

DRAWINGS FOR MONTANA STATE UNIVERSITY STADIUM VIDEO BOARD UPGRADE BOZEMAN, MONTANA 59715

04/21/23

PREPARED BY:



engineers • surveyors • planners • scientists

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LOCATION MAP

NOT TO SCALE

PROJECT
LOCATION



PROJECT VIEW

NOT TO SCALE

SHEET INDEX	
SHEET NUMBER	SHEET NAME
SD1.0	DEMO FDN/SLAB PLAN
SD1.1	DEMO ELEVATION
S0.0	GENERAL STRUCTURAL NOTES
S0.1	STRUCTURAL SPECIAL INSPECTIONS
S1.0	FOUNDATIONS/LAB PLAN
S1.1	CATWALK PLAN
S1.2	ROOF PLAN
S1.3	ELEVATION PLAN
S3.0	FOUNDATION DETAILS
S4.0	FRAMING DETAILS
S4.1	FRAMING DETAILS
A1.0	EXTERIOR ELEVATIONS AND DETAILS
E001	ELECTRICAL NOTES & LEGENDS
E002	ELECTRICAL DETAILS & SCHEDULES
E100	ELECTRICAL PLAN

Morrison Maierle engineers • surveyors • planners • scientists	
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STRUCTURAL / ELECTRICAL ENGINEER MORRISON MAIERLE INC. 2880 TECHNOLOGY BLVD. WEST BOZEMAN, MONTANA (406) 587-0721	

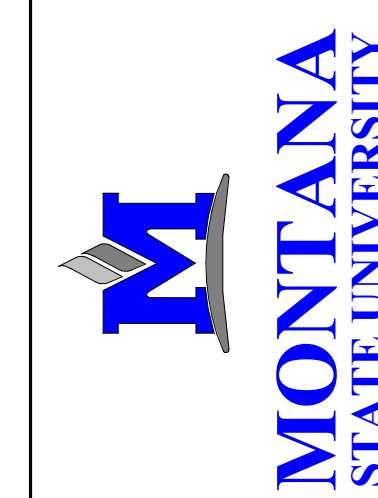
KEY PLAN

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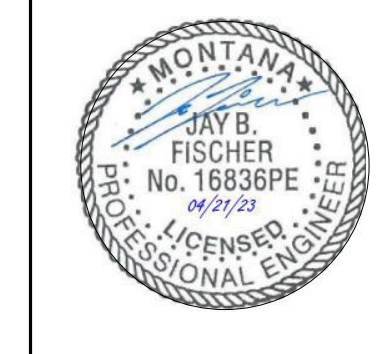
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BID DRAWINGS
STADIUM VIDEO BOARD UPGRADE
MONTANA STATE UNIVERSITY



DRAWN BY: Author
REVIEWED BY: Checker

REV.	DESCRIPTION	DATE



PPA#22-0611
A/E#00-00-00

0747.080

SHEET TITLE
COVER SHEET

SHEET
0.0

DATE
04-21-2023

STATEMENT OF SPECIAL INSPECTION AND TESTING NOTES:

SPECIAL INSPECTIONS SHALL CONFORM TO CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE (IBC), CONTRACT DOCUMENTS, AND APPROVED SUBMITTALS. THE OWNER SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS AND TESTING DESCRIBED HEREIN.

SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED AND ACCREDITED INDEPENDENT AGENCY MEETING THE REQUIREMENTS OF ASTM E29 (GENERAL), ASTM D3740 (SOILS), ASTM C1077 (CONCRETE), ASTM A898 (STEEL) AND ASTM E843 (NON-DESTRUCTIVE). THE INSPECTION AND TESTING AGENCY SHALL FURNISH TO THE ARCHITECT AND ENGINEER A COPY OF THEIR SCOPE OF ACCREDITATION. SPECIAL INSPECTIONS SHALL BE APPROVED BY THE BUILDING OFFICIAL. WELDING INSPECTION SHALL BE QUALIFIED PER AWS D1.1.

THE CONSTRUCTION OR WORK FOR WHICH SPECIAL INSPECTION IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTIONS.

THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONTRACT DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION AND NOTED IN THE INSPECTION REPORTS. ISSUES REQUIRING IMMEDIATE CORRECTIVE ACTIONS OR ENGINEERING INPUT ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY UPON DISCOVERY.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, ARCHITECT, ENGINEER, CONTRACTOR, AND OWNER. THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED, IS IN CONFORMANCE WITH THE APPROVED CONTRACT DOCUMENTS, AND THAT ALL DISCREPANCIES NOTED IN THE REPORTS HAVE BEEN CORRECTED.

EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND-OR SEISMIC FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM, OR A WIND-OR SEISMIC-RESISTING COMPONENT LISTED SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED HEREIN.

INSPECTION FREQUENCY:
A. CONTINUOUS INSPECTION: THE SPECIAL INSPECTOR SHALL BE PRESENT WHEN AND WHERE THE WORK IS BEING PERFORMED AT ALL TIMES.
B. PERIODIC INSPECTION: THE SPECIAL INSPECTOR SHALL BE INTERMITTENTLY PRESENT WHEN AND WHERE THE WORK IS BEING PERFORMED. THE INSPECTOR SHALL OBSERVE THE WORK AT ITS COMMENCEMENT, AT PERIODIC INTERVALS THEREAFTER, AND WHEN THE WORK IS COMPLETED.
C. OBSERVE: THE INSPECTOR SHALL OBSERVE THESE FUNCTIONS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING OBSERVATIONS. (REFERENCE AISC 300 AND AISC 341 FOR ADDITIONAL INFORMATION).
D. PERFORM: THESE FUNCTIONS SHALL BE COMPLETED AT THE FINAL ACCEPTANCE OF THE ITEM (REFERENCE AISC 300 AND AISC 341 FOR ADDITIONAL INFORMATION).
E. DOCUMENT: THE INSPECTOR SHALL PREPARE REPORTS INDICATING THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS (REFERENCE AISC 300 AND AISC 341 FOR ADDITIONAL INFORMATION).

SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH SPECIAL INSPECTION. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND PERIODIC AUDITING OF FABRICATION PRACTICES BY AN APPROVED SPECIAL INSPECTION AGENCY. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

STEEL FABRICATORS AND INSTALLERS CERTIFIED THROUGH AISC COMPLY WITH THIS PROVISION. THE FABRICATOR AND/OR INSTALLER MUST STILL COMPLETE AND DOCUMENT THE QUALITY CONTROL TASKS AND NON-DESTRUCTIVE TESTING OUTLINED IN AISC 300 AND AISC 341, AS APPLICABLE.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTIONS OF STRUCTURAL STEEL CONSTRUCTION table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTION TASKS PRIOR TO WELDING STRUCTURAL STEEL table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTION TASKS DURING WELDING STRUCTURAL STEEL table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTION TASKS AFTER WELDING STRUCTURAL STEEL table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTION TASKS PRIOR TO BOLTING STRUCTURAL STEEL table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

REQUIRED SPECIAL INSPECTION TASKS DURING BOLTING STRUCTURAL STEEL (NOT REQUIRED FOR SNUG-TIGHT JOINTS) table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

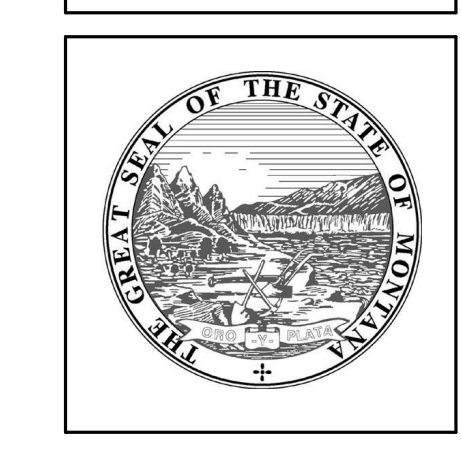
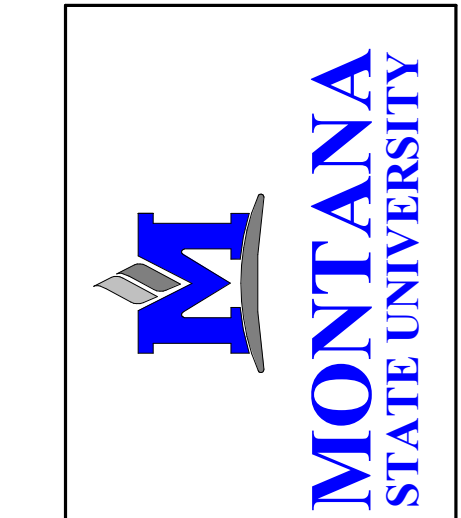
REQUIRED SPECIAL INSPECTION TASKS AFTER BOLTING STRUCTURAL STEEL table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY, REMARKS

TESTING OF SOILS AND FOUNDATIONS table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY

TESTING OF CONCRETE CONSTRUCTION table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY

TESTING OF STEEL CONSTRUCTION table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY

TESTING OF STEEL CONSTRUCTION FOR SEISMIC RESISTANCE table with columns: TASK, IBC REFERENCE, REFERENCE STANDARD, FREQUENCY

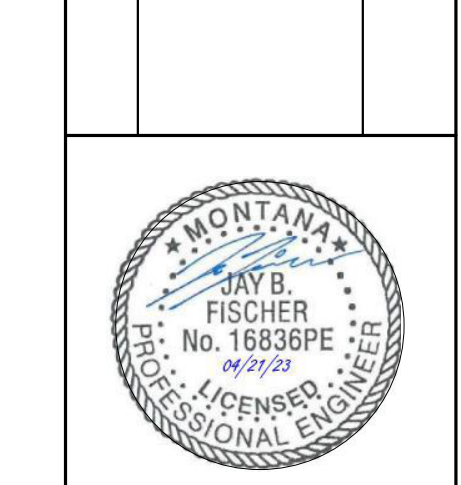


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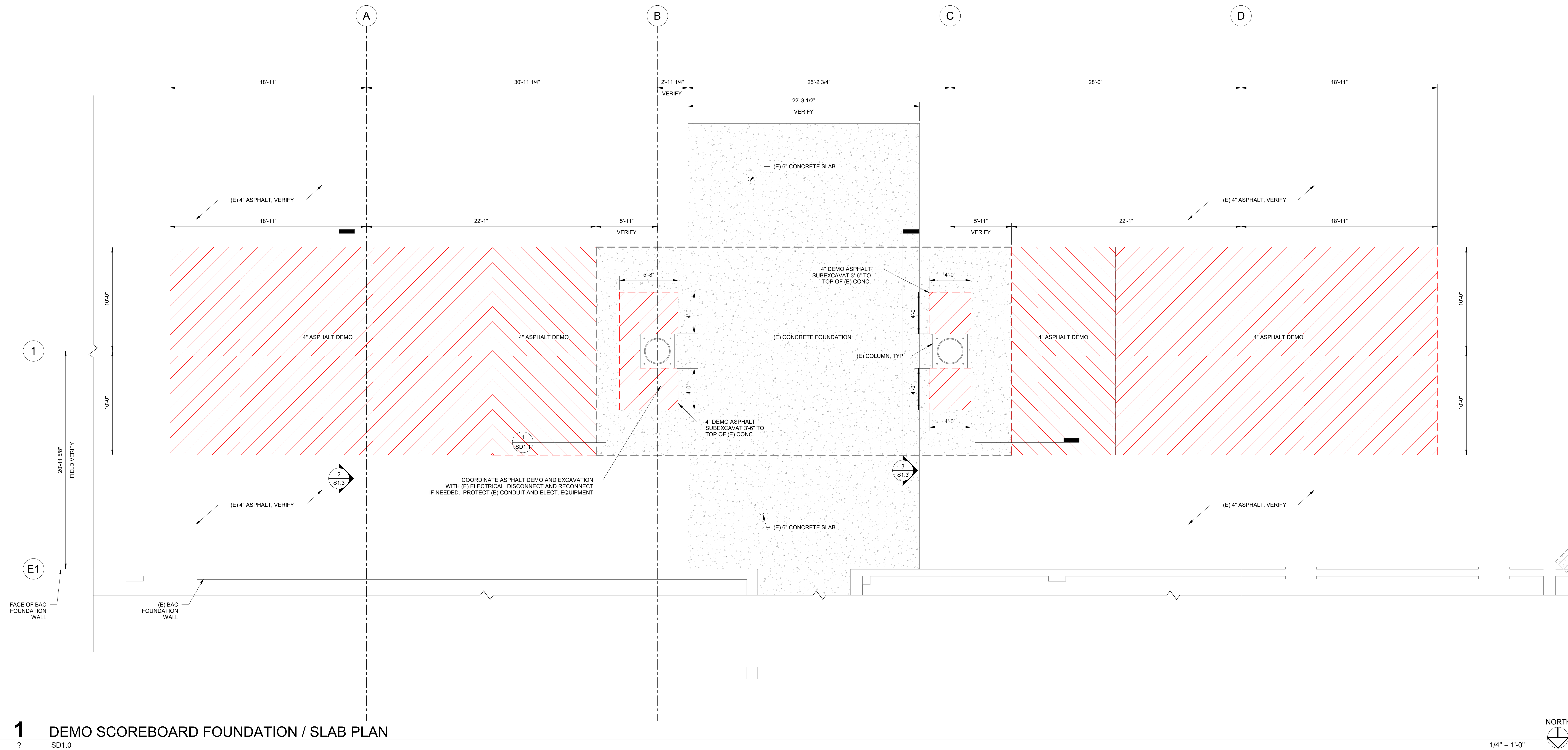
Revision table with columns: REV, DESCRIPTION, DATE



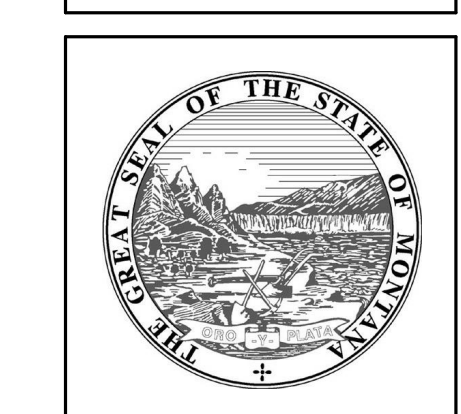
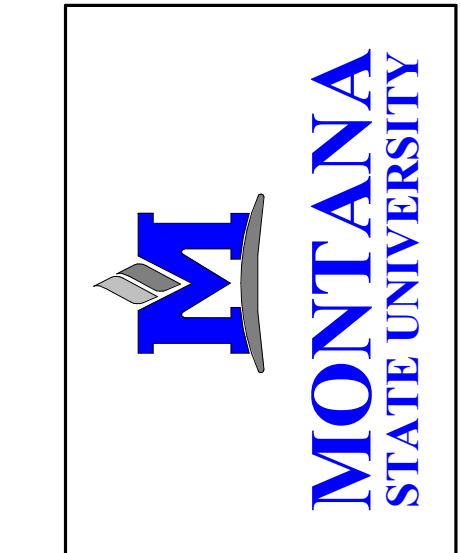
PPA#22-0611 A/E#00-00-00 0747.080 SHEET TITLE STATEMENT OF SPECIAL INSPECTIONS S0.1 DATE 04-21-2023

DEMO NOTES

1. FIELD VERIFY SIZE AND LOCATION OF EXISTING FOUNDATIONS. NOTIFY STRUCTURAL ENGINEER IF, AFTER THE EXISTING FOUNDATION HAVE BEEN EXPOSED, A POTENTIAL FOUNDATION CONFLICT IS ANTICIPATED. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE UNDERMINING OF EXISTING FOUNDATIONS.
2. CALL TWO WORKING DAYS BEFORE YOU DIG 1-800-424-5555
3. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CITY OF BOZEMAN, MT CONSTRUCTION STANDARDS, THE MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS AND ALL OTHER GOVERNING AGENCIES' STANDARDS.
4. EXISTING UNDERGROUND INSTALLATIONS AND PRIVATE UTILITIES SHOWN ARE INDICATED ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THIS DOES NOT GUARANTEE THE ACCURACY OF SUCH INFORMATION. SERVICE LINES MAY NOT BE STRAIGHT LINE OR AS INDICATED ON THE PLANS. TRADE CONTRACTOR SHALL CALL ALL UTILITY LOCATES.
5. CONTRACTOR SHALL REVIEW EXISTING CONDITIONS AND COORDINATE WITH THE CITY OF BOZEMAN AND ENGINEER PRIOR TO DEMOLITION ACTIVITIES.
6. REMOVE DEBRIS FROM SITE IMMEDIATELY AND DISPOSE OF LEGALLY.
7. ALL REMOVED ITEMS EXCEPT THOSE NOTED TO BE REUSED OR TO REMAIN SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE JOB SITE, AND LEGALLY DISPOSED.
8. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF OR REMOVAL AND REPLACEMENT OF ALL CONCRETE, ASPHALT AND WALKWAYS WITHIN THE PROJECT LIMITS AREA. CONDITION TO BE ASSESSED BEFORE AND AFTER BY AN ONSITE MEETING BETWEEN THE CONTRACTOR, MSU FACILITIES, AND ENGINEER. DOCUMENT EXISTING CONDITIONS WITH VIDEO AND/OR PHOTOGRAPHS.
9. FIELD VERIFY SIZE AND LOCATION OF EXISTING FOUNDATIONS. NOTIFY STRUCTURAL ENGINEER IF, AFTER THE EXISTING FOUNDATION HAVE BEEN EXPOSED, A POTENTIAL FOUNDATION CONFLICT IS ANTICIPATED. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE UNDERMINING OF EXISTING FOUNDATIONS.



1 DEMO SCOREBOARD FOUNDATION / SLAB PLAN
SD1.0



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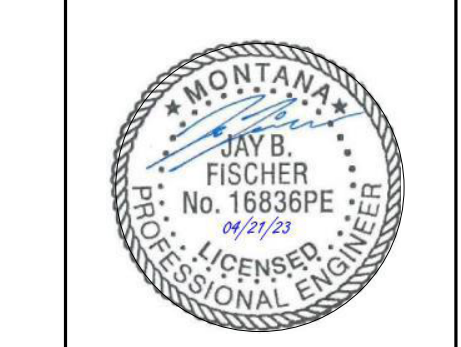
BID DRAWINGS

STADIUM VIDEO BOARD UPGRADE

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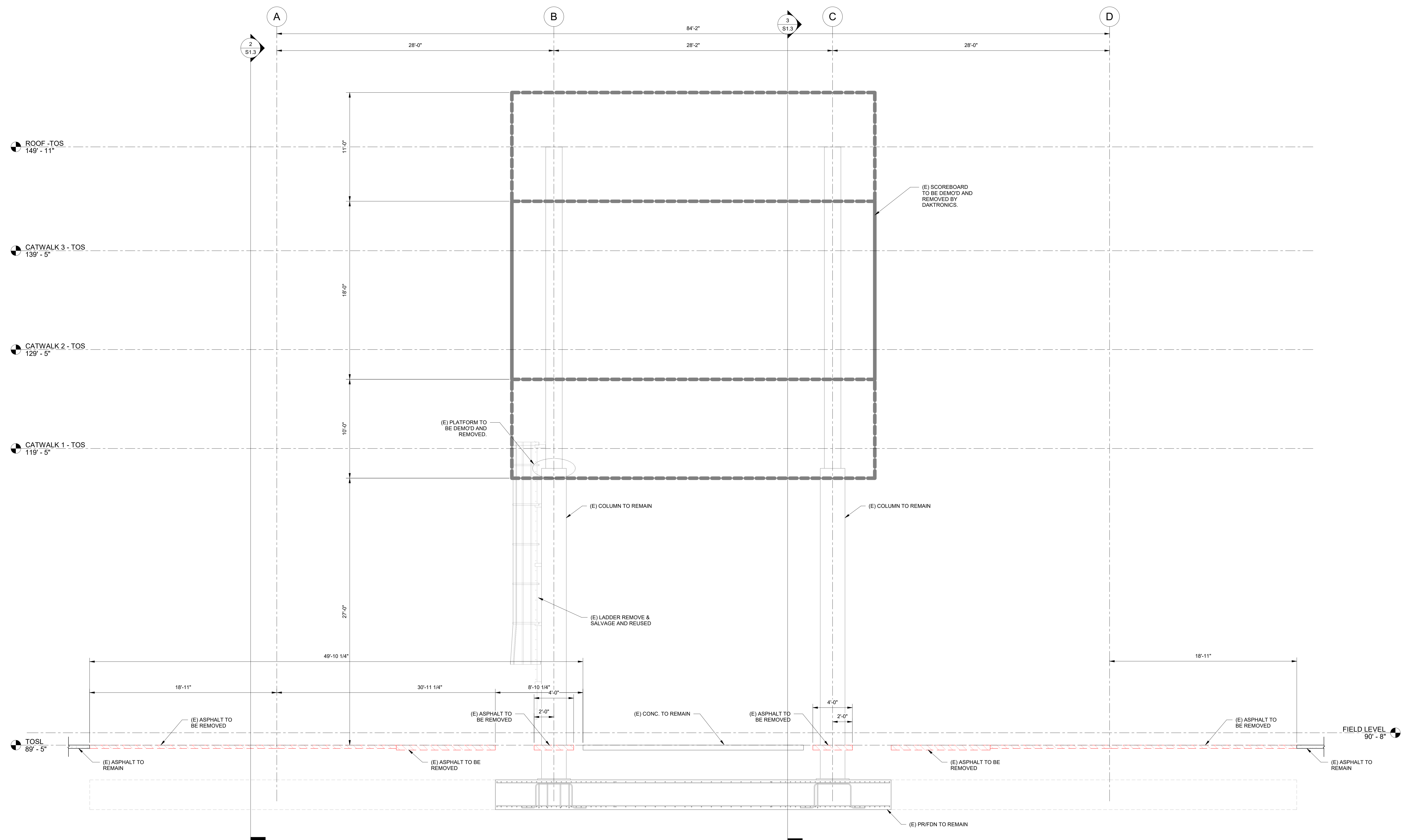


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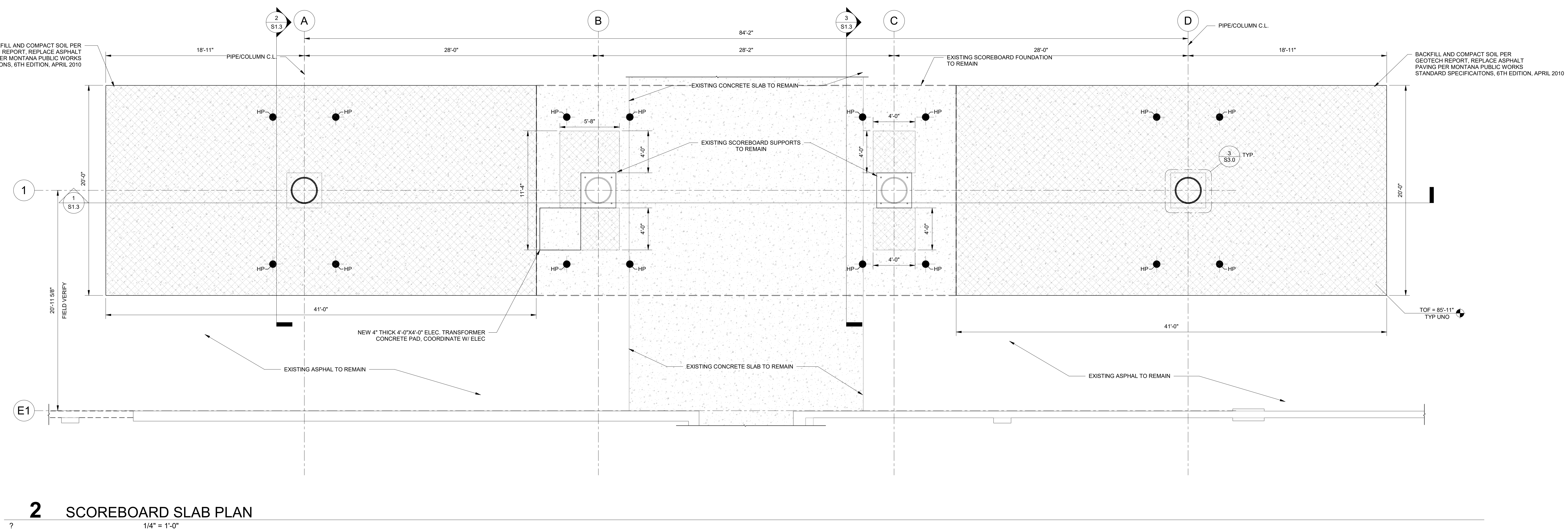
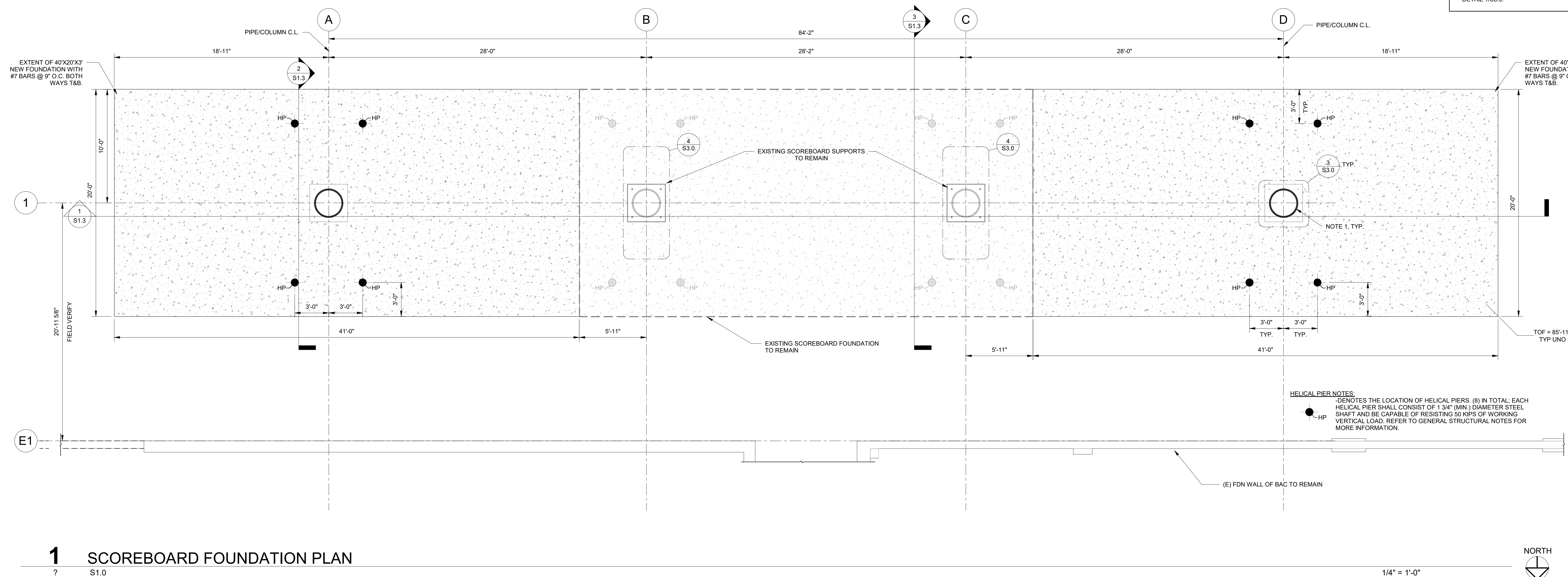
- DEMO NOTES**
1. FIELD VERIFY SIZE AND LOCATION OF EXISTING FOUNDATIONS. NOTIFY STRUCTURAL ENGINEER IF, AFTER THE EXISTING FOUNDATION HAVE BEEN EXPOSED, A POTENTIAL FOUNDATION CONFLICT IS ANTICIPATED. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE UNDERMINING OF EXISTING FOUNDATIONS.
 2. CALL TWO WORKING DAYS BEFORE YOU DIG 1-800-424-5555
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 5. CONTRACTOR SHALL REVIEW EXISTING CONDITIONS AND COORDINATE WITH THE CITY OF BOZEMAN AND ENGINEER PRIOR TO DEMOLITION ACTIVITIES.
 6. REMOVE DEBRIS FROM SITE IMMEDIATELY AND DISPOSE OF LEGALLY.
 7. ALL REMOVED ITEMS EXCEPT THOSE NOTED TO BE REUSED OR TO REMAIN SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE JOB SITE, AND LEGALLY DISPOSED.
 8. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF GIR REMOVAL AND REPLACEMENT OF ALL CONCRETE, ASPHALT AND WALKWAYS WITHIN THE PROJECT LIMITS AREA. CONDITION TO BE ASSESSED BEFORE AND AFTER BY AN ONSITE MEETING BETWEEN THE CONTRACTOR, MSU FACILITIES, AND ENGINEER. DOCUMENT EXISTING CONDITIONS WITH VIDEO AND/OR PHOTOGRAPHS.
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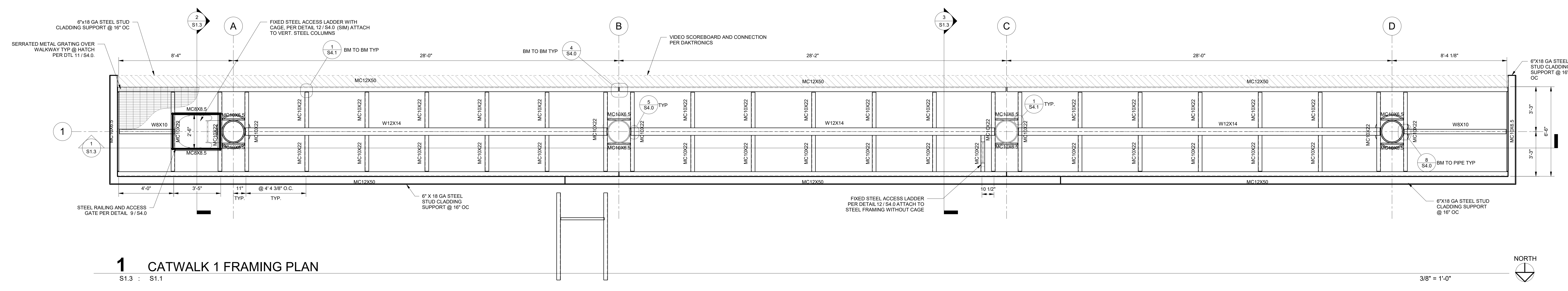


1 SCOREBOARD ELEVATION
SD1.0 1/4" = 1'-0"

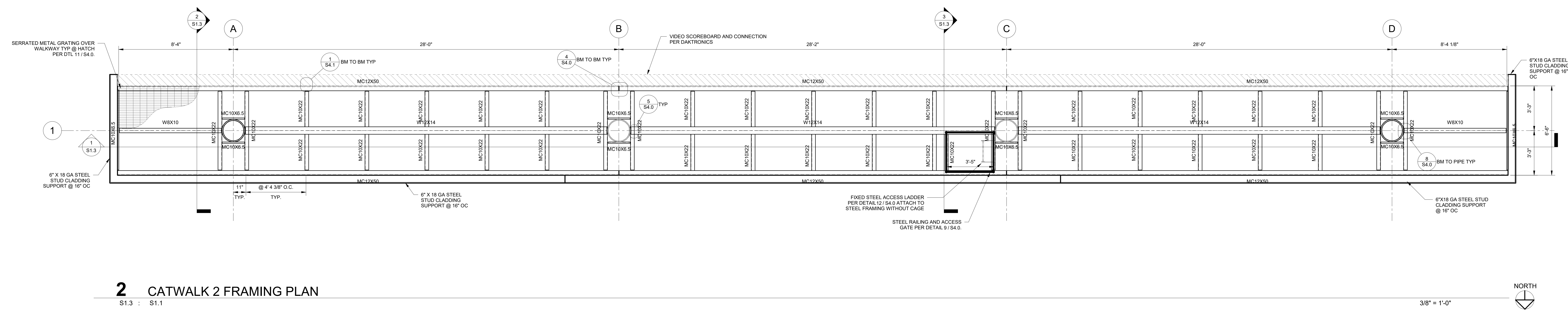
PLAN NOTES

- NOTES:**
1. COMPLETELY FILL STRUCTURAL PIPE WITH 4000 PSI (MN) CONCRETE CONFORMING TO THE REQUIREMENTS OF THE GENERAL STRUCTURAL NOTES. PLACE CONCRETE USING TREMIE TUBE OR APPROVED EQUIVALENT TO PREVENT GREATER THAN 4- FEET FREEFALL OF CONCRETE INTO THE PIPE.
 2. THIS STRUCTURAL DRAWING SET SERVES TO DEFINE AND INCLUDE THE STRUCTURAL PIPE COLUMNS AND ASSOCIATED BASE PLATES, FOUNDATIONS, REINFORCEMENT, AND ACCESS PLATFORM FRAMING MEMBERS. THE SCOREBOARD / VIDEOBOARD AND ALL ASSOCIATED COMPONENTS AND THE CONNECTION OF THESE ELEMENTS TO THE STRUCTURE ARE THE RESPONSIBILITY OF THE SCOREBOARD / VIDEOBOARD SUPPLY CONSULTANT. COORDINATE SIZE, LOCATION AND CONNECTION REQUIREMENTS OF SAID SCOREBOARD / VIDEOBOARD COMPONENTS WITH THE SCOREBOARD / VIDEOBOARD SUPPLY CONSULTANT.
 3. COORDINATE SLEEVING AND PENETRATIONS FOR MECHANICAL, PLUMBING, AND ELECTRICAL WORK TO BE PROVIDED IN A FUTURE SCHEDULE. AT OPENINGS IN FOUNDATION WALLS, PROVIDE OPENING REINFORCING PER DETAIL 1/S3.3.

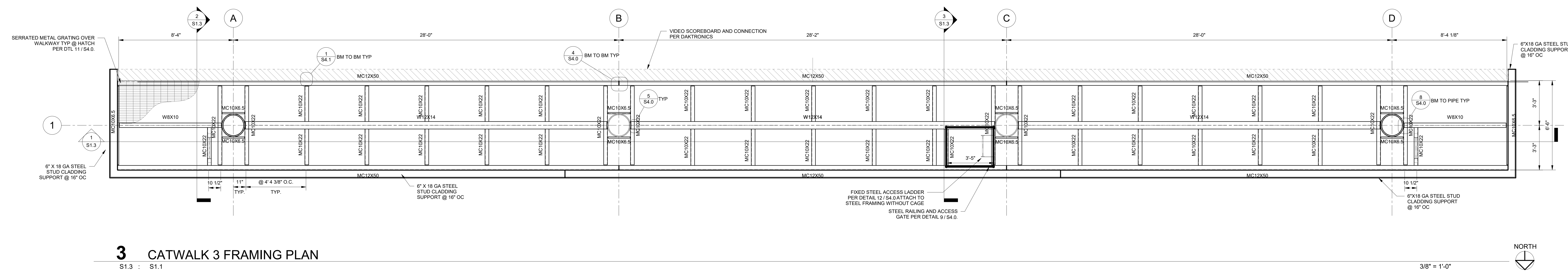




1 CATWALK 1 FRAMING PLAN
S1.3 : S1.1



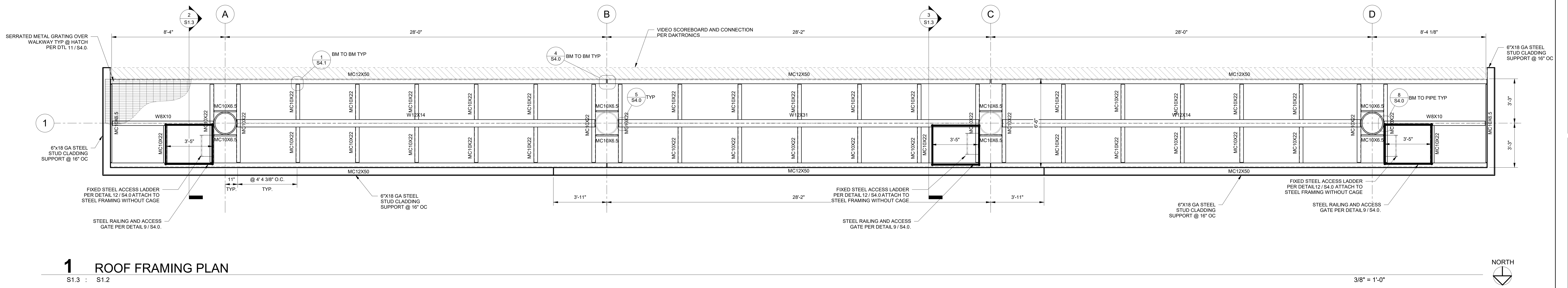
2 CATWALK 2 FRAMING PLAN
S1.3 : S1.1



3 CATWALK 3 FRAMING PLAN
S1.3 : S1.1

PLAN NOTES

- NOTES**
- MECHANICAL ROOF TOP EQUIPMENT, COORDINATE LOCATIONS AND PENETRATIONS WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR. PROVIDE OPENING FRAMING PER DETAIL 1034.4.
 - PROVIDE ADDITIONAL CLOSER SPACED ROOF RAFTERS TO SUPPORT MECHANICAL ROOF TOP EQUIPMENT.
 - COORDINATE OTHER ROOF PENETRATIONS NOT SHOWN (LESS THAN OR EQUAL TO 8" IN LARGEST DIMENSION) WITH MECHANICAL/PLUMBING/ELECTRICAL DRAWINGS AND WITH THE MECHANICAL/PLUMBING/ELECTRICAL CONTRACTORS.
 - RAFTER/JOIST BRACING IS REQUIRED BUT NOT SHOWN. SEE GENERAL STRUCTURAL NOTES ON SHEET S1.0 FOR BRACING AND OTHER JOIST/RAFTER REQUIREMENTS.



1 ROOF FRAMING PLAN

S1.3 : S1.2

BID DRAWINGS

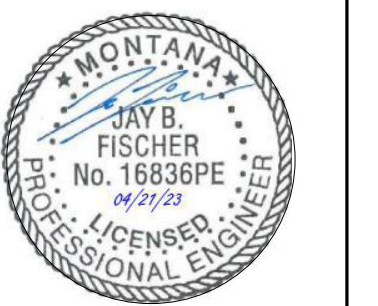
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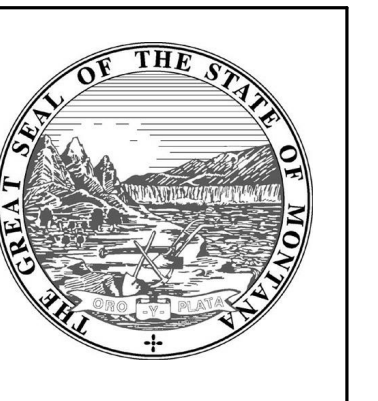


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 ROOF PLAN

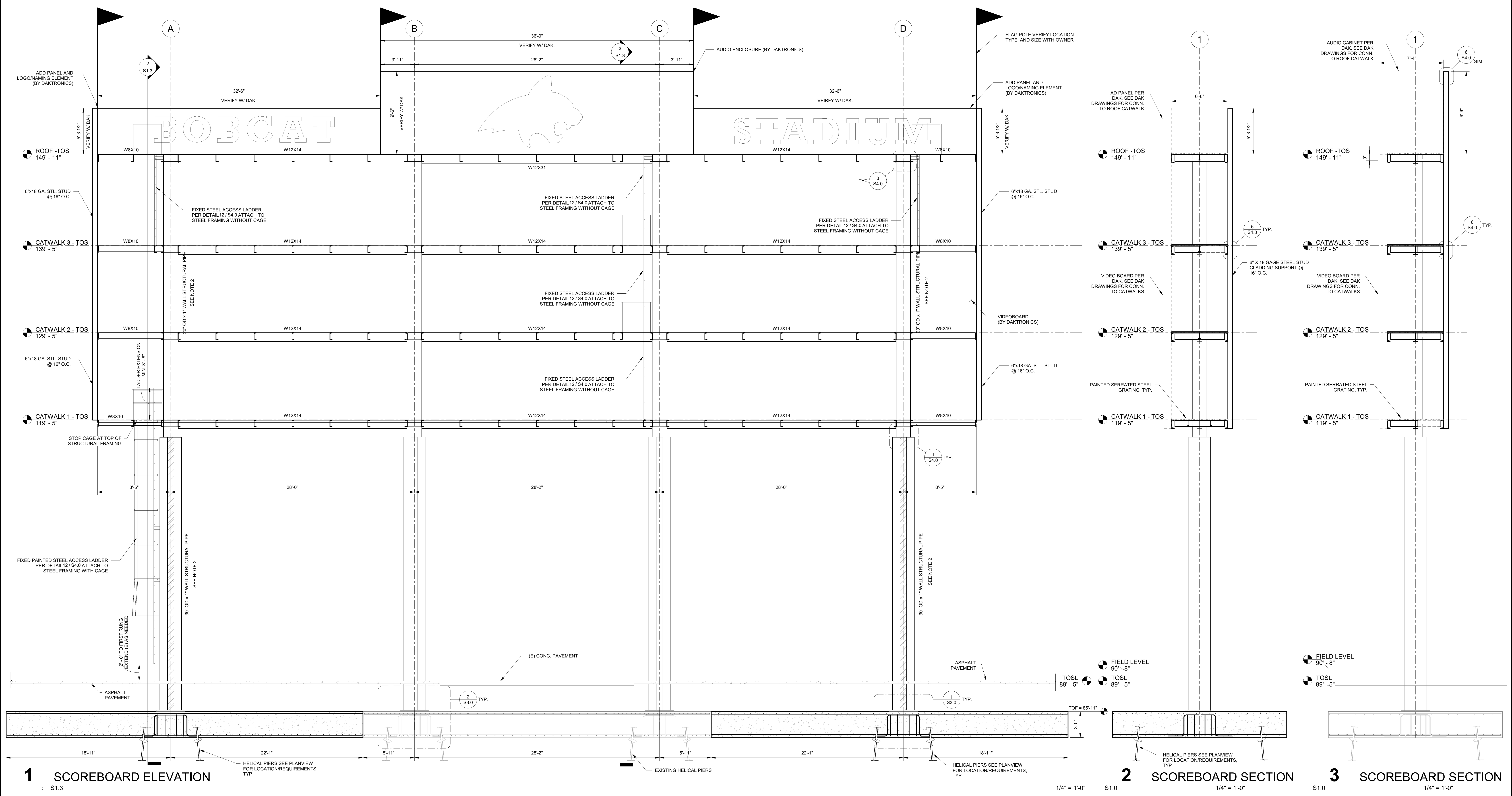
SHEET
S1.2

DATE
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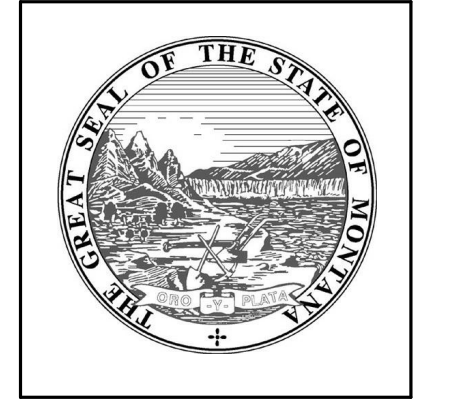
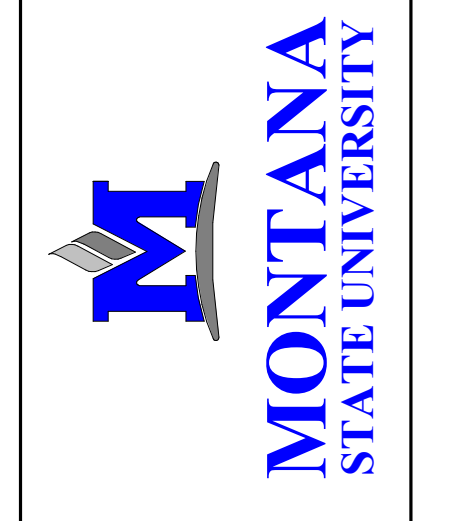
- ELEVATION PLAN NOTES**
- FIELD VERIFY SIZE AND LOCATION OF EXISTING FOUNDATIONS. NOTIFY STRUCTURAL ENGINEER IF, AFTER THE EXISTING FOUNDATION HAVE BEEN EXPOSED, A POTENTIAL FOUNDATION CONFLICT IS ANTICIPATED. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE UNDERMINING OF EXISTING FOUNDATIONS.
 - COMPLETELY FILL STRUCTURAL PIPE WITH 4000 PSI (MIN) CONCRETE CONFORMING TO THE REQUIREMENTS OF THE GENERAL STRUCTURAL NOTES. PLACE CONCRETE USING TREME TUBE OR APPROVED EQUIVALENT TO PREVENT GREATER THAN 4 FEET FREEFALL OF CONCRETE INTO THE PIPE. STEEL ELEMENTS TO BE EXPOSY PAINTED ACCORDING TO SPECIFICATIONS.
 -



1 SCOREBOARD ELEVATION
: S1.3

2 SCOREBOARD SECTION
S1.0 1/4" = 1'-0"

3 SCOREBOARD SECTION
S1.0 1/4" = 1'-0"



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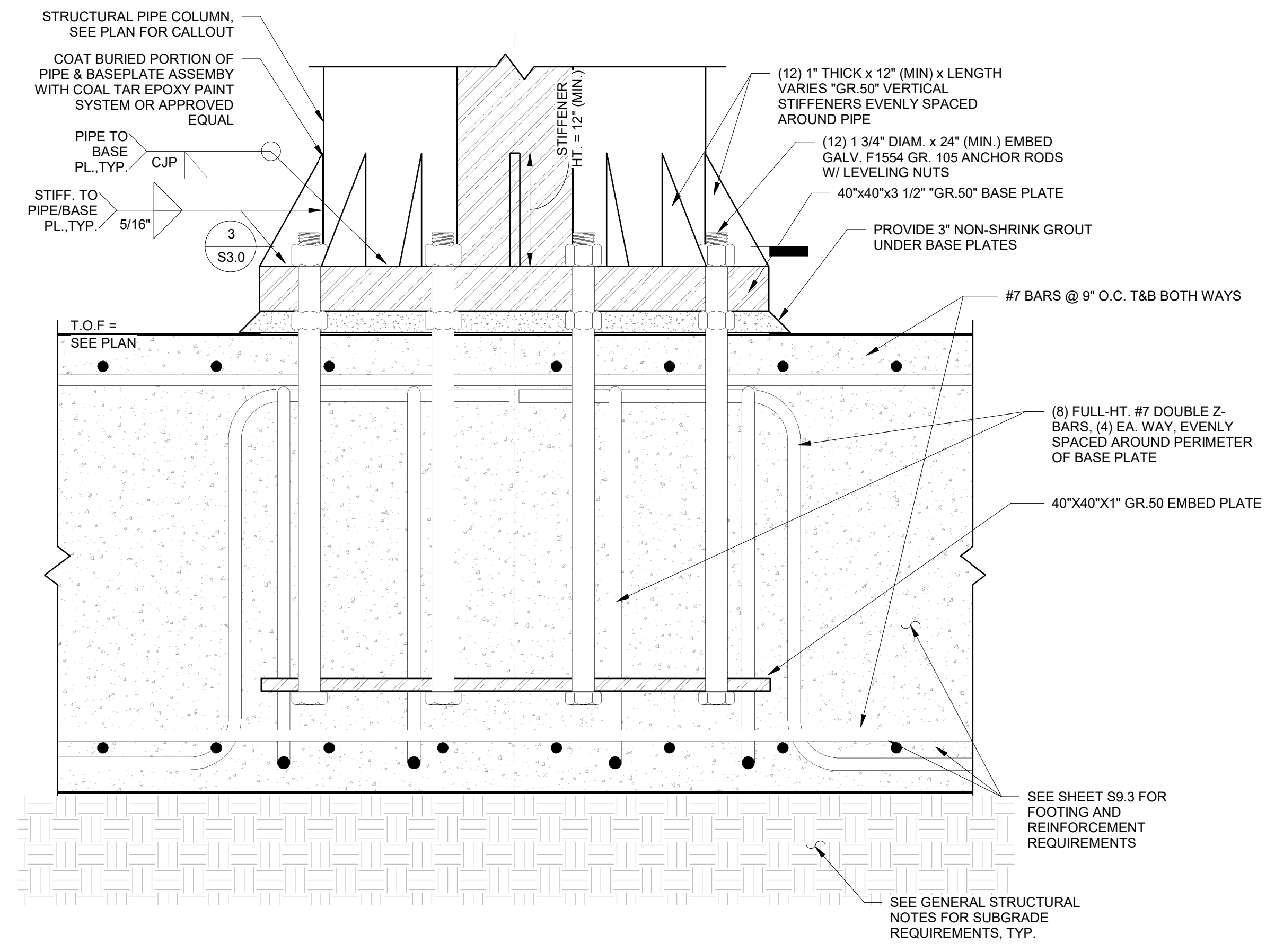
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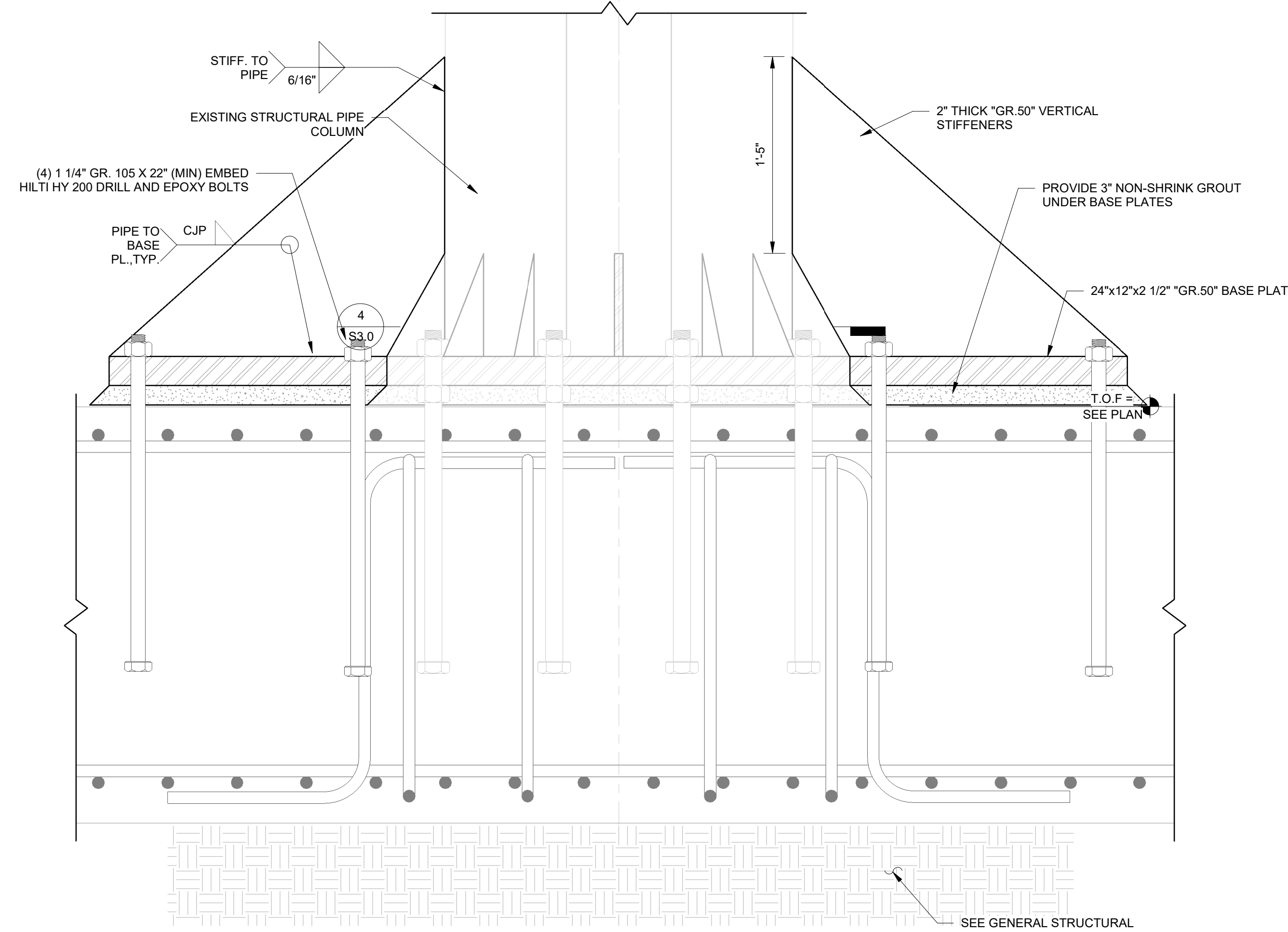
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A/E#00-00-00
0747.080
SHEET TITLE
ELEVATION PLAN

SHEET
S1.3
DATE
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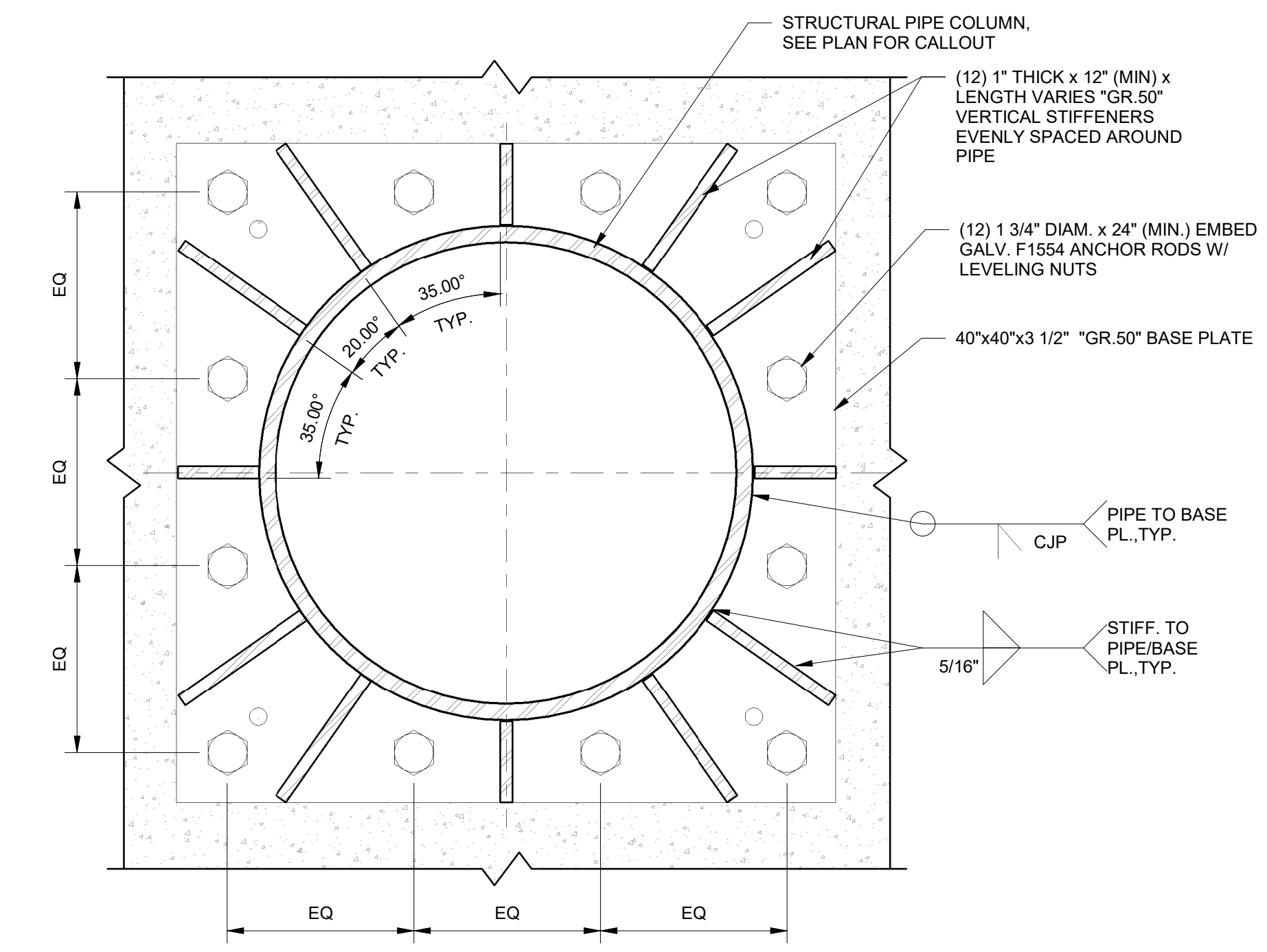
1 SCOREBOARD FRMG. DETAIL

S1.3 1 1/2" = 1'-0"



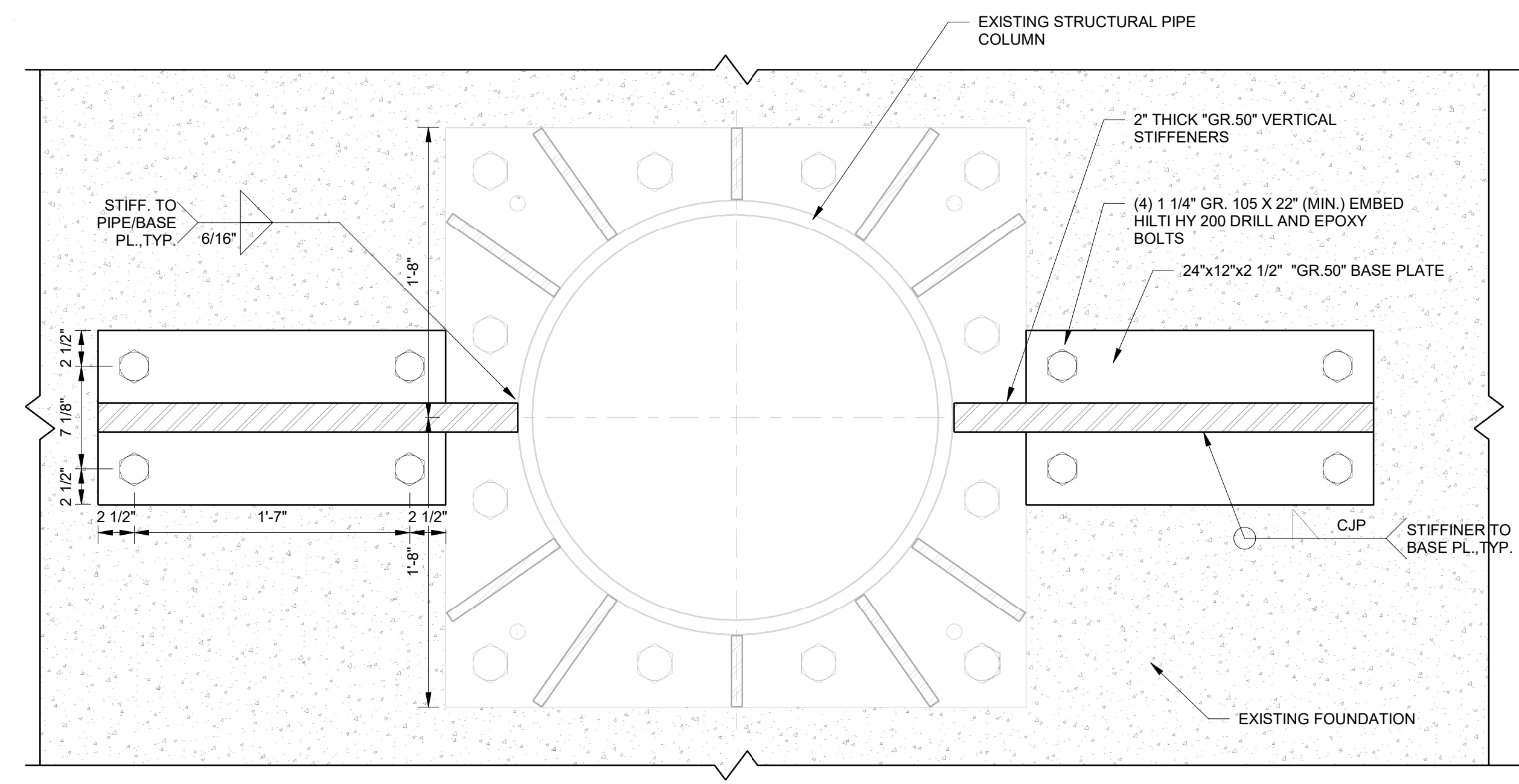
2 SCOREBOARD FRMG. DETAIL

S1.3 1 1/2" = 1'-0"



3 SCOREBOARD FRMG. DETAIL

S1.0 1 1/2" = 1'-0"



4 SCOREBOARD FRMG. DETAIL

S1.0 1 1/2" = 1'-0"



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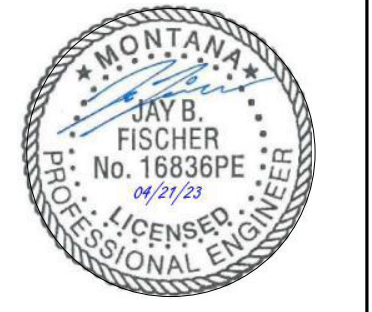
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BID DRAWINGS

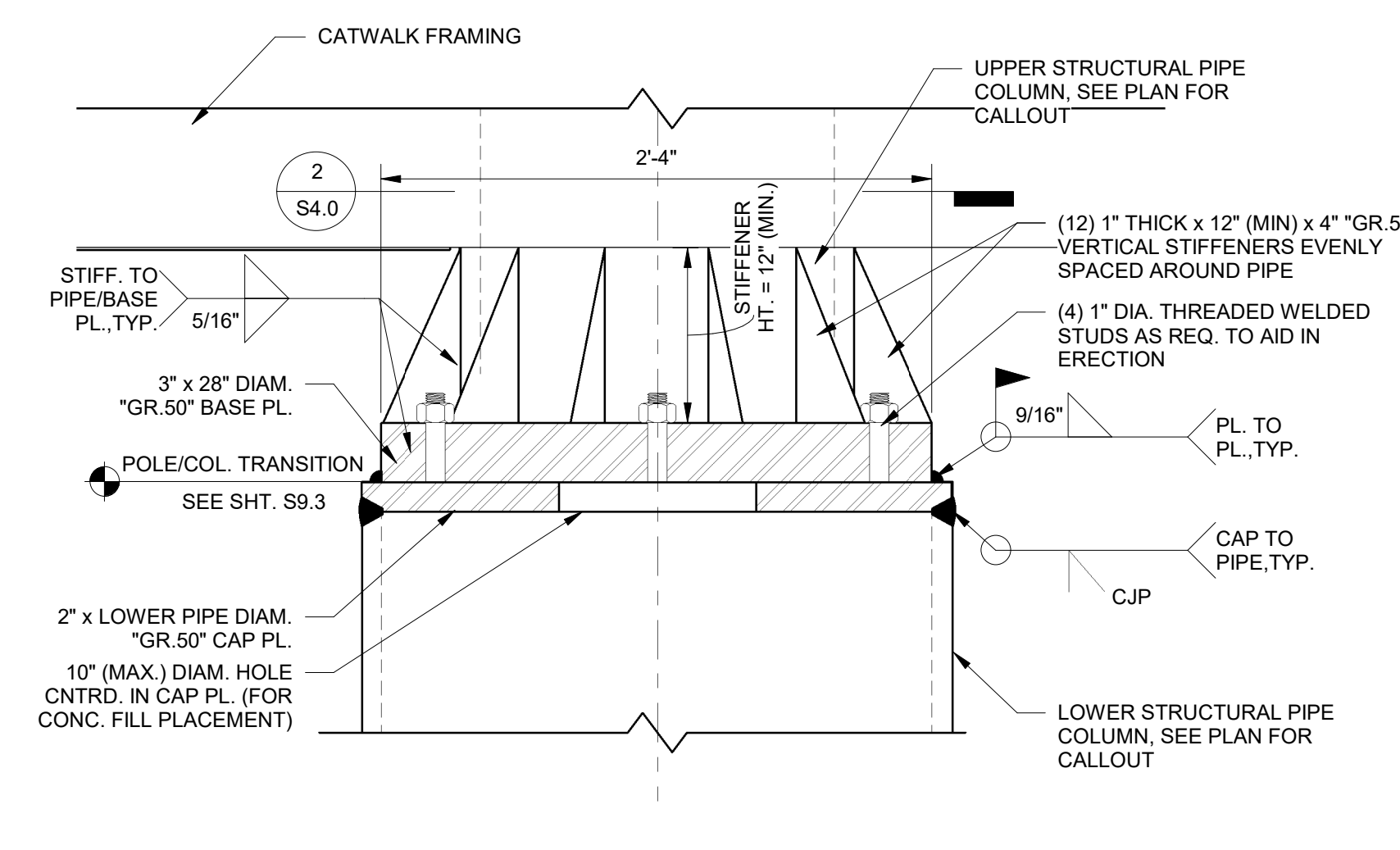


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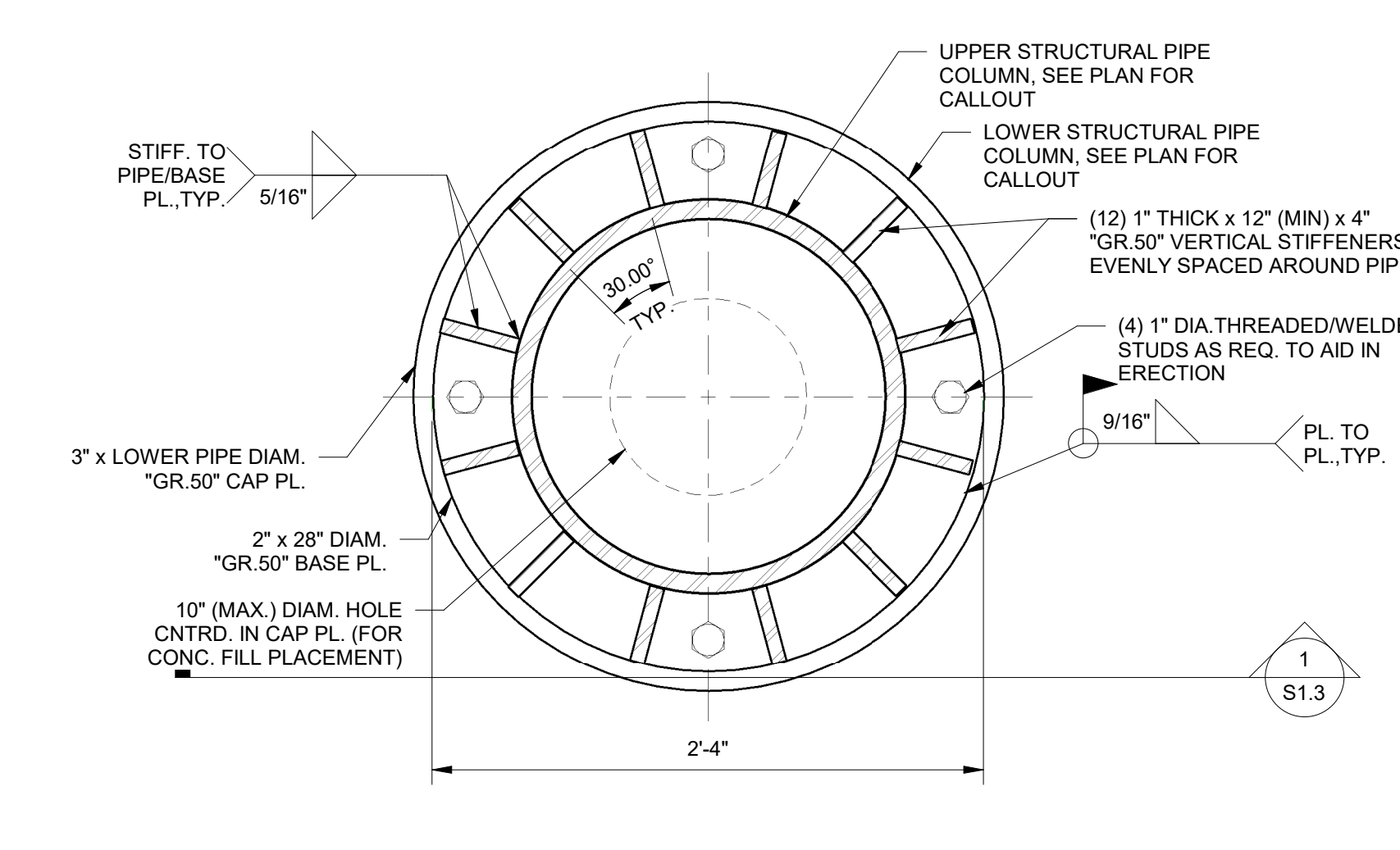
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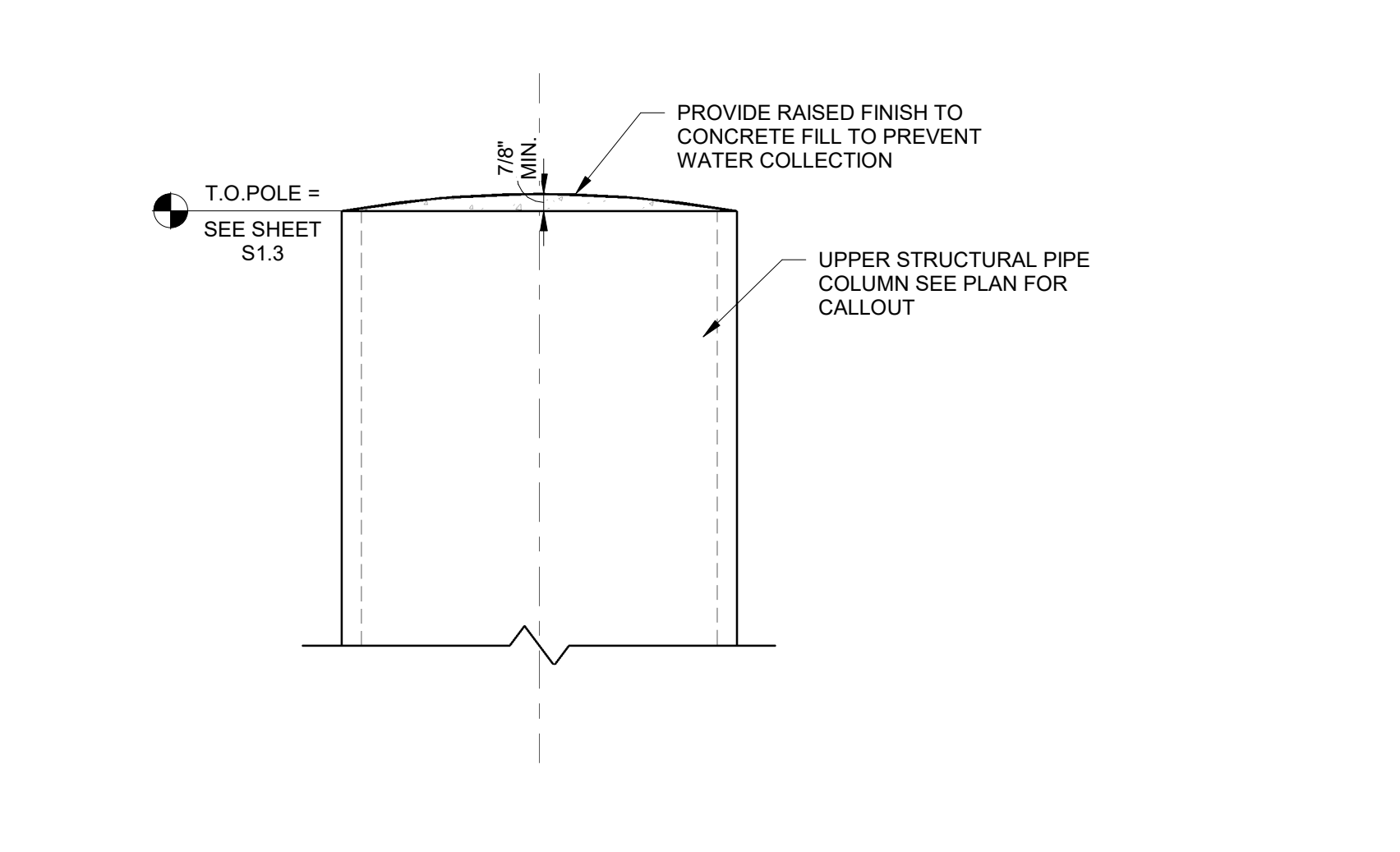
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DATE
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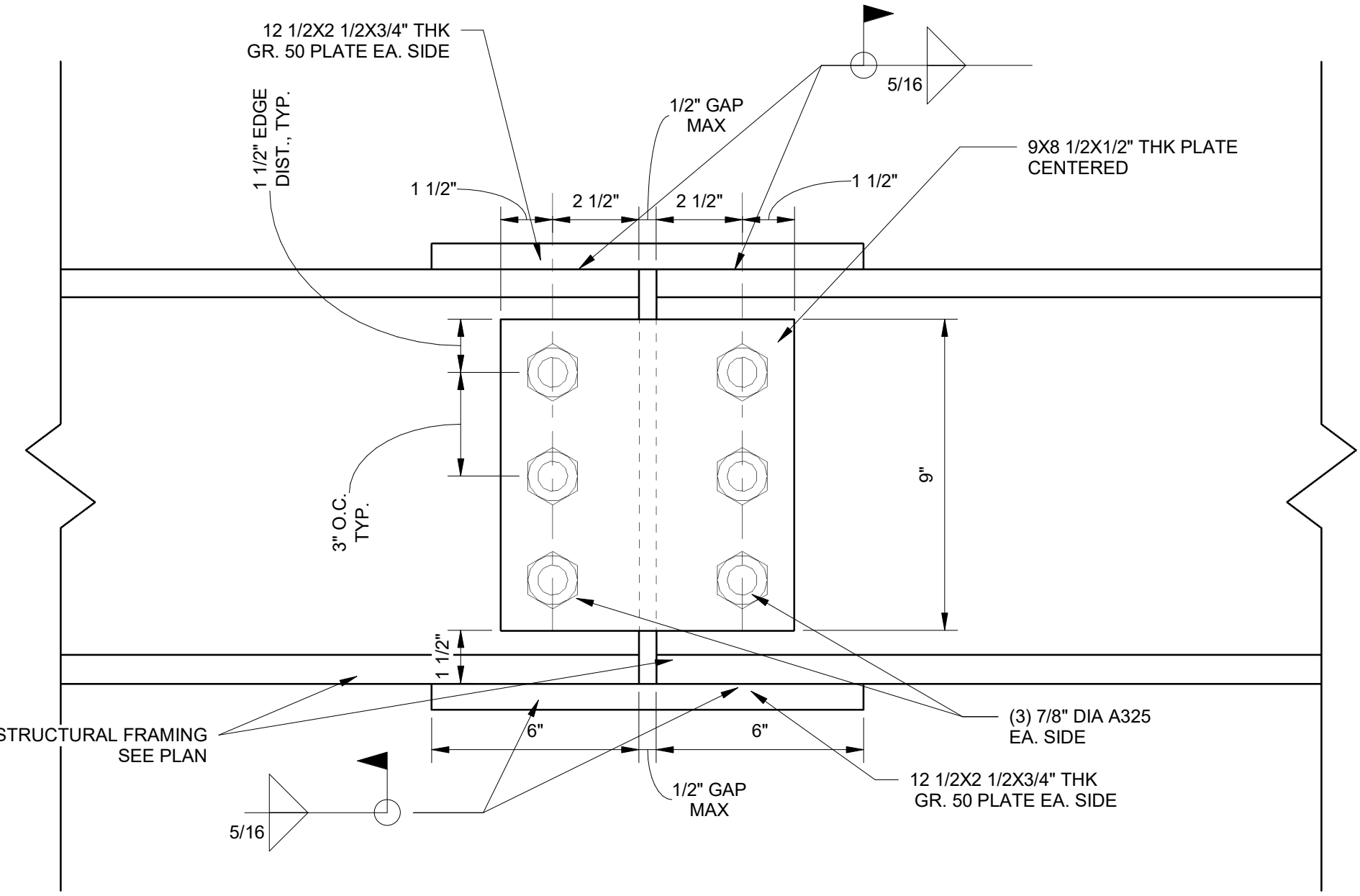
1 SCOREBOARD FRMG. DETAIL
S1.3 1 1/2" = 1'-0"



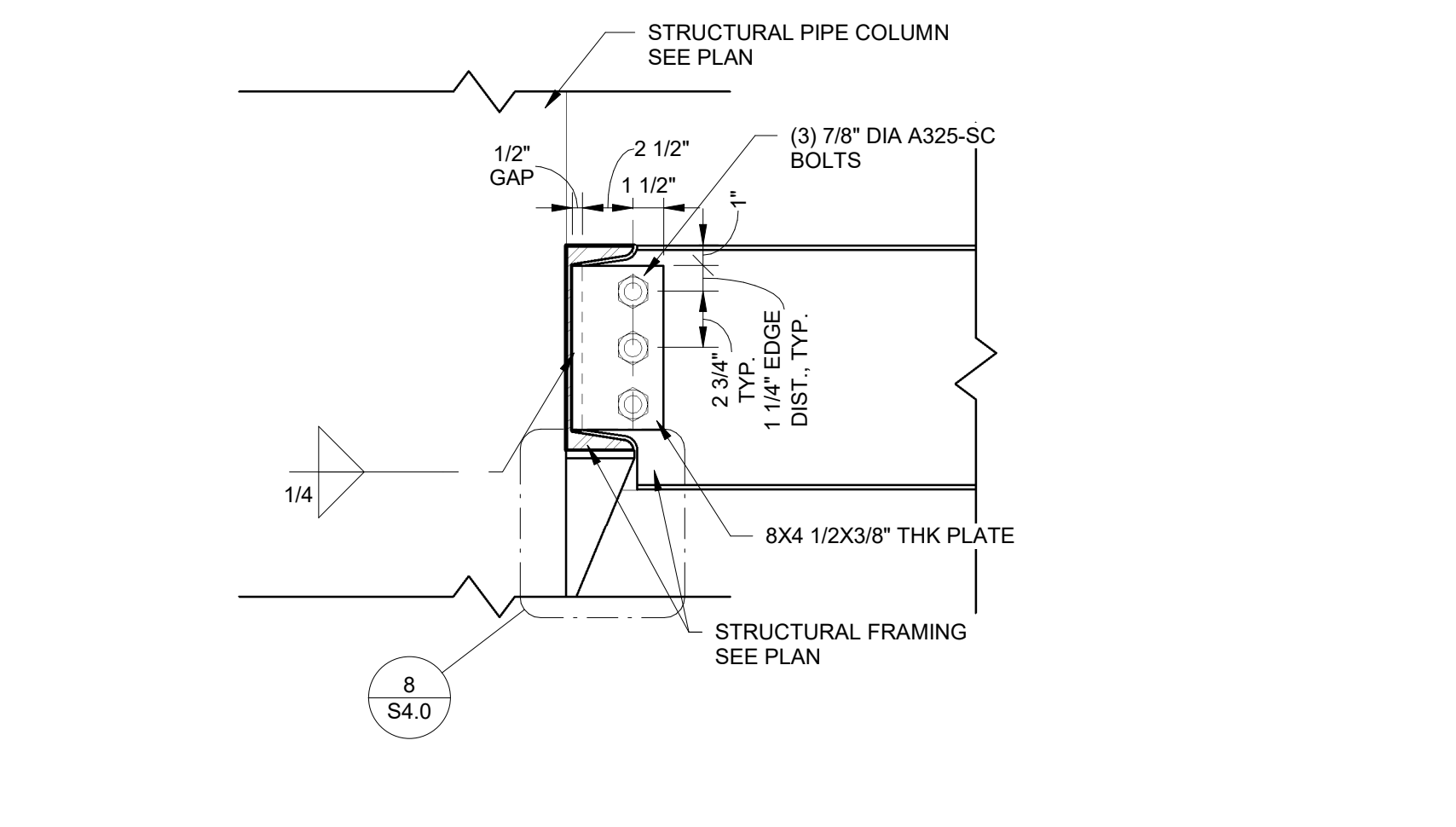
2 SCOREBOARD FRMG. DETAIL
S4.0 1 1/2" = 1'-0"



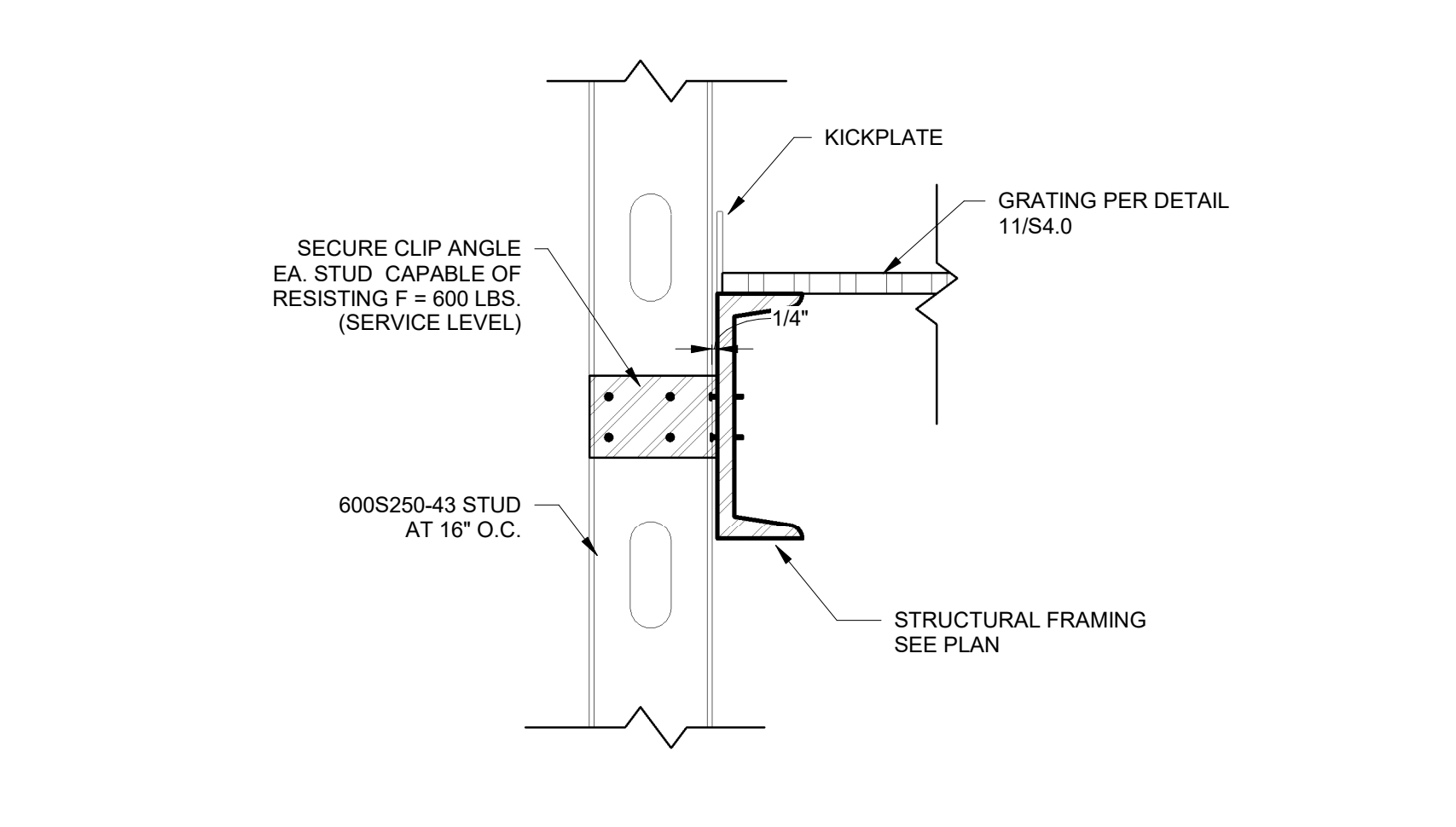
3 SCOREBOARD FRMG. DETAIL
S1.3 1 1/2" = 1'-0"



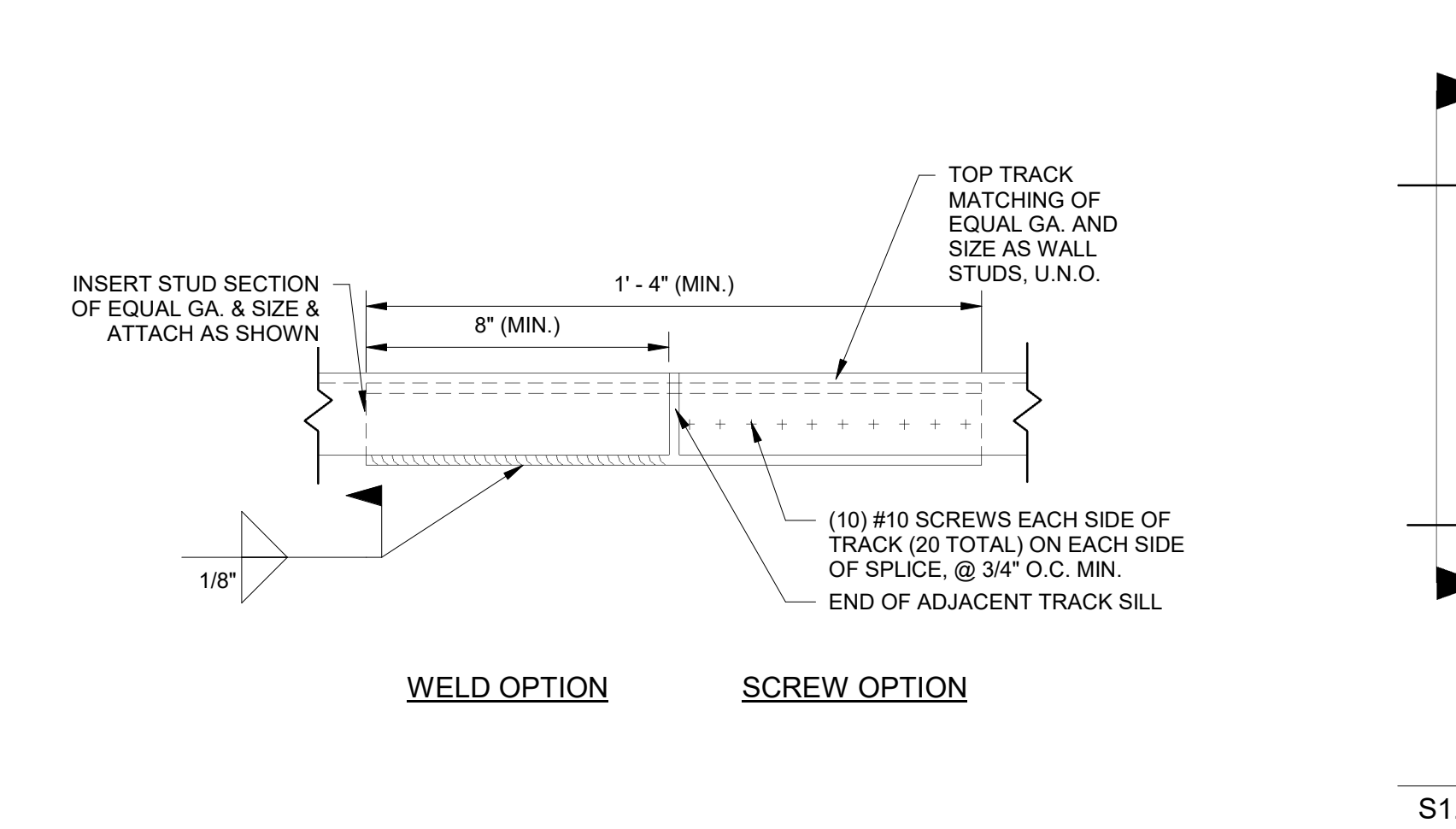
4 SCOREBOARD FRMG. DETAIL
S1.1 3" = 1'-0"



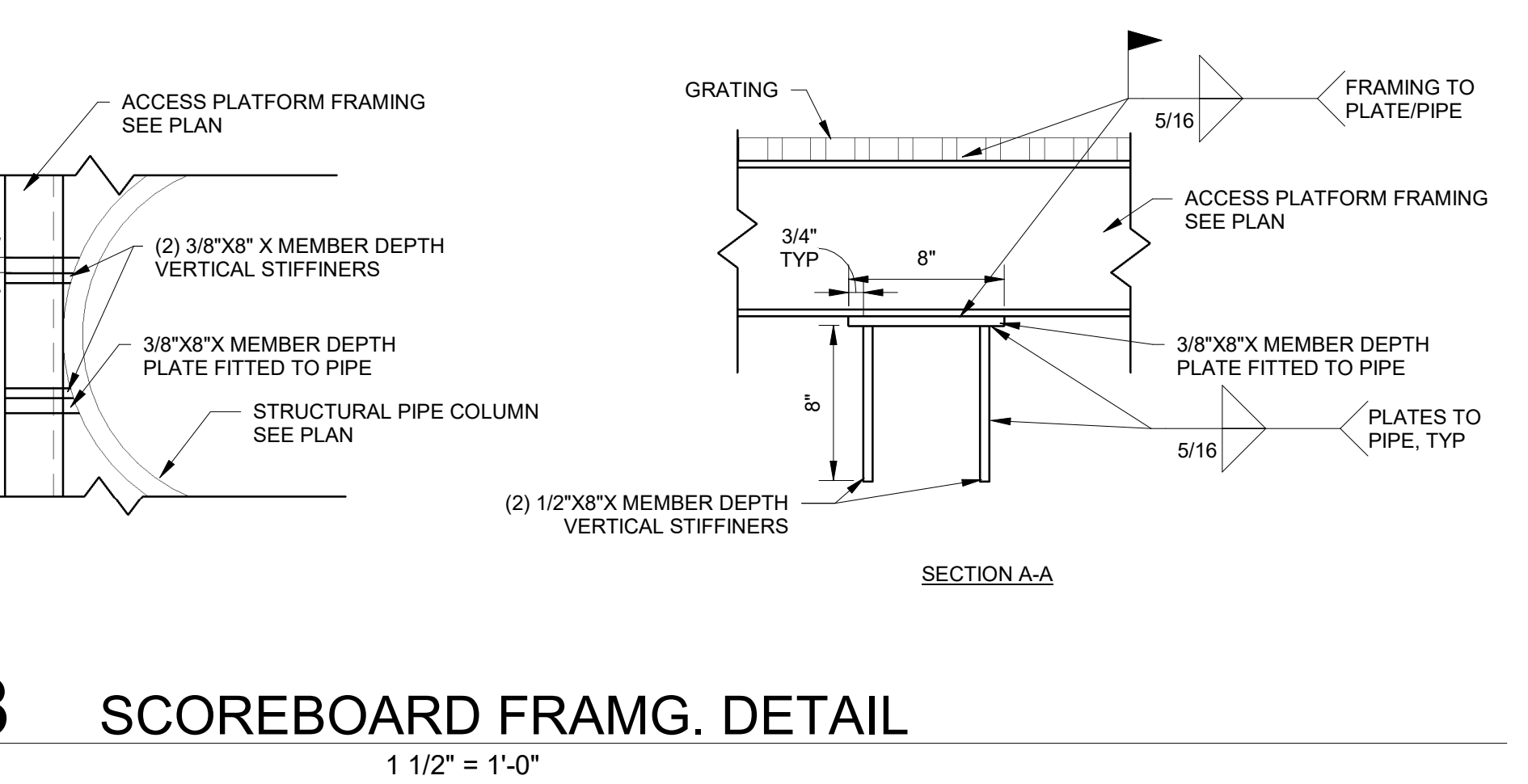
5 SCOREBOARD FRMG. DETAIL
S1.1 1 1/2" = 1'-0"



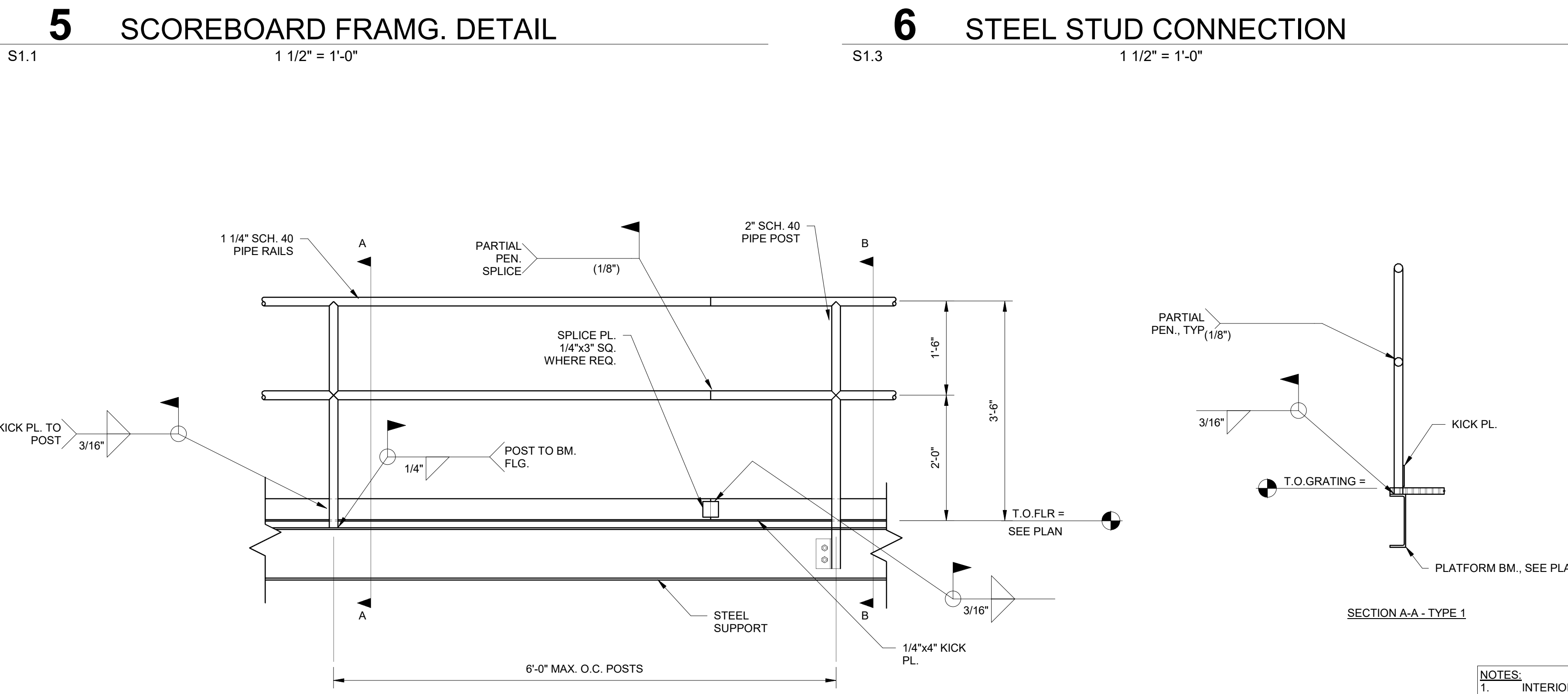
6 STEEL STUD CONNECTION
S1.3 1 1/2" = 1'-0"



7 STL. STUD WALL TOP TRACK SPLICE
S1.1 1" = 1'-0"

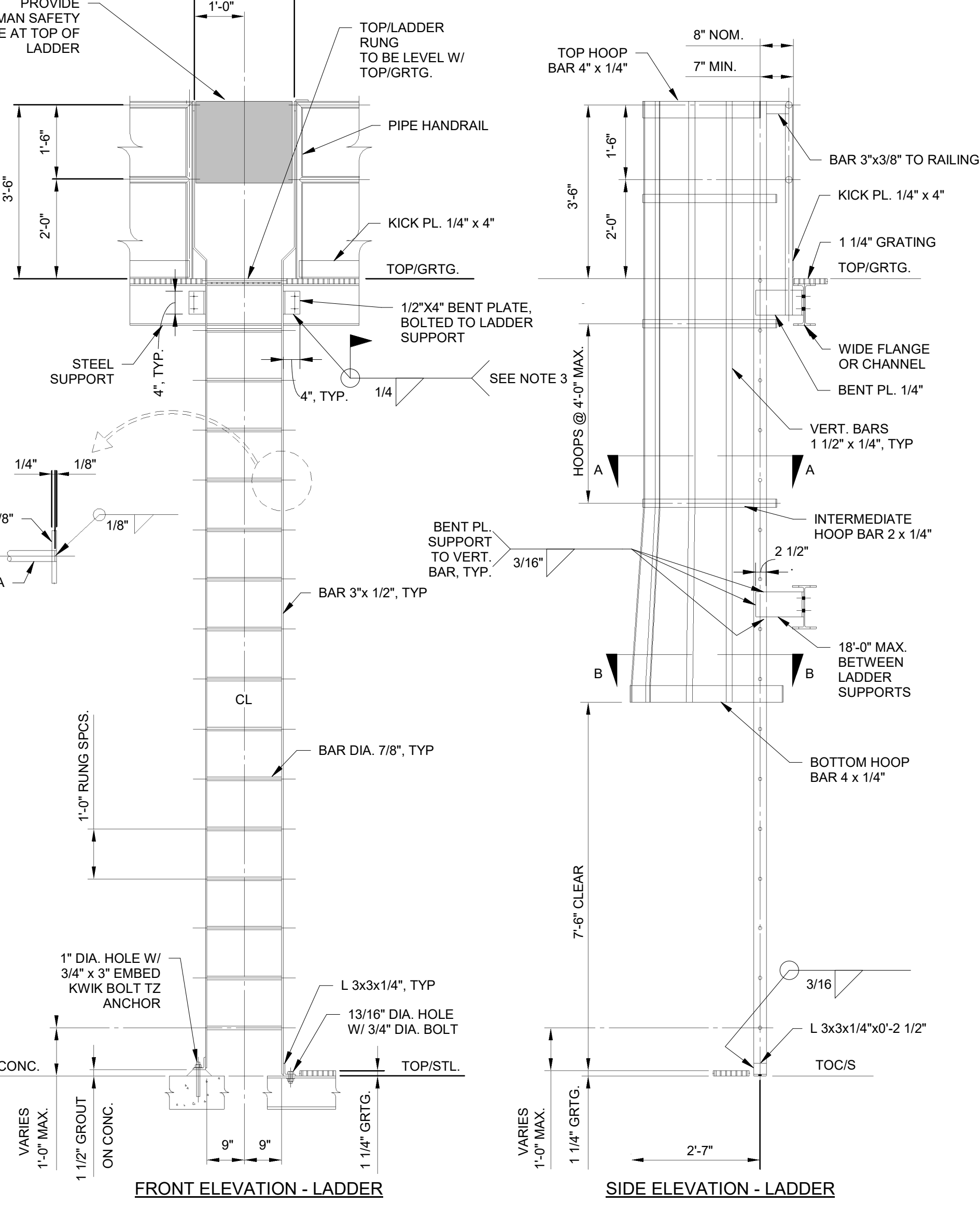
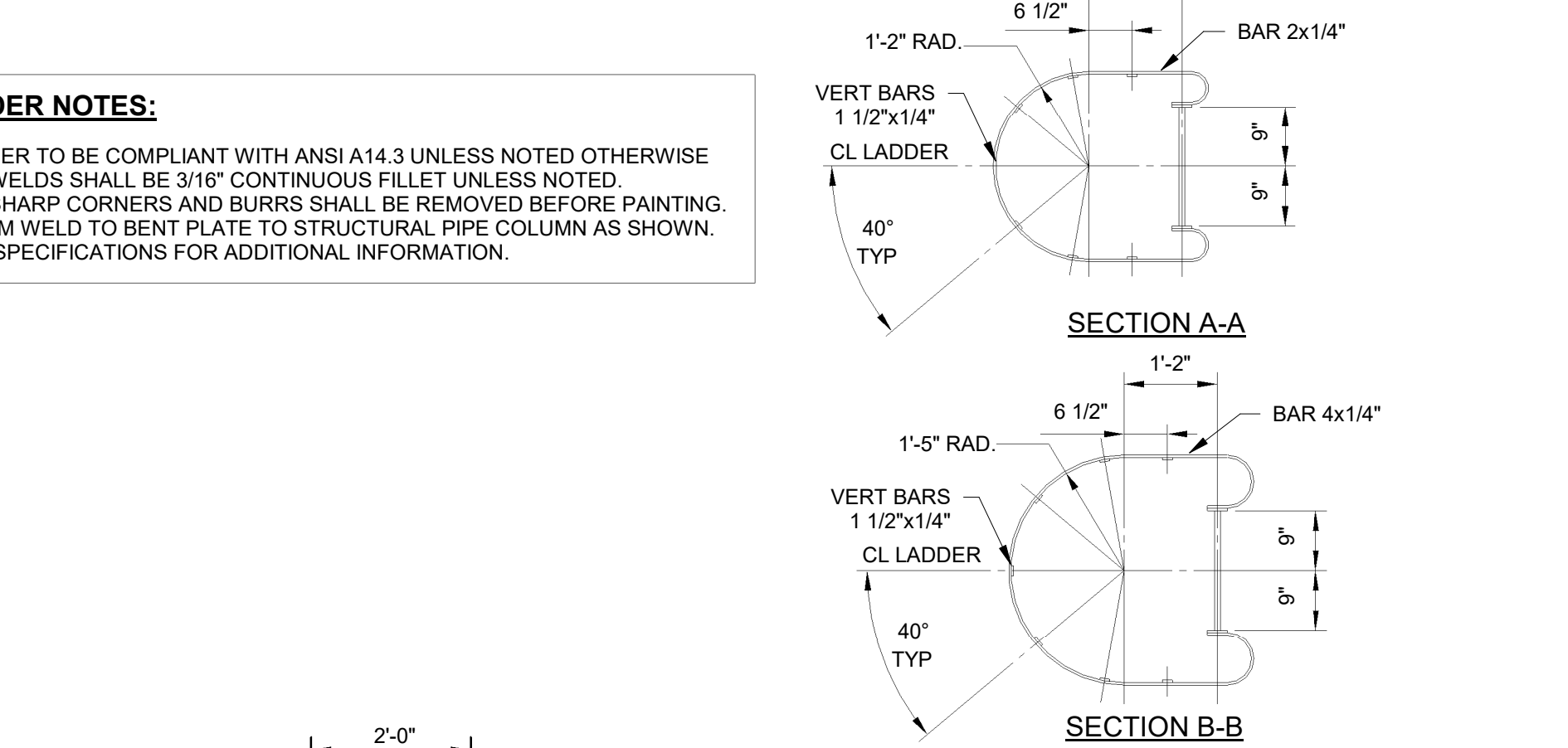


8 SCOREBOARD FRMG. DETAIL
S1.1 1 1/2" = 1'-0"

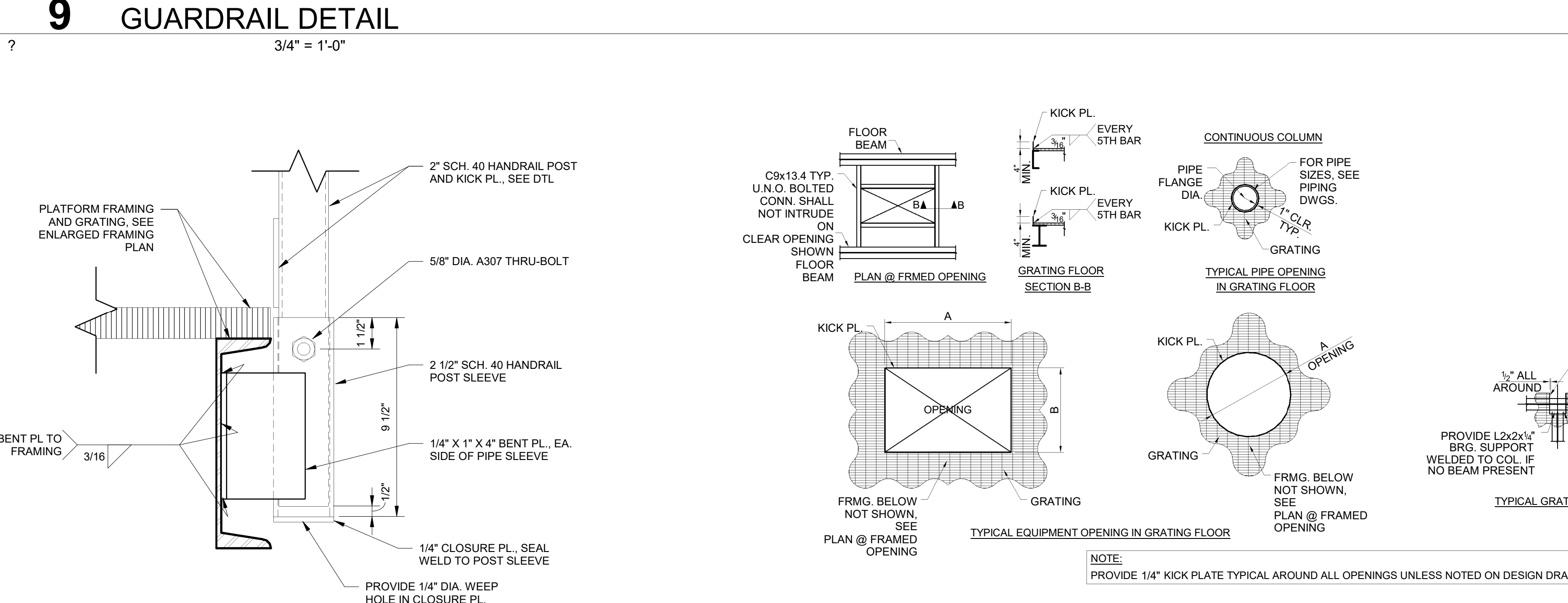


STEEL HANDRAILS:
1. MATERIAL SPECIFICATIONS:
STEEL PIPE = ASTM A53, GRADE B
BOLTS = ASTM A307, U.N.O.
WELDING ELECTRODES = E70XX SERIES
2. PAINT HANDRAILS PER SYSTEM "P1" IN PAINTING SPECIFICATION, COLOR PER OWNER REQUIREMENTS.
3. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

NOTES:
1. INTERIOR PLATFORMS TO BE TYPE 2, EXTERIOR PLATFORMS TO BE TYPE 1
2. REMOVABLE GUARDRAIL TO BE FABRICATED IN SECTIONS LESS THAN 100 LBS

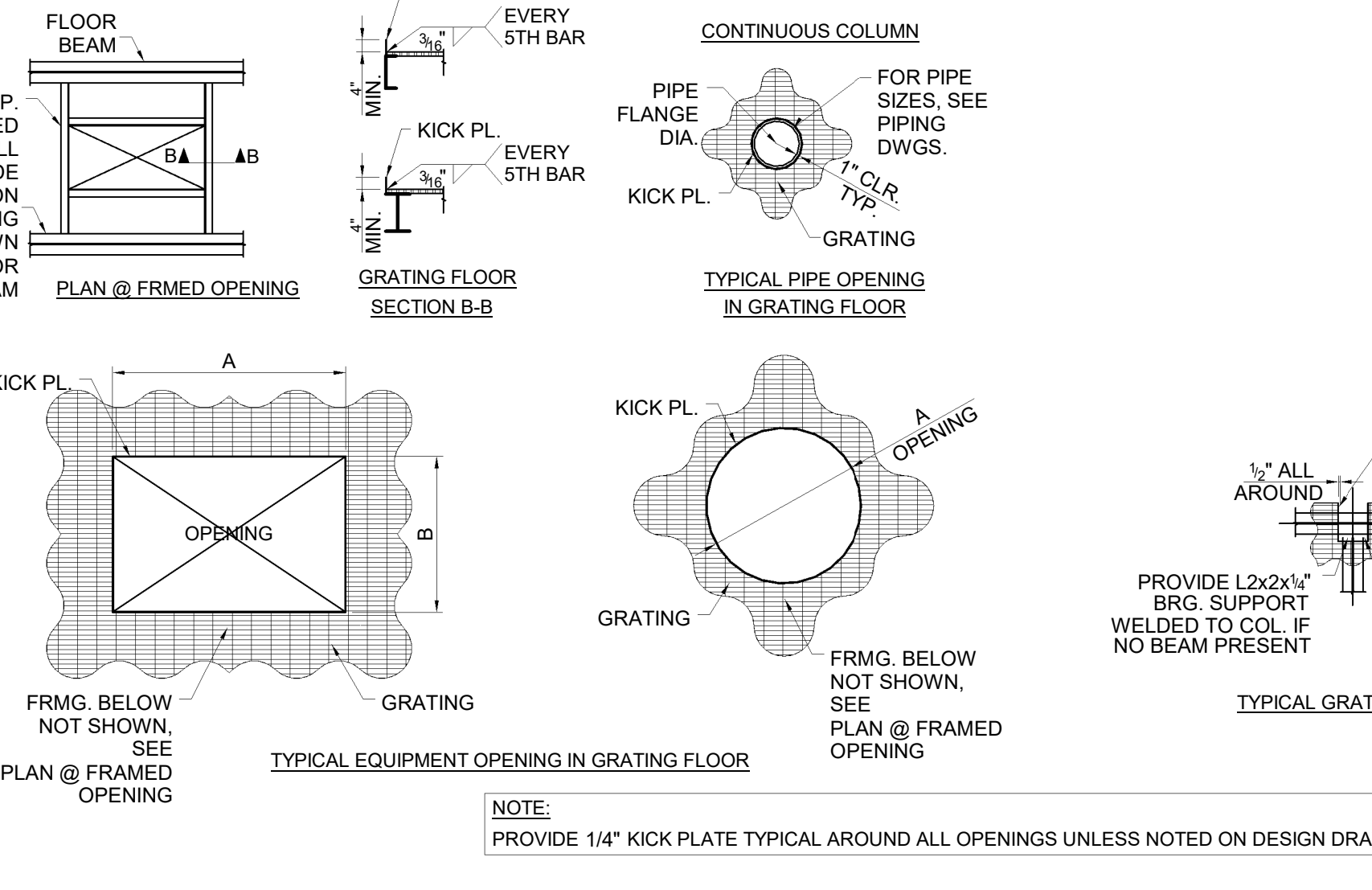


12 LADDER
S1.1 1" = 1'-0"



10 REMOVABLE GUARDRAIL CONNECTION
S1.1 3" = 1'-0"

STEEL GRATING / CHECKERED PLATE FLOORING:
1. MATERIAL SPECIFICATIONS:
GRATING FOR PLATFORMS AND SUMPS
U.N.O = SERRATED CARBON STEEL 1 1/2" x 3 1/2" BEARING BARS @ 1 3/16" O.C. W/ CROSS BARS @ 4" O.C.
STEEL PLATE PLATFORM WALKING SURFACES
U.N.O = CHECKER PLATED ASTM A36 STEEL THICKNESS = AS INDICATED ON DRAWINGS
2. CONNECT GRATING TO SUPPORTS WITH MANUFACTURER'S REMOVABLE "WING-NUT" FASTENERS CONNECTED TO WELDED / THREADED ANCHORS INSTALLED ON TOP OF FRAMING.
3. CONNECT STEEL PLATE TO FRAMING BELOW WITH 1/4" MACHINE SCREWS @ 18" O.C. MAX EA. PL. EDGE. COUNTERSUNK SCREWS INTO PLATE MATERIAL, AND SCREW INTO TAPPED HOLES BELOW.
4. GRATING AND PLATE SHALL BE PROVIDED IN REMOVABLE SECTIONS WEIGHING NOT MORE THAN 100 POUNDS. SPLICES AS REQUIRED OVER SUPPORTING MEMBERS, BRINGING SPLICED EDGES TOGETHER TO CREATE HARKLINE JOINTS.
5. PAINT PER SYSTEM "P1" IN PAINTING SPECIFICATION, COLOR PER OWNER REQUIREMENTS.
6. SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.



11 TYPICAL GRATING DETAIL
S1.1 1/4" = 1'-0"

BID DRAWINGS

STADIUM VIDEO BOARD UPGRADE

MONTANA STATE UNIVERSITY

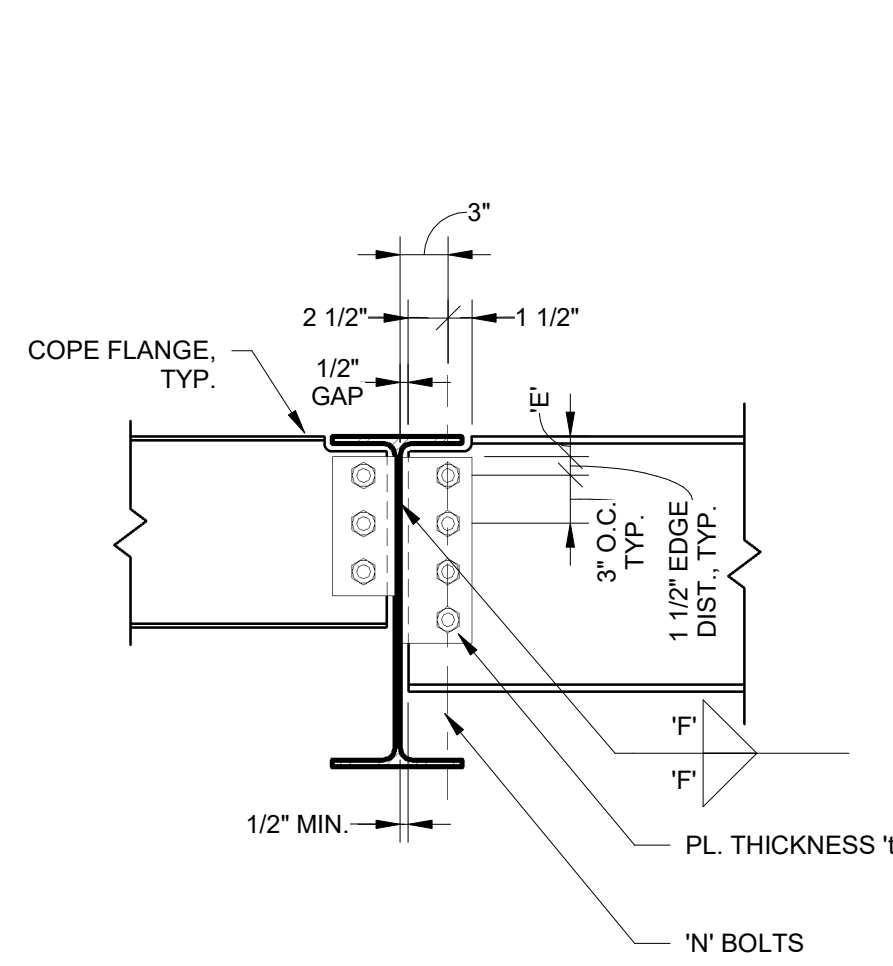
MSU-CAMPUS PLANNING,
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MONTANA STATE UNIVERSITY
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Morrison Maierle
engineers - surveyors - planners - scientists

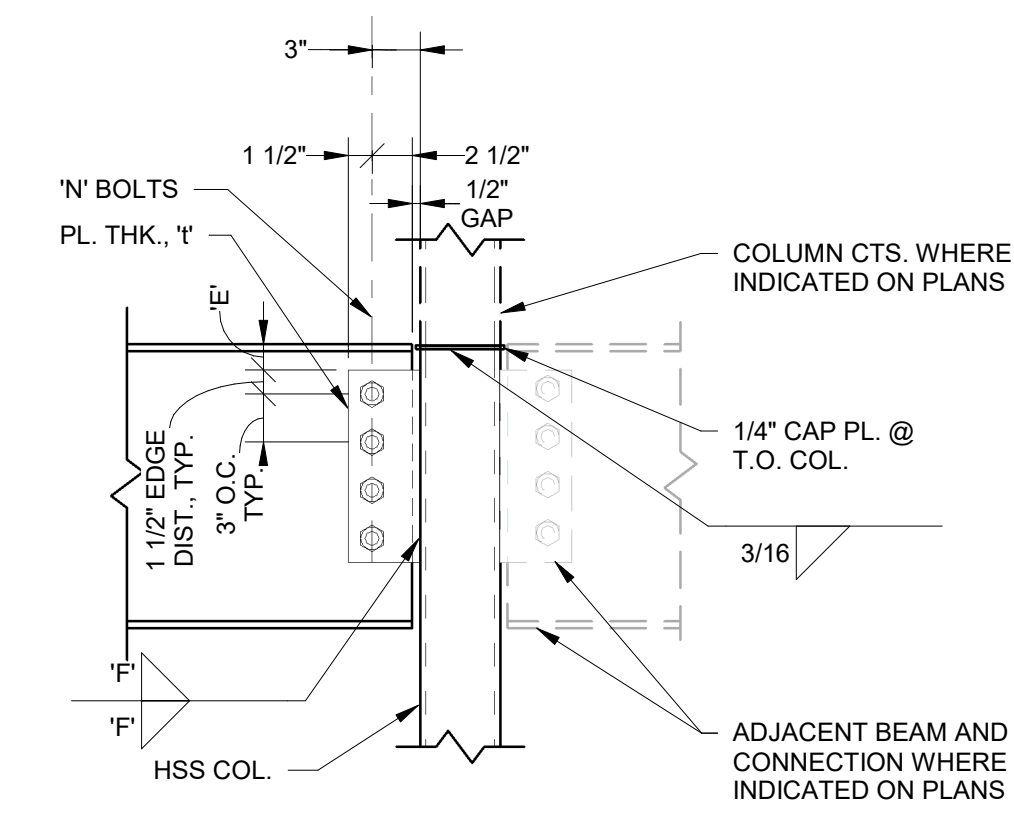
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NOTES:
1. FOR WELD 'F', NUMBER OF BOLTS 'N', VERT. PLATE OFFSET DIMENSION 'E', AND PLATE THICKNESS 'Y', SEE THE TYPICAL SINGLE PLATE CONNECTION SCHEDULE.

1 SCOREBOARD FRMG. DETAIL
S1.1 1" = 1'-0"



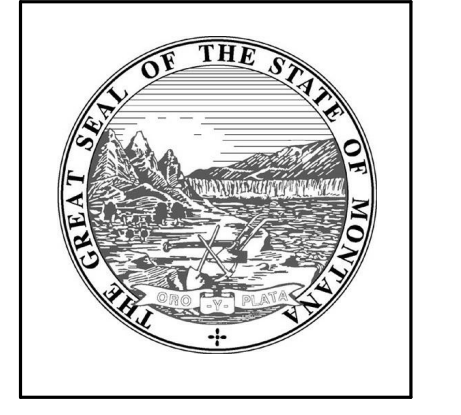
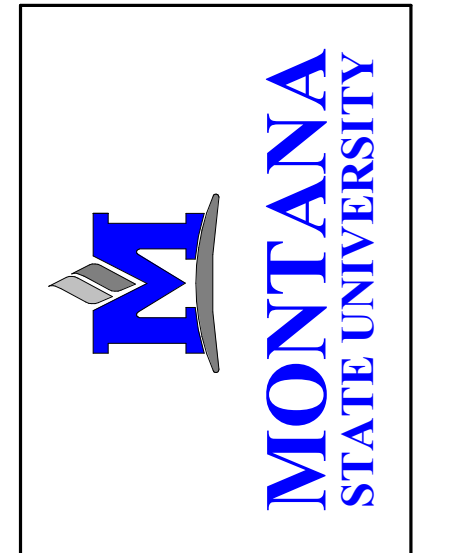
NOTES:
1. SIMILAR CONDITIONS APPLY FOR BMS. ON BOTH SIDES OF COL.
2. FOR WELD SIZE 'F', NUMBER OF BOLTS 'N' & PL. THICKNESS 'Y', SEE THE TYPICAL SINGLE PLATE CONNECTION SCHEDULE.
3. 'X' IS THE FLANGE/WEB FILLET DIMENSION LISTED IN THE AISC MANUAL.

2 SCOREBOARD FRMG. DETAIL
? 1" = 1'-0"

BEAM CONNECTION SCHEDULE				
NOMINAL MEMBER DEPTH	SHEAR PL. THICKNESS (T)	FASTENERS A325 SC U.O.N. (N)	WELD SIZE (F)	VERT. PL. OFFSET (E)
8" THRU 10"	3/8"	(2) 7/8"Ø	1/4"	1 1/4"
12" THRU 14"	3/8"	(3) 7/8"Ø	1/4"	1 1/2"
16" THRU 18"	3/8"	(4) 7/8"Ø	1/4"	1 1/2"
21"	3/8"	(5) 7/8"Ø	1/4"	1 1/2"
24"	3/8"	(6) 7/8"Ø	1/4"	1 1/2"
27"	3/8"	(7) 7/8"Ø	1/4"	1 1/2"
30"	3/8"	(8) 7/8"Ø	1/4"	1 1/2"
33"	3/8"	(9) 7/8"Ø	1/4"	1 1/2"

NOTES:
1. HORIZONTALLY SHORT-SLOTTED HOLES ARE PERMITTED IN THE SHEAR PLATE, AT THE CONTRACTOR'S OPTION, UNLESS OTHERWISE NOTED.
2. BOLTS ARE TO BE INSTALLED PRE-TENSIONED, UNLESS OTHERWISE NOTED.
3. SCHEDULE BASED ON NOMINAL DEPTH OF WIDE FLANGE BEAMS, CHANNELS, HOLLOW STRUCTURAL SECTIONS, & OTHER MISCELLANEOUS SHAPES.

3 SCOREBOARD FRMG. DETAIL
? NO SCALE



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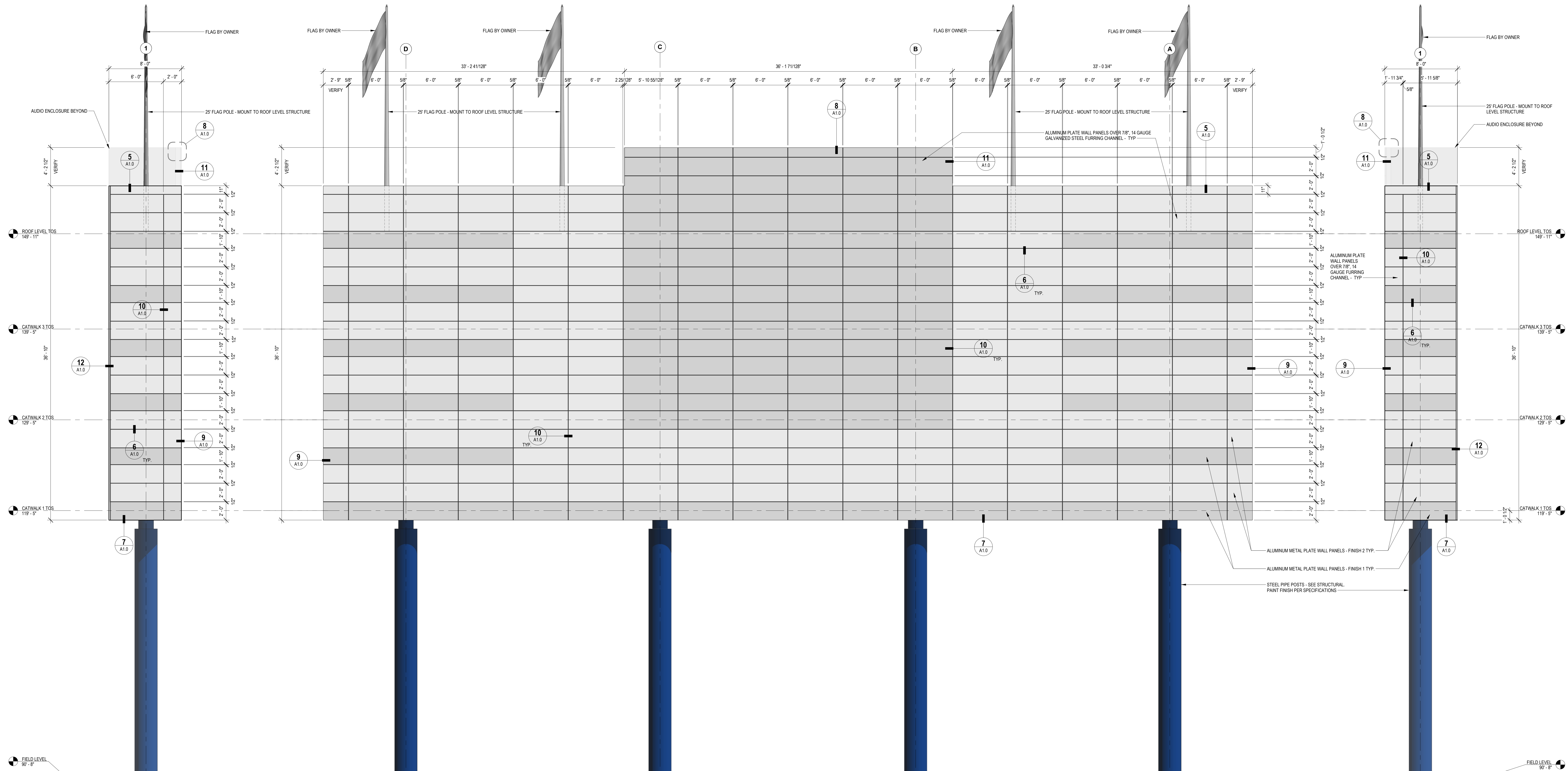
BID DRAWINGS
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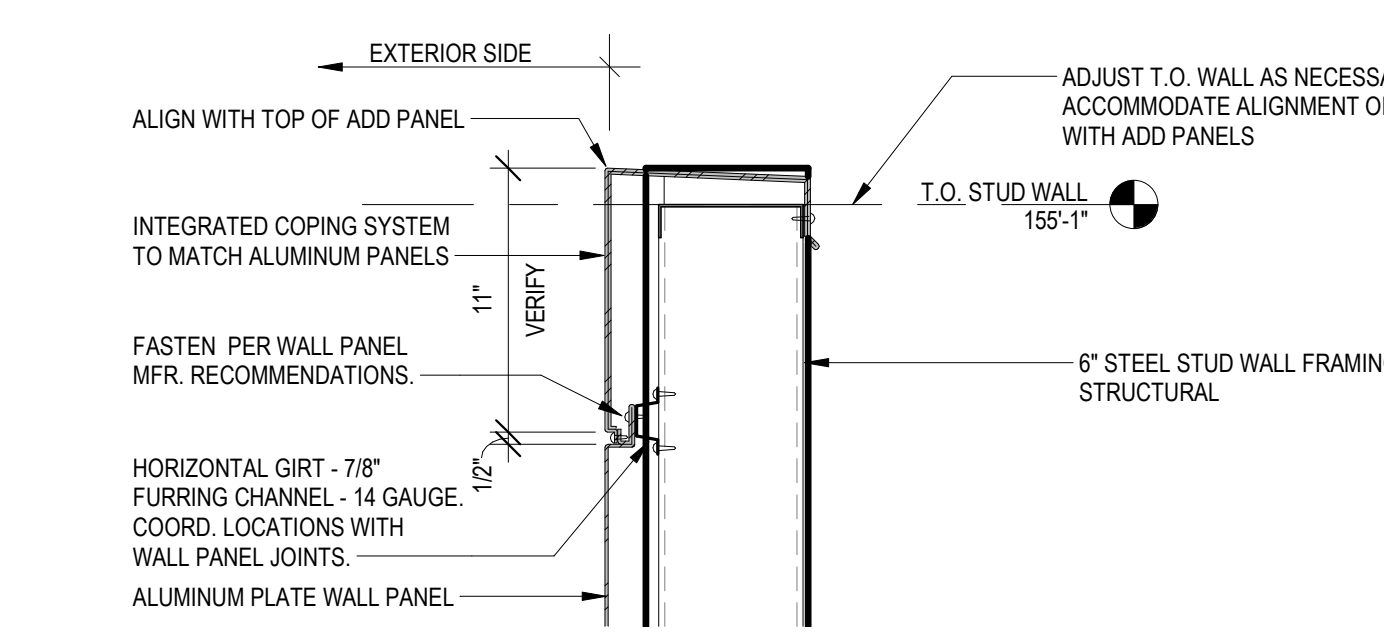
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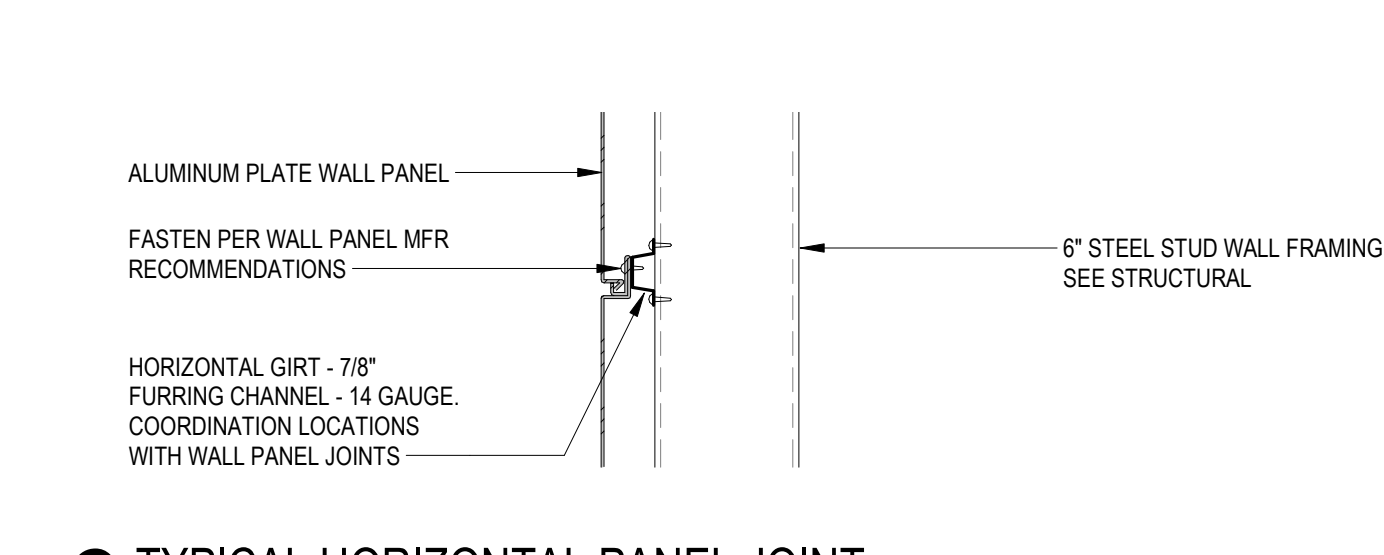
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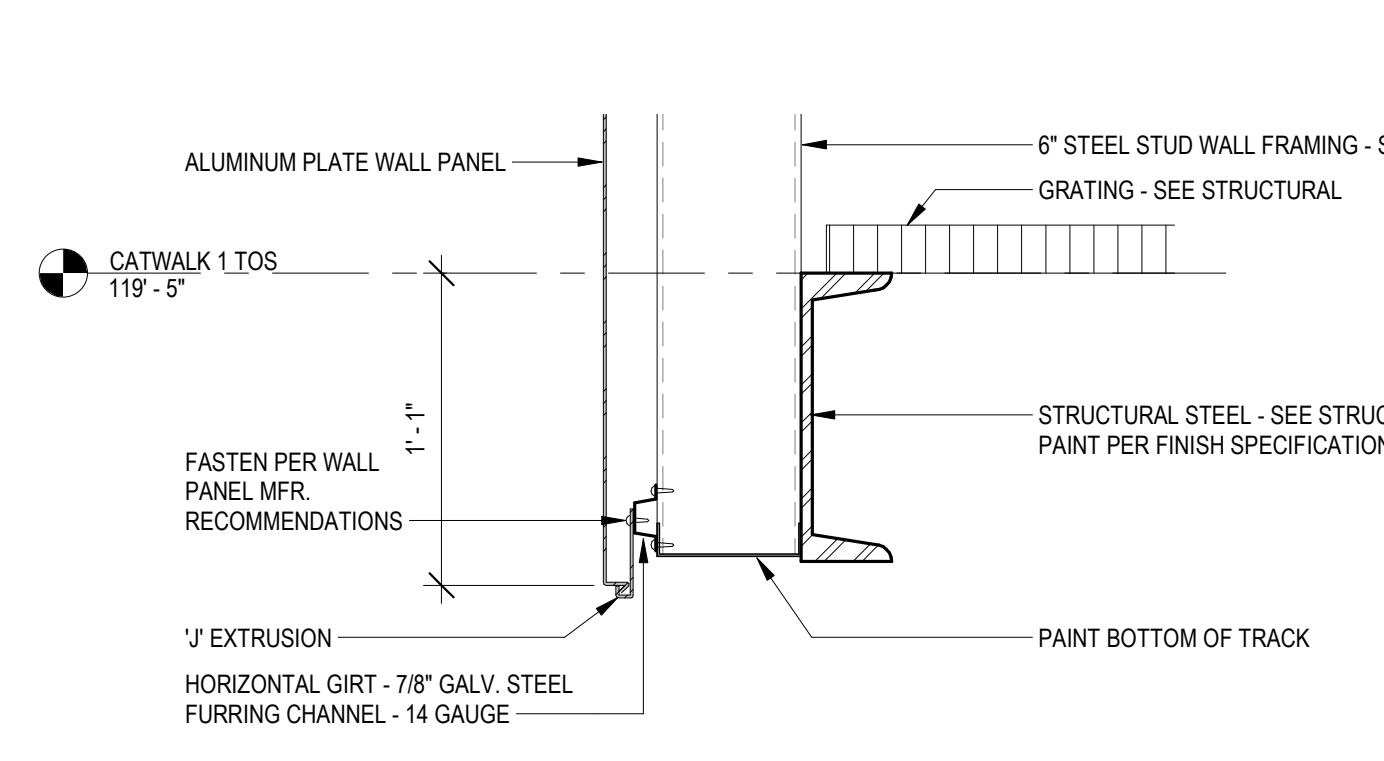
1 EAST ELEVATION
1/4" = 1'-0"



5 TOP OF WALL - TYP.
1 1/2" = 1'-0"

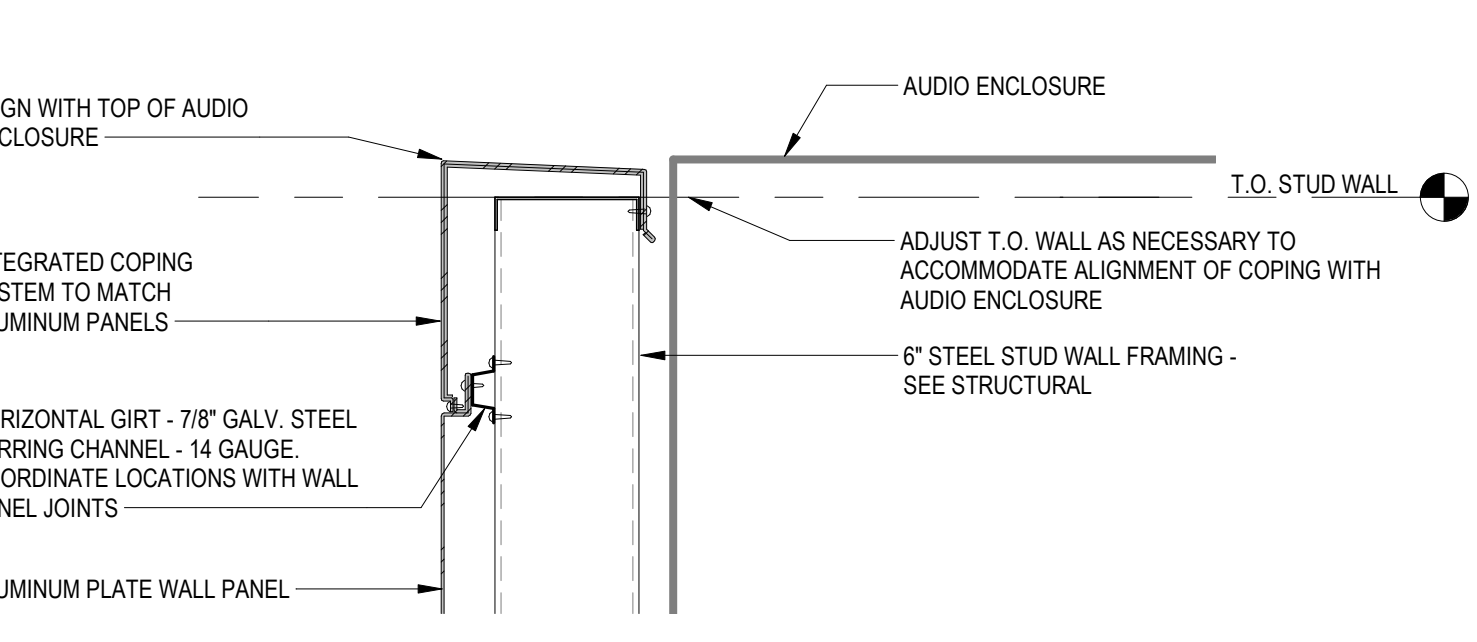


6 TYPICAL HORIZONTAL PANEL JOINT
1 1/2" = 1'-0"

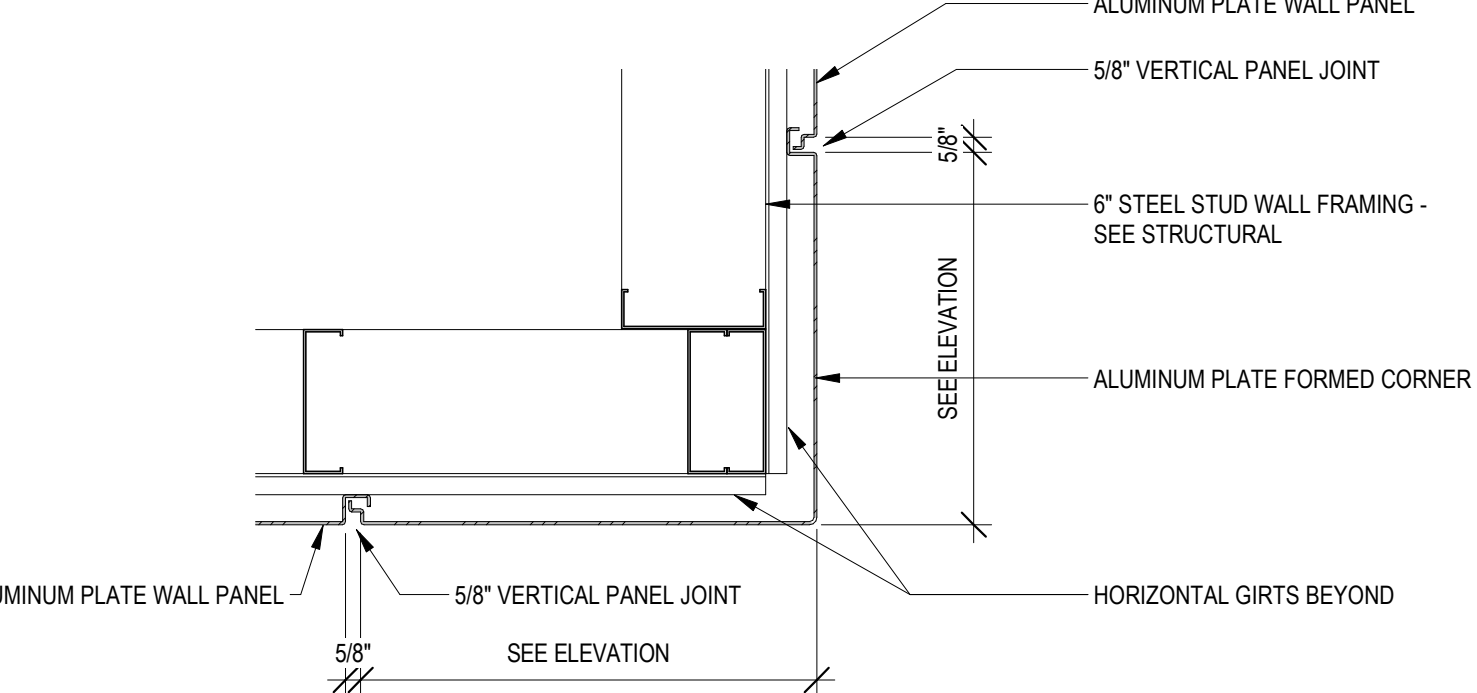


7 BOTTOM OF WALL DETAIL
1 1/2" = 1'-0"

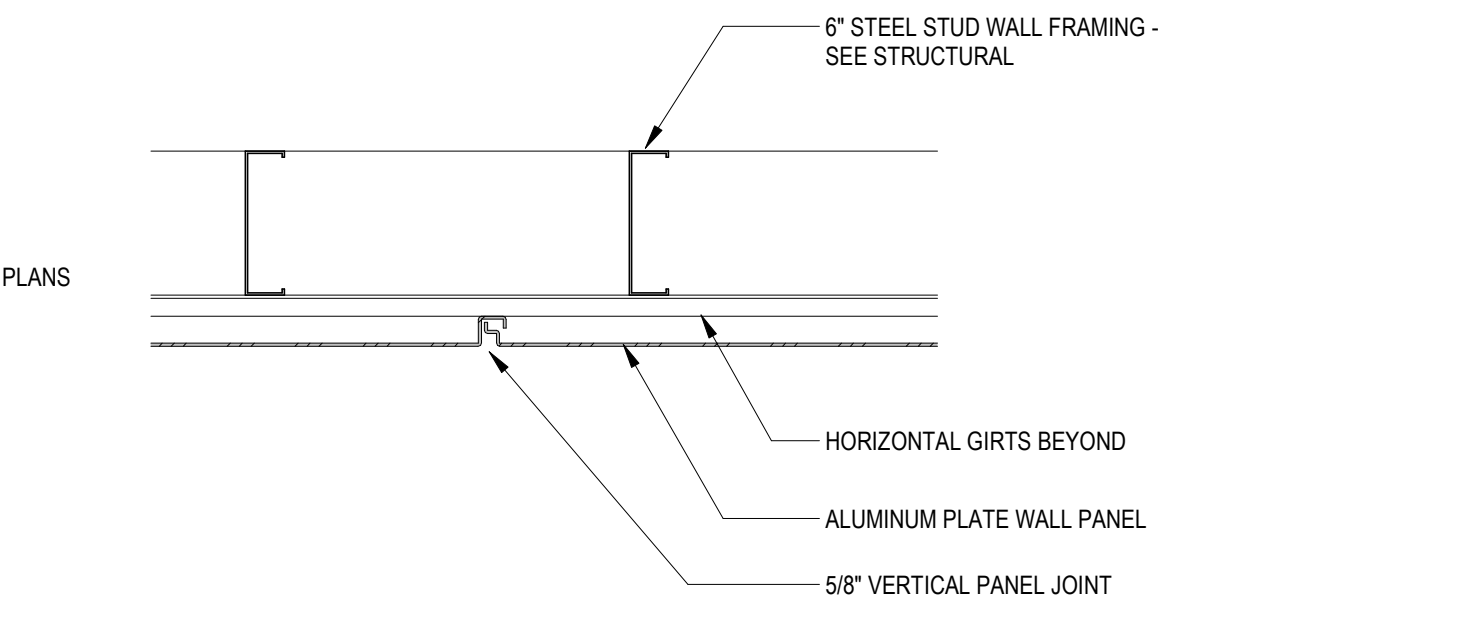
2 NORTH ELEVATION
1/4" = 1'-0"



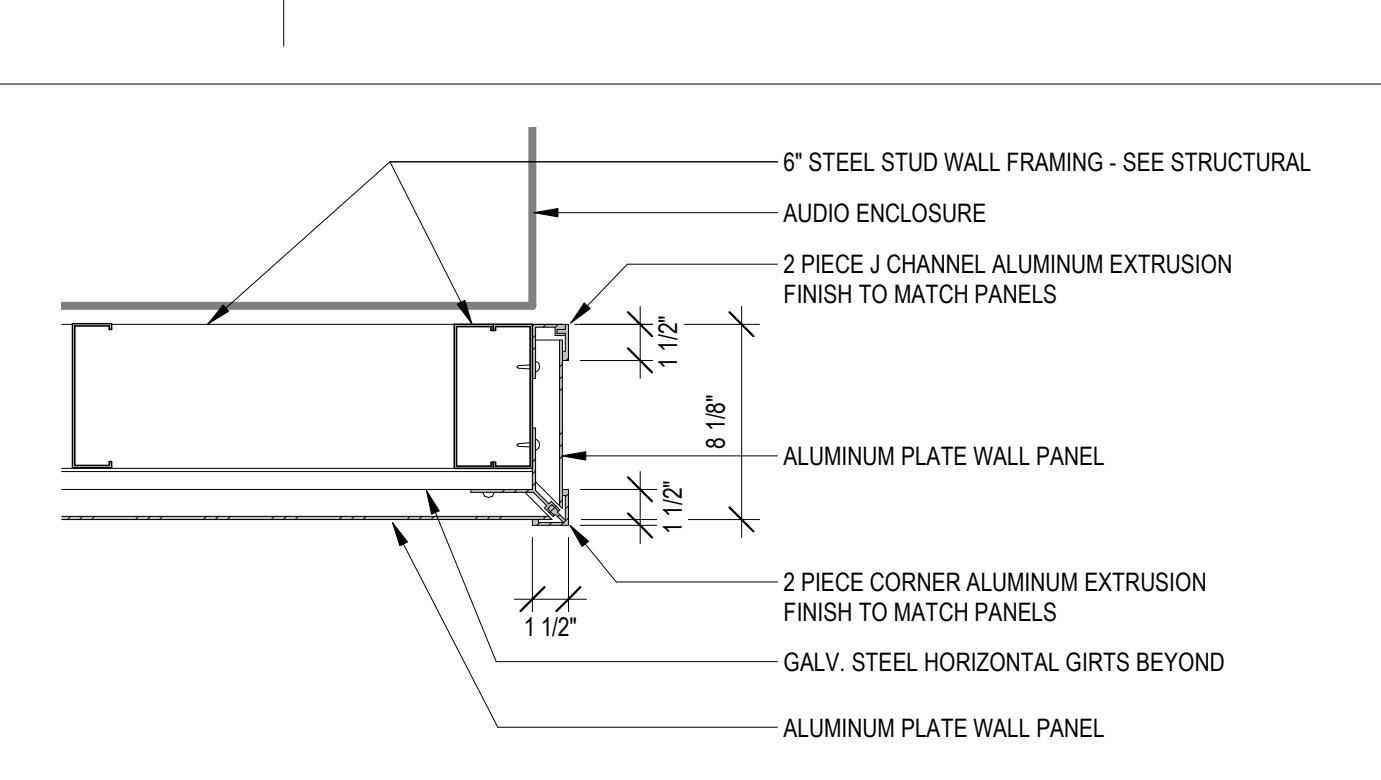
8 TOP OF WALL DETAIL AT AUDIO ENCLOSURE
1 1/2" = 1'-0"



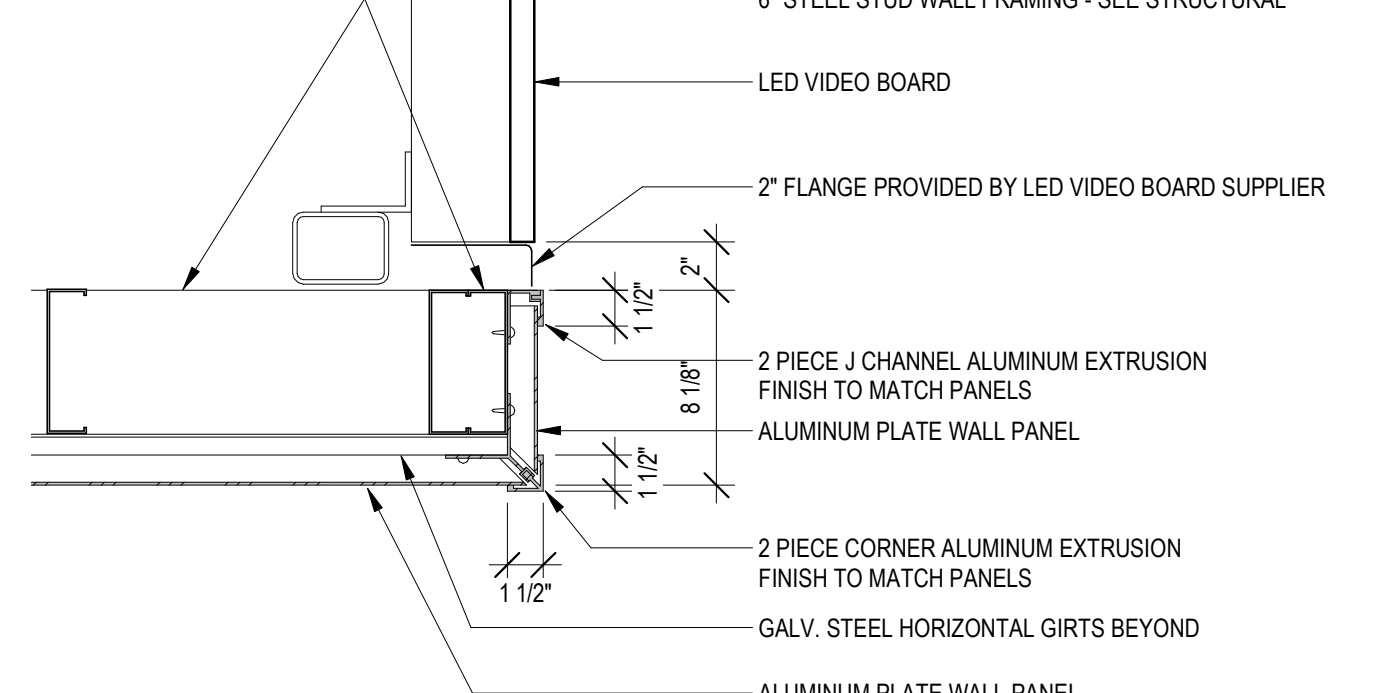
9 FORMED PANEL CORNER DETAIL
1 1/2" = 1'-0"



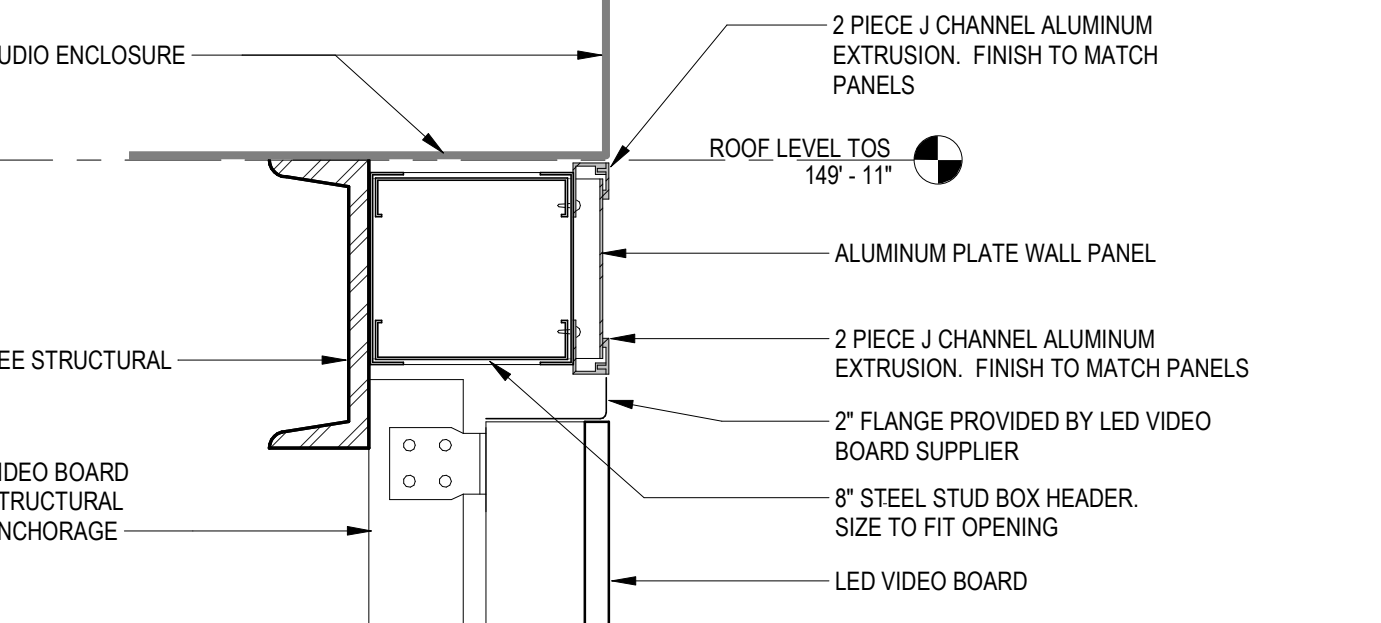
10 TYPICAL VERTICAL PANEL JOINT
1 1/2" = 1'-0"



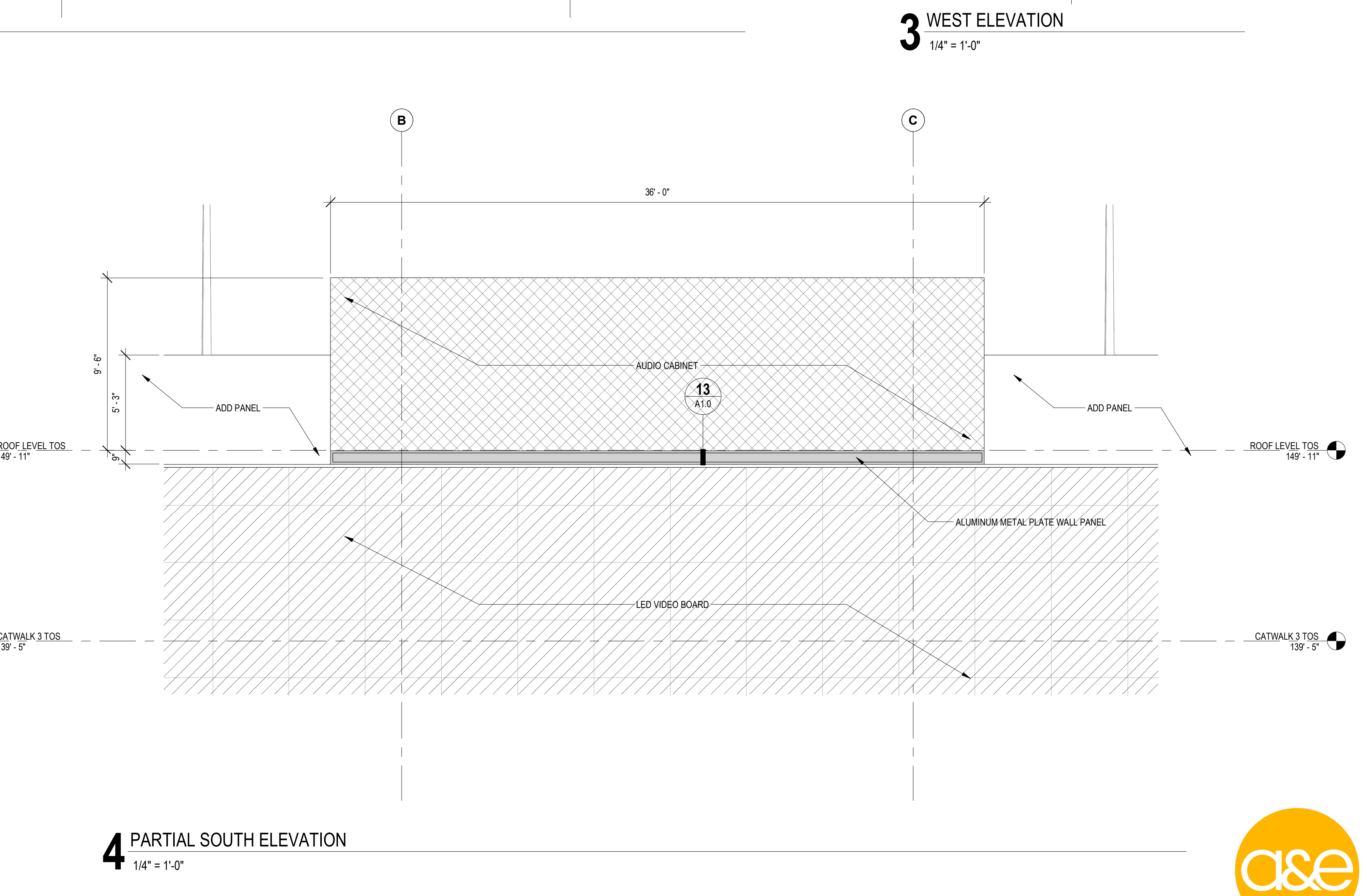
11 CORNER AT AUDIO ENCLOSURE
1 1/2" = 1'-0"



12 VIDEO BOARD CORNER
1 1/2" = 1'-0"



13 VIDEO BOARD/AUDIO ENCLOSURE INFILL
1 1/2" = 1'-0"



4 PARTIAL SOUTH ELEVATION
1/4" = 1'-0"



ELECTRICAL ABBREVIATIONS LEGEND		
A	AMP	AMPERES
AC		ALTERNATING CURRENT
AC		AIR CONDITIONING
AF		AMP FUSE
AF		ABOVE FINISHED FLOOR
AFG		ABOVE FINISHED GRADE
AHU		AIR HANDLING UNIT
AL		ALUMINUM
AS		AMP SWITCH
ATS		AUTOMATIC TRANSFER SWITCH
BAS		BUILDING AUTOMATION SYSTEM
BKR		BREAKER
C		RACEWAY/CONDUIT
CB		CLOSED CIRCUIT TELEVISION
CKT		CIRCUIT
CLS		CEILING
C.O.		RACEWAY/CONDUIT ONLY, WITH PULL STRING
CONTR		CONTROL
CU		COPPER
D		EXISTING TO BE DEMOLISHED
DISC		DISCONNECT
DIST		DISTRIBUTION
DROT		DOUBLE POLE DOUBLE THROW
DWG		DRAWING
EA		EACH
EC		ELECTRICAL CONTRACTOR
EF		EXHAUST FAN
ELEC		ELECTRIC
EMT		ELECTRICAL METALLIC TUBING
EQUIP		EQUIPMENT
EX	EXIST	EXISTING
FA		FIRE ALARM
FAA		FIRE ALARM ANNUNCIATOR
FACP		FIRE ALARM CONTROL PANEL
FD		FUSED DISCONNECT
FLR		FLOOR
FO		FIBER OPTIC
FSD		FIRE SMOKE DAMPER RELAY, CONTROLLED BY ASSOCIATED SMOKE DETECTOR AND CIRCUITED BACK TO FACP
FVNR		FULL VOLTAGE NON-REVERSING
FVR		FULL VOLTAGE REVERSING
GEC		GROUNDING ELECTRODE CONDUCTOR
GFI		GROUND FAULT INTERRUPTER
GFP		GROUND FAULT PROTECTION
GND		GROUND
GRC		GALVANIZED RIGID CONDUIT
HD		HAND DRYER
HP		HORSEPOWER
HPS		HIGH PRESSURE SODIUM
HTR		HEATER
HVAC		HEATING, VENTILATION & AIR CONDITIONING
HC		HERTZ
JBOX		JUNCTION BOX
KVA		KILOVOLT-AMPERES
KW		KILOWATTS
LCP		LIGHTING CONTROL PANEL
LPW		LUMENS PER WATT
LTO		LIGHTING
LV		LOW VOLTAGE
MAG		MAGNETIC STARTER
MAN		MANUAL
MAX		MAXIMUM
MCA		MINIMUM CIRCUIT AMPACITY
MCC		MOTOR CONTROL CENTER
MCP		MAIN DISTRIBUTION PANEL
MCH		MECHANICAL
MH		METAL HALIDE
MINIUM		MINIMUM
MSS		MOTOR STARTER SWITCH WITH THERMAL OVERLOADS
N		NEUTRAL
NC		NORMALLY CLOSED
NEC		NATIONAL ELECTRIC CODE
NEMA		NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFD		NON-FUSED DISCONNECT
NIC		NOT IN CONTRACT
NO		NORMALLY OPEN
#		NUMBER
OAE		OR APPROVED EQUAL
OC		ON CENTER
OCPD		OVERCURRENT PROTECTIVE DEVICE
OH		OVERHEAD
P		POLE
PB		PUSHBUTTON
PH		PHASE
PNL		PANEL
PS		POWER SUPPLY
PVC		POLYVINYL CHLORIDE CONDUIT
PWR		POWER
R		EXISTING TO REMAIN
RCPT		RECEPTACLE
RCS		RIGID GALVANIZED STEEL
RM		ROOM
RVR		REDUCED VOLTAGE NON-REVERSING
RVR		REDUCED VOLTAGE REVERSING
SP		SINGLE POLE TOGGLE SWITCH
SPD		SURGE PROTECTIVE DEVICE (TVSS)
SPEC		SPECIFICATION
SSBT		SINGLE POLE SINGLE THROW START-STOP PUSHBUTTON
SSPB		START-STOP PUSHBUTTON
SW		SWITCH
SWBD		SWITCHBOARD
SWGR		SWITCHGEAR
TB		TELEPHONE BOARD
TC		TIME CLOCK
TD		TIME DELAY
TEL		TELEPHONE
TSP		TWISTED SHIELDED PAIR
TTP		TYPICAL
UG		UNDERGROUND
UH		UNIT HEATER
UNO		UNLESS NOTED OTHERWISE
V		VOLT
VA		VOLT-AMPERES
VFD		VARIABLE FREQUENCY DRIVE
W		WATTS
WP		WEATHERPROOF
W/O		WITHOUT
WTR		TRANSFORMER
Y		WYE-CONNECTED
Δ		DELTA-CONNECTED
ø		PHASE

ELECTRICAL PLAN LEGEND	
	CT AND CUSTOMER POWER METER
	MOTOR
	UTILITY ELECTRIC METER AND BASE (BASE BY CUSTOMER)
	SURGE PROTECTION DEVICE
	LIGHTNING ARRESTER, TYPE 1 SPD, MOUNTED ON EXTERIOR OF MAIN SWITCHGEAR (SQUARE D NO. SDBA3650, OAE)
	EQUIPMENT TOGGLE DISCONNECT SWITCH *X INDICATES TYPE: F - FUSIBLE M - MOTOR STARTER SWITCH W/ THERMAL OVERLOADS
	CONTACTOR NORMALLY OPEN, NORMALLY CLOSED
	TRANSFORMER, 3-PH, 3-WIRE DELTA CONNECTION
	TRANSFORMER, 3-PH, 4-WIRE GROUNDED WYE CONNECTION
	PANEL AND CIRCUIT DESIGNATION ARE SHOWN NEXT TO EACH DEVICE (PANEL NAME - CIRCUIT NUMBER). BRANCH CIRCUIT WIRE SIZE IS #12, UNO, A SINGLE INSULATED GREEN GROUND CONDUCTOR SHALL BE PROVIDED WITH EACH HOME RUN. PROVIDE A SEPARATE NEUTRAL FOR EACH CIRCUIT. HOME RUNS SHALL HAVE NO MORE THAN THREE CIRCUITS. LINE VOLTAGE AND LOW VOLTAGE WIRING IS NOT SHOWN ON PLANS. FOR EQUIPMENT CIRCUITING, SEE MEP COORDINATION SCHEDULE. *X INDICATES TYPE: GFI - GROUND FAULT INTERRUPTER WP - WEATHERPROOF WHILE-IN-USE COVER U - PROVIDE WITH (2) USB PORTS
	SIMPLEX RECEPTACLE - CEILING MOUNT, WALL MOUNT (+18" UNO)
	DUPLEX RECEPTACLE - CEILING MOUNT, WALL MOUNT (+18" UNO)
	QUADRUPLEX RECEPTACLE - CEILING MOUNT, WALL MOUNT (+18" UNO)
	ABOVE COUNTER RECEPTACLE - MOUNT AT +4" ABOVE BACKSPLASH
	FLOOR BOX WITH QUADRUPLEX RECEPTACLE - WITH TELEDATA PORTS, WITHOUT TELEDATA
	AUTOMATIC TRANSFER SWITCH
	VARIABLE FREQUENCY DRIVE
	FIXED MOUNT LV BREAKER
	FUSED SWITCH (XXXX/XXXXF) - SW AND FUSE AMP RATING(S)
	GENERATOR
	WALL MOUNTED BREAKER
	THERMAL OVERLOAD ELEMENT
	DISCONNECT SWITCH (XXXX/XXXXF) - SW AND FUSE AMP RATING(S)
	FUSED DISCONNECT SWITCH (XXXX/XXXXF) - SW AND FUSE AMP RATING(S)
	COMBINATION MOTOR STARTER (STR SIZE, TYP, AS, AF, SEE MEP COORDINATION SCHEDULE)
	SWITCHBOARD OR PANELBOARD, NAME, VOLTAGE, PHASE, NUMBER OF WIRES WHEN INDICATED
	PANELBOARD
	SPECIAL PURPOSE RECEPTACLE (MOUNT AT +18" UNO) *X INDICATES TYPE: A - NEMA 5-20R, #12 CU; B - NEMA 5-30R, #10 CU; C - NEMA 5-50R, #8 CU; D - NEMA 6-20R, #12 CU; E - NEMA 6-30R, #10 CU; F - NEMA 6-50R, #8 CU; G - NEMA 14-30R, #12 CU; H - NEMA 14-30R, #10 CU; I - NEMA 14-50R, #8 CU
	PUSHBUTTON (MOUNT AT +46" UNO) *X INDICATES TYPE: EPO - EMERGENCY POWER OFF ADA - HANDICAPPED ACCESSIBLE DOOR (DEVICE BY OTHERS) ODO - OVERHEAD DOOR OPERATOR (DEVICE BY OTHERS)
	FLATSREEN TV BOX, 2-GANG, FLUSH IN WALL, HUBBELL NS402M, WITH NS402V COVER, 120V DUPLEX RECEPTACLE & RG-6 DATA PORT, MOUNT AT +12" UNO.
	JUNCTION BOX
	DROP-DOWN RECEPTACLE
	SURFACE MOUNTED RACEWAY
	RACEWAY CONCEALED IN WALL, FLOOR, OR CEILING IN FINISHED SPACES, EXPOSED IN UNFINISHED SPACES
	RACEWAY BELOW FLOOR OR BELOW GRADE
	RACEWAY STUB-OUT WITH CAPPED END
	RACEWAY STUB-OUT WITH BRUSHED END
	GROUNDING BUS

ELECTRICAL PROJECT GENERAL NOTES	
A.	PRIOR TO BID CONTRACTOR SHALL VISIT THE SITE. NOT ALL WORK REQUIRED TO COMPLETE THE PROJECT IS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH ALL THE WORK REQUIRED TO COMPLETE THE PROJECT IN ADDITION TO THE LOCAL CONDITIONS AND INCLUDE S&D WORK IN THE BID.
B.	GENERAL WORK PRACTICES FOR ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NECA 1, "STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING." THIS PUBLICATION IS AVAILABLE FROM NECA BY TELEPHONE AT 301-657-3110 OR ON-LINE AT WWW.NECANET.ORG.
C.	FIRE-RESISTANCE: PROVIDE A MINIMUM HORIZONTAL DISTANCE OF 24" BETWEEN OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE-RESISTANCE RATED WALLS. WHERE THIS IS NOT POSSIBLE, INSTALL UL LISTED PUTTY PADS ON ALL OUTLET BOXES NOT MEETING THE 24" SEPARATION. PROVIDE A UL LISTED THROUGH-PENETRATION FIRESTOP FOR PENETRATIONS OF FIRE-RESISTANCE RATED ASSEMBLIES. CONDUCTORS ARE SIZED PER THE 75 DEGREE C RATING COLUMN OF NEC TABLE 310.16. IF THE TERMINAL USED FOR A TERMINATION OF A PARTICULAR CONDUCTOR IS NOT MARKED, OR THE TERMINAL IS MARKED FOR 60 DEGREE C CONDUCTORS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EITHER ADJUST THE AMPACITY OF THE CONDUCTOR TO MATCH THE 60 DEGREE COLUMN OF TABLE 310.16, OR REPLACE THE TERMINAL WITH ONE RATED FOR AT LEAST 75 DEGREES C.
D.	BASED ON ACTUAL HOMERUN LENGTHS REQUIRED IN THE FIELD, THE CONTRACTOR SHALL CALCULATE AND INCREASE THE WIRE SIZES AS REQUIRED TO LIMIT BRANCH CIRCUIT VOLTAGE DROP TO 3%. FOR 20A BRANCH CIRCUITS THE MINIMUM CONDUCTOR SIZES SHALL BE AS FOLLOWS: #10 AWG CU FOR RUNS BETWEEN 100 AND 200 LINEAR FEET, #8 AWG CU FOR RUNS BETWEEN 200 AND 325 LINEAR FEET, AND AS CALCULATED BY THE CONTRACTOR FOR CIRCUITS EXTENDING BEYOND 325 LINEAR FEET. IN ALL CASES WHERE WIRE SIZES INCREASE, THE CONTRACTOR SHALL PROVIDE LARGER CONDUITS AS REQUIRED.
F.	PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH 120V BRANCH CIRCUIT.

ELECTRICAL PROJECT DEMO NOTES	
A.	DURING DEMOLITION, THE CONTRACTOR SHALL NOTE ALL EXISTING RACEWAY (BOTH SURFACE AND CONCEALED) TO THE EXTENT POSSIBLE. THESE RACEWAYS SHALL BE REUSED TO THE GREATEST EXTENT POSSIBLE TO INSURE A CLEAN FINISHED PRODUCT. WHERE PRACTICAL, AND ALLOWED PER CODE, FISHING THROUGH WALLS WITH MC CABLE IS PREFERRED TO SURFACE MOUNTED CONDUIT.
B.	CONTRACTOR SHALL REMOVE, TRANSPORT AND LEGALLY DISPOSE OF LAMPS AND BALLASTS OFF-SITE. IT IS ASSUMED THAT THE BALLASTS DO NOT CONTAIN PCBs. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY IF IT IS SUSPECTED THAT BALLASTS CONTAIN PCBs.
C.	ALL POWER INTERRUPTIONS SHALL BE COORDINATED WITH OWNER. ANY DISRUPTION OF WORKERS IN THE SPACE SHALL BE KEPT TO A MINIMUM AND BE COORDINATED WITH THE OWNER PRIOR TO WORK COMMENCING IN THAT SPACE.
D.	ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY EXISTING CONDUIT OR FEEDER CIRCUITS THAT ARE INTENDED TO REMAIN THAT ARE SAW-CUT, OR OTHERWISE DAMAGED, AS PART OF THE DEMOLITION PROCESS. PROVISION FOR THIS WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL NECESSARY CONDUIT AND CONDUCTORS, MOUNTING ACCESSORIES AND LABOR, TO RESTORE THE SYSTEM TO ITS INTENDED FUNCTION.
E.	ELECTRICAL DRAWINGS SHOWING EXISTING BUILDING CONDITIONS, SUCH AS DEMOLITION DRAWINGS, EXISTING PANEL SCHEDULES, ETC ARE BASED ON RECORD DRAWINGS AND SITE VISITS. IF ACTUAL EXISTING CONDITIONS DIFFER FROM THOSE SHOWN ON DRAWINGS, PLEASE NOTIFY ENGINEER.
F.	OWNER SHALL HAVE FIRST RIGHTS AT ANY DEMOLISHED ITEMS THEY CHOOSE TO RETAIN FOR THEIR USE OR SPARE STOCK. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL REMAINING DEMO ITEMS NOT DESIRED BY OWNER.

ABBREVIATIONS AND SYMBOLS GENERAL NOTES	
A.	THE ABBREVIATIONS ON THIS SHEET COMPRISE A STANDARD LIST. NOT ALL ABBREVIATIONS APPEAR ON THIS PROJECT.
B.	THE SYMBOLS ON THIS SHEET COMPRISE A STANDARD LIST. NOT ALL SYMBOLS APPEAR ON THIS PROJECT.
C.	ALL MOUNTING HEIGHTS ARE TO CENTER OF DEVICE ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE. MOUNTING HEIGHTS INDICATED ON ARCHITECTURAL WALL ELEVATIONS OR AS NOTED SPECIFICALLY ON THE DRAWINGS OR IN THE SPECIFICATIONS SHALL TAKE PRECEDENCE OVER MOUNTING HEIGHTS LISTED.



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BID DOCUMENTS

STADIUM VIDEOBOARD UPGRADE

MONTANA STATE UNIVERSITY



engineers • surveyors • planners • scientists

DRAWN BY: MB
REVIEWED BY: RM
REV. DESCRIPTION DATE



PPA#22-0611

MMI#0747.080

SHEET TITLE
ELECTRICAL NOTES
AND LEGENDS

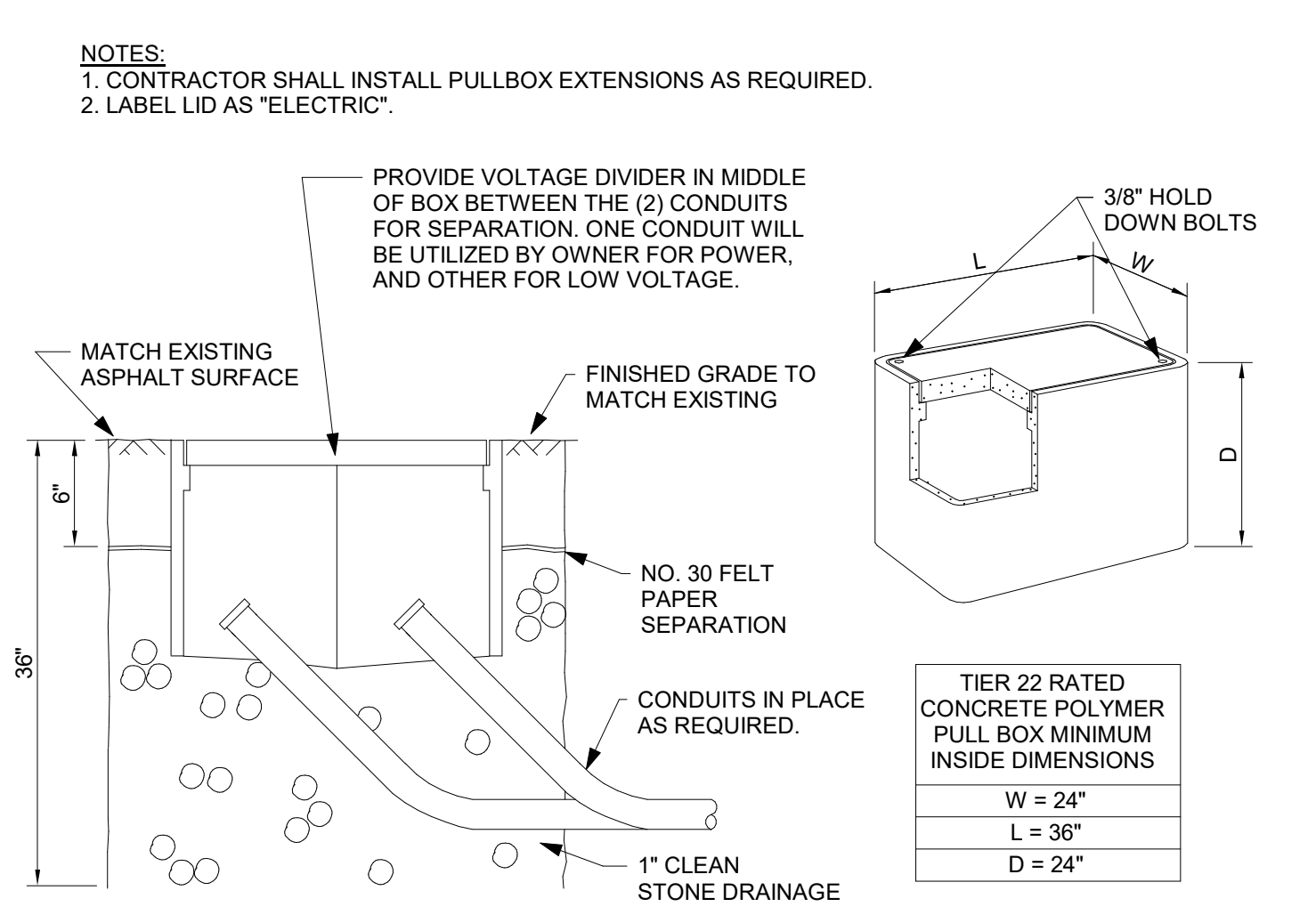
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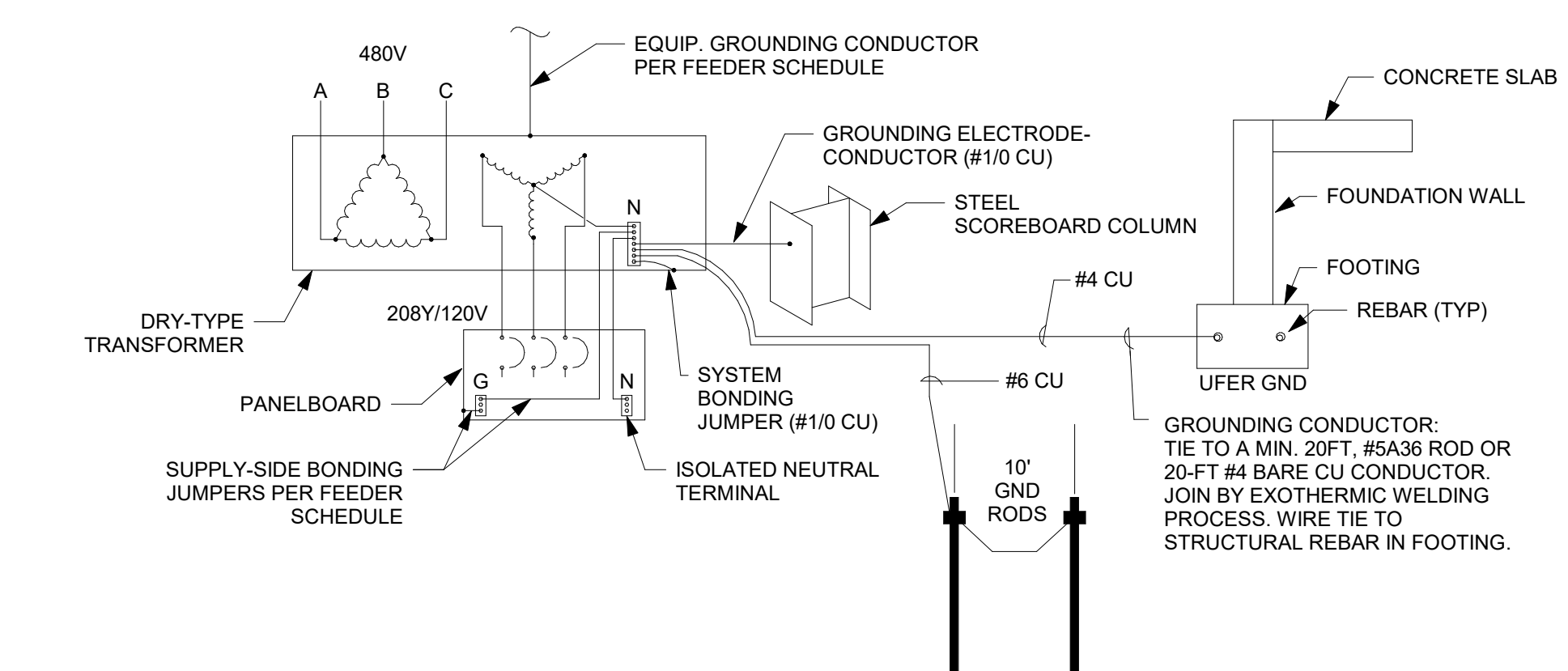
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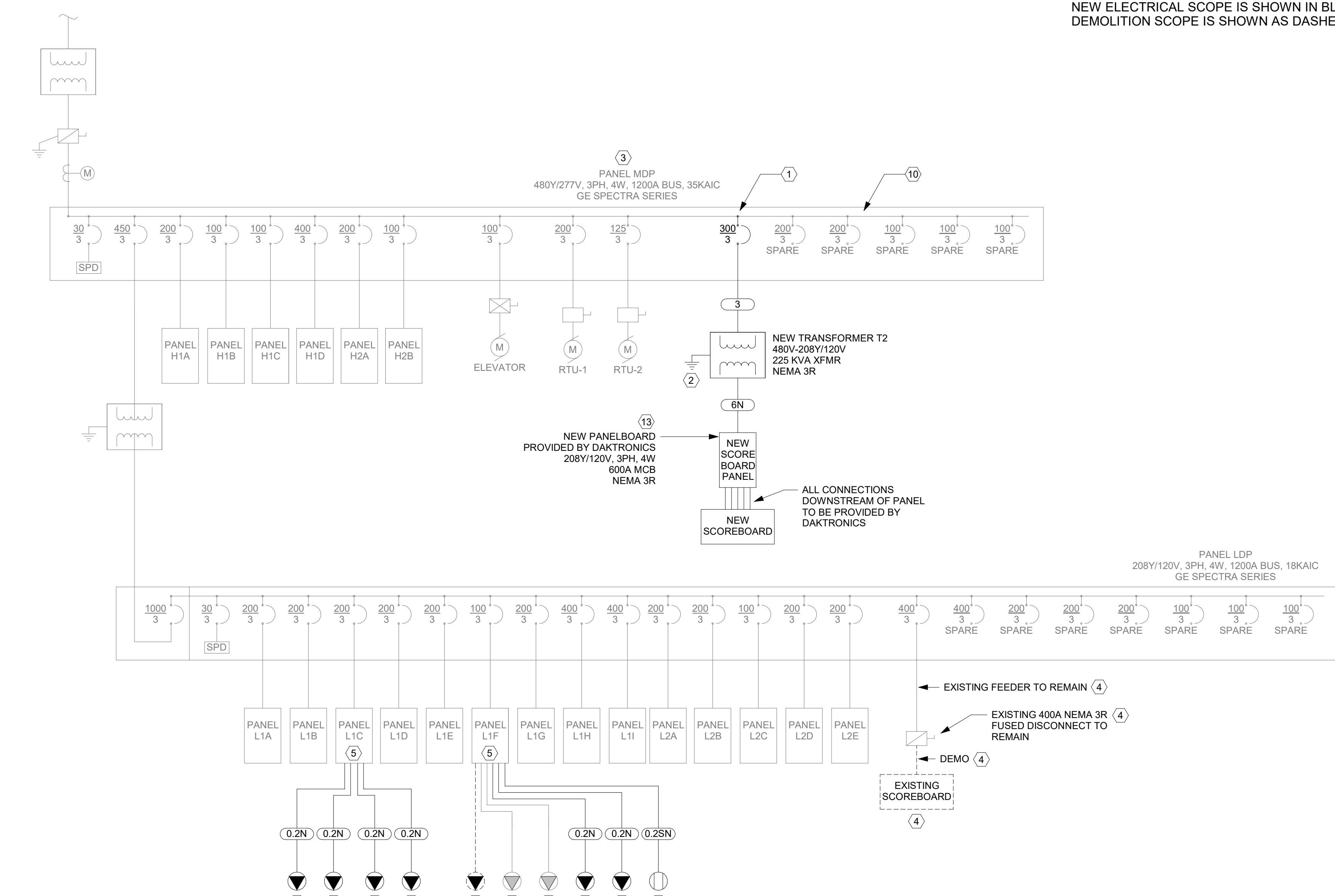
- KEY NOTES: 1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL MDP FOR NEW SCOREBOARD FEEDER...



3 ELECTRICAL HANDHOLE DETAIL N.T.S.



2 TRANSFORMER GROUNDING RISER DIAGRAM N.T.S.



1 PARTIAL ELECTRICAL ONE LINE DIAGRAM N.T.S.

COPPER FEEDER SCHEDULE table with columns: FEEDER NUMBER, AMP'S, WIRE QTY PER CONDUIT, SETS IN PARALLEL, CONDUIT, PHASE QTY AND AVG, NEUTRAL AVG, GROUND AVG

Branch Panel: L1C load schedule table with columns: CKT, Circuit Description, Load Classification, Trip, Poles, VA, Amps

Legend and Panel Totals table for Branch Panel: L1C

Branch Panel: L1F load schedule table with columns: CKT, Circuit Description, Load Classification, Trip, Poles, VA, Amps

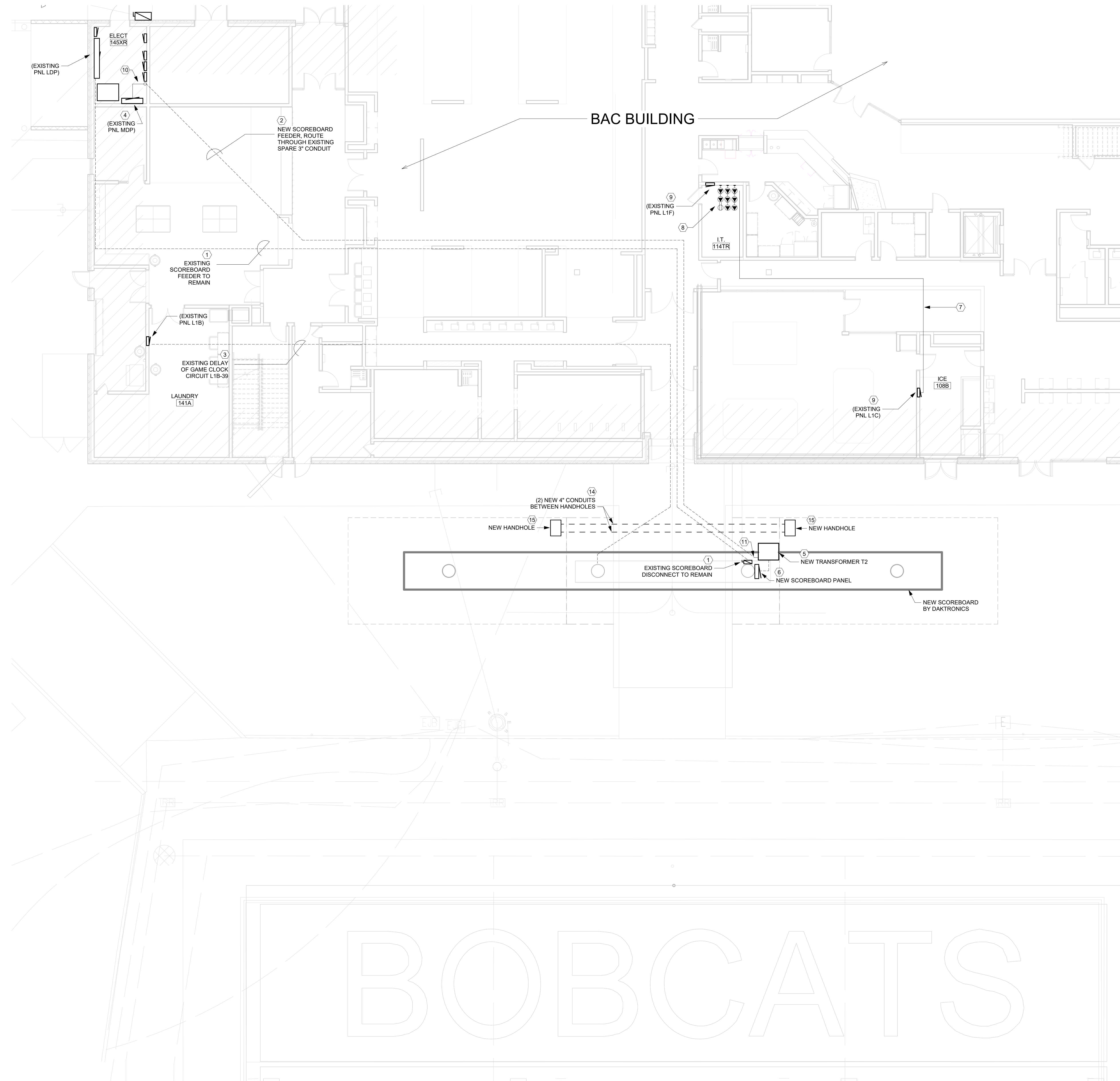
Legend and Panel Totals table for Branch Panel: L1F

GENERAL ELECTRICAL NOTES

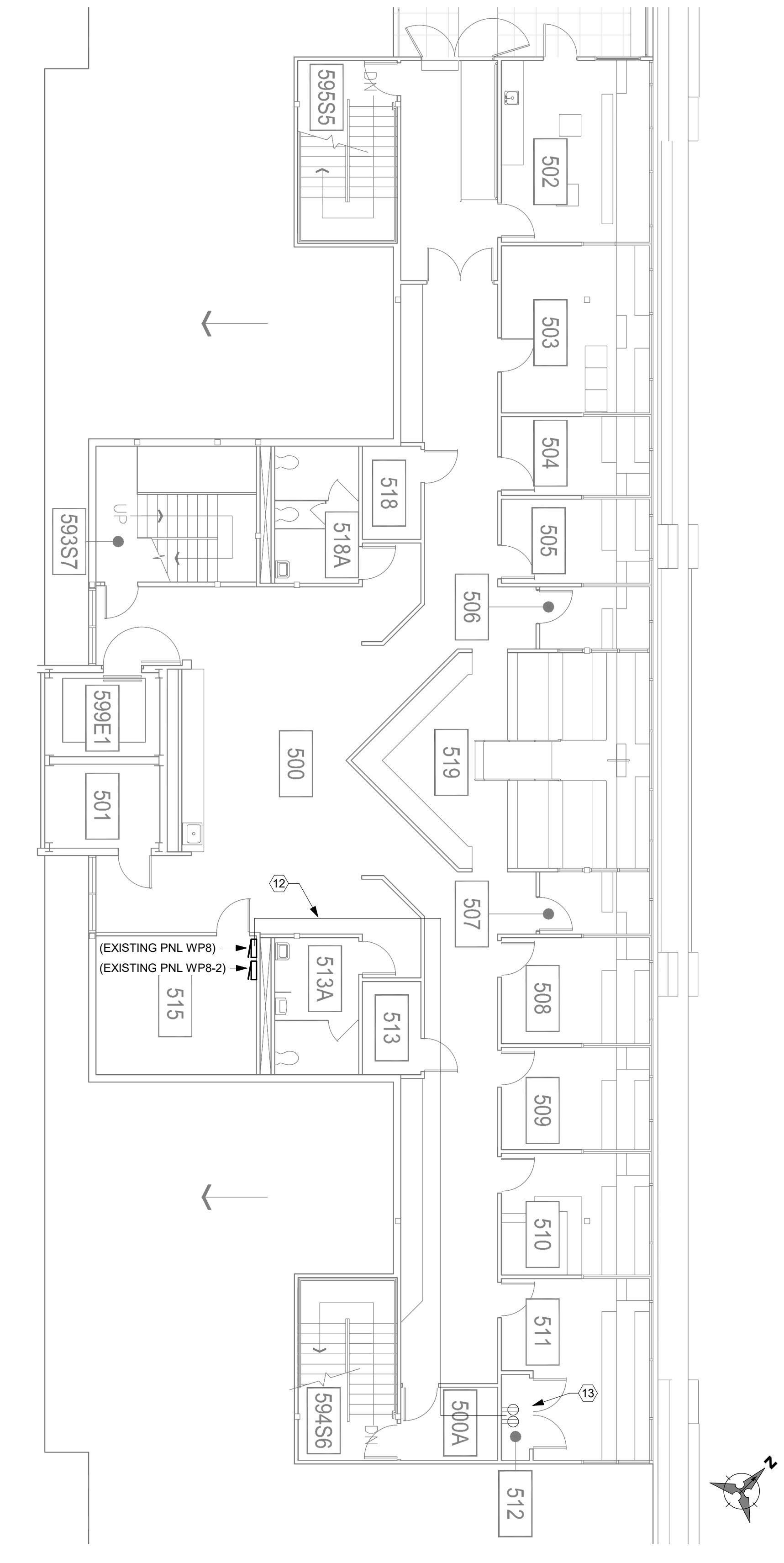
- A. IT IS ABSOLUTELY NECESSARY FOR ALL TRADES INVOLVED TO COORDINATE WITH EACH OTHER AND VERIFY THAT THERE ARE NO CONFLICTS IN LOCATION OF CONDUITS, BOXES, STRUCTURE, AND OTHER ITEMS THROUGHOUT THIS PROJECT BEFORE FINAL PLACEMENT OF MATERIALS.
- B. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING OF FLOORS, WALLS, CEILINGS, ROOFS, ASPHALT, AND CONCRETE TO PERFORM THE REQUIRED WORK DEPICTED IN THESE DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL PATCHING/REPAIR TO THE SATISFACTION OF THE OWNER/ENGINEER AND PROJECT MANAGER. PATCH/REPAIR ALL CUTS AS REQUIRED IN ORDER TO RETURN ANY AFFECTED SURFACES TO MATCH THEIR ORIGINAL STATE.
- C. COORDINATE ALL EQUIPMENT, DEVICE, AND CONDUIT LOCATIONS WITH OWNER AND DAKTRONICS PRIOR TO ROUGH-IN.

KEY NOTES:

- 1. EXISTING SCOREBOARD TO BE DEMOLISHED BY DAKTRONICS. ELECTRICAL CONTRACTOR SHALL DEMOLISH EXISTING POWER CONNECTION BETWEEN SCOREBOARD AND ASSOCIATED DISCONNECT MOUNTED ON BASE COLUMN. EXISTING FUSED DISCONNECT SWITCH SHALL REMAIN IN PLACE, INCLUDING FEEDER BACK TO PANEL LDP. PROTECT DISCONNECT AND FEEDER THROUGHOUT PROJECT. OWNER TO UTILIZE THIS EXISTING DISCONNECT AND FEEDER FOR SPECIAL EVENT POWER.
- 2. THERE ARE (2) EXISTING SPARE 3" CONDUITS BETWEEN MAIN ELECTRICAL ROOM AND SCOREBOARD. UTILIZE ONE SPARE FOR NEW FEEDER TO NEW SCOREBOARD. SEE ONE-LINE FOR NEW FEEDER REQUIREMENTS.
- 3. EXISTING DELAY OF GAME CLOCK 120V CIRCUIT: (2) #10 CU, #10 CU GND IN 1" CONDUIT. DISCONNECT FROM EXISTING SCOREBOARD AND RECONNECT TO NEW SCOREBOARD AS REQUIRED.
- 4. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL MDP FOR NEW SCOREBOARD FEEDER. SEE ONE-LINE FOR DETAILS.
- 5. PROVIDE NEW DRY-TYPE TRANSFORMER. SEE ONE-LINE FOR DETAILS. PAD MOUNT NEXT TO SCOREBOARD COLUMN AS SHOWN. PROVIDE 4" RAISED CONCRETE HOUSEKEEPING PAD FOR EQUIPMENT. COORDINATE FINAL PAD DIMENSIONS WITH TRANSFORMER SHOP DRAWING SUBMITTAL.
- 6. PROVIDE FEEDER TO NEW SCOREBOARD PANELBOARD AS SHOWN. PANELBOARD FURNISHED AND INSTALLED BY DAKTRONICS. COORDINATE EXACT LOCATION WITH DAKTRONICS PRIOR TO ROUGH-IN.
- 7. ROUTE NEW CIRCUITS FROM PANEL L1C TO AUDIO RACK ABOVE CEILING WITHIN EXISTING ACCESSIBLE CEILING SPACE ALONG PATH SHOWN. SEE ONE-LINE FOR DETAILS.
- 8. NEW AUDIO RACK TO REPLACE EXISTING AUDIO RACK IN ROOM 114TR. MOUNT NEW RECEPTACLES ON NORTH WALL OF ROOM 114TR TO SERVE NEW AUDIO RACK. COORDINATE INSTALLATION WITH DAKTRONICS AND OWNER. SEE ONE-LINE FOR DETAILS.
- 9. SEE ONE-LINE AND PANEL SCHEDULES FOR REQUIRED SCOPE OF WORK.
- 10. EXISTING SPARE 3" CONDUITS STUB UP HERE ALONG EAST WALL OF MAIN ELECTRICAL ROOM. EXTEND (1) 3" CONDUIT TO PANEL MDP WITHIN MAIN ELECTRICAL ROOM AS REQUIRED TO COMPLETE PATHWAY FOR NEW FEEDER. PROVIDE PULL BOX, GUTTER, OR LB AS REQUIRED TO FACILITATE WIRE PULL.
- 11. EXISTING SPARE 3" CONDUITS STUB UP ALONG EXISTING EAST LEG OF OLD SCOREBOARD. INTERCEPT UNDERGROUND AND EXTEND (1) 3" CONDUIT TO NEW TRANSFORMER T2 AS REQUIRED TO COMPLETE PATHWAY FOR NEW FEEDER.
- 12. ROUTE NEW CIRCUITS FROM PANEL WPS TO SCOREBOARD CONTROL RACK ABOVE EXISTING CEILING WITHIN CEILING SPACE ALONG PATH SHOWN. UTILIZE EXISTING EMT CONDUIT PATHWAY RUNNING ABOVE CEILING SPACE IF POSSIBLE TO RUN NEW CIRCUITS. SEE ONE-LINE FOR DETAILS.
- 13. NEW SCOREBOARD CONTROL RACK TO REPLACE EXISTING RACK IN ROOM 511 CLOSET. MOUNT NEW RECEPTACLES ON WEST WALL OF ROOM 512 TO SERVE NEW RACK. COORDINATE INSTALLATION WITH DAKTRONICS AND OWNER. SEE ONE-LINE FOR DETAILS.
- 14. PROVIDE (2) NEW 4" EMPTY CONDUITS UNDERGROUND AS SHOWN. TERMINATE CONDUITS AT HANDHOLE ON BOTH SIDES OF CONCRETE WALKWAY AS SHOWN. BORE UNDERNEATH EXISTING CONCRETE WALKWAY AS REQUIRED TO INSTALL CONDUITS WITHOUT CUTTING EXISTING CONCRETE. TAKING CARE TO NOT DAMAGE OTHER EXISTING BURIED CONDUITS/UTILITIES. THESE NEW EMPTY CONDUITS WILL BE USED BY OWNER AS PATHWAY FOR CABLE AND HANDHOLES TO AVOID RUNNING CABLES ON SURFACE ACROSS CONCRETE WALKWAY.
- 15. SEE HANDLE DETAIL ON SHEET E002. HANDLE TO BE LOCATED WITHIN NEW ASPHALT SURFACE. SEE STRUCTURAL DRAWINGS FOR ASPHALT DEMO EXTENTS.



1 ELECTRICAL PLAN - NORTH SCOREBOARD
1/8" = 1'-0"



2 ELECTRICAL PLAN - WEST STADIUM LEVEL 5
1/8" = 1'-0"

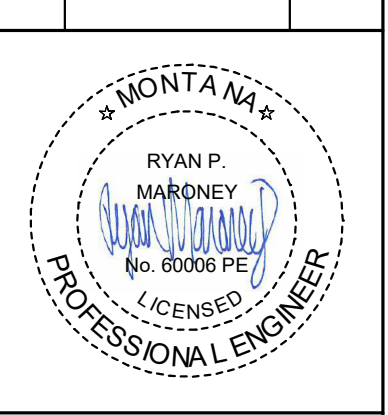


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SHEET TITLE
ELECTRICAL PLAN

SHEET
E100

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