

**Glen Oaks Community College
Renovations to B and D Halls | 20220049
6/13/2024**

ADDENDUM NO. 3

This addendum is issued as a supplement to the plans and specifications and shall be considered an integral part of the same.

- Item: 3.01**
Location: General
Description: All reference to vinyl graphics in the drawings will be provided and installed by owner. Strike vinyl graphics allowance reference in addendum #2. Viking head logo on reflected ceiling to be provided and installed by contractor. See A9.1b, for basis of design. Coordinate final graphics with owner.
- Item: 3.02**
Location: General, Mechanical
Description: The controls contractor for this project shall be Controls Resources.
- Item: 3.03**
Location: General, Mechanical
Description: The variable frequency drives shall be provided by TCC and installed by EC.
- Item: 3.04**
Location: Specifications, Section 12 24 13 - Roller Window Shades
Description: Please note that Open Light Manual Shades has been added to the list of approved products.
- Item: 3.05**
Location: Specifications, Section 21 13 13, Wet-Pipe Sprinkler Systems
Description: Original bid document specifications included Section 21 13 13 - Wet-Pipe Sprinkler Systems. This specification section can be removed, as the renovation area is not sprinkled, and additional fire-suppression will not be added.
- Item: 3.06**
Location: Reference Drawings, Cold Formed Stud
Description: See attached "Reference_Cold Formed Studs" for basis of design for cold formed stud. Basis of design is for bidding purposes only. Winning General Contractor is still required to have cold formed supplier engineer and design final stud sizes.

Item: 3.07
Location: Drawings, Sheet A2.1 - Roof Plan
Description: **CLARIFICATION OF ALTERNATE #6:**
 ROOF CORING WAS NOT PART OF THE 2018 BUILDING ENVELOPE ASSESSMENT APPROVED SCOPE AND THE AVAILABILITY OF EXISTING DRAWINGS WAS LIMITED.
 THEREFORE IT IS UNKNOWN WHAT MATERIALS CONSTITUTE THE CROSS SECTION OF ANY ROOF ASSEMBLY. ROOFING MATERIAL NOTES THAT APPEAR ON THE DRAWINGS WAS DERIVED FROM THE LIMITED DRAWINGS AVAILABLE TO THE ASSESSMENT TEAM. IT IS ALSO UNKNOWN IF MINIMAL (1/8" PER 12") OR NO SLOPE IS BUILT INTO THE STRUCTURE OR IF THE EXISTING ROOF ASSEMBLY CONSISTS OF TAPERED INSULATION.
 DESIGN COLLABORATIVE CURRENTLY DOES NOT HAVE ENOUGH INFORMATION AT THIS POINT TO DIRECT BIDDING CONTRACTORS IF TAPERED INSULATION IS NEEDED OR WHAT THAT LAYOUT WOULD ENTAIL.
 IT IS SUGGESTED THE BIDDING CONTRACTOR BID DEMOLITION BASED ON DENOTED ROOF ASSEMBLY INFORMATION SHOWN AND THE INSTALLATION OF ROOF ASSEMBLIES RA-1, RA-2, RA-3 & RA-4 AS SHOWN ON SHEET A2.1 WITH FLAT STOCK INSULATION BOARDS FOR A MINIMAL SLOPE (1/8" PER 12") OR NO SLOPE INSTALLATION.
 TO COMPENSATE FOR A ROOF SYSTEM INSTALLED WITH MINIMAL SLOPE AT OR BELOW 1/8" PER 12" OR FLAT, DESIGN COLLABORATIVE RECOMMENDS THAT ROOFING CONTRACTORS INCLUDE REDUNDANT STRIPPING IN OF ALL TPO HEAT WELDED SEAMS WITH TPO COVER STRIPS IN THEIR BIDS. COVER STRIPS TO CONSIST OF 8" WIDE PIECES OF TPO CENTERED OVER THE PRIMARY TPO HEAT WELDED SEAM. HEAT WELD EACH EDGE ALONG ITS ENTIRE LENGTH TO THE PRIMARY TPO FIELD SHEET.
 DESIGN COLLABORATIVE SUGGESTS AN ALLOWANCE OF \$5000 BE INCLUDED IN ROOFING CONTRACTORS BIDS FOR 2:1 LENGTH TO WIDTH RATIO SADDLES AND CRICKETS.
 IT IS RECOMMENDED THAT UPON ACCEPTANCE OF A ROOFING CONTRACTORS BID AND PRIOR TO CONSTRUCTION. THE SUCCESSFUL ROOFING CONTRACTOR PERFORM PRE-CONSTRUCTION CORES IN QUANTITIES AND LOCATIONS AS NEEDED TO DETERMINE IF EXISTING ROOF MATERIALS DENOTED IS CORRECT, IF SLOPE IS BUILT INTO THE STRUCTURE OR WHAT THE EXTENT OF TAPERED INSULATION THICKNESS AND LAYOUT IS. PATCH ALL CORE LOCATIONS TO RE-ESTABLISH A PERMANENT WATER TIGHT CONDITION.
 IF DEMOLITION OF EXISTING ROOFING MATERIALS IS CONTRARY TO DENOTED SYSTEMS AND/OR IF AN EXISTING TAPERED INSULATION PACKAGE IS CONFIRMED, CONTRACTOR TO REQUEST THE DEVELOPMENT OF A PROPOSAL REQUEST FROM THE ARCHITECT FOR PRICING AND OWNER-ARCHITECT-CONTRACTOR (OAC) REVIEW AND CONSIDERATION.

Item: 3.06
Location: Drawings, A11.1b, Floor Finish Plan - Main Level
Description: CWT-1 updated to be Daltile Miramo-Oyster.

Item: 3.07
Location: Drawings, A11.2b, Floor Finish Plan - Second Level
Description: RF-1 color to be selected from manufacturer's standard line.

Item: 3.08
Location: Drawings, Plumbing Plan Sheets
Description: General plumbing note #2 shall be revised to require trap seal devices equal to Zurn Model Z1072 to be installed in floor drains in lieu of trap primer valves.

Item: 3.09
Location: Drawings, PD1.1b, Plumbing Demolition Plan - Main Level
Description: Provided additional information regarding removal of piping in boiler room penetrating roof within area required for installation of new metal wall panel system. Refer to attached revised sheet for additional information.

Item: 3.10
Location: Drawings, P1.1b, Plumbing Plan - Main Level
Description: Provided additional information regarding relocation of piping within boiler room to avoid interference with new metal wall panel system. Refer to attached revised sheet for additional information.

Item: 3.11
Location: Drawings, P3.1, Enlarged Plumbing Plans
Description: Revised plumbing fixture tags of lavatories and urinals to align with previous project on north end of facility and as updated in plumbing fixture schedule. Refer to attached revised sheet for additional information.

Item: 3.12
Location: Drawings, P4.1, Plumbing Schedules & Details
Description: Updated information in plumbing fixture schedule to align with tags, manufacturers, models, and accessories as provided in previous project on north end of facility. Refer to attached revised sheet for additional information.

Item: 3.13
Location: Drawings, MD1.3b, Mechanical Demolition Plan - Roof Level
Description: Provided clarification on scope between Base Bid and Alternate #6 regarding relocation of existing roof mounted hydronic piping. Refer to attached revised sheet for additional information.

Item: 3.14
Location: Drawings, M1.1b, Mechanical Plan - Main Level
Description: Provided additional information for relocation and installation of flues and combustion air connecting to gas-fired equipment in boiler room. Refer to attached revised sheet for additional information.

Item: 3.15
Location: Drawings, M1.1b, Mechanical Plan - Main Level
Description: Indicated extent of existing and new ductwork for one of the mains where it connects at an existing chase location. Refer to attached revised sheet for additional information.

Item: 3.16
Location: Drawings, M1.3, Mechanical Plan - Roof Level
Description: Provided clarification and additional information on scope requirements between Base Bid and Alternate #6 regarding relocation of existing roof mounted hydronic piping. Refer to attached revised sheet for additional information.

Item: 3.17
Location: Drawings, M3.1, Mechanical Plans - Fan Room Level & Underground, Plan 2/M3.1
Description: Added hydronic terminal box on air handler #5 similar to existing boxes on the system to accommodate increased airflow on south end of lower concourse. Refer to attached revised sheet for additional information.

Item: 3.18
Location: Drawings, M3.1, Mechanical Plans - Fan Room Level & Underground, Plans 1/M3.1 and 2/M3.1
Description: Revised terminal box serving north end of lower concourse level to remain existing. Refer to attached revised sheet for additional information.

Item: 3.19
Location: Drawings, M3.1, Mechanical Plans - Fan Room Level & Underground, Plan 2/M3.1
Description: Added note for existing zone dampers at Air Handler #2 serving branch with new terminal boxes to be locked in open position.

Item: 3.20
Location: Drawings, M4.1, Mechanical Schedules & Details
Description: Added schedule and detail for hydronic terminal boxes. Refer to attached revised sheet for additional information.

Item: 3.21
Location: Drawings, M5.2, HVAC Controls
Description: Added sheet to set including control sequence for hot water terminal boxes and BAS specifications.

Each contractor is responsible for incorporating all changes into their bid.

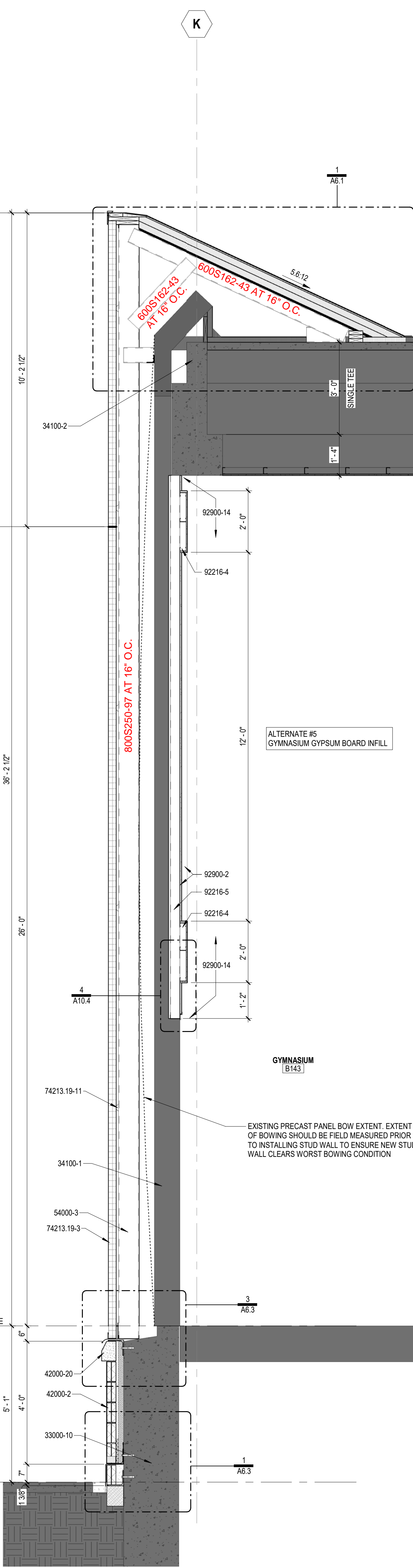
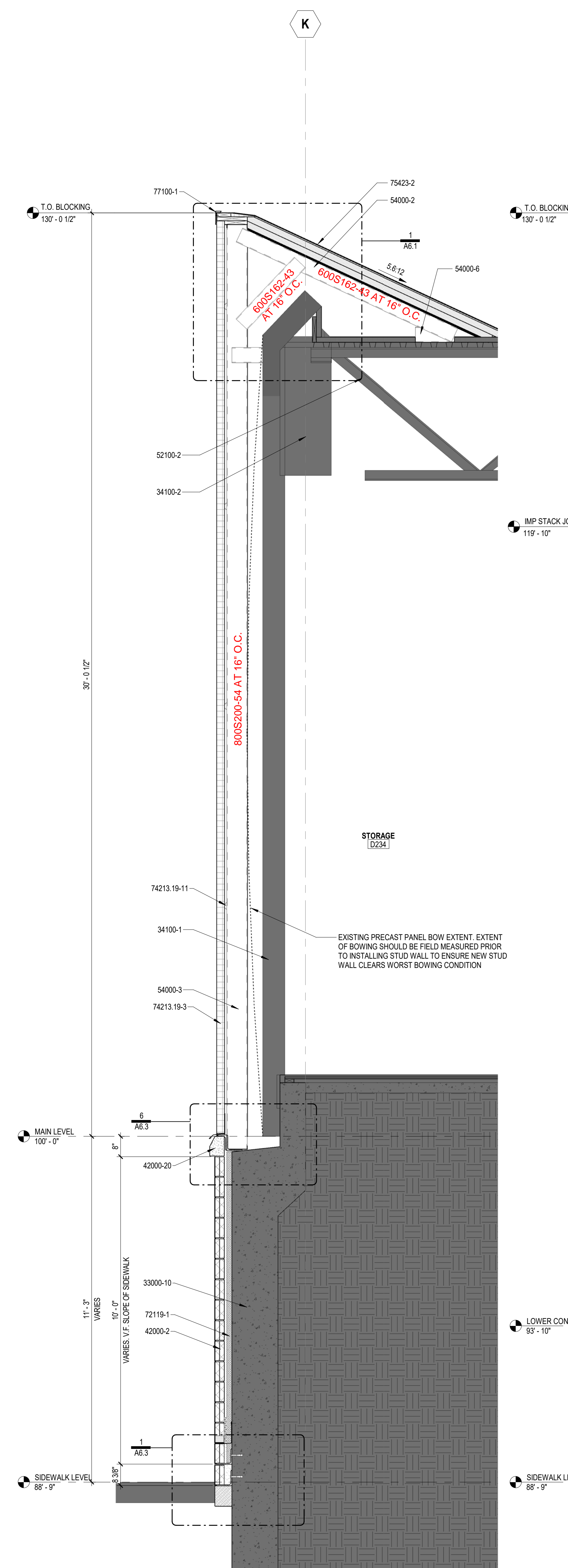
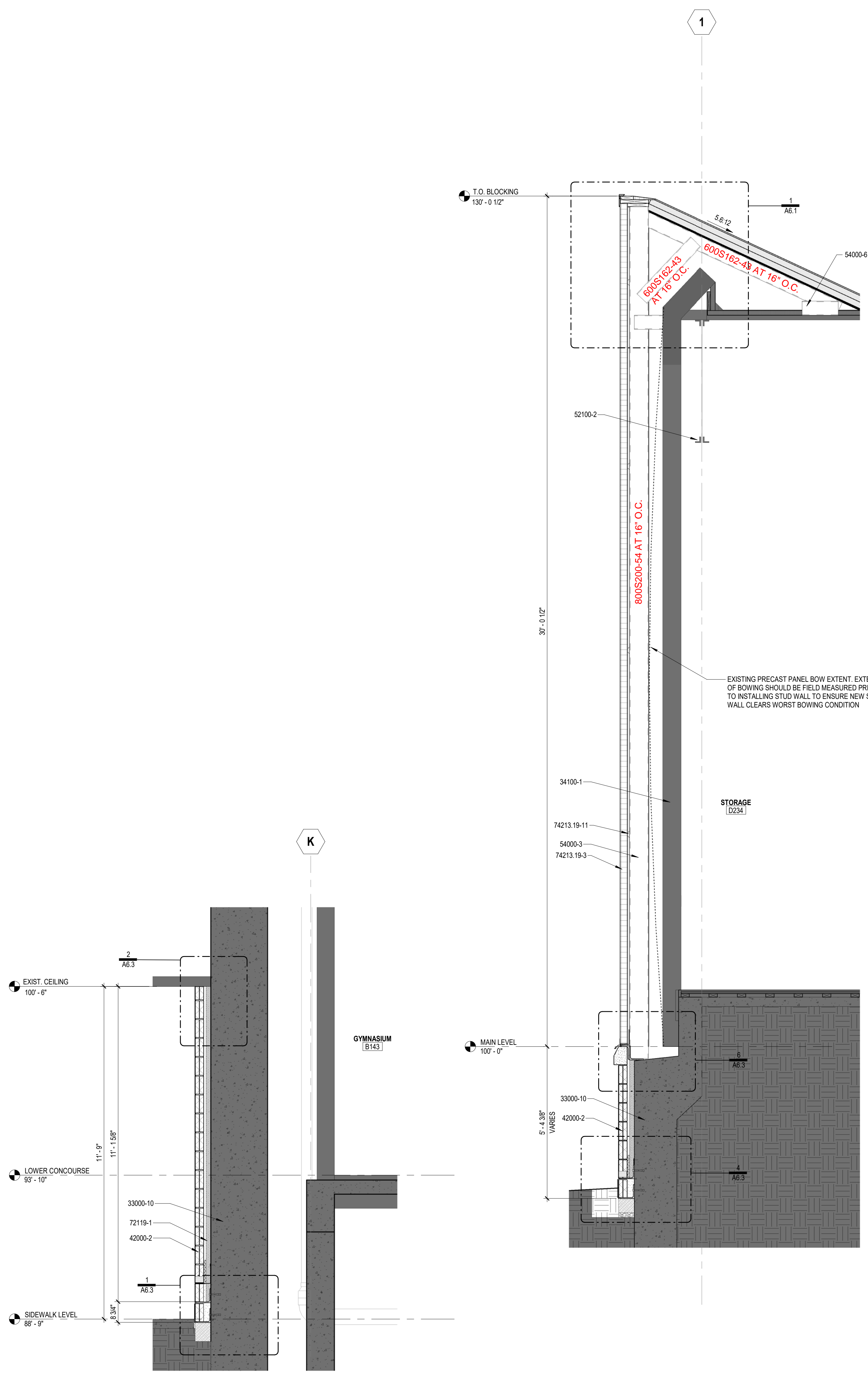
Respectfully submitted,



Jeremiah M. Hatfield, RA, LEED BD+C, Senior Architect
Design Collaborative, Inc.

REFERENCE ONLY - COLD FORMED STUDS

WALL SECTION KEYNOTES	
33000-10	EXISTING CONCRETE FOUNDATION TO REMAIN.
34100-1	EXISTING PRECAST STRUCTURAL CONCRETE WALL PANEL TO REMAIN.
34100-2	EXISTING PRECAST STRUCTURAL CONCRETE BUILDING SUPPORT SYSTEM TO REMAIN.
42000-2	4" SPLITFACE CMU VENEER TIED BACK TO SUPPORTING SUBSTRATE WITH ADJUSTABLE WIRE ANCHORS @ 32" O.C. EACH WAY. OFFSET 16" VERTICALLY. FASTEN THROUGH TO BACK-UP STRUCTURE.
42000-20	6" SPLITFACE SLOPED SILL. COLOR TO MATCH SPLITFACE BLOCK.
52100-2	EXISTING BAR JOIST TO REMAIN.
54000-2	6" METAL STUDS. SEE SPECIFICATIONS.
54000-3	6" METAL STUDS. SEE SPECIFICATIONS.
54000-6	LIGHT GAUGE CLIP ANGLE CONNECTION TO EXISTING LIGHT GAUGE METAL DECK WITH MIN. OF (4) #10 TEK SCREWS.
72119-1	2" SPRAY APPLIED CLOSED CELL POLYURETHANE FOAM INSULATION (SPUF)
74213.19-3	3" PREFINISHED VERTICAL INSULATED METAL PANEL SYSTEM (PANEL 1). BASIS OF DESIGN METL.SPAN. COLOR TO BE ASH GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-11	7/8" HAT CHANNEL PROVIDED BY MP CONTRACTOR. SPACE HAT CHANNEL AS RECOMMENDED BY MP MANUFACTURER PER THEIR WINDLOAD DESIGN CRITERIA.
75423-2	SINGLE PLY MEMBRANE FLASHING. RUN UP UNDER COPING AND DOWN FACE 2" MIN. AND ONTO ROOF MEMBRANE 4" MIN. SEE SPECIFICATIONS FOR ATTACHMENT METHOD.
77100-1	PREFINISHED METAL EDGE FASCIA. SNAP-ON OVER METAL CLEAT SECURED TO SUBSTRATE. INCLUDING EXPANSION CLOSURE AT EACH JOINT. REFER TO "SMACTA DETAIL 3.4 SERIES.
82216-4	2-1/2" LIGHT GA. METAL STUDS.
82216-5	3-5/8" LIGHT GA. METAL STUDS.
92900-2	5/8" TYPE "X" GYP. BD. PAINTED. SEE FINISH SCHEDULE.
92900-14	ALTERNATE #5. ON THE NORTH SIDE OF THE GYMNASIUM, BETWEEN COLUMNS AT PRECAST PANELS, PROVIDE METAL STUD AND GYP. BD. INFILL.



4 NORTH FACADE AT CONCOURSE
 SCALE: 1/2" = 1'-0"

3 TYP. EAST FACADE
 SCALE: 1/2" = 1'-0"

2 NORTH FACADE @ SIDEWALK
 SCALE: 1/2" = 1'-0"

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

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ISSUE DATE: 01/26/2024

REVISIONS

NO.	DATE	DESCRIPTION
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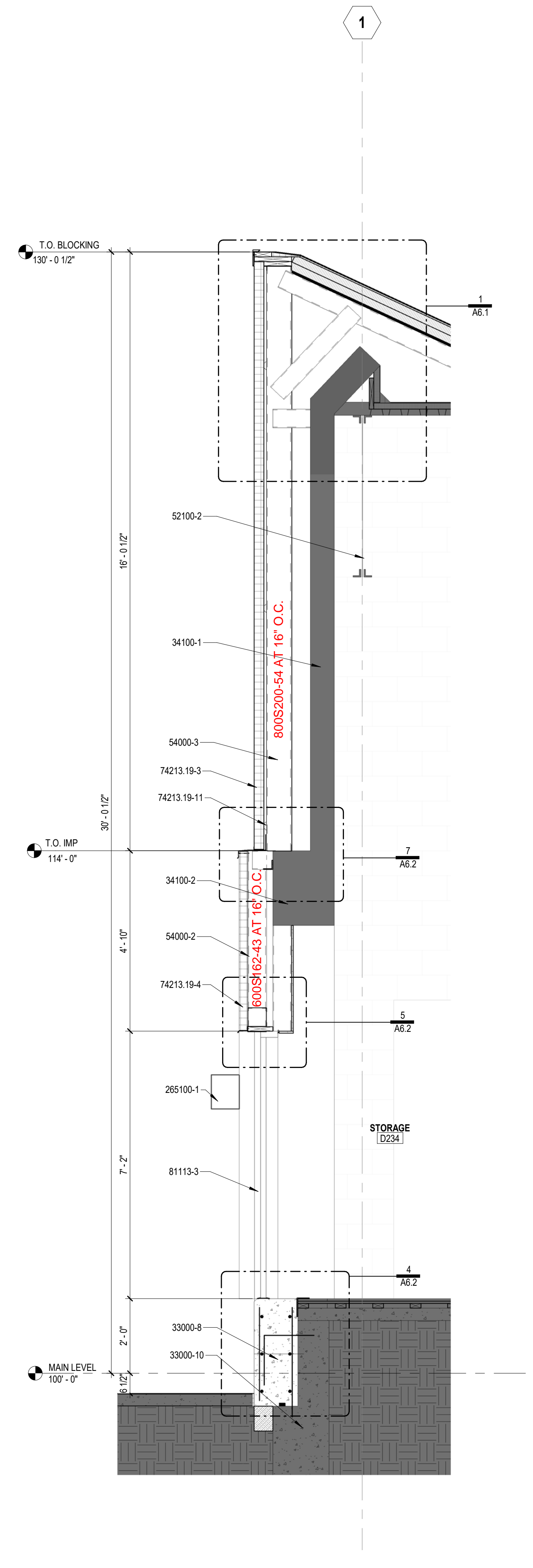
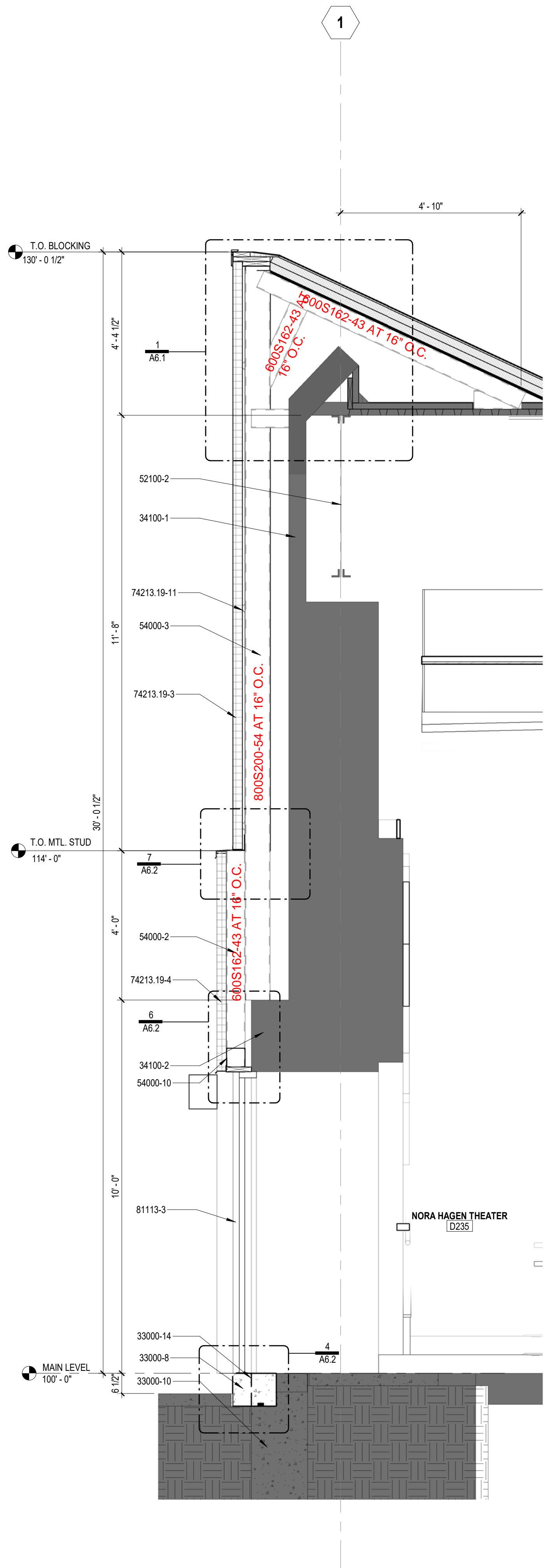
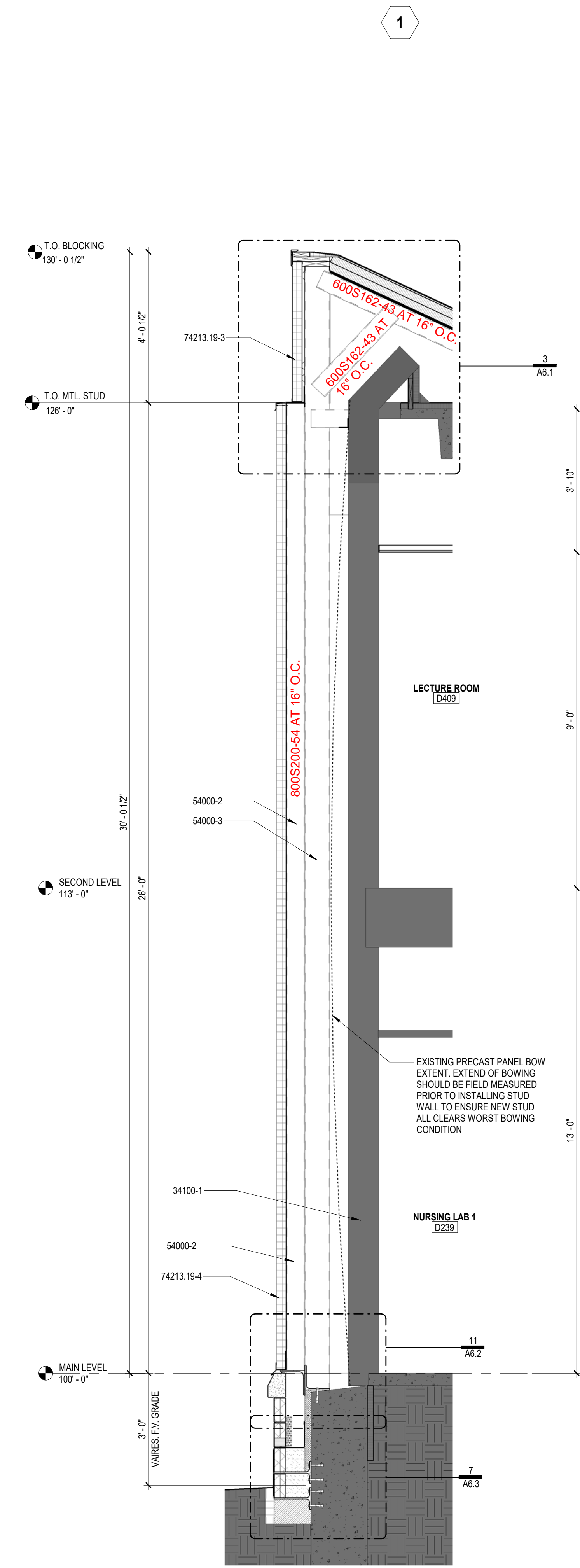
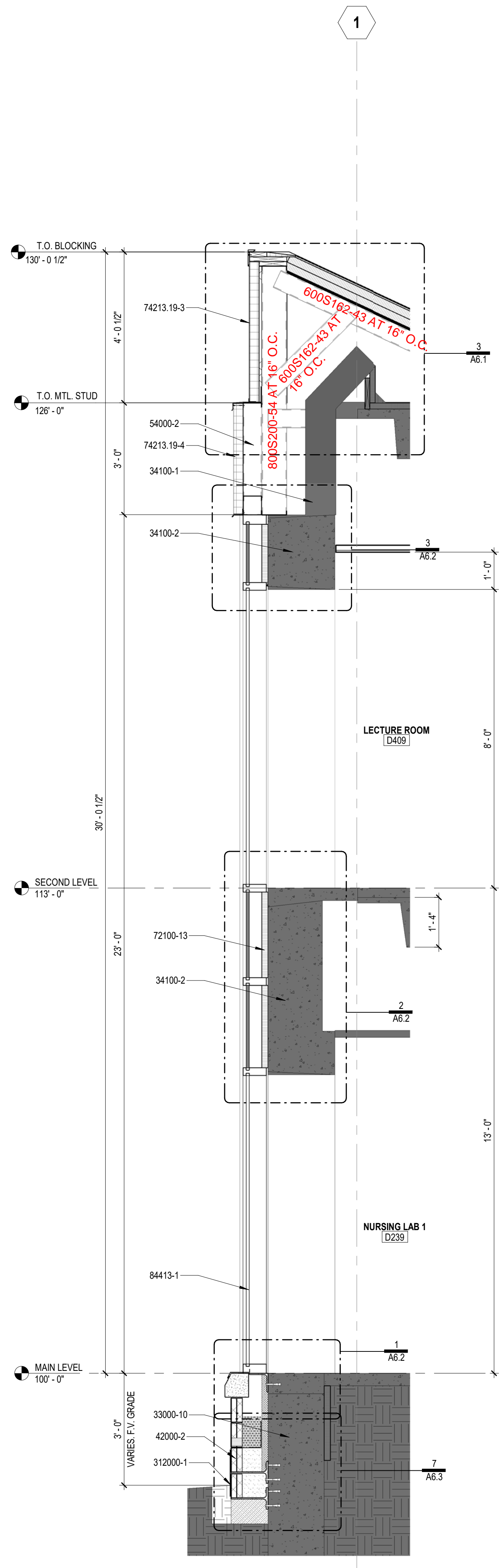
WALL SECTIONS

A5.1

1/24/2024 3:18:33 PM

REFERENCE ONLY - COLD FORMED STUDS

WALL SECTION KEYNOTES	
33000-8	CAST-IN-PLACE CONCRETE INFILL WITH #4 HORIZONTAL BARS AT 12" O.C. BOTH SIDES.
33000-10	EXISTING CONCRETE FOUNDATION TO REMAIN.
33000-14	EXTENT OF CONCRETE FOUNDATION AND EMBEDDED STEEL AND SIDEWALK TO BE REMOVED. PREPARE FOUNDATION TO RECEIVE CONCRETE INFILL.
34100-1	EXISTING PRECAST STRUCTURAL CONCRETE WALL PANEL TO REMAIN.
34100-2	EXISTING PRECAST STRUCTURAL CONCRETE BUILDING SUPPORT SYSTEM TO REMAIN.
42000-2	4" SPLITFACE CMU VENEER TIED BACK TO SUPPORTING SUBSTRATE WITH ADJUSTABLE WIRE ANCHORS @ 32" O.C. EACH WAY. OFFSET 16" VERTICALLY. FASTEN THROUGH TO BACK-UP STRUCTURE.
52100-2	EXISTING BAR JOIST TO REMAIN.
54000-2	6" METAL STUDS. SEE SPECIFICATIONS.
54000-3	8" METAL STUDS. SEE SPECIFICATIONS.
54000-10	COLD FRAMED STRUCTURAL BOX HEADER.
72100-13	1" MINERAL WOOL SPANDREL GLASS INSULATION (R=4.3) WITH A VAPOR RETARDING FOIL FACE. TAPE ALL PERIMETER JOINTS. MAINTAIN 3/4" MINIMUM BETWEEN #4 SURFACE OF GLASS AND BACKSIDE OF SPANDREL INSULATION BOARD. BOB: OWENS CORNING THERMAFIBER 40 (4 PCF).
74213.19-3	3" PREFINISHED VERTICAL INSULATED METAL PANEL SYSTEM (PANEL 1). BASIS OF DESIGN METL.SPAN. COLOR TO BE ASH GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-4	3" PREFINISHED HORIZONTAL INSULATED METAL PANEL SYSTEM (PANEL 2). BASIS OF DESIGN METL.SPAN. COLOR TO BE CHARCOAL GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-11	7/8" HAT CHANNEL PROVIDED BY IMP CONTRACTOR. SPACE HAT CHANNEL AS RECOMMENDED BY IMP MANUFACTURER PER THEIR WINDLOAD DESIGN CRITERIA.
81113-3	HOLLOW METAL DOOR. INSULATED. SEE SCHEDULE.
84413-1	THERMALLY BROKEN ALUMINUM CURTAINWALL SYSTEM. BASIS OF DESIGN - "WAWNEER 1600 WALL SYSTEM". SEE FRAME ELEVATIONS FOR GLASS TYPES.
265100-1	LIGHT FIXTURE. SEE ELECTRICAL.
312000-1	FINISHED GRADE. SLOPE AWAY FROM STRUCTURE. TYP. FIELD VERIFY EXISTING GRADES AROUND BUILDING. NEW GRADE AND SLOPE TO MATCH EXISTING.



4 TYP WINDOW WALL FACADE
 SCALE: 1/2" = 1'-0"

3 EAST FACADE @ PANEL 2
 SCALE: 1/2" = 1'-0"

2 EAST @ AUDITORIUM DOORS
 SCALE: 1/2" = 1'-0"

1 STAGE DOOR INFILL
 SCALE: 1/2" = 1'-0"

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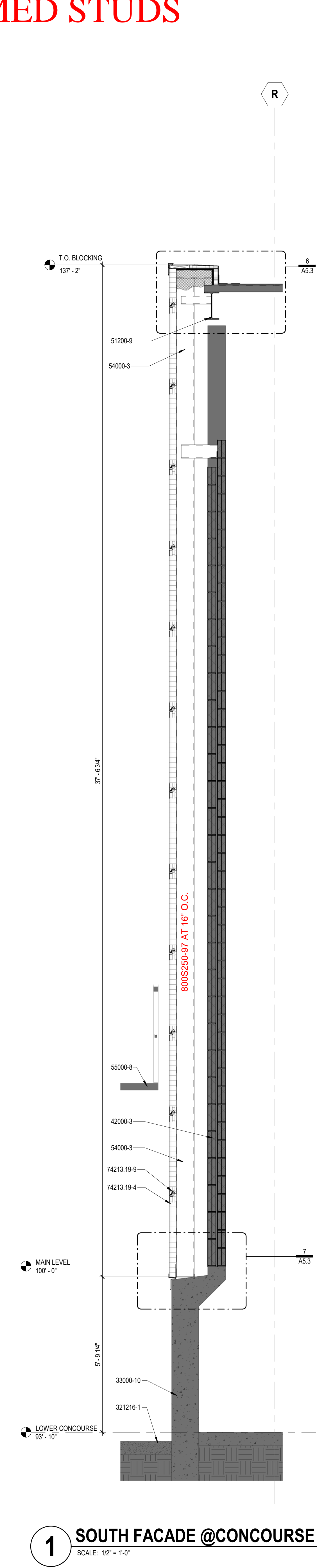
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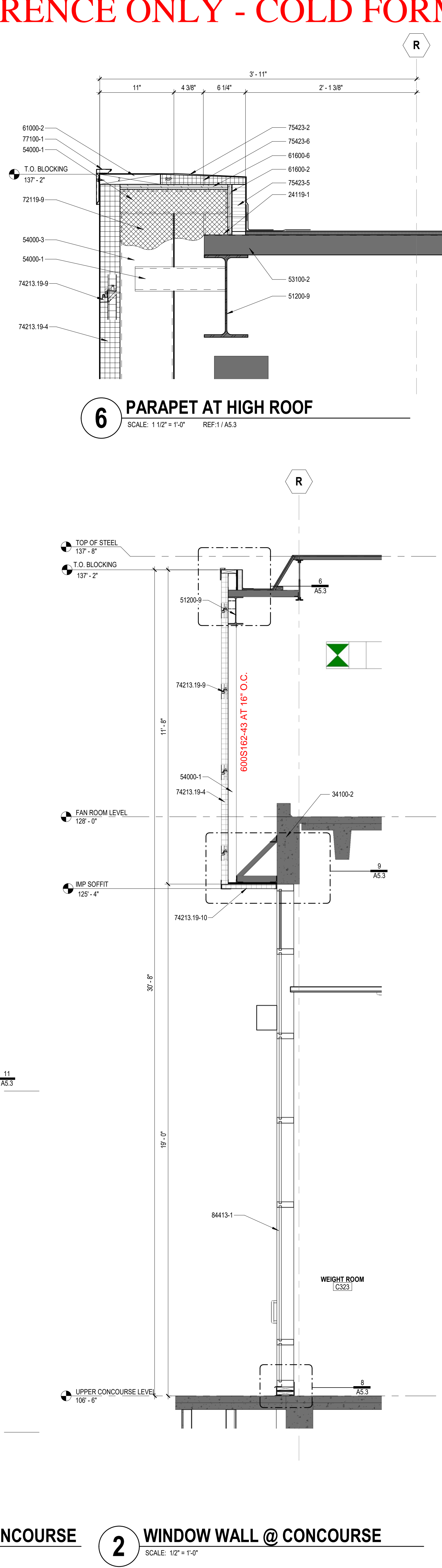
WALL SECTIONS

A5.3

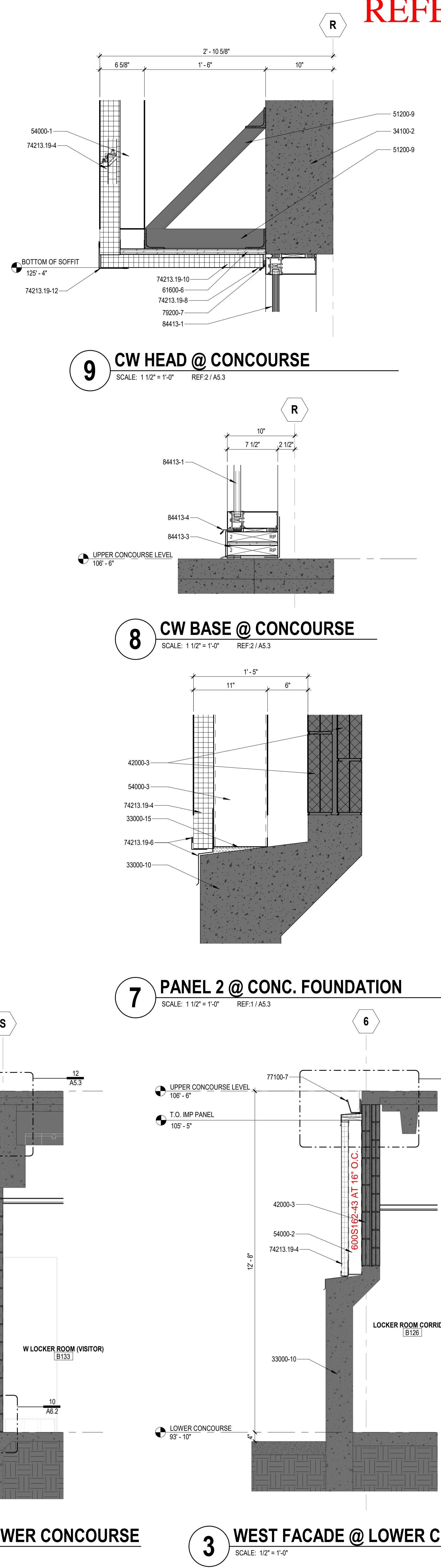
WALL SECTION KEYNOTES	
24119-1	CUT BACK EXISTING ROOFING MEMBRANE AND INSULATION TO MAKE ROOM FOR NEW PARAPET WALL.
33000-10	EXISTING CONCRETE FOUNDATION TO REMAIN.
33000-15	NON-SHRINK GROUT UNDER METAL STUD BASE TRACK. FORM TO PROVIDE LEVEL SURFACE FOR STUDS TO BEAR ON.
34100-2	EXISTING PRECAST STRUCTURAL CONCRETE BUILDING SUPPORT SYSTEM TO REMAIN.
34500-2	PRECAST COPING PROFILE WITH INTEGRAL CONTINUOUS DRIP.
42000-2	4" SPLITFACE CMU VENEER TIED BACK TO SUPPORTING SUBSTRATE WITH ADJUSTABLE WIRE ANCHORS @ 32" O.C. EACH WAY. OFFSET 16" VERTICALLY. FASTEN THROUGH TO BACK-UP STRUCTURE.
42000-3	EXISTING MASONRY WALL TO REMAIN.
42000-4	POLYPROPYLENE BRICK VENTS. FULL DEPTH OF MASONRY VENEER @ 24" O.C.
42000-5	26 GA. TYPE 304 STAINLESS STEEL DRIP PLATE. DRIP PLATE SET IN A FULL BED OF WATER CUT OFF MASTIC.
42000-6	GROUT AIR SPACE SOLID FROM BOTTOM OF FLASHING TO TOP OF MASONRY SUPPORT STEEL ANGLE.
42000-12	FULLY SUPPORTED THROUGH WALL FLASHING. RUN UP SUPPORTING SUBSTRATE 8" MIN. SECURE W/METAL TERM. BAR SECURED TO SUBSTRATE W/ GASKETED FASTENERS @ 16" O.C. PROVIDE CONTINUOUS SEALANT AT TOP OF TERM. BAR.
51200-6	16x6x5/16 GALVANIZED, WITH 1/2" DIA. HILTI KWIK BOLT TZ AT 12" O.C. WITH 2-1/2" EMBEDMENT INTO EXISTING CONCRETE.
51200-8	1/4"x6"x1/2" GALVANIZED BENT PLATE WITH 1/2" DIA. HILTI HAS-V-36 ROOFS AT 8" O.C. WITH HILTI H770 ADHESIVE.
51200-9	EXISTING STEEL FRAMING TO REMAIN.
53100-2	EXISTING STEEL DECKING TO REMAIN.
54000-1	3-5/8" METAL STUDS. SEE SPECIFICATIONS.
54000-2	6" METAL STUDS. SEE SPECIFICATIONS.
54000-3	8" METAL STUDS. SEE SPECIFICATIONS.
55000-8	EXISTING METAL EMERGENCY ESCAPE CATWALK TO REMAIN. CONTRACTOR TO REMOVE CATWALK IF NECESSARY TO INSTALL IMP PANELS.
61000-2	2x WOOD BLOCKING, TREATED. SECURE TO SUBSTRATE WITH STAINLESS STEEL FASTENERS.
61600-2	5/8" PLYWOOD SHEATHING, EXTERIOR GRADE.
61600-6	3/4" FIRE TREATED PLYWOOD SHEATHING.
72100-14	TAPERED INSULATION WITH POSITIVE SLOPE, ANCHORED TO TOP OF BLOCKING.
72119-1	2" SPRAY APPLIED CLOSED CELL POLYURETHANE FOAM INSULATION (SPUF)
72119-9	SPRAY APPLIED CLOSED CELL POLYURETHANE FOAM INSULATION AT - R-38 MIN.
74213.19-4	3" PREFINISHED HORIZONTAL INSULATED METAL PANEL SYSTEM (PANEL 2) BASIS OF DESIGN METL.SPAN. COLOR TO BE CHARCOAL GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-6	PREFINISHED METAL SILL FLASHING TO MATCH METAL PANEL SYSTEM.
74213.19-8	PREFINISHED METAL CLOSURE PIECE TO MATCH METAL PANEL SYSTEM.
74213.19-9	HORIZONTAL PANEL JOINT. FOLLOW MANUFACTURERS STANDARD DETAILS FOR JOINTS AND SEALANT.
74213.19-10	2" PREFINISHED INSULATED METAL SOFFIT PANELS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-12	BRAKE METAL CORNER TRIM TO MATCH METAL WALL PANEL.
74213.19-13	PREFINISHED METAL SILL FLASHING TO MATCH METAL PANEL SYSTEM. RUN VERTICAL LEG UP BEHIND NEW GUTTER AND EXISTING ROOF FLASHING. SECURE HEIMED EDGE TO PANEL, AND APPLY WATER CUT OFF MASTIC BETWEEN FLASHING AND PANEL.
74213.19-14	PREFINISHED METAL SILL FLASHING TO MATCH METAL PANEL SYSTEM. RUN VERTICAL LEG UP BEHIND EXISTING ROOF FLASHING. SECURE HEIMED EDGE TO PANEL, AND APPLY WATER CUT OFF MASTIC BETWEEN FLASHING AND PANEL.
75423-2	SINGLE PLY MEMBRANE FLASHING. RUN UP UNDER COPINGS AND DOWN FACE 2" MIN. AND ONTO ROOF MEMBRANE 4" MIN. SEE SPECIFICATIONS FOR ATTACHMENT METHOD.
75423-5	1-1/2" POLYISOCYANURATE INSULATION BOARD (R-9) FOR ALL INSIDE FACE PARAPET WALL CONDITIONS ABOVE ROOF LINE. ADHERE POLYISO BOARD TO EXTERIOR GRADE SHEATHING. TEMPORARILY SECURE WITH FASTENERS.
75423-6	POLYISOCYANURATE TAPERED EDGE STRIP. ADHERE TAPERED EDGE STRIP TO SUBSTRATE FRAMING.
77100-1	PREFINISHED METAL EDGE FASCIA. SNAP-ON OVER METAL CLEAT SECURED TO SUBSTRATE, INCLUDING EXPANSION CLOSURE AT EACH JOINT. REFER TO "SMACNA DETAIL 3.4 SERIES.
77100-7	PREFINISHED EXTERIOR HUNG METAL GUTTER. TO MATCH METAL PANEL. W/ SUPPORT BRACKETS & ACCESSORIES. SLOPE 1/8" MIN. FASTEN NEW GUTTER UNDER EXISTING ROOF FLASHING. TIE INTO EXISTING STORM LOCATION. DOWNSPOUT COLOR TO MATCH GUTTER.
77100-10	EXISTING ROOF FLASHING TO REMAIN. FLASHING TO BE PAINTED WITH HIGH PERFORMANCE PAINT TO MATCH METAL PANEL SYSTEM.
77100-11	PREFINISHED METAL SILL FLASHING TO MATCH METAL PANEL SYSTEM. RUN VERTICAL LEG UP BEHIND EXISTING ROOF FLASHING.
78200-7	BACKER ROD AND SEALANT.
84413-1	THERMALLY BROKEN ALUMINUM CURTAIN WALL SYSTEM BASIS OF DESIGN - "KAWNEER 1600 WALL SYSTEM". SEE FRAME ELEVATIONS FOR GLASS TYPES.
84413-3	BUILD UP CURB FOR BASE OF CURTAIN WALL. SET BUILT UP 2x TREATED LUMBER IN BED OF WATER CUT OFF MASTIC. WRAP CURB IN 0.557" CONTINUOUS ALUMINUM SHEET METAL TO MATCH CURTAIN WALL. RUN INTERIOR VERTICAL LEG UP AND ADHERE TO BASE W/MULLION.
84413-4	0.557" CONTINUOUS ALUMINUM WINDOW SILL TRIM FLASHING WITH HEIMED EDGE. TURN VERTICAL LEG TRIM UP BEHIND CURTAIN WALL PRESSURE PLATE. SEAL ALL LAP UNITS WATER TIGHT.
321216-1	EXISTING ASPHALT PAVING TO REMAIN.



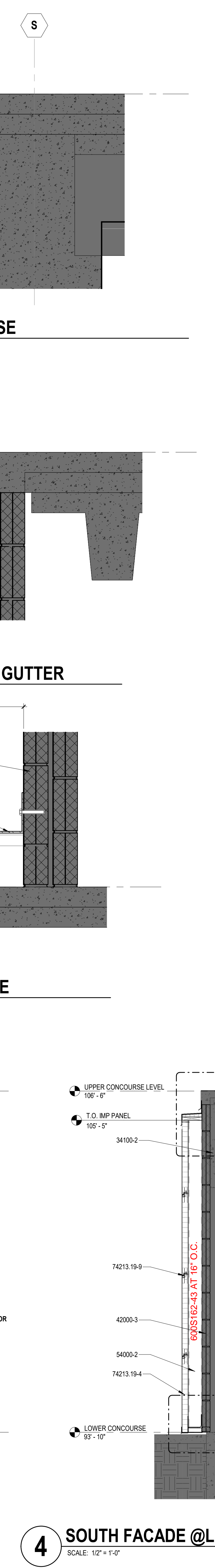
1 SOUTH FACADE @ CONOURSE
 SCALE: 1/2" = 1'-0"



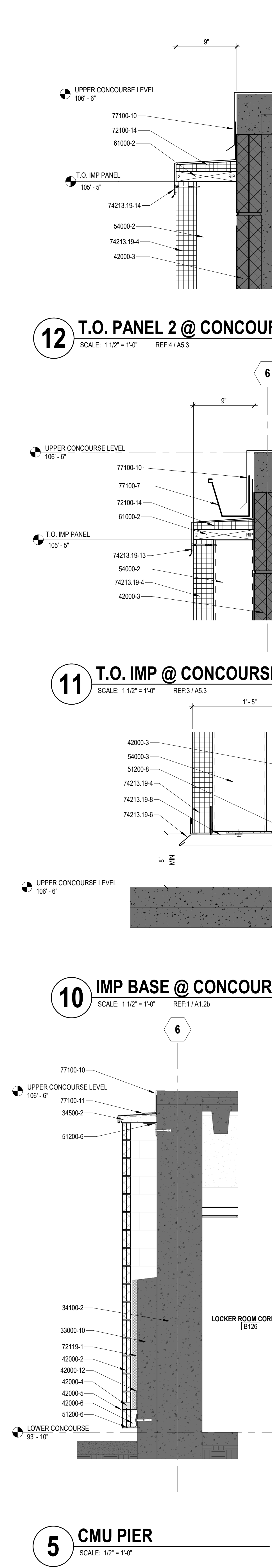
2 WINDOW WALL @ CONOURSE
 SCALE: 1/2" = 1'-0"



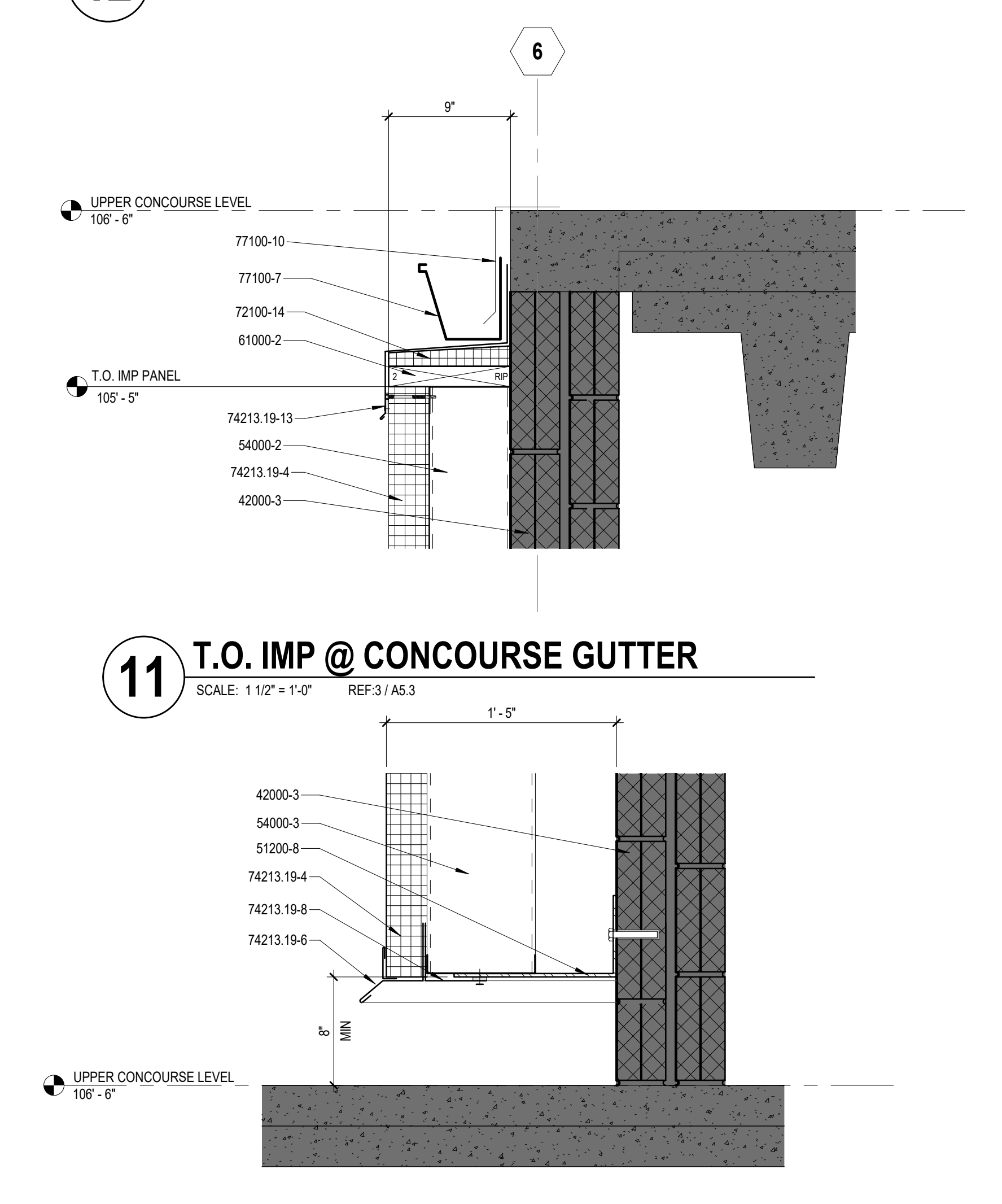
3 WEST FACADE @ LOWER CONCOURSE
 SCALE: 1/2" = 1'-0"



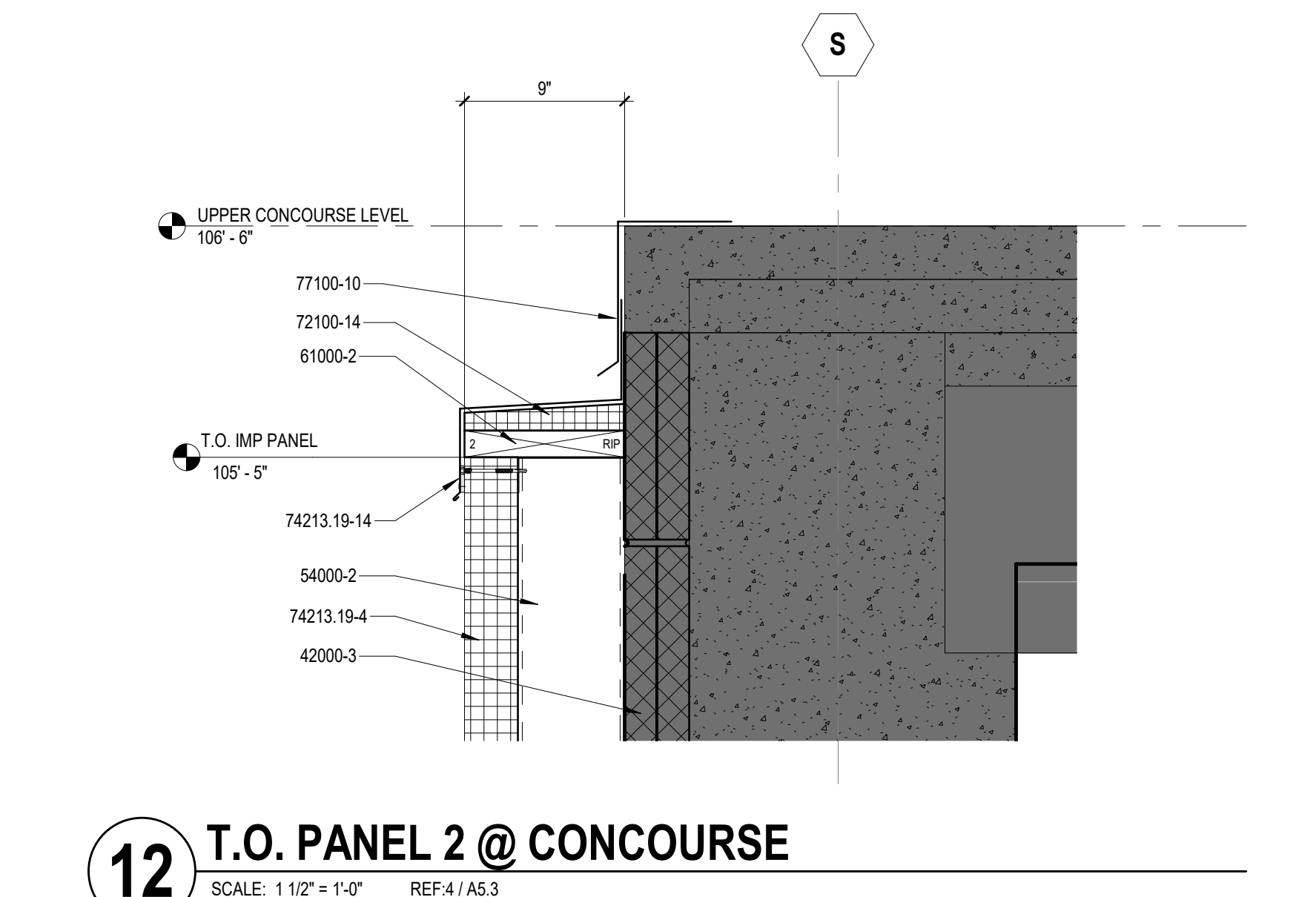
4 SOUTH FACADE @ LOWER CONCOURSE
 SCALE: 1/2" = 1'-0"



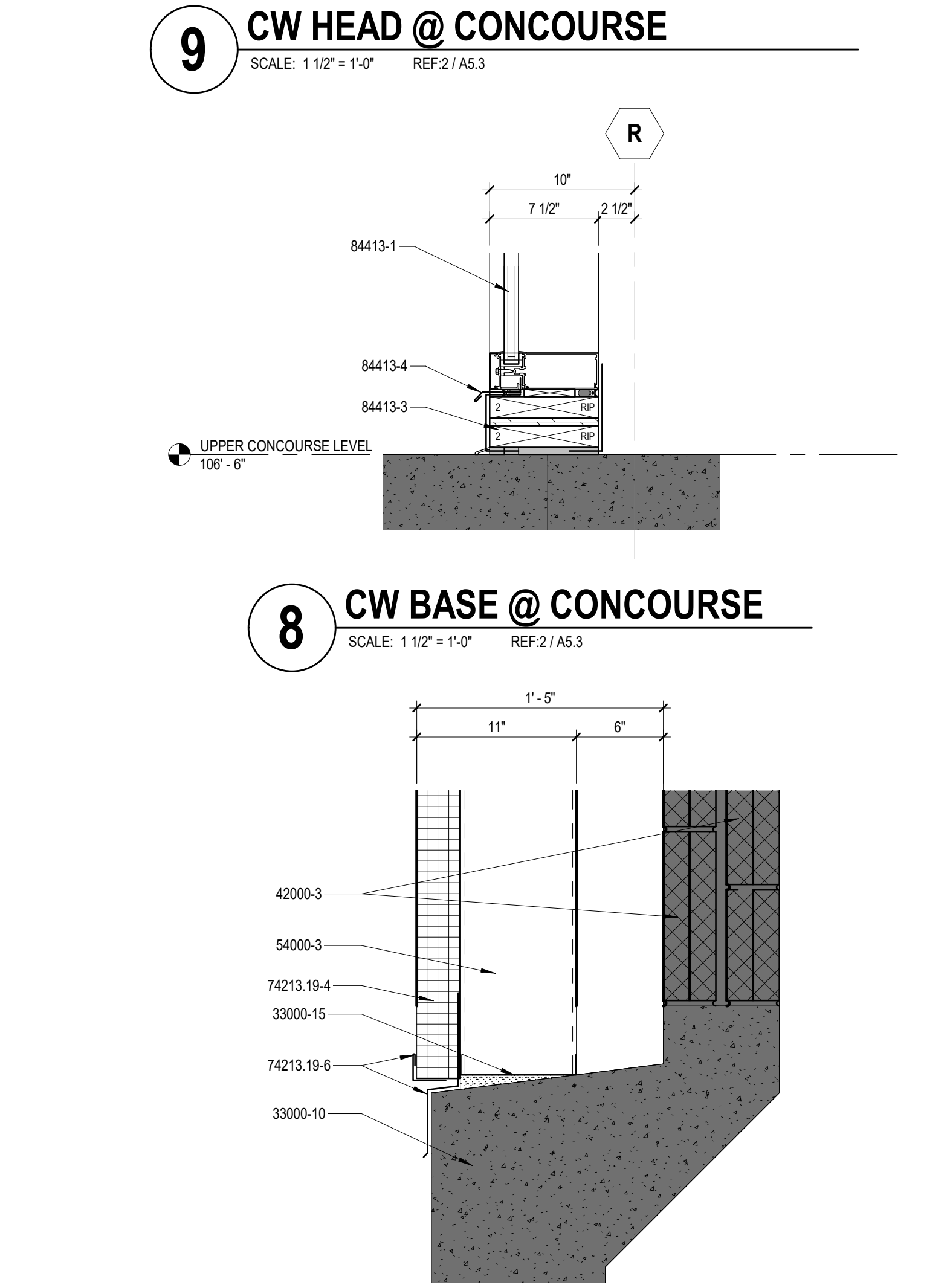
5 CMU PIER
 SCALE: 1/2" = 1'-0"



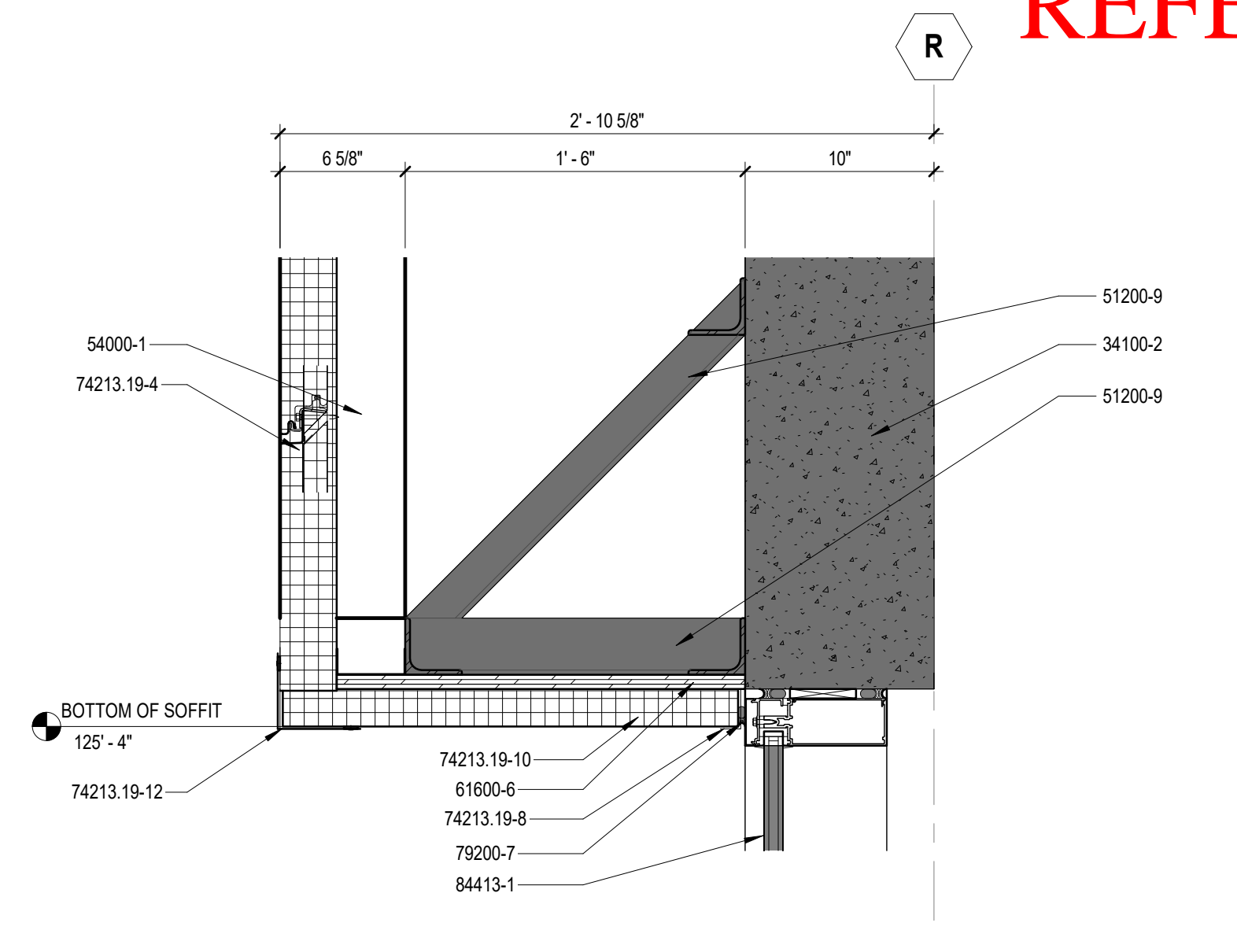
11 T.O. IMP @ CONCOURSE GUTTER
 SCALE: 1 1/2" = 1'-0" REF: 3 / A5.3



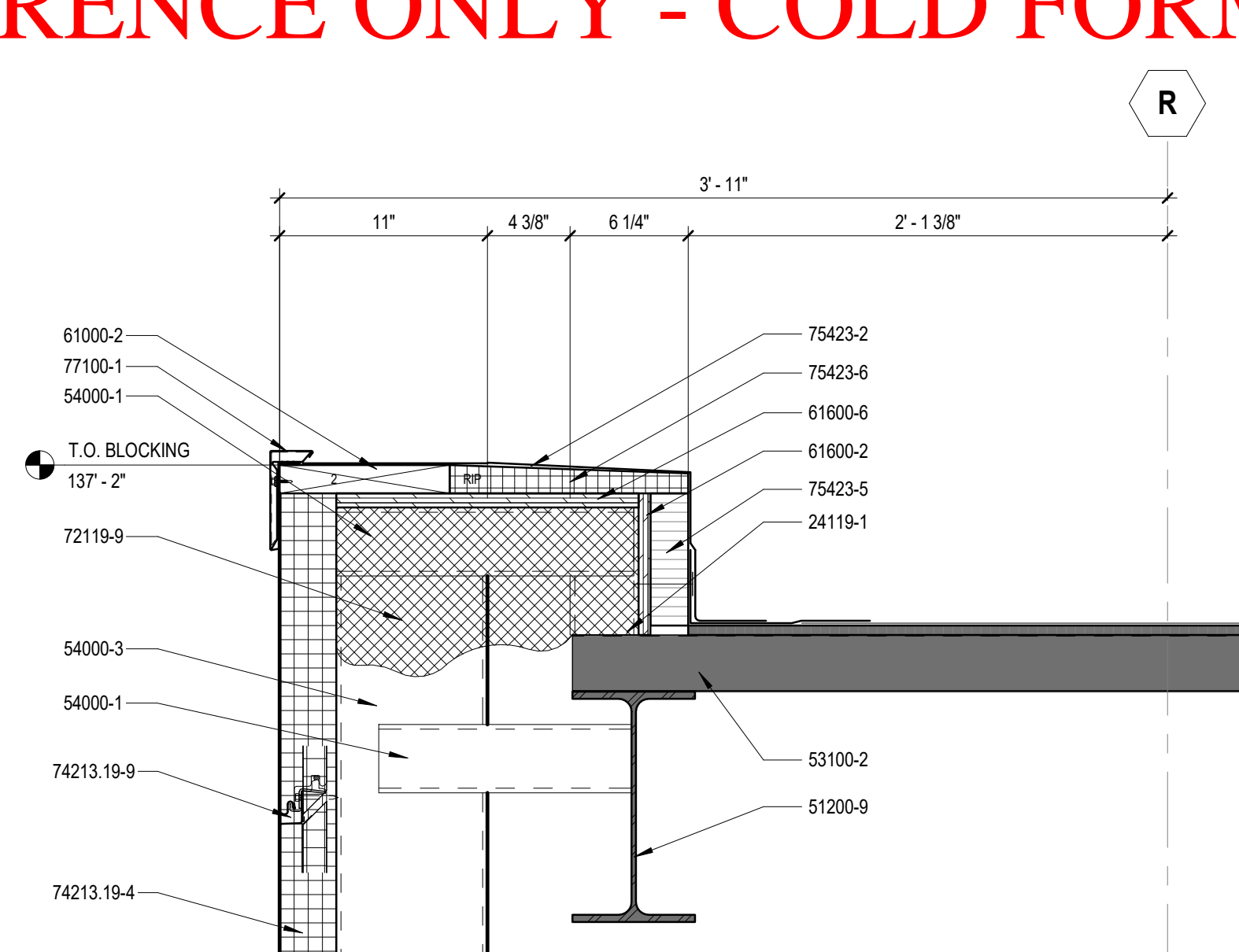
12 T.O. PANEL 2 @ CONCOURSE
 SCALE: 1 1/2" = 1'-0" REF: 4 / A5.3



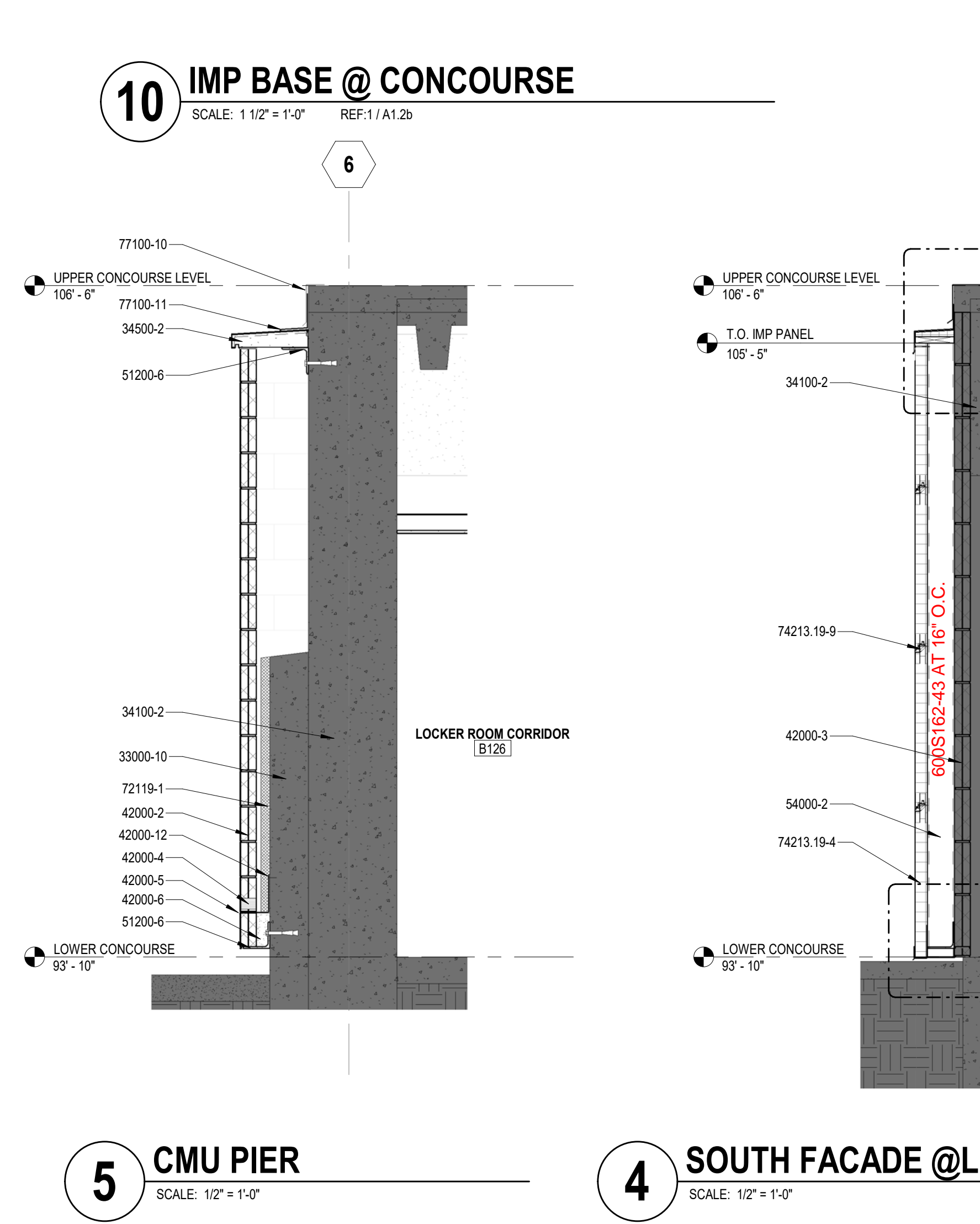
7 PANEL 2 @ CONC. FOUNDATION
 SCALE: 1 1/2" = 1'-0" REF: 11 / A5.3



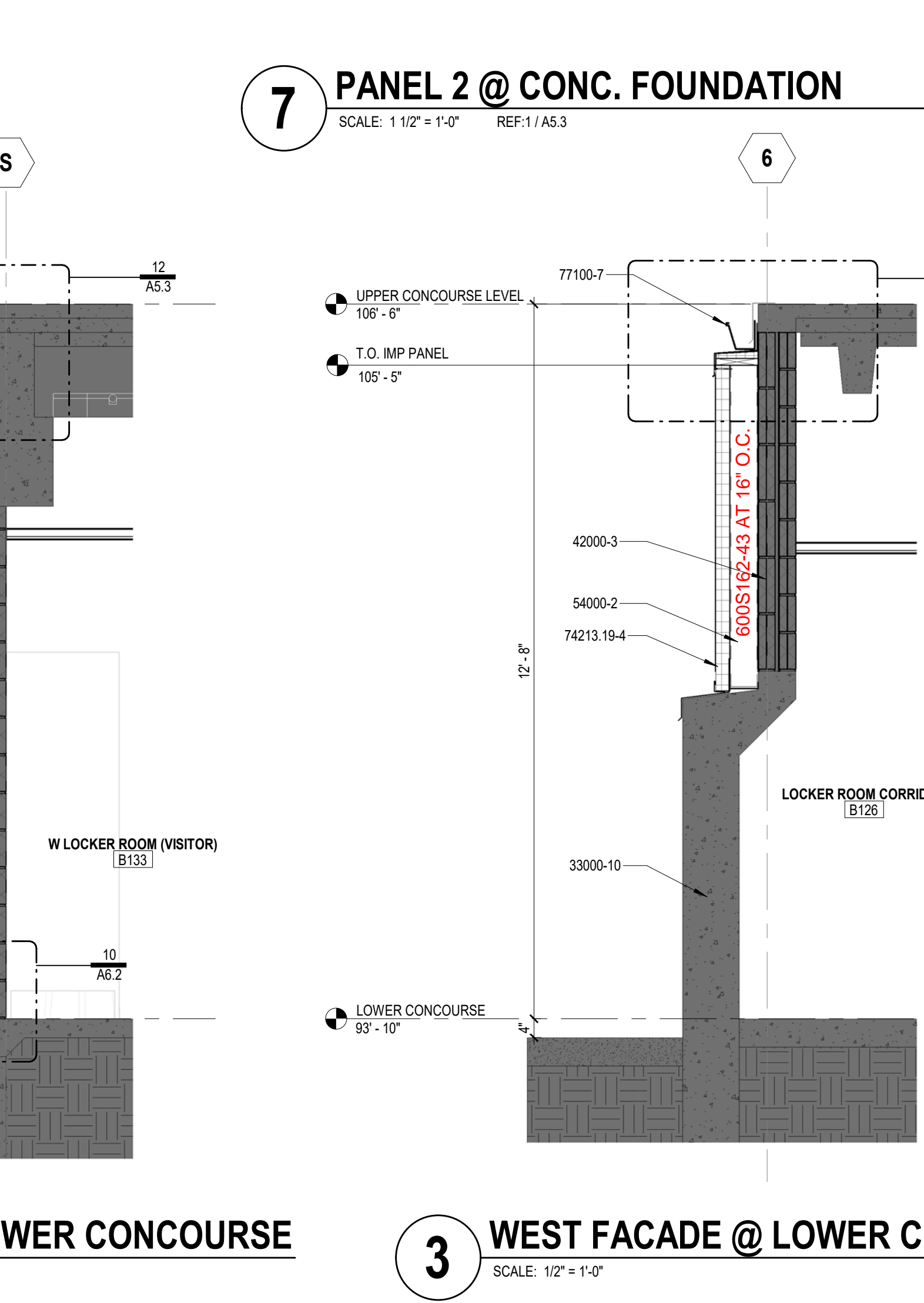
9 CW HEAD @ CONCOURSE
 SCALE: 1 1/2" = 1'-0" REF: 2 / A5.3



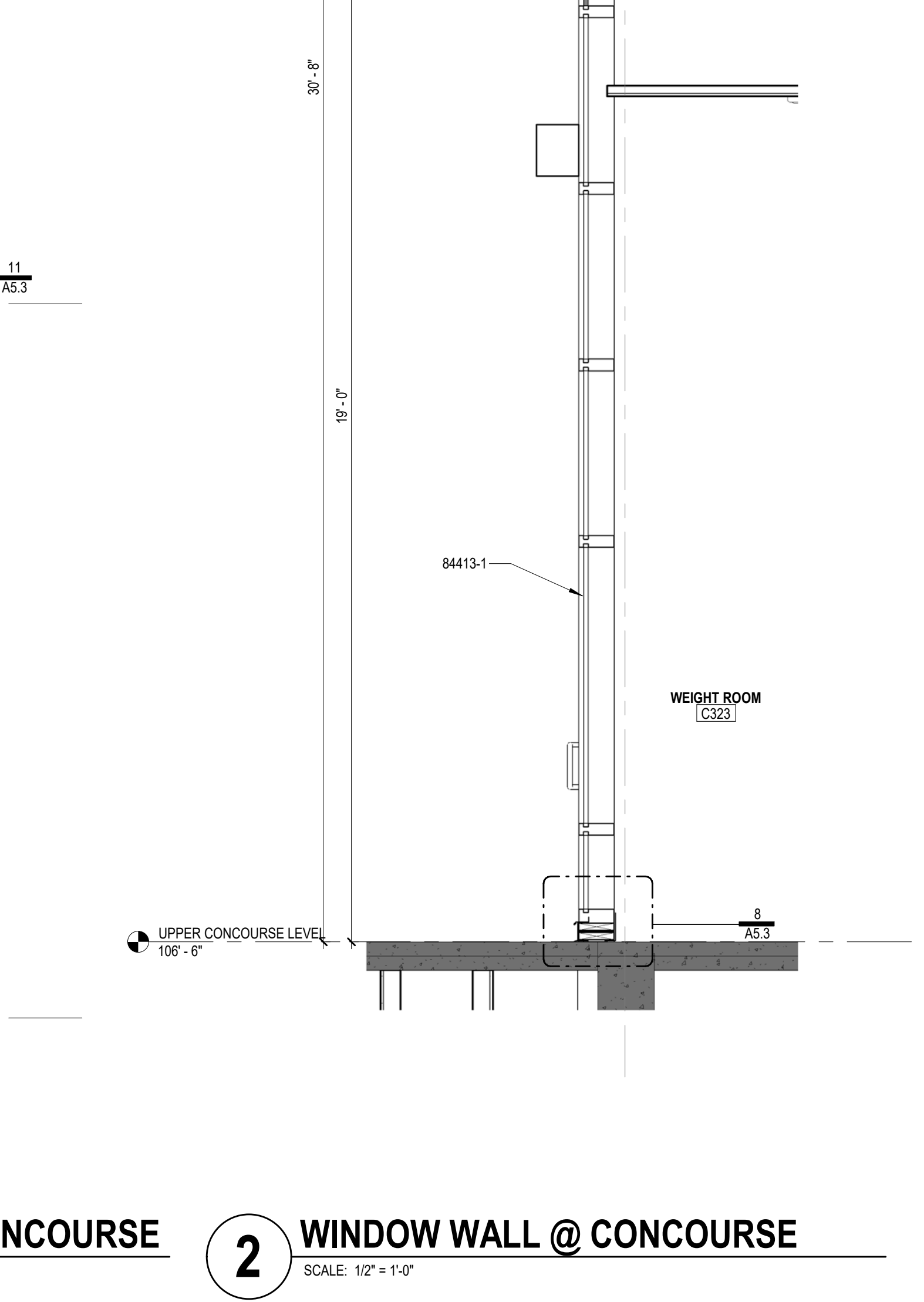
6 PARAPET AT HIGH ROOF
 SCALE: 1 1/2" = 1'-0" REF: 1 / A5.3



10 IMP BASE @ CONCOURSE
 SCALE: 1 1/2" = 1'-0" REF: 1 / A1.2b



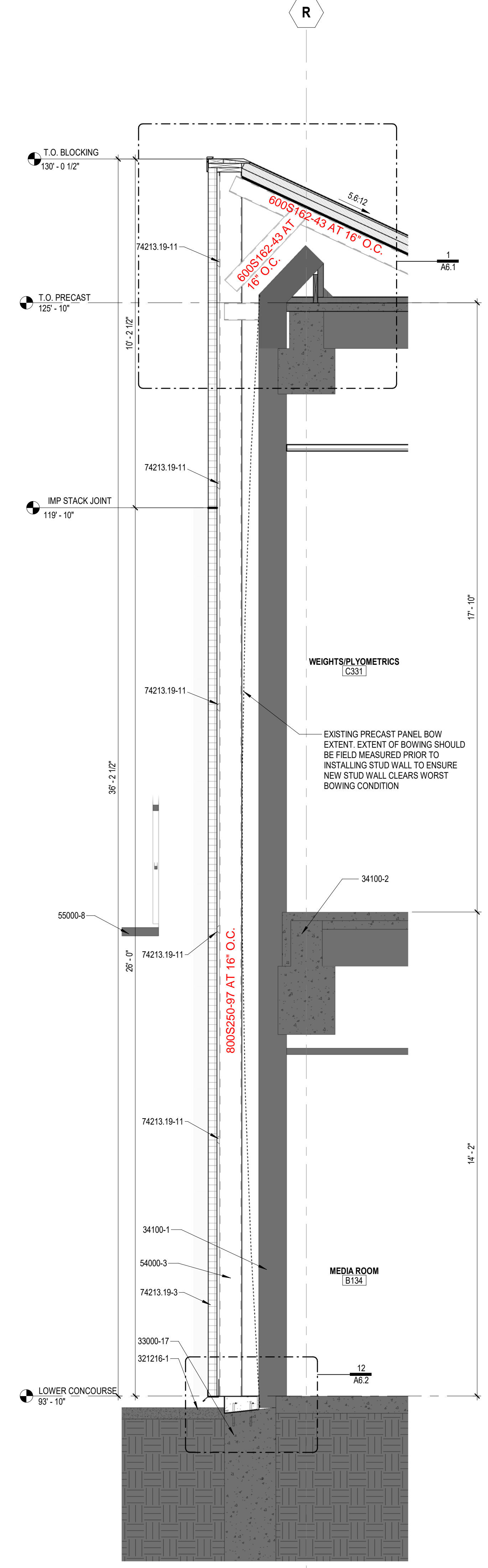
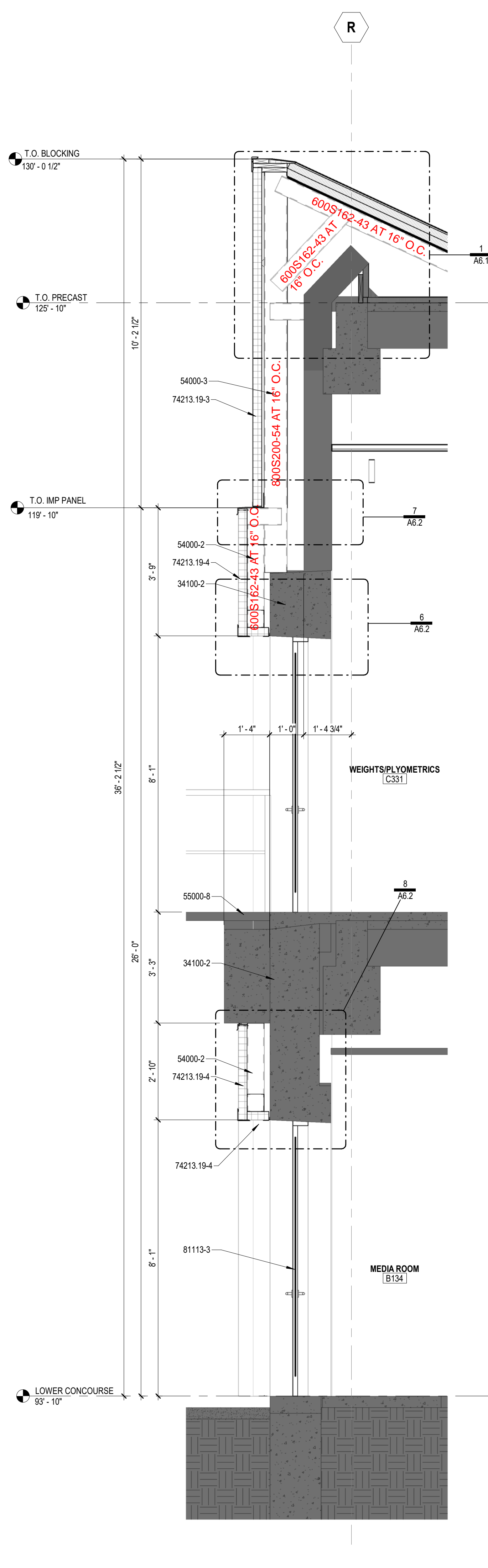
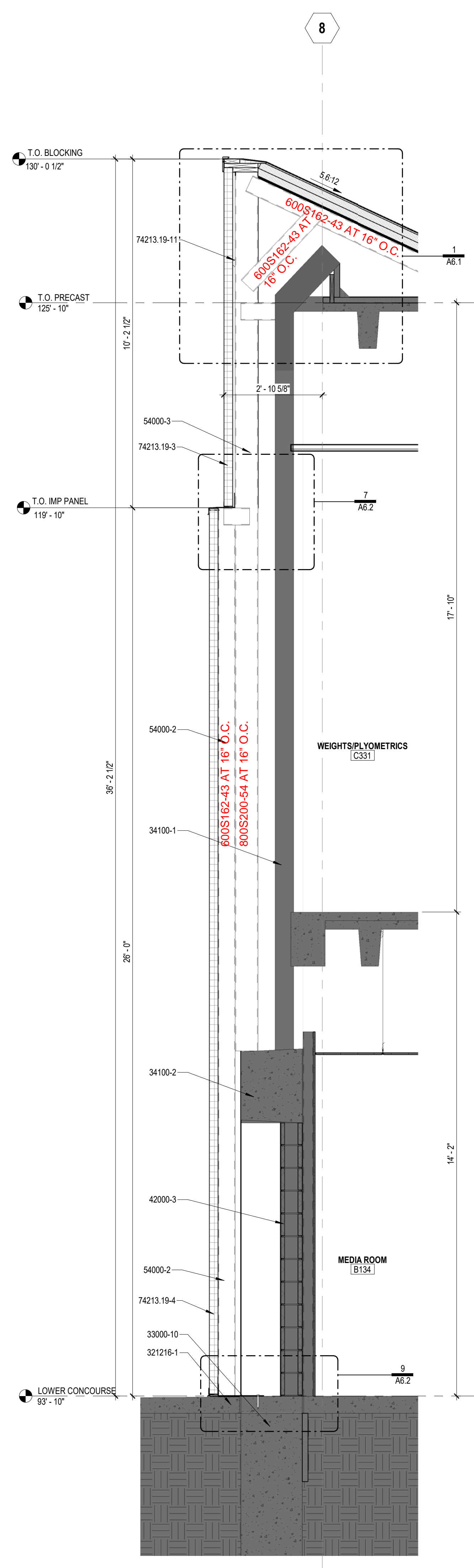
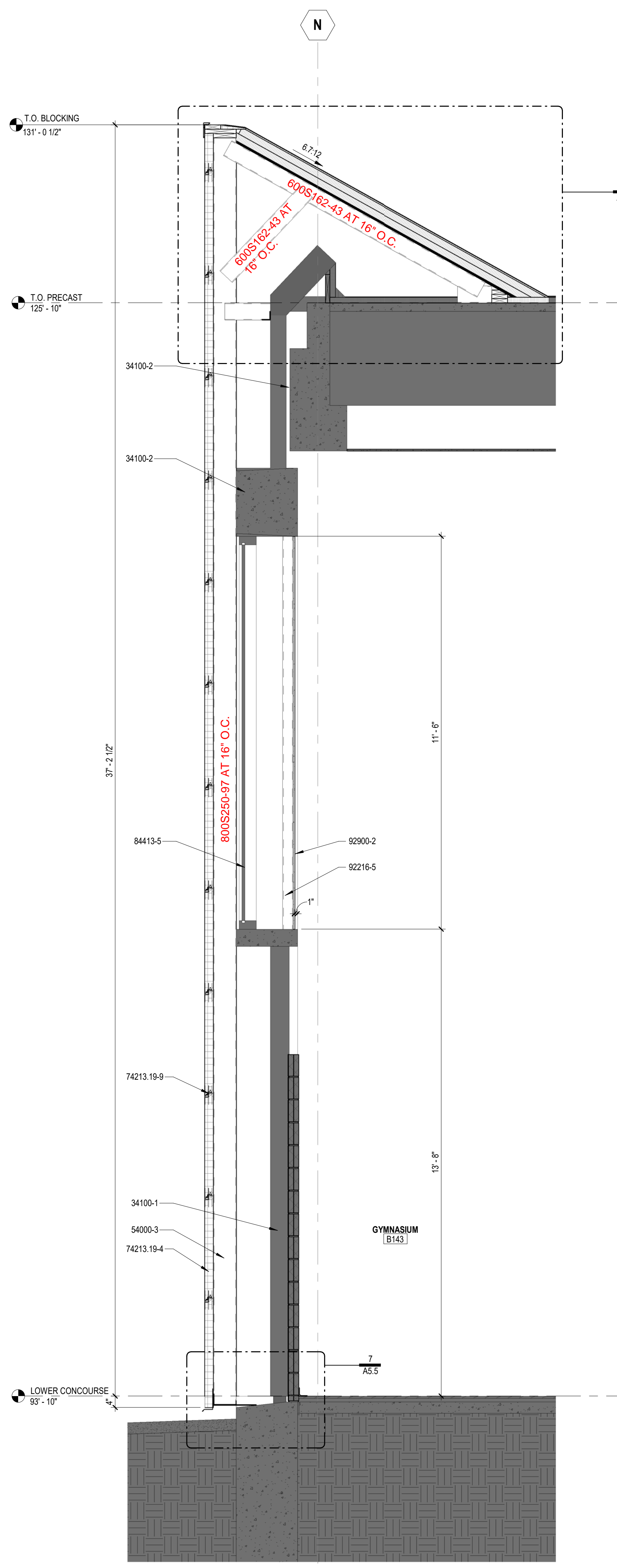
8 CW BASE @ CONCOURSE
 SCALE: 1 1/2" = 1'-0" REF: 2 / A5.3



3 WEST FACADE @ LOWER CONCOURSE
 SCALE: 1/2" = 1'-0"

REFERENCE ONLY - COLD FORMED STUDS

WALL SECTION KEYNOTES	
33000-10	EXISTING CONCRETE FOUNDATION TO REMAIN.
33000-17	EXISTING CONCRETE FOUNDATION WALL. FIELD VERIFY LOCATIONS REQUIRING EPOXY CRACK REPAIR.
34100-1	EXISTING PRECAST STRUCTURAL CONCRETE WALL PANEL TO REMAIN.
34100-2	EXISTING PRECAST STRUCTURAL CONCRETE BUILDING SUPPORT SYSTEM TO REMAIN.
42000-3	EXISTING MASONRY WALL TO REMAIN.
54000-2	6" METAL STUDS. SEE SPECIFICATIONS.
54000-3	8" METAL STUDS. SEE SPECIFICATIONS.
55000-6	EXISTING METAL EMERGENCY ESCAPE CATWALK TO REMAIN. CONTRACTOR TO REMOVE CATWALK IF NECESSARY TO INSTALL IMP PANELS.
74213-19-3	3" PREFINISHED VERTICAL INSULATED METAL PANEL SYSTEM (PANEL 1). BASIS OF DESIGN METL-SPAN. COLOR TO BE ASH GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213-19-4	3" PREFINISHED HORIZONTAL INSULATED METAL PANEL SYSTEM (PANEL 2). BASIS OF DESIGN METL-SPAN. COLOR TO BE CHARCOAL GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213-19-9	HORIZONTAL PANEL JOINT. FOLLOW MANUFACTURERS STANDARD DETAILS FOR JOINTS AND SEALANT.
74213-19-11	7/8" HAT CHANNEL PROVIDED BY IMP CONTRACTOR. SPACE HAT CHANNEL AS RECOMMENDED BY IMP MANUFACTURER PER THEIR WINDOWLOAD DESIGN CRITERIA.
81113-3	HOLLOW METAL DOOR. INSULATED. SEE SCHEDULE.
84413-5	EXISTING CURTAIN WALL SYSTEM TO REMAIN.
92216-5	3-5/8" LIGHT GA. METAL STUDS.
92900-2	5/8" TYPE "X" GYP. BD. PAINTED. SEE FINISH SCHEDULE.
321216-1	EXISTING ASPHALT PAVING TO REMAIN.



4 SOUTH GYM WALL
 SCALE: 1/2" = 1'-0"

3 OVERHEAD DOOR INFILL
 SCALE: 1/2" = 1'-0"

2 SOUTH @ EMERGENCY EXIT DOORS
 SCALE: 1/2" = 1'-0"

1 SOUTH FACADE @ PANEL 1
 SCALE: 1/2" = 1'-0"

RENOVATIONS TO B & D HALLS

Glen Oaks Community College

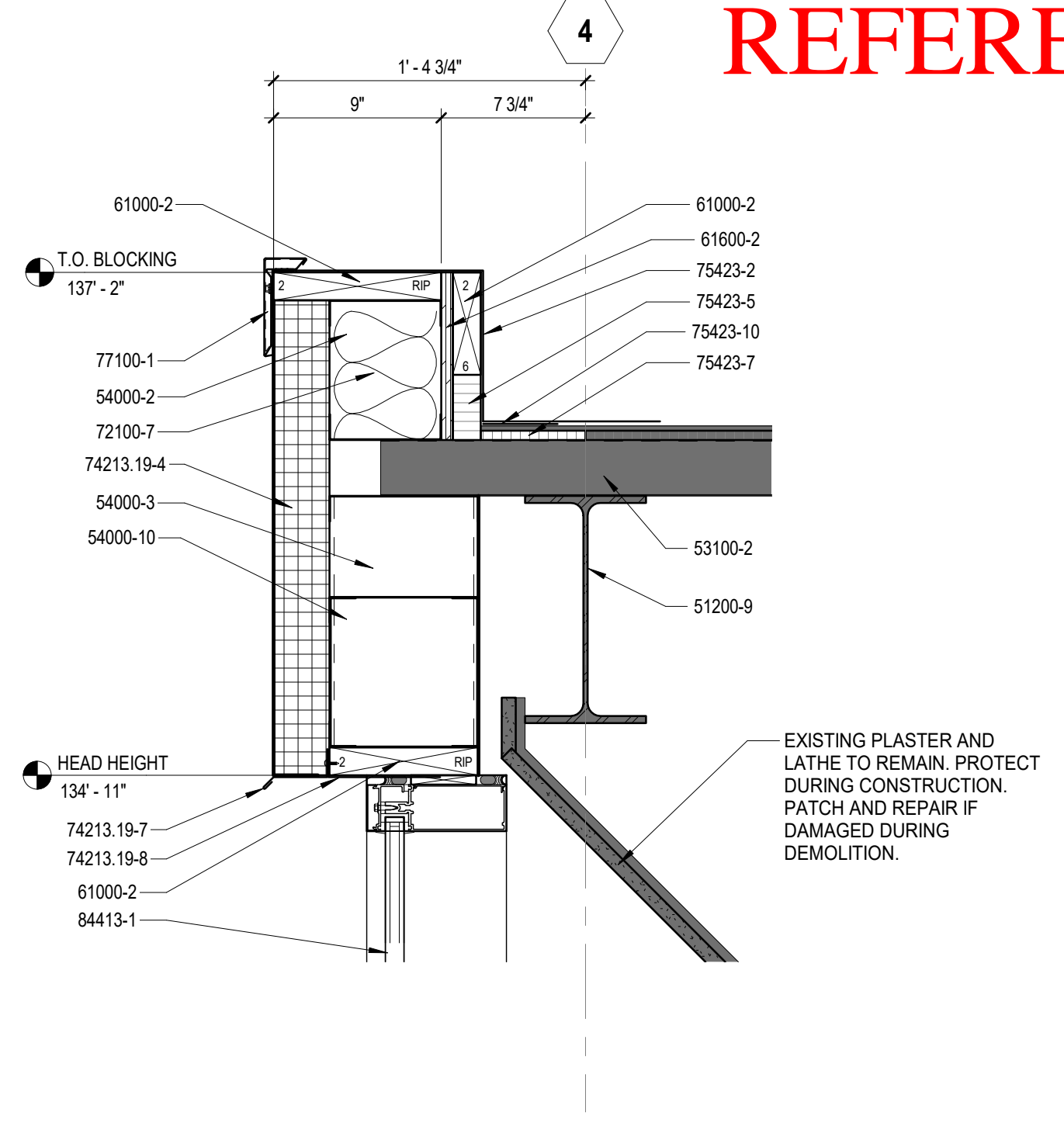
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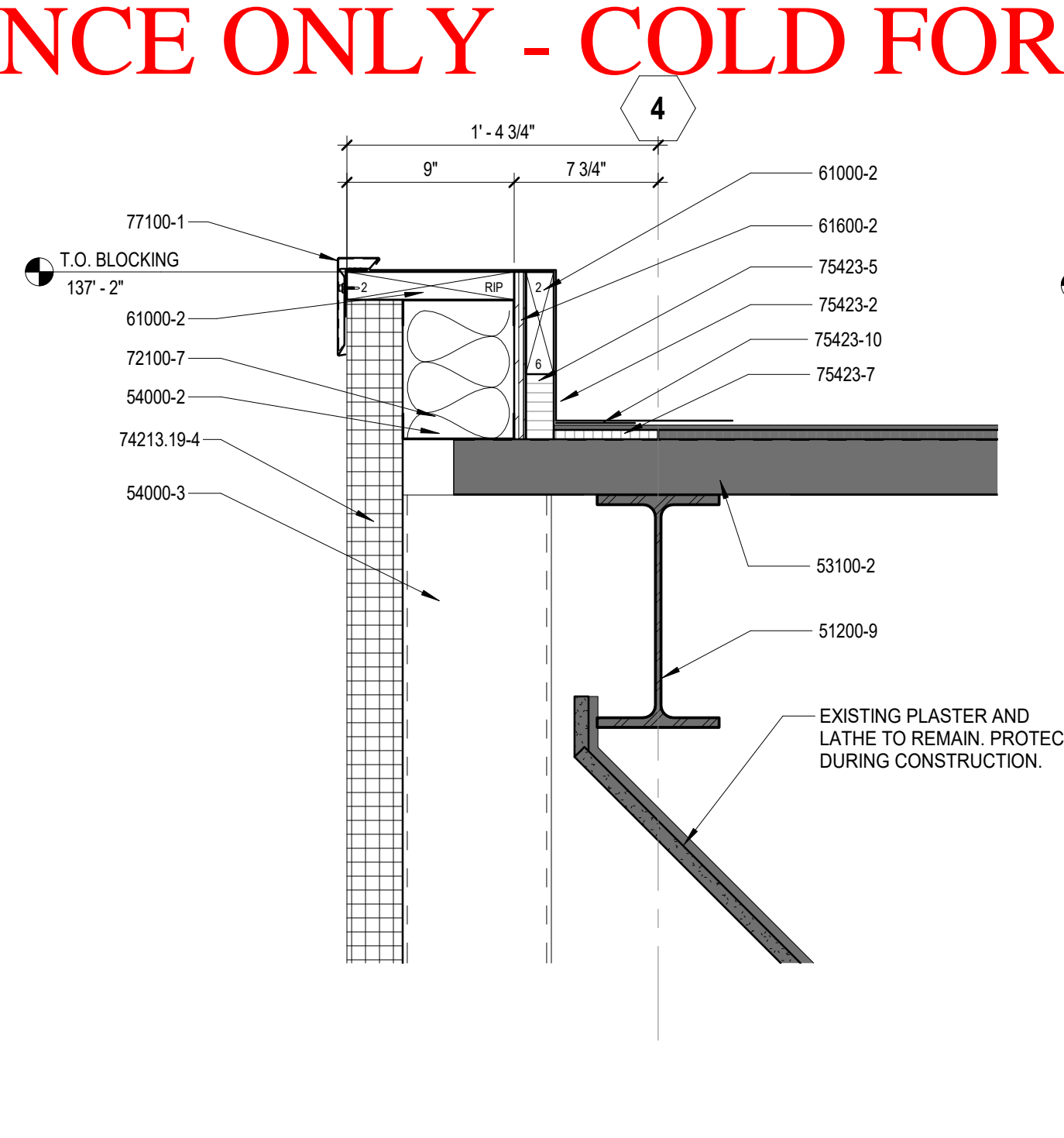
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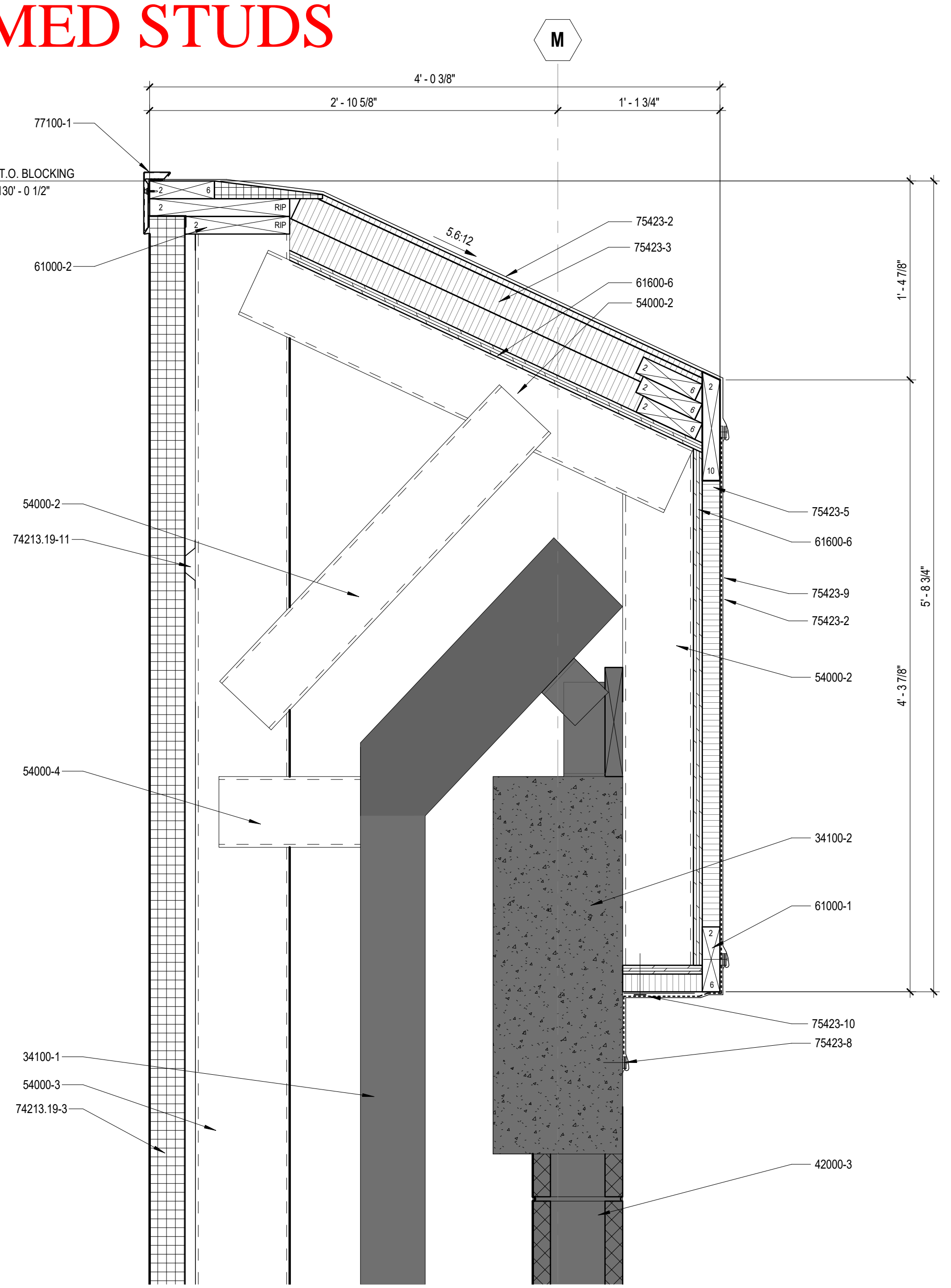
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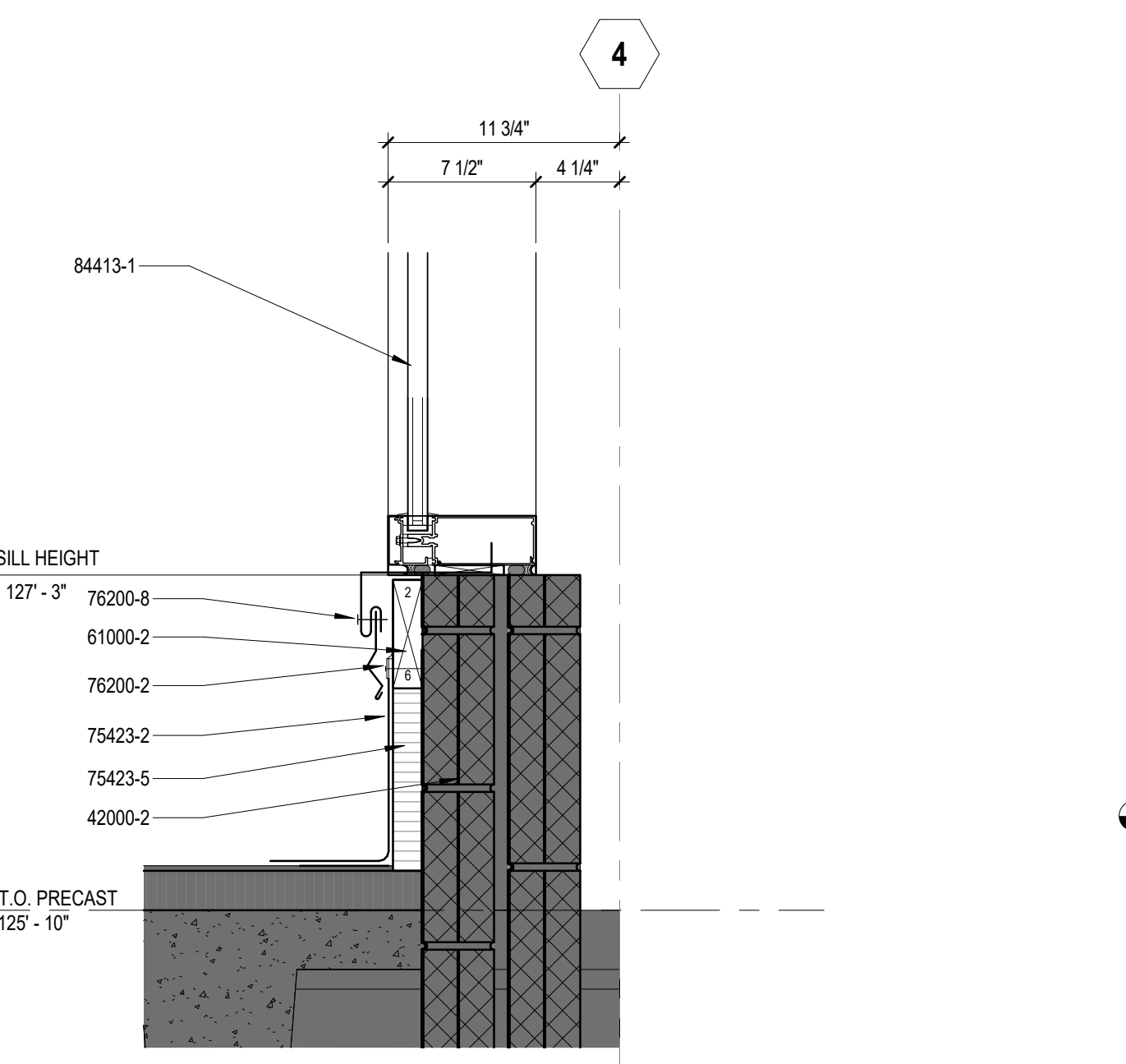
9 CLERESTORY WINDOW HEAD
SCALE: 1/2" = 1'-0" REF: 3 / A5.5



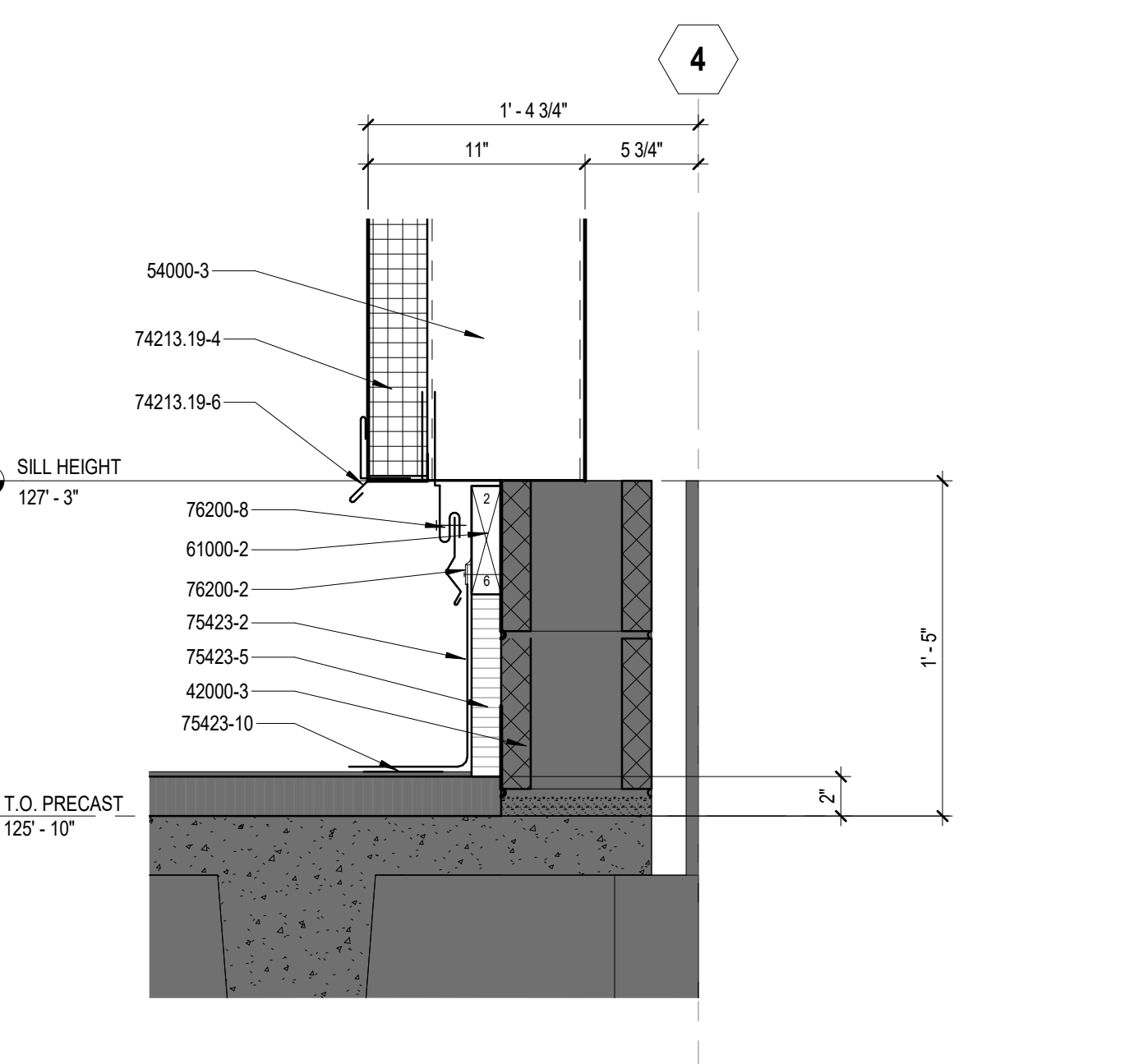
6 CLERESTORY INFILL TOP
SCALE: 1/2" = 1'-0" REF: 2 / A5.5



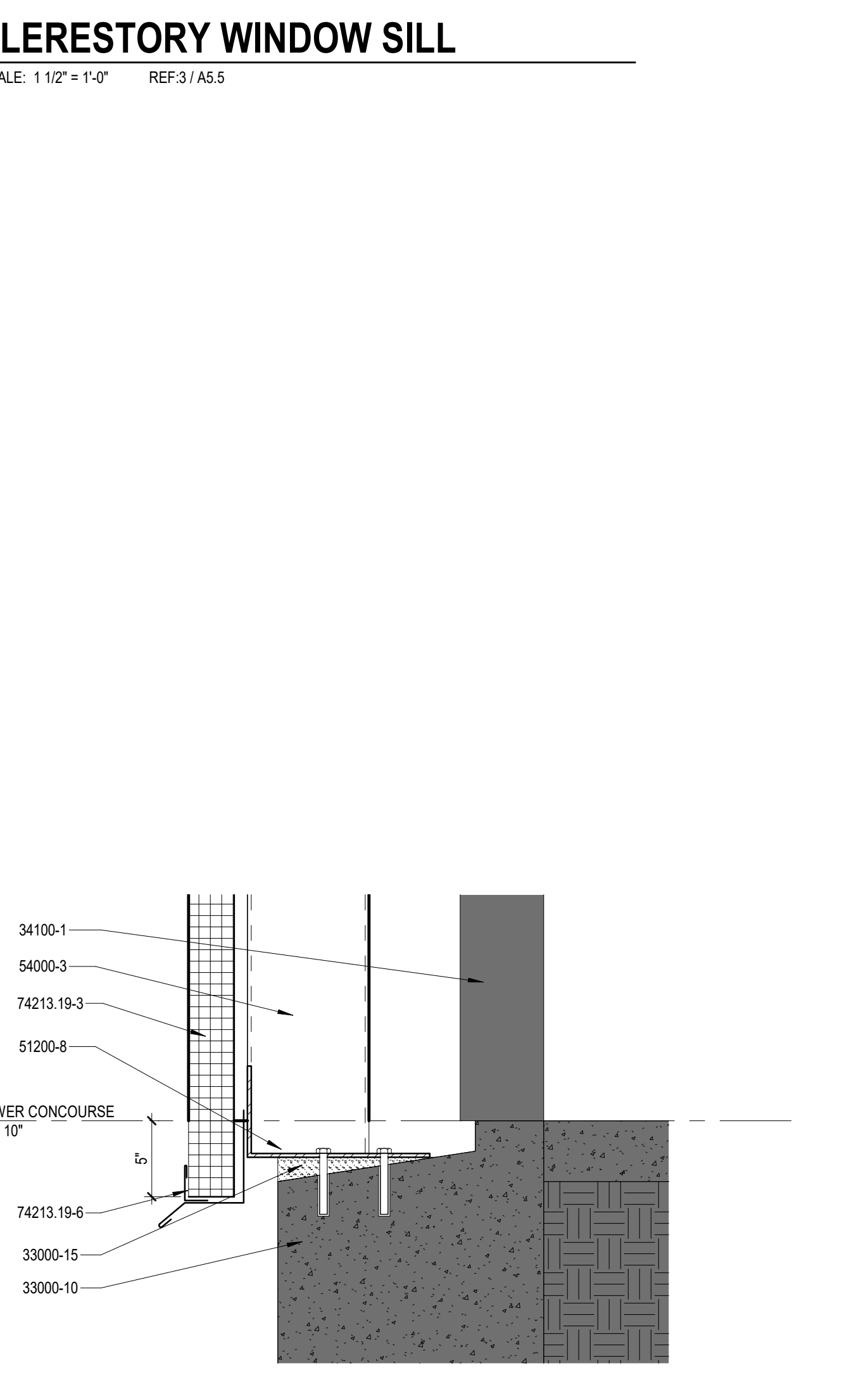
4 PARAPET @ SUNKEN ROOF
SCALE: 1/2" = 1'-0" REF: 1 / A5.5



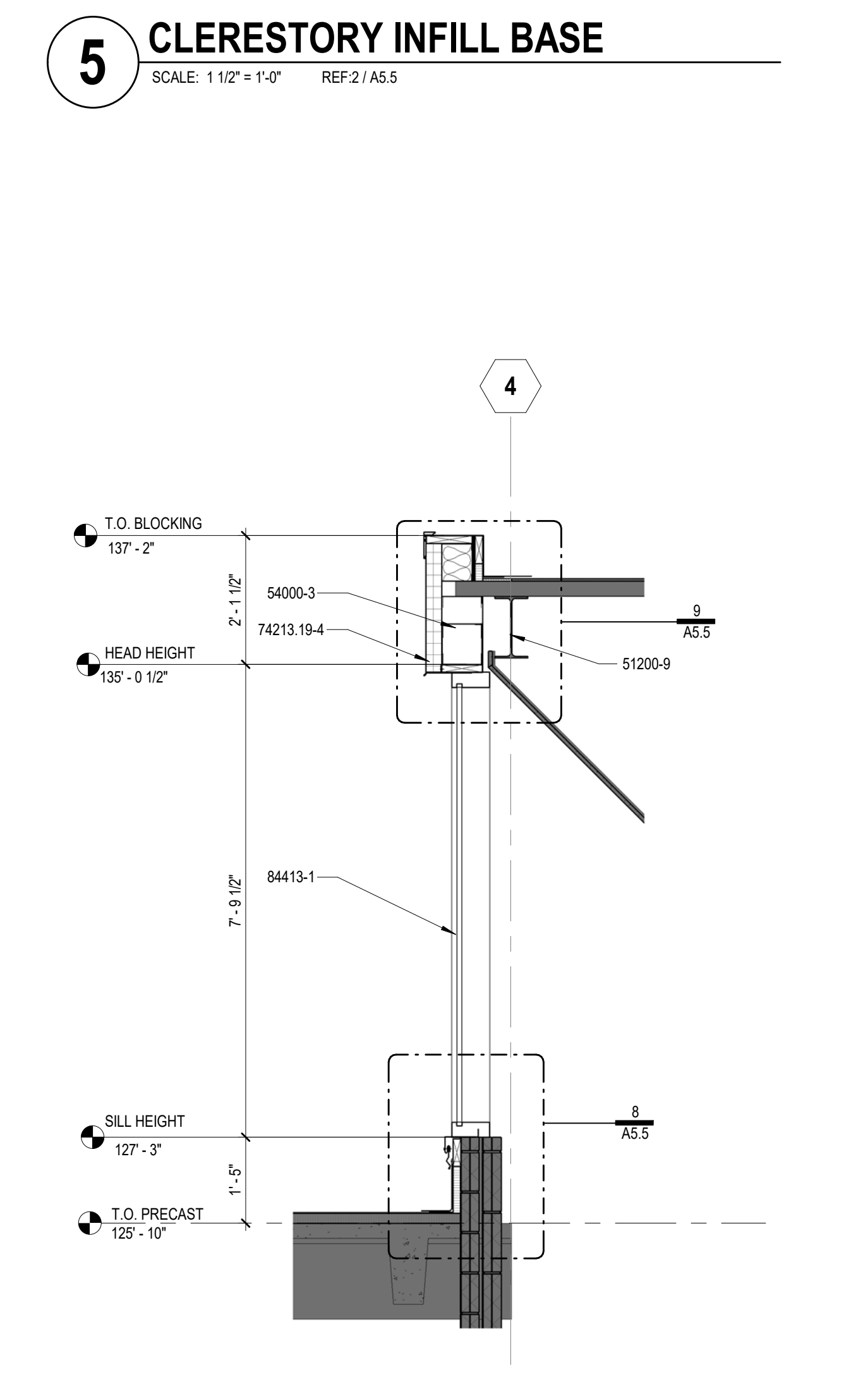
8 CLERESTORY WINDOW SILL
SCALE: 1/2" = 1'-0" REF: 3 / A5.5



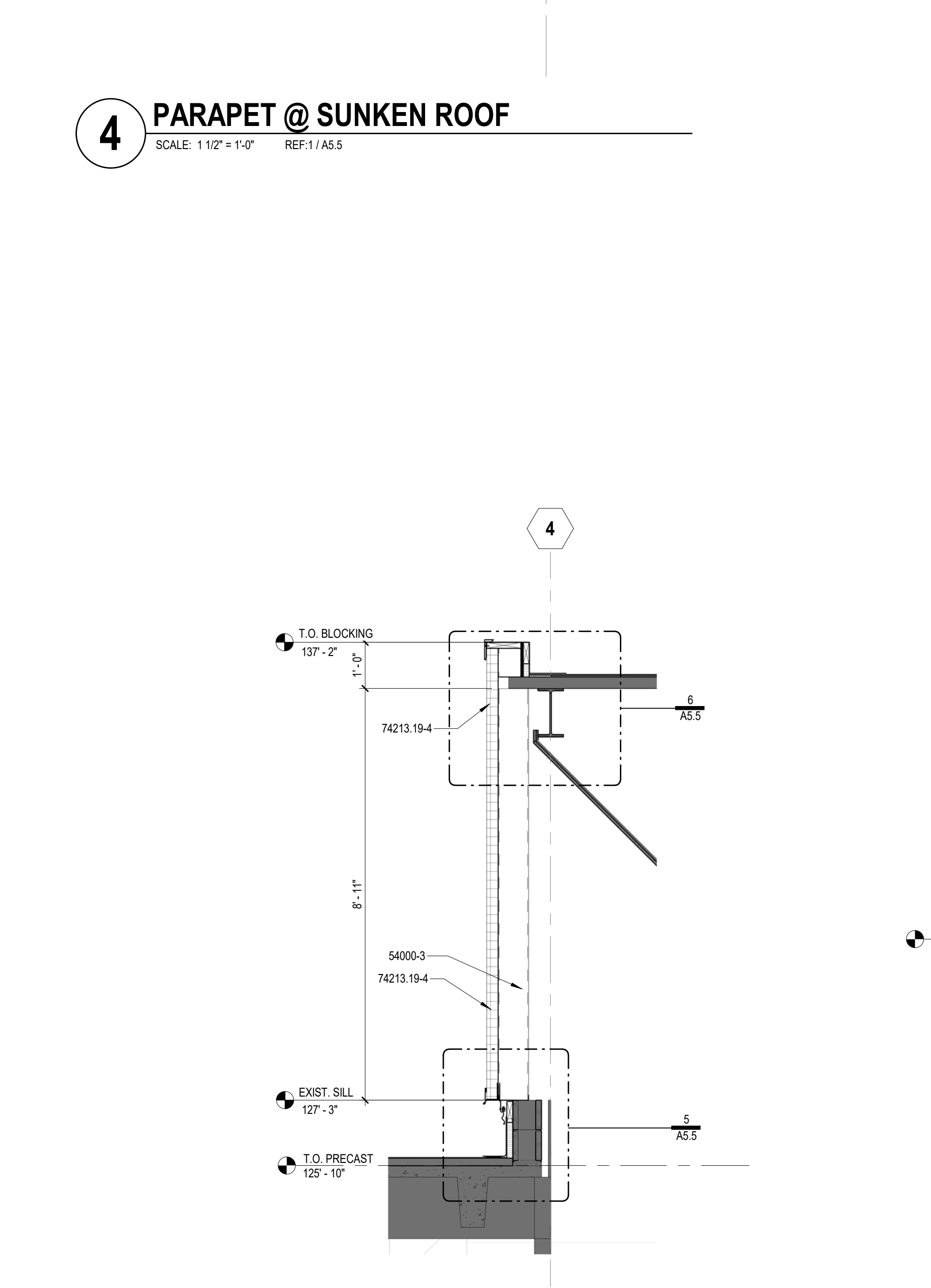
5 CLERESTORY INFILL BASE
SCALE: 1/2" = 1'-0" REF: 2 / A5.5



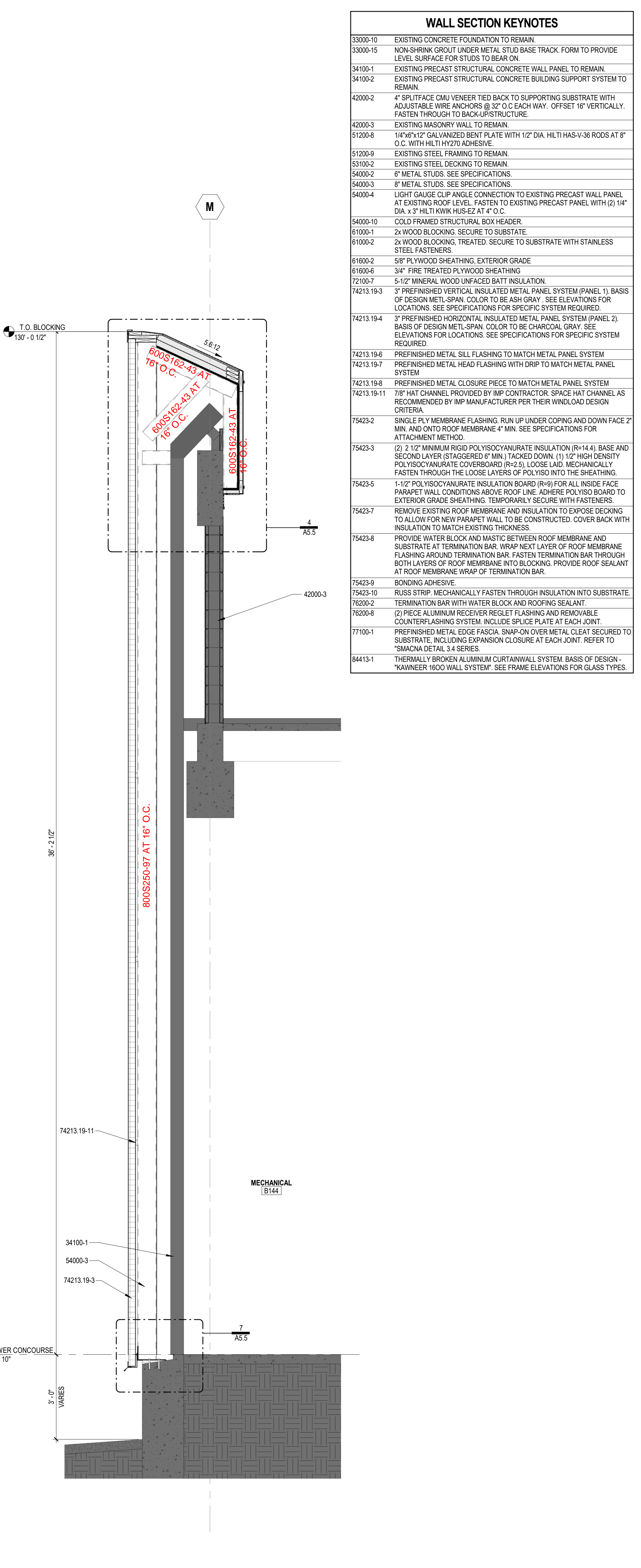
7 PANEL 2 BASE
SCALE: 1/2" = 1'-0" REF: 4 / A5.4



3 NEW CLERESTORY WINDOWS
SCALE: 1/2" = 1'-0"



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



1 SOUTH FACADE @ SUNK-IN ROOF
SCALE: 1/2" = 1'-0"

WALL SECTION KEYNOTES	
33000-10	EXISTING CONCRETE FOUNDATION TO REMAIN.
33000-15	NON-SHRINK GROUT UNDER METAL STUD BASE TRACK. FORM TO PROVIDE LEVEL SURFACE FOR STUDS TO BEAR ON.
34100-1	EXISTING PRECAST STRUCTURAL CONCRETE WALL PANEL TO REMAIN.
34100-2	EXISTING PRECAST STRUCTURAL CONCRETE BUILDING SUPPORT SYSTEM TO REMAIN.
42000-2	4" SPLITFACE CMU VENEER TIED BACK TO SUPPORTING SUBSTRATE WITH ADJUSTABLE WIRE ANCHORS @ 32" O.C. EACH WAY. OFFSET 16" VERTICALLY. FASTEN THROUGH TO BACK-UP STRUCTURE.
42000-3	EXISTING MASONRY WALL TO REMAIN.
51200-8	1/4"x6"x1/2" GALVANIZED BENT PLATE WITH 1/2" DIA. HILTI HAS-V-36 RODS AT 8" O.C. WITH HILTI HY270 ADHESIVE.
51200-9	EXISTING STEEL FRAMING TO REMAIN.
53100-2	EXISTING STEEL DECKING TO REMAIN.
54000-2	6" METAL STUDS. SEE SPECIFICATIONS.
54000-3	8" METAL STUDS. SEE SPECIFICATIONS.
54000-4	LIGHT GAUGE CLIP ANGLE CONNECTION TO EXISTING PRECAST WALL PANEL AT EXISTING ROOF LEVEL. FASTEN TO EXISTING PRECAST PANEL WITH (2) 1/4" DIA. x 3" HILTI HYWISS-2 AT 4" O.C.
54000-10	COLD FORMED STRUCTURAL BOX HEADER.
61000-1	2x WOOD BLOCKING. SECURE TO SUBSTRATE WITH STAINLESS STEEL FASTENERS.
61600-2	5/8" PLYWOOD SHEATHING, EXTERIOR GRADE.
61600-4	3/4" FIRE TREATED PLYWOOD SHEATHING.
72100-7	5-1/2" MINERAL WOOL UNFACED BATT INSULATION.
74213.19-3	3" PREFINISHED VERTICAL INSULATED METAL PANEL SYSTEM (PANEL 1). BASIS OF DESIGN METL-SPAN. COLOR TO BE ASH GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-4	3" PREFINISHED HORIZONTAL INSULATED METAL PANEL SYSTEM (PANEL 2). BASIS OF DESIGN METL-SPAN. COLOR TO BE CHARCOAL GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-6	PREFINISHED METAL SILL FLASHING TO MATCH METAL PANEL SYSTEM.
74213.19-7	PREFINISHED METAL HEAD FLASHING WITH DRIP TO MATCH METAL PANEL SYSTEM.
74213.19-8	PREFINISHED METAL CLOSURE PIECE TO MATCH METAL PANEL SYSTEM.
74213.19-11	7/8" HAT CHANNEL PROVIDED BY IMP CONTRACTOR. SPACE HAT CHANNELS AS RECOMMENDED BY IMP MANUFACTURER PER THEIR WINDOW/DOOR DESIGN CRITERIA.
75423-2	SINGLE PLY MEMBRANE FLASHING. RUN UP UNDER COPING AND DOWN FACE 2" MIN. AND ONTO ROOF MEMBRANE 4" MIN. SEE SPECIFICATIONS FOR ATTACHMENT METHOD.
75423-3	(2) 2 1/2" MINIMUM RIGID POLYISOCYANURATE INSULATION (R=14.4). BASE AND SECOND LAYER (STAGGERED) 1/4" MIN. TACKED DOWN. (1) 1/2" HIGH DENSITY POLYISOCYANURATE COVERBOARD (R=2.5). LOOSE LAD. MECHANICALLY FASTEN THROUGH THE LOOSE LAYERS OF POLYISO INTO THE SHEATHING.
75423-5	1 1/2" POLYISOCYANURATE INSULATION BOARD (R=9) FOR ALL INSIDE FACE PARAPET WALL CONDITIONS ABOVE ROOF LINE. ADHERE POLYISO BOARD TO EXTERIOR GRADE SHEATHING. TEMPORARILY SECURE WITH FASTENERS.
75423-7	REMOVE EXISTING ROOF MEMBRANE AND INSULATION TO EXPOSE DECKING TO ALLOW FOR NEW PARAPET WALL TO BE CONSTRUCTED. COVER BACK WITH INSULATION TO MATCH EXISTING THICKNESS.
75423-8	PROVIDE WATER BLOCK AND MASTIC BETWEEN ROOF MEMBRANE AND SUBSTRATE. AT TERMINATION BAR. W/SP NEXT LAYER OF ROOF MEMBRANE FLASHING AROUND TERMINATION BAR. FASTEN TERMINATION BAR THROUGH BOTH LAYERS OF ROOF MEMBRANE INTO BLOCKING. PROVIDE ROOF SEALANT AT ROOF MEMBRANE WORK OF TERMINATION BAR.
75423-9	BONDING ADHESIVE.
75423-10	RUSS STRIP. MECHANICALLY FASTEN THROUGH INSULATION INTO SUBSTRATE.
76200-2	TERMINATION BAR WITH WATER BLOCK AND ROOFING SEALANT.
76200-8	(2) PREC ALUMINUM RECEIVER REULET FLASHING AND REMOVABLE COUNTERFLASHING SYSTEM. INCLUDE SPLICE PLATE AT EACH JOINT.
77100-1	PREFINISHED METAL EDGE FASCIA. SNAP-ON OVER METAL CLEAT SECURED TO SUBSTRATE, INCLUDING EXPANSION CLOSURE AT EACH JOINT. REFER TO "SMACNA DETAIL 3.4 SERIES."
84413-1	THERMALLY BROKEN ALUMINUM CURTAINWALL SYSTEM. BASIS OF DESIGN - "KAWNEER 1600 WALL SYSTEM". SEE FRAME ELEVATIONS FOR GLASS TYPES.

DESIGN COLLABORATIVE

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WALL SECTION KEYNOTES	
34100-2	EXISTING PRECAST STRUCTURAL CONCRETE BUILDING SUPPORT SYSTEM TO REMAIN.
51200-12	1 1/4" X 1/2" GALVANIZED BENT PLATE WITH 1/2" DIA. HILTI HAS-V-36 RODS AT 6" O.C. WITH HILTI HY270 ADHESIVE.
54000-1	3-5/8" METAL STUDS. SEE SPECIFICATIONS.
61000-1	2x WOOD BLOCKING. SECURE TO SUBSTRATE.
61000-2	2x WOOD BLOCKING. TREATED. SECURE TO SUBSTRATE WITH STAINLESS STEEL FASTENERS.
61600-1	1/2" PLYWOOD SHEATHING, EXTERIOR GRADE.
61600-2	5/8" PLYWOOD SHEATHING, EXTERIOR GRADE.
72119-9	SPRAY APPLIED CLOSED CELL POLYURETHANE FOAM INSULATION AT - R-38 MIN.
72500-1	WEATHER BARRIER MEMBRANE SYSTEM COMPLETE, EQUAL TO DUPONT TYVEK COMMERCIAL WRAP.
74213.19-4	3" PREFINISHED HORIZONTAL INSULATED METAL PANEL SYSTEM (PANEL 2). BASIS OF DESIGN METL-SPAN. COLOR TO BE CHARCOAL GRAY. SEE ELEVATIONS FOR LOCATIONS. SEE SPECIFICATIONS FOR SPECIFIC SYSTEM REQUIRED.
74213.19-6	PREFINISHED METAL SILL FLASHING TO MATCH METAL PANEL SYSTEM.
74213.19-8	PREFINISHED METAL CLOSURE PIECE TO MATCH METAL PANEL SYSTEM.
74213.23-1	PREFINISHED METAL COMPOSITE WALL PANEL SYSTEM EQUAL TO CTD/DEL ENVELOPE 200 R9 (COLOR 1 - CHARCOAL GRAY TO MATCH IRI). METAL PANEL INSTALLER RESPONSIBLE FOR PROVIDING SHIMS AND FURRING AS NEEDED TO PROVIDE A PLUMB FINISH OF PANELS.
74213.23-2	1/2" METAL PANEL REVEAL.
74213.23-5	PREFINISHED METAL CLOSURE PIECE TO MATCH M. PNL. SYSTEM.
74213.23-8	PREFINISHED METAL COMPOSITE WALL PANEL BENT OUTSIDE CORNER.
75423-2	SINGLE PLY MEMBRANE FLASHING. RUN UP UNDER COPING AND DOWN FACE 2" MIN. AND ONTO ROOF MEMBRANE 4" MIN. SEE SPECIFICATIONS FOR ATTACHMENT METHOD.
75423-5	1-1/2" POLYISOCYANURATE INSULATION BOARD (R-9) FOR ALL INSIDE FACE PARAPET WALL CONDITIONS ABOVE ROOF LINE. ADHERE POLYISO BOARD TO EXTERIOR GRADE SHEATHING. TEMPORARILY SECURE WITH FASTENERS.
75423-10	RUSS STRIP. MECHANICALLY FASTEN THROUGH INSULATION INTO SUBSTRATE.
77100-1	PREFINISHED METAL EDGE FASCIA. SNAP-ON OVER METAL CLEAT SECURED TO SUBSTRATE. INCLUDING EXPANSION CLOSURE AT EACH JOINT. REFER TO "SMACNA DETAIL 3" SERIES.
84413-1	THERMALLY BROKEN ALUMINUM CURTAIN WALL SYSTEM. BASIS OF DESIGN - "KAWNEER 1800 WALL SYSTEM". SEE FRAME ELEVATIONS FOR GLASS TYPES.
84413-4	61507 CONTINUOUS ALUMINUM WINDOW SILL TRIM FLASHING WITH HEIMED EDGE. TURN VERTICAL LEG TRIM UP BEHIND CURTAIN WALL PRESSURE PLATE. SEAL ALL LAP UNITS WATER TIGHT.
84413-5	EXISTING CURTAIN WALL SYSTEM TO REMAIN.
92900-6	EXISTING EXTERIOR CEILING COMPOSITE TO REMAIN. TAKE PRECAUTION TO PROTECT DURING CONSTRUCTION. SURFACE TO BE PREPARED TO RECEIVE NEW PAINT. PAINT COLOR TO BE DETERMINED AT A LATER DATE BY ARCHITECT.

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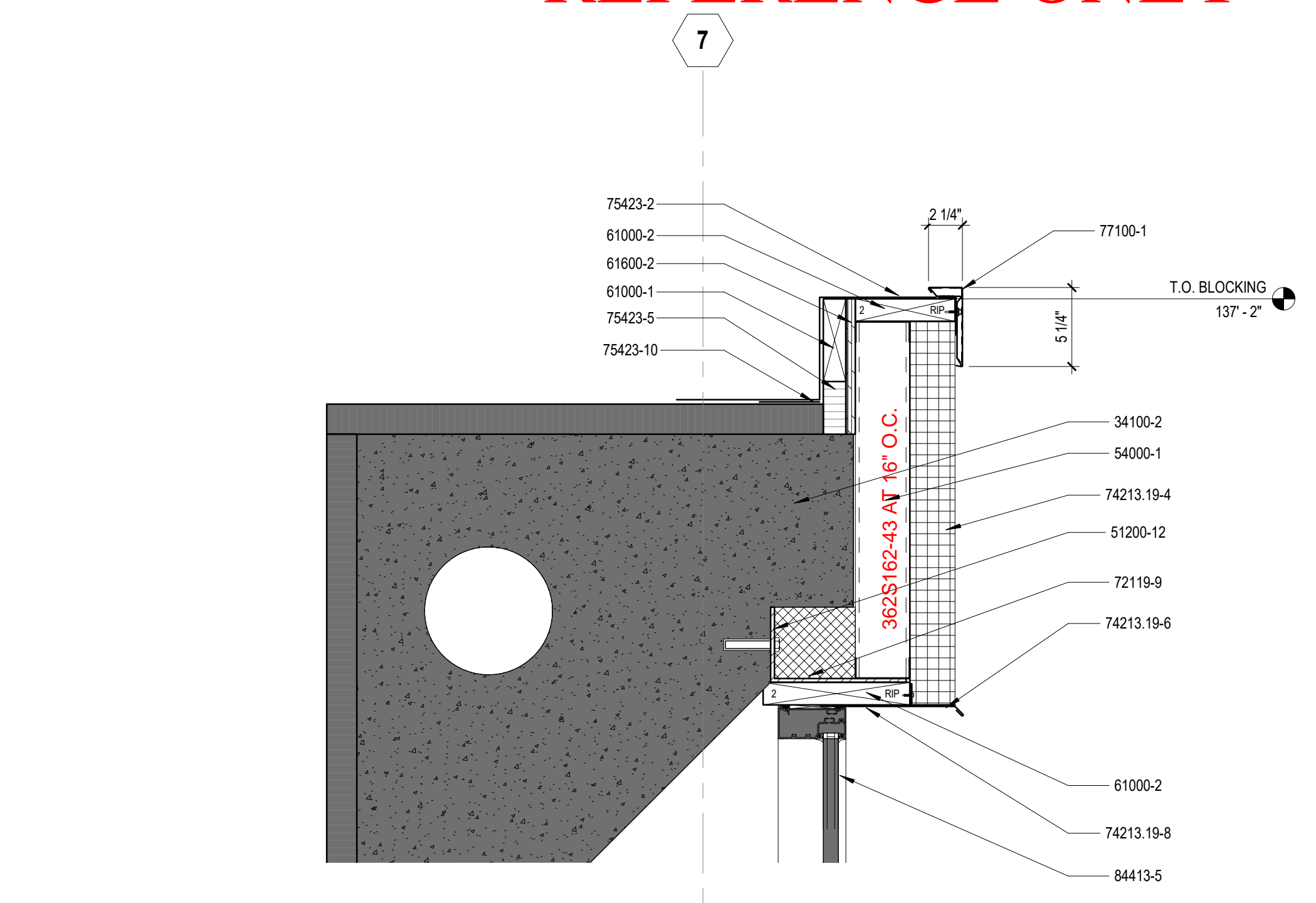
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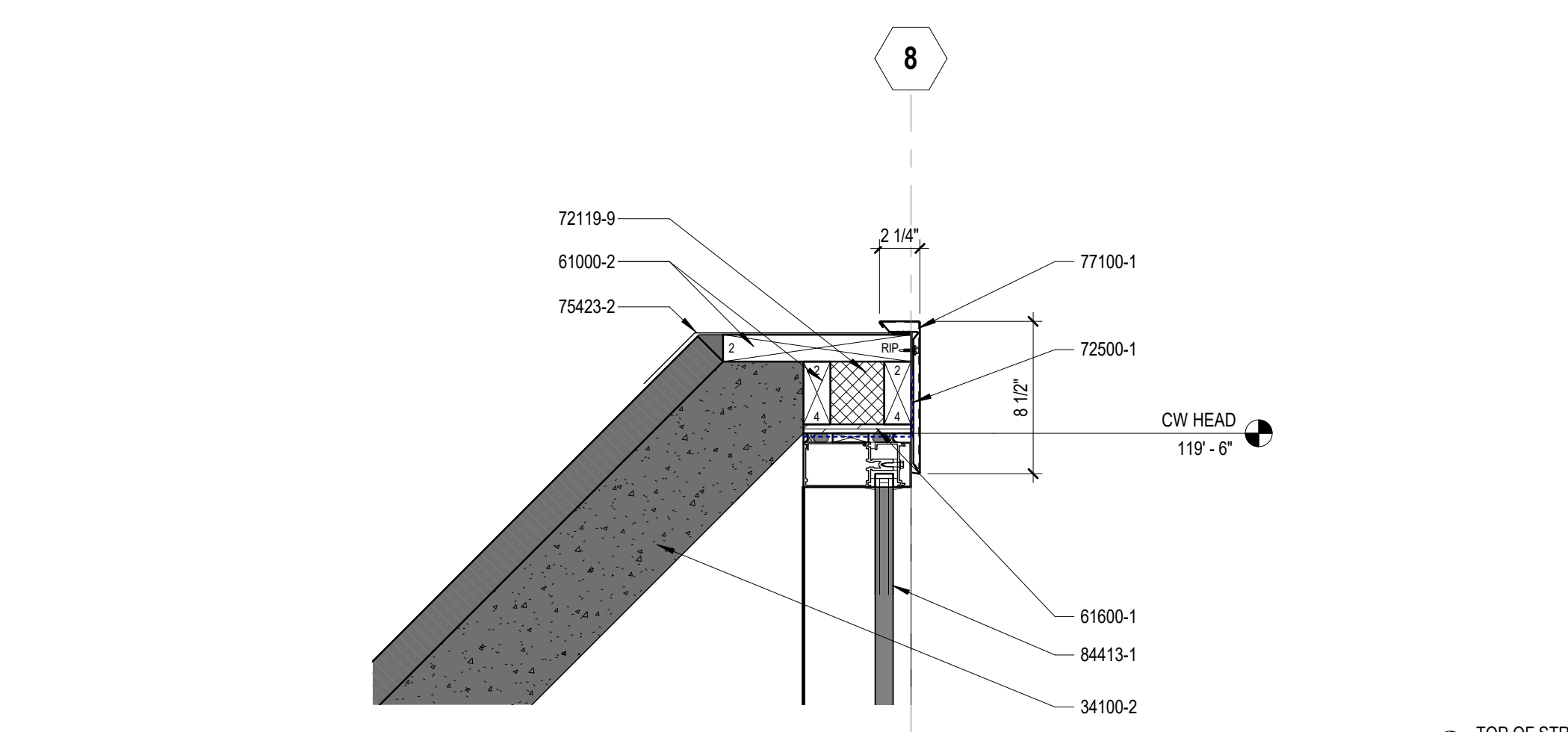
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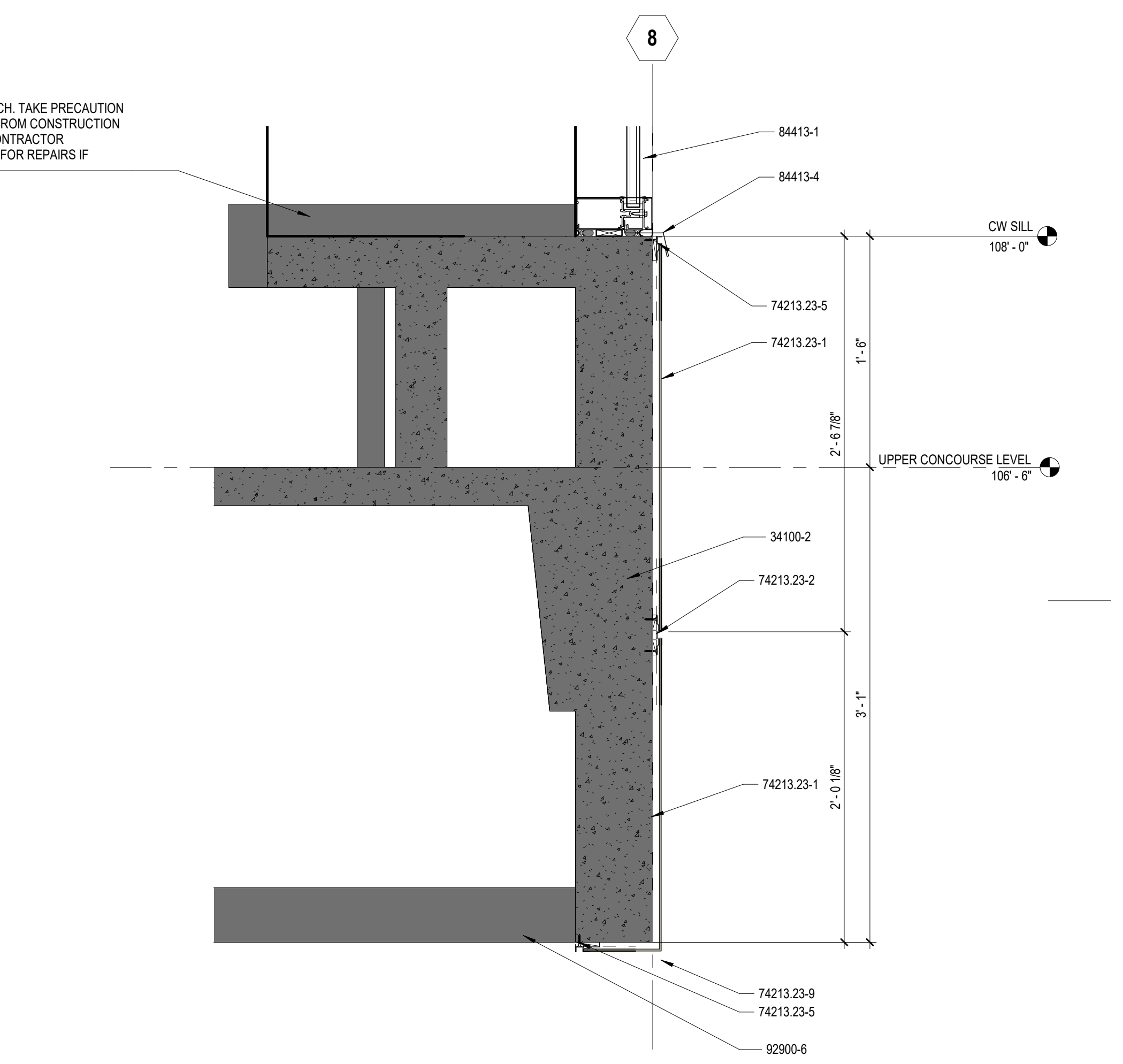
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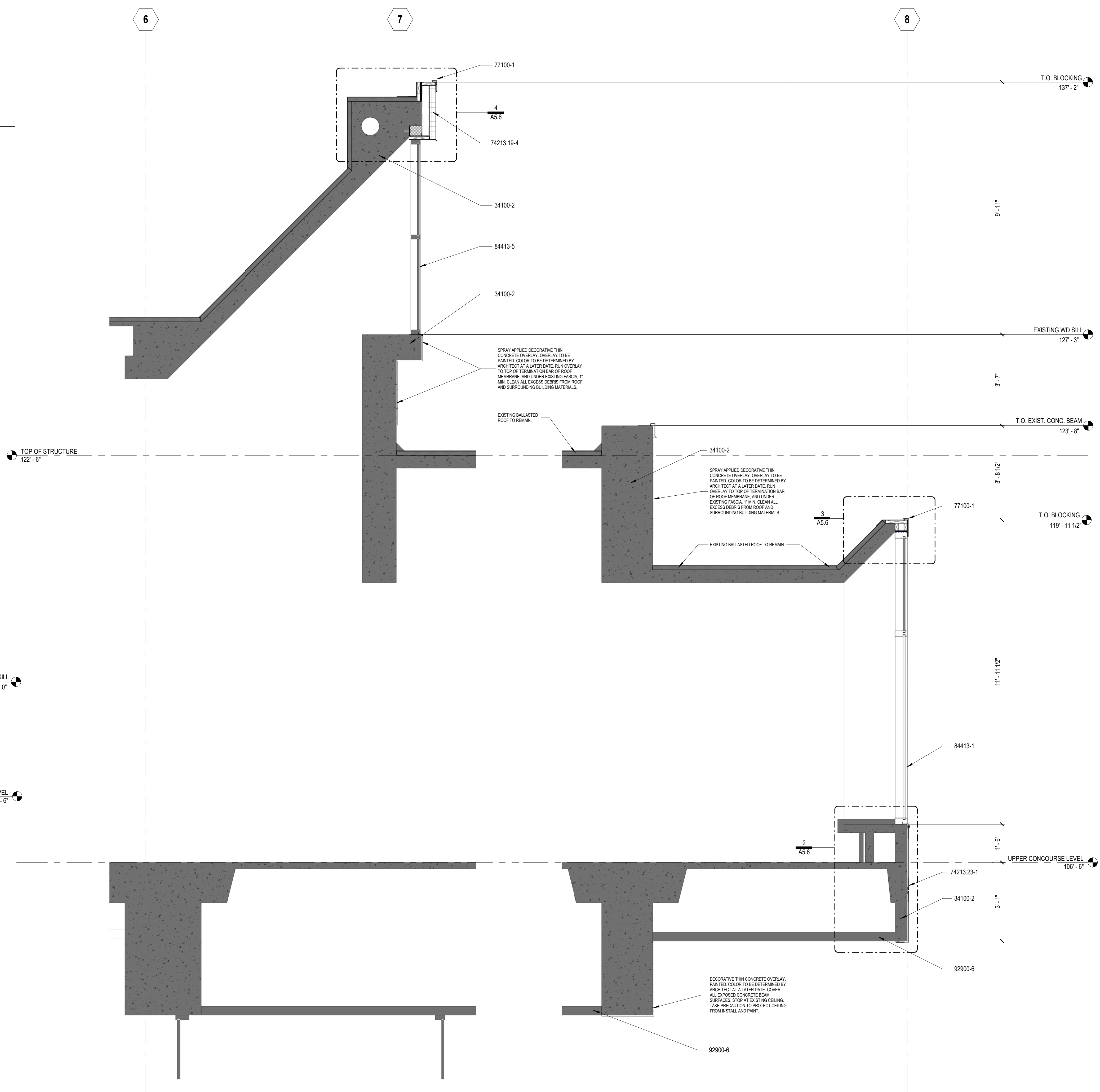
4 CONCOURSE PARAPET
SCALE: 1 1/2" = 1'-0" REF: 1 / A5.6



3 CONCOURSE CW HEAD
SCALE: 1 1/2" = 1'-0" REF: 1 / A5.6

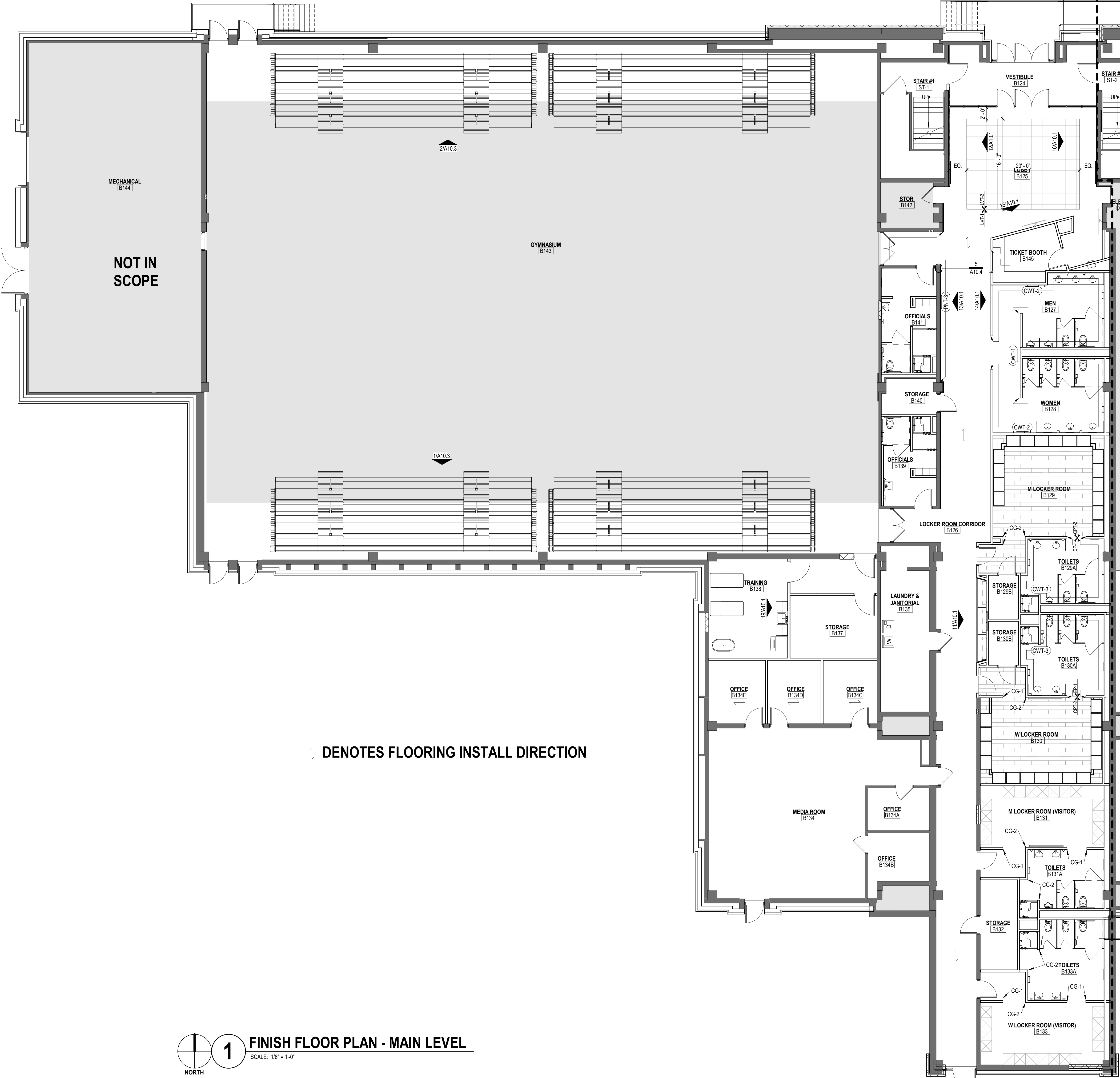
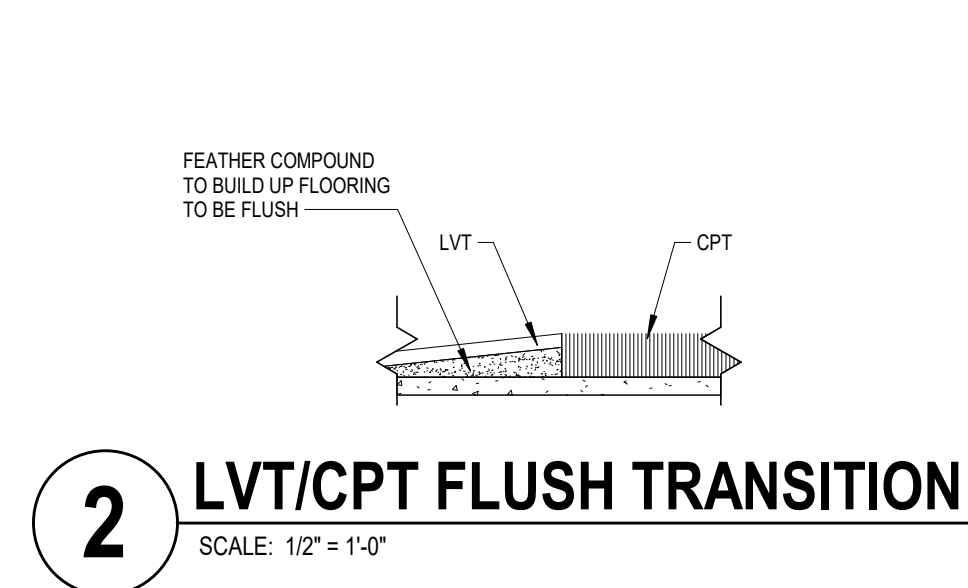
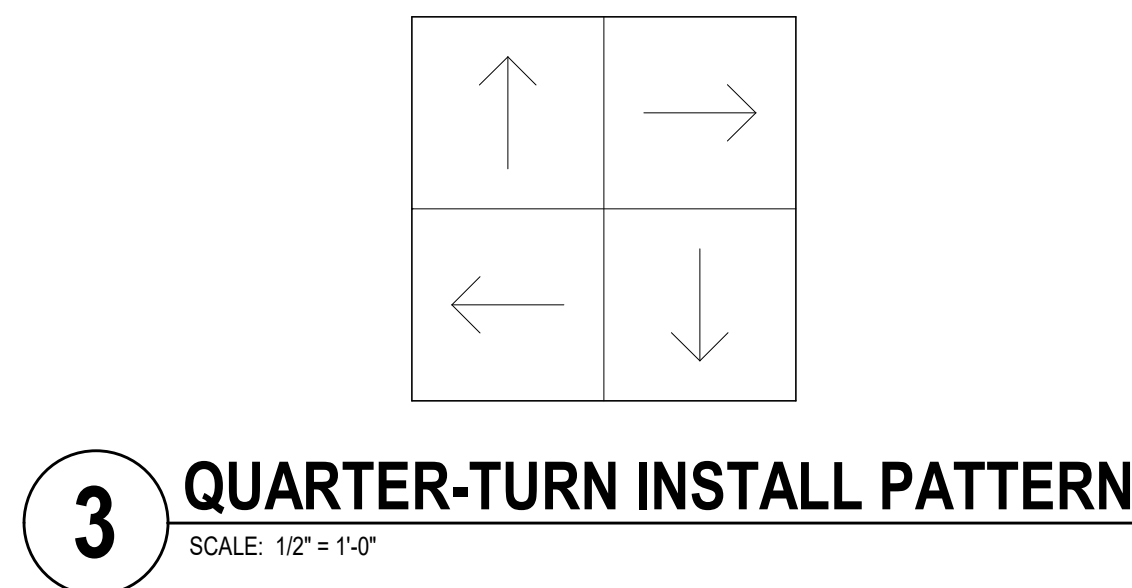
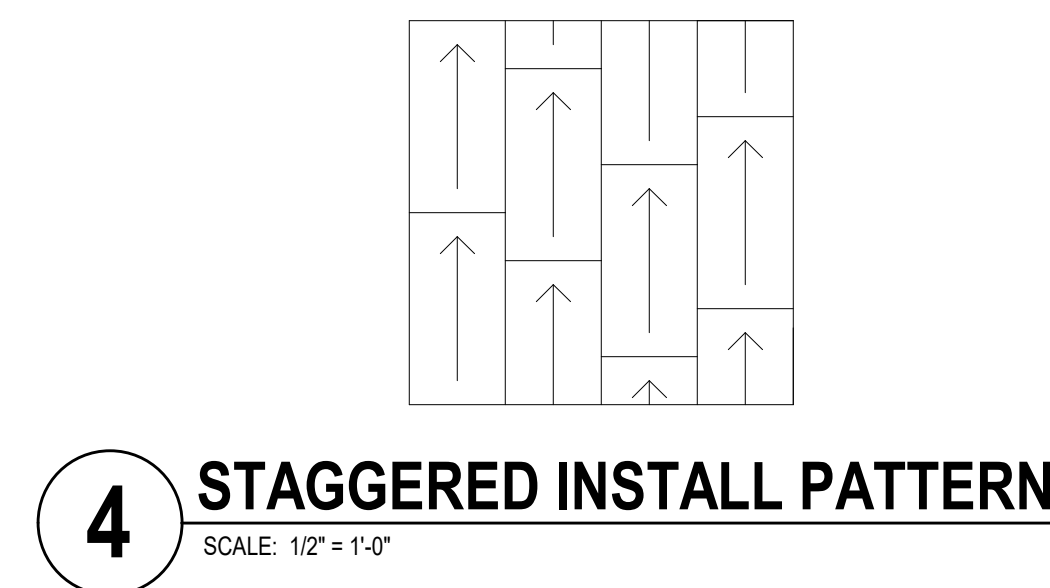
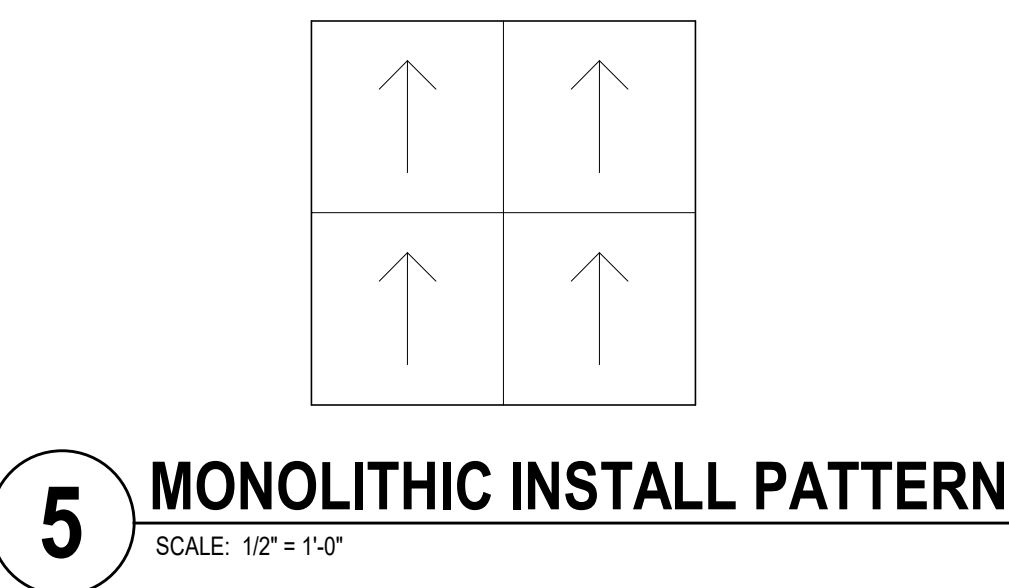


2 CONCOURSE CW SILL
SCALE: 1 1/2" = 1'-0" REF: 1 / A5.6



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

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1 FINISH FLOOR PLAN - MAIN LEVEL
SCALE: 1/8" = 1'-0"

FINISH LEGEND

ACOUSTIC CEILING TILE
ACT-1 ARMSTRONG, CORTEGA, ITEM NO. 770, SIZE: 24" X 24" X 5/8", EDGE: SQUARE, COLOR: WHITE

ACOUSTIC WALL PANEL
AWP-1 CARNEGIE, XOREL PANEL, SHAPE: PLANK, SIZE: SMALL, 5' X 20', SUBSTRATE: QUIET-CORE, EDGE: BEVEL, FABRIC: LINEN 6291 S, INSTALL: QUICK GRAB WALL MOUNTED
AWP-2 CARNEGIE, XOREL PANEL, SHAPE: PLANK, SIZE: SMALL, 5' X 20', SUBSTRATE: QUIET-CORE, EDGE: BEVEL, FABRIC: SAHARA MATTE 6099 629, INSTALL: QUICK GRAB WALL MOUNTED
AWP-3 CARNEGIE, XOREL PANEL, SHAPE: PLANK, SIZE: SMALL, 5' X 20', SUBSTRATE: QUIET-CORE, EDGE: BEVEL, FABRIC: METEOR 6427 2018, INSTALL: QUICK GRAB WALL MOUNTED
AWP-4 CARNEGIE, XOREL PANEL, SHAPE: PLANK, SIZE: LARGE, 10' X 20', SUBSTRATE: QUIET-CORE, EDGE: BEVEL, FABRIC: LINEN 6291 S, INSTALL: QUICK GRAB WALL MOUNTED
AWP-5 CARNEGIE, XOREL PANEL, SHAPE: PLANK, SIZE: LARGE, 10' X 20', SUBSTRATE: QUIET-CORE, EDGE: BEVEL, FABRIC: SAHARA MATTE 6099 629, INSTALL: QUICK GRAB WALL MOUNTED

CARPET
CPT-1 MOHAWK, COLLECTION: NUTOPA MATRIX, STYLE: URBAN TERRAIN GT413, COLOR: FUSION 969, SIZE: 12' X 36", INSTALL: STAGGER
CPT-2 SHAW, COLLECTION: IN SYNC, STYLE: COMPANION TILE ST352, COLOR: FUSE 5515, SIZE: 24" X 24", INSTALL: QUARTER-TURN
CPT-4 SHAW, COLLECTION: COLOR FRAME AND COLOR FORM, STYLE: COLOR FRAME TILE ST681, COLOR: DISAPPEAR B1557, INSTALL: MONOLITHIC

CERAMIC WALL TILE
CWT-1 DALTILE, COLLECTION: MIRAM, STYLE: PICKET, COLOR: OYSTER M343, SIZE: 2' X 5', MESH MOUNTED, GROUT: MAPEI, COLOR: 09 GRAY, UNSANDED
CWT-2 DALTILE, COLLECTION: SADDLE BROOK, COLOR: GRAVEL ROAD SD16, SIZE: 6' X 36", INSTALL: STAGGER, GROUT: MAPEI, COLOR: 09 GRAY, UNSANDED
CWT-3 DALTILE, COLLECTION: CONCRETE MASONRY, COLOR: ARTISAN GREY P036, SIZE: 16" X 32", INSTALL: 33% OFFSET, GROUT: MAPEI, COLOR: 107 IRON, UNSANDED
CWT-4 BASIS OF DESIGN: OTTIMO CERAMICS, STYLE: DASH, COLOR: TBD, SIZE: 16" X 48", INSTALL: VERTICAL STACKED, GROUT: MAPEI, COLOR: TBD, UNSANDED

CORNER GUARD
CG-1 INPRO, 1500 HIGH IMPACT END WALL PROTECTOR, 8" H, MOUNTED TOP OF BASE, COLOR: DOVE GRAY 0106
CG-2 INPRO, 150 HIGH IMPACT CORNER GUARD, 8" H, MOUNTED TOP OF BASE, COLOR: DOVE GRAY 0106

LUXURY VINYL TILE
LVT-1 PATCRAFT, COLLECTION: LINCOUT 1660, COLOR: CHSEL 00550, SIZE: 9' X 36", INSTALL: STAGGER
LVT-2 SHAW, COLLECTION: COMPOUND + CAST, STYLE: COMPOUND 5.0 407TV, COLOR: PATINA 7405, SIZE: 24" X 24", INSTALL: QUARTER-TURN

PAINT
PNT-1 SHERWIN WILLIAMS, COLOR: SW7050 ELLIE GRAY, FINISH: EGGSHELL
PNT-2 SHERWIN WILLIAMS, COLOR: GLEN OAKS SCONE WHITE, FINISH: EGGSHELL
PNT-3 GLEN OAKS GREEN, PANTONE# 1235C, FINISH: EGGSHELL
PNT-4 GLEN OAKS YELLOW, PANTONE# 7484C, FINISH: EGGSHELL
PNT-5 SHERWIN WILLIAMS, COLOR: SW7005 PURE WHITE, FINISH: FLAT
PNT-6 PPG, COLOR: 10094, FINISH: SEMI-GLOSS

PLASTIC LAMINATE
PL-1 FORMICA, COLOR: 5787-NI TAUPE WALNUT, FINISH: NATURAL GRAIN
PL-2 ARBORITE, COLOR: P407 MONOLITH, FINISH: VL
PL-3 PONTITE, COLOR: A6801SD JUMPING IN PUDDLES, FINISH: TEXTURED/SUEDE

PRIVACY CURTAIN
PC-1 INPRO, STYLE: FRAMEWORK, COLOR: PLATINUM, 64" LONG WITH 20" LONG SNOW MESH CURTAIN HEADING ABOVE

RUBBER
RB-1 TARKETT, TRADITIONAL 4" BASE, COLOR: 20 CHARCOAL

RUBBER FLOORING
RF-1 THOR RUBBER FLOORING, STYLE: RESI24, COLOR: TBD, 48" WIDE ROLLED GOODS

SEALED CONCRETE
SC-1 SHERWIN WILLIAMS, ARMORSEAL 1K, WATER-BASED URETHANE FLOOR ENAMEL, FINISH: CLEAR 865C775

SHEET VINYL
SV-1 MANNINGTON, COLLECTION: PARADIGM II, STYLE: FLOW, COLOR: PURPOSE PD316

SOLID SURFACE
SS-1 CORIAN, COLOR: COSMOS PRIMA
SS-2 CORIAN, COLOR: EVEREST

STAIR COMPONENT
STC-1 MANNINGTON, DOUBLE UNDERCUT CARPET STAIR NOSING 565, COLOR: 217 CHARCOAL

WALK-OFF MAT
WOM-1 PATCRAFT, COLLECTION: WALK FORWARD, STYLE: CONNECTING 06585, COLOR: PATHWAY 00580, SIZE: 24" X 24", INSTALL: QUARTER-TURN

WOOD
WD-1 PLAIN SLICED MAPLE STAINED TO MATCH EXISTING WOOD

WOOD CEILING
WOC-1 ARMSTRONG, WOODWORKS LINEAR VENEERED PLANKS, ITEM NO: 6460W1, SIZE: 5-1/4" X 96" X 3/4", FINISH: TBD

GENERAL ROOM FINISH NOTES

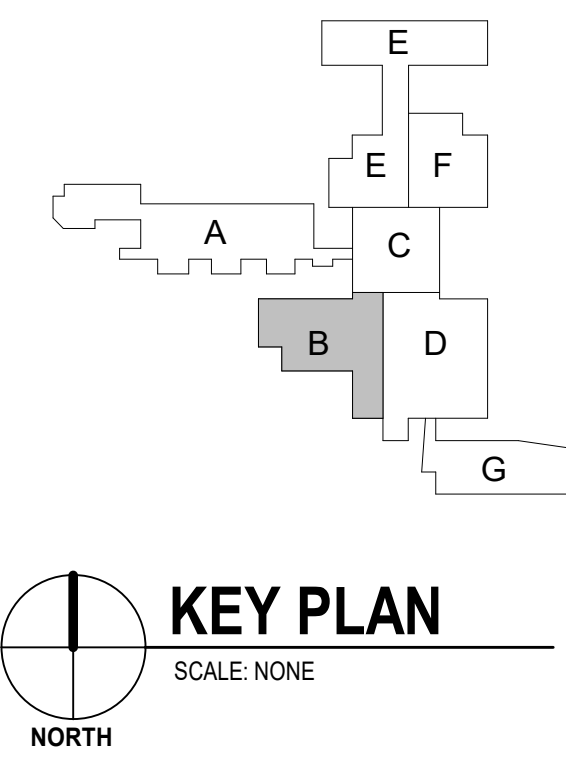
- SEE "GENERAL" SHEETS IN THE FRONT OF THE WORKING DRAWING SET FOR DEFINITION OF ABBREVIATIONS.
- THE SCHEDULED MATERIALS AND FINISHES SHALL NOT BE ORDERED OR INSTALLED BEFORE THE CONTRACTOR'S ACTUAL COLOR SAMPLE SUBMITTALS HAVE BEEN APPROVED AS CALLED FOR ON THE DRAWINGS AND IN THE SPECIFICATIONS.
- ALL FLOOR FINISH TRANSITIONS TO OCCUR IN THE MIDDLE OF DOOR FRAME, UNLESS NOTED OTHERWISE ON FLOOR FINISH PLAN.
- PROVIDE JOHNSONITE SLIMLINE RUBBER TRANSITIONS STRIP WHEREVER DIFFERING FLOOR MATERIALS MEET, UNLESS NOTED OTHERWISE.
- ALL HOLLOW METAL DOOR FRAMES AND WINDOWS FRAMES TO BE PAINTED PNT-4 WITH ZERO VOC ACRYLIC BASED PAINT WITH A SEMI-GLOSS FINISH.
- BASIS OF DESIGN: ALL SOLID WOOD DOORS TO BE MASONITE DOOR SYSTEMS, SPORES: MATCH EXISTING, CUT: MATCH EXISTING, STAIN: MATCH EXISTING.
- REFER TO A10 SERIES FOR ADDITIONAL WALL FINISH INFORMATION.
- BOTTOM OF ALL CYP BOARD CEILING TO BE PAINTED PNT-6 WITH FLAT FINISH, UNLESS NOTED OTHERWISE ON REFLECTED CEILING PLAN.
- FACE OF ALL BULKHEADS TO BE PAINTED PNT-5, UNLESS NOTED OTHERWISE ON REFLECTED CEILING PLAN.
- ALL TOILET PARTITIONS TO BE COLOR-THRU PENOLIC.
- REFER TO FLOOR FINISH PLAN FOR FLOORING INSTALL DIRECTION.
- ALL CASEWORK HARDWARE TO BE WIRE FULL UNLESS NOTED OTHERWISE.
- PROVIDE SCHLUTER JOLLY TRIM PEEC WITH EB FINISH AT ALL EXPOSED TILE EDGES.
- PROVIDE SWF CONTRACT MANUAL ROLLER SHADES ON WINDOWS NOTED ON PLANS, SHADE FABRIC: SHEAR WEAVE 2701
- FLOORING DIRECTION INDICATED ON PLANS.

FINISH COMMENTS

- NO FINISH WORK.
- RUBBER BASE TO BE INSTALLED ON NEW WALL TO MATCH EXISTING.
- CERAMIC TILE TO BE INSTALLED FLOOR TO CEILING; NO RUBBER BASE TO BE INSTALLED ON WALL.
- CPT-4 TO BE INSTALLED AS NEEDED WHERE NEW WINDOWS HAVE BEEN INSTALLED.
- FINISH WORK SHOWN ON A10.3.
- AWP SHOWN ON A10.2 TO INCLUDED IN ALTERNATE #3.
- ALTERNATE #2A CEILING TO BE ACT-1.
- WORK SHOWN IN FINISH SCHEDULE TO BE INCLUDED IN ALTERNATE #1.
- ALTERNATE #3B CEILING TO BE WOC-1.
- TREADS AND RISERS TO RECEIVE CPT-1 WITH STC-1 NOSING.

FINISH SCHEDULE - 01 MAIN FLOOR

#	ROOM	FLOOR	BASE	WALLS				CEILING	COMMENTS
				NORTH	SOUTH	EAST	WEST		
B124	VESTIBULE	WOM-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B125	LOBBY	LVT-1, LVT-2	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B126	LOCKER ROOM CORRIDOR	LVT-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B127	MEN	LVT-1	CWT-2	CWT-2	CWT-2	CWT-2	CWT-2	ACT-1	3
B128	WOMEN	LVT-1	CWT-2	CWT-2	CWT-2	CWT-2	CWT-2	ACT-1	3
B129	M LOCKER ROOM	CPT-2	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B129A	TOILETS	EP-1	EP-1	CWT-3	CWT-3	CWT-3	CWT-3	ACT-1	3
B129B	STORAGE	SC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B130	W LOCKER ROOM	CPT-2	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B130A	TOILETS	EP-1	EP-1	CWT-3	CWT-3	CWT-3	CWT-3	ACT-1	3
B130B	STORAGE	SC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B131	M LOCKER ROOM (VISITOR)	EP-1	EP-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B131A	TOILETS	EP-1	EP-1	CWT-3	CWT-3	CWT-3	CWT-3	ACT-1	3
B132	STORAGE	SC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B133	W LOCKER ROOM (VISITOR)	EP-1	EP-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B133A	TOILETS	EP-1	EP-1	CWT-3	CWT-3	CWT-3	CWT-3	ACT-1	3
B134C	OFFICE	CPT-2	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B134D	OFFICE	CPT-2	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B134E	OFFICE	CPT-2	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B135	LAUNDRY & JANITORIAL	SC-1	--	--	--	--	--	--	
B136	CORRIDOR	SC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B137	STORAGE	SC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	EXPOSED	
B138	TRAINING	EP-1	EP-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B139	OFFICIALS	EP-1	EP-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B140	STORAGE	SC-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B141	OFFICIALS	EP-1	EP-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
B143	GYMNASIUM	--	--	--	--	--	--	--	5
B145	TICKET BOOTH	LVT-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
D233	ATHLETICS	CPT-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
D233A	OFFICE	CPT-1	RB-1	PNT-1	PNT-1	PNT-1	PNT-1	ACT-1	
D235	NORA HAGEN THEATER	CPT-1	EXIST. TO REMAIN	PNT-2	PNT-2	PNT-2	PNT-2	--	6, 7, 8, 10
D239	NURSING LAB 1	--	--	--	--	--	--	--	4
D242	NURSING LAB 2	--	--	--	--	--	--	--	4
D245	CLASSROOM	CPT-3	RB-1	PNT-2	PNT-2	PNT-2	PNT-2	ACT-1	
D248	STORAGE	SC-1	RB-1	PNT-2	PNT-2	PNT-2	PNT-2	ACT-1	
D250	CLASSROOM	CPT-3	RB-1	PNT-2	PNT-2	PNT-2	PNT-2	ACT-1	
ST-1	STAIR #1	EXIST. TO REMAIN	WD-1	CWT-4, PNT-1	CWT-4, PNT-1	CWT-4, PNT-1	CWT-4, PNT-1	ACT-1	
ST-2	STAIR #2	EXIST. TO REMAIN	WD-1	CWT-4, PNT-1	CWT-4, PNT-1	CWT-4, PNT-1	CWT-4, PNT-1	ACT-1	

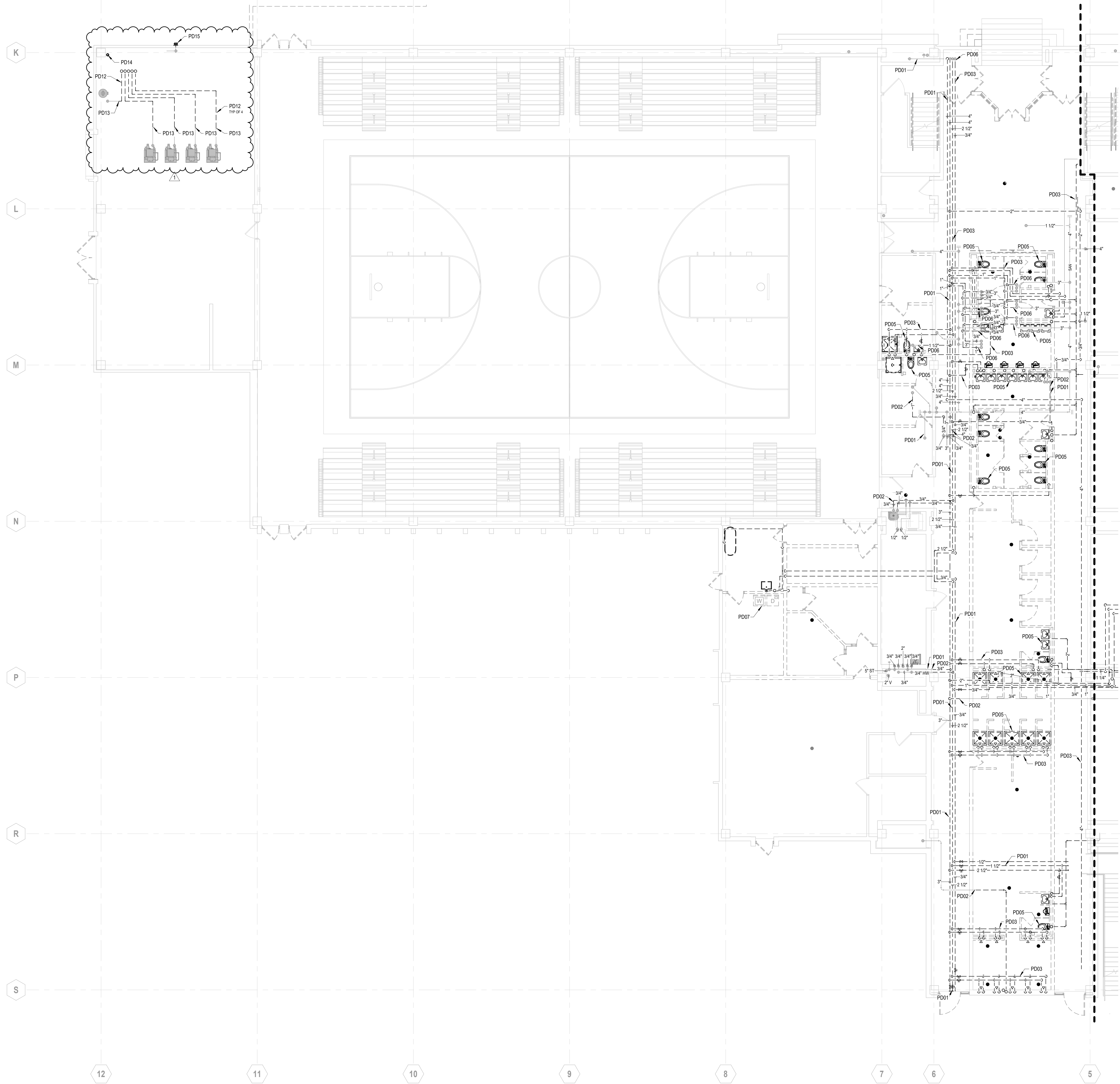


CONSTRUCTION DOCUMENTS

ISSUE DATE: 01/26/2024

REVISIONS

NO.	DATE	DESCRIPTION
1	2024/06/07	Addendum 2
2	2024/06/13	Addendum 3



- GENERAL PLUMBING DEMOLITION NOTES**
- LOCATIONS OF ALL EXISTING PIPING AND EQUIPMENT SHALL BE VERIFIED ON SITE TO DETERMINE EXACT LOCATIONS, SIZES AND INVERTS.
 - PATCH ALL CEILINGS, WALLS, FLOORS AND ROOFS WHERE PIPING AND EQUIPMENT ARE REMOVED WITH A MATERIAL MATCHING THE EXISTING CONSTRUCTION. TYPICAL OF ALL AREAS.
 - REMOVE ALL SANITARY, VENT AND SUPPLY PIPING FROM FIXTURES THAT ARE TO BE REMOVED BACK TO THE CONNECTION AT THE MAIN AND CAP AT THE MAIN.
 - EXISTING SANITARY MAIN BELOW SLAB SHALL BE JETTED CLEAN AND CAMERA SCOPED TO DETERMINE CONDITION OF PIPE AND FEASIBILITY OF REUSING.
- PLUMBING DEMOLITION NOTES**
- EXISTING PIPING, SHOWN GRAY, TO REMAIN. SHOWN FOR REFERENCE ONLY. TYPICAL.
 - REMOVE PIPING TO THIS LOCATION AND PREPARE EXISTING FOR NEW CONNECTION.
 - REMOVE EXISTING PIPING, SHOWN BOLD, IN ITS ENTIRETY INCLUDING ALL ASSOCIATED VALVES AND SUPPORTS. TYPICAL.
 - REMOVE ALL EXISTING PLUMBING FIXTURES IN THIS SPACE IN THEIR ENTIRETY INCLUDING ALL ASSOCIATED PIPING AND SUPPORTS.
 - REMOVE PIPING TO VERTICAL ELBOW AND PREPARE FOR CONNECTION TO NEW.
 - EXISTING LAUNDRY UNITS TO BE RELOCATED. REMOVE EXISTING PIPING SERVING EXISTING UNITS IN ITS ENTIRETY.
 - REMOVE EXISTING GAS VENTS IN THEIR ENTIRETY. TYPICAL.
 - REMOVE GAS VENT TO THIS LOCATION AND PREPARE FOR NEW INSTALLATION.
 - REMOVE EXISTING PLUMBING VENT TO BELOW ROOF LEVEL AND PREPARE FOR NEW INSTALLATION.
 - CAREFULLY REMOVE AND SALVAGE EXISTING FIRE DEPARTMENT CONNECTION AND PREPARE FOR NEW INSTALLATION.

DESIGN COLLABORATIVE

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RENOVATIONS TO B & D HALLS
62249 Shimmel Road
Centerville, MI 49032
PROJECT: 2022.0049

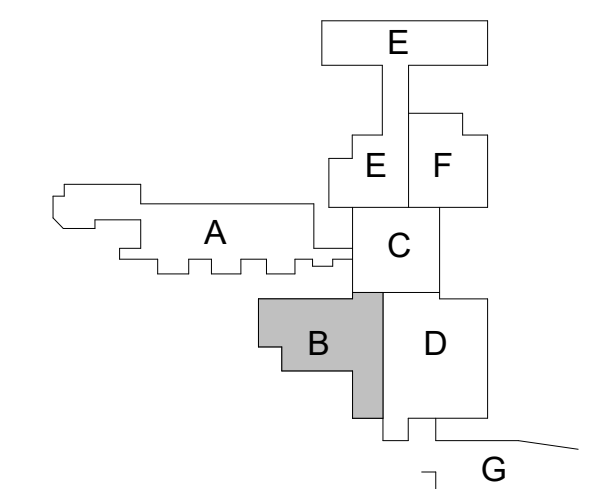


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CONSTRUCTION DOCUMENTS

ISSUE DATE: 07/15/2022

REVISIONS		
NO.	DATE	DESCRIPTION
1	2024/06/13	Addendum 3



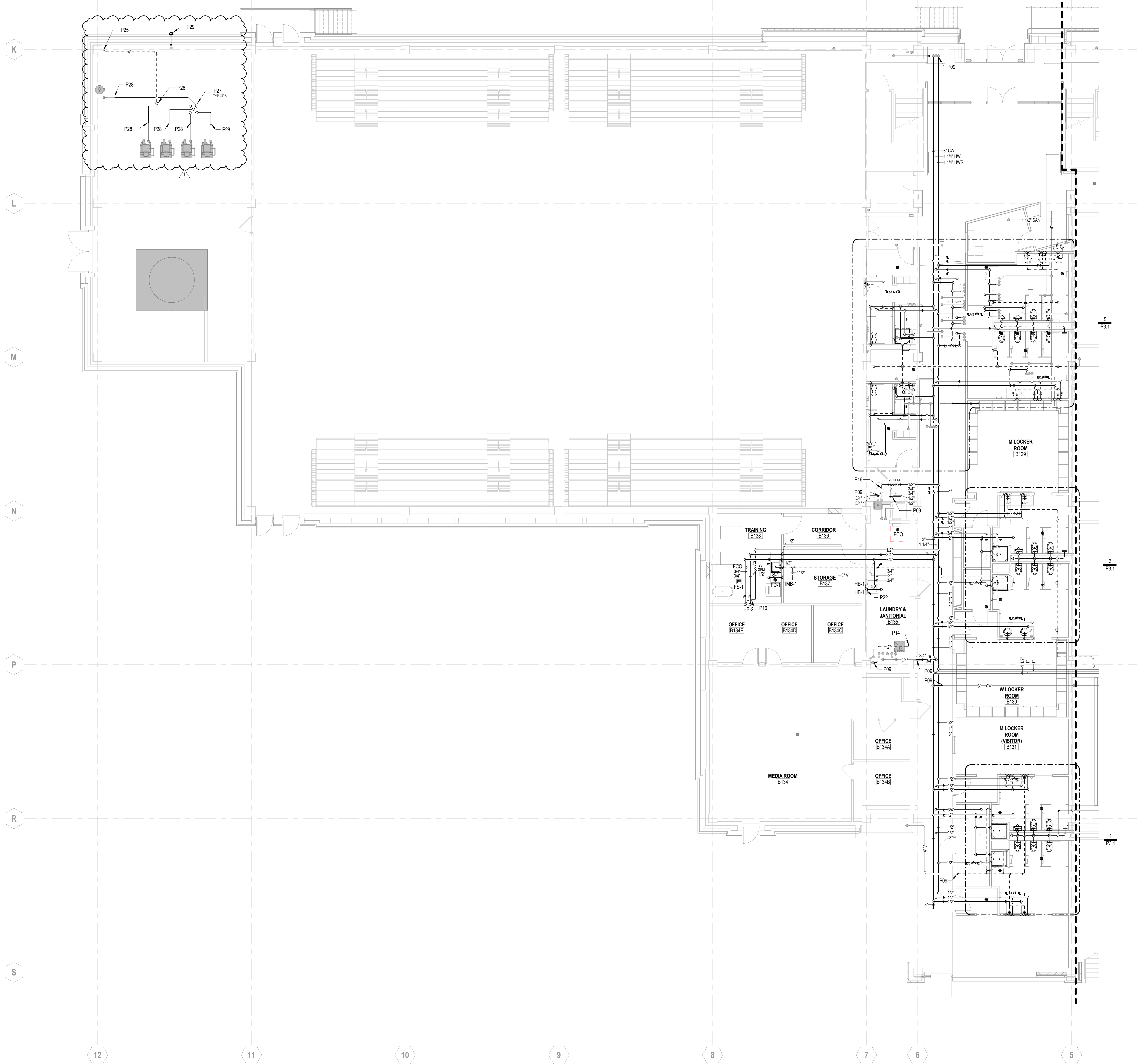
KEY PLAN
SCALE: NONE

1 PLUMBING DEMOLITION PLAN - MAIN LEVEL (B HALL)
SCALE: 1/8" = 1'-0"

PLUMBING DEMOLITION PLAN - MAIN LEVEL

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- GENERAL PLUMBING NOTES**
- DEAD ENDS SHALL BE AVOIDED IN A DRAINAGE SYSTEM, EXCEPT WHERE NECESSARY TO INSTALL A CLEANOUT IN AN ACCESSIBLE LOCATION. THE DEAD ENDS INTENDED FOR FUTURE CONNECTION OR CREATED BY REMOVAL OR ABANDONMENT OF PIPE, WHICH IS MORE THAN TWO (2) FEET ABOVE A FLOOR OR MORE THAN TEN (10) FEET HORIZONTALLY FROM THE NEAREST VENTED CONNECTION MUST HAVE A VENTED CONNECTION TO THE OUTSIDE ATMOSPHERE.
 - ALL FLOOR DRAINS SHALL BE INSTALLED WITH A TRAP SEAL DEVICE EQUAL TO ZURN MODEL Z1072.
 - ALL LAVATORY FAUCETS FOR PUBLIC USE SHALL BE PROVIDED WITH AN AUTOMATIC SAFETY WATER-MIXING DEVICE AND SHALL COMPLY WITH ANSI/ASSE 1016-1996 OR 1017-1998. THE SAFETY-MIXING DEVICE SHALL BE ADJUSTED TO A MAXIMUM SETTING OF 110 DEGREES FAHRENHEIT, AT THE TIME OF INSTALLATION.
 - PIPING LOCATIONS, INVERTS AND SIZES SHALL BE VERIFIED ON SITE TO DETERMINE EXACT LOCATION AND SIZE.
 - PROVIDE WALL CLEANOUTS ON ALL SANITARY AND STORM LINES AT 12" AFF WHERE THEY ROUTE TO BELOW THE SLAB.
- PLUMBING NOTES**
- P09 CONNECT NEW PIPING TO EXISTING IN THIS APPROXIMATE LOCATION. TRANSITION AS REQUIRED TO MAKE CONNECTION.
- P14 ROUTE VENT PIPING DOWN BELOW SLAB IN THIS APPROXIMATE LOCATION AND CONNECT TO SANITARY. REFER TO SHEET P1.08, PLUMBING PLAN - UNDERGROUND (B HALL) FOR CONTINUATION.
- P16 DOMESTIC HOT WATER RETURN LINE TO CONNECT INTO DOMESTIC HOT WATER LINE AT THIS APPROXIMATE LOCATION. HOT WATER BALANCING VALVE IS TO BE SET TO CRM SHOWN ON PLANS.
- P22 ROUTE NEW PIPING TO SERVE RELOCATED LAUNDRY UNIT ALONG WALL. TERMINATE DOMESTIC WATER PIPING WITH HOSE BIBB ON EACH PIPE AT 40" A.F.F. CONTRACTOR SHALL MAKE FINAL HOSE CONNECTIONS TO UNIT. COORDINATE INSTALLATION WITH OTHER TRADES.
- P25 CONNECT NEW PLUMBING VENT TO EXISTING IN THIS LOCATION.
- P26 ROUTE VENT PIPING UP THROUGH ROOF IN THIS APPROXIMATE LOCATION.
- P27 ROUTE GAS VENT UP THROUGH ROOF WITH FATE PIPE CURB.
- P28 CONNECT NEW GAS VENT TO EXISTING IN THIS APPROXIMATE LOCATION.
- P29 EXTEND FIRE PROTECTION PIPING AND REINSTALL FIRE DEPARTMENT CONNECTION.



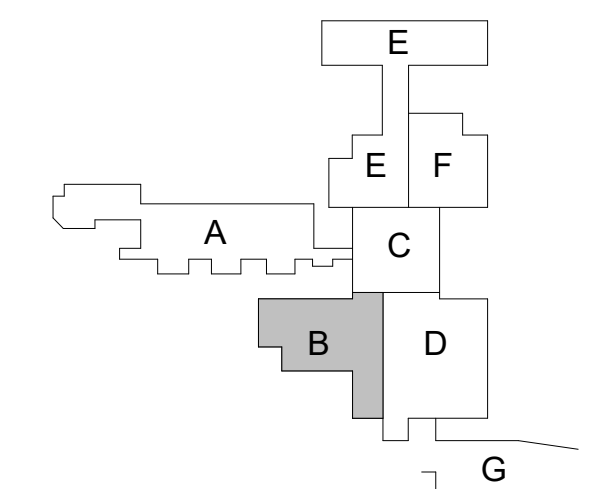
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1	2024/06/13	Addendum 3



1 PLUMBING PLAN - MAIN LEVEL (B HALL)
 SCALE: 1/8" = 1'-0"

KEY PLAN
 SCALE: NONE

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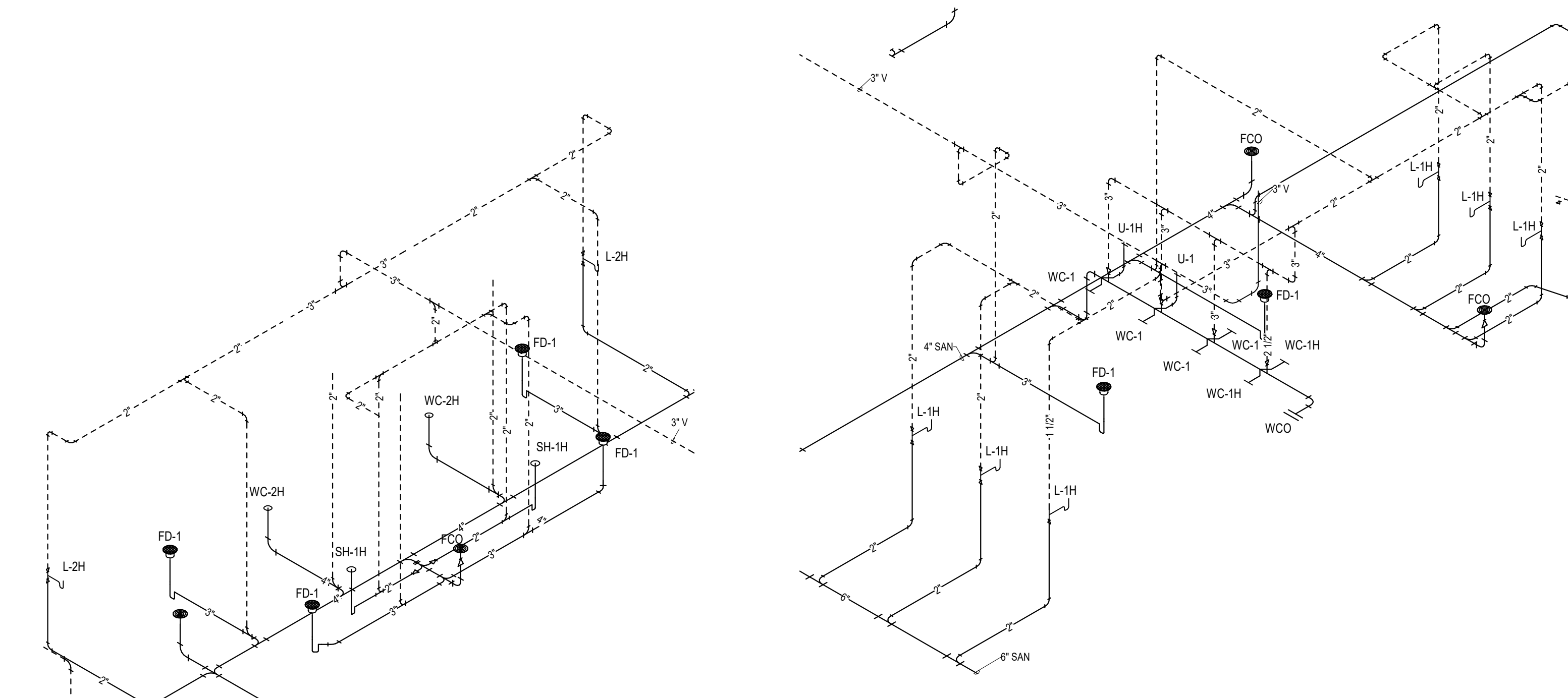
ISSUE DATE: 07/15/2022

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NO.	DATE	DESCRIPTION
1	2024/06/13	Addendum 3

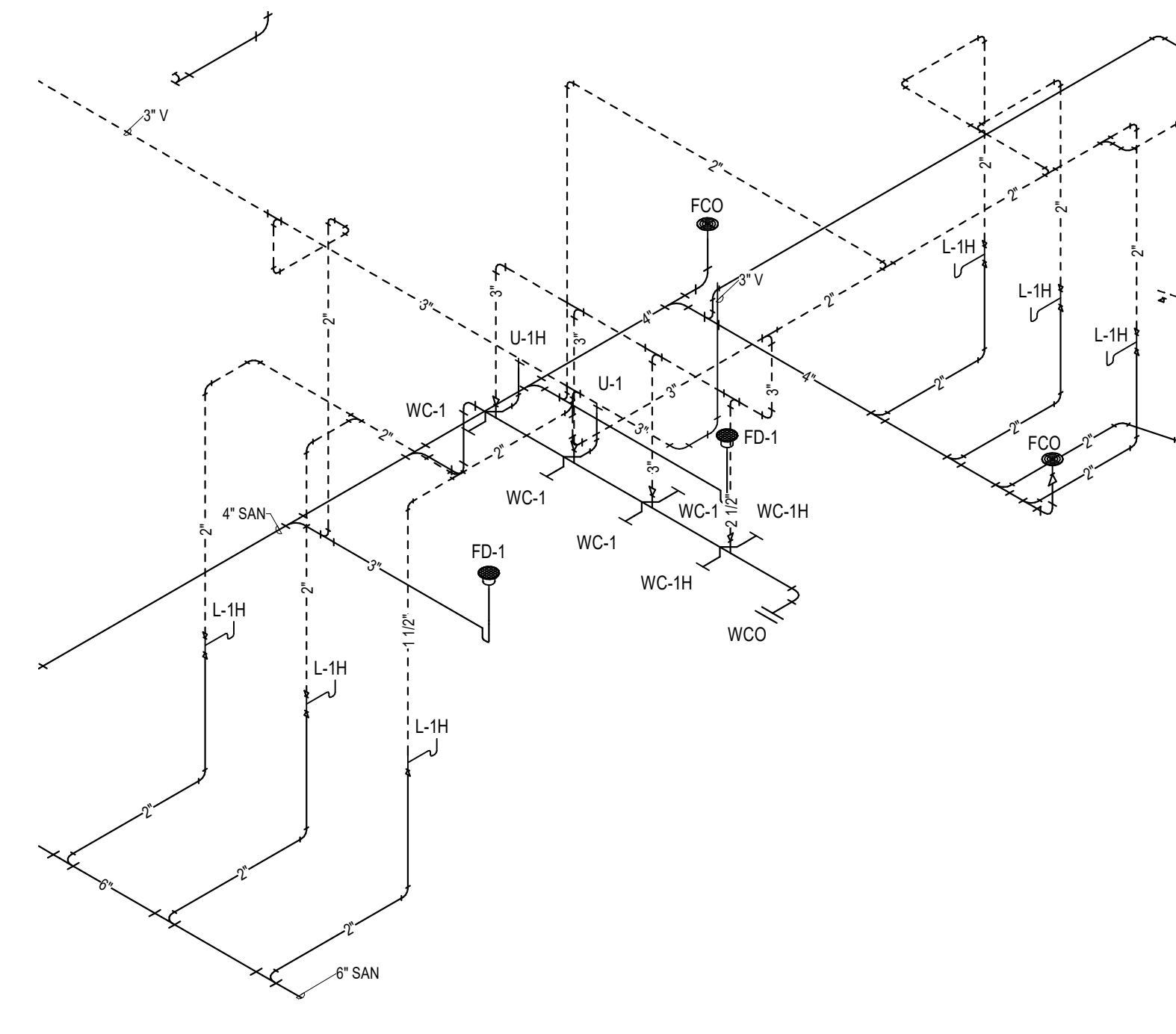
ENLARGED PLUMBING PLANS

PLUMBING NOTES	
P09	CONNECT NEW PIPING TO EXISTING IN THIS APPROXIMATE LOCATION. TRANSITION AS REQUIRED TO MAKE CONNECTION.
P11	ROUTE SANITARY PIPING BELOW SLAB IN THIS APPROXIMATE LOCATION. REFER TO SHEET P1.08, PLUMBING PLAN - UNDERGROUND (B HALL), FOR CONTINUATION.
P12	ROUTE PIPING DOWN INSIDE WALL AND CONNECT TO PLUMBING FIXTURE BELOW.
P13	ROUTE DOMESTIC COLD WATER DOWN INSIDE CHASE. ROUTE FULL SIZE HEADER ALONG ENTIRE LENGTH OF CHASE. BRANCH CONNECTIONS TO EACH PLUMBING FIXTURE. REFER TO FIXTURE CONNECTION SIZES LISTED IN PLUMBING FIXTURE SCHEDULE ON SHEET P4.1.
P14	ROUTE VENT PIPING DOWN BELOW SLAB IN THIS APPROXIMATE LOCATION AND CONNECT TO SANITARY. REFER TO SHEET P1.08, PLUMBING PLAN - UNDERGROUND (B HALL), FOR CONTINUATION.
P16	DOMESTIC HOT WATER RETURN LINE TO CONNECT INTO DOMESTIC HOT WATER LINE AT THIS APPROXIMATE LOCATION. HOT WATER BALANCING VALVE IS TO BE SET TO GPM SHOWN ON PLANS.
P17	2" SANITARY LINE SERVING UNIT D TO CONNECT INTO 4" SANITARY WITHIN CHASE.
P20	DOMESTIC COLD WATER, DOMESTIC HOT AND VENT PIPING TO ROUTE DOWN WITHIN STUD WALL IN THIS LOCATION TO AVOID OVERHEAD DIFFUSER. PIPING TO ROUTE FULL SIZE WITHIN CASEWORK AND MAKE INDIVIDUAL TAPS FOR EACH LAVATORY.

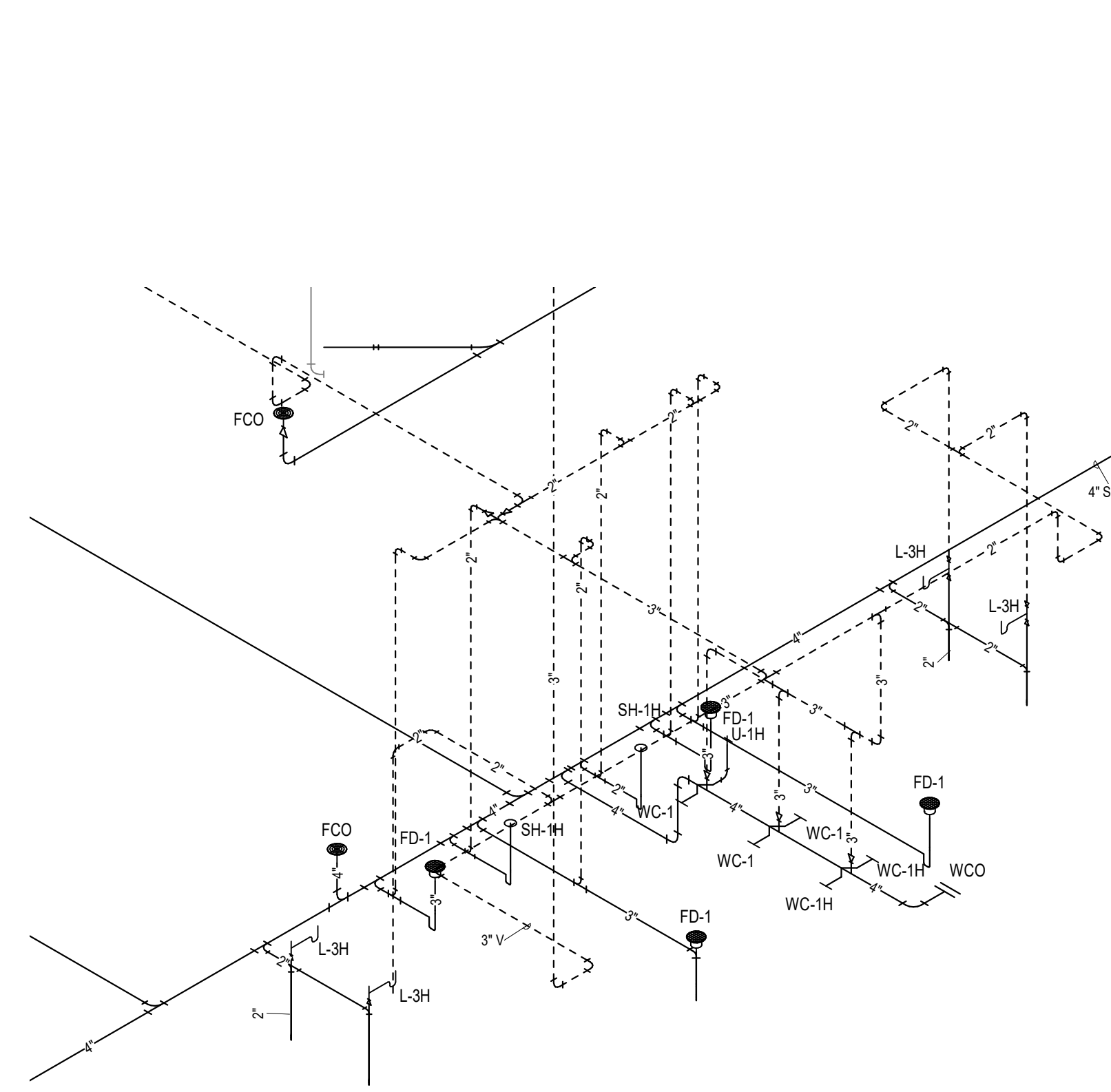
GENERAL PLUMBING NOTES	
1.	DEAD ENDS SHALL BE AVOIDED IN A DRAINAGE SYSTEM, EXCEPT WHERE NECESSARY TO EXTEND THE SYSTEM TO INSTALL A CLEANOUT IN AN ACCESSIBLE LOCATION. THE DEAD ENDS INTENDED FOR FUTURE CONNECTION OR CREATED BY REMOVAL OR ABANDONMENT OF PIPE, WHICH IS MORE THAN TWO (2) FEET ABOVE A FLOOR OR MORE THAN TEN (10) FEET HORIZONTALLY FROM THE NEAREST VENTED CONNECTION MUST HAVE A VENTED CONNECTION TO THE OUTSIDE ATMOSPHERE.
2.	ALL FLOOR DRAINS SHALL BE INSTALLED WITH A TRAP SEAL DEPTH EQUAL TO ZURN MODEL 21072.
3.	ALL LAVATORY FAUCETS FOR PUBLIC USE SHALL BE PROVIDED WITH AN AUTOMATIC SAFETY WATER-MIXING DEVICE AND SHALL COMPLY WITH ANSI/ASSE 1016/1996 OR 1017/1998. THE SAFETY-MIXING DEVICE SHALL BE ADJUSTED TO A MAXIMUM SETTING OF 110 DEGREES FAHRENHEIT, AT THE TIME OF INSTALLATION.
4.	PIPING LOCATIONS, INVERTS AND SIZES SHALL BE VERIFIED ON SITE TO DETERMINE EXACT LOCATION AND SIZE.
5.	PROVIDE WALL CLEANOUTS ON ALL SANITARY AND STORM LINES AT 12" AFF WHERE THEY ROUTE TO BELOW THE SLAB.



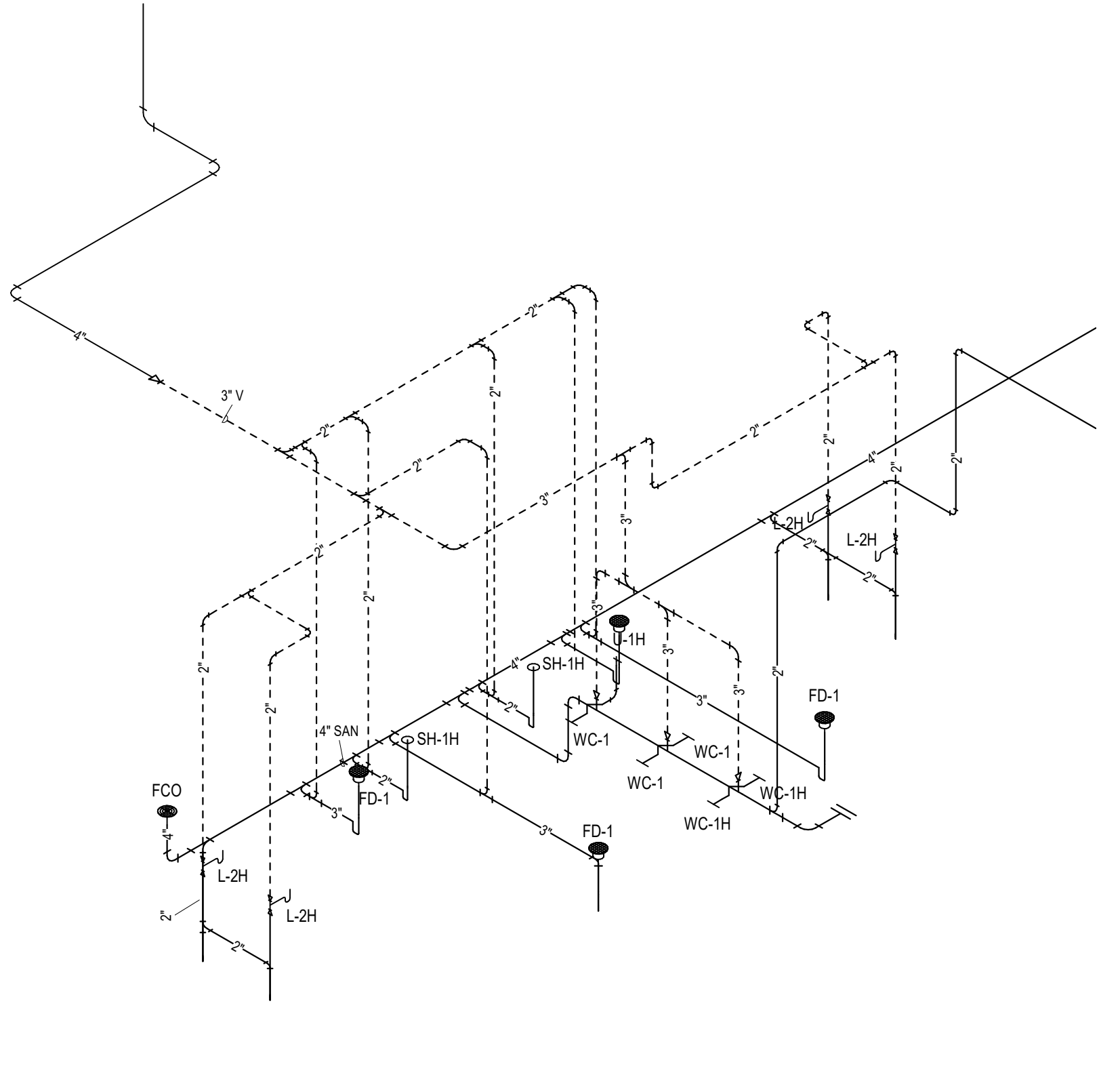
7 WASTE AND VENT ISOMETRIC - B136, B139



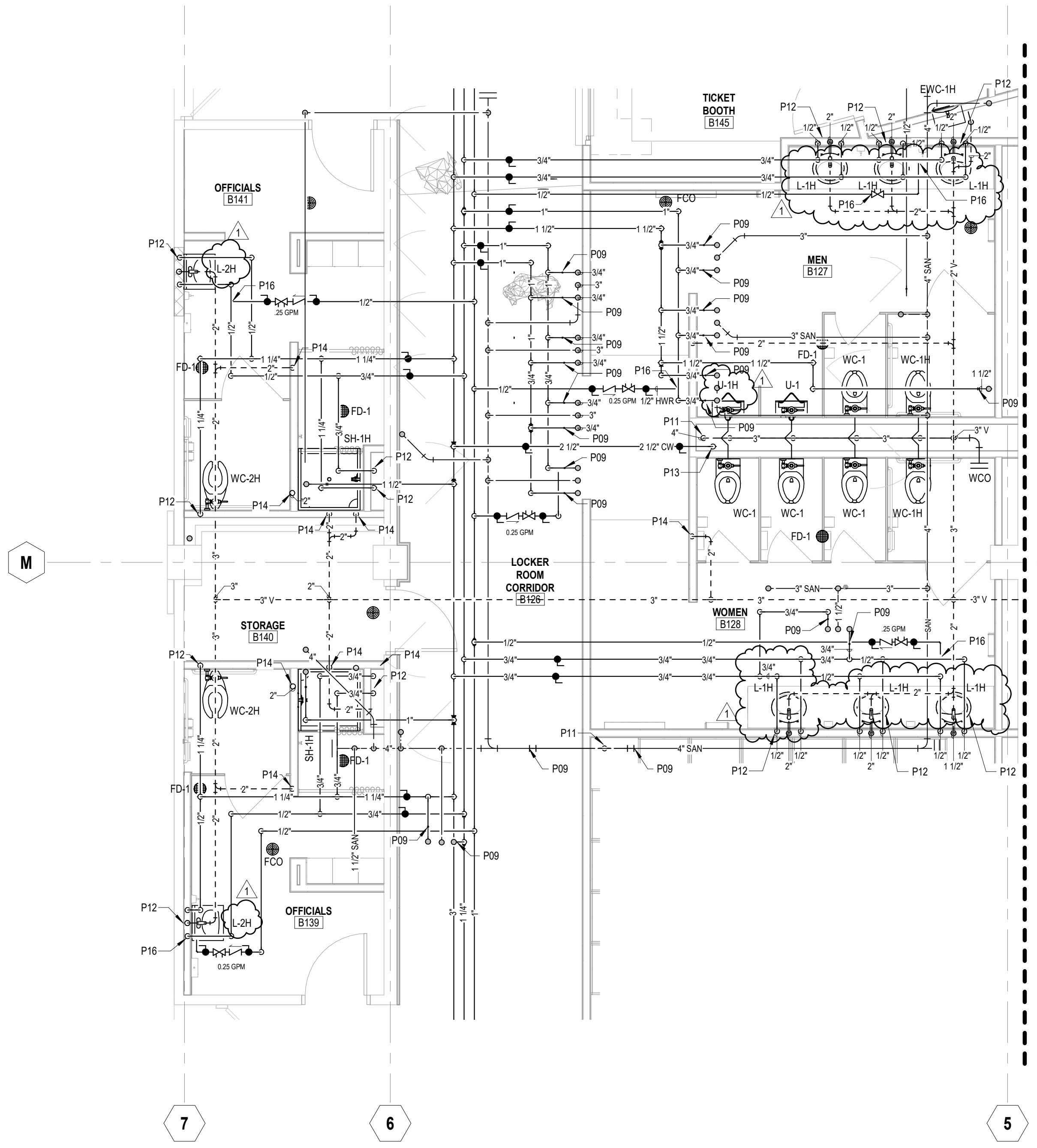
6 WASTE AND VENT ISOMETRIC - B127, B128



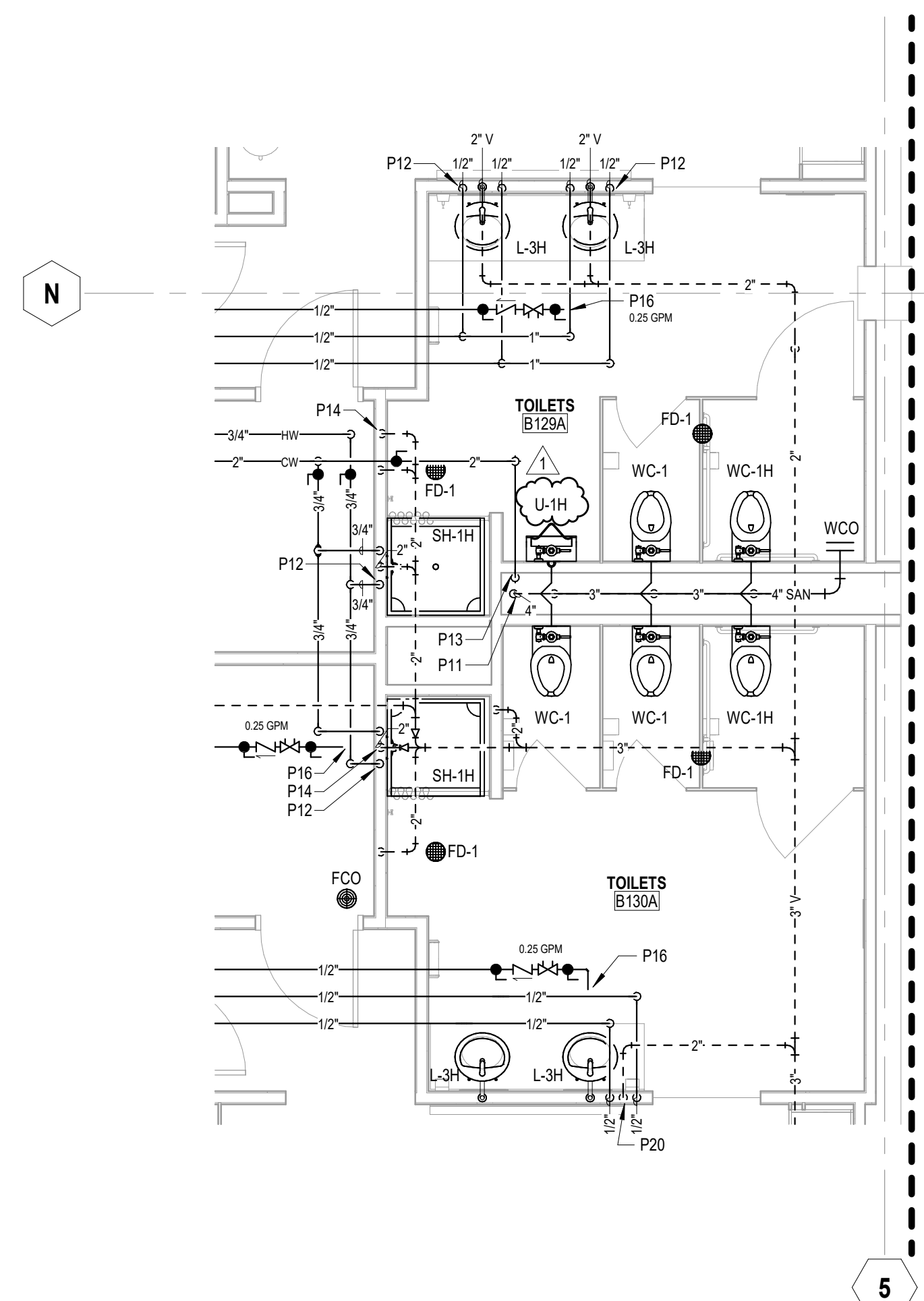
4 WASTE AND VENT ISOMETRIC - B129, B130



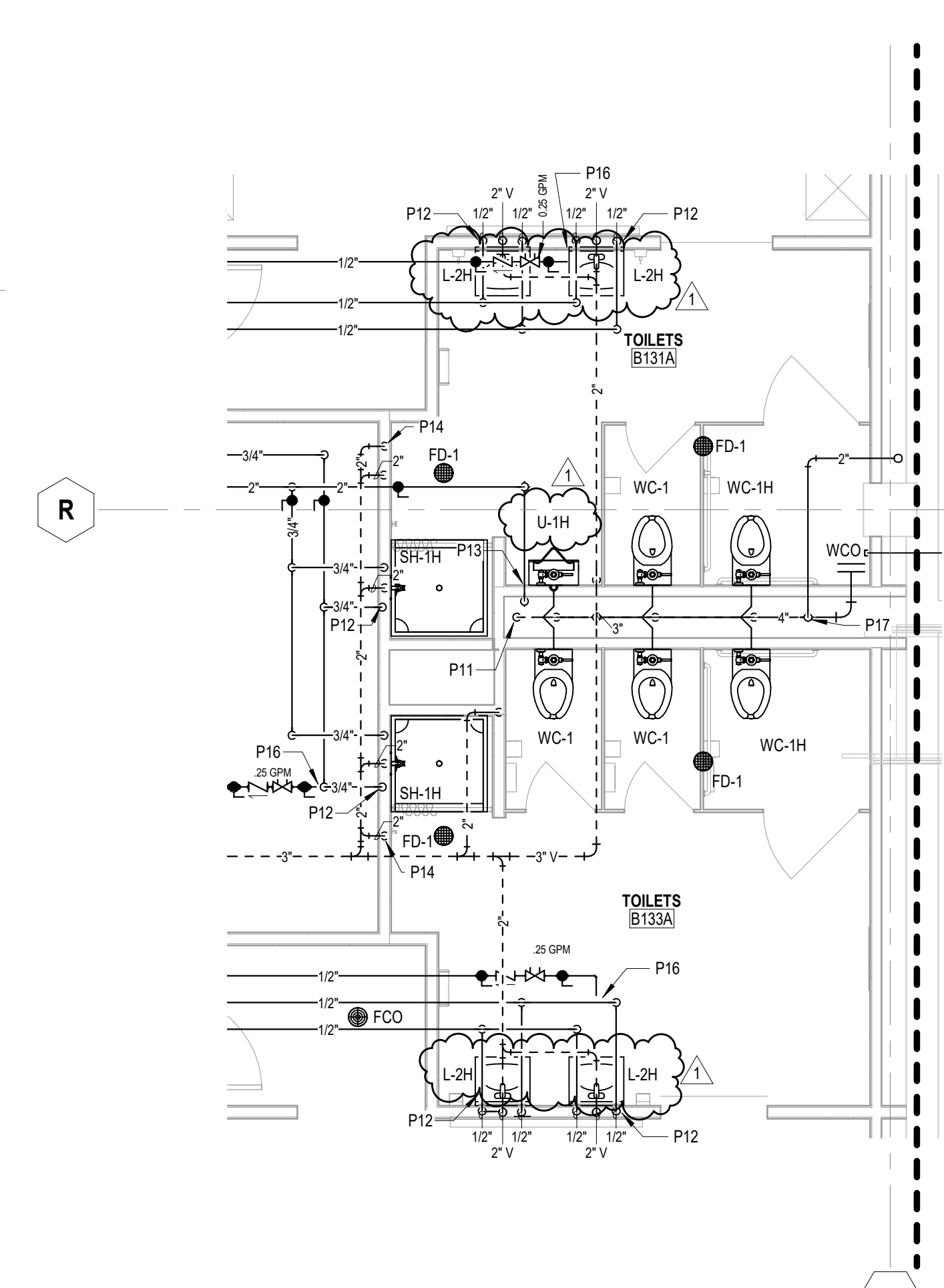
2 WASTE AND VENT ISOMETRIC - B131, B133



5 ENLARGED PLUMBING PLAN - B127, B128, B136, B139
 SCALE: 1/4" = 1'-0"

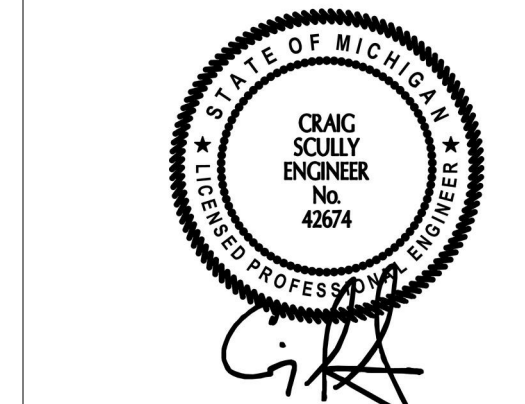


3 ENLARGED PLUMBING PLAN - B129, B130
 SCALE: 1/4" = 1'-0"



1 ENLARGED PLUMBING PLAN - B131, B133
 SCALE: 1/4" = 1'-0"

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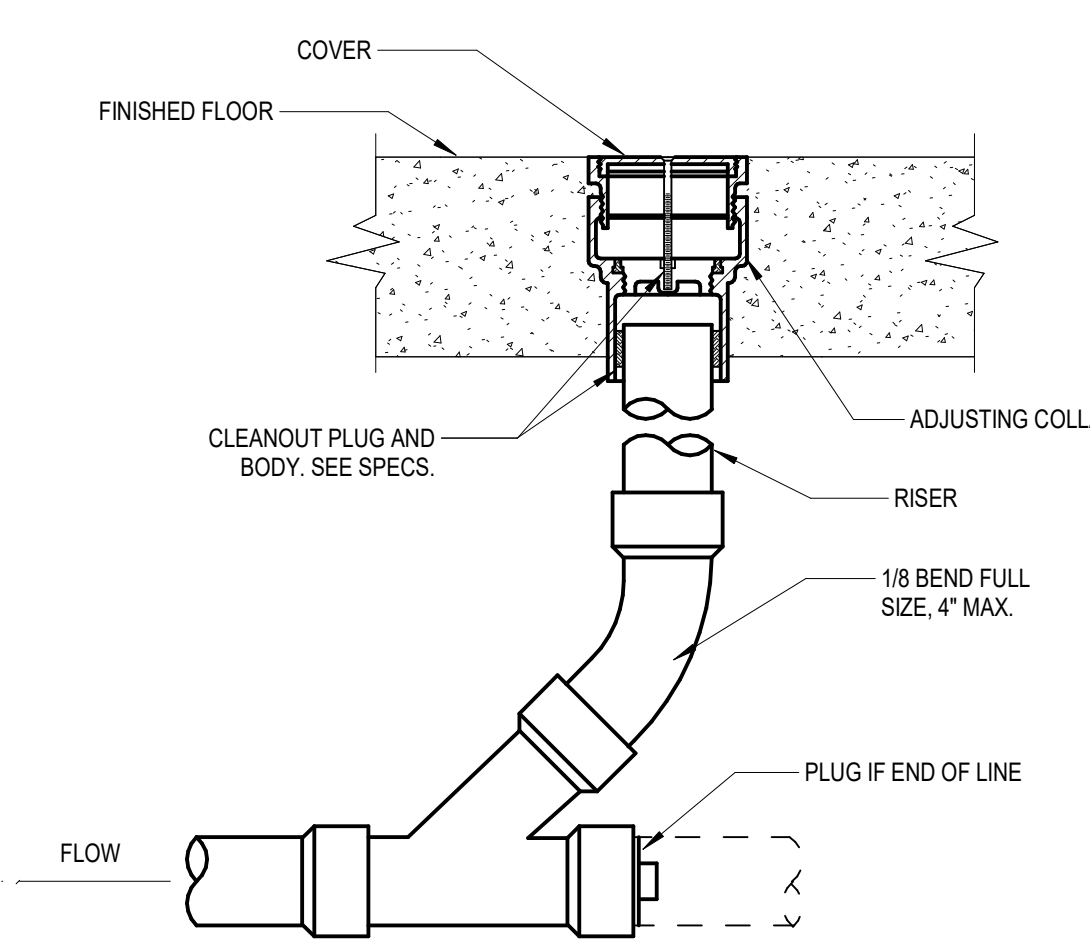
ISSUE DATE: 07/15/2022

REVISIONS

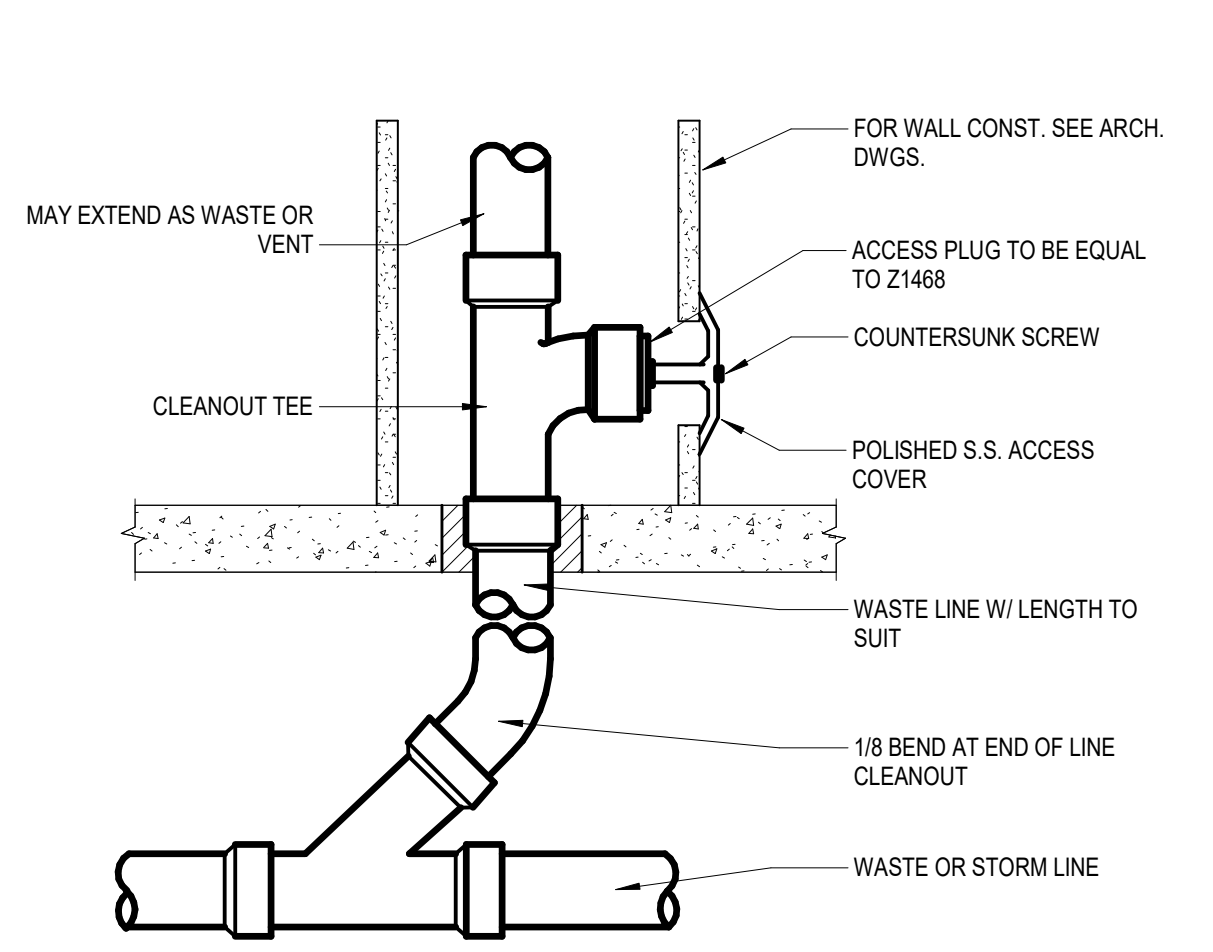
NO.	DATE	DESCRIPTION
1	2024/06/13	Addendum 3

PLUMBING FIXTURE SCHEDULE																			
FIXTURE					TRIM					MINIMUM CONNECTION SIZE				ACCESSORIES				NOTES	
TAG	MANUFACTURER	MODEL	EQUALS	FINISH	RIM HEIGHT	MANUFACTURER	MODEL	EQUALS	FINISH	COLD	HOT	VENT	WASTE	STOPS	TUBES	GRID DRAIN	P-TRAP		ADA WRAP
WC-1	AMERICAN STANDARD	2257.101	KOHLER	WHITE	15"	ZURN	ZEMS6000AV	SLOAN	POLISHED CHROME	1"		2"	4"						CARRIER HUNG TOILET WITH TOP SPUD, HARDWIRED SENSOR FLUSH VALVE, 1.6 GPF, REMIS 1955CT OPEN FRONT SEAT LESS COVER, ZURN 21203 CARRIER
WC-1H	AMERICAN STANDARD	2257.101	KOHLER	WHITE	17"	ZURN	ZEMS6000AV	SLOAN	POLISHED CHROME	1"		2"	4"						CARRIER HUNG ADA TOILET WITH TOP SPUD, HARDWIRED SENSOR FLUSH VALVE, 1.6 GPF, REMIS 1955CT OPEN FRONT SEAT LESS COVER, ZURN 21203 CARRIER
WC-2H	AMERICAN STANDARD	3481.001	KOHLER	WHITE	17"	ZURN	ZEMS6000AV	SLOAN	POLISHED CHROME	1"		2"	4"						FLOOR MOUNTED ADA TOILET WITH TOP SPUD, HARDWIRED SENSOR FLUSH VALVE, 1.6 GPF, REMIS 1955CT OPEN FRONT SEAT LESS COVER AND WAX RING
U-1	AMERICAN STANDARD	6590.001	KOHLER	WHITE	24"	ZURN	ZEMS6003AV	SLOAN	POLISHED CHROME	3/4"		1 1/2"	2"						CARRIER HUNG URINAL WITH TOP SPUD, HARDWIRED SENSOR FLUSH VALVE, 0.5 GPF, ZURN 21221 CARRIER
U-1H	AMERICAN STANDARD	6590.001	KOHLER	WHITE	17"	ZURN	ZEMS6003AV	SLOAN	POLISHED CHROME	3/4"		1 1/2"	2"						CARRIER HUNG ADA URINAL WITH TOP SPUD, HARDWIRED SENSOR FLUSH VALVE, 0.5 GPF, ZURN 21221 CARRIER
L-1H	AMERICAN STANDARD	0475.047	KOHLER	WHITE	34"	AMERICAN STANDARD	PK00.PAC	KOHLER, CHICAGO FAUCET	POLISHED CHROME	1/2"	1/2"	1 1/4"	1 1/2"	Yes	Yes	Yes	Yes	Yes	SELF RIMMING OVAL BOWL, SINGLE HOLE FOR FAUCET, SENSOR FAUCET WITH AC POWER SUPPLY, 0.5 GPM, VANDAL RESISTANT, OFFSET TAILPIECE, 17 GA. CAST BRASS TRAP, LEONARD 170-LF-8P POINT OF USE UNDER COUNTER MIXING VALVE WITH COLD WATER BYPASS, ZURN 21231 CONCEALED ARM CARRIER
L-2H	AMERICAN STANDARD	0355.012	KOHLER	WHITE	34"	ZURN	Z7440-XL	KOHLER, CHICAGO FAUCET	POLISHED CHROME	1/2"	1/2"	1 1/4"	1 1/2"	Yes	Yes	Yes	Yes	Yes	CARRIER HUNG ADA LAVATORY, THREE HOLES FOR FAUCET SINGLE LEVER MANUAL FAUCET WITH 4 INCH CENTERSET, 0.5 GPM, VANDAL RESISTANT, OFFSET TAILPIECE, 17 GA. CAST BRASS TRAP, LEONARD 170-LF-8P POINT OF USE UNDER COUNTER MIXING VALVE WITH COLD WATER BYPASS, ZURN 21231 CONCEALED ARM CARRIER
L-3H	AMERICAN STANDARD	0475.047	KOHLER	WHITE	34"	ZURN	Z7440-XL	KOHLER, CHICAGO FAUCET	POLISHED CHROME	1/2"	1/2"	1 1/4"	1 1/2"	Yes	Yes	Yes	Yes	Yes	SELF RIMMING OVAL BOWL, THREE HOLES FOR FAUCET SINGLE LEVER MANUAL FAUCET WITH 4 INCH CENTERSET, 0.5 GPM, VANDAL RESISTANT, OFFSET TAILPIECE, 17 GA. CAST BRASS TRAP, LEONARD 170-LF-8P POINT OF USE UNDER COUNTER MIXING VALVE WITH COLD WATER BYPASS, ZURN 21231 CONCEALED ARM CARRIER
S-1	ELKAY	DLR221910	JUST	STAINLESS STEEL	34"	AMERICAN STANDARD	6545.170	KOHLER, CHICAGO FAUCET, ELKAY	POLISHED CHROME	1/2"	1/2"	1 1/4"	1 1/2"	Yes	Yes	Yes	Yes	Yes	SINGLE BOWL SELF RIMMING SINK, THREE FAUCET HOLES, NON-AERATING GOOSENECK FAUCET WITH DUAL 4 INCH WRISTBLADE HANDLES, 17 GA. CAST BRASS TRAP, LEONARD 170-LF-8P POINT OF USE UNDER COUNTER MIXING VALVE WITH COLD WATER BYPASS, LK18 GRID STRAINER
S-2	ELKAY	DLR172010	JUST	STAINLESS STEEL	34"	AMERICAN STANDARD	6545.170	KOHLER, CHICAGO FAUCET, ELKAY	POLISHED CHROME	1/2"	1/2"	1 1/4"	1 1/2"	Yes	Yes	Yes	Yes	Yes	SINGLE BOWL SELF RIMMING SINK, THREE FAUCET HOLES, NON-AERATING GOOSENECK FAUCET WITH DUAL 4 INCH WRISTBLADE HANDLES, 17 GA. CAST BRASS TRAP, LEONARD 170-LF-8P POINT OF USE UNDER COUNTER MIXING VALVE WITH COLD WATER BYPASS, LK18 GRID STRAINER
S-3	ELKAY	ELUH31675	JUST	STAINLESS STEEL	34"	AMERICAN STANDARD	6545.170	KOHLER, CHICAGO FAUCET, ELKAY	POLISHED CHROME	1/2"	1/2"	1 1/4"	1 1/2"	Yes	Yes	Yes	Yes	Yes	DOUBLE BOWL UNDER MOUNT SINK, OPENING FOR SINK AND HOLES FOR FAUCET BY COUNTERTOP MANUFACTURER, PROVIDE TEMPLATE TO COUNTERTOP PROVIDER FOR HOLE CUTTING, THREE FAUCET HOLES, NON-AERATING GOOSENECK FAUCET WITH DUAL 4 INCH WRISTBLADE HANDLES, 17 GA. CAST BRASS TRAP, LEONARD 170-LF-8P POINT OF USE UNDER COUNTER MIXING VALVE WITH COLD WATER BYPASS, LK18 GRID STRAINER
SH-1H	AQUA BATH	C41388F	AKER, AQUARIUS	WHITE	34"	SYMMONS	9605-X-PLR-TRM	AMERICAN STANDARD, DELTA	POLISHED CHROME	1/2"	1/2"	1 1/2"	2"						FIBERGLASS OPEN TOP ONE-PIECE SHOWER, BARRIER FREE, STAINLESS STEEL STRAINER, SET IN A BED OF NON-SHRINK GROUT, 80" HOSE FOR HAND SHOWER, TEMPERATURE CONTROL VALVE AND DIVERter VALVE, FOLD UP SEAT, SHOWER CURTAIN ROD WITH WEIGHTED SHOWER CURTAIN AND RINGS
EWC-1H	ELKAY	LZWSGRN8PK	OASIS, HALSEY TAYLOR	STAINLESS STEEL	27"					1/2"			1 1/4"						RECESSED BOTTLE FILL STATION, ADA COMPLIANT
HB-1	WOODFORD	MODEL 24	ZURN, JOSAM	ROUGH CHROME						3/4"									INTERIOR WALL FAUCET WITH HANDLE AND VACUUM BREAKER
HB-2	WOODFORD	MODEL 24	ZURN, JOSAM	ROUGH CHROME						3/4"	3/4"								INTERIOR WALL FAUCET WITH HANDLE AND VACUUM BREAKER
FD-1	ZURN	Z415-7B	JOSAM, WADE	NICKEL BRONZE									3"						7" STRAINER, NO-HUB OUTLET, SEE DRAWING FOR SIZES
FS-1	ZURN	ZN1901-33-312	JOSAM, WADE	NICKEL BRONZE									3"						12"x12" DEEP FLOOR SINK WITH WHITE ACID RESISTANT FINISH, ARE DONE STRAINER, 1/2 GRATE, STAINLESS STEEL MESH LINER FOR BUCKET, NO HUB OUTLET, SEE DRAWINGS FOR SIZES
FCO	ZURN	ZN-1400	JOSAM, WADE	NICKEL BRONZE									3"						INTERIOR FLOOR CLEANOUT, NO HUB OUTLET, SEE DRAWINGS FOR SIZES
IMB-1	IPSGUY GRAY	MB1AB	OATEY	WHITE						1/2"									RECESSED ICE MAKER BOX WITH QUARTER TURN BRASS PLATED VALVE AND COVER PLATE

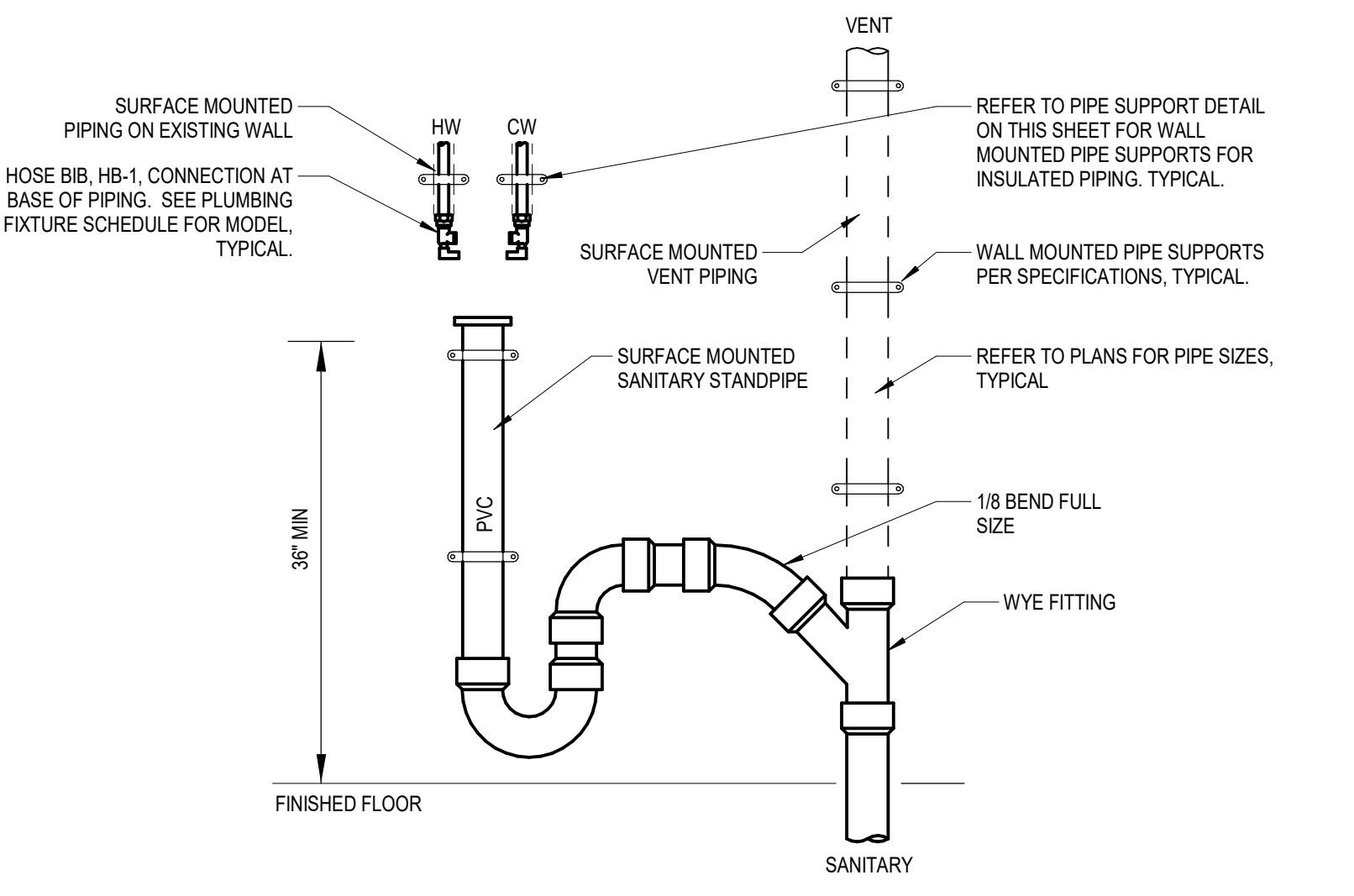
1. USE MANUFACTURERS CURRENT COMPARISON CHARTS FOR CROSS REFERENCE FOR FIXTURE EQUALS. SUBMIT EQUALS TO ENGINEER PRIOR TO BID. SEE DRAWINGS FOR OUTLET SIZES.
2. PLUMBING ACCESSORIES SHALL BE THE FOLLOWING (ACCEPTABLE MANUFACTURERS ARE: MCQUIRE, BRASSCRAFT, ZURN, KEENEY)
3. STOPS - CHROME PLATED BRASS ANGLE STOPS WITH 1/2" F.I.P. INLET AND 3/8" OUTLET, QUARTER TURN HANDLE, CHROME PLATED ESCHUTCHEON
4. TUBES - 12" LONG BRAIDED STAINLESS STEEL HOSES
5. GRID DRAIN - POLISHED CHROME 17 GA. CAST BRASS SOLID TOP OPEN GRID STRAINER WITH TAILPIECE
6. OFFSET GRID - POLISHED CHROME 17 GA. CAST BRASS SOLID TOP OPEN GRID STRAINER WITH OFFSET TAILPIECE (ADA COMPLIANT)
7. P-TRAP - PVC DWV P-TRAP WITH THREADED COMPRESSION ENDS, PVC ARM, AND ESCHUTCHEON AT WALL
8. ADA WRAP - WHITE POLYOLEFIN WRAP FOR SUPPLY TUBES, STOPS, TAILPIECE, TRAP AND ARM



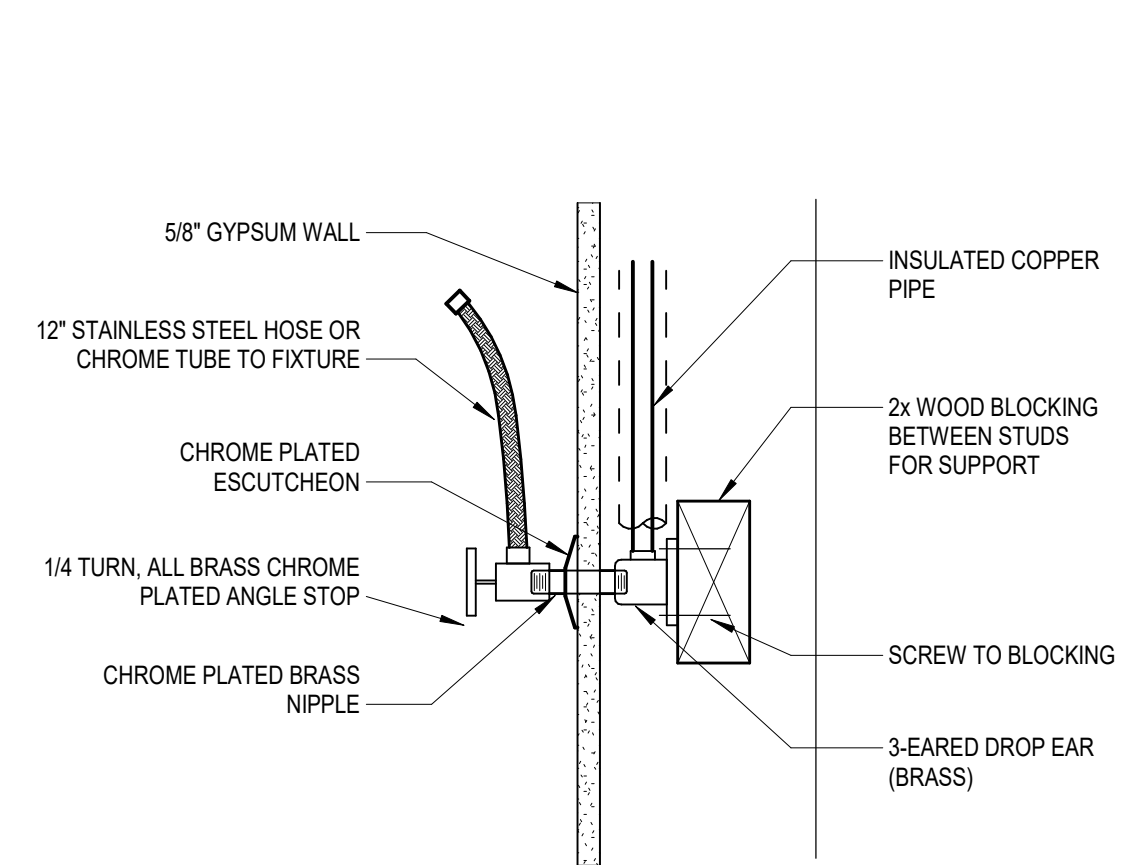
4 FLOOR CLEANOUT DETAIL



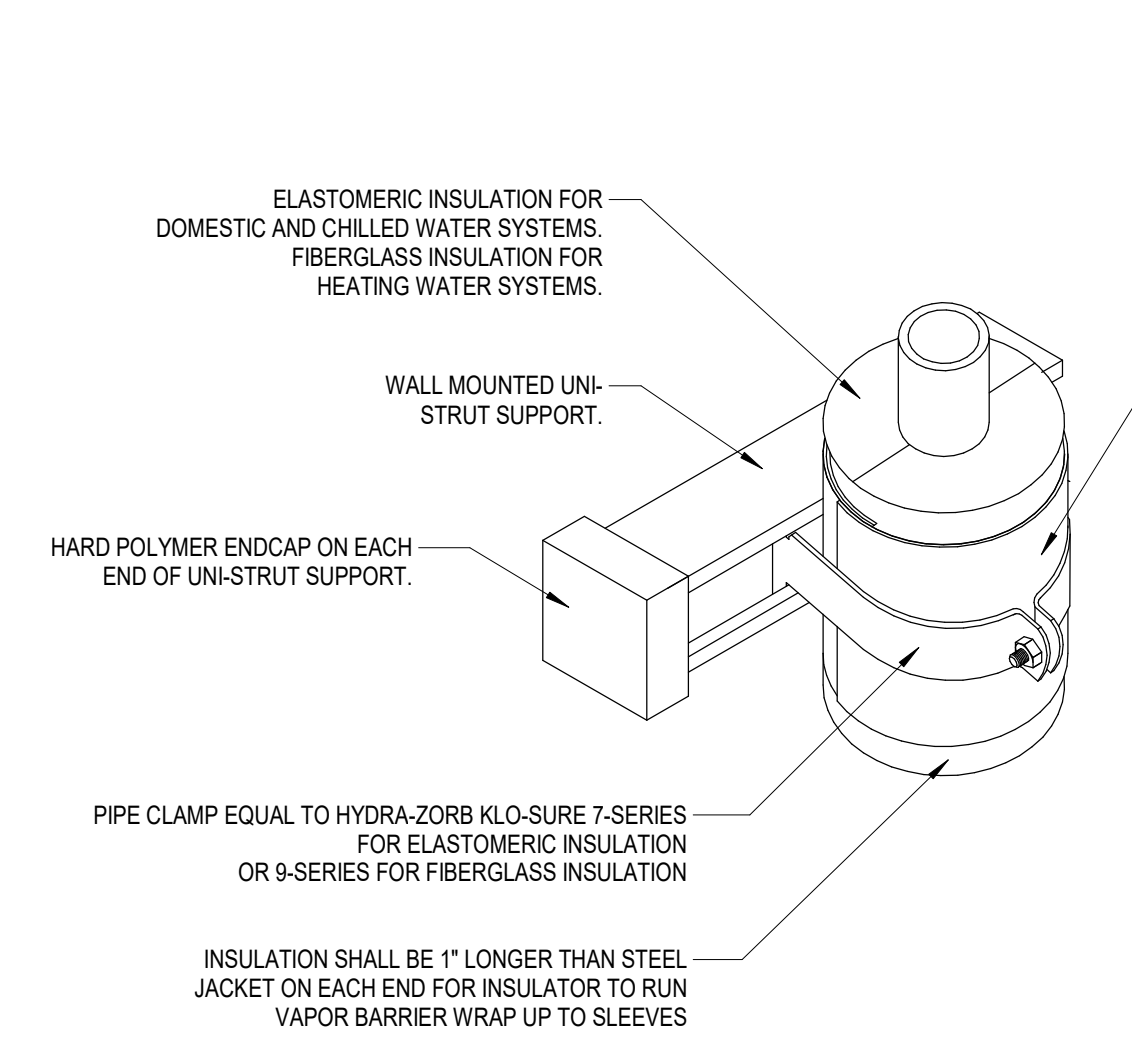
3 WALL CLEANOUT DETAIL



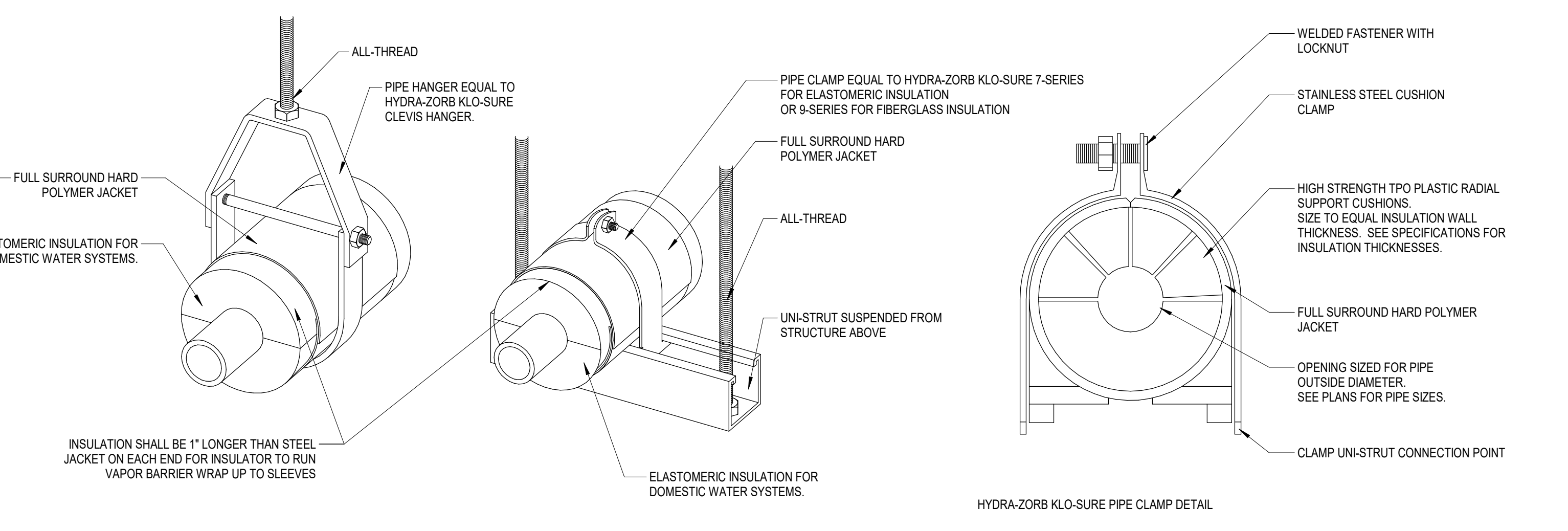
2 WASHING MACHINE PIPING DETAIL



5 FIXTURE CONNECTION DETAIL

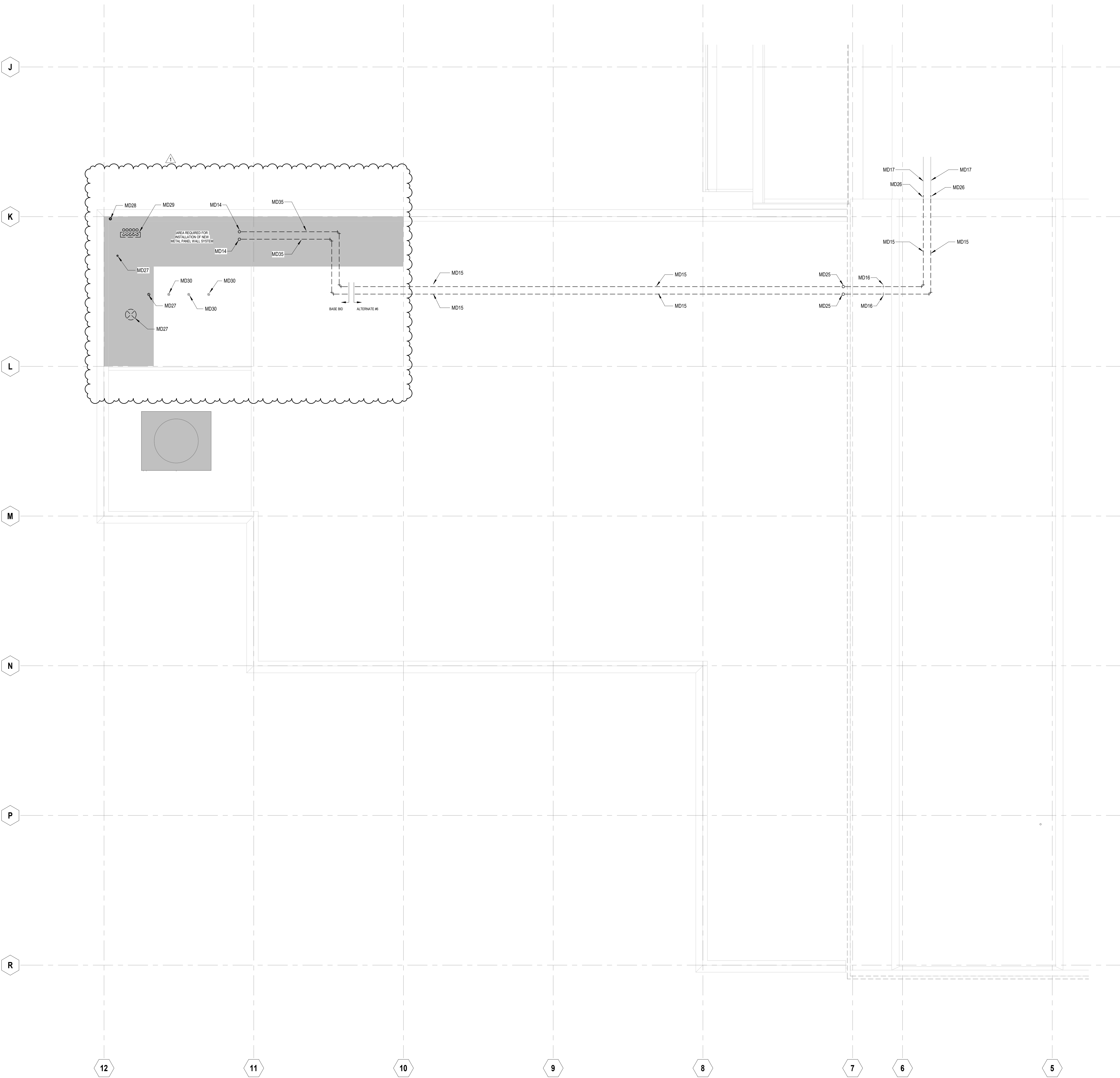


1 PIPE SUPPORT DETAIL



HYDRA-ZORB KLO-SURE PIPE CLAMP DETAIL

6/13/2024 5:55:22 AM

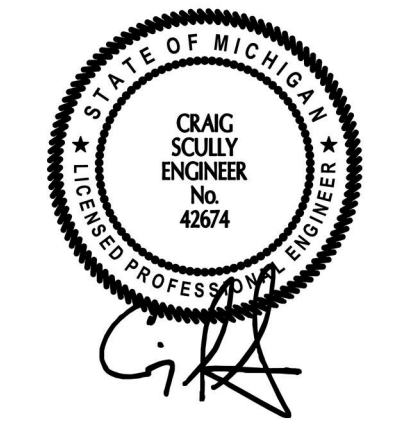


- GENERAL MECHANICAL DEMOLITION NOTES**
- VERIFY ALL EXACT LOCATIONS OF EXISTING DUCTS, PIPING AND EQUIPMENT AS WELL AS SIZES.
 - PATCH ALL CEILINGS, WALLS, FLOORS AND ROOFS WHERE PIPING, EQUIPMENT AND DUCT ARE REMOVED WITH A MATERIAL MATCHING THE EXISTING CONSTRUCTION, TYPICAL OF ALL AREAS.
- MECHANICAL DEMOLITION NOTES**
- MD14 REMOVE EXISTING HYDRONIC PIPING TO BELOW ROOF AND PREPARE FOR NEW CONNECTION.
 - MD15 UNDER ALTERNATE #1, CAREFULLY REMOVE AND SALVAGE EXISTING ROOF MOUNTED HYDRONIC PIPING IN ITS ENTIRETY.
 - MD16 UNDER ALTERNATE #1, REMOVE EXISTING HYDRONIC BRANCH PIPING TO ROOF LINE AND PREPARE FOR NEW CONNECTION.
 - MD17 EXISTING ROOF MOUNTED HYDRONIC PIPING, SHOWN GRAY, TO REMAIN AND BE REUSED.
 - MD25 UNDER ALTERNATE #1, REMOVE EXISTING HYDRONIC PIPING ROUTED VERTICALLY UP SIDE OF BUILDING.
 - MD26 UNDER ALTERNATE #1, REMOVE EXISTING HYDRONIC PIPING TO VERTICAL TURN DOWN AND PREPARE FOR NEW CONNECTION.
 - MD27 REMOVE EXISTING DUCTWORK LOCATED WITHIN AREA REQUIRED FOR NEW METAL PANEL WALL SYSTEM INSTALLATION. COORDINATE WITH OWNER'S ROOF WARRANTY PROVIDER TO PATCH EXISTING ROOF AS REQUIRED.
 - MD28 REMOVE EXISTING VENT THROUGH ROOF LOCATED WITHIN AREA REQUIRED FOR NEW METAL PANEL WALL SYSTEM INSTALLATION. COORDINATE WITH OWNER'S ROOF WARRANTY PROVIDER TO PATCH EXISTING ROOF AS REQUIRED.
 - MD29 REMOVE EXISTING CURB CONTAINING NATURAL GAS VENTS. COORDINATE WITH OWNER'S ROOF WARRANTY PROVIDER TO PATCH EXISTING ROOF AS REQUIRED.
 - MD30 EXISTING FLUE TO REMAIN. SHOWN FOR REFERENCE ONLY.
 - MD35 UNDER BASE BID, CAREFULLY REMOVE AND SALVAGE EXISTING ROOF MOUNTED HYDRONIC PIPING AND ASSOCIATED SUPPORTS LOCATED WITHIN REGION REQUIRED FOR NEW METAL WALL PANEL INSTALLATION. PREPARE PIPING FOR REINSTALLATION IN NEW LOCATION.

DESIGN COLLABORATIVE

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Glen Oaks Community College
RENOVATIONS TO B & D HALLS
62249 Shimmel Road
Centerville, MI 49032
PROJECT: 2022.0049

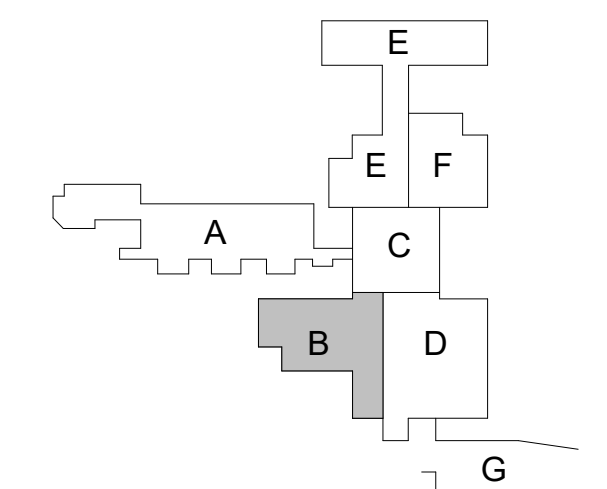


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NO.	DATE	DESCRIPTION
1	2024/06/13	Addendum 3



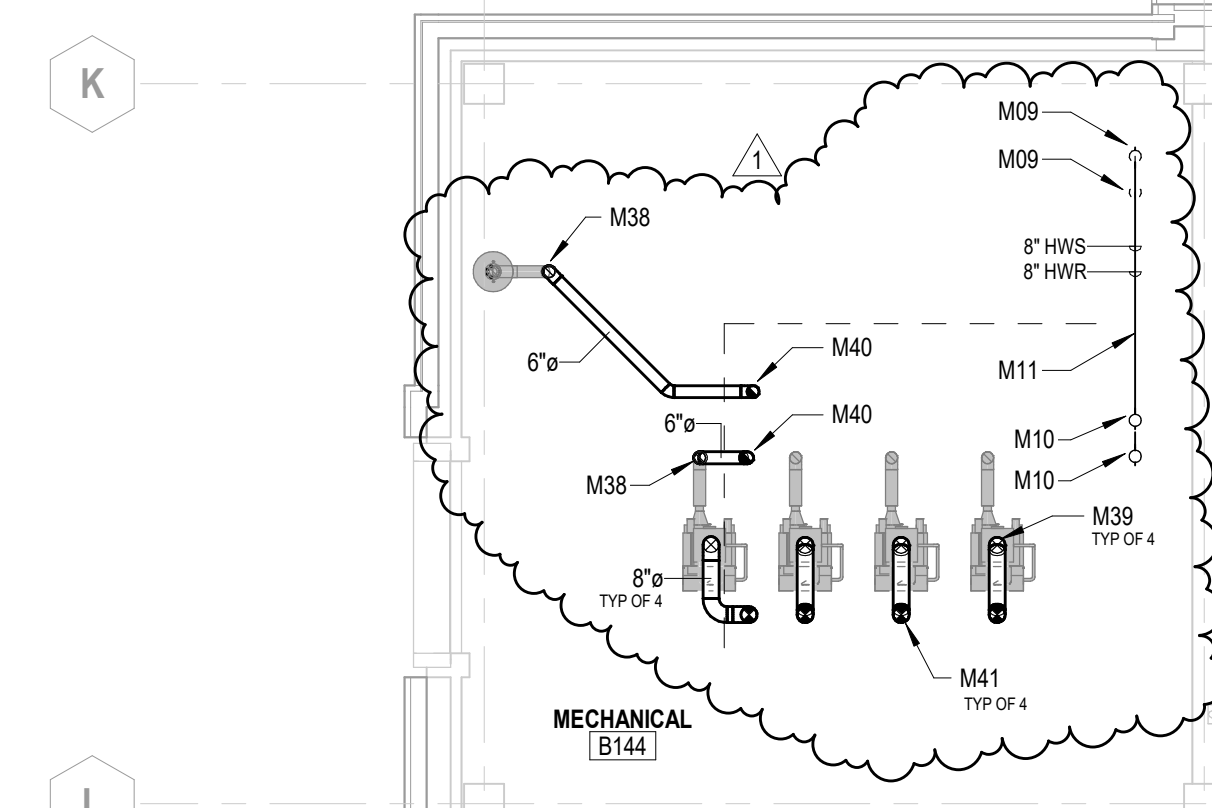
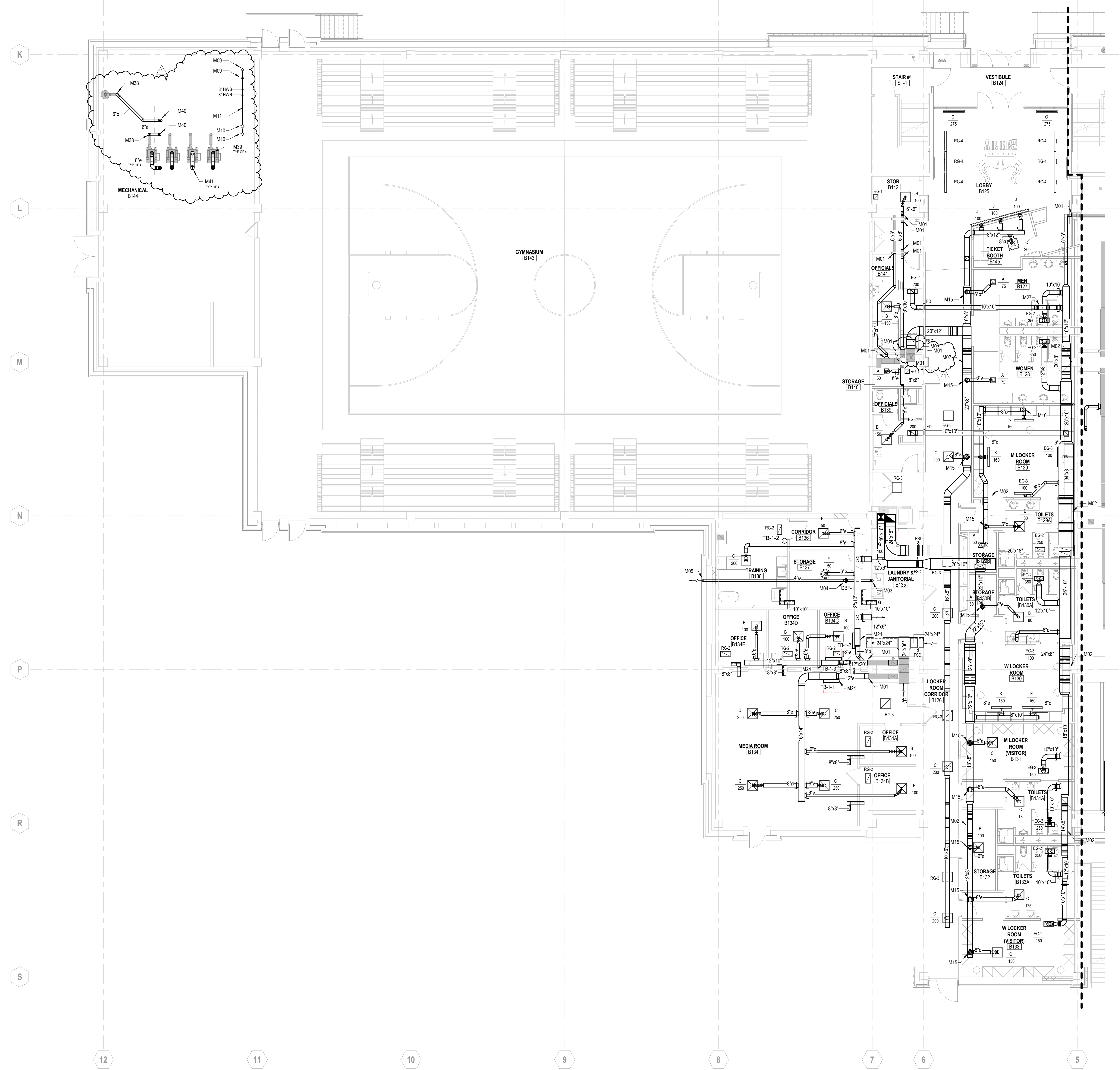
KEY PLAN
SCALE: NONE

1 MECHANICAL DEMOLITION PLAN - ROOF LEVEL
SCALE: 1/8" = 1'-0"

MECHANICAL DEMOLITION PLAN - ROOF

MD1.3

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- GENERAL MECHANICAL NOTES**
- MECHANICAL CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AS REQUIRED TO COMPLETE THE INSTALLATION OF THE DUCT SYSTEMS. LAYOUTS ARE SCHEMATIC IN NATURE AND PROVIDE GENERAL ROUTING SOLUTIONS. CONTRACTOR SHALL COORDINATE ALL ROUTES ON SITE.
 - ALL DUCTS SHALL BE SEALED AND INSULATED PER SPECIFICATIONS.
 - INSTALL ALL DUCTS AND PIPING AS HIGH AS POSSIBLE TO ALLOW FOR CLEARANCE WITH CEILINGS AND OTHER TRADES.
 - SEE THE REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL DIFFUSERS IN THE CEILINGS.

- MECHANICAL NOTES**
- M01 CONNECT NEW DUCTWORK TO EXISTING. TRANSITION AS REQUIRED TO MAKE CONNECTION.
 - M02 OFFSET AND TRANSITION DUCTWORK AS REQUIRED TO ROUTE BELOW EXISTING CONCRETE BEAM IN THIS APPROXIMATE LOCATION.
 - M03 ROUTE DRYER VENT UP ALONG WALL TO APPROXIMATELY 10'-0" A.F.F. TERMINATE AT 12" AFF FOR CONNECTION TO DRYER.
 - M04 INSTALL DRYER BOOSTER FAN IN THIS APPROXIMATE LOCATION. MOUNT UNIT SUSPENDED FROM STRUCTURE IN STRICT COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS.
 - M05 ROUTE DRYER EXHAUST THROUGH EXTERIOR WALL IN THIS APPROXIMATE LOCATION AND TERMINATE WITH DRYER VENT LOUVER.
 - M09 CONNECT NEW PIPING TO EXISTING IN THIS APPROXIMATE LOCATION. TRANSITION AS REQUIRED TO MAKE CONNECTION.
 - M10 ROUTE PIPING THROUGH EXISTING ROOF IN THIS APPROXIMATE LOCATION. COORDINATE REQUIRED OPENINGS WITH OTHER TRADES AND OWNER'S ROOF WARRANTY PROVIDER.
 - M11 ROUTE PIPING STACKED BELOW ROOF INSIDE MECHANICAL ROOM SPACE.
 - M15 TAP BRANCH DUCT OFF TOP OF MAIN DUCT.
 - M16 TRANSITION DUCTWORK DOWN AT THIS APPROXIMATE LOCATION TO CONNECT INTO SUPPLY DIFFUSER BOOT.
 - M24 INSTALL TERMINAL UNIT WITH ELECTRIC REHEAT ABOVE CEILING IN ACCESSIBLE LOCATION IN STRICT COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS. COORDINATE INSTALLATION REQUIREMENTS WITH OTHER TRADES.
 - M27 OFFSET DUCT TO AVOID INTERFERENCE WITH ADJACENT DUCT.
 - M38 ROUTE EXHAUST FLUE DOWN TO GAS-FIRED EQUIPMENT BELOW AND CONNECT TO EXISTING.
 - M39 ROUTE COMBUSTION AIR DUCT DOWN TO GAS-FIRED EQUIPMENT BELOW AND CONNECT.
 - M40 ROUTE EXHAUST FLUE UP THROUGH ROOF ABOVE.
 - M41 ROUTE COMBUSTION AIR DUCT UP THROUGH ROOF ABOVE.



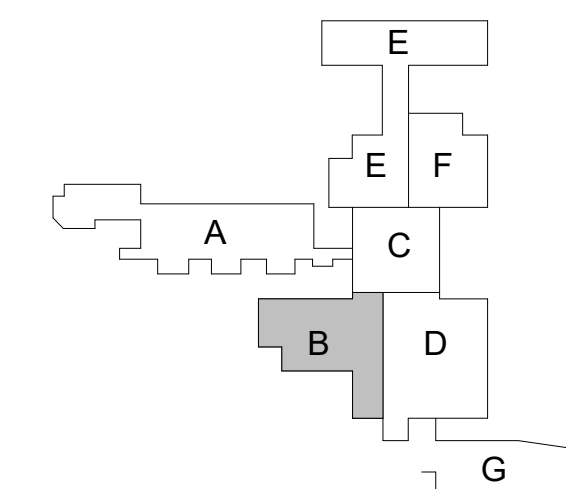
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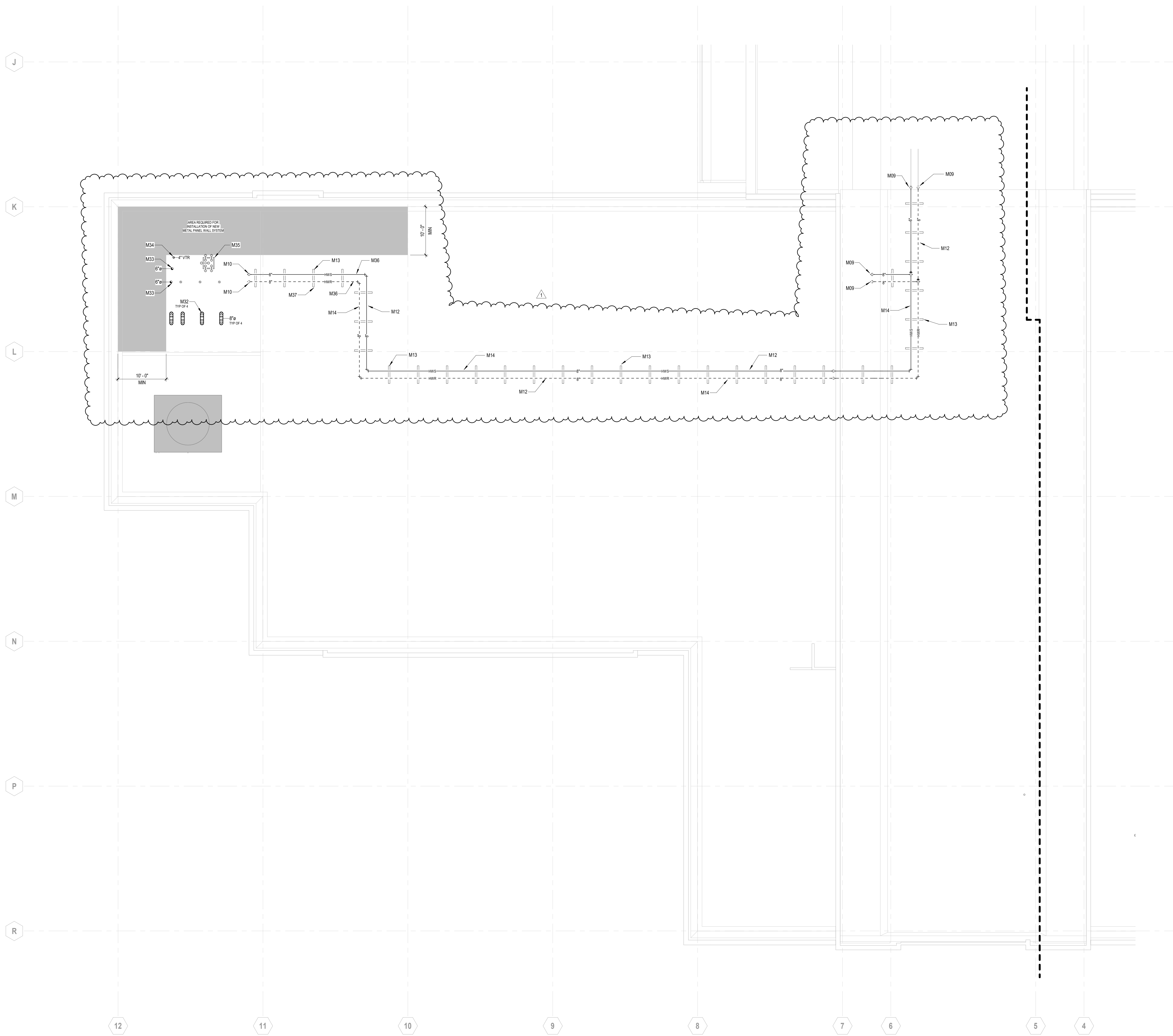
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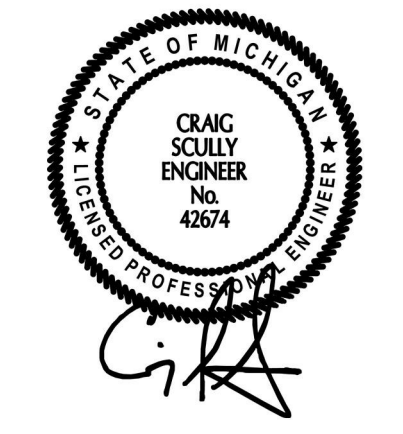
MECHANICAL PLAN - MAIN LEVEL (B HALL)
SCALE: 1/8" = 1'-0"

6/12/2024 1:34:25 PM



GENERAL MECHANICAL NOTES	
1.	MECHANICAL CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AS REQUIRED TO COMPLETE THE INSTALLATION OF THE DUCT SYSTEMS. LAYOUTS ARE SCHEMATIC IN NATURE AND PROVIDE GENERAL ROUTING SOLUTIONS. CONTRACTOR SHALL COORDINATE ALL ROUTES ON SITE.
2.	ALL DUCTS SHALL BE SEALED AND INSULATED PER SPECIFICATIONS.
3.	INSTALL ALL DUCTS AND PIPING AS HIGH AS POSSIBLE TO ALLOW FOR CLEARANCE WITH CEILINGS AND OTHER TRADES.
4.	SEE THE REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL DIFFUSERS IN THE CEILINGS.

MECHANICAL NOTES	
M09	CONNECT NEW PIPING TO EXISTING IN THIS APPROXIMATE LOCATION. TRANSITION AS REQUIRED TO MAKE CONNECTION.
M10	ROUTE PIPING THROUGH EXISTING ROOF IN THIS APPROXIMATE LOCATION. COORDINATE REQUIRED OPENINGS WITH OTHER TRADES AND OWNER'S ROOF WARRANTY PROVIDER.
M12	UNDER ALTERNATE #6, INSULATE PIPING WITH VENTURECLAD INSULATED JACKETING SYSTEM MATCHING EXISTING CONDITION.
M13	UNDER ALTERNATE #6, CONTRACTOR SHALL RAISE PIPING OFF OF EXISTING ROOF AND INSTALL DURASLOK PIPE SUPPORTS SPACED PER MANUFACTURER RECOMMENDATIONS OR 6'-0" MAXIMUM. TYPICAL.
M14	UNDER ALTERNATE #6, REINSTALL EXISTING SALVAGED PIPING IN NEW LOCATION AND SUPPLEMENT WITH NEW AS REQUIRED TO ACCOMMODATE ROOFING CHANGES.
M32	ROUTE COMBUSTION AIR DUCT THROUGH ROOF AND TERMINATE WITH TURNED DOWN GOOSENECK WITH INSECT SCREEN.
M33	ROUTE FLUE THROUGH ROOF IN THIS APPROXIMATE LOCATION AND TERMINATE WITH HOODED EXHAUST CAP.
M34	ROUTE VENT THROUGH ROOF AND TERMINATE A MINIMUM OF 18" ABOVE ROOF LEVEL.
M35	ROUTE RELOCATED NATURAL GAS VENTS THROUGH ROOF WITH PATE PIPE CURB AND TERMINATE WITH TURNED DOWN ELBOWS.
M36	UNDER BASE BID, RECONNECT RELOCATED PIPING TO EXISTING IN THIS LOCATION.
M37	UNDER BASE BID, REINSTALL EXISTING BLOCK SUPPORTS WITH RELOCATED PIPING. TYPICAL.

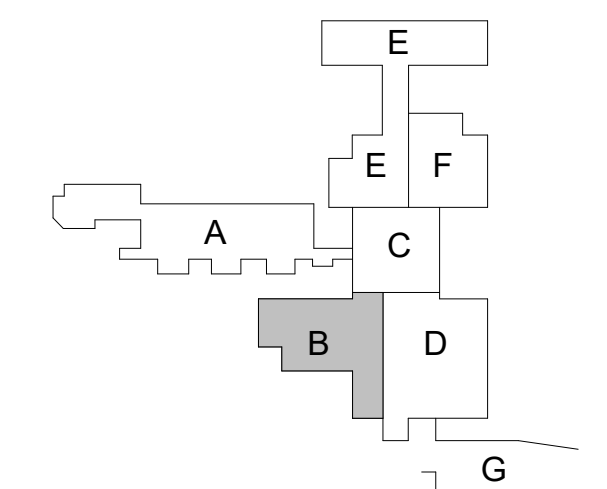


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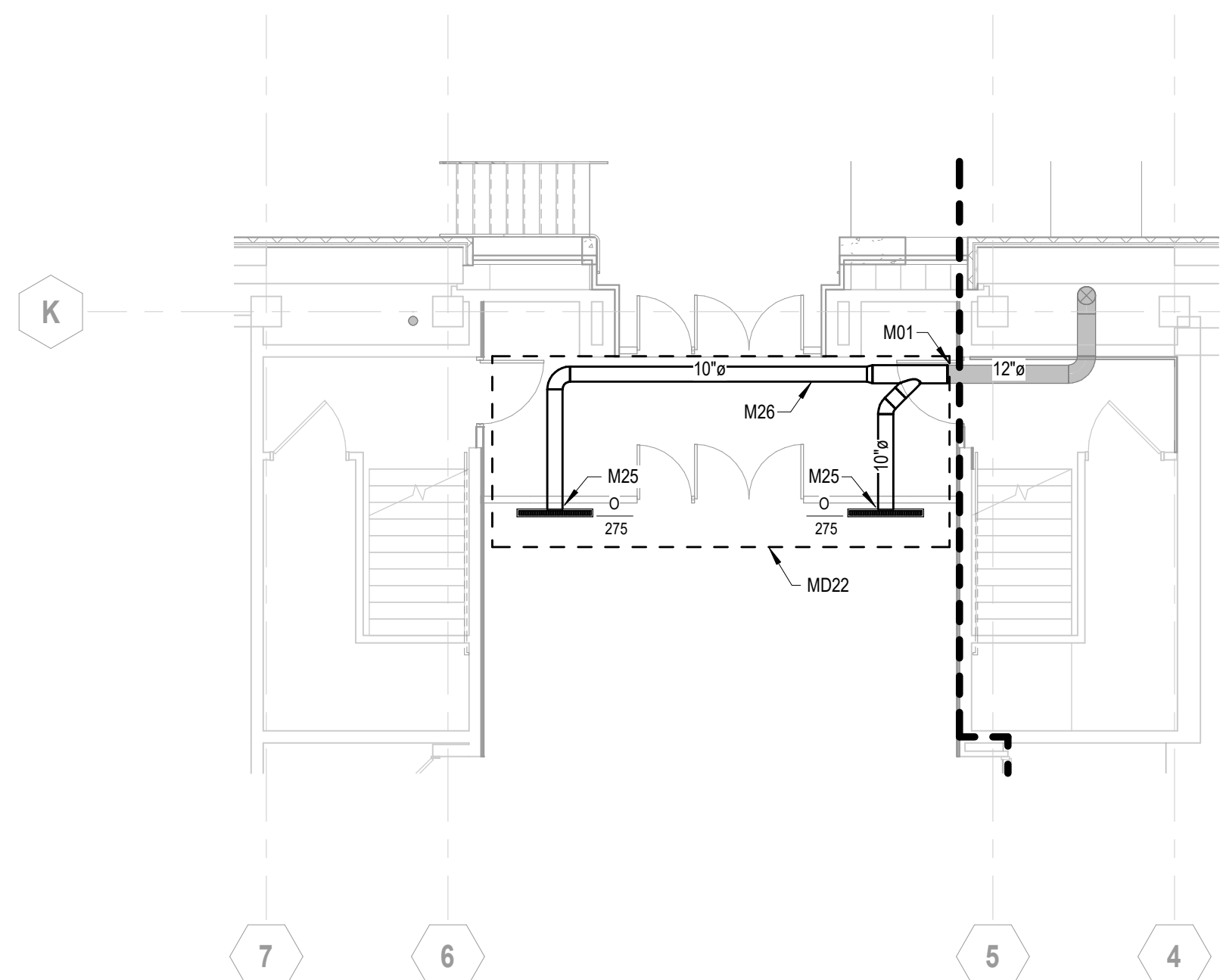
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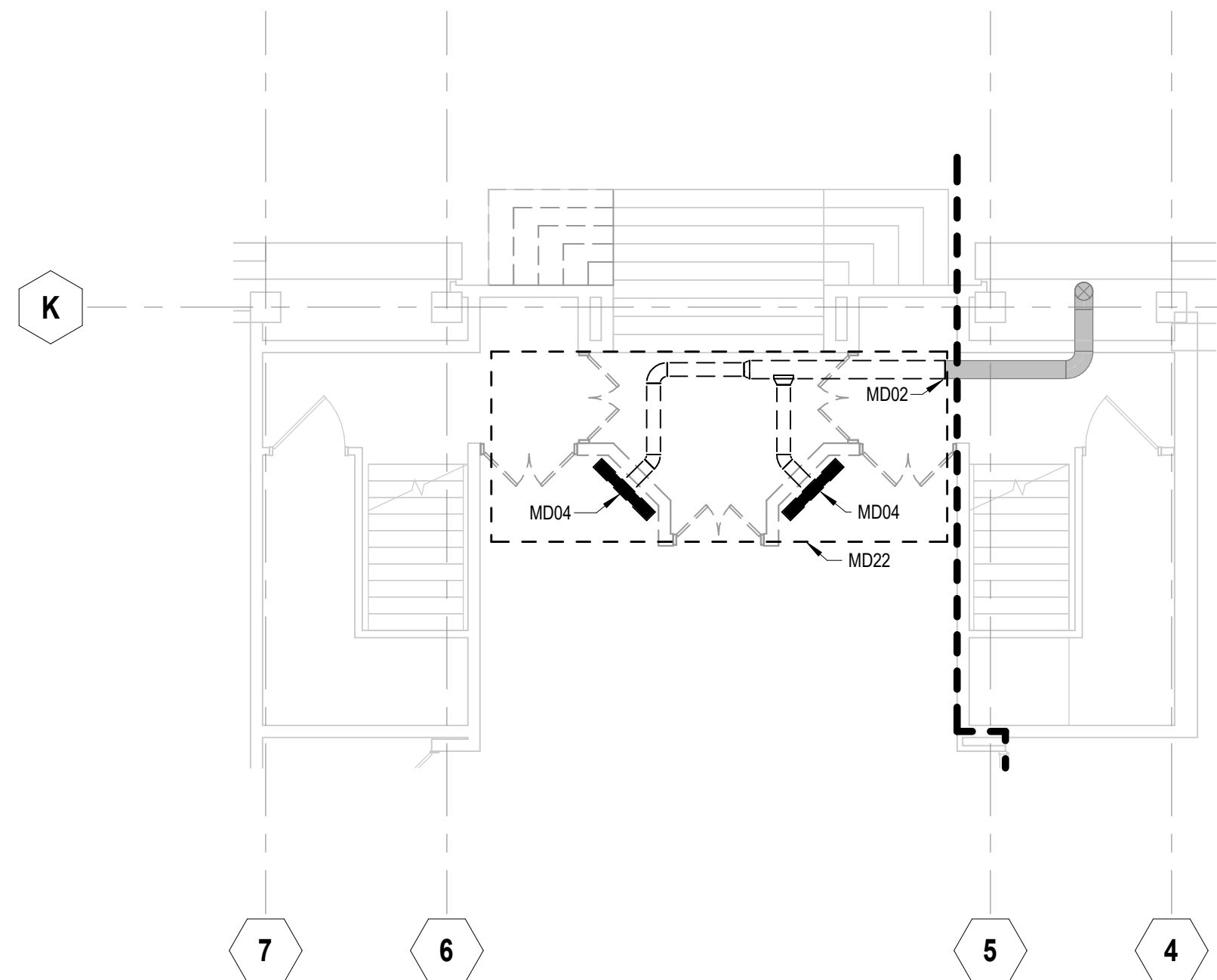


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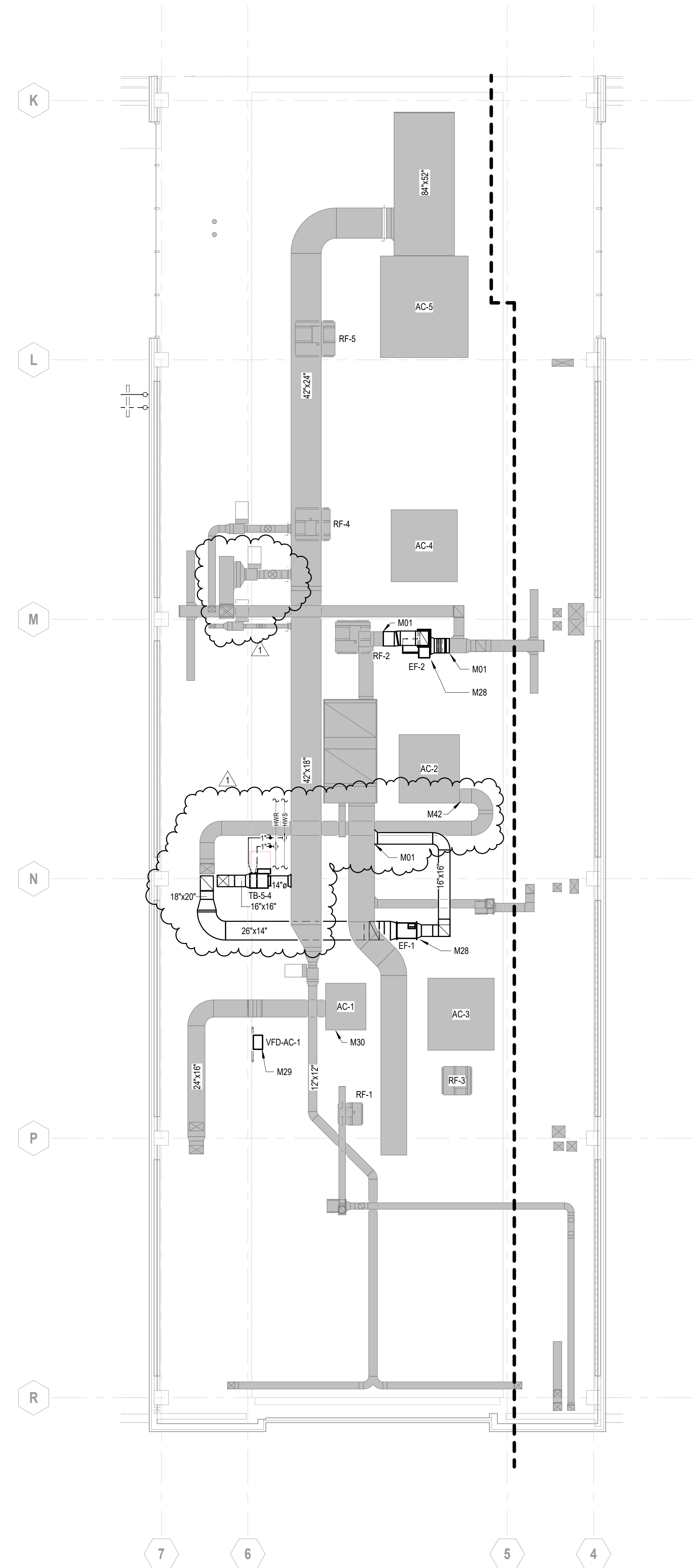
MECHANICAL PLAN - ROOF LEVEL
SCALE: 1/8" = 1'-0"



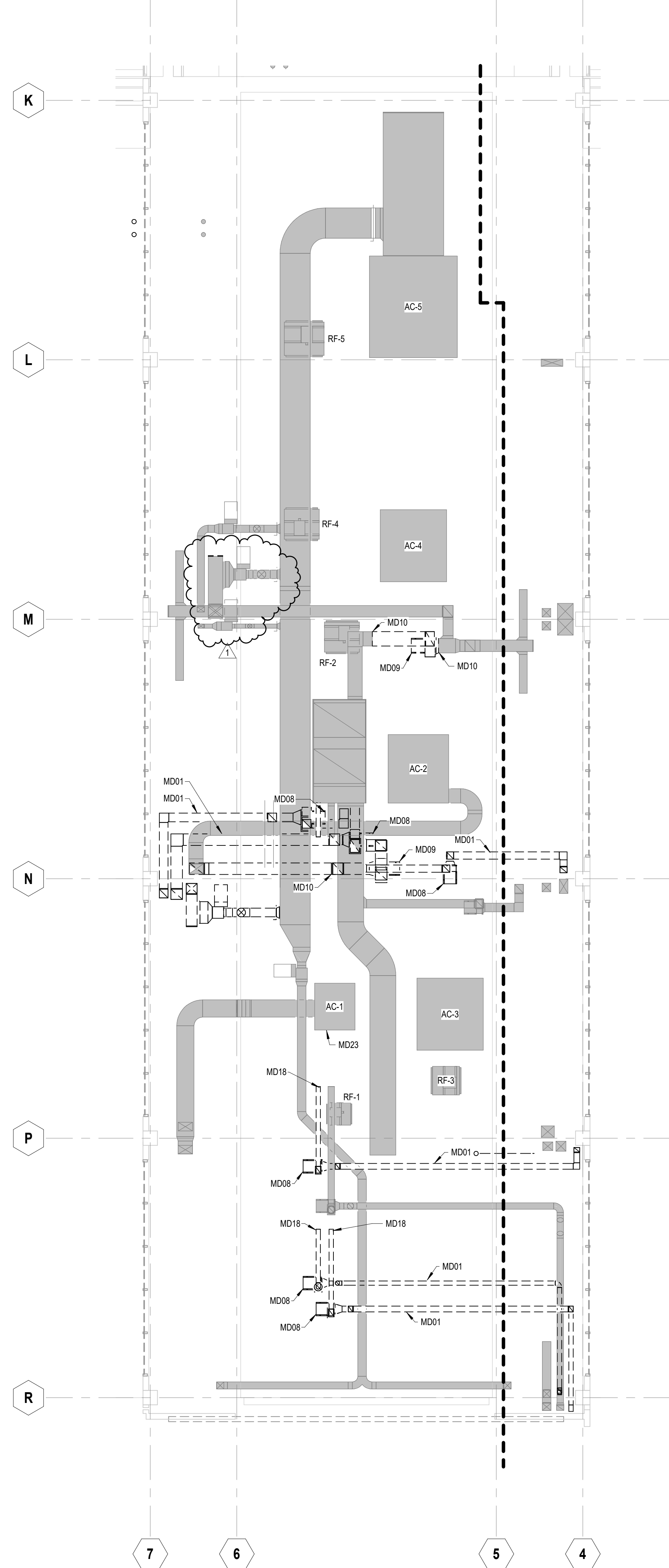
4 MECHANICAL PLAN - UNDERGROUND (B HALL)
SCALE: 1/8" = 1'-0"
NORTH



3 MECHANICAL DEMOLITION PLAN - UNDERGROUND (B HALL)
SCALE: 1/8" = 1'-0"
NORTH



2 MECHANICAL PLAN - FAN ROOM LEVEL
SCALE: 1/8" = 1'-0"
NORTH



1 MECHANICAL DEMOLITION PLAN - FAN ROOM LEVEL
SCALE: 1/8" = 1'-0"
NORTH

GENERAL MECHANICAL DEMOLITION NOTES	
1.	VERIFY ALL EXACT LOCATIONS OF EXISTING DUCTS, PIPING AND EQUIPMENT AS WELL AS SIZES.
2.	PATCH ALL CEILINGS, WALLS, FLOORS AND ROOFS WHERE PIPING, EQUIPMENT AND DUCT ARE REMOVED WITH A MATERIAL MATCHING THE EXISTING CONSTRUCTION. TYPICAL OF ALL AREAS.

MECHANICAL DEMOLITION NOTES	
MD01	REMOVE EXISTING DUCTWORK IN ITS ENTIRETY INCLUDING ALL ASSOCIATED DAMPERS AND SUPPORTS.
MD02	REMOVE EXISTING DUCTWORK TO THIS APPROXIMATE LOCATION AND PREPARE FOR NEW CONNECTION.
MD04	REMOVE EXISTING DIFFUSER/GRILLE/REGISTER IN ITS ENTIRETY INCLUDING ALL ASSOCIATED DUCT CONNECTIONS AND SUPPORTS.
MD08	REMOVE EXISTING EXHAUST FAN IN ITS ENTIRETY INCLUDING ALL ASSOCIATED DUCTWORK, POWER, CONTROLS, AND SUPPORTS.
MD09	UNDER ALTERNATE BID, REMOVE EXISTING EXHAUST FAN WITH ASSOCIATED DUCT CONNECTIONS, POWER, CONTROLS, AND SUPPORTS.
MD10	UNDER ALTERNATE BID, REMOVE EXISTING DUCTWORK TO THIS APPROXIMATE LOCATION AND PREPARE FOR NEW CONNECTION.
MD18	REMOVE EXISTING EXHAUST DUCTWORK TO EXHAUST PLENUM AND CAP.
MD22	GENERAL CONTRACTOR TO COORDINATE ANY AND ALL DEMOLITION, SAWCUTTING, AND/OR PATCHWORK AS REQUIRED. TYPICAL.
MD23	REMOVE EXISTING FAN MOTOR FROM AIR HANDLING UNIT AND PREPARE FOR INSTALLATION OF NEW.

GENERAL MECHANICAL NOTES	
1.	MECHANICAL CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AS REQUIRED TO COMPLETE THE INSTALLATION OF THE DUCT SYSTEMS. LAYOUTS ARE SCHEMATIC IN NATURE AND PROVIDE GENERAL ROUTING SOLUTIONS. CONTRACTOR SHALL COORDINATE ALL ROUTES ON SITE.
2.	ALL DUCTS SHALL BE SEALED AND INSULATED PER SPECIFICATIONS.
3.	INSTALL ALL DUCTS AND PIPING AS HIGH AS POSSIBLE TO ALLOW FOR CLEARANCE WITH CEILINGS AND OTHER TRADES.
4.	SEE THE REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF ALL DIFFUSERS IN THE CEILINGS.

MECHANICAL NOTES	
M01	CONNECT NEW DUCTWORK TO EXISTING. TRANSITION AS REQUIRED TO MAKE CONNECTION.
M25	FRP SUPPLY BOOTS FROM DUCT MANUFACTURER. THESE SHALL BE INSULATED THE SAME AS THE SUPPLY DUCT. AN 8" TAP IN THE SIDE OF THE BOOT SHALL BE PROVIDED. ALL FITTINGS SHALL BE SHOP FABRICATED AND ASSEMBLED ON SITE. PROVIDE SHOP DRAWING OF DUCT SYSTEM.
M26	DUCTWORK ROUTED BELOW SLAB SHALL BE DUAL WALL INSULATED FIBERGLASS REINFORCED PLASTIC (FRP) DUCT. INSTALL DUCTWORK WITH BOTTOM A MAXIMUM OF 24" BELOW FINISHED FLOOR. DUCT SHALL BE FULLY SEALED AND PROTECTED DURING CONSTRUCTION. TYPICAL.
M28	INSTALL NEW FAN IN THIS LOCATION. INTALL AND TRANSITION NEW DUCT AS REQUIRED TO MAKE NEW CONNECTION INTO EXISTING DUCT AS SHOWN ON PLANS.
M29	INSTALL NEW VFD MOUNTED ON UNISTRUT IN THIS APPROXIMATE LOCATION TO SERVE AC-1. DRIVE SHALL BE PROVIDED BY TCC AND INSTALLED BY EC.
M30	REPLACE MOTOR FOR AC-1 FAN WITH NEW CAPABLE OF MODULATING AIRFLOW CAPACITY TO ACCOMMODATE ADDITION OF TERMINAL BOXES ON SYSTEM. NEW MOTOR SHALL MATCH POWER REQUIREMENTS OF EXISTING.
M42	LOCK EXISTING ZONE DAMPER SERVING BRANCH WITH NEW TERMINAL BOXES ADDED TO SYSTEM IN OPEN POSITION.



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TERMINAL BOX SCHEDULE - HOT WATER HEAT																							
TAG	MANUFACTURER	MODEL	CASING			AIRFLOW			HOT WATER COIL														
			INLET DIAMETER	OUTLET WIDTH	HEIGHT	MIN	HEAT	MAX	TH	EAT DB	LAT DB	APD	GPM	WPD (RH20)	EWT	LWT	FLUID	ROWS	FPI	CONTROL	CO2 SENSOR	NOTES	
TB-S-4	TITUS	DESV-14	14"	20"	18"	18"	220	880	1750	47447 Btu/h	55.0 F	104.9 F	0.33 in-wg	4	1.57	190.0 F	136.3 F	WATER	2	10	2-WAY		1-7

- ELECTRONIC PRESSURE INDEPENDENT CONTROL
- SLIP AND DRIVE DUCT CONNECTIONS ON COIL DISCHARGE
- INLET FLOW RING
- FIELD MOUNTED CONTROLS BY TCC

- 24V TRANSFORMER PROVIDED IN CONTROL SECTION OF TERMINAL UNIT. POWER AND DISCONNECT BY E.C.
- 1" FIBER FREE LINER
- BOTTOM ACCESS DOOR

TERMINAL BOX SCHEDULE - ELECTRIC HEAT																						
TAG	MANUFACTURER	MODEL	CASING			PRIMARY AIR			ELECTRIC HEAT COIL													
			INLET DIAMETER	OUTLET WIDTH	HEIGHT	BOX HEIGHT	MIN	HEAT	DESIGN	MAX	VOLTAGE	PHASE	KW	TH	EAT DB	LAT DB	STAGES	NOTES				
TB-1-1	TITUS	DESV-12	12"	16"	15"	15"	170	850	1200	1700	277 V	1	9 kW	30709 Btu/h	55.0 F	88.4 F		2				1-7
TB-1-2	TITUS	DESV-08	8"	12"	10"	12"	70	350	500	700	277 V	1	4 kW	13649 Btu/h	55.0 F	91.1 F		2				1-7
TB-1-3	TITUS	DESV-08	8"	12"	10"	12"	70	350	300	700	277 V	1	4 kW	13649 Btu/h	55.0 F	91.1 F		2				1-7
TB-2-1	TITUS	DESV-08	8"	12"	10"	12"	70	350	400	700	277 V	1	4 kW	13649 Btu/h	55.0 F	91.1 F		2				1-7
TB-2-2	TITUS	DESV-08	8"	12"	10"	12"	70	350	400	700	277 V	1	4 kW	13649 Btu/h	55.0 F	91.1 F		2				1-7
TB-2-3	TITUS	DESV-12	12"	16"	15"	15"	170	850	1200	1700	277 V	1	9 kW	30709 Btu/h	55.0 F	88.4 F		2				1-7

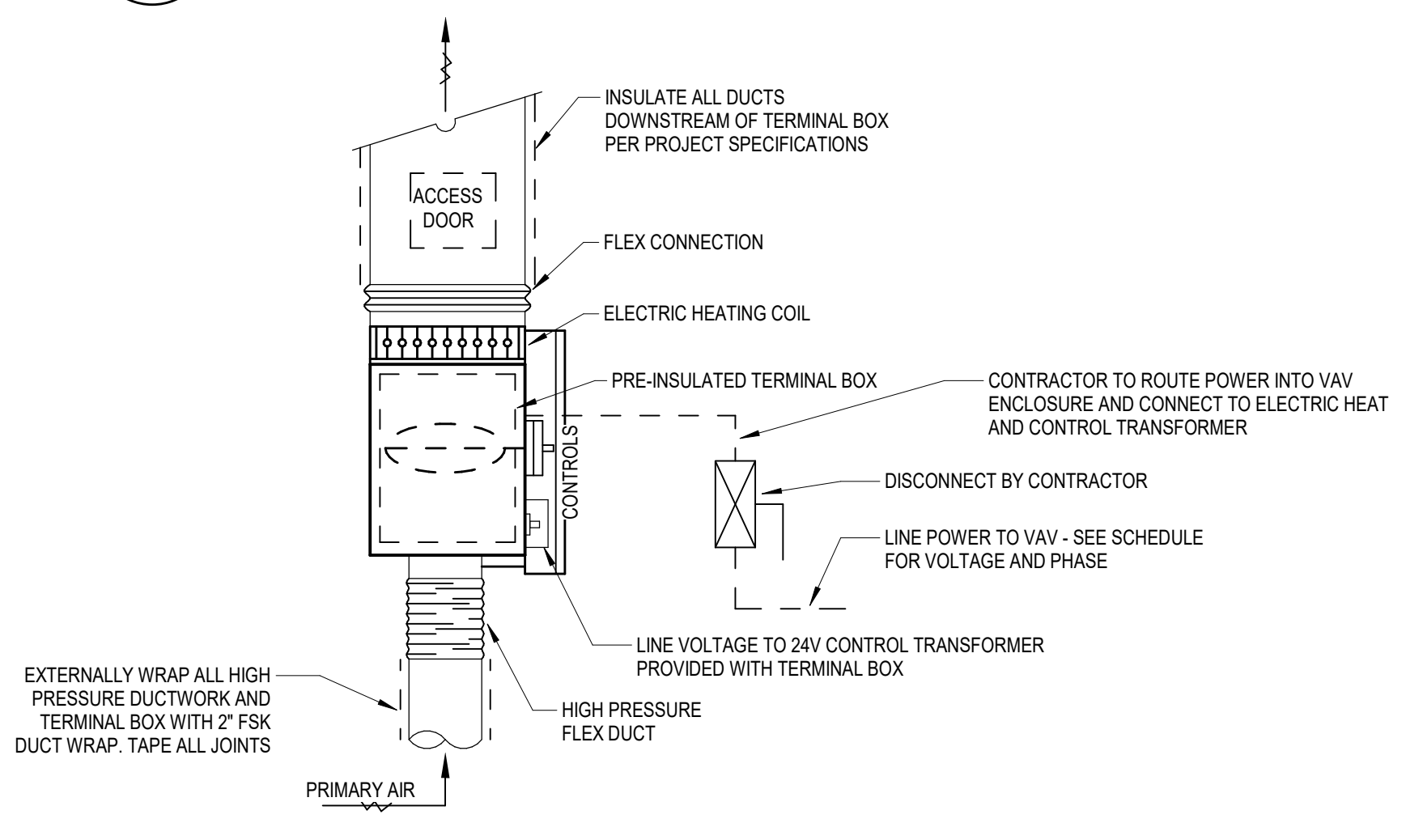
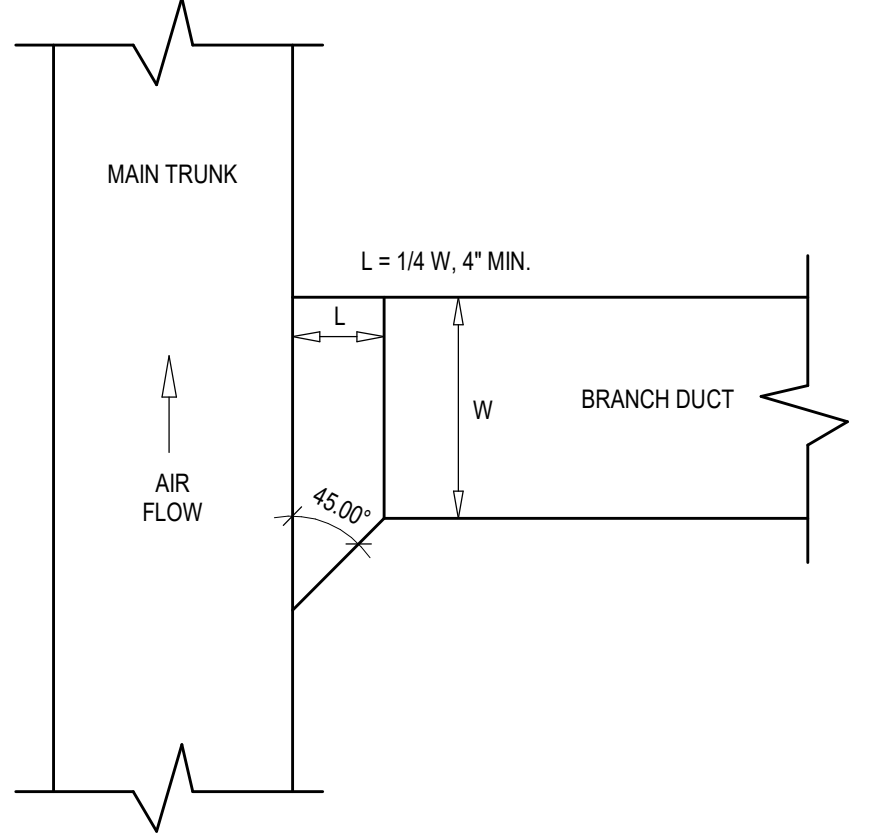
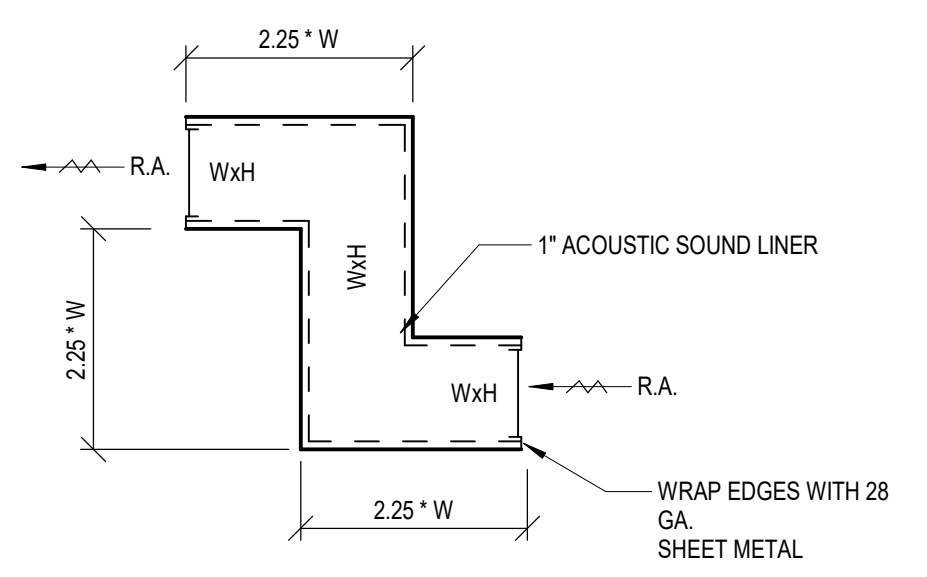
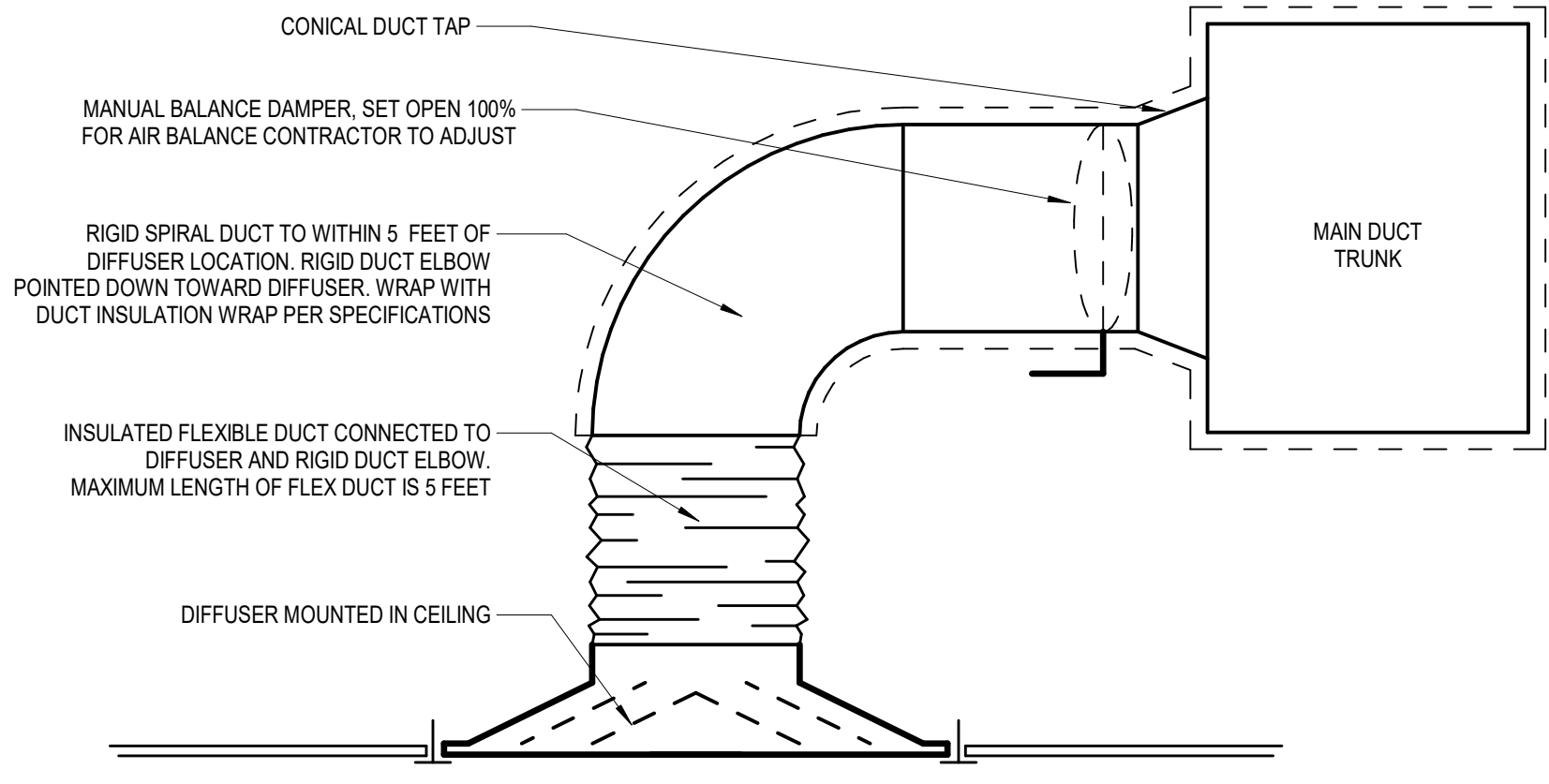
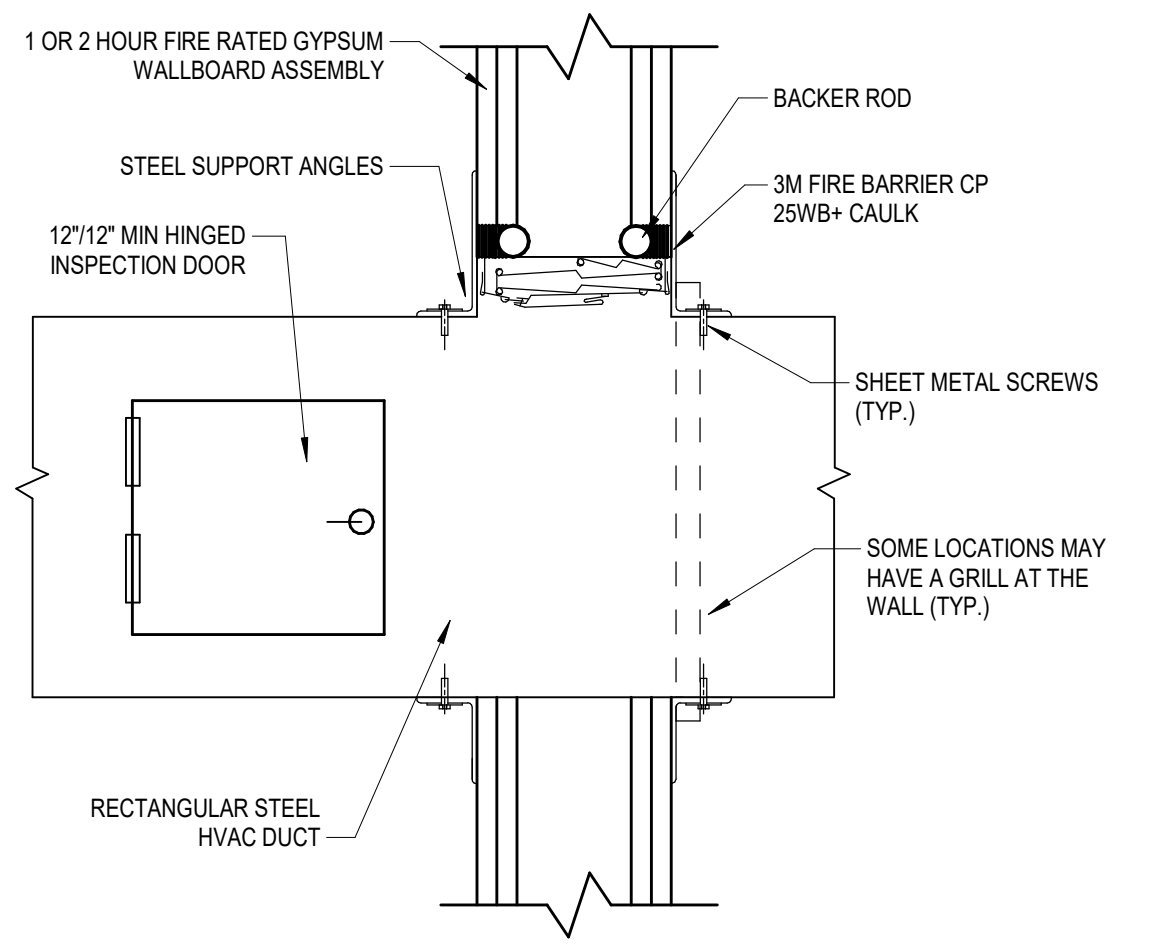
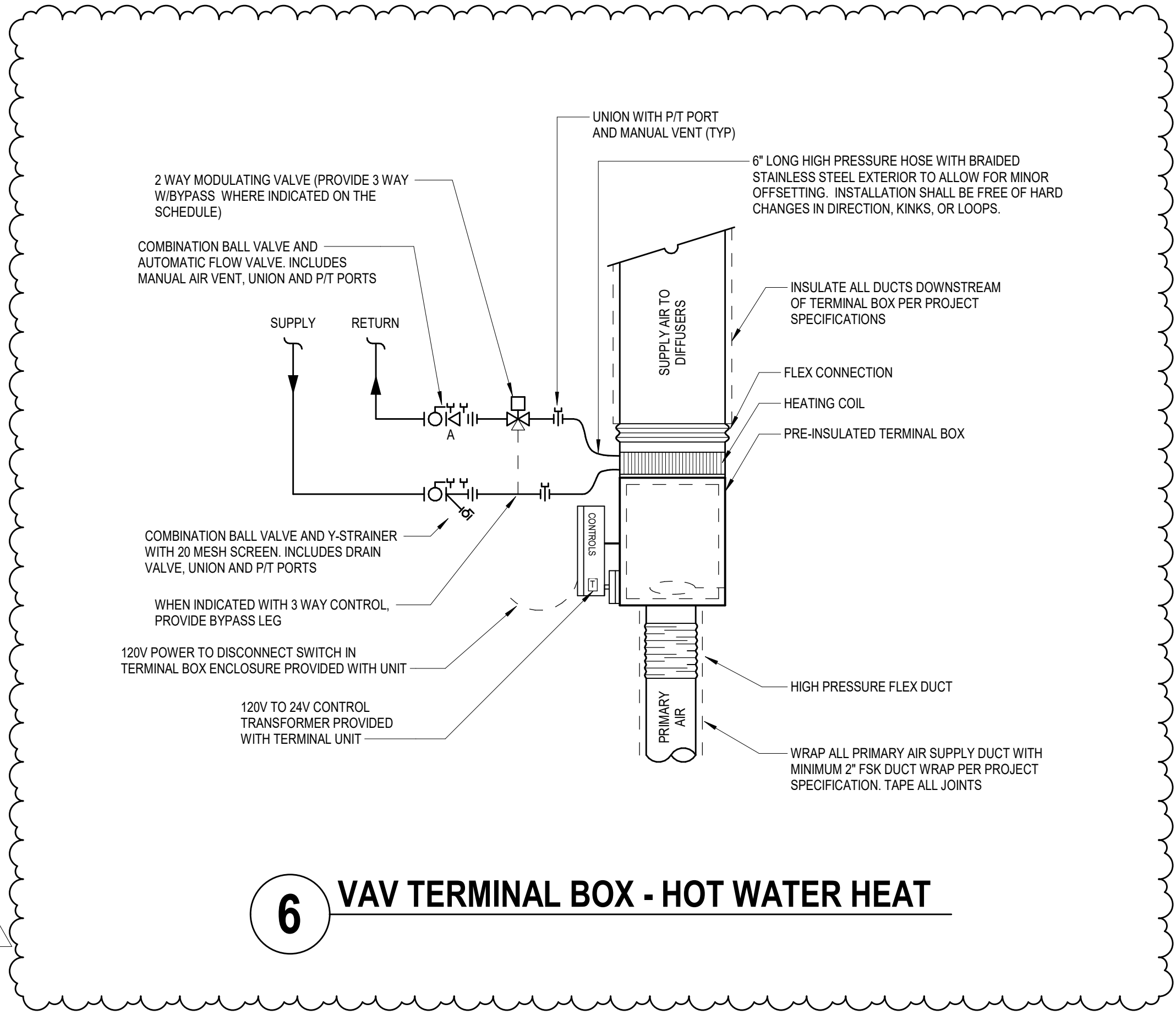
- ELECTRONIC PRESSURE INDEPENDENT CONTROL
- SLIP AND DRIVE DUCT CONNECTIONS ON COIL DISCHARGE
- INLET FLOW RING
- FIELD MOUNTED CONTROLS BY TCC
- 24V TRANSFORMER PROVIDED IN CONTROL SECTION OF TERMINAL UNIT. POWER AND DISCONNECT BY E.C.
- 1" FIBER FREE LINER
- BOTTOM ACCESS DOOR

FAN SCHEDULE														
TAG	MANUFACTURER	MODEL	FAN				MOTOR							
			TOTAL CFM	TSP	RPM	TYPE	MOUNTING	DRIVE	VOLTAGE	PHASE	HP	WEIGHT	NOTES	
DBF-1	TIERNLIND	LE2	180			DRIVER BOOSTER	DUCT	DIRECT	120 V	1	3/4	50 W		1-3
EF-1	LOREN COOK	150 TMX	2500	1,000 in-wg	1725	IN-LINE	FLOOR	DIRECT	120 V	1	3/4	150 lb	4-10, 21	
EF-2	LOREN COOK	195 CPA	2400	0,500 in-wg	1725	UTILITY SET	FLOOR	DIRECT	208 V	1	1 1/4	250 lb	4, 8-14, 21	
PF-1	QMARK	48201	21000	0,100 in-wg	315	PADOLE	CEILING	DIRECT	120 V	1	1/8	22 lb	3, 15-20	
PF-2	QMARK	48201	21000	0,100 in-wg	315	PADOLE	CEILING	DIRECT	120 V	1	1/8	22 lb	3, 15-20	
PF-3	QMARK	48201	21000	0,100 in-wg	315	PADOLE	CEILING	DIRECT	120 V	1	1/8	22 lb	3, 15-20	

- DRIVER BOOSTER FAN WITH REVERSE INCLINED IMPELLER SUITABLE FOR PARTICULATE HANDLING
- BOOSTER NOTIFICATION PANEL MOUNTED IN VISIBLE LOCATION ADJACENT TO DRIVER
- DISCONNECT BY E.C.
- UNIT MOUNTED DISCONNECT
- MIXED FLOW IN-LINE FAN
- MOTOR IN 12 O'CLOCK POSITION
- FAN SHALL RUN DURING OCCUPIED SCHEDULE BY TCC
- INERTIA BASE ON 4" HOUSEKEEPING PAD WITH SPRING ISOLATORS
- FLANGED DUCT CONNECTIONS ON INLET AND OUTLET
- ECM MOTOR WITH PREWIRED FAN SPEED CONTROLLER
- HIGH EFFICIENCY ALUMINUM UTILITY SET WITH ALUMINUM WHEEL
- LOW LEAK OPPOSED BLADE DAMPER ON FAN OUTLET EQUAL TO TAMCO 1000 SERIES
- SHAFT GROUNDING RING
- FAN SHALL RUN BASED UPON BUILDING STATIC PRESSURE SENSOR
- MOTOR GUARD
- CUSTOM COLOR TO BE SELECTED BY ARCHITECT
- 48" FAN DIAMETER
- CUSTOM DOWNROD LENGTH
- REMOTE WALL MOUNTED SPEED CONTROLLER TO CONTROL 3 FANS
- SOLID STATE CONTROLS WITH REVERSIBLE FAN DIRECTION
- TO BE INCLUDED AS PART OF ALTERNATE BID

AIR TERMINAL SCHEDULE													
TAG	MANUFACTURER	MODEL	NECK SIZE	FACE SIZE	SYSTEM	MOUNTING	MATERIAL	FINISH	NOTES				
A	TUTTLE & BAILEY	T1100-06-SF	6" DIA	12"x12"	SUPPLY	SURFACE	STEEL	WHITE	1, 2				
B	TUTTLE & BAILEY	T1100-06-LT	6" DIA	24"x24"	SUPPLY	LAY-IN	STEEL	WHITE	1				
C	TUTTLE & BAILEY	T1100-08-LT	8" DIA	24"x24"	SUPPLY	LAY-IN	STEEL	WHITE	1				
D	TUTTLE & BAILEY	T1100-10-LT	10" DIA	24"x24"	SUPPLY	LAY-IN	STEEL	WHITE	1				
F	TUTTLE & BAILEY	RT1100	6" DIA	11" DIA	SUPPLY	DUCT	STEEL	WHITE	--				
G	TUTTLE & BAILEY	T54	12x6	14x8	SUPPLY	WALL	STEEL	WHITE	2				
H	TUTTLE & BAILEY	T54	20x6	28x10	SUPPLY	WALL	STEEL	WHITE	2				
J	TUTTLE & BAILEY	6000 SERIES	8" DIA	96"x6"	SUPPLY	SURFACE	ALUMINUM	CUSTOM	3, 8				
K	TUTTLE & BAILEY	6000 SERIES	8" DIA	96"x6"	SUPPLY	SURFACE	ALUMINUM	CUSTOM	3, 8				
L	TUTTLE & BAILEY	6000 SERIES	8" DIA	48 X 4.5	SUPPLY	WALL	ALUMINUM	CUSTOM	4, 6				
M	TUTTLE & BAILEY	6000 SERIES	8" DIA	96"x6"	SUPPLY	SURFACE	ALUMINUM	CUSTOM	5, 6, 7				
O	TUTTLE & BAILEY	4000 SERIES	10" DIA	48"x6"	SUPPLY	FLOOR	STEEL	ANODIZED	8				
RG-1	TUTTLE & BAILEY	CRE500	10" x 10"	12" x 12"	RETURN	SURFACE	ALUMINUM	WHITE	2				
RG-2	TUTTLE & BAILEY	CRE500	22" x 10"	24" x 12"	RETURN	SURFACE	ALUMINUM	WHITE	--				
RG-3	TUTTLE & BAILEY	CRE500	22" x 22"	24" x 24"	RETURN	LAY-IN	ALUMINUM	WHITE	--				
RG-4	TUTTLE & BAILEY	6000 SERIES	--	48"x6"	RETURN	SURFACE	ALUMINUM	CUSTOM	3				
RG-5	TUTTLE & BAILEY	6000 SERIES	--	48"x6"	RETURN	SURFACE	ALUMINUM	CUSTOM	4				
EG-2	TUTTLE & BAILEY	CRE500	22" x 10"	24" x 12"	EXHAUST	SURFACE	ALUMINUM	WHITE	--				
EG-3	TUTTLE & BAILEY	6000 SERIES	6" DIA	96"x6"	EXHAUST	SURFACE	ALUMINUM	CUSTOM	3				

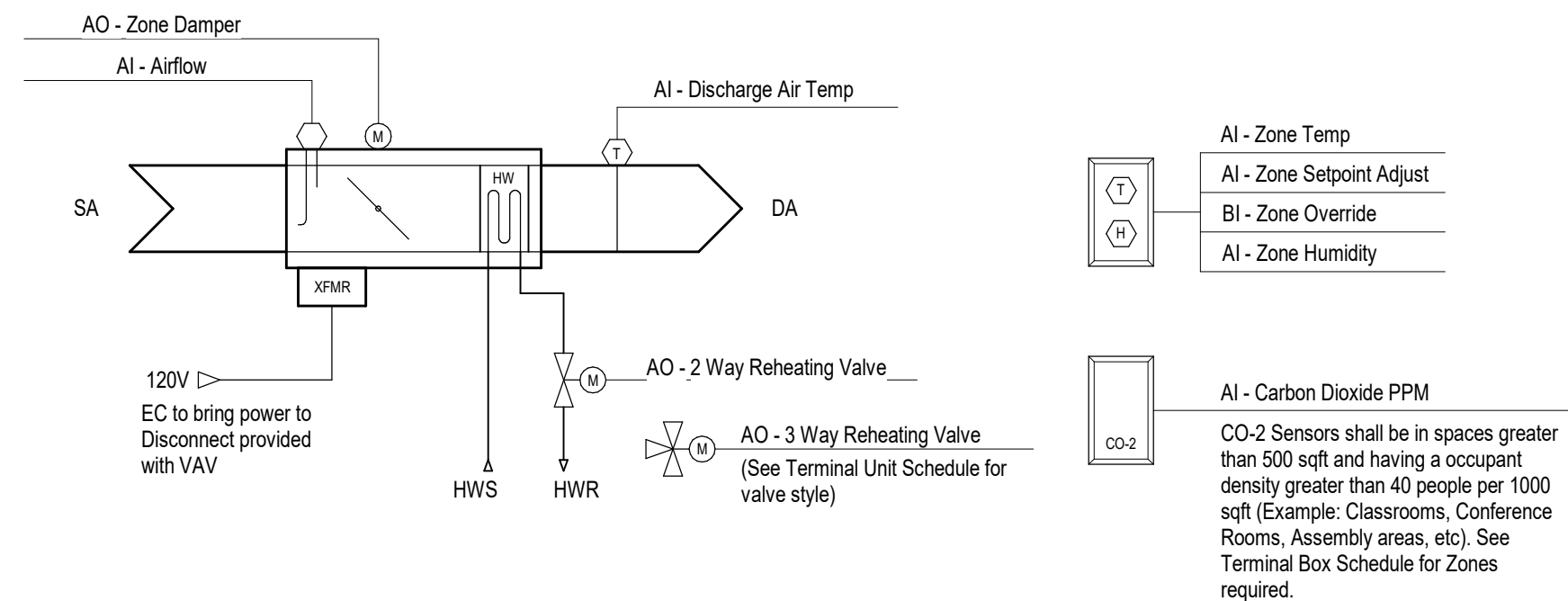
- FACTORY INSULATED BACKPAN
- DRYWALL FLANGE
- SLOT DIFFUSER WITH TWO (2) 1" SLOTS
- SLOT DIFFUSER WITH THREE (3) 1" SLOTS
- CURVED FACE SLOT DIFFUSER WITH THREE (3) 1" SLOTS
- INTERNALLY INSULATED PLENUM WITH DUCT COLLAR
- INTEGRAL BUTTERFLY DAMPER
- LINEAR BAR GRILLE WITH HEAVY DUTY, HEEL PROOF SPACING



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CONSTRUCTION DOCUMENTS		
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REVISIONS		
NO.	DATE	DESCRIPTION
1	2024/06/13	Addendum 3

SINGLE DUCT VAV TERMINAL BOX CONTROL W/CO-2



SHUT-OFF VAV BOX SEQUENCE OF OPERATION

RUN CONDITIONS:

THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN OCCUPIED AND UNOCCUPIED MODES WITH SETPOINTS PER THE TABLE IN THE GENERAL INFORMATION.

ZONE SETPOINT ADJUST:

THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE HEATING AND COOLING SETPOINTS AT THE ZONE SENSOR. THE SENSOR SHALL HAVE A SOFTWARE LIMIT RANGE OF 34°F (ADJ) OF THE ZONE SETPOINT.

ZONE OPTIMAL START:

THE UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING START-UP. THIS ALGORITHM SHALL MINIMIZE THE UNOCCUPIED WARM-UP OR COOL-DOWN PERIOD WHILE STILL ACHIEVING COMFORT CONDITIONS BY THE START OF SCHEDULED OCCUPIED PERIOD.

ZONE UNOCCUPIED OVERRIDE:

A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR A UP TO 2 HOURS (ADJ). AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.

AIRFLOW OVERRIDE CONTROL W/ ROOM CO-2 SENSING:

THE CONTROLLER SHALL MEASURE THE CO-2 LEVEL OF THE SPACE. IF THE SPACE CO-2 LEVEL IS ABOVE 1100 PPM (ADJ), THE CONTROLLER SHALL COMMUNICATE TO THE AIR HANDLER TO OVERRIDE THE VENTILATION AIR DAMPER POSITION TO ITS MAXIMUM VENTILATION POSITION AS INDICATED ON THE DRAWINGS AND SET DURING AIR BALANCE. THE AIR HANDLER OUTSIDE AIR DAMPER SHALL RETURN TO NORMAL VENTILATION POSITION ONCE ALL ZONES WITH CO-2 SENSORS ARE BELOW 900 PPM (ADJ). IF THE SPACE CO-2 CONCENTRATION IS ABOVE 1400 PPM (ADJ) AN ALARM SHALL BE SENT TO THE BAS.

CRITICAL ZONE SETBACK:

THE CONTROLLER SHALL SET THE SUPPLY AIR TEMPERATURE FROM THE AIR HANDLER BASED UPON A RESET SCHEDULE USING ZONE DAMPER POSITIONS OF ALL ZONES SERVED BY THE AIR HANDLER.

THE ZONE DAMPER THAT IS OPEN THE MOST SHALL BE THE CRITICAL ZONE. THE BAS SHALL ALLOW THE SUPPLY AIR TEMPERATURE TO RESET BETWEEN 55°F (ADJ) AND 62°F (ADJ) TO MAINTAIN THE CRITICAL ZONE POSITION AT 100% OPEN. THE SUPPLY AIR TEMPERATURE SHALL RESET BACK DOWN IF THE SPACE SENSOR IS MORE THAN 1°F ABOVE COOLING SETPOINT.

VARIABLE VOLUME TERMINAL UNIT - COOLING AIRFLOW CONTROL:

THE UNIT SHALL MAINTAIN ZONE SETPOINTS BY CONTROLLING THE AIRFLOW THROUGH ONE OF THE FOLLOWING:

OCCUPIED:
WHEN ZONE TEMPERATURE IS GREATER THAN ITS COOLING SETPOINT, THE ZONE DAMPER SHALL MODULATE BETWEEN THE MINIMUM OCCUPIED AIRFLOW (ADJ.) AND THE MAXIMUM COOLING AIRFLOW (ADJ.) UNTIL THE ZONE IS SATISFIED.

WHEN THE ZONE TEMPERATURE IS LESS THAN THE COOLING SETPOINT, BUT GREATER THAN THE HEATING SETPOINT, THE ZONE DAMPER SHALL MAINTAIN THE MINIMUM REQUIRED ZONE VENTILATION (ADJ.).

UNOCCUPIED:

WHEN THE ZONE IS UNOCCUPIED THE ZONE DAMPER SHALL BE CLOSED. WHEN A MINIMUM QUANTITY OF ZONES HAVE TEMPERATURES GREATER THAN THE UNOCCUPIED COOLING SETPOINT, START THE ASSOCIATED AIR HANDLER AND OPEN THE ZONE DAMPERS TO THE MAXIMUM COOLING AIRFLOW (ADJ.) UNTIL THE ZONES ARE SATISFIED.

HUMIDITY CONTROL:

IF THE ZONE HUMIDITY DROPS BELOW THE HUMIDITY SETPOINT OF 40% RH (ADJ.) DURING THE WINTER MONTHS, A SIGNAL SHALL BE SENT TO THE ROOFTOP UNIT AND HUMIDIFIERS TO START THE UNIT HUMIDIFIER SHALL START AND STAGE TO MAINTAIN THE SETPOINT. THIS IS TO BE USED IN CONJUNCTION WITH THE RETURN AIR HUMIDITY SENSOR.

IF THE ZONE HUMIDITY RISES ABOVE 55% RH (ADJ.), THE VAV SHALL OPEN THE ZONE DAMPER TO THE DESIGN COOLING AIRFLOW AND MODULATE THE REHEAT COIL VALVE TO MAINTAIN THE ROOM SETPOINT OF 71°F (ADJ). THE VAV SHALL RESUME ITS NORMAL SEQUENCE ON A CALL FOR COOLING OR HEATING, OR THE ZONE HUMIDITY LOWERS BACK BELOW 50% RH (ADJ.)

REHEATING COIL VALVE:

WHEN THE ZONE TEMPERATURE IS BELOW THE HEATING SETPOINT, THE ZONE DAMPER SHALL MODULATE TO THE HEATING AIRFLOW POSITION (ADJ) AND THE CONTROLLER SHALL MODULATE THE HEATING COIL VALVE OPEN TO MAINTAIN ITS HEATING SETPOINT.

THE HEATING SHALL BE ENABLED WHENEVER THE ZONE TEMPERATURE IS BELOW HEATING SETPOINT.

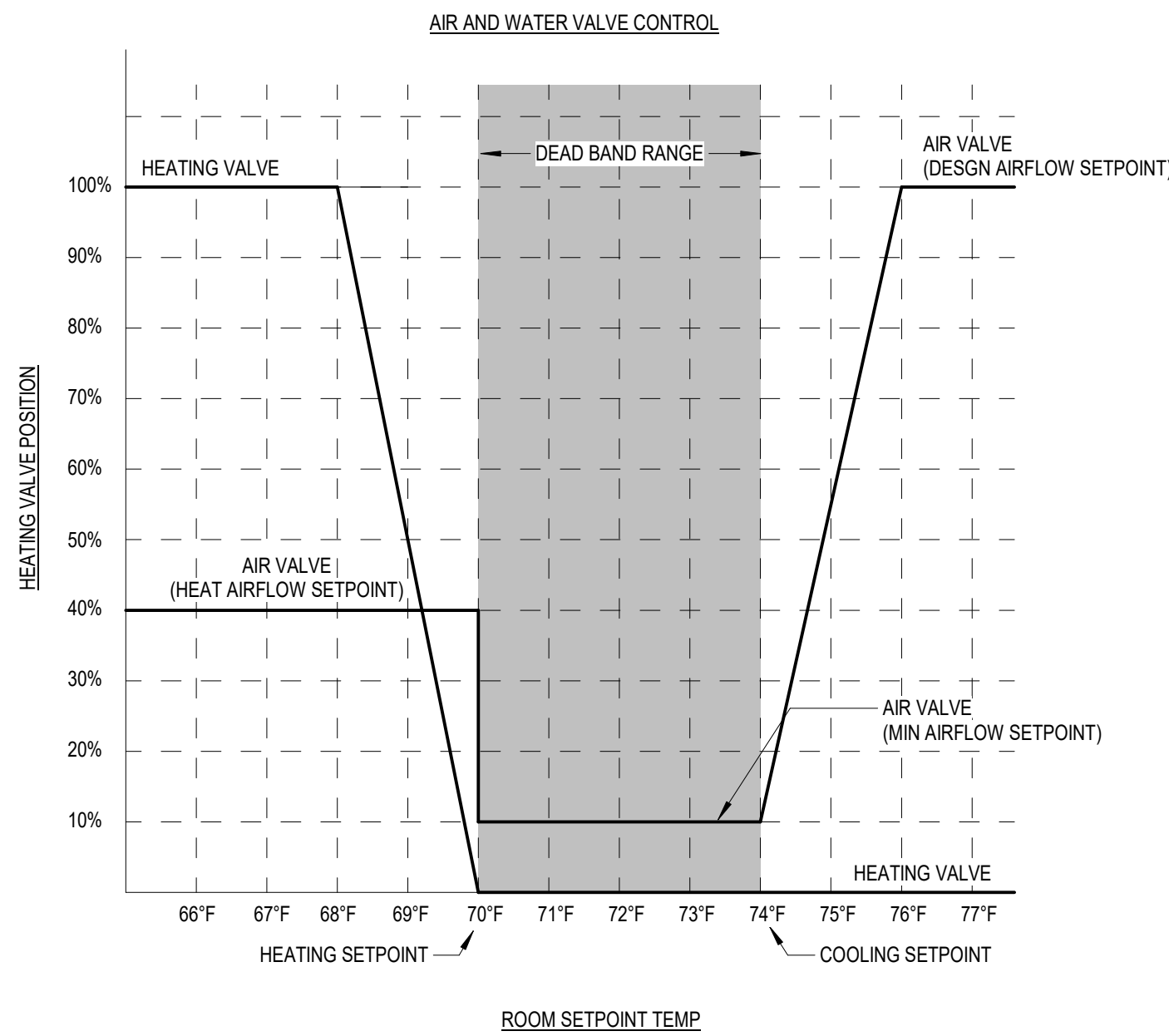
DISCHARGE AIR TEMPERATURE:

THE DISCHARGE AIR TEMPERATURE SHALL BE MONITORED AND MADE AVAILABLE TO THE SYSTEM

ALARMS:

THE FOLLOWING ALARMS SHALL BE INCLUDED ON THE GRAPHICS:

- HIGH ZONE TEMPERATURE
- LOW ZONE TEMPERATURE
- HIGH ZONE CO2 ALARM
- LOW ZONE HUMIDITY
- HIGH ZONE HUMIDITY



BUILDING AUTOMATION SYSTEM SPECIFICATION

DIRECT DIGITAL CONTROL (DDC) TECHNOLOGY SHALL BE USED TO PROVIDE THE FUNCTIONS NECESSARY FOR CONTROL OF MECHANICAL SYSTEMS ON THIS PROJECT PER THE DETAILS SHOWN ON THE PLAN SHEETS. THE FULL INTENT OF THIS SPECIFICATION IS TO PROVIDE COMPLETE DIGITAL TEMPERATURE CONTROL SYSTEM FOR THE RENOVATED AREA. THE SYSTEM SHALL BE AN EXTENSION OF THE CONTROL SYSTEM. CONTRACTOR SHALL INCLUDE ALL REQUIRED CONTROLLERS, DRIVES, WIRING, CONDUIT, AND PROGRAMMING AS PART OF BID. THE CONTROL SYSTEM SHALL ACCOMMODATE SIMULTANEOUS MULTIPLE USER OPERATION. ACCESS TO THE CONTROL SYSTEM DATA SHOULD BE LIMITED ONLY BY OPERATOR PASSWORD. MULTIPLE USERS SHALL HAVE ACCESS TO ALL VALID SYSTEM DATA. AN OPERATOR SHALL BE ABLE TO LOG ON TO ANY WORK-STATION ON THE CONTROL SYSTEM AND HAVE ACCESS TO ALL APPROPRIATE DATA. PROVIDE 8 HOURS (IN 2 SEPARATE DAYS OF 4 HOUR BLOCKS) TO FULLY TRAIN THE OWNERS REPRESENTATIVES ON THE SYSTEM USE.

THE NEW CONTROLS SHALL INTEGRATE WITH THE EXISTING CONTROL SYSTEM WITH COMMUNICATION BETWEEN ALL APPLICATION SPECIFIC CONTROLLERS AND THE NETWORK ADMINISTRATOR. ALL SOFTWARE, LICENSES, UPGRADES AND RIGHTS FOR THE OWNER TO MAKE MODIFICATIONS TO THE SYSTEM FOR 2 YEARS SHALL BE INCLUDED. APPROVED CONTROL VENDORS AND MANUFACTURERS FOR THIS PROJECT INCLUDE:

1. CONTROLS RESOURCES

INCLUDE COMPUTER SOFTWARE AND HARDWARE. A SINGLE FIXED OPERATOR INPUT/OUTPUT DEVICE, CONTROL UNITS, LOCAL AREA NETWORKS (LAN) BETWEEN CONTROLLERS, SENSORS, CONTROL DEVICES, ACTUATORS. THE SYSTEM SHALL BE CAPABLE OF SUPPORTING AN UNLIMITED NUMBER OF CLIENTS USING A STANDARD WEB BROWSER SUCH AS GOOGLE CHROME. COMMUNICATION BETWEEN THE MAIN CONTROL PANEL, THE CONTROL CABINET SHALL BE NEMA 1 TYPE CONSTRUCTION WITH HINGED DOOR, KEY-LOCK LATCH LOCATED IN THE MAIN MECHANICAL ROOM AND ALL EQUIPMENT SHALL BE OVER A HIGH SPEED NETWORK. APPLICATION SPECIFIC CONTROLLERS AT EQUIPMENT SHALL BE CONSTANTLY SCANNED BY THE NETWORK CONTROLLERS TO UPDATE POINT INFORMATION AND ALARM INFORMATION. WHILE A LOCAL OPERATOR STATION (LAPTOP COMPUTER) IS NOT REQUIRED, COMMUNICATION SHALL BE THRU ANY WEB BASED OPERATOR STATION. A 10BASET JACK SHALL BE PROVIDED AT THE MAIN BUILDING CONTROL PANEL AND PC WORKSTATION FOR CONNECTION TO THIS NETWORK. CONNECTION OF AN OPERATOR INTERFACE DEVICE TO ANY ONE CONTROLLER ON THE INTERNET WORK WILL ALLOW THE OPERATOR TO INTERFACE WITH ALL OTHER CONTROLLERS AS IF THAT INTERFACE WERE DIRECTLY CONNECTED TO THE OTHER CONTROLLERS. DATA STATUS INFORMATION, REPORTS, SYSTEM SOFTWARE, CUSTOM PROGRAMS, ETC., FOR ALL CONTROLLERS SHALL BE AVAILABLE FOR VIEWING AND EDITING FROM ANY ONE CONTROLLER ON THE INTERNET WORK.

PROVIDE CONTROL SYSTEMS CONSISTING OF SENSORS, CONTROL VALVES, CONTROL DAMPERS ALL WITH ELECTRONIC OPERATORS, INDICATING DEVICES, INTERFACE EQUIPMENT AND OTHER APPARATUS AND ACCESSORIES REQUIRED TO OPERATE MECHANICAL SYSTEMS, AND TO PERFORM FUNCTIONS IDENTIFIED ON THESE DRAWINGS. INCLUDE INSTALLATION AND CALIBRATION, SUPERVISION, ADJUSTMENTS, AND FINE TUNING NECESSARY FOR COMPLETE AND FULLY OPERATIONAL SYSTEM. THE DOCUMENTATION SHOWN ON THESE PLANS IS SCHEMATIC IN NATURE AND THE CONTRACTOR SHALL PROVIDE FULL SHOP DRAWING AND MANUFACTURERS SUBMITTALS FOR THE ENTIRE SYSTEM. OPERATORS MANUAL WITH PROCEDURES OF OPERATING THE CONTROL SYSTEMS INCLUDING LOGGING ON/OFF, ALARM HANDLING, PRODUCING POINT REPORTS, TRENDS DATA, OVERRIDING COMPUTER CONTROL, AND CHANGING SET POINTS AND OTHER VARIABLES. PROVIDE FIVE YEAR MANUFACTURERS WARRANTY FOR FIELD PROGRAMMABLE MICRO-PROCESSOR BASED UNITS.

PROVIDE AUTOMATIC CONTROL VALVES, AUTOMATIC CONTROL DAMPERS, THERMOSTATS, CLOCKS, SENSORS, CONTROLLERS, AND OTHER COMPONENTS AS REQUIRED FOR COMPLETE INSTALLATION. SPACE SENSORS SHALL BE AVAILABLE WITH SETPOINT ADJUSTMENT AND VISIBLE OVERRIDE SWITCH. THERMO WELLS FOR ALL IMMERSION SENSORS SHALL BE STAINLESS STEEL OR BRASS AS REQUIRED FOR THE APPLICATION. THE DIFFERENTIAL PRESSURE SENSORS SHALL BE TEMPERATURE COMPENSATED AND SHALL VARY THE OUTPUT VOLTAGE WITH A CHANGE IN DIFFERENTIAL PRESSURE. SENSING RANGE SHALL BE SUITABLE FOR THE APPLICATION WITH LINEARITY OF 1.5% OF FULL SCALE AND OFFSET OF 1% OF FULL SCALE OR BETTER. SENSOR SHALL BE CAPABLE OF WITHSTANDING UP TO 150% OF RATED PRESSURE WITHOUT DAMAGE.

THE CONTRACTOR SHALL PROVIDE HARDWARE AND SOFTWARE NECESSARY TO IMPLEMENT THE FUNCTIONS AND SEQUENCES SHOWN. PROVIDE DATA FOR EACH SYSTEM COMPONENT AND SOFTWARE MODULE. SHOP DRAWINGS SHALL INDICATE TRUNK CABLE SCHEMATIC SHOWING PROGRAMMABLE CONTROL UNIT LOCATIONS AND TRUNK DATA CONDUCTORS. LIST ALL CONNECTED DATA POINTS, INCLUDING CONNECTED CONTROL UNIT AND INPUT DEVICE. PROVIDE DYNAMIC SYSTEM GRAPHICS INDICATING MONITORED SYSTEMS, DATA CONNECTED AND CALCULATED) POINT ADDRESSES, AND OPERATOR NOTATIONS. PROVIDE DEMONSTRATION CD CONTAINING THESE GRAPHICS. SHOW SYSTEM CONFIGURATION WITH PERIPHERAL DEVICES, BATTERIES, POWER SUPPLIES, DIAGRAMS, AND INTERCONNECTIONS. INDICATE DESCRIPTION AND SEQUENCE OF OPERATION OF OPERATING, USER, AND APPLICATION SOFTWARE.

AT PROJECT COMPLETION, PROVIDE PROJECT RECORD DOCUMENTS THAT RECORD ACTUAL LOCATIONS OF CONTROL COMPONENTS, INCLUDING CONTROL UNITS, THERMOSTATS, AND SENSORS. REVISE THE SHOP DRAWINGS TO REFLECT ACTUAL INSTALLATION AND OPERATING SEQUENCES AND INCLUDE SUBMITTALS DATA IN FINAL RECORD DOCUMENTS FORM. PROVIDE COMPLETE ORIGINAL ISSUE CDS FOR ALL SOFTWARE PROVIDED INCLUDING OPERATING SYSTEMS, PROGRAMMING LANGUAGE, OPERATOR WORK-STATION SOFTWARE, AND GRAPHICS SOFTWARE. PROVIDE SERVICE AND MAINTENANCE OF ENERGY MANAGEMENT AND CONTROL SYSTEMS FOR ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION. DURING 1 YEAR WARRANTY PERIOD, PROVIDE COMPLETE SERVICE OF SYSTEMS, INCLUDING CALL BACKS. ASSUME A MINIMUM OF 4 COMPLETE NORMAL INSPECTIONS OF APPROXIMATELY 4 HOURS DURATION IN ADDITION TO NORMAL SERVICE CALLS TO INSPECT, CALIBRATE, AND ADJUST CONTROLS.

WIRING REQUIREMENTS:

CONFIGURE LAN AS EITHER A BUS, STAR, OR COMBINATION OF THE TWO. USE TWISTED PAIR, COAX, OR FIBEROPTIC CABLE TO MEET NOISE IMMUNITY AND/OR DISTANCE REQUIREMENTS. DESIGN SYSTEM FOR DATA TRANSFER RATE OF NO LESS THAN 1 MEGABAUD. LAN WIRING REQUIRES SHIELDED CABLE OR SHALL BE CABLE CERTIFIED FOR BNC NET. ALL LAN WIRING MUST MEET SUPPLIER'S STANDARDS OF OPERATION AND QUALITY.

1. USE BELDEN NO. 22 GAGE OR LARGER BELDFOIL OR EQUAL FOR RUNS UP TO 250 FEET.
2. USE BELDEN NO. 18 GAGE OR LARGER BELDFOIL OR EQUAL FOR RUNS 250 FEET TO 500 FEET.
3. ALL INPUT/OUTPUT WIRING SHALL HAVE SUFFICIENT STRENGTH TO MEET ALL OPERATIONAL REQUIREMENTS.

SENSOR WIRING OVER 50 FEET, WHERE RUN IN A COMMON CONDUIT OR NEAR INDUCTIVE LOADS, SHALL BE SHIELDED CABLE.

1. USE BELDEN NO. 24 GAGE OR LARGER BELDFOIL OR EQUAL FOR RUNS UP TO 100 FEET.
2. USE BELDEN NO. 18 GAGE OR LARGER BELDFOIL OR EQUAL FOR RUNS UP TO 400 FEET.
3. ALL INPUT/OUTPUT WIRING SHALL HAVE SUFFICIENT STRENGTH TO MEET ALL OPERATIONAL REQUIREMENTS.

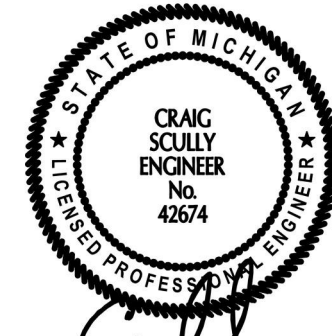
INSTALL ALL CONTROL AND INTERLOCK WIRING IN ADDITION TO LOW VOLTAGE SENSOR AND LAN WIRING IN ACCORDANCE WITH LOCAL REQUIREMENTS, THE NATIONAL ELECTRICAL CODE AND ELECTRICAL DIVISIONS OF PROJECT SPECIFICATIONS

INSTALLATION MINIMUM REQUIREMENTS:

1. MECHANICAL AND SERVICE AREAS PLUS ANY AREAS WITHOUT FINISHED CEILINGS. ALL WIRING INCLUDING CABLES IN EMT.
2. SPACE SENSORS AND ALARMS: ALL WIRING AND CABLES IN EMT WITH WALL CONSTRUCTION.
3. CEILING RETURNS (ACCESSIBLE OR DROP CEILINGS - DUCTED RETURNS): APPROVED NON-PLENUM CABLE.
4. CEILINGS (OPEN RETURNS): APPROVED PLENUM RATED CABLE.
5. CEILING RETURNS (NON-ACCESSIBLE): EMT OR CODE COMPLIANT EQUAL SOLID CONDUIT.
6. INSIDE AIR HANDLING UNITS: ALL WIRING INCLUDING CABLES IN EMT OR CODE COMPLIANT EQUAL SOLID CONDUIT.
7. NOTE THAT THE USE OF CABLE IS LIMITED TO LOW VOLTAGE SERVICE LESS THAN 24 VOLT ONLY.
8. IN NO CASE SHALL CABLES BE ALLOWED TO LAY ON CEILING GRID.
9. NOTE THAT ALL CONDUIT, JUNCTIONS AND TERMINATIONS SHALL UTILIZE COMPRESSION FITTINGS.
10. INSTALLATION OF ALL CABLING ON CEILINGS AND WALLS SHALL BE RUN IN A PROFESSIONAL WORKMANLIKE FASHION ACCEPTABLE TO ARCHITECT/ENGINEER. CABLES TO BE SUPPORTED WITH THE WRAPS SUCH THAT DROOP AND SAG IS WITHIN ACCEPTABLE DEGREES AND SHALL BE SECURELY FASTENED TO FIXED MEMBERS OF THE BUILDING STRUCTURE AT SUFFICIENT POINTS TO AVOID EXCESSIVE FREEDOM OF MOVEMENT.

GRAPHICS SHALL INCLUDE ALL SHOWN GRAPHIC INFORMATION ALONG WITH A FLOORPLAN WITH ALL ZONES SHOWN. GRAPHIC SHALL INCLUDE AS A MINIMUM COLORS OF RED, GREEN, BLUE COLORS IN THE ZONES TO IDENTIFY ROOMS THAT ARE AT OR WITHIN A DEGREE OF SETPOINT (GREEN) OR ABOVE SETPOINT (RED) OR COOLER THAN SETPOINT (BLUE). DOUBLE CLICK OF THESE IMAGES SHALL BRING UP THE DYNAMIC GRAPHIC OF THE SYSTEM SERVING THE AREA.

END OF SPECIFICATIONS



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1	2024/06/13	Addendum 3