

ADDENDUM NO. 3 TO PROJECT NO. 44155-C, H, P, E

**REHABILITATE TOWER NOS. 5, 6 AND 7
CLINTON CORRECTIONAL FACILITY
ROUTE 374, COOK STREET
DANNEMORA, NY**

June 4, 2013

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

SPECIFICATION GROUP

1. DELETE: Contract C,E,H,P: Page 011000, Article 1.05 B
2. DELETE: Contract C,E,H,P: Page 015000, Article 1.04 B & C
3. DELETE: Contract C,E,H,P: Page 015000, Article 1.05 A & B
4. DELETE: Contract C,E,H,P: Page 015000, Article 1.09 A & B
5. ADD: Contract C: Page 061000:

2.09 BALLISTIC GRADE SHEATHING

A. Fiberglass Composite Panel Sheathing.

1. Woven roving ballistic grade fiberglass cloth impregnated with a thermoset polyester resin and compressed into flat rigid sheets by Armortex or accepted equal.

6. REPLACE: Contract C: Page 062000, Article 2.02 CABINETS AND COUNTERTOPS with the following:

2.02 CABINETS AND COUNTERTOPS

A. Comply with AWI Section 10 and 11.

B. Cabinets:

1. For Laminate Finish: AWS Custom Grade, with plastic laminate cover on exposed cabinetwork on inside face of hinged doors.
2. Cabinet Hardware; Provide the following:
 - a. Wire Pulls: EPCO Model MC 402-4 or accepted equal. Aluminum with clear anodized finish; 5/16" diameter, 4" center to center width, and 15/16" surface projection or accepted equal. Countersink screws at inside face of drawer front. Provide two pulls for drawers over 24" wide.
 - b. Catches: Double action, spring tension, nylon roller type. On all tall cases, heavy duty, spring tension, rubber roller type.
 - c. Locks: Heavy duty cylinder type with phosphor bronze 5 tumbler springs and brass barrels on all doors and drawers. Provide 3 non-duplicative keys for each lock and 3 master keys for each master key group. Provide satin chrome finish.

- d. Hinges: Concealed European 170° self-closing hinges finished in brushed satin chrome.
- C. Plastic Laminate: NEMA Standards Publication LD3 for the following types; color, texture, and finish as indicated, or if not indicated, as selected by the Director:
1. Horizontal Surfaces: General Purpose Type; HGS Grade; 0.050 inch nominal thickness.
 2. Post-Formed Surfaces: Post-forming Type: HGP Grade; 0.040 inch nominal thickness.
 3. Vertical Surfaces and Exposed Edges: General Purpose Type; VGS or VGP Grade; 0.030 inch nominal thickness.
 4. Concealed Back Faces: Backer Type; BKV Grade; 0.030 inch nominal thickness.
7. ADD: Contract C: Specification Section 061753: Wood Trusses. Please see attached Specification Section and ADD to Contract C: Table of Content.
 8. ADD: Contract C: Specification Section 073113: Asphalt Shingle Roof System. Please see attached Specification Section and ADD to Contract C: Table of Content.
 9. ADD: Contract C: Specification Section 074113: Preformed Metal Siding System. Please see attached Specification Section and ADD to Contract C: Table of Content.
 10. DELETE: Contract C: Page 085113, Article 2.02 B
 11. DELETE: Contract C: Page 085116, Article 2.02 B

DRAWINGS

12. Drawing C-002:
 - a. REPLACE Detail H1/C-002 included in this Addendum and supersedes the same numbered originally issued drawing.
 - b. REPLACE Detail H3/C-002 included in this Addendum and supersedes the same numbered originally issued drawing.
 - c. REPLACE Detail K1/C-002 included in this Addendum and supersedes the same numbered originally issued drawing.
 - d. REPLACE Detail K3/C-002 included in this Addendum and supersedes the same numbered originally issued drawing.
 - e. REPLACE Detail K4/C-002 included in this Addendum and supersedes the same numbered originally issued drawing.
 - f. REPLACE Detail K10/C-002 included in this Addendum and supersedes the same numbered originally issued drawing.
 - g. REPLACE Detail F12/C-002 included in this Addendum and supersedes the same numbered originally issued drawing.
13. Drawing A-001:
 - a. DELETE "SIMILAR OPP. HAND" on the Elevation Reference at Drawing J1/A-001
 - b. DELETE "SIMILAR OPP. HAND" on the Elevation Reference at Drawing J4/A-001
 - c. DELETE "SIMILAR OPP. HAND" on the Elevation Reference at Drawing J8/A-001
14. Drawing A-101:
 - a. REPLACE Interior Elevation Reference at Drawing C8/A-101 with B8/A-402.
 - b. REPLACE Interior Elevation Reference at Drawing G8/A-101 with D8/A-402.
 - c. REPLACE Interior Elevation Reference at Drawing K8/A-101 with B8/A-402.
15. Drawing A-103:
 - a. DELETE Interior Elevation Reference at Drawing D8/A-103
 - b. DELETE Interior Elevation Reference at Drawing G8/A-103
 - c. DELETE Interior Elevation Reference at Drawing K8/A-103

16. Drawing A-302:
- a. REPLACE Detail Reference at Detention Door Frame Head F1/A-401 TYP. with C1/A-401 TYP.
 - b. DELETE Detention Door Frame Sill Detail H1/A-401 TYP.
 - c. REPLACE Detail Reference B5/A-401 TYP. with B3/A-401 TYP.
 - d. REPLACE Detail Reference D5/A-401 TYP. with D3/A-401 TYP.
 - e. REPLACE Detail Reference F5/A-401 TYP. With F3/A-401 TYP.
17. Drawing A-304:
- a. DELETE Detention Door Frame Sill Detail H1/A-401 TYP.
 - b. REPLACE Detail Reference B5/A-401 TYP. with B3/A-401 TYP.
 - c. REPLACE Detail Reference D5/A-401 TYP. with D3/A-401 TYP.
 - d. REPLACE Detail Reference F5/A-401 TYP. With F3/A-401 TYP.
18. Drawing A-306:
- a. DELETE Detention Door Frame Sill Detail H1/A-401 TYP.
 - b. REPLACE Detail Reference B5/A-401 TYP. with B3/A-401 TYP.
 - c. REPLACE Detail Reference D5/A-401 TYP. with D3/A-401 TYP.
 - d. REPLACE Detail Reference F5/A-401 TYP. With F3/A-401 TYP.
19. Drawing A-401:
- a. REPLACE the Hardware Group in the Door Schedule with the following:
Hardware Group A (Section 111901): Door G05, G06, G07
Hardware Group B (Section 111901): Door 500A, 600A, 700A
Hardware Group 1 (Section 087100): Door 100A, 500, 500B, 600, 600B, 700, 700B
 - b. REPLACE the Finish Schedule for Guard Post No. 100 with the included Finish Schedule in this Addendum.
 - c. REPLACE Detail F3/A-401 included in this Addendum and supersedes the same numbered originally issued drawing.
 - d. REPLACE Detail B5/A-401 included in this Addendum and supersedes the same numbered originally issued drawing.
 - e. REPLACE Detail D5/A-401 included in this Addendum and supersedes the same numbered originally issued drawing.
 - f. REPLACE Detail B7/A-401 included in this Addendum and supersedes the same numbered originally issued drawing.
 - g. REPLACE Detail D7/A-401 included in this Addendum and supersedes the same numbered originally issued drawing.
 - h. REPLACE Detail H7/A-401 included in this Addendum and supersedes the same numbered originally issued drawing.
20. Drawing A-403:
- a. REPLACE Detail K9/A-403 included in this Addendum and supersedes the same numbered originally issued drawing.
 - b. REPLACE Detail G12/A-403 included in this Addendum and supersedes the same numbered originally issued drawing.
 - c. ADD Detail J12/A-403 included in this Addendum.
 - d. ADD Detail K12/A-403 included in this Addendum.
21. Drawing P-001
- a. ADD the following to the Abbreviations on the Plumbing Legend:
EIT Electric Incinerating Toilet
 - b. REPLACE the Plumbing Fixture Schedule with the included Plumbing Fixture Schedule in this Addendum.

22. Drawing E-001:

- a. DELETE the following items from Tower #5 Electrical Phasing Schedule:
 - 1A Temporary Guard Tower at Guard Post No. 5
- b. ADD the following to 1B Electrical Construction Associated with Guard Tower Post No. 5:
 - 1B.1A Disconnect and remove all electrical equipment as shown or indicated on drawings in existing tower.
- c. DELETE the following items from Tower #6 Electrical Phasing Schedule:
 - 2A Relocate Temporary Guard Tower at Guard Post No. 6
- d. ADD the following to 2B Electrical Construction Associated with Guard Post No. 6:
 - 2B.1A Disconnect and remove all electrical equipment as shown or indicated on drawings in existing tower.
- e. REPLACE 3A Relocate Temporary Tower at Guard Post No. 7 from Tower #7 Electrical Phasing Schedule with the following:
 - 3A Temporary Guard Tower at Guard Post No. 7
 - 3A.1 Protect any equipment that will not be removed to prevent damage during demolition and construction. Protect wiring and conduit coming in and out of the equipment.
 - 3A.2 Locate and excavate power feeder to existing Guard Post No. 6 within 25 feet from location of Temporary Tower 100A and provide pullbox for temporary feeder to temporary tower panelboard TTP-1.
 - 3A.3 Provide 2" conduit and feeder conductors to Temporary Tower 100A, 3P, Fused disconnect from pullbox, cut and tap onto existing Guard Post No. 6 feeder conductors leaving slack for splice to Guard Post No. 6 (See 1/E-103).
 - 3A.4 Provide Temporary tower panelboard TTP-1, devices, and fixtures for temporary guard tower upper level (see Detail 2/E-103).
 - 3A.5 Provide conduit and wiring for temporary guard tower lower section with flexible connection.
 - 3A.6 Disconnect and remove all electrical equipment as shown or indicated on drawings in existing tower.
 - 3A.7 Flood lights shall remain operational, relocate as required during construction. Flood lights shall be powered from TTP-1 in temporary tower during construction. Coordinate exact location with Director's Representative.
 - 3A.8 Relocate telecommunications line to temporary tower.
- f. ADD the following to the General Notes on E-001:
 5. Contractor is responsible for the labor, material, fuel and equipment for the temporary generator for the duration as required to complete the work for Guard Post #7.

23. Drawing E-103:

- a. ADD the following to the Notes on 2/E-103:
 - 2: Provide new 20 amp duplex receptacle within 2 feet of Electric Incinerating Toilet. Wire from panel TTP-1, circuit number 6 using spare breaker.

END OF ADDENDUM

SECTION 061753

WOOD TRUSSES

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Rough Carpentry: Section 061000.

1.02 REFERENCES

- A. Design Standards: Comply with the following as applicable:
 - 1. User Specification for Treated Wood, American Wood Protection Association Standard (AWPA) U1-02
 - 2. National Design Standards for Metal-Plate Connected Wood Truss Construction, TPI 1-2002, by the Truss Plate Institute, Inc. (TPI).
 - 3. Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses, TPI DSB, by the Truss Plate Institute, Inc. (TPI).
 - 4. Building Component Safety Information: Guide to Good Practice for Handling, Installing, Restraining, & Bracing Metal Plate Connected Wood Trusses, TPI BCSI, by the Truss Plate Institute, Inc. (TPI).
 - 5. National Design Specification for Wood Construction, and its supplement, Design Values for Wood Construction, NDS-01, by the American Wood Council, of the American Forest and Paper Association (AF & PA).
 - 6. Manual for Engineered Wood Construction, and its supplements and guidelines, latest addition, by the American Wood Council of the American Forest and Paper Association (AF & PA).
- B. Lumber Standard: American Softwood Lumber Standard, PS 20-99, by the U.S. Department of Commerce (DOC).
 - 1. Grading agencies: Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - a. NeLMA: Northeastern Lumber Manufacturers' Association.
 - b. NLGA: National Lumber Grades Authority.
 - c. RIS: Redwood Inspection Service.
 - d. SPIB: The Southern Pine Inspection Bureau.
 - e. WCLIB: West Coast Lumber Inspection Bureau.
 - f. WWPA: Western Wood Products Association.
 - 2. Grading Rules:
 - a. Douglas fir-larch; WCLIB or WWPA.
 - b. Douglas fir-larch (north); NLGA.
 - c. Douglas fir-south; WWPA.
 - d. Hem-fir; WCLIB, or WWPA.
 - e. Hem-fir (north); NLGA.
 - f. Southern pine and mixed southern pine; SPIB.
 - g. Spruce-pine-fir; NLGA.
 - h. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

- C. Connector Plate Manufacture: Comply with Quality Control Manual by the TPI.

1.03 DESIGN REQUIREMENTS

- A. Design Criteria: Design loads and deflection limit are indicated on the Drawings.

1.04 SUBMITTALS

- A. Shop Drawings: Include truss framing plans, truss elevations, locations and details of connector plates, bearing and anchorage details, bracing and connection details, species and grades of lumber, and connections required for the support of other Work.
- B. Quality Control Submittals:
 - 1. Design Data:
 - a. Connector plate evaluation information.
 - b. Lumber design values.
 - c. Design calculations stamped and signed by a licensed Professional Engineer.

1.05 QUALITY ASSURANCE

- A. Metal Connector-Plate Manufacturer Qualifications: A manufacturer that is a member of TPI and that complies with quality-control procedures in TPI 1 for manufacture of connector plates.
 - 1. Manufacturer's responsibilities include providing professional engineering services needed to assume engineering responsibility.
 - 2. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.
- B. Fabricator Qualifications: Shop that participates in a recognized quality-assurance program that complies with quality-control procedures in TPI 1 and that involves third-party inspection by an independent testing and inspecting agency licensed structural engineer.
- C. Source Quality Control: Grade Marks: Each piece of lumber shall be stamped with a grade mark and registered symbol of a grading agency certified by the Board of Review of the American Lumber Standards Committee.
- D. Fire-Retardant Treatment Testing Agency Qualifications:
 - 1. For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to the Structural Engineer of Record, that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect trusses from moisture, warping, and distortion. Use methods of handling and storage which will maintain truss alignment and prevent loosening of joints. Store trusses off the ground on sufficient blocking to prevent damage. Protect trusses from moisture in a manner that allows adequate ventilation. Furnish

components as needed to prevent damage while lifting and handling completed trusses.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Lumber: S4S, 19 percent or less moisture content at time of dressing. Lumber dimensions indicated are nominal. Species and grade as follows:
 - 1. Chord and Web Members: Southern Pine, structural No. 2 (minimum) grade except where otherwise indicated.
 - 2. Bracing Members: Southern Pine or Douglas Fir, structural No. 2 or Construction grade; or Hem-Fir, structural No. 2 grade.

- B. Metal Connector Plates: Structural (physical) quality, zinc coated sheet steel complying with ASTM A 446, Grade A or better.
 - 1. Minimum Thickness: 20 US Standard gage, except where otherwise indicated.
 - 2. Zinc Coating: ASTM A653, Coating Designation G 60, hot-dip zinc coating.
 - 3. Fabrication: Die stamped, with integral teeth or with marked pattern for location of separate fasteners.
 - 4. Fasteners: Galvanized steel, size and type to suit conditions unless indicated. Fasteners exposed to treated wood shall be Hot-Dip galvanized conforming to ASTM Standard A653; Class G-185 and epoxy coated.

2.02 FABRICATION

- A. Cut members accurately to length and angle.
- B. Assemble trusses in accurate configuration and true alignment, with tight joints.
- C. Build designed camber into trusses.
- D. Install connector plates on both sides of joints.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Examine surfaces to receive wood trusses and bracing for defects that will adversely affect the execution and quality of the Work. Do not proceed until unsatisfactory conditions are corrected.
 - 1. Verify that supports are ready to receive trusses.
 - 2. Verify that there is sufficient end bearing area.

3.02 ERECTION

- A. Do not cut, notch, or otherwise alter trusses at the Site.
- B. Set and secure trusses plumb and level in the designed locations.

1. Tolerance: 1/2 inch maximum from true position.
- C. Provide temporary bracing and anchorage as required to maintain trusses in position and alignment until permanent bracing and anchorage is installed.
- D. Install permanent bracing and anchors prior to application of any loads.
- E. Shim trusses at interior load bearing walls if they do not meet. Lower interior walls and partitions if they are too high.

END OF SECTION

SECTION 073113

ASPHALT SHINGLE ROOF SYSTEM

PART 1 GENERAL

1.01 REFERENCES

- A. ASTM - American Society For Testing and Materials.
- B. TIMA - Thermal Insulation Manufacturer's Association.
- C. UL - Underwriter's Laboratories Inc.

1.03 SYSTEM DESCRIPTION

- A. Asphalt Shingle Roof System: Asphalt fiberglass, felt underlayment, concealed flashing, and perimeter edge metal installed over the structural deck.

1.04 SUBMITTALS

- A. Submittals Package: Submit the product data, samples, and quality control submittals specified at the same time as a package.
- B. Product Data: Catalog sheets, specifications, and installation instructions for each material specified.
- C. Quality Control Submittals; Manufacturer's Warranty: Sample copy of the shingle manufacturer's warranty.
- D. Contract Closeout Submittals: Warranty and proof of purchase (dated itemized sales receipts or invoices) for warrantied materials.

1.05 QUALITY ASSURANCE

- A. Fire Resistance Rating: The asphalt shingle roof system shall have an Underwriters Laboratories External Fire Resistance Rating as follows:
 - 1. Asphalt Fiberglass Shingles: UL Class A.
- B. Wind Resistance Rating: The asphalt shingle roof system shall have an Underwriters Laboratories "Wind Resistant" label.
- C. Shingle packages shall bear the UL fire resistance and wind resistant labels.
- D. Pre-Roofing Conference: Before the roofing Work is scheduled to commence, a conference will be called by the Director's Representative at the Site for the purpose of reviewing the Drawings and the Specifications and discussing

requirements for the Work. The conference shall be attended by the Contractor, and the roofing applicator.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the Site in manufacturer's labeled, unbroken containers.
- B. Store materials on raised platforms protected from the weather with waterproof covers.
 - 1. Do not stack bundles of shingles more than 4 feet high.
 - 2. Store roll goods on end.

1.07 PROJECT CONDITIONS

- A. Do not install underlayment or shingles on wet surfaces.
- B. Do not apply shingles when air temperature is below 40 degrees.
- C. Do not perform the Work of this Section unless the Director's Representative is present or unless he directs that the Work be performed during his absence.
- D. Moisture Protection:
 - 1. Cover, seal or otherwise protect the roof and flashings so that water cannot accumulate or flow under completed portions. When and where necessary to accomplish this, provide temporary water cut-offs.

1.08 WARRANTY

- A. Manufacturer's Warranty: In addition to the 2 year period specified above, furnish the shingle manufacturer's warranty certifying that the shingles will not warp, shrink, or deteriorate, and that they are free from manufacturing defects as follows:
 - 1. Asphalt Shingles (3-tab): 25 year warranty.

PART 2 PRODUCTS

2.01 COMPANIES

- A. CertainTeed Corporation, Roofing Products Group, P.O. Box 860, Valley Forge, PA 19482, (610) 341-7000, www.certainteed.com.
- B. Owens Corning, One Owens Corning Parkway, Toledo, OH 43659, (800) 438-7465, www.owenscorning.com.
- C. GAF/Elk Corporation, 1361 Alps Road, Wayne, NJ (732) 398-2671, www.gaf.com.
- D. Grace Construction Products, 62 Whittemore Ave., Cambridge, MA 02140, (800) 354-5414, www.na.graceconstruction.com.

- E. NEI, 50 Pine Road, Brentwood, NH, (800) 998-4634, www.nei-act.com.
- F. Air Vent Inc., 4117 Pinnacoe Point Drive, Suite 400, Dallas, TX 75211, (800) 247-8368, www.airvent.com.
- G. Cor-A-Vent Inc., P.O. Box 428, Mishawaka, IN 46546-0428, (800) 837-8368, www.cor-a-vent.com.
- H. Portals Plus, 484 N, Thomas Drive, Bensenville, IL 60106, (630)766-5240, www.portalsplus.com.

2.02 MATERIALS

- A. Asphalt Shingles:
 - 1. UL Classified, fiberglass or organic, three tab, square butt, self sealing wind resistant shingle, with 25 year warranty, ASTM D 3462.
 - a. XT25/Seal King Shingles by CertainTeed Corporation, Supreme AR Shingles by Owens Corning, or Royal Sovereign by GAF/Elk Corporation.
 - 2. Algae Protection: Manufacturers maximum protection.
 - 3. Color: As selected from the manufacturer's standard colors.
 - 4. Underlayment: No. 15 asphalt saturated felt, non-perforated, ASTM D 226.
 - 5. Starter Course: 90 lb mineral surfaced felt, ASTM D 249 or asphalt shingles with tabs removed.
- B. Concealed Flashing (Vapor Barrier): Self adhering, self sealing, rubberized asphalt sheet membrane with slip resistant surface and manufacturer's primer for masonry surfaces (if any).
 - 1. Thickness: 40 mils minimum, ASTM D 3767 Method A.
 - 2. Tensile strength: 250 psi minimum, ASTM D 412.
 - 3. Elongation: 250 percent minimum, ASTM D 412 (Die C Modified).
 - 4. Permeance: 0.05 Perms maximum, ASTM E 96.
 - a. Grace Ice & Water Shield by Grace Construction Products or AC POLY Ice and StormSeal by NEI.
- E. Shingle and Underlayment Fasteners:
 - 1. Nails: Galvanized or aluminum, 11 or 12 gage, barbed shank roofing nails with 3/8 inch minimum diameter head, and a sufficient length to penetrate through the roofing materials and a minimum 3/4 inch into the roof sheathing.
- F. Perimeter Edge Metal:
 - 1. Prefinished Aluminum: ASTM B 209, 3003-H14 alloy, 0.032 inch thick.
 - a. Finish: Fluorocarbon coating (polyvinylidene Fluoride PVDF). Reverse side primed. Shipped with strippable protective tape.
- G. Plastic Cement: Flashing grade, fibrated asphalt roofing cement, ASTM D 4586.
- H. Shingle Over Ridge Vents: ShingleVent II by Air Vent Inc., Cobra Ridge Vent 3 by GAF/Elk Corporation, or V-400E Ridge Vent by Cor-A-Vent Inc.

1. Accessories: Manufacturer's standard or recommended straps, connectors, and end plugs.
 2. Color: As selected from the manufacturer's standard colors.
- I. Continuous Soffit Vents: LSV8 Series Continuous Soffit Vents by GAF/Elk Corporation or AirVent Soffit Vents by Air Vent, Inc.
1. Material: Aluminum.
 2. Color: As selected from the manufacturer's standard colors.
- M. Insulation Baffles: ProVent by ADO Products or Vent-Rite by Plymouth Foam Building Products.
- N. Pipe Flashing Boot: Molded one-piece elastomeric pipe boot, by Portals Plus, Inc.

PART 3 EXECUTION

3.01 PREPARATION

- A. Cover cracks in existing roof deck exceeding 1/4 inch in width and knotholes with sheet metal nailed securely in place.
- B. Do not proceed with application of shingles until surfaces are dry, free of debris and protruding nails, and properly supported for shingle nailing and application.

3.02 APPLICATION

- A. Installing Concealed Flashings:
 1. Broom clean the deck surface before installation.
 2. Apply the flashing manufacturer's primer over masonry wall surfaces (if any), before installing flashing. Lap edges and ends a minimum of 6 inches. Press flashing into place. Cut out and patch blisters. Roll edges and ends to insure complete adhesion.
 3. Tack the concealed flashing in place if it does not adhere immediately to the deck.
 4. Eaves: Unless shown otherwise on the drawings extend the flashing from the roof edge to a line a minimum of 2 feet beyond the interior face of the building wall.
- C. Installing Underlayment:
 1. Slopes 4 Inches Per Foot and More: Install one ply of underlayment over the entire surface to be shingled. Lap edges a minimum of 2 inches and ends a minimum of 6 inches.
 2. Slopes Less Than 4 Inches Per Foot: Install 2 plies of underlayment over the entire surface to be shingled. Install underlayment shingle fashion, lapping each ply 19 inches over the preceding ply.
 3. Install the underlayment parallel to the eaves. Secure the underlayment with only enough fasteners to hold it in place until the shingles are installed.

4. At eaves install the underlayment over the metal drip edge, at rakes install the underlayment beneath the metal drip edge.
- D. Installing Perimeter Edge Flashing:
1. Install in lengths not to exceed 10'-0". Lap ends a minimum of 3 inches.
 2. At eaves install the flashing under the underlayment. At rakes install the flashing over the underlayment.
 3. Secure the flashing to the roof deck with nails spaced 8 inches oc.
- E. Installing Asphalt Shingles:
1. Except as shown or specified otherwise, layout, install, and fasten the shingles in accordance with the shingle manufacturer's instructions and specifications.
 2. Fastening:
 - a. Slopes Up To 60 Degrees (20 on 12 slope): Install 4 fasteners per shingle.
 - b. Slopes Over 60 Degrees (20 on 12 slope): Install 6 fasteners per shingle. Place a one inch diameter dab of plastic cement under the center of each shingle tab above the cut out.
 - c. Staples will not be allowed.
 3. Vented Ridges: Install ridge vent following the manufacturers' instructions. Form the ridge cap with pieces cut from the roof shingles or use the manufacturer's hip and ridge shingles. Secure each shingle with one nail on each side, 5-1/2 inches back from the exposed end and one inch up from the edge.
 4. Hips and Non-Vented Ridges: Form the hips and ridges with pieces cut from the roof shingles or use the manufacturer's hip and ridge shingles. Secure each shingle with one nail on each side, 5-1/2 inches back from the exposed end and one inch up from the edge.

END OF SECTION

SECTION 074113

PREFORMED METAL PANEL SYSTEM

PART 1 GENERAL

1.01 DEFINITIONS

- A. Company Field Advisor: An employee of the Company which lists and markets the primary components of the system under their name who is certified in writing by the Company to be technically qualified in design, installation, and servicing of the required products or an employee of an organization certified by the foregoing Company to be technically qualified in design, installation, and servicing of the required products.
- B. Concentrated Loads: Positive downward acting, localized loads.
- C. Uniform Design Loads: Positive downward acting loads and negative upward acting loads specified in this section, including wind uplift and snow loads.
- D. Test Loads: The ultimate uniform test load at which each element of the siding system fails.
- E. Allowable loads: The ultimate tested load on each element of the siding system divided by the appropriate safety factor for the failure mode being evaluated. Allowable loads may be increased by 1/3 for wind loading only.
 - 1. For yielding type failure modes such as panel buckling, use a factor of safety of 2.0.
 - 2. For connection related failure modes such as fastener withdrawal, clip failure, panel disengagement from clip and seam failure, use a factor of safety of 2.5.
 - a. For fastener withdrawal use a leverage factor of 2 in addition to a safety factor of 2.5.
- F. Hydrostatic Joinery: Watertight joints that can withstand a static head of water without leaking. Flashings shall contain hydrostatic joinery, with no joint dependant on exterior sealants for water tightness at panel to panel, flashing to flashing or flashing to panel transitions.

1.02 SYSTEMS DESCRIPTION

- A. Preformed Insulated Metal Siding System: Interlocking siding panels formed with stiffening ribs and secured with exterior concealed fasteners to metal framing and furring.
- B. Preformed Metal Soffit System: Interlocking, perforated soffit panels secured with concealed fasteners.

1.03 PERFORMANCE REQUIREMENTS

- A. Uniform Siding and Soffit Design Loads: The uniform load capacity of the siding and soffit systems shall safely resist a positive and negative load requirement listed in Zone 4 and Zone 5 as shown on Drawing S-001 of the Contract Documents or Design Code: ASCE-7, Method 2 for Components and Cladding.
- B. Air Infiltration: No more than 0.0036 CFM at 20 PSF when tested in accordance with ASTM E 1680-95.
- C. Water Penetration: None, when tested at 20 PSF for 15 minutes in accordance with ASTM E 1646-95.
- D. Thermal Expansion: The system including all flashings, shall allow for expansion and contraction within a minimum ambient temperature range of 200 degrees F.
- E. Metal panel assembly shall be listed with Underwriter's Laboratories as a Class "A" system with regards to their resistance to external flame sources.
- F. Metal panels shall be listed with Underwriter's Laboratories as Class 4 Hail resistant panels.

1.04 SUBMITTALS

- A. Waiver of Submittals: The "Waiver of Certain Submittal Requirements" in Section 013300 does not apply to this Section.
- B. Submittals: Submit product data, samples, all the items listed under Quality Control Submittals, and any proposed deviations from the Contract Documents, at the same time as one complete package. Partial submittals will not be considered.
 - 1. Proposed Deviations From The Contract Documents: To be considered for approval, proposed deviations must be submitted with the initial submittal package. Proposed deviations submitted after the initial submittals package is approved will not be considered or approved and may be cause for rejection of the previously approved manufacturer or system.
 - 2. Product Data: Catalog sheets, specifications, load tables, and installation instructions for each material specified.
 - a. Contract Documents: Unless approved otherwise, the Contract Documents have precedence over manufacturer's details and specifications except when a specific detail or condition is not addressed in the Contract Documents.
 - b. Manufacturer's Details: Do not use or submit manufacturer's details unless there is an omission or proposed deviation from the Contract Documents. In such instances, submit the proposed detail for approval. The proposed detail shall be referenced directly to the related detail on the Contract Drawings.

- c. **Manufacturer's Specifications:** When there is a proposed deviation from the Specifications of the Contract Documents, submit the proposed deviation for approval. The proposed deviation shall be referenced directly to the related article in the Contract Specifications.
 - d. **Manufacturer's Warranty:** Sample copy of the metal siding system manufacturer's single source 20 year no leak warranty and 20 year finish warranty, covering workmanship and materials.
- C. **Samples:**
 - 1. **Siding Panel:** Full panel width, 12 inches long.
 - 2. **Soffit Panel:** Full panel width, 12 inches long, each type.
 - 3. **Fasteners:** 1 of each type.
 - 4. **Warranty:** Copy of printed warranty applicable to this project.
 - 5. **Color Samples:** Panel manufacturer's standard range of colors for finish specified.
- D. **Shop Drawings:** Show fabrication and installation details and methods of joining and fastening panels, fastener spacing, flashings, curbs, snow guards and other accessories in accordance with the Contract Documents and approved deviations (if any). Shop drawings shall be prepared by the metal siding panel manufacturer. All shop drawings to be stamped and sealed by an engineer employed by the metal siding manufacturer and shall be registered in the state of New York.
 - a. Show the location and spacing of the concealed clips and bearing plates as required to resist the uniform siding design loads.
 - b. Show the location and spacing required at siding, eaves, soffits and corners.
 - c. Concealed clips and bearing plates spacing not to exceed 4'-0" on center maximum.
 - d. Show the location and spacing of the snow guards.
- E. **Quality Control Submittals:**
 - 1. **Test Reports:**
 - a. **UL Wind Uplift Rating:** Statement certifying that the siding system has been tested in conjunction with the type of siding applicable to the project and has achieved a UL 90 Wind Uplift rating. Acceptable certification: Letter from UL or a copy of the UL classification listing for the siding system.
 - b. **Test Report of ASTM E 1592-01:** Test report written and signed by a professional engineer from a recognized independent test laboratory listing the complete documentation and test results. Include a letter certifying that the siding system as tested, meets or exceeds the specified uniform design loads.
 - c. **Air and Water Infiltration Tests:** Statement certifying that the siding system has been tested in accordance with the specified test procedure and that the specified minimum requirements have been achieved.
 - 2. **Manufacturer's Qualifications Data:**

- a. Certified statement that the metal siding system manufacturer has been actively marketing the proposed standing seam metal siding system for a minimum of 5 years.
 - b. If requested, submit the names and addresses of 5 previous standing seam metal siding projects of the type specified herein. Include the size of each project, and name and telephone number of a contact person at the project location.
 - 4. Installer's Qualifications Data:
 - a. Statement from the siding system manufacturer certifying that the installer is licensed or approved to install the siding system.
 - b. Statement certifying that the installer has been actively installing concealed clip standing seam metal siding systems for a minimum of 5 years.
 - c. If requested, the names and addresses of 5 previous standing seam metal siding projects of the type specified. Include the size of each project, the metal siding manufacturer's name, and the name and telephone number of a contact person at the project location.
 - d. Statement certifying that the supervisor, job foreman or crew chief and the workers installing the metal siding system is qualified architectural sheet metal workers and have had a minimum of 3 years experience in the installation of concealed clip standing seam metal siding systems.
 - 5. Company Field Advisor Data:
 - a. Name, business address and telephone number of Company Field Advisor secured for the required services.
 - b. Certified statement from the Company listing the qualifications of the Company Field Advisor.
 - c. Services for which authorization is given by the Company, listed specifically for this Project.
- F. Maintenance Data: For metal siding panels to include in maintenance manuals.
- G. Contract Closeout Submittals:
- 1. Warranties: Specified warranties.

1.05 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
 - 1. The manufacturer shall have been actively marketing the proposed concealed clip standing seam metal siding system for a minimum of 5 years.
 - 2. The proposed metal siding system shall have previously been installed on a minimum of 5 siding projects of comparable scope and complexity to the Work of this Section.
- B. Installer's Qualifications:
 - 1. The installer shall be licensed or approved by the metal siding system manufacturer.

2. The installer shall have been actively installing concealed clip metal siding systems for a minimum of 5 years.
 3. The installer shall have previously installed and completed a minimum of 5 concealed clip metal siding projects of comparable scope and complexity to the Work of this Section.
 4. The people supervising the Work of this Section, the job foreman or crew chief, and the workers installing the metal siding system, must be qualified architectural sheet metal workers and shall have had a minimum 3 years of experience in the installation of concealed clip metal siding systems.
- C. Source Limitations: Obtain metal siding or siding system through one source from a single Manufacturer.
- D. Field Example: Prior to installation of the Work of this Section, construct a siding and siding assembly example at the Site. When approved, the example will be the standard of workmanship required for all metal siding and siding assemblies. The field example will be field fabricated.
1. Construct a 4 foot long x 3 foot wide outside corner assembly that shows the eave, rake, ridge, fascia, soffit and siding details and their relationship and connection to each other. Permanently fasten the parts in their proper locations.
 2. Do not start the metal siding and siding until the example assembly has been approved in writing by the Director's Representative.
 3. Maintain the approved example assembly intact until all metal siding and siding has been installed and approved, then remove the example assembly from the site.
- E. Pre-Installation Conference: Prior to commencement of the siding work, a conference will be scheduled by the Director's Representative at the site to review the Drawings and Specifications and resolve questions. The conference shall be attended by the Contractor, the authorized system installer, the person supervising the Work, the job foreman or crew chief, and the Company Field Advisor. OGS designers and facility personnel may attend.

1.06 SIDING MANUFACTURER'S COMPANY FIELD ADVISOR

- A. The manufacturer of the siding and siding system, issuing the final system guarantee on this siding and siding project, must supply a Company Field Advisor, as a technical representative, with the following minimum qualifications:
1. Documentation of 5 years of field experience on the same type of siding system.
 2. Documentation of 10 projects where role was a Company Field Advisor; include contact names and phone numbers for each project.
 3. Documentation of attendance at a siding specific instructional seminar within the last two years.

- B. Secure the services of the Company Field Advisor for a minimum of six (6) days at a minimum of four (4) hours per day to inspect the workmanship of the siding system installer.

- C. Company Field Advisor Duties and Responsibilities:
 - 1. Become familiar with the Contract Documents and approved submittals prior to the pre-siding conference.
 - 2. Attend the pre-siding conference and the beginning of the actual membrane installation for the purpose of:
 - a. Rendering technical assistance to the Contractor regarding installation procedures of the system.
 - b. Familiarizing the Director's Representative with all aspects of the system including inspection techniques.
 - c. Answering questions that might arise.
 - 3. Be objective, unbiased and impartial in each inspection, recommendation, conversation, action and written report.
 - a. Inspect and approve the existing substrate, flashing, blocking, and related materials as being acceptable for the installation of the siding system.
 - b. Ensure proper fastening patterns and fastener sizes of wood blocking, insulation, edge flashing, and related components.
 - 5. Immediately report non-compliant conditions, if any, to the Director's Representative.
 - 6. Provide to the Director's Representative a written report, submitted prior to leaving the Project Site each day the Company Field Advisor is present. Each daily written report shall contain at a minimum:
 - a. Date of report and inspection.
 - b. Weather conditions at the start, middle, and end of the work day.
 - c. Work performed including Contractor activity, contractor crew size, supervisor's name, area of activity, and progress and quality of the work as observed.
 - d. Discussions with Contractor regarding work anomalies and resolution.
 - e. Conditions that are not in compliance with the Contract documents.
 - 1) Continue documenting non-compliance issues in subsequent reports until the issue has been resolved. Document resolution of non-compliance issues when resolved.
 - 7. Report to the Director's Representative in writing failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
 - 8. Confirm, after completion of the siding and siding work and based on the Company Field Advisor's inspections and tests, that the Company Field Advisor has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Store metal panels flat on slightly sloped, raised platforms. Store preformed and prefinished materials in a manner that will prevent twisting, bending or abrasion.
- B. Handle materials by methods which will prevent damage to components, including finishes.
- C. Lift up prefinished panels when unstacking; do not slide.
- D. Remove damaged or permanently stained materials from the site.

1.08 PROJECT CONDITIONS

- A. Unless directed otherwise, do not execute the Work of this Section unless the Director's Representative is present.
- B. Do not install the Work of this Section unless the substrate is dry and free of dirt and debris.

1.09 WARRANTY

- A. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal siding panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Finish: Deterioration includes, but is not limited to, 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 paint to adhere to bare metal.
 - d. Finish Warranty Period: 20 years from date of final Completion.
- B. Manufacturer's Warranty:
 - 1. Furnish a single source warranty issued by the siding system manufacturer for the Work of this Section as follows:
 - a. Twenty year, no leak weather tightness warranty covering workmanship and all materials provided by the metal siding manufacturer.
 - b. Twenty Year Finish Warranty for all elements of the siding and siding systems including, but not limited to; corrosion, rust, finish durability, and other defects which would impair the aesthetic or watersiding properties of the siding and siding system.
 - c. The warranty shall include, but not be limited to; repair and/or replacement of the siding panels, soffit and eave trim, flashings, penetrations, underlayments and as necessary to correct defects in materials or workmanship.
 - d. The warranty shall include, but not be limited to, repair of leakage and the repair and/or replacement of the siding system as

necessary to correct defects or damage caused by wind speeds less than 72 MPH.

C. Warranties shall commence on the date of completion of the siding when accepted.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Insulated Wall Panel:
1. Prefinished, 24 gauge min, to meet the maximum deflection limit of L/340, G-90 Zinc-coated galvanized steel sheet, 24 gauge minimum ASTM A 653; or AZ55 galvalume, 24 gauge minimum, steel sheet ASTM A 792, fabricated from "tension leveled" coil stock, continuous up to 40 feet with no endlaps.
 2. "Oil Canning": Excessive oil canning in individual wall panels or throughout the all area is not permitted, however minor oil canning that is not readily apparent to the eye and does not detract from the aesthetic look of the building is acceptable provided that it only occurs on a minimum number of panels. Acceptance or rejection of individual wall panels or the finished wall based on oil canning is at the sole discretion of the Director's Representative.
 3. Covering Width: 12 inch minimum as shown on Drawings..
 4. Seam Design (Sidejoint): Interlocking side ribs. Offset double tongue and groove with extended metal shelf for positive face fastening.
 5. Cross Section Profile:
 - a. 2 inch deep with smooth, flat face and flush joints.
 6. Panel Length: Continuous with no end laps. Shop cut the bottom of the panel so the finished edge is straight and 90 degrees to the panel seams. Field cutting of the bottom edge will not be allowed.
 7. Attachment to Supporting Members: Exterior Concealed fasteners.
 8. Panel Core: Foamed-in-place, non CFC and zero ODP polyurethane, FM Class I approval.
- B. Soffit: Perforated or Solid prefinished, 24 gage AZ55 galvalume ASTM A 792 steel panels. Soffit panels shall be manufactured by the siding panel manufacturer. See Drawings for locations of perforated panels.
1. Panel Width: 12 inches maximum.
 2. Panel Length: As required to run perpendicular to the building wall.
 3. Seam Configuration: Form the panel with a flush joint design and interlocking seams with flanges for concealed fastening.
- C. Finish: Full strength 70 percent Kynar 500 Fluorocarbon Coating (polyvinylidene fluoride, PVF) applied by the coil coating process. Minimum dry film thickness .9 mil.
1. Cover concealed side with the manufacturer's standard protective finish.
- D. Concealed Clips:

1. One Piece Clips: One piece clips are only allowed on snap and interlocking seams, and on mechanical seams when the clip does not extend into the folded lock portion of the seam. Provide the panel manufacturer's one piece clip designed to allow maximum expansion and contraction of the siding relative to the structure within a minimum ambient temperature range of 200 degrees F.
 - a. The clip shall support the pan section of the metal siding panels so that the panel does not come in contact with the clip mounting screws.
- E. Concealed Fasteners:
1. For Securing All Components Of The Metal Siding System To Light Gage Sheet Metal (14 gage, .0747" and lighter):
 - a. No. 14 Type A sheet metal screws manufactured of H3 or 300 Series stainless steel with cadmium plating. Holes shall be pre-drilled with a twist drill recommended by the fastener manufacturer for the total material thickness. As an alternate #14 diameter, 410 stainless steel self-drilling fasteners with cadmium plating may be used. Where two fasteners are required per clip, #12 diameter fasteners are acceptable.
 - b. Fasteners shall penetrate the underside of the steel deck a minimum of 1/2 inch.
 2. For Securing All Components Of The Metal Siding System To Structural Steel and Sheet Metal (13 gage .0897 inch and heavier):
 - a. Type B fasteners manufactured of H3 or 300 Series stainless steel with cadmium plating. Pre-drill holes with a No. 1 twist drill.
 - b. Fasteners shall penetrate through the structural steel a minimum of 1/2 inch.
- F. Sealant:
1. Exposed Sealant: ASTM C 920; elastomeric polyurethane sealant; of type, grade, class, and use classifications required to seal joints in metal siding panels and remain watertight; and as recommended in writing by metal siding panel manufacturer. Color to match metal panel as close as possible.
 2. Concealed Sealant:
 - a. Preformed Tape Sealant: Pressure-sensitive, 99 percent solids, gray butyl rubber compound sealant tape with release-paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape 1 inch wide and 1/16 inch thick minimum containing nylon spacer beads
 - b. Type 3 Sealant: One part butyl rubber sealant specified in Section 079200.
- G. Flashings and Trim:
1. Metal Flashings and Trim: Prefinished, 24 gage galvalume steel panels ASTM A 792.
 - a. Panels for flashing and trim shall be manufactured by the siding panel manufacturer.

- b. Color and finish of flashings and trim shall be the same as the siding panels.
- H. Touch Up Paint: Panel manufacturers recommended paint compatible with the panel finish. Color to match the exposed surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces to receive the metal siding system for defects that will adversely affect the execution and quality of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

- A. Install the Work of this Section in accordance with the Contract Documents, the approved shop drawings and approved deviations (if any) from the Contract Documents.
 - 1. Coordinate the installation of the metal siding system with other Work of the Contract.
 - 2. Install the Work of this Section so the system is secure, watertight, plumb, and straight and true to adjacent work.
 - 3. Exposed metal shall be free of visible dents, scratches, tool marks, cuts, and other imperfections.
 - 4. Paint to match adjacent surfaces, all exposed edges of metal siding panels and flashings which have been cut to install the work of this Section.
 - 5. The type and size of power screwdrivers used shall be properly matched to the fastener and shall be equipped with depth sensing nose pieces and slip clutches to prevent overdriving and stripping. Use the fastener manufacturer's recommended power screwdriver.
 - 6. Use sealing washers at all locations on the siding panels and flashings where exposed fasteners are required. Do not use sealing washers on vertical siding panels or siding trim.
 - 7. To prevent fastener heads from coming in contact with the underside of the metal panels at the eaves and rakes, form the trim with a 1/4 inch deep step down where the fasteners are to be installed.
- B. Installing Siding Panels:
 - 1. Install the panels in one continuous length. Install the panels in straight vertical plumb alignment, free of buckles or distortions.
 - 2. Fasten the panels with exterior concealed fasteners as recommended by the panel manufacturer, and as indicated on the Drawings.
 - 3. Install flashings and trim for siding panels as indicated and specified, unless approved otherwise by the Director.
- C. Installing Soffit Panels:
 - 1. Install the panels perpendicular to the building wall. Install the panels free of buckles or distortion.

2. Fasten the panels with concealed fasteners as recommended by the panel manufacturer, and as indicated.
3. Install flashings and trim for soffit panels as indicated and specified, unless approved otherwise by the Director.

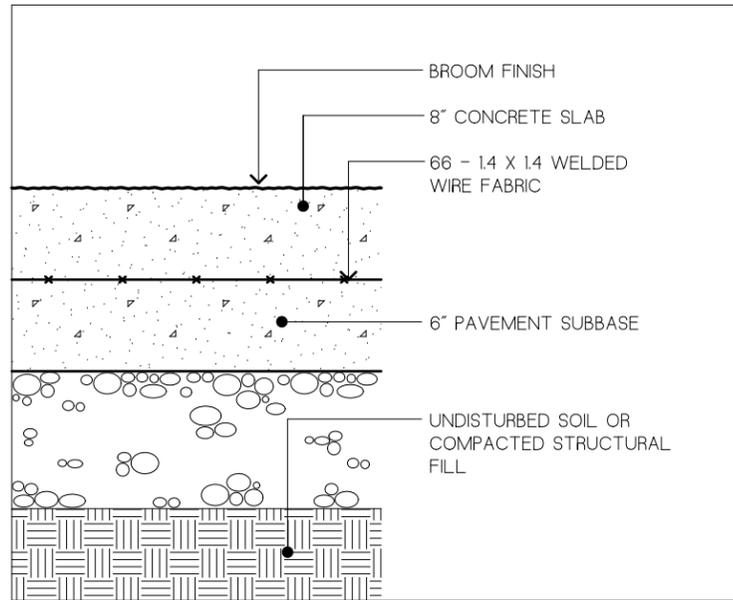
3.03 ADJUSTING

- A. Restore minor visual damage to factory applied finishes in a manner to match the appearance and performance of the original finish, or remove the damaged parts and replace them with undamaged parts.

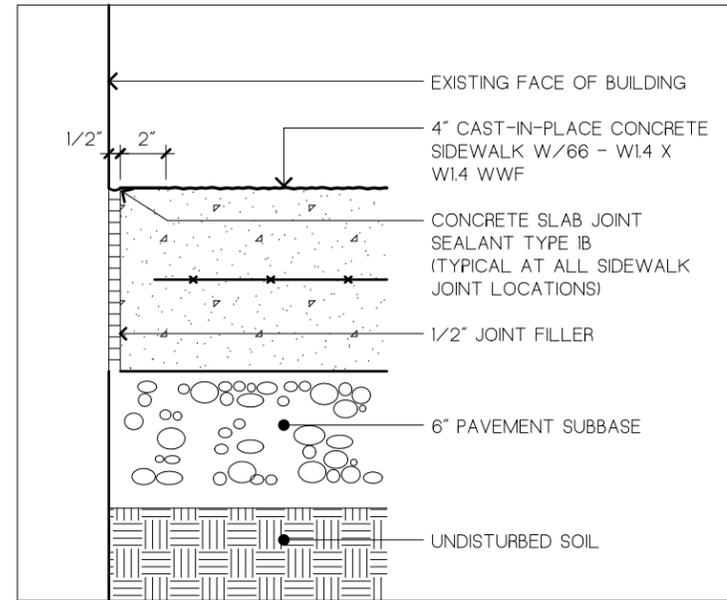
3.04 CLEANING

- A. Remove strippable protective coatings; if any, immediately after completion of Work.
- B. Clean exposed exterior surfaces. Remove residue from strippable coatings. Comply with manufacturer's printed instructions for cleaning.

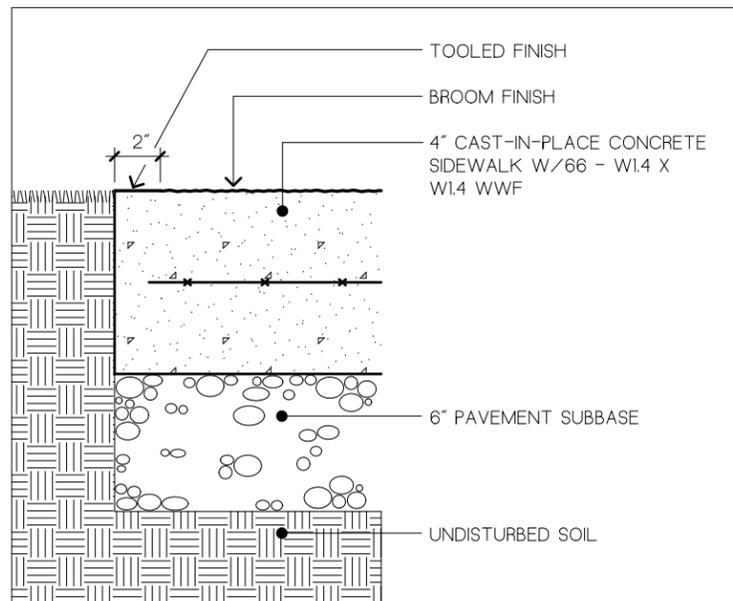
END OF SECTION



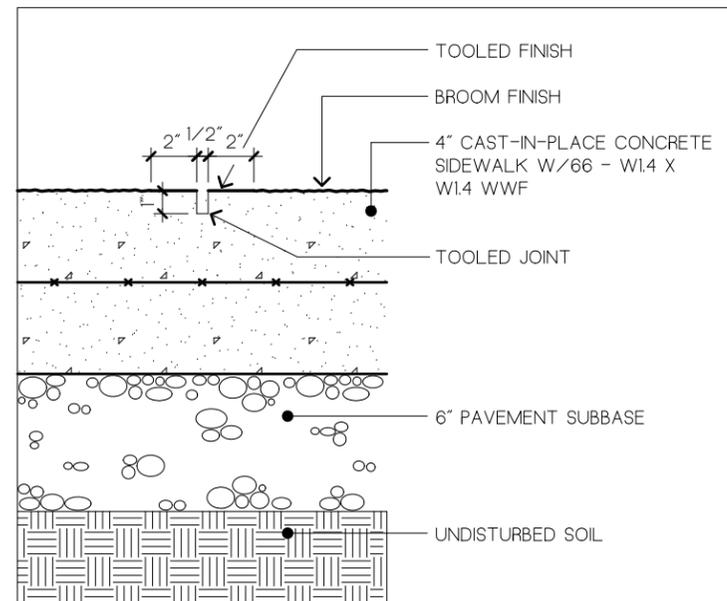
H1 SIDEWALK DETAIL (TYPICAL)
C-002 SCALE: 1 1/2" = 1'-0"



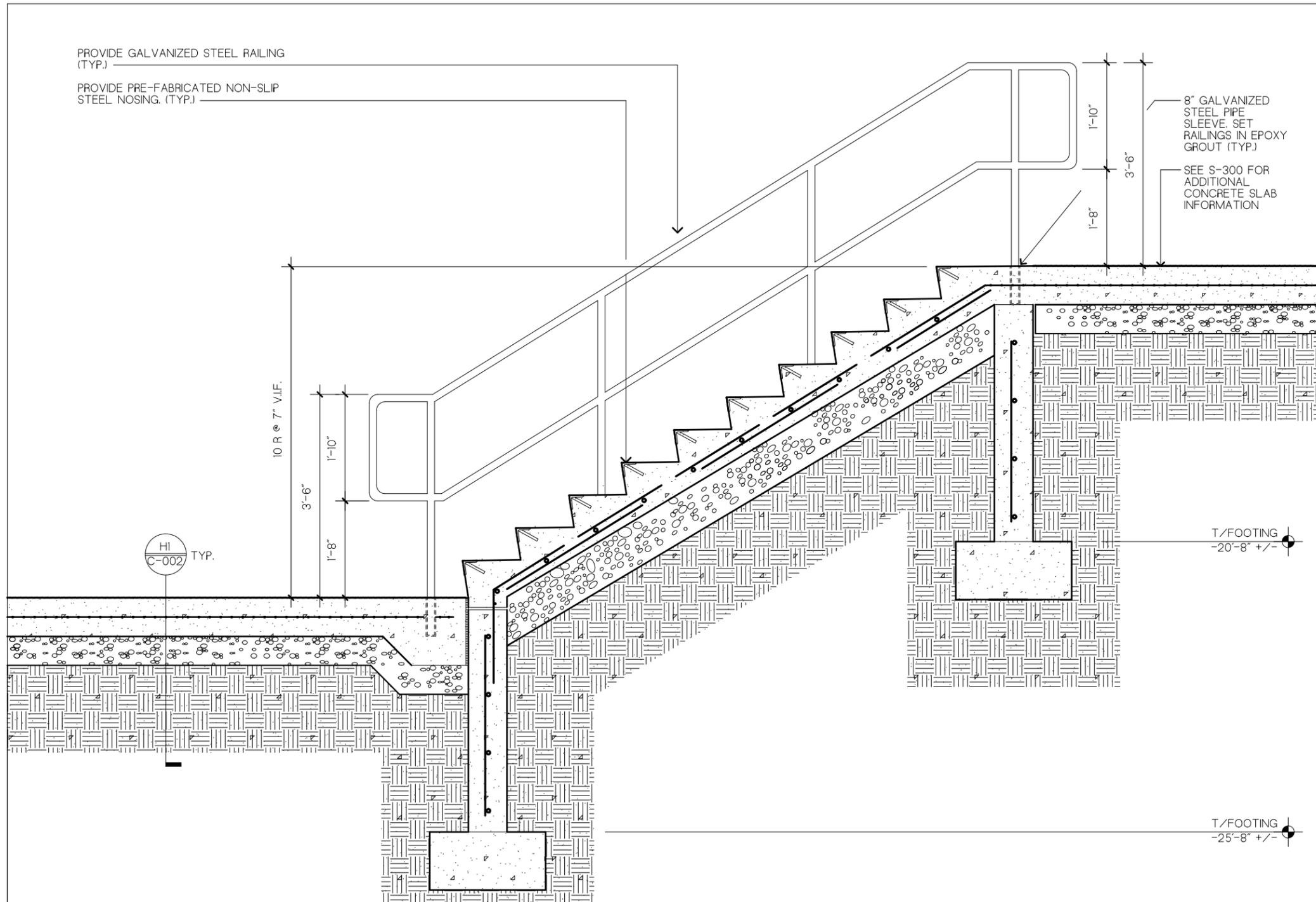
H3 SIDEWALK ISOLATION JOINT
C-002 SCALE: 1 1/2" = 1'-0"



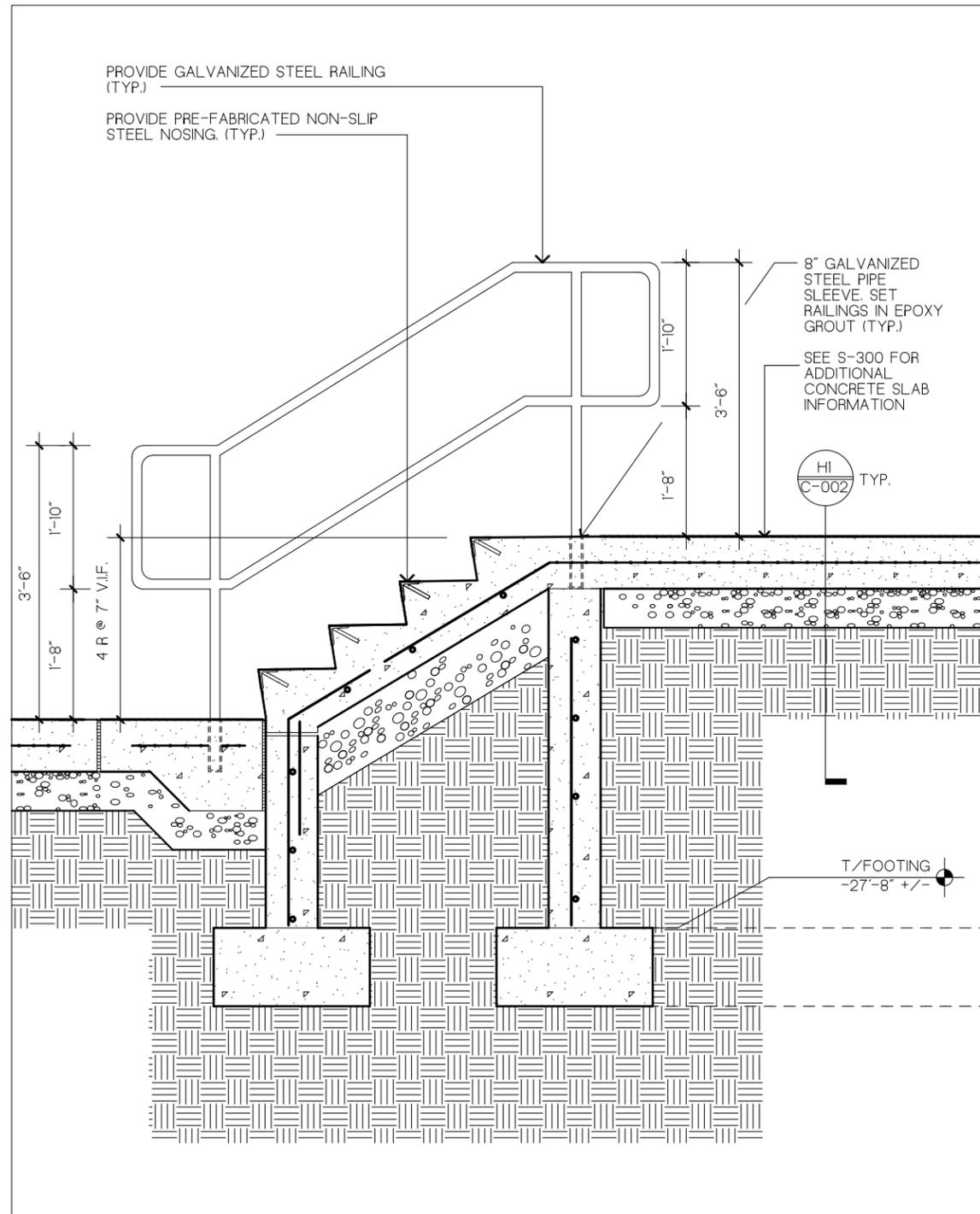
K1 SIDEWALK EDGE DETAIL
C-002 SCALE: 1 1/2" = 1'-0"



K3 SIDEWALK CONTROL JOINT
C-002 SCALE: 1 1/2" = 1'-0"



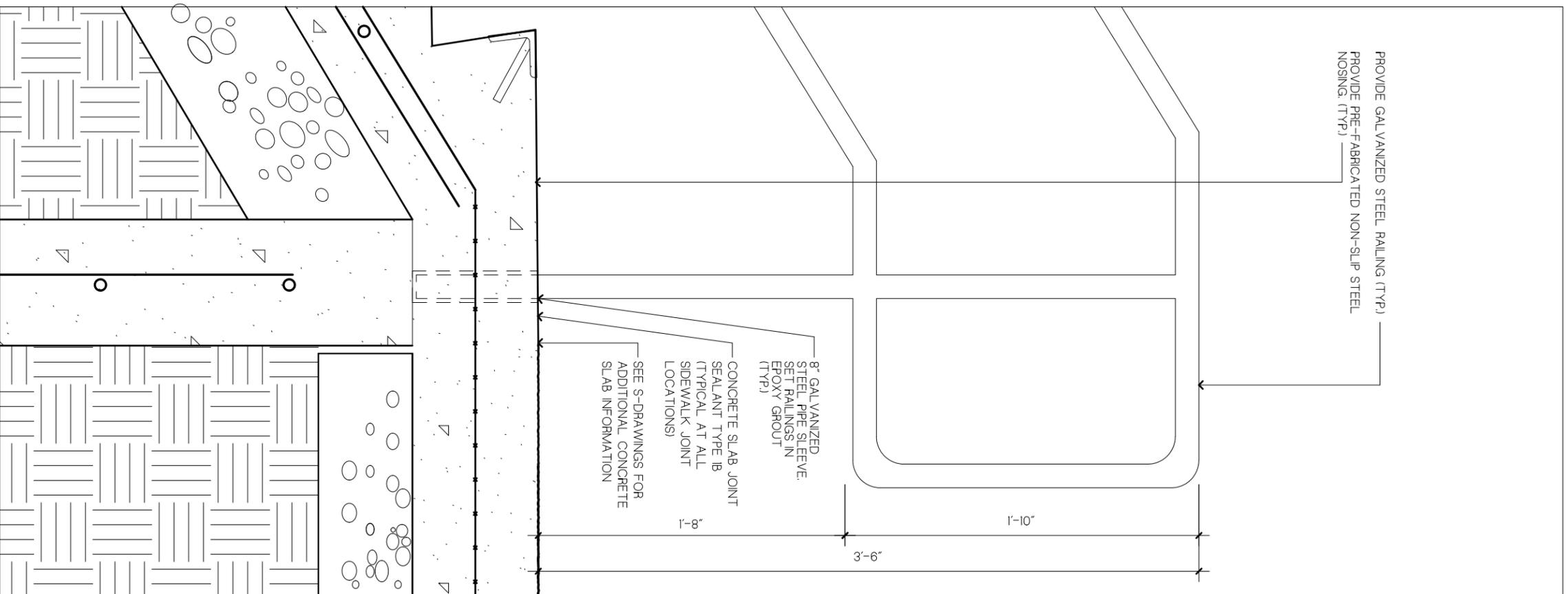
K4 STAIR DETAIL AT GUARD POST #7
 C-002 SCALE: 1/2" = 1'-0"



K10
C-002

STAIR DETAIL AT GUARD POST #5

SCALE: 1/2" = 1'-0"

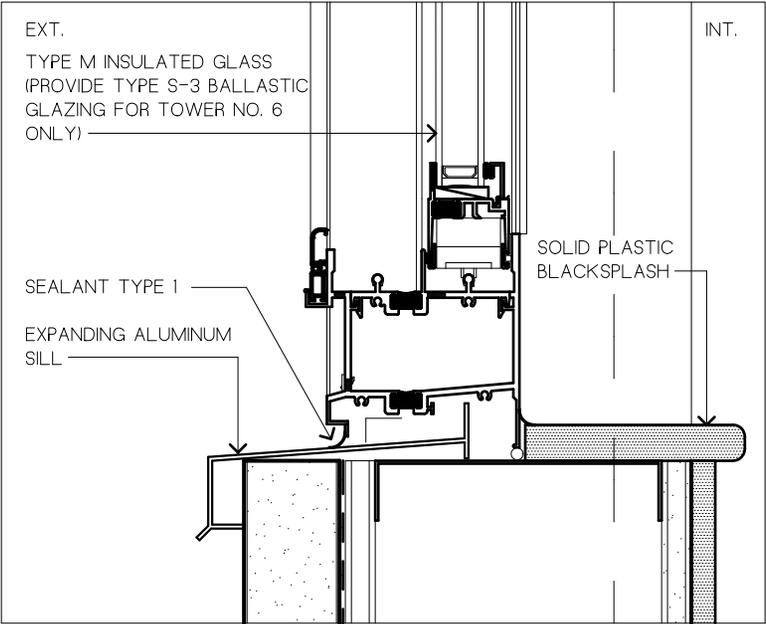


F12
 C-002
 PIPERAIL DETAIL
 SCALE: 1 1/2" = 1'-0"

TEMPORARY GUARD TOWER																			
100	GUARD POST	VCT	-	RB	-	PLY	P	PLY	P	PLY	P	PLY	P	9'-0" +/-	PLY	P	-	-	

FINISH KEY

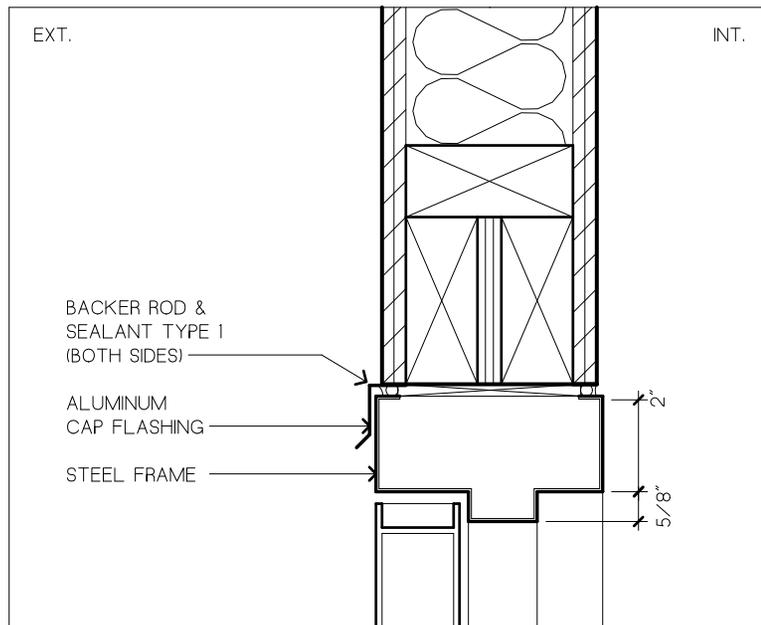
PLY -MDO PLYWOOD



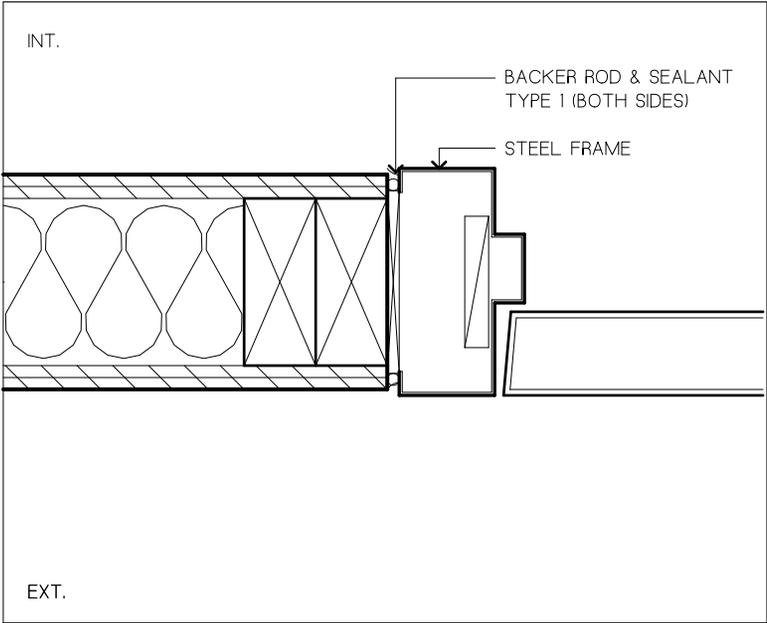
F3
A-401

WINDOW SILL DETAIL

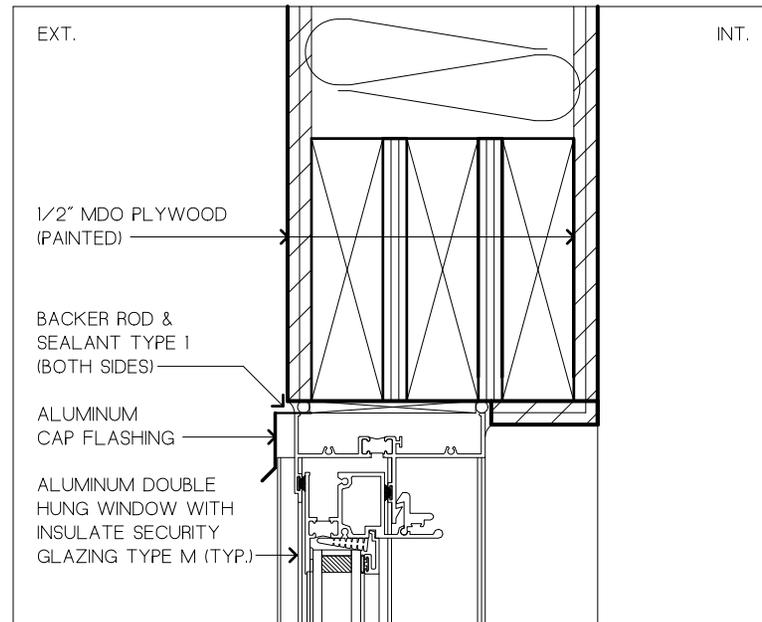
SCALE: 3" = 1'-0"



B5 STEEL FRAME HEAD DETAIL
 A-401 SCALE: 3" = 1'-0"

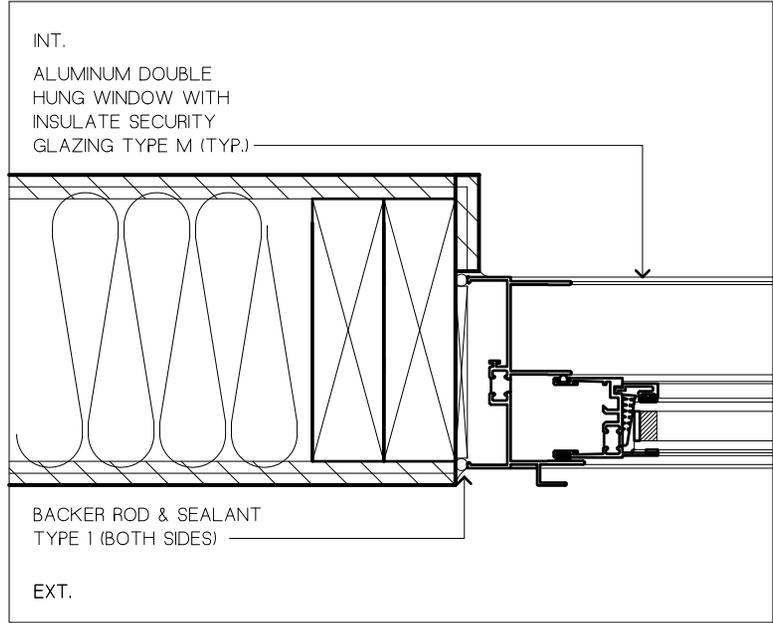


D5 STEEL FRAME JAMB DETAIL
A-401 SCALE: 3" = 1'-0"



B7
 A-401

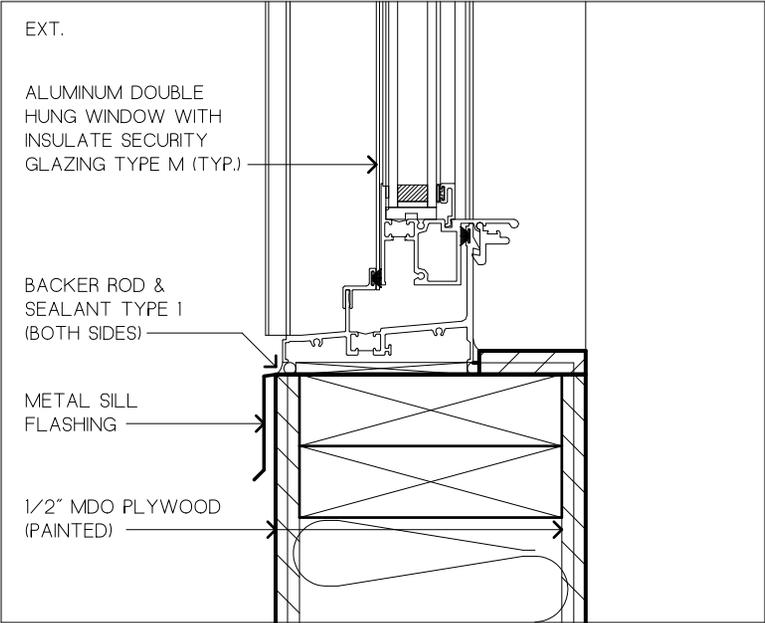
WINDOW HEAD DETAIL
 SCALE: 3" = 1'-0"



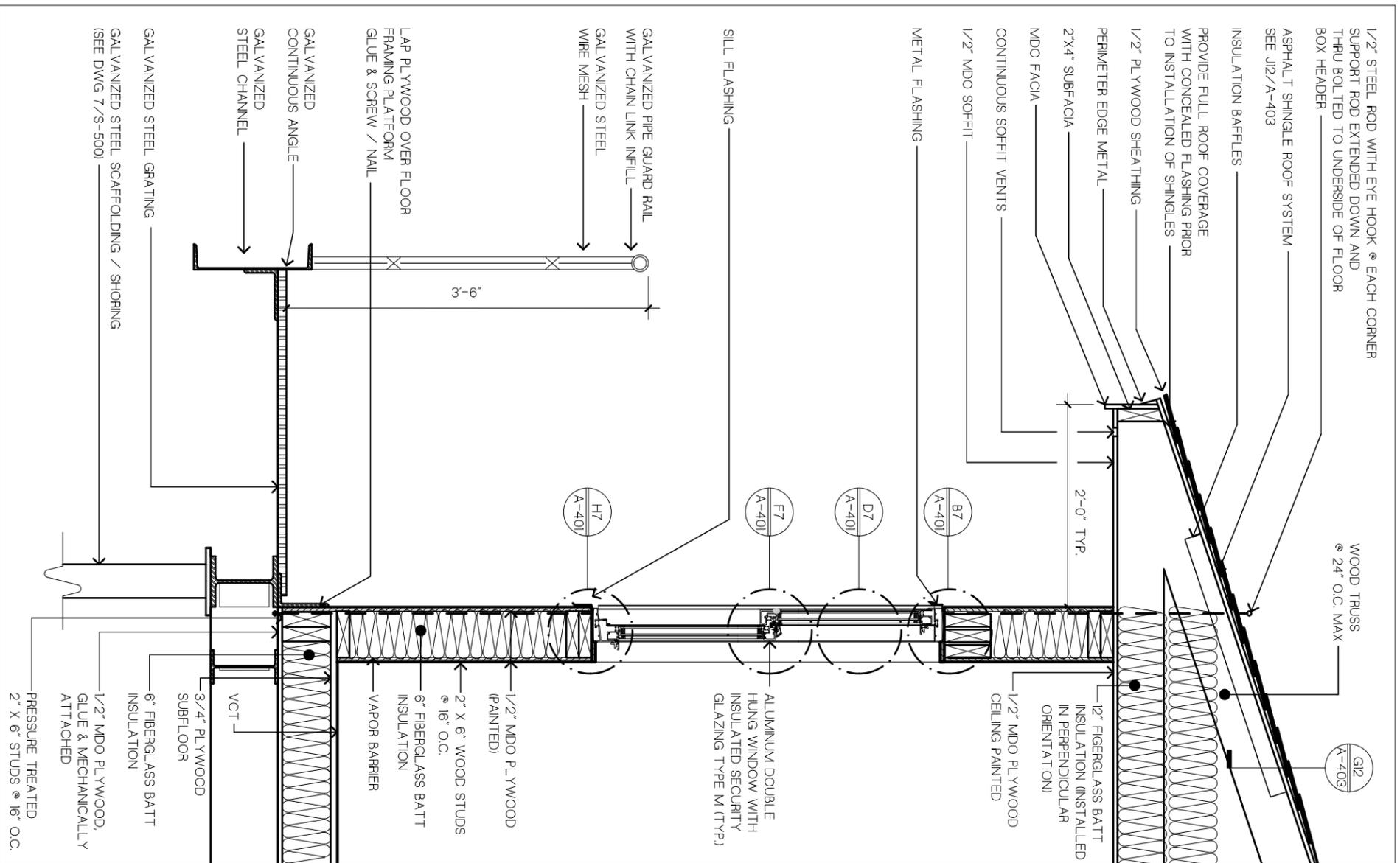
D7
A-401

WINDOW JAMB DETAIL

SCALE: 3" = 1'-0"

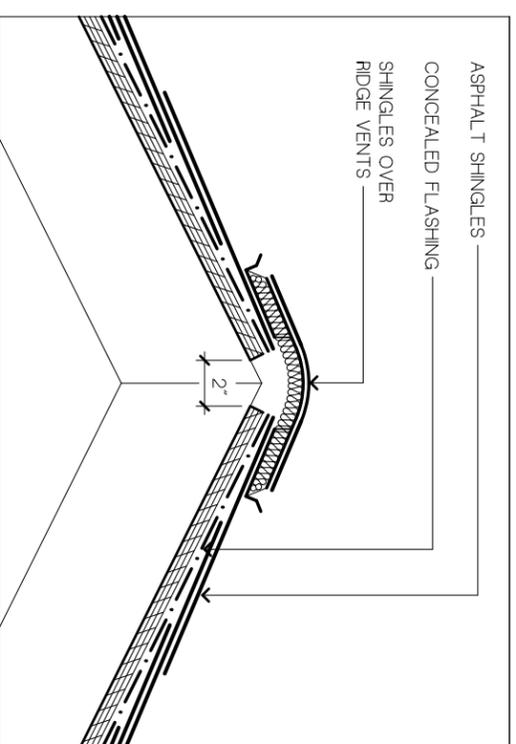


H7 WINDOW SILL DETAIL
A-401 SCALE: 3" = 1'-0"

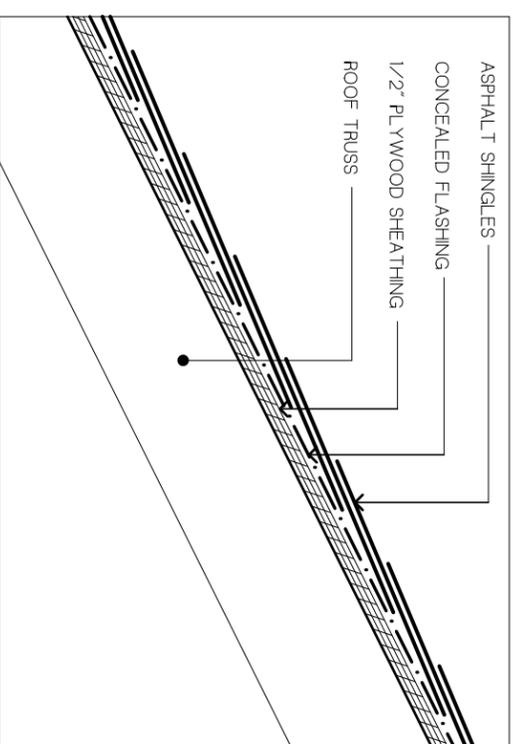


K9
A-403
SCALE: 3/4" = 1'-0"

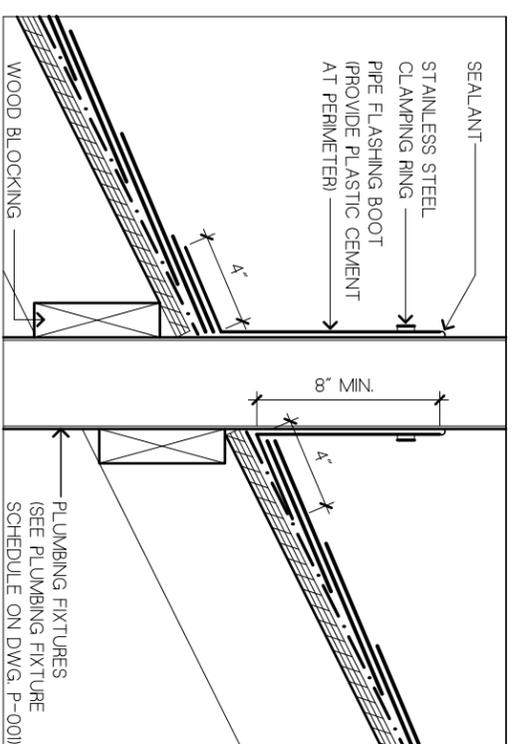
DETAIL SECTION



RIDGE DETAIL (TYP.)



ASPHALT ROOF DETAIL (TYP.)



VENT THROUGH ROOF DETAIL

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE TYPE	WASTE	VENT	CW	HW	ACCESSORIES/FITTINGS	MODEL
WC	AMERICAN STANDARD CADET #2462.016	3"	2"	½"	½"	OLSONITE #95C SEAT	VITREOUS CHINA, WATER SAVER, PRESSURE ASSISTED, ELONGATED BOWL, 1.6GPF, 15"HT, BOTTOM OUTLET MEETS ANSI A112.19.2M/CSA 845.1-08 COLOR: WHITE
CT LAV	AMERICAN STANDARD OVALYN UNDERCOUNTER 0495.221	1¼"	1¼"	½"	½"	SYMMONS S-20-2-G/FR	UNDER COUNTER MOUNT LAVATORY WITH CHROME SINGLE LEVER FAUCET, 0.5GPM (24" MINIMUM COUNTERTOP PROVIDED BY OTHERS) COLOR: WHITE
EIT	INCINOLET MODEL CF 120W ELECTRIC INCINERATING TOILET; OR ACCEPTED EQUAL	N/A	4"	N/A	N/A	VENT TOILET THROUGH ROOF WITH MATERIALS AS RECOMMENDED BY TOILET MANUFACTURER. FLASH PENETRATION AND TERMINATE 12 INCHES ABOVE ROOF WITH RAIN CAP. SEAL VENT PIPING AND PROVIDE APPROPRIATE SUPPORT THROUGH LENGTH OF RUN	INSTALLATION SHALL BE PER MANUFACTURER'S INSTRUCTIONS. INSTALL ELECTRIC INCINERATING TOILET IN TEMPORARY TOWER LOCATION AS INDICATED BY DIRECTOR'S REPRESENTATIVE. SEE DRAWING E-103 FOR ELECTRICAL COORDINATION