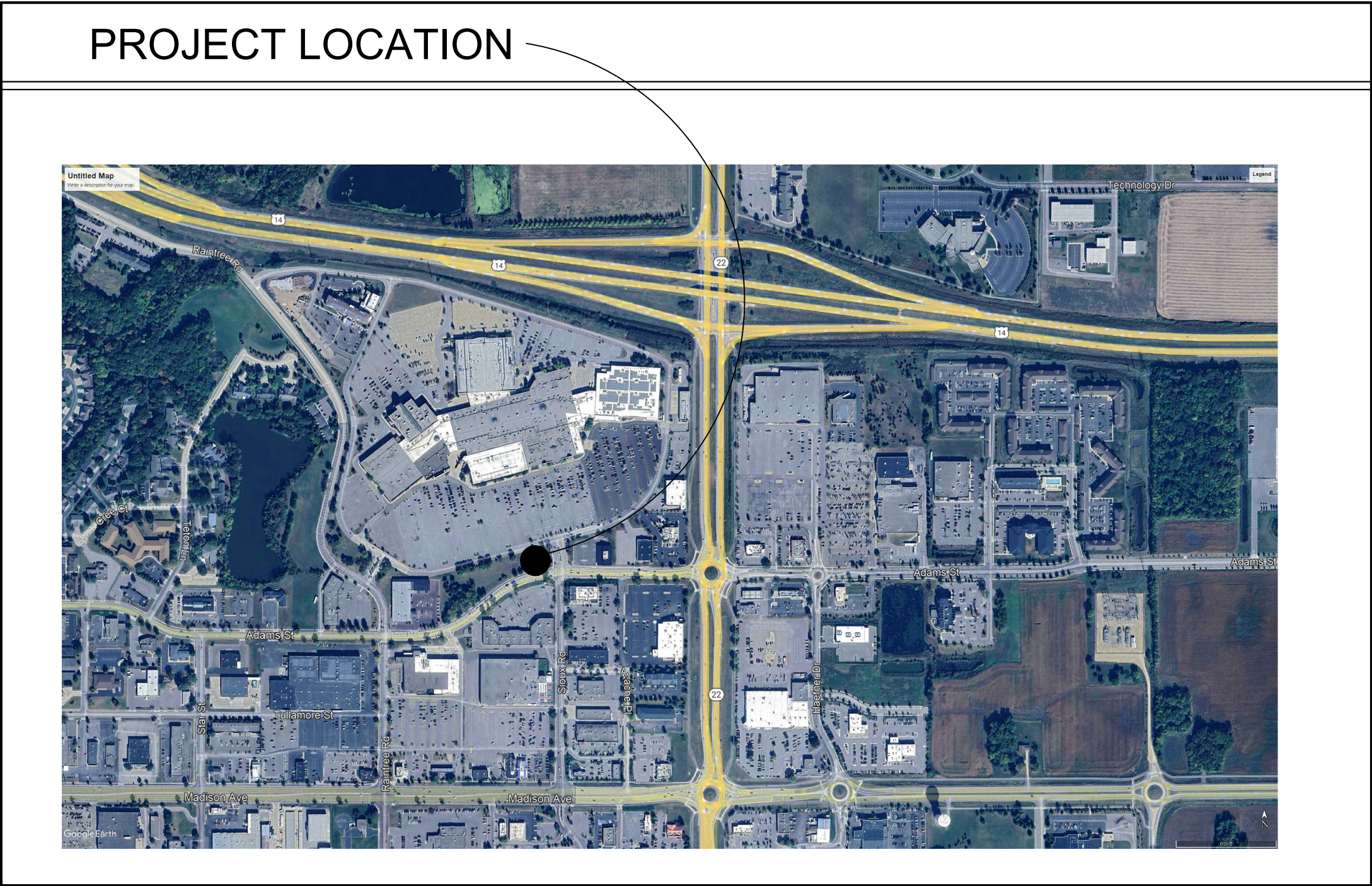




RHM BUILDING - 2

MANKATO, MN 56001



PROJECT TITLE:
RIVER HILLS MALL
BUILDING TWO
MANKATO, MN 56001



Envelope Compliance Certificate

Project Information

Energy Code: 90.1 (2019) Standard
Project Title: RHM-2
Location: Mankato, Minnesota
Climate Zone: 6a
Project Type: New Construction
Vertical Glazing / Wall Area: 0.319
Performance Sim. Specs: EnergyPlus 24.1.0 (EPW:)

Building Area

Description	Floor Area
1-Retail (Retail) : Nonresidential	3718

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof:Roof, Exterior Envelope, [Bldg. Use 1 - Retail]	3541	---	31.25	0.031	0.032
Floor:Floor, Vertical 4 ft., Exterior Envelope, [Bldg. Use 1 - Retail] (c)	269	---	12.40	0.751	0.688
NORTH					
Ext Wall:Ext Wall - North, Exterior Envelope, [Bldg. Use 1 - Retail]	1515	21.00	3.00	0.051	0.051
Window:Windows - North, Perf. Specs.: Product ID Tubelite T14000, SHGC 0.30, PF 0.04, VT 0.90, Exterior Envelope, [Bldg. Use 1 - Retail] (b)	355	---	---	0.250	0.340
EAST					
Ext Wall:Ext Wall - East, Exterior Envelope, [Bldg. Use 1 - Retail]	640	21.00	3.00	0.051	0.051
Window:Windows - East, Perf. Specs.: Product ID Tubelite T14000, SHGC 0.30, PF 0.17, VT 0.90, Exterior Envelope, [Bldg. Use 1 - Retail] (b)	74	---	---	0.250	0.340
SOUTH					
Ext Wall:Ext Wall - South, Exterior Envelope, [Bldg. Use 1 - Retail]	1515	21.00	3.00	0.051	0.051
Window:Windows - South, Perf. Specs.: Product ID Tubelite T14000, SHGC 0.30, PF 0.33, VT 0.90, Exterior Envelope, [Bldg. Use 1 - Retail] (b)	545	---	---	0.250	0.340
Door:Doors - South, Perf. Specs.: Product ID Tubelite T14000, SHGC 0.30, PF 0.33, VT 0.90, Exterior Envelope, [Bldg. Use 1 - Retail] (b)	42	---	---	0.290	0.630
WEST					
Ext Wall:Ext Wall - West, Exterior Envelope, [Bldg. Use 1 - Retail]	640	21.00	3.00	0.051	0.051
Window:Window - West, Perf. Specs.: Product ID Tubelite T14000, SHGC 0.30, PF 0.17, VT 0.90, Exterior Envelope, [Bldg. Use 1 - Retail] (b)	340	---	---	0.250	0.340
Door:Door - West, Perf. Specs.: Product ID Tubelite T14000, SHGC 0.30, PF 0.04, VT 0.90, Exterior Envelope, [Bldg. Use 1 - Retail] (b)	21	---	---	0.290	0.630

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 6% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2019) Standard requirements in COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Matt J Borowy - Designer
Name - Title
Signature
Date 2-24-26



GENERAL CONSTRUCTION NOTES

THE CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE PROJECT AND VERIFY ALL CONDITIONS AND DIMENSIONS. ANY DISCREPANCIES BETWEEN THESE DOCUMENTS AND ANY CODE, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY FOR CORRECTIONS.

THE CONTRACTOR SHALL VERIFY ALL EXACT ELEVATIONS, INVERTS, AND LOCATIONS OF UTILITIES.

ALL CONTRACTORS SHALL USE CAUTION TO LIMIT DAMAGE TO ANY EXISTING PLANTINGS, PROPERTY AND ADJOINING SURFACES.

THE DESIGN & CONSTRUCTION OF ACCESSIBLE BUILDING ELEMENTS WILL BE IN ACCORDANCE WITH THESE PLANS, MINNESOTA STATE BUILDING CODE CHAPTER 1341, INTERNATIONAL BUILDING CODE (I.B.C.) AND THE COUNCIL OF AMERICAN BUILDING OFFICIALS (CABO)/ AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A117.1-1992.

ALL NEW MATERIALS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTACT ARCHITECT FOR ADDITIONAL DIMENSIONS IF REQUIRED INSTEAD OF SCALING.

TRASH REMOVAL DURING CONSTRUCTION SHALL BE BY GENERAL CONTRACTOR AT GENERAL CONTRACTOR'S EXPENSE.

GENERAL CONTRACTOR TO OBTAIN ALL BUILDING PERMITS

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN AN ALL WEATHER SURFACE ROADWAY FOR EMERGENCY VEHICLE PASSAGE FROM THE CITY STREET TO THE FRONT DOOR OF THE STRUCTURE.

SOME WALLS, WHETHER NOTED OR NOT, MAY NEED WIDER FRAMING TO ACCOMMODATE PLUMBING, CONDUIT, OR DUCTWORK. VERIFY AND COORDINATE WITH MECHANICAL AND/OR ELECTRICAL CONTRACTOR.

ALL OUTSIDE CORNERS OF GYPSUM BOARD PARTITIONS SHALL HAVE A METAL CORNER BEAD.

TERMINATE ALL GYPSUM BOARD ABUTTING DISSIMILAR MATERIALS AND EDGES EXPOSED TO VIEW WITH NON-EXPOSED METAL CASING BEAD AND ISOLATED BY RODSTOCK AND SEALANT FULL LENGTH UNLESS NOTED OTHERWISE.

ALL DIMENSIONS AND LOCATIONS PERTAINING TO MECHANICAL OR ELECTRICAL SERVICES OR EQUIPMENT SHALL BE VERIFIED WITH RESPECTIVE TRADES.

CONTRACTOR SHALL VERIFY WITH THE RESPECTIVE TRADES FOR THE FOLLOWING:
A. CUTTING AND PATCHING TO MATCH WORK REQUIRED FOR MECHANICAL AND/OR ELECTRICAL CONSTRUCTION.
B. SIZE AND LOCATION OF PENETRATIONS FOR MECHANICAL AND/OR ELECTRICAL SERVICES OR EQUIPMENT.
C. SIZES AND LOCATIONS OF CONCRETE PADS FOR MECHANICAL AND/OR ELECTRICAL EQUIPMENT.
D. LOCATION FOR WOOD BLOCKING AS REQUIRED FOR MOUNTING MECHANICAL AND/OR ELECTRICAL EQUIPMENT.

CHANGES IN FLOOR MATERIALS OR FINISH SHALL OCCUR UNDER THE CENTER LINE OF THE DOOR OR AS NOTED.

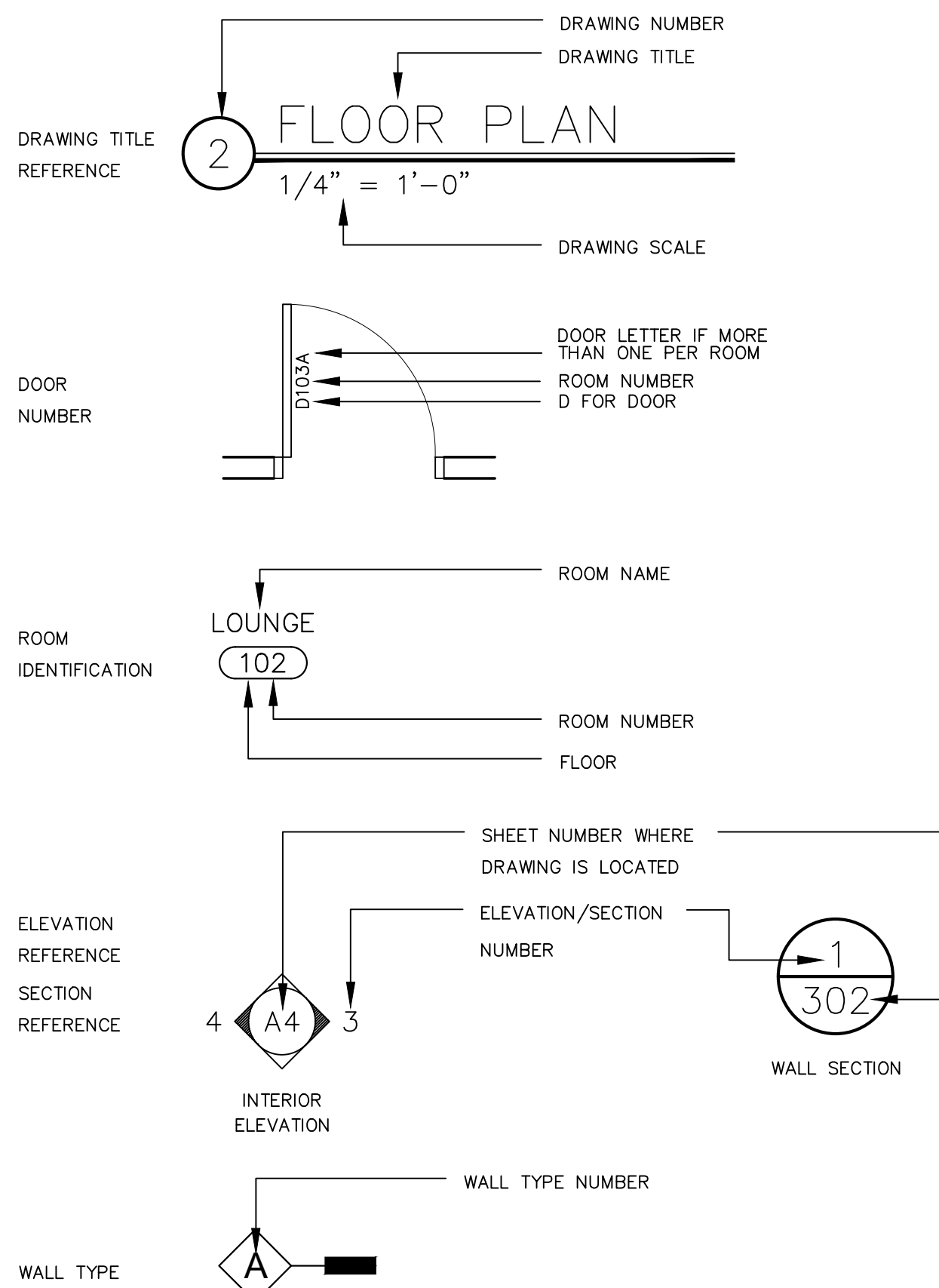
ALL FINISHES TO BE COORDINATED WITH OWNER PRIOR TO PURCHASING AND INSTALLING.

ENSURE ALL SEALANTS AND CAULKS ARE COMPATIBLE WITH ALL MATERIALS THEY COME IN CONTACT WITH.

GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DEBRIS LEFT AFTER CONSTRUCTION AND CLEAN THE SPACE FOR TURNOVER TO THE OWNER.

ALL FIRE STOPPING, CUTTING AND PATCHING WILL BE COMPLETED NY THE RESPECTED SUB-CONTRACTORS.

ARCHITECTURAL SYMBOLS



SHEET INDEX

T1.1 TITLE SHEET & CODE REVIEW
A1.1 FLOOR PLAN & ROOF PLAN
A2.1 BUILDING SECTION AND DETAILS
A2.2 BUILDING SECTION AND DETAILS
A3.1 EXTERIOR ELEVATIONS
A4.1 DOOR AND FRAME INFO AND LADDER DETAIL

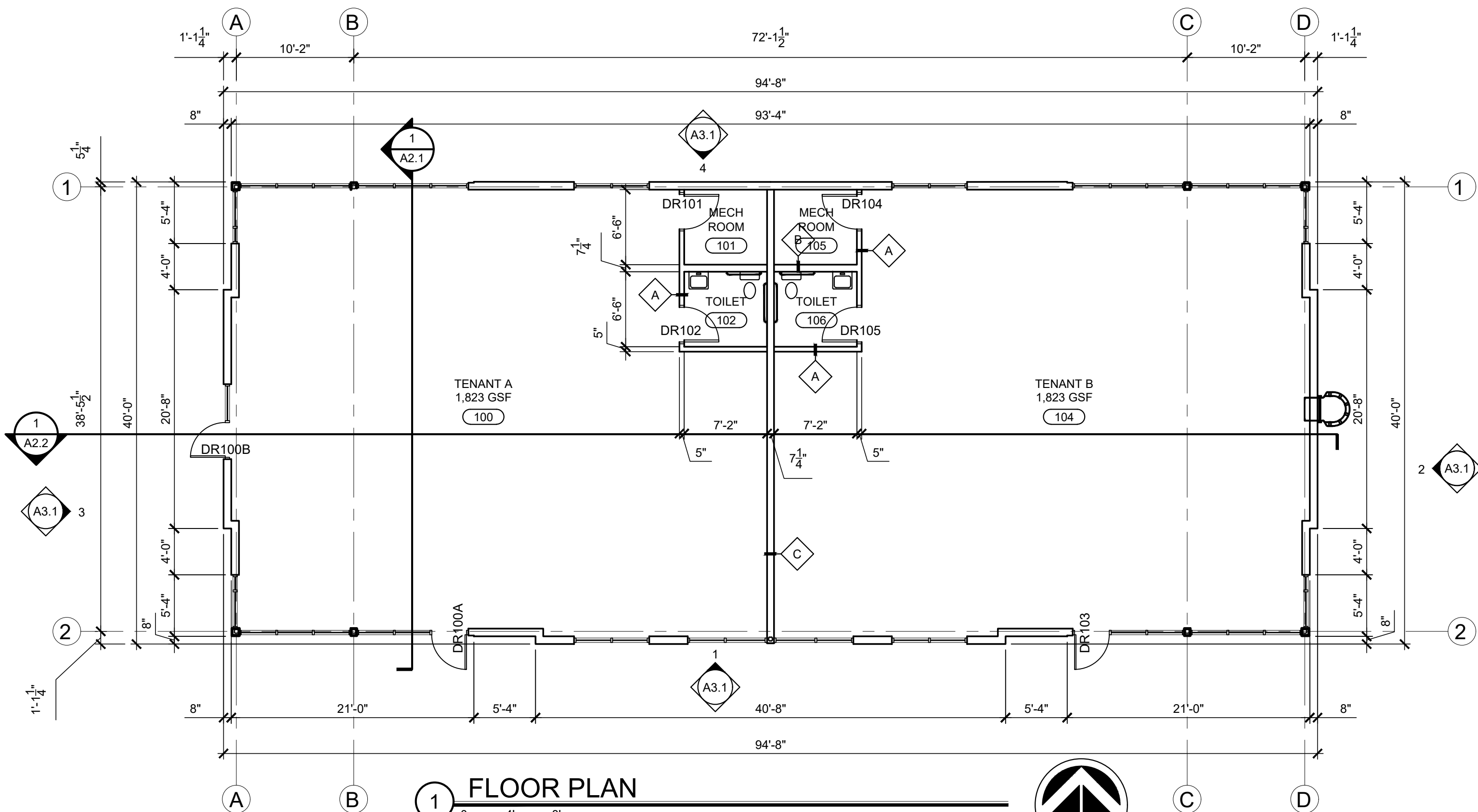
CIVIL DESIGN BY BOLTON & MENK
STRUCTURAL DESIGN BY IMEG ENGINEERING

No.	SUBMISSIONS & REVISIONS	Date

TITLE SHEET

JOB NO.: 26.22.1
DATE: 4-17-2026
DRAWN BY: MJB

T1.1



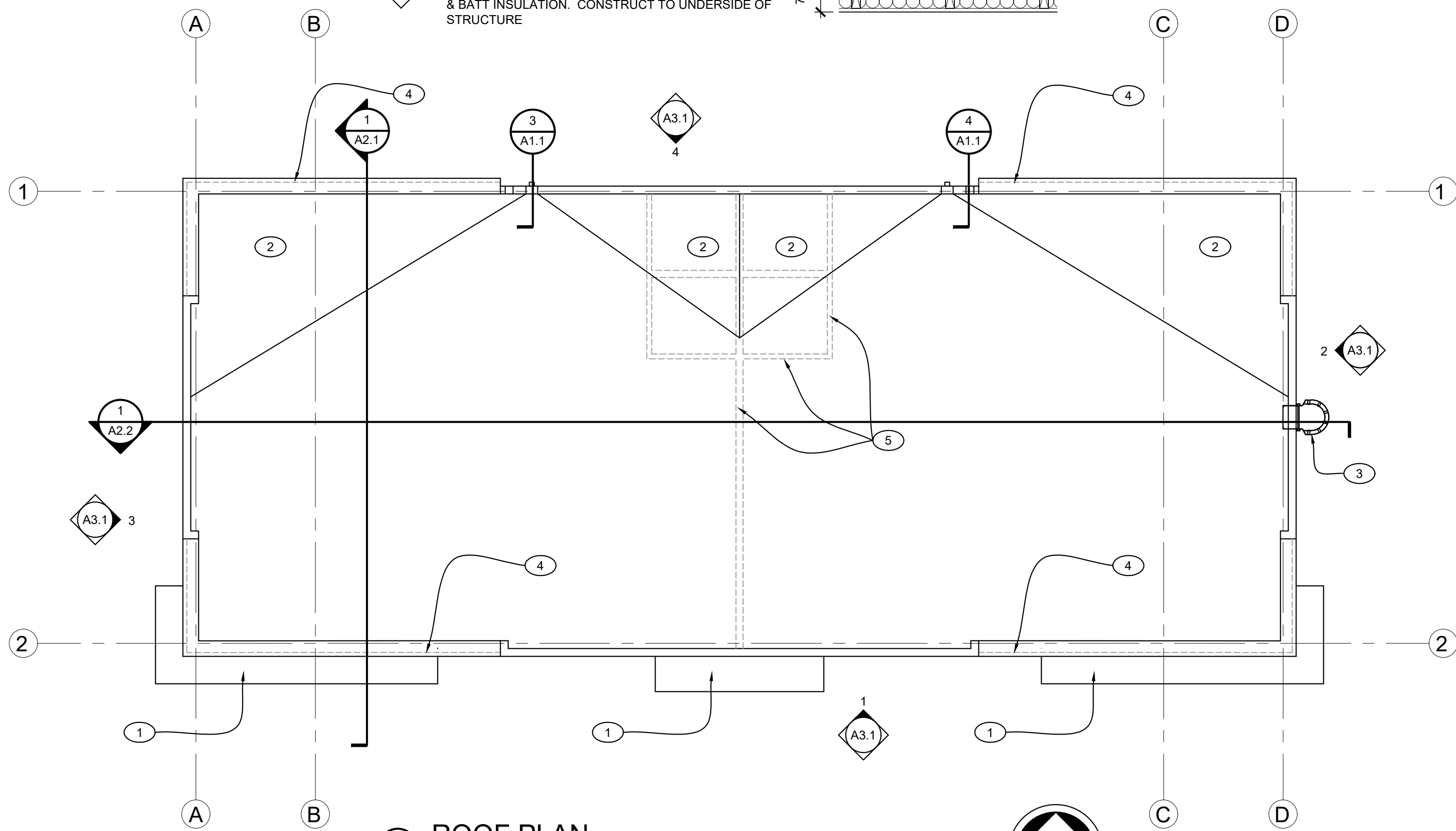
1 FLOOR PLAN

0 4' 8' SCALE: 1/8"=1'-0"



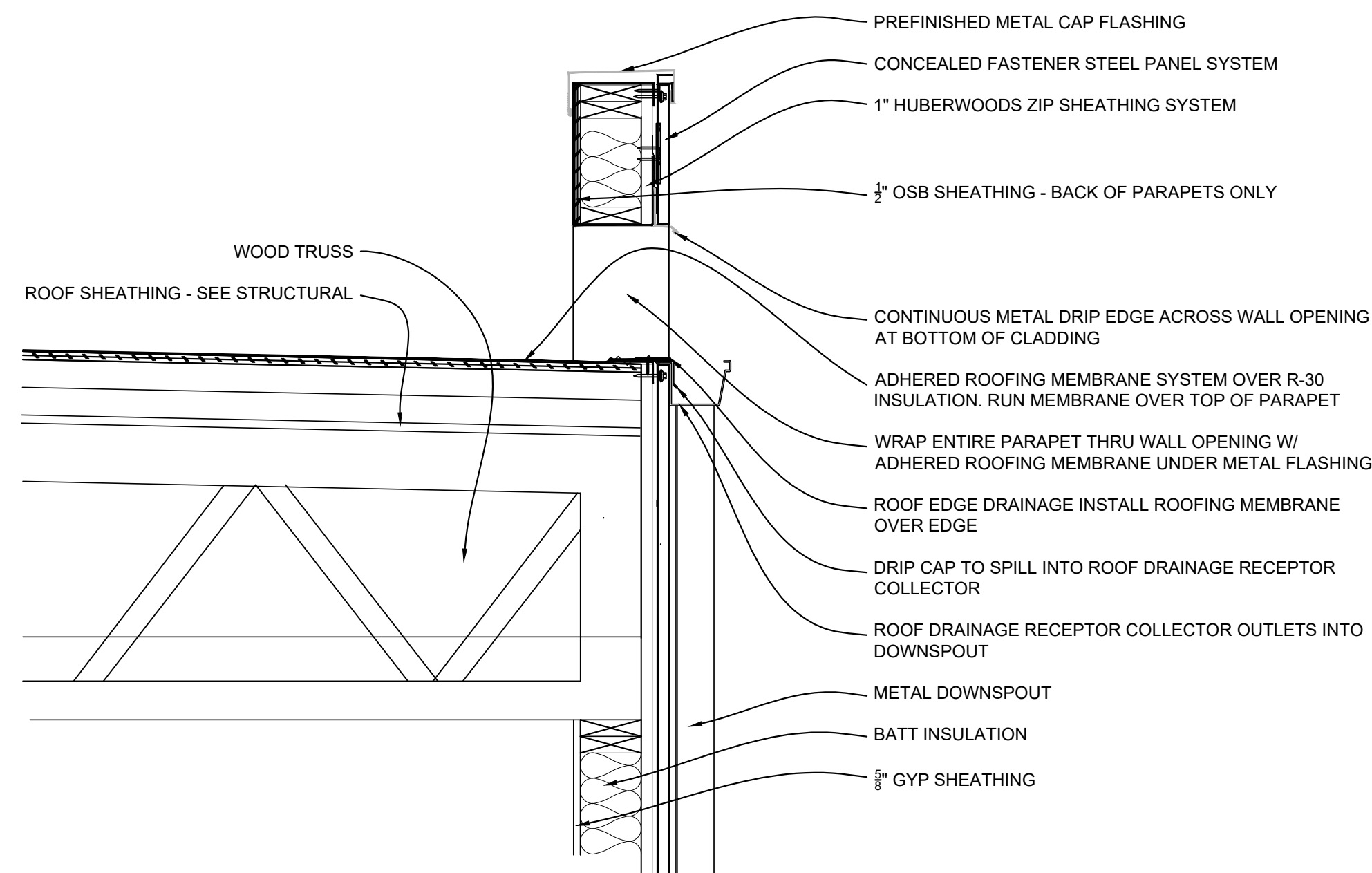
WALL TYPES

- A** 5/8" GYPSUM BOARD ON BOTH SIDES OF 2X4 WOOD STUDS @ 16" O.C. W/ BATT INSULATION - CONSTRUCT TO UNDERSIDE OF HARD CEILING
- B** 5/8" GYPSUM BOARD ON BOTH SIDES OF 2X6 WOOD STUDS @ 16" O.C. W/ BATT INSULATION. CONSTRUCT TO UNDERSIDE OF STRUCTURE
- C** 5/8" GYPSUM BOARD ON BOTH SIDES OF 2X6 WOOD STUDS @ 16" O.C. W/ RESILIENT CHANNEL ONE SIDE & BATT INSULATION. CONSTRUCT TO UNDERSIDE OF STRUCTURE



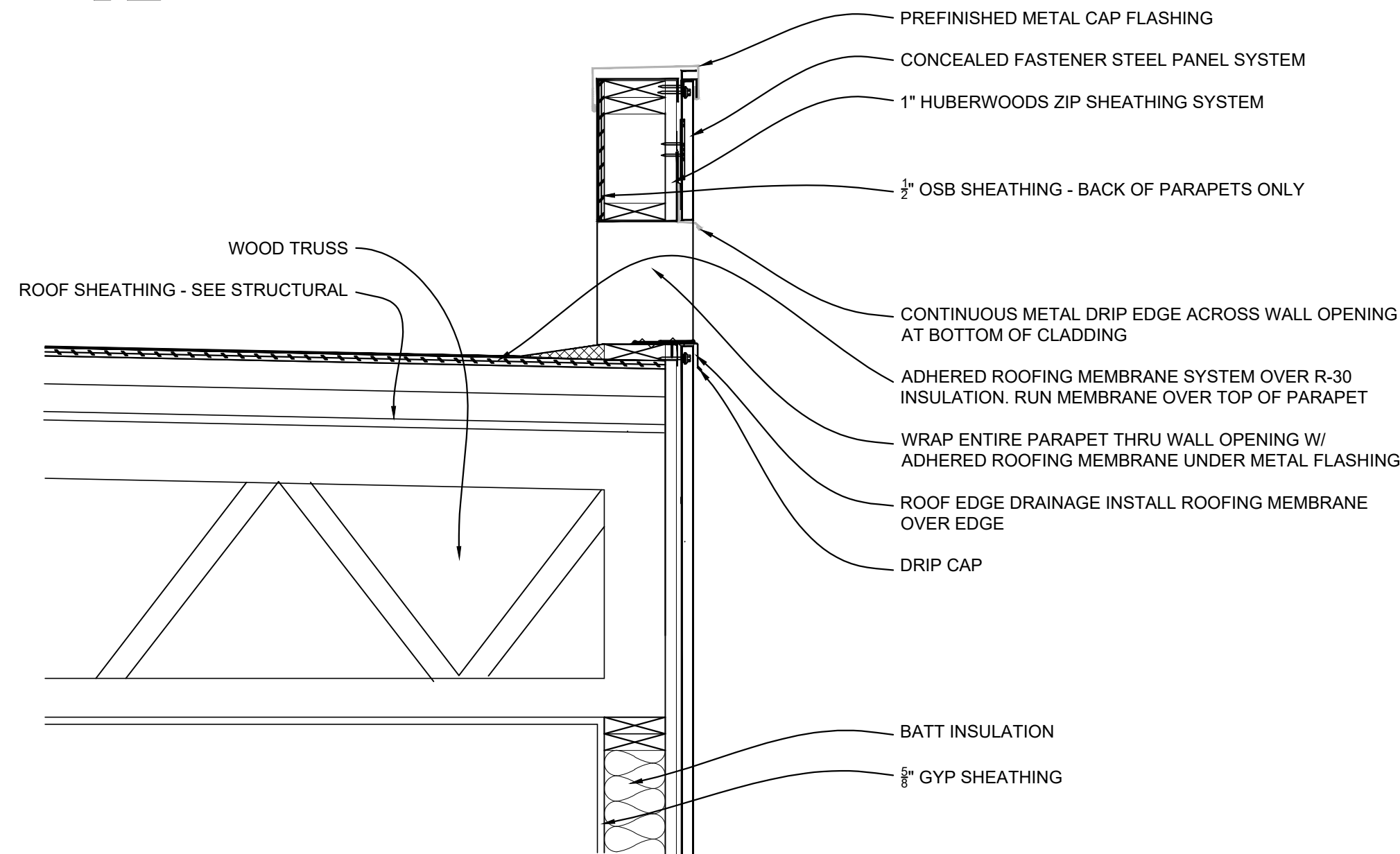
2 ROOF PLAN

0 4' 8' SCALE: 1/8"=1'-0"



3 SCUPPER AND DOWNSPOUT DETAIL

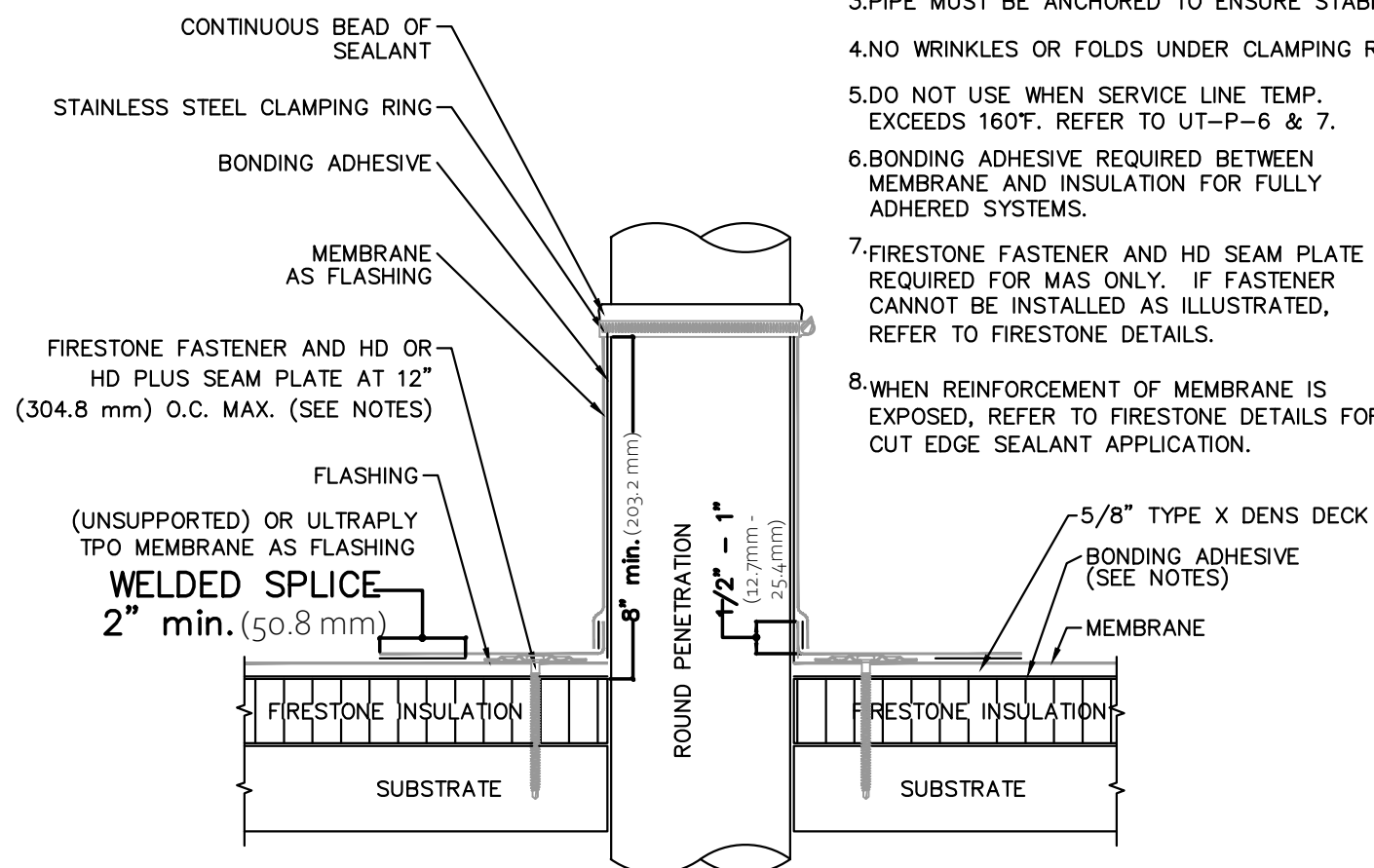
0 6\"/>



4 OVERFLOW SCUPPER DETAIL

0 6\"/>

- NOTES:
1.REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2.REMOVE ALL EXISTING FLASHINGS, LEADS, ETC. PIPE SURFACE MUST BE FREE OF ALL RUST, GREASE, INSULATION, ETC.
3.PIPE MUST BE ANCHORED TO ENSURE STABILITY.
4.NO WRINKLES OR FOLDS UNDER CLAMPING RING.
5.DO NOT USE WHEN SERVICE LINE TEMP. EXCEEDS 160°F. REFER TO UT-P-6 & 7.
6.BONDING ADHESIVE REQUIRED BETWEEN MEMBRANE AND INSULATION FOR FULLY ADHERED SYSTEMS.
7.FIRESTONE FASTENER AND HD SEAM PLATE REQUIRED FOR MAS ONLY. IF FASTENER CANNOT BE INSTALLED AS ILLUSTRATED, REFER TO FIRESTONE DETAILS.
8.WHEN REINFORCEMENT OF MEMBRANE IS EXPOSED, REFER TO FIRESTONE DETAILS FOR CUT EDGE SEALANT APPLICATION.



5 ROOF PENETRATION DETAIL

0 6\"/>

BUILDING CODE REVIEW

BASED ON 2020 IBC
BASED ON 2020 MN BUILDING CODE

BUILDING TYPE VB
NO FIRE SPRINKLER SYSTEM INSTALLED
BUILDING IS 1 STORY WOOD FRAME CONSTRUCTION

BUILDING IS MULTI-TENANT BUILDING
NON-SEPARATED OCCUPANCY
TOTAL SQ. FTG. = 3714 SQ. FT.

ALLOWABLE BUILDING AREA CALCULATIONS
BASED ON MOST RESTRICTIVE OCC. (M) RETAIL
BASE ALLOWABLE SQ. FTG. = 9,000 SQ. FT.
ALLOWABLE 1 STORY
ACTUAL AREA = 3714 SQ. FT.

POTENTIAL OF 2 TENANT SPACES

TENANT #2 M (RETAIL) 1857 TOTAL SQ. FT. / 60 PER OCC. = 31 OCC.
EXITS REQUIRED (1) (1) PROVIDED

PLUMBING FIXTURE COUNT

OCCUPANT LOAD PER TENANT SPACE
M OCC. LOAD (RETAIL) = 31 OCC.

FIXTURES REQ'D BY CODE

M OCC. REQUIRES 1 TOILET/500 OCC.
TOILETS REQ'D (1)

M OCC. REQUIRES 1 SINK/750 OCC.
SINKS REQ'D (1)

TOTAL TOILETS REQUIRED (1)
TOTAL TOILETS PROVIDED (1)
SINGLE GENDER NUETRAL RESTROOM ALLOWED DUE TO OCCUPANT LOAD OF 100 OR LESS

TOTAL SINKS REQ'D (1)
TOTAL SINKS PROVIDED (1)



PROJECT TITLE:

RIVER HILLS MALL
BUILDING TWO
MANKATO, MN 56001



Richard D. Storke

GENERAL NOTES:

CONTRACTORS TO FOLLOW
MANUFACTURER'S INSTRUCTIONS AND
INDUSTRY BEST PRACTICES FOR ALL
PRODUCT INSTALLATIONS.

SHEET NOTES:

- 1 PREFABRICATED ALUMINUM SUNSHADE
2 WATER DIVERSION CRICKET CONSTRUCTED OF TAPERED RIGID INSULATION UNDER ADHERED ROOFING MEMBRANE
3 ROOF ACCESS LADDER SEE 1/A4.1
4 DASHED LINE DENOTES KELVIX ZOLO 5 OUTDOOR GRAZER LIGHT FIXTURE IN CAP
5 DASHED LINE DENOTES NON-STRUCTURAL WALLS BELOW

No. SUBMISSIONS & REVISIONS Date

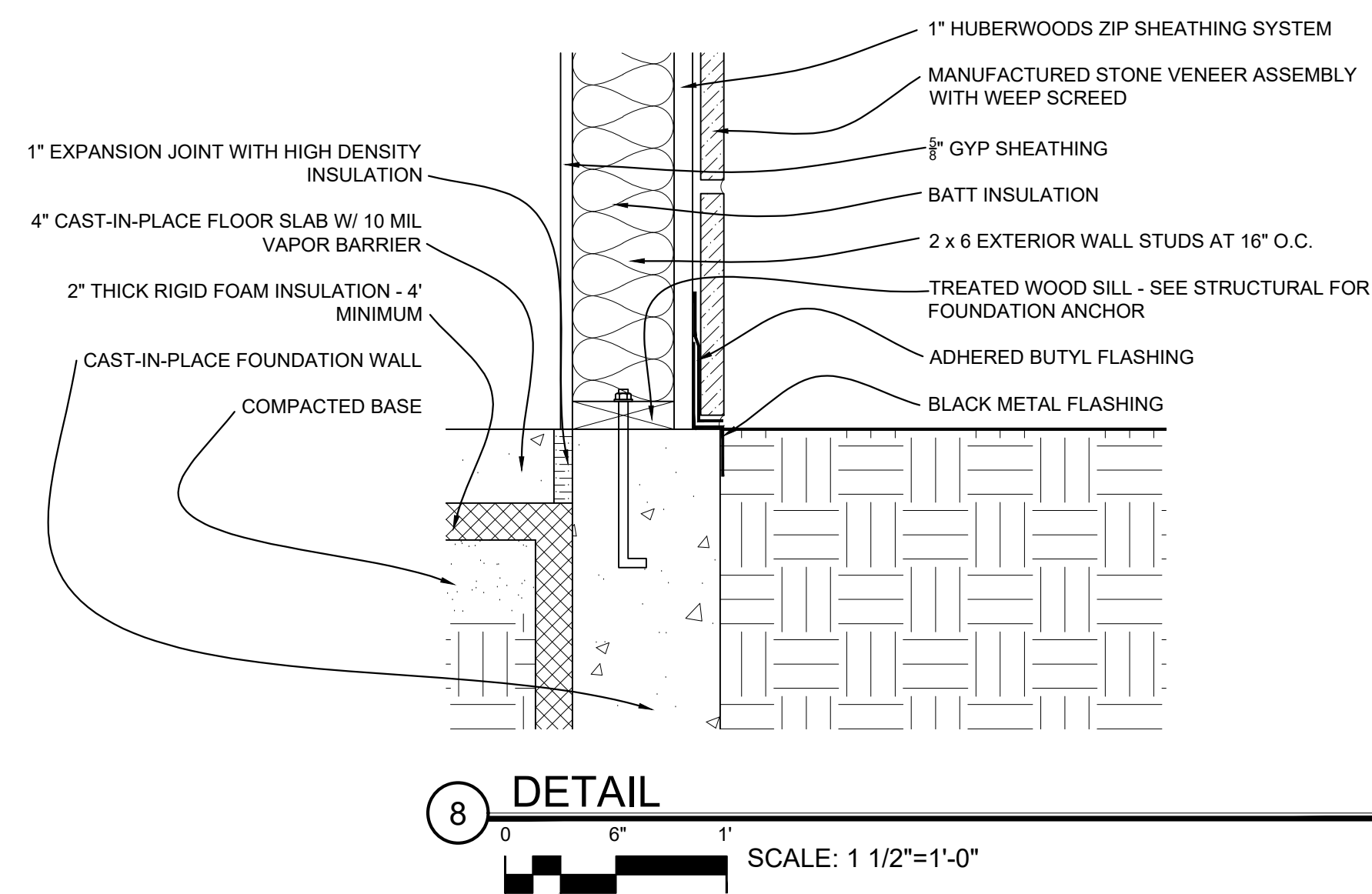
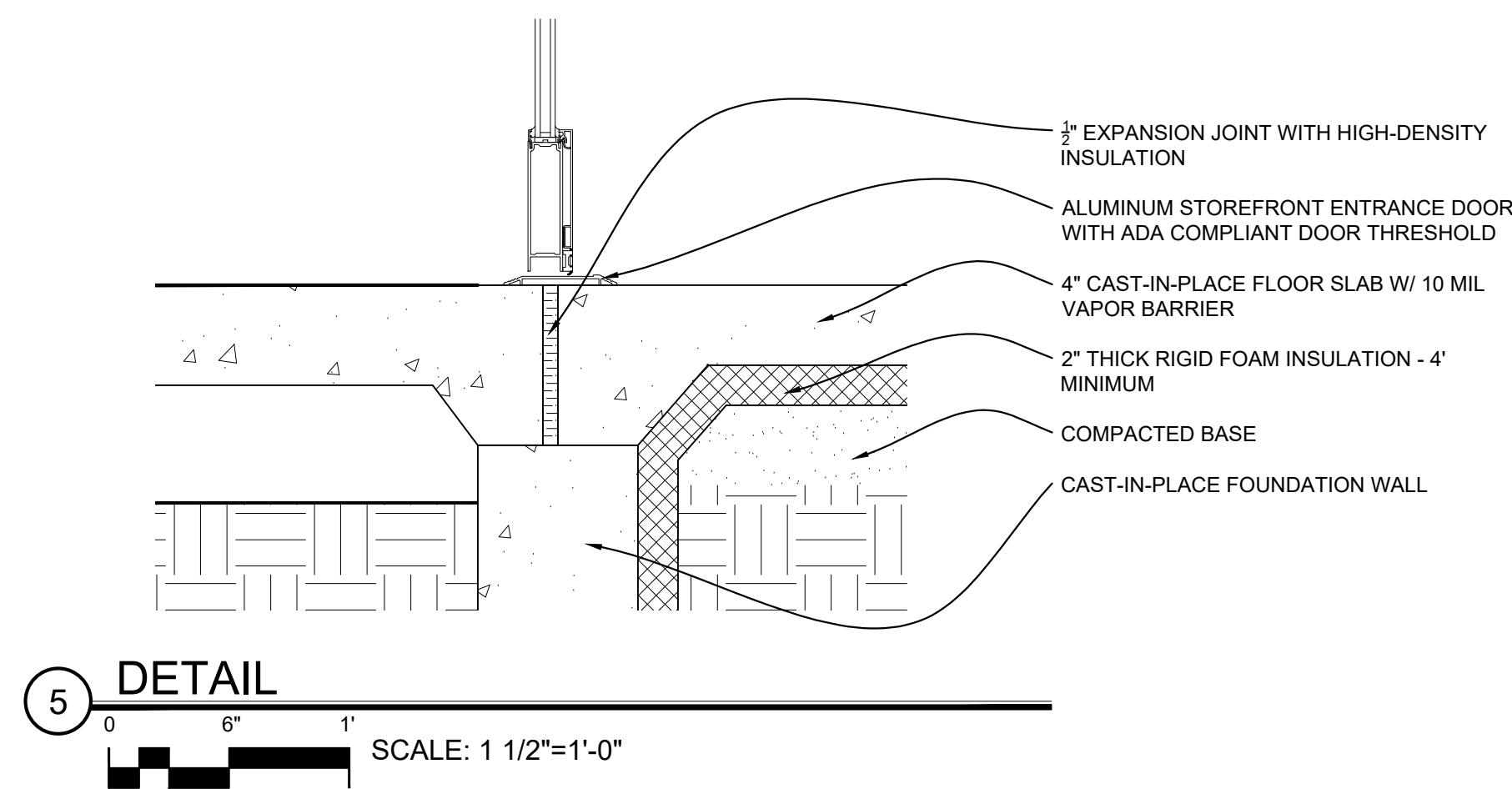
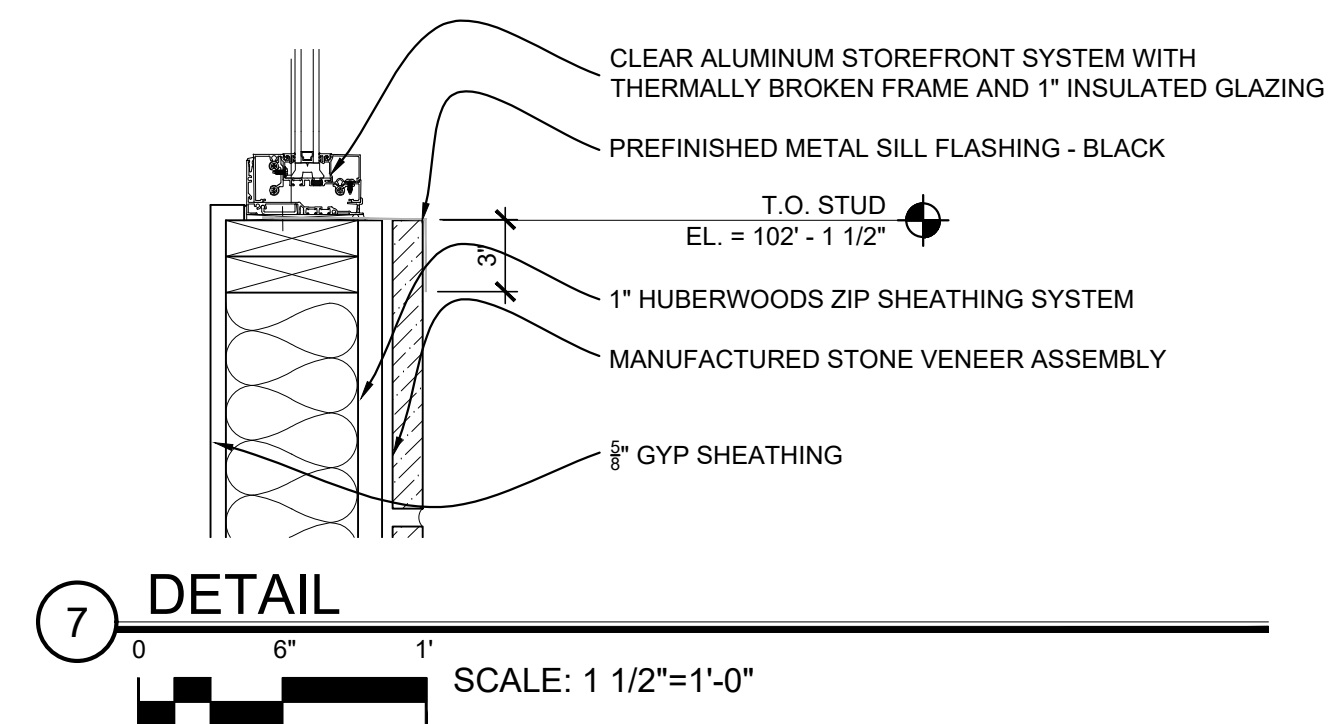
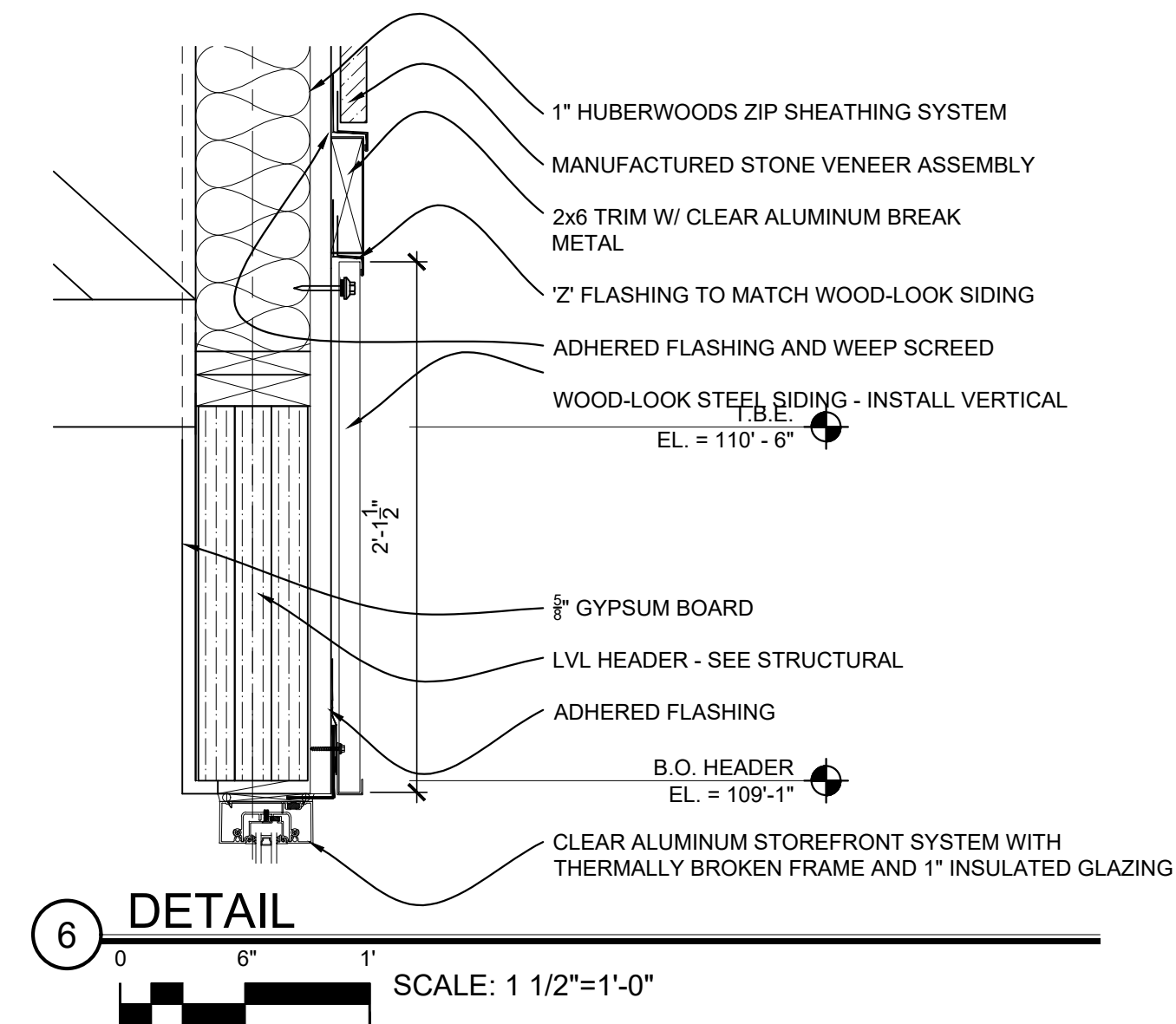
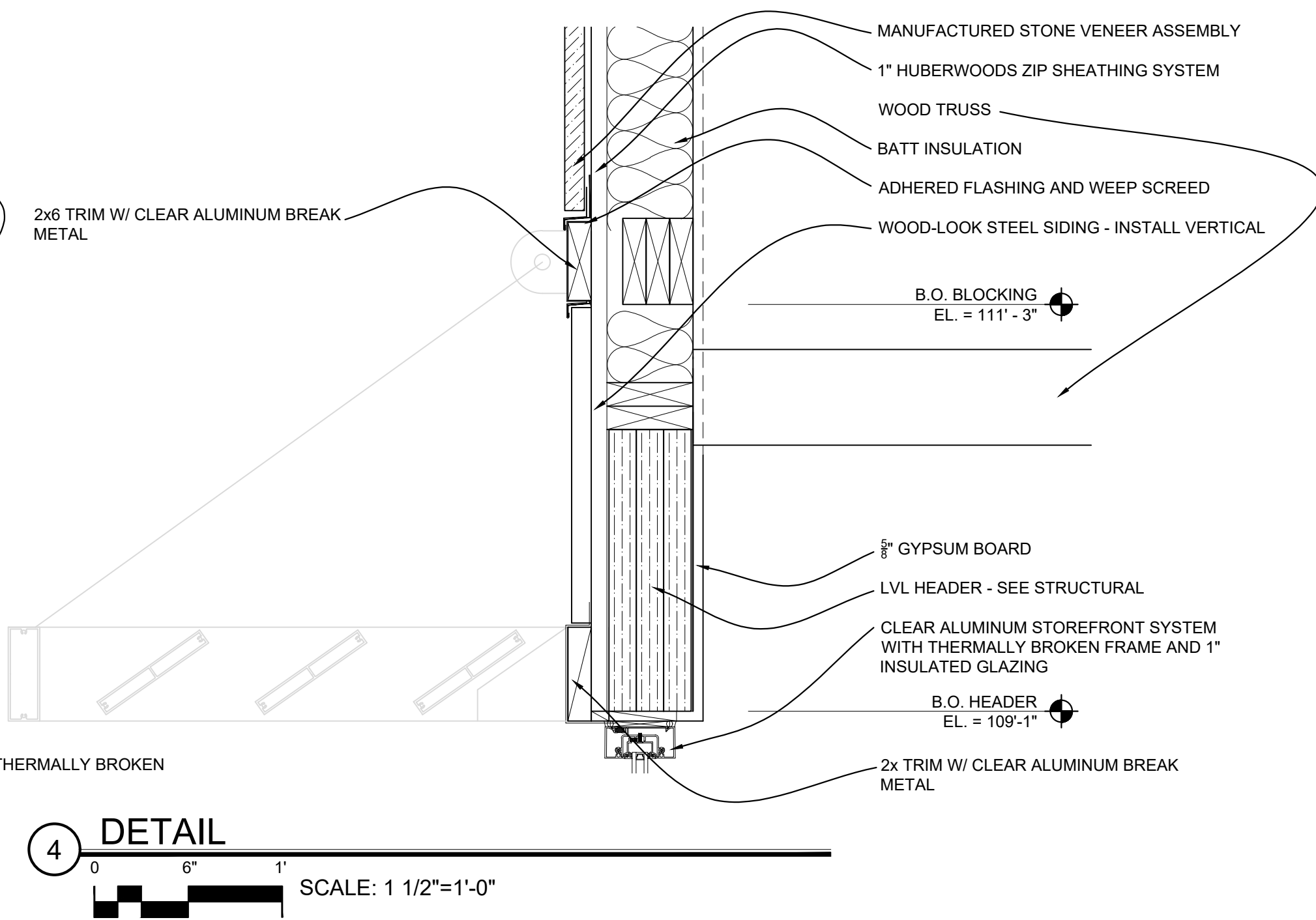
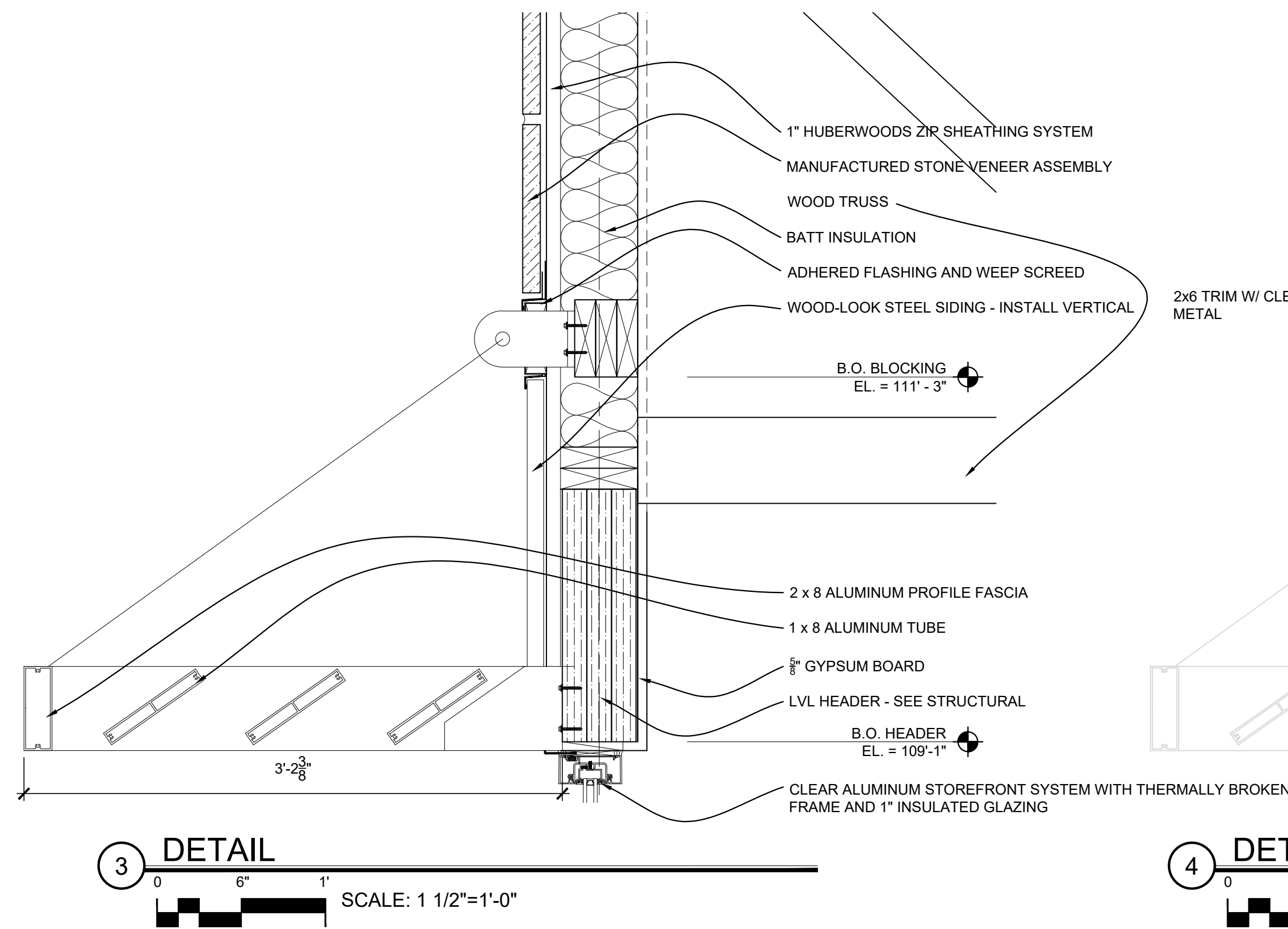
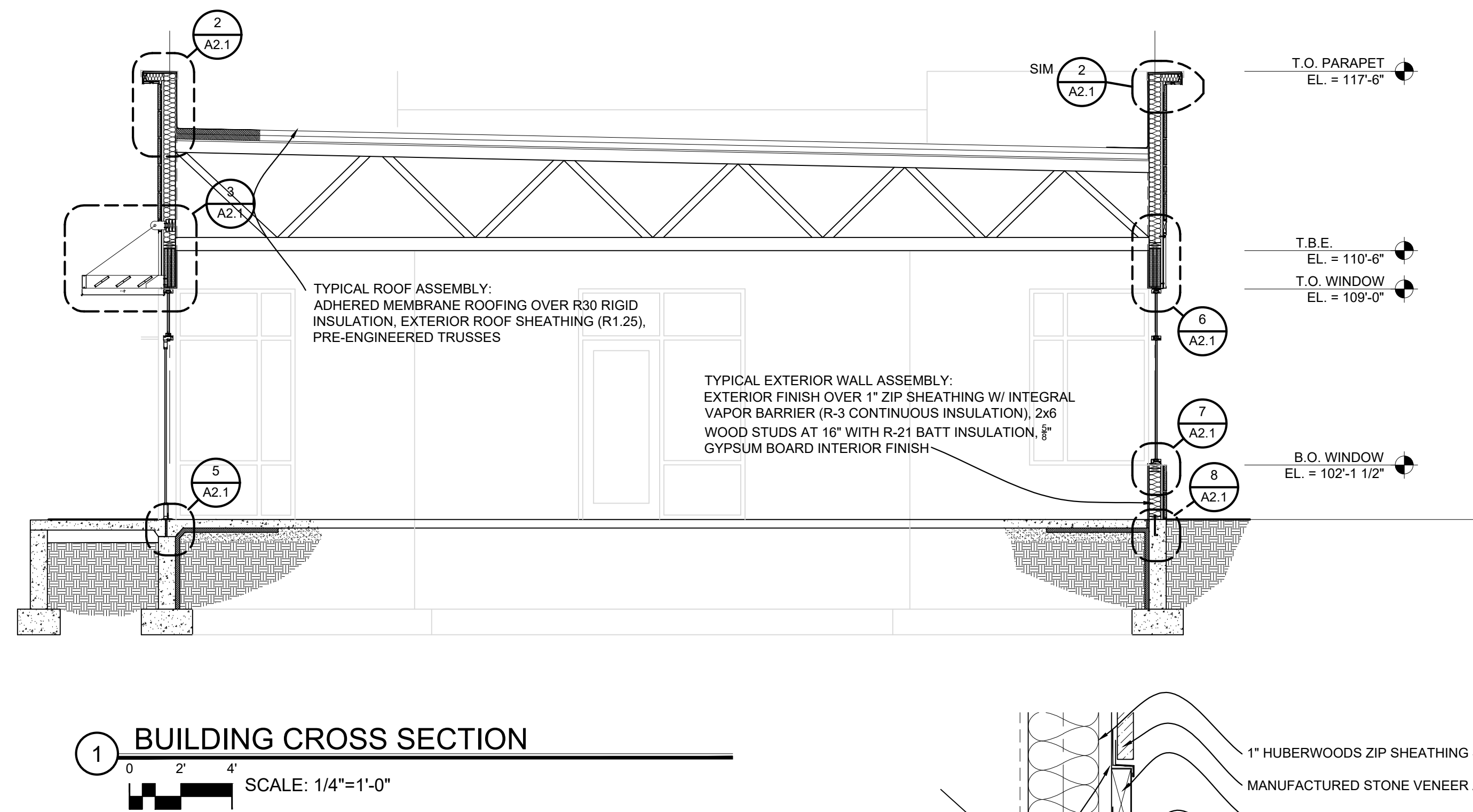
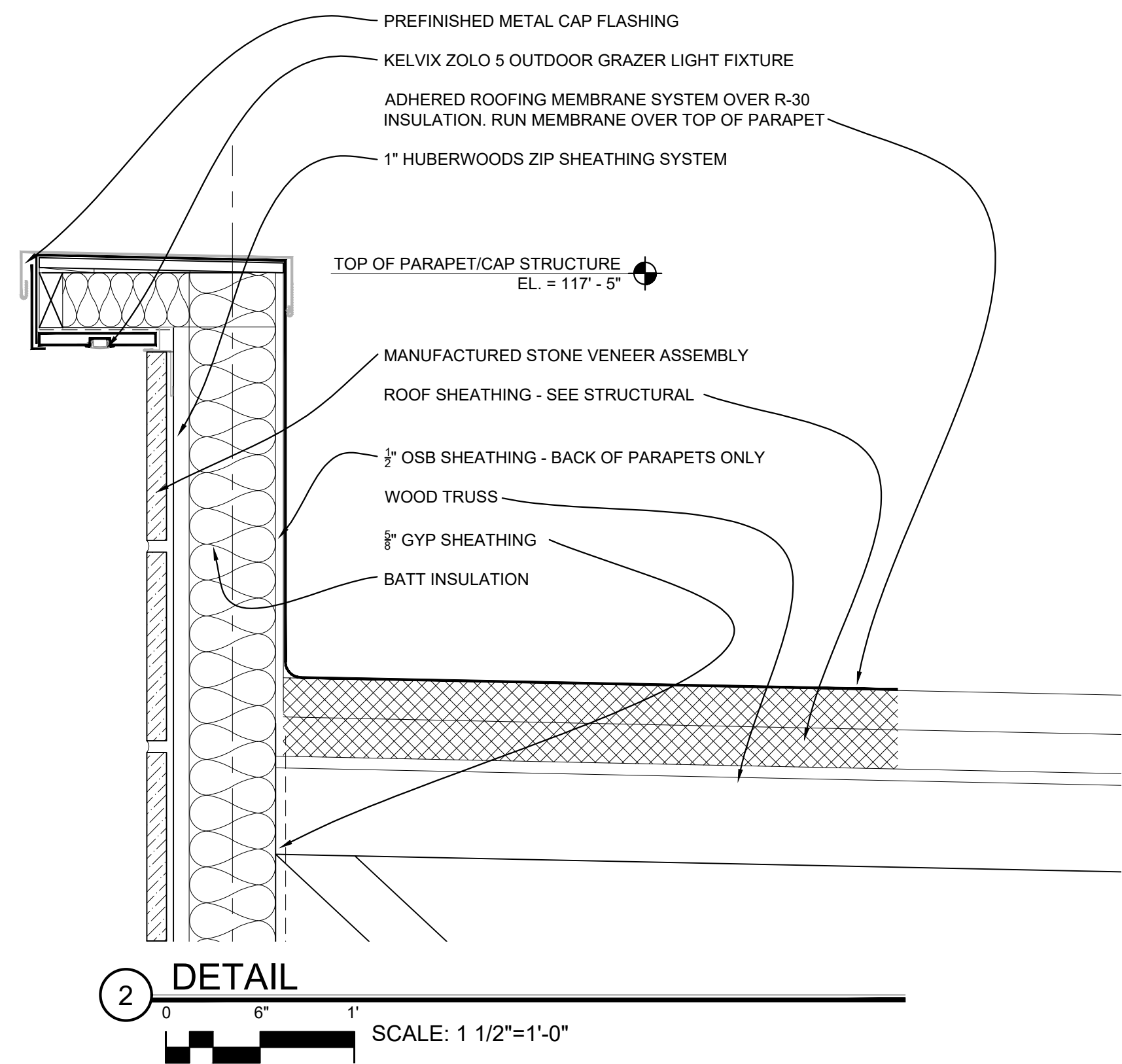
FLOOR PLAN & ROOF PLAN

JOB NO.: 26.22.1

DATE: 4-17-2026

DRAWN BY: MJB

A1.1



PROJECT TITLE:
**RIVER HILLS MALL
BUILDING TWO
MANKATO, MN 56001**



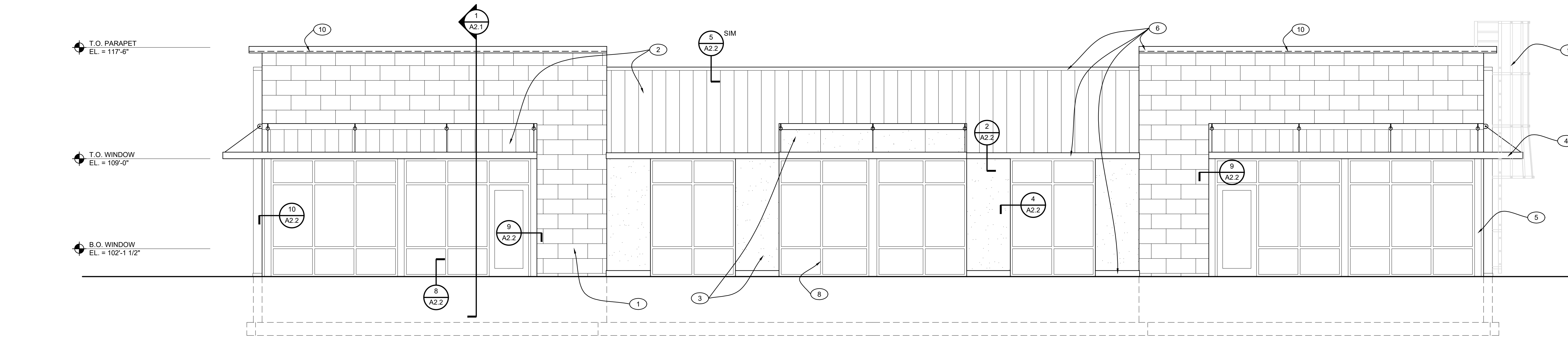
Edward D. Storber

GENERAL NOTES:
CONTRACTORS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND INDUSTRY BEST PRACTICES FOR ALL PRODUCT INSTALLATIONS.

SHEET NOTES:
1 NOTE

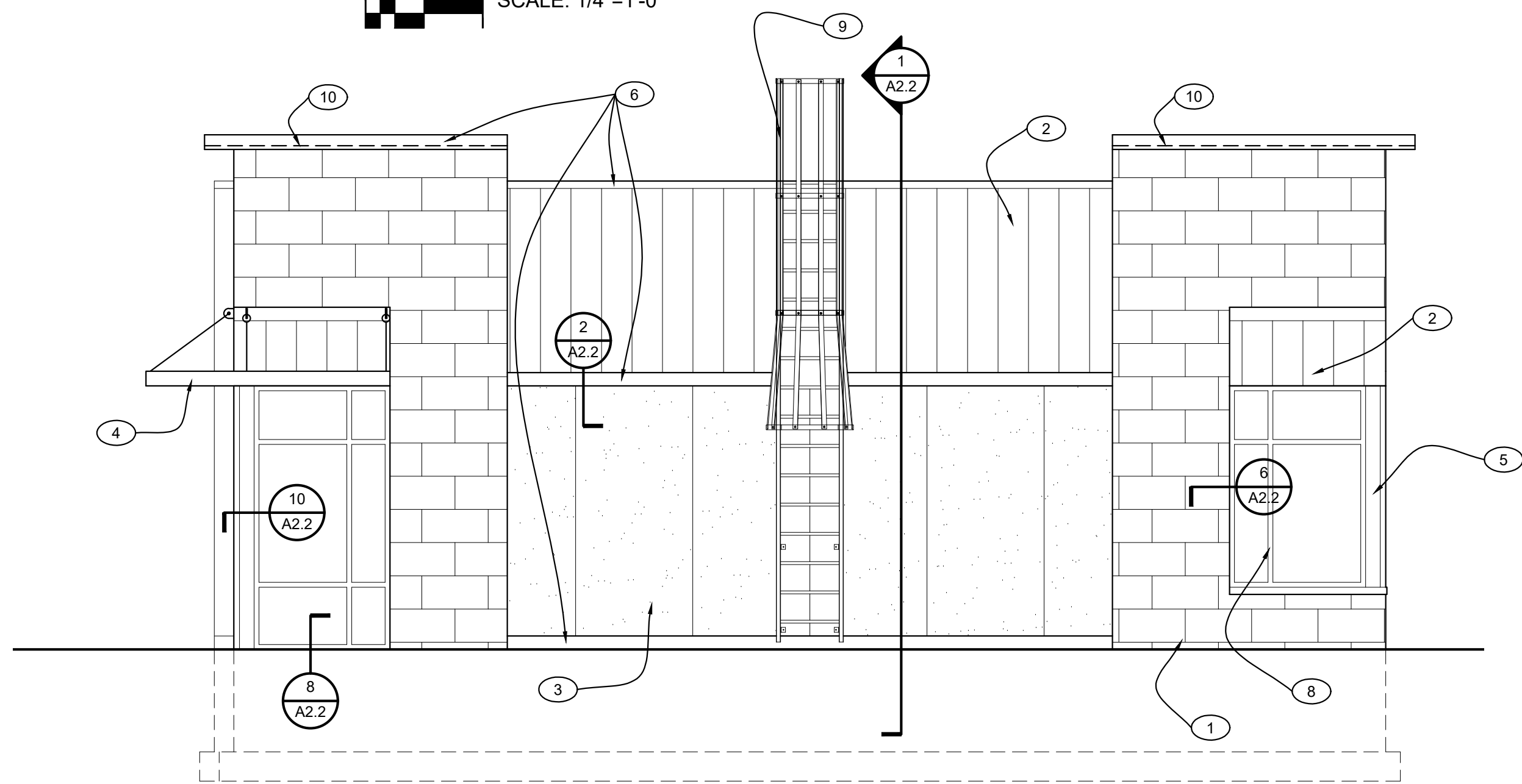
No.	SUBMISSIONS & REVISIONS	Date

BUILDING SECTION & DETAILS	
JOB NO.:	26.22.1
DATE:	4-17-2026
DRAWN BY:	MJB



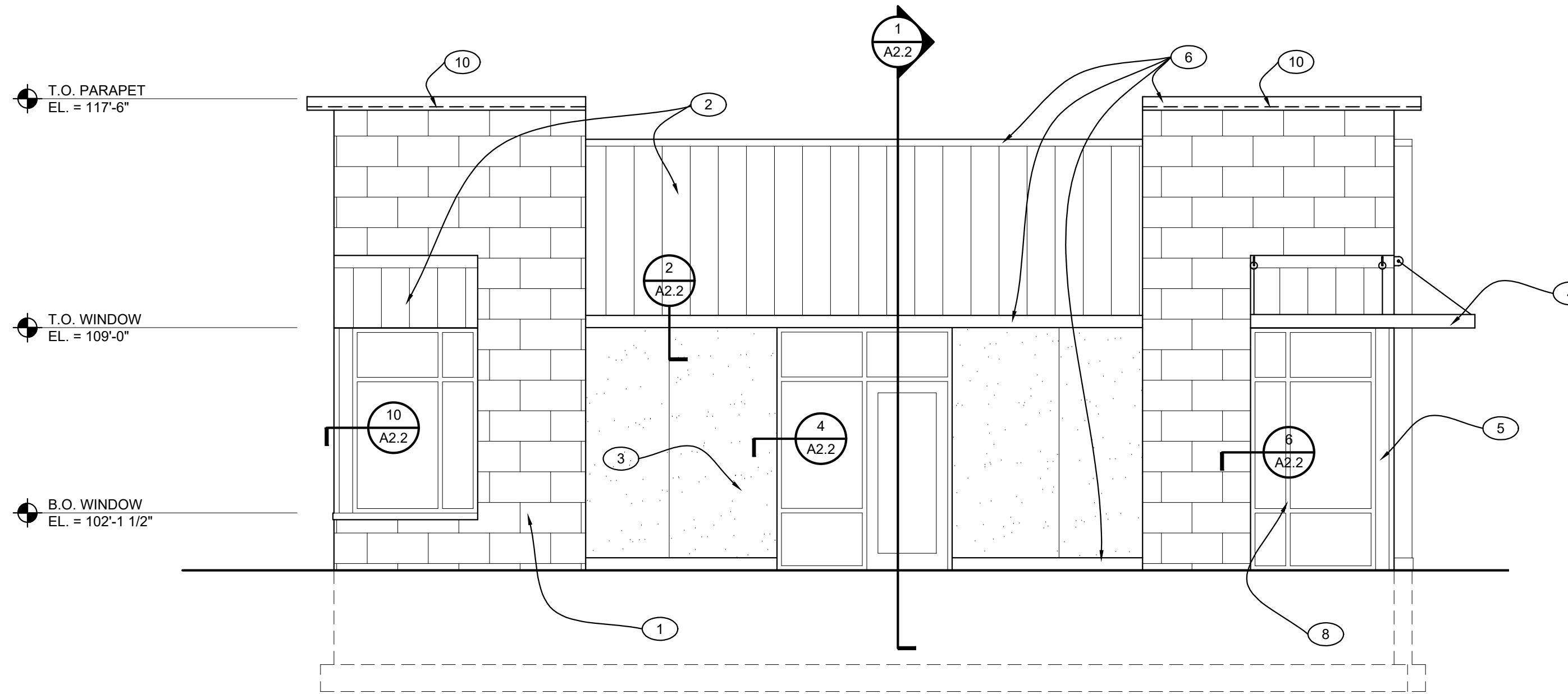
1 SOUTH ELEVATION

0 2' 4' SCALE: 1/4"=1'-0"



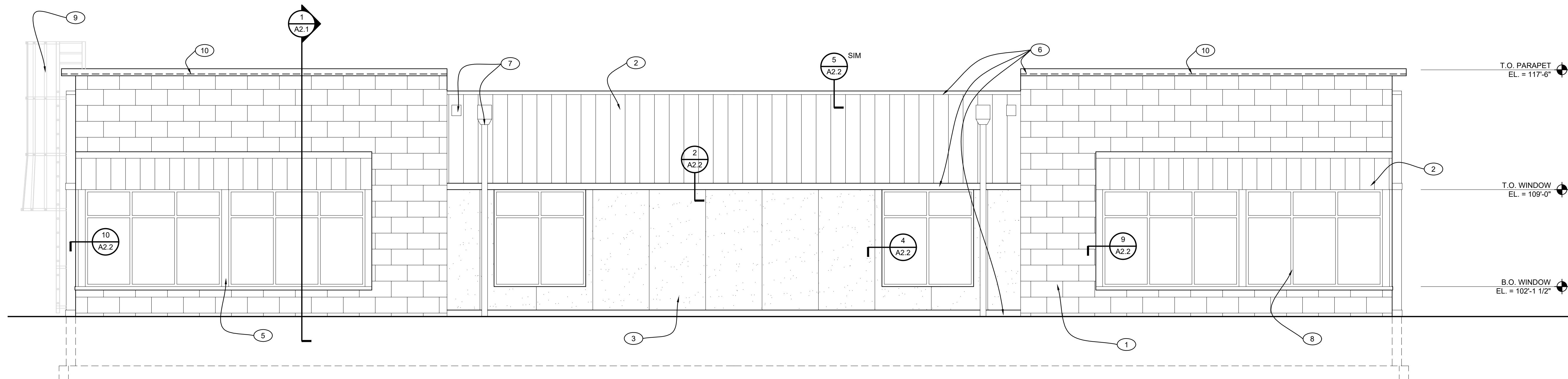
2 EAST ELEVATION

0 2' 4' SCALE: 1/4"=1'-0"



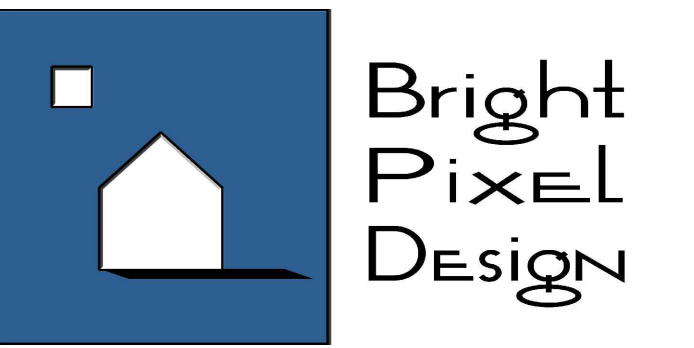
3 WEST ELEVATION

0 2' 4' SCALE: 1/4"=1'-0"



4 NORTH ELEVATION

0 2' 4' SCALE: 1/4"=1'-0"



PROJECT TITLE:
RIVER HILLS MALL
BUILDING TWO
MANKATO, MN 56001



Richard D. Storke

GENERAL NOTES:

CONTRACTORS TO FOLLOW
MANUFACTURER'S INSTRUCTIONS AND
INDUSTRY BEST PRACTICES FOR ALL
PRODUCT INSTALLATIONS.

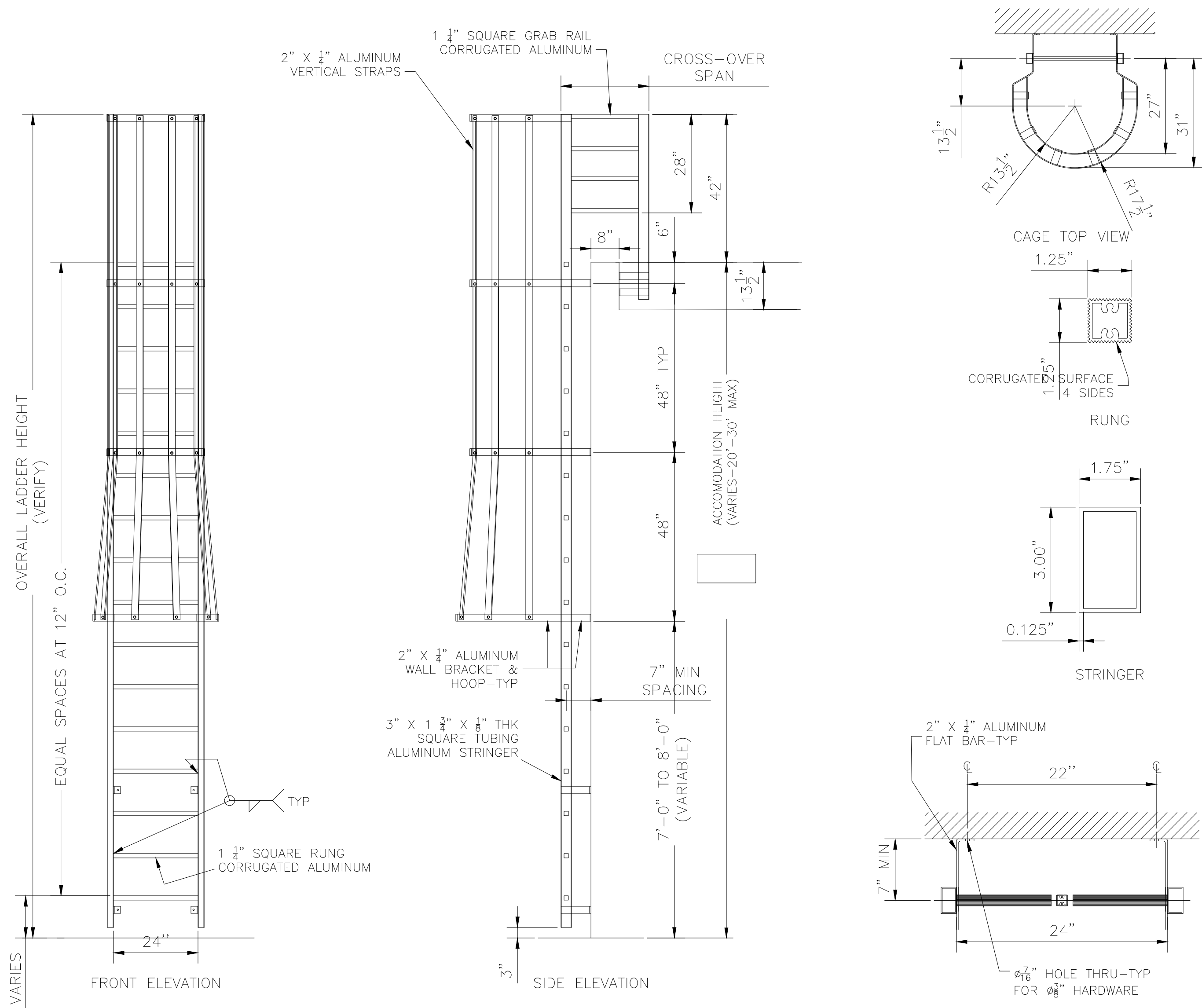
SHEET NOTES:

- 1 THINSTONE : CENTURION STONE
DIMENSIONAL SLATE FLAT & CORNER UNITS -
CHARCOAL GREY/MT RUNDLE NO ACCENTS
- 2 PREFINISHED STEEL SIDING: METAL SALES
EM15-1211 CONCEALED FASTENER WALL
PANELS WITH 1" OPEN EXPOSURE
HORIZONTAL CHANNELS PER 2/A2.2
COLOR: SNOWDRIFT WHITE
- 3 STUCCO TEXTURE $\frac{5}{8}$ " HARDIE PANEL W/1"
JOINT AT VERTICALS, TAMLYN XOCLP516 AT
OUTSIDE CORNERS AND 2" FLASHING AT
HORIZONTALS. COLOR: SW 7074
- 4 INDUSTRIAL LOUVERS, INC. PREFINISHED
ALUMINUM SUNSHADE WITH ORNAMENTAL
TIE-BACKS PER 4/A2.1 - CLEAR
- 5 CLEAR ALUMINUM BREAK METAL
- 6 PREFINISHED BLACK METAL WRAP FOR CAPS,
SILLS AND TRIM WRAP
- 7 SCUPPER, OVERFLOW SCUPPER AND
DOWNSPOUT: SNOWDRIFT WHITE
- 8 CLEAR ALUMINUM STOREFRONT SYSTEM: SEE
SHEET A4.1
- 9 ROOF ACCESS LADDER SEE 1/A4.1
- 10 CORNICE/CAP WITH KELVIX ZOLO 5 OUTDOOR
GRAZER LIGHT FIXTURE

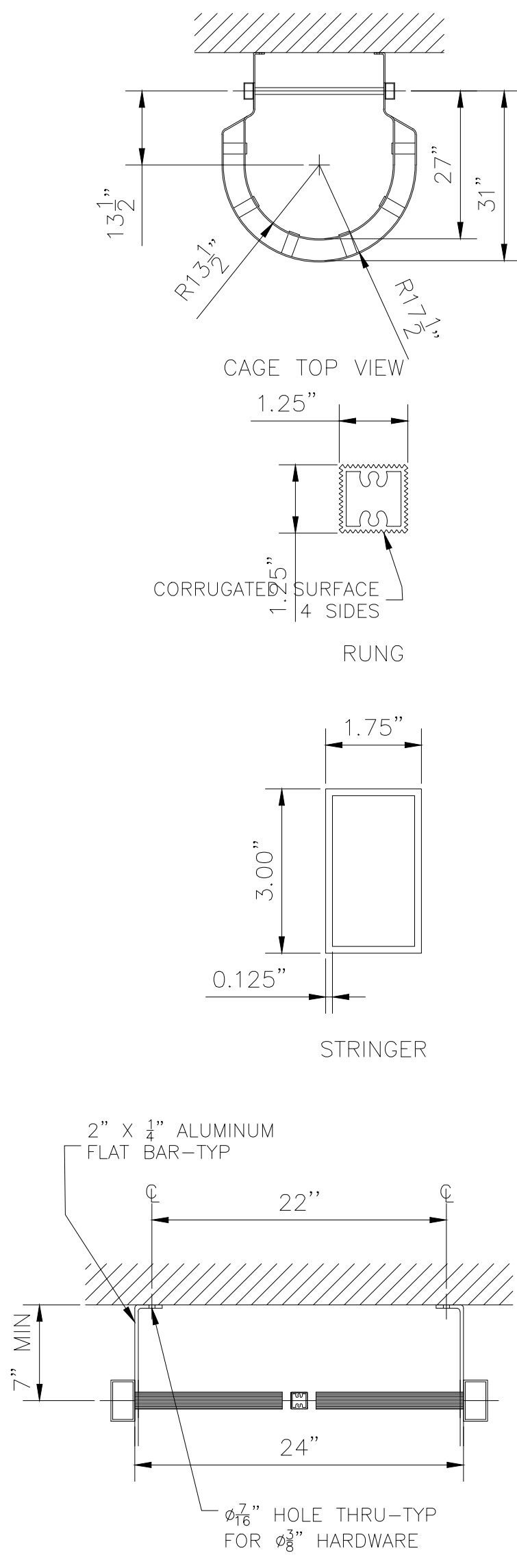
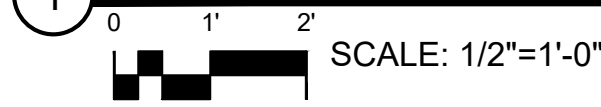
No.	SUBMISSIONS & REVISIONS	Date

EXTERIOR ELEVATIONS

JOB NO.:	26.22.1
DATE:	4-17-2026
DRAWN BY:	MJB



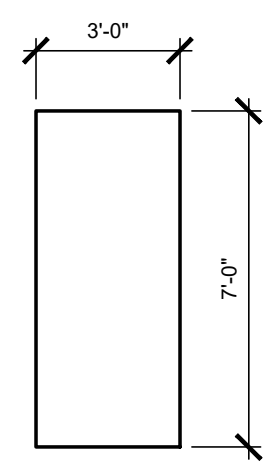
1 ROOF ACCESS LADDER DETAILS



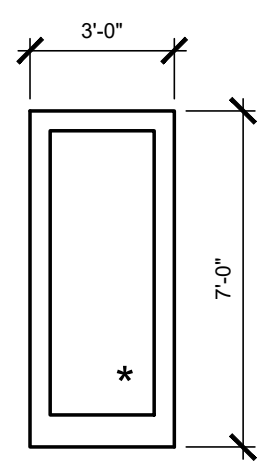
DOOR & FRAME TYPES

V. I.F. ROUGH OPENING PRIOR TO FABRICATION

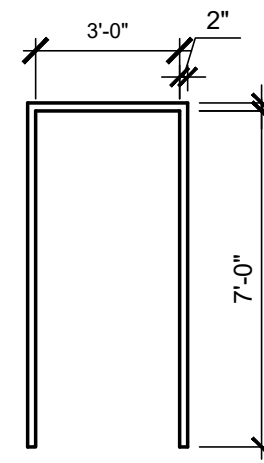
* = TEMPERED GLAZING



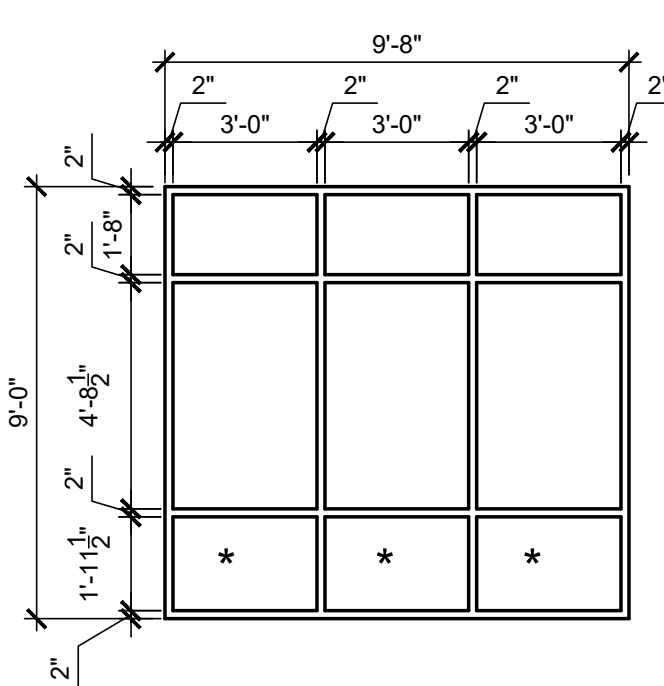
WOOD FLUSH
WD-1
SOLID CORE



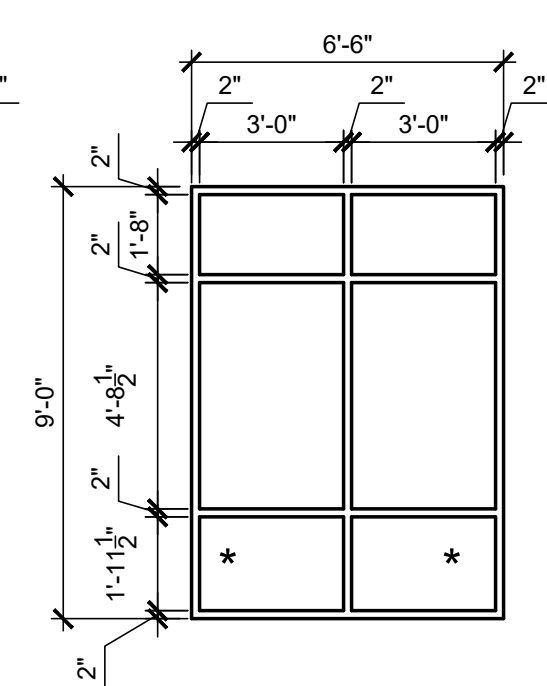
CLEAR ALUMINUM
FULL GLASS
AD-1



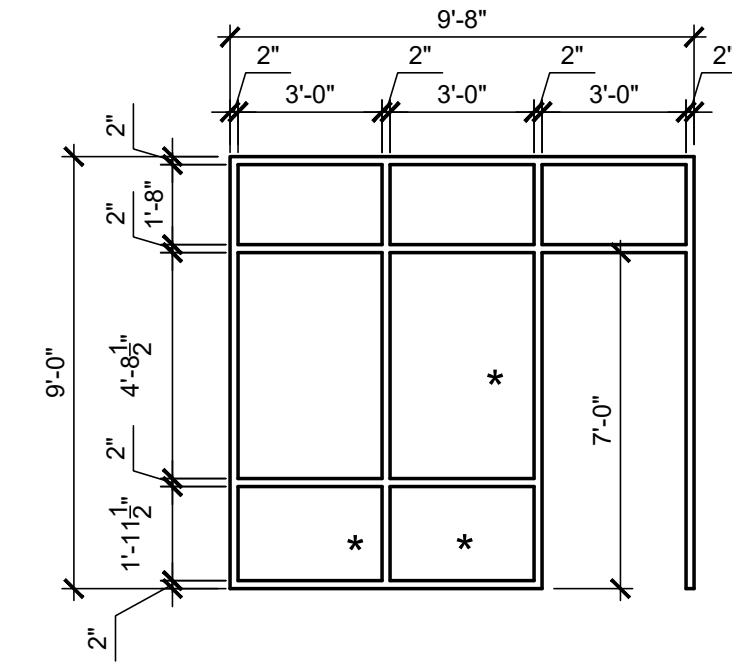
HOLLOW METAL
PAINTED
HM-1



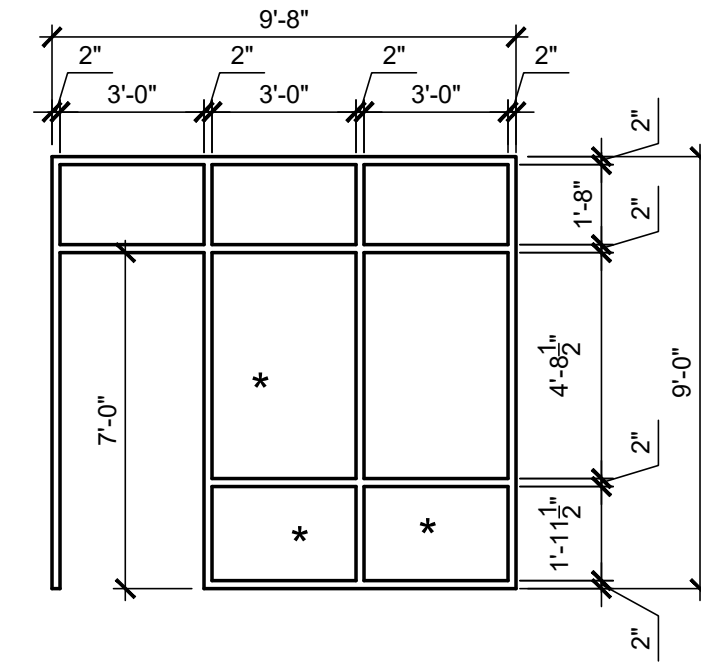
CLEAR ALUMINUM
AL-2



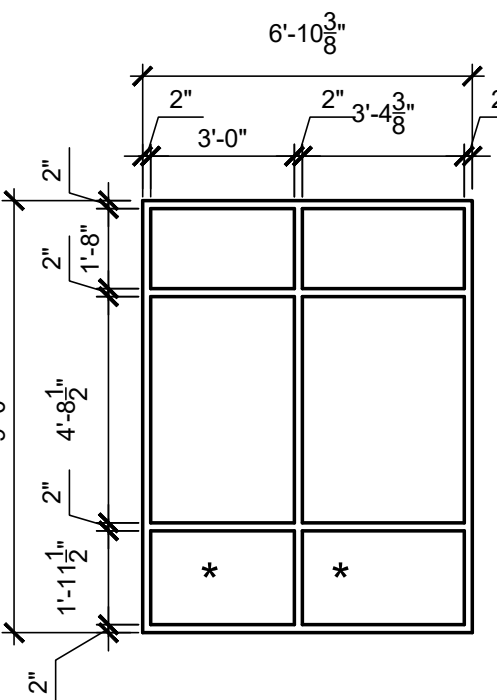
CLEAR ALUMINUM
AL-3



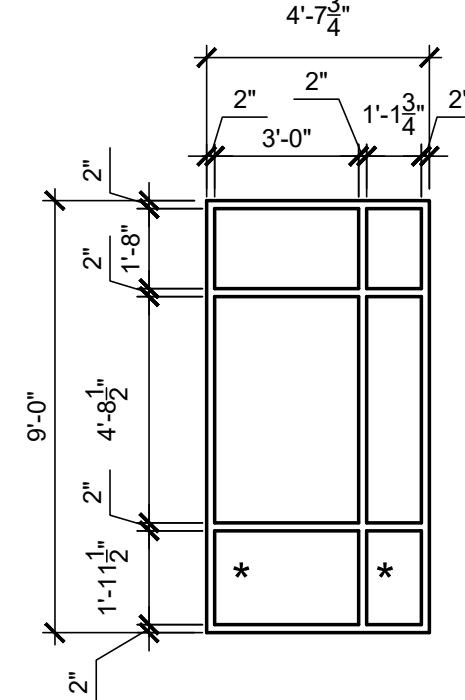
CLEAR ALUMINUM
AL-1a



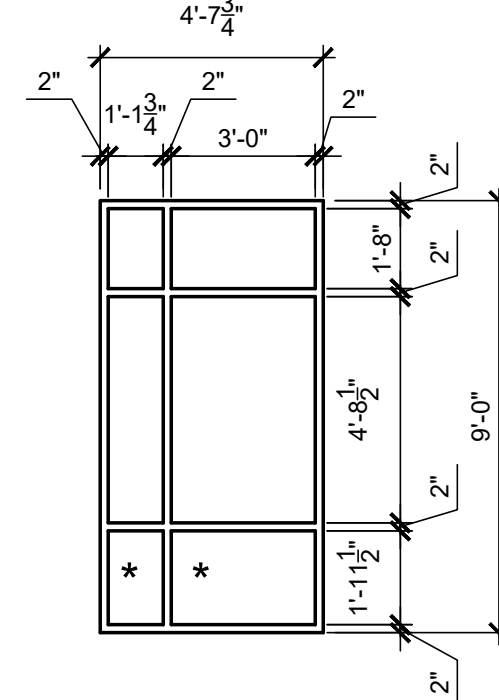
CLEAR ALUMINUM
AL-1b



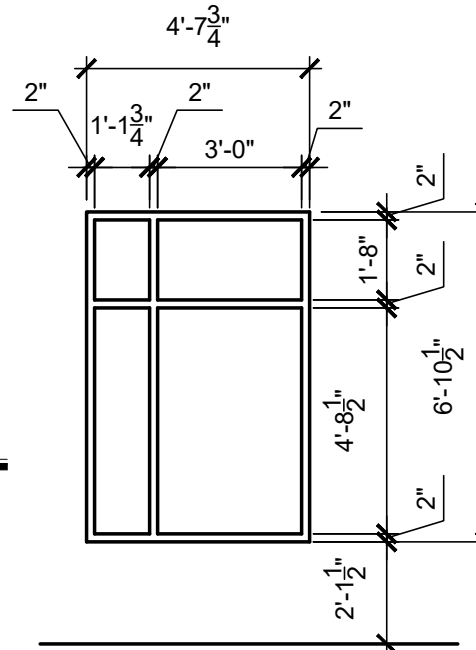
CLEAR ALUMINUM
AL-4



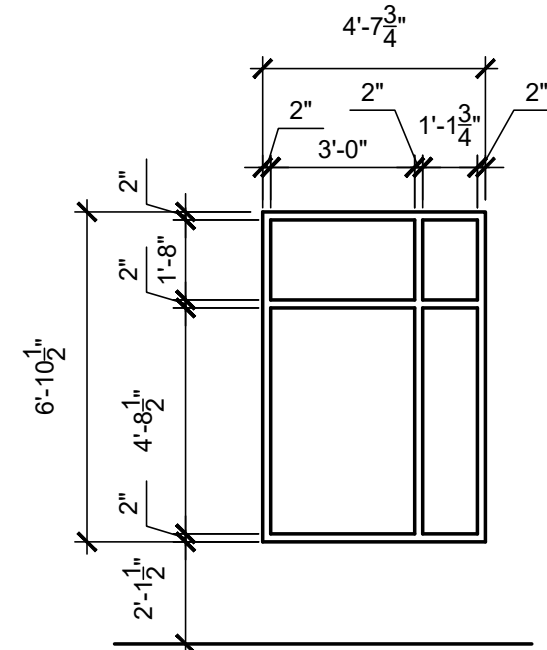
CLEAR ALUMINUM
AL-5a



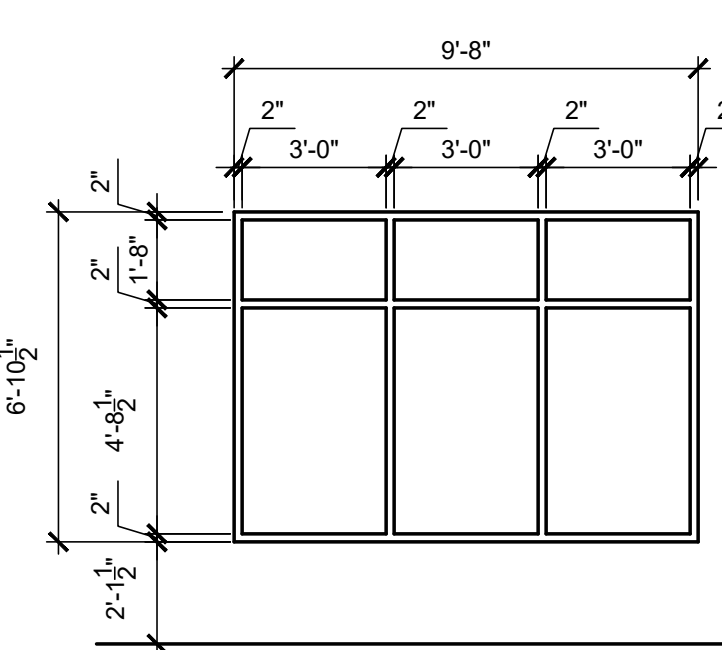
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AL-5b



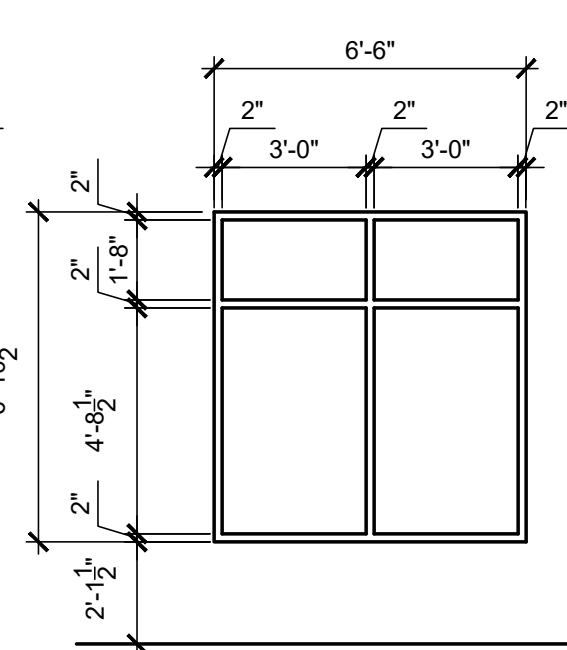
CLEAR ALUMINUM
AL-6a



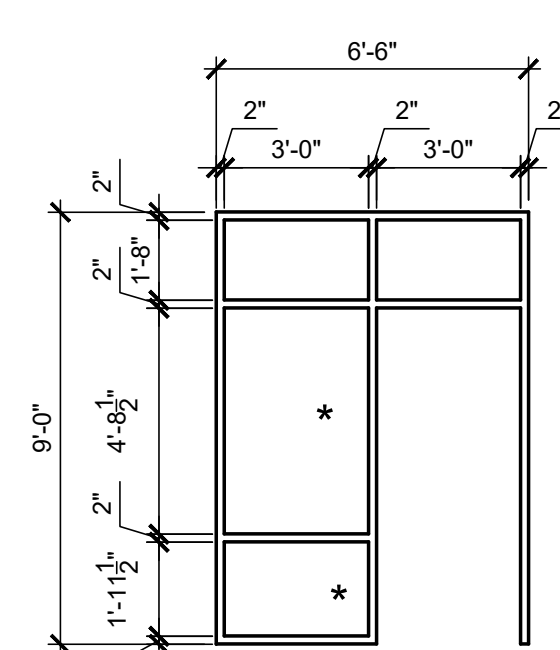
CLEAR ALUMINUM
AL-6b



CLEAR ALUMINUM
AL-7

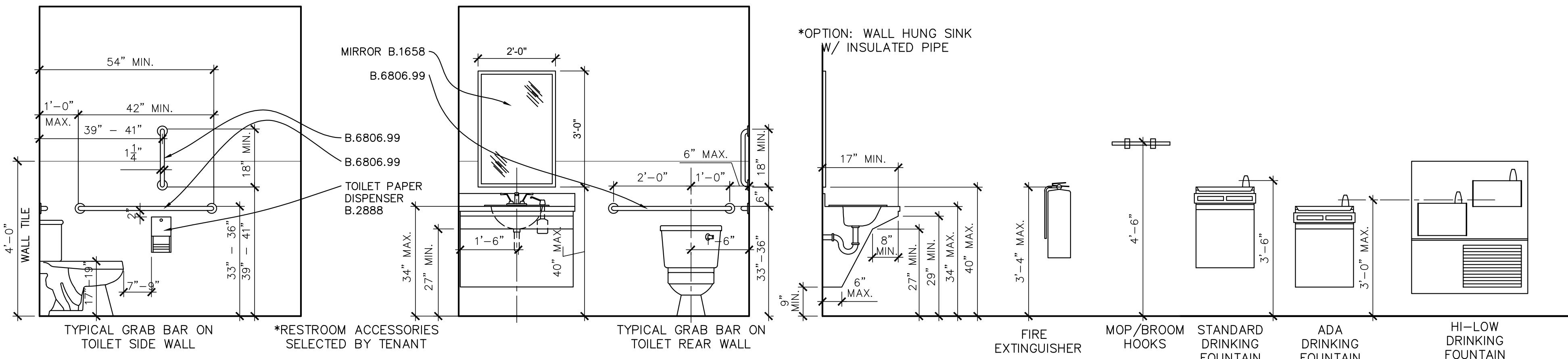


CLEAR ALUMINUM
AL-8



CLEAR ALUMINUM
AL-9

RESTROOM ELEVATIONS & MOUNTING HEIGHTS

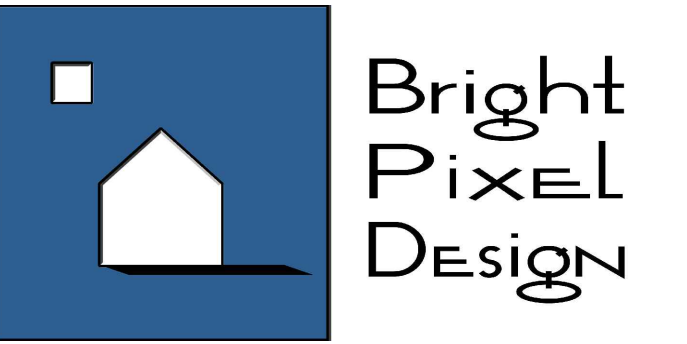


DOOR SCHEDULE

DESIGNATION		DOOR	FRAME	HDWR	MISC.
DOOR NUMBER	ROOM	DOOR TYPE	FRAME TYPE	GROUP	
100A	TENANT A	AD-1	AL-1a	STOREFRONT LOCKSET	CLOSER, GASKETS
100B	TENANT A	AD-1	AL-9	STOREFRONT LOCKSET	CLOSER, GASKETS, DRIP CAP
101	MECHANICAL ROOM	WD-1	HM-1	STOREROOM LOCKSET	-
102	TOILET ROOM	WD-1	HM-1	PRIVACY LOCKSET	CLOSER
103	TENANT B	AD-1	AL-1b	STOREFRONT LOCKSET	CLOSER, GASKETS
104	MECHANICAL ROOM	WD-1	HM-1	STOREROOM LOCKSET	-
105	TOILET ROOM	WD-1	HM-1	PRIVACY LOCKSET	CLOSER

NOTES:

- VERIFY ALL HARDWARE WITH OWNER PRIOR TO PURCHASE AND INSTALLATION
- FINISH: CLEAR ALUMINUM
- ALL DOORS TO HAVE LEVER HANDLES UNLESS NOTED OTHERWISE



PROJECT TITLE:

RIVER HILLS MALL
BUILDING TWO
MANKATO, MN 56001



Richard D. Storber

No. SUBMISSIONS & REVISIONS Date

DOOR & FRAME INFO AND LADDER DETAILS

JOB NO.: 26.22.1

DATE: 4-17-2026

DRAWN BY: MJB