

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
<b>GENERAL</b>	
G100	COVER SHEET
G101	TITLE SHEET
G102	TYPICAL ASSEMBLIES
G111	LIFE SAFETY
G120	ANCHORING HEIGHTS
<b>CIVIL</b>	
C100	SITE PLAN
<b>STRUCTURAL</b>	
S001	GENERAL STRUCTURAL NOTES
S101	STRUCTURAL FRAMING PLANS
S201	STRUCTURAL DETAILS
S401	STRUCTURAL DETAILS
<b>ARCHITECTURAL</b>	
A101	DEMO PLANS
A201	FLOOR PLANS
A202	ENLARGED PLANS & CASEWORK
A203	ROOF PLANS & DETAILS
A220	DR. SCHED. & GLZ. ELEV.
A302	EXT. ELEV. & WALL SECTIONS
A320	DETAILS
A420	VERTICAL CIRCULATION
A601	FINISH PLANS
A701	REFLECTED CEILING PLANS
<b>FIRE PROTECTION</b>	
F101	FIRE PROTECTION PLANS
<b>MECHANICAL</b>	
M001	MECHANICAL TITLE SHEET
<b>PLUMBING</b>	
P100	PLUMBING PLANS
<b>MECHANICAL</b>	
M100	MECHANICAL PIPING PLANS
M101	HVAC PLANS
M102	SCHEDULES AND DETAILS
<b>ELECTRICAL</b>	
E100	SYMBOLS & LUMINAIRE SCHEDULE
E200	2ND FLOOR AREA E LIGHTING & POWER
E201	2ND FLOOR AREA E SYSTEMS
E300	ELECTRICAL DETAILS
E401	ELECTRICAL ONE-LINE DIAGRAM

WEST FARGO PUBLIC SCHOOLS

# HORACE HIGH SCHOOL - AREA E BUILD-OUT

8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA





LIST OF ABBREVIATIONS	
WHAT	LIST OF ABBREVIATIONS DESCRIPTION
A/E	ARCHITECT/ENGINEER
AC	ALTERNATING CURRENT
ACI	AMERICAN CONCRETE INSTITUTE
ACM	ASBESTOS CONTAINING MATERIAL
ACT	ACoustical CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
AF	ABOVE FINISH FLOOR
AHJ	APPROPRIATE AGENCY
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AIT	ALTERNATE
ALUM	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECT
AS	ARCHITECTURAL SUPPLEMENTAL INSTRUCTION
AWI	AMERICAN WOODWORKING INSTITUTE
BD	BUILDING
BLDG	BUILDING
BM	BEAM
BTU	BOTTOM
BMS	BEARING
BTU	BRITISH THERMAL UNITS
BUK	BULLET PROOFING
CB	CABINET
CB	CATCH BASIN
CG	CORNER GUARD
CI	CAST IRON
CP	CAST IN PLACE
CT	CONTROL JOINT
C/G	CEILING
CL	CEILING
CMU	COMMON MASONRY UNIT
CO	CLEAN OUT
CONC	CONCRETE
CPT	CARPET
CSMT	CEASEMENT
CSWK	CASING
CUH	CERAMIC TILE
CUH	CABINET UNIT HEATER
CUH	CERAMIC WALL TILE
DEM	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DI	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIST	DISTANCE
DOC	DOCUMENT
DTC	DRINKING TOWER
DTL	DETAIL
D/W	DRAINWASHER
DWG	DRAWING
EA	EACH
EIS	EXTERIOR INSULATION FINISH SYSTEM
EI	EXPANSION JOINT
ELEC	ELECTRIC
ELEV	ELEVATION/ELEVATION
EP	ECOPLY PANEL
EQ	EQUAL
EQU	EQUIPMENT
EW	ELECTRIC WATER COOLER
EXT	EXISTING
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER CABINET
FEE	FURNITURE, FIXTURE, AND EQUIPMENT
FHC	FIRE HOSE CABINET
FIN	FINISH
FIB	FLOOR
FND	FOUNDATION
FTG	FOOTING
FWC	FABRIC WALL COVERING

LIST OF ABBREVIATIONS	
WHAT	LIST OF ABBREVIATIONS DESCRIPTION
ACC	ALUMINUM CURTAIN WALL
GEN	GENERAL
GL	GLASS OR GLAZING
GWB	GYP-SUM WALL BOARD
HS	HOSE BIB
HPC	HANDICAP
HW	HARDWARE
HW	HARDWOOD
HM	HOLLOW METAL
HM	HOLLOW METAL
HT	HEIGHT
INT	INTERNATIONAL BUILDING CODE
INS	INSULATION
IP	INTERIOR FINISH
JAN	JANITOR
LAM	LAMINATE
LAV	LAVATORY
MAS	MASONRY
MIR	MIRROR
MD	MEDIUM DENSITY FIBERBOARD
MFC	METAL FINISH
MH	MASONRY
MIL	MILITARY
MIL	MILITARY
MIL	MILITARY
MTL STD	METAL STUD
NC	NON COMBUSTIBLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NOT	NOT TO SCALE
OC	OWNER CENTER
OFI	OWNER FURNISHED CONTRACTOR INSTALLED
OFI	OWNER FURNISHED OWNER INSTALLED
OHD	OVERHEAD
OIB	ORIENTED STRAND BOARD
PA	PARTICLE BOARD
PCL	PRECAST
PLM	PLASTIC LAMINATE
PLST	PLASTER
PLY	PLYWOOD
PREX	PREFINISHED
PT	PAINT
PFD	PAPER TOWEL DISPENSER
RF	RADIUS
RF BRD-1	7/8" GLASS MAT FACED ROOF BOARD
RF BRD-4	7/8" HD POLYSTYRENE COVER BOARD
SEALANT-1	0.7500" JOINT SEALANT OR CALLING WITH OR WITHOUT BACKER ROD
SM-1	0.7500" PREFINISHED GALVANIZED STEEL
SM-2	0.7500" PREFINISHED ALUMINUM
SP-1	SP-1 SOAP DISPENSER, WALL MOUNT
THERM-BR-2	0.9000" THERMAL BREAK COATING
TP-1	TOILET PAPER DISPENSER
VPR RET-4	0.3000" SELF ADHERED ROOF DECK VAPOR RETARDER
VPR RET-5	0.3000" SELF ADHERED ROOF DECK VAPOR RETARDER
WD BRG	WOOD BLOCKING
WD SHTG-30	3/4" SHEATHING
WD SHTG-31	5/8" SHEATHING
WD SHTG-32	3/4" SHEATHING
WD SHTG-33	5/8" SHEATHING, FIRE RETARDANT TREATED

PROJECT SPEC ID LIST	
SPEC ID	SPEC SECTION & DESCRIPTION
ACC-PNL-1	08 3100 - WALL AND CEILING ACCESS PANELS
ALC-PNL-1	08 4133 - ALUMINUM CURTAIN WALL
BRS-1	04 2000 - BURISHED (BRUSHED FINISH) MASONRY UNIT
CFT-1	03 3000 - STANDARD FLAT FINISH
CP-1	04 2000 - MASONRY (BRUSHED FINISH)
CSB-1	03 3000 - STANDARD GRADE CONCRETE
EPDM-2	07 5300 - FULLY ADHERED EPDM ROOFING SYSTEM
FGB-1	10 4400 - FIRE EXTINGUISHER CABINET 15EM RECESSED
FIB-5	09 2116 - FIBERGLASS CLIP WITH Z-GIRT
GR-18	10 2800 - GRAB BAR, 1 1/2 INCHES
GR-36	10 2800 - GRAB BAR, 3 INCHES
GR-42	10 2800 - GRAB BAR, 4 1/2 INCHES
GL-1	08 8000 - 1/4" INCH GLASS
GLARD-1	05 5100 - CAST-4 WALL GLASS RAIL
GYP BRD-1	09 2116 - 5/8" TYPE C GYPSUM BOARD
GYP BRD-4	09 2116 - 5/8" TYPE C GYPSUM BOARD
GYP BRD-6	09 2116 - 5/8" TYPE X GYPSUM BOARD
GYP BRD-16	09 2116 - 5/8" GYP MAT FACED TYPE B GYPSUM BOARD
GYP SHTG-2	09 2116 - 5/8" GYP MAT FACED GYPSUM SHEATHING
INFL-1	08 4133 - INSULATED ALUMINUM FACED INFL PANEL
INSUL-GL-1	08 8000 - CLEAR INSULATED GLAZING
INSUL-GL-40	08 8000 - INSULATED SINGLE GLASS
INSUL-GL-48	07 2100 - XPS EXTRUDED POLYSTYRENE INSULATION
INSUL-15	07 2100 - POLYISOCYANURATE INSULATION, FOL FACED
INSUL-21	07 2100 - UNFACED FIBERGLASS BATT INSULATION
INSUL-36	07 2119 - CLOSED CELL SPRAV FOAM INSULATION
INSUL-49	07 2100 - CURTAIN WALL DRAFT STOPPING INSULATION
INSUL-50	07 2100 - FLAT POLYISOCYANURATE INSULATION (CONSTANT THICKNESS)
INSUL-51	07 3300 - TAPERED POLYSTYRENE OVER CONSTANT THICKNESS POLYSTYRENE
INSUL-80	09 2116 - ACOUSTIC INSULATION, MINERAL FIBER
INT-1	09 6000 - LUXURY VINYL TILE
INT-2	05 4000 - STRUCTURAL STEEL STUDS
MET STUD-1	09 2116 - 5/8" TYPE X GYPSUM BOARD
MET STUD-2	09 2116 - 5/8" TYPE X GYPSUM BOARD
MIR-10	10 2800 - MIRROR, ANGLED FRAMED
MIRBRD-1	10 2800 - MIRROR BOARD
MTL-1	09 3000 - TILE TRIM
MTL-PNL-21	07 4233 - METAL WALL PANEL - 9938 DOVE GRAY
RA-1	10 2800 - SANITARY NAPIN DISPOSAL
RAL-1	05 5100 - HANDRAIL, STEEL PIPE
RBR-1	09 6000 - RESILIENT BASE
RF BRD-1	07 5300 - 7/8" GLASS MAT FACED ROOF BOARD
RF BRD-4	07 5300 - 7/8" HD POLYSTYRENE COVER BOARD
SEALANT-1	07 5300 - JOINT SEALANT OR CALLING WITH OR WITHOUT BACKER ROD
SM-1	07 5300 - PREFINISHED GALVANIZED STEEL
SM-2	07 5300 - PREFINISHED ALUMINUM
SP-1	SP-1 SOAP DISPENSER, WALL MOUNT
THERM-BR-2	0.9000" THERMAL BREAK COATING
TP-1	TOILET PAPER DISPENSER
VPR RET-4	0.3000" SELF ADHERED ROOF DECK VAPOR RETARDER
VPR RET-5	0.3000" SELF ADHERED ROOF DECK VAPOR RETARDER
WD BRG	WOOD BLOCKING
WD SHTG-30	3/4" SHEATHING
WD SHTG-31	5/8" SHEATHING
WD SHTG-32	3/4" SHEATHING
WD SHTG-33	5/8" SHEATHING, FIRE RETARDANT TREATED

INTERIOR MATERIALS SPEC ID LIST	
MATERIAL ID	SPEC SECTION & DESCRIPTION
ACT-1	09 5100 - ACOUSTICAL CEILING TILE
CP-1	10 2000 - CORNER GUARD
CP-2	10 2000 - CORNER GUARD
CPT-1	09 6016 - CARPET TILE
SPE-3	09 6016 - CARPET TILE
FT-1	09 3000 - GROUT
LVT-1	09 6000 - LUXURY VINYL TILE
MIRBRD-1	10 2800 - MIRROR BOARD
MT-1	09 3000 - METAL TRIM
MT-2	09 3000 - METAL TRIM
MT-3	09 3000 - METAL TRIM
PLM-1	06 4100 - HIGH PRESSURE LAMINATE
PLM-2	12 3000 - HIGH PRESSURE LAMINATE
PLM-3	06 4100 - HIGH PRESSURE LAMINATE
PF-1	09 9123 - PAINT
PF-2	09 9123 - PAINT
PF-3	09 9123 - PAINT
PF-4	09 9123 - PAINT
RBR-1	09 6000 - RESILIENT BASE
RBT-1	09 6000 - RUBBER TILE NOISING
RTS-1	09 6000 - RESILIENT TRANSITION STRIP
RST-1	09 6000 - RESILIENT TRANSITION STRIP
SSM-1	13 3000 - SOLID SURFACE - CORIAN
T-1	09 3000 - WALL AND FLOOR TILE
VWC-1	09 7200 - VINYL WALL COVERING
VWC-2	09 7200 - VINYL WALL COVERING
VWC-3	09 7200 - VINYL WALL COVERING
WT-1	12 2400 - WINDOW TREATMENT

**DESIGN TEAM**

Architect: JLG Architects, 124 North 3rd Street, Grand Forks, ND 58502, P: 701.408.7009, Contact: Whitney Loughhead

Civil Engineer: MBN Engineering, Inc., 503 7th Street N., Suite 200, Fargo, ND 58102, P: 701.478.6336, Contact: Tony Eukal

Structural Engineer: Heyer Engineering, 1020 86th St. S., Ste. A, Fargo, ND 58103, P: 701.280.0949, Contact: Andrew Wellum

Mechanical Engineer: CMTA, 2201 12th St. N., Suite E, Fargo, ND 58102, P: 701.551.5762, Contact: Ross Young

Electrical Engineer: MBN Engineering, Inc., 503 7th Street N., Suite 200, Fargo, ND 58102, P: 701.478.6336, Contact: Tony Maginn

### PROJECT GENERAL NOTES

- FIRST LEVEL ELEVATION OF 100'-0" NOTED ON ARCHITECTURAL AND STRUCTURAL DRAWINGS. ELEVATION OF 913.00' NOTED ON CIVIL DRAWINGS.
- THE OWNER'S NORMAL OPERATIONS WILL BE CONTINUED DURING CONSTRUCTION. THE CONSTRUCTION SHALL NOT INTERFERE WITH THESE OPERATIONS IN ANY WAY WITHOUT THE OWNER'S EXPRESS CONSENT.
- IT SHALL BE EACH TRADE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND FAMILIARIZE HIMSELF/HERSELF WITH ALL EXISTING CONDITIONS. EACH CONTRACTOR SHALL TAKE ALL NECESSARY FIELD MEASUREMENTS AND OTHERWISE VERIFY ALL DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE DRAWINGS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED THEREBY UNTIL REPORTING THE SAME TO THE ARCHITECT AND THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND/OR CORRECTION.
- DIMENSIONS FOLLOWED BY "F" SHALL BE REVIEWED AND ALL NECESSARY ADJUSTMENTS MADE PRIOR TO FABRICATION AND/OR INSTALLATION OF WORK. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
- ALL EXISTING CONSTRUCTION AND SURFACES WHICH ARE TO REMAIN BUT ARE AFFECTED BY THE WORK UNDER THIS CONTRACT SHALL BE RESTORED AND REFINISHED TO MATCH THE CONSTRUCTION, FINISH AND ALIGNMENT OF THE EXISTING ADJACENT CONSTRUCTION AND FINISHES.
- VERIFY QUANTITY, SIZE AND LOCATION OF ALL FLOOR, ROOF AND WALL OPENINGS FOR MECHANICAL AND ELECTRICAL WORK WITH THE APPROPRIATE TRADE. PROVIDE ALL OPENINGS SHOWN OR REQUIRED FOR COMPLETION OF WORK.
- COORDINATE SIZE AND LOCATION OF ALL ACCESS PANELS WITH APPROPRIATE TRADES. COORDINATE SIZE & LOCATION OF ALL HOUSE KEEPING AIDS AND/OR EQUIPMENT SUPPORTS WITH APPROPRIATE TRADES/TRADE CONTRACTORS.
- PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINAGE WHILE KEEPING FLOOR LEVEL AT WALL BASE CONDITION. PROVIDE FIRE RATING CUTTING FIRE CUTTING AND WELDING OPERATIONS, MEETING OWNER'S REQUIREMENTS.
- PROVIDE FIRE RETARDANT WOOD BLOCKING AND/OR BRASS METAL PLATES BETWEEN STUDS AT ALL LOCATIONS REQUIRING BLOCKING IN WALL. THESE LOCATIONS INCLUDE BUT ARE NOT LIMITED TO GRAB BARS, CRASH RAILS, CABINETS, WALL HUNG SHELVES, AIRWORK, ETC.
- THE EXTENT OF HATCHING ON DRAWINGS IS ONLY INTENDED TO INDICATE THE NATURE OF THE CONSTRUCTION OR MATERIALS. TERMINATION OF THE HATCHING SHALL NOT BE CONSTRUED TO REPRESENT A CHANGE OR TERMINATION OF MATERIALS.
- THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES IN WORK AREAS PRIOR TO PROCEEDING WITH CONSTRUCTION. ALL DISCREPANCIES SHALL BE DOCUMENTED AND FORWARDED TO ARCHITECT AND OWNER REPRESENTATIVE FOR ACTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE FIELD CONDITIONS AND PROVIDE AS NEEDED TEMPORARY SUPPORTS, SHORING AND/OR PROTECTION OF EXISTING STRUCTURES AND UNDERGROUND UTILITIES DURING EXECUTION OF WORK.
- ALL WORK TO CONFORM TO THE REQUIREMENTS OF THE LOCAL AND STATE CODES.
- RELEVANT DIMENSIONS AND ELEVATIONS FOR EQUIPMENT INSTALLATIONS SHALL BE VERIFIED AGAINST MANUFACTURER'S CERTIFIED EQUIPMENT DRAWINGS.
- CONTRACTOR SHALL PROVIDE TEMPORARY GUST PROOF PARTITIONS AS REQUIRED, OR WHERE REQUESTED BY OWNER'S REPRESENTATIVE. PARTITIONS SHALL BE FIRE RATED WHERE REQUIRED BY CODE HAVING JURISDICTION. ALL TEMPORARY PARTITIONS SHALL BE CONSTRUCTED IN A MANNER AND OF MATERIALS OFFERING ADEQUATE PROTECTION TO OWNER'S EQUIPMENT AND PERSONNEL.
- DO NOT SCALE DRAWINGS TO DETERMINE SIZES AND DIMENSIONS. USE FIGURED DIMENSIONS ONLY. DIMENSIONS ARE TO FINISHED FACE OF WALLS UNLESS OTHERWISE NOTED. ALL PERMITTED DIMENSIONS ARE FROM FACE OF PERIMETER WALLS.
- ALL PENETRATIONS TO FLOORS, CEILINGS AND WALLS SHALL BE SEALED AND FIRE STOPPED TO A FIRE RATING EQUAL TO THE CONSTRUCTION BEING PENETRATED.
- NEW WORK SHALL ALLOW WITH AND MATCH EXISTING WORK UNLESS NOTED OTHERWISE.

### MATERIAL INDEX

- CONCRETE, CUT/SURFACE PATTERN
- FILL: SEE STRUCTURAL
- BRICK, CUT PATTERN
- BRICK, SURFACE PATTERN
- CMU: CUT PATTERN
- CMU: SURFACE PATTERN
- BURNISHED/CMU: SURFACE PATTERN
- CHDUT: CUT PATTERN
- STONE: CUT PATTERN
- ALUMINUM: CUT PATTERN
- STEEL: CUT PATTERN
- MDP: CUT PATTERN
- FRYWOOD: CUT PATTERN
- SOLID SURFACE: CUT PATTERN
- WOOD: CUT PATTERN
- WOOD: SURFACE PATTERN
- METAL PANEL, SURFACE
- CORRUGATED METAL PANEL, SURFACE
- FIBROUS METAL PANEL, SURFACE
- RIGID INSULATION: CUT PATTERN
- TAPERED INSULATION: SURFACE PATTERN
- SPRINKLER GLAZING: SURFACE PATTERN
- GLAZING: SURFACE PATTERN
- A.C.T. (I): SURFACE PATTERN
- A.C.T. (II): SURFACE PATTERN
- A.C.T. (III): SURFACE PATTERN
- A.C.T.: CUT PATTERN
- CARPET TILE: SURFACE PATTERN
- ACCENT CARPET TILE: SURFACE PATTERN
- INTERIOR GYPSUM: CUT PATTERN
- EXTERIOR GYPSUM SHEATHING: CUT PATTERN
- TILE: CUT PATTERN
- LATH: CUT PATTERN
- PEA ROCK: CUT PATTERN
- SAND: CUT PATTERN

### SYMBOLS LEGEND

**ROOM IDENTIFICATION TAG**

SAMPLE ROOM: ROOM NAME  
ROOM NUMBER

**OPENING IDENTIFICATION TAG**

ROOM NUMBER

**COLUMN/GRID IDENTIFICATION**

NEW COLUMN/STRUCTURAL GRID  
EXISTING COLUMN/STRUCTURAL GRID

**ELEVATION DATUM**

ELEVATION

**ASSEMBLY IDENTIFICATION**

WALL/FLOOR/ROOF TAG

**MATERIAL/OBJECT IDENTIFICATION**

MATERIAL ID TAG

**REVISION TAG**

REVISION TAG

**ROOM FINISH PLAN TAG**

ROOM NUMBER  
NORTH WALL FINISH  
WEST WALL FINISH  
EAST WALL FINISH  
SOUTH WALL FINISH  
WALL BASE FINISH  
FLOOR FINISH

**DRAWING IDENTIFICATION**

VIEW NAME  
SCALE: 1/8" = 1'-0"

**SECTION IDENTIFICATION**

DIRECTION OF CUT  
DRAWING NUMBER  
SHEET NUMBER

**DETAIL SECTION IDENTIFICATION**

DRAWING NUMBER  
SHEET NUMBER

**ELEVATION IDENTIFICATION**

ELEVATION NUMBER  
SHEET NUMBER

**NORTH ARROW**

**SHEET KEYNOTES**

KEYNOTE

### MEMBRANE LINETYPE LEGEND

- UNDERSLAB VAPOR RETARDER (VPR RET-4)
- VAPOR BARRIER ROOF (VPR RET-5)
- WEATHER BARRIER (VPR RET-10)

### ROOF ASSEMBLIES

**RA1 - FULLY ADHERED ROOF - SLOPED STRUCTURE**

**FL3 - STEEL DECK OVER STEEL UNITS**

**FL1 - SLAB ON GRADE**

### EXTERIOR WALL ASSEMBLIES

**XB5 - PROFILE PANEL WALL**

**FDN1 - SLAB ON GRADE**

### INTERIOR WALL ASSEMBLIES

**PARTITION TYPE 'M'**

**PARTITION TYPE 'A'**

**PARTITION TYPE 'F'**

WALL TAG	STUD SIZE & SPACING	WIDTH	G.B. THK	INSUL THICK	RATING	UL NO.	COMMENTS
AA	3/8" M.S. @ 16" O.C.	0' - 4 7/8"	5/8"	FILL CAVITY	0HR	-	-
AG	6" M.S. @ 16" O.C.	0' - 7 1/4"	5/8"	FILL CAVITY	0HR	-	-
AG*	6" M.S. @ 16" O.C.	0' - 8 1/2"	5/8"	FILL CAVITY	0HR	STC 54	-
AG*	6" M.S. @ 16" O.C.	0' - 10 1/2"	5/8"	FILL CAVITY	0HR	STC 54	-

WALL TAG	STUD SIZE & SPACING	WIDTH	G.B. THK	INSUL THICK	RATING	UL NO.	COMMENTS
FA	2 1/2" M.S. @ 16" O.C.	0' - 3 1/4"	5/8"	N/A	0HR	-	-
FA*	3 1/8" M.S. @ 16" O.C.	0' - 4 1/4"	5/8"	N/A	0HR	-	-
FA*	3 1/8" M.S. @ 16" O.C.	0' - 7 1/4"	5/8"	N/A	0HR	-	-

### CEILING ASSEMBLIES

**CLG-2.0 - FRAMED GYPSUM BOARD**

**CLG-1.0 - ACOUSTICAL CEILING TILE**

**REVISION SCHEDULE**

NO.	DESCRIPTION	DATE

**WEST FARGO PUBLIC SCHOOLS**  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
PHASE: 100% CDs  
PROJECT: 23231  
SHEET: G101  
TITLE SHEET



Horace High School - Area E Level 2 Build Out - Code Analysis  
8100 Lakeview Drive  
Horace, ND 58047

**Applicable Codes:**  
2021 International Existing Building Code with the following codes as applicable for new work:  
2021 International Building Code  
2021 International Mechanical Code  
2021 International Fuel Gas Code  
2021 International Energy Conservation Code  
2018 North Dakota Plumbing Code based on the 2018 UPC with amendments  
2020 North Dakota Electrical Code based on NFPA 70, 2020 with amendments  
2018 International Fire Code

**Chapter 3: Use and Occupancy Classification**

Occupancy: Group E Education

**Chapter 4: Special Detailed Requirements Based on Occupancy and Use:**

None

**Chapter 5: General Building Heights and Areas**

504 Building Height and Number of Stories Above Grade Plane  
Scope of work is not altering existing building heights or stories above grade plane.

506 Building Area  
Scope of work is adding additional building area. See Building Area Calculations.

**509 Incidental use Areas**

None within scope of work area.

**Chapter 6: Types of Construction**

601 General  
Building type is Type IIB. No fire-resistance rated requirements for building elements per Table 601.

**602 Construction Classification**

All new exterior walls maintain a fire separation distance of greater than 10'-0" requiring no exterior wall fire rating.

**Chapter 7: Fire and Smoke Protection Features**

705.8 Exterior Openings  
Per 705.8.1 Exception 2, unlimited unprotected openings are permitted at exterior walls.

**706 Fire Walls**

See Life Safety Plan for existing fire wall locations. No existing fire wall will be impacted through this scope of work.

**707 Fire Barriers**

No existing fire barriers will be impacted through this scope of work.

**708 Fire Partitions**

No existing fire partitions will be impacted with this scope of work.

709 Smoke Barriers  
No existing smoke barriers will be impacted with this scope of work.

710 Smoke Partitions  
No existing smoke partitions will be impacted with this scope of work.

712 Vertical Openings  
Two-story openings are permitted per 712.1.9.  
Vertical openings for exit access stairways are permitted in accordance with Section 1019.

713 Shaft  
No existing shafts will be impacted with this scope of work.

**Chapter 8: Interior Finishes**

**803.13 Interior Finish Requirements Based on Occupancy**

GROUP	SPRINKLERED		NON-SPRINKLERED		REASON AND EXISTING SYSTEM?
	CEILING AND PARTITION	WALL	CEILING AND PARTITION	WALL	
A-1, A-2, A-3	B	B	C	C	SP
A-4, A-5, A-6	B	B	C	C	SP
B-1, B-2, B-3	B	B	C	C	SP

**Chapter 9: Fire Protection and Life Safety Systems**

903.2.3 NFPA 13 System is existing. System will be reconfigured as required for this new scope of work.

**906.3 Fire Extinguishers**

Fire Extinguishers to be provided as shown on the life safety plans.

**907.2.3 Group E**

An existing emergency voice/alarm communication system is provided. The system will be extended and reconfigured as required for this new scope of work.

**Chapter 10: Means of Egress**

See Life Safety Plans for existing requirements from new scope of work area.

**1017.2 Limitations**

Exit Access Travel Distance: 250 feet

**1020.2 Corridor Width**

Group E having an occupant load of 100 or more: 72 inches

**1020.4 Corridor Dead Ends**

Exception 2: In occupancies in groups...L, where the building is equipped throughout with an automatic sprinkler system...the length of dead-end corridors shall not exceed 50 feet.

**Chapter 11: Accessibility**

See plans and general mounting heights for accessibility compliance with Chapter 11.

**Chapter 12: Interior Environment**  
Section 1207.2 Enhanced Classroom Acoustics complying with Section 808 of ICC A117.1 are to be provided in Group E Occupancies with a volume of 20,000 cubic feet or less.

**Section 802.2 Reverberation Times.**

Material NRCC  
CPT-4: .35  
ACT-1: .86  
Gypsum Board: .05

Typical Classroom (less than 10,000 cubic feet)

$$\text{Reverberation Time, Prescriptive: } (NRC_{\text{Floor}} \times S_{\text{Floor}}) + (NRC_{\text{Ceiling}} \times S_{\text{Ceiling}}) + (NRC_{\text{Wall}} \times S_{\text{Wall}}) \geq \text{Volume} / 12$$

$$285 + 701 + 53 \geq 629$$

$$1039 \geq 629 \text{ PASS}$$

**Section 808.3 Ambient Sound Level.**

Ambient Sound Levels to be field verified:  
Outside sources are not to exceed 35 dBA and 55 dBC.  
Inside sources are not to exceed 35 dBA and 55 dBC.

**Chapter 14: Exterior Walls**

**Chapter 15: Roof Assemblies and Rooftop Structures**

**2021 International Energy Conservation Code**

**C301 Climate Zone**

Climate Zone: 6A

**C402 Building Envelope Requirements**

C402.2 Opaque Thermal Envelope Insulation Component Minimum Requirements  
Insulation Entirely Above Roof Deck: R-30ci  
Metal Framed: R-13 + R-12.5ci or U-0.049  
Unheated Slabs: R20 below for 24" below

C402.4 Building Envelope Fenestration Maximum U-Factor and SHGC Requirements  
Fixed Fenestration: 0.31  
SHGC, PF-0.2; SEW - 0.40, N - NR

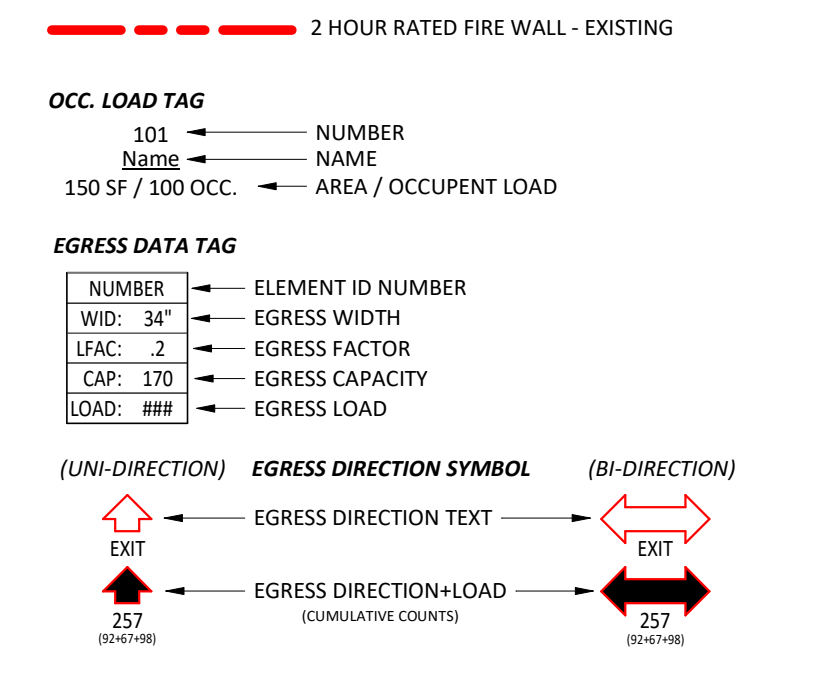
**FLOOR AREA SCHEDULE - EDUCATION**

NUMBER	NAME	AREA	OCCUPANCY CLASSIFICATION (SEC CHAPTER 10)	FUNCTION OF SPACE	IBC CHAPTER 10		
					SF PER OCC. LOAD FACTOR (OUI)	SF PER OCC. MEASUREMENT	OCCUPANT LOAD
E216	CLASSROOM	688 SF	E	EDUCATIONAL - CLASSROOM	20	NET	0 35
E219	BOOKS	178 SF	E	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300	GROSS	0 1
E223	STAFF	829 SF	E	BUSINESS AREA	150	GROSS	0 6
E224	CLASSROOM	814 SF	E	EDUCATIONAL - CLASSROOM	20	NET	0 41
E225	CLASSROOM	851 SF	E	EDUCATIONAL - CLASSROOM	20	NET	0 43
E226	CLASSROOM	788 SF	E	EDUCATIONAL - CLASSROOM	20	NET	0 40
E227	CLASSROOM	897 SF	E	EDUCATIONAL - CLASSROOM	20	NET	0 45
E228	COMMONS	548 SF	E	ASSEMBLY - W/O FIXED SEATING - UNCONCENTRATED	15	NET	0 38

**PLUMBING DETAIL ANALYSIS**  
BASED ON 1861 OCCUPANTS FOR EDUCATION OCCUPANCY, NON-SIMULTANEOUS WITH ASSEMBLY OCCUPANCIES

REQ.	PROVIDED
WATER CLOSETS:	34 306
LAVATORIES:	34 78
DRINKING FOUNTAINS:	17 33

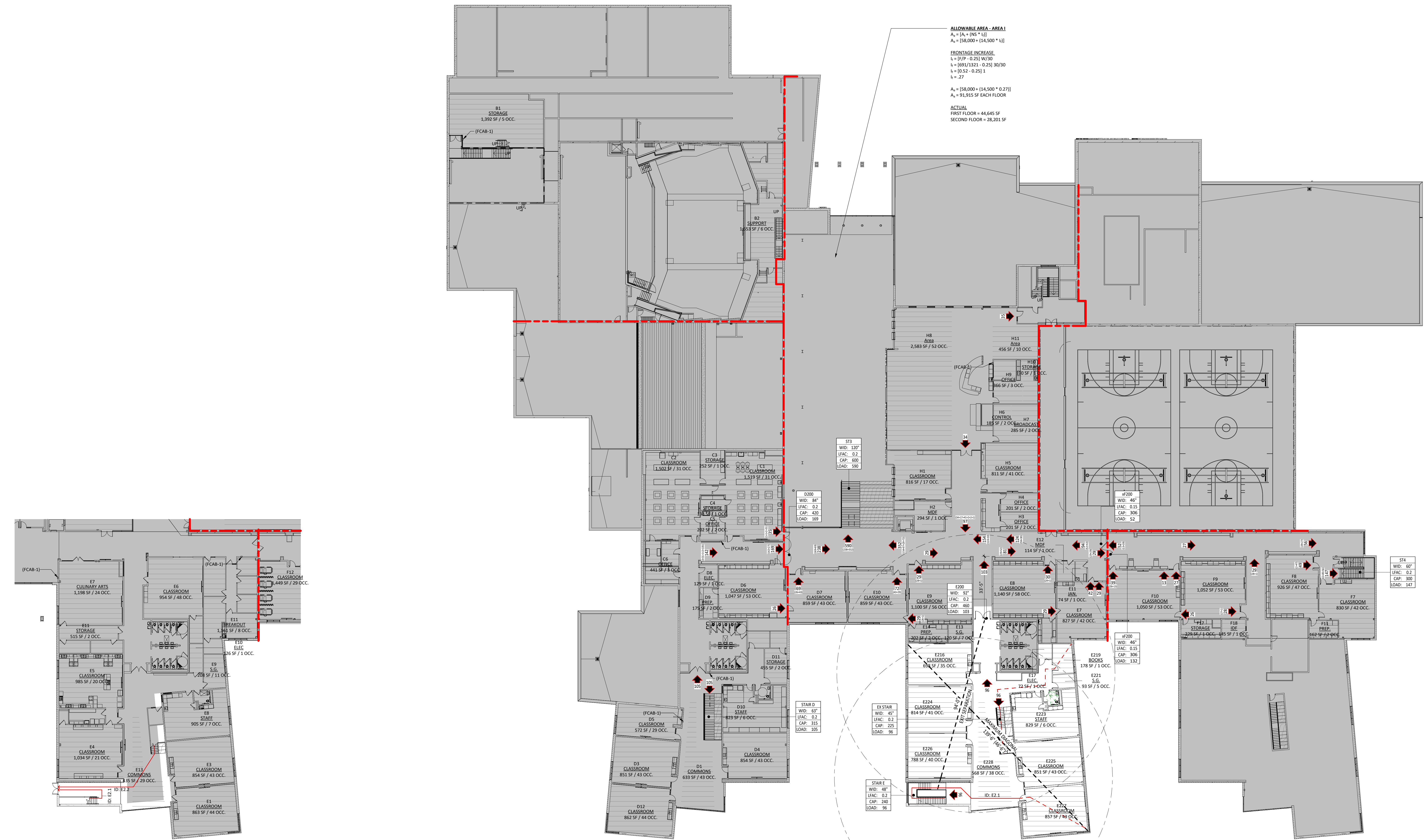
**LIFE SAFETY LEGEND**



**TRAVEL DISTANCE**

PATH ID	TRAVEL DISTANCE	
	COMMON PATH	TOTAL
E2.1	467'-0"	1860'-3"
E2.2	56'-1"	156'-10"

MAX COMMON PATH: 75'-0"  
MAX PATH OF TRAVEL: 250'-0"



**8A FIRST FLOOR LIFE SAFETY PLAN**  
SCALE: 3/8" = 1'-0"

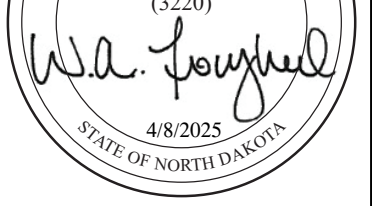
**6A SECOND FLOOR LIFE SAFETY PLAN**  
SCALE: 3/8" = 1'-0"



214 Broadway  
Fargo, ND 58102  
701.384.0237  
foc@jlgarchitects.com  
www.jlgarchitects.com  
copyright © 2022



4180 25th Ave S  
Fargo, ND 58104  
(701) 280-0949  
www.heyerengineering.com  
509.626.2025



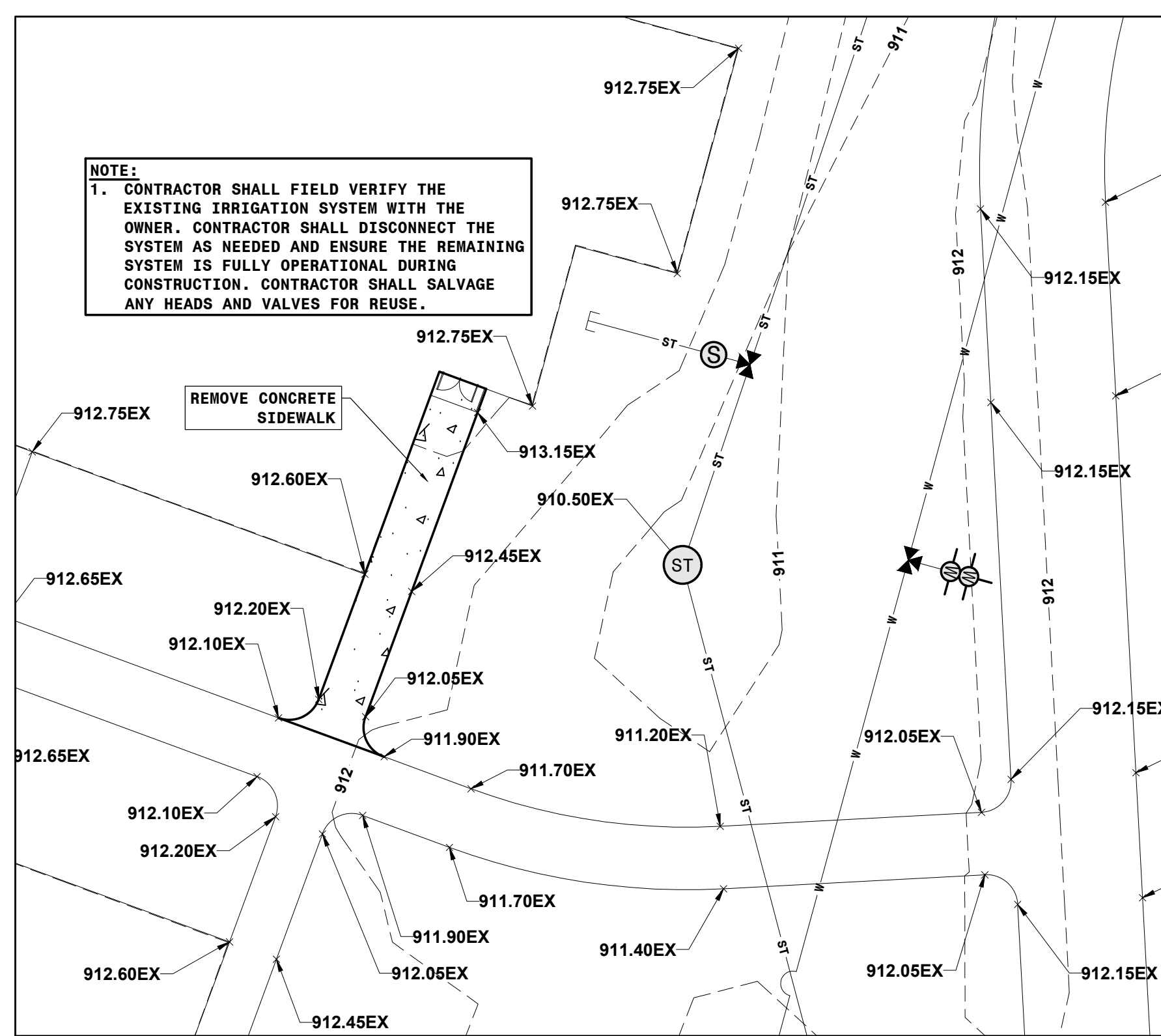
**REVISION SCHEDULE**

NO.	DESCRIPTION	DATE

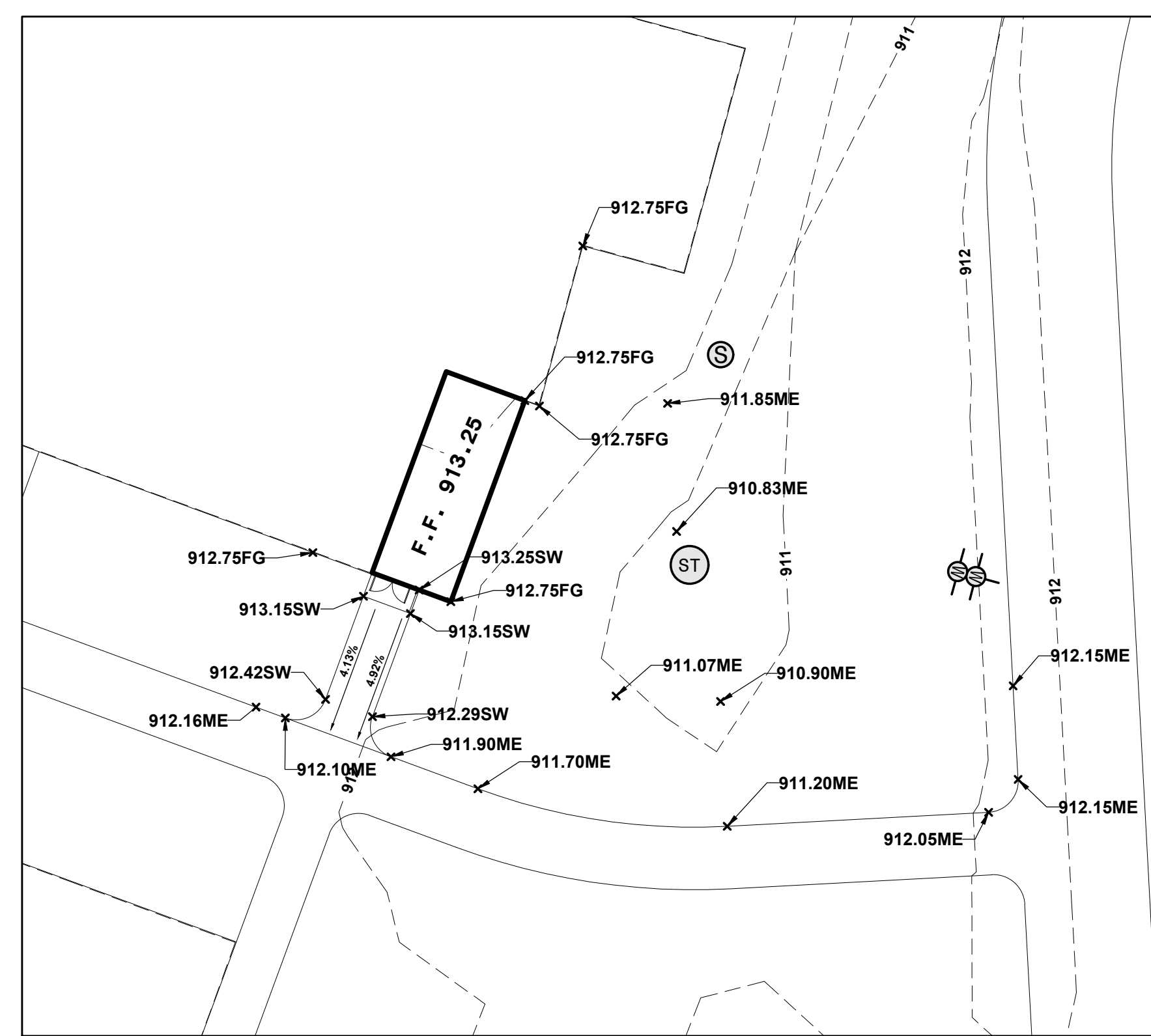
WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
PHASE: 100% CDs  
PROJECT: 23231  
SHEET: **G111**  
LIFE SAFETY

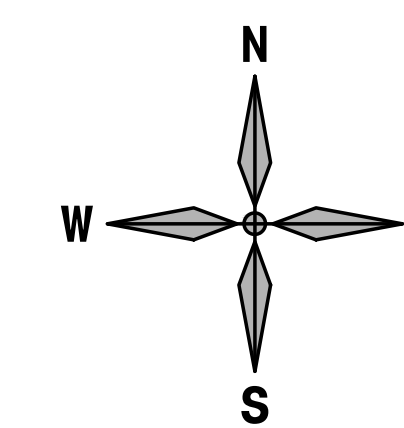




EXISTING CONDITIONS/DEMOLITION PLAN



GRADING PLAN

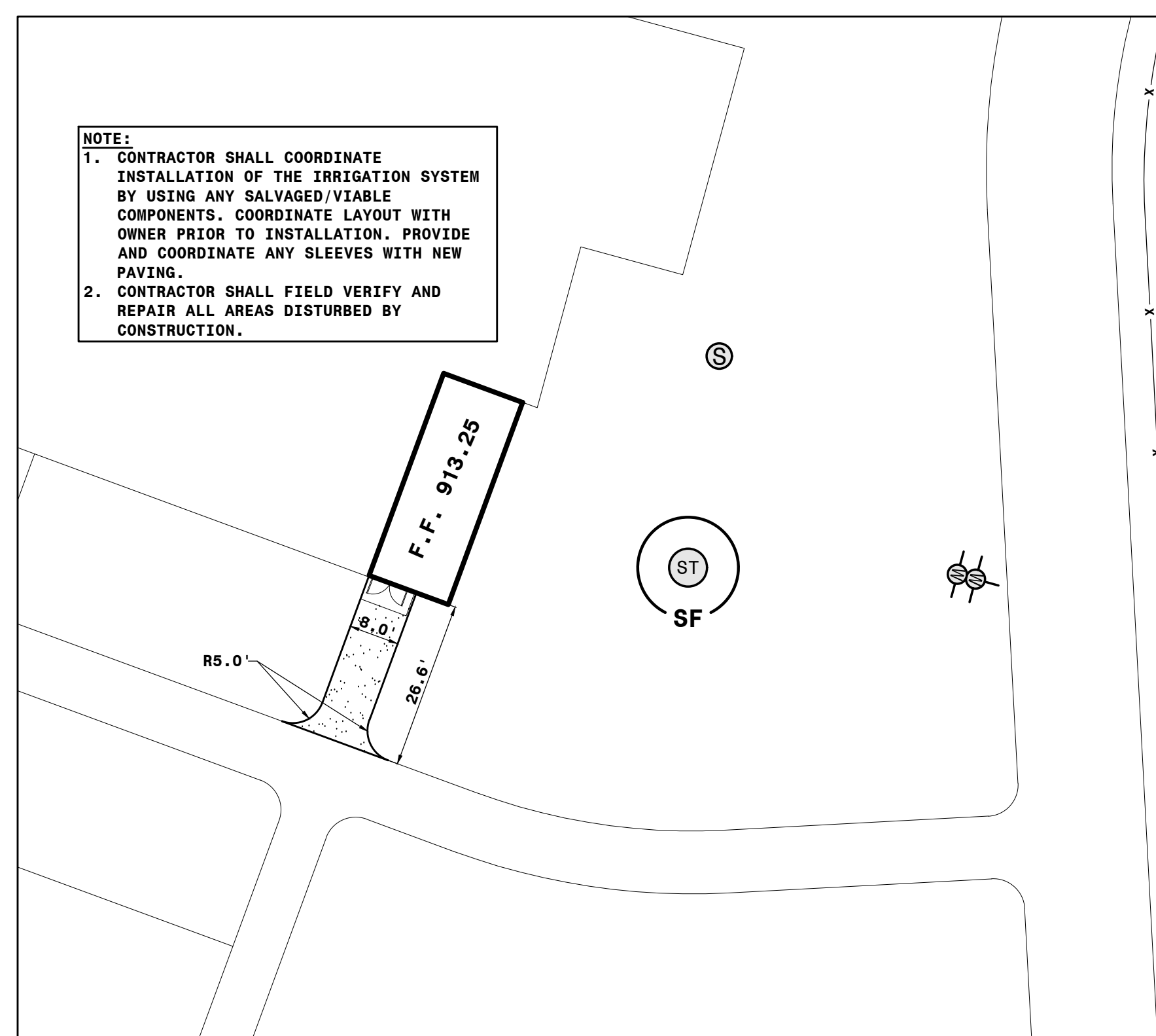


**SYMBOL LEGEND:**

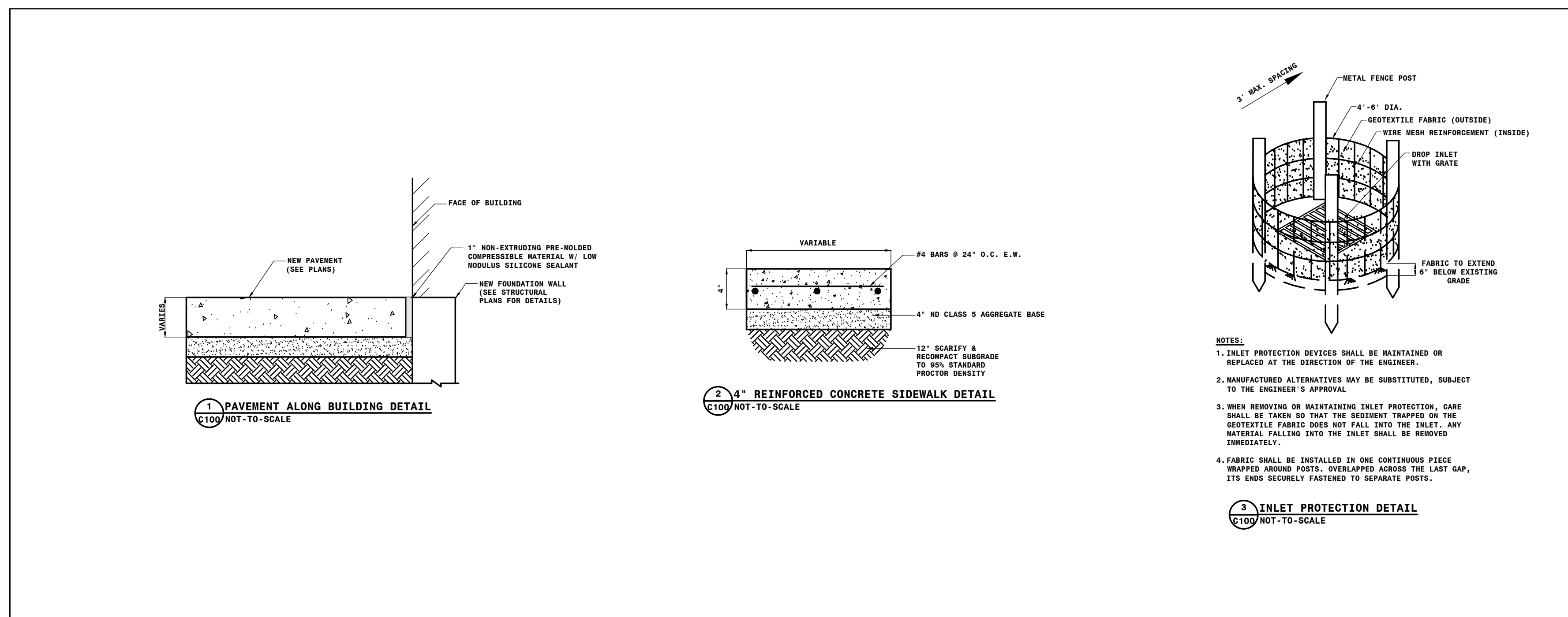
- EXISTING GATE VALVE
- EXISTING FIRE HYDRANT
- EXISTING SANITARY CLEANOUT
- EXISTING STORM MANHOLE
- EXISTING WATERMAIN
- EXISTING STORM SEWER LINE
- NEW INLET PROTECTION
- EXISTING SPOT ELEVATION
- NEW FINISHED GRADE ELEVATION
- NEW SIDEWALK ELEVATION
- MATCH EXISTING ELEVATION
- REMOVE EXISTING CONCRETE SIDEWALK
- NEW 4" REINFORCED CONCRETE SIDEWALK

**PLAN NOTES:**

1. ALL WORK SHALL COMPLY WITH THE MOST RECENT CITY OF HORACE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES.
2. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES FOR UNDERGROUND LOCATIONS 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. NORTH DAKOTA ONE CALL PHONE NUMBER: 1-800-795-0555
3. CONTRACTOR SHALL PROTECT ALL PROPERTY PINS. PROPERTY PINS DESTROYED OR DISTURBED SHALL BE REPLACED AT CONTRACTORS EXPENSE.
4. IF THE LAND BOUNDARY DENOTED ON THE PLANS ENCOMPASSES MORE THAN ONE (1) ACRE OR IS LESS THAN ONE (1) ACRE, BUT IS PART OF A LARGER DEVELOPMENT PLAN, A NOTICE OF INTENT TO OBTAIN A STORM WATER POLLUTION PERMIT SHALL BE ACQUIRED BY THE CONTRACTOR AND OWNER FROM THE NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY SEVEN (7) DAYS PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL MAINTAIN TEMPORARY EROSION CONTROL UNTIL PERMANENT EROSION CONTROL IS ESTABLISHED.
6. CONTRACTOR SHALL ACQUIRE AN EROSION SEDIMENT CONTROL (ESC) PERMIT FROM THE CITY OF HORACE PRIOR TO START OF CONSTRUCTION.
7. ALL PAVEMENT MARKED FOR DEMOLITION SHALL BE FULL DEPTH SAW CUT PRIOR TO REMOVAL.
8. ALL GRASSED AREAS DISTURBED BY CONSTRUCTION SHALL BE TOPSOILED (6" DEPTH), GRADED, SEEDED, AND HYDRO-MULCHED.
9. EXCAVATION OR OTHER WORK IN THE RIGHT-OF-WAY SHALL REQUIRE A TRAFFIC CONTROL PLAN THAT MEETS ALL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS. THIS PLAN IS REQUIRED BEFORE ANY PERMITS TO WORK IN THE RIGHT-OF-WAY WILL BE ISSUED.



PAVING/EROSION CONTROL PLAN



**REVISION SCHEDULE**

NO.	DESCRIPTION	DATE



**GENERAL CONSTRUCTION NOTES:**

- THE INTENT OF THESE PLANS AND NOTES IS TO PRESENT THE REQUIREMENTS FOR THE HORACE HIGH SCHOOL PROJECT IN HORACE, ND.
- FOOTINGS ARE DESIGNED FOR A NET ALLOWABLE SOIL BEARING PRESSURE OF 1,500 PSF FOR COLUMNS AND EXTERIOR PAD FOOTINGS AND 2,000 PSF FOR INTERIOR PAD FOOTINGS. FOUNDATION COMPLETES WITH GEOTECHNICAL REPORT #16FG00464 DATED 12/29/2018 BY NTL.
- FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL OR ENGINEERED FILL. SOILS SHALL BE OBSERVED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOOTING CONCRETE. IF NATURAL UNDISTURBED SOILS ARE NOT ENCOUNTERED AND/OR INADEQUATE SOILS ARE NOTED AT FOOTING BEARING LEVEL, ARCHITECT/ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH FURTHER WORK AT THOSE FOOTING LOCATIONS.
- PROTECT FOOTINGS FROM THE ACTION OF WATER OR FREEZING.
- FOOTINGS ARE CENTERED UNDER WALLS ABOVE (U/W).
- PRIOR TO PLACEMENT OF FOOTING CONCRETE, CLEAN FOOTING EXCAVATIONS OF SNOW, WATER, MUD, DIRT, AND DEBRIS.
- FOOTINGS SHALL **NOT** BE EARTH FORMED.

**FOUNDATION NOTES:**

- EXCAVATION AND BACKFILL SHALL BE EXECUTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- BACKFILL AND COMPACTION SHALL BE INSPECTED AND CERTIFIED BY A LICENSED GEOTECHNICAL ENGINEER. REPORTS ARE TO BE SUBMITTED TO THE ARCHITECT/ENGINEER.
- FOOTING EXCAVATIONS SHALL BE EXCAVATED TO PROPER LINE AND LEVEL TO ENSURE MINIMUM CONCRETE COVER OF FOOTING REINFORCEMENT FOR FOOTING DEPTH.
- BACKFILL SHALL BE COMPACTED BY MECHANICAL MEANS. FLOODING OR WATER INUNDATION SHALL NOT BE PERMITTED.
- BACKFILL SHALL BE PLACED IN 8" (ALTERNATING) LIFTS ON EACH SIDE OF THE FOUNDATION WALLS TO MAINTAIN STABILITY OF FOUNDATION WALLS. COMPACT EACH LIFT TO THE FOLLOWING DENSITY (ASTM D698):
  - 90% DRY DENSITY - BELOW FOOTINGS
  - 90% DRY DENSITY - BELOW SLABS ON GRADE
  - 90% DRY DENSITY - EXTERIOR FOUNDATION WALL BACKFILL
- BACKFILL SHALL NOT BE PLACED AGAINST BASEMENT FOUNDATION WALLS UNLESS WALLS ARE ADEQUATELY BRACED, TOP AND BOTTOM. FINAL WALL BRACING IS BASEMENT SLAB AND 18" FLOOR STRUCTURE. IF THESE ELEMENTS ARE NOT IN PLACE AT TIME OF BACKFILL, CONTRACTOR SHALL PROVIDE AN ENGINEERED TEMPORARY BRACING SYSTEM. THE TEMPORARY BRACING SYSTEM PROPOSED SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO BACKFILLING.

**EXCAVATION AND BACKFILL NOTES:**

- THE CONTRACT STRUCTURAL DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE MEANS AND METHODS USED TO PREPARE THE EXCAVATION IS AT THE SOLE DISCRETION OF THE CONTRACTOR, INCLUDING THE DESIGN AND INSTALLATION OF TEMPORARY BRACING OR SHORING. CONTRACTOR IS RESPONSIBLE FOR ALL CODE AND REGULATORY SAFETY REQUIREMENTS.

**CONCRETE NOTES:**

- CONCRETE CONSTRUCTION SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) CODES AND SPECIFICATIONS, LATEST EDITION.
- ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"  
ACI 318 "DETAILS & DETAILING OF CONCRETE REINFORCEMENT"  
ACI 318.14 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
- CAST-IN-PLACE CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH IS AS FOLLOWS:
  - 3,000 psi FOOTINGS
  - 3,000 psi EXTERIOR FOUNDATION WALLS
  - 3,000 psi INTERIOR FOUNDATION WALLS
  - 3,000 psi PIERS
  - 4,000 psi INTERIOR SLABS ON GRADE
  - 4,000 psi EXTERIOR SLABS ON GRADE - AIR ENTRAINED
  - 4,000 psi RAISED SLABS
  - 4,000 psi EXTERIOR SLABS ON DECK - AIR ENTRAINED
- CONCRETE MIX DESIGNS SHALL BE BY AN INDEPENDENT TESTING LABORATORY, AND SUBMITTED FOR REVIEW & APPROVAL.
- CAST-IN-PLACE CONCRETE SHALL BE SUBJECT TO TESTING BY AN INDEPENDENT TESTING LABORATORY. SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS.
- NON-WELDED REINFORCING STEEL SHALL BE GRADE 60 DEFORMED BILLET-STEEL. ASTM A615, U/W ALL WELDED WIRE FABRIC (W/WF) SHALL BE PLAN ASTM A106.
- WELDED REINFORCING STEEL SHALL BE GRADE 60, LOW CARBON, ASTM A106.
- CLEAR CONCRETE COVER FOR ALL REINFORCING SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE DRAWINGS:
  - CONCRETE ON SOIL 5" MIN-HEIGHT
  - SLAB ON GRADE
  - WALLS, STRUCTURAL SLABS FORMED & EXPOSED TO EARTH OR WEATHER:
    - #8 THROUGH #10 2"
    - #11 & SMALLER 1 1/2"
  - NOT EXPOSED TO EARTH & WEATHER:
    - #11 & SMALLER 3/4"
    - BEAMS & COLUMNS (COVER TO STIRRUPS OR TIES) 1 1/2"
- PROVIDE EXTRA REINFORCEMENT AROUND ALL OPENINGS GREATER THAN 1'-0" SQUARE OR 1'-0" IN DIAMETER, INCLUDING DOOR OPENINGS, IN CONCRETE WALLS & SLABS. PROVIDE 2 - #5 BARS @ 12" OC, ON EACH SIDE OF THE OPENING EXTENDING 2'-0" BEYOND THE CORNER OF THE OPENING & 2 - #5 BARS AT 3" OC BY 3'-0" LONG DIAGONAL BARS AT EACH CORNER. PLACE DIAGONAL BARS CENTERED ON CORNER & 2' CLEAR OF CORNER. ADDITIONAL REINFORCEMENT SHALL BE PROVIDED AT EACH LAYER OF REINFORCING.
- REINFORCING STEEL SHALL BE BENT, SPLICED, AND PLACED IN ACCORDANCE WITH ACI 301 (LATEST EDITION).
- PROVIDE LAP SPLICE FOR REINFORCING STEEL AS FOLLOWS:
  - TYPE #1 SPLICE - ONLY WHERE SPECIFICALLY SHOWN ON PLAN
  - TYPE #2 SPLICE - TYPICAL FOR HORIZONTAL REINFORCING BARS IN SLABS, GRADE BEAMS, FOOTINGS AND FOUNDATION WALLS (U/W)
  - TYPE #3 SPLICE - WHERE CONCRETE COVER IS LESS THAN 2x B<sub>d</sub> AND THE SPACING IS LESS THAN 2x B<sub>d</sub>
  - TYPE #4 SPLICE - TYPICAL FOR VERTICAL BARS IN COLUMNS AND PIERS (U/W)

**REINFORCING STEEL SPLICE LENGTHS STANDARD NON-COATED BARS**

CONCRETE STRENGTH	TYPE 1 SPLICE CLASS A SPLICE	TYPE 2 SPLICE CLASS B SPLICE	TYPE 3 SPLICE CLASS B SPLICE	TYPE 4 SPLICE COMPRESSION SPLICE
	F <sub>c</sub>	#6 & #7	#6 & #7	#7 & #8
	#8 & #9	#10 & #11	#11 & #12	#12 & #14
3,000 psi	48 B <sub>d</sub>	55 B <sub>d</sub>	57 B <sub>d</sub>	60 B <sub>d</sub>
4,000 psi	41 B <sub>d</sub>	51 B <sub>d</sub>	53 B <sub>d</sub>	56 B <sub>d</sub>
5,000 psi	36 B <sub>d</sub>	47 B <sub>d</sub>	49 B <sub>d</sub>	52 B <sub>d</sub>
6,000 psi	34 B <sub>d</sub>	42 B <sub>d</sub>	44 B <sub>d</sub>	46 B <sub>d</sub>
8,000 psi	31 B <sub>d</sub>	36 B <sub>d</sub>	40 B <sub>d</sub>	42 B <sub>d</sub>

- NOTES:**
- MIN LAP: 1'-0" FOR TYPE #1 THRU TYPE #3 & 1'-0" FOR TYPE #4 SPLICES
  - MULTIPLY THE SPLICE LENGTH ABOVE BY THE FOLLOWING ADJUSTMENT FACTORS:
    - A. 1.0 - FOR STANDARD REBAR
    - B. 1.3 - WHEN HORIZONTAL REINFORCING HAS MORE THAN 1'-0" OF FRESH CONCRETE PLACED BELOW BAR
    - C. 1.3 - FOR LIGHTWEIGHT CONCRETE
    - D. 1.2 - FOR TYPICAL EPOXY COATED REBAR
    - E. 1.5 - FOR EPOXY COATED REBAR WITH COVER LESS THAN 3 B<sub>d</sub> OR CLEAR SPACING LESS THAN 6 B<sub>d</sub>
    - F. F<sub>y</sub> USED/60 - FOR REBAR STRENGTHS OTHER THAN 60 KSI
  - ALL ADJUSTMENT FACTORS THAT APPLY SHALL BE USED TO CALCULATE REQUIRED SPLICE LENGTH.

- PROVIDE ADEQUATE SUPPORT BARS AND ACCESSORIES TO HOLD REINFORCING BARS FIRMLY IN PLACE TO SPECIFIED COVERAGE.
- UNLESS SHOWN SPECIFICALLY ON PLAN, CONTROL JOINTS SHALL BE PLACED IN A SQUARE PATTERN WITH A MAXIMUM SPACING OF 36 TIMES THE SLAB THICKNESS. WHERE A SQUARE PATTERN IS NOT POSSIBLE, THE MAXIMUM LONG SIDE TO SHORT SIDE OF THE JOINT PATTERN SHALL NOT EXCEED A RATIO OF 1.25. CONSTRUCTION JOINTS SHALL BE LOCATED BY THE CONTRACTORS AS REQUIRED FOR CONSTRUCTION WITH A MAXIMUM OF 3,000 SQUARE FEET. CONTRACTOR SHALL SUBMIT A JOINT PLACEMENT PLAN TO OWNER/ARCHITECT/ENGINEER FOR REVIEW PRIOR TO POURING CONCRETE.
- CAST DONNELLS WITH STD 40" HOOD. IN FOOTINGS FOR CONCRETE PIERS AND WALLS ABOVE, DONNELLS SHALL BE THE SAME SIZE AND NUMBER AS THE VERTICAL REINFORCING (U/W).

**STRUCTURAL STEEL NOTES:**

- STRUCTURAL STEEL WORK SHALL BE PER AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION, LATEST EDITION. MATERIAL:
  - A490 1/2" x 3/4" x 1/4" SHAPES F<sub>y</sub> = 80 ksi
  - A589 GRADE B - STANDARD PIPES F<sub>y</sub> = 35 ksi
  - A500 GRADE B - HSS PIPES F<sub>y</sub> = 42 ksi
  - A500 GRADE B - HSS TUBES F<sub>y</sub> = 46 ksi
  - A36 PLATES, BARS, MISG SHAPES (ANGLES), CHANNELS & RODS F<sub>y</sub> = 36 ksi
  - F1554 GRADE 36 - ANCHOR RODS F<sub>y</sub> = 36 ksi
  - F325 GRADE 55 - ANCHOR RODS F<sub>y</sub> = 55 ksi
  - GRADE 40S - ANCHOR RODS F<sub>y</sub> = 109 ksi
  - A563 WASHERS F<sub>y</sub> = 65 ksi
  - A108 HEADED STUD ANCHORS F<sub>y</sub> = 70 ksi
  - E70XX ELECTRODES F<sub>t</sub> = 70 ksi
- WELDED CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE LATEST RECOMMENDATIONS OF:
  - AISC - AMERICAN INSTITUTE OF STEEL CONSTRUCTION
  - AWS - AMERICAN WELDING SOCIETY
- COLUMN BASE AND GAP PLATES TO BE WELDED AROUND ALL SIDES.
- BOTTOM PLATE OF STEEL LINTELS SHALL BE WELDED TO THE BEAM WITH 3/16" FILLET WELD (BOTH SIDES) 3' LONG @ 1'-0" OC (U/W).
- WELDS NOT SPECIFIED SHALL BE A FILLET WELD, CONTINUOUS AND/OR ALL AROUND WITH MINIMUM THROAT DIMENSION AS REQUIRED FOR MATERIAL THICKNESS PER AISC.
- STRUCTURAL FABRICATORS SHALL SHOW ALL FIELD WELDING REQUIREMENTS ON SHOP DRAWINGS SUBMITTED TO THE ENGINEER.
- BEFORE ENCASED STEEL COLUMNS IN CONCRETE OR MASONRY, COAT COLUMN BASES AND TOPS OF ANCHOR BOLTS WITH ASPHALTIC ROOF GEMENT.
- BEAMS AND COLUMNS SHALL BE ERECTED TRUE AND PLUMB WITHIN AISC TOLERANCE. PROVIDE TEMPORARY BRACING AS REQUIRED.
- BEARING PLATES FOR STEEL COLUMNS SHALL BE DRY PACKED WITH A NON-SHRINK, NON-METALLIC GROUT AS SPECIFIED.
- BRIDGING SHALL BE SUPPLIED AND DESIGNED BY THE STEEL JOIST SUPPLIER, AS PER ALL STANDARDS FOR THE PROJECT DESIGN LOADS. STEEL JOIST SUPPLIER TO PROVIDE CONNECTIONS TO ANCHOR BRIDGING TO MASONRY AND/OR CONCRETE WALLS. SEE STANDARD DETAILS.
- PROVIDE DOUBLE ANGLE CONNECTIONS AS DESCRIBED IN PART 10 OF THE AISC. MANUAL OF STEEL CONSTRUCTION (WITH LEDASD):
  - CONNECTIONS SHALL BE SELECTED TO SUPPORT BEAM END REACTIONS INDICATED ON THE CONTRACT DRAWINGS.
  - IF BEAM END REACTIONS ARE NOT INDICATED, CONNECTIONS SHALL BE SELECTED TO SUPPORT 1/2 THE TOTAL UNIFORM LOAD CAPACITY GIVEN IN THE ALLOWABLE UNIFORM LOAD TABLES, PART 3, TENTH EDITION (ASD), FOR THE SPECIFIED BEAM SIZE, SPAN, AND STEEL GRADE (U/W). OTHER RATIONAL ENGINEERING CONNECTION DESIGN AND STANDARD CONNECTION PRACTICES MAY BE USED WITH APPROVAL OF THE ENGINEER.
  - CONNECTIONS SHALL HAVE MINIMUM ROWS OF BOLTS FOR BEAM DEPTHS AS INDICATED IN PART 10.
- FRAMED STEEL BEAM CONNECTIONS SHALL BE "BEARING TYPE" U/W.
- STEEL BEAM KEY:
  - NUMBER OF HEADED STUDS (EQUALLY SPACED)
  - CAMBER
  - ELEVATION FROM T.O. STEEL
- BEAMS SHALL BE MARKED AND ERECTED WITH NATURAL CAMBER PLACED UPWARDS. EACH 4" OF WALL THICKNESS:
  - SPAN TO 4'-0" - 1x2 @ 12x1/4"
  - 4'-0" TO 8'-0" - 1x3 @ 12x1/4"
  - 8'-0" TO 8'-0" - 1x3 @ 12x1/4"
  - FOR SPANS GREATER THAN 8'-0" CONTACT STRUCTURAL ENGINEER
- DO NOT PAINT STEEL SURFACES TO BE FIELD WELDED.
- DO NOT PAINT STEEL SURFACES THAT HEADED STUD ANCHORS WILL BE WELDED TO.
- ALL HEADED STUD ANCHORS TO BE ATTACHED TO STEEL SECTION USING ELECTRIC ARC WELDING 6A.
- FOR STEEL TO RECEIVE SPRAY APPLIED FIREPROOFING, VERIFY STEEL SURFACE PREPARATION REQUIREMENTS MANUFACTURER.
- STEEL JOISTS TO BE MANUFACTURED AND ERECTED IN ACCORDANCE WITH STEEL JOIST INSTITUTE SPECIFICATIONS.
- METAL DECK TO BE MANUFACTURED AND ERECTED IN ACCORDANCE WITH STEEL DECK INSTITUTE SPECIFICATIONS.
  - ROOF DECK - 1 1/2" DEEP, TYPE B, 20 GA, AS MADE BY VULCRANT OR EQUAL
  - COMPOSITE FORM DECK - 2" DEEP, TYPE VII, 22 GA, AS MADE BY VULCRANT OR EQUAL
  - 5'00" DECK - 1 1/2" DEEP, TYPE G, 20 GA, GALVANIZED, AS MADE BY VULCRANT OR EQUAL
- VERIFY LOCATION OF ROOF OPENINGS WITH MECHANICAL CONTRACTOR. ROOF OPENINGS SHALL BE FRAMED WITH L3x3x3/8 ON FOUR SIDES (U/W). SEE STANDARD DETAILS.
- ROOF PERIMETER STEEL ELEMENTS SUCH AS ANGLES OR BENT PLATES, NOTED TO BE CONTINUOUS SHALL BE FIELD SPLICED WITH A FULL LENGTH SQUARE GROOVE FULL PENETRATION WELD UTILIZING A MINIMUM 3/16" ROOT OPENING.

**SPECIAL INSPECTIONS:**

- THE CONTRACTOR SHALL COORDINATE THE TESTING AND INSPECTION SERVICES IN ACCORDANCE WITH THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE TO THE TESTING OR INSPECTION AGENCY OF THE REQUIRED WORK TO ALLOW ALLOCATION OF PERSONNEL. THE COST OF ANY RETESTING OR ADDITIONAL INSPECTIONS AS A RESULT OF UNSPECTED WORK, FAILED TESTS, OR REJECTED WORK, SHALL BE BORNE BY THE CONTRACTOR.
- THE FOLLOWING TABLE INCLUDES ITEMS REQUIRING SPECIAL INSPECTION PROVIDED BY THE OWNER. SPECIAL INSPECTIONS LISTED IN THIS TABLE MAY NOT INCLUDE ALL INSPECTIONS AND/OR TESTING THAT IS REQUIRED FOR THE PROJECT PER IBC CHAPTER 17. ADDITIONAL TESTING MAY BE REQUIRED BY THE CONTRACTOR, AS PART OF THEIR CONTRACT. THESE SPECIAL INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS BY THE BUILDING OFFICIAL THAT ARE IDENTIFIED IN SECTION 110 IBC.

DESCRIPTION OF WORK IBC CHAPTER 17	REQUIRED SPECIAL INSPECTION				REMARKS
	YES	NO	YES	NO	
DRIVEN PILING					SEE TABLE 1709.1
CAST-IN-PLACE CONCRETE PIERS					SEE TABLE 1709.2
GRADING, EXCAVATION, & FILLING	X		X		SEE TABLE 1709.3
CAST-IN-PLACE CONCRETE	X		X		SEE TABLE 1709.3
ANCHOR RODS INSTALLED IN CONCRETE	X		X		PERIODIC
POST-INSTALLED ANCHORS	X		X		SEE TABLE 1709.3
STRUCTURAL CONCRETE REINFORCING STEEL	X		X		PERIODIC
STRUCTURAL STEEL WELDING	X		X		SEE AISC 360 (CHAPTER N)
STRUCTURAL STEEL BOLTING	X		X		SEE AISC 360 (CHAPTER N)
STRUCTURAL STEEL DECKING	X		X		SEE AISC-360, GAUSS
FABRICATOR & ERECTOR DOCUMENTS	X		X		SUBMITTAL REVIEW

**ABBREVIATIONS AND SYMBOLS**

- AA ADHESIVE ANCHOR ROD
- APA AMERICAN PLYWOOD ASSOCIATION
- ARCH ARCHITECT/ARCHITECTURAL
- BB BOND BEAM
- BLDG BUILDING
- BLOCK BLOCK
- BM BEAM
- BOT BOTTOM
- BRG BEARING
- CL CENTER LINE
- CJ CONTROL JOINT
- CONSTR CONSTRUCTION CONTROL JOINT
- CLR CLEAR/CLEARANCE
- CMU CONCRETE MASONRY UNIT
- COL COLUMN
- CONG CONCRETE
- CONNECTION CONNECTION
- CONT CONTINUOUS
- COR CONCRETE CORNER ANCHOR
- DET DETAIL
- DEGREE DEGREE
- DIA DIAMETER
- DM DIMENSION
- DLO DOWN LOAD
- DT DRAM TILE
- DONEL DONNEL
- EA EACH
- EF EACH FACE
- EXPAN EXPANSION JOINT
- ELEV ELEVATION
- ELEV ELEVATOR
- EG EQUAL
- EN EACH END
- EX EXISTING
- EXC EXCAVATION
- EXP EXPANSION
- FL FLOOR DRAIN
- FDN FOUNDATION
- FOOTING FOOTING
- FT FOOT FEET
- GALV GALVANIZE
- GA GAUGE
- GC GENERAL CONTRACTOR
- GRD GROUND
- HOLLOW HOLLOW CORE
- HORIZ HORIZONTAL
- HTD HEADED STUD ANCHOR
- HSS HOLLOW STRUCTURAL SECTION
- INSIDE INSIDE FACE
- INT INTERIOR
- NT NOT
- K KIPS
- KLF KIPS PER LINEAR FOOT
- KS KIPS PER SQUARE INCH
- L ANGLE
- LEAVE LEAVE
- LB LEADER BEAM
- LBS POUNDS
- LONG LONG
- LONG LONG LEG VERTICAL
- LONG LONG LEG VERTICAL
- LONG LONG
- MASONRY MASONRY
- MAX MAXIMUM
- MECH MECHANICAL
- MANUFACTURER MANUFACTURER
- MIN MINIMUM
- MISC MISCELLANEOUS
- MTL METAL
- OPENING OPENING
- N NORTH
- NTS NOT TO SCALE
- NS NON-SHRINK
- OC ON CENTER
- OUTSIDE OUTSIDE FACE
- OP OPENING
- OPNG OPENING
- ORIG ORIGINAL
- PART PARTITION
- FASTEN ACTUATED FASTENER
- FRG FRESH CONCRETE
- FOOT PER LINEAR FOOT
- PLATE PLATE
- PLYWOOD PLYWOOD
- PNL PANEL
- PSF POUNDS PER SQUARE FOOT
- PSI POUNDS PER SQUARE INCH
- RAD RADIUS
- RD ROOF DRAIN
- REIN REINFORCING
- RES RESERVE
- RQD REQUIRED
- ROOF ROOFING
- ROOF ROOFING
- ROOF ROOFING
- ROOF ROOFING
- SCA SCREDA ANCHOR
- SOL SUPERIMPOSED DEAD LOAD
- SD SUPERIMPOSED DEAD LOAD
- SER STRUCTURAL ENGINEER OF RECORD
- SHT SHEET
- SM SQUARE
- SP SQUARE
- STEEL JOIST STEEL JOIST
- SNOW SNOW LOAD
- SPE SPACE/SPACING
- SPECIFICATIONS SPECIFICATIONS
- STD STANDARD
- STD STANDARD
- TEMP TEMPORARY
- TOP TOP
- TOP BOTTOM
- TONGUE & GROOVE TONGUE & GROOVE
- THICK THICKENED THICK/THICKENED
- T.O. TOP OF
- TRANS TRANSVERSE
- TUBE TUBE STEEL
- TYPE TYPE
- UNLESS OTHERWISE NOTED UNLESS OTHERWISE NOTED
- VERT VERTICAL
- VERT VERTICAL
- WIDE FLANGE WIDE FLANGE
- W/WF WELDED WIRE FABRIC
- W/WF WELDED WIRE FABRIC
- W/WF WELDED WIRE FABRIC
- AT AT
- +/- PLUS OR MINUS

**JLG architects**

224 Broadway  
Fargo, ND 58102  
Phone: 701.314.6237  
Facsimile: 701.314.6238  
www.jlgarchitects.com  
copyright © 2020

**REVISION SCHEDULE**

NO.	DESCRIPTION	DATE
1	ISSUE	8 APR 2025

**HEVEN ENGINEERING**  
STRUCTURAL CONSULTANT

4180 24th Ave S  
Fargo, ND 58104  
(701)280-0949  
www.hevenengineering.com  
039.0265.2025

REGISTERED PROFESSIONAL ENGINEER  
ANDREW WELLS  
PE-62004  
ISS 8 APR 2025

REVISION SCHEDULE

NO.	DESCRIPTION	DATE
1	ISSUE	8 APR 2025

WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

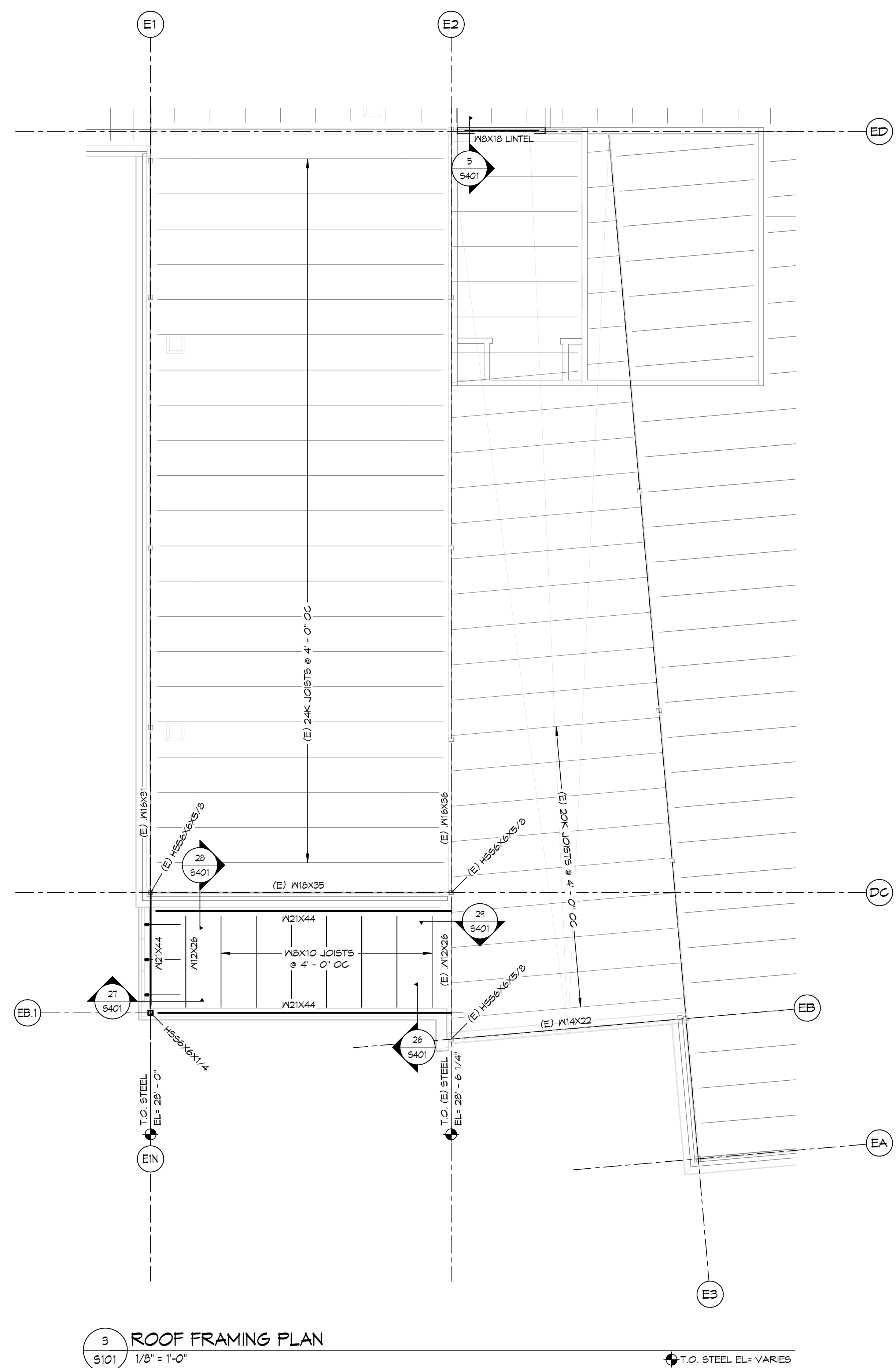
DATE  
**04/08/2025**

PHASE  
**100% CDs**

PROJECT  
**23231**

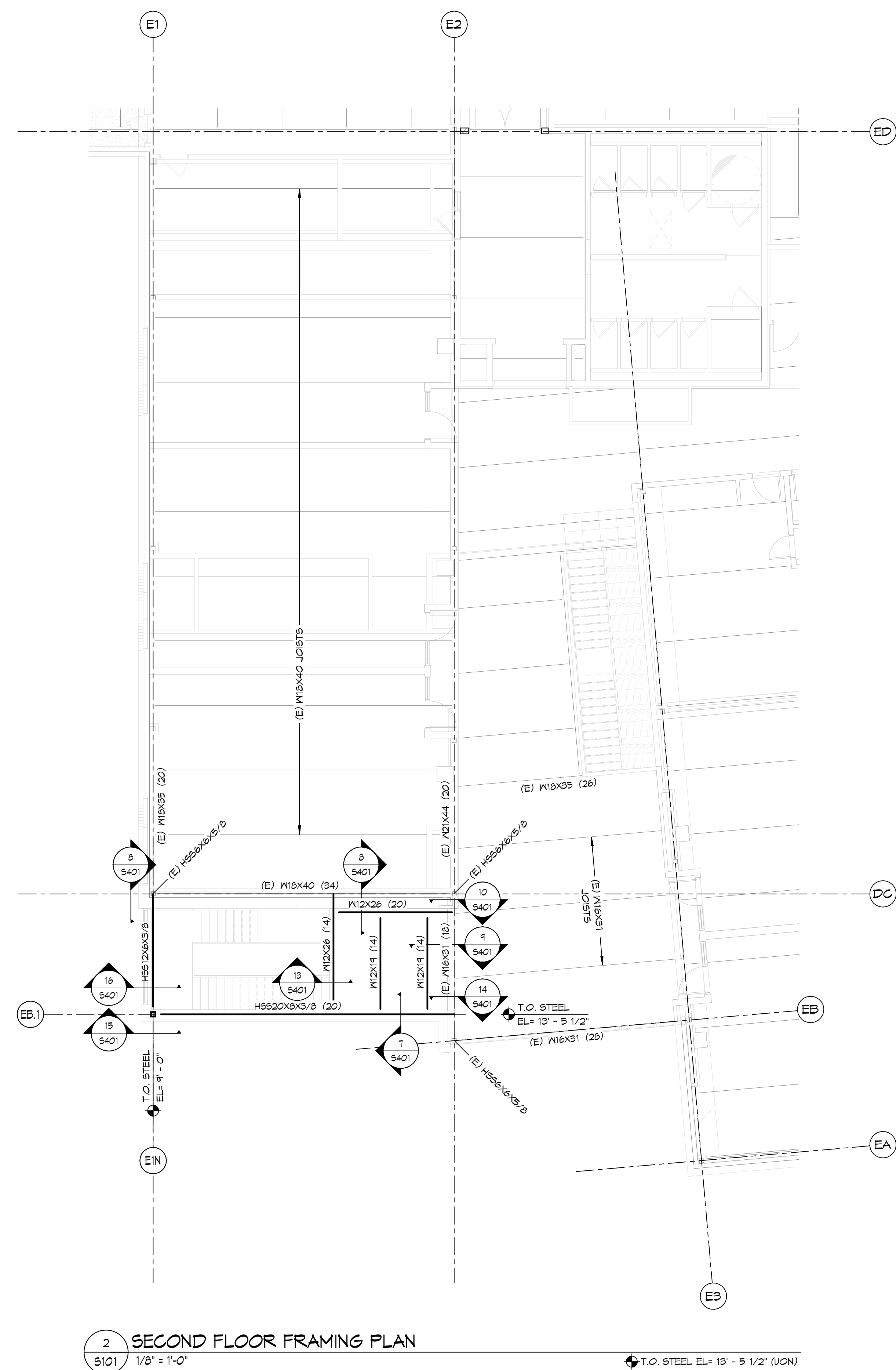
SHEET  
**S001**  
GENERAL STRUCTURAL NOTES





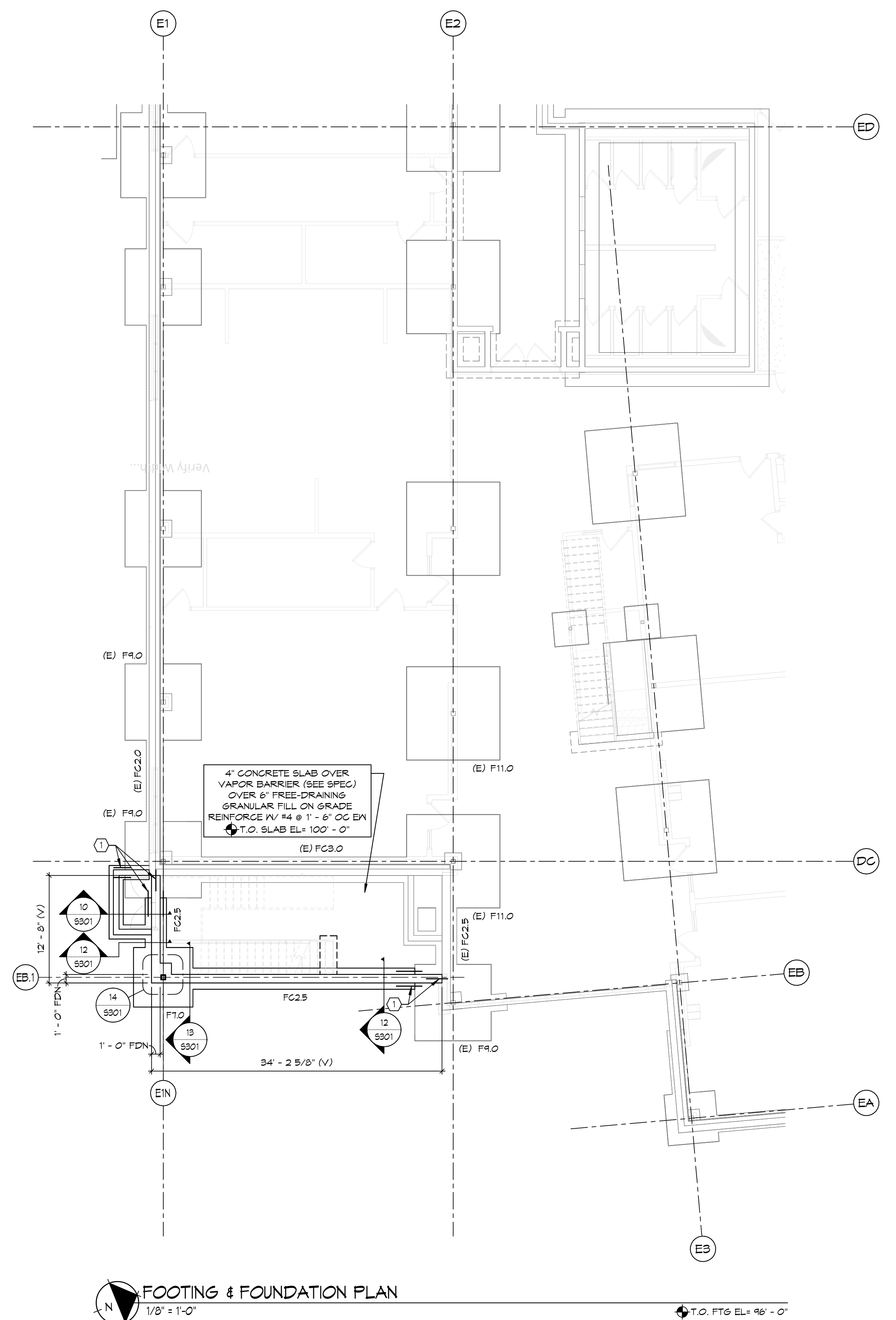
**3 ROOF FRAMING PLAN**  
S101 1/8" = 1'-0"

- ROOF FRAMING SHEET NOTES:**
- SEE SHEET S001 FOR GENERAL STRUCTURAL NOTES.
  - VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS, WHICH SHALL BE GOVERNING.
  - ROOF DECKING SHALL BE 1 1/2" TYPE 'B', 20 GA STEEL DECKING WITH A 36/9 FASTENING PATTERN & SIDELAP FASTENERS @ 1'-0" OC (UON). SD 29/S401. PROVIDE TYPE 'DA' ACOUSTICAL DECKING WHERE NOTED ON PLAN.
  - ALL LIGHT GAUGE FRAMING AND CONNECTIONS TO STRUCTURE SHALL BE DESIGNED BY THE SUPPLIER FOR FORCES NOTED ON PLANS.
  - VERIFY SIZE, WEIGHT AND LOCATION OF ALL ROOF TOP UNITS AND OPENINGS WITH MECHANICAL DRAWINGS.



**2 SECOND FLOOR FRAMING PLAN**  
S101 1/8" = 1'-0"

- SECOND FLOOR FRAMING SHEET NOTES:**
- SEE SHEET S001 FOR GENERAL STRUCTURAL NOTES.
  - VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS, WHICH SHALL BE GOVERNING.
  - FLOOR SLAB SHALL BE 6 1/2" (TOTAL THICKNESS) COMPOSITE CONCRETE FLOOR SLAB. REINFORCE W/ #6-#12 @ 12" MIN. COMPOSITE DECK USING 2" TYPE #11.20 GAUGE DECK BY VULCRANT OR EQUAL. ATTACH DECK USING #12 SCREWS IN A 36/4 PATTERN. USE 2" #10 SIDE LAP FASTENERS PER SPAN.
  - ALL SHEAR STUDS SHALL BE 3/4" Ø x 9" HIGH SHEAR CONNECTORS STUDS SPACED EQUALLY ALONG SPAN.
  - ALL LIGHT GAUGE FRAMING AND CONNECTIONS TO STRUCTURE SHALL BE DESIGNED BY THE SUPPLIER FOR FORCES NOTED ON PLANS.



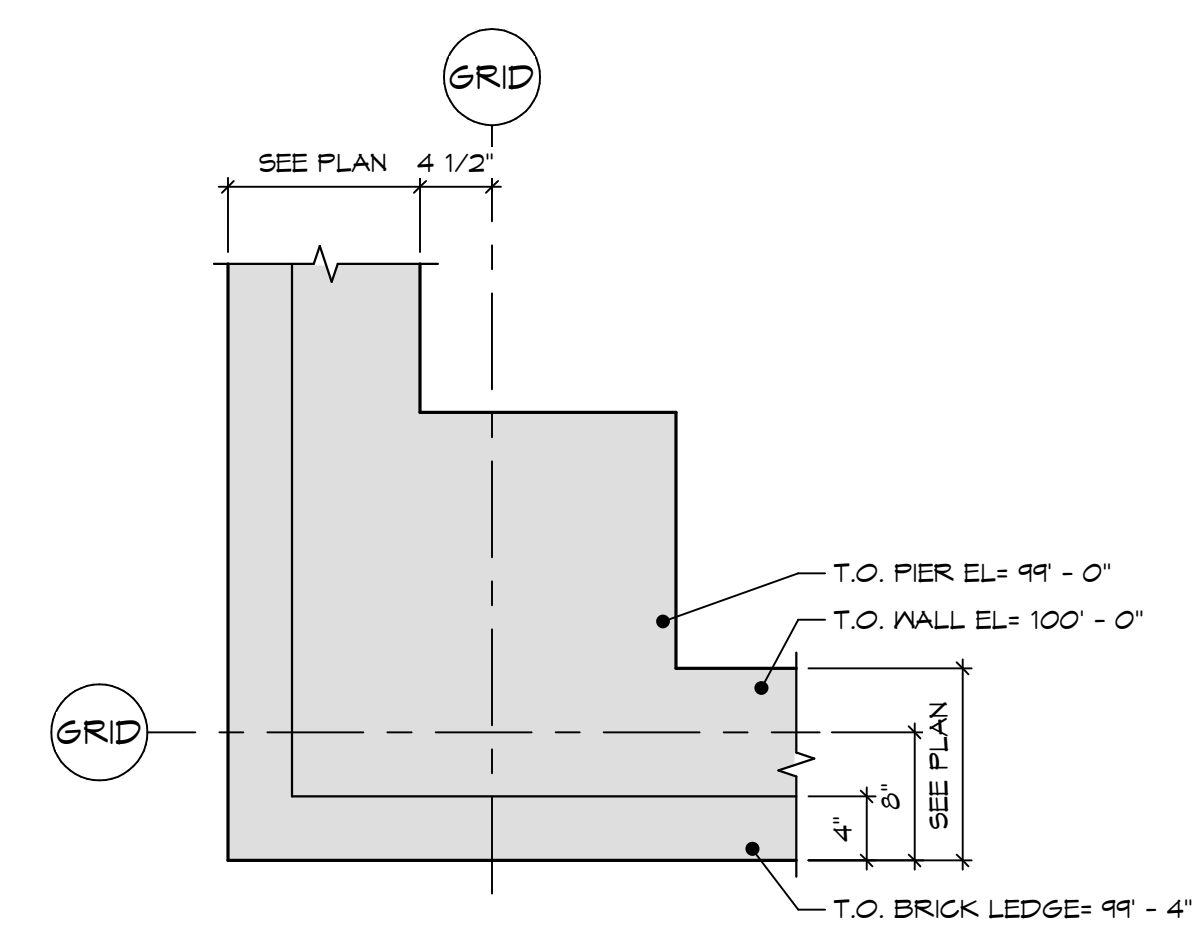
**FOOTING & FOUNDATION PLAN**  
S101 1/8" = 1'-0"

MARK	SIZE	DEPTH	REINFORCING		REMARKS
			TRANS.	LONG.	
FG1.7	1'-8" CONT	1'-0"	—	2-#4	
FG2.5	2'-8" CONT	1'-0"	#4 @ 4'-0" OC	3-#6	
FG1.9	1'-0" SQ	1'-0"	3-#6	3-#6	

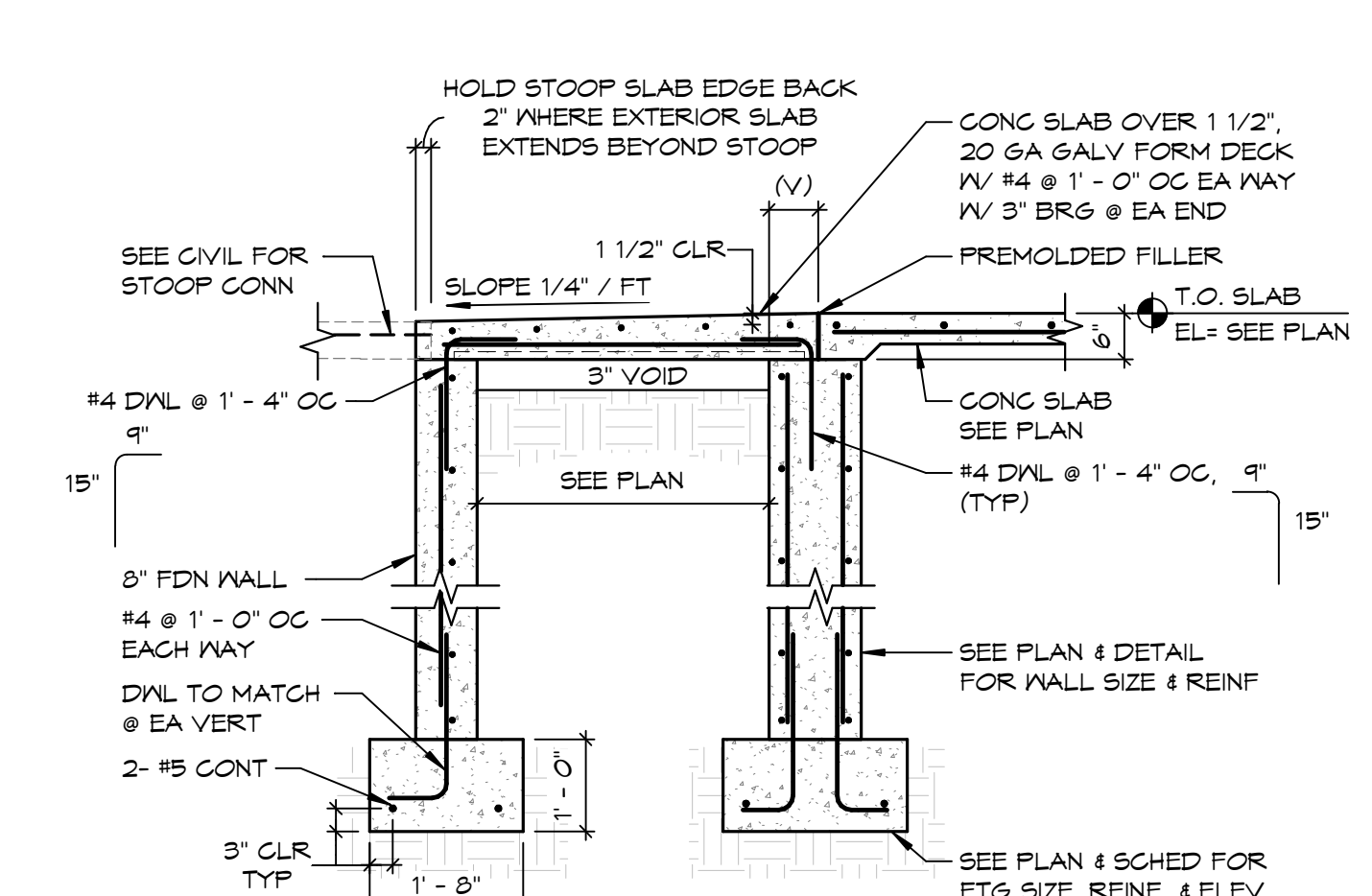
- FOOTING & FOUNDATION SHEET NOTES:**
- VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS. DO NOT SCALE DRAWINGS.
  - SEE SHEET S001 FOR GENERAL STRUCTURAL NOTES.
  - ① = STEPPED FOOTING, SD 1/S301.
  - COORDINATE LOCATIONS OF MECHANICAL & ELECTRICAL PENETRATIONS THROUGH ALL FOUNDATION SLABS.
  - ALL STGOPS SHALL BE CENTERED ON DOOR OPENINGS (UON). VERIFY DOOR OPENING LOCATIONS & DIMENSIONS WITH ARCHITECTURAL PLANS.
  - F# OR FGA - FOOTING MARK, SEE FOOTING SCHEDULE.
  - F# - PIER MARK, SEE PIER SCHEDULE.
  - SEE GEOTECHNICAL REPORT FOR ALL FOUNDATION RECOMMENDATIONS.
  - VERIFY SLOPE, GRADE, ELEVATION OF BUILDING & EXTERIOR CONC. WITH CIVIL PLANS.

- KEY NOTES:**
- ① DRILL 4 EPOXY 3-#6 x 3'-0" DOVELS INTO (E) FTG W/ 2" MIN EMBED. DRILL 4 EPOXY 1# x 2'-8" DOVELS @ 1'-0" OC INTO (E) FDN WALL W/ 6" MIN EMBED

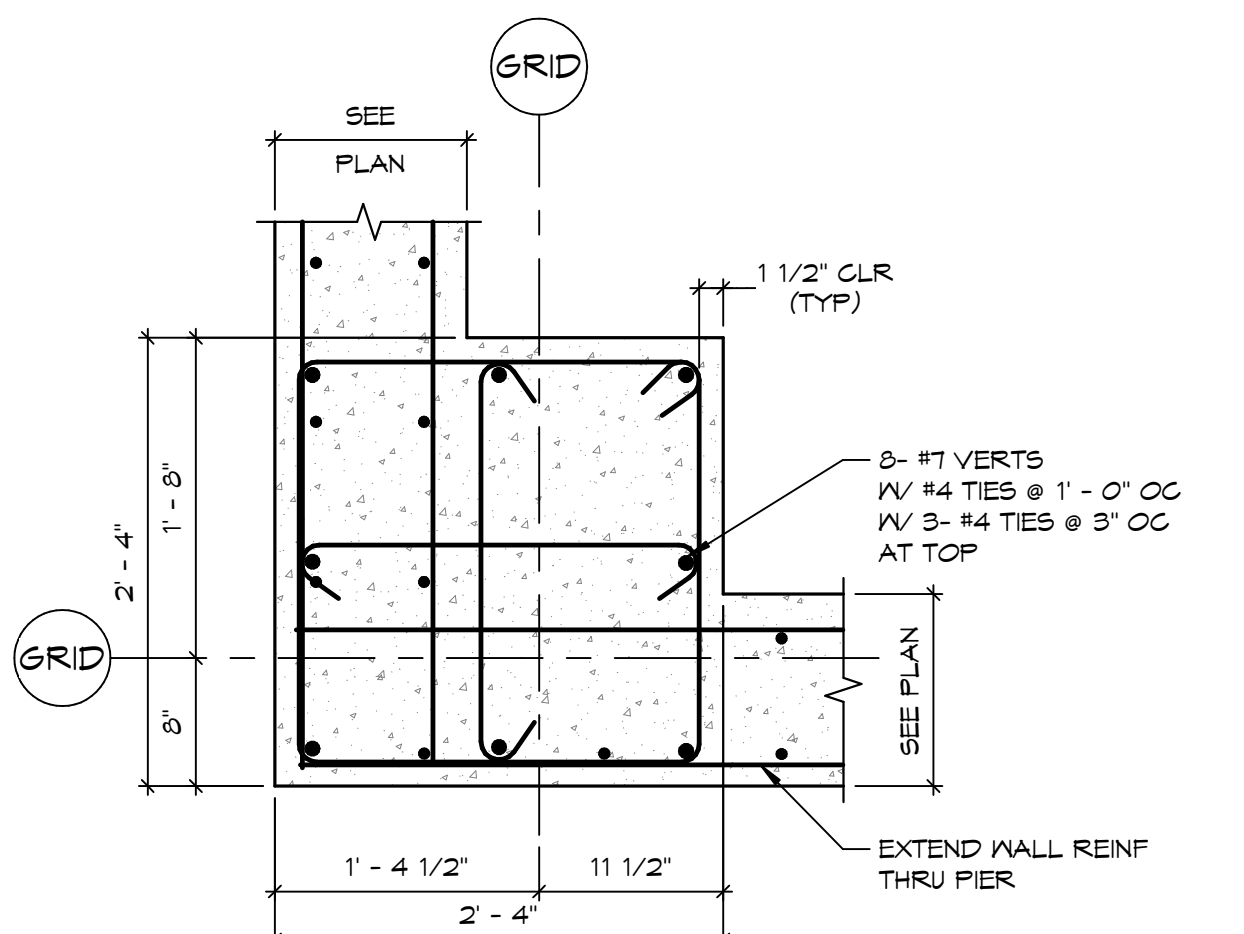
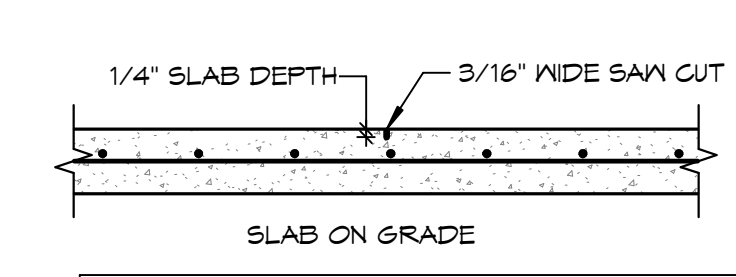




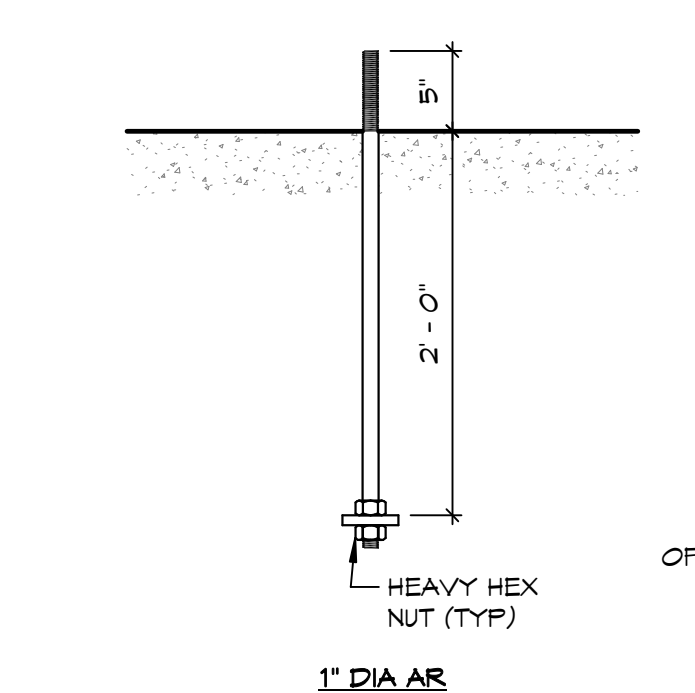
10 **STOOP**  
S301 1/2" x 1'-0"



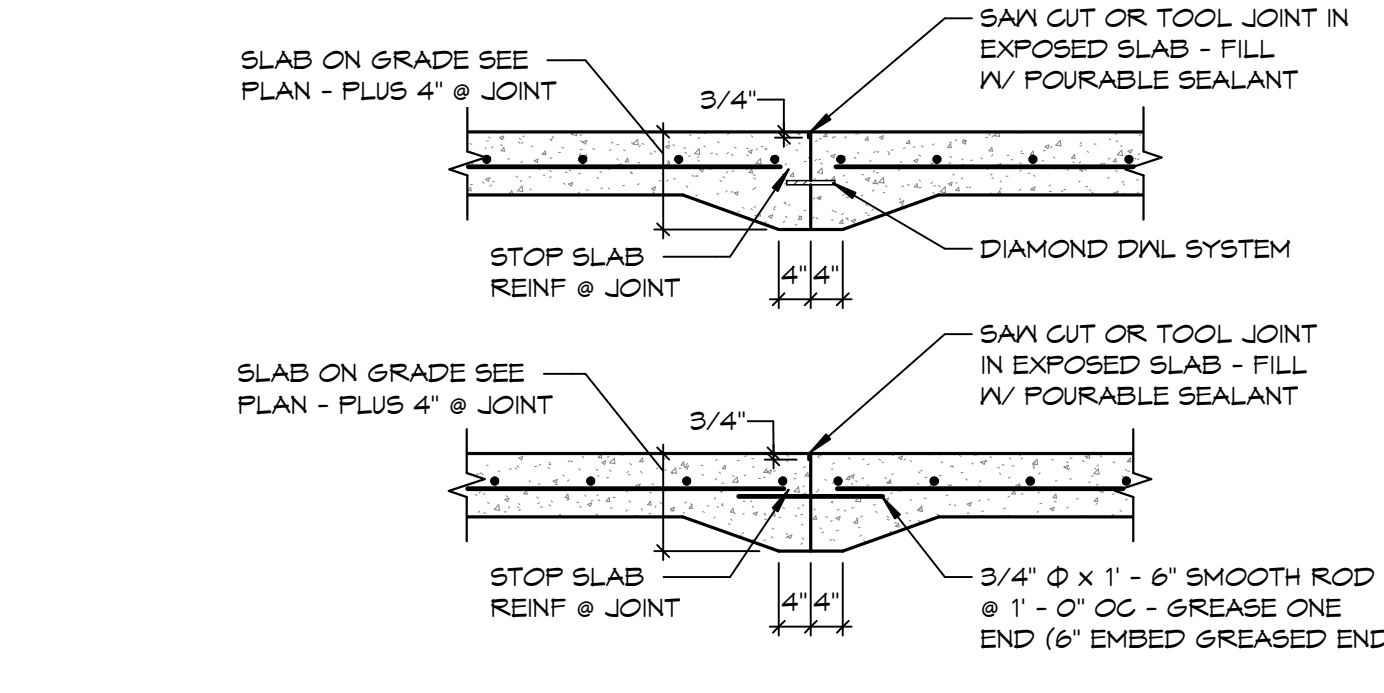
5 **FLOOR CONTROL JOINT-CJ**  
S301 1/2" x 1'-0"



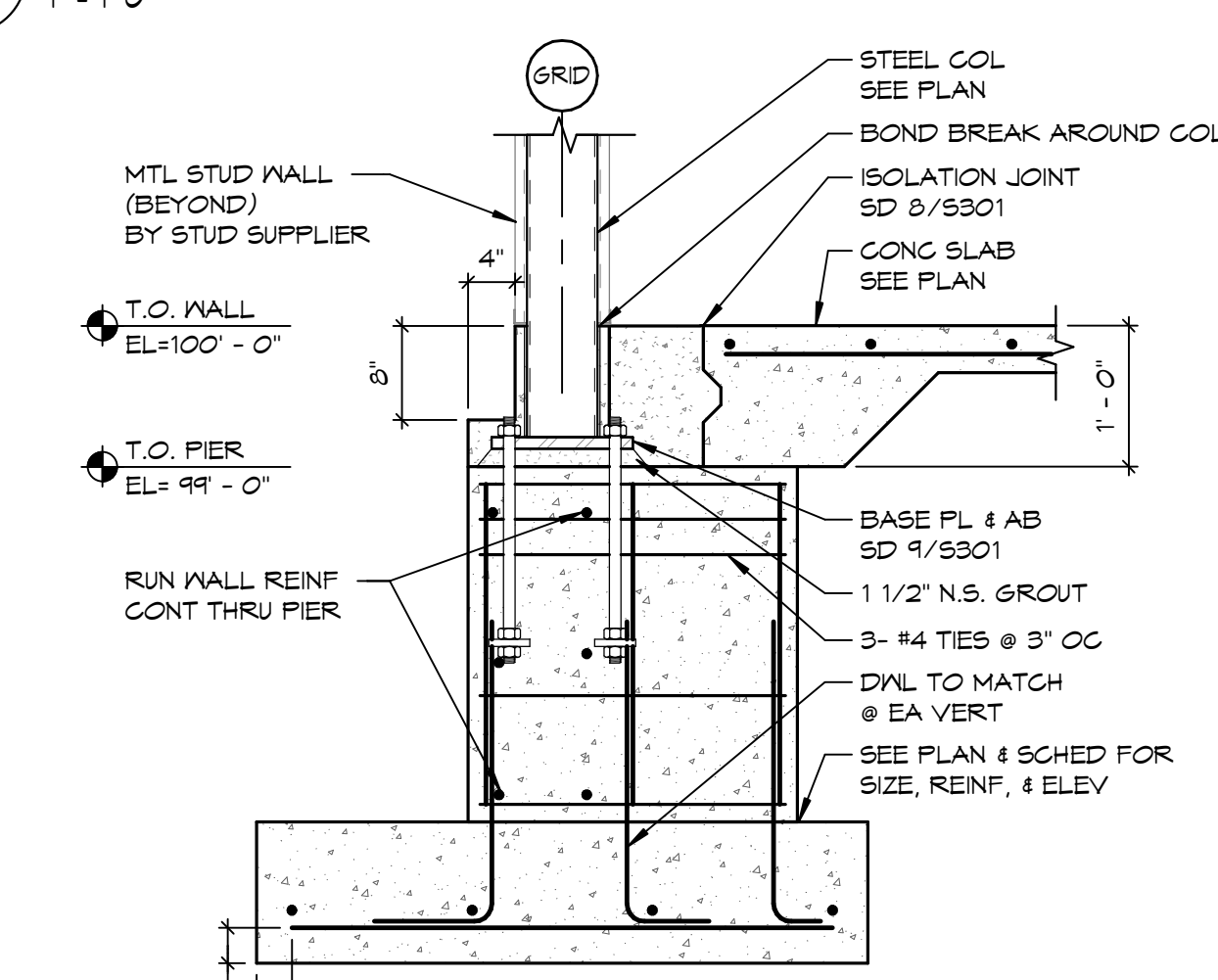
14 **PIER DETAIL - PLAN VIEW**  
S301 1" x 1'-0"



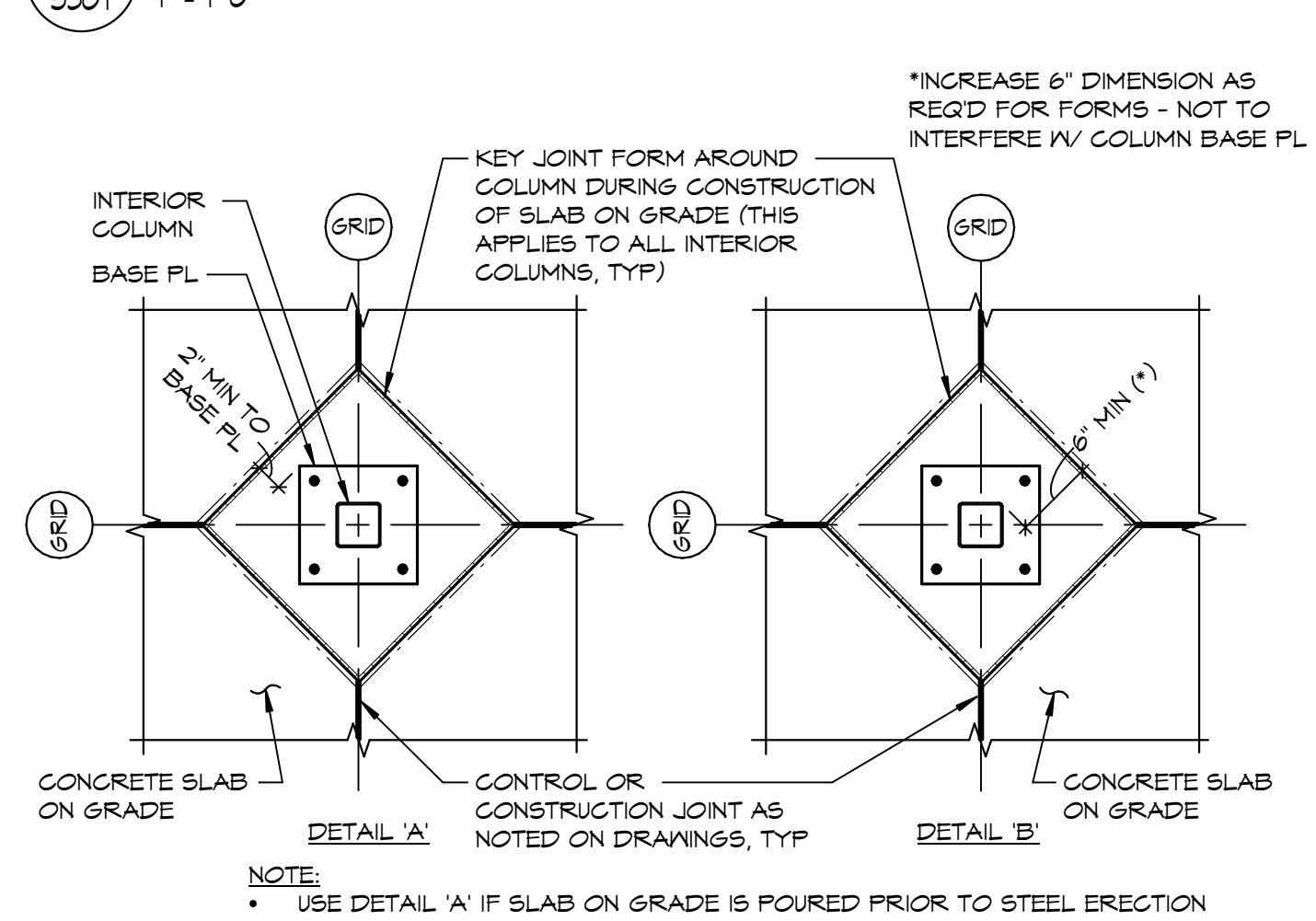
9 **BASE PLATE & AR**  
S301 1" x 1'-0"



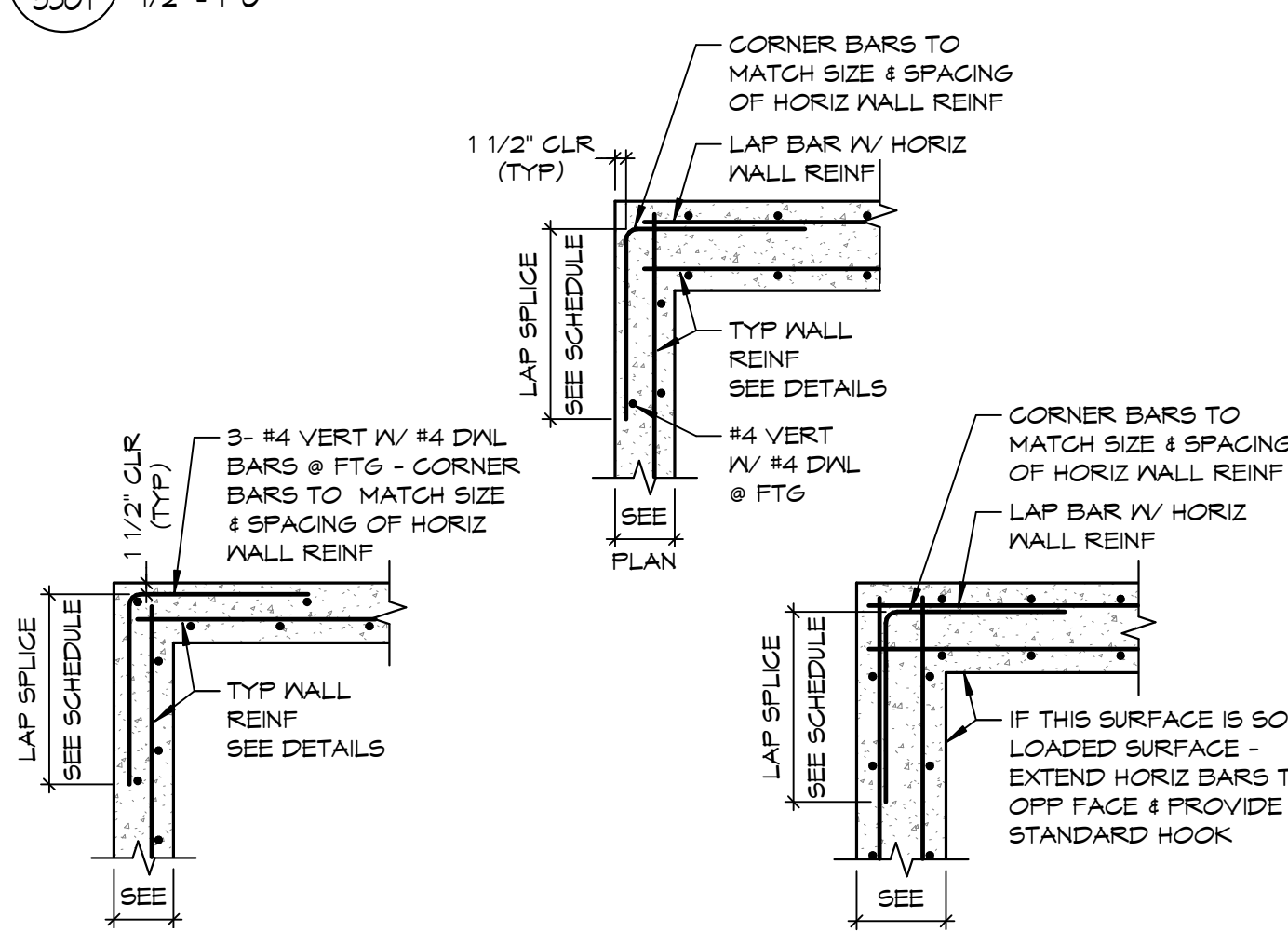
4 **FLOOR CONSTRUCTION JOINT-CGJ**  
S301 1/2" x 1'-0"



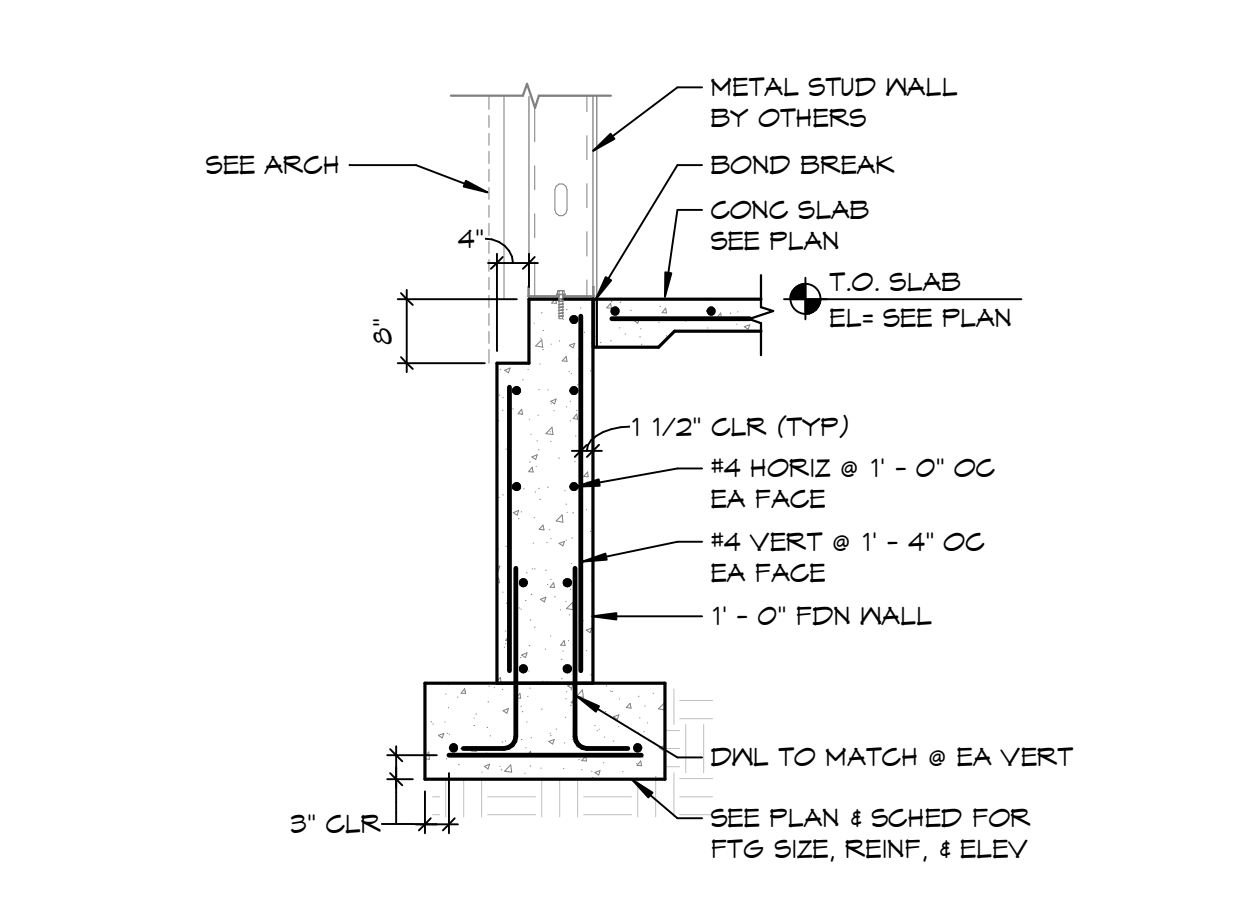
13 **EXTERIOR PIER DETAIL**  
S301 3/4" x 1'-0"



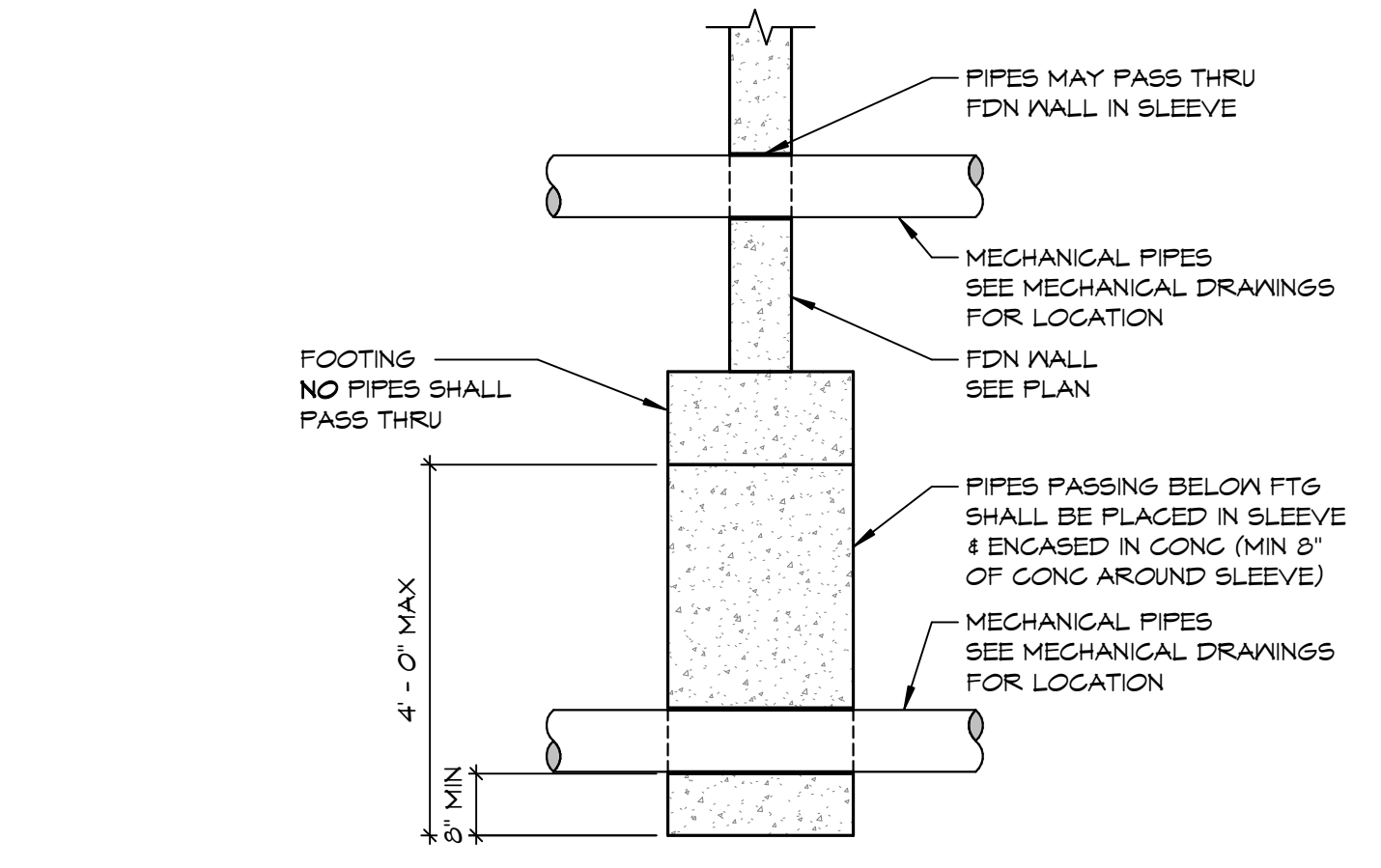
8 **INTERIOR COLUMN ISOLATION JOINT**  
S301 1/2" x 1'-0"



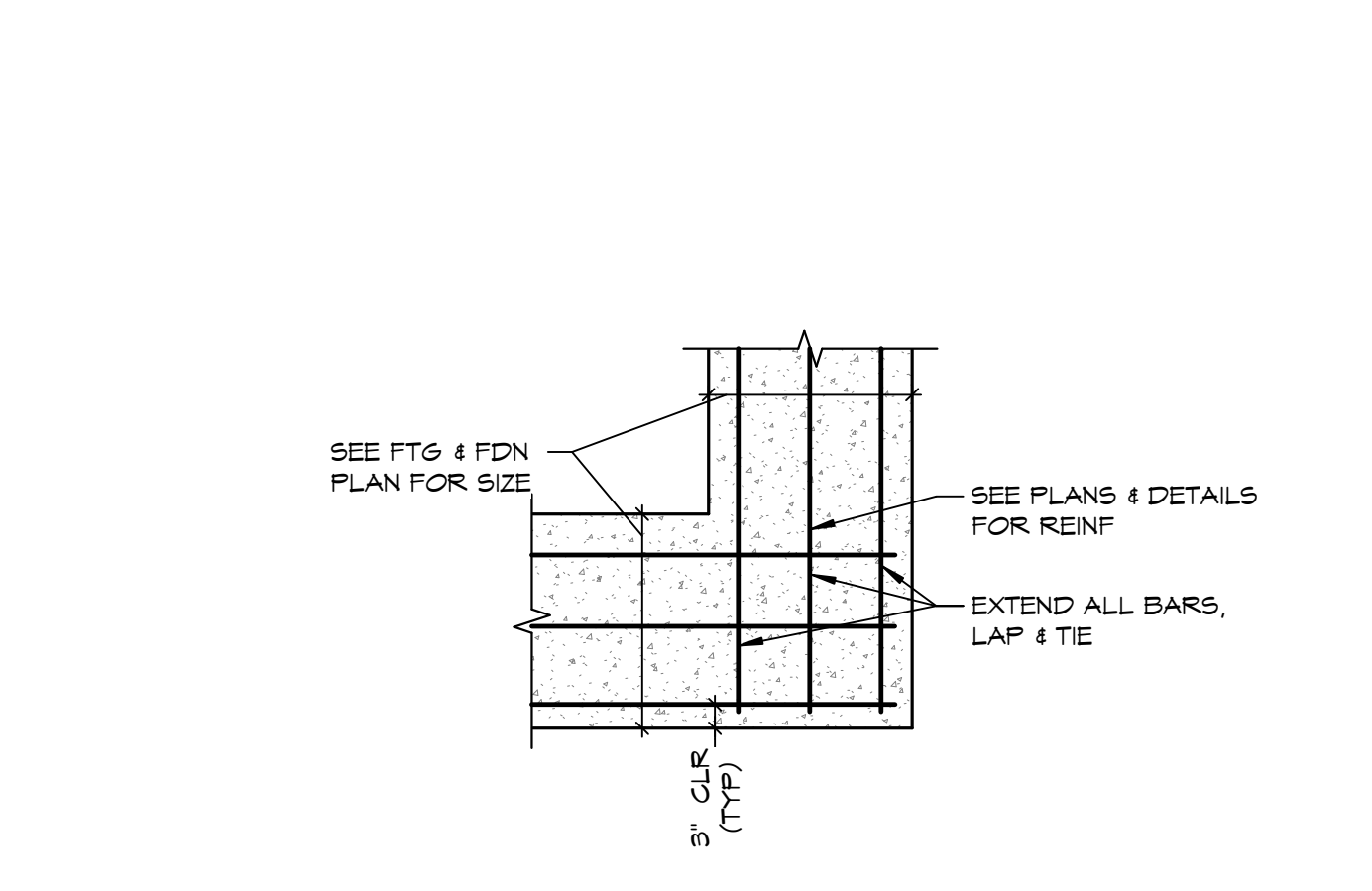
3 **TYPICAL CORNER BAR**  
S301 1/2" x 1'-0"



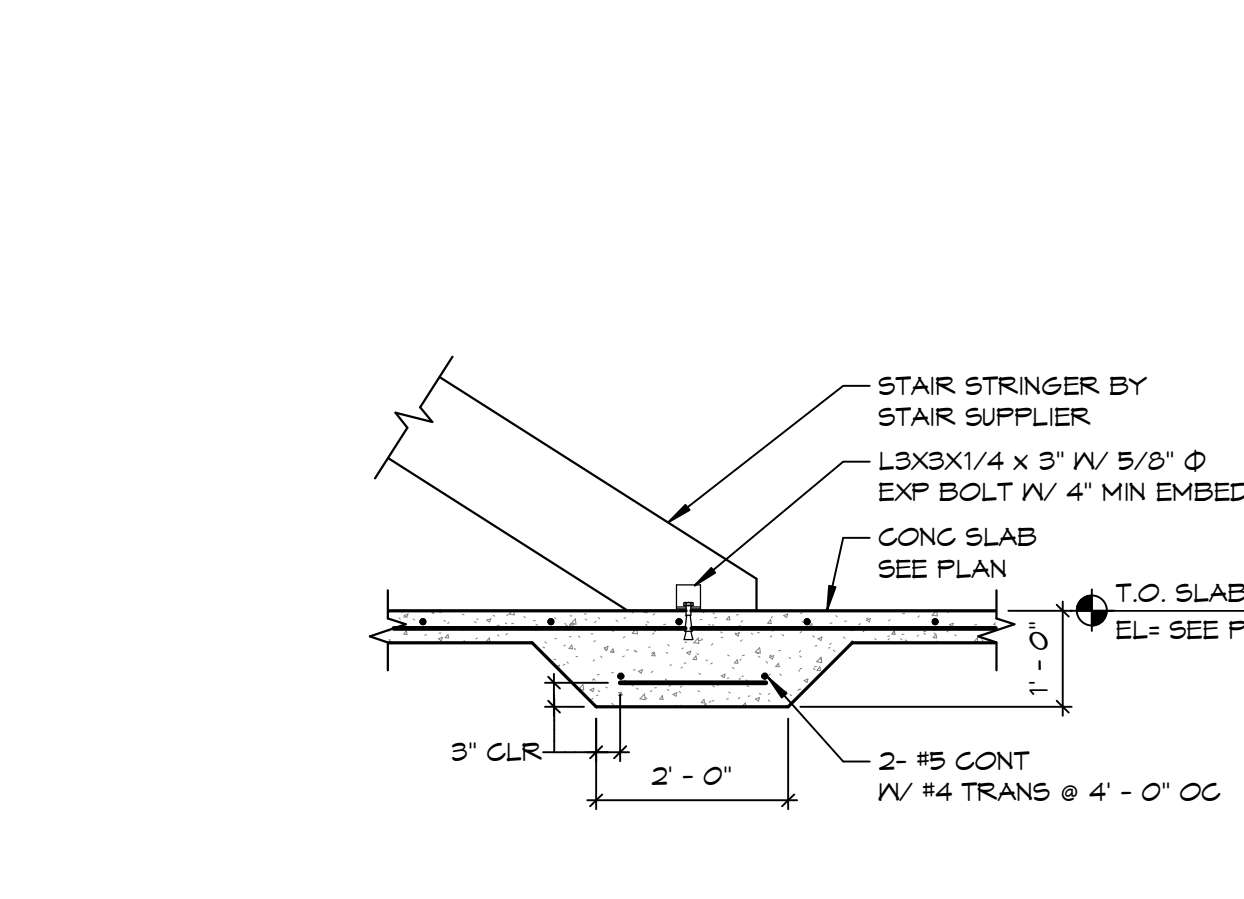
12 **EXTERIOR FOUNDATION WALL DETAIL**  
S301 1/2" x 1'-0"



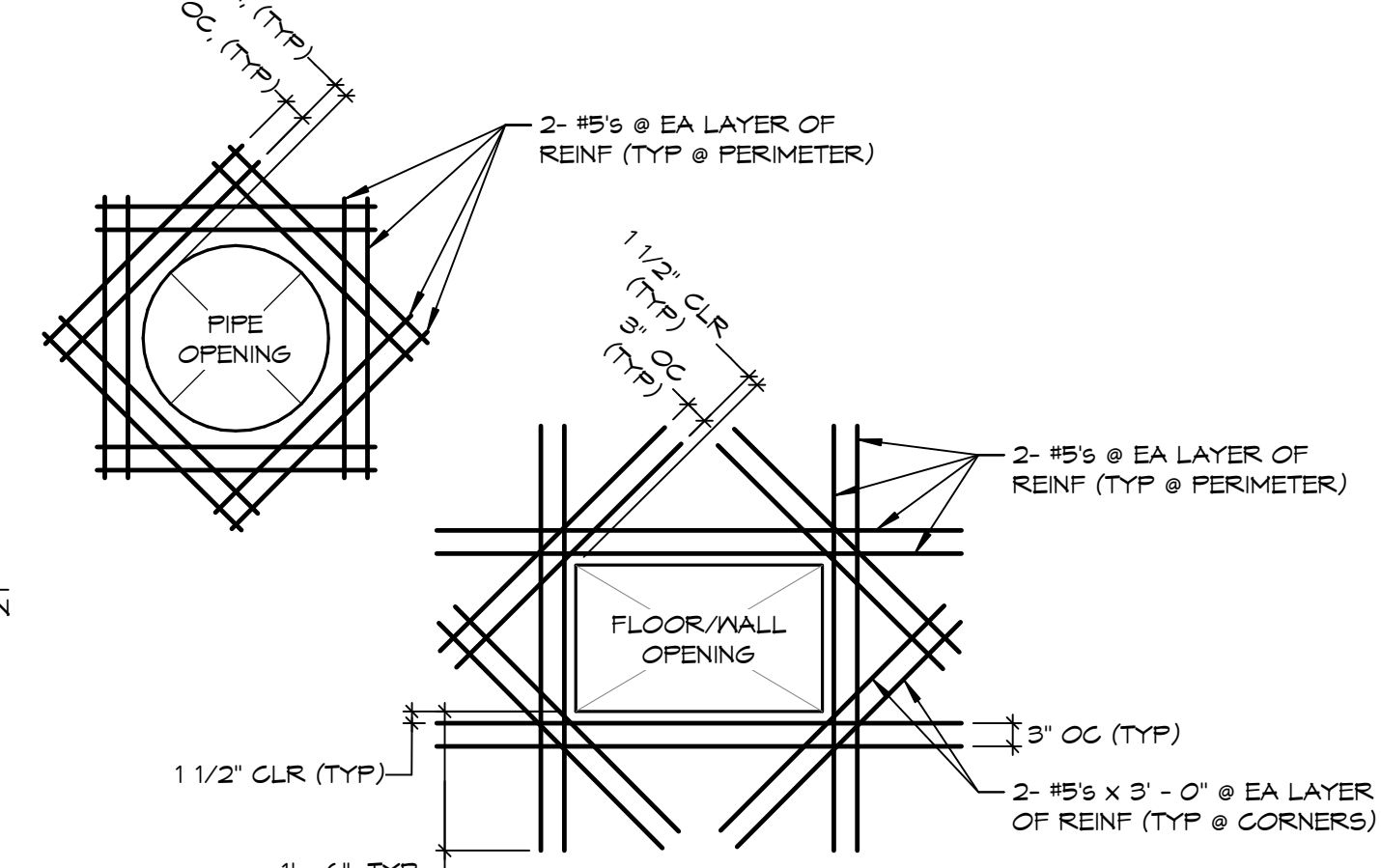
7 **TYPICAL PIPE PENETRATION**  
S301 1/2" x 1'-0"



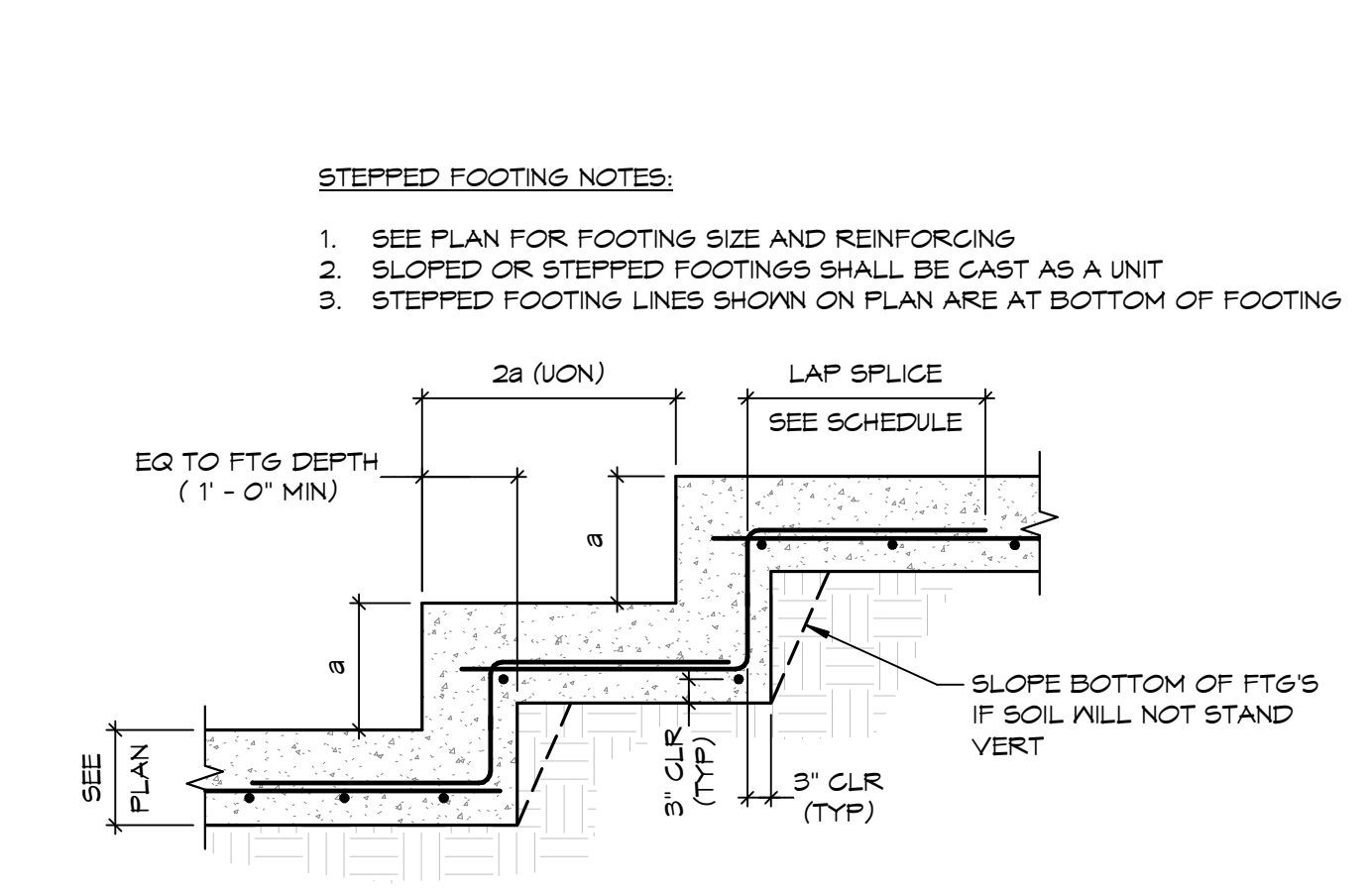
2 **FOOTING CORNER REINFORCEMENT**  
S301 1/2" x 1'-0"



11 **INTERIOR THICKENED SLAB AT STAIR**  
S301 1/2" x 1'-0"

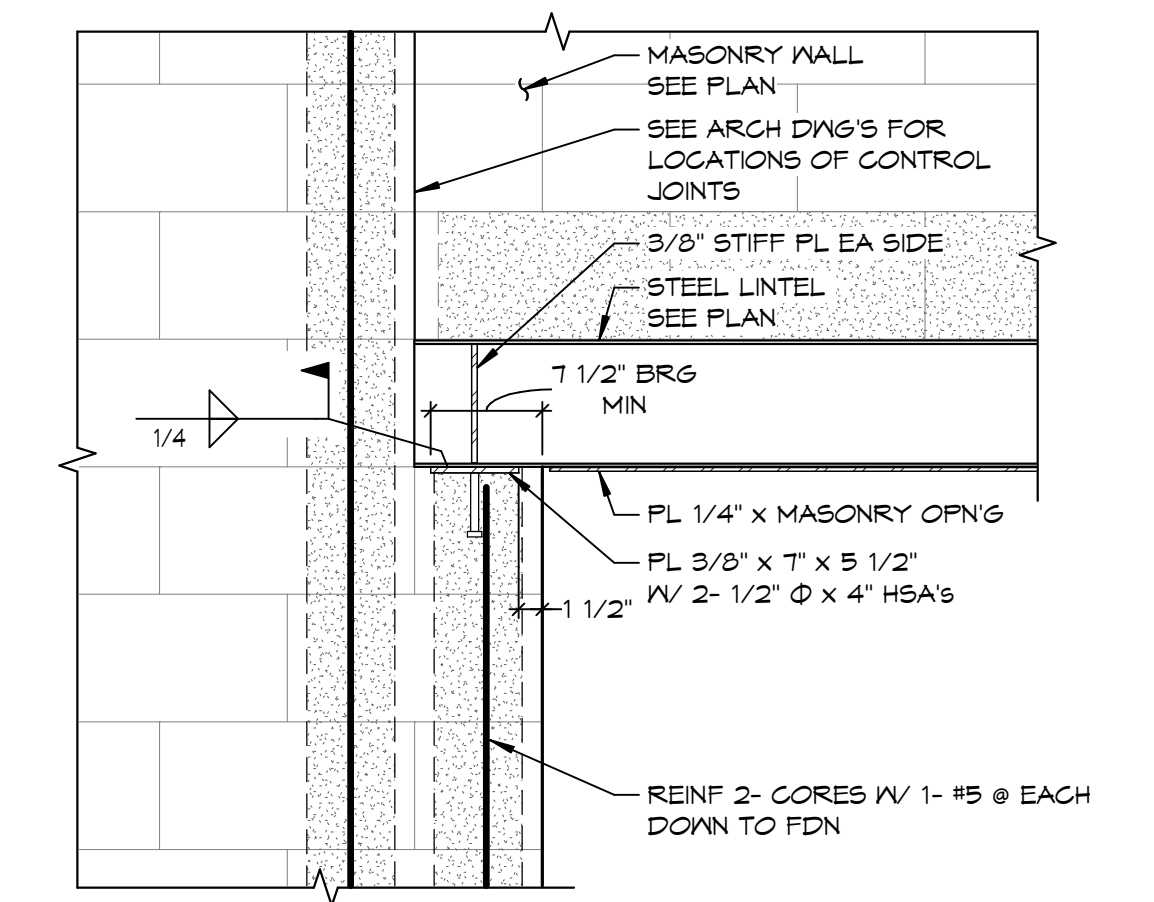


6 **ADDITIONAL REINFORCING AT OPENING**  
S301 1/2" x 1'-0"

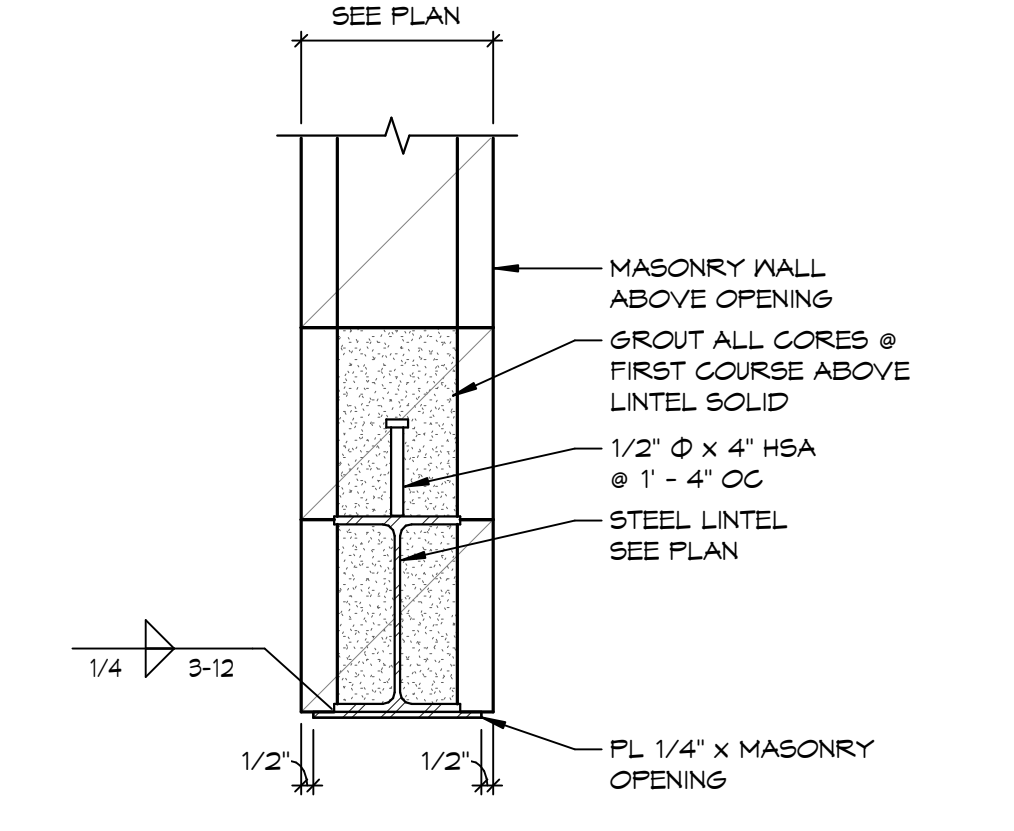


1 **TYPICAL STEPPED FOOTING**  
S301 1/2" x 1'-0"

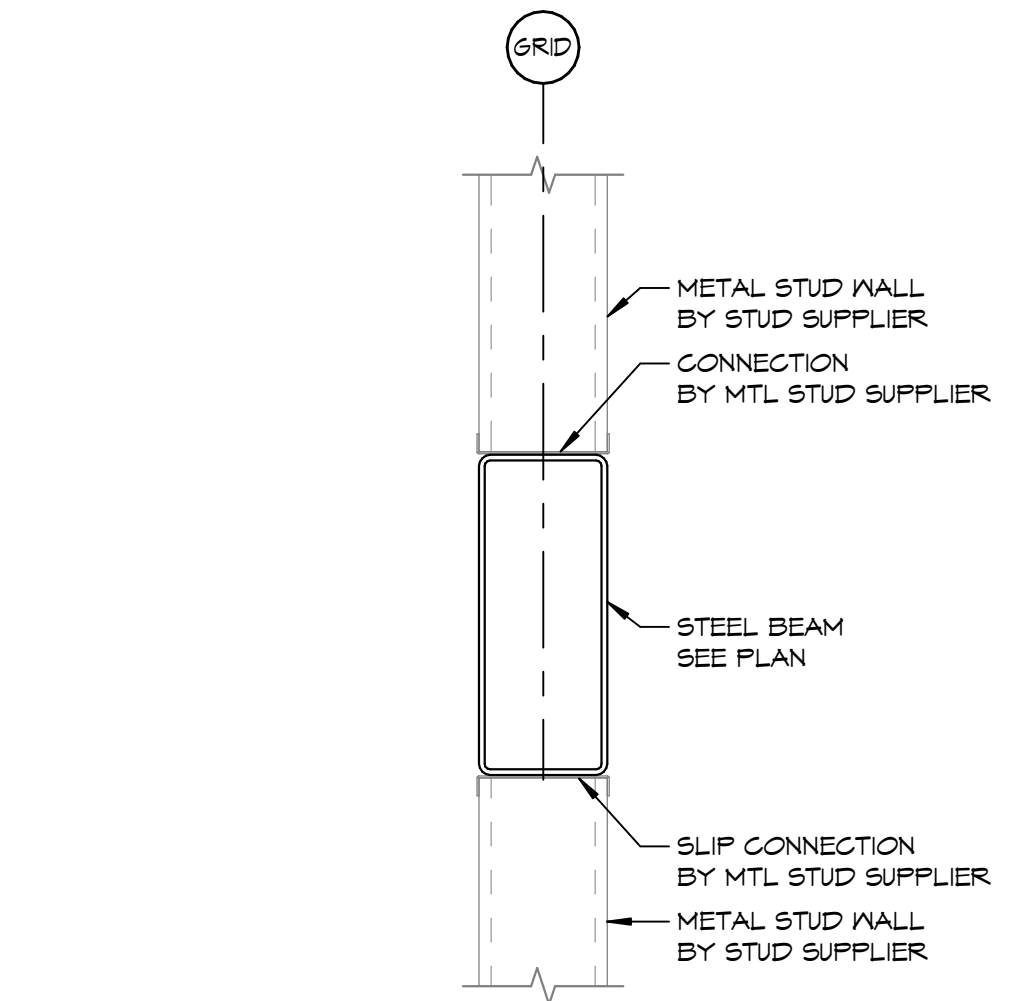




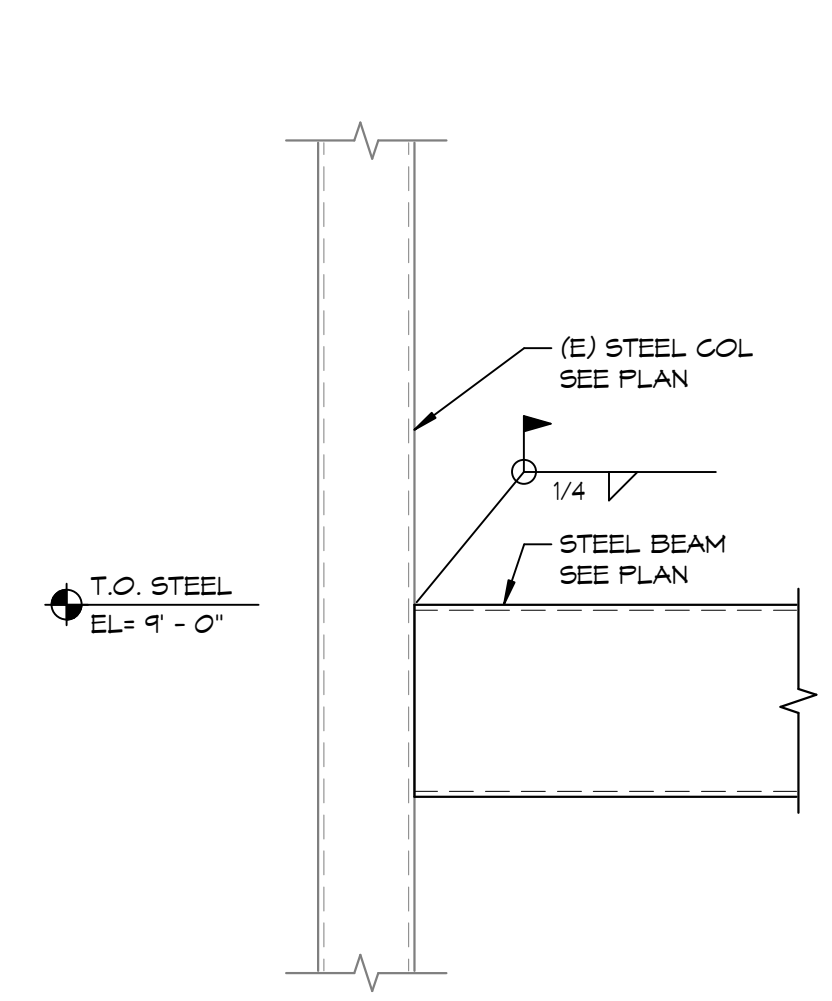
6 TYPICAL MASONRY LINTEL BEARING  
S401 1" = 1'-0"



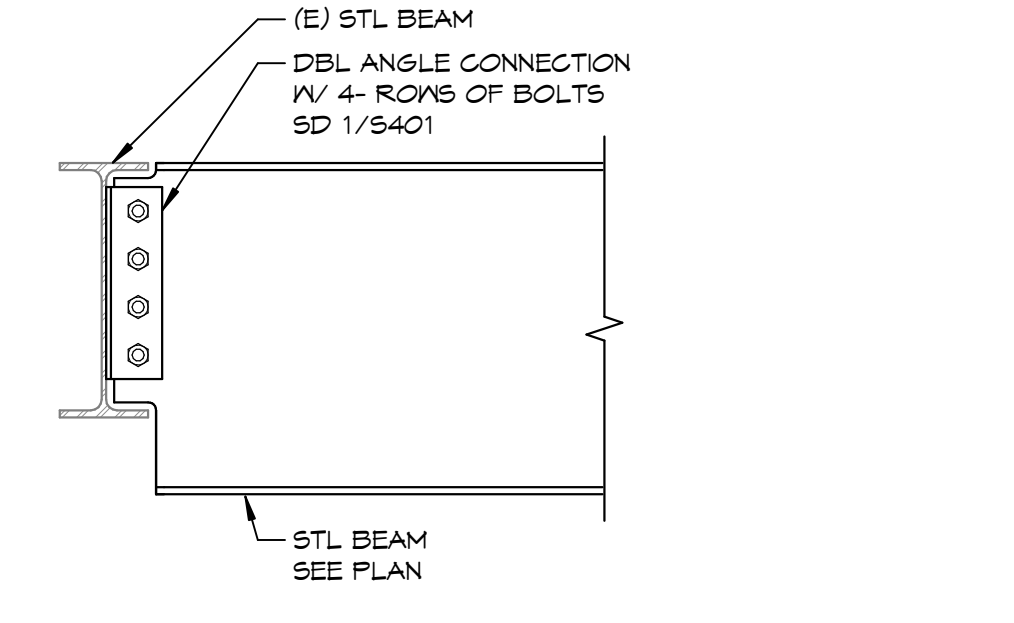
5 TYPICAL MASONRY LINTEL  
S401 1 1/2" = 1'-0"



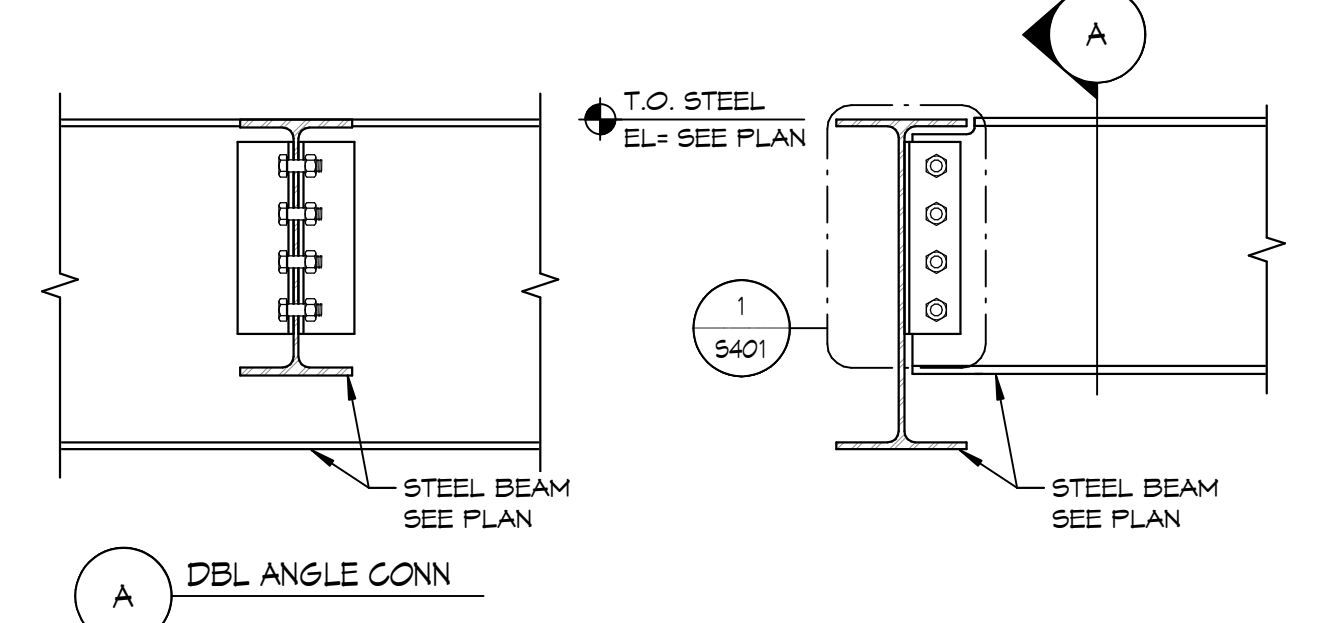
11 FRAMING DETAIL  
S401 1" = 1'-0"



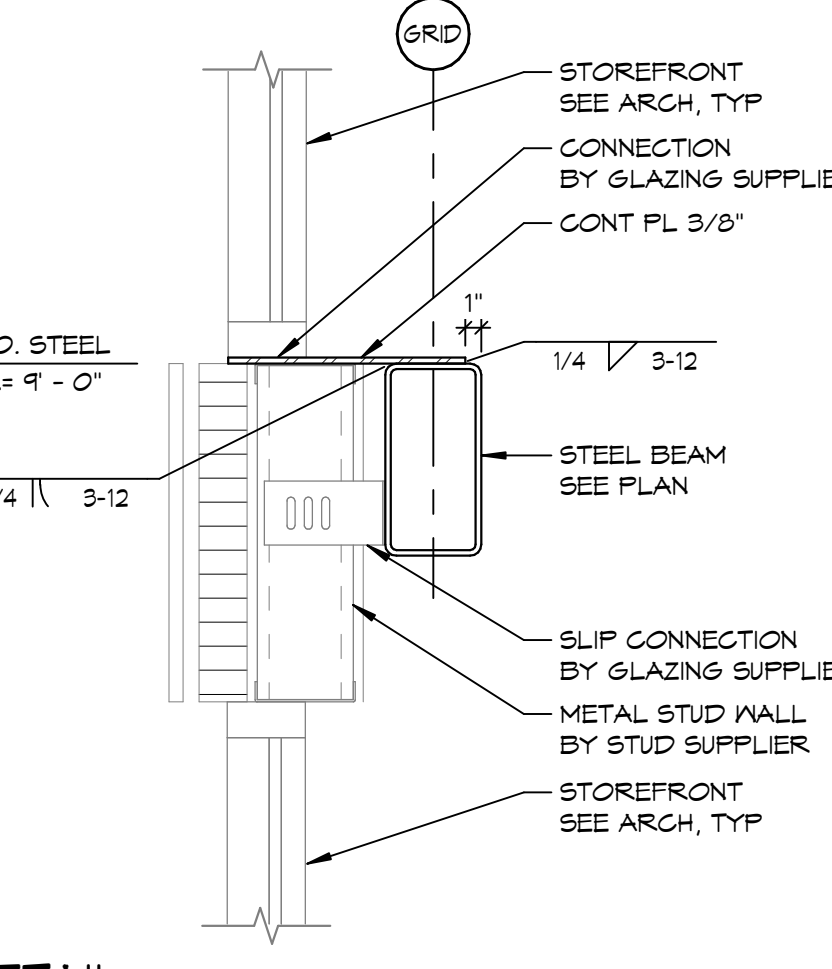
17 FRAMING DETAIL  
S401 1" = 1'-0"



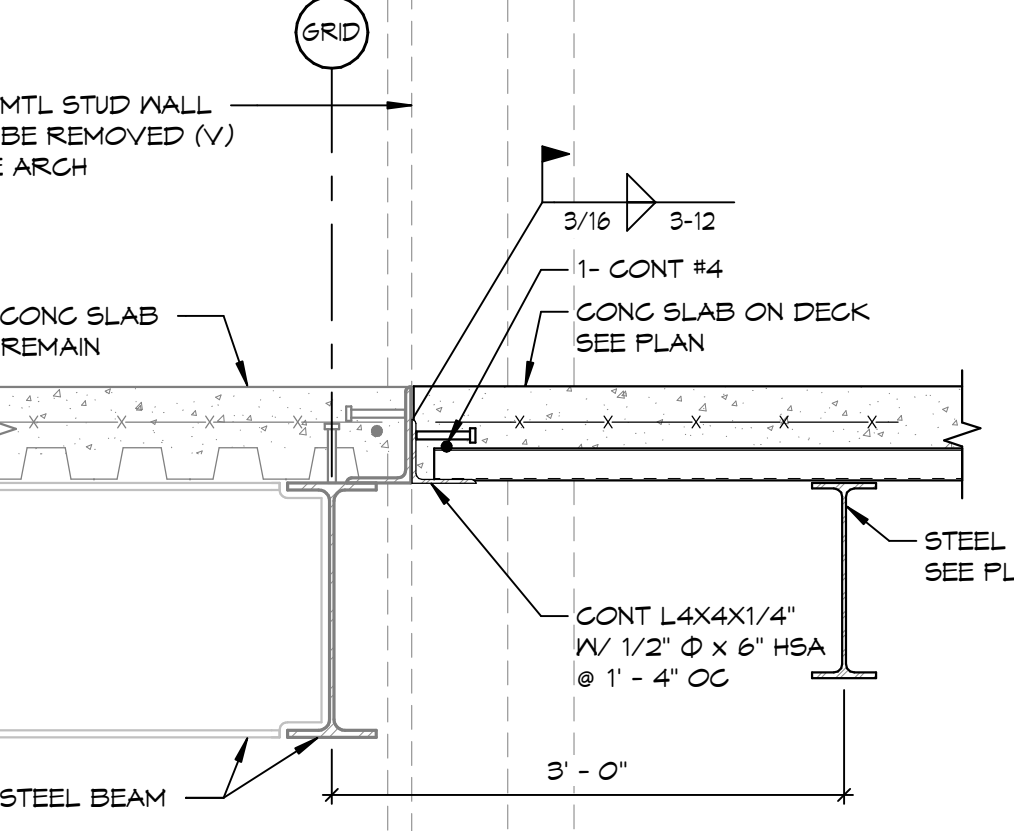
10 FRAMING DETAIL  
S401 1" = 1'-0"



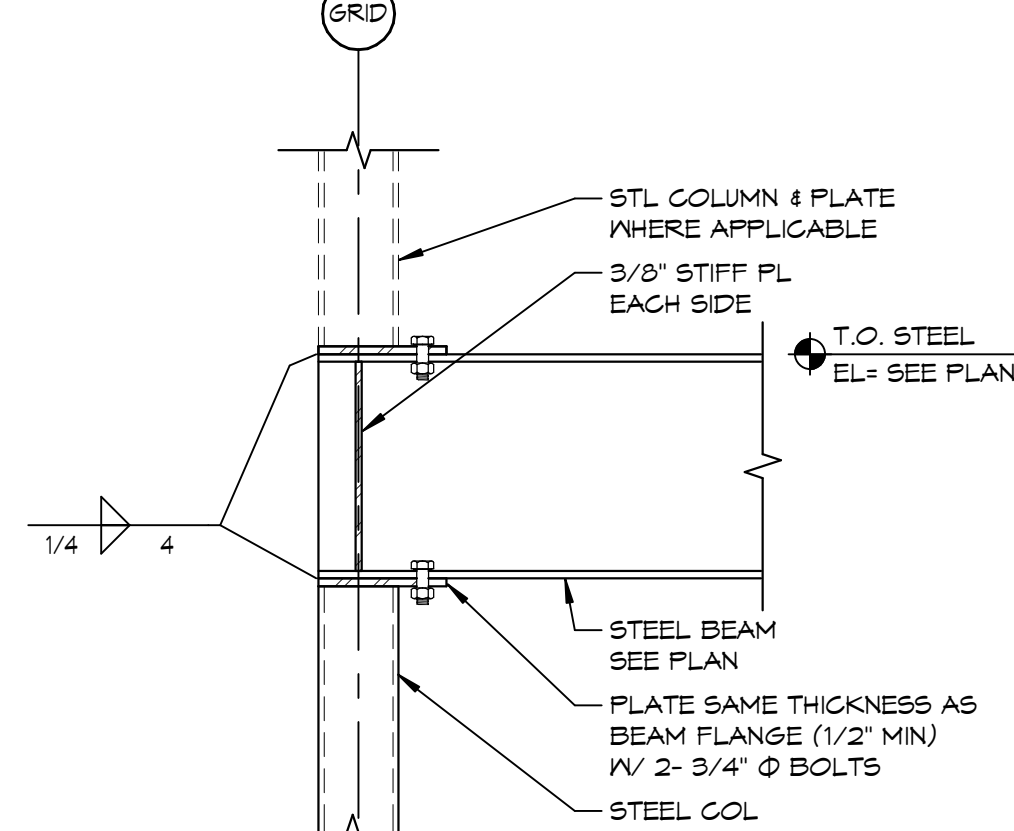
4 TYPICAL BEAM DOUBLE ANGLE CONNECTION  
S401 1" = 1'-0"



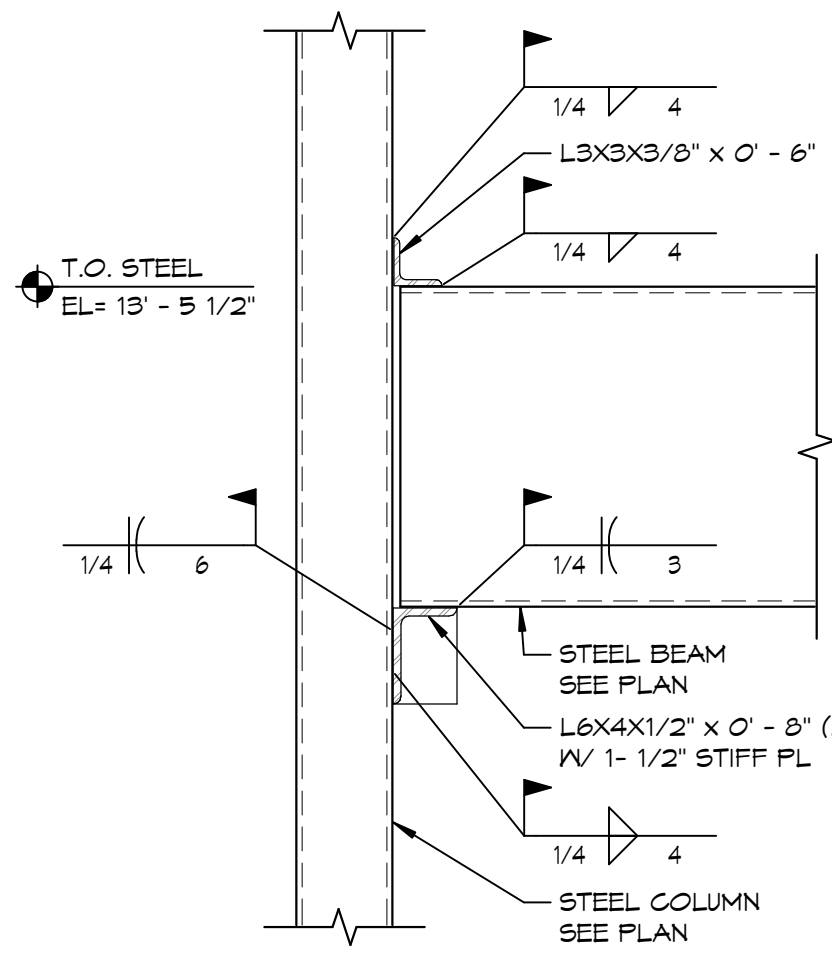
16 FRAMING DETAIL  
S401 1" = 1'-0"



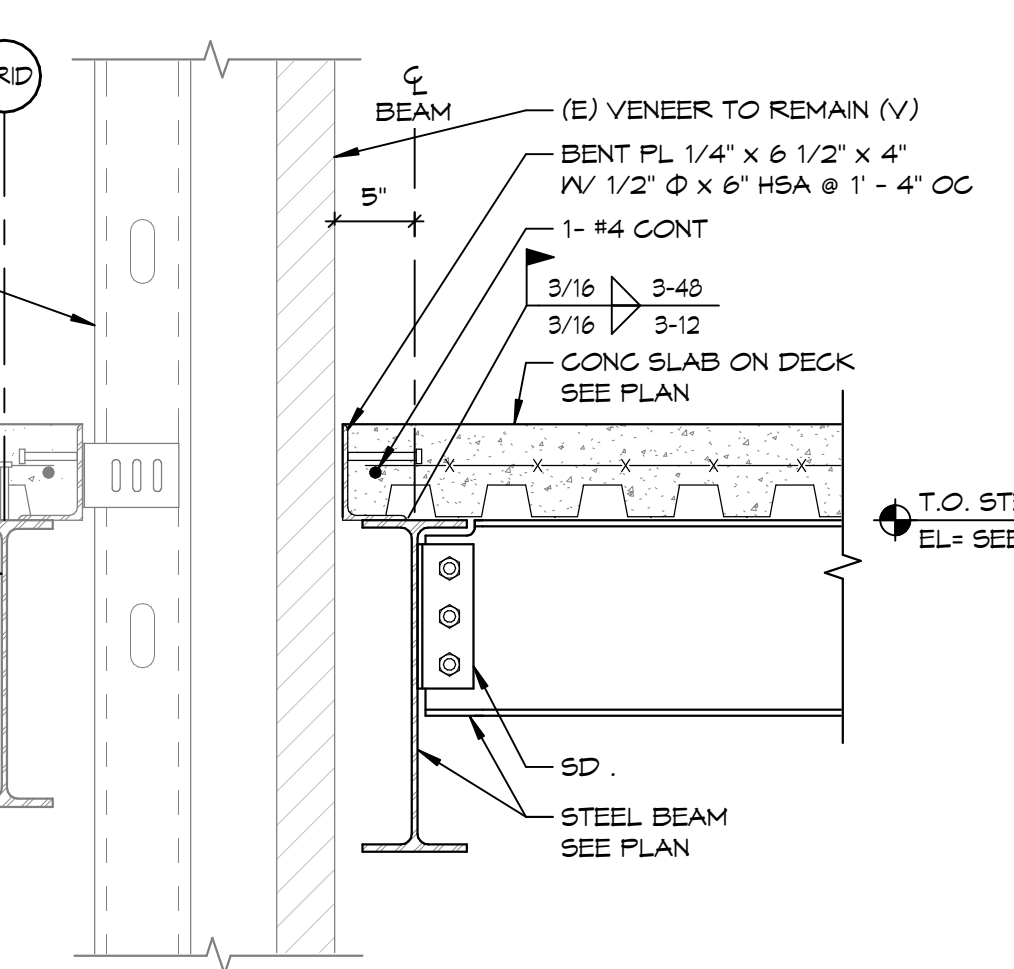
9 FRAMING DETAIL  
S401 1" = 1'-0"



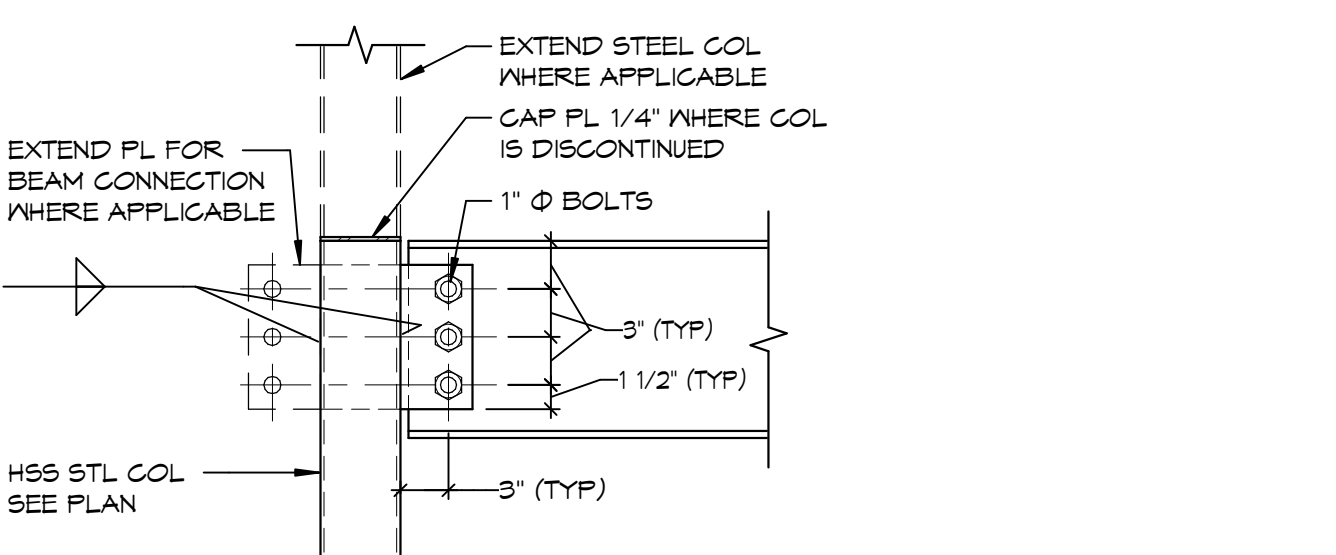
3 TYPICAL STEEL BEAM END  
S401 1" = 1'-0"



15 FRAMING DETAIL  
S401 1" = 1'-0"

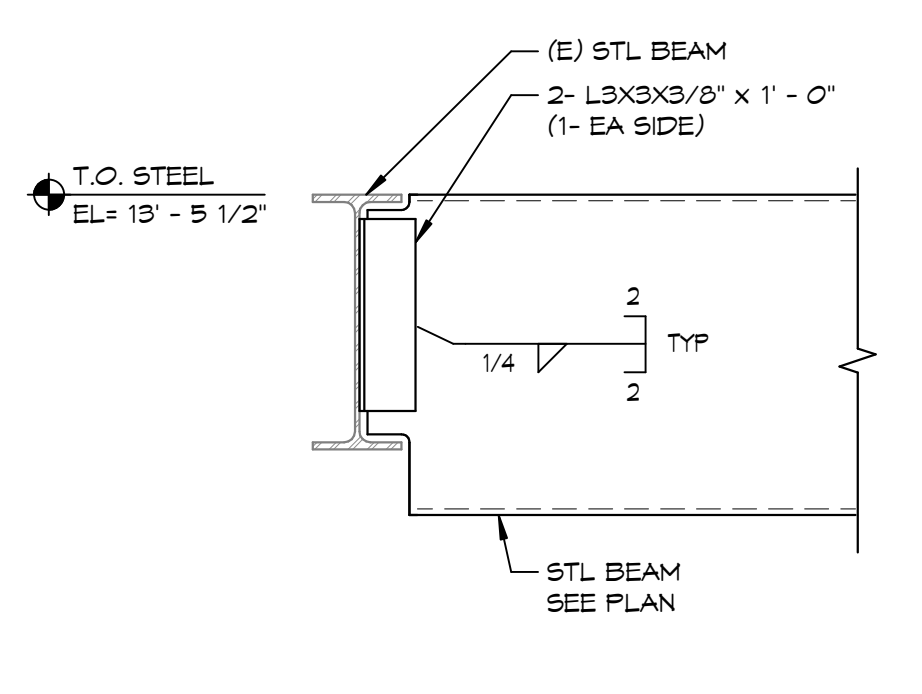


8 FRAMING DETAIL  
S401 1" = 1'-0"

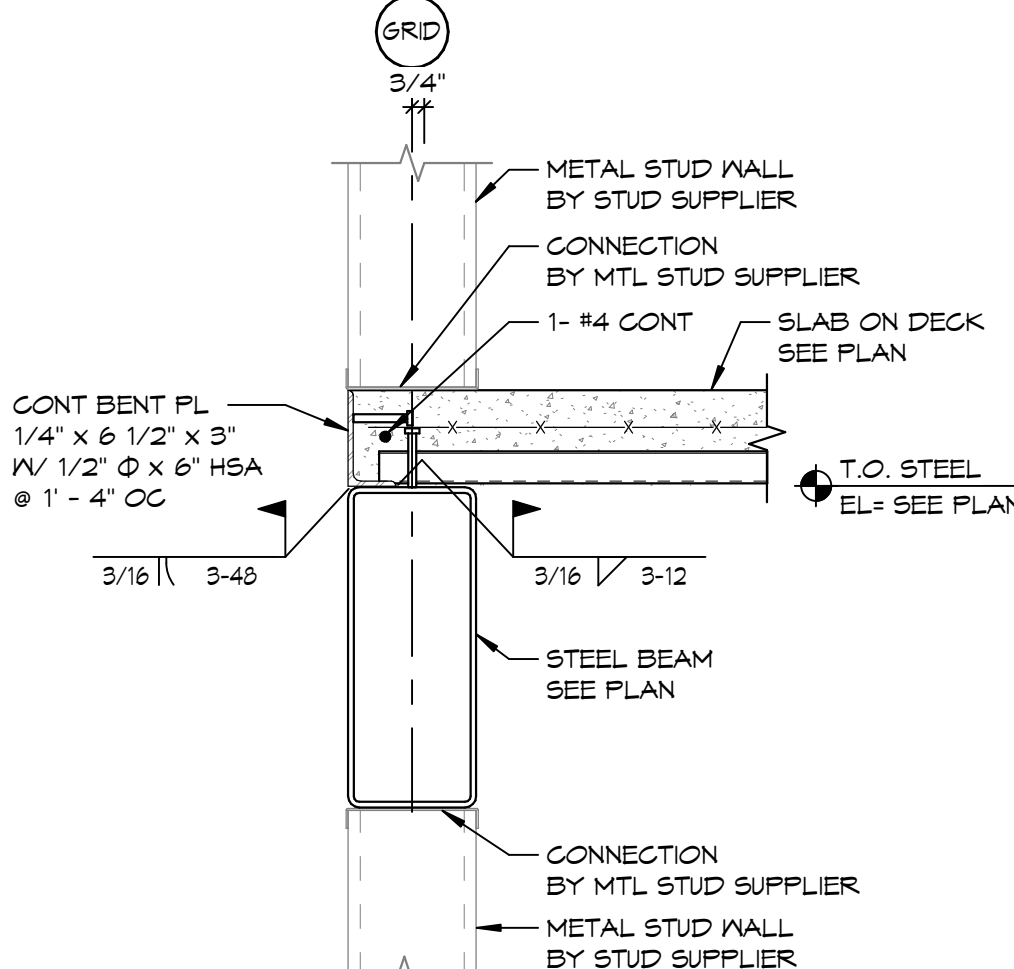


2 TYPICAL BEAM CONNECTION AT HSS COLUMN  
S401 1" = 1'-0"

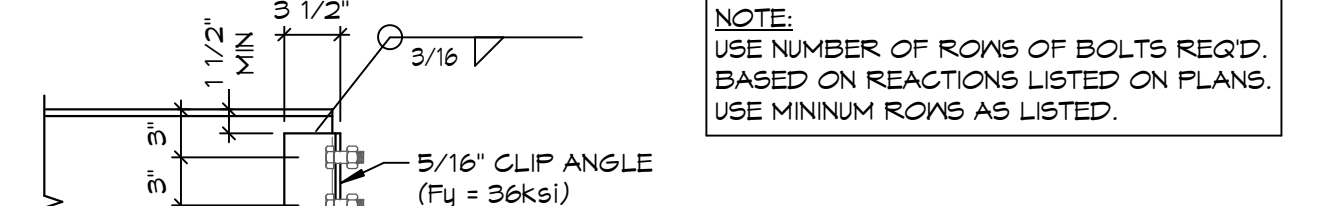
# OF ROWS	CONNECTION CAPACITY (KIPS) A913			
	PLATE THICKNESS (IN) SEE (A913)	1/4" (5/16")	3/8" (1/2")	1/2" (5/8")
2	14	14	14	14
3	29	20	20	20
4	43	43	43	43
5	59	63	64	64
6	75	75	75	75
7	93	93	100	100



14 FRAMING DETAIL  
S401 1" = 1'-0"



7 SLAB EDGE CONNECTION  
S401 1" = 1'-0"

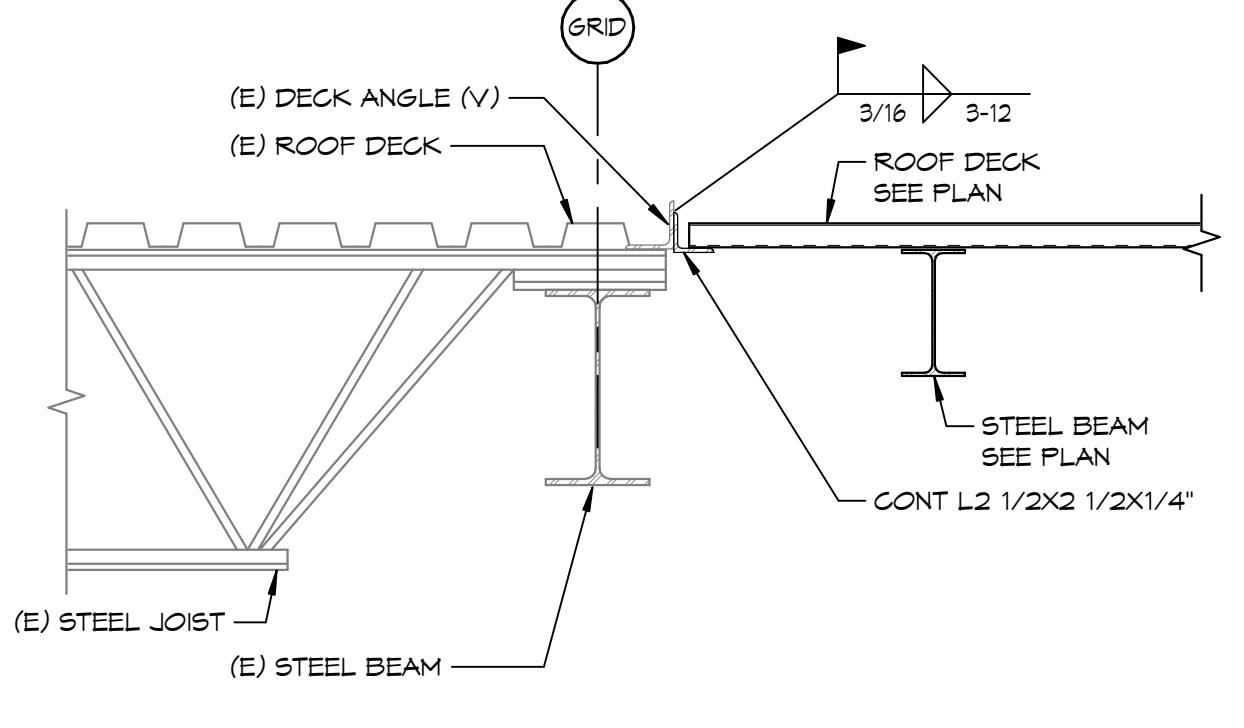


1 TYPICAL BEAM CONNECTION  
S401 1" = 1'-0"

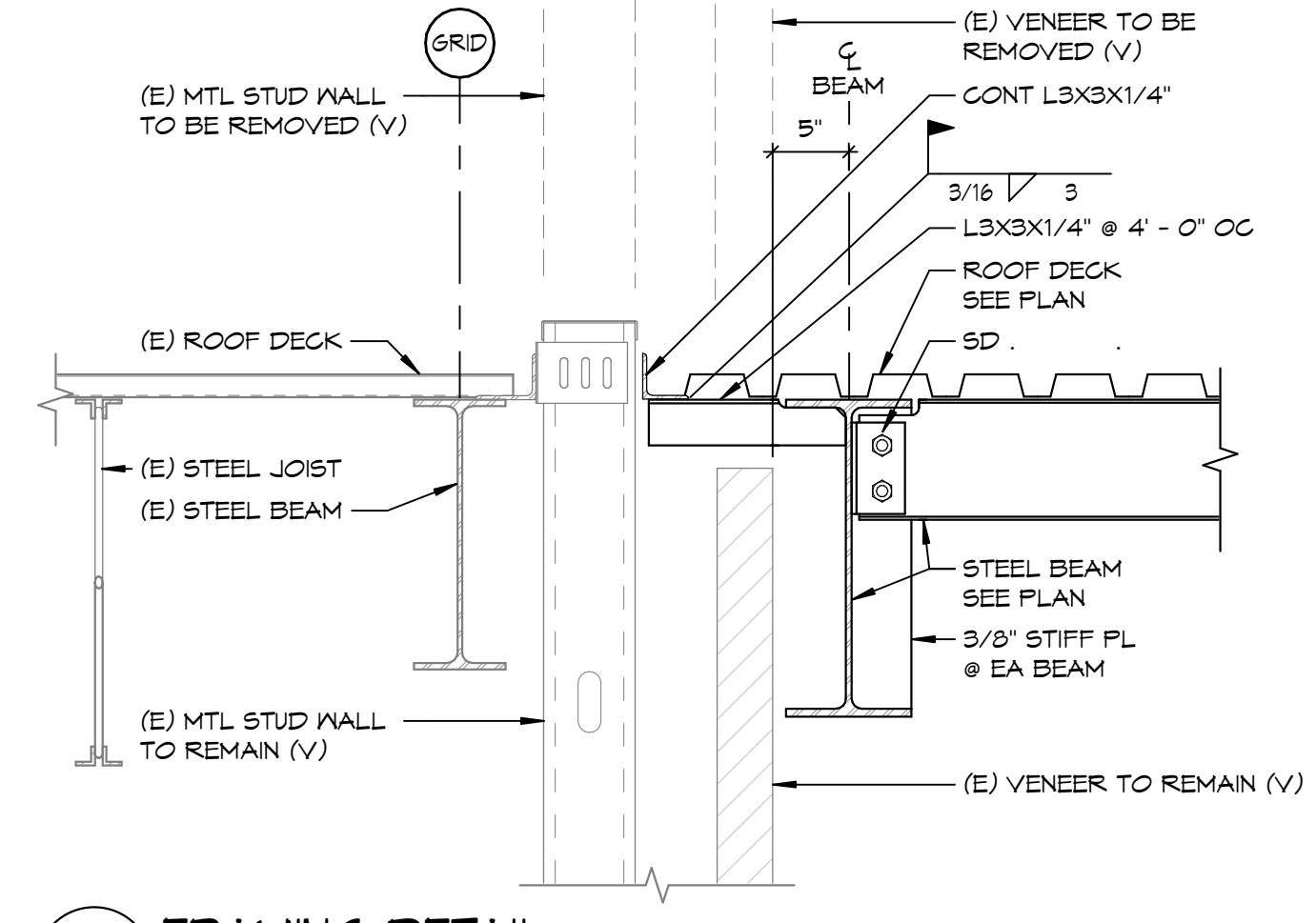
NOTE: USE NUMBER OF ROWS OF BOLTS REQ'D BASED ON REACTIONS LISTED ON PLANS. USE MINIMUM ROWS AS LISTED.

# OF ROWS	CONNECTION CAPACITY (KIPS) A913			
	PLATE THICKNESS (IN) SEE (A913)	1/4" (5/16")	3/8" (1/2")	1/2" (5/8")
2	24	33	37	37
3	37	44	55	55
4	49	64	74	74
5	61	78	83	83
6	75	93	111	111
7	90	111	130	130
8	105	130	148	148
9	120	148	167	167

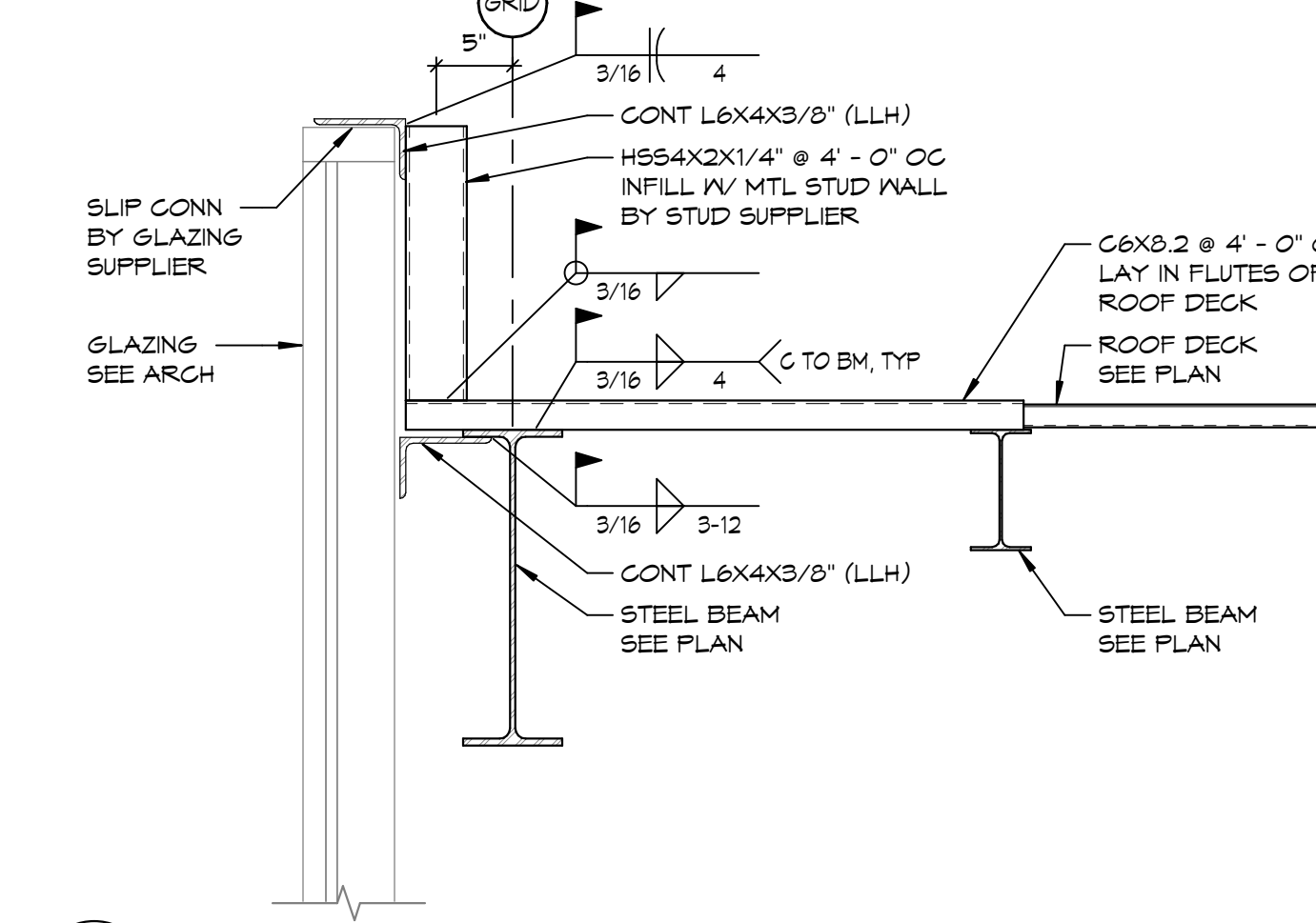
# OF ROWS	BEAM SIZE	MIN ROWS OF BOLTS
2	M10, M12	2
3	M12, M14	3
4	M16, M18, M20	4
5	M24, M27, M30	5



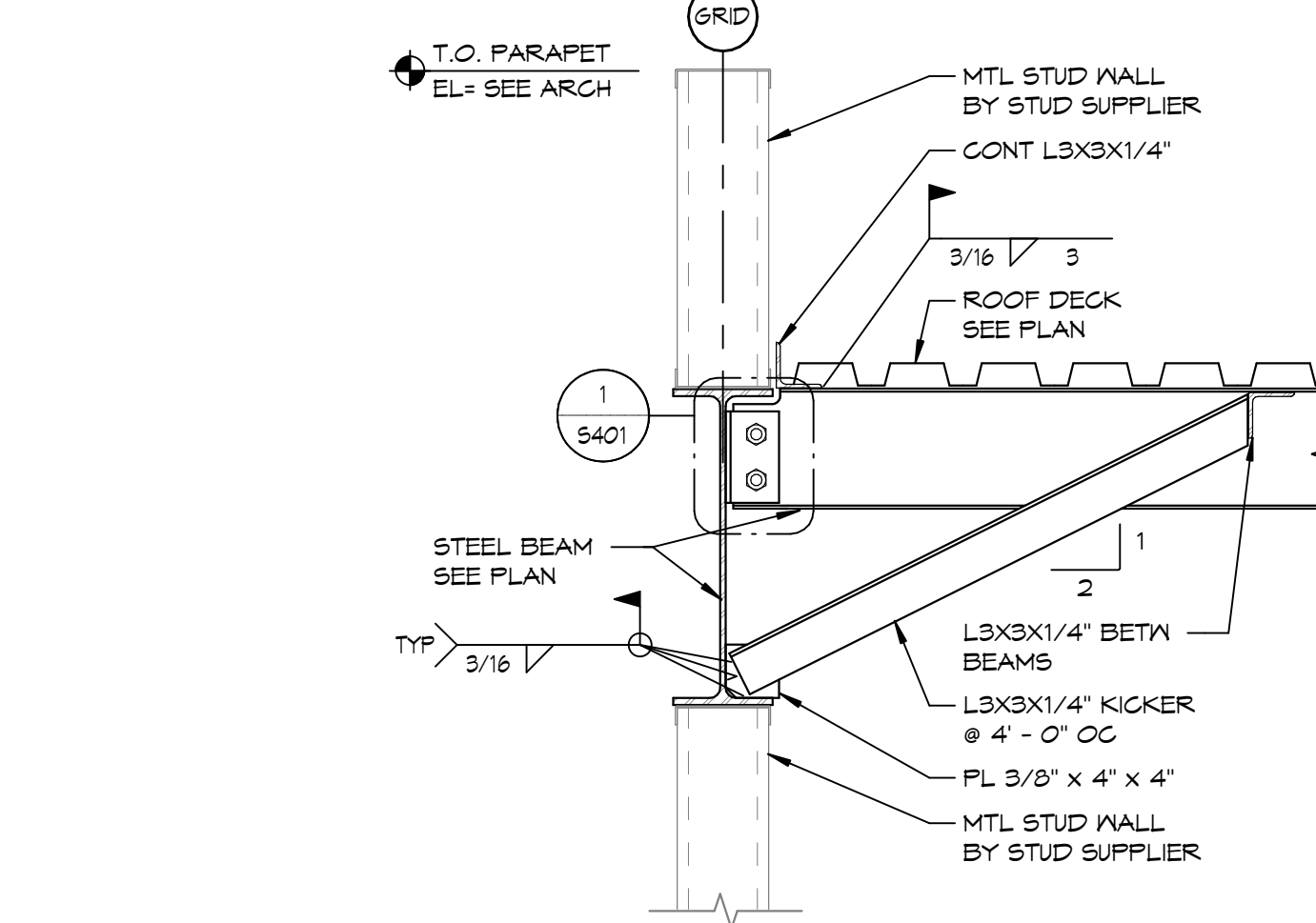
24 FRAMING DETAIL  
S401 1" = 1'-0"



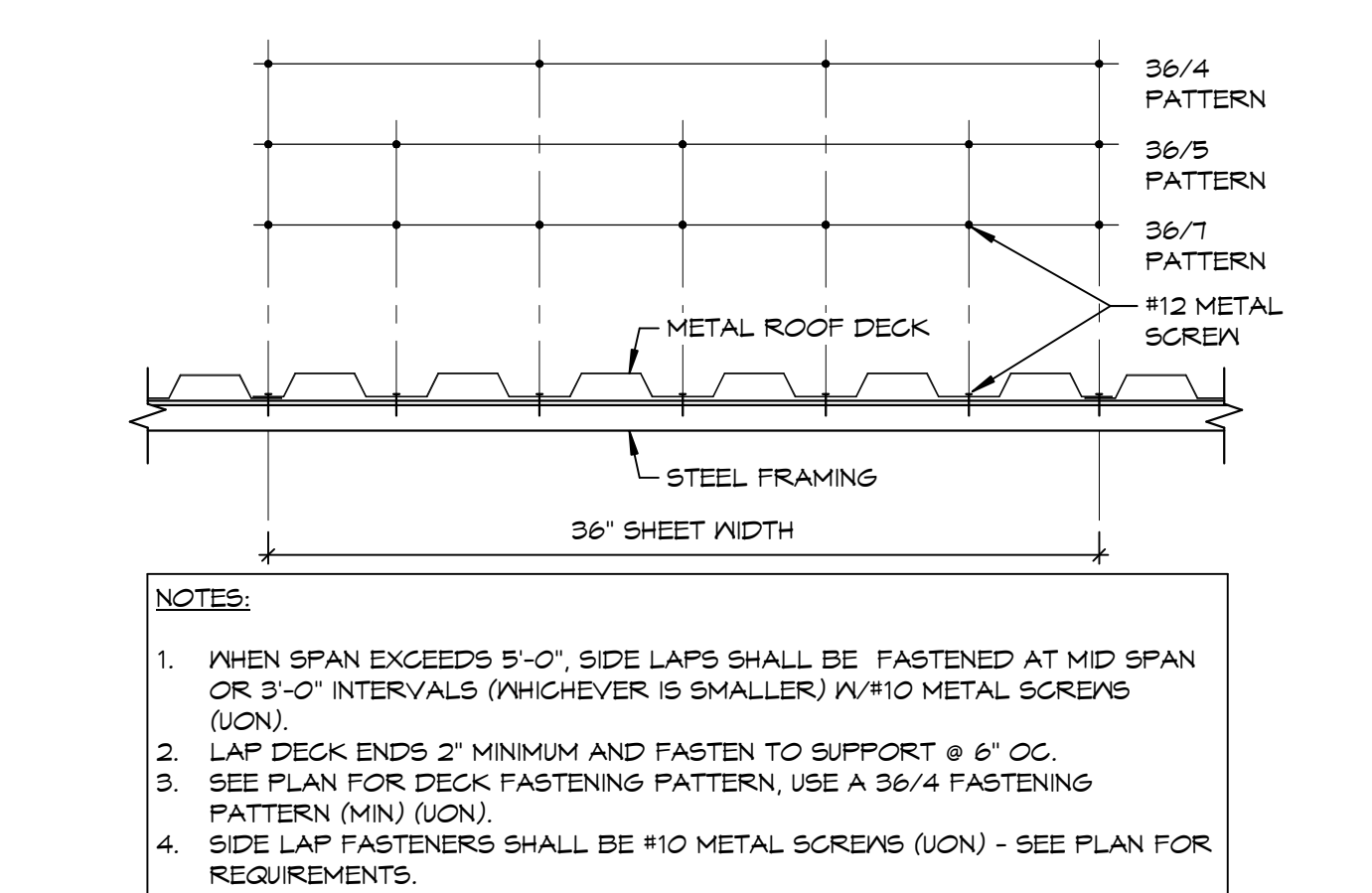
25 FRAMING DETAIL  
S401 1" = 1'-0"



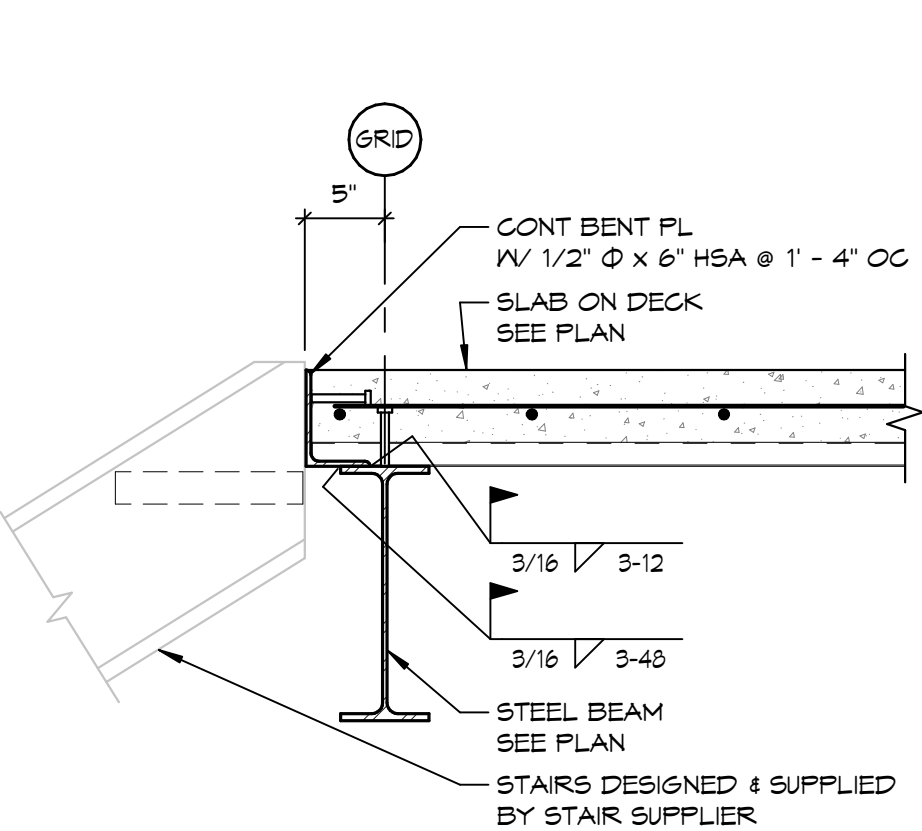
27 FRAMING DETAIL  
S401 1" = 1'-0"



26 FRAMING DETAIL  
S401 1" = 1'-0"



25 ROOF DECK FASTENING  
S401 3/4" = 1'-0"



13 SLAB EDGE DETAIL AT STAIR  
S401 1" = 1'-0"



### DEMOLITION LEGEND

- EXISTING WALL/OBJECT TO REMAIN
- EXISTING WALL/OBJECT TO BE REMOVED
- EXISTING DOOR TO REMAIN
- EXISTING DOOR TO BE REMOVED
- DEMOLITION KEYNOTE

ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.

### DEMOLITION KEYNOTES

ID	DESCRIPTION
1	REMOVE AND DISPOSE OF EXISTING DOOR AND HARDWARE. FRAME TO REMAIN IN PLACE.
2	REMOVE AND SALVAGE FOR REINSTALLATION EXISTING DOOR, HARDWARE AND FRAME.
3	REMOVE AND SALVAGE FOR REINSTALLATION EXISTING DOOR AND HARDWARE. FRAME TO REMAIN IN PLACE.
4	REMOVE EXISTING STUCCO AND SIKKENS AS REQUIRED TO CONSTRUCT NEW ADDITION. SEE CIVIL AND STRUCTURAL FOR ADDITIONAL INFORMATION.
5	REMOVE AND DISPOSE OF EXISTING ALUMINUM FOUNDATION FLASHING CAP.
6	REMOVE AND DISPOSE OF EXISTING PVC.
7	REMOVE AND DISPOSE OF EXISTING ACET BACK TO NEAREST FULL TILE.
8	REMOVE AND DISPOSE OF EXISTING GYP BD SOFFIT AS REQUIRED TO INSTALL NEW WALL.
9	REMOVE AND DISPOSE OF EXISTING ACET GRID AND ASSOCIATED HANGERS. EXISTING ACET TILES TO BE SALVAGED FOR REINSTALLATION.
10	REMOVE AND SALVAGE FIRE EXTINGUISHER FOR REINSTALLATION IN NEW FIRE EXTINGUISHER CABINET.
11	REMOVE AND DISPOSE OF EXISTING DRAIN TILE.
12	REMOVE AND DISPOSE OF EXISTING COP OF WALL. BRICK TO BE SALVAGED FOR PATCH AND REPAIR. SEE NEW CONSTRUCTION DETAILS FOR EXTENTS AND FURTHER INDICATION.
13	REMOVE AND SALVAGE SECTION OF GUARD AND HANDRAIL.
14	REMOVE CEILING AS REQUIRED TO REMOVE RIGID INSULATION AT SPANDREL PANEL LOCATIONS ABOVE THE CEILING.
15	REMOVE RIGID INSULATION AT SPANDREL PANEL LOCATIONS.
16	DOOR HARDWARE TO BE SALVAGED AND TURNED OVER TO OWNER.

- ### DEMOLITION GENERAL NOTES
- A. THE OWNER'S NORMAL OPERATIONS WILL BE CONTINUED DURING DEMOLITION. DEMOLITION CONTRACTOR SHALL NOT INTERFERE WITH THESE OPERATIONS IN ANY WAY WITHOUT THE OWNER'S EXPRESSED CONSENT.
  - B. OWNER WILL OCCUPY PORTIONS OF THE BUILDING IMMEDIATELY ADJACENT TO AREA OF SELECTIVE DEMOLITION WORK. SELECTIVE DEMOLITION WORK IN MANNER THAT WILL MINIMIZE NEED FOR DISRUPTION OF OWNER'S NORMAL OPERATIONS. REFER TO SPECIFICATIONS FOR MINIMUM ADVANCE NOTICE TO OWNER.
  - C. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
  - D. PROTECT FROM DAMAGE EXISTING CONSTRUCTION BARRIERS WHERE NEED TO PROTECT EXISTING CONSTRUCTION AND OWNER'S OPERATIONS. SEE SPECIFICATIONS FOR BARRIER CONSTRUCTION.
  - E. PROTECT FLOORS FROM DAMAGE EXISTING FRESH WORK THAT IS TO REMAIN IN PLACE AND BECOME EXPOSED DURING DEMOLITION OPERATIONS.
  - F. PROTECT FLOORS WITH SUITABLE COVERINGS WHEN NECESSARY.
  - G. COVER AND PROTECT FURNITURE, EQUIPMENT, AND FIXTURES FROM SOILAGE OR DAMAGE WHEN DEMOLITION WORK IS PERFORMED IN AREAS WHERE SUCH ITEMS HAVE NOT BEEN REMOVED.
  - H. PRIOR TO CUTTING EXISTING CONSTRUCTION, LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL FLOOR PENETRATIONS, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC. AND ANY WALLS THAT CONTAIN LIFE SAFETY VERTICAL RISERS THAT MUST REMAIN IN OPERATION DURING THE DEMOLITION WORK.
  - I. CONTRACTOR SHALL VERIFY ALL EXISTING BUILDING DIMENSIONS, PARTITION AND WALL LOCATIONS AND FLOOR ELEVATIONS IN FIELD AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES BEFORE THE START OF WORK.
  - J. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH INTENDED FUNCTION OF DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE BOTH NATURE AND EXTENT OF THE CONFLICT AND NOTIFY ARCHITECT.
  - K. MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION.
  - L. WHERE DEMOLITION IS REQUIRED BEYOND THE LIMITS OF THE CONTRACT TO ROUTE NEW ELECTRICAL, PIPING, CONDUITS, ETC., BATE WALLS AND SMOKE BARRIERS SHALL BE PATCHED BY CONTRACTOR REQUIRING PENETRATIONS. ALL FINISHES DAMAGED BY THE WORK SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
  - M. REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. RETURN ELEMENTS OF CONSTRUCTION AND SURFACES TO REMAIN, TO THE CONDITION EXISTING PRIOR TO START OF OPERATIONS. REPAIR ADJACENT CONSTRUCTION OR SURFACES SOILED OR DAMAGED BY SELECTIVE DEMOLITION.
  - N. PROVIDE SHORING, BRACING AND ANY OTHER MEANS REQUIRED TO PROTECT AND MAINTAIN THE SAFETY, INTEGRITY AND STABILITY OF ALL EXISTING AND NEW CONSTRUCTION.
  - O. WHEN ROOFING, GLAZING, FLASHING, COPING OR PORTIONS OF EXTERIOR WALLS ARE REMOVED OR OPENED, SUITABLE WEATHER PROTECTION SHALL BE PROVIDED AND MAINTAINED FOR THE DURATION OF WORK.
  - P. REMOVAL OF ITEMS NOTED INCLUDES REMOVAL OF ANCHORS, ADHESIVES, HARDWARE, CONDUIT, WIRE, PIPING, ETC. FOR A COMPLETE REMOVAL OF THE ITEMS OR SYSTEMS.
  - Q. ALL CONCRETE FLOOR SLABS NOTED TO BE REMOVED SHALL BE SAWCUT TO PROVIDE A NEAT JOINT.
  - R. SEE STRUCTURAL, MECHANICAL, CIVIL, AND ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE OF DEMOLITION WORK.
  - S. SALVAGE ALL EXISTING REMOVED BRICK FOR PATCHING AND REFINISH WORK AS REQUIRED.
  - T. DEMOLITION OF ANY EXISTING CONSTRUCTION SHALL INCLUDE WHAT IS NECESSARY AND REQUIRED TO ACCOMMODATE THE REQUIREMENTS OF NEW CONSTRUCTION. REFER TO THE APPROPRIATE DRAWINGS AS TO THE EXTENT OF NEW CONSTRUCTION TO REMAIN.
  - U. SURFACES SHALL BE CLEANED AND PREPARED WITHIN THE NEW MATERIALS GUIDELINES OF INSTALLATION OF THEIR PRODUCT IN EXISTING CONSTRUCTION.
  - V. ALL DEMOLITION SHALL COMPLY WITH APPLICABLE LOCAL CODES AND STATE CODES AND ORDINANCES.
  - W. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

**JLG** architects  
224 Broadway  
Fargo, ND 58102  
PHONE: 701.384.0237  
FACSIMILE: 701.384.0228  
www.jlgarchitects.com  
copyright © 2022

**HE** HEYER ENGINEERING  
STRUCTURAL CONSULTANTS  
4180 28th Ave S  
Fargo, ND 58104  
(701) 280-0949  
WWW.HEYERENGINEERING.COM  
509.269.2025

**CMTA**  
A LICENSED CONTRACTOR  
www.cmta.com | 877-390-9551

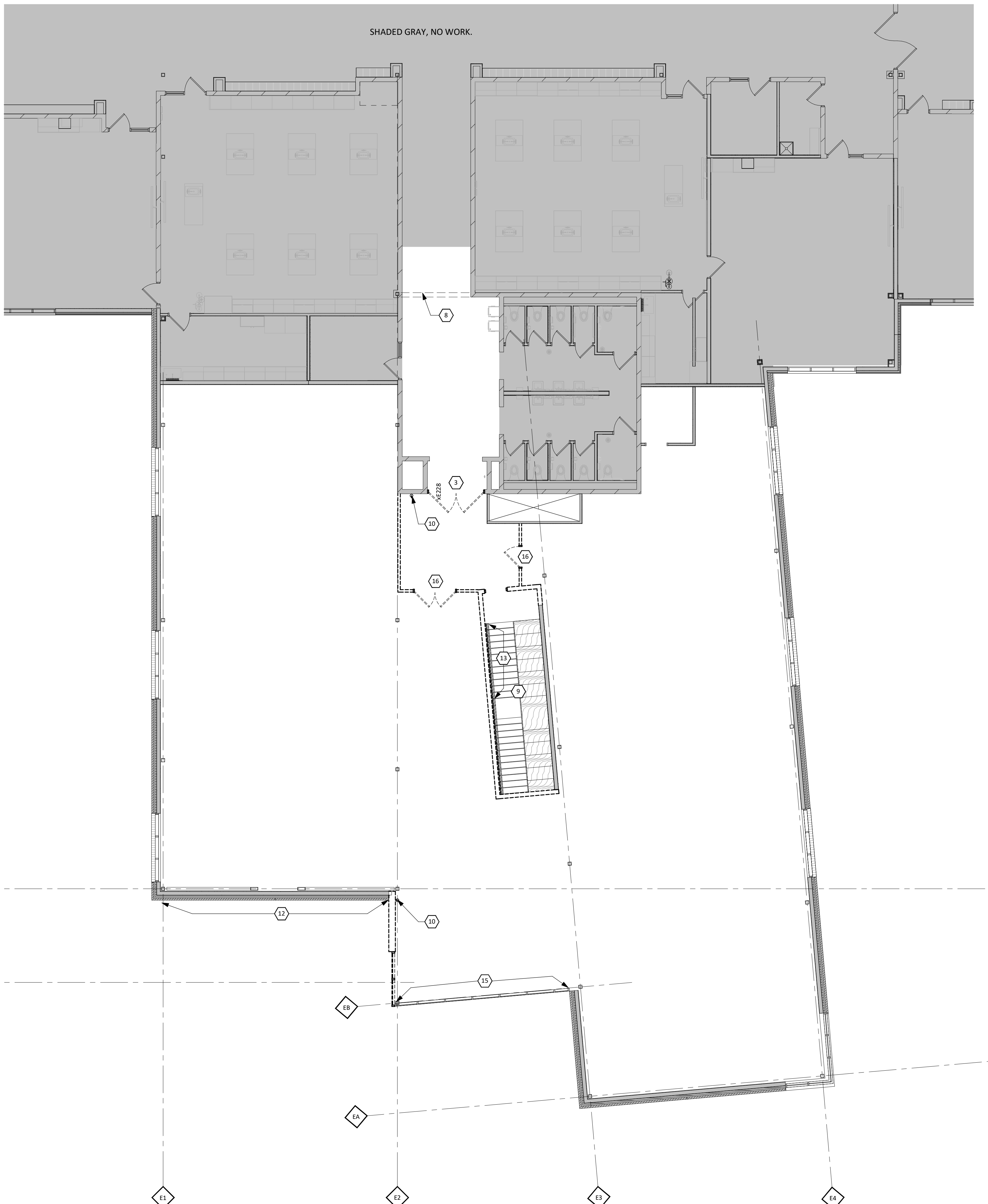
**MBN**  
MECHANICAL - ELECTRICAL - CIVIL  
800 778 6622, 701 280 7000  
FARGO, ND 58102  
FAX: 701 280 4848

*W.S. Jorgensen*  
Professional Engineer  
No. 12203  
N.D. 12/2022  
12/21/22

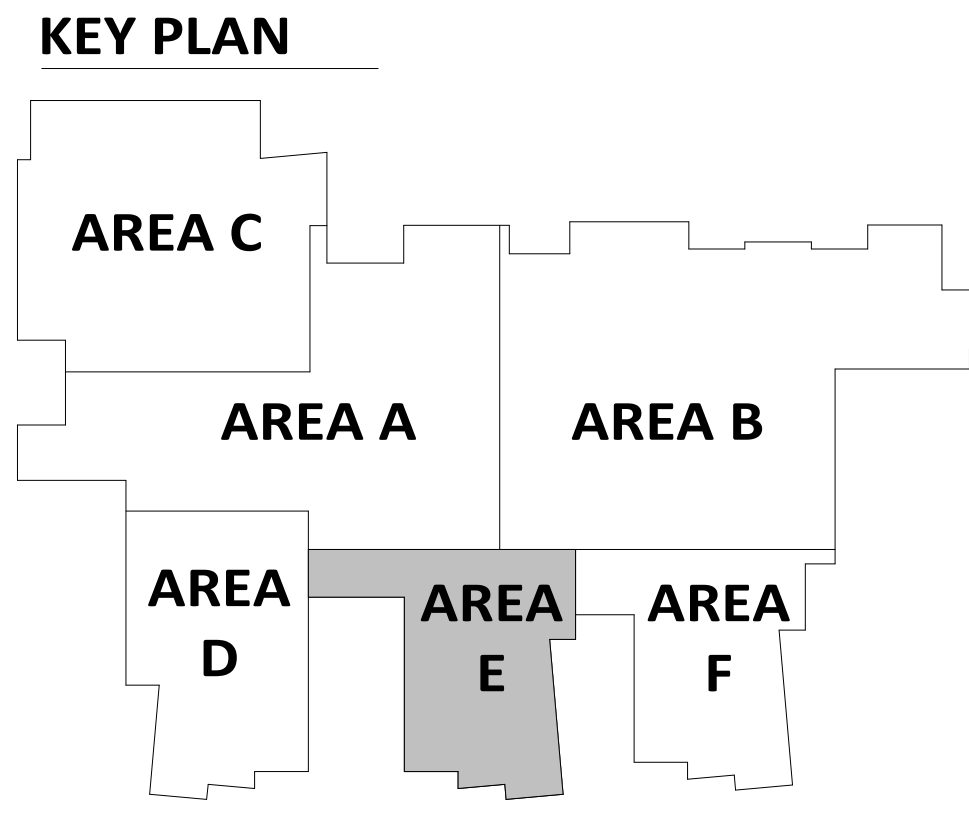
**REVISION SCHEDULE**  
NO. DESCRIPTION DATE



9A A101 FIRST FLOOR DEMO PLAN - AREA E  
SCALE: 1/8" = 1'-0"



5A A101 SECOND FLOOR DEMO PLAN - AREA E  
SCALE: 1/8" = 1'-0"



WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
PHASE: 100% CDs  
PROJECT: 23231  
SHEET: **A101**  
DEMO PLANS

4/27/2025 2:32:46 PM



FLOOR PLAN GENERAL NOTES

- A. ALL PARTITION TYPES ARE "AT" UNLESS OTHERWISE NOTED.
- B. PROVIDE WALL REINFORCEMENT AT WALL-MOUNTED SHELVES AND STORAGE UNITS, MARKER BOARDS, MONITORS AND OTHER CONTRACTOR OR OWNER FURNISHED WALL-MOUNTED ITEMS REQUIRING SUCH.
- C. FOR ALL CARRIAGE TYPE CHANGES BETWEEN ROOMS, TRANSITION SHALL OCCUR AT CENTERLINE OF DOOR PANEL TYPICAL.
- D. ALL DIMENSIONS ARE TO FACE OF METAL STUD OR FACE OF MASONRY UNLESS OTHERWISE NOTED.
- E. COORDINATE ALL FLOOR OPENING DIMENSIONS AND CLEARANCES FOR DUCTWORK WITH MECHANICAL.

FLOOR PLAN KEYNOTES

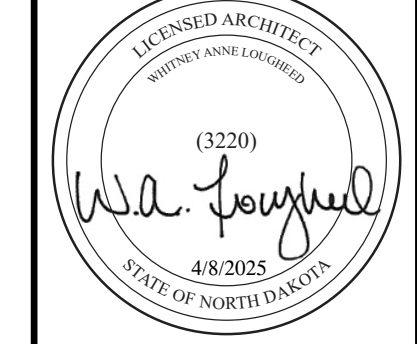
KEYNOTE	DESCRIPTION
1	PATCH HINGE POCKETS IN FRAME. WELD SMOOTH PAINT FRAME, PT-4.
2	INSTALL (1) ADDITIONAL LAYER OF (GYP BD-1) THIS WALL.
3	INSTALL (1) LAYER OF (GYP BD-1) THIS WALL. ADD (INSUL-R) AS REQ. TO COMPLETE ACOUSTIC WALL INSULATION.
4	RETURN (1) LAYER OF (GYP BD-1) INTO WINDOW HEAD AND JAMBS. SEE FINISH PLANS FOR SILES.
5	INSTALL (1) LAYER OF (GYP BD-1) THIS WALL.
6	INSTALL NEW ALUMINUM SILL FLASHING. REMOVE CURTAIN WALL MULLION CAP AS REQUIRED FOR PROPER INSTALLATION. SEE DETAILS.
7	COORDINATE (ACC. PNL-1) LOCATION AND WALL OPENING WITH EXISTING MECHANICAL AS REQUIRED.



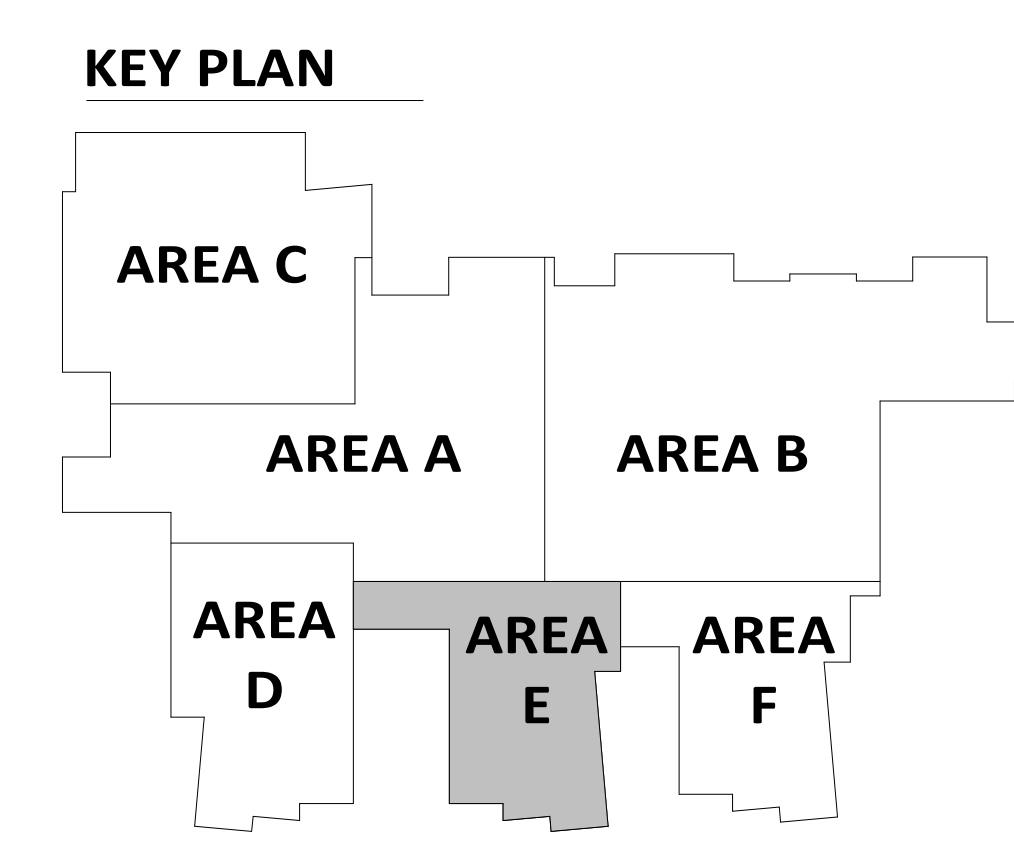
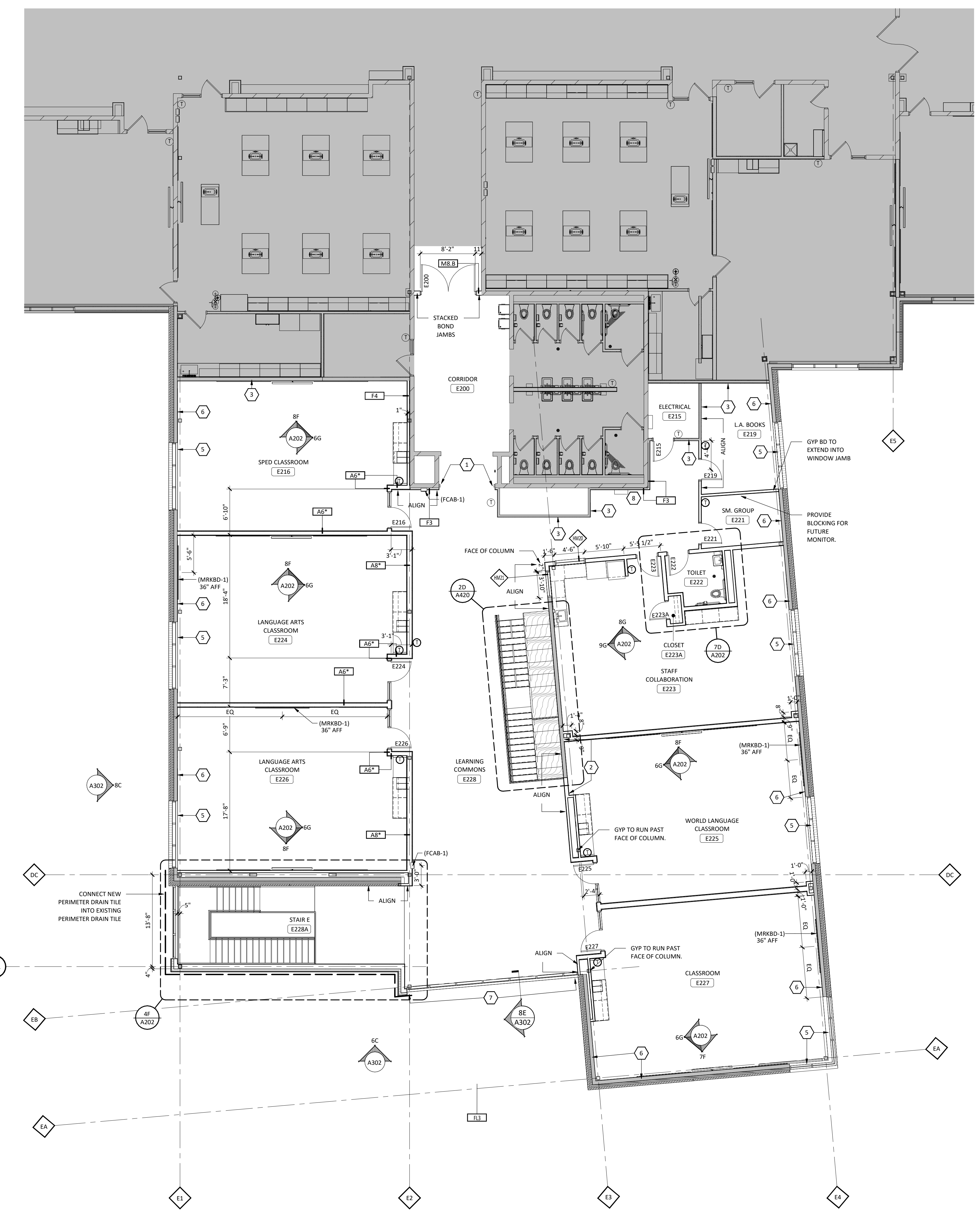
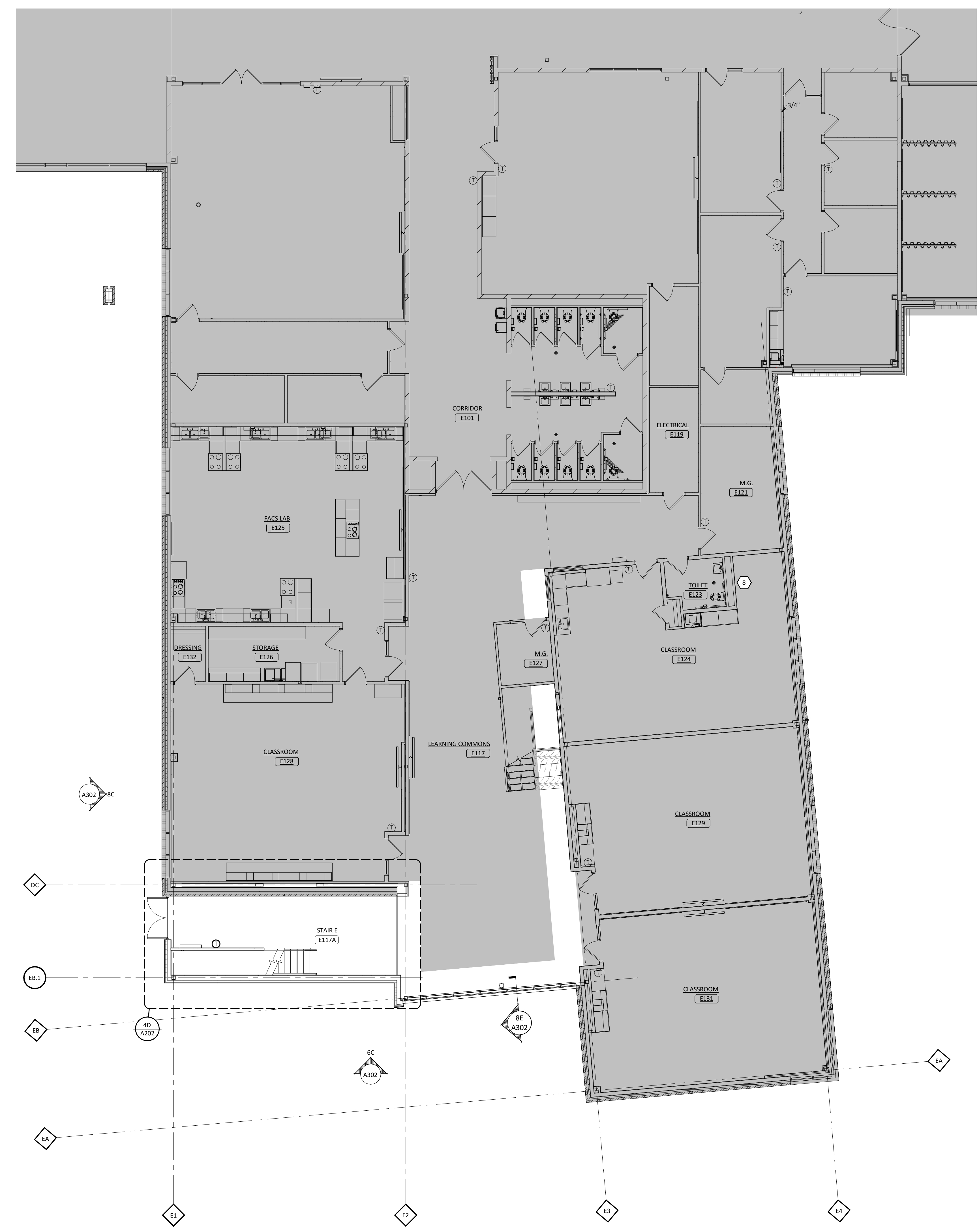
224 Broadway  
 Fargo, ND 58102  
 phone 701.384.0237  
 facsimile 701.384.0228  
 www.jlgarchitects.com  
 copyright © 2025



4180 24th Ave S  
 Fargo, ND 58104  
 (701) 701-2800-0949  
 WWW.HEYERENGINEERING.COM  
 039.0265.2025



REVISION SCHEDULE		
NO.	DESCRIPTION	DATE



9A A201 FIRST FLOOR PLAN - AREA E  
 SCALE: 1/8" = 1'-0"

5A A201 SECOND FLOOR PLAN - AREA E  
 SCALE: 1/8" = 1'-0"

WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
 8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA  
 DATE: 04/08/25  
 PHASE: 100% CDs  
 PROJECT: 23231  
 SHEET: **A201**  
 FLOOR PLANS



FLOOR PLAN GENERAL NOTES

- ALL PARTITION TYPES ARE "AT" UNLESS OTHERWISE NOTED.
- PROVIDE WALL REINFORCEMENT AT WALL MOUNTED SHELVES AND STORAGE UNITS, MARKER BOARDS, MONITORS AND OTHER CONTRACTOR OR OWNER FURNISHED WALL MOUNTED ITEMS REQUIRING SUCH.
- FOR ALL CARPET TYPE CHANGES BETWEEN ROOMS, TRANSITION SHALL OCCUR AT CENTERLINE OF DOOR PANEL TYPICAL.
- ALL DIMENSIONS ARE TO FACE OF METAL STUD OR FACE OF MASONRY UNLESS OTHERWISE NOTED.
- COORDINATE ALL FLOOR OPENING DIMENSIONS AND CLEARANCES FOR DUCTWORK WITH MECHANICAL.

INTERIOR ELEVATION GENERAL NOTES

- SEE THIS SHEET FOR STANDARD CASEWORK ELEVATIONS AND CONSTRUCTION.
- ANY EXPOSED CABINET EDGE SHALL BE FINISHED EDGE TO MATCH ADJACENT CABINET FINISH.
- SEE THIS SHEET FOR TOILET RIM HEIGHTS AND ACCESSORY MOUNTING HEIGHTS.
- PROVIDE FILLER AT BETWEEN ENDS OF ALL CASEWORK AND WALL CONDITIONS AS REQUIRED, U.N.O.

CASEWORK GENERAL NOTES

- \* DENOTES LOCK TO BE PROVIDED FOR DOORS OR DRAWERS
- INDICATES WIDTH OF CABINET (IN INCHES)
- CABINET TYPE - SEE SCHEDULE THIS SHEET

- FOR ACTUAL ROOM DIMENSIONS REFER TO FLOOR PLANS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE FABRICATION.
- OVERALL LENGTH OF TOPS SHALL BE DETERMINED BY CASEWORK DIMENSIONS AS INDICATED ON PLANS. SUCH LENGTHS SHALL REMAIN CONSTANT REGARDLESS OF SUCCESSIVE ROOM'S STANDARDS.
- OVERALL HEIGHT OF BASE CABINET TOPS SHALL BE MAINTAINED AS SHOWN ON INTERIOR ELEVATIONS.
- INSTALLATION OF CASEWORK SHALL BEGIN AT THE HIGH POINT OF THE ROOM WITH ALL LEVELS IN AS FAR AS POSSIBLE.
- COUNTERTOPS AND SPLASHES SHALL BE SCRIBED TO MATCH IRREGULARITIES AND CONTOURS OF WALLS.
- CASEWORK SHALL BE INSTALLED ON TOP OF FINISHED VLT.
- PROVIDE FINISHED BACK & END PANELS TO COMPLETE THE ENCLOSURE OF ALL CABINETS TO WALLS AND ADJACENT CABINETS.
- INTERIOR FINISH AT OPEN CABINETS WITHOUT DOORS SHALL MATCH THE COLOR, MATERIAL AND FINISH OF ADJACENT CABINET EXTERIORS, U.N.O.
- CONCEALED CABINET BACKS, DRAWER BODY, AND DRAWER BOTTOMS ARE TO BE 1/2" THICKNESS.
- DOORS IN TALL CABINETS (TYPE "T" CABINETS) SHALL BE 3/4" THICK.
- SEE INTERIOR ELEVATIONS FOR LOCKING CONFIGURATIONS AND LOCATIONS.
- SEE INTERIOR ELEVATIONS FOR ALL FINISHES.
- SEE INTERIOR ELEVATIONS FOR BASE AT CABINETS.
- INTERIOR FINISH AT OPEN CABINETS WITHOUT DOORS SHALL MATCH THE COLOR, MATERIAL AND FINISH OF ADJACENT CABINET EXTERIORS, U.N.O.
- CONCEALED CABINET BACKS, DRAWER BODY, AND DRAWER BOTTOMS ARE TO BE 1/2" THICKNESS.
- DOOR AND DRAWER FACE, WALL AND TALL CABINET TOP AND BOTTOMS, CABINET SOLES, DRAWER SPREADERS, CABINET BACK REAR HANGERS, STRUCTURAL DIVIDERS, EXPOSED CABINET BACKS, AND SHELVES OF LESS THAN 30 INCH SPACE: 3/4" THICKNESS.
- SHELVES OVER 30 INCH SPAN AND LIBRARY STACK SHELVING ARE TO BE 1" THICKNESS.



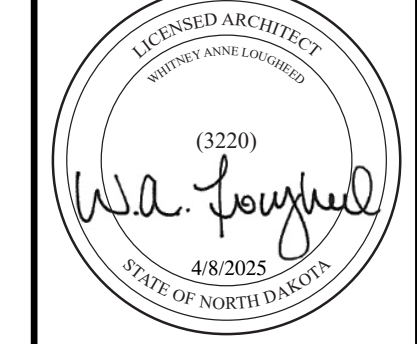
224 Broadway  
Fargo, ND 58102  
PHONE: 701.336.4023  
FACSIMILE: 701.336.4028  
www.jlgarchitects.com  
copyright © 2022



4180 24th Ave S  
Fargo, ND 58104  
(701) 280-0949  
WWW.HEYERENGINEERING.COM  
039.0265.2025

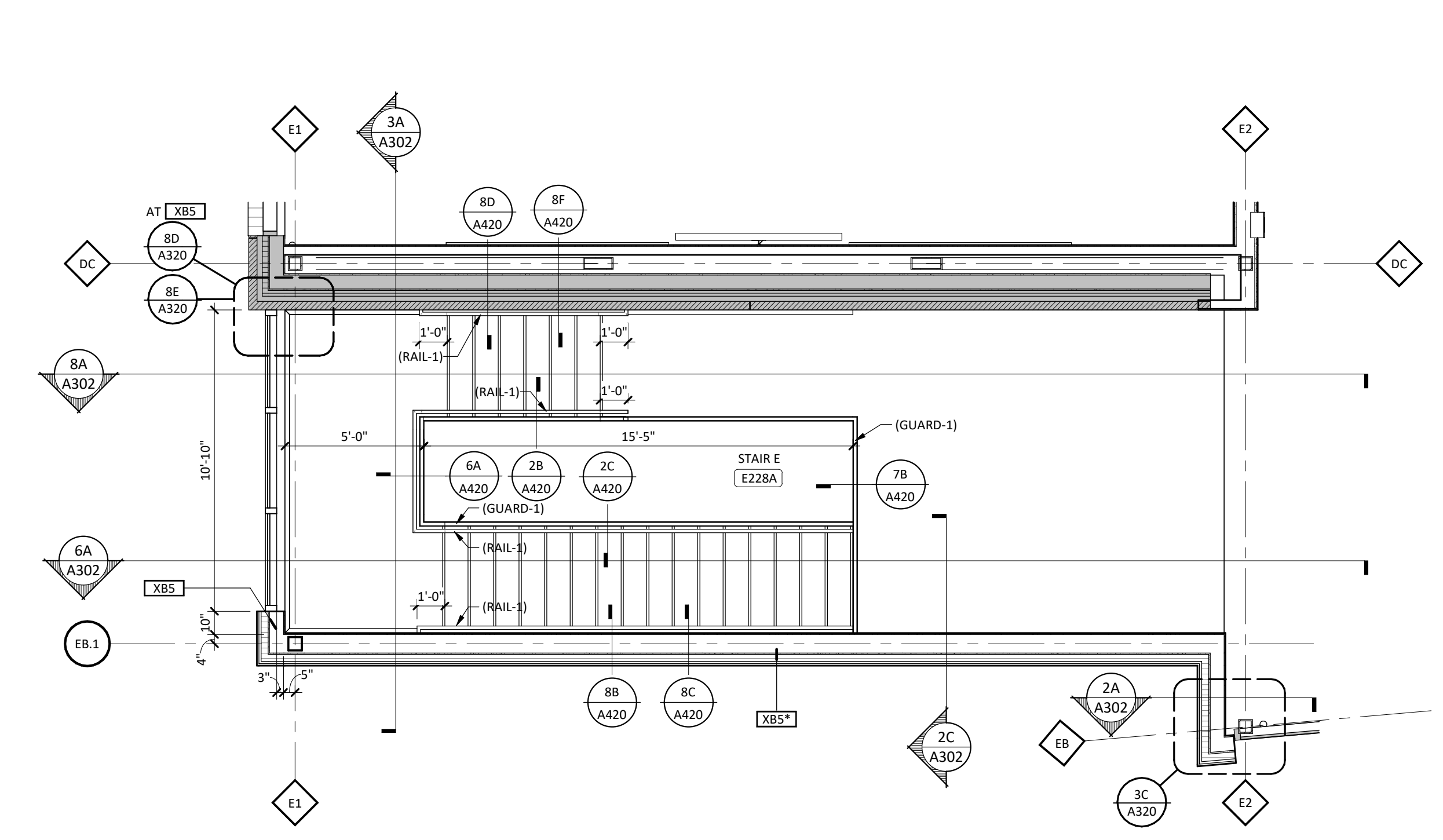


1115 WEST 10TH AVE  
FARGO, ND 58103  
PHONE: 701.785.4444  
FAX: 701.785.4444

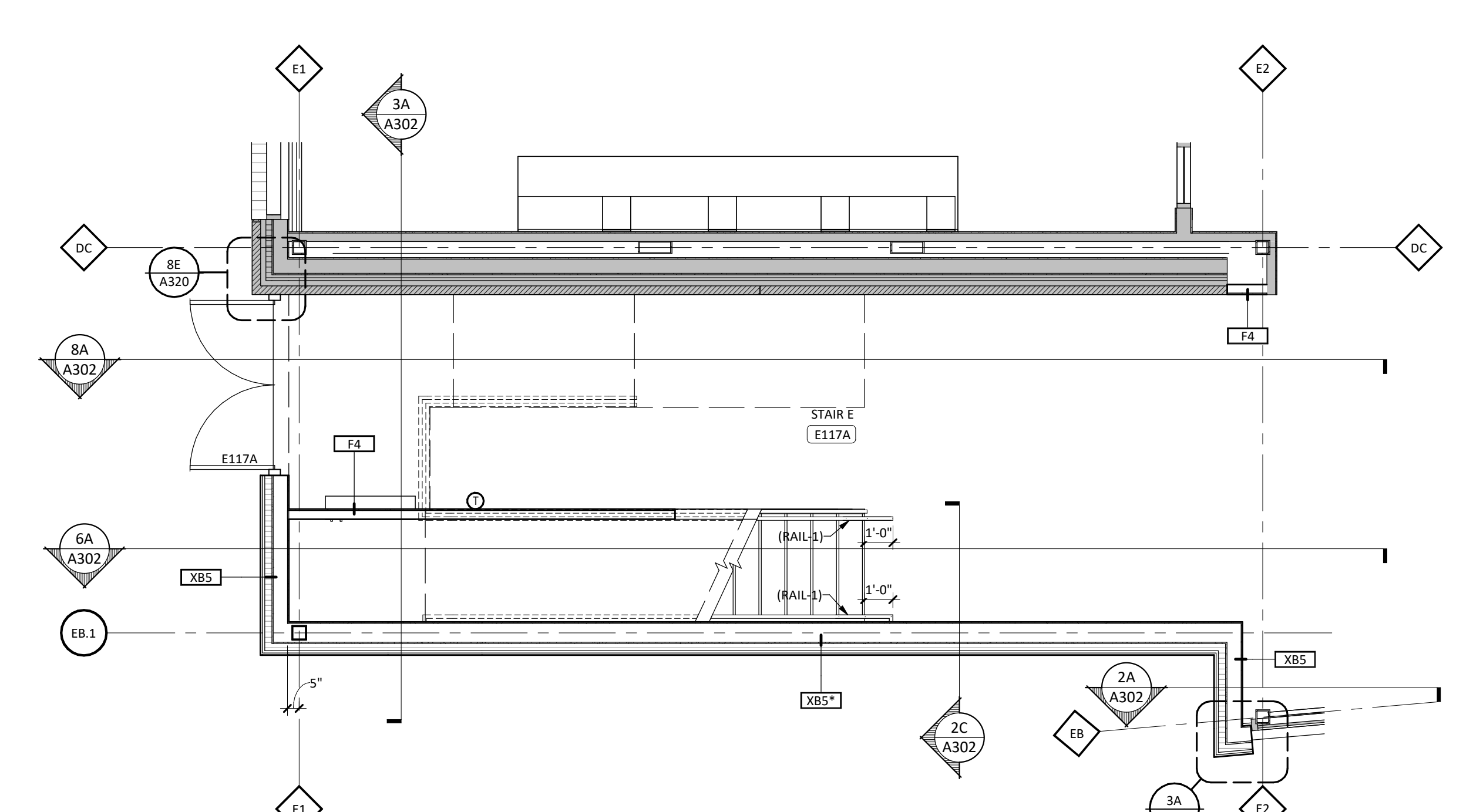


MECHANICAL - ELECTRICAL - CIVIL  
1001 7TH ST SW, SUITE 300  
FARGO, ND 58103  
PHONE: 701.785.4444  
FAX: 701.785.4444

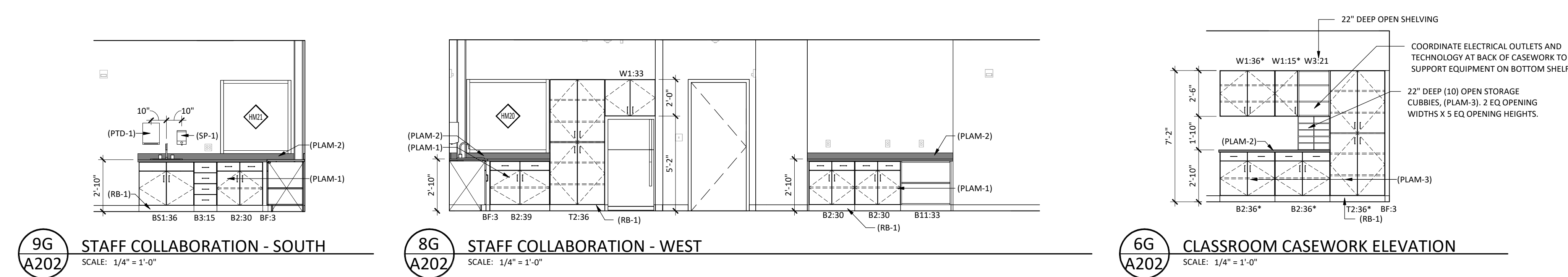
REVISION SCHEDULE  
NO. DESCRIPTION DATE



4F STAIR ADDITION - SECOND FLOOR ENLARGED PLAN  
SCALE: 1/4" = 1'-0"



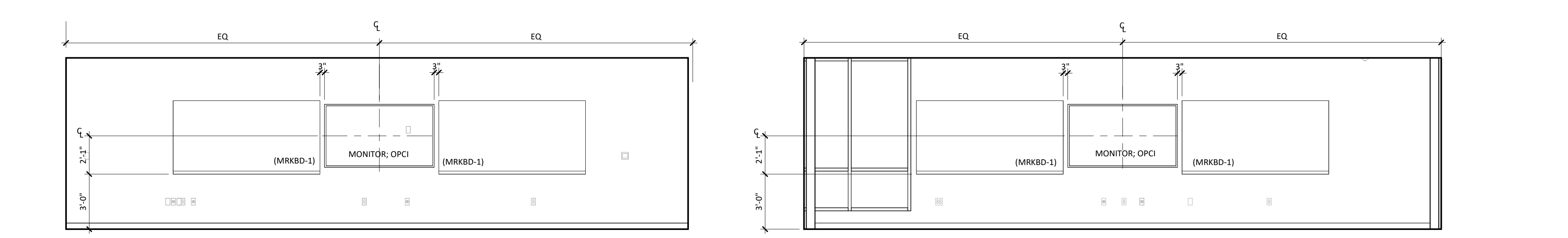
4D STAIR ADDITION - FIRST FLOOR ENLARGED PLAN  
SCALE: 1/4" = 1'-0"



9G STAFF COLLABORATION - SOUTH  
SCALE: 1/4" = 1'-0"

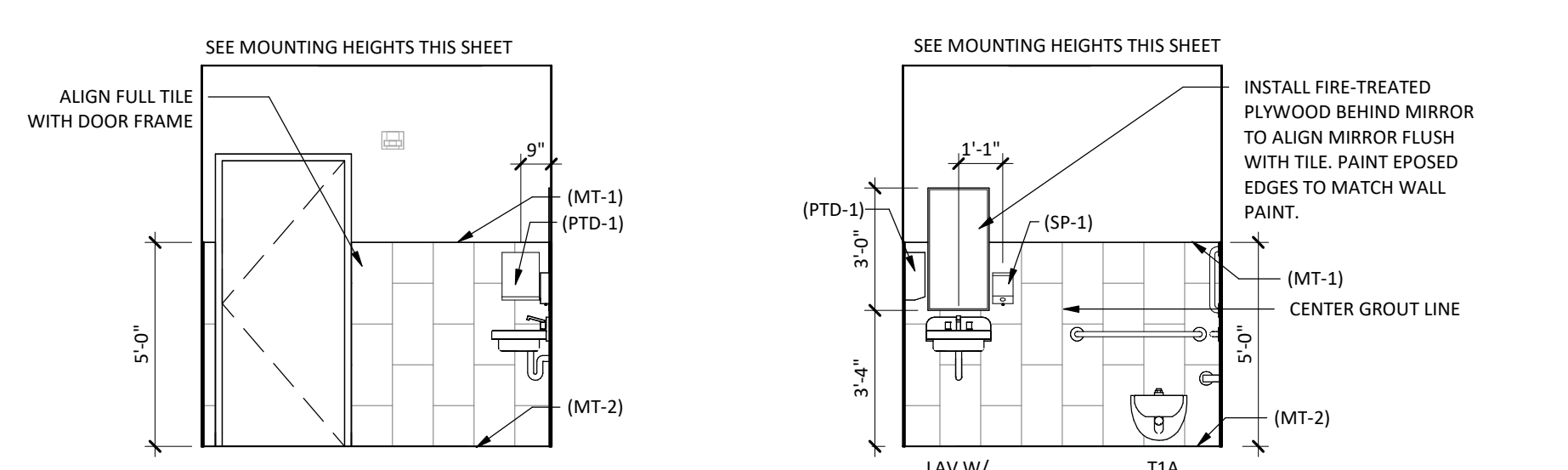
8G STAFF COLLABORATION - WEST  
SCALE: 1/4" = 1'-0"

6G CLASSROOM CASEWORK ELEVATION  
SCALE: 1/4" = 1'-0"



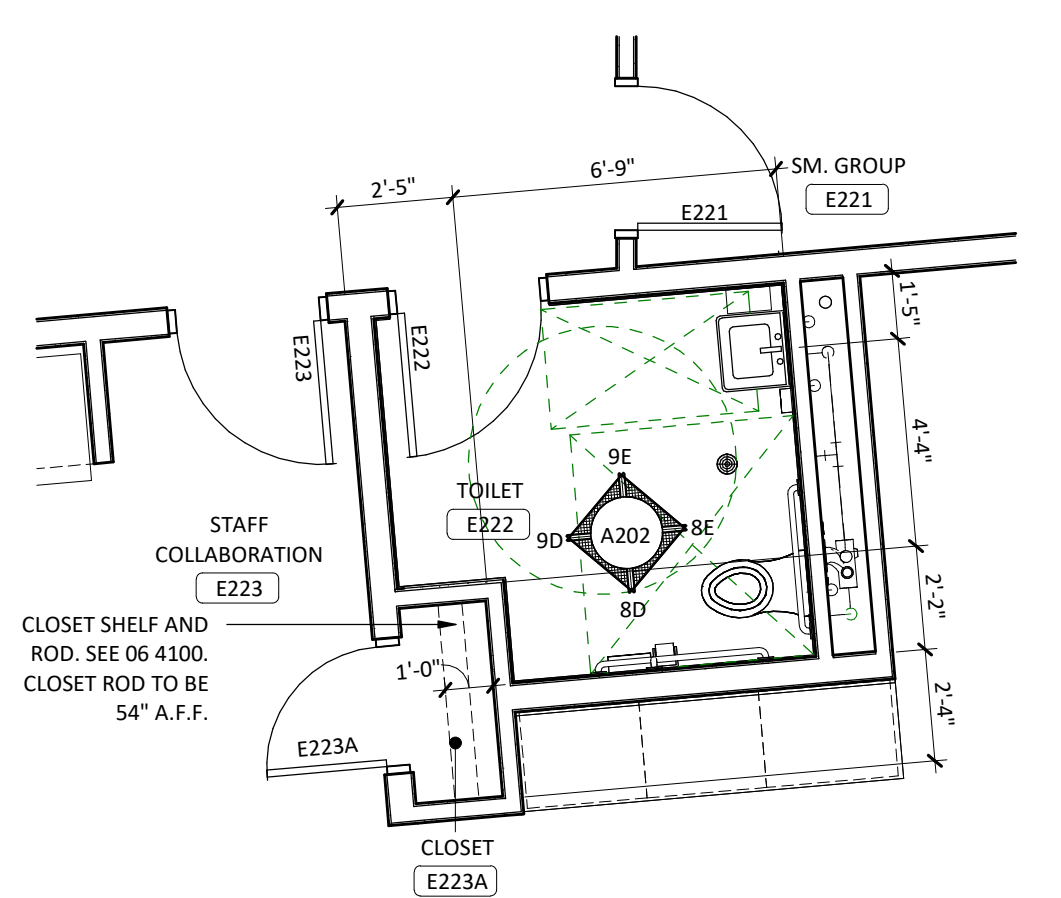
8F TEACHING WALL ELEVATION - TYPICAL  
SCALE: 1/4" = 1'-0"

7F TEACHING WALL ELEVATION - MODIFIED  
SCALE: 1/4" = 1'-0"

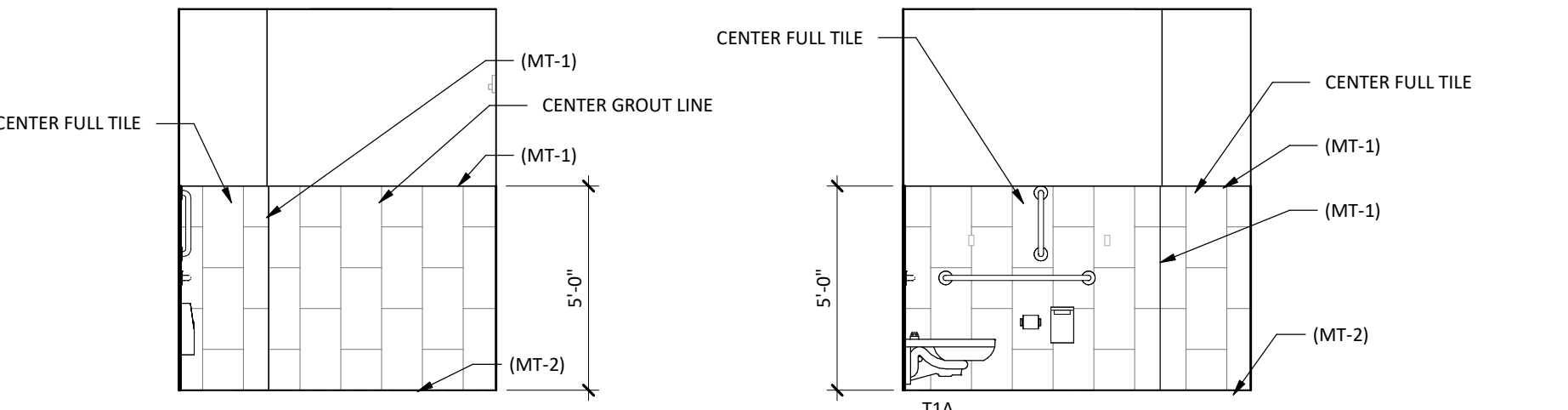


9E TOILET E22 - WEST  
SCALE: 1/4" = 1'-0"

8E TOILET E22 NORTH  
SCALE: 1/4" = 1'-0"

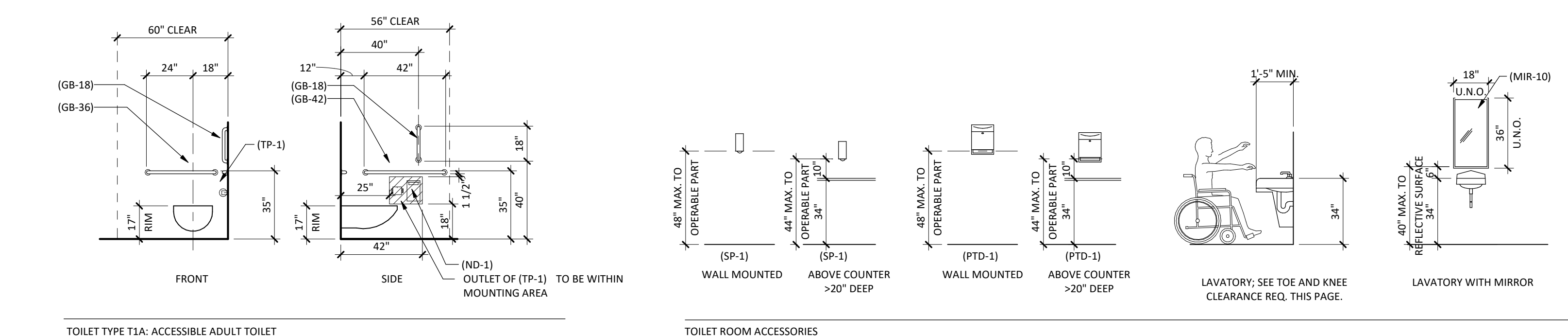


7D TOILET E222  
SCALE: 1/4" = 1'-0"



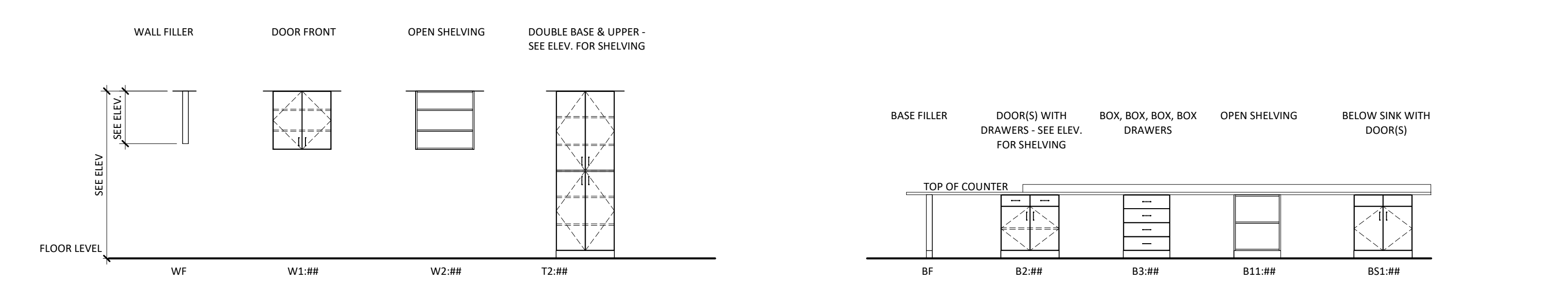
9D TOILET E222 - SOUTH  
SCALE: 1/4" = 1'-0"

8D TOILET E222 - EAST  
SCALE: 1/4" = 1'-0"



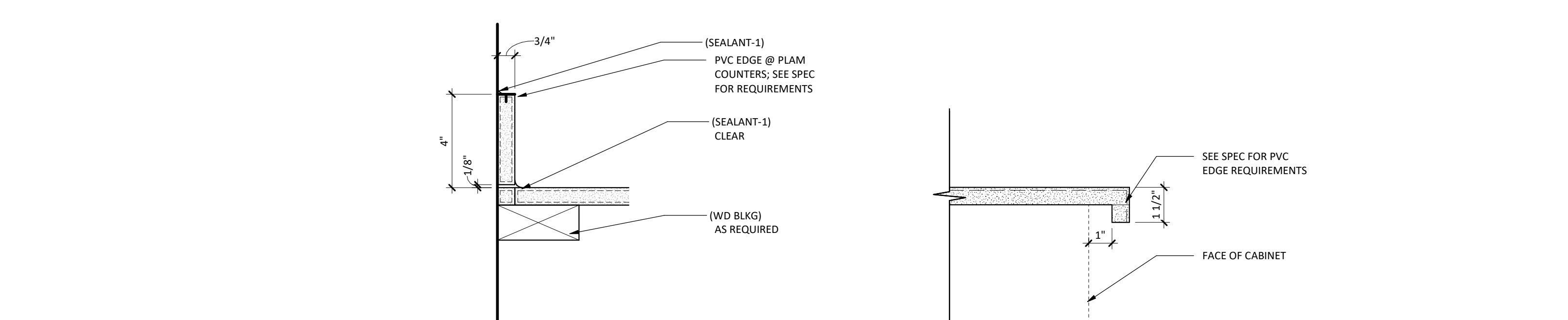
TOILET ROOM ACCESSORIES

MOUNTING HEIGHTS - TOILETS, GRAB BARS, AND ACCESSORIES



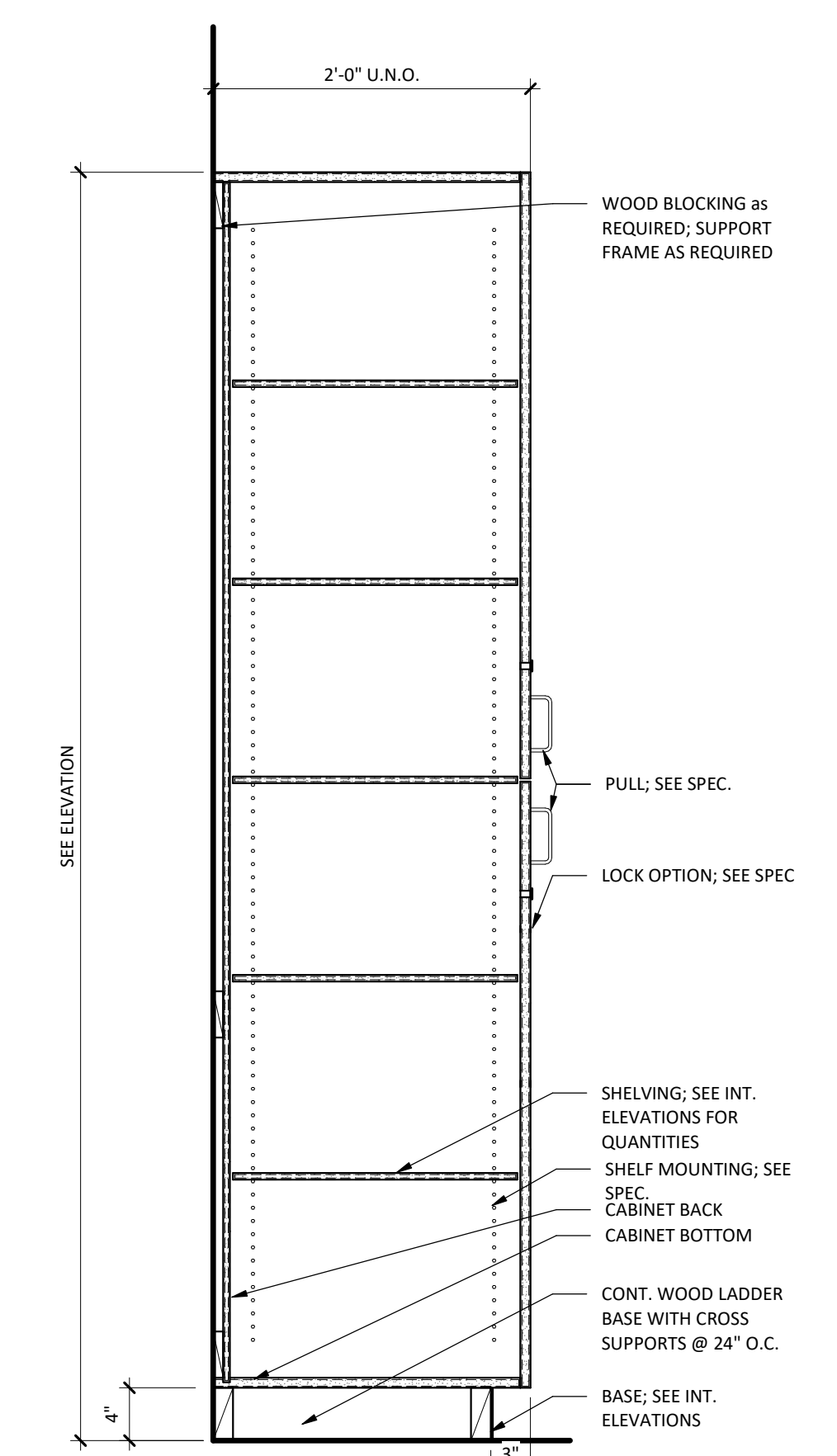
WALL CABINETS

BASE CABINETS

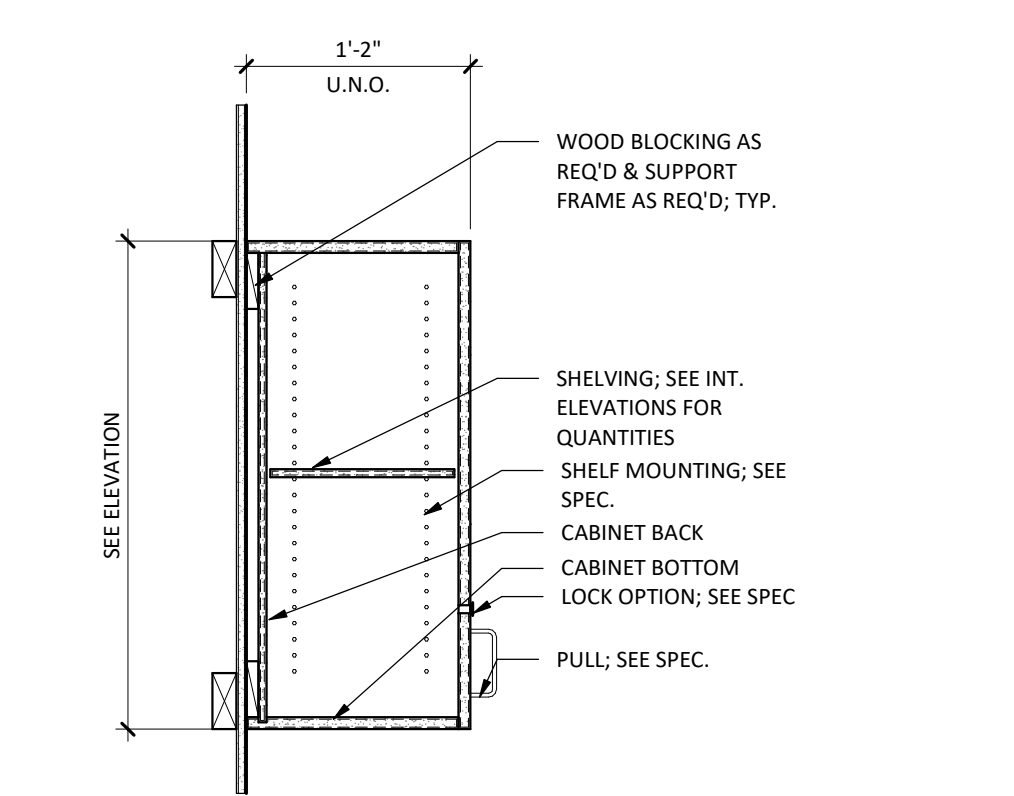


8A BACKSPASH SCRIBE  
SCALE: 3" = 1'-0"

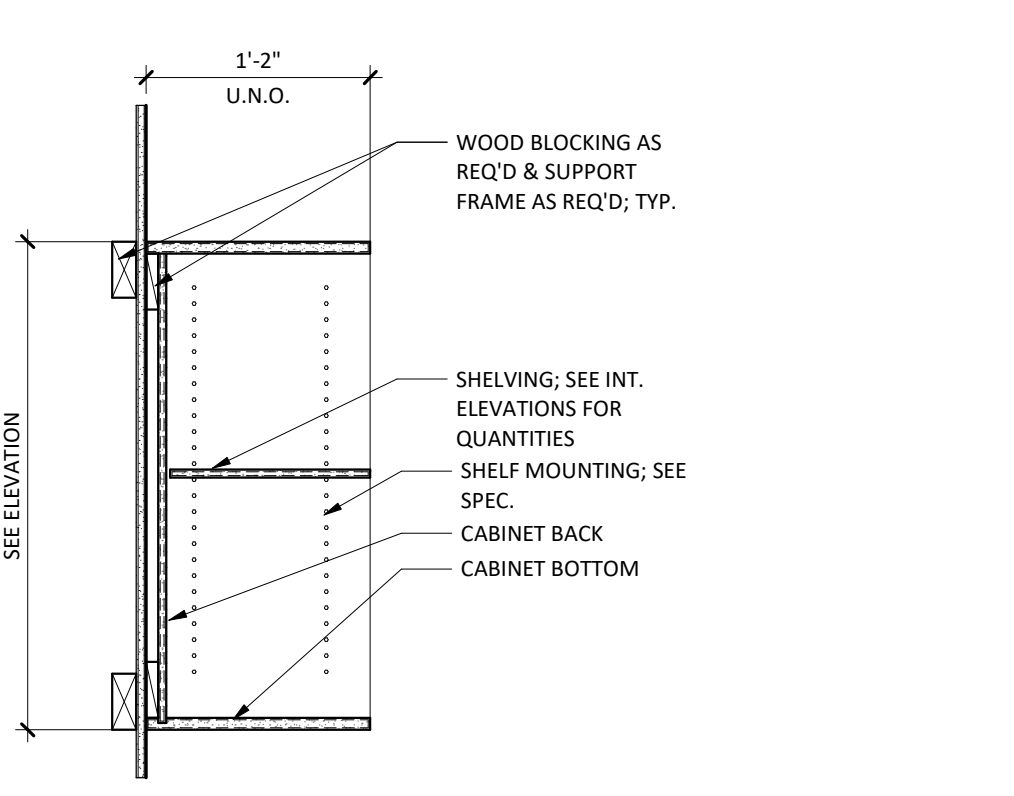
7A COUNTERTOP EDGE  
SCALE: 3" = 1'-0"



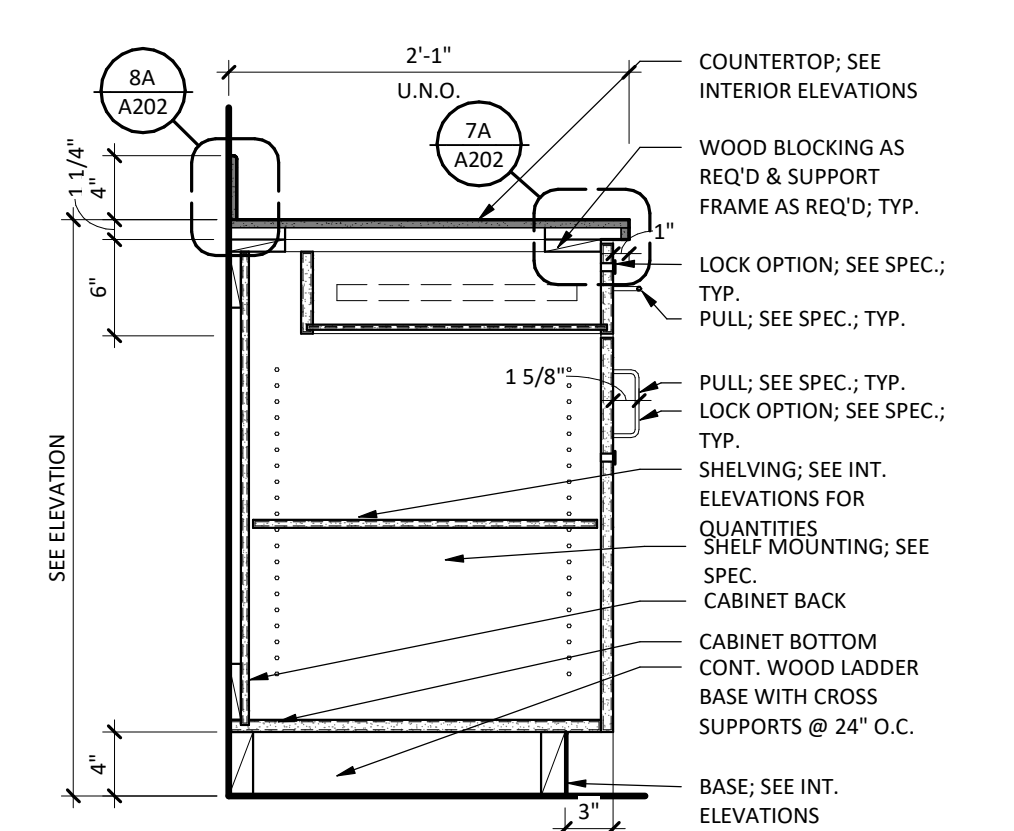
6A T4 - DOUBLE UPPER & BASE  
SCALE: 1" = 1'-0"



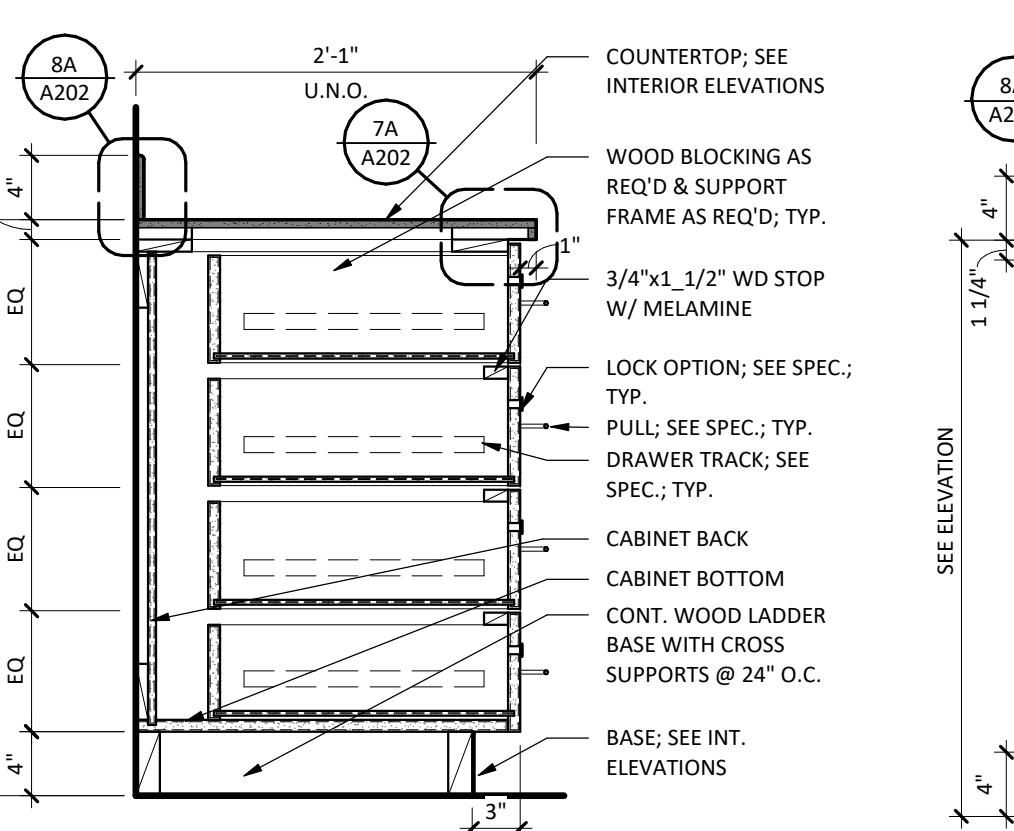
5B W1 - WALL CAB. DOOR FRONT  
SCALE: 1" = 1'-0"



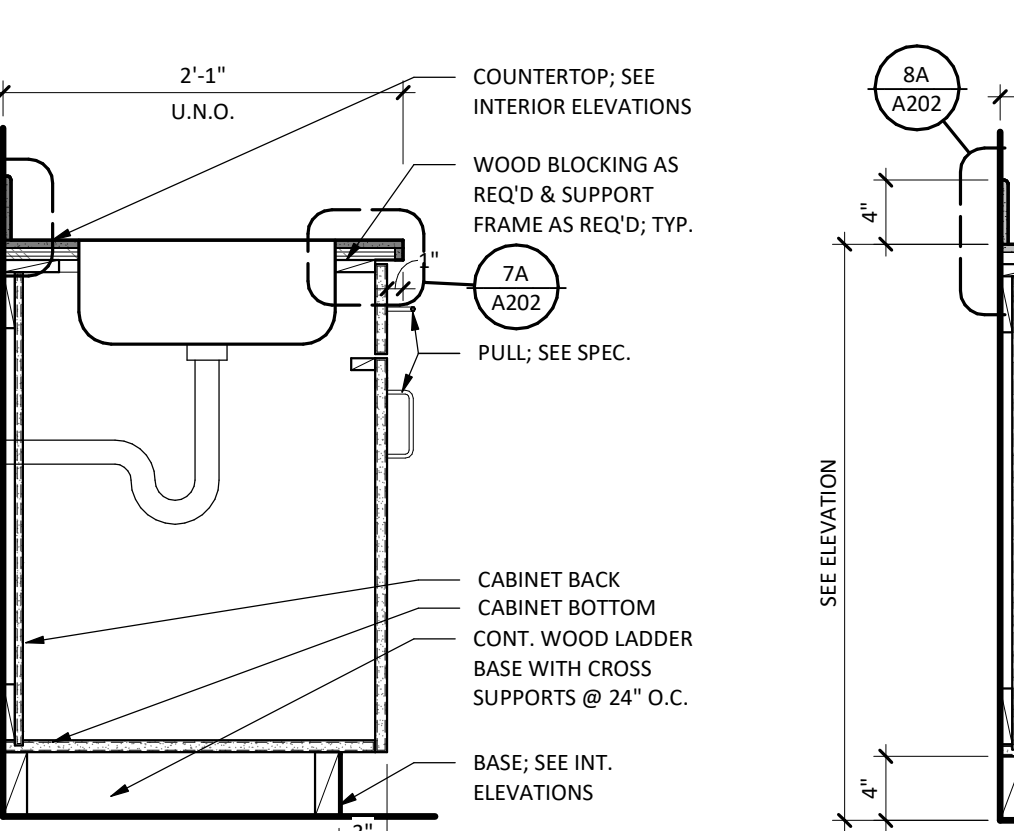
4B W3 - WALL CAB. OPEN SHELVING  
SCALE: 1" = 1'-0"



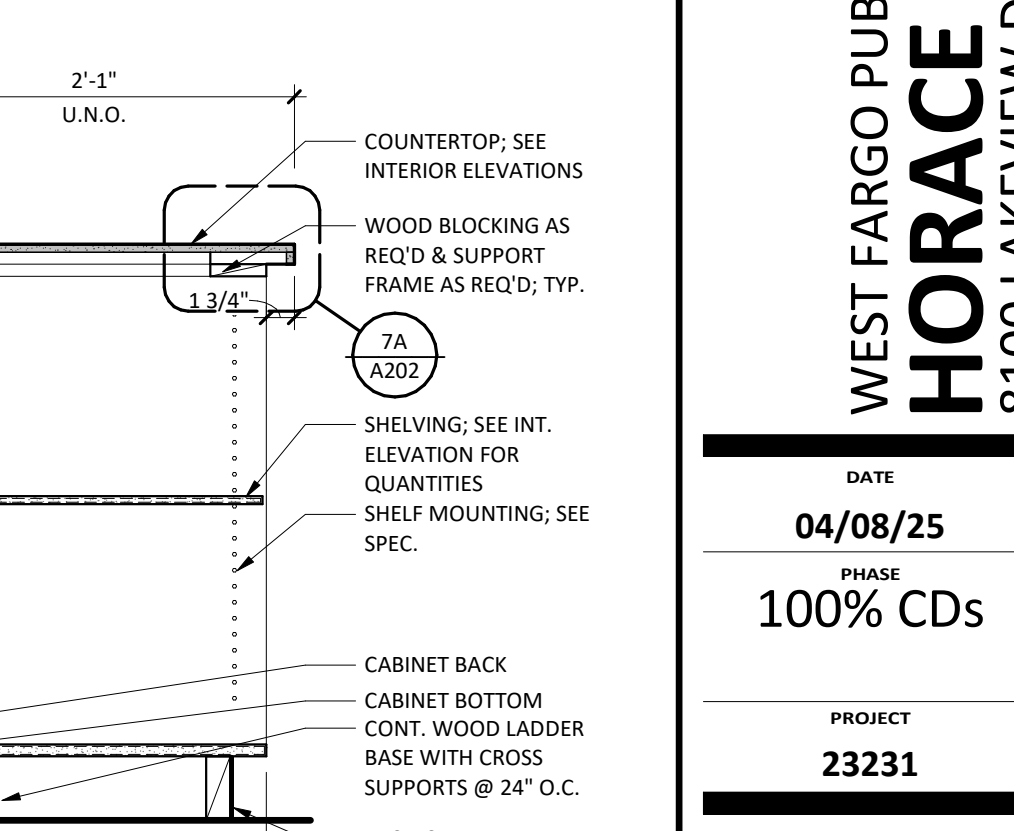
5A B2 - BASE BA. W/ DOOR, DRAWER  
SCALE: 1" = 1'-0"



3A B3 - BASE CAB. 4 BOX  
SCALE: 1" = 1'-0"



2A BS1 - BELOW SINK CABINET  
SCALE: 1" = 1'-0"

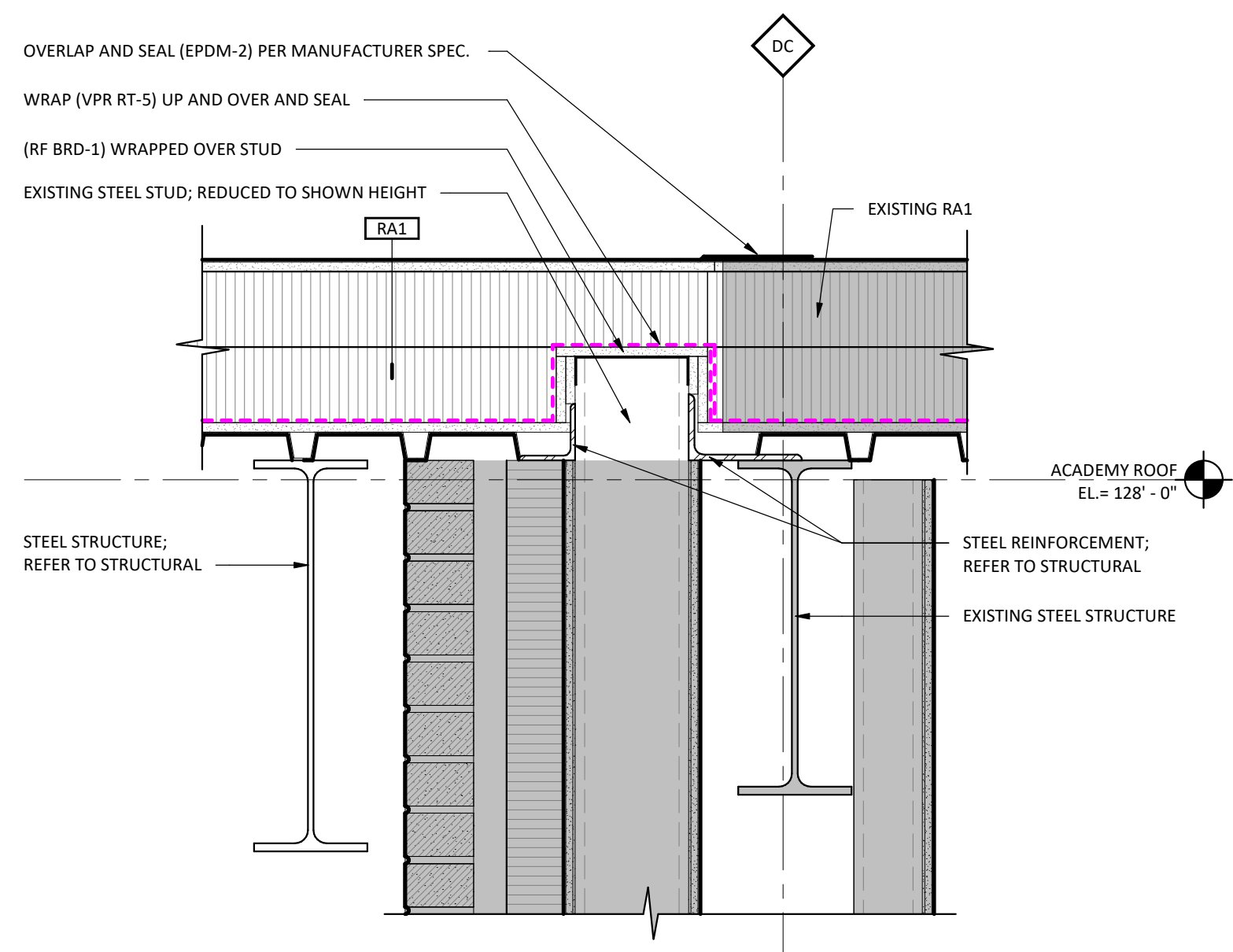


1A B11 - BASE CAB - OPEN SHELVING  
SCALE: 1" = 1'-0"

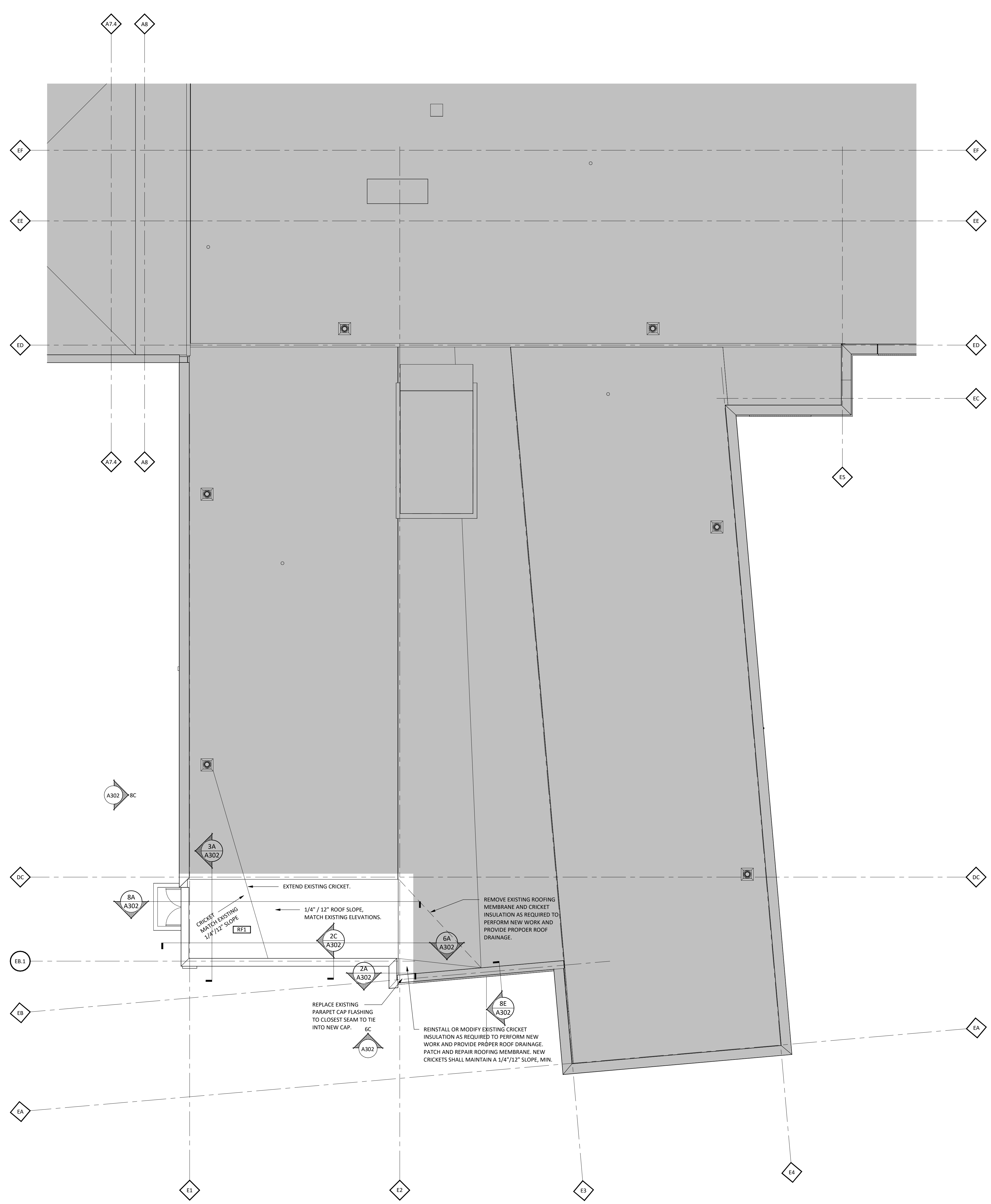
WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
PHASE: 100% CDs  
PROJECT: 23231  
SHEET: A202  
ENLARGED PLANS & CASEWORK





**8F**  
**A203** EXISTING TO NEW ROOF TRANSITION  
SCALE: 1/4" = 1'-0"



**9A**  
**A203** ROOF PLAN - AREA E  
SCALE: 1/8" = 1'-0"

**ROOF PLAN GENERAL NOTES**

- A. COORDINATE FINAL SIZE AND FINAL LOCATION OF ALL EQUIPMENT SUPPORT WITH THE APPROPRIATE EQUIPMENT MANUFACTURER.
- B. PROVIDE POSITIVE SLOPE TO ALL ROOF DRAINS. ROOF SLOPE TO BE 1/4" PER FOOT MINIMUM.
- C. SEE SHEET A330 FOR ROOF DETAILS. ROOFING CONTRACTOR TO VERIFY ALL ROOF DETAILS COMPLY WITH APPROVED ROOFING SYSTEM. IT IS THE RESPONSIBILITY OF THE ROOFING CONTRACTOR TO SUPPLY ANY ADDITIONAL DETAILS AND/OR MATERIALS TO ENSURE COMPLIANCE WITH WARRANTY.
- D. REFER TO MECHANICAL AND ELECTRICAL DOCUMENTS FOR ALL PIPES, CURBS, VENTS, DUCTS, CONDUITS, AND OTHER FEATURES EXTENDING THROUGH ROOF SURFACES WHICH REQUIRE FLASHING. COORDINATE SIZE AND LOCATION OF SAME.
- E. FOR ROOF ASSEMBLY TYPES SEE SHEET E100.
- F. INLET OF OVERFLOW ROOF SUMPS SHALL BE LOCATED 2" ABOVE ROOF SUMP INLET (TOP) MIN.
- G. SEE MECHANICAL DRAWINGS M-XX FOR FINAL QUANTITIES & FINAL LOCATIONS OF VENTS THRU ROOF.
- H. PROVIDE SPLASH BLOCK AT ALL PRIMARY AND SECONDARY RAIN CONDUCTOR TERMINATIONS ONTO SINGLE-PLY MEMBRANE ROOFING.
- I. INSTALL ROOF FRAMES PRIOR TO CUTTING & REMOVING OF ANY METAL DECK.

- R.S. - ROOF SUMP
- H.P. - HIGH POINT
- D.S. - OVERFLOW ROOF SUMP
- S.C. - SCUPPER
- V.T.R. - VENT THRU ROOF



214 Broadway  
Fargo, ND 58102  
PHONE: 701.384.0237  
FACSIMILE: 701.384.0228  
www.jlgarchitects.com  
copyright © 2022



4180 24th Ave S  
Fargo, ND 58104  
(701) 280-0949  
WWW.HEYERENGINEERING.COM  
039.0269.2025



REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
PHASE: 100% CDs

PROJECT: 23231

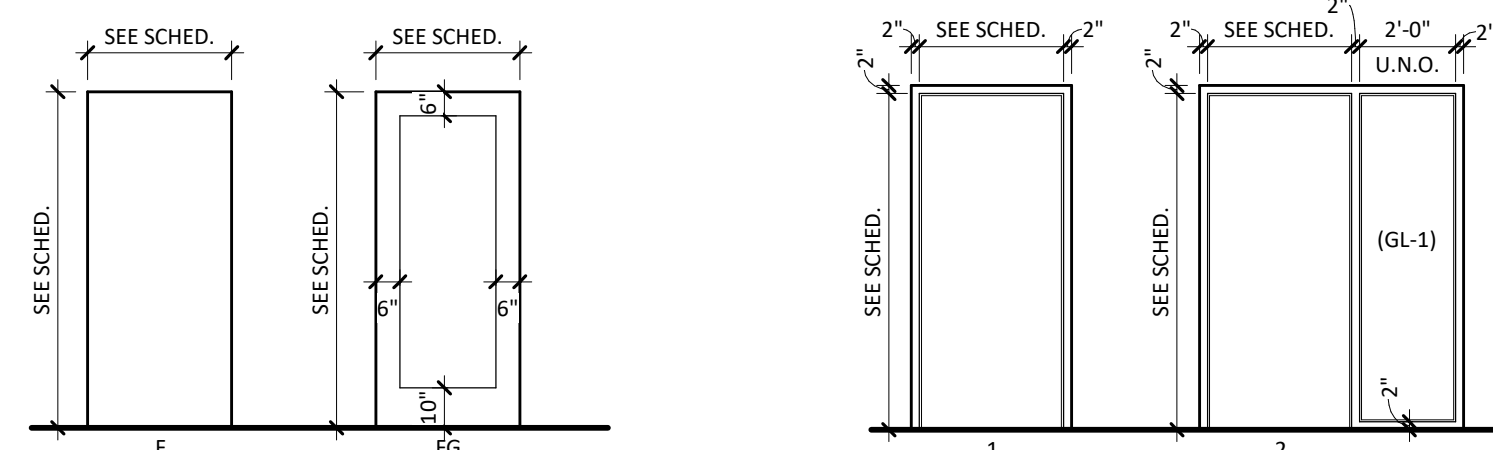
SHEET: **A203**  
ROOF PLAN & DETAILS

4/22/2025 2:15:53 PM



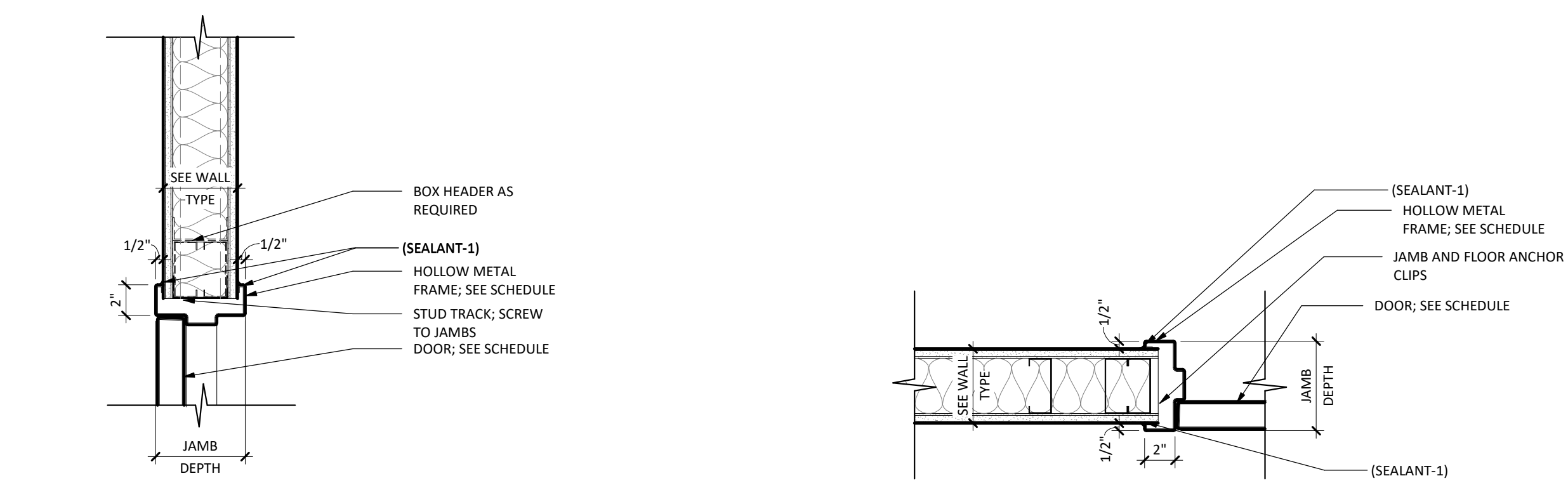
**FIRST FLOOR DOOR SCHEDULE**

TAG	HW SET	RATING	ROOM NAME	SIZE			MATERIAL	TYPE	DOORS			FRAME			DETAILS			NOTES
				WIDTH	HEIGHT	THK			FINISH	GLZ	MATERIAL	TYPE	FINISH	GLZ	JAMB	HEAD	SILL	
1ST FLOOR	E137A	340.1	--	STAIR E	6'-0"	7'-0"	1 3/4"	EX ALUM	FG FG	EX PREFIN	EXIST.	EX ALUM	CW-2	EX PREFIN	SEE ELEV.	--	--	Relocated door, frame and hardware from #E137B
2ND FLOOR	E200	48.0	--	CORRIDOR	8'-0"	7'-0"	1 3/4"	EX WD	F-F	EX PREFIN	--	HM	3A	PT-4	--	RD/A220	SD/A220	Relocated door and hardware from #E228
	E215	14.0	--	ELECTRICAL	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	EXHM	1	PT-4	--	EX	EX	
	E216	3.0	--	SPED CLASSROOM	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	2	PT-4	SEE ELEV.	8E/A220	9E/A220	
	E218	3.0	--	L.A. BOOKS	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	1	PT-4	--	8E/A220	9E/A220	
	E221	3.0	--	SM GROUP	3'-0"	7'-0"	1 3/4"	WD	FG	PREFIN	GL-1	HM	1	PT-4	--	8E/A220	9E/A220	
	E222	12.0	--	TOILET	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	1	PT-4	--	8E/A220	9E/A220	
	E223	3.0	--	STAFF COLLABORATION	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	1	PT-4	--	8E/A220	9E/A220	
	E233A	1.0	--	CLOSET	2'-6"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	1	PT-4	--	8E/A220	9E/A220	
	E234	3.0	--	LANGUAGE ARTS CLASSROOM	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	2	PT-4	SEE ELEV.	8E/A220	9E/A220	
	E235	3.0	--	WORLD LANGUAGE CLASSROOM	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	2	PT-4	SEE ELEV.	8E/A220	9E/A220	
	E236	3.0	--	LANGUAGE ARTS CLASSROOM	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	2	PT-4	SEE ELEV.	8E/A220	9E/A220	
	E237	3.0	--	CLASSROOM	3'-0"	7'-0"	1 3/4"	WD	F	PREFIN	--	HM	3	PT-4	SEE ELEV.	8E/A220	9E/A220	



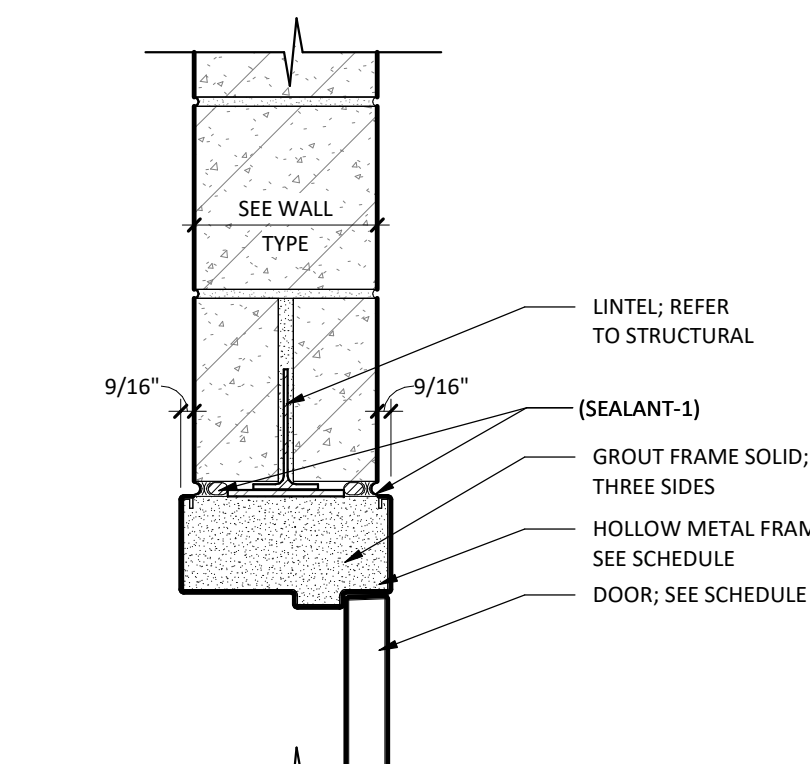
**DOOR TYPES**

**FRAME TYPES**

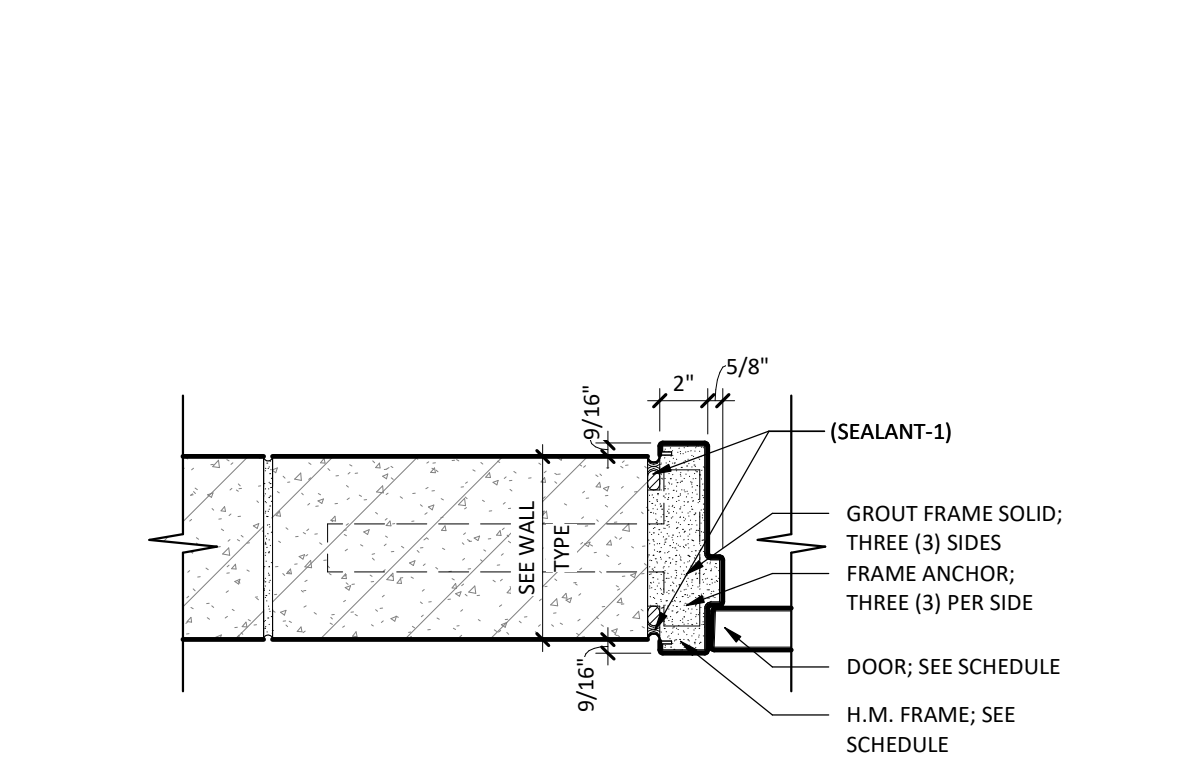


**9E HM HEAD AT WALL TYPE 'A'**  
SCALE: 1/2" = 1'-0"

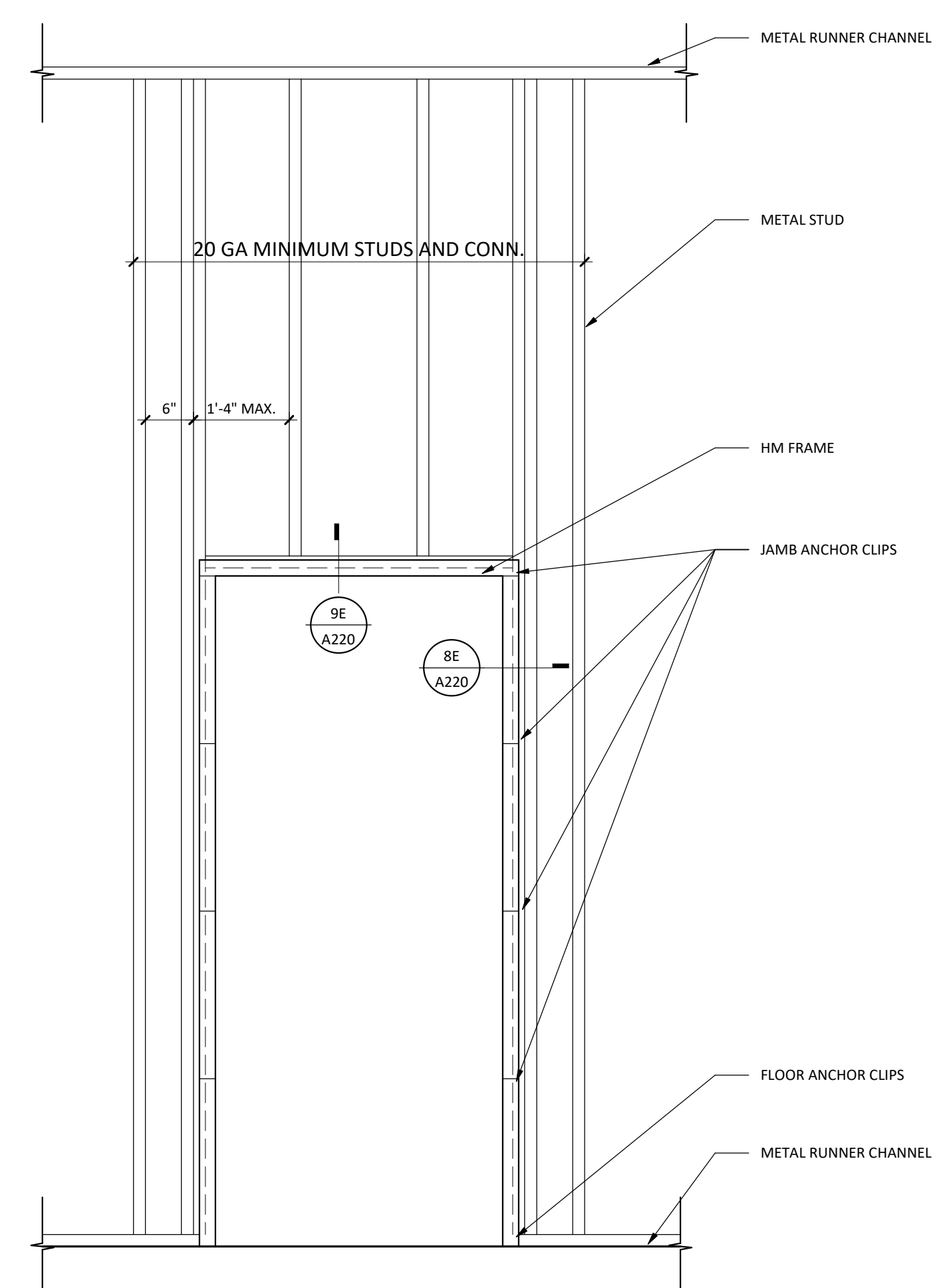
**8E HM JAMB AT WALL TYPE 'A'**  
SCALE: 1/2" = 1'-0"



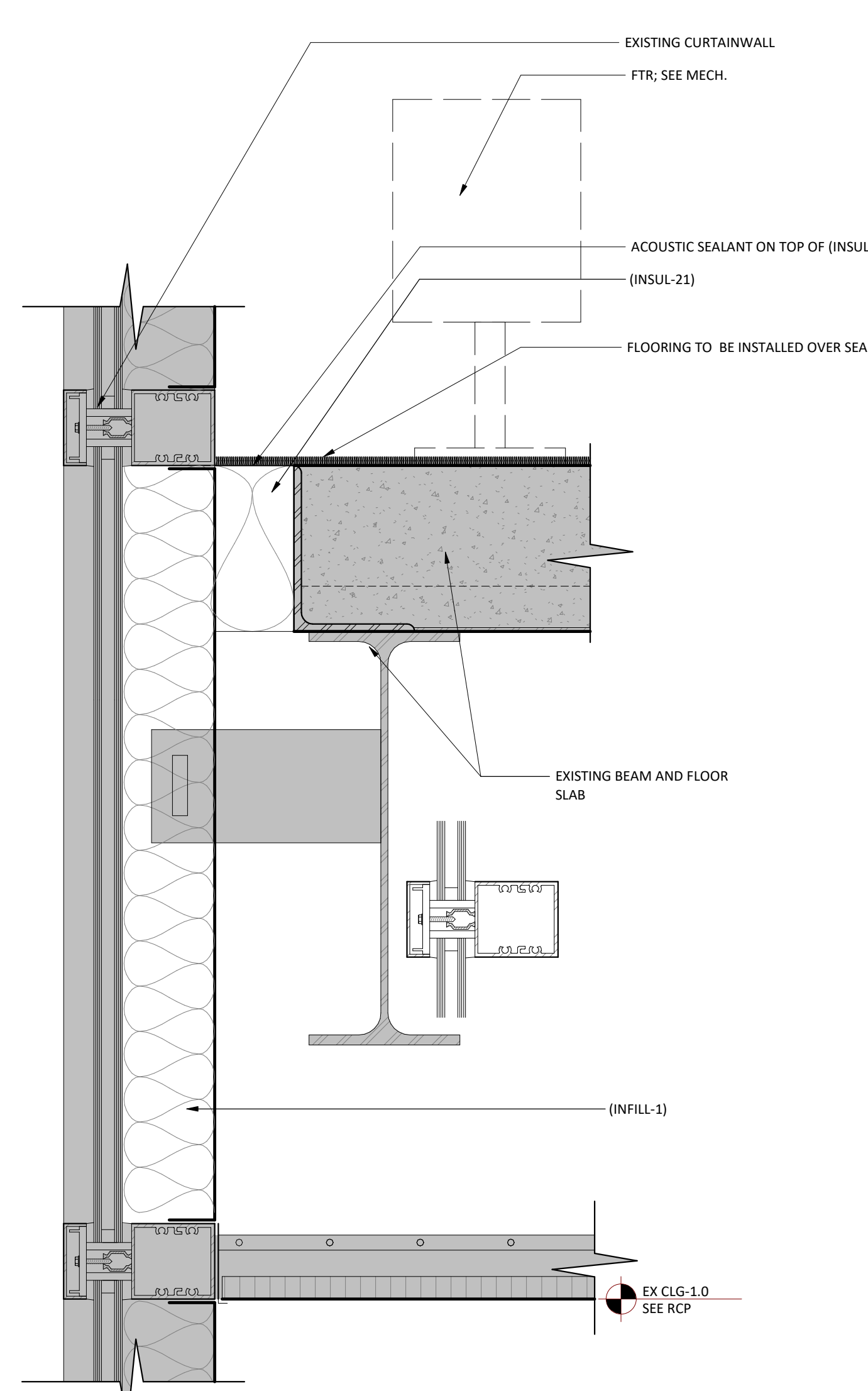
**9D HM HEAD @ WALL TYPE 'M'**  
SCALE: 1/2" = 1'-0"



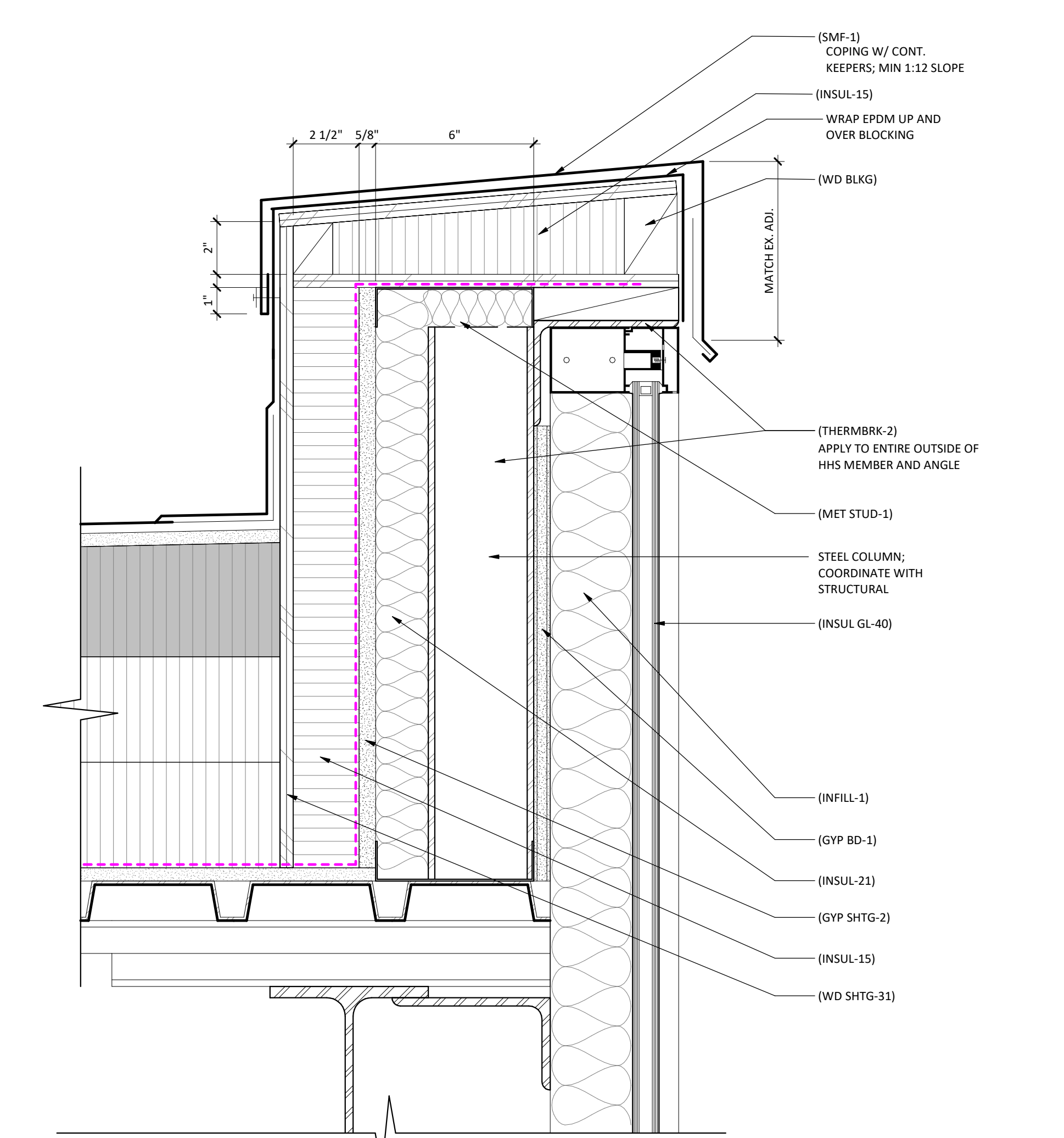
**8D HM JAMB AT WALL TYPE 'M'**  
SCALE: 1/2" = 1'-0"



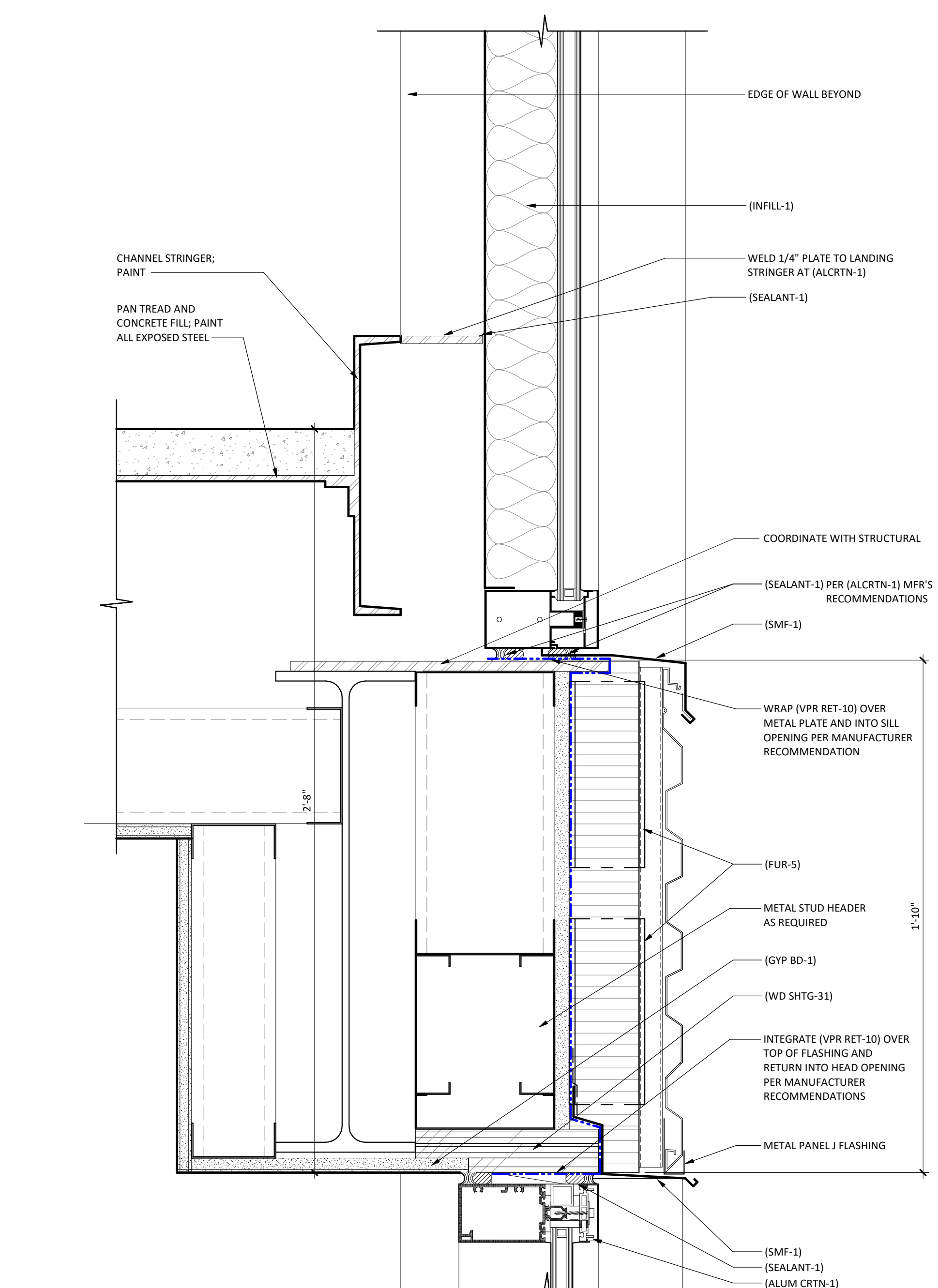
**6D DOOR FRAMING ELEVATION 1**  
SCALE: 3/4" = 1'-0"



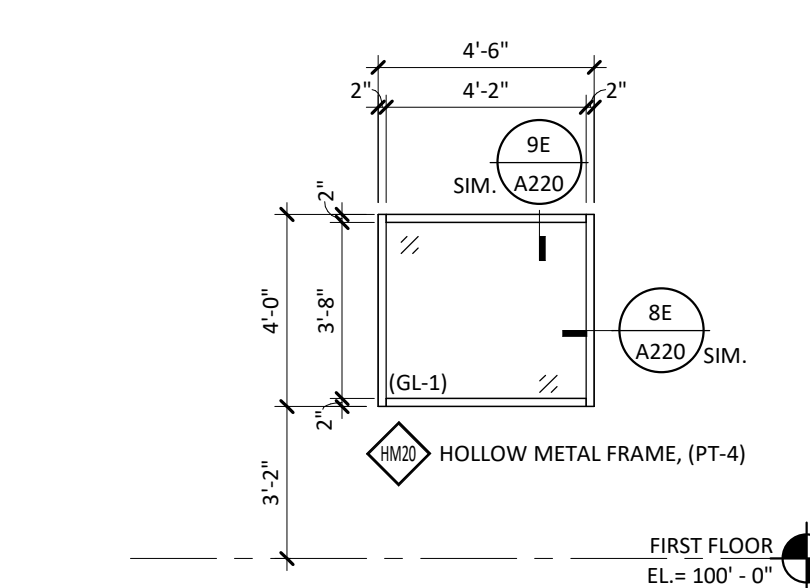
**4B EXISTING CURTAINWALL AT FLOOR SLAB**  
SCALE: 3/4" = 1'-0"



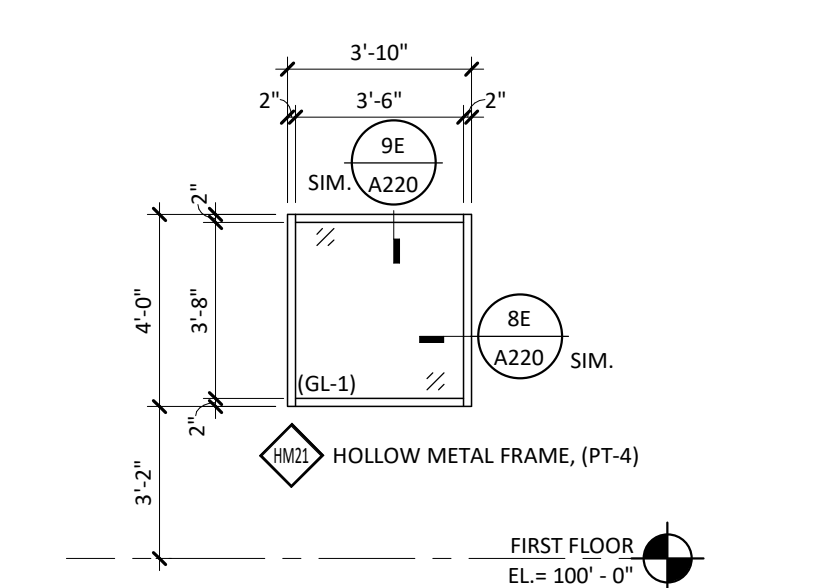
**2E SPANDREL PARAPET DETAIL**  
SCALE: 3/4" = 1'-0"



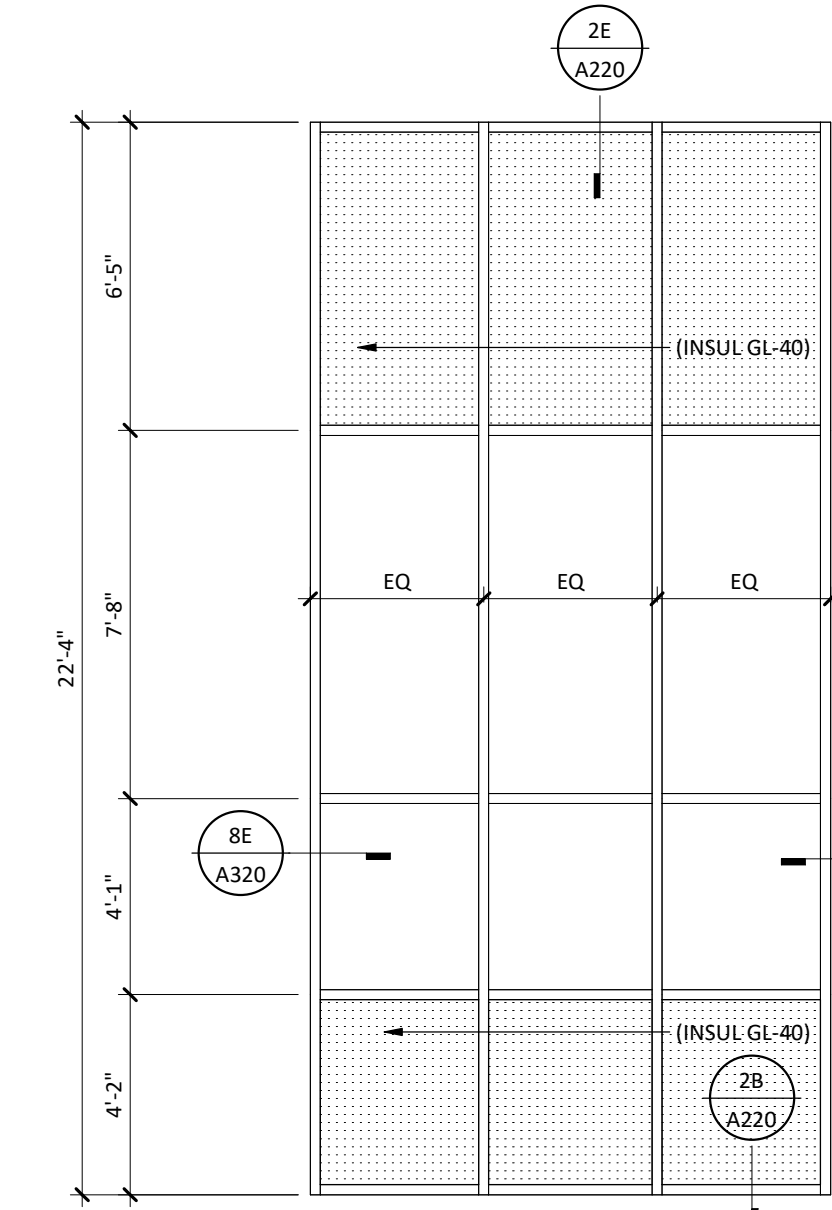
**2B (ALCRT-1) AT STAIR LANDING**  
SCALE: 3/4" = 1'-0"



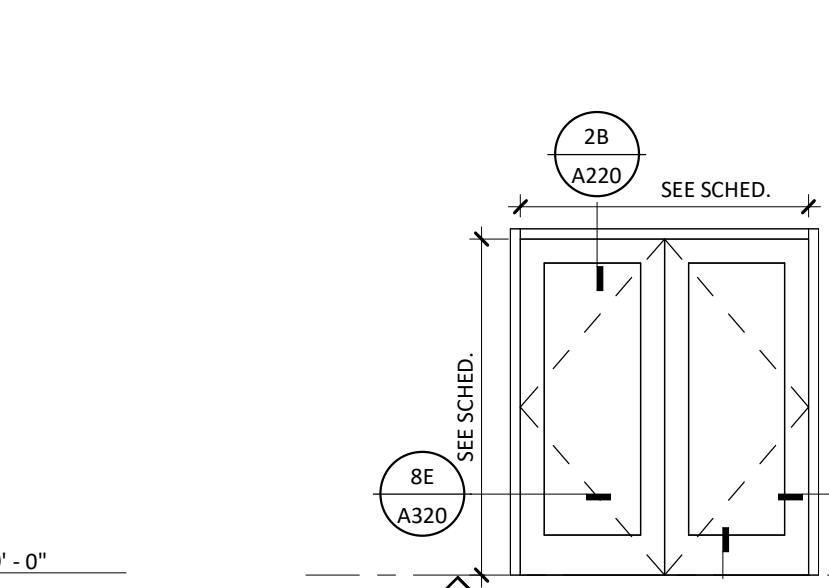
**HM20**  
SCALE: 1/4" = 1'-0"



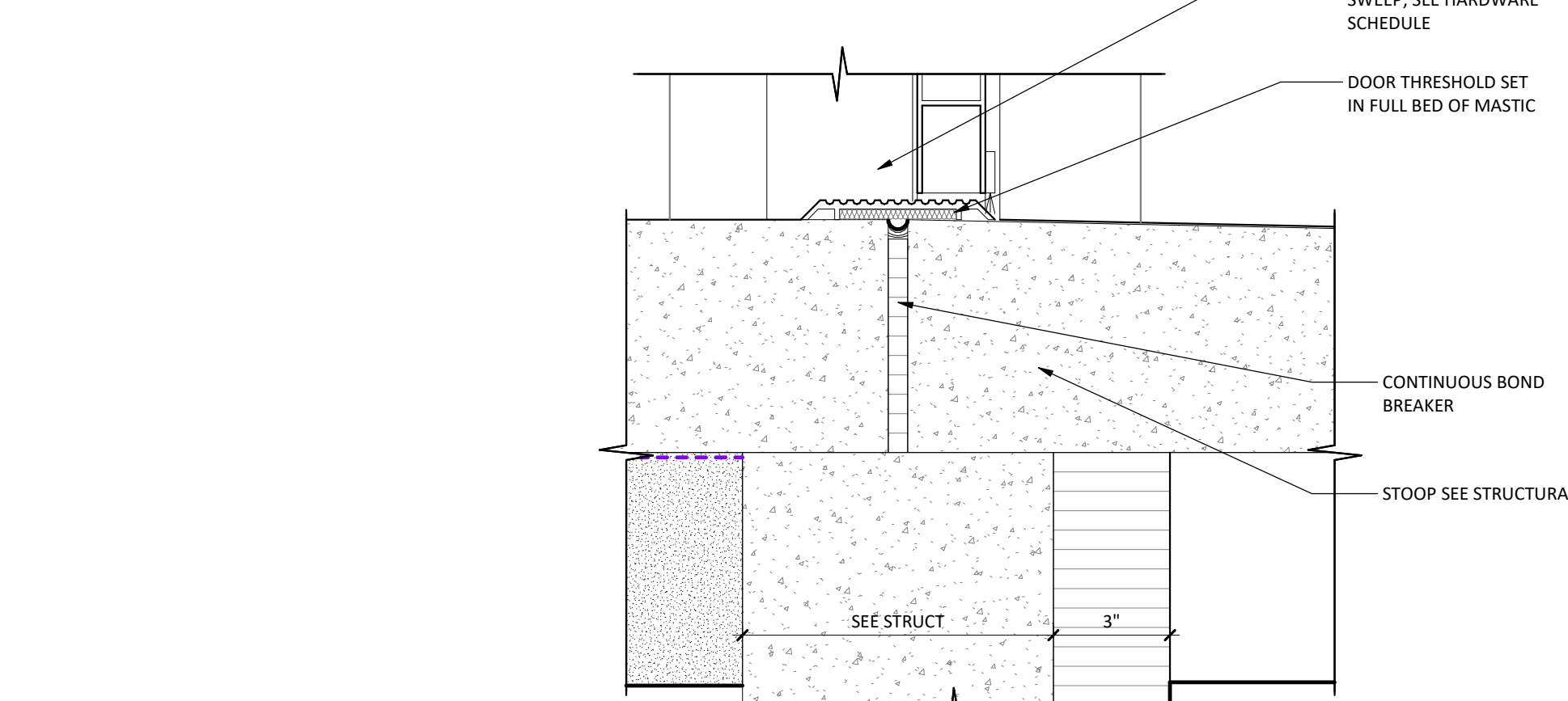
**HM21**  
SCALE: 1/4" = 1'-0"



**CW-1**  
SCALE: 1/4" = 1'-0"



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



**2A CW SILL AT DOOR**  
SCALE: 3/4" = 1'-0"

224 Broadway  
Fargo, ND 58102  
PHONE: 701.338.4023  
FACSIMILE: 701.338.4028  
WWW.JLGARCHITECTS.COM  
COPYRIGHT © 2022

HEYER ENGINEERING  
STRUCTURAL CONSULTANTS  
4180 24TH AVE S  
FARGO, ND 58104  
(701) 781-0949  
WWW.HEYERENGINEERING.COM  
539.0269.2025

CMTA  
A LICENSED CONSULTANT  
www.cmta.com | 877-380-9551

MECHANICAL - ELECTRICAL - CIVIL  
100 FIVE 10th NORTH 300  
FARGO, ND 58103  
FAX: 701-774-8847

W. J. Jorgensen  
Professional Engineer  
No. 13270  
State of North Dakota

**REVISION SCHEDULE**

NO.	DESCRIPTION	DATE

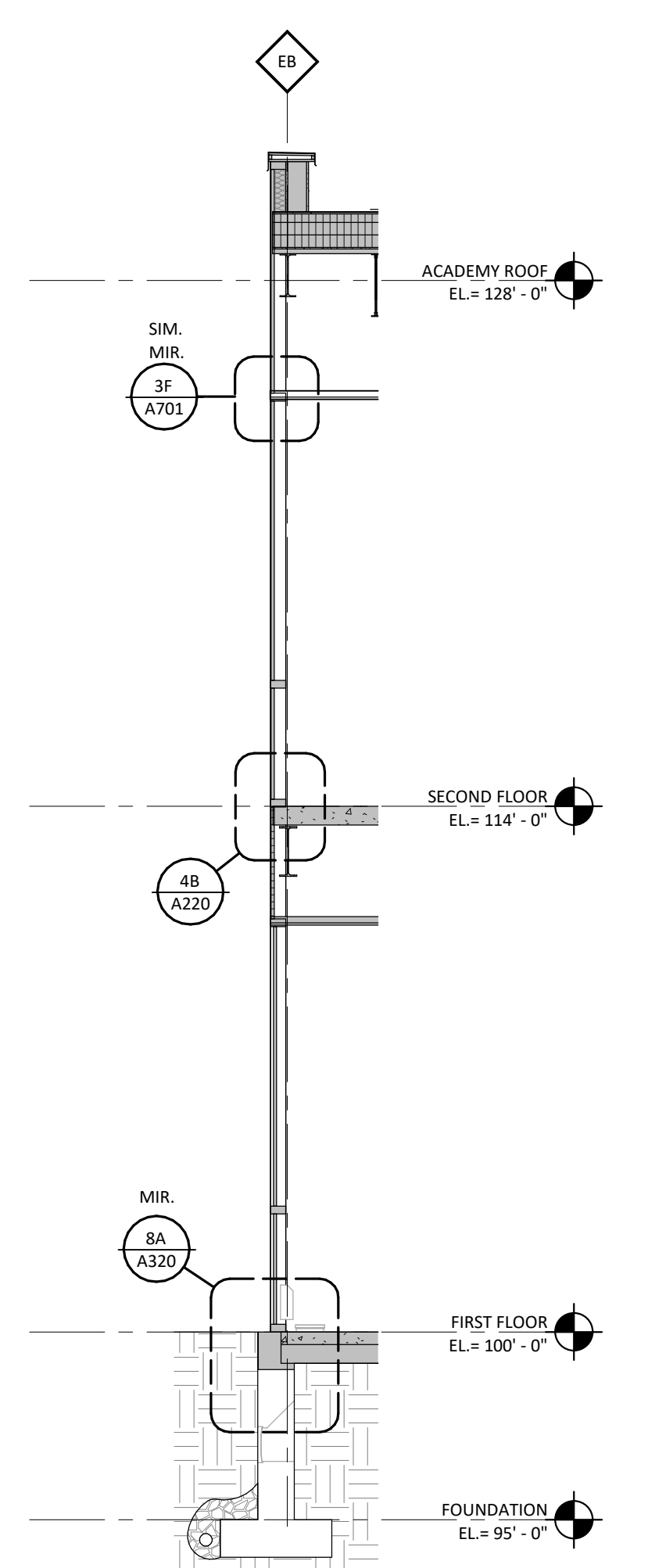
WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
PHASE: 100% CDs  
PROJECT: 23231  
SHEET: **A220**  
DR. SCHED. & GLZ. ELEV.

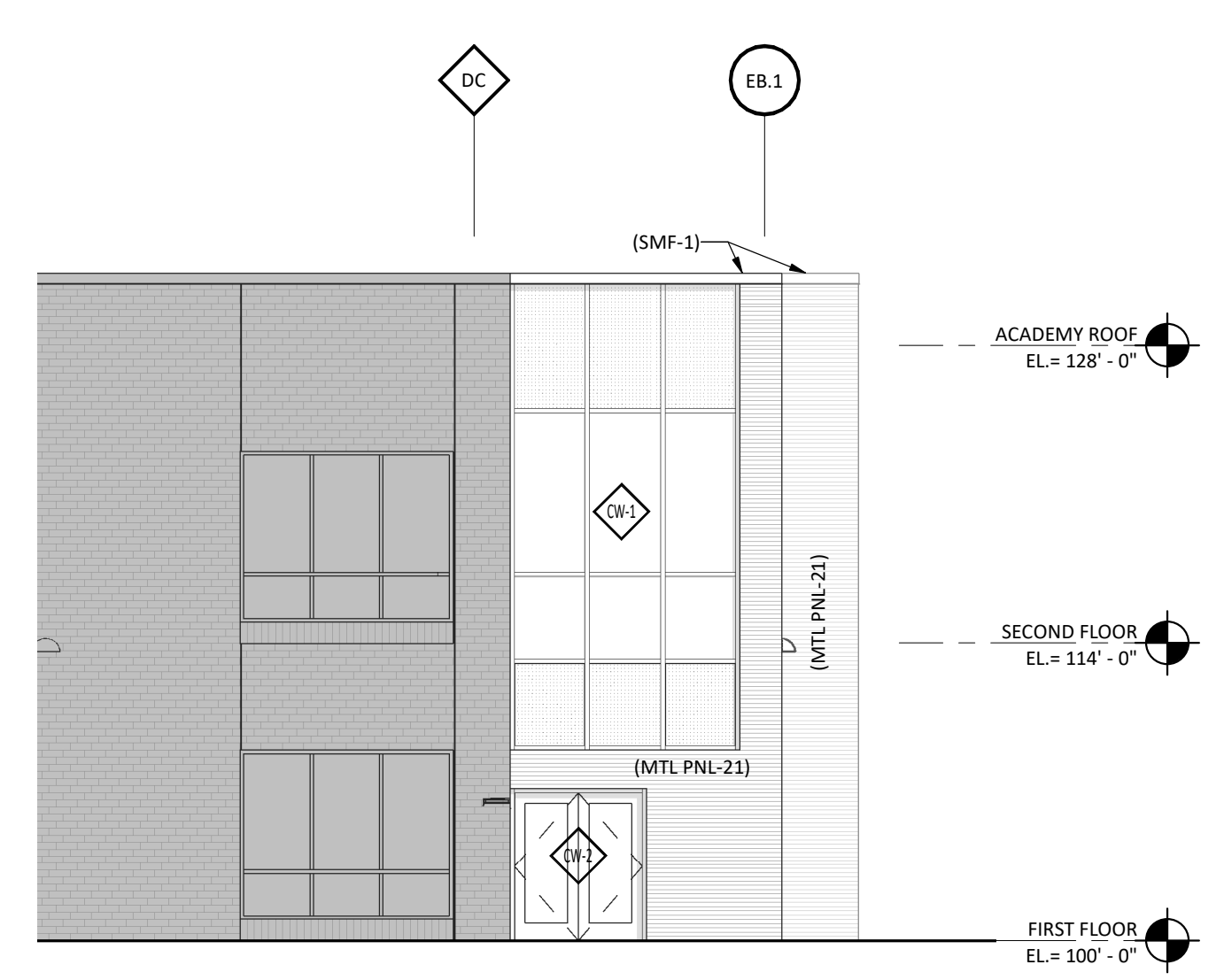


**EXT. ELEVATIONS KEYNOTE**

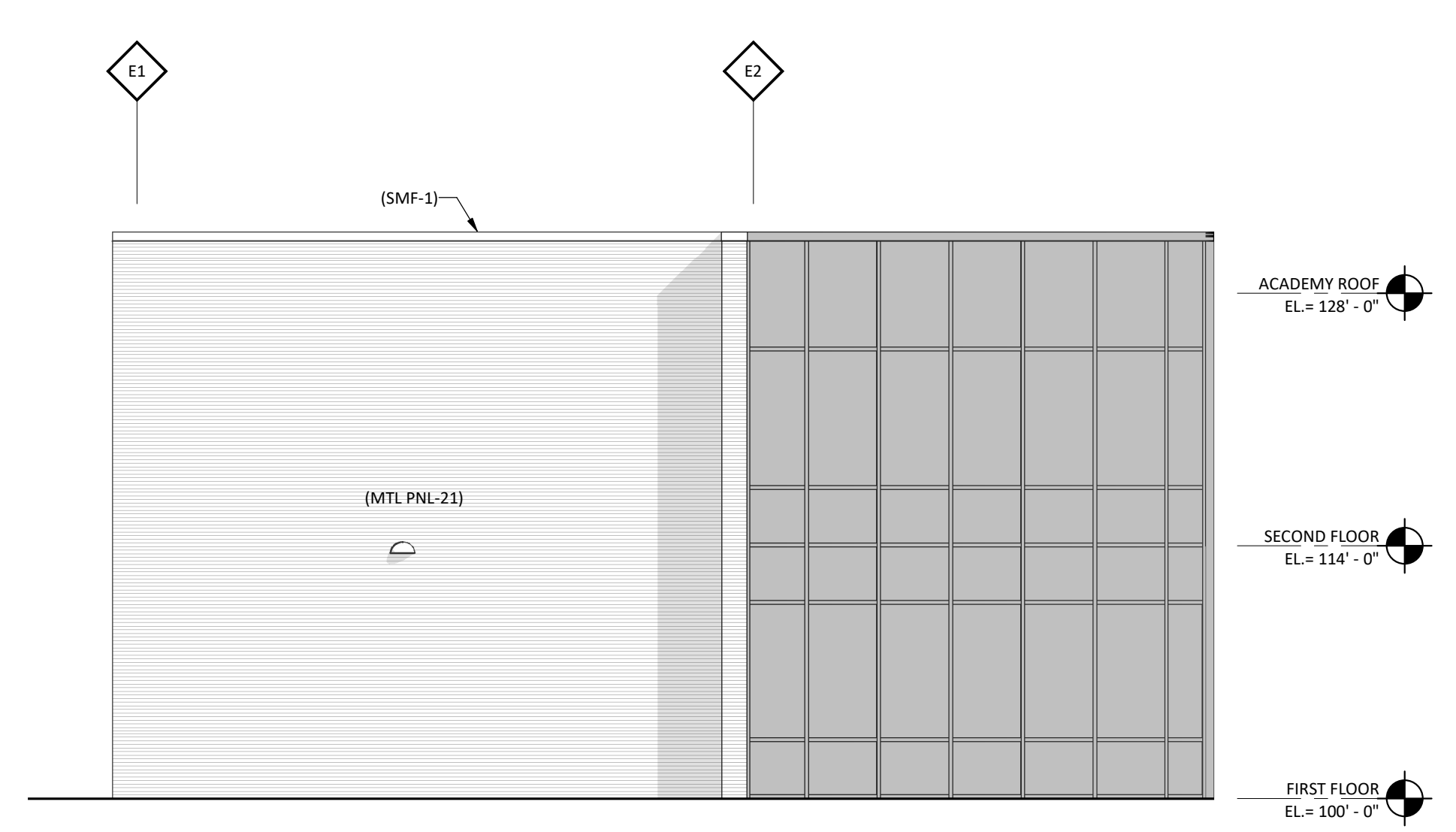
KEYNOTE	DESCRIPTION



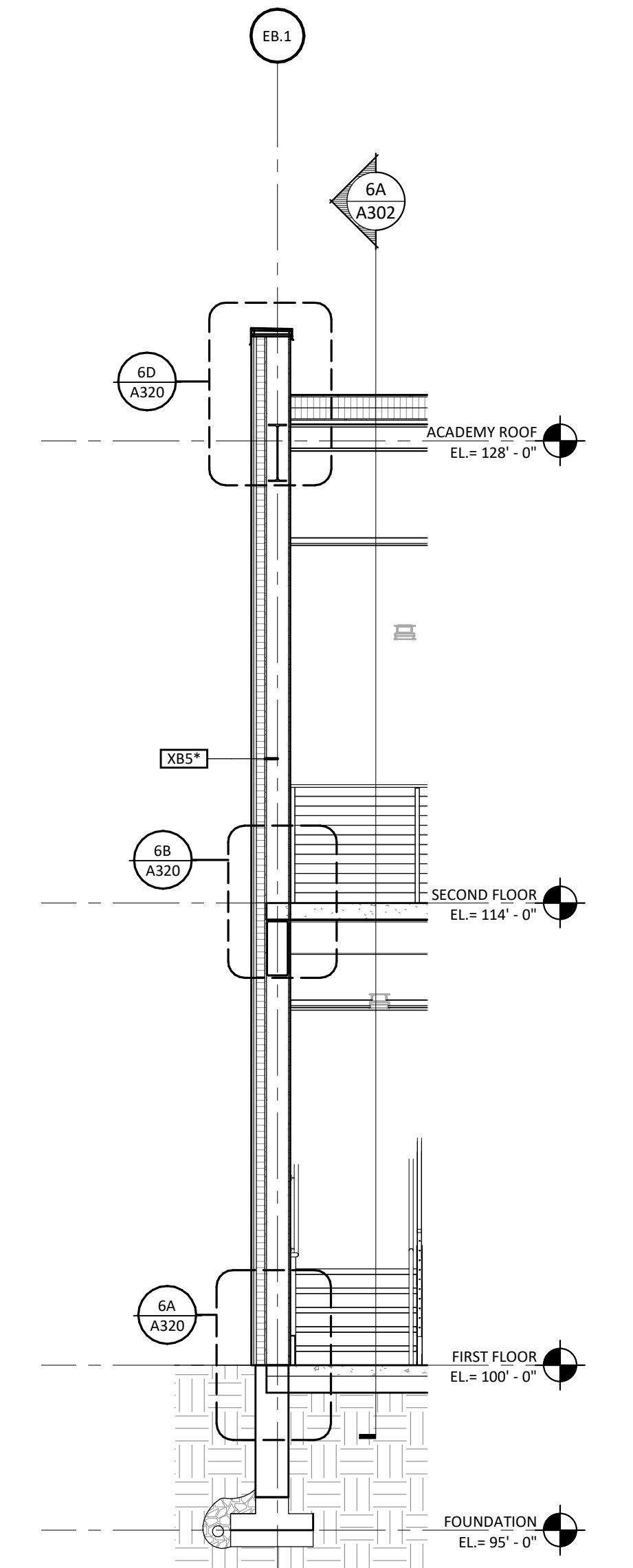
**8E**  
**A302** WALL SECTION - EXISTING CURTAINWALL  
SCALE: 1/4" = 1'-0"



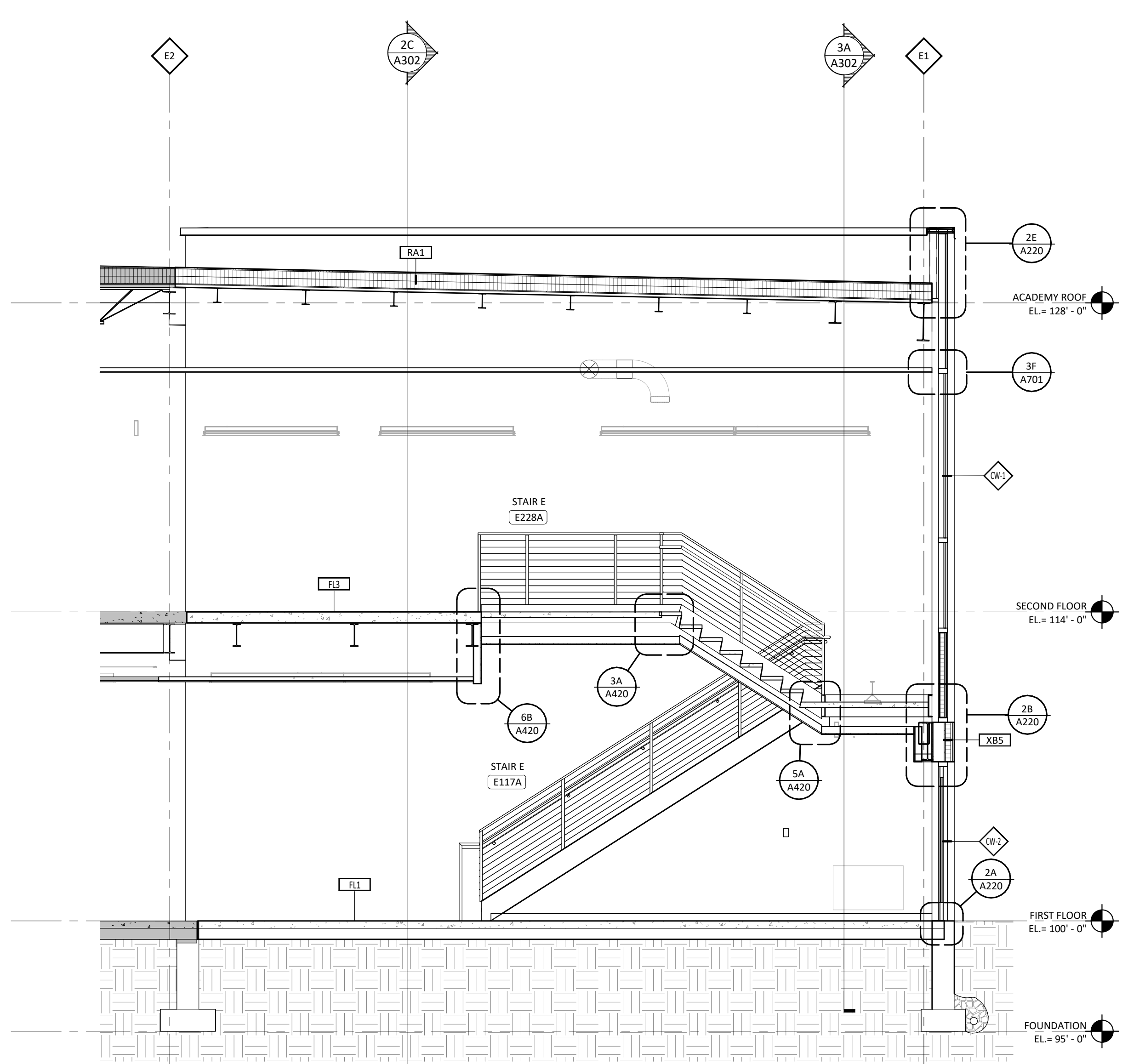
**8C**  
**A302** SOUTH ELEVATION - AREA E  
SCALE: 1/8" = 1'-0"



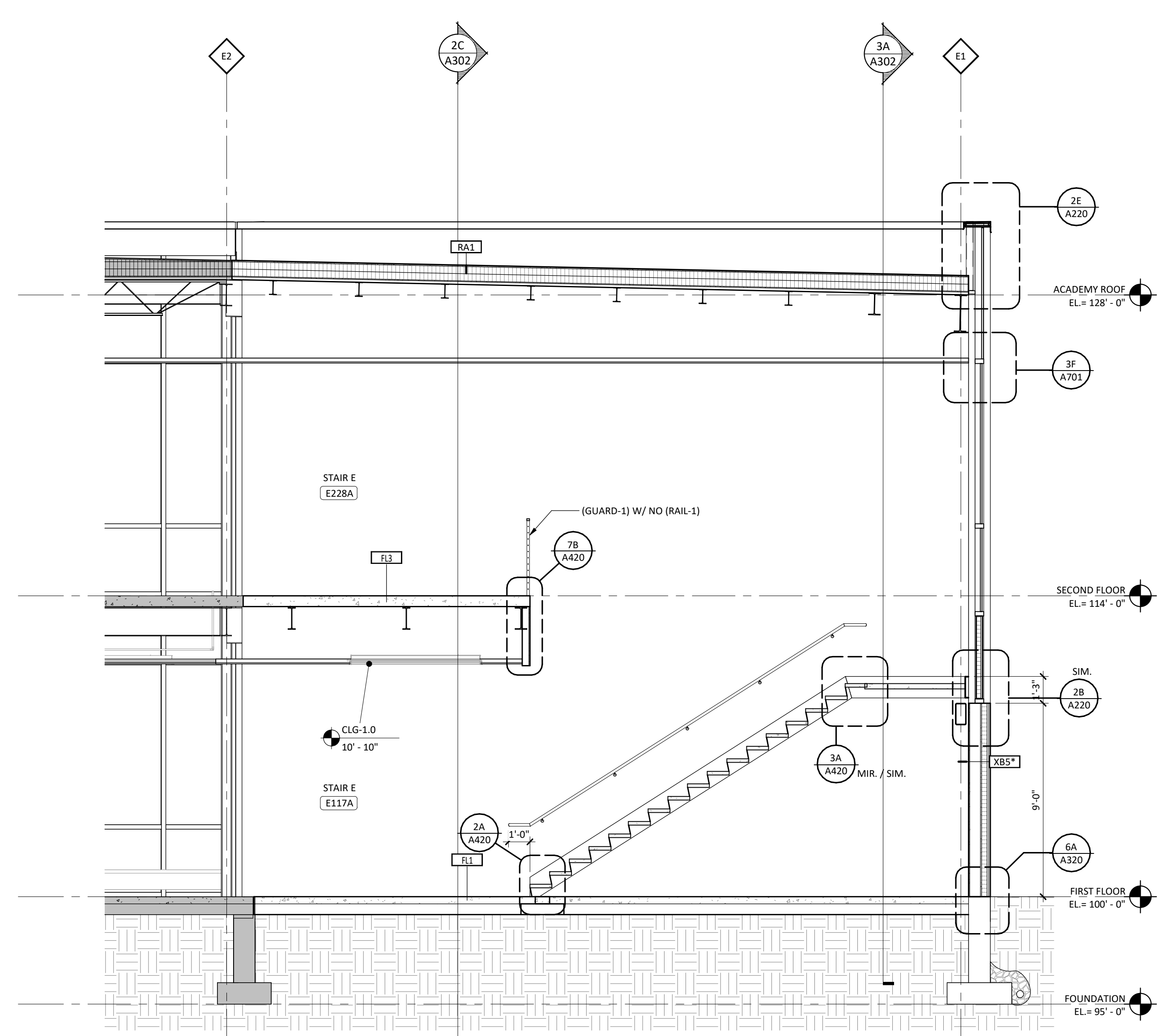
**8C**  
**A302** EAST ELEVATION - AREA E  
SCALE: 1/8" = 1'-0"



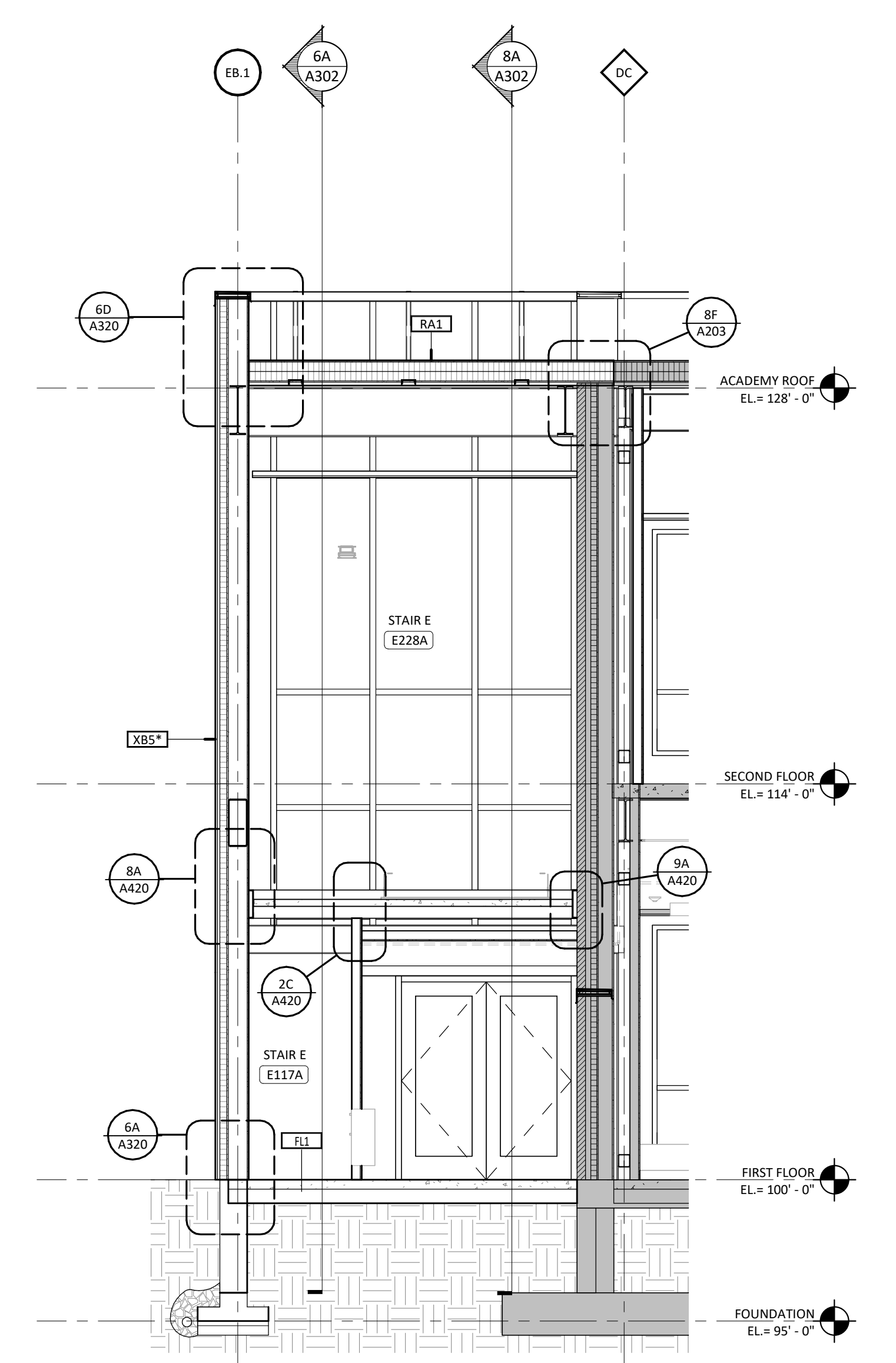
**2C**  
**A302** WALL SECTION - NEW  
SCALE: 1/4" = 1'-0"



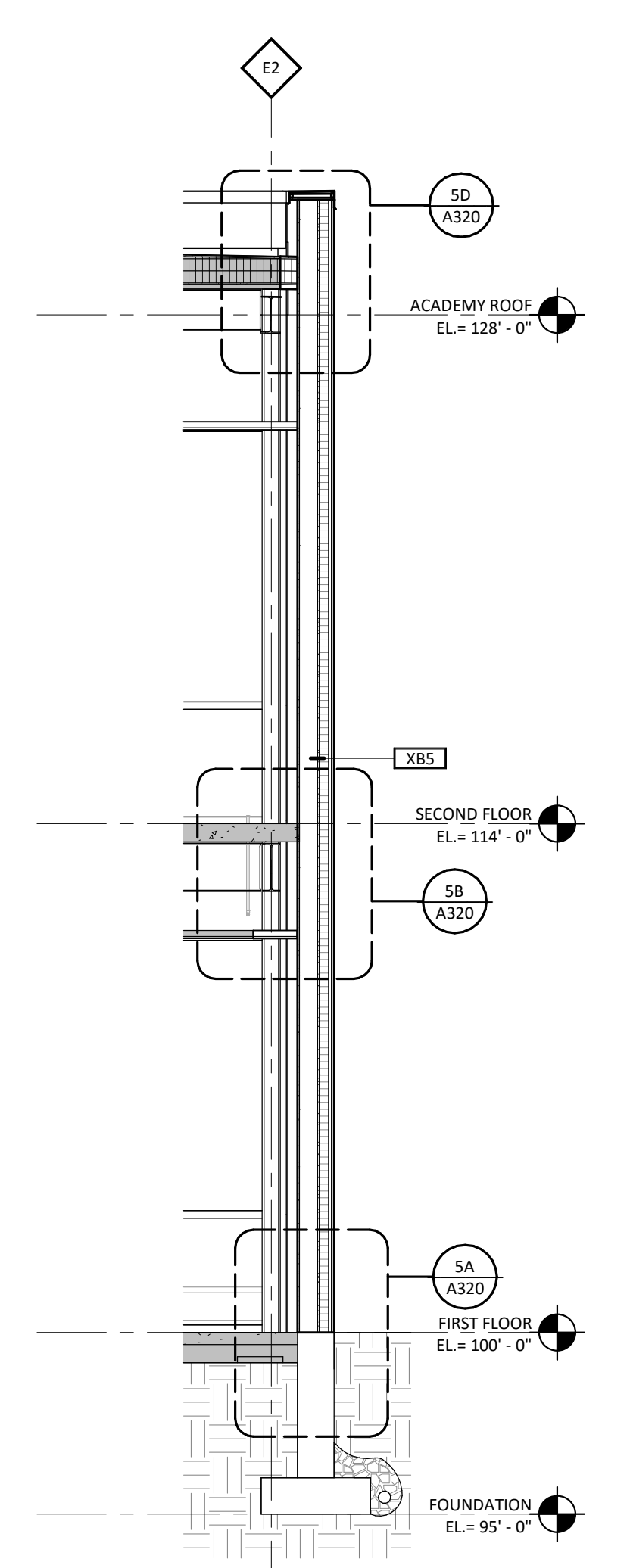
**8A**  
**A302** STAIR SECTION 1  
SCALE: 1/4" = 1'-0"



**6A**  
**A302** STAIR SECTION 2  
SCALE: 1/4" = 1'-0"

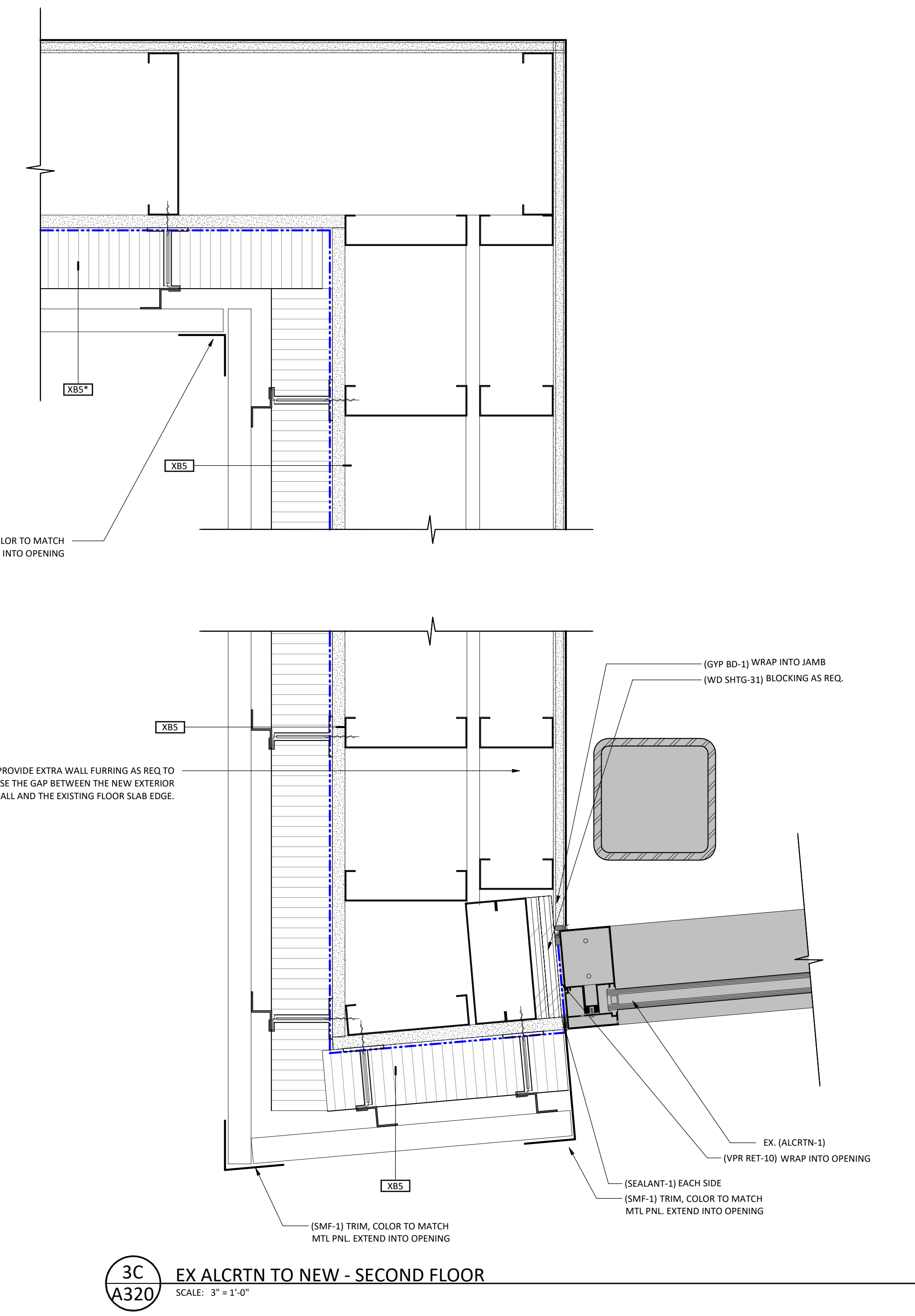
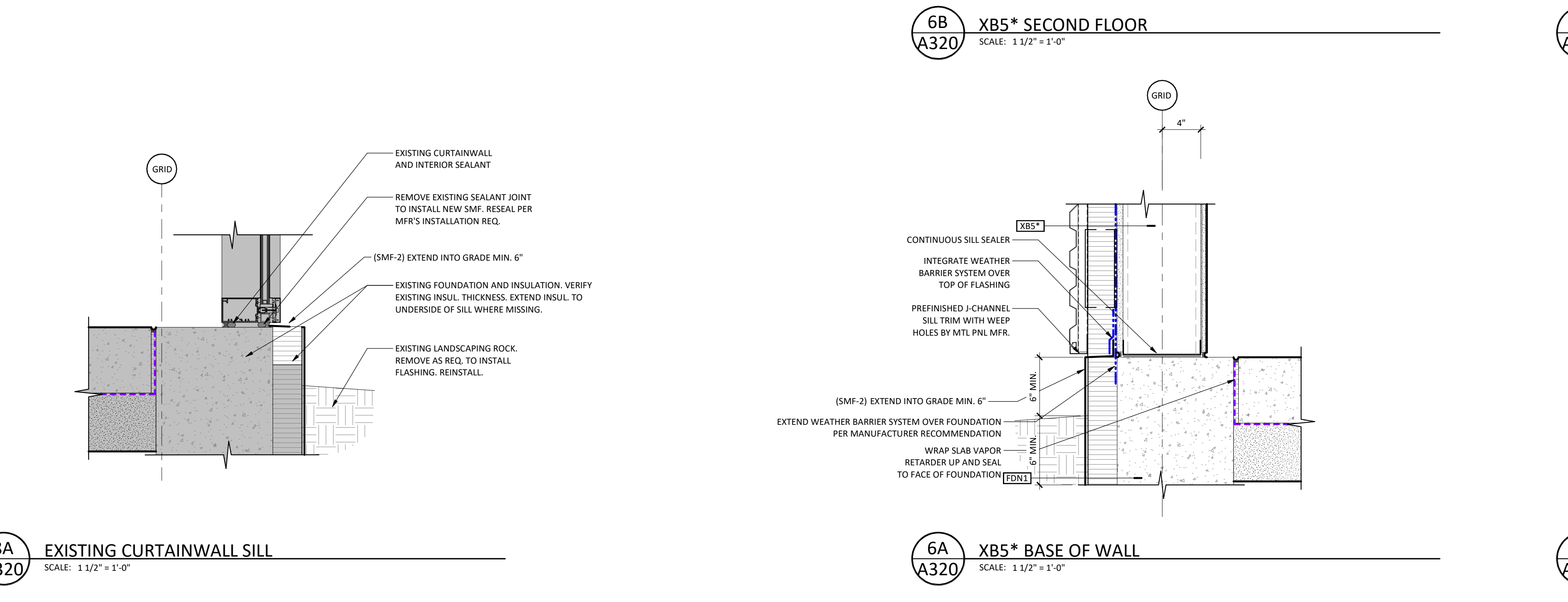
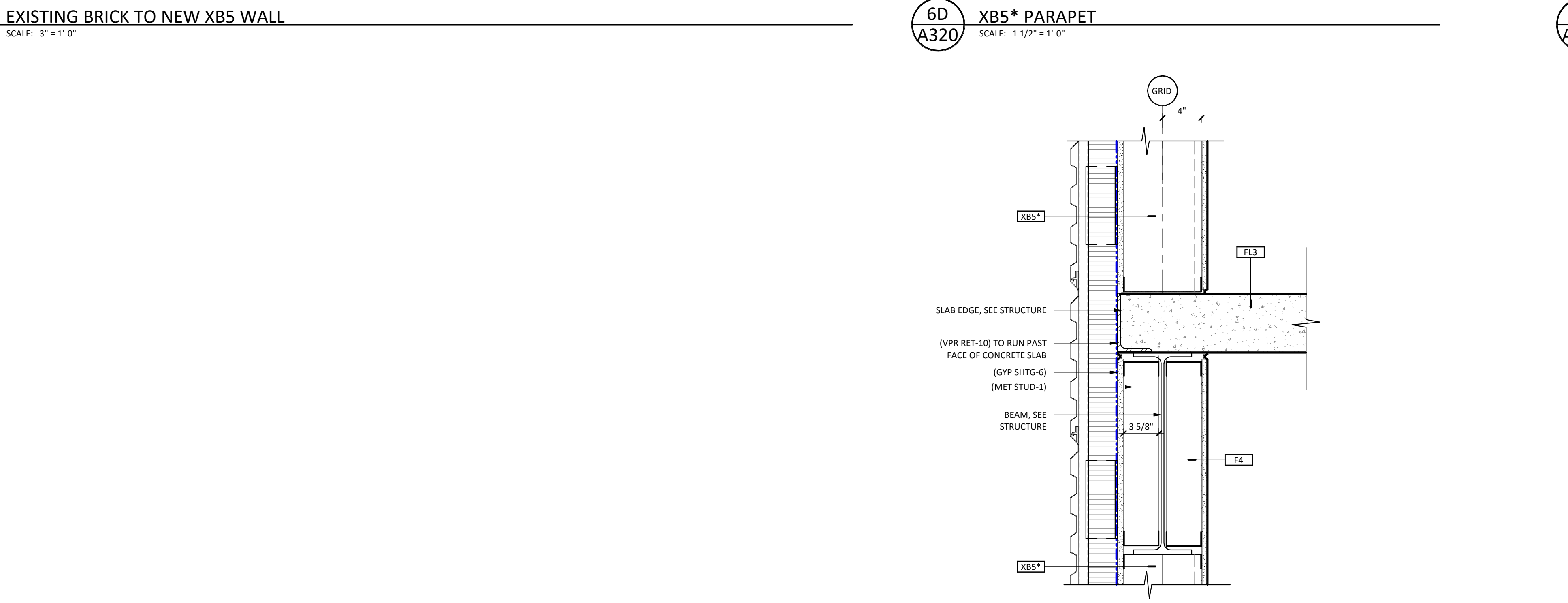
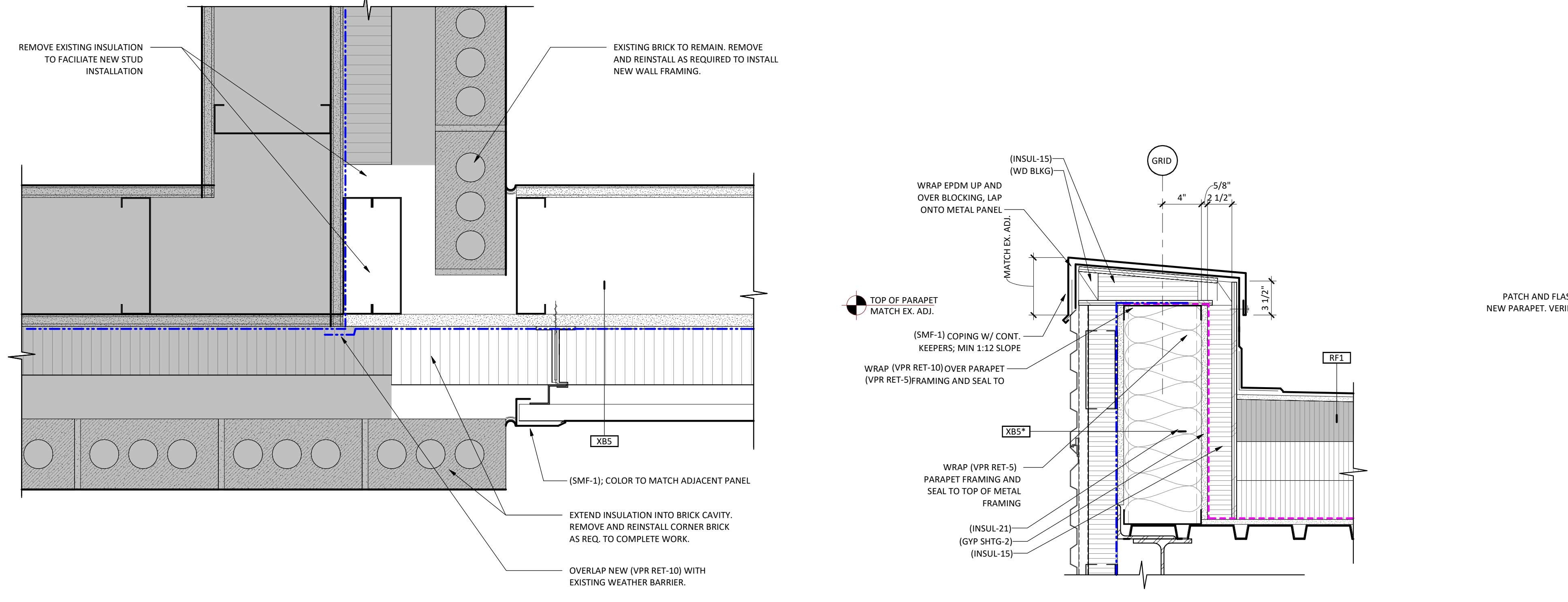
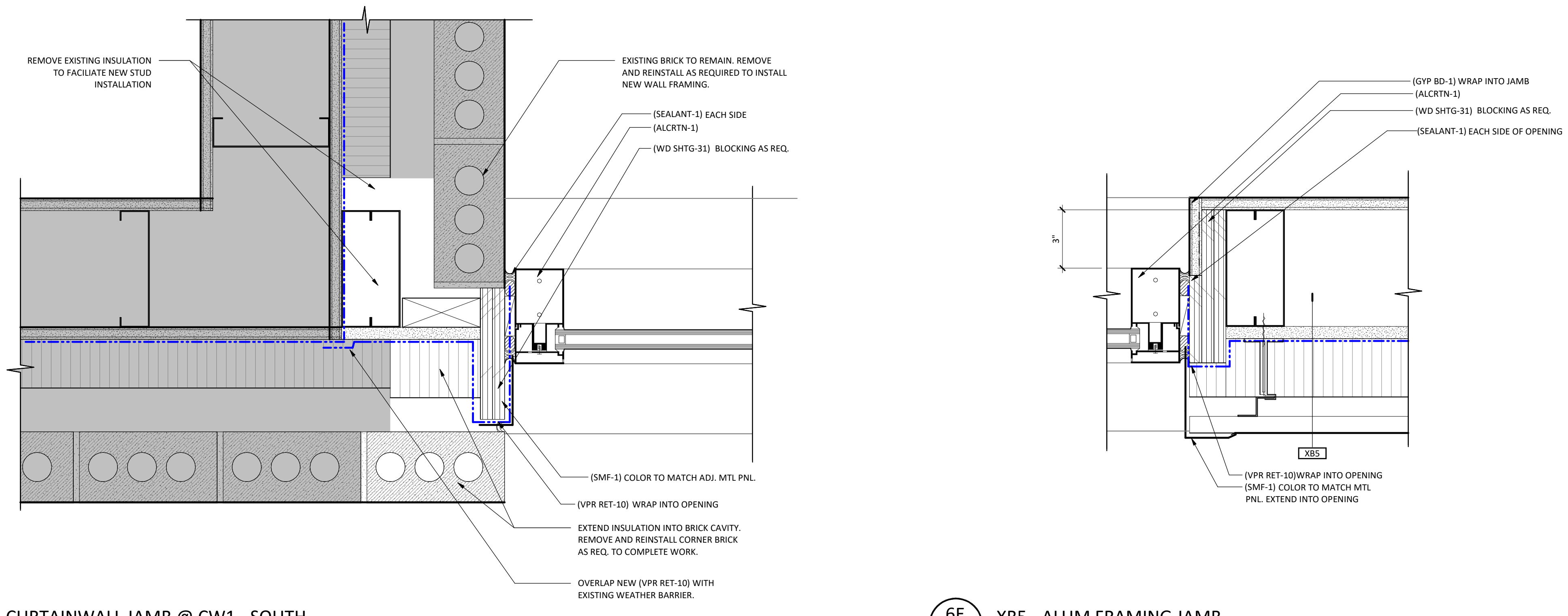


**3A**  
**A302** STAIR SECTION - LANDING  
SCALE: 1/4" = 1'-0"

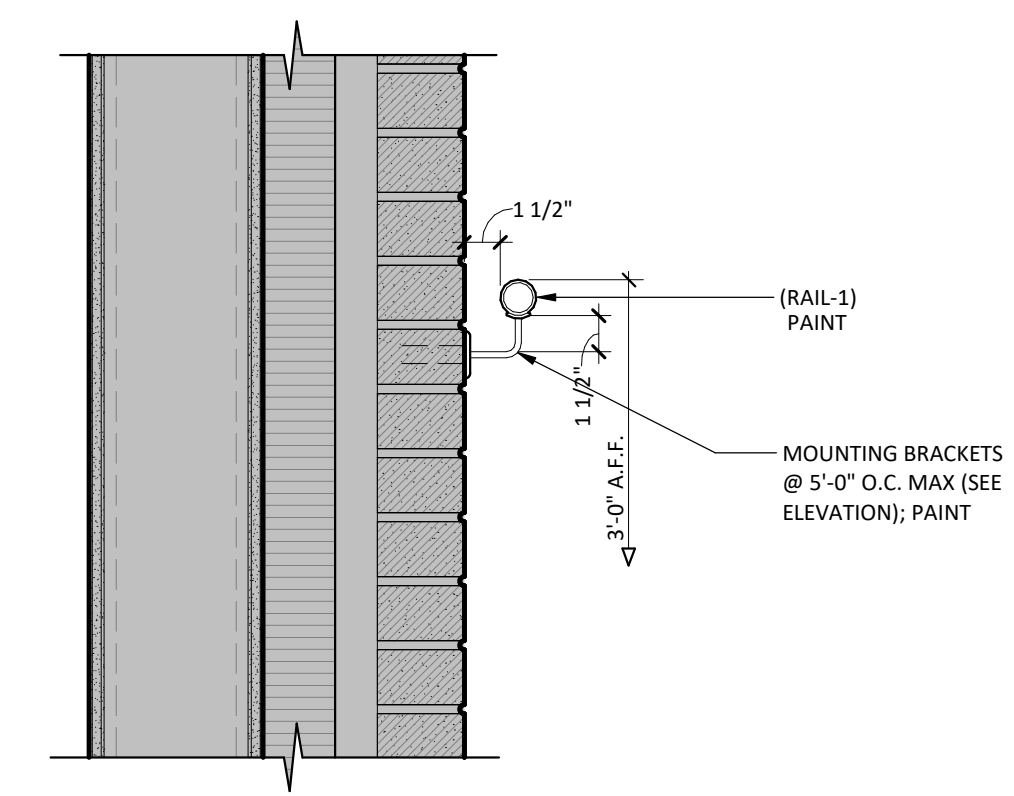


**2A**  
**A302** WALL SECTION - EXISTING  
SCALE: 1/4" = 1'-0"

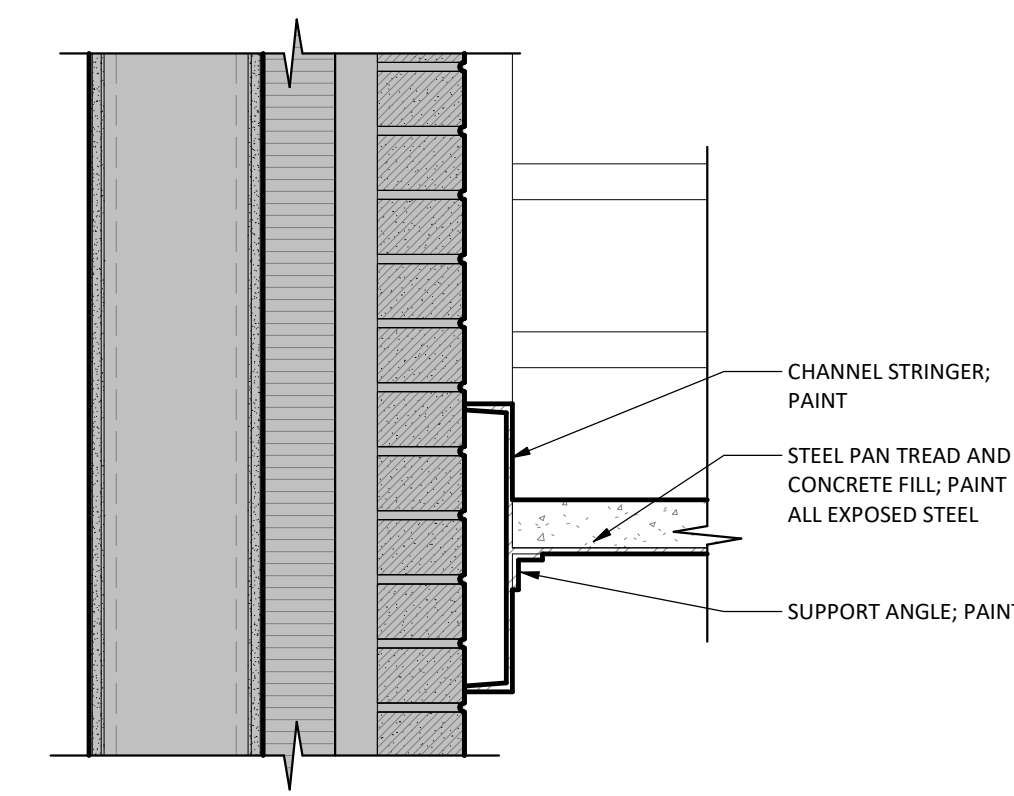




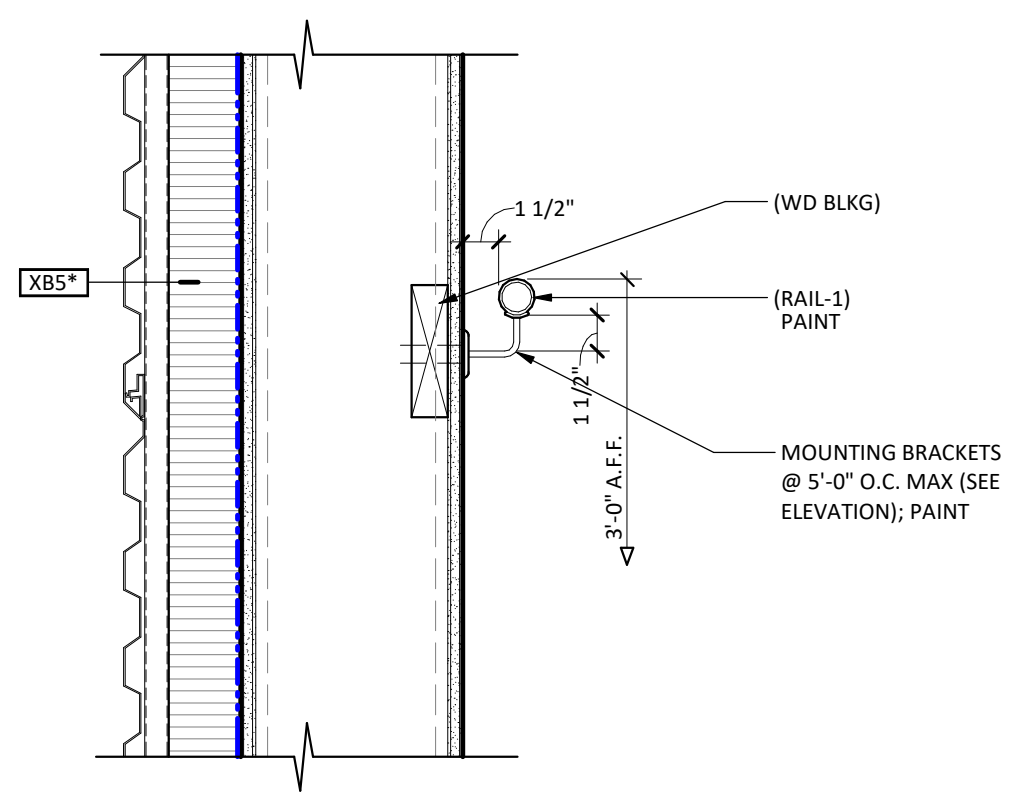




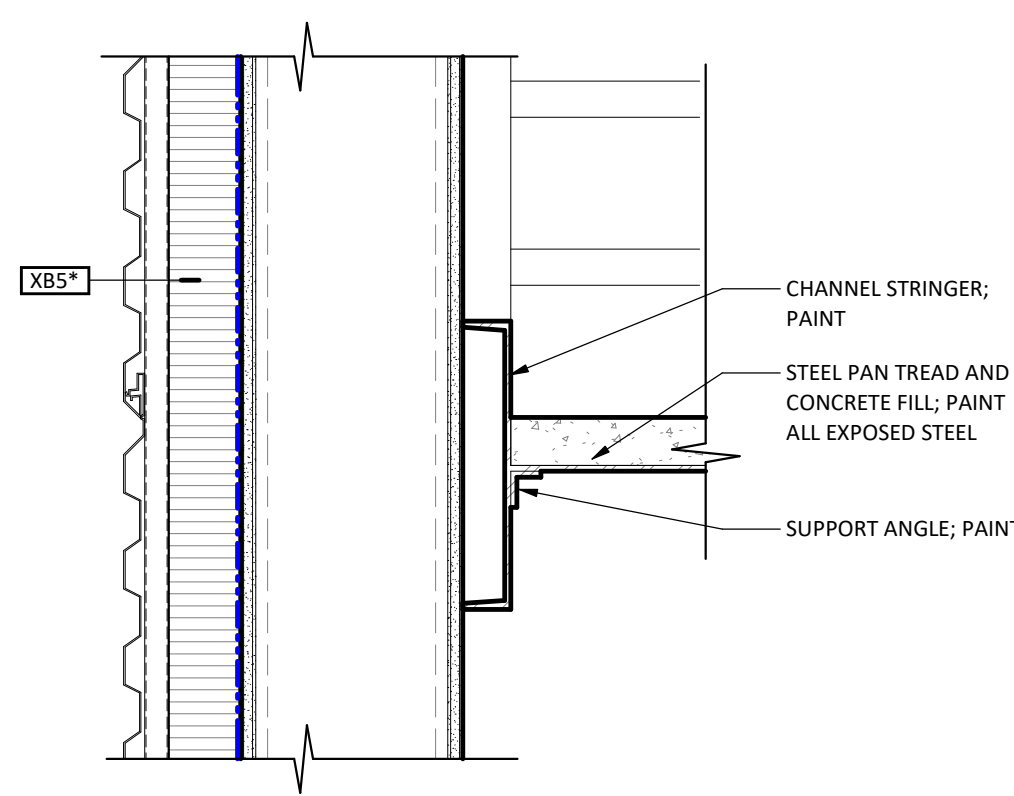
**8F (RAIL-1) AT EXT BRICK WALL**  
SCALE: 1 1/2" = 1'-0"



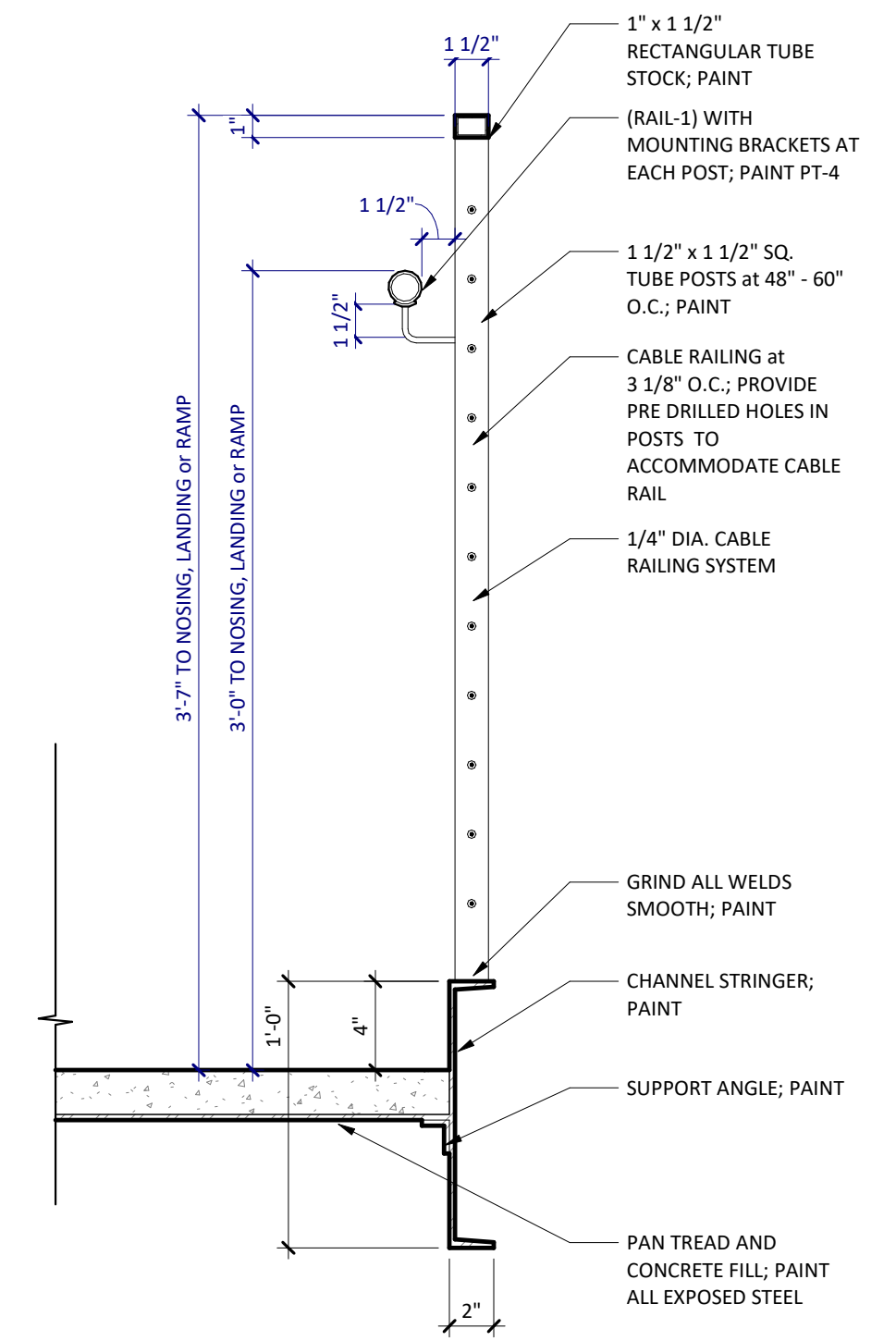
**8D TREAD @ EXT BRICK WALL**  
SCALE: 1 1/2" = 1'-0"



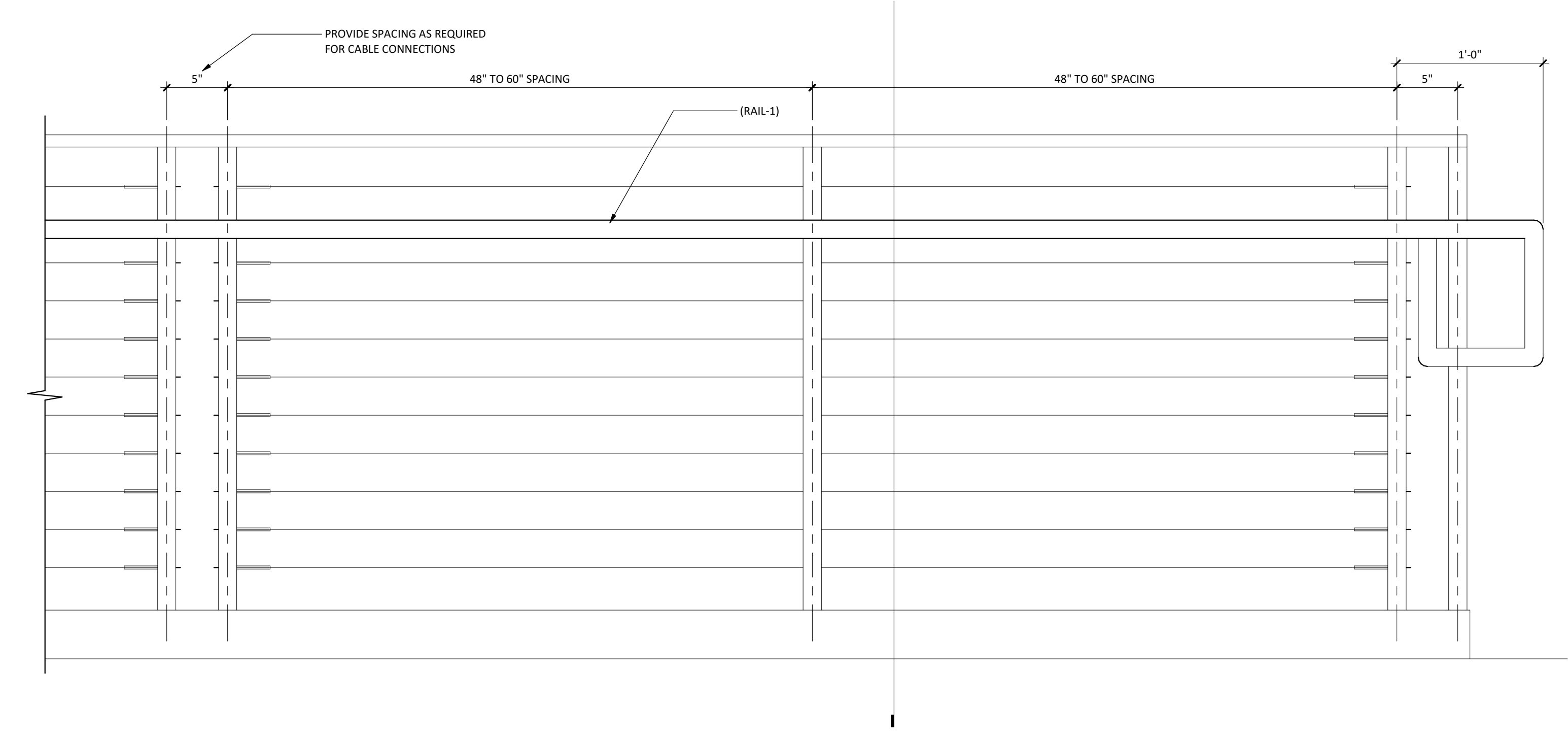
**8C (RAIL-1) AT METAL STUD WALL**  
SCALE: 1 1/2" = 1'-0"



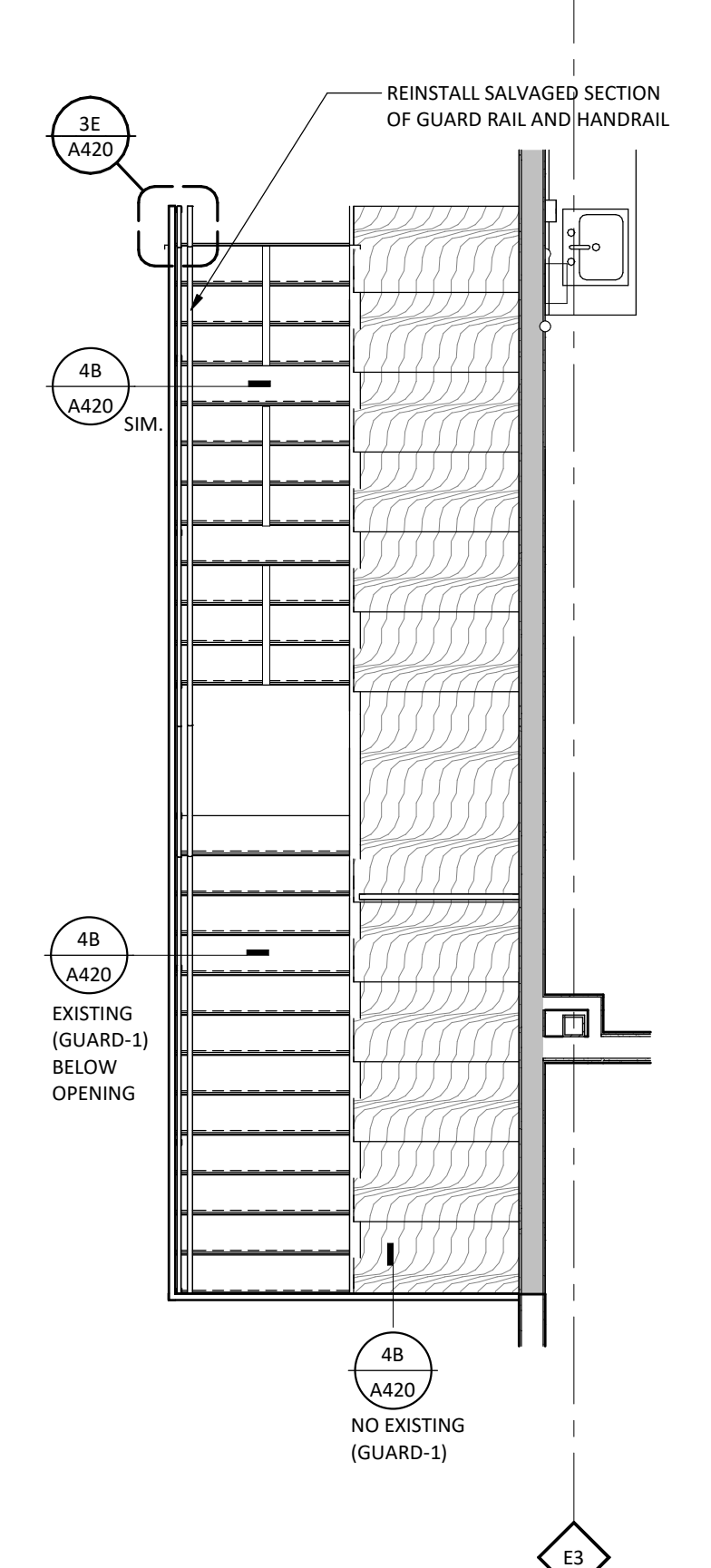
**8B TREAD @ METAL STUD WALL**  
SCALE: 1 1/2" = 1'-0"



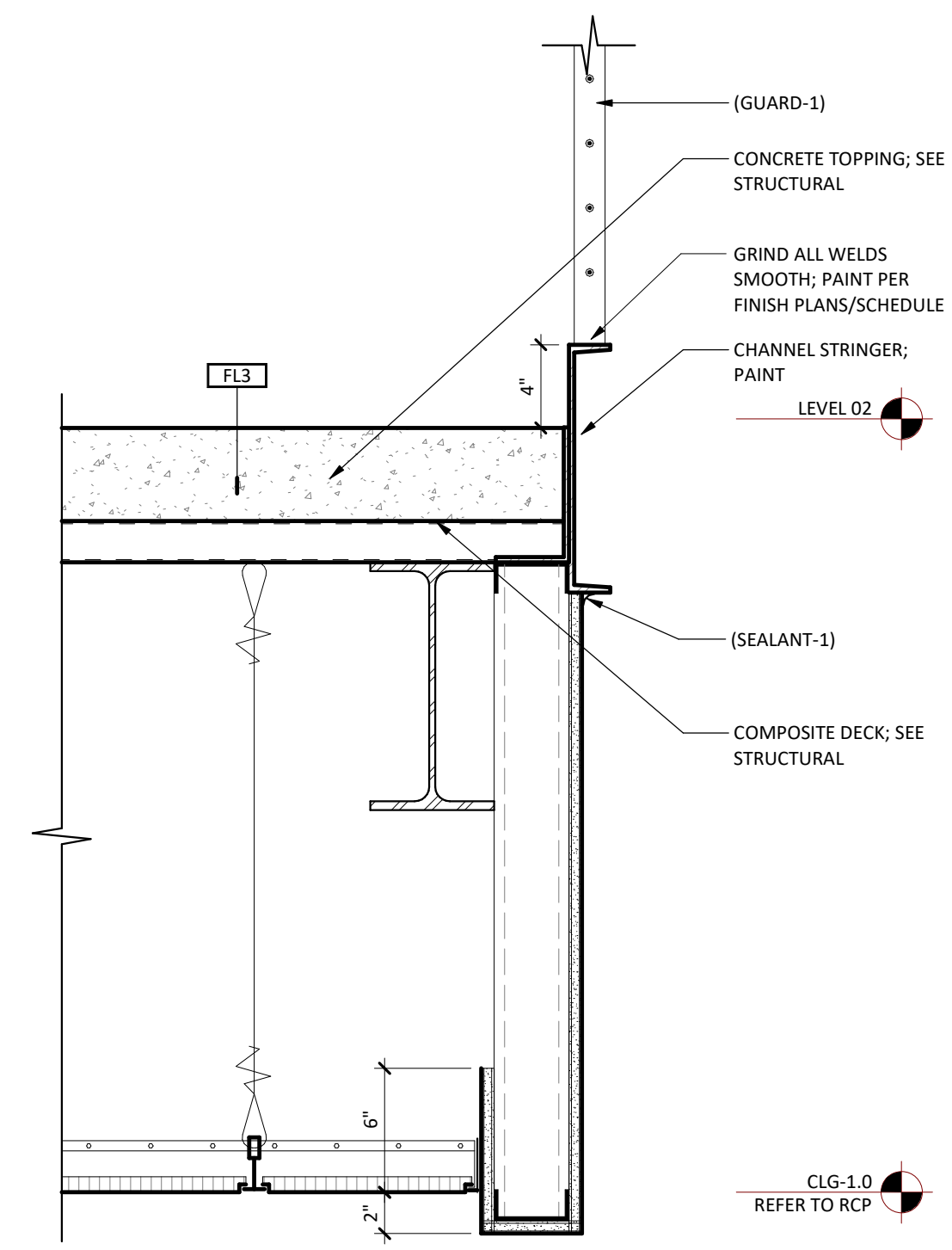
**3B (GUARD-1) SECTION**  
SCALE: 1 1/2" = 1'-0"



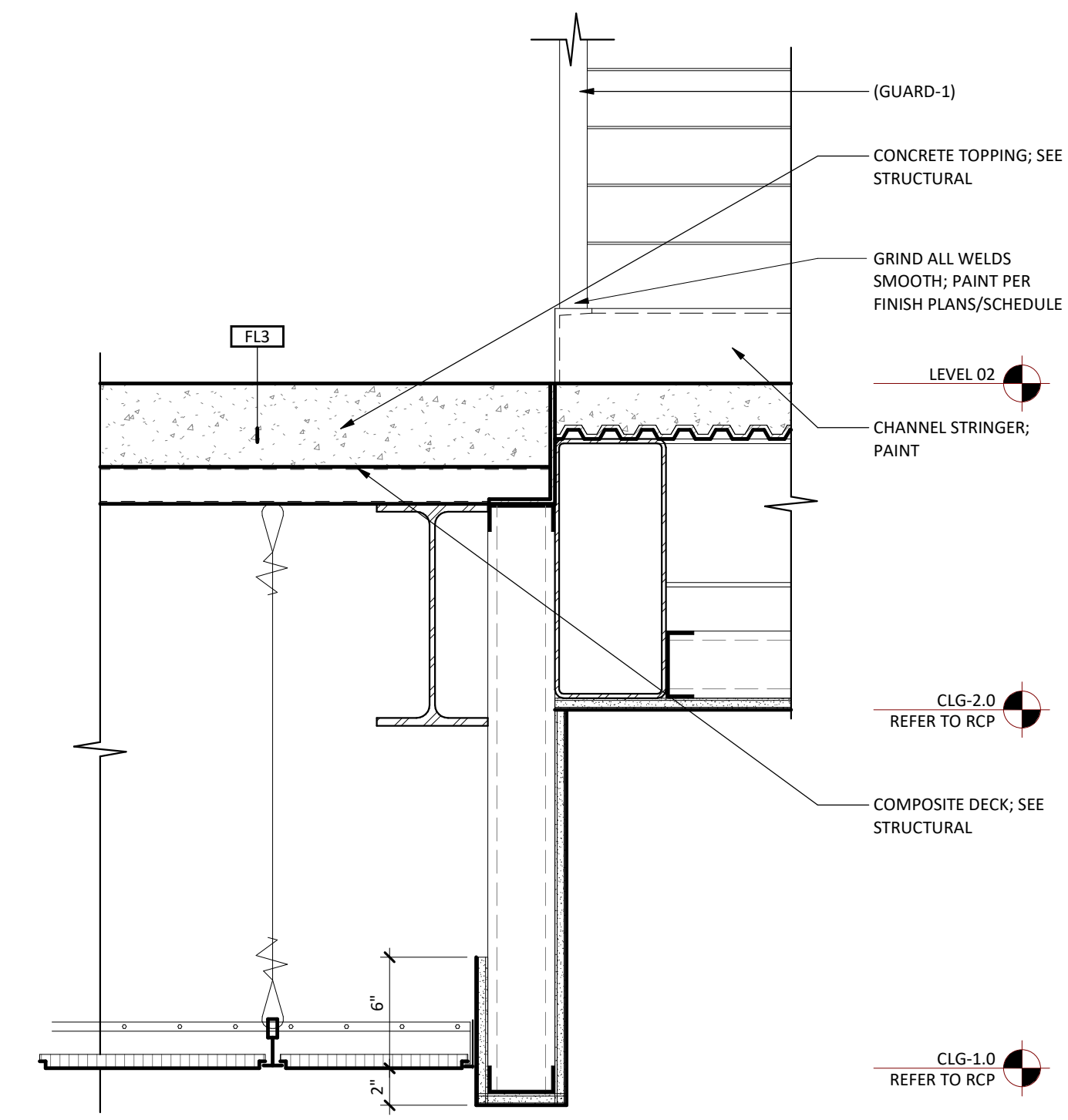
**3D (GUARD-1) ELEVATION**  
SCALE: 1 1/2" = 1'-0"



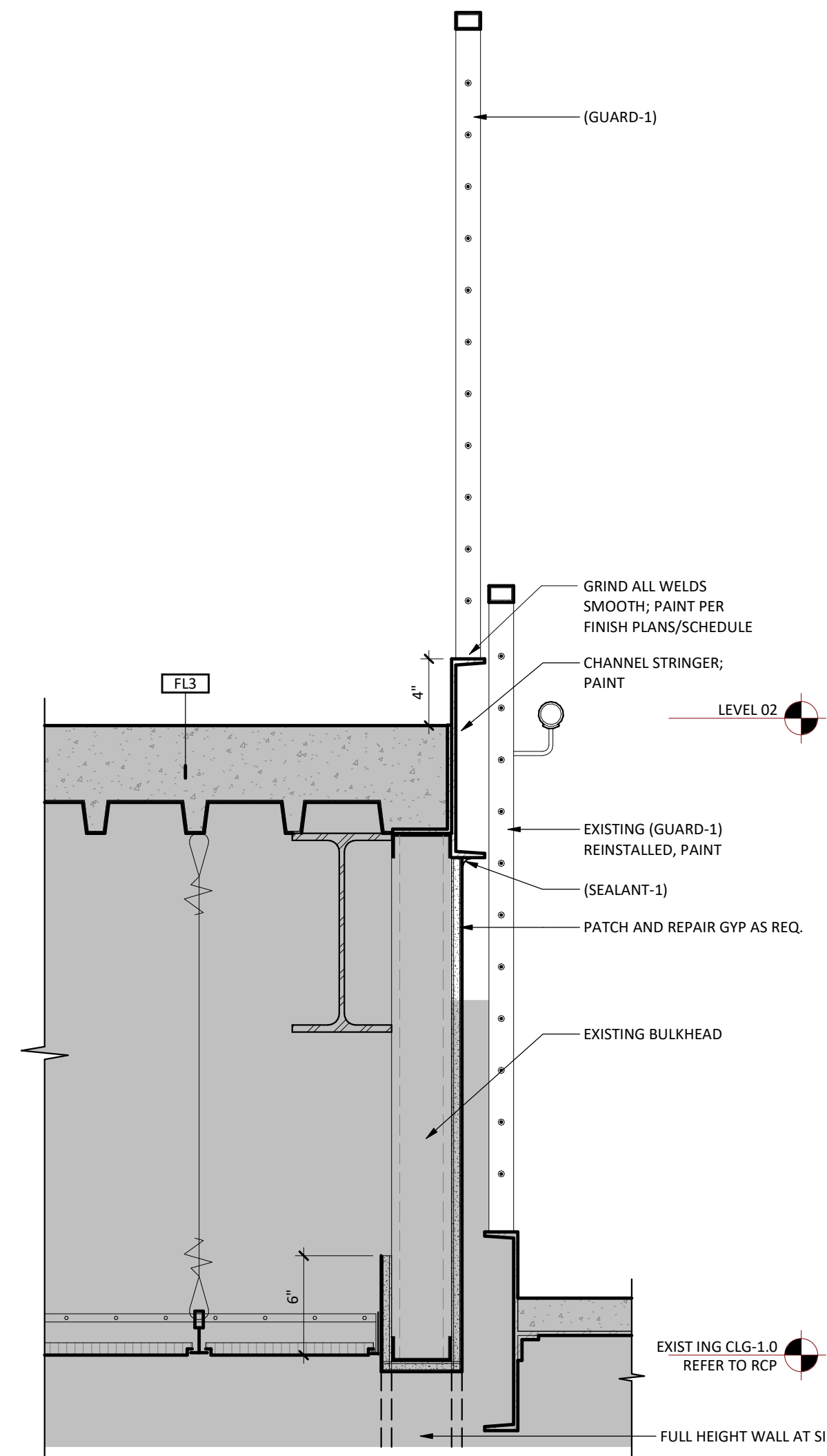
**2D EXISTING STAIR PLAN**  
SCALE: 1/4" = 1'-0"



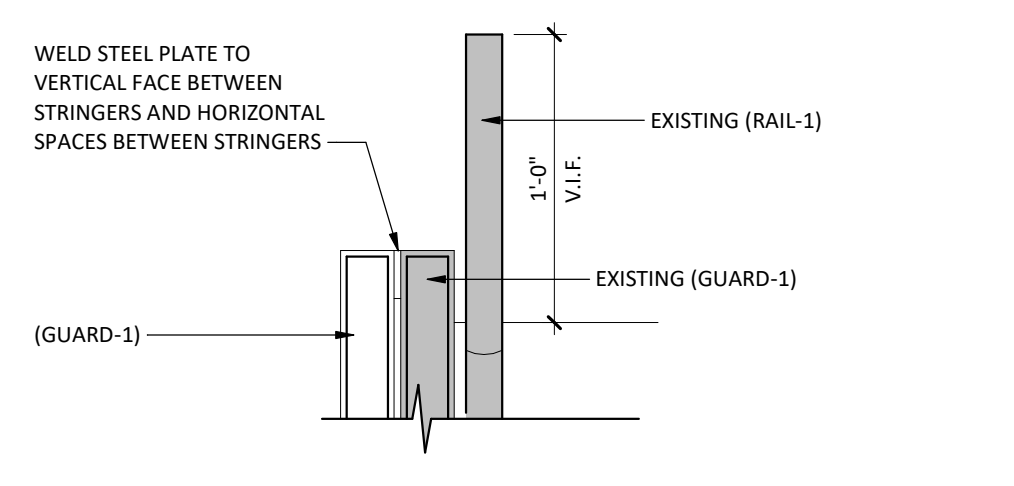
**7B BULKHEAD @ STRINGER**  
SCALE: 1 1/2" = 1'-0"



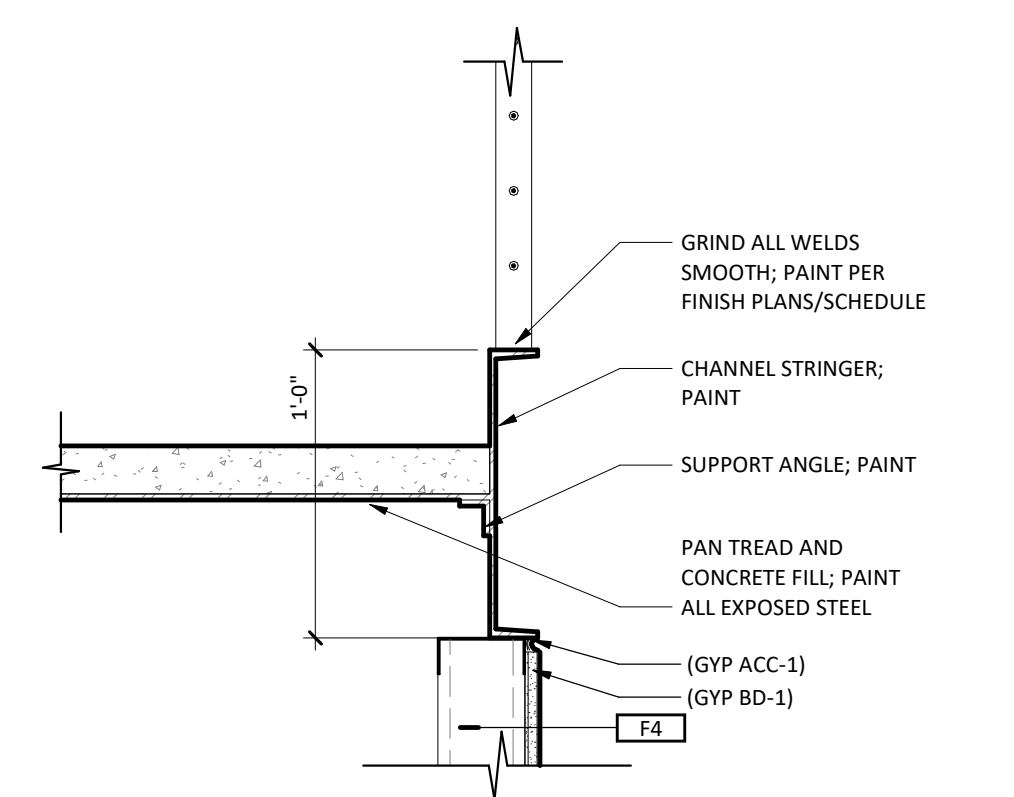
**6B STAIR LANDING @ BULKHEAD**  
SCALE: 1 1/2" = 1'-0"



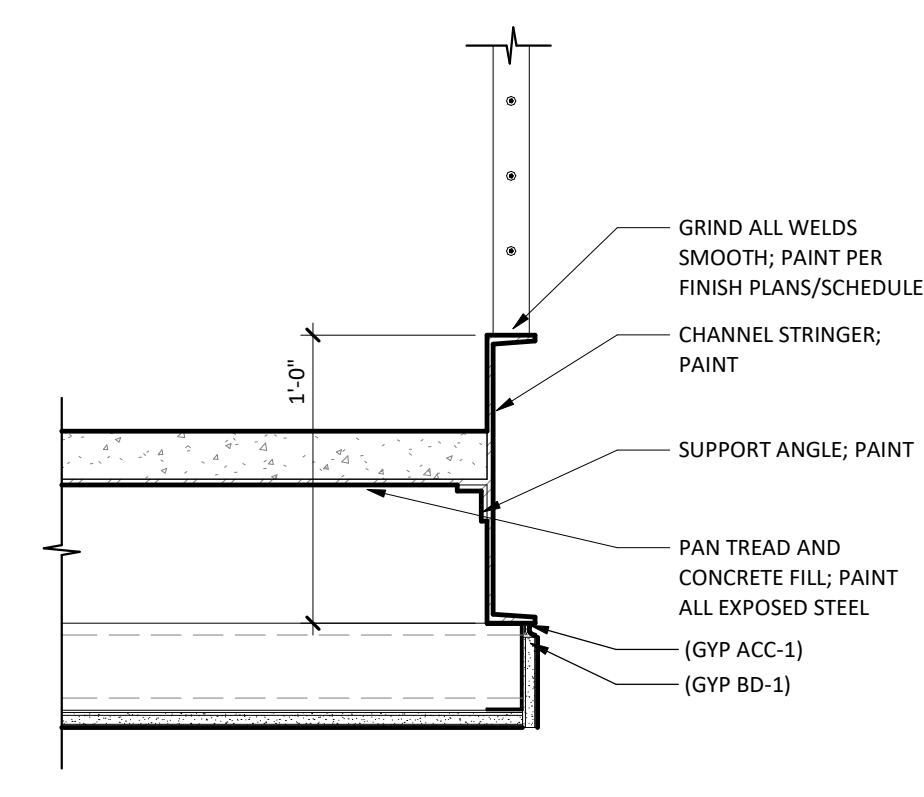
**4B GUARD-1 @ EXISTING STAIR**  
SCALE: 1 1/2" = 1'-0"



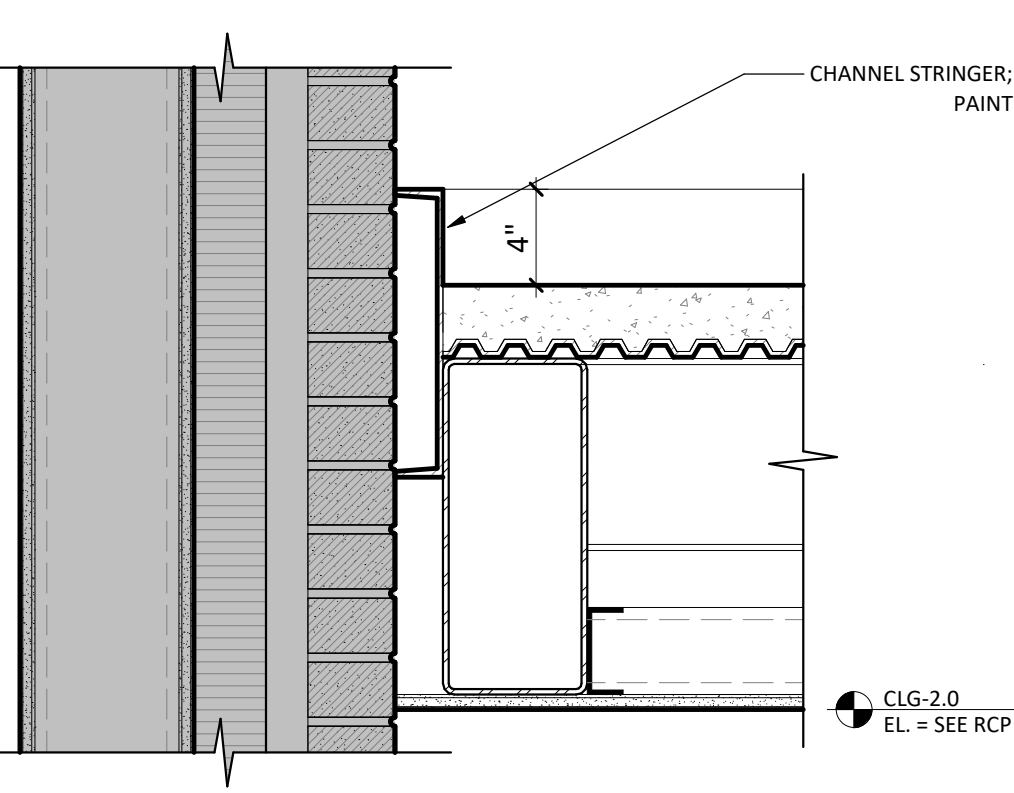
**3E NEW (GUARD-1) TO EXISTING (GUARD-1) DETAIL**  
SCALE: 1 1/2" = 1'-0"



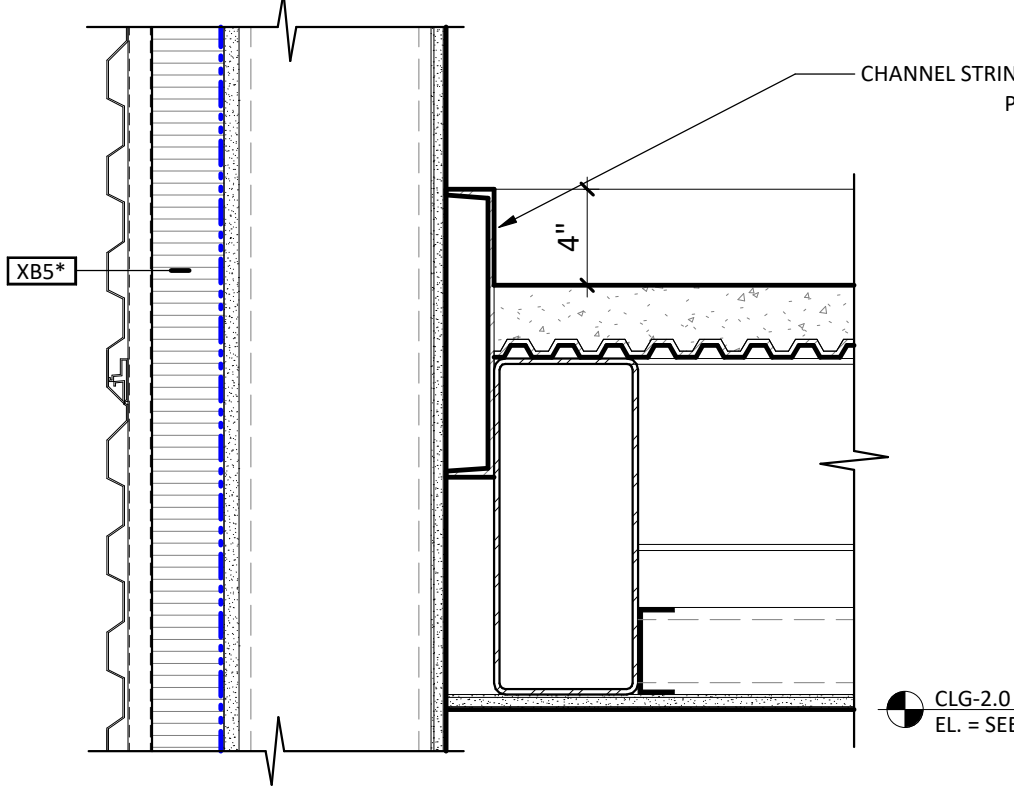
**2C (GUARD-1) @ INFILL UNDER STRINGER**  
SCALE: 1 1/2" = 1'-0"



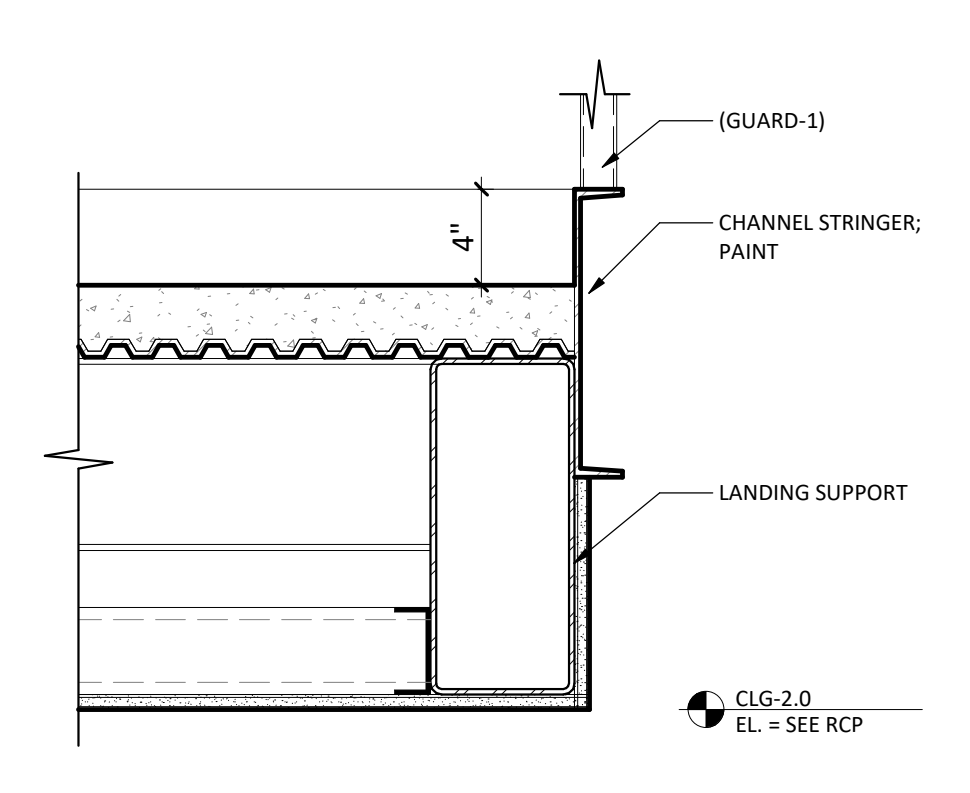
**2B (GUARD-1) @ SOFFIT UNDER STAIR**  
SCALE: 1 1/2" = 1'-0"



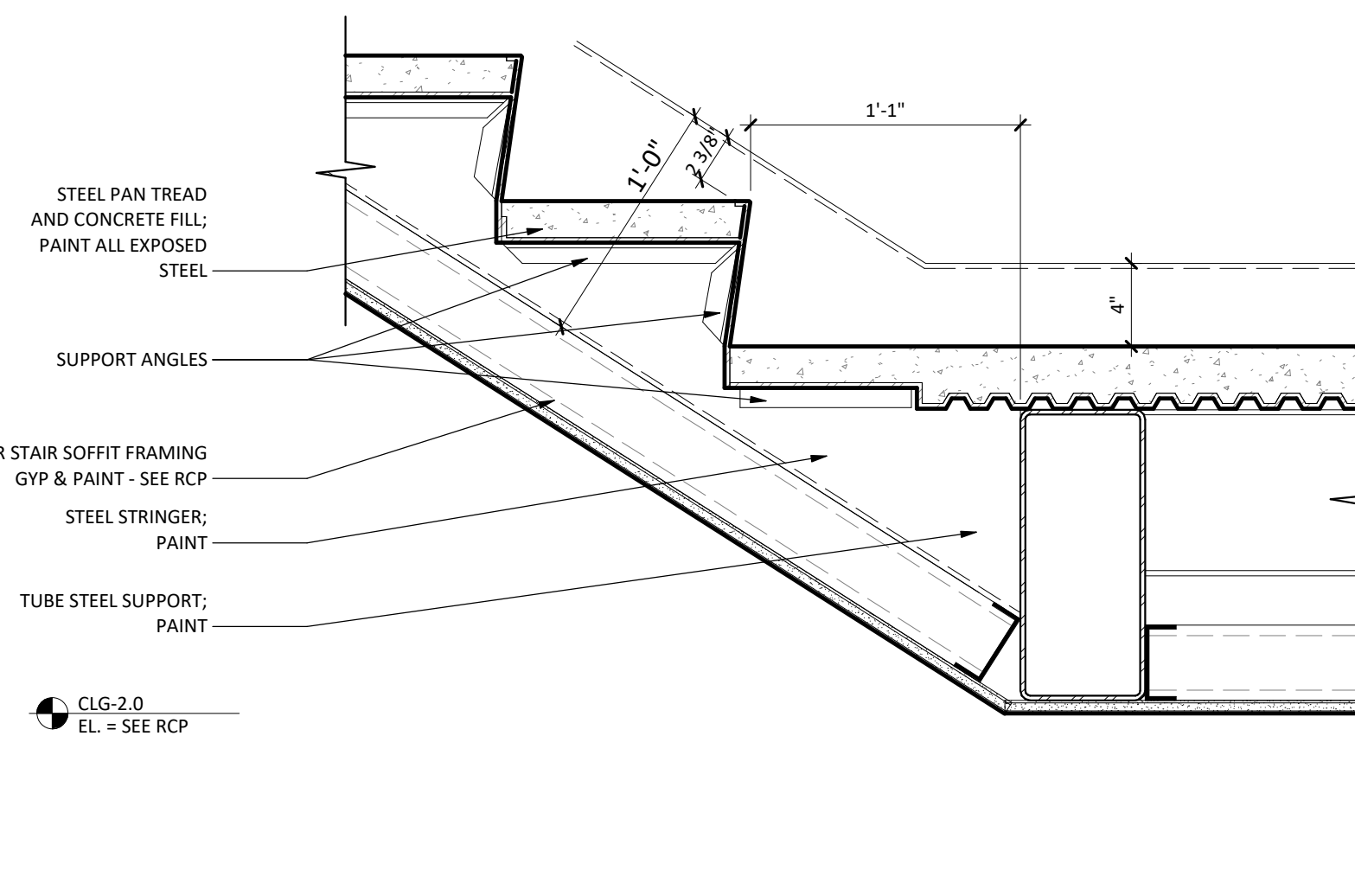
**9A LANDING @ EXT BRICK WALL**  
SCALE: 1 1/2" = 1'-0"



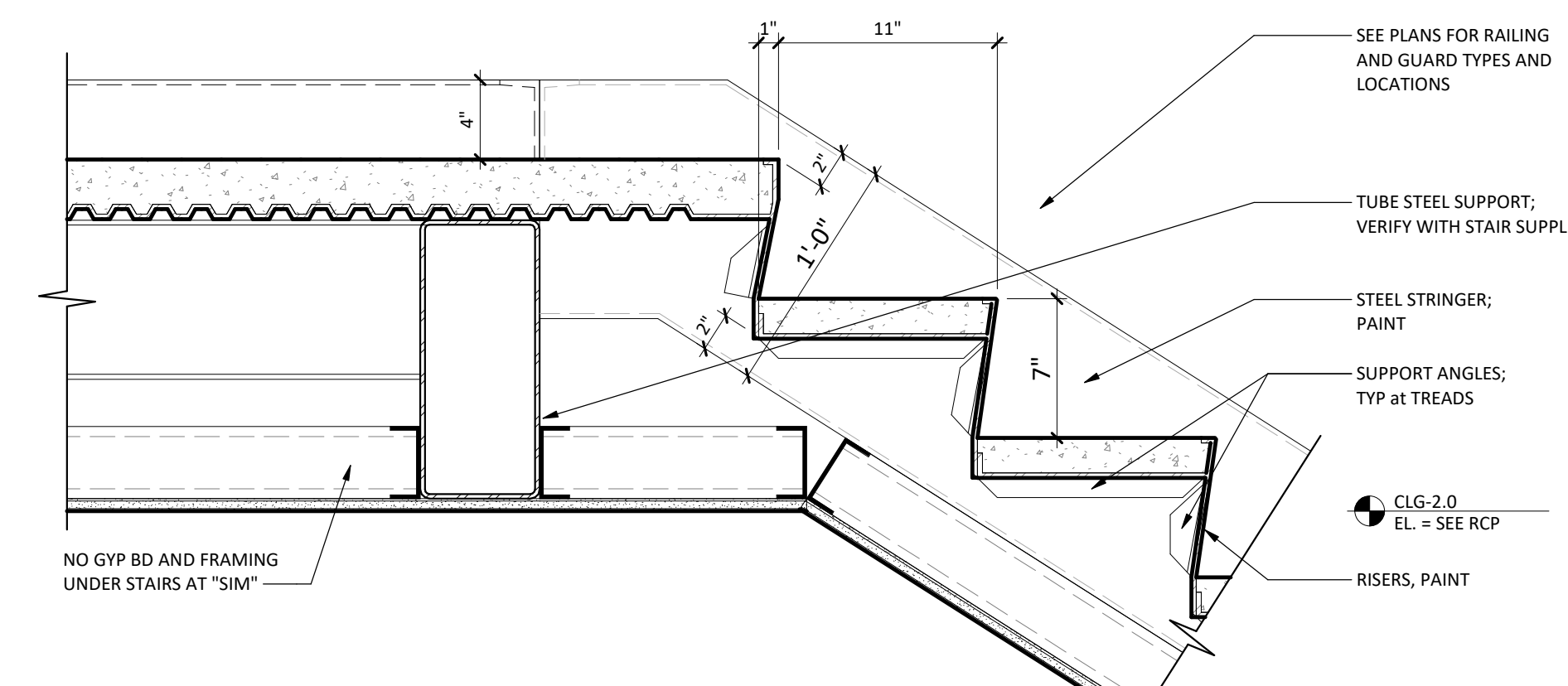
**8A LANDING AT EXTERIOR WALL**  
SCALE: 1 1/2" = 1'-0"



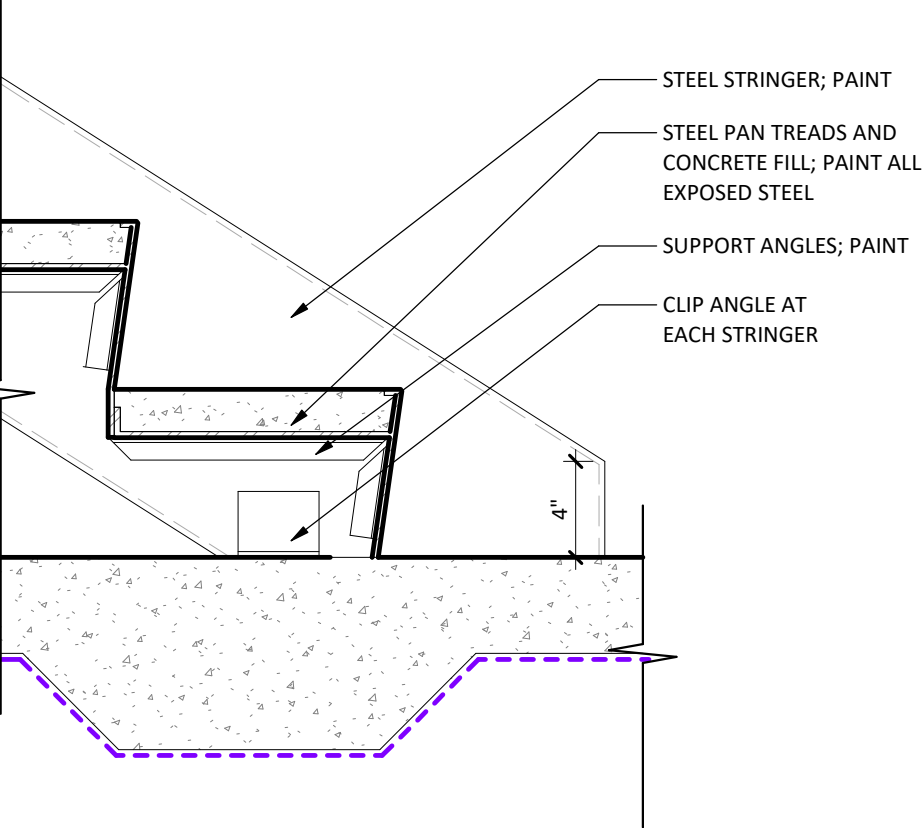
**6A GUARDRAIL AT LANDING**  
SCALE: 1 1/2" = 1'-0"



**5A STAIR LANDING C**  
SCALE: 1 1/2" = 1'-0"



**3A STAIR LANDING D**  
SCALE: 1 1/2" = 1'-0"



**2A BOTTOM OF STAIRS**  
SCALE: 1 1/2" = 1'-0"



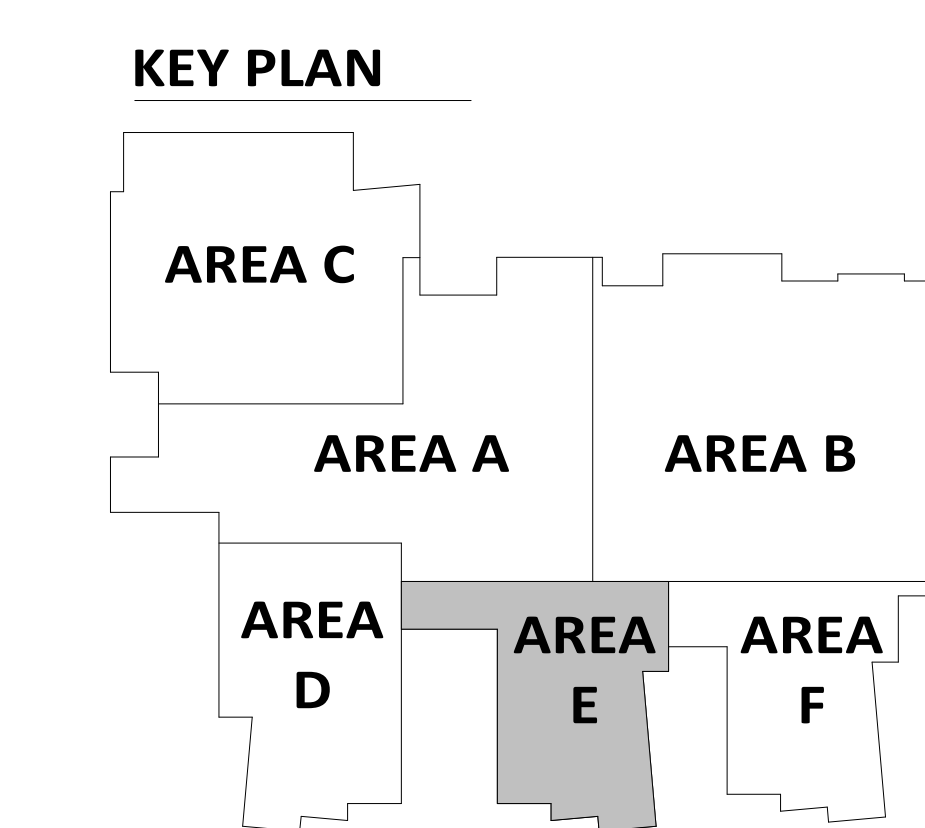
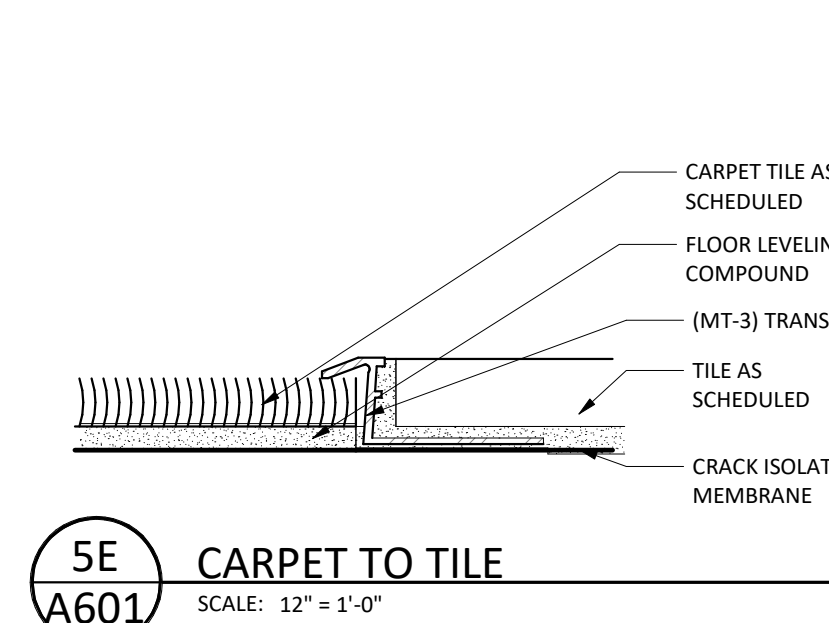
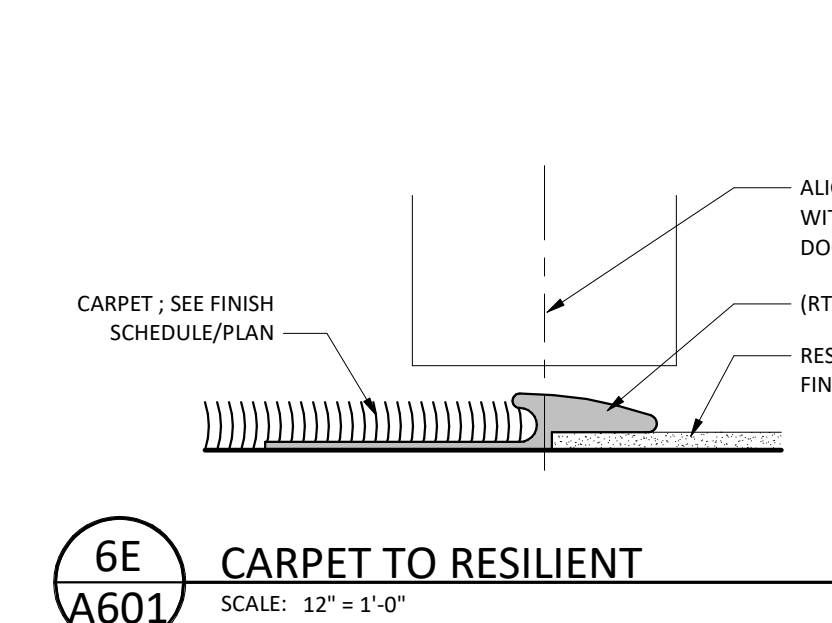
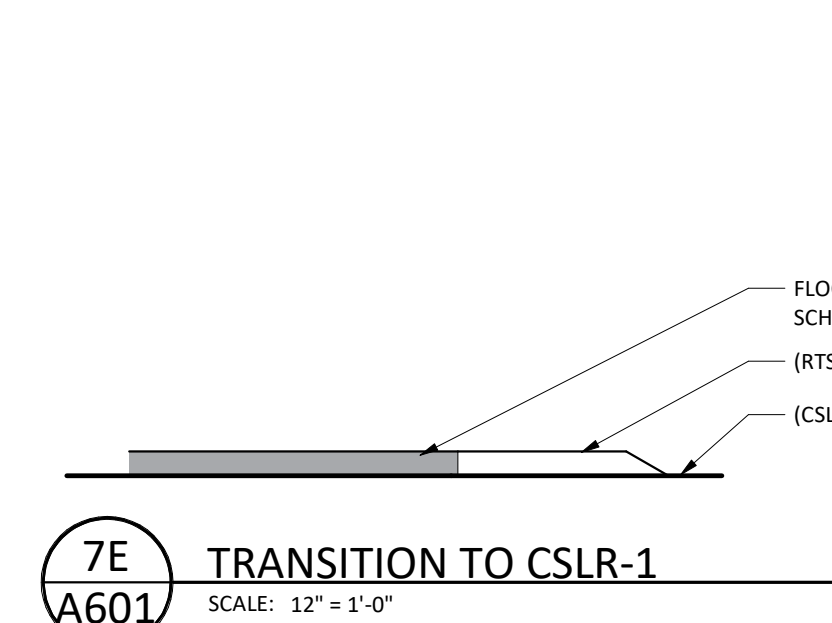
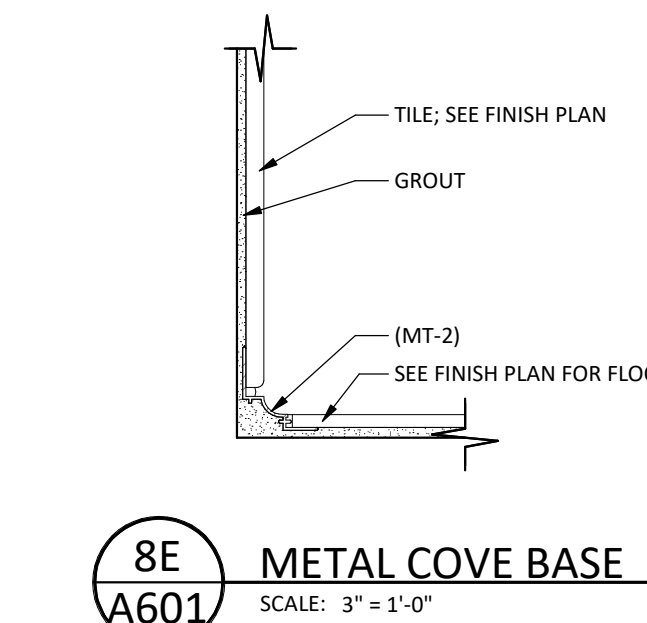
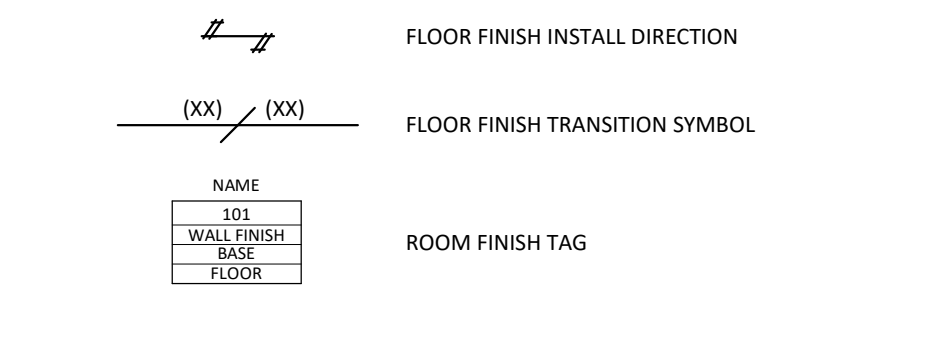
INTERIOR MATERIAL SCHEDULE

MARK	SPEC SECTION	DESCRIPTION	MANUFACTURER	PRODUCT / MODEL	COLOR / FINISH	MTO	SIZE	SPECIAL INSTRUCTION	LOCATION	CONTACT INFO NAME / EMAIL
ACT-1	09 5100	ACOUSTICAL CEILING TILE	ARABSTRONG	ULTRAMA REGULAR	WHITE		24" X 24" X 3/4"	USE WITH 9/16" SUSPENSION SYSTEM. COLOR: WHITE	(SEE DRAWINGS)	ELIZABETH M. SCHELDORP, MSCHELDORP@ARABSTRONGCEILING.COM
CG-1	10 3000	CORNER GUARD	CONSTRUCTION SPECIALTIES	SSM-20N	927 FOLKSTONE		2" WING	4" HIGH WITH TOP AND BOTTOM END CAPS, RETAINER, AND COVER	(SEE DRAWINGS)	STUART WALKER, CS@SDWALTERINC.COM
CG-2	10 3000	CORNER GUARD	CONSTRUCTION SPECIALTIES	SSM-20N	927 FOLKSTONE		2" WING	FULL HEIGHT	(SEE DRAWINGS)	STUART WALKER, CS@SDWALTERINC.COM
CF-1	09 8815	CARPET TILE	HJ INVISON	NARRATIVE B 7084	FOLIO 3000		24" X 24"	ASHLAR INSTALL	CLASSROOMS	TONY HILL, TONY.HILL@FLOORING.COM
CF-2	09 8815	CARPET TILE	HJ INVISON	ELEVATED 3074	HIGHRISE 8084		24" X 24"	BRICK INSTALL	STAFF COLLABORATION	TONY HILL, TONY.HILL@FLOORING.COM
GT-1	09 3000	GROUT	TEC	SEE SPECIFICATIONS	STANDARD GRAY 933			USE MINIMUM AMOUNT OF GROUT PER TILE MANUFACTURER RECOMMENDATION		
INTERIOR WOOD DOORS	08 8145	WOOD VENEERED DOORS	VT INDUSTRIES	WHITE MAPLE - PLAIN SLICED	CLEAR MAPLE (CONFORM WITH SHOPS)					
LVT-1	09 6500	LUXURY VINYL TILE	INTERFAC	NATURAL WOODGRAINS	TEAK		4.5mm, 25CM X 1M	(VERIFY WITH EX DRAWINGS)	STAFF COLLABORATION	COURTNEY HEDRINGTON, COURTNEY.HEDRINGTON@INTERFACE.COM
MKB-1	10 1015	MARKERBOARD	CLAIRDICE	LCS DELUX LCS206R	WHITE		48" X 96"		WALL TILE EXPOSED EDGES AND OUTSIDE CORNER OF WALL TILE AS NOTED	NATHAN SUPRENTANT, @NSUPRENTANT@CFRAPS.COM
MT-1	09 3000	METAL TRIM	SCHLUTER	QUADREC	ANODIZED ALUMINUM				WALL TILE EXPOSED EDGES AND OUTSIDE CORNER OF WALL TILE AS NOTED	JEREMY GHENT, JGHENT@SCHLUTER.COM
MT-2	09 3000	METAL TRIM	SCHLUTER	DIALEX - ANK	ANODIZED ALUMINUM				WALL TO FLOOR TILE COVE AND ALL INSIDE CORNERS OF TILE	JEREMY GHENT, JGHENT@SCHLUTER.COM
MT-3	09 3000	METAL TRIM	SCHLUTER	REN-TR	ANODIZED ALUMINUM				CARPET TO TILE TRANSITIONS	JEREMY GHENT, JGHENT@SCHLUTER.COM
PLAM-1	06 4100	HIGH PRESSURE LAMINATE	FORMICA	HIGH PRESSURE LAMINATE	ESPRESSO PEAR S48-S8, NG FINISH				CASEWORK	CHEERY CABLE, CHEERY.CABLE@FORMICA.COM
PLAM-2	12 3600	HIGH PRESSURE LAMINATE	FORMICA	HIGH PRESSURE LAMINATE	LAYERED SAND 9522, SCOVATO FINISH				COUNTERTOPS	CHEERY CABLE, CHEERY.CABLE@FORMICA.COM
PLAM-3	06 4100	HIGH PRESSURE LAMINATE	FORMICA	HIGH PRESSURE LAMINATE	756 NATURAL MARBLE SIL WHITE				CASEWORK	CHEERY CABLE, CHEERY.CABLE@FORMICA.COM
PT-1	09 9123	PAINT	SHERWIN WILLIAMS	SEE SPECIFICATIONS	ELDER WHITE SW 7014			SEE SPECIFICATIONS	FIELD	TYLER S DAV, TYLER.DAV@SHERWIN.COM
PT-2	09 9123	PAINT	SHERWIN WILLIAMS	SEE SPECIFICATIONS	NOT USED			SEE SPECIFICATIONS	FIELD	TYLER S DAV, TYLER.DAV@SHERWIN.COM
PT-3	09 9123	PAINT	SHERWIN WILLIAMS	SEE SPECIFICATIONS	OSAGE ORANGE SW 6890			SEE SPECIFICATIONS	ACCENT	TYLER S DAV, TYLER.DAV@SHERWIN.COM
PT-4	09 9123	PAINT	SHERWIN WILLIAMS	SEE SPECIFICATIONS	ANDRON SW 6124			SEE SPECIFICATIONS	HM FRAMES	TYLER S DAV, TYLER.DAV@SHERWIN.COM
RB-1	09 6500	RESILIENT BASE	TARKETT	BASEWORKS THERMSET RUBBER	CHARCOAL 20		4" H		TYPICAL BASE	KIRSTEN MALTZEN, @K12500-2635, KIRSTEN.MALTZEN@TARKETT.COM
RBT-1	09 6500	RUBBER TILE - FIELD	TARKETT - JOHNSONITE	COLOR SPLASH	SONIC AREA V15		24" X 24" @ 0.125" THICKNESS	HAMMERED STYLE	FIELD	KIRSTEN MALTZEN, @K12500-2635, KIRSTEN.MALTZEN@TARKETT.COM
RST-1	09 6500	RESILIENT STAIR NOSING	JOHNSONITE	STAIR NOSING RGN-20-A	CHARCOAL 20		CONTRACTOR TO VERIFY NOMINAL LENGTH		(SEE DRAWINGS)	KIRSTEN MALTZEN, @K12500-2635, KIRSTEN.MALTZEN@TARKETT.COM
RST-1	09 6500	RESILIENT TRANSITION STRIP	TARKETT - JOHNSONITE	JOHNSONITE REDUCERS	CHARCOAL 20		CONTRACTOR TO VERIFY SIZE		TRANSITION TO SEALED CONCRETE	KIRSTEN MALTZEN, @K12500-2635, KIRSTEN.MALTZEN@TARKETT.COM
RST-2	09 6500	RESILIENT TRANSITION STRIP	TARKETT - JOHNSONITE	CTA-20-A	CHARCOAL 20		CONTRACTOR TO VERIFY SIZE		TRANSITION CARPET TO RESILIENT	KIRSTEN MALTZEN, @K12500-2635, KIRSTEN.MALTZEN@TARKETT.COM
SSM-1	12 3600	SOLID SURFACE - CORIAN	CORIAN	SOLID SURFACE	WHITE JASMINE		1/2" THICK, 6" D x WINDOW WIDTH	EDGE: EASED	WINDOW SILLS	KIM BROSE, @K12362-4522, KIM@HILLMARK.COM
T-1	09 3000	WALL AND FLOOR TILE	CERAMIC TILEWORKS	ADORIC	LATTE		12" X 24"	STAGGER INST ALL, USE WITH GT-1; SEE ELEVATIONS FOR HEIGHT	TOILET ROOM TILE	KELLY ANDERS, KELL@CEAMCETILEWORKS.COM
VWC-1	09 7200	VINYL WALL COVERING	MDC	GENON CONTRACT ASIAN LINEN	SOFT WHITE W2AWG5			SEE SPECIFICATIONS	FIELD	KELIAN BAKER, @KBAKER@MDCWALL.COM
VWC-1A	09 7200	VINYL WALL COVERING	MDC	GENON CONTRACT ASIAN LINEN	SOFT WHITE W2AWG5			SEE SPECIFICATIONS	FIELD - EXTERIOR WALLS	KELIAN BAKER, @KBAKER@MDCWALL.COM
VWC-2	09 7200	VINYL WALL COVERING	MAHARAM	BOLT	99998-011 KOTO			SEE SPECIFICATIONS	ACCENT	TRACY SHAND, TSHAND@MAHARAM.COM
VWC-3	09 7200	VINYL WALL COVERING	KOROSEAL	BELEAM	1087-11		TYPE II VINYL, WIDTH: 53" - 54"	SEE SPECIFICATIONS	ACCENT	GAYL LINDEMAN, @GLINDEMAN@KOROSEAL.COM
WT-1	12 3600	WINDOW TREATMENT	DAWNER	TELEKHADE NEWS MANUAL	SHERWAVE 4600 V07 PEWTER (HOUSING COLOR: T8D		3% OPENNESS		TYPICAL WINDOW TREATMENT	

FINISH PLAN GENERAL NOTES

- (CG-1) U.N.O.
- 1. PRINT ALL EXPOSED CMU AND OPSRAM BOARD UNLESS NOTED OTHERWISE.
- 2. PROVIDE APPROPRIATE SCORING TRANSITION TYPE, CENTER UNDER DOOR UNLESS NOTED OTHERWISE AT DOOR LOCATIONS. SEE TRANSITIONS THIS SHEET.
- 3. PAINT ALL METAL SURFACES AT STAIRS, ETC., INCLUDING, BUT NOT LIMITED TO, STRINGERS, RISERS, AND RAILINGS.
- 4. PAINT ALL EXPOSED STEEL COLUMNS P.T. 10 AND CASEWORK SHALL BE INSTALLED ON TOP OF FINISHED LVL.
- 5. REFER TO REFLECTED CEILING PLANS FOR CEILING FINISHES AND COLORS.
- 6. PAINT HORIZONTAL AND VERTICAL FACES OF ALL SLOPPES AND BULKHEADS. REFER TO REFLECTED CEILING PLANS FOR COLORS.

FLOOR FINISH LEGEND



8A A601 FIRST FLOOR - FINISH PLAN - AREA E SCALE: 1/8" = 1'-0"

5A A601 SECOND FLOOR - FINISH PLAN - AREA E SCALE: 1/8" = 1'-0"

**JLG architects**

224 Broadway  
Fargo, ND 58102  
701.384.6023  
www.jlgarchitects.com

**HEYER ENGINEERING**  
STRUCTURAL CONSULTANTS  
4180 25th Ave S  
Fargo, ND 58104  
701.703.2800  
www.heyereengineering.com

**CMTA**  
A LICENSED CONTRACTOR  
www.cmta.com

**MBN**  
MECHANICAL, ELECTRICAL, CIVIL  
100 7th St, Ste 200  
Fargo, ND 58102  
701.779.4844

**REVISION SCHEDULE**

NO.	DESCRIPTION	DATE

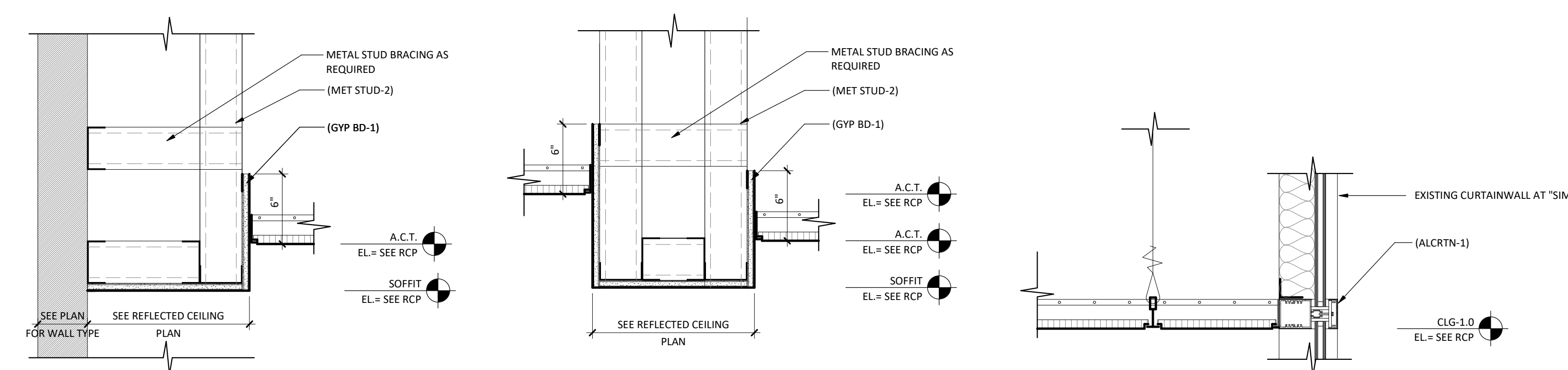
**WEST FARGO PUBLIC SCHOOLS**  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
PHASE: 100% CDs  
PROJECT: 23231  
SHEET: A601  
FINISH PLANS



RCP GENERAL NOTES

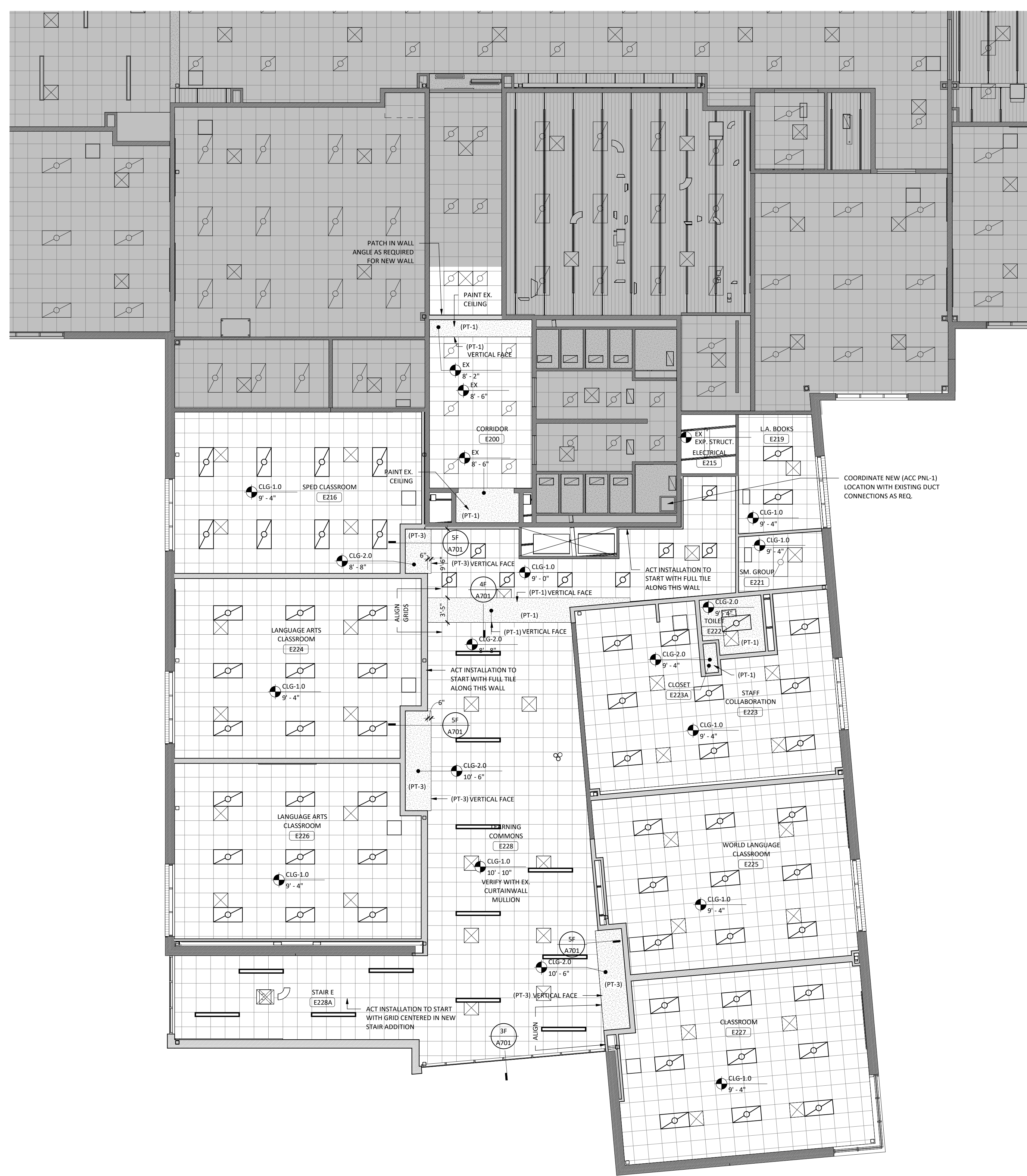
- COORDINATE FINAL SIZE AND FINAL LOCATION OF ALL ACCESS PANELS WITH TRADE REQUIRING SAME.
- COORDINATE CEILING SUSPENSION SYSTEMS WITH OTHER CEILING SPACE EQUIPMENT SUPPORTING DEVICES.
- FOR PARTITION TYPES, SEE SHEET C02.
- CEILING SYSTEM TO BE CENTERED IN ROOM IN BOTH DIRECTIONS UNLESS NOTED OTHERWISE. SEE PLANS FOR LIGHTING LOCATIONS TO DETERMINE IF FULL CEILING TILE OR GRID IS TO BE CENTERED TO FACILITATE LIGHTING LAYOUT.
- NO CEILING PANELS TO BE CUT TO LESS THAN 6" WIDTH AT CEILING PANEL INSTALLATION, TYPICAL, AT CONDITIONS WHERE CEILING TILE PADS EXCEED 2'-0" TRIM 2'x4" CEILING PADS AS REQUIRED TO FIT.
- SPRINKLER HEADS TO BE LOCATED IN THE CENTER OF CEILING PANELS TYPICALLY.
- VERIFY EXACT LOCATIONS OF SOFFIT AND CEILING CONTROL JUNCTIONS WITH THE ARCHITECT'S REPRESENTATIVE IN THE FIELD.
- COORDINATE THE LOCATION OF EJECTION/DRON PLATES AT CEILING PANEL PENETRATIONS WITH ELECTRICAL AND MECHANICAL TRADES.
- SEE ELECTRICAL DRAWINGS FOR FUTURE TYPES.



5F SOFFIT CONNECTION AT WALL SCALE: 1/2" = 1'-0"  
 4F SOFFIT/ACT CONNECTION SCALE: 1/2" = 1'-0"  
 3F ACT CEILING AT CURTAINWALL SCALE: 1/2" = 1'-0"

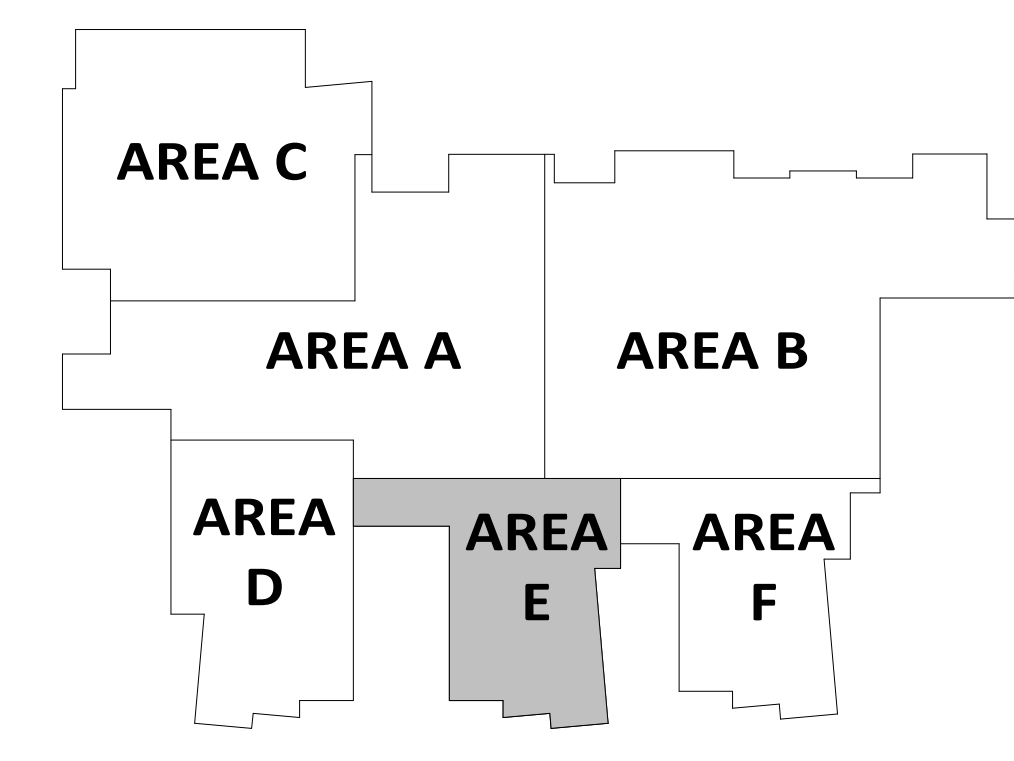


8A FIRST FLOOR RCP - AREA E & F SCALE: 1/8" = 1'-0"



5A SECOND FLOOR RCP - AREA E SCALE: 1/8" = 1'-0"

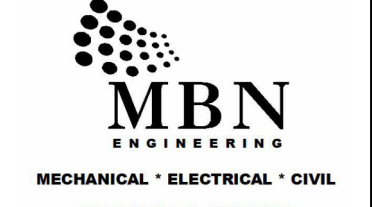
KEY PLAN



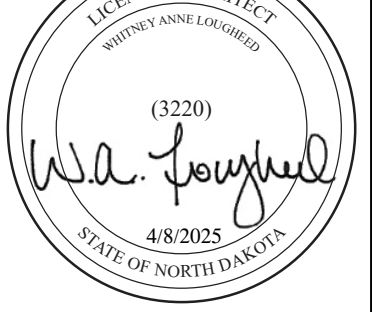
224 Broadway  
 Fargo, ND 58102  
 phone: 701.336.4237  
 facsimile: 701.336.4238  
 www.jlgarchitects.com  
 copyright © 2022



4180 25th Ave S  
 Fargo, ND 58104  
 (701) 701-2800  
 WWW.HEYERENGINEERING.COM  
 039-0269-2025



MECHANICAL - ELECTRICAL - CIVIL  
 800 7TH ST, SUITE 300  
 FARGO, ND 58103  
 FAX: 701-478-8844



REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

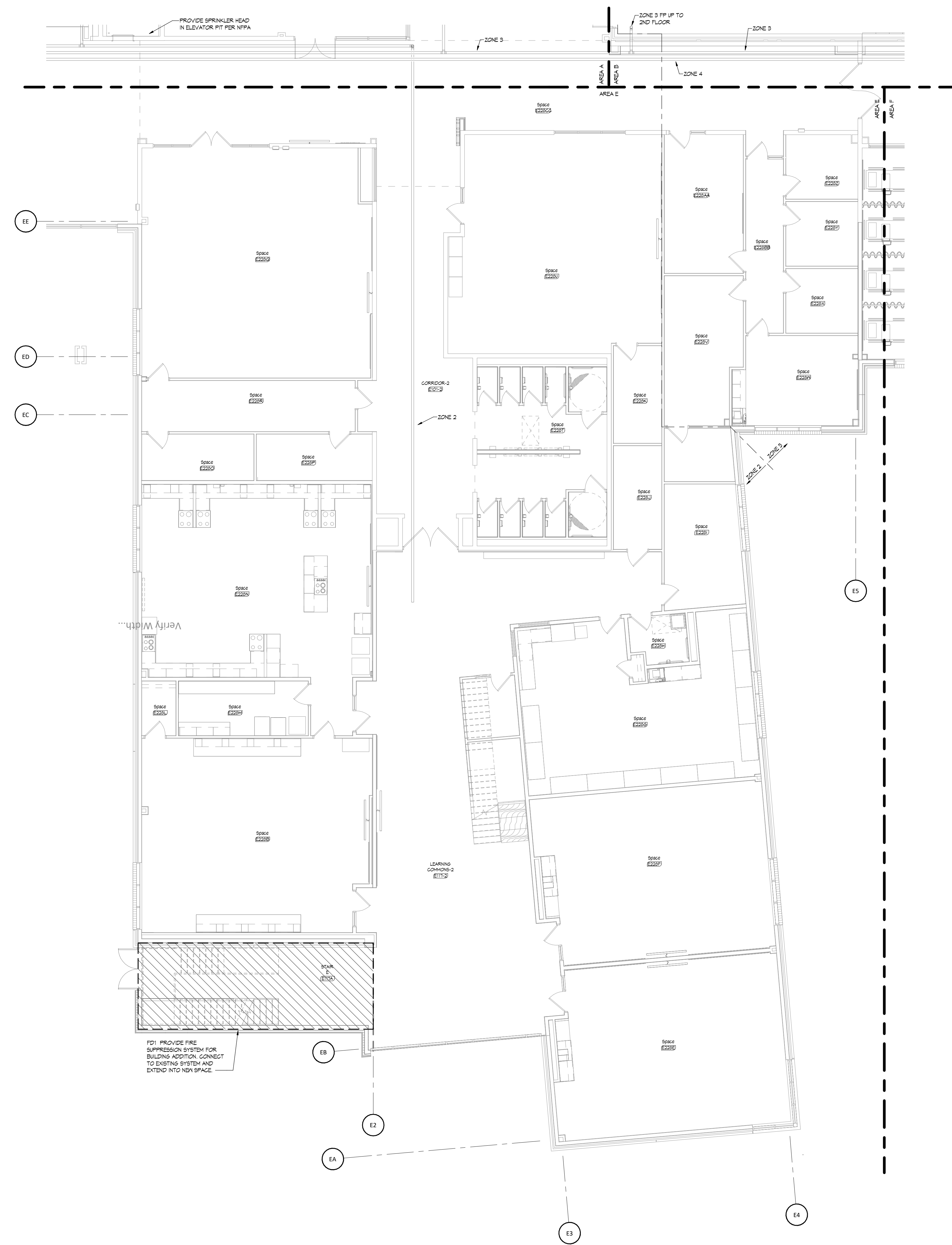
WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
 8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/25  
 PHASE: 100% CDs  
 PROJECT: 23231  
 SHEET: **A701**  
 REFLECTED CEILING PLANS

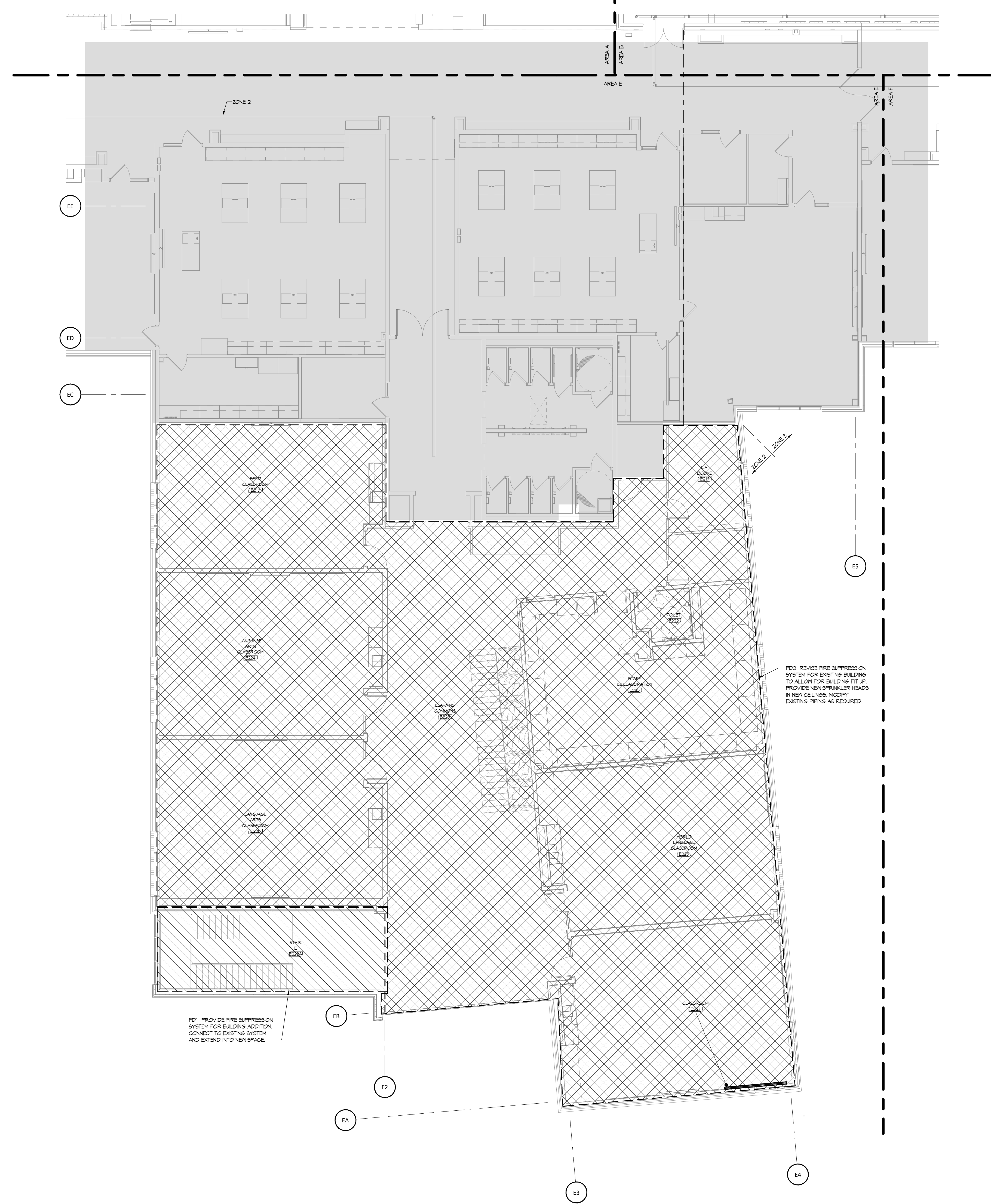




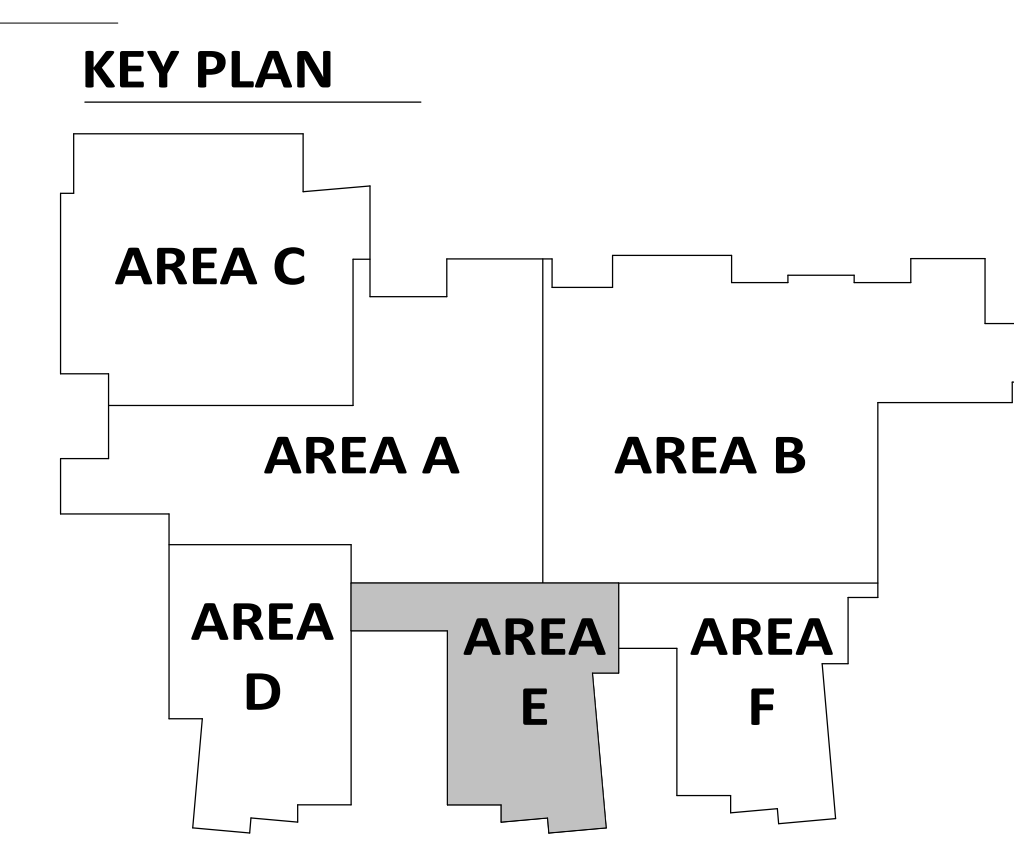




**2** FIRST FLOOR - FIRE PROTECTION-AREA E  
SCALE: 1/8" = 1'-0"



**1** SECOND FLOOR PLAN - FIRE PROTECTION - AREA E  
SCALE: 1/8" = 1'-0"





**PLUMBING FIXTURE ROUGH-IN CONNECTION SCHEDULE**

FIXTURE	AWATE	VENT	DN	HN
PULL HYDRANT	-	-	3/4"	-
CLEAN OUT	4"	-	-	-
FLOOR DRAIN	2"	2"	-	-
LAVATORY	2"	2"	1/2"	1/2"
WATER CLOSET (WV)	4"	2"	1"	-
URINAL	2"	2"	3/4"	-
SHOWER	2"	2"	3/4"	3/4"
EMERG. EYE WASH-SHOWER	2"	2"	-	-
SINK	2"	2"	1/2"	1/2"
ENC.	2"	2"	1/2"	-
MIXING VALVE	-	-	3/4"	3/4"
HOT BATH	3"	2"	3/4"	3/4"
HOSE BIBB	-	-	3/4"	-
WASH MACHINE TRM	2"	2"	3/4"	3/4"

NOTES:  
1. SIZES SHALL BE AS SCHEDULED UNLESS OTHERWISE NOTED ON DRAWINGS.



224 Broadway  
 Fargo, ND 58102  
 Phone: 701.336.4237  
 Facsimile: 701.336.4228  
 www.jlgarchitects.com  
 copyright © 2025



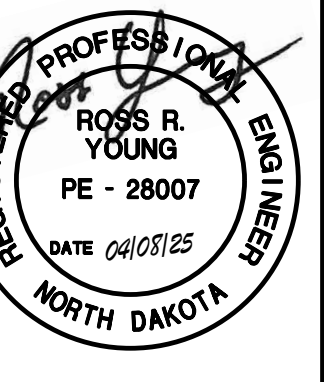
HEVER ENGINEERING  
 STRUCTURAL CONSULTANT  
 4180 24th Ave S  
 Fargo, ND 58104  
 (701) 728-0949  
 WWW.HEVERENGINEERING.COM  
 039.0265.2025



CMTA  
 A LIBERTY COMPANY  
 www.cmta.com 877-366-6861

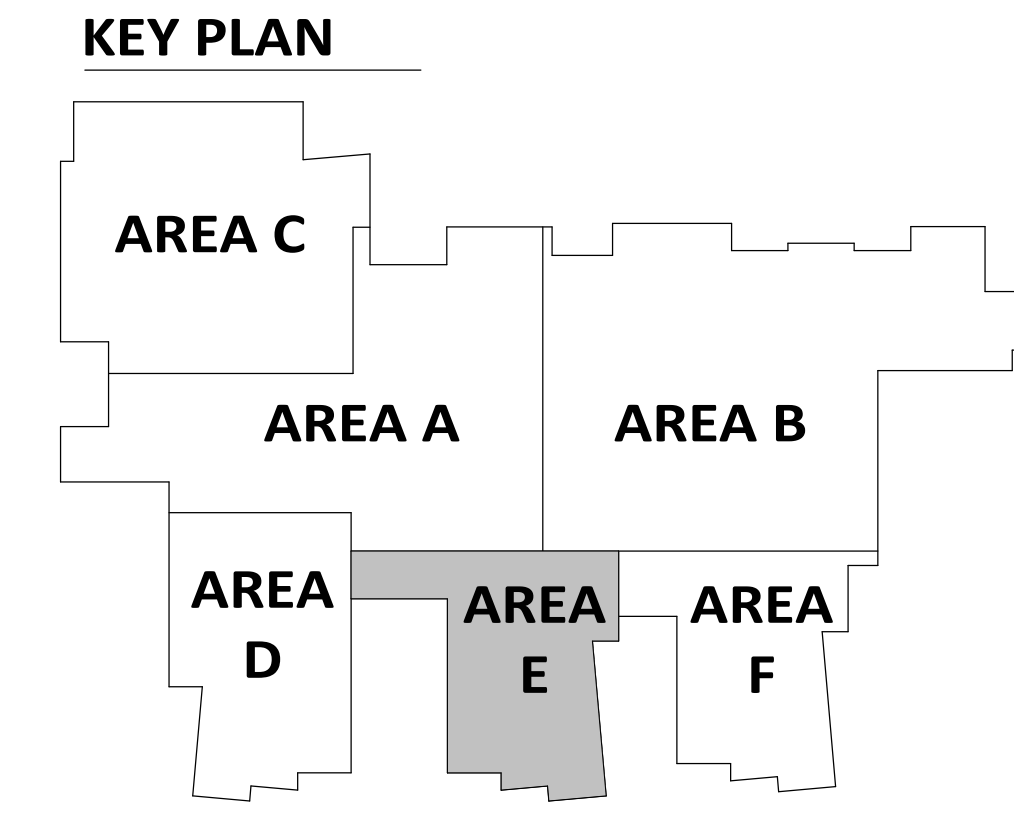
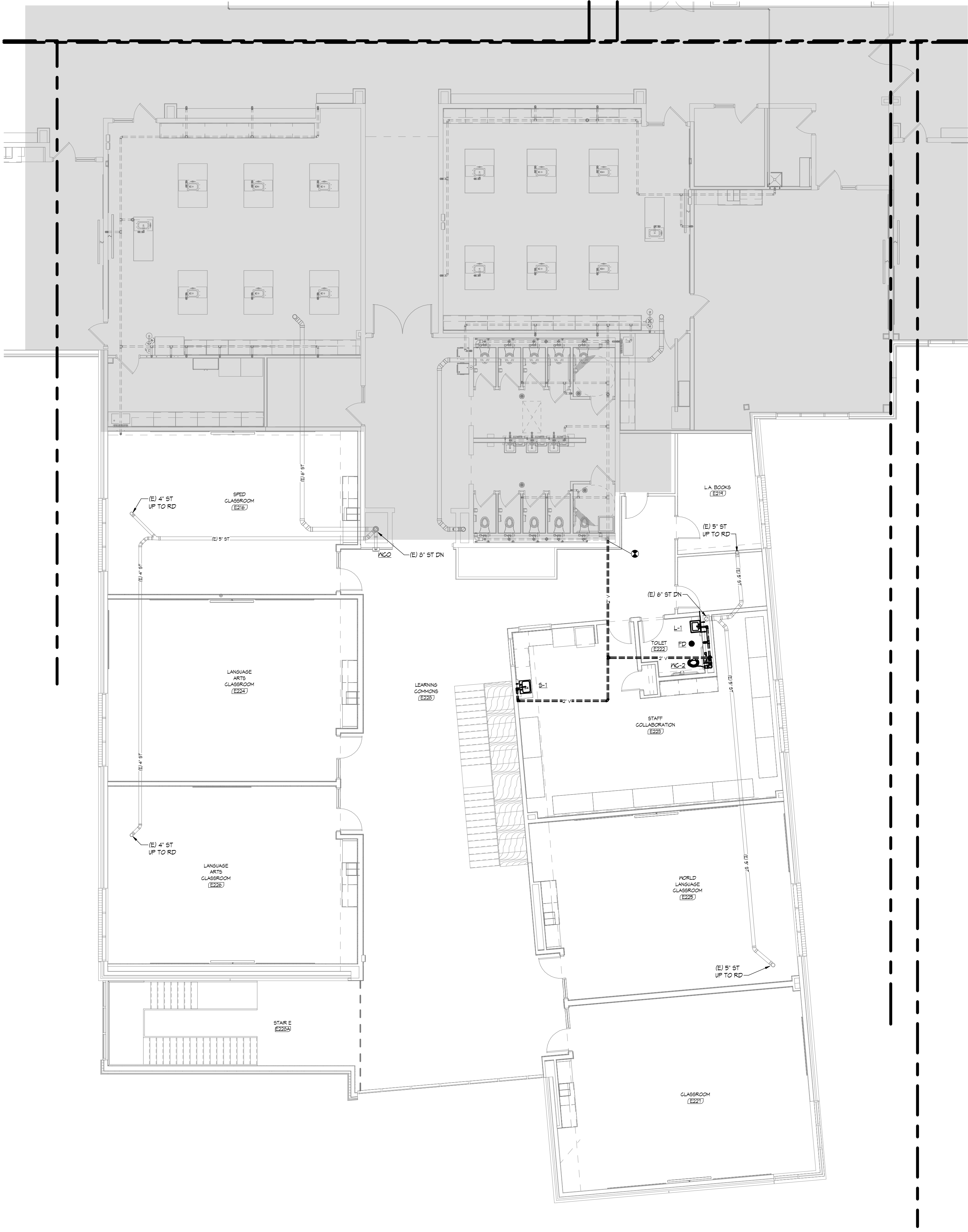
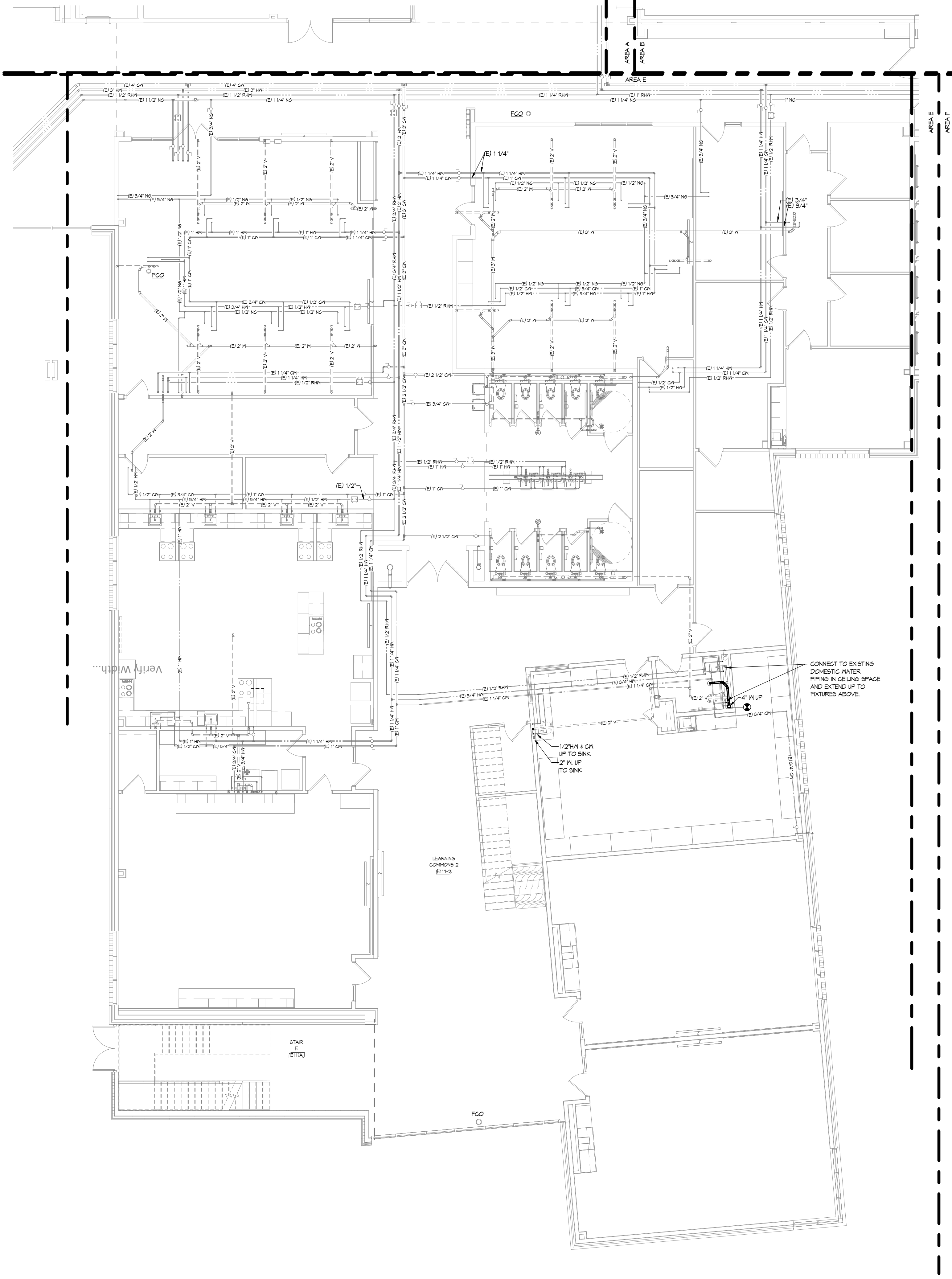
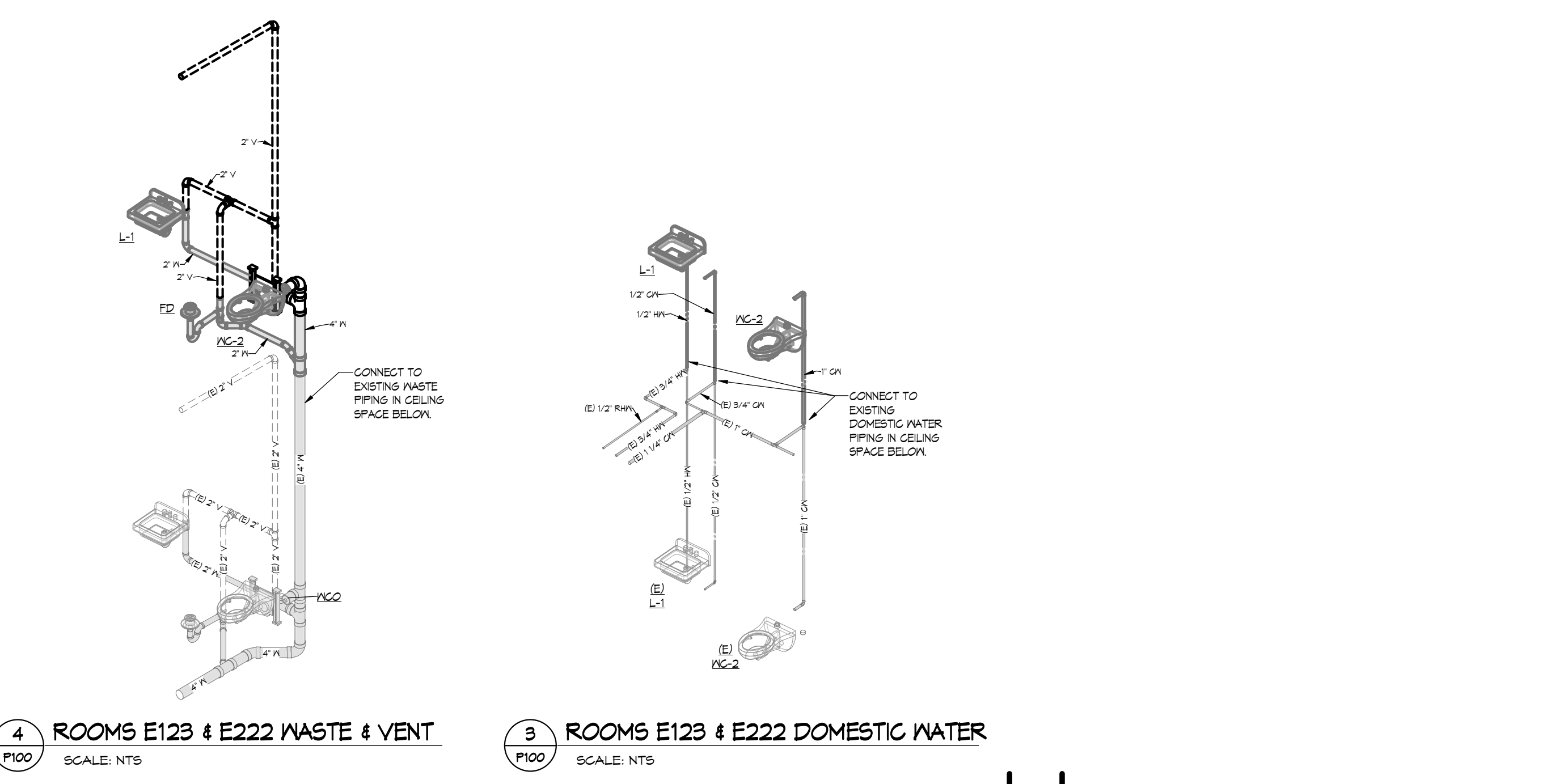


MECHANICAL • ELECTRICAL • CIVIL  
 885 7TH ST, SUITE 100  
 FARGO, ND 58103  
 FARGO, ND 58103



**REVISION SCHEDULE**

NO.	DESCRIPTION	DATE



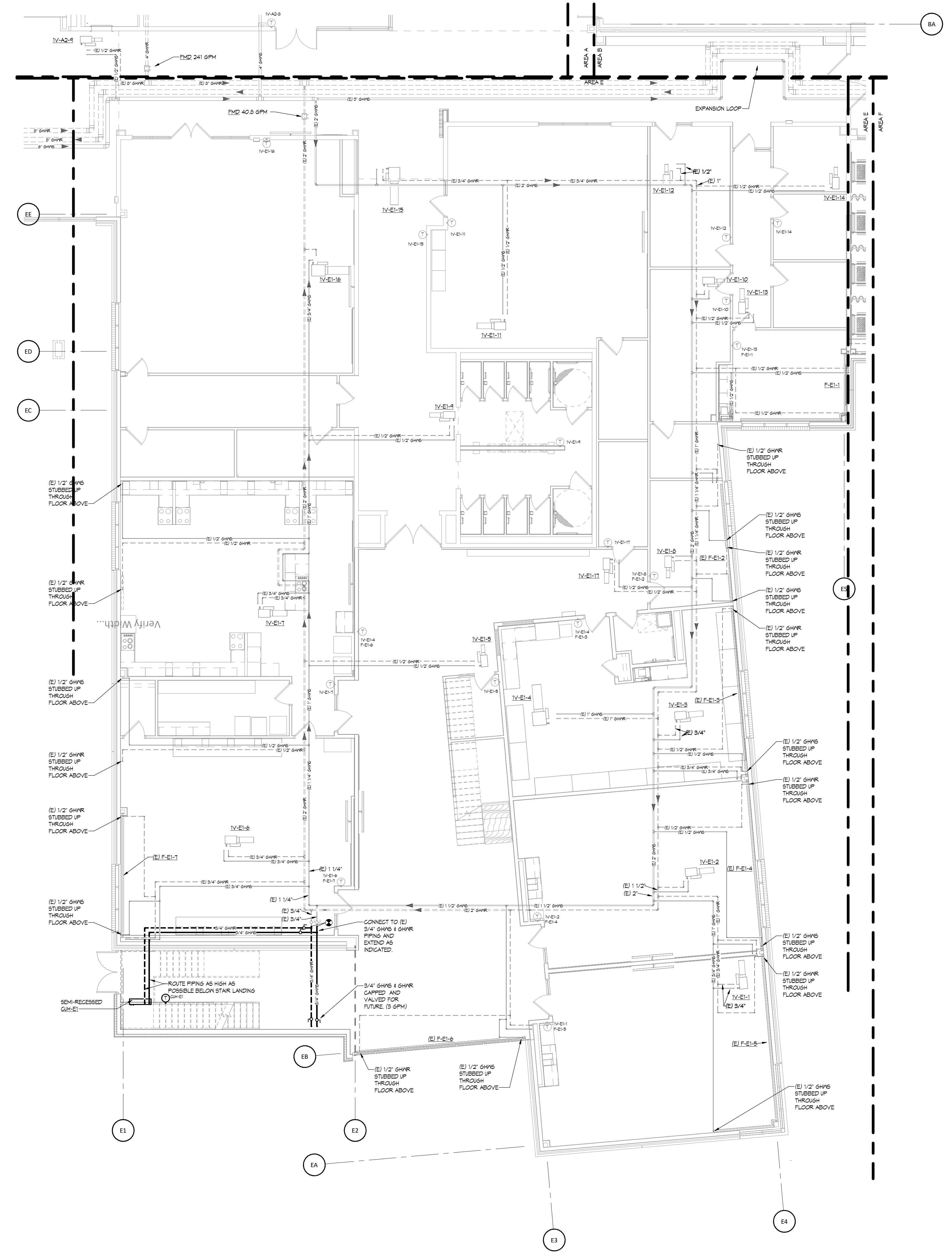
WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
 8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/2025  
 PHASE: CONSTRUCTION DOCUMENTS  
 PROJECT: 23231

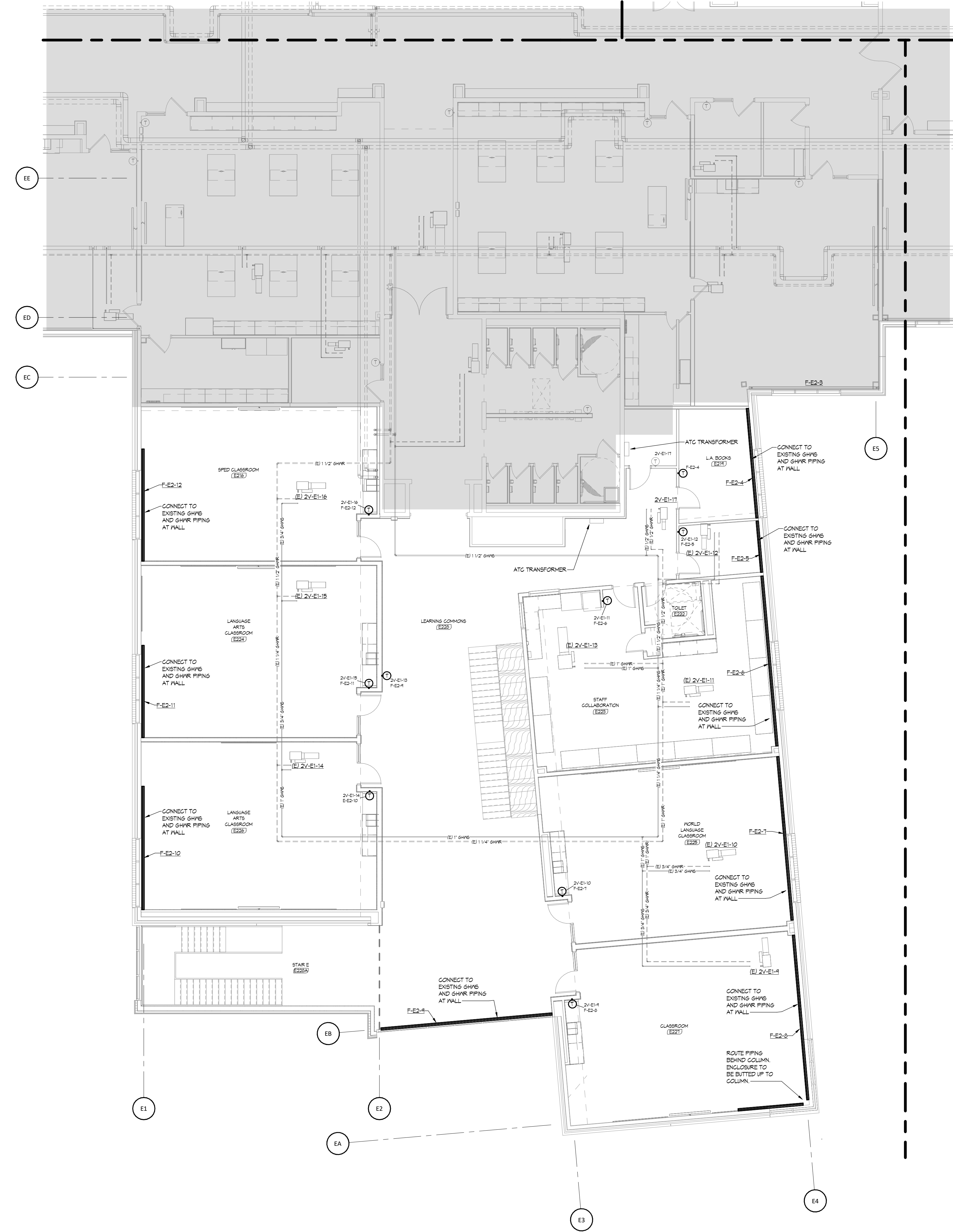
SHEET: **P100**  
 PLUMBING PLANS

4/8/2025 8:57:02 AM



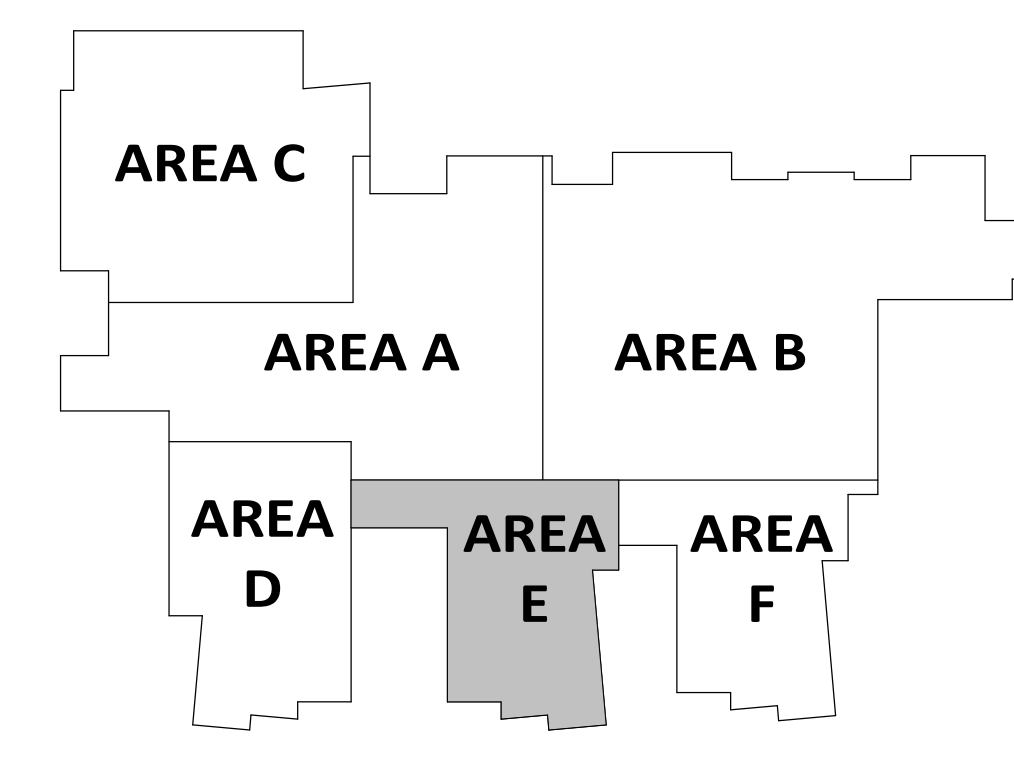


2 FIRST FLOOR - HVAC PIPING - AREA E  
SCALE: 1/8" = 1'-0"

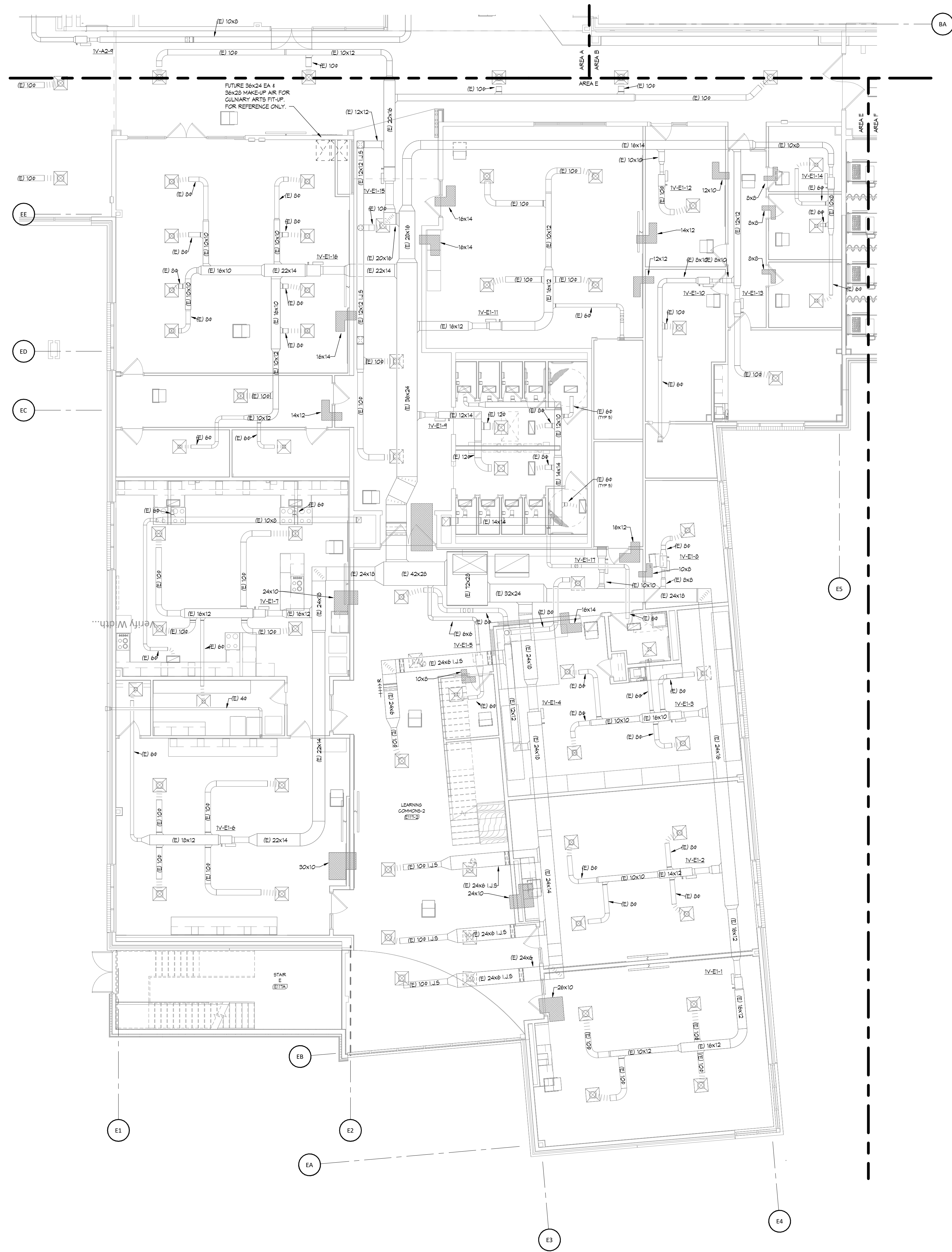


1 PARTIAL SECOND FLOOR PLAN - MECHANICAL PIPING - AREA E  
SCALE: 1/8" = 1'-0"

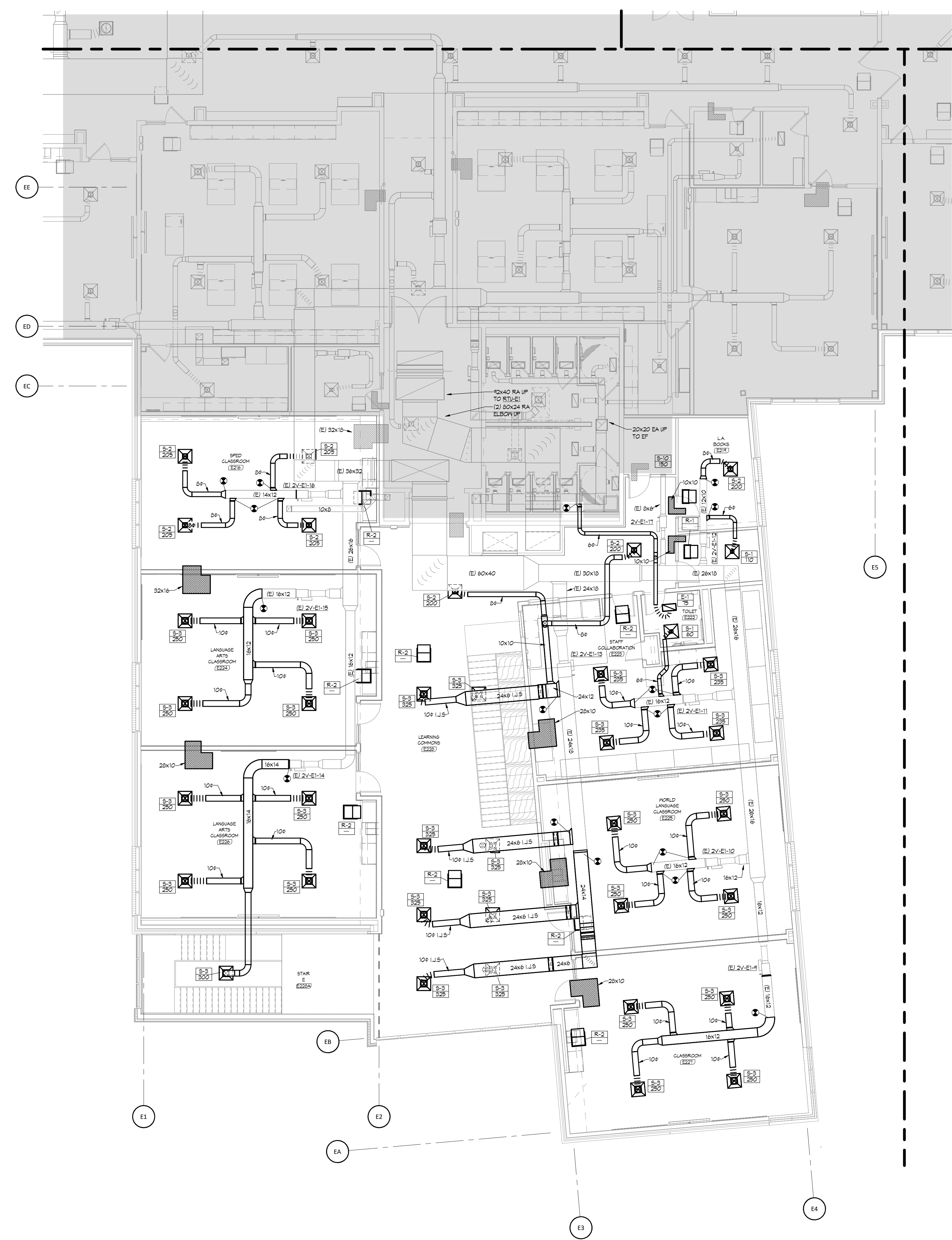
KEY PLAN



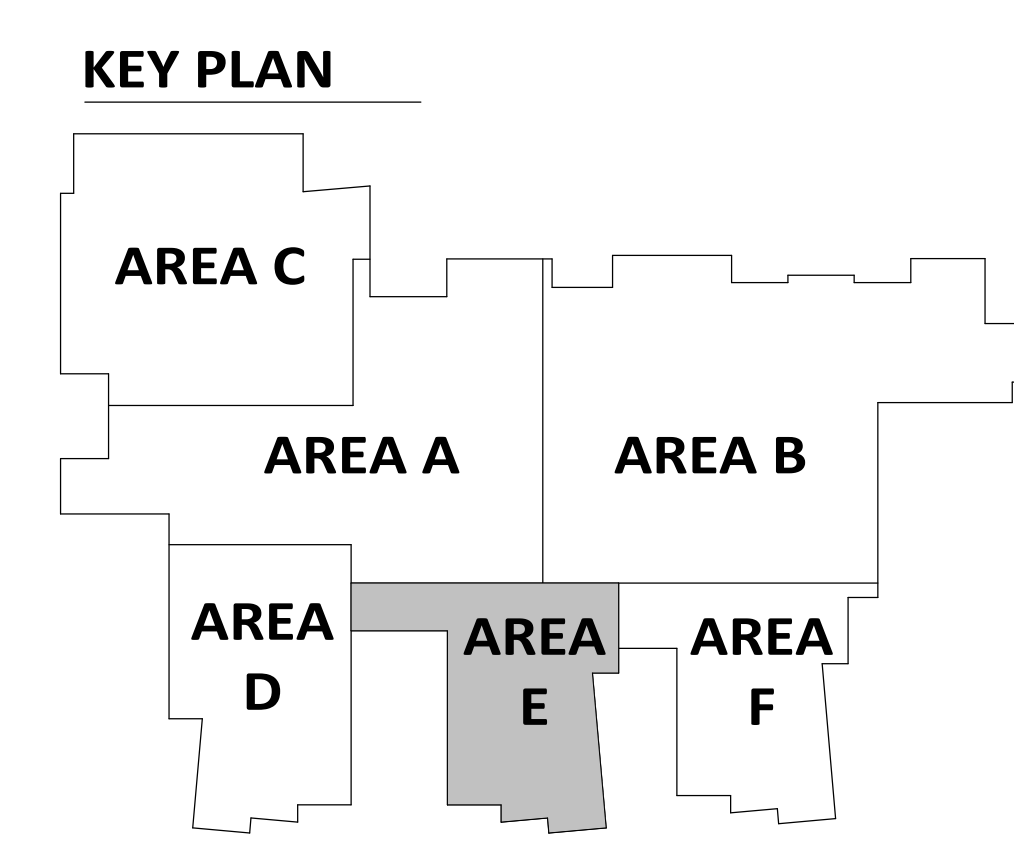




**2** FIRST FLOOR - VENTILATION - AREA E  
SCALE: 1/8" = 1'-0"



**1** SECOND FLOOR PLAN - VENTILATION - AREA E  
SCALE: 1/8" = 1'-0"





UNIT NO.	MANUFACTURER #	TYPE	CPM	EAT	LAT	OUTPUT MBH	MOTOR HP	DISC BY	ENT	LVT	SPM	RECESS	NOTES
CUM-E1	RC/VN/980-04	PV1	420	80	88	18.2	1/25	1	MC	180	1.4	8R	1, 2

W WATER  
 H HORIZONTAL  
 I INVERTED  
 R RECESSED  
 SR SON RECESSED  
 PH PULL HAND  
 DISC DISCONNECT  
 MC MECHANICAL CONTRACTOR  
 EC ELECTRICAL CONTRACTOR

NOTES:  
 1. MANUFACTURER REFERENCED BRAND RITTLING  
 2. CAPACITY BASED ON 40% ETHYLENE GLYCOL SOLUTION

UNIT NO.	MODEL NO.	TYPE	NECK SIZE	PANEL STYLE	FRAME	NC	MOUNTING	AR	MAX CFM	NOTES
S-1	SFD	SFD	80	24x24	31	QD	LIT	SA	150	1, 2
S-2	SFD	SFD	80	24x24	31	QD	LIT	SA	250	1, 2
S-3	SFD	SFD	100	24x24	31	QD	LIT	SA	350	1, 2
R-1	80	GR	12x22	12x24	F	QD	LIT	RA	500	1, 2
R-2	80	GR	22x22	24x24	F	QD	LIT	RA	1600	1, 2
E-1	80	GR	12x22	12x24	F	QD	LIT / GYP	EA	500	1, 2

RCD ROUND CONE DIFFUSER  
 SFD SQUARE FLANGE DIFFUSER  
 R80 REGISTER  
 E80 E80 GRATE GRILLE  
 GR GRILLE  
 O80 OPPOSED BLADE DAMPER  
 O90 OPPOSED HALL OR CEILING  
 LIT LAY-IN TILE  
 SA SUPPLY AIR  
 RA RETURN AIR  
 EA EXHAUST AIR

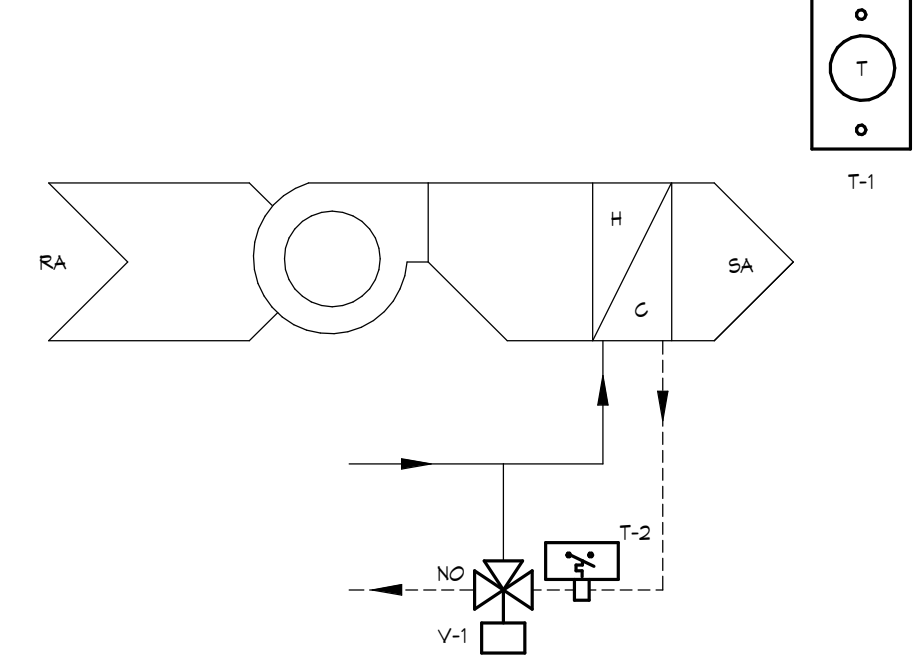
NOTES:  
 1. ALL DIFFUSERS, GRILLES & REGISTERS TAKEN FROM THE PRICE AIR DISTRIBUTION EQUIPMENT CATALOGUE SEE SPECIFICATIONS  
 2. S-1 INDICATES AIR QUANTITY IN CFM  
 3. INDICATES AIR QUANTITY IN CFM  
 4. INDICATES QUANTITY OF SUPPLY AIR IN THE SAME ROOM OR GENERAL AREA

UNIT NO.	MANUFACTURER #	FLUID	COVER TYPE	COVER HEIGHT	COVER DEPTH	COVER LENGTH	TUBE SIZE	FNS PER	FN LENGTH	BTU PER	TOTAL	SPM	NOTES
F-E2-4	RITTLING F93	W	ST	11	4	PH-V1	3/4	40	9.0	T10	9.1	0.9	1, 2, 3
F-E2-5	RITTLING F93	W	ST	11	4	PH-V1	3/4	40	9.0	T10	3.6	0.5	1, 2, 3
F-E2-6	RITTLING F93	W	ST	11	4	PH-V1	3/4	40	19.0	T10	12.0	1.0	1, 2, 3
F-E2-7	RITTLING F93	W	ST	11	4	PH-V1	3/4	40	19.0	T10	12.0	1.0	1, 2, 3
F-E2-8	RITTLING F93	W	ST	11	4	B2	3/4	40	22.0	T10	15.6	1.2	1, 2, 3
F-E2-9	RITTLING PB65	W	PED	8	9.5	PH-C	3/4	48	23.0	T78	11.0	1.5	1, 2, 3
F-E2-10	RITTLING F93	W	ST	11	4	C-C	3/4	40	16.0	T10	11.4	0.9	1, 2, 3
F-E2-11	RITTLING F93	W	ST	11	4	PH-C	3/4	40	11.0	T10	7.0	0.6	1, 2, 3
F-E2-12	RITTLING F93	W	ST	11	4	PH-C	3/4	40	14.0	T10	9.9	0.6	1, 2, 3

W 40% ETHYLENE GLYCOL / WATER  
 ST SLOPE TOP  
 PH HALL TO HALL

NOTES:  
 1. CAPACITIES BASED ON 180°F AVG. WATER TEMP AND 60°F ΔT  
 2. BOTTOM OF COVER = ABOVE FLOOR  
 3. FINED ELEMENT TO COVER THE ENTIRE LENGTH OF FINCH WHERE INSTALLED BELOW FINCHING

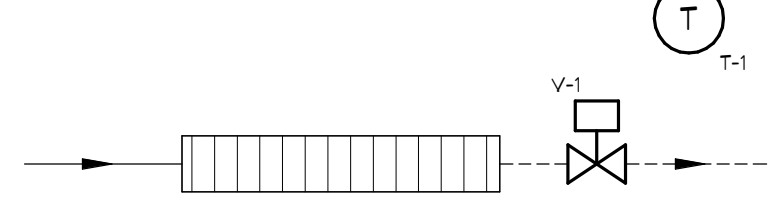
SEQUENCE OF OPERATION  
 CONTROL MODE: THE CABINET UNIT HEATER SHALL BE IN THE UNOCCUPIED OR OCCUPIED CONTROL MODE.  
 TEMPERATURE SET POINT CONTROL: IN THE OCCUPIED CONTROL MODE, THE ACTIVE TEMPERATURE SET POINT SHALL BE SET TO A MAXIMUM OF 68 DEGREE F IN THE UNOCCUPIED CONTROL MODE, THE ACTIVE TEMPERATURE SET POINT SHALL BE SEPARATE NIGHT-SETBACK TEMPERATURE SET POINT THAT IS ADJUSTABLE BY THE OPERATOR.  
 SPACE TEMPERATURE CONTROL: WHEN THE SPACE TEMPERATURE IS BELOW THE ACTIVE SET POINT, THE PROPORTION HEATING VALUE SHALL BE OPEN TO MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE SET POINT. A STRAIN ON ADJUSTER ON THE RETURN LINE FROM THE UNIT HEATER GOLL SHALL CLOSE THE UNIT HEATER FAN. UPON LOSS OF POWER, THE HEATING VALVE SHALL BE OPEN.  
 OUTSIDE AIR TEMPERATURE CONTROL: WHEN THE OUTSIDE AIR IS ABOVE 45 DEGREE F, THE HOT WATER CONTROL VALVE TO THE CABINET UNIT HEATER SHALL BE CLOSED AND THE FAN SHALL BE OFF.  
 FAN CONTROL: WHEN THE SPACE IS BELOW THE HEATING SET POINT, THE FAN SHALL BE ON. THE STATUS OF THE FAN SHALL BE MONITORED IF THE FAN IS COMMANDER ON AND STATUS CANNOT BE PROVIDED, A FAN FAILURE ALARM SHALL BE GENERATED.  
 REFER TO DRAWINGS FOR 2-WAY OR 3-WAY CONTROL VALVE



CONTROL DEVICE	POINT NAME	POINT DESCRIPTION	POINT TYPE				ALARM	NOTES
			AI	BI	AO	BO		
T1	SpaceTemp	SPACE TEMPERATURE SET POINT	x					
T2	SpaceTemp	SPACE TEMPERATURE		x				
T3	SpaceTemp	SPACE TEMPERATURE			x			
V1	Heating	HEATING VALVE				x		
GM1	OnOff	OUTSIDE AIR TEMPERATURE (WIPED)					x	

8 CABINET UNIT HEATER CONTROL  
 SCALE: NTS

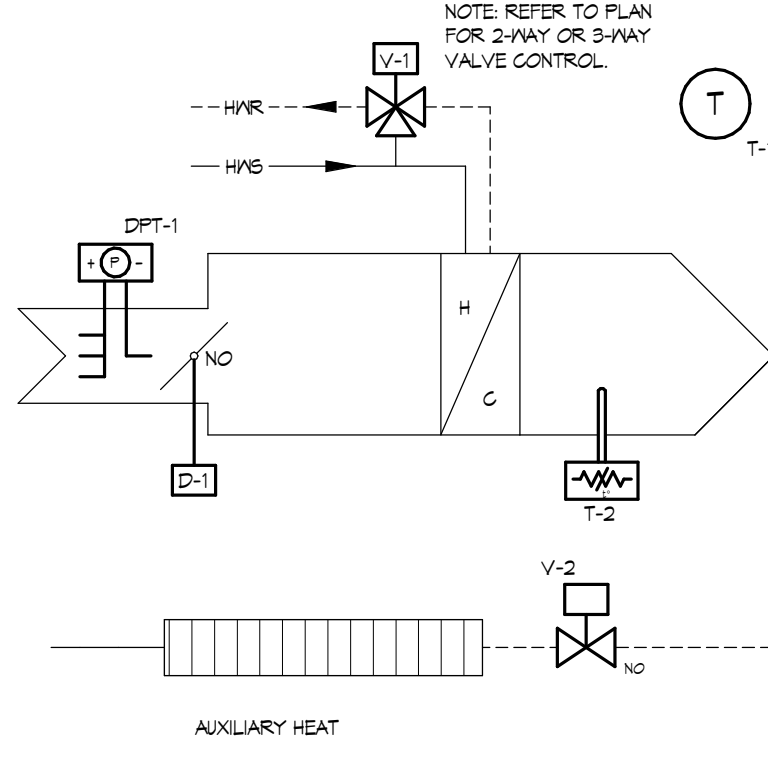
SEQUENCE OF OPERATION  
 CONTROL MODE: THE SPACE SHALL BE IN THE UNOCCUPIED OR OCCUPIED CONTROL MODE.  
 HEATING VALVE CONTROL: THE HEATING VALVE SHALL MODULATE TO MAINTAIN SPACE SET POINT.



CONTROL DEVICE	POINT NAME	POINT DESCRIPTION	POINT TYPE				ALARM	NOTES
			AI	BI	AO	BO		
T1	SpaceTemp	SPACE TEMPERATURE SET POINT	x					
T2	SpaceTemp	SPACE TEMPERATURE		x				
V1	Heating	HEATING VALVE				x		
V2	Heating	AUXILIARY HEATING VALVE					x	

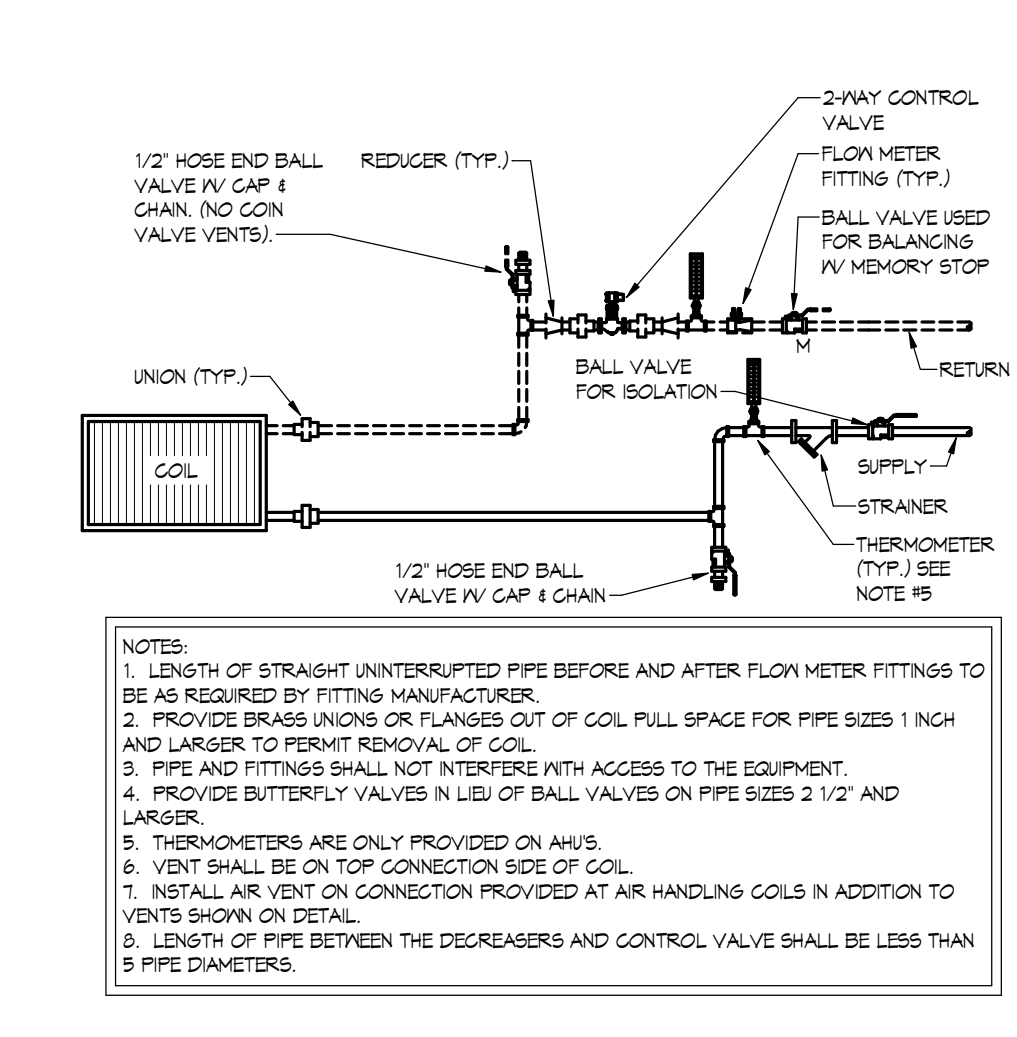
9 RADIATION CONTROL  
 SCALE: NTS

SEQUENCE OF OPERATION  
 CONTROL MODE: THE VAV TERMINAL UNIT SHALL BE IN THE UNOCCUPIED OR OCCUPIED CONTROL MODE. THE CONTROL MODE SHALL BE THE SAME AS THE CONTROL MODE OF THE ASSOCIATED AIR HANDLING UNIT. AN OVERSIZE BUTTON ON THE SPACE TEMPERATURE SENSOR SHALL ALLOW THE VAV UNIT TO RETURN TO THE OCCUPIED MODE FOR AN ADJUSTABLE PERIOD.  
 TEMPERATURE SET POINT CONTROL: IN THE OCCUPIED CONTROL MODE, THE TEMPERATURE SET POINTS SHALL BE OBTAINED FROM THE SPACE TEMPERATURE SET POINT. IN THE UNOCCUPIED CONTROL MODE, THE TEMPERATURE SET POINTS SHALL BE SEPARATE NIGHT-SETBACK TEMPERATURE SET POINTS THAT ARE ADJUSTABLE BY THE OPERATOR.  
 SPACE TEMPERATURE CONTROL: THE VAV DAMPER SHALL BE MODULATED OPEN AND CLOSED TO MAINTAIN THE SPACE TEMPERATURE AT THE OCCUPY SETPOINT. THE MAXIMUM AIRFLOW THROUGH THE VAV UNIT SHALL NOT BE ALLOWED TO EXCEED THE MAXIMUM AIRFLOW SETPOINT OR DROP BELOW THE MINIMUM AIRFLOW SETPOINT. IF THE SPACE TEMPERATURE DECREASES BELOW THE HEATING SETPOINT, THE VAV DAMPER SHALL BE RECLOSED TO MAINTAIN THE AIRFLOW AT THE HEATING AIRFLOW SETPOINT. THE AIRFLOW SETPOINTS SHALL BE ADJUSTABLE BY THE OPERATOR. WHEN THE SPACE TEMPERATURE IS BELOW THE HEATING SETPOINT AND THE VAV DAMPER IS MAINTAINING THE HEATING AIRFLOW, THE HEATING VALVE, ON THE RETURN LINE TO THE REHEAT GOLL SHALL BE MODULATED TO MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT.  
 AUX. HEATING VALVE CONTROL: FOR ROOMS WITH AUXILIARY HEATING UNIT, THE AUXILIARY HEATING VALVE SHALL BE MONITORED IN PARALLEL WITH THE TERMINAL GOLL HEATING VALVE. UPON LOSS OF POWER, THE HEATING VALVE SHALL BE OPEN.

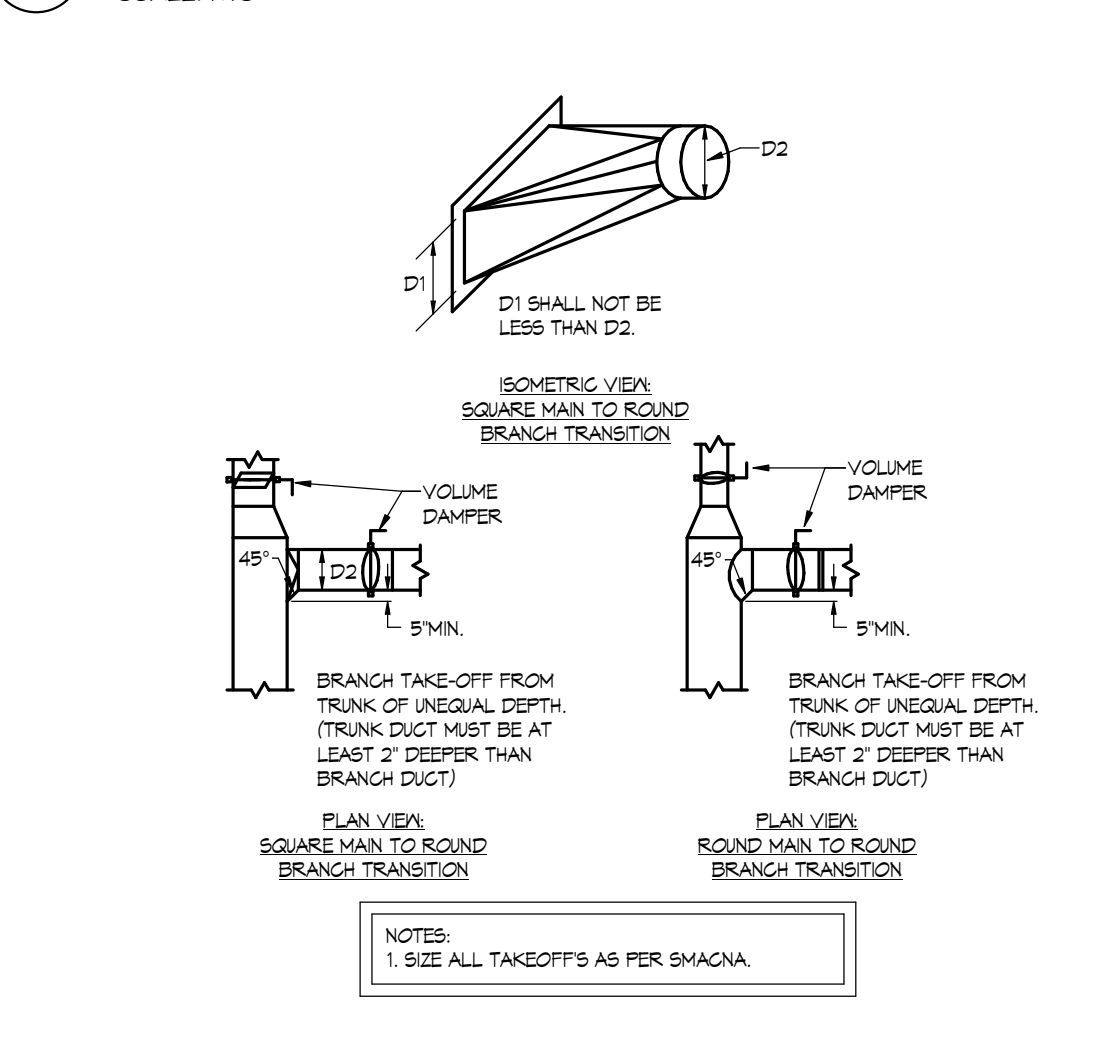


CONTROL DEVICE	POINT NAME	POINT DESCRIPTION	POINT TYPE				ALARM	NOTES
			AI	BI	AO	BO		
T1	SpaceTemp	SPACE TEMPERATURE SET POINT	x					
T2	SpaceTemp	SPACE TEMPERATURE		x				
T3	SpaceTemp	SPACE TEMPERATURE			x			
D1	Heating	HEATING VALVE				x		
V1	Heating	AUXILIARY HEATING VALVE					x	
V2	Heating	AUXILIARY HEATING VALVE					x	

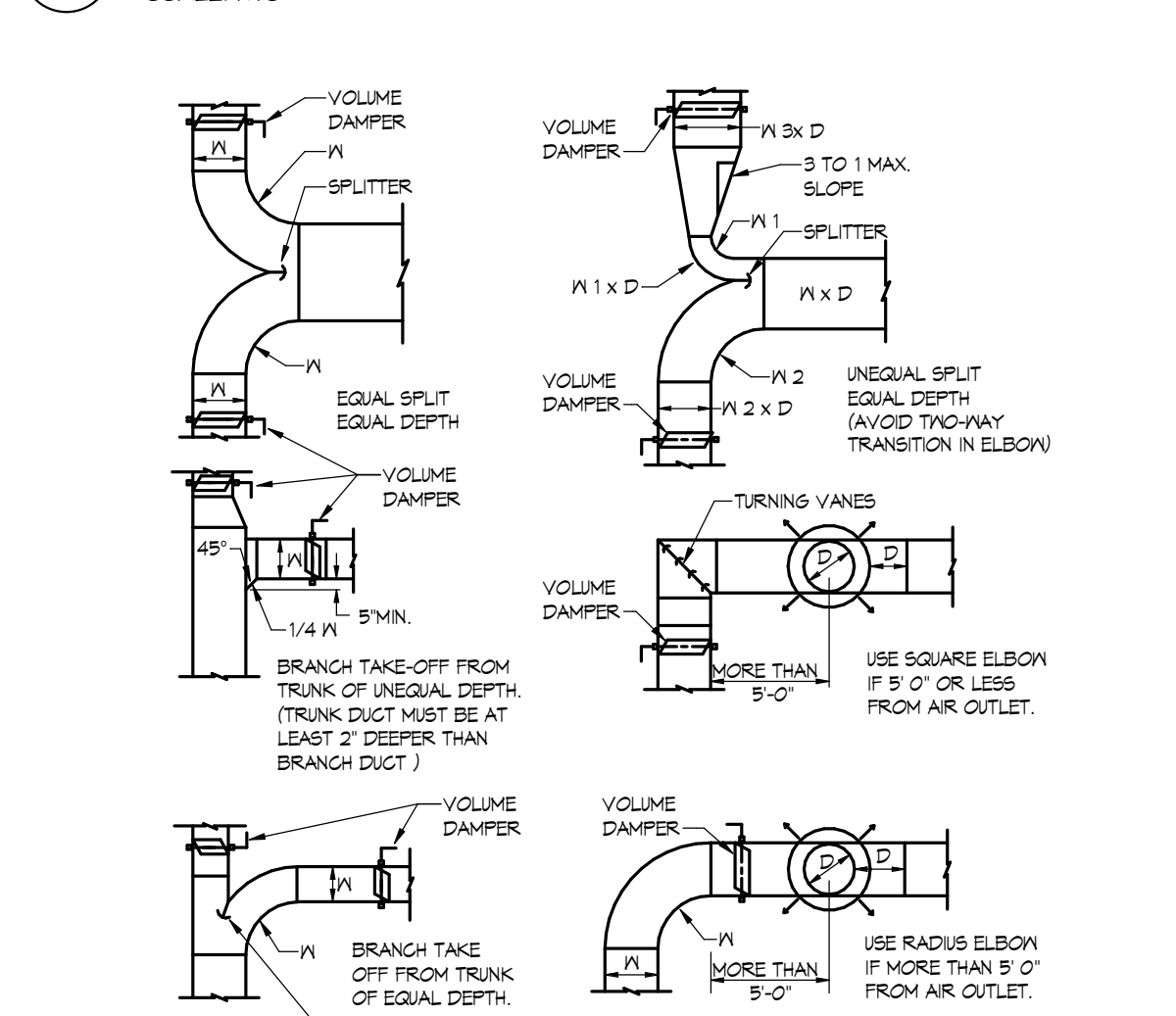
10 VAV UNIT WITH FINNED TUBE RADIATION CONTROL  
 SCALE: NTS



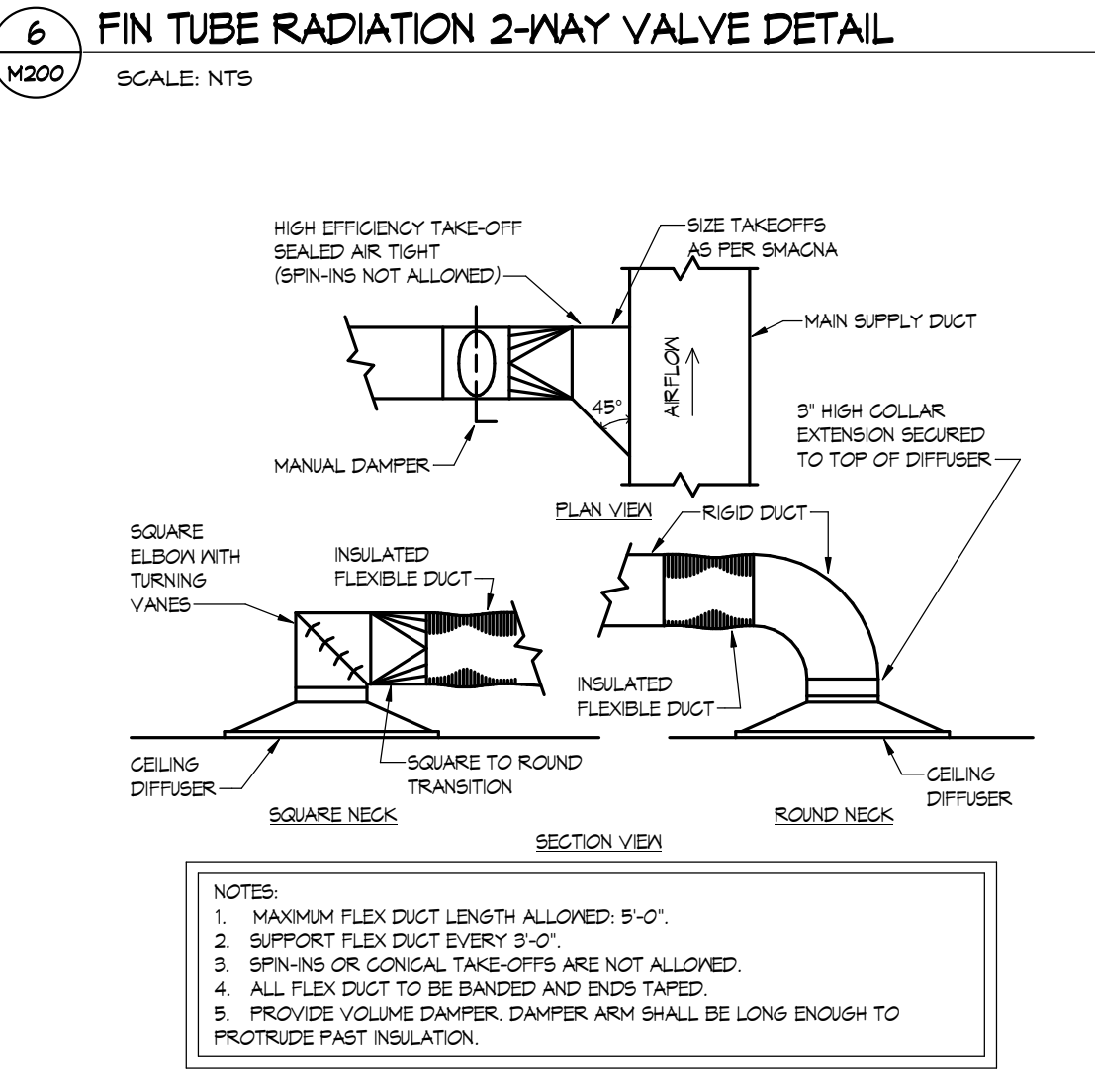
7 WATER COIL 2-WAY VALVE PIPING DETAIL  
 SCALE: NTS



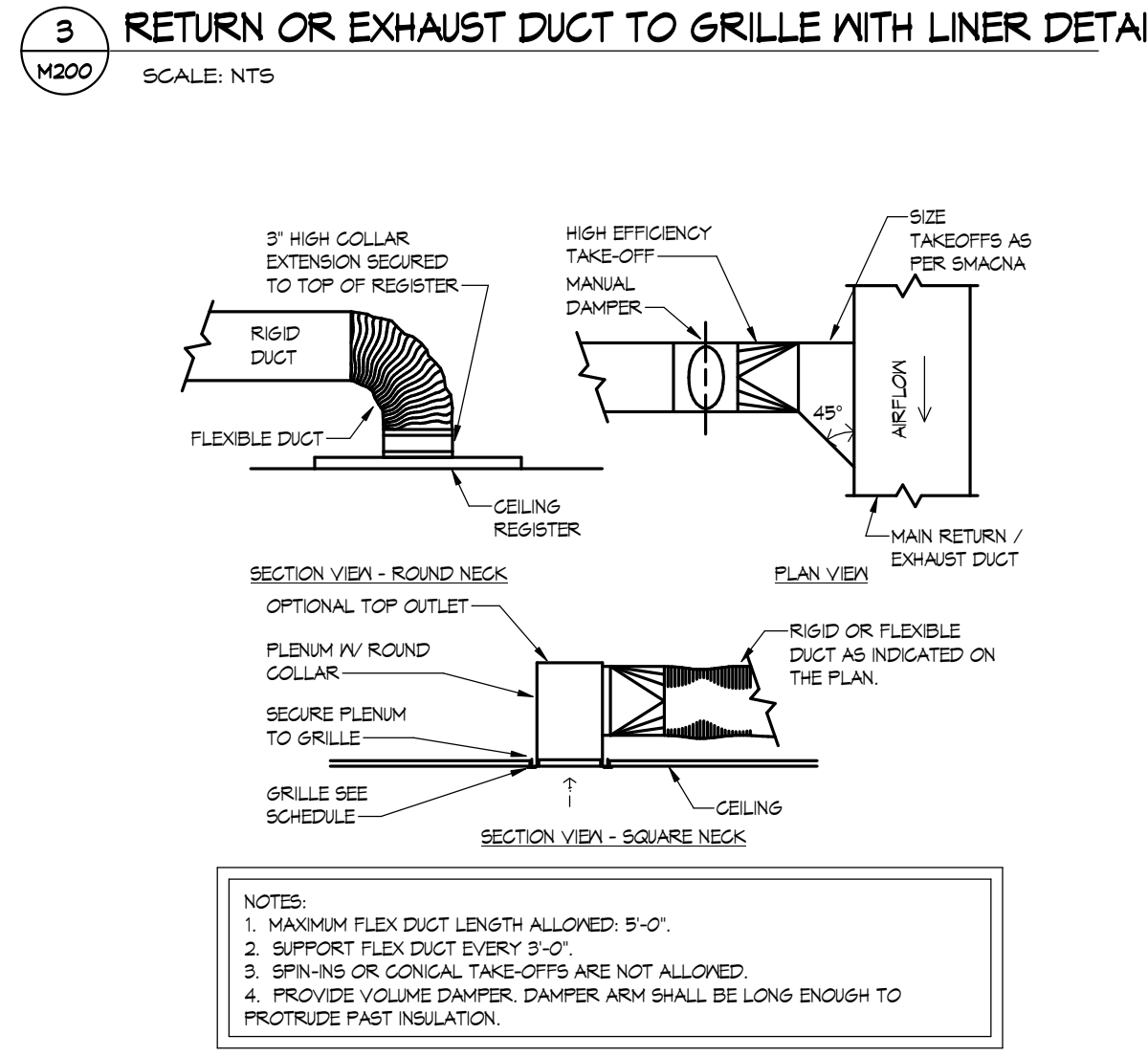
4 ROUND DUCT CONNECTION DETAIL  
 SCALE: NTS



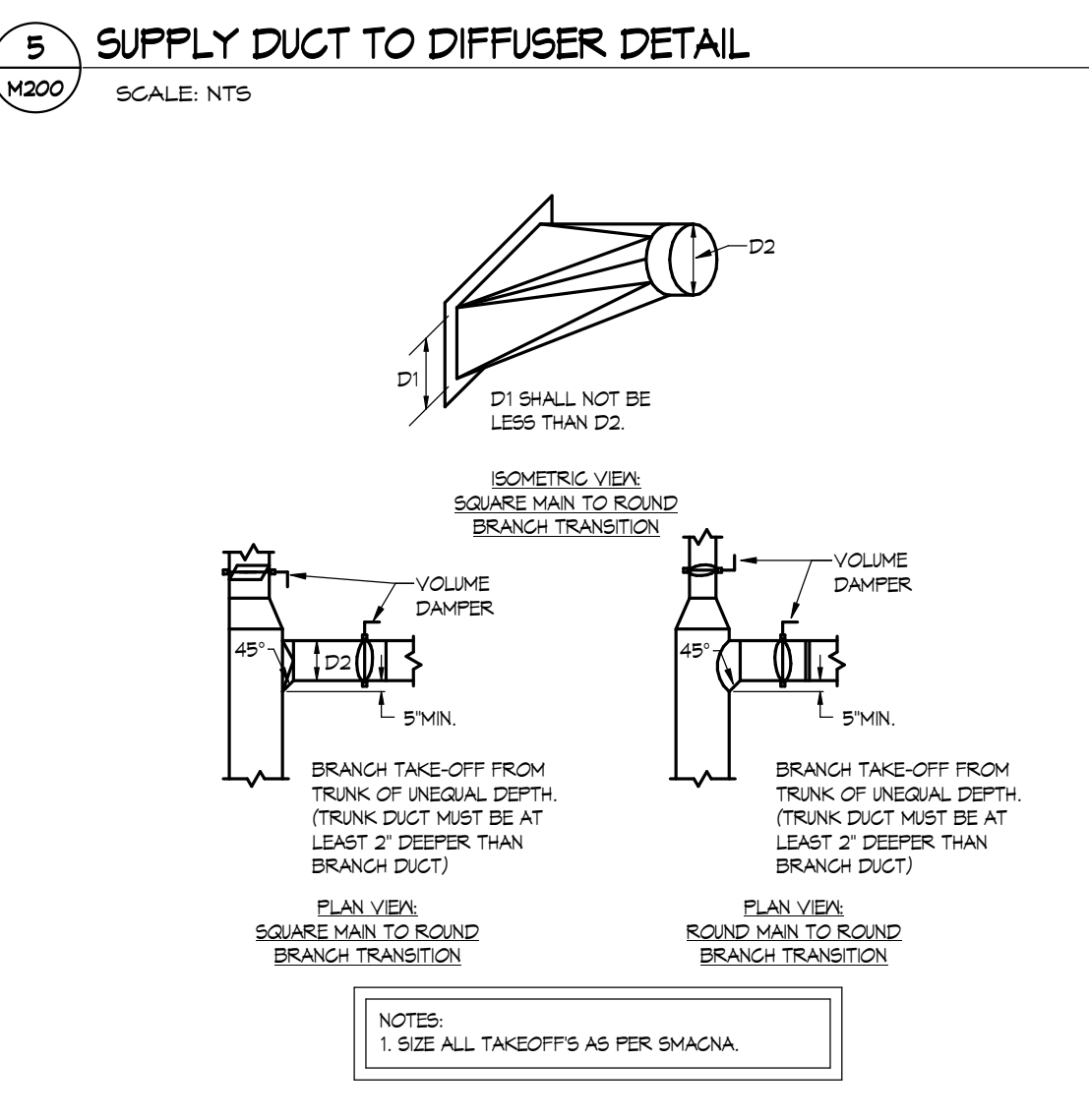
1 DUCT CONNECTION DETAILS  
 SCALE: NTS



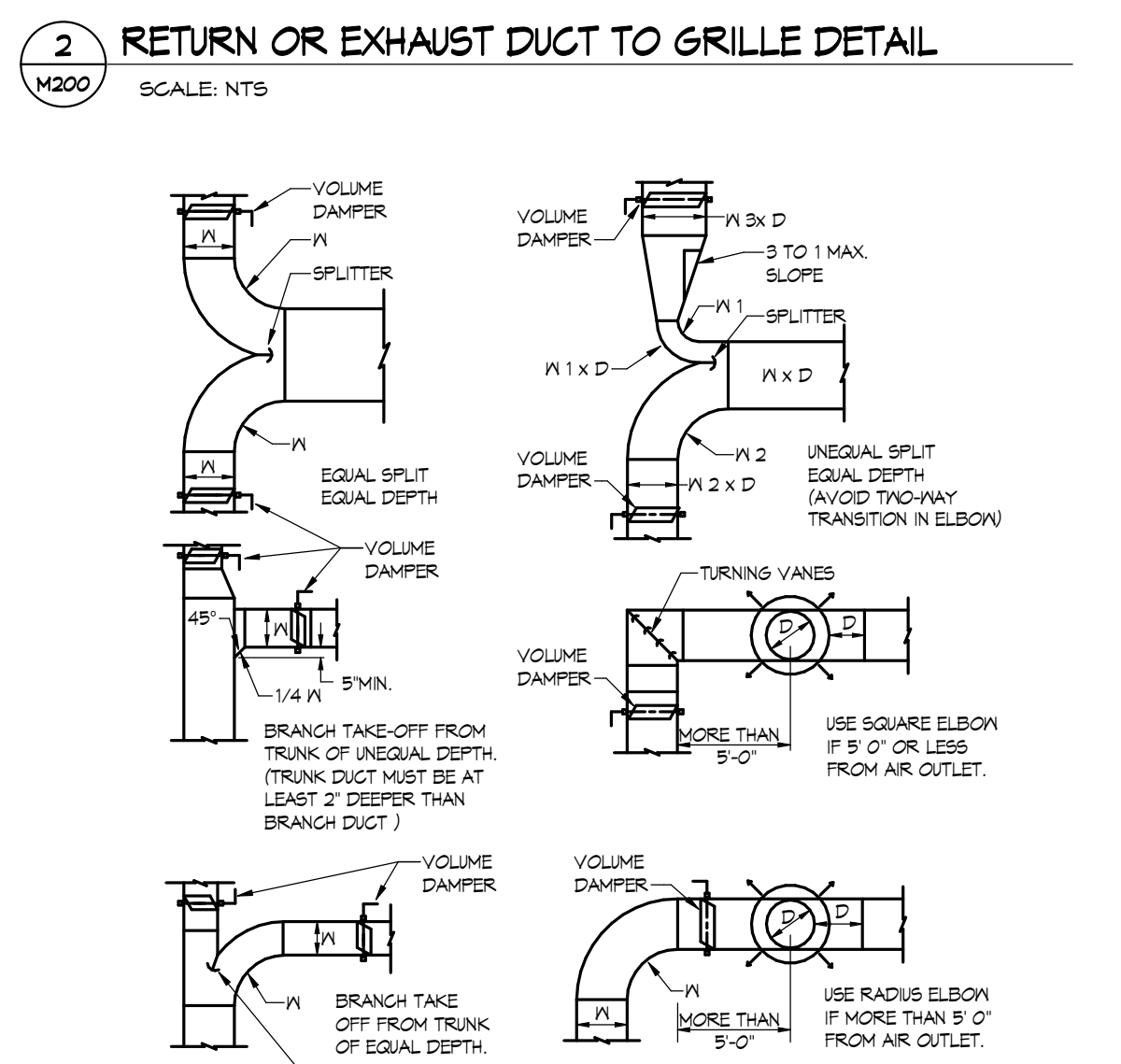
6 FIN TUBE RADIATION 2-WAY VALVE DETAIL  
 SCALE: NTS



3 RETURN OR EXHAUST DUCT TO GRILLE WITH LINER DETAIL  
 SCALE: NTS



5 SUPPLY DUCT TO DIFFUSER DETAIL  
 SCALE: NTS



2 RETURN OR EXHAUST DUCT TO GRILLE DETAIL  
 SCALE: NTS

**JLG** architects  
 224 Broadway  
 Fargo, ND 58102  
 Phone: 701.336.4237  
 Facsimile: 701.336.4228  
 www.jlgarchitects.com  
 copyright © 2025

**HEVER ENGINEERING**  
 STRUCTURAL CONSULTANT  
 4180 24TH AVE S  
 FARGO, ND 58104  
 (701) 230-0949  
 WWW.HEVERENGINEERING.COM  
 039.0265.2025

**CMTA**  
 A LIBERTEC COMPANY  
 MECHANICAL • ELECTRICAL • CIVIL  
 1801 15TH SW SUITE 100  
 FARGO, ND 58103  
 WWW.CMTA.COM

**MBN**  
 MECHANICAL • ELECTRICAL • CIVIL  
 1801 15TH SW SUITE 100  
 FARGO, ND 58103  
 WWW.MBN.COM

PROFESSIONAL REGISTERED ENGINEER  
 ROBERT YOUNG  
 PE - 28007  
 STATE OF NORTH DAKOTA

**REVISION SCHEDULE**  
 NO. DESCRIPTION DATE

WEST FARGO PUBLIC SCHOOLS  
**HORACE HIGH SCHOOL - AREA E BUILD-OUT**  
 8100 LAKEVIEW DRIVE, HORACE, NORTH DAKOTA

DATE: 04/08/2025  
 PHASE: CONSTRUCTION DOCUMENTS  
 PROJECT: 23231  
 SHEET: M200 SCHEDULES AND DETAILS



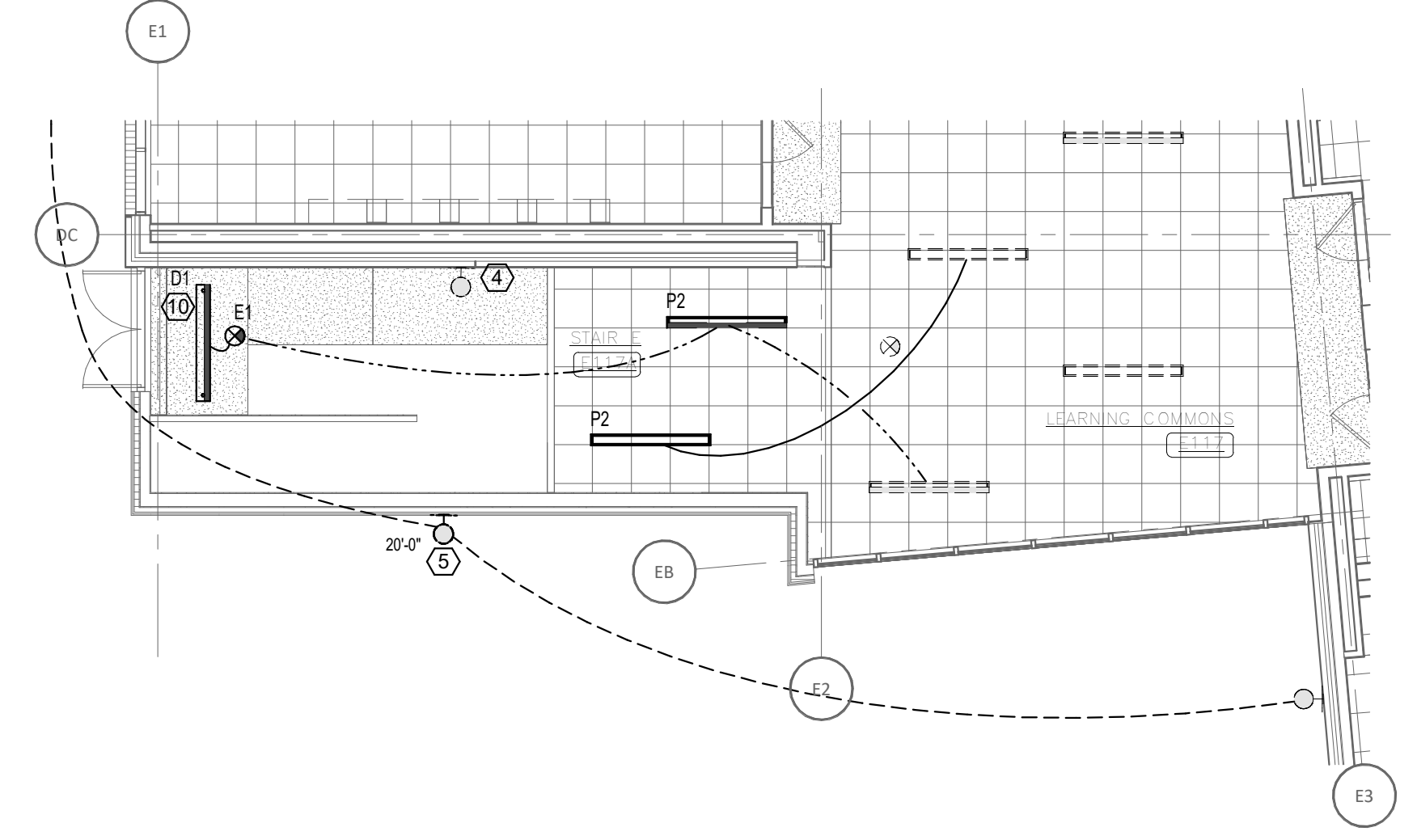
### ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING HEIGHT	SYMBOL	DESCRIPTION	MOUNTING HEIGHT	SYMBOL	DESCRIPTION	MOUNTING HEIGHT	SYMBOL	DESCRIPTION	MOUNTING HEIGHT	ABBREVIATIONS
	CEILING SURFACE MOUNTED LIGHT FIXTURE. CAPITAL LETTER INDICATES FIXTURE TYPE. SMALL LETTER INDICATES SWITCHING			DUPLEX RECEPTACLE	18"		CEILING MOUNTED SPEAKER. LETTER INDICATES TYPE			MANUAL FIRE ALARM PULL STATION	48"	A AMPERE
	RECESSED CEILING MOUNTED LIGHT FIXTURE			DOUBLE DUPLEX RECEPTACLE	18"		WALL MOUNTED SPEAKER. LETTER INDICATES TYPE	80"		FIXED TEMPERATURE DETECTOR		AC ABOVE COUNTER
	WALL MOUNTED LIGHT FIXTURE			FLOOR BOX (DUPLEX SHOWING)			SURFACE MOUNTED SPEAKER			DUCT SMOKE DETECTOR		AFF ABOVE FINISHED FLOOR
	CEILING EXIT SIGN. SHADED SIDE INDICATES LIGHTED FACE. ARROWS INSTALLED AS SHOWN			TYPE 14-20 RECEPTACLE	18"		VOLUME CONTROL	48"		SMOKE DETECTOR (E INDICATES DEVICE WITH ELEVATOR RECALL)		AHU AIR HANDLING UNIT
	WALL EXIT SIGN	6" ABOVE DOOR FRAME TO BOTTOM		TYPE 14-30 RECEPTACLE	18"		SOUND SYSTEM CONTROL PANEL	48"		FIRE ALARM HORN WITH STROBE	80"	ANN ANNUNCIATOR
	SUBPENDED LIGHT FIXTURE			TYPE 16-20 RECEPTACLE	18"		AUDIO/VISUAL TEACHER PLATE	18"		FIRE ALARM STROBE WITH STROBE	80"	ATS AUTOMATIC TRANSFER SWITCH
	SURFACE MOUNTED LIGHT FIXTURE			GFCI RECEPTACLE	18"		AUDIO/VISUAL MONITOR PLATE	60"		MASS NOTIFICATION STROBE WITH AMBER LENS	18"	ATC AUTOMATIC TEMPERATURE CONTROLS
	RECESSED MOUNTED LIGHT FIXTURE			USB RECEPTACLE - (2) USB PORTS	18"		FIRE ALARM STROBE LIGHT	48"		COMBINATION FIRE/SMOKE DAMPER OR SMOKE DAMPER BY DIVISION 23	48"	AV AUDIO VISUAL
	LIGHT FIXTURE ON EMERGENCY CIRCUIT			SPECIAL RECEPTACLE. PLANS FOR DESCRIPTION	18"		FIRE ALARM MODULE RELAY	18"		FIRE ALARM CONTROL PANEL	80"	BC BELOW COUNTER
	PENDANT LIGHT FIXTURE			CEILING MOUNTED JUNCTION BOX			MAGNETIC DOOR HOLD OPEN			FIRE ALARM REMOTE ANNUNCIATOR	72"	C CONDUIT
	EMERGENCY BATTERY LIGHT	7'-0"		WALL MOUNTED JUNCTION BOX			SPRINKLER FLOW SWITCH			FIRE ALARM CONTROL PANEL	72"	CUH CABINET UNIT HEATER
	SINGLE POLE (HORSE POWER RATED WHEN USED AS MOTOR DISCONNECT)	48"		HAND/CAP DOOR OPERATOR	42"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	EF EXHAUST FAN
	LINE VOLTAGE DIMMING SWITCH	48"		BOILER SHUTDOWN BUTTON	48"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	EWG ELECTRIC WATER COOLER
	3-WAY SWITCH	48"		BOILER SHUTDOWN BUTTON	48"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	FA FIRE ALARM
	LOW VOLTAGE CONTROL SWITCH WITH DIMMING	48"		CIRCUIT BREAKER PANEL	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	FACP FIRE ALARM CONTROL PANEL
	LOW VOLTAGE CONTROL SWITCH - X INDICATES QUANTITY OF BUTTONS	48"		DISTRIBUTION PANEL	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	GFCI GROUND FAULT CIRCUIT INTERRUPTER
	DUAL TECHNOLOGY 0-10V DIMMING WALL VACANCY SWITCH	48"		LIGHTING CONTROL PANEL	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	GR GROUND
	PASSIVE INFRARED WALL SWITCH	48"		SPECIAL CABINET	48"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	HP HORSEPOWER
	PASSIVE INFRARED WALL VACANCY SWITCH	48"		TRANSFORMER	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	PH PHASE
	PHOTOCELL	9'-0"		MOTOR (SEE SCHEDULE)	48"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	RA RETURN AIR
	CEILING MOUNT OCCUPANCY SENSOR			COMB. MOTOR STARTER (NON-FUSED)	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	RU ROOF TOP UNIT
	CEILING MOUNT VACANCY SENSOR			COMB. MOTOR STARTER (FUSED)	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	SA SUPPLY AIR
	MOTION SENSOR SWITCH WITH OUTPUT OF 24V DC			SAFETY DISC. SW (NON-FUSED)	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	SWBD SWITCHBOARD
	0-10V DIMMING ROOM CONTROLLER			SAFETY DISC. SW (FUSED)	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	TV TELEVISION
				VARIABLE FREQUENCY DRIVE	72"		FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	UE UNDERGROUND ELECTRICAL
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	V VOLT
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	VFD VARIABLE FREQUENCY DRIVE
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	W WIRE
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	WH WATERHEATER
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	WP WEATHERPROOF
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
							FIRE ALARM CONTROL PANEL	80"		FIRE ALARM CONTROL PANEL	72"	
		</										

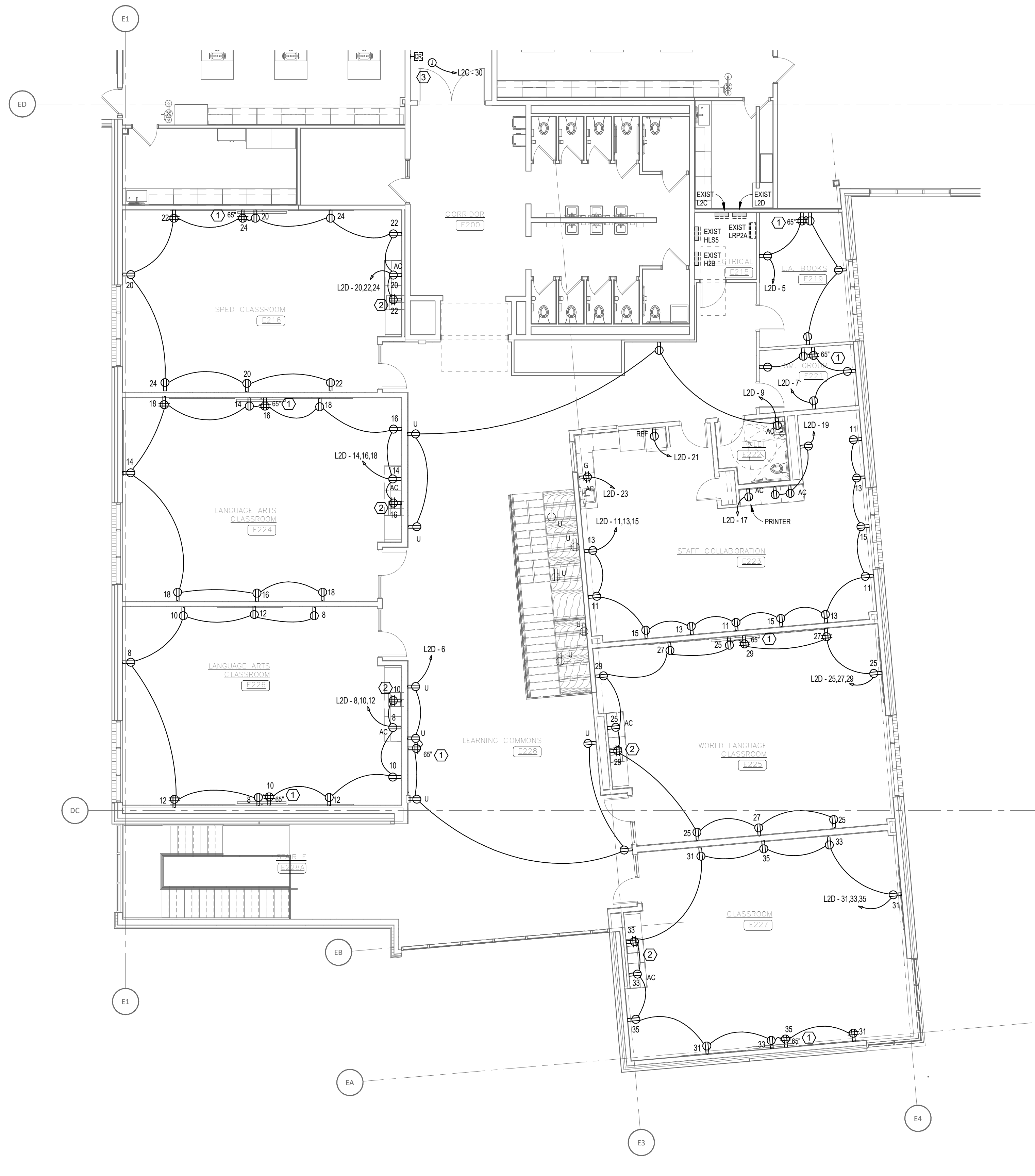


- LIGHTING GENERAL NOTES:**
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR LOW VOLTAGE WIRING BETWEEN LOW VOLTAGE OCCUPANCY REMEDIATION SWITCHES AND POWER PACKS OR ROOM CONTROLLERS.
- DEMOLITION/LIGHTING PLAN NOTES:**
- CONNECT TO ROOM CONTROLLER, SEE DETAIL 2E300 FOR ADDITIONAL INFORMATION
  - SEE DETAIL 2E300 FOR ROOM LIGHTING CONTROL DETAIL
  - SEE DETAIL 1E300 FOR EMERGENCY RELAY WIRING DIAGRAM
  - DISCONNECT, REMOVE AND REINSTALL EXISTING WALL MOUNTED LIGHT FIXTURE. PROVIDE BLANK COVER TO MATCH EXISTING WALL FINISH
  - REINSTALL AND RECONNECT EXISTING WALL MOUNTED LIGHT FIXTURE
  - DISCONNECT, REMOVE AND SALVAGE EXISTING PENDANT LIGHT FIXTURE OVER STAIRS TO ACCOMMODATE NEW CEILING INSTALLATION. REINSTALL AND RECONNECT EXISTING PENDANT LIGHT FIXTURE. COORDINATE WITH GENERAL CONTRACTOR
  - DISCONNECT, REMOVE AND SALVAGE EXISTING EXIT SIGN. PROVIDE BLANK PLATE PAINTED TO MATCH ADJACENT FINISH COLOR.
  - REINSTALL AND RECONNECT EXISTING EXIT SIGN. CONNECT TO NEAREST UNWITTHED LIGHTING CIRCUIT.
  - DISCONNECT, REMOVE AND SALVAGE EXISTING CARD READER. CARD READER TO BE REINSTALLED. SEE DETAIL 2E201. PROVIDE BLANK PLATE
  - LIGHT FIXTURE TO BE SURFACE MOUNTED TO SHEETROCK CEILING UNDER LANDING. CONDUIT TO BE CONCEALED. NO EXPOSED CONDUIT. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR

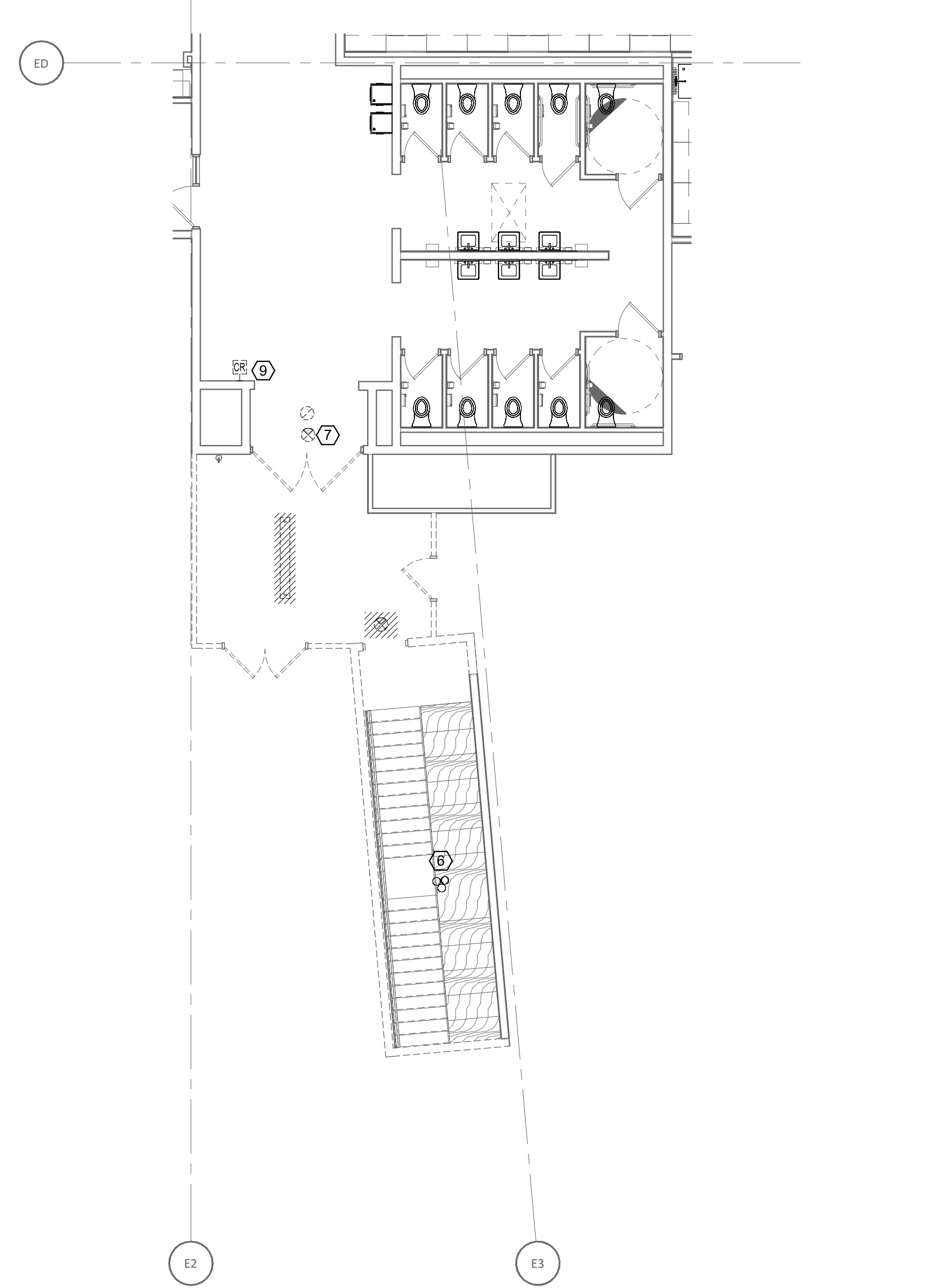
- POWER GENERAL NOTES:**
- ALL NEW RECEPTACLES INDICATED TO BE TAMPER RESISTANT.
- POWER PLAN NOTES:**
- PROVIDE RECEPTACLE AT TEACHING MONITOR LOCATION. VERIFY FINAL LOCATION WITH OWNER/ARCHITECT. MOUNT AT 48 INCHES ABOVE FINISHED FLOOR. PROVIDE RECEPTACLE HANG BOX FOR POWER AND COMMUNICATIONS PLATES. SEE SECTION 29 504 AND DETAIL 4E300 & 5E300 FOR REQUIREMENTS.
  - MOUNT RECEPTACLE IN ANY SHALF FOR ANY EQUIPMENT. VERIFY LOCATION AND MOUNTING HEIGHT WITH OWNER/ARCHITECT PRIOR TO PROGRAM.
  - PROVIDE 120 VOLT CONNECTION TO DOOR POWER SUPPLY LOCATED ABOVE ACCESSIBLE CEILING.



**2**  
**E200** FIRST FLOOR LIGHTING PLAN - AREA E  
SCALE: 1/8" = 1'-0"



**4**  
**E200** SECOND FLOOR POWER PLAN - AREA E  
SCALE: 1/8" = 1'-0"



**1**  
**E200** SECOND FLOOR ELECTRICAL DEMOLITION - AREA E  
SCALE: 1/8" = 1'-0"



**3**  
**E200** SECOND FLOOR LIGHTING PLAN - AREA E  
SCALE: 1/8" = 1'-0"



NO.	DESCRIPTION	DATE
1	ADDITIONAL #3	02/05/2025

**GENERAL NOTES**

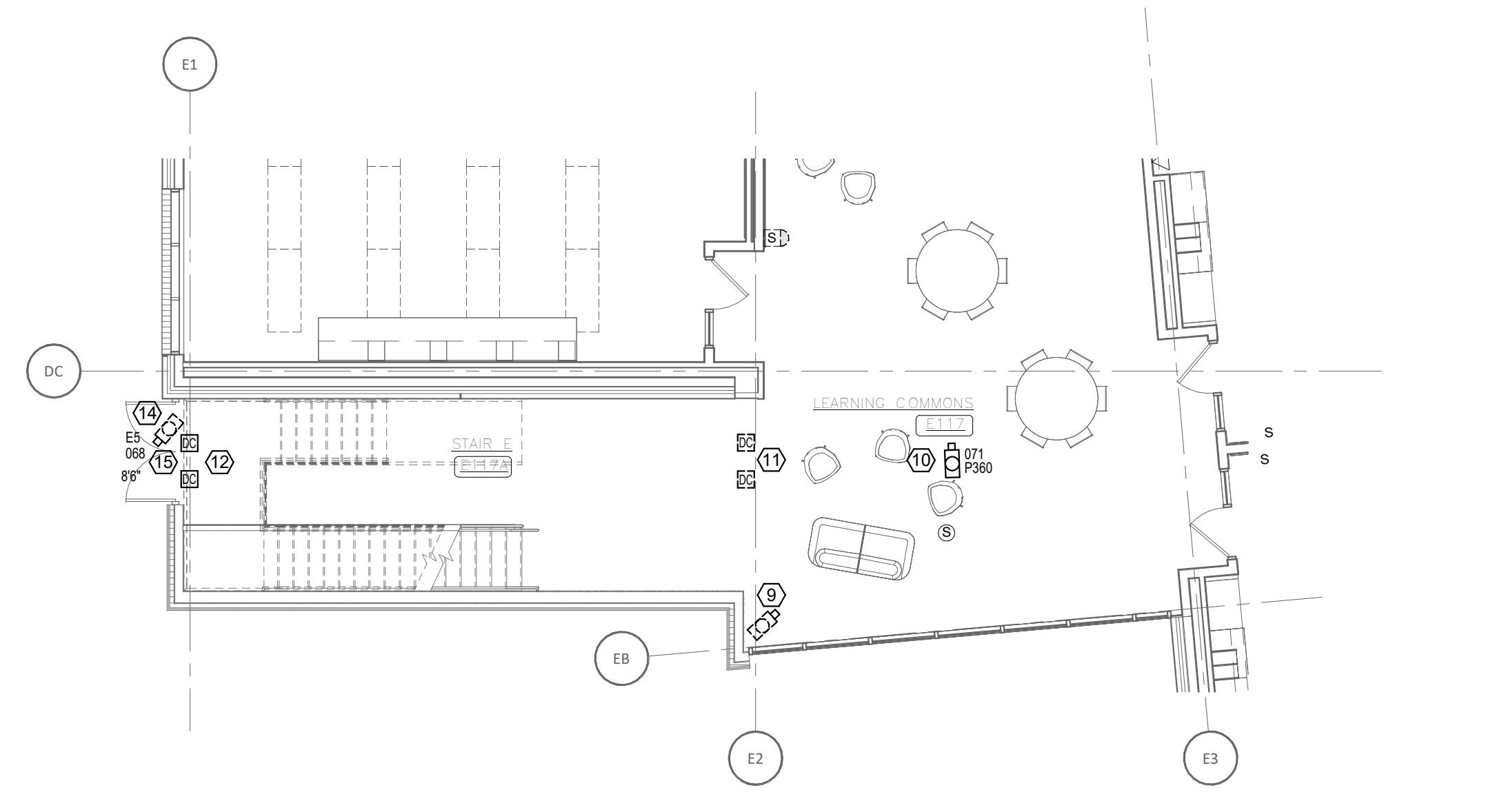
- ALL FIRE ALARM WIRING SHALL BE IN RED, FACTORY TINTED CONDUIT.
- ALL CONDUIT RUNS INTENDED FOR VOICE/DATA CABLING WIRING SHALL BE A MINIMUM OF 3/4" DIA. RUN IN THE MOST DIRECT PATH WITH A MINIMUM AMOUNT OF BENDS TO THE NEAREST CABLE TRAY. TELECOM CONDUITS SHALL BE ORANGE, FACTORY TINTED CONDUITS.
- PROVIDE 2 CATEGORY 6 CABLES AT EACH ACCESS POINT LOCATION WITH A 30 FOOT SERVICE LOOP COILED IN THE ACCESSIBLE CEILING ACCESS POINTS INSTALLED BY OWNER.
- VERIFY EXACT MOUNTING LOCATION FOR THE LOOSPEAKER IN EACH CLASSROOM WITH THE OWNER PRIOR TO RUSH-IN.
- PROVIDE PLAN/RATED CATEGORY 5E FOR IP SECURITY CAMERA. ROUTE TO MFP 4206. PROVIDE 30 FT SERVICE LOOP IN CEILING AT EACH CAMERA. LETTER INDICATES TYPE. 'R' INDICATES WIRING AND ROUGH IN FOR FUTURE CAMERA.
- ROUTE DATA CABLING TO MFP 4206.

**ISLAND NOTES**

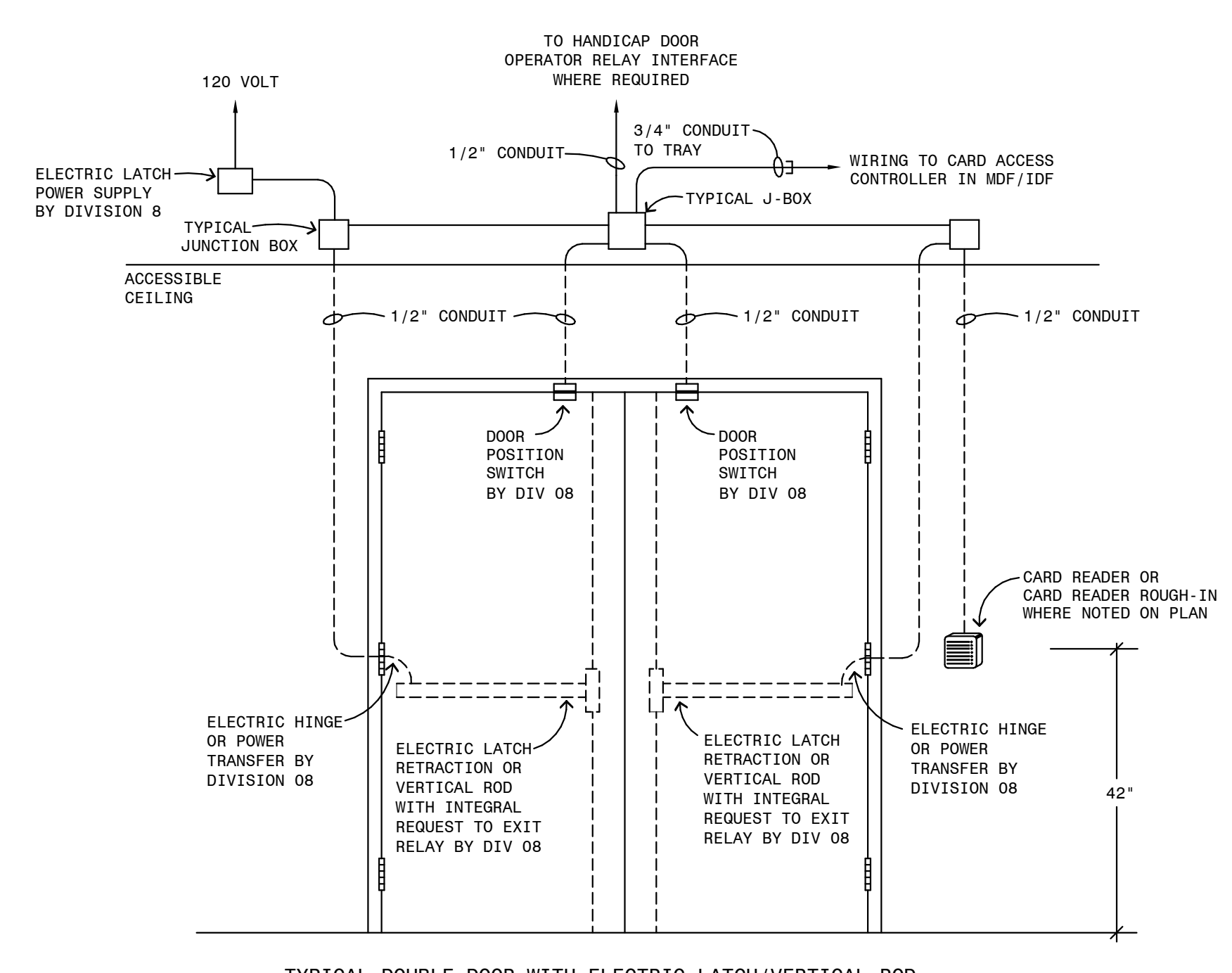
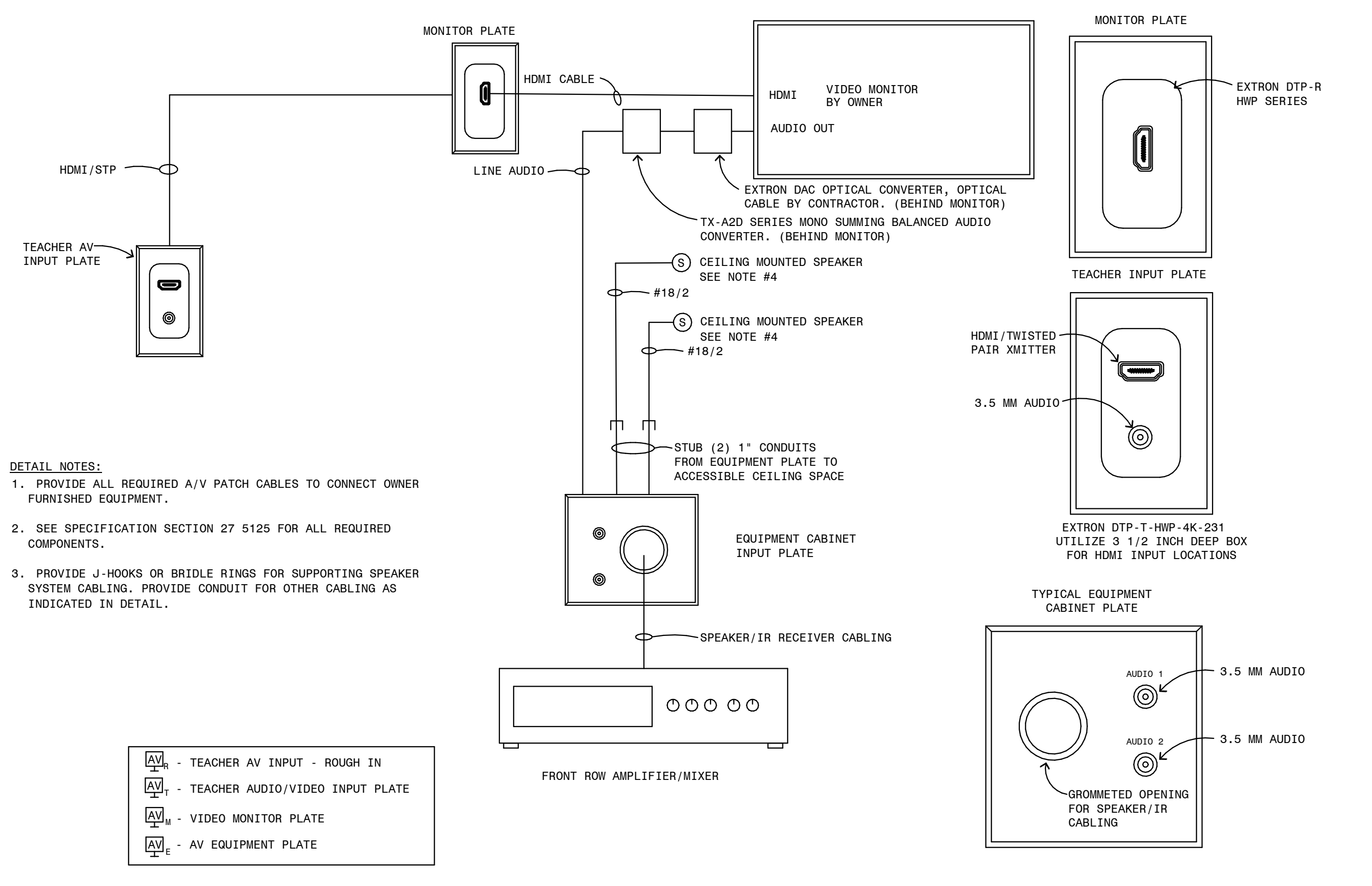
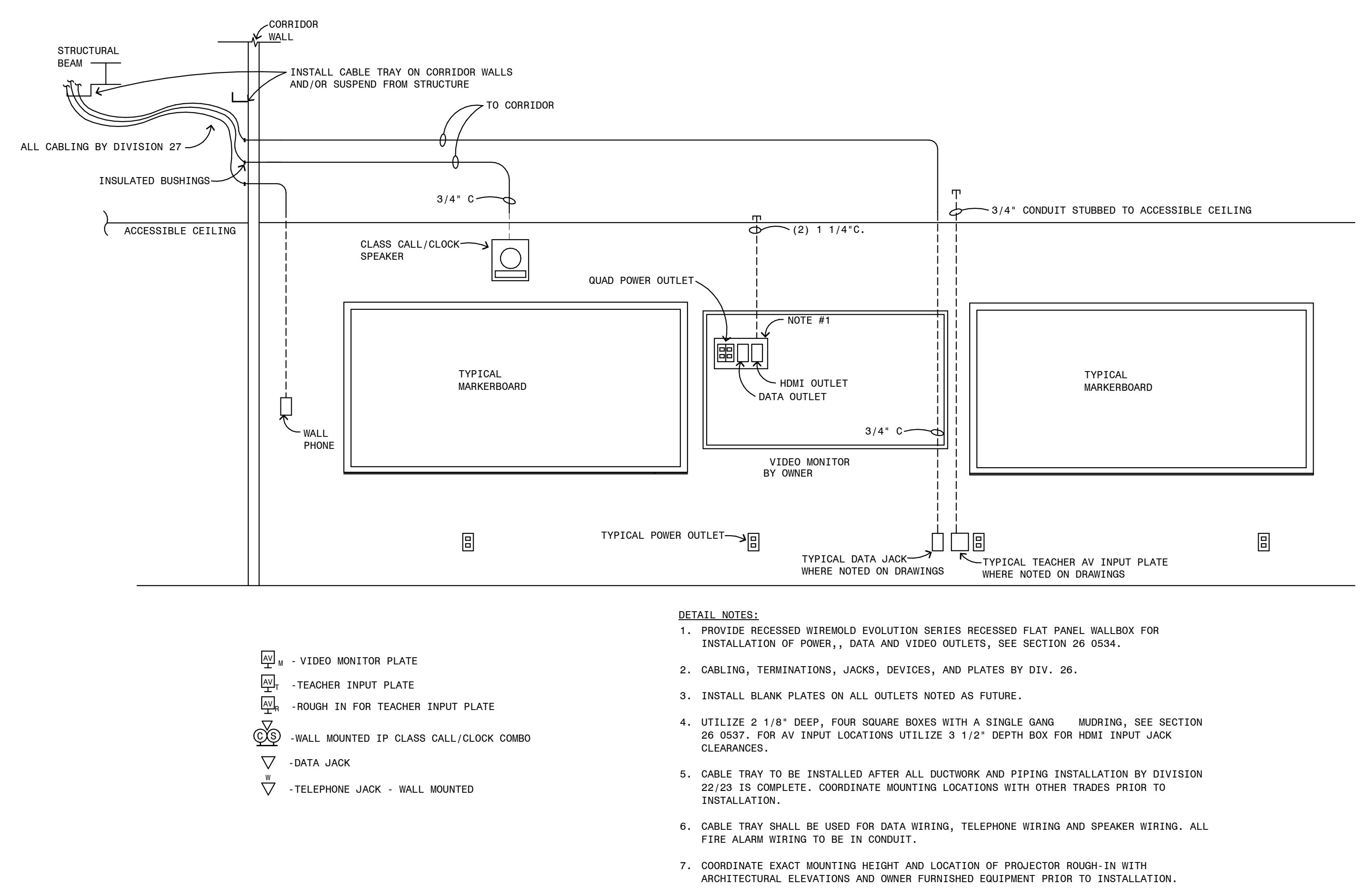
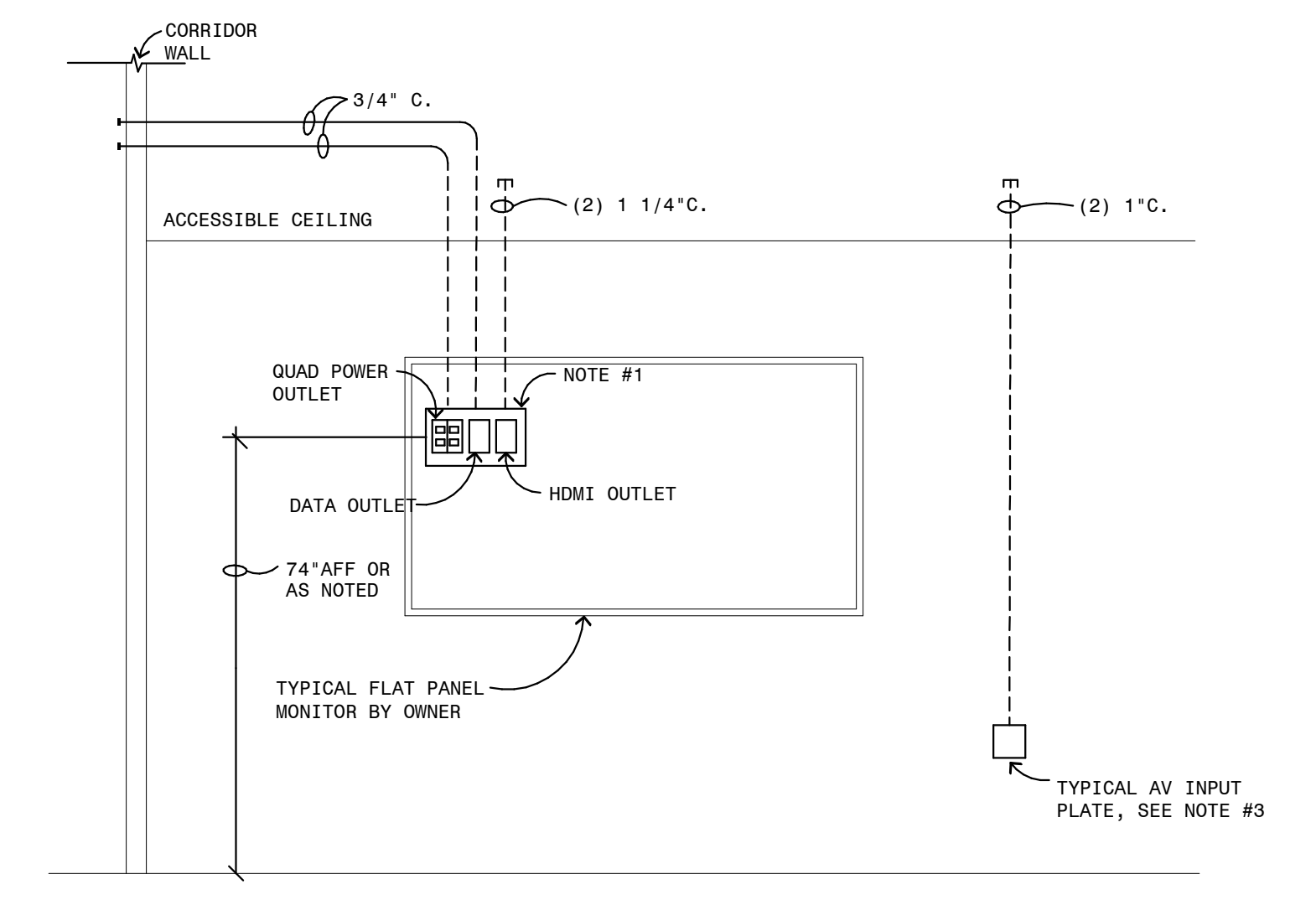
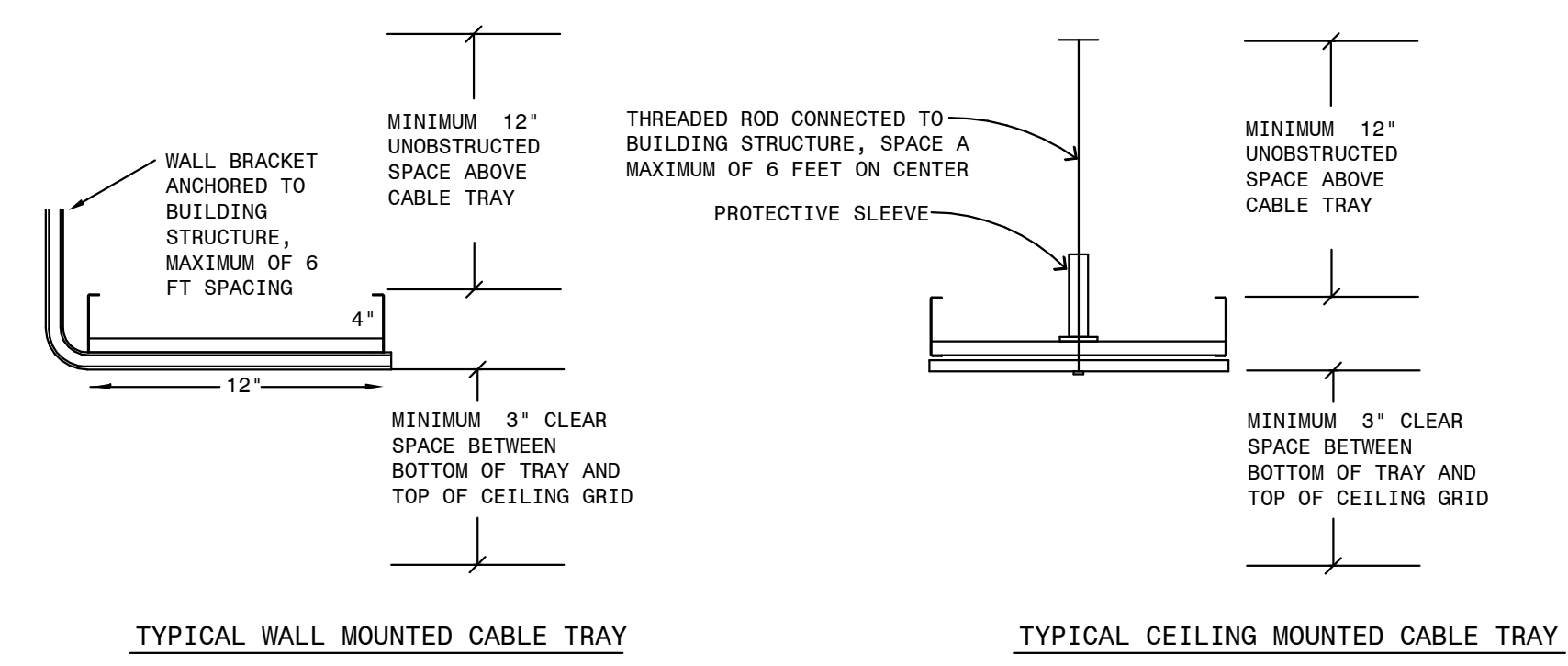
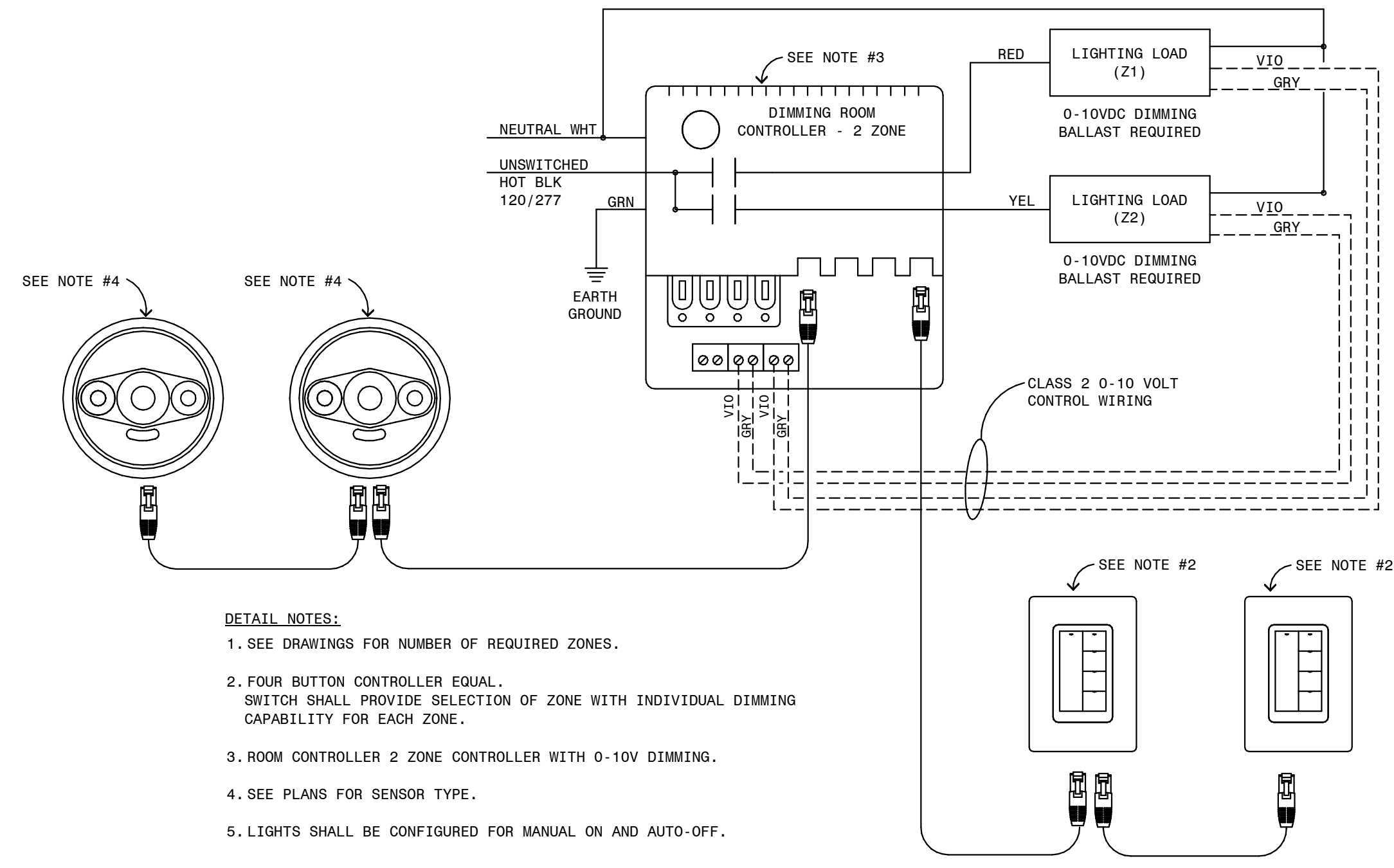
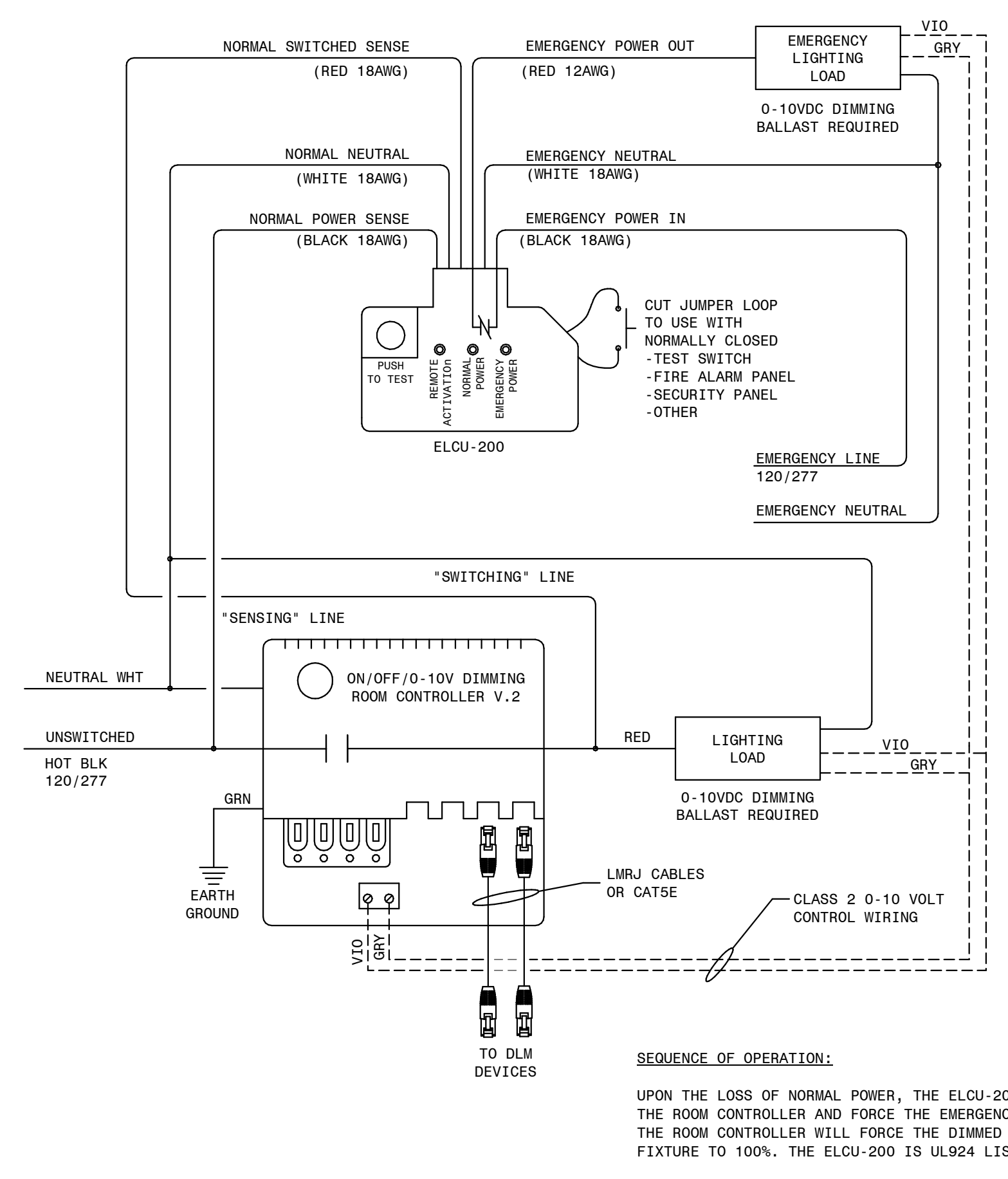
- REINSTALL AND RECONNECT EXISTING RELOCATED CARD READER. PROVIDE CARD ACCESS CONTROL AT THIS DOOR. SEE DETAIL, TEXO FOR REQUIREMENTS.
- MOUNT EQUIPMENT PLATE AND DATA OUTLET IN AVY SHELF. COORDINATE WITH ARCHITECTURAL ELEVATIONS. SEE DETAIL, TEXO FOR ADDITIONAL INFORMATION.
- TEACHER AV SYSTEM INFLU. PLATE. SEE DETAIL 6X30.
- PROVIDE DATA OUTLET AND HDMI RECEIVER INSTALLED IN MULTITAGGING RECESSED MONITOR SINK. SEE POWER SHEETS AND DETAILS 4E30 & 5E30 FOR ADDITIONAL INFORMATION.
- PROVIDE 40W BULB/LITE AND ASSOCIATED CONNECTION TO LOCAL MONITOR. VERIFY LOCATION WITH OWNER PRIOR TO INSTALLATION. SEE DETAIL 4E30 AND SECTION 27.5128 FOR ADDITIONAL INFORMATION.
- REMOVE AND REINSTALL EXISTING CEILING TILES FOR INSTALLATION OF NEW DATA MAP CAMERA AND CARD ACCESS CABLES TO MFP 4206. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO REPLACE ANY DIRTY OR DAMAGED CEILING TILES.
- RELEASE MAGNETIC HOLDS AT THIS SET OF DOORS VIA EXISTING LOCKDOWN PULLBUTTON.
- TO EXISTING CLASS CALL SPEAKER IN EXISTING CORRIDOR E202.
- DISCONNECT, REMOVE AND SALVAGE EXISTING SECURITY CAMERA. CAMERA TO BE REINSTALLED IN STARWELL LANDING AS CAMERA 115. SEE 2E201.
- INSTALL NEW SECURITY CAMERA. COORDINATE EXACT PLACEMENT WITH OWNER. REUSE EXISTING CAMERA CABLE.
- DISCONNECT EXISTING DOOR POSITION SWITCHES.
- PROVIDE DOOR POSITION SWITCH WIRING. PROVIDE (1) 18GA CABLE FROM DOOR CONTACTS TO MFP 4206 LOCATED APPROXIMATELY 200 FEET AWAY. SEE DETAIL, TEXO.
- EXTEND NEW CABLE TRAY TO EXISTING CABLE TRAY IN CORRIDOR E202.
- DISCONNECT, REMOVE AND SALVAGE EXISTING SECURITY CAMERA. REMOVE CABLING BACK TO SOURCE.
- REINSTALL EXISTING RELOCATED SECURITY CAMERA. COORDINATE EXACT PLACEMENT WITH OWNER. PROVIDE NEW CABLING TO MFP 4206. SEE 2E201.
- PROVIDE ADDITIONAL PATCH PANELS IN EXISTING DATA RACKS.

**1**  
**E201** FIRST FLOOR SYSTEMS PLAN - AREA E  
SCALE: 3/8" = 1'-0"

**2**  
**E201** SECOND FLOOR SYSTEMS PLAN - AREA E  
SCALE: 1/8" = 1'-0"



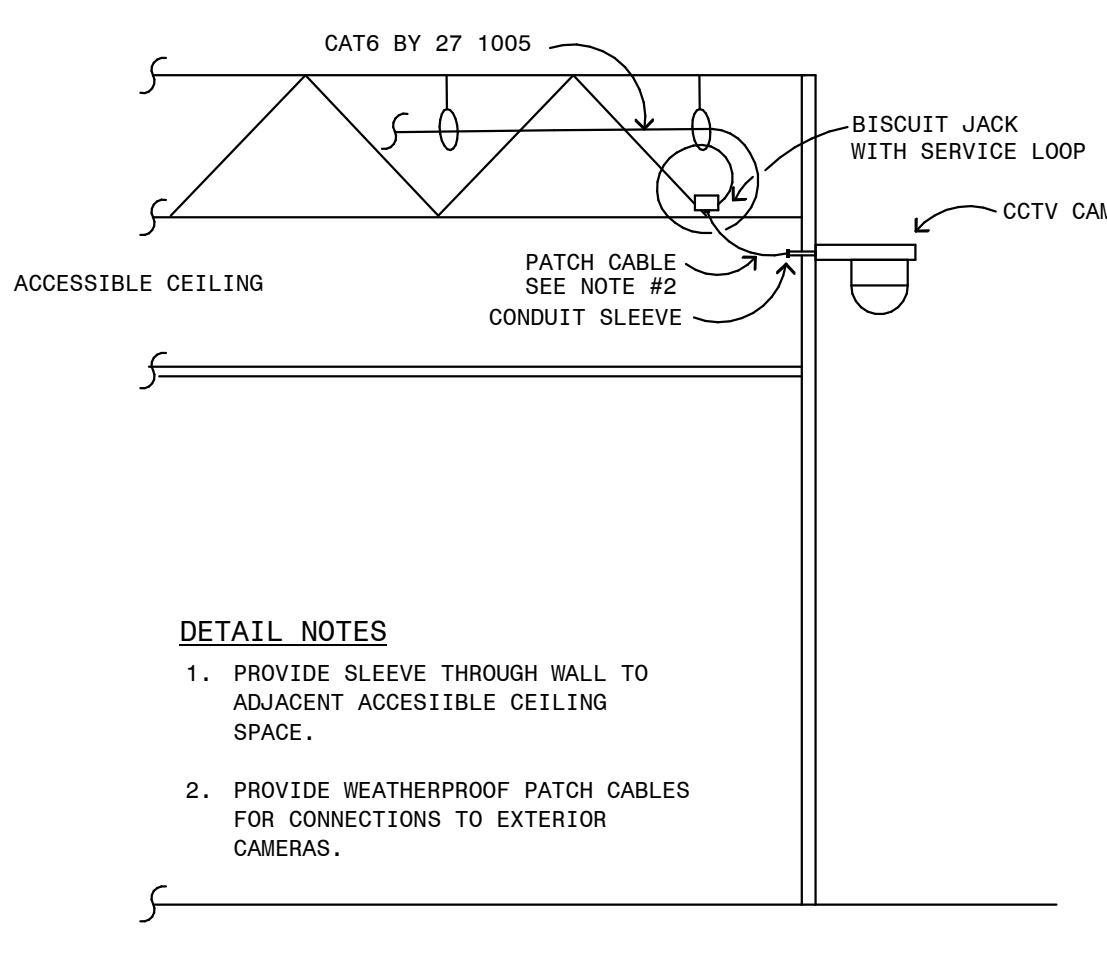
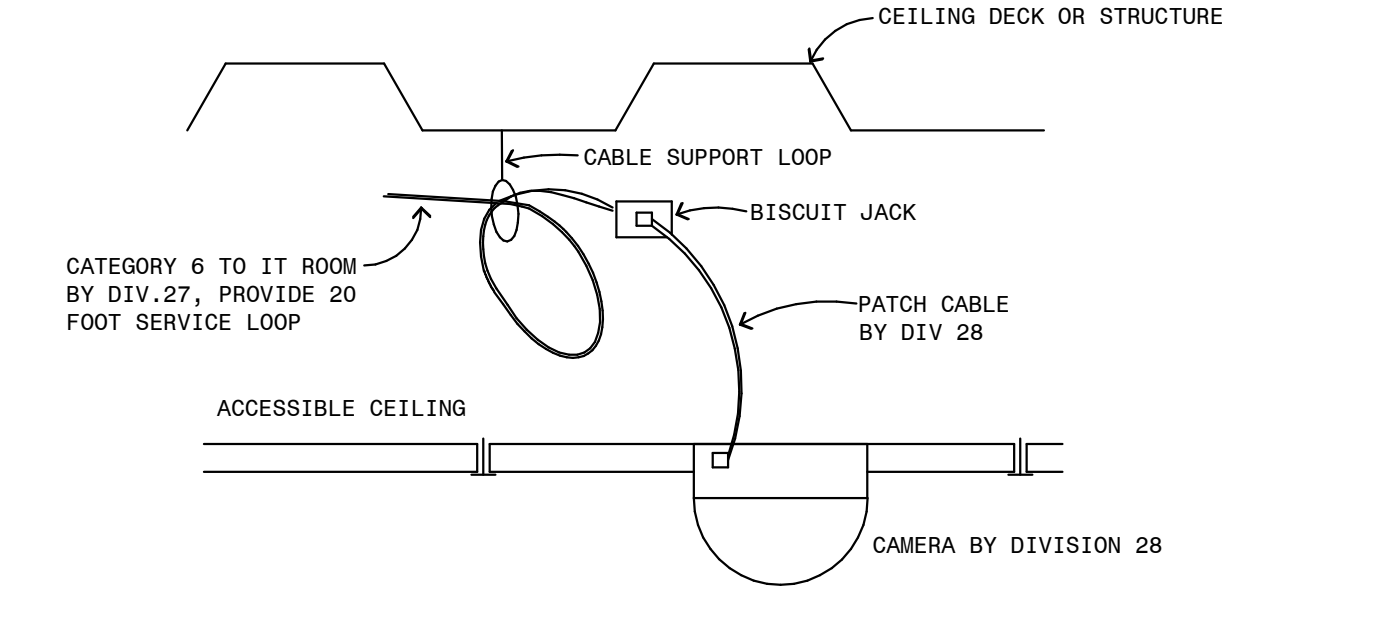
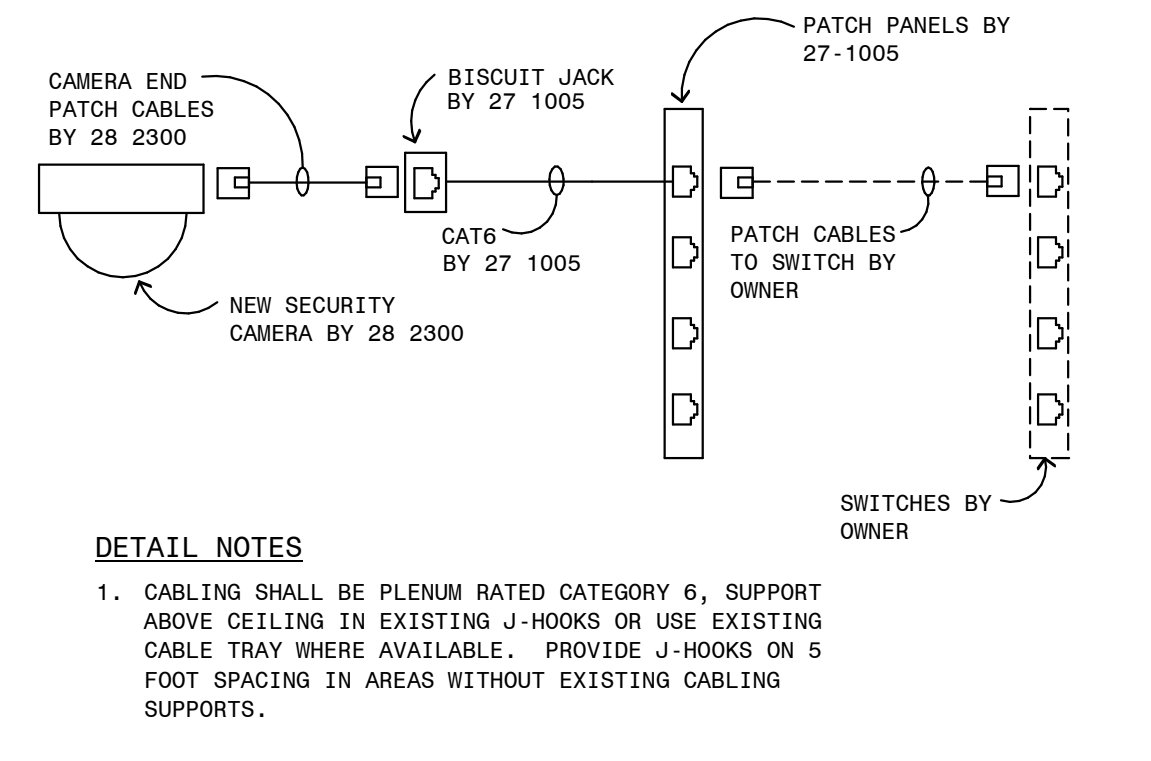
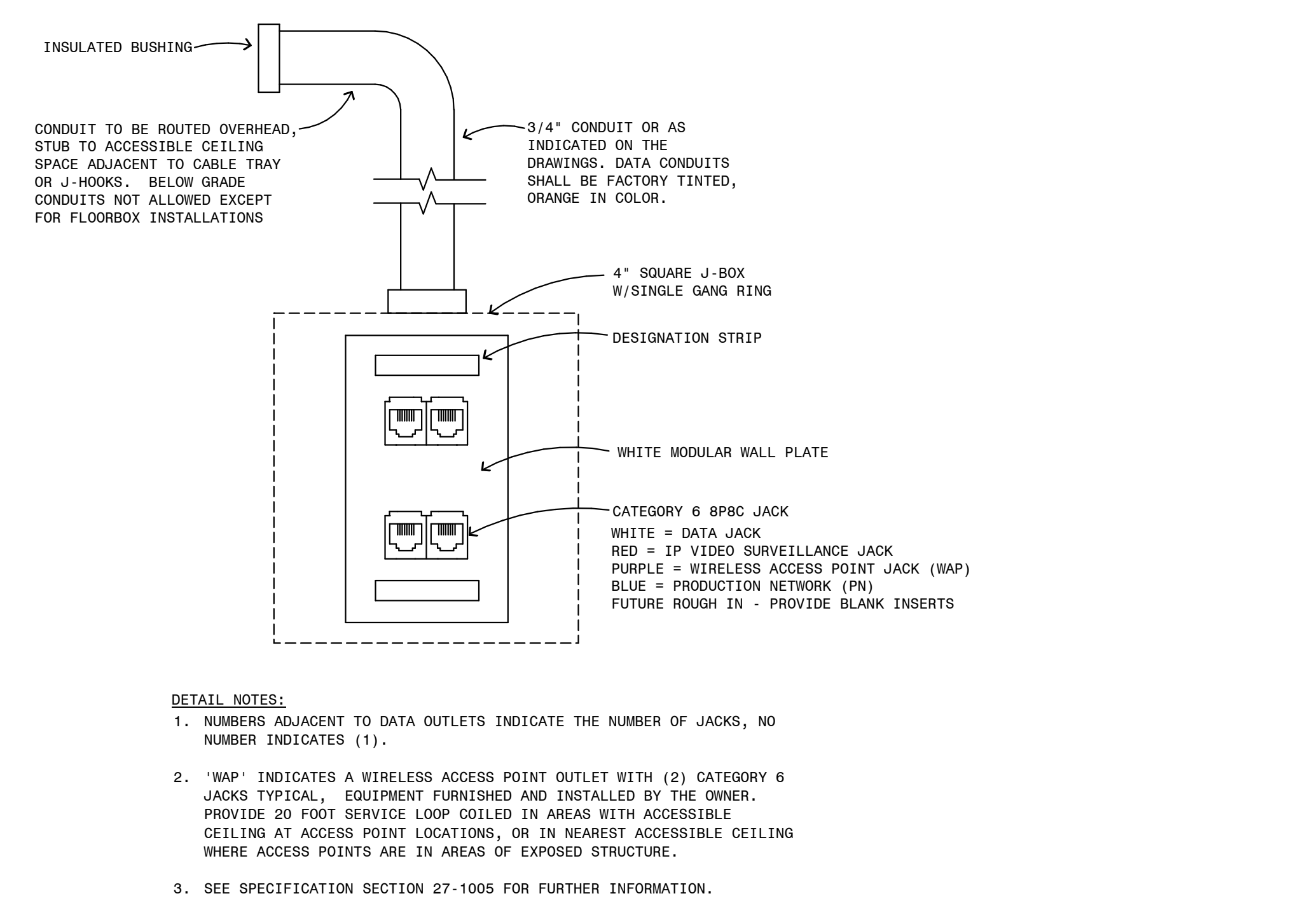




**5 TYPICAL ROOM CONDUIT DIAGRAM**  
NO SCALE

**6 TYPICAL CLASSROOM AUDIO/VIDEO SYSTEM ONE-LINE AND PLATE DETAILS**  
NO SCALE

**7 TYPICAL CARD ACCESS AND SECURITY WIRING**  
NO SCALE



**8 TYPICAL DATA PLATE DETAIL**  
NO SCALE

**9 TYPICAL CAMERA WIRING ONE-LINE DIAGRAM**  
NO SCALE

**10 TYPICAL INTERIOR CAMERA WITH ACCESSIBLE CEILING GRID**  
NO SCALE

**11 TYPICAL WALL MOUNTED CAMERA WITH ACCESSIBLE CEILING**  
NO SCALE