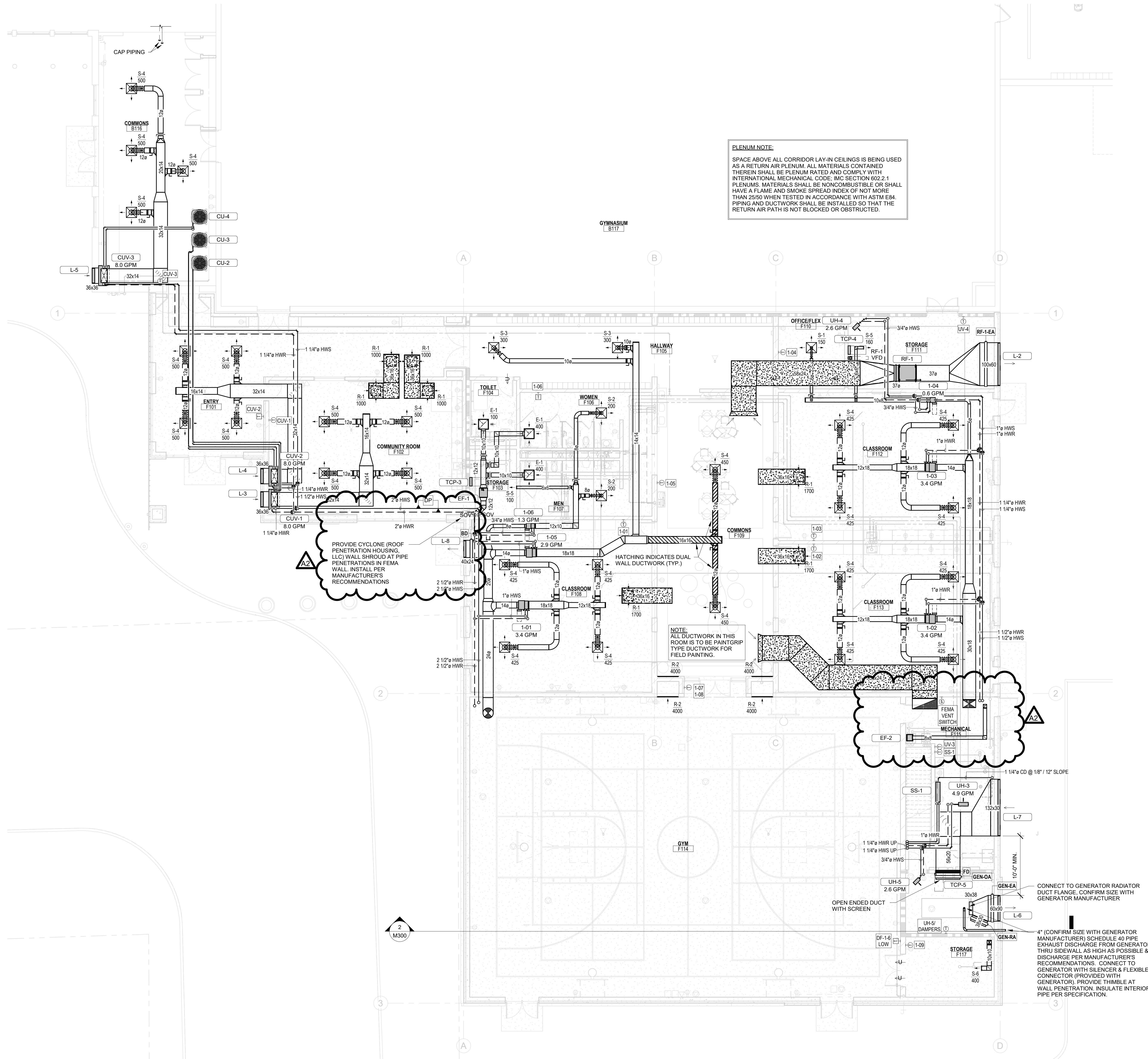
**BID  
DOCUMENTS**

No.	Description	Date
A2	Addendum #02	01/05/2022

Graphic Scale: **VARIES**

Last Update: **1/5/2022 8:53:25 AM**

**M100**



**PLENUM NOTE:**  
SPACE ABOVE ALL CORRIDOR LAY-IN CEILINGS IS BEING USED AS A RETURN AIR PLENUM. ALL MATERIALS CONTAINED THEREIN SHALL BE PLENUM RATED AND COMPLY WITH INTERNATIONAL MECHANICAL CODE, IMC SECTION 602.2.1 PLENUMS. MATERIALS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME AND SMOKE SPREAD INDEX OF NOT MORE THAN 25/50 WHEN TESTED IN ACCORDANCE WITH ASTM E84. PIPING AND DUCTWORK SHALL BE INSTALLED SO THAT THE RETURN AIR PATH IS NOT BLOCKED OR OBSTRUCTED.

PROVIDE CYCLONE (ROOF PENETRATION HOUSING, LLC) WALL SHROUD AT PIPE PENETRATIONS IN FEMA WALL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS

NOTE: ALL DUCTWORK IN THIS ROOM IS TO BE PAINTGRIP TYPE DUCTWORK FOR FIELD PAINTING.

CONNECT TO GENERATOR RADIATOR DUCT FLANGE. CONFIRM SIZE WITH GENERATOR MANUFACTURER  
4" (CONFIRM SIZE WITH GENERATOR MANUFACTURER) SCHEDULE 40 PIPE EXHAUST DISCHARGE FROM GENERATOR THRU SIDEWALL AS HIGH AS POSSIBLE & DISCHARGE PER MANUFACTURER'S RECOMMENDATIONS. CONNECT TO GENERATOR WITH SILENCER & FLEXIBLE CONNECTOR PROVIDED WITH GENERATOR. PROVIDE THIMBLE AT WALL PENETRATION. INSULATE INTERIOR PIPE PER SPECIFICATION.



**1 FIRST FLOOR REMODEL PLAN**  
1/8" = 1'-0"





Consultant:

Project Title: **ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION**

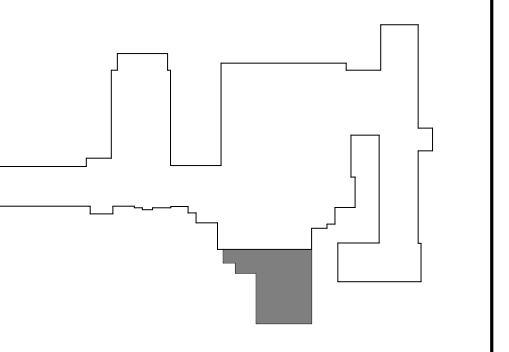
Project Location: **510 WEST HEIMLOCK STREET  
ABBOTSFORD, WISCONSIN**

HSR Project Number: **21027**

Project Date: **DECEMBER 2021**

Drawn By: **JB**

Key Plan:



KEY PLAN

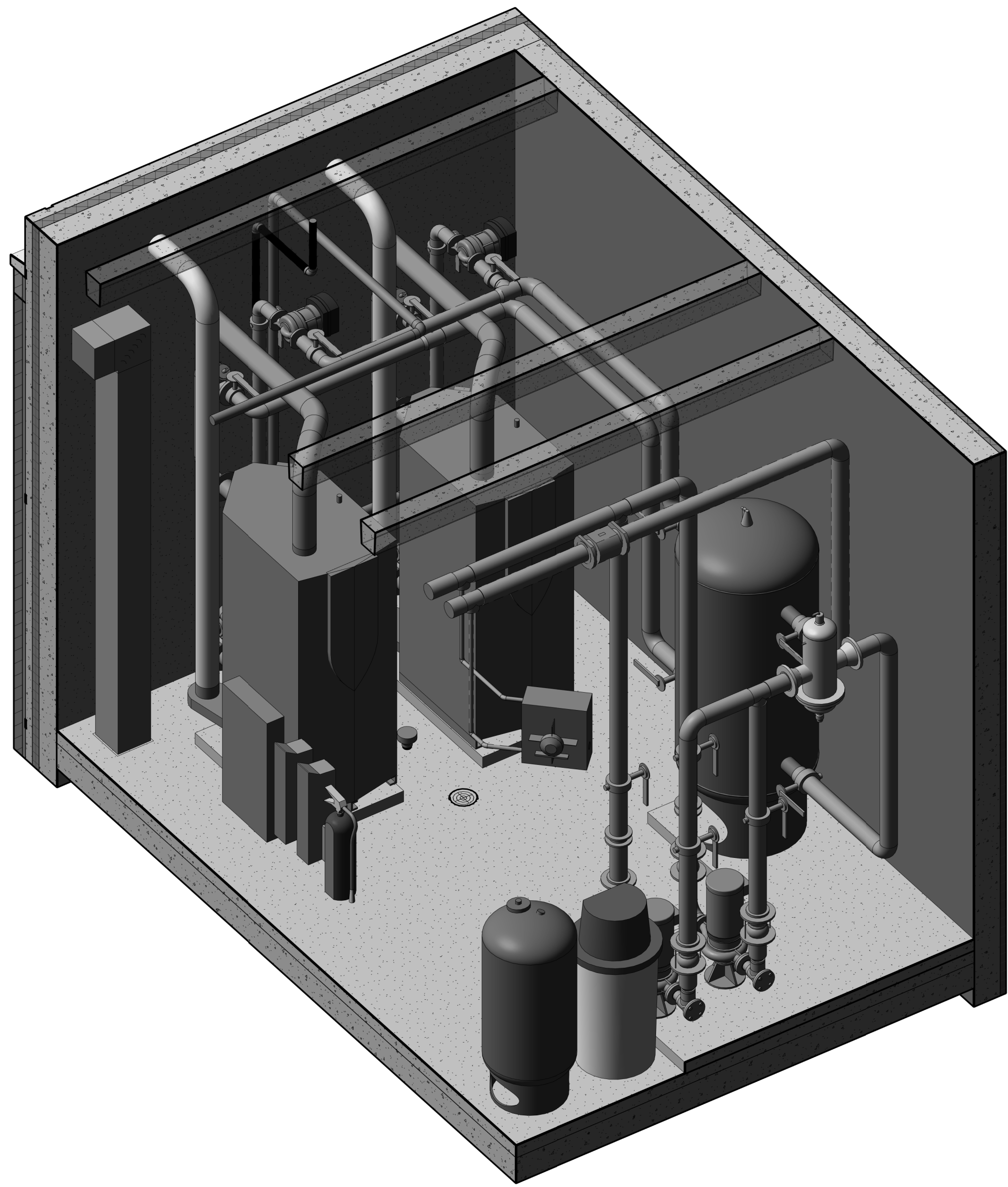
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DOCUMENTS**

No.	Description	Date
A2	Addendum #02	01/05/2022

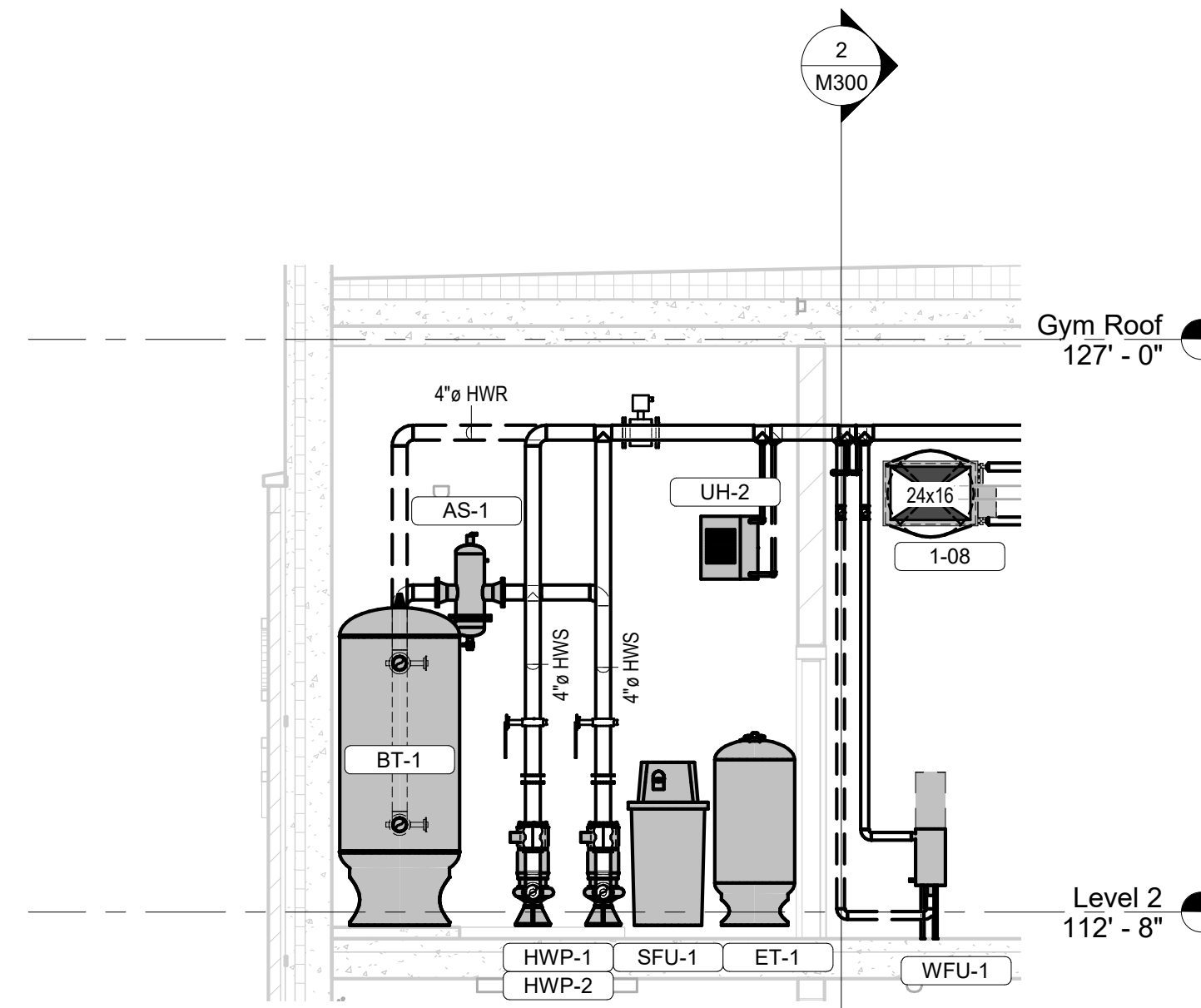
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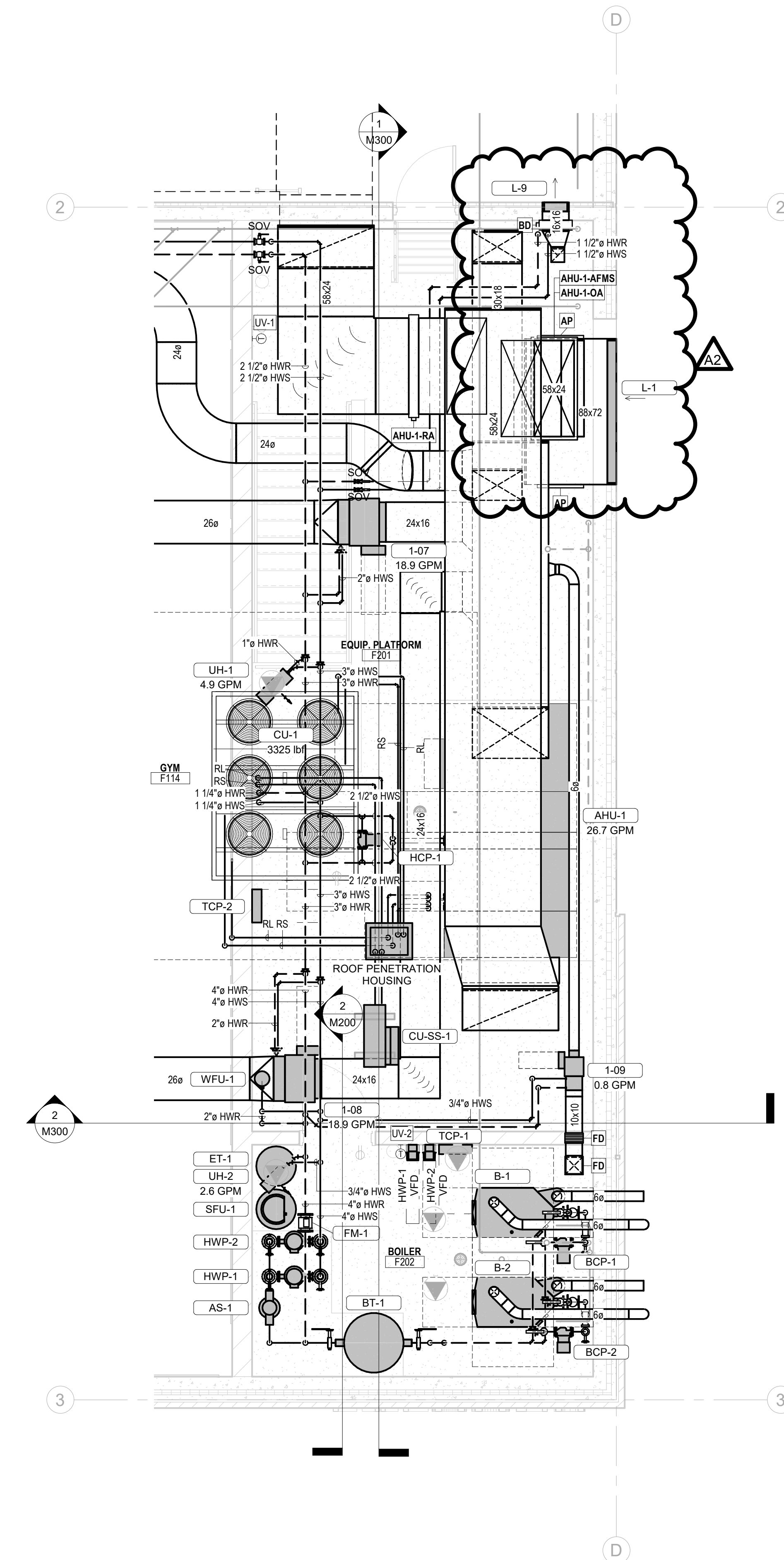
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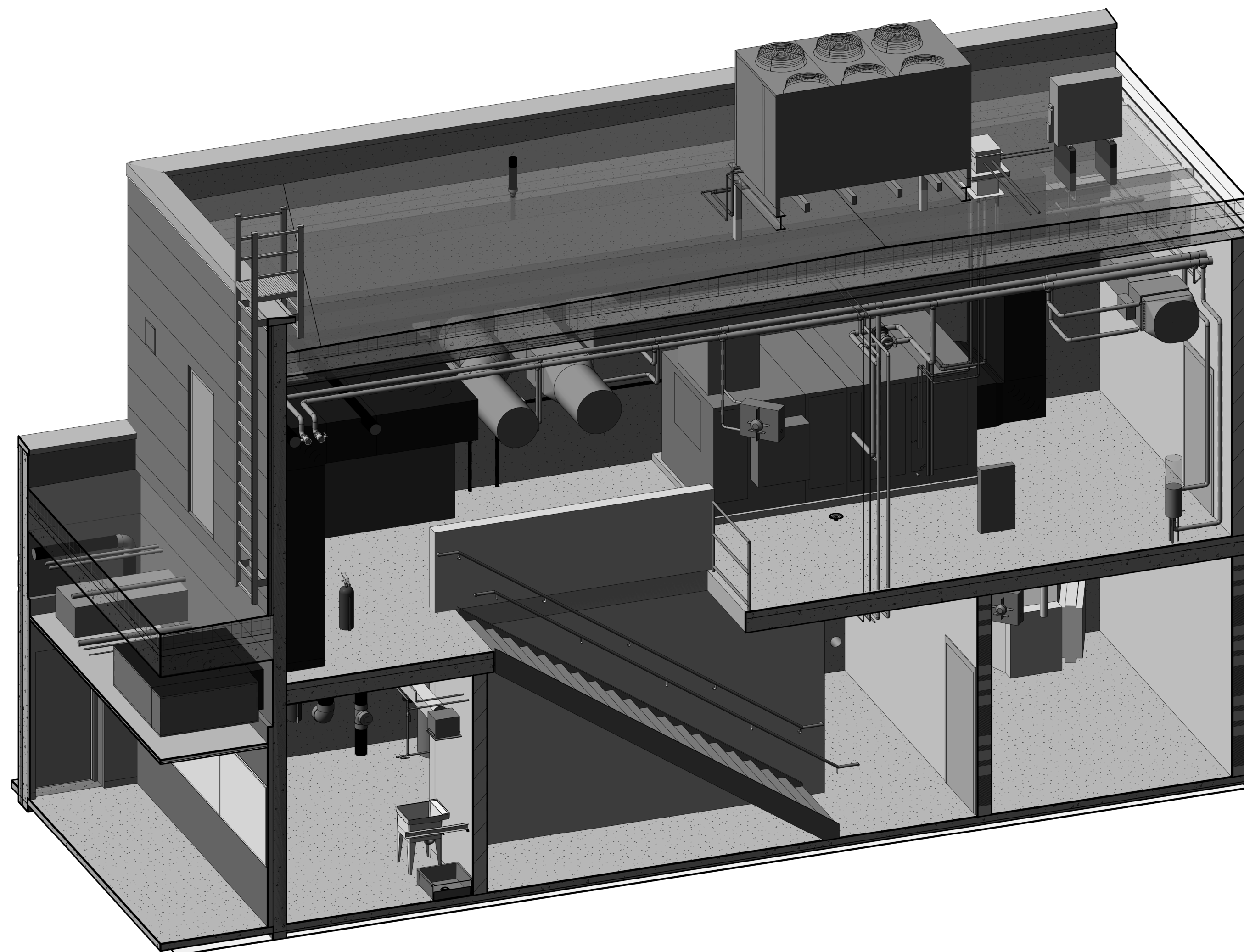
**3** **BOILER ROOM 3D ISOMETRIC**  
N.T.S.



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



**1** **ENLARGED UPPER LEVEL PLAN**  
1/4" = 1'-0"



**4** **EQUIPMENT PLATFORM 3D ISOMETRIC**  
N.T.S.



Consultant:

Project Title: **ABBOTSFORD SCHOOL DISTRICT  
FEMA ADDITION**  
 Project Location: **510 WEST HEIMLOCK STREET  
ABBOTSFORD, WISCONSIN**  
 Sheet Title: **HVAC SCHEDULES**

HSR Project Number: **21027**  
 Project Date: **DECEMBER 2021**  
 Drawn By: **JB**

Key Plan:

**BID  
DOCUMENTS**

No.	Description	Date
A2	Addendum #02	01/05/2022

Graphic Scale: **VARIES**

Last Update: **1/5/2022 8:54:14 AM**

**M601**

**LOUVER SCHEDULE**

UNIT NO.	LOCATION		MANUFACTURER	MODEL NO.	SYSTEM	AIR FLOW	FREE AREA	FACE AREA	VELOCITY	STATIC PRESS.	DAMP. TYPE	TYPE	SECTIONS	DIMENSIONS			MATERIAL DESCRIPTION	FINISH	OPTIONS	WEIGHT	REFERENCE DETAIL NO.	REMARKS
	ROOM	NUMBER												WIDTH	HEIGHT	DEPTH						
L-1			GREENHECK	AFL-501	AHU-1 INTAKE	14000 CFM	22.5 SF	620 FPM	0.10 in-wg	-	-	FEMA 361 & ICC 500	2	88"	72"	5.5"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	565 lbf	7M502	RECESSED/FLUSH CONFIGURATION W/ REAR MOUNTING LOCATION & HEAD/SILL ANCHORS
L-2			GREENHECK	AFL-501	RF-1 RELIEF	12000 CFM	21.1 SF	570 FPM	0.08 in-wg	-	-	FEMA 361 & ICC 500	2	100"	60"	5.5"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	534 lbf	7M502	RECESSED/FLUSH CONFIGURATION W/ REAR MOUNTING LOCATION & HEAD/SILL ANCHORS
L-3			GREENHECK	ESD-635	CLV INTAKE/RELIEF	2000 CFM	5.0 SF	400 FPM	0.02 in-wg	-	-	FIXED DRAINABLE	1	36"	36"	6.0"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	35 lbf	7M502	
L-4			GREENHECK	ESD-635	CLV INTAKE/RELIEF	2000 CFM	5.0 SF	400 FPM	0.02 in-wg	-	-	FIXED DRAINABLE	1	36"	36"	6.0"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	35 lbf	7M502	
L-5			GREENHECK	ESD-635	CLV INTAKE/RELIEF	2000 CFM	5.0 SF	400 FPM	0.02 in-wg	-	-	FIXED DRAINABLE	1	36"	36"	6.0"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	35 lbf	7M502	
L-6			GREENHECK	AFL-501	GENERATOR EXHAUST	8200 CFM	19.0 SF	430 FPM	0.05 in-wg	-	-	FEMA 361 & ICC 500	2	60"	90"	5.5"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	481 lbf	7M502	RECESSED/FLUSH CONFIGURATION W/ REAR MOUNTING LOCATION & HEAD/SILL ANCHORS
L-7			GREENHECK	AFL-501	GENERATOR INTAKE	8400 CFM	12.9 SF	670 FPM	0.11 in-wg	-	-	FEMA 361 & ICC 500	2	132"	30"	5.5"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	350 lbf	7M502	RECESSED/FLUSH CONFIGURATION W/ REAR MOUNTING LOCATION & HEAD/SILL ANCHORS
L-8			GREENHECK	AFL-501	EF-2 EXHAUST	200 CFM	0.6 SF	370 FPM	0.03 in-wg	-	-	FEMA 361 & ICC 500	1	16"	16"	5.5"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	22 lbf	7M502	RECESSED/FLUSH CONFIGURATION W/ REAR MOUNTING LOCATION & HEAD/SILL ANCHORS
L-9			GREENHECK	AFL-501	EF-2 EXHAUST	200 CFM	0.6 SF	370 FPM	0.03 in-wg	-	-	FEMA 361 & ICC 500	1	16"	16"	5.5"	ALUMINUM	KYNAR CUSTOM MATCH	BIRD SCREEN, EXTENDED DRIP SILL W/ END DAMS	22 lbf	7M502	RECESSED/FLUSH CONFIGURATION W/ REAR MOUNTING LOCATION & HEAD/SILL ANCHORS
Grand total: 9																						

**CIRCULATING PUMP SCHEDULE**

UNIT NO.	LOCATION		MANUFACTURER	MODEL NO.	SYSTEM	TYPE	FLOW	HEAD	PUMP EFFICIENCY	IMPELLER DIA.	MOTOR			GLYCOL %	UNIT WEIGHT	ELECTRICAL VOLTAGE	PHASE	REFERENCE DETAIL NO.	REMARKS		
	ROOM	NUMBER									POWER	RPM	BHP								
BCP-1			Taco	VR15	BOILER	INLINE ECM WET ROTOR W/ INTEGRATED VFD	48.0 GPM	15 RH20	62.0%		1	0.60 hp	3400	0.29	NONE	0	26 lbf	120 V	1	2M501, 5M502	PROVIDE WITH BOILER
BCP-2			Taco	VR15	BOILER	INLINE ECM WET ROTOR W/ INTEGRATED VFD	48.0 GPM	15 RH20	62.0%		1	0.60 hp	3400	0.29	NONE	0	26 lbf	120 V	1	2M501, 5M502	PROVIDE WITH BOILER
HCP-1			Taco	VR15	AHU-1 HEATING COIL	INLINE ECM WET ROTOR W/ INTEGRATED VFD	27.0 GPM	15 RH20	59.0%		1	0.60 hp	2800	0.17	NONE	0	26 lbf	120 V	1	2M501, 1M502	
HWP-1			Taco	2009 - 2x2	HEATING SYSTEM	Close-Coupled In-Line	150.0 GPM	80 RH20	72.0%		9.1	7.50 hp	1760	4.21	NONE	0	326 lbf	208 V	3	1M501	PROVIDE PUMP SUPPORT STAND, EMERGENCY POWER
HWP-2			Taco	2009 - 2x2	HEATING SYSTEM	Close-Coupled In-Line	150.0 GPM	80 RH20	72.0%		9.1	7.50 hp	1760	4.21	NONE	0	326 lbf	460 V	3	1M501	PROVIDE PUMP SUPPORT STAND
Grand total: 5																					

**EXHAUST FAN SCHEDULE**

UNIT NO.	LOCATION		MANUFACTURER	MODEL NO.	AIRFLOW	TYPE	EXHAUST FAN				MOTOR		UNIT WEIGHT	SONES	ELECTRICAL VOLTAGE	PHASE	REFERENCE DETAIL NO.	REMARKS
	ROOM	NUMBER					EXT. STATIC PRESS.	BRAKE POWER	FAN RPM	DRIVE TYPE	QUANTITY	POWER						
EF-1			Greenheck	SQ-120-VG	900 CFM	CENTRIFUGAL INLINE	0.50 in-wg	0.14 hp	1164	DIRECT ECM	1	0.50 hp	58 lbf	6.1	120 V	1	8M502	PROVIDE HANGING SPRING ISOLATORS, FACTORY VARIABLE SPEED DIAL ON MOTOR, DISCONNECT SWITCH
EF-2			Greenheck	SP-A390	200 CFM	CEILING	0.50 in-wg	0.00 hp	1058	DIRECT	1	0.20 hp	26 lbf	3.0	120 V	1	8M502	PROVIDE HANGING SPRING ISOLATORS, FACTORY VARIABLE SPEED DIAL ON MOTOR, DISCONNECT SWITCH
RF-1			Greenheck	QEID-27	12000 CFM	INLINE MIXED FLOW	0.50 in-wg	2.11 hp	906	DIRECT	1	5.00 hp	485 lbf	18.9	460 V	3	8M502	PROVIDE HANGING SPRING ISOLATORS, SHAFT GROUNDING W/ VFD RATED MOTOR, ACCESS DOOR, SURE-AIR FLOW STATION W/ BAS INTEGRATION
Grand total: 3																		

**DESTRATIFICATION FANS**

UNIT NO.	MANUFACTURER	MODEL	FAN TYPE	LOCATION	dB(A) @ 35 FT	WEIGHT LBS.	COVERAGE AREA	MAX CFM	MAX RPM	ELECTRICAL (TWIST LOCK CORD AND PLUG)		VARIABLE SPEED CONTROLLER	SAFETY CABLE	COLOR	REFERENCE DETAIL NO.	REMARKS
										FULL LOAD AMPS	VOLTAGE					
DF-1	Zoofans	H50 AC	SUSPENDED OPEN CEILING	GYM	35.5	23	2000 SF	1150	1500	0.7 A	120V1	0-10V BAS	Yes	BY A/E	9M502	PROVIDE MOUNTING HARDWARE
DF-2	Zoofans	H50 AC	SUSPENDED OPEN CEILING	GYM	35.5	23	2000 SF	1150	1500	0.7 A	120V1	W/DF-1	Yes	BY A/E	9M502	PROVIDE MOUNTING HARDWARE
DF-3	Zoofans	H50 AC	SUSPENDED OPEN CEILING	GYM	35.5	23	2000 SF	1150	1500	0.7 A	120V1	W/DF-1	Yes	BY A/E	9M502	PROVIDE MOUNTING HARDWARE
DF-4	Zoofans	H50 AC	SUSPENDED OPEN CEILING	GYM	35.5	23	2000 SF	1150	1500	0.7 A	120V1	W/DF-1	Yes	BY A/E	9M502	PROVIDE MOUNTING HARDWARE
DF-5	Zoofans	H50 AC	SUSPENDED OPEN CEILING	GYM	35.5	23	2000 SF	1150	1500	0.7 A	120V1	W/DF-1	Yes	BY A/E	9M502	PROVIDE MOUNTING HARDWARE
DF-6	Zoofans	H50 AC	SUSPENDED OPEN CEILING	GYM	35.5	23	2000 SF	1150	1500	0.7 A	120V1	W/DF-1	Yes	BY A/E	9M502	PROVIDE MOUNTING HARDWARE
Grand total: 6																

**SYSTEM FEEDER UNIT SCHEDULE**

UNIT NO.	LOCATION		MANUFACTURER	MODEL NO.	SYSTEM	PUMP FLOW	DISCHARGE PRESSURE	TANK VOLUME	UNIT WEIGHT	ELECTRICAL (PLUG AND CORD)			REFERENCE DETAIL NO.	REMARKS
	ROOM	NUMBER								FLA	VOLTAGE	PHASE		
SFU-1			AXIOM	SF100	HEATING SYSTEM	1.0 GPM	12.0 psig	55.0 gal	460 lbf	1 A	120 V	1	4M502	PROVIDE R1A10-1-SAA LOW LEVEL ALARM
Grand total: 1														

**BUFFER TANK SCHEDULE**

UNIT NO.	LOCATION		MANUFACTURER	MODEL NO.	SYSTEM	ASME TANK VOLUME	DIMENSIONS			UNIT WEIGHT	REFERENCE DETAIL NO.	REMARKS
	ROOM	NUMBER					DIAMETER	HEIGHT	DIAMETER			
BT-1			Taco	MPT0300G04-125N1AN	HEATING SYSTEM	300.0 gal	3'-0"	8'-0"	4"	940 lbf	3M501	PROVIDE 3/4" NPT P/T PORTS AT EACH NOZZLE
Grand total: 1												

**AIR/DIRT SEPARATOR SCHEDULE**

UNIT NO.	LOCATION		MANUFACTURER	MODEL NO.	TYPE	SYSTEM	MAX FLOW	MAX PRESSURE	CONNECTION DIAMETER	REFERENCE DETAIL NO.	REMARKS
	ROOM	NUMBER									
AS-1			Sprotherm	VDN 400 FA	COALESCING	150.0 GPM	1.0 ftH2O	4"	4M502		
Grand total: 1											

**EXPANSION TANK SCHEDULE**

UNIT NO.	TYPE	MANUFACTURER	MODEL NO.	SYSTEM	TANK VOLUME	ACCEPTANCE VOLUME	INITIAL TANK FILL PRESSURE	PRESSURE RELIEF	DIMENSIONS		UNIT WEIGHT	REFERENCE DETAIL NO.	REMARKS
									DIAMETER	HEIGHT			
ET-1	BLADDER	Taco	CA300-125	HEATING SYSTEM	79.0 gal	79.0 gal	12.0 psi	50.0 psi	1'-8"	4'-10"	978 lbf	4M502	INCLUDE SIGHT GLASS
Grand total: 1													

**ELECTRONIC FLOW METER SCHEDULE**

UNIT NO.	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL	SYSTEM	FLUID PROPERTIES				VALVE PROPERTIES		REFERENCE DETAIL NO.	REMARKS	
						MIN. TEMP.	MAX. TEMP.	MAXIMUM FLOW	GLYCOL TYPE	GLYCOL %	NOMINAL DIAMETER			MIN. RATED FLOW
FM-1	Electromagnetic Flow Meter with Junction Box	ONICON	F-3204	CARBON STEEL, PTFE LINER	HEATING SYSTEM	32 °F	180 °F	150.0 GPM	NONE	0	4"	3.8 GPM	9M501	PROVIDE SYSTEM-10 BTU METER W/ GAS INTEGRATION. PROVIDE REMOTE MOUNT DISPLAY.
Grand total: 1														

**WATER FILTER UNIT SCHEDULE**

UNIT NO.	LOCATION		MANUFACTURER	MODEL NO.	SYSTEM	DESCRIPTION	EFFICIENCY	FILTER FLOW RATE	FILTER QTY.	FILTER LENGTH	TANK VOLUME	DIMENSIONS			UNIT WEIGHT	REFERENCE DETAIL NO.	REMARKS
	ROOM	NUMBER										DIAMETER	HEIGHT	DIAMETER			
WFL-1			PARKER	FE6-1.2	HEATING SYSTEM	BYPASS FILTER	5 MICRON	30.0 GPM	6	10"	3.6 gal	0'-8 11/32"	2'-9"	2"	115 lbf	4M501	INCLUDE EXTRA FILTER SETS PER SPECIFICATION. INCLUDE FLOOR MOUNTING LEGS.
Grand total: 1																	