



## Architect's Supplemental Instructions

**PROJECT:** *(name and address)*

Fort Huachuca  
Ground Transport Eqpm Bldg  
Corner of Arizona St. & Hunt St.  
Fort Huachuca, AZ

**CONTRACT INFORMATION:**

Contract for: Fort Huachuca-New Ground Transport Eqpm Bldg  
Date: 01/12/2022  
ASI Number: 01  
ASI Date: 08/26/2022

**OWNER:** *(name and address)*

US Army Corps of Engineers  
Los Angeles District  
915 Wilshire Blvd.  
Los Angeles, CA 90017

**ARCHITECT:** *(name and address)*

Hartmann Architecture Studio  
430 S. Carrillo Rd.  
Ojai, CA 93023

**CONTRACTOR:** *(name and address)*

AMG & Associates, Inc.  
26535 Summit Circle  
Santa Clarita, CA 91350

The Contractor shall carry out the Work in accordance with the following supplemental instructions without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

*(Insert a detailed description of the Architect's supplemental instructions and, if applicable, attach or reference specific exhibits.)*

1. G.000
  - a. Updated Applicable Codes.
2. A.002
  - a. Removed gypsum sheathing product specifications. Added specifications for air and water barrier and fire-retardant plywood.
3. A.101
  - a. Revised wall schedule.
  - b. Added wall type 5 at lavatory.
  - c. Added detail references and dimensions along grid lines 1 and 6.

**ISSUED BY THE ARCHITECT:**

Hartmann Architecture Studio

**ARCHITECT** *(Firm name)*

**SIGNATURE**

Martin Hartmann, AIA, Architect

**PRINTED NAME AND TITLE**

08/26/2022

**DATE**

## ***Architect's Supplemental Instructions cont'd***



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4. A.102
  - a. Revised wall schedule.
  - b. Changed exterior walls to wall type 6.
5. A.103
  - a. Revised wall schedule.
  - b. Changed exterior walls to wall type 6.
6. A.104
  - a. Added downspouts and sizes.
  - b. Revised size of gutters.
  - c. Added expansion joints.
  - d. Revised roof material legend.
7. A.105
  - a. Added steel channel openings for mechanical ventilation.
8. A.201
  - a. Added detail 4.
9. A.203
  - a. Added detail 3.
10. A.304
  - a. Revised and added Z girts.
  - b. Added cove base detail reference.
  - c. Revised concrete cap detail reference.
11. A.305
  - a. Revised and added Z girts.
12. A.401
  - a. Removed/relocated details.
  - b. Added detail 7: typical cove base and curb.
  - c. Added detail 5: seismic joint at exterior cmu.

## ***Architect's Supplemental Instructions cont'd***



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- d. Added detail 6: seismic joint at interior door.
- e. Revised detail 3: gutter and eave detail.
- f. Revised detail 2: gable detail.

Note: Delta 1 and Delta 2 revisions are part of RFI responses and not listed herein but are represented in the documents and RFI responses.

### GENERAL PROJECT NOTES

- ALL WORK SHALL CONFORM TO THE 2021 EDITION INTERNATIONAL BUILDING CODE.
- THE DRAWINGS AND SPECIFICATIONS AND ALL COPIES THEREOF, ARE LEGAL INSTRUMENTS OF SERVICE FOR THE USE OF THE OWNER AND AUTHORIZED REPRESENTATIVE ON THE DESIGNATED PROPERTY ONLY. OTHER USE, WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ARCHITECT, IS PROHIBITED.
- SPECIFICATIONS, DETAILS AND SCHEDULES WHICH MAY BE BOUND SEPARATELY, ARE PART OF THESE CONTRACT DOCUMENTS. DRAWINGS BY SEPARATELY CONTRACTED CONSULTING PROFESSIONALS (SUCH AS STRUCTURAL, INTERIORS OR LANDSCAPE) ARE SUPPLEMENTARY TO THE DESIGN DRAWINGS AND ARE PART OF THESE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IF INFORMATION IS NOT SHOWN OR IS UNCLEAR. REPORT APPARENT DISCREPANCIES ON DRAWINGS AND/OR SPECIFICATIONS TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVAL FOR ALL WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND COORDINATING THE WORK FOR ALL UTILITIES AND SERVICES.
- ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. QUESTIONS REGARDING THE SAME, OR THEIR EXACT MEANING, SHALL BE DIRECTED TO THE ARCHITECT.
- EXISTING CONDITIONS: CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS DESIGNATED AS, OR REQUIRED TO, INTERFACE WITH NEW CONSTRUCTION. REPORT ANY DISCREPANCIES, DEFICIENCIES, OR CONDITIONS INCOMPATIBLE WITH PROPOSED CONSTRUCTION PRIOR TO PROCEEDING.
- IT IS THE RESPONSIBILITY OF THE G.C. TO INSTALL ALL TEMPORARY BRACING AND SHORING TO ENSURE THE SAFETY OF THE WORK UNTIL IT IS IN ITS COMPLETED FORM. DO NOT REMOVE EXISTING STRUCTURAL SUPPORTS OR WALLS WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT OR STRUCTURAL ENGINEER.
- DIMENSIONS/ NOTES/ DETAILS: DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CONDITIONS IN FIELD, AND IMMEDIATELY REPORT ANY DISCREPANCIES OR EXISTING AND PROPOSED VARIATIONS TO THE ARCHITECT. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND COORDINATING DIMENSIONS. ALL WRITTEN DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS. SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER ANY GENERAL NOTES OR DETAILS. CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED AS SIMILAR CONDITIONS DETAILED AND/OR INDICATED ON THE DRAWINGS. ANY WORK INSTALLED IN CONFLICT WITH THE DESIGN DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.
- ALL EXTERIOR DIMENSIONS ARE TO ASSUMED FACE OF PLYWOOD SHEATHING OR FACE OF MASONRY UNO. INTERIOR DIMENSIONS ARE TO FACE OF GYPSUM BOARD FINISH OR CENTERLINE OF WALL UNO.
- ONLY APPROVED WORKING DRAWINGS, WITH THE STATEMENT "APPROVED DRAWINGS", ARE TO BE USED FOR CONSTRUCTION OF THIS PROJECT. CONTRACTORS USING OTHER THAN APPROVED DRAWINGS ARE SOLELY RESPONSIBLE FOR SUCH WORK.
- GEOTECHNICAL REPORTS ARE NOT INCLUDED IN THE CONTRACT DOCUMENTS, BUT MAY BE MADE AVAILABLE TO THE CONTRACTOR FOR INFORMATION ONLY. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR ANY CONCLUSIONS THE CONTRACTOR MAY DRAW FROM SUCH INFORMATION. THE CONTRACTOR SHALL INVESTIGATE AND DETERMINE EXISTING SOILS AND SITE CONDITIONS UNDER WHICH CONTRACTOR WILL OPERATE IN PERFORMING THE WORK.
- THE CONTRACTOR IS TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF DEMOLITION AND CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. HIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL RESTRICT GENERAL PUBLIC ACCESS TO THE DEMOLITION, CONSTRUCTION, AND STORAGE AREAS.
- HAZARDOUS MATERIALS ARE NOT TO BE STORED IN THE BUILDING, NOR USED IN CONSTRUCTION, IN QUANTITIES EXCEEDING THOSE SPECIFIED IN THE IBC.
- DURING DEMOLITION AND CONSTRUCTION THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE EXISTENCE AND PRECISE LOCATION OF UNDERGROUND PIPING AND OTHER STRUCTURES WHICH MAY BE AFFECTED BY CONSTRUCTION. PROMPTLY NOTIFY EACH UTILITY COMPANY, MUNICIPALITY, OR OTHER AGENCY OWNING OR OPERATING ANY AFFECTED FACILITIES OR STRUCTURES, AND REQUEST ENGINEERING INFORMATION AND MARKING OF FACILITIES IN FIELD, PRIOR TO COMMENCING ANY WORK ON THE SITE. REMOVE ALL ITEMS SPECIFIED TO BE ABANDONED, AND TAKE CARE TO PREVENT ANY DAMAGE TO, OR DISRUPTION OF, ITEMS TO REMAIN.
- WHERE FIRE-RATED WALL OR CEILING ASSEMBLIES ARE PENETRATED BY RECESSED FIXTURES, MECHANICAL DUCTS, OR OTHER ITEMS, THE FIXTURES, DUCTS, OR OTHER ITEMS SHALL BE FIRE-RATED TO MATCH THE WALL OR CEILING ASSEMBLY.
- U.N.O. ALL EXTERIOR DOORS SHALL LIMIT AIR INFILTRATION WHEN IN CLOSED POSITION AS FOLLOWS: PROVIDE WEATHERSTRIPPING AT HEAD, SILL AND JAMBS. INSTALL A STRAGLE WITH DOUBLE DOORS, DOORS REQUIRING VERTICAL TRACKS OR GUIDES SHALL USE CONTINUOUS MOUNTING ANGLE, AND SHALL BE SEALED TO LIMIT AIR LEAKAGE.
- CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BLOCKING, BACKING, HANGERS, BACK-UP PLATES, AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK, TOILET ROOM ACCESSORIES, FIXTURES, PARTITIONS, AND ALL WALL MOUNTED OR SUSPENDED MECHANICAL, KITCHEN, ELECTRICAL OR MISCELLANEOUS EQUIPMENT AND FURNISHING.
- CONTRACTOR SHALL VERIFY EXACT SIZES AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PADS, BASE STRUCTURES, ROOF OPENINGS, AS WELL AS POWER, WATER, DRAIN INSTALLATIONS AND STRUCTURAL STEEL SUPPORT LOCATIONS, WHEN APPLICABLE, WITH EQUIPMENT MANUFACTURERS BEFORE PROCEEDING WITH THE WORK. CHANGES TO ACCOMMODATE FIELD CONDITIONS OR APPROVED SUBSTITUTIONS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.
- ALL PIPES, CONDUIT, WIRES, AND DUCTS SHALL BE CONCEALED FROM VIEW UNO.
- ALL GLAZING INSTALLED IN HAZARDOUS LOCATIONS, AS DEFINED BY IBC CHAPTER 24, SHALL BE TEMPERED GLASS. SKYLIGHTS ARE TO BE TEMPERED GLASS OR FIBERGLASS AS SPECIFIED.
- INSTALL SEALANT AT JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS, AND AT PENETRATIONS OF UTILITIES THROUGH THE BUILDING ENVELOPE, TO LIMIT AIR INFILTRATION.
- THE CONTRACTOR SHALL PROVIDE THE OWNER A LIST OF THE FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES INSTALLED IN THE BUILDING, AND INSTRUCTIONS ON HOW TO USE THEM EFFICIENTLY. THE INSTRUCTIONS SHALL BE CONSISTENT WITH SPECIFICATIONS SET FORTH BY THE EXECUTIVE DIRECTOR OF THE STATE ENERGY COMMISSION. THE ENERGY "CERTIFICATION OF COMPLIANCE" SHALL BE SUBMITTED AFTER THE INSTALLATION OF THE REQUIRED EQUIPMENT AND/OR MATERIAL, AND PRIOR TO ANY REQUEST FOR A FINAL INSPECTION.
- CONDITIONS OF APPROVAL: ALL WORK SHALL CONFORM TO THE CITY OF OJAI MINOR CONDITIONS OF APPROVAL AND PROPERTY OF OWNER'S GUIDELINES FOR THIS PROJECT. THE CONTRACTOR SHALL READ THESE CONDITIONS PRIOR TO PREPARING BIDS AND COMMENCING CONSTRUCTION, AND AVAILABLE DIRECTLY FROM THE OWNER.
- ITEMS IN THESE DRAWINGS NOT SPECIFICALLY IDENTIFIED AS EXISTING ARE ASSUMED TO BE NEW
- ALL ASTM AND/OR ANSI DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATIONS.
- MATERIAL AND EQUIPMENT NECESSARY FOR WORK SHALL NOT BE PLACED OR STORED ON PUBLIC PROPERTY SO AS TO OBSTRUCT A FREE AND CONVENIENT APPROACH TO AND USE OF ANY FIRE HYDRANT, FIRE OR POLICE ALARM BOX, UTILITY BOX, CATCH BASIN OR MANHOLE OR SO AS TO INTERFERE WITH THE FREE FLOW OF WATER IN STREET OR ALLEY GUTTER. PROTECTION AGAINST DAMAGE SHALL BE PROVIDED TO SUCH UTILITY FIXTURES DURING THE PROGRESS OF THE WORK, BUT SIGHT OF THEM SHALL NOT BE OBSTRUCTED.
- WHERE NOT SPECIFICALLY DESCRIBED IN ANY OF THE NOTES OR SPECIFICATIONS, WORKMANSHIP SHALL CONFORM TO THE METHODS AND OPERATIONS OF BEST STANDARDS AND ACCEPTED PRACTICES OF THE RESPECTIVE TRADE.

### APPLICABLE CODES

2021 INTERNATIONAL BUILDING CODE  
AMERICAN WITH DISABILITIES ACT

- NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS:
- NFPA 10-18 STANDARD FOR PORTABLE FIRE EXTINGUISHERS
  - NFPA 13-16 STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS
  - NFPA 14-16 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEM
  - NFPA 20-16 STANDARD D FOR THE INSTALL. OF STATIONARY PUMPS FOR FIRE PROTECTION
  - NFPA 24-16 INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
  - NFPA 54-15 NATIONAL FUEL GAS CODE
  - NFPA 72-16 NATIONAL FIRE ALARM AND SIGNALING CODE
  - NFPA 80-16 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES
  - NFPA 101-18 LIFE SAFETY CODE
  - NFPA 105-16 STANDARD FOR SMOKE DOOR ASSEMBLIES AND OTHER OPENING PROTECTIVES
  - NFPA 170-18 STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS
  - NFPA 221-18 STANDARD FOR HIGH CHALLENGE FIRE WALLS, FIRE WALLS, AND FIRE BARRIER WALLS
  - NFPA 252-17 STANDARD METHODS OF FIRE TESTS DOOR ASSEMBLIES
  - NFPA 253-15 STANDARD METHOD OF TEST FOR CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS USING A RADIANT HEAT ENERGY SOURCE
  - NFPA 257-17 STANDARD FOR FIRE TEST FOR WINDOW AND GLASS BLOCK ASSEMBLIES
  - NFPA 720-15 STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE (CO) DETECTION AND WARNING EQUIPMENT

### DRAWING SHEET INDEX

G-000	TITLE SHEET
A.001	SPECIFICATIONS
A.002	SPECIFICATIONS
A.100	OVERALL FLOOR PLAN
A.101	FLOOR PLAN - GROUND LEVEL
A.102	FLOOR PLAN - CRANE LEVEL
A.103	RCP
A.104	ROOF PLAN
A.105	ROOF TRUSS PLAN
A.201	EXTERIOR ELEVATIONS - EAST
A.202	EXTERIOR ELEVATIONS - SOUTH
A.203	EXTERIOR ELEVATIONS - WEST
A.204	EXTERIOR ELEVATIONS - NORTH
A.301	BUILDING SECTIONS
A.302	BUILDING SECTIONS
A.303	BUILDING SECTIONS
A.304	WALL SECTIONS
A.305	WALL SECTIONS
A.401	DETAILS
TOTAL NO OF SHEETS: 19	

AGENCY APPROVAL:



**HARTMANN ARCHITECTURE STUDIO**  
HARTMANNARCHITECTURESTUDIO.COM  
430 S. CARRILLO RD.  
OJAI, CALIFORNIA 93023  
(805) 530-5559  
hartmannarchitecturestudio.com

CONSULTANTS:

STATUS:

**FOR CONSTRUCTION**

SEALS:



PROJECT:

**FT. HUACHUCA NEW GROUND TRANSPORT EQUIPMENT BUILDING**

OWNER:

US CORPS OF ENGINEERS  
LOS ANGELES DISTRICT  
915 WILSHIRE BLVD.  
LOS ANGELES, CALIFORNIA 90017

CONTRACTOR:

AMG & ASSOCIATES  
26535 SUMMIT CIRCLE  
SANTA CLARITA, CALIFORNIA 91350  
(661) 251- 7401  
amgassociatesinc.com

PROJECT ADDRESS:

CORNER OF ARIZONA ST. & HUNT ST.  
FORT HUACHUCA, ARIZONA

ISSUE:

MARK	DATE	DESCRIPTION
3	08/23/2022	ASI #01

PROJECT INFORMATION:

PROJECT NUMBER:	2022.003
PROJECT PHASE:	CD
DRAWN BY:	MEH
REVIEWED BY:	MEH

SHEET TITLE:

**TITLE SHEET**

SHEET NUMBER:

**G-000**

DATE: 07/07/22

CONSULTANTS: THE DOCUMENTS, THIS DOCUMENT AND THE LOGO AND DESIGN INFORMATION ARE THE PROPERTY OF HARTMANN ARCHITECTURE STUDIO AND SHALL NOT BE USED OR REPRODUCED IN ANY FORM OR BY ANY MEANS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE ARCHITECT. COPYRIGHT HARTMANN ARCHITECTURE STUDIO.

## SECTION 073011 ROOFING UNDERLAYMENT, HIGH-TEMPERATURE

### PART 1 GENERAL

#### 1.01 SUMMARY

- A. Installation of roofing underlayment, high temperature on surfaces indicated on drawings, consisting of preparation of existing and repaired roof deck surfaces. Selection of roof deck or insulation substrate and/or use of a primer or adhesive are the responsibility of the architect, specifier or roofing contractor to determine based on the roof assembly and environmental conditions.

#### 1.02 RELATED SECTIONS

- A. Section 061000 - Rough Carpentry.  
B. Section 073113 - Asphalt Shingles.  
C. Section 073116 - Metal Shingles.  
D. Section 073119 - Mineral-Fiber Cement Shingles.  
E. Section 073126 - Slate Shingles.  
F. Section 073219 - Wood Shingles and Shakes.  
G. Section 073200 - Roof Tiles.  
H. Section 076100 - Sheet Metal Roofing.

#### 1.03 REFERENCES

- A. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tensile Properties  
B. ASTM D461 - Standard Test Methods for Felt.  
C. ASTM D 903 - Standard Test Method for Peel or Stripping Strength of Adhesive Bonds.  
D. ASTM D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.  
E. ASTM D3767 - Standard Practice for Rubber— Measurement of Dimensions.  
F. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.  
G. ASTM G90 - EMMAqua test.

#### 1.4 SYSTEM DESCRIPTION

- A. Product provided by this Section is a high temperature, self-adhesive roofing underlayment membrane consisting of not less than 40 mils thickness, consisting of 36 mils of rubberized asphalt membrane laminated to a 4-mil skid-resistant membrane that is available in either black or white.

#### 1.05 SUBMITTALS

- A. General: Submit in accordance with Section 01 30 00.  
B. Product Data: Submit manufacturer's product literature and installation instructions.  
C. Subcontractor Qualifications: Submit document stating manufacturer's acceptance of subcontractor as an Approved Applicator for the specified materials.  
D. Warranty: Submit a sample warranty identifying the terms and conditions stated in Section 1.07.

#### Section 1.06 QUALITY ASSURANCE

- A. Applicator Qualifications: Applicator shall have 5 years of experience in applying the same or similar materials and shall be specifically approved in writing by the membrane manufacturer.  
B. Regulatory Requirements: Comply with applicable codes, regulations, ordinances, and laws regarding use and application of products that contain volatile organic compounds (VOC).  
C. Pre-Application Conference: Prior to beginning work, convene a conference to review conditions, installation procedures, schedules and coordination with other work.

#### 1.07 WARRANTY

- A. Upon completion and acceptance of the work required by this section, the manufacturer will issue a warranty agreeing to promptly replace defective materials installed by an approved applicator for a period of 5 years.  
B. The formation or presence of mold or fungus in a building is dependent upon a broad range of factors including, but not limited to, the presence of spores and nutrient sources, moisture, temperatures, climatic conditions, relative humidity, and heating/ventilating systems and their maintenance and operating capabilities. These factors are beyond the control of Carlisle and Carlisle shall not be responsible for any claims, repairs, restoration, or damages relating to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in any building or in the air, land, or water serving the building.

#### 1.08 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to project site in original, factory-sealed, unopened containers bearing manufacturer's name and label intact and legible with following information.  
1. Name of material.  
2. Manufacturer's stock number and date of manufacture.  
3. Material safety data sheet.  
B. Store materials in protected and well-ventilated area. Protect from damage from sunlight, weather, excessive temperatures and construction operations. Remove damaged material from the site and dispose of in accordance with local applicable regulations.

#### 1.09 PROJECT CONDITIONS

- A. Do not apply membrane when surface temperature is below or inclement weather conditions conflict with manufacturer's published requirements.  
B. Coordinate waterproofing work with other trades. The applicator shall have sole right of access to the specified areas for the time needed to complete the installation.  
C. Warn personnel against breathing of vapors and contact of material with skin or eyes. Wear applicable protective clothing and respiratory protection gear.  
D. Keep flammable materials away from spark or flame. Do not allow the use of spark producing equipment during application and until all vapors have dissipated. Post "NO SMOKING" signs.  
E. Maintain work area in a neat and orderly condition, removing empty containers, rags, and rubbish daily from the site.

### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

- A. Provide CCW MiraDR1 860/861 Sheet Membrane Waterproofing as manufactured by Carlisle Coatings and Waterproofing Incorporated, 900 Hensley Lane, Wylie, Texas 75098, Phone: (800) 527-7092 Fax: (972) 442-0076.

#### 2.02 PRODUCTS

- A. High temperature, self-adhesive roofing underlayment membrane consisting of not less than 40 mils thickness, consisting of 36 mils of rubberized asphalt membrane laminated to a 4-mil skid-resistant membrane, and shall meet or exceed the following requirements:  
1. Thickness: 40 mils, ASTM D 1970  
2. Tensile Strength (Machine Direction): 250 psi, ASTM D 412  
3. Tensile Strength (Transverse Direction): 190psi, ASTM D 412  
4. Elongation at Break Machine Direction: 250% minimum, ASTM D 412  
5. Elongation at Break Transverse Direction: 170% minimum, ASTM D 412  
6. Adhesion to Plywood at 75°F: 35 lbs./ft., ASTM D 1970  
7. Lap Seam Adhesion: 21.0 lb/in, ASTM D 1970  
8. Sealability Around Nail: Pass, ASTM D 1970  
9. Slip Resistance: Pass, ASTM D 1970  
10. Slip Resistance: Pass ASTM D 1970  
11. Thermal Stability: Pass ASTM D 1970  
12. Moisture Vapor Permeance: 0.02 perms ASTM D 1970  
13. Water Absorption: 0.5% ASTM D 1970  
B. For application of air temperatures below 40°F, use CCW-702, CCW-702WB, Cav-Grip or CCW-AWP.

#### 2.03 ACCESSORY PRODUCTS

- A. Surface Primer: Shall be CCW-702, CCW-702WB, CCW-AWP or Cav-Grip.  
B. Sealants: Shall be approved sealants by CCW.

### PART 3 EXECUTION

#### 3.01 INSPECTION

- A. Before any underlayment work is started the waterproofing applicator shall thoroughly examine all surfaces for any deficiencies or unsatisfactory conditions detrimental to the proper completion of the work. Should any deficiencies exist, the architect, owner, or general contractor shall be notified in writing. Do not proceed with work until all deficiencies or unsatisfactory conditions are corrected.

#### 3.02 SURFACE PREPARATION

- A. Refer to manufacturer's literature for requirements for preparation of substrates. Surfaces shall be structurally sound and free of voids, spalled concrete, aggregate and sharp protrusions. Remove contaminants such as grease, oil and wax from exposed surfaces. Remove dust, dirt, loose stone and debris. Use repair materials and methods which are acceptable to manufacturer of sheet membrane waterproofing.

#### 3.03 INSTALLATION

- A. Install roofing underlayment on sloped surfaces at locations indicated on the Drawings, but not less than at hips, ridges, eaves, valleys, sidewalls and chimneys. Strictly comply with manufacturer's installation instructions including but not limited to the following:  
1. Schedule installation such that underlayment is covered by roofing within the published exposure limit of the underlayment.  
2. Do not install underlayment on wet or frozen substrates.  
3. Install finish samples of all colors specified.  
4. Remove dust, dirt, loose materials and protrusions from deck surface.  
5. Install membrane on clean, dry, continuous structural deck. Fill voids and damaged or unsupported areas prior to installation.  
6. Prime concrete and masonry surfaces using specified primer at a rate of 300-350 square feet per gallon. Priming is not required for other suitable clean and dry surfaces when temperatures are above 40°F.  
7. Install membrane such that all laps shed water. Work from the low point to the high point of the roof at all times. Apply the membrane in valleys before the membrane is applied to the eaves. Following placement along the eaves, continue application of the membrane up the roof. Membrane may be installed either vertically or horizontally after the first horizontal course.  
8. Side laps minimum 3 inches and end laps minimum 6 inches (152 mm) following lap lines marked on underlayment.  
9. Patch penetrations and damage using manufacturer's recommended methods.

#### 3.04 CLEANING AND PROTECTION

- A. Protection: Protect from damage during construction operations and installation of roofing materials. Promptly repair any damaged or deteriorated surfaces.  
B. Repair minor damage to eliminate all evidence of repair. Remove and replace work which cannot be satisfactorily repaired in the opinion of the Architect.  
C. Provide temporary protection to ensure work being without damage or deterioration at time of final acceptance. Remove protective film and rectan as necessary immediately before final acceptance.

End of Section

## SECTION 074203.01 EXPOSED FASTENER FACTORY MANUFACTURED PREFORMED WALL PANELS

### PART 1 GENERAL

#### 1.01 DESCRIPTION OF WORK

- A. This section covers the pre-finished, pre-fabricated exposed fastener metal roof and wall system. All metal trim, accessories, fasteners, insulation and sealants indicated on the drawings as part of this section.  
B. Drawings and general provisions of the Contract, including general and Supplementary Conditions and Division 01 Specifications, apply to this section.  
C. Related Work Spreads:  
1. Roof Deck structural steel, flat roof systems, perimeter edge systems. Roof hatches, firestopping not included in this section.

#### 1.02 SUMMARY

- A. Section Includes  
1. Factory formed exposed fastener metal roof and wall panels  
B. Related work specified elsewhere. (Note: select from the below or add appropriate sections)  
1. Section 051200 - Structural Steel  
2. Section 052100 or 054000 - Steel Joists  
3. Section 076000 - Flashing and Sheet Metal

#### 1.03 DEFINITIONS

- A. Metal Roof/Wall Panel Assembly: Metal roof/panels, attachment system components, miscellaneous metal framing, thermal, and accessories necessary for a complete weathertight roofing system.  
B. References:  
1. American Society for Testing and Materials (ASTM)  
a. ASTM A 653: Steel Sheet, Zinc Coated by the Hot Dip Process  
b. ASTM A 792: Steel Sheet, Aluminum-Zinc Alloy Coated by the Hot Dip Process  
c. ASTM B 209: Aluminum and Aluminum Alloy Sheet and Plate  
d. ASTM B370 Standard Specification for Copper Sheet and Strip for Building Construction  
2. Sheet Metal and Air Conditioning Contractors National Association (SMACNA)  
a. SMACNA Architectural Sheet Metal Manual, 1993 edition  
3. American Iron and Steel Institute (AISI)  
a. AISI Cold Formed Steel Design Manual  
4. Aluminum Association  
a. Aluminum Design Manual  
5. Metal Construction Association  
a. Preformed Metal Wall Guidelines  
6. Code References  
a. ASCE, Minimum Loads for Buildings and Other Structures  
b. BOCA National Building Codes  
c. UBC Uniform Building Code  
d. SBC Standard Building Code

#### 1.04 QUALITY ASSURANCE

- A. Petersen Aluminum Corp, Elk Grove Village, IL, 800-323-1960 products establish a minimum of quality required.  
B. Manufacturer and erector shall demonstrate experience of a minimum of five (5) years in this type of project.  
C. Panels shall be factory-produced only. No portable, installer-owned or installer-rented machines will be permitted.

#### 1.05 SUBSTITUTIONS

- A. The material, products and equipment specified in this section establish a standard for required function, dimension, appearance and quality to be met by any proposed substitution.  
B. Manufacturers listed in this section are prequalified manufacturers. Substitution of manufacturer's products for those specified shall not be allowed at any time during construction.

#### 1.06 SYSTEM DESCRIPTION

- A. Material to comply with:  
1. ASTM A792/A792M Standard Specification for Sheet Steel, 55% Aluminum-Zinc Alloy Coated by the Hot-Dip process

#### 1.07 ROOF SYSTEM PERFORMANCE TESTING

- A. General Performance: Metal roof/wall panels shall comply with performance requirements without failure due to defective manufacture, fabrication, installation or other defects in construction.

- B. Roof System shall be designed to meet Standard Building Code Wind Load requirements.  
C. Panels to meet:  
1. Roof/Wall System shall be designed to meet applicable Local Building Code and the System shall have tested by the Manufacturer per ASTM E-1592 and have the applicable Load Tables published from this testing for loads.

#### 1.08 WARRANTIES

- A. Finish warranty: Manufacturer's standard form in which manufacturer agrees to repair finish or replace standing seam metal roof panels that show evidence of deterioration of factory-applied finish within specified warranty period.  
1. Exposed Panels Finish - deterioration includes the following:  
a. Color fading more than 5 hunter units when tested according to ASTM D 2244  
b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214  
c. Cracking, checking, peeling or failure of a paint to adhere to a bare metal.  
2. Warranty Period: 20 Years from the date of substantial completion  
B. Applicator shall furnish written warranty for a two (2) year period from date of substantial completion of building covering repairs required to maintain roof and flashings in watertight condition.

#### 1.09 SUBMITTALS

- A. Furnish detailed drawings showing profile and gauge of exterior sheets, location and type of fasteners, location, gauges, shape and method of attachment of all trim locations and types of sealants, and any other details as may be required for a weather-tight installation.  
B. Finish samples of all colors specified.  
C. Shop drawings: Show fabrication and installation layouts of metal roof panels, metal wall panels or metal soffit panels, details of edge conditions, side-seam joints, panel profiles, corners, anchorages, trim, flashings, closures and accessories, and special details. Distinguish between factory and field-assembled work.  
D. Coordination Drawings: Roof plans, drawn to scale, on which the following are shown and coordinated with each other, based on input from installer of the items involved:  
1. Roof panels and attachments  
2. Metal trusses, bracings and supports  
3. Roof-mounted items including snow guards and items mounted on roof curbs.  
E. LEED Submittals  
1. Product Test reports for Credit SS 7.2. For roof panels, indicating that the panels comply with Solar Reflective Index requirement  
2. Product data for Credit MR 4.1 and credit MR 4.2: Indicating the percentages by weight of postconsumer and preconsumer recycled content for products having recycled content.

#### 1.10 DELIVERY, STORAGE AND HANDLING

- A. Ordering: Comply with manufacturer's ordering instruction and lead time requirements to avoid construction delays.  
B. Deliver components, sheets, metal roof/wall panels and other manufactured items so as not to be damaged or deformed. Package metal roof/wall panels for protection during transportation and handling.  
C. Unload, store and erect metal roof/wall panels in a manner to prevent bending, warping, twisting and surface damage.  
D. Stack metal roof panels on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal roof/wall panels to ensure dryness. Do not store metal roof panels in contact with other materials that might cause staining, denting or other surface damage.  
E. Protect strippable protective coating on any metal coated product from exposure to sunlight and high humidity, except to the extent necessary for material installation.

#### 1.11 PROJECT CONDITIONS

- A. Weather Limitations: proceed with installation only when existing and forecasted weather conditions permit metal roof panel work to be performed.  
B. Field Measurements: Verify actual dimensions of construction contiguous with metal roof panels by field measurements before fabrication.

#### 1.12 COORDINATION

- A. Coordinate sizes and locations of roof curbs, equipment supports and roof penetrations with actual equipment provided.  
B. Coordinate metal roof panels with rain drainage work, flashing, trim and construction of decks, parapet walls and other adjoining work to provide a leakproof, secure and noncorrosive installation.

### PART 2 PRODUCTS

#### 2.01 PANEL DESIGN

- A. General: Provide factory-formed, prefinished, lapable exposed fastener, structural ribbed metal roof/wall panel system, that has been prestressed and certified by manufacturer to comply with specified requirements under installed conditions.  
B. Roof panels shall be exposed fastener R-36 Panels with 1 1/4" deep profile ribs, 12" on center, total coverage of Roof/Wall panels when installed shall be 36% coverage  
C. Structural Requirements: Engineer panels for structural properties in accordance with latest edition of American Iron and Steel Institute's Cold Formed Steel Design Manual using effective width concept and Aluminum Associations Aluminum Design Manual.  
D. Forming: Use continuous end rolling method. No end laps on panels. No portable rolling machines will be permitted on this project, no installer-owned or installer-rented machines will be permitted. It is the intent of the Architect to provide Factory-Manufactured panel systems only for this project.  
E. Panels shall be designed to be attached to the substrate.  
F. The panel shall have an overlapping sidelap feature.

#### 2.02 ACCEPTABLE MANUFACTURERS

- A. This project is detailed around the roofing product of Petersen Aluminum Corporation Petersen Aluminum Corp, Elk Grove Village, IL, 800-323-1960, R-36 Panel.

#### 2.03 MATERIALS AND FINISHES

- A. Preformed roofing panels shall be fabricated of 22 GA Steel  
B. Color shall be Sandstone.  
C. Texture: Panel shall be smooth.  
D. Finish shall be Kynar 500 or Hylar 5000 Fluorocarbon coating with a top side film thickness of 0.70 to 0.90 mil over a 0.25 to 0.3 mil prime coat to provide a total dry film thickness of 0.95 to 1.25 mil, to meet AAMA 621. Bottom side shall be coated with a primer with a dry film thickness of 0.25 mil. Finish shall conform to all tests for adhesions, flexibility and longevity as specified by Kynar 500 or Hylar 5000 finish supplier.  
E. If Strippable coating to be applied on the pre-finished panels to the top side to protect the finish during fabrication, shipping and handling, film shall be removed before installation.  
F. Trim: Trim shall be fabricated of the same material and finish to match the profile, and will be press broken in lengths of 10 to 12 feet. Trim shall be formed only by the manufacturer of their approved dealer. Trim to be erected in overlapped condition. Use lap strips only as indicated on drawings. Miter conditions shall be factory welded material to match the sheeting. Trim to be fabricated in accordance with standard SMACNA procedure and details.  
G. Closures: shall be pre-molded polyethylene to match the profile of the exposed fastener panel and shall be supplied by the panel manufacturer.  
H. Accessories/Fasteners: Fasteners shall be of type, material, size, corrosion resistance, holding power and other properties required to fasten miscellaneous framing members to substrates. Accessories and their fasteners shall be capable of resisting the specified design wind uplift forces and shall allow for thermal movement of the roof panel system. Exposed fasteners shall not restrict free movement of the roof panel system resulting from thermal forces, except at designated points of roof panel fixity.  
1. Fasteners shall have combination steel and EPDM washers  
2. Screws for panel to girt/purlins shall be sufficient to penetrate the supporting member by 1". All fasteners shall be applied in accordance with the fastening schedule as provided by panel manufacturer.  
3. Screws for flashings and sidelaps shall be #14 HHA x 3/4" sheet metal stitch screws. All accessories, flashings and sidelaps shall be fastened 12" OC.

- A. The material, products and equipment specified in this section establish a standard for required function, dimension, appearance and quality to be met by any proposed substitution.  
J. Caulking: Shall be a polyurethane where it is exposed and there is no thermal movement. All caulking and sealing shall be done in a neat manner with excess caulking or sealant removed from exposed surfaces.

- I. Caulking shall be non-skinning, non hardening gun grade butyl sealant or butyl sealant tape with a minimum thickness of 7" where it is concealed and where thermal movement must be accommodated. All caulking or sealing shall be done in a neat manner with excess caulking or sealant removed from exposed surfaces.  
J. Vapor Retarder: retarder with a permeance of 0.05 or less as determined by ASTM 98.

#### 2.04 FABRICATION

- A. Comply with dimensions, profile limitations, gauges and fabrication details shown and if not shown, provide manufacturer's standard product fabrication.  
B. Fabricate components of the system in factory, ready for field assembly.  
C. Fabricate components and assemble units to comply with fire performance requirements specified.  
D. Apply specified finishes in conformance with manufacturer's standard, and according to manufacturer's instructions.  
E. Panels are lapable. It is recommended that individual aluminum roof panels not exceed 16' in length and steel roof panels not exceed 32' in length for thermal movement reasons.  
F. Panels shall be roll formed on a stationary industrial type rolling mill to gradually shape the sheet metal. Portable rollformers rented or owned by the installer, are not acceptable.

### PART 3 EXECUTION

#### 3.01 INSPECTION

- A. Examine alignment of structural steel and related supports, primary and secondary roof framing, solid roof sheathing, prior to installation. Components should comply with shop drawings and be smooth, even, sound and free of depressions.  
B. For the record, prepare written report, endorsed by installer, listing conditions detrimental to performance of the Work.  
C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 FASTENERS

- A. Secure units to supports  
B. Place fasteners as indicated in manufacturer's standards.

#### 3.03 INSTALLATION

- A. Panels shall be installed plumb and true in a proper alignment and in relation to the structural framing. The erector must have at least five years successful experience with similar applications.  
B. Install metal panels, fasteners, trim and related sealants in accordance with approved shop drawings and as may be required for a weather-tight installation. Conform to standards set forth in SMACNA architectural sheet metal manuals and approved shop drawings for this project.  
C. Remove all strippable coating and provide a dry-wipe down cleaning of the panels as they are erected.  
D. Install panel system so it is watertight, without waves, warps, buckles or distortions, and allow for thermal movement conditions.  
E. Abrasive devices shall not be used to cut on or near roof or wall panel system.  
F. Apply sealant tape or caulking as necessary at flashing and panel joints to prevent water penetration.  
G. Remove any strippable film immediately upon exposure to direct sunlight.  
H. Panels shall be attached to the joints, perimeter, and all openings shall be sealed per the manufacturer's instructions to provide a continuous vapor retarder.  
I. Underlayment (solid substrate):  
1. Provide one layer of 30# felt with horizontal overlaps and endlaps staggered between layers.  
2. Provide ice and water shield membrane at all valley and eave conditions as well as any area at less than a 3:12 slope.  
3. Lay parallel to ridge line with 2 1/2" horizontal laps and 6" vertical laps

#### 3.04 DAMAGED MATERIAL

- A. Upon determination of responsibility, repair or replace damaged metal panels and trim to the satisfaction of the Architect and Owner.

END OF SECTION

## SECTION 074213.02 PREFORMED METAL STANDING SEAM ROOFING

### PART 1 GENERAL

#### 1.01 DESCRIPTION OF WORK

- A. This section covers the pre-finished, pre-fabricated Architectural standing seam roof system. All metal trim, accessories, fasteners, insulation and sealants indicated on the drawings as part of this section.  
B. Drawings and general provisions of the Contract, including general and Supplementary Conditions and Division 01 Specifications, apply to this section.  
C. Related Work Spreads:  
1. Roof Deck structural steel, flat roof systems, perimeter edge systems. Roof hatches, firestopping not included in this section.

#### 1.02 SUMMARY

- A. Section Includes  
1. Factory formed Standing Seam metal roof panels  
B. Related work specified elsewhere. (Note: select from the below or add appropriate sections)  
1. Section 051200 - Structural Steel  
2. Section 052100 or 054000 - Steel Joists  
3. Section 076000 - Flashing and Sheet Metal

#### 1.03 DEFINITIONS

- A. Metal Roof Panel Assembly: Metal roof panels, attachment system components, miscellaneous metal framing, thermal, and accessories necessary for a complete weathertight roofing system.  
B. References:  
1. American Society for Testing and Materials (ASTM)  
a. ASTM A 653: Steel Sheet, Zinc Coated by the Hot Dip Process  
b. ASTM A 792: Steel Sheet, Aluminum-Zinc Alloy Coated by the Hot Dip Process  
c. ASTM B 209: Aluminum and Aluminum Alloy Sheet and Plate  
d. ASTM B370 Standard Specification for Copper Sheet and Strip for Building Construction  
2. Sheet Metal and Air Conditioning Contractors National Association (SMACNA)  
a. SMACNA Architectural Sheet Metal Manual, 1993 edition  
3. American Iron and Steel Institute (AISI)  
a. AISI Cold Formed Steel Design Manual  
4. Aluminum Association  
a. Aluminum Design Manual  
5. Metal Construction Association  
a. Preformed Metal Wall Guidelines  
6. Code References  
a. ASCE, Minimum Loads for Buildings and Other Structures  
b. BOCA National Building Codes  
c. UBC Uniform Building Code  
d. SBC Standard Building Code

#### 1.04 QUALITY ASSURANCE

- A. Products establish a minimum of quality required.  
B. Manufacturer and erector shall demonstrate experience of a minimum of five (5) years in this type of project.  
C. Panels shall be factory-produced only. No portable, installer-owned or installer-rented machines will be permitted.

#### 1.05 SUBSTITUTIONS

- A. The material, products and equipment specified in this section establish a standard for required function, dimension, appearance and quality to be met by any proposed substitution.

### 1.06 SYSTEM DESCRIPTION

- A. Material to comply with:  
1. ASTM A792/A792M Standard Specification for Sheet Steel, 55% Aluminum-Zinc Alloy Coated by the Hot-Dip process

#### 1.07 ROOF SYSTEM PERFORMANCE TESTING

- A. General Performance: Metal roof panels shall comply with performance requirements without failure due to defective manufacture, fabrication, installation or other defects in construction.  
B. Roof System shall be designed to meet Standard Building Code Wind Load requirements.  
C. Panels to meet:  
1. Water Penetration: When tested per ASTM E-283/1680 and ASTM E-331/1646 there shall be no uncontrolled water penetration or air infiltration through the panel joints.  
2. Roof System shall be designed to meet a UL Class 90 wind uplift in accordance with UL standard 580 and panel system shall be ASTM 1592 Tested and approved  
3. UL 2218 - Impact Resistance rated.

#### 1.08 WARRANTIES

- A. Weathertight warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace standing seam metal roof panel assemblies that fail to remain weathertight, including leaks, within specified warranty period.  
1. Warranty Period: 20 Years from date of Substantial Completion  
B. Finish warranty: Manufacturer's standard form in which manufacturer agrees to repair finish or replace standing seam metal roof panels that show evidence of deterioration of factory-applied finish within specified warranty period.  
1. Exposed Panels Finish - deterioration includes the following:  
a. Color fading more than 5 hunter units when tested according to ASTM D 2244  
b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214  
c. Cracking, checking, peeling or failure of a paint to adhere to a bare metal.  
2. Warranty Period: 20 Years from the date of substantial completion  
C. Applicator shall furnish written warranty for a two (2) year period from date of substantial completion of building covering repairs required to maintain roof and flashings in watertight condition.

#### 1.09 SUBMITTALS

- A. Furnish detailed drawings showing profile and gauge of exterior sheets, location and type of fasteners, location, gauges, shape and method of attachment of all trim locations and types of sealants, and any other details as may be required for a weather-tight installation.  
B. Provide finish samples of all colors specified.  
C. Shop drawings: Show fabrication and installation layouts of metal roof panels, metal wall panels or metal soffit panels, details of edge conditions, side-seam joints, panel profiles, corners, anchorages, trim, flashings, closures and accessories, and special details. Distinguish between factory and field-assembled work.  
D. Coordination Drawings: Roof plans, drawn to scale, on which the following are shown and coordinated with each other, base don input from installer of the items involved:  
1. Roof panels and attachments  
2. Metal trusses, bracings and supports  
3. Roof-mounted items including snow guards and items mounted on roof curbs.  
E. LEED Submittals  
1. Product Test reports for Credit SS 7.2. For roof panels, indicating that the panels comply with Solar Reflective Index requirement  
2. Product data for Credit MR 4.1 and credit MR 4.2: Indicating the percentages by weight of postconsumer and preconsumer recycled content for products having recycled content.

#### 1.10 DELIVERY, STORAGE AND HANDLING

- A. Ordering: Comply with manufacturer's ordering instruction and lead time requirements to avoid construction delays.  
B. Deliver components, sheets, metal roof panels and other manufactured items so as not to be damaged or deformed. Package metal roof panels for protection during transportation and handling.  
C. Unload, store and erect metal roof panels in a manner to prevent bending, warping, twisting and surface damage.  
D. Stack metal roof panels on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal roof panels to ensure dryness. Do not store metal roof panels in contact with other materials that might cause staining, denting or other surface damage.  
E. Protect strippable protective coating on any metal coated product from exposure to sunlight and high humidity, except to the extent necessary for material installation.

#### 1.11 PROJECT CONDITIONS

- A. Weather Limitations: proceed with installation only when existing and forecasted weather conditions permit metal roof panel work to be performed.  
B. Field Measurements: Verify actual dimensions of construction contiguous with metal roof panels by field measurements before fabrication.

#### 1.12 COORDINATION

- A. Coordinate sizes and locations of roof curbs, equipment supports and roof penetrations with actual equipment provided.  
B. Coordinate metal roof panels with rain drainage work, flashing, trim and construction of decks, parapet walls and other adjoining work to provide a leakproof, secure and noncorrosive installation.

### PART 2 PRODUCTS

#### 2.01 PANEL DESIGN

- A. General: Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates and accessories required for a weathertight installation.  
B. Roof panels shall be Snap Clad standing seam in 18" widths with 1 3/4" high seam.  
C. Panels to be produced with Factory supplied hot melt mastic in the seams.  
D. Panels to be produced Smooth - Factory Standard.  
E. Panels to be designed for attachment with concealed fastener clips, spaced as required by the manufacturer to provide for both positive and negative design loads, while allowing for the expansion and contraction of the entire roof system resulting from variations in temperature.  
F. Forming: Use continuous end rolling method. No end laps on panels. No portable rolling machines will be permitted on this project, no installer-owned or installer-rented machines will be permitted. It is the intent of the Architect to provide Factory-Manufactured panel systems only for this project.

#### 2.02 ACCEPTABLE MANUFACTURERS

- A. This project is detailed around the roofing product of Petersen Aluminum Corporation , Snap Clad.

#### 2.03 MATERIALS AND FINISHES

- A. Preformed roofing panels shall be fabricated of 22 GA Steel  
B. Color shall be Sandstone  
C. Finish shall be Kynar 500 or Hylar 5000 Fluorocarbon coating with a top side film thickness of 0.70 to 0.90 mil over a 0.25 to 0.3 mil prime coat to provide a total dry film thickness of 0.95 to

- F. Closures: use composition or metal profiled closures at the top of each elevation to close ends of the panels. Metal closures to be made in the same material and finish as face sheet.
- G. Fasteners: Fasteners shall be of type, material, size, corrosion resistance, holding power and other properties required to fasten miscellaneous framing members to substrates.
- H. Substrate shall be 5/8" Fire-rated Plywood
- I. Roofing Underlayment
- On all surfaces to be covered with roofing material, furnish and install a 40 mil Peel & Stick membrane, required as outlined by metal panel manufacturer. Membrane to be a minimum of 40 mil thickness, smooth, non-granular, high temperature. **Basis of design:** Carlisle WIP 300 HT High Temperature Protection Self Adhering Roofing Underlayment. Other acceptable manufacturers include:
    - W.R Grace "Ice & Water Shield"
    - Interwrap Titanium PSU-30
    - Tamko TW Tile and Metal Underlayment

- Underlayment shall be laid in horizontal layers with joints lapped toward the eaves a minimum of 6", and well secured along laps and at ends as necessary to properly hold the felt in place. All underlayment shall be preserved unbroken and whole.
- Peel and Stick Underlayment shall lap all hips and ridges at least 12" to form double thickness and shall be lapped 6" over the metal of any valley or built-in gutters and shall be installed as required by the Standing Seam Panel Manufacturer to attain the desired 20 Year Weather-tightness Warranty.

- J. Sealants
- Provide two-part polysulfide class B non-sag type for vertical and horizontal joints or
  - one part polysulfide not containing pitch or phenolic extenders or
  - Exterior grade silicone sealant recommended by roofing manufacturer or
  - One part non-sag, gun grade exterior type polyurethane recommended by the roofing manufacturer.

#### 2.04 FABRICATION

- Comply with dimensions, profile limitations, gauges and fabrication details shown and if not shown, provide manufacturer's standard product fabrication.
- Fabricate components of the system in factory, ready for field assembly.
- Fabricate components and assemble units to comply with fire performance requirements specified.
- Apply specified finishes in conformance with manufacturer's standard, and according to manufacturer's instructions.

#### PART 3 EXECUTION

##### 3.01 INSPECTION

- Examine alignment of structural steel and related supports, primary and secondary roof framing, solid roof sheathing, prior to installation.
- For the record, prepare written report, endorsed by installer, listing conditions detrimental to performance of the Work.
- Proceed with installation only after unsatisfactory conditions have been corrected.

##### 3.02 FASTENERS

- Secure units to supports
- Place fasteners as indicated in manufacturer's standards.

##### 3.03 INSTALLATION

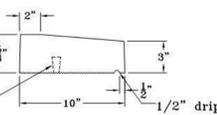
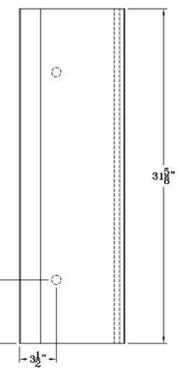
- Panels shall be installed plumb and true in a proper alignment and in relation to the structural framing. The erector must have at least five years successful experience with similar applications.
- Install metal panels, fasteners, trim and related sealants in accordance with approved shop drawings and as may be required for a weather-tight installation.
- Remove all strippable coating and provide a dry-wipe down cleaning of the panels as they are erected.

##### 3.04 DAMAGED MATERIAL

- Upon determination of responsibility, repair or replace damaged metal panels and trim to the satisfaction of the Architect and Owner.

END OF SECTION

SI 155 S 31-5/8 dp ti  
Weight Concrete ±75 lbs.



#### CONCRETE CAP

#### BUILDING AIR BARRIER SYSTEM

# TYPAR® METROWRAP™ THREE-PART SPECIFICATIONS

#### PART 1. GENERAL

##### 1.1 Summary

- This Section specifies TYPAR MetroWrap applied as a water-resistive barrier and air barrier assembly on exterior walls.

##### 1.2 Submittals

- Product Data: Submit manufacturer's product data and installation instructions.
- Samples: Submit 12" (300mm) square sample for approval.

##### 1.3 Quality Assurance

- Manufacturer:
  - Obtain primary materials from a single manufacturer regularly engaged in manufacturing building wraps. Obtain secondary materials from a source acceptable to the primary materials manufacturer.
- Installer:
  - Minimum two years experience with installation of similar building wraps.

#### PART 2. PRODUCTS

##### 2.1 Manufacturer

- Berry Global, Inc., 70 Old Hickory Blvd, Old Hickory, TN 37138, +1 615-847-7000, www.TYPAR.com.

##### 2.2 Water-Resistant Barrier

- Material shall comply with the following:
  - Thickness 0.127" average
  - Breaking Strength Test: 94 pounds mean value per ASTM D5034
  - Water Vapor Transmission: 9-15 perms (grams per hr in Hg sqft) per ASTM E96, desiccant method
  - Flatability: No signs of cracking per AC308, Sec. 3.2.4
  - Ultraviolet Exposure: Not less than 10 months prior to exterior cladding coverage
  - Accelerated Aging Cycling: No signs of failure at 21 days per AC308
  - Water Resistance Test: Exceeds one hour per ASTM D779
  - Elongation: 1.2" mean value per ASTM D5034, 4" wide sample
  - Air Penetration Resistance (Gurley Hill Porosity) [TAPPI T.460] [sec/100cc] <4800
  - Surface Burning Characteristics: Class A, when tested in accordance with ASTM E84 Flame Spread Pass Smoke Spread Pass NFPA 285 Pass.

##### 2.2 Manufacturer's Accessory Products - Sealing Tape/Fasteners

- Tape: TYPAR® Construction Tape
  - Description:
    - Face Material Composition: Polyethylene barrier
    - Face Color: Gray
    - Adhesive Composition: Acrylic
    - Thickness: 3.6mil
    - Dimensions: 3-7/8" x 165', 3" x 165'
  - Performance Characteristics:
    - Temperature Resistance: 0°F (-18°C) - Min. application temperature, 230°F (110°C) - Max. application temperature
    - Peel Adhesion: PSTC-1\*
    - Tensile Strength: PSTC - 31\*
    - \*Pressure-Sensitive Tape Council
  - Accessories:
    - Primer: Polyken spray adhesive or equal.
    - Flashing Tape: TYPAR® All-Temperature Flashing, TYPAR® Flexible Flashing, and TYPAR® Butyl Flashing
    - Fastener: Fastener is dependent on substrate construction
    - Sealant: Must comply with ASTM C920 elastomeric polymer sealant
- Flashing: TYPAR Butyl Flashing
  - Description:
    - Face Material Composition: Polyethylene barrier
    - Face Color: Gray
    - Adhesive Composition: Butyl rubber adhesive
    - Thickness: 18.5mil
    - Release Liner: Kraft paper
    - Dimensions: 4" x 25', 4" x 75', 6" x 75', 9" x 75', 12" x 75'



#### TYPAR® METROWRAP™ - THREE-PART SPECIFICATIONS

02

- Performance Characteristics:
  - Low Temp. Flatability: ASTM C765 PASS.
  - Nail Sealability: ASTM D1970 PASS.
  - Tensile Strength: ASTM D5034-95 PASS.
  - Peel Adhesion: ASTM D3330-04 PASS.
- Accessories:
  - Primer: Polyken spray adhesive or equal.
  - Seam Tape: TYPAR® Construction Tape
  - Fastener: Fastener is dependent on substrate construction
  - Sealant: Must comply with ASTM C920 elastomeric polymer sealant.
- Recommended Sealants Against TYPAR® Logo-Side Coating:
  - Elastomeric polymer-based, butyl rubber, rubber-based, meeting ASTM C920 evaluation
- Recommended Fasteners for Wood, Insulated Sheathing Board, Exterior Gypsum:
  - Plastic cap nails
  - Plastic cap staples
- Recommended Fasteners for Steel Frame Construction:
  - Rust-resistant screws with washers
- Recommended Fastening to Masonry:
  - Sealant: Polyurethane-based, meeting ASTM C920 evaluation
  - Mechanical Masonry fastener with washer

#### PART 3. EXECUTION

##### 3.1 Installation

- TYPAR MetroWrap:
  - Install in accordance with manufacturer's instruction over exterior sheathing or open studs. Seal joints and penetrations through weather-resistive barrier with specified tape and fasteners prior to installation of finish material. Air infiltration barrier shall be airtight and free from holes, tears, and punctures. All window and door penetrations are to be flashed and sealed per ASTM 2112, AAMA guidelines and manufacturer instructions. Cover with exterior cladding within six months of installation.
- TYPAR® Butyl Flashing:
  - Follow the TYPAR® Flashing installation procedures.
- TYPAR Construction Tape:
  - Follow the TYPAR Construction Tape installation procedures.

##### 3.2 Examination

- TYPAR MetroWrap:
  - Verify substrate and surface conditions are in accordance with the flashing manufacturer's recommendation.
- TYPAR Butyl Flashing:
  - Verify substrate and surface conditions are in accordance with the flashing manufacturer's recommendation.
- TYPAR Construction Tape:
  - Verify substrate and surface conditions are in accordance with the flashing manufacturer's recommendation.

##### 3.3 Protection

- TYPAR Butyl Flashing:
  - Protect installed self-adhesive and flashing tapes from damage during construction.
- TYPAR Construction Tape:
  - Protect installed self-adhesive and flashing tapes from damage during construction.

#### FIRE RETARDANT-TREATED PLYWOOD

#### HOOVER TREATED WOOD PRODUCTS, INC

### TECHNICAL NOTE

FOR ADDITIONAL INFORMATION: [www.frtw.com](http://www.frtw.com) or 1-800-TEC-WOOD (832-9663)

### SPECIFICATIONS

#### EXTERIOR-FIRE-X® Exterior Fire-Retardant-Treated Wood

##### PART 1 - General Product Information

- Lumber and plywood designated EXTERIOR FIRE-X® has a flame spread index of 25 or less (Class A) when tested in accordance with ASTM E84, "Standard Test Method for Surface Burning Characteristics of Building Materials."
- EXTERIOR FIRE-X® fire-retardant-treated wood shows no evidence of significant progressive combustion when the test is extended for an additional 20-minute period. The flame front does not progress more than 10 1/2 feet beyond the centerline of the burners at any time during the test. Surface burning characteristics for each species and product are listed by Underwriters Laboratories (UL).
- EXTERIOR FIRE-X® shows no increase in the listed classification when evaluated for flame spread after testing in accordance with ASTM D2898 "Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing."
- EXTERIOR FIRE-X® lumber and plywood is manufactured under the independent third-party inspection of Underwriters Laboratories (UL) Follow-Up Service and each piece shall bear the UL classified mark indicating the extended 30 minute ASTM E84 test and no increase in classification after ASTM D2898.
- EXTERIOR FIRE-X® shall be kiln-dried after treatment (KDAT). The kiln drying process is monitored by Timber Products Inspection, Inc. (TP). The TP mark appears on the label.
- EXTERIOR FIRE-X® meets the performance requirements of AWWA U1, Specification H for Use Category UCFB (fire protection, exterior, above ground) and AWWA C20/C27 (Exterior Type).
- EXTERIOR FIRE-X® is available with a blue colorant or branding as required for identification by the nuclear power industry and Department of Defense (DOD) Mil Spec requirements, Type II (Exterior Type).
- EXTERIOR FIRE-X® is listed on the Qualified Products List (QPL) for Mil Spec Mil-L. 19140-E.

##### PART 2 - Fire-Retardant Treatment

- EXTERIOR FIRE-X® is manufactured by Hoover Treated Wood Products, Inc.
- EXTERIOR FIRE-X® is a proprietary product of Hoover Treated Wood Products Inc. No substitutions permitted.
- EXTERIOR FIRE-X® shall be kiln-dried to a maximum moisture content of 19% for lumber and 15% for plywood.
- EXTERIOR FIRE-X® lumber and plywood shall use design value adjustments and span ratings as published by the Hoover Treated Wood Products Inc.
- EXTERIOR FIRE-X® fire-retardant treatment is free of halogens, sulfates, chlorides, ammonium phosphate, and contains no added urea formaldehyde.
- Lumber and plywood of the appropriate size, grade and species, and bond durability shall be specified by the design criteria for the intended application.
- Plywood shall have a minimum bond durability of Exposure 1 in accordance with US Product Standard PS 1, Construction and Industrial Plywood.
- Grade marked structural lumber treated with EXTERIOR FIRE-X® shall be in accordance with PS 20.

##### PART 3 - Execution

- EXTERIOR FIRE-X® is a leach resistant fire-retardant treatment and may be installed with direct exposure to precipitation; however, it cannot be substituted for preservative treated wood.
- EXTERIOR FIRE-X® fire-retardant-treated lumber and plywood used in structural applications shall be applied according to the lumber and plywood strength tables available from Hoover Treated Wood Products.
- Field cutting is allowed without end treating. Do not rip or mill fire-retardant-treated lumber. Cross cuts, joining cuts, and drilling holes are permitted in lumber. Fire-retardant-treated plywood may be cut in any direction.

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05-2019

#### HOOVER TREATED WOOD PRODUCTS, INC

### TECHNICAL NOTE

FOR ADDITIONAL INFORMATION: [www.frtw.com](http://www.frtw.com) or 1-800-TEC-WOOD (832-9663)

### LUMBER & PLYWOOD ENGINEERING DATA

#### EXTERIOR-FIRE-X® Exterior Fire-Retardant-Treated Wood

- Exterior Fire-X® pressure treated fire retardant lumber is limited to uses where the lumber temperature does not exceed 150° F in:
- Walls
  - Floors
  - Roofing/ceiling assemblies where ventilation is evenly distributed providing a uniform airflow over all interior roof surfaces effectively removing built up heat and moisture from the roof system.

#### DESIGN VALUE ADJUSTMENTS FOR EXTERIOR FIRE-X® LUMBER

Exterior Fire-X® treated lumber shall bear the mark of an ALSC approved lumber grading or inspection agency. The adjustments below apply to the design values for Southern Pine as listed in the National Design Specification®.

(4) ASD® (Allowable Stress Design Specifications) (2005) and NDS Supplement: Design Values for Wood Construction, American Wood Council [www.awc.org](http://www.awc.org)

Property	Adjustment Factor
Extreme fiber in bending	0.85
Tension	0.80
Horizontal shear	0.90
Compression perpendicular to grain	0.90
Compression parallel to grain	0.90
Modulus of elasticity	0.90
Fastener/connector design loads	0.90

#### SPAN RATINGS FOR EXTERIOR FIRE-X® PLYWOOD

The following plywood roof sheathing and subfloor spans apply to span-rated plywood and/or plywood bearing the trademark of an approved inspection agency, treated with Exterior Fire-X®. Roof system ventilation shall be evenly distributed providing a uniform airflow over all interior roof surfaces, and sufficient to effectively remove moisture.

Panel Thickness Category	Untreated Span Index	Exterior Fire-X® Maximum Span (inches)	
		Roof Sheathing (1, 2, 5)	Wall & Subfloor (3)
15/32, 1/2	32/16	24	16
19/32, 5/8	40/20	32	20
23/32, 3/4	48/24	40	24
7/8 (4)		48	24

- Clips, blocking or other edge supports must be used with roof sheathing.
- Maximum roof load: 10 psf dead load plus 40 psf live load.
- Maximum floor load: 10 psf dead load plus 100 psf live load.
- Limited to 7/8" CDX plywood made with group 1 species.
- EXTERIOR FIRE-X® treated plywood shall not be used in roof designs employing a radiant shield that is located underneath the bottom surface of the sheathing.

NOTE: THESE SPAN RATINGS ARE BASED ON TEST RESULTS FOR EXTERIOR FIRE-X TREATED PLYWOOD AFTER EXTENDED EXPOSURE TO ELEVATED TEMPERATURES AND MOISTURE.

Where Exterior Fire-X® treated plywood is used for diaphragm or shear wall design there is a 10% reduction.

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12-2017

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(805) 530-5559  
hartmannarchitecturestudio.com

CONSULTANTS:

STATUS:

FOR CONSTRUCTION

SEALS:



PROJECT:

FT. HUACHUCA NEW  
GROUND TRANSPORT  
EQUIPMENT BUILDING

OWNER:

US CORPS OF ENGINEERS  
LOS ANGELES DISTRICT  
915 WILSHIRE BLVD.  
LOS ANGELES, CALIFORNIA 90017

CONTRACTOR:

AMG & ASSOCIATES  
26535 SUMMIT CIRCLE  
SANTA CLARITA, CALIFORNIA 91350  
(661) 251-7401  
amgassociatesinc.com

PROJECT ADDRESS:

CORNER OF ARIZONA ST. & HUNT ST.  
FORT HUACHUCA, ARIZONA

ISSUE:

MARK	DATE	DESCRIPTION
3	08/23/2022	ASI #01

PROJECT INFORMATION:

PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
DRAWN BY: MEH  
REVIEWED BY: MEH

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SHEET TITLE:

SPECIFICATIONS

SHEET NUMBER:

A.002

DATE: 07/07/22

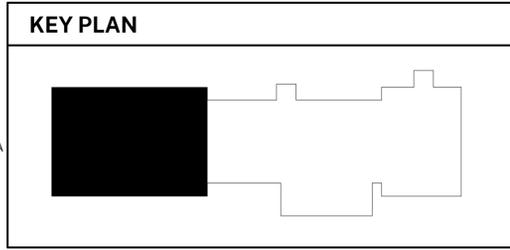
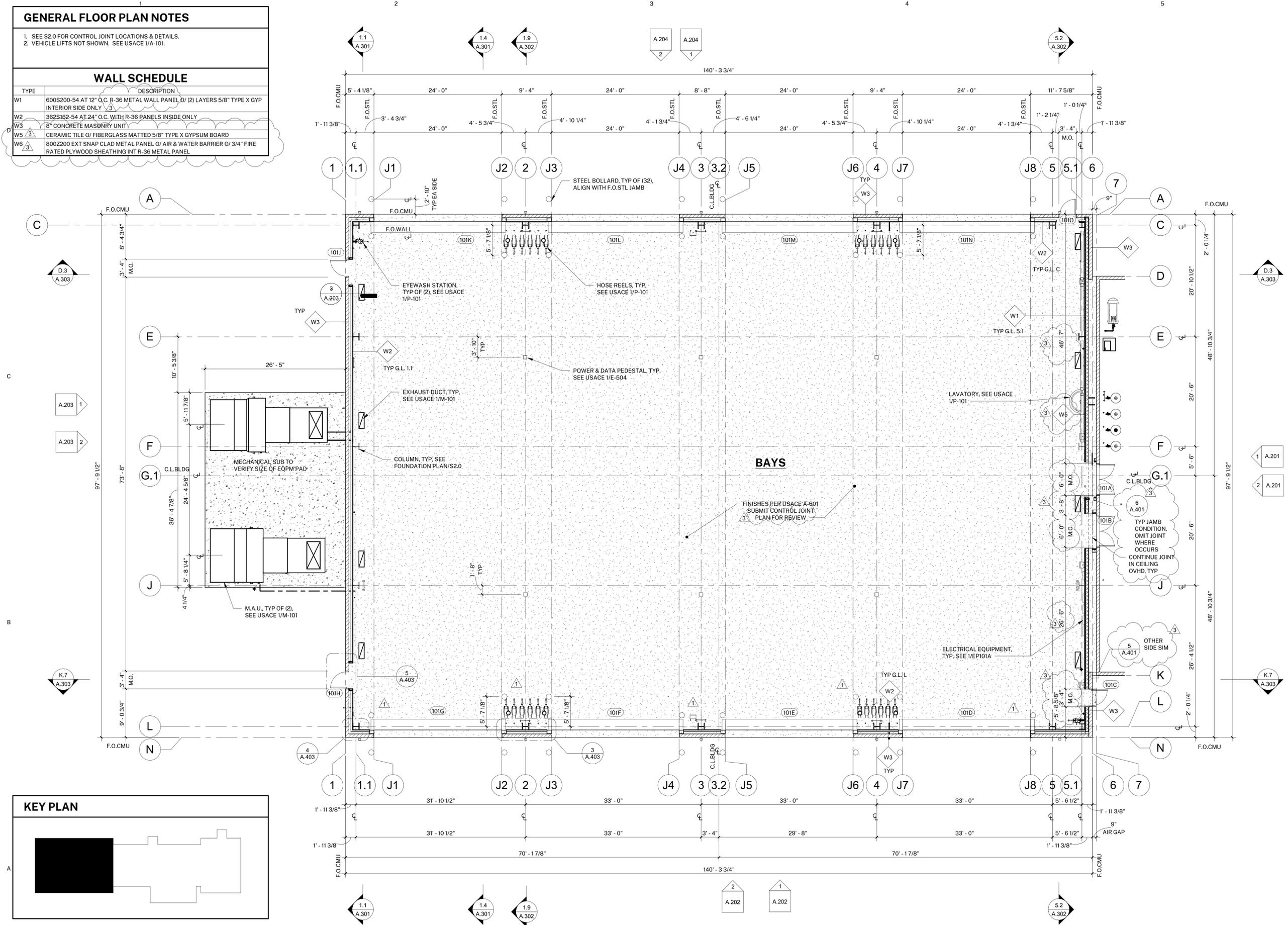


**GENERAL FLOOR PLAN NOTES**

- SEE S2.0 FOR CONTROL JOINT LOCATIONS & DETAILS.
- VEHICLE LIFTS NOT SHOWN. SEE USACE 1/A-101.

**WALL SCHEDULE**

TYPE	DESCRIPTION
W1	600S200-54 AT 12" O.C. R-36 METAL WALL PANEL O/ (2) LAYERS 5/8" TYPE X GYP INTERIOR SIDE ONLY
W2	362S162-54 AT 24" O.C. WITH R-36 PANELS INSIDE ONLY
W3	8" CONCRETE MASONRY UNIT
W5	CERAMIC TILE O/ FIBERGLASS MATTED 5/8" TYPE X GYPSUM BOARD
W6	800Z200 EXT SNAP CLAD METAL PANEL O/ AIR & WATER BARRIER O/ 3/4" FIRE RATED PLYWOOD SHEATHING INT R-36 METAL PANEL



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OWNER:  
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 915 WILSHIRE BLVD.  
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PROJECT ADDRESS:  
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MARK	DATE	DESCRIPTION
1	07/07/2022	AMG RFI's 114 & 115
3	08/23/2022	ASI #01

PROJECT INFORMATION:  
 PROJECT NUMBER: 2022.003  
 PROJECT PHASE: CD  
 DRAWN BY: MEH  
 REVIEWED BY: MEH

SHEET TITLE:  
**FLOOR PLAN - GROUND LEVEL**

SHEET NUMBER:  
**A.101**

DATE: 07/07/22



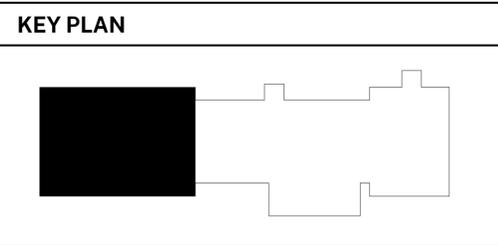
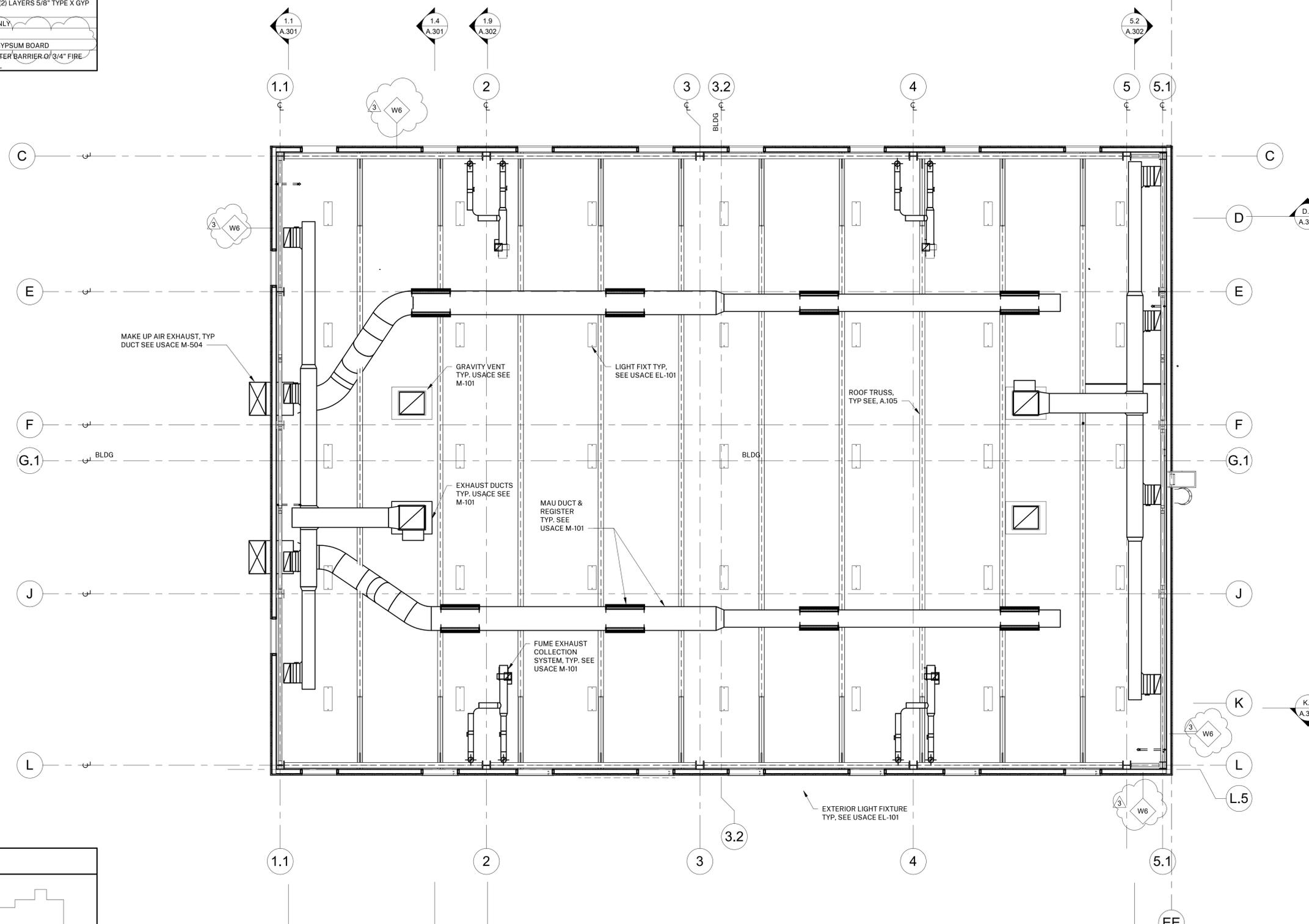


**GENERAL FLOOR PLAN NOTES**

1. SEE 1/A.101 & A.105 FOR BUILDING & TRUSS DIMENSIONS

**WALL SCHEDULE**

TYPE	DESCRIPTION
W1	600S200-54 AT 12" O.C. R-36 METAL WALL PANEL O/ (2) LAYERS 5/8" TYPE X GYP INTERIOR SIDE ONLY
W2	362S162-54 AT 24" O.C. WITH R-36 PANELS INSIDE ONLY
W3	8" CONCRETE MASONRY UNIT
W5	CERAMIC TILE O/ FIBERGLASS MATTED 5/8" TYPE X GYPSUM BOARD
W6	800Z200 EXT SNAP CLAD METAL PANEL O/ AIR & WATER BARRIER O/ 3/4" FIRE RATED PLYWOOD SHEATHING INT R-36 METAL PANEL



1 RCP - PROPOSED  
1/8" = 1'-0"

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**FT. HUACHUCA NEW  
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3	08/23/2022	ASI #01

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 PROJECT PHASE: CD  
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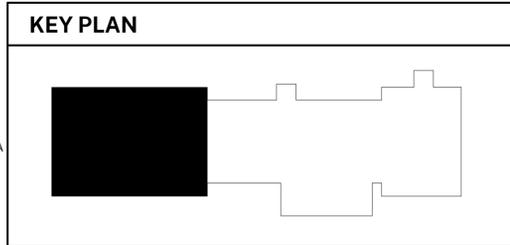
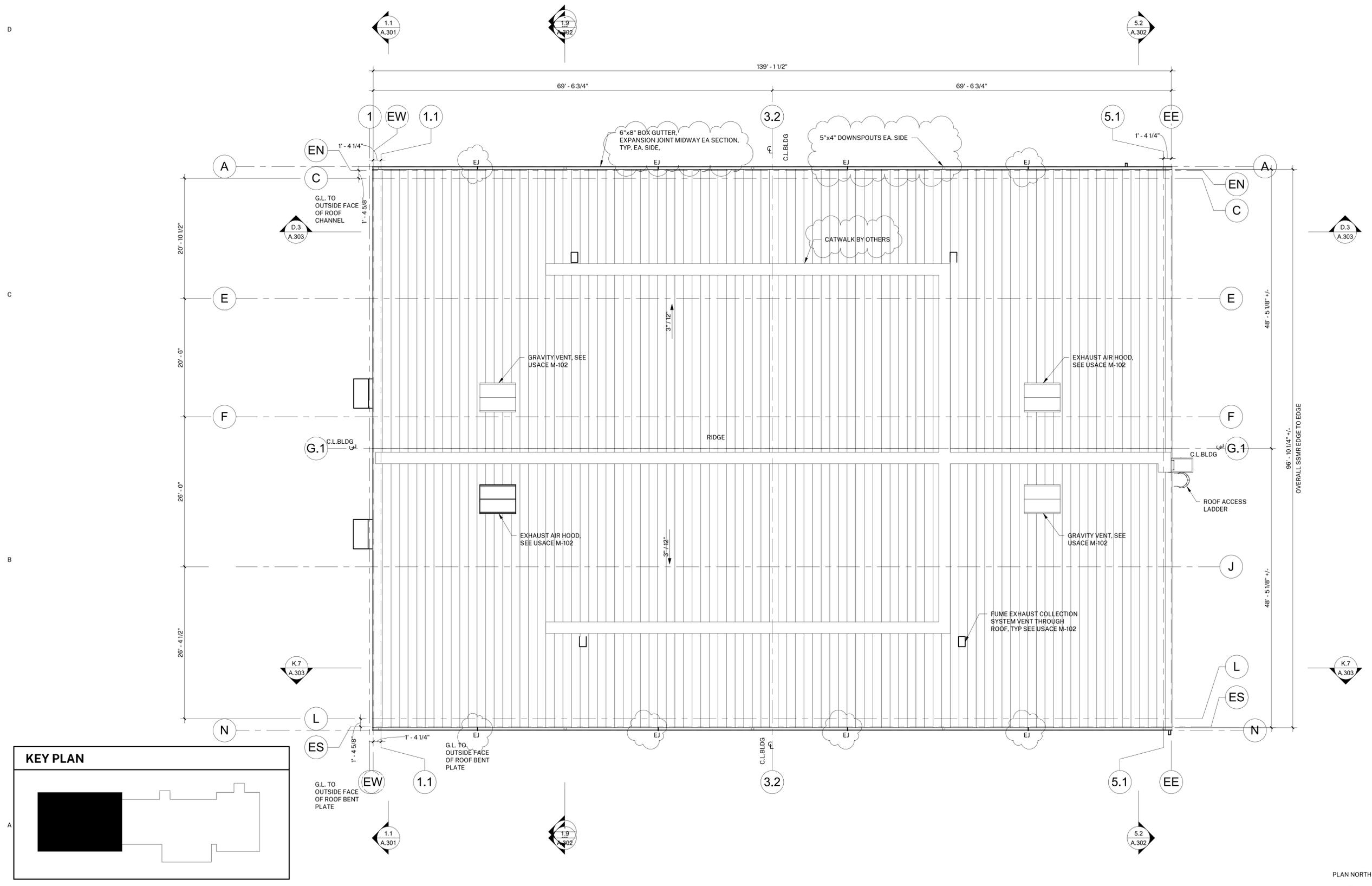
SHEET TITLE:  
**RCP**

SHEET NUMBER:  
**A.103**

DATE: 07/07/22

**ROOF MATERIAL LEGEND**

STANDING SEAM METAL ROOF O/ ICE & WATER SHIELD O/ 5/8" FIRE RETARDENT PLYWOOD ROOF DECK O/ POLYISO FOAM BOARD O/ METAL DECK



1 ROOF PLAN  
1/8" = 1'-0"

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PROJECT INFORMATION:  
 PROJECT NUMBER: 2022.003  
 PROJECT PHASE: CD  
 DRAWN BY: MEH  
 REVIEWED BY: MEH

SHEET TITLE:  
**ROOF PLAN**

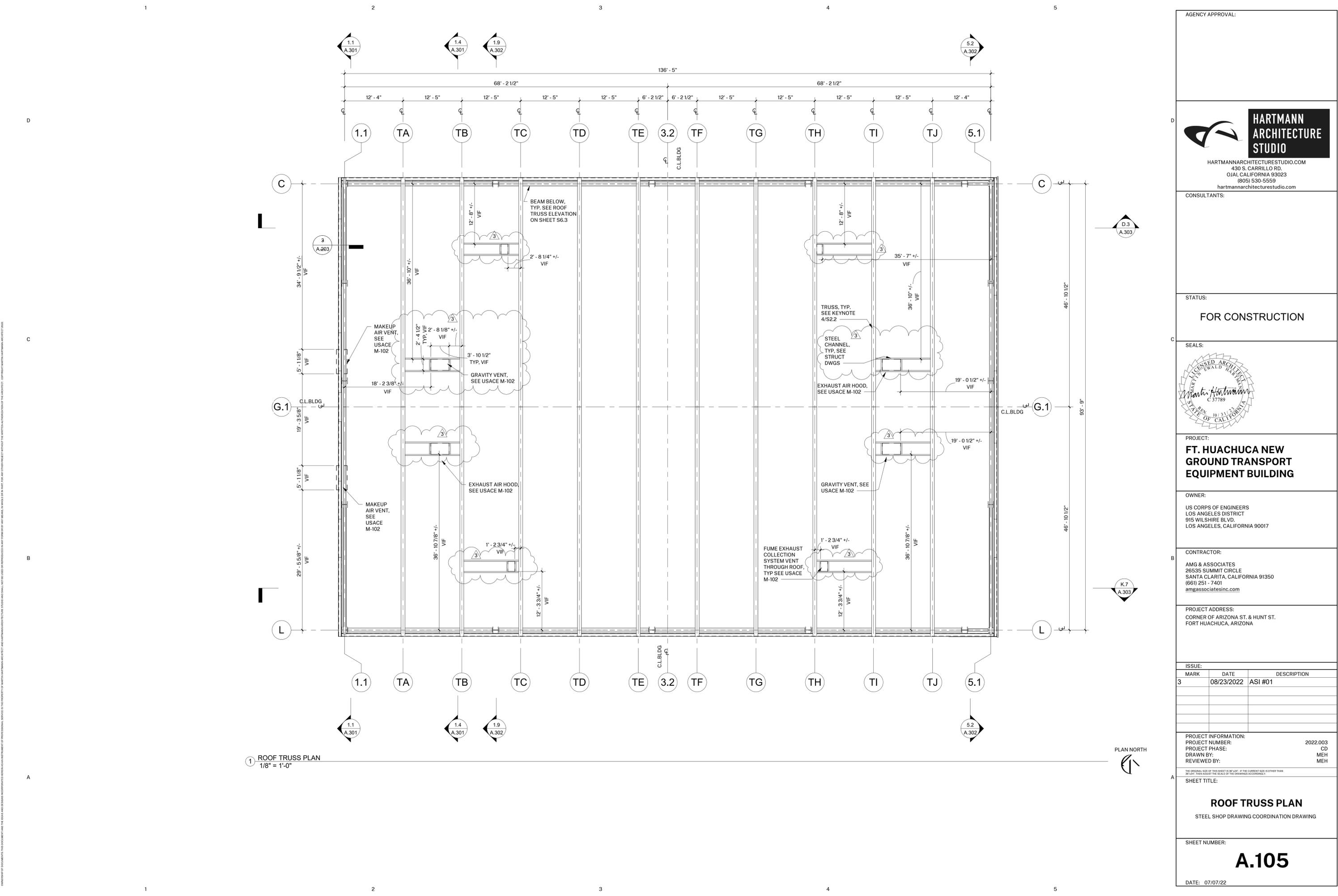
SHEET NUMBER:  
**A.104**

DATE: 07/07/22

PLAN NORTH



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1 ROOF TRUSS PLAN  
1/8" = 1'-0"

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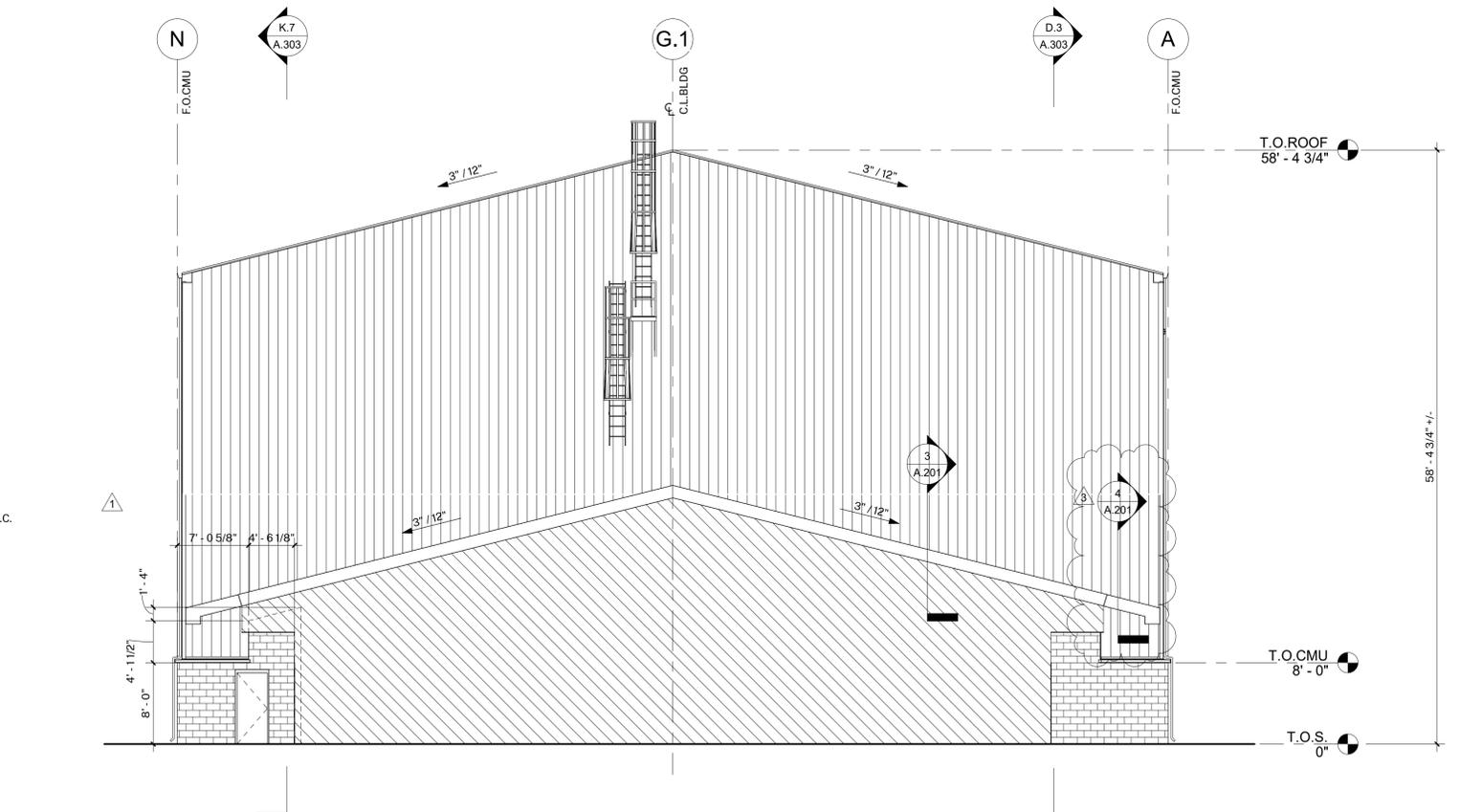
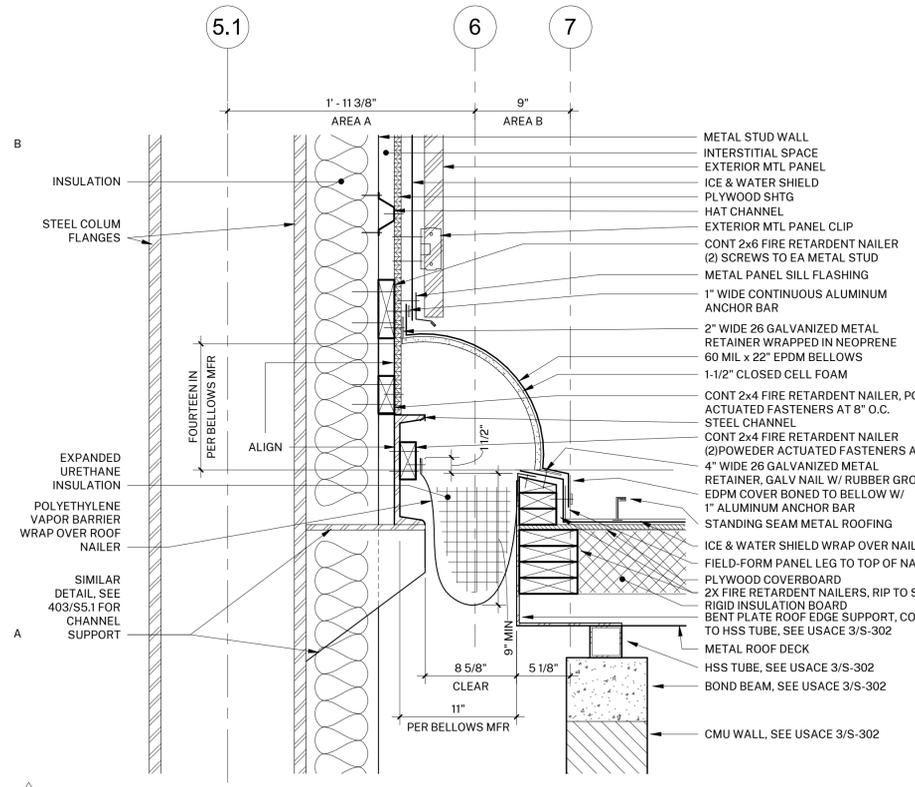
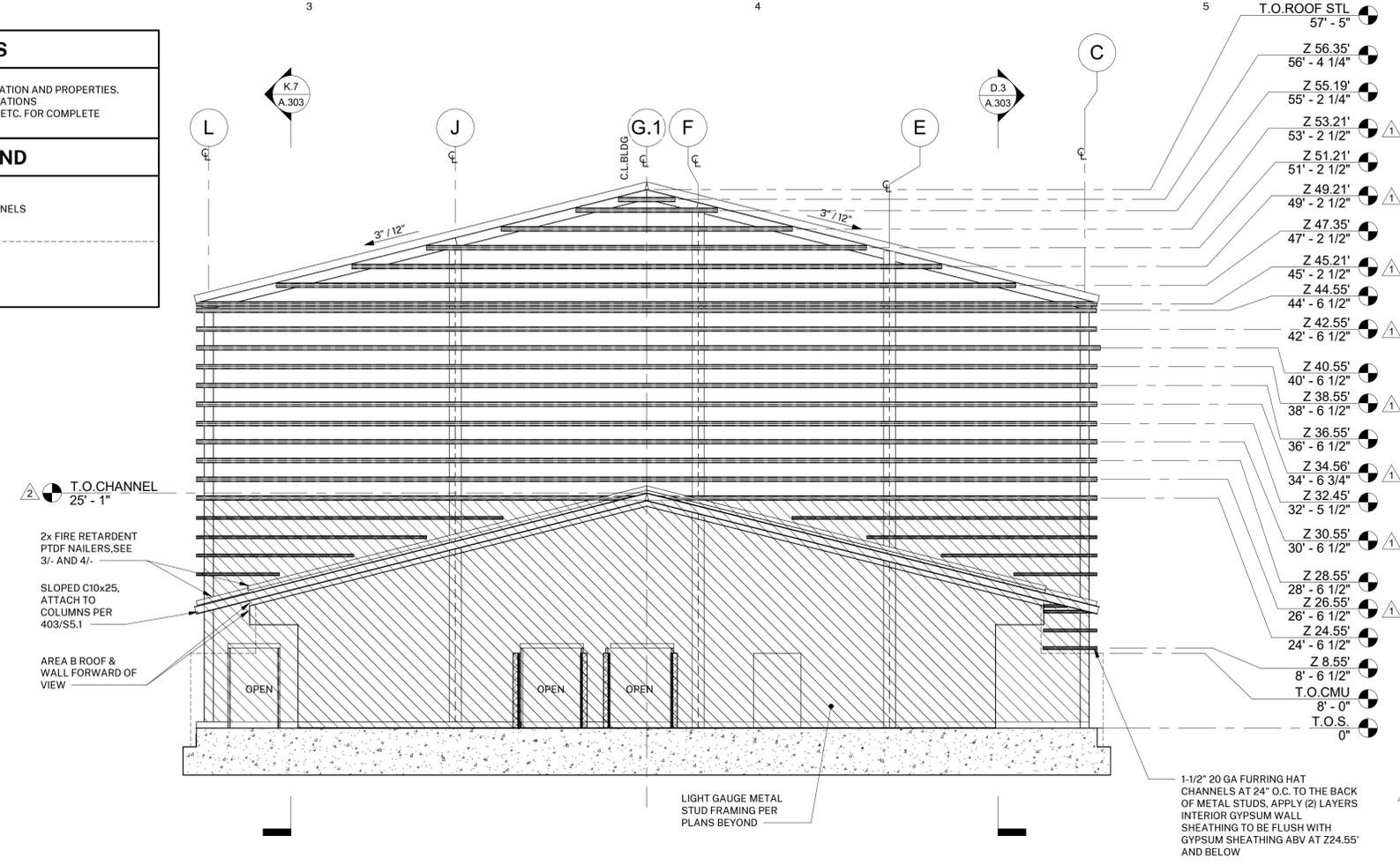
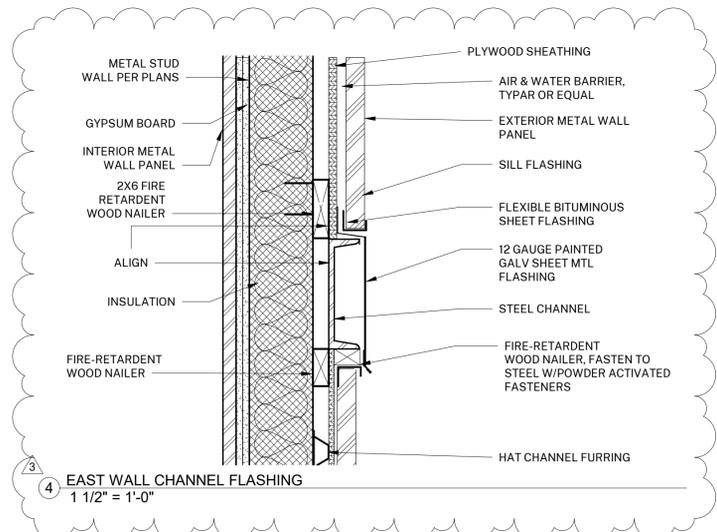
ISSUE:		
MARK	DATE	DESCRIPTION
3	08/23/2022	ASI #01

PROJECT INFORMATION:  
 PROJECT NUMBER: 2022.003  
 PROJECT PHASE: CD  
 DRAWN BY: MEH  
 REVIEWED BY: MEH

SHEET TITLE:  
**ROOF TRUSS PLAN**  
 STEEL SHOP DRAWING COORDINATION DRAWING

SHEET NUMBER:  
**A.105**  
 DATE: 07/07/22

GENERAL ELEVATION NOTES	
1.	SEE S SHEETS FOR STRUCTURAL MEMBER IDENTIFICATION AND PROPERTIES.
2.	SEE 1/A.101 & 1/A.102 FOR HORIZONTAL OPENING LOCATIONS
3.	PROVIDE ALL SNAP-CLAD CORNER, BASE, JAMB, SILL ETC. FOR COMPLETE INSTALLATION
ELEVATION MATERIAL LEGEND	
	SNAP-CLAD METAL WALL PANELS
	CMU, SEE USAGE A-601



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GROUND TRANSPORT  
EQUIPMENT BUILDING**

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CONTRACTOR:  
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PROJECT ADDRESS:  
CORNER OF ARIZONA ST. & HUNT ST.  
FORT HUACHUCA, ARIZONA

MARK	DATE	DESCRIPTION
1	07/07/2022	AMG RFI's 114 & 115
2	07/14/2022	JB RFI's 15, 16, 17, 18
3	08/23/2022	ASI #01

PROJECT INFORMATION:  
PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
DRAWN BY: MEH  
REVIEWED BY: MEH

SHEET TITLE:  
**EXTERIOR ELEVATIONS - EAST**

SHEET NUMBER:  
**A.201**

DATE: 07/07/22

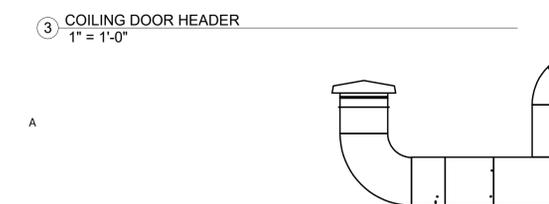
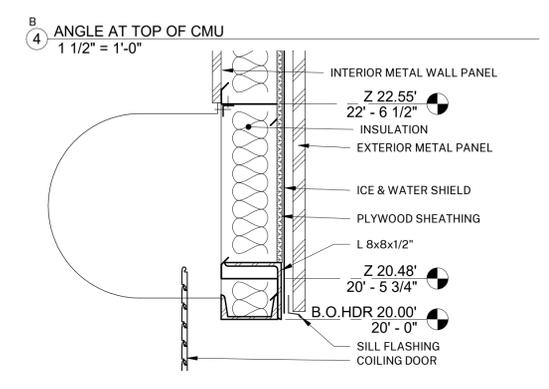
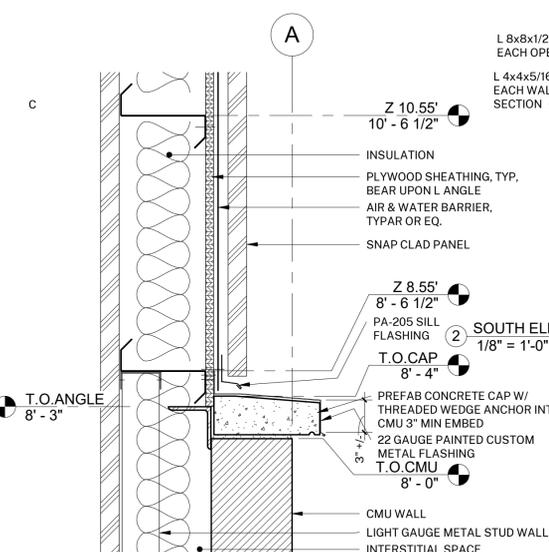
**GENERAL ELEVATION NOTES**

- SEE S SHEETS FOR STRUCTURAL MEMBER IDENTIFICATION AND PROPERTIES.
- SEE I/A.101 & I/A.102 FOR HORIZONTAL OPENING LOCATIONS
- PROVIDE ALL SNAP CLAD CORNER, BASE, JAMB, SILL ETC. FOR COMPLETE INSTALLATION

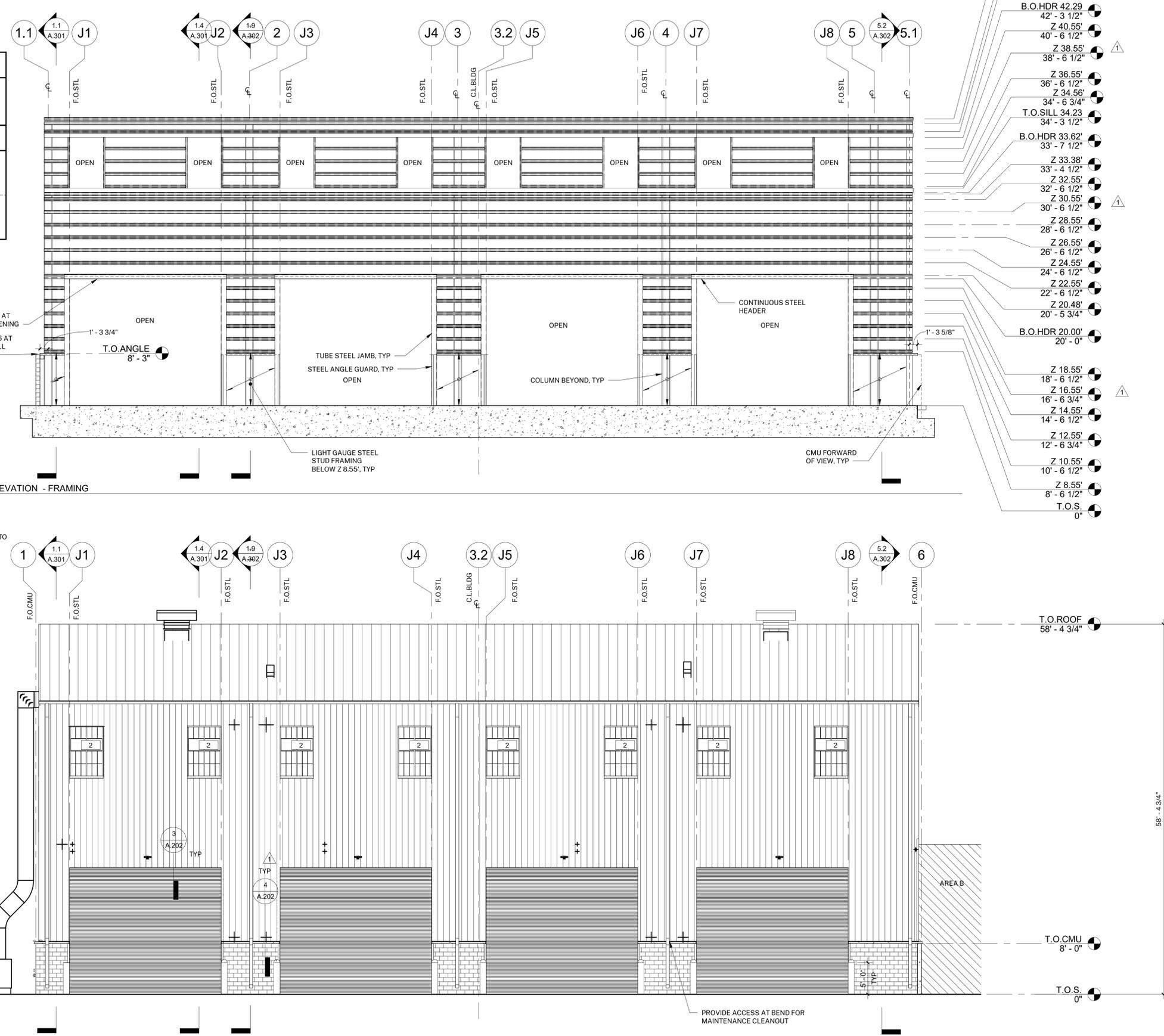
**ELEVATION MATERIAL LEGEND**

SNAP-CLAD METAL WALL PANELS

CMU, SEE USAGE A-601



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



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PROJECT:  
**FT. HUACHUCA NEW  
GROUND TRANSPORT  
EQUIPMENT BUILDING**

OWNER:  
US CORPS OF ENGINEERS  
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915 WILSHIRE BLVD.  
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CONTRACTOR:  
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PROJECT ADDRESS:  
CORNER OF ARIZONA ST. & HUNT ST.  
FORT HUACHUCA, ARIZONA

MARK	DATE	DESCRIPTION
1	07/07/2022	AMG RFI's 114 & 115
2	07/14/2022	JB RFI's 15, 16, 17, 18
3	08/23/2022	ASI #01

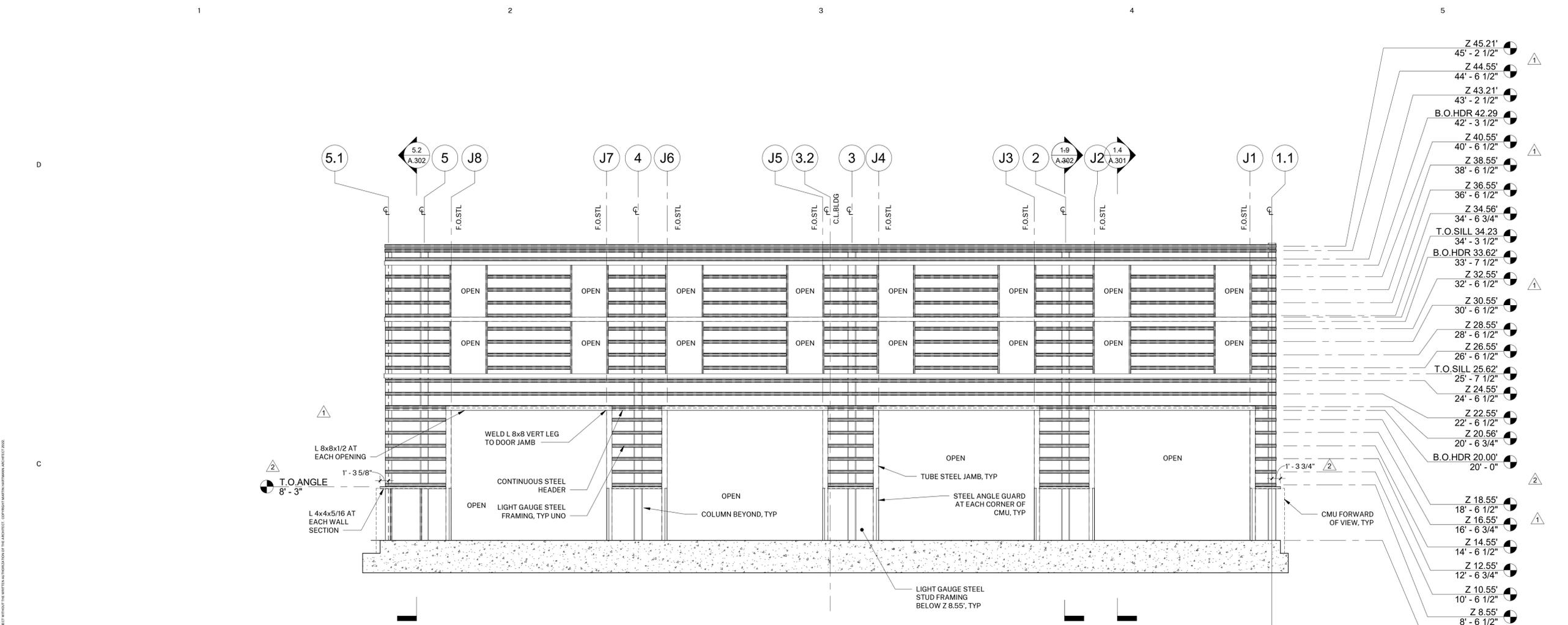
PROJECT INFORMATION:  
PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
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SHEET TITLE:  
**EXTERIOR ELEVATIONS -  
SOUTH**

SHEET NUMBER:  
**A.202**

DATE: 07/07/22





2 NORTH ELEVATION - FRAMING  
1/8" = 1'-0"

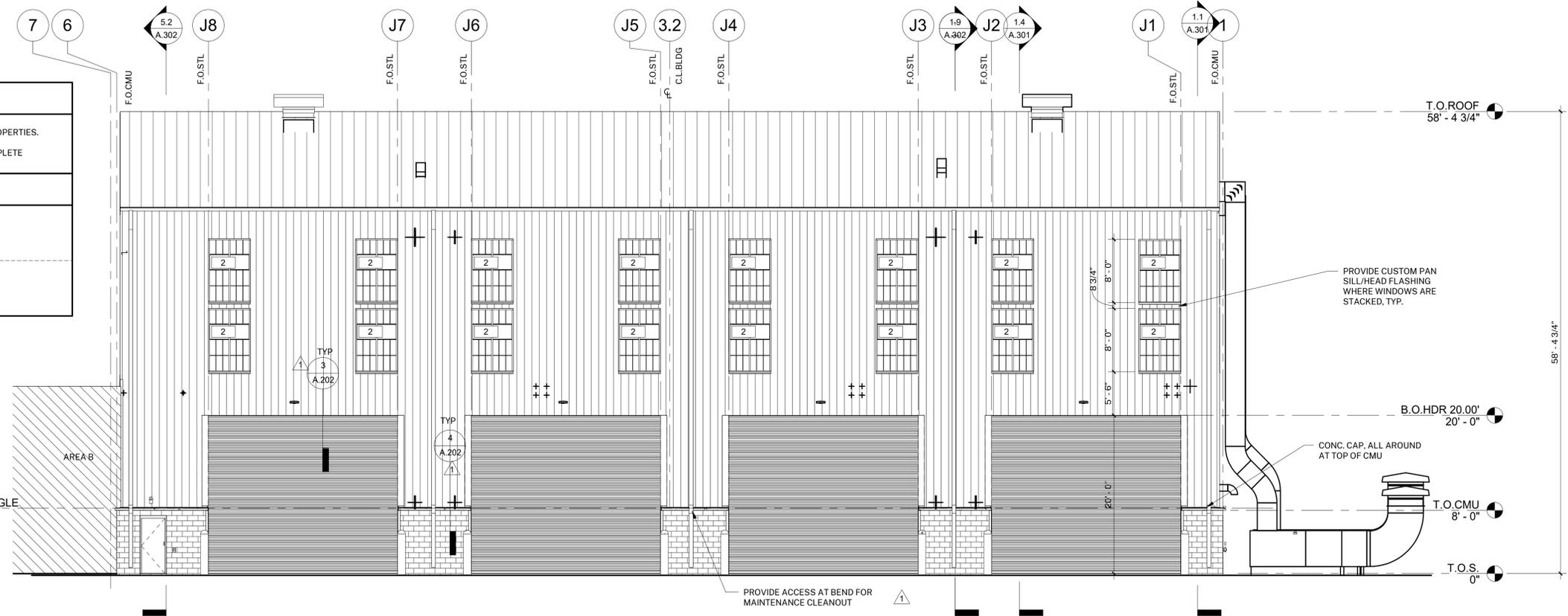
- Z 45.21' 45' - 2 1/2"
- Z 44.55' 44' - 6 1/2"
- Z 43.21' 43' - 2 1/2"
- B.O.HDR 42.29 42' - 3 1/2"
- Z 40.55' 40' - 6 1/2"
- Z 38.55' 38' - 6 1/2"
- Z 36.55' 36' - 6 1/2"
- Z 34.56' 34' - 6 3/4"
- T.O.SILL 34.23 34' - 3 1/2"
- B.O.HDR 33.62' 33' - 7 1/2"
- Z 32.55' 32' - 6 1/2"
- Z 30.55' 30' - 6 1/2"
- Z 28.55' 28' - 6 1/2"
- Z 26.55' 26' - 6 1/2"
- T.O.SILL 25.62' 25' - 7 1/2"
- Z 24.55' 24' - 6 1/2"
- Z 22.55' 22' - 6 1/2"
- Z 20.56' 20' - 6 3/4"
- B.O.HDR 20.00' 20' - 0"
- Z 18.55' 18' - 6 1/2"
- Z 16.55' 16' - 6 3/4"
- Z 14.55' 14' - 6 1/2"
- Z 12.55' 12' - 6 3/4"
- Z 10.55' 10' - 6 1/2"
- Z 8.55' 8' - 6 1/2"
- T.O.S. 0"

**GENERAL ELEVATION NOTES**

- SEE S SHEETS FOR STRUCTURAL MEMBER IDENTIFICATION AND PROPERTIES.
- SEE 1/A-101 & 1/A-102 FOR HORIZONTAL OPENING LOCATIONS
- PROVIDE ALL SNAP CLAD CORNER, BASE, JAMB, SILL, ETC. FOR COMPLETE INSTALLATION

**ELEVATION MATERIAL LEGEND**

	SNAP-CLAD METAL WALL PANELS
	CMU, SEE USAGE A-601



1 NORTH ELEVATION  
1/8" = 1'-0"

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**FT. HUACHUCA NEW  
GROUND TRANSPORT  
EQUIPMENT BUILDING**

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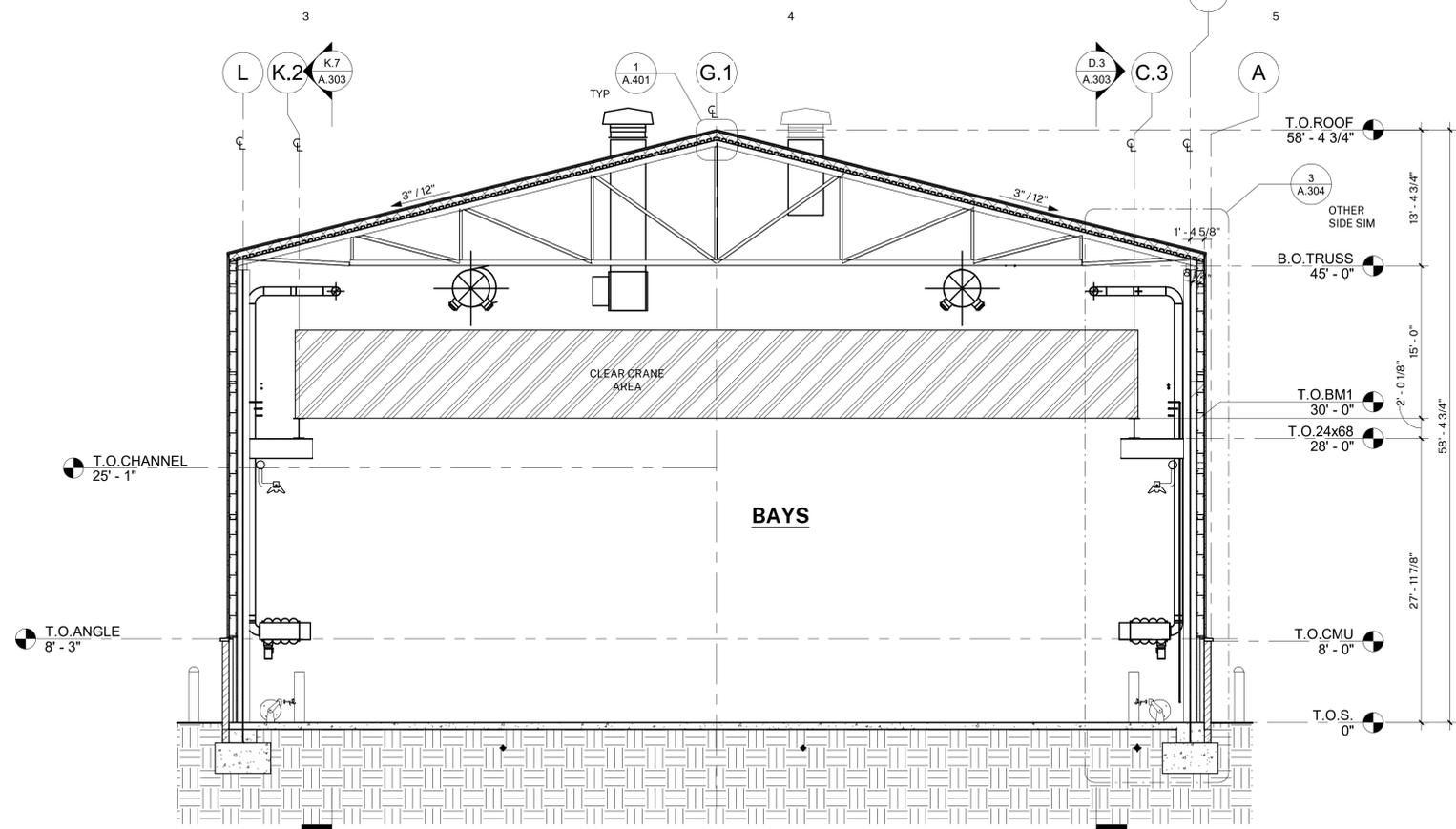
MARK	DATE	DESCRIPTION
1	07/07/2022	AMG RFI's 114 & 115
2	07/14/2022	JB RFI's 15, 16, 17, 18

PROJECT INFORMATION:  
PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
DRAWN BY: MEH  
REVIEWED BY: MEH

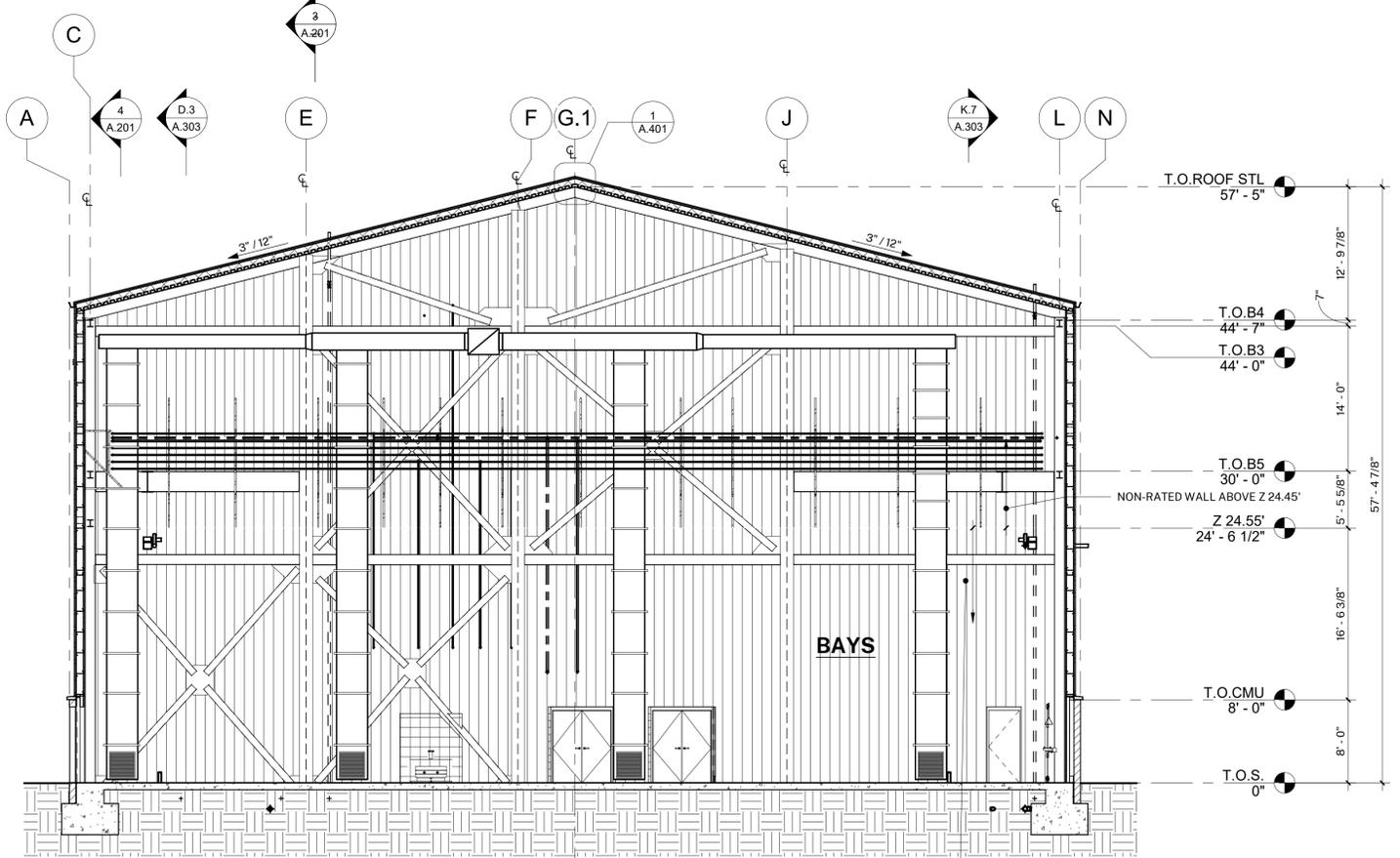
SHEET TITLE:  
**EXTERIOR ELEVATIONS -  
NORTH**

SHEET NUMBER:  
**A.204**  
DATE: 07/07/22





1.9 SECT 1.9  
1/8" = 1'-0"



5.2 SECT 5.2  
1/8" = 1'-0"

1-HR FIRE BARRIER BELOW Z 24.55'. (2) LAYERS 5/8" TYPE X GYPSUM BOARD APPLIED DIRECTLY TO FRAMING. THE BASE LAYER OF GYPSUM BOARD IS APPLIED EITHER PARALLEL OR AT RIGHT ANGLES TO THE WALL FRAMING AND ATTACHED WITH 1" TYPE S OR TYPE S-12 DRYWALL SCREWS SPACED 6" O.C. THE FACE LAYER OF GYPSUM BOARD IS APPLIED EITHER PARALLEL OR AT RIGHT ANGLES TO THE FRAMING AND ATTACHED WITH 1-5/8" TYPE S OR TYPE S-12 DRYWALL SCREWS SPACED 8" O.C. JOINTS OF THE FACE LAYER ARE OFFSET 24" FROM THE JOINTS IN THE BASE LAYER. FACE LAYER JOINTS AND FASTENERS ARE FINISHED TO LEVEL 1 AS SPECIFIED IN GYPSUM ASSOCIATION GA-14 "LEVELS OF GYPSUM BOARD FINISH". ASSEMBLY BASED UPON UL DESIGN U 301. PROVIDE 1-HR PROTECTIONS AT ALL MEMBRANE PENERTATIONS

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CONSULTANTS:

STATUS:

FOR CONSTRUCTION

SEALS:



PROJECT:

FT. HUACHUCA NEW  
GROUND TRANSPORT  
EQUIPMENT BUILDING

OWNER:

US CORPS OF ENGINEERS  
LOS ANGELES DISTRICT  
915 WILSHIRE BLVD.  
LOS ANGELES, CALIFORNIA 90017

CONTRACTOR:

AMG & ASSOCIATES  
26535 SUMMIT CIRCLE  
SANTA CLARITA, CALIFORNIA 91350  
(661) 251-7401  
amgassociatesinc.com

PROJECT ADDRESS:

CORNER OF ARIZONA ST. & HUNT ST.  
FORT HUACHUCA, ARIZONA

ISSUE:

MARK	DATE	DESCRIPTION

PROJECT INFORMATION:

PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
DRAWN BY: MEH  
REVIEWED BY: MEH

SHEET TITLE:

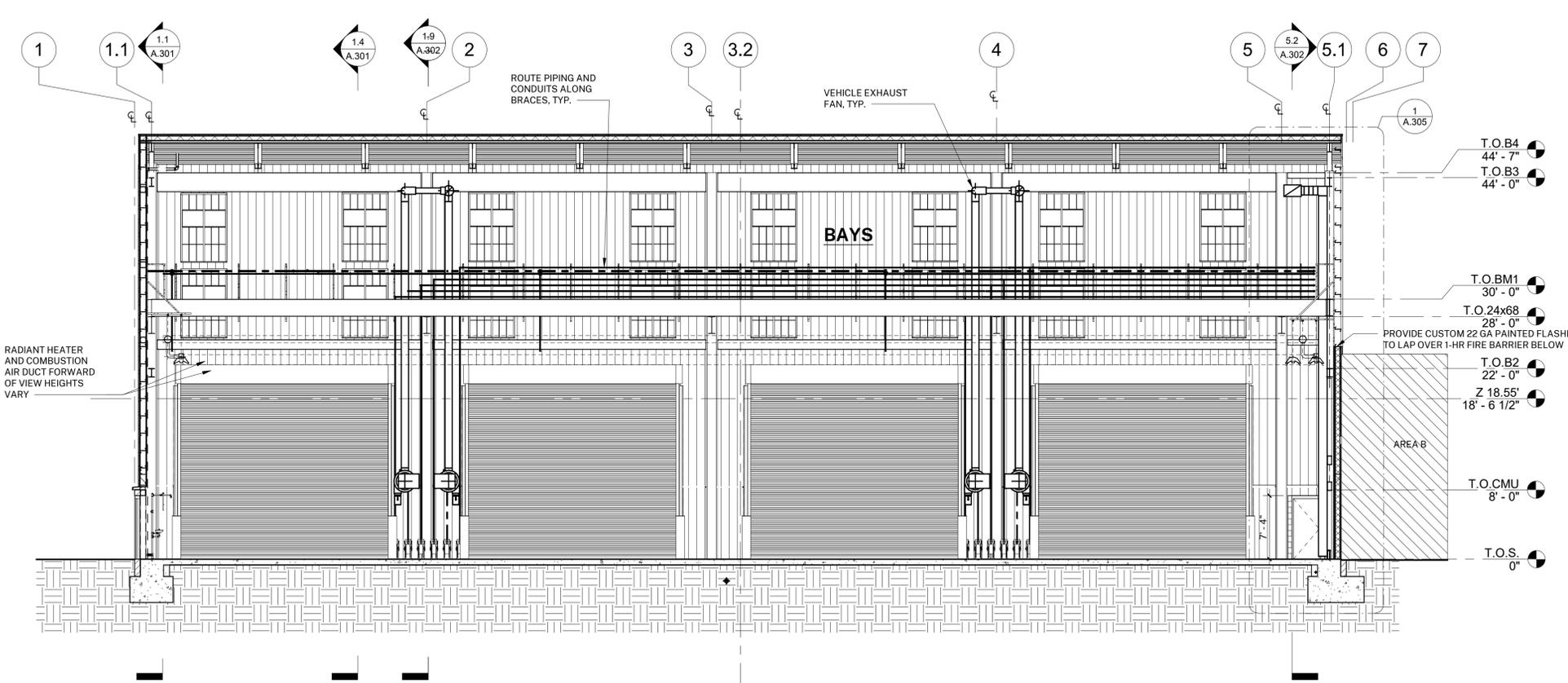
BUILDING SECTIONS

SHEET NUMBER:

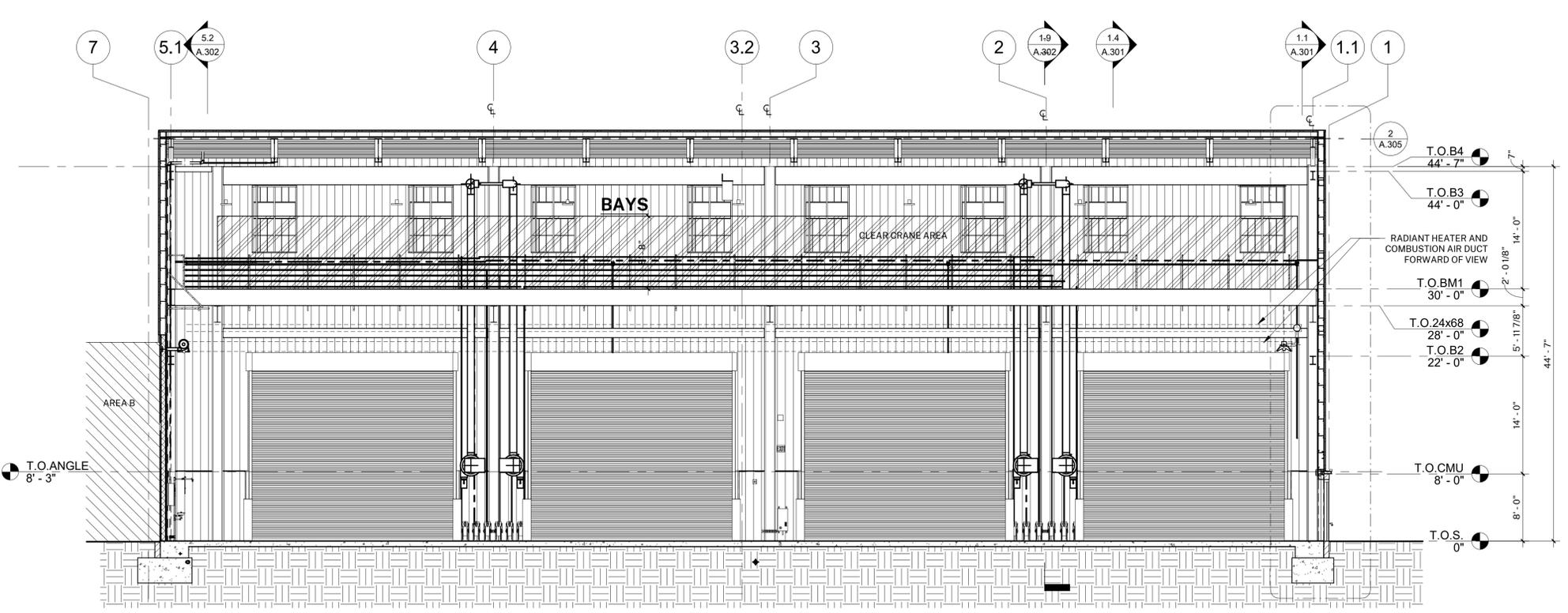
A.302

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SECT D.3  
1/8" = 1'-0"



SECT K.7

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**FT. HUACHUCA NEW  
GROUND TRANSPORT  
EQUIPMENT BUILDING**

OWNER:  
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PROJECT ADDRESS:  
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ISSUE:

MARK	DATE	DESCRIPTION

PROJECT INFORMATION:  
PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
DRAWN BY: MEH  
REVIEWED BY: MEH

SHEET TITLE:  
**BUILDING SECTIONS**

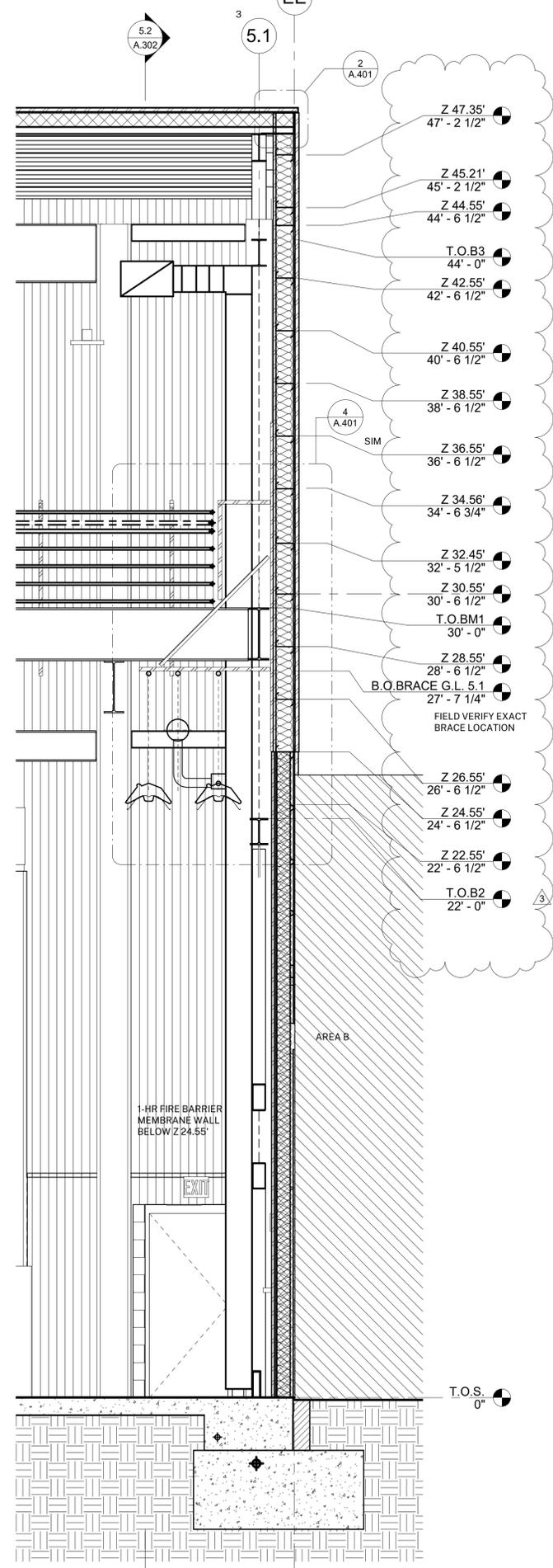
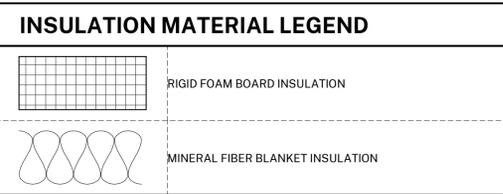
SHEET NUMBER:  
**A.303**

DATE: 07/07/22

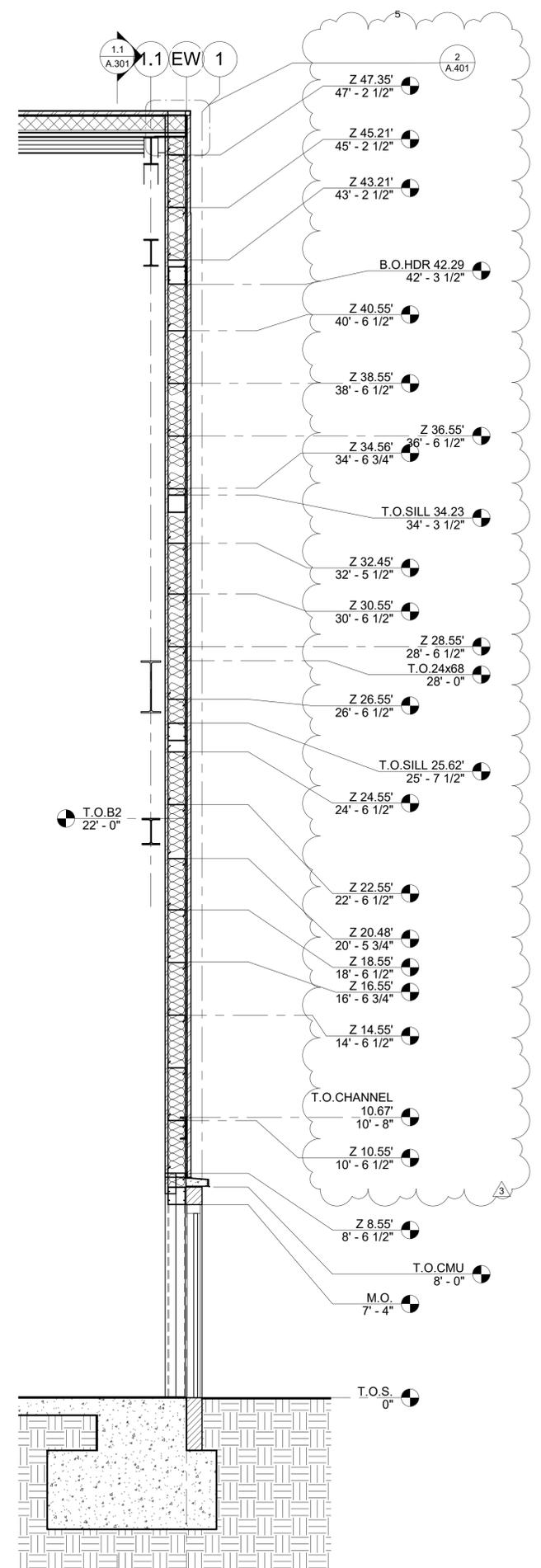


**GENERAL WALL SECTION NOTES**

- FULLY FILL HEADERS AND AREAS WITH LIMITED ACCESS WITH EXPANSIVE FOAM TO MEET THE ENVELOPE R-VALUES.
- ROOF R-VALUE = R-34
- WALL R-VALUE = R-20



1 WALL SECT 9  
3/8" = 1'-0"



2 WALL SECT 8  
3/8" = 1'-0"

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**FT. HUACHUCA NEW  
GROUND TRANSPORT  
EQUIPMENT BUILDING**

OWNER:  
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MARK	DATE	DESCRIPTION
1	07/07/2022	AMG RFI's 114 & 115
3	08/23/2022	ASI #01

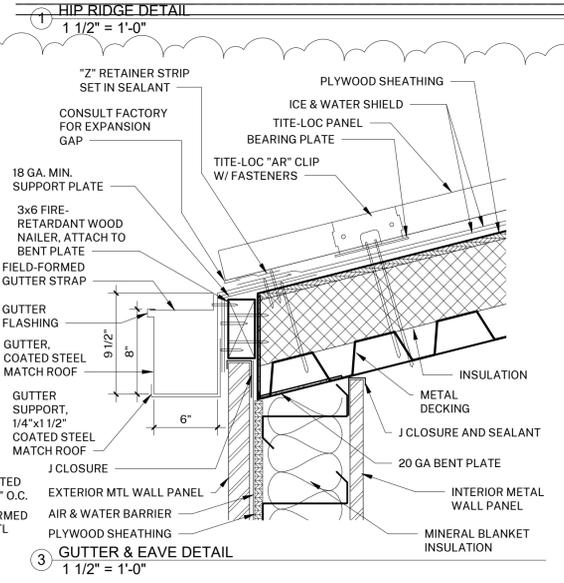
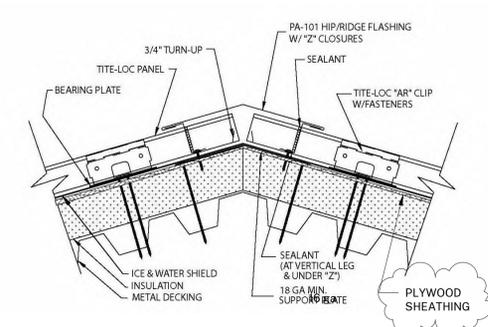
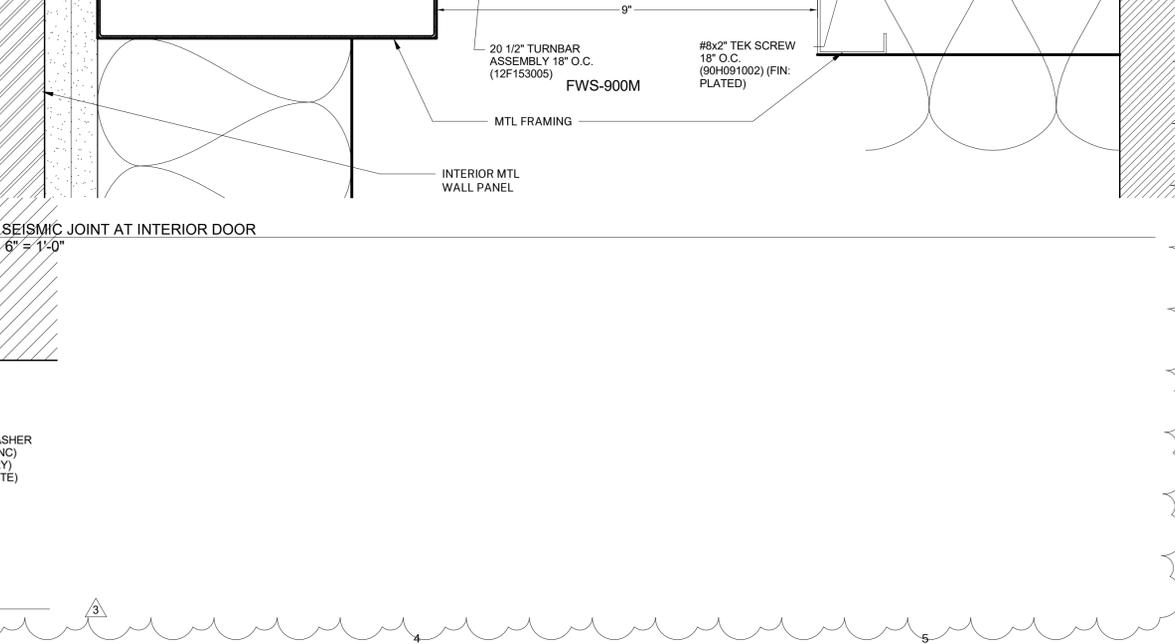
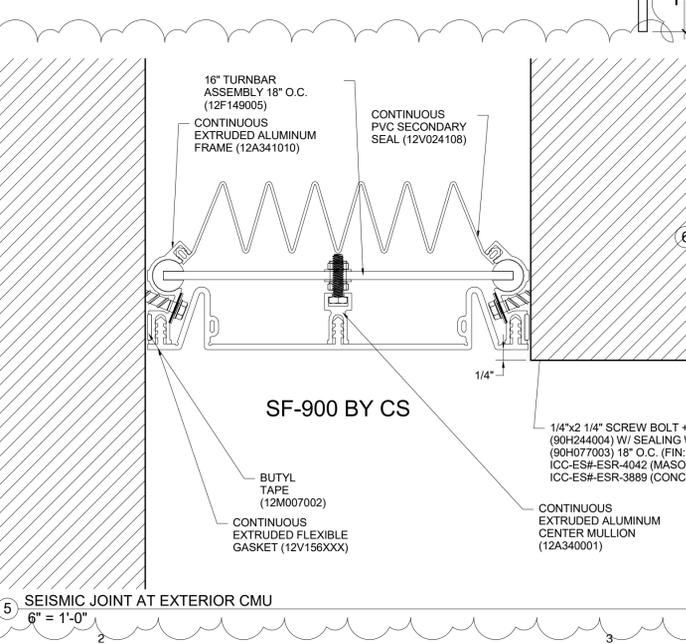
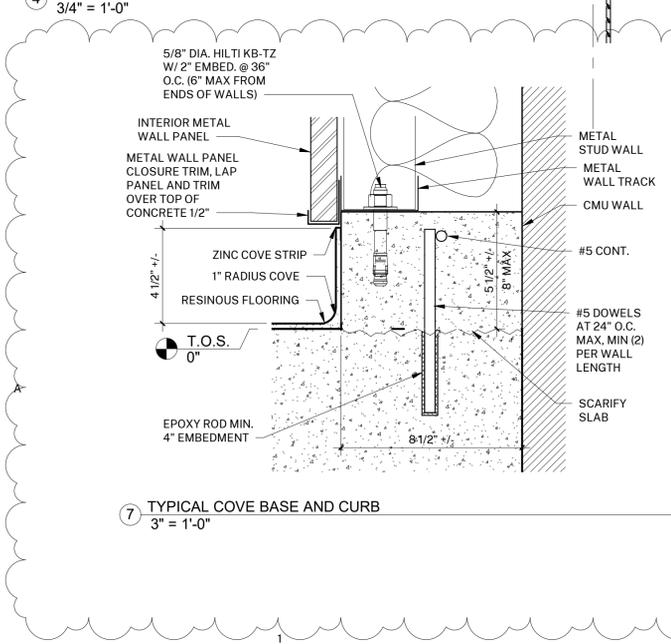
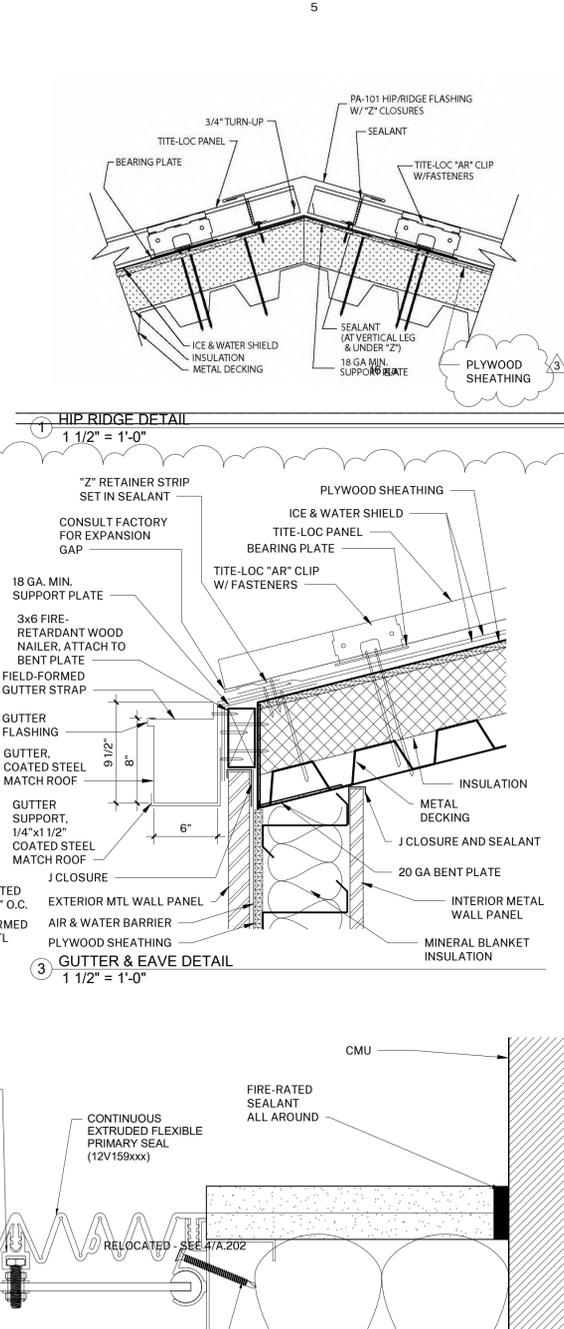
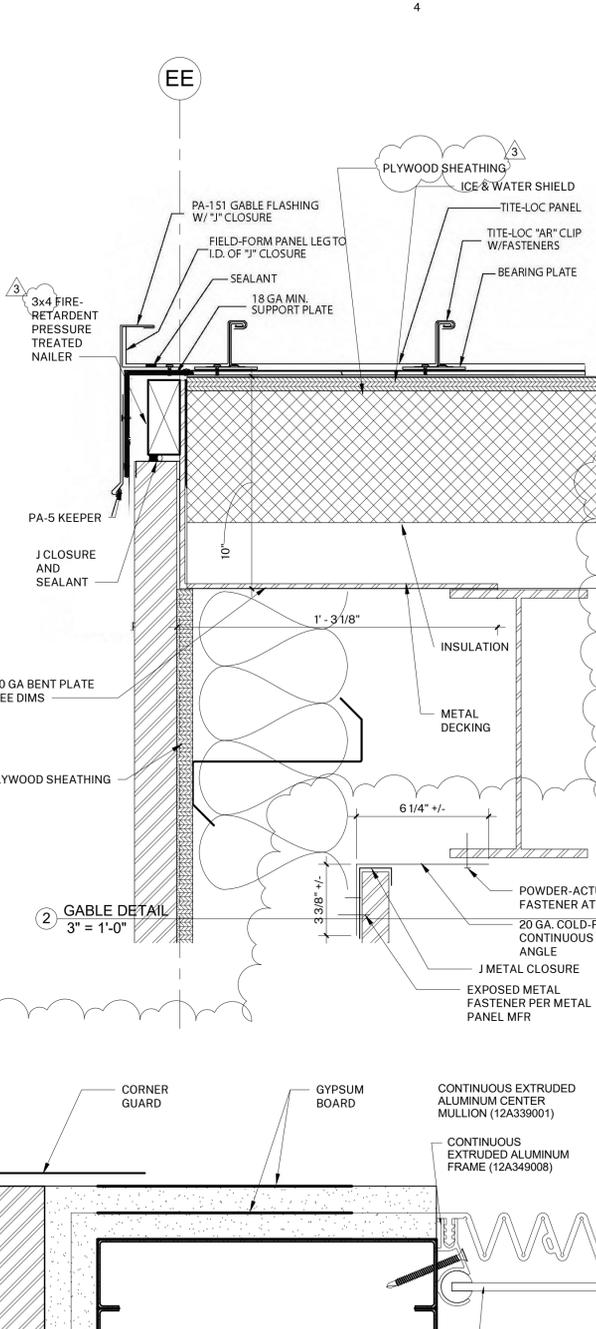
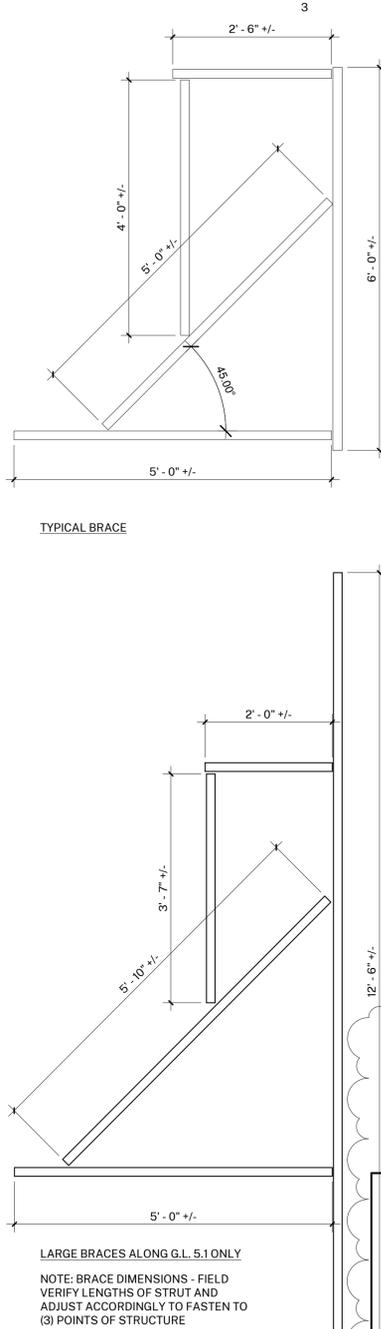
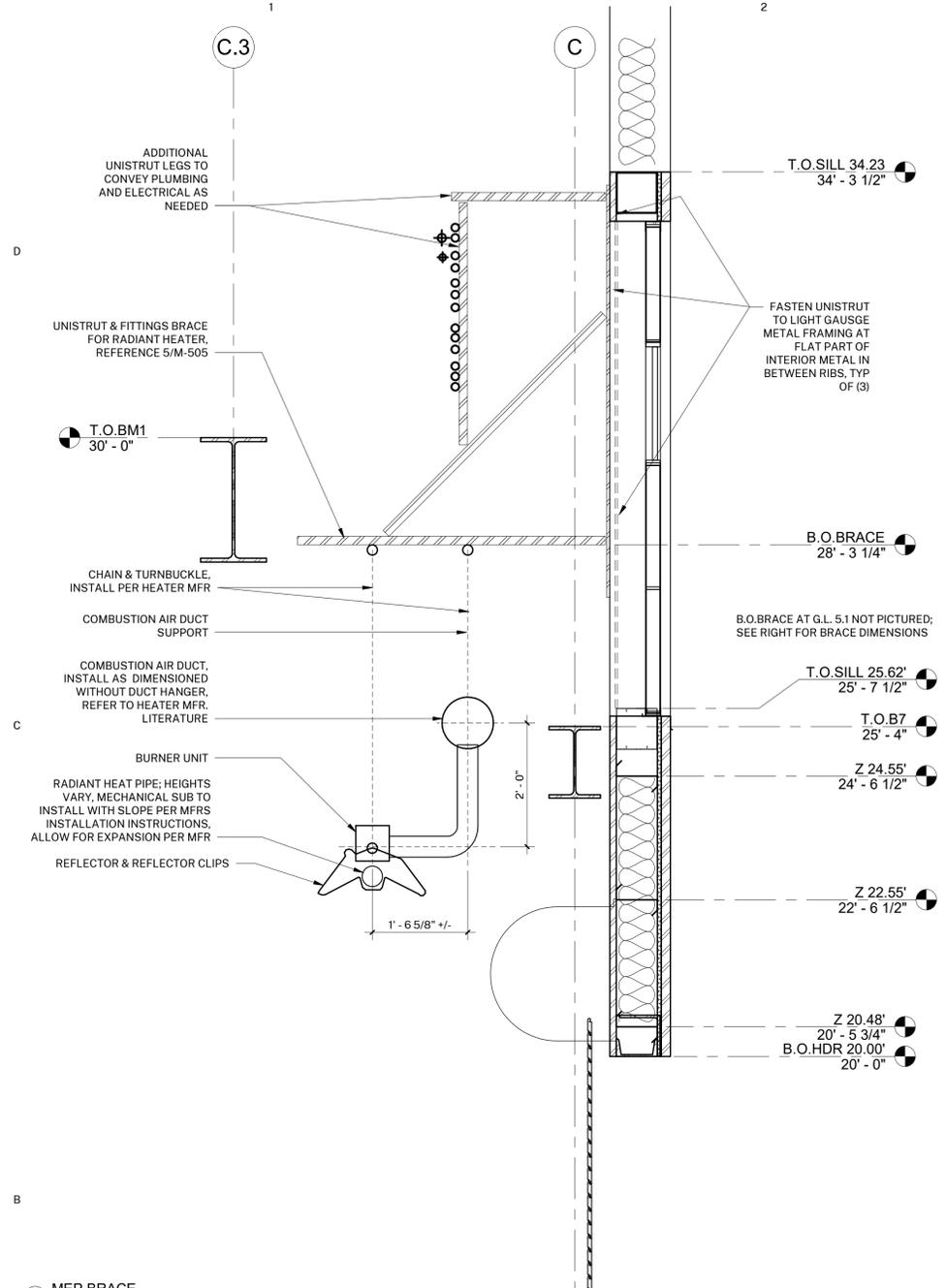
PROJECT INFORMATION:  
PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
DRAWN BY: MEH  
REVIEWED BY: MEH

SHEET TITLE:  
**WALL SECTIONS**

SHEET NUMBER:  
**A.305**

DATE: 07/07/22

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STATE OF CALIFORNIA

PROJECT:

**FT. HUACHUCA NEW GROUND TRANSPORT EQUIPMENT BUILDING**

OWNER:

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LOS ANGELES, CALIFORNIA 90017

CONTRACTOR:

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PROJECT ADDRESS:

CORNER OF ARIZONA ST. & HUNT ST.  
FORT HUACHUCA, ARIZONA

MARK	DATE	DESCRIPTION
3	08/23/2022	ASI #01

PROJECT INFORMATION:

PROJECT NUMBER: 2022.003  
PROJECT PHASE: CD  
DRAWN BY: MEH  
REVIEWED BY: MEH

SHEET TITLE:

**DETAILS**

SHEET NUMBER:

**A.401**

DATE: 07/07/22