

# MSU PARKING GARAGE SAFETY UPGRADES PHASE 01 - ADDENDUM 01 REVIEW SET

516 W GRANT  
BOZEMAN, MT, 59717

ISSUE DATE: 10/09/2026

A&E PROJECT NUMBER: 26082



## KEY PLAN

This space reserved for  
Montana State University use  
(cover page only).



MONTANA  
STATE UNIVERSITY



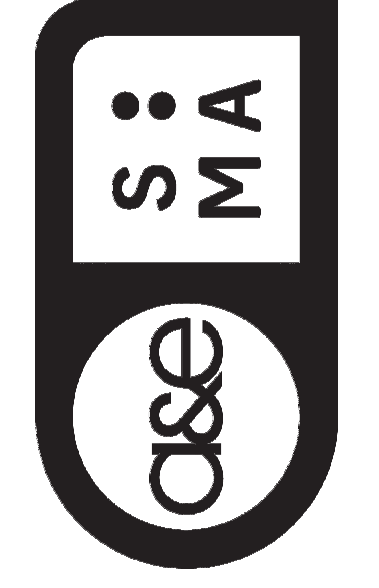
SEAL OF THE STATE OF MONTANA

MSU-CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION

MONTANA STATE UNIVERSITY  
1000 W. GATEWAY AVENUE  
BOZEMAN, MT 59717-3100  
PHONE: 406/994-5411  
FAX: 406/994-5405

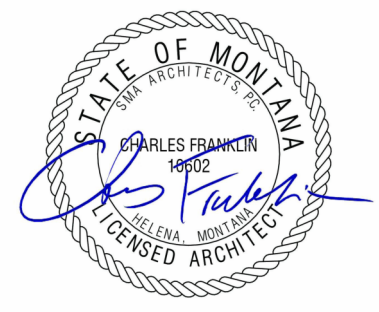
100% CONSTRUCTION DOCUMENTS

**MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01  
- ADDENDUM 01 REVIEW SET**



ase  
s:ma

|              |             |      |
|--------------|-------------|------|
| DRAWN BY:    | EK          |      |
| REVIEWED BY: | JS          |      |
| REV.         | DESCRIPTION | DATE |
|              |             |      |
|              |             |      |



DAVID J. TAYLOR  
REGISTERED PROFESSIONAL ENGINEER  
MONTANA  
NO. 10000

PPA#26-1462  
A/E#26082  
Consultant #:  
COVER SHEET

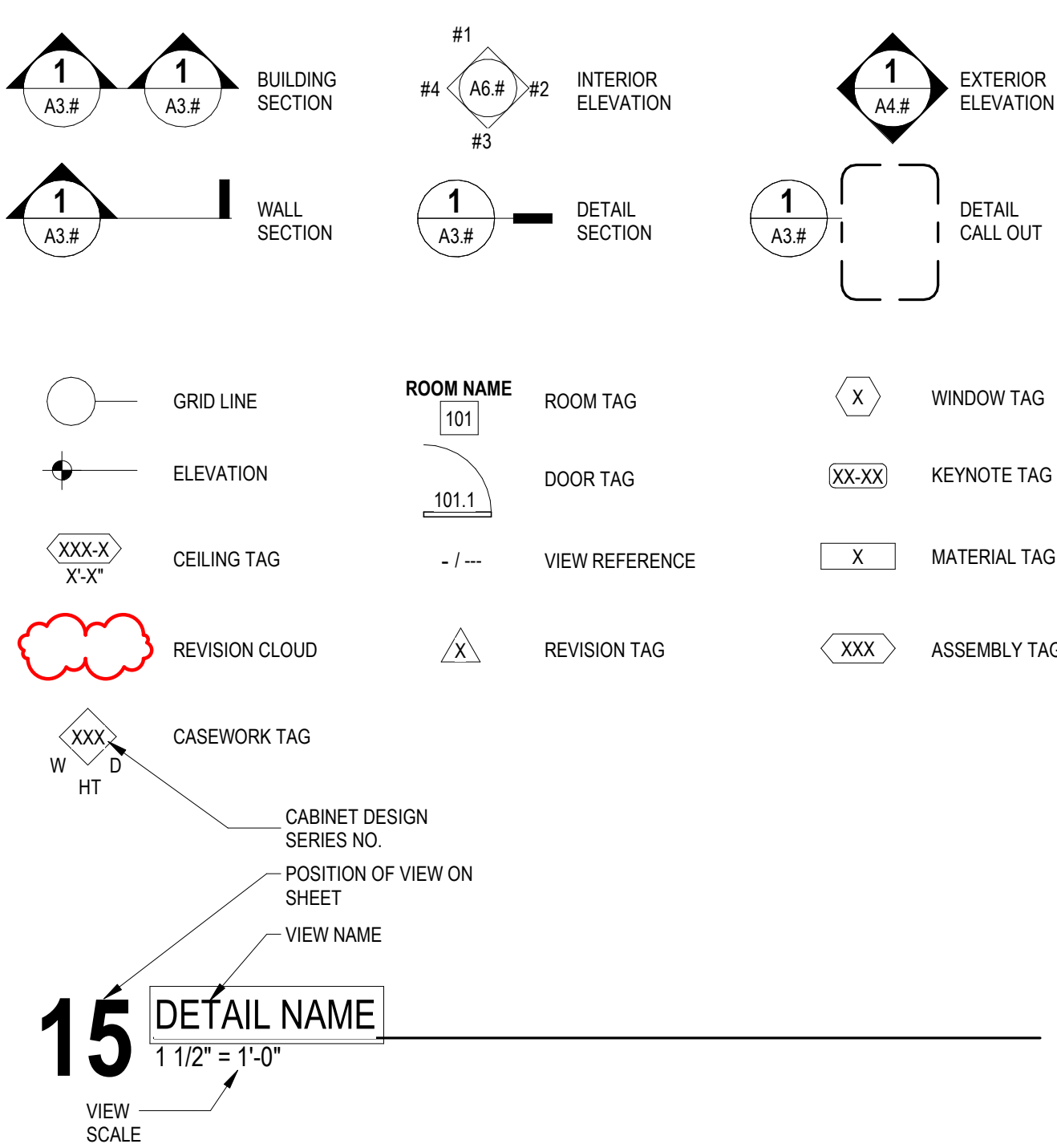
SHEET  
G0.0

DATE  
10/09/2026

ARCHITECTURAL ABBREVIATIONS

|         |                           |       |                                        |        |                               |
|---------|---------------------------|-------|----------------------------------------|--------|-------------------------------|
| AB      | ANCHOR BOLT               | GA    | GAUGE                                  | R      | RADIUS                        |
| ABV     | ABOVE                     | GAUV  | GALVANIZED                             | RA     | RETURN AIR                    |
| AC      | AIR CONDITIONING          | GB    | GYPSUM BOARD                           | RB     | RUBBER BASE                   |
| ACT     | ACoustical CEILING TILE   | GC    | GENERAL CONTRACTOR                     | RD     | ROOF DRAIN                    |
| ADOL    | ADDITIONAL                | GL    | GLASS GLAZING                          | RECY   | RECYCLED                      |
| ADJ     | ADJUSTABLE                | GWB   | GYPSUM WALL BOARD                      | REF    | REFERENCE                     |
| AF      | ABOVE FINISH FLOOR        | GYP   | GYPSUM                                 | REFRIG | REFRIGERATOR OR REFRIGERATION |
| ALT     | ALTERNATE                 | HC    | HANDCAP                                | REINF  | REINFORCEMENT                 |
| ALUM    | ALUMINUM                  | HDR   | HEADER                                 | REDD   | REQUIRED                      |
| ARCH    | ARCHITECTURAL             | HDW   | HARDWARE                               | ROW    | ROUGH OPENING                 |
| AWN     | AWNING                    | HM    | HOLLOW METAL                           | RO     | RIGHT OF WAY                  |
| B       | BOTTOM OF                 | HORIZ | HORIZONTAL                             | ROW    | RIGHT OF WAY                  |
| BD      | BOARD                     | HR    | HOURS                                  |        |                               |
| BLDG    | BUILDING                  | HT    | HEIGHT                                 |        |                               |
| BLKG    | BLOCKING                  | HTD   | HEATED                                 |        |                               |
| BM      | BEAM OR BENCHMARK         | HVAC  | HEATING/VENTILATION & AIR CONDITIONING |        |                               |
| BRG     | BEARING                   | ID    | INSIDE DIAMETER                        |        |                               |
| BTWN    | BETWEEN                   | INFO  | INFORMATION                            |        |                               |
| BUR     | BUILT-UP ROOF             | INSUL | INSULATE / INSULATED / INSULATION      |        |                               |
| CAB     | CABINET                   | INT   | INTERIOR                               |        |                               |
| CJ      | CONTROL JOINT             | INVT  | INVERT                                 |        |                               |
| CL      | CENTERLINE                | JBOX  | JUNCTION BOX                           |        |                               |
| CLG     | CEILING                   | JT    | JOINT                                  |        |                               |
| CMU     | CONCRETE MASONRY UNIT     | JBOX  | JUNCTION BOX                           |        |                               |
| COL     | COLUMN                    | KIT   | KITCHEN                                |        |                               |
| CMC     | CONCRETE                  | L     | LONG / LENGTH                          |        |                               |
| CONT    | CONTINUOUS                | LAM   | LAMINATE(D)                            |        |                               |
| CONST   | CONSTRUCTION              | LAV   | LAVATORY                               |        |                               |
| CG      | CORNER GUARD              | LF    | LINEAR FEET                            |        |                               |
| CPT     | CARPET                    | LT    | LIGHT                                  |        |                               |
| CSMT    | CASHEMENT                 | MAS   | MASONRY                                |        |                               |
| CT      | CERAMIC TILE              | MATL  | MATERIAL                               |        |                               |
| D       | DEEP                      | MAX   | MAXIMUM                                |        |                               |
| DF      | DRINKING FOUNTAIN         | MECH  | MECHANICAL                             |        |                               |
| DH      | DOUBLE HUNG               | MEZZ  | MEZZANINE                              |        |                               |
| DIMS(S) | DIMENSIONS                | MFR   | MANUFACTURER                           |        |                               |
| DISP    | DISPENSER                 | MIN   | MINIMUM                                |        |                               |
| DN      | DOWN                      | MISC  | MISCELLANEOUS                          |        |                               |
| DR      | DOOR                      | MO    | MASONRY OPENING                        |        |                               |
| DS      | DOWNSPOUT                 | MTL   | METAL                                  |        |                               |
| DTL     | DETAIL                    | N     | NORTH                                  |        |                               |
| DWG     | DRAWING                   | NIC   | NOT IN CONTRACT                        |        |                               |
| E       | EAST                      | NOM   | NOMINAL                                |        |                               |
| EA      | EACH                      | NTS   | NOT TO SCALE                           |        |                               |
| EJ      | EXISTING COLUMN           | OC    | ON CENTER                              |        |                               |
| EJ      | EXPANSION JOINT           | OD    | OUTSIDE DIAMETER OR OVERFLOW           |        |                               |
| ELEC    | ELECTRICAL                | OPNG  | OPENING                                |        |                               |
| EL      | ELEVATION                 | OPP   | OPPOSITE                               |        |                               |
| ELEV    | ELEVATOR                  | OSB   | ORIENTED STRAND BOARD                  |        |                               |
| EQ      | EQUAL                     | OVHD  | OVERHEAD                               |        |                               |
| EQUIP   | EQUIPMENT                 | PL    | PLATE                                  |        |                               |
| EW      | ELECTRIC WATER COOLER     | PLMB  | PLASTIC LAMINATE                       |        |                               |
| EXH     | EXHAUST                   | PLUMB | PLUMBING                               |        |                               |
| EXIST   | EXISTING                  | PLYWD | PLYWOOD                                |        |                               |
| EXP     | EXPANSION OR EXPOSED      | PNT   | PANEL                                  |        |                               |
| EXT     | EXTERIOR                  | FIN   | FINISH                                 |        |                               |
| FACP    | FIRE ALARM CONTROL PANEL  | FLR   | FLOOR                                  |        |                               |
| FD      | FLOOR DRAIN               | FLR   | FLOOR                                  |        |                               |
| FE      | FIRE EXTINGUISHER         | FND   | FOUNDATION                             |        |                               |
| FEC     | FIRE EXTINGUISHER CABINET | FR    | FRAME                                  |        |                               |
| F.F     | FINISH FLOOR              | FRMG  | FRAMING                                |        |                               |
| FIN     | FINISH                    | FT    | FEET/FOOT OR FIRE TREATED              |        |                               |
| FIXT    | FIXTURE                   | FTG   | FOOTING                                |        |                               |
| FLR     | FLOOR                     | FTNG  | FOOTING                                |        |                               |
| FND     | FOUNDATION                | FRP   | FIBERGLASS REINFORCED                  |        |                               |
| FP      | FIRE PROTECTION           | FRT   | FIRE RETARDANT TREATED                 |        |                               |
| FR      | FRAME                     |       |                                        |        |                               |
| FRMG    | FRAMING                   |       |                                        |        |                               |
| FT      | FEET/FOOT OR FIRE TREATED |       |                                        |        |                               |
| FTG     | FOOTING                   |       |                                        |        |                               |
| FTNG    | FOOTING                   |       |                                        |        |                               |
| FRP     | FIBERGLASS REINFORCED     |       |                                        |        |                               |
| FRT     | FIRE RETARDANT TREATED    |       |                                        |        |                               |

EXPLANATION OF SYMBOLS



TYPICAL SHEET VIEW NUMBERING LAYOUTS

|    |    |    |    |
|----|----|----|----|
| 1  | 2  | 3  | 4  |
| 5  | 6  | 7  | 8  |
| 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |

ARCH D (24"x36")

|    |    |    |    |    |
|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  |
| 6  | 7  | 8  | 9  | 10 |
| 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 |

ARCH E1 (36"x48")

DELEGATED DESIGN AND DEFERRED/DESIGN-BUILD SUBMITTAL REQUIREMENTS

DELEGATED DESIGN AND DEFERRED/DESIGN-BUILD SUBMITTAL REQUIREMENTS

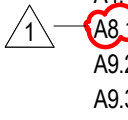
- REFERENCE THE LIST BELOW FOR DELEGATED DESIGN AND DEFERRED/DESIGN-BUILD ITEMS THE CONTRACTOR IS RESPONSIBLE FOR. THIS LIST MAY NOT BE ALL INCLUSIVE AND THOROUGH REVIEW OF ALL PROJECT SPECIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE PORTIONS OF THE PROJECT LISTED BELOW WILL BE CONSTRUCTED USING A DESIGN-BUILD APPROACH. THE DRAWINGS INCLUDED IN THIS PACKAGE ARE PRELIMINARY TO PROVIDE A BASIS FOR PLANNING AND BIDDING.
- ACTUAL DRAWINGS, DETAILS, AND CALCULATIONS FOR THE PORTIONS OF WORK LISTED AS DEFERRED/DESIGN-BUILD SUBMITTALS ARE TO BE PROVIDED BY THE CONTRACTOR AND SHALL INCLUDE ALL WORK REQUIRED TO IMPLEMENT THE ENTIRE PROJECT SCOPE RELATED TO THESE PORTIONS AND COORDINATION WITH OTHER WORK.
- DEFERRED/DESIGN-BUILD SUBMITTAL INFORMATION REQUIRES REVIEW OF BOTH ARCHITECT/ENGINEER AND APPROVAL BY THE AUTHORITY HAVING JURISDICTION.
- PERMIT ACQUISITION FOR THE DEFERRED/DESIGN-BUILD SCOPE OF WORK SHALL BE PROVIDED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL VERIFY ALL UTILITIES AND EQUIPMENT, AND COORDINATE EQUIPMENT REQUIREMENTS AND LOCATIONS.
- THE PROCEDURE FOR DEFERRED/DESIGN-BUILD SUBMITTAL IS AS FOLLOWS:
  - INITIAL DESIGN REVIEW SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR PRELIMINARY REVIEW.
  - FINAL DESIGN, ENGINEERING, AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW. SUCH DRAWINGS SHALL BE STAMPED AND SIGNED BY AN ENGINEER WHEN REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
  - FOLLOWING THE ARCHITECT'S REVIEW, THE CONTRACTOR SHALL SUBMIT TO THE AUTHORITY HAVING JURISDICTION FOR PERMIT APPROVAL AND ACQUISITION.
  - PROCUREMENT, FABRICATION AND OTHER WORK RELATED TO DEFERRED/DESIGN-BUILD SUBMITTAL SHALL NOT BE PERFORMED UNTIL THE DEFERRED/DESIGN-BUILD SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT AND THE AUTHORITY HAVING JURISDICTION.

THE CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING DEFERRED/DESIGN-BUILD SUBMITTALS:

- FIRE SPRINKLER SYSTEM MODIFICATIONS
- FIRE ALARM MODIFICATIONS
- LOW VOLTAGE AND DATA
- ENGINEERING OF EXTERIOR BUILDING ENVELOPE FRAMING AND CLADDING ATTACHMENT ASSEMBLIES
- SEISMIC BRACING OF INTERIOR FINISHES AND SUSPENDED EQUIPMENT

ARCHITECTURAL DRAWINGS

| SHEET NO. | SHEET NAME              |
|-----------|-------------------------|
| 00.0      | COVER SHEET             |
| 00.1      | GENERAL INFORMATION     |
| SHEET NO. | SHEET NAME              |
| 02.1      | LEVEL 4 DEMOLITION PLAN |
| SHEET NO. | SHEET NAME              |



| SHEET NO. | SHEET NAME                   |
|-----------|------------------------------|
| A2.4      | LEVEL 4 FLOOR PLAN           |
| A4.0      | EXTERIOR ELEVATIONS          |
| A4.1      | EXTERIOR ELEVATIONS          |
| A8.2      | VERTICAL CIRCULATION DETAILS |
| A8.3      | DETAILS                      |

STRUCTURAL DRAWINGS

| SHEET NO. | SHEET NAME                               |
|-----------|------------------------------------------|
| S8.0      | GENERAL STRUCTURAL NOTES                 |
| S8.1      | STATEMENT OF SPECIAL INSPECTIONS         |
| S2.4      | FOURTH LEVEL FRAMING PLAN                |
| S4.0      | ELEVATIONS                               |
| S4.1      | ELEVATIONS                               |
| S8.1      | ENLARGED STAIR FRAMING PLANS AND DETAILS |
| S8.0      | ANCHORAGE AND FRAMING DETAILS            |

PROJECT TEAM

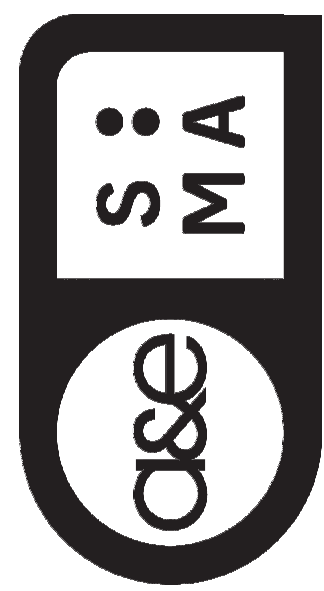
|                                                                                                                                                                                                       |                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>OWNER</b>                                                                                                                                                                                          | <b>STRUCTURAL ENGINEER</b>                                                       |
| STATE OF MONTANA - MONTANA STATE UNIVERSITY<br>UNIVERSITY FACILITIES MANAGEMENT<br>MANAGED BY: PLANNING, DESIGN & CONSTRUCTION<br>PLEV BUILDING 6TH & GRANT<br>PO BOX 17780<br>BOZEMAN, MT 59717-2780 | MORRISON-MAIERLE<br>2880 TECHNOLOGY BLVD W.<br>BOZEMAN, MT 59714<br>406.587.0721 |
| <b>ARCHITECT</b>                                                                                                                                                                                      |                                                                                  |
| A&E + SMA DESIGN<br>515 W. ASPEN ST. SUITE 200A<br>BOZEMAN, MT 59715<br>406.453.7310                                                                                                                  |                                                                                  |
| <b>CONTRACTOR</b>                                                                                                                                                                                     |                                                                                  |
| XXXXX<br>XXXXX                                                                                                                                                                                        |                                                                                  |

KEY PLAN

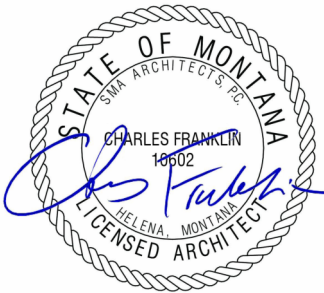
This space reserved for  
Montana State University use  
(cover page only).

100% CONSTRUCTION DOCUMENTS

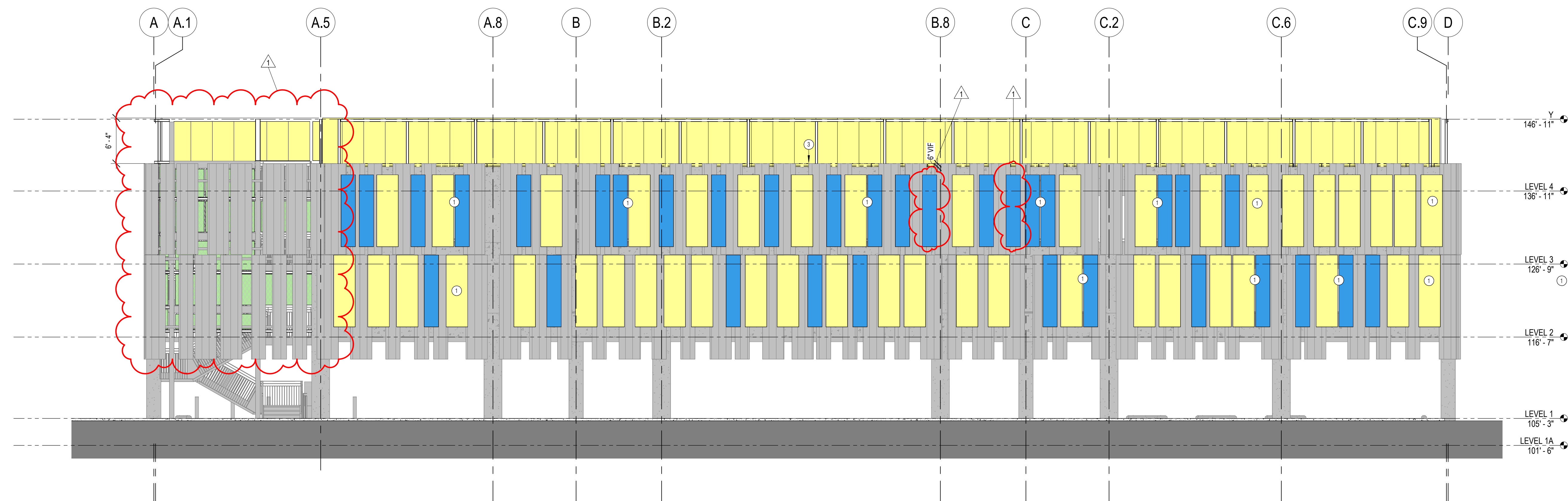
MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01  
- ADDENDUM 01 REVIEW SET



|                        |                   |                  |
|------------------------|-------------------|------------------|
| DRAWN BY: <b>EK</b>    |                   |                  |
| REVIEWED BY: <b>JS</b> |                   |                  |
| REV.                   | DESCRIPTION       | DATE             |
| <b>1</b>               | <b>Revision 2</b> | <b>2026-10-0</b> |



|                     |
|---------------------|
| PPA#26-1462         |
| A/E#26082           |
| Consultant #:       |
| GENERAL INFORMATION |
| SHEET G0.1          |
| DATE 10/09/2026     |



**PANEL LEGEND**

2' x 10' PANEL

3' x 10' PANEL

EXISTING PANEL

PERFORATED METAL PANEL

**KEYNOTES - EXTERIOR ELEVATIONS**

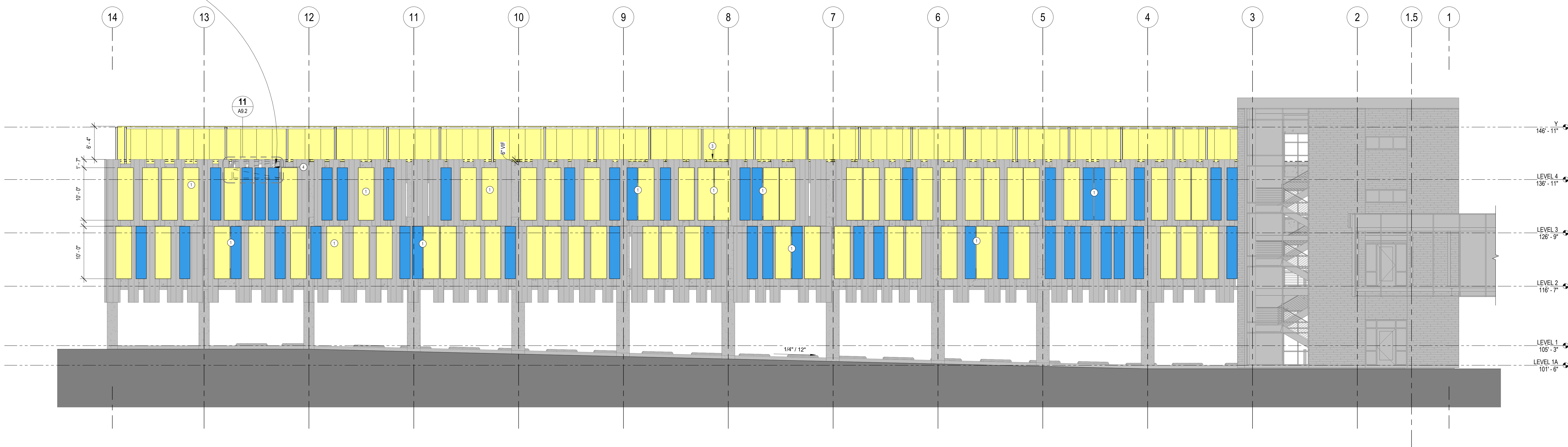
- 1 POST INSTALLED ANCHOR REQUIRED AT BOTH PANELS - 2' MAX. BETWEEN PANELS. CONTRACTOR TO FIELD VERIFY DEPTH OF CLIP REQUIRED.
- 2 (E) SNOW GATE BEYOND
- 3 EXISTING GUARD RAIL TO BE DEMO'D - SEE DEMO PLANS
- 4 EXISTING SNOW GATE TO REMAIN AND WELD SHUT

1 SOUTH ELEVATION  
1/8" = 1'-0"



GATE AT EAST ELEVATION- CONTRACTOR TO WELD OR BOLT SHUT

EXISTING GATE



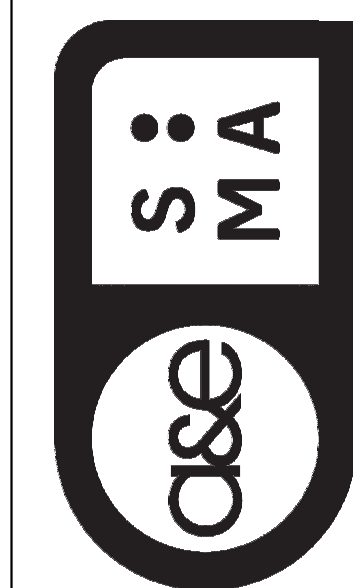
2 EAST ELEVATION  
1/8" = 1'-0"

KEY PLAN

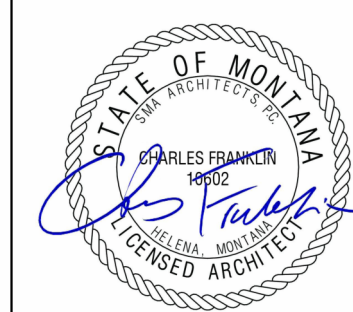
This space reserved for  
Montana State University use  
(cover page only).

100% CONSTRUCTION DOCUMENTS

MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01  
- ADDENDUM 01 REVIEW SET



|                        |                   |             |
|------------------------|-------------------|-------------|
| DRAWN BY: <b>EK</b>    |                   |             |
| REVIEWED BY: <b>JS</b> |                   |             |
| REV.                   | DESCRIPTION       | DATE        |
| <b>1</b>               | <b>Revision 1</b> | <b>Date</b> |
|                        |                   |             |



PPA#26-1462  
A/E#26082  
Consultant #:

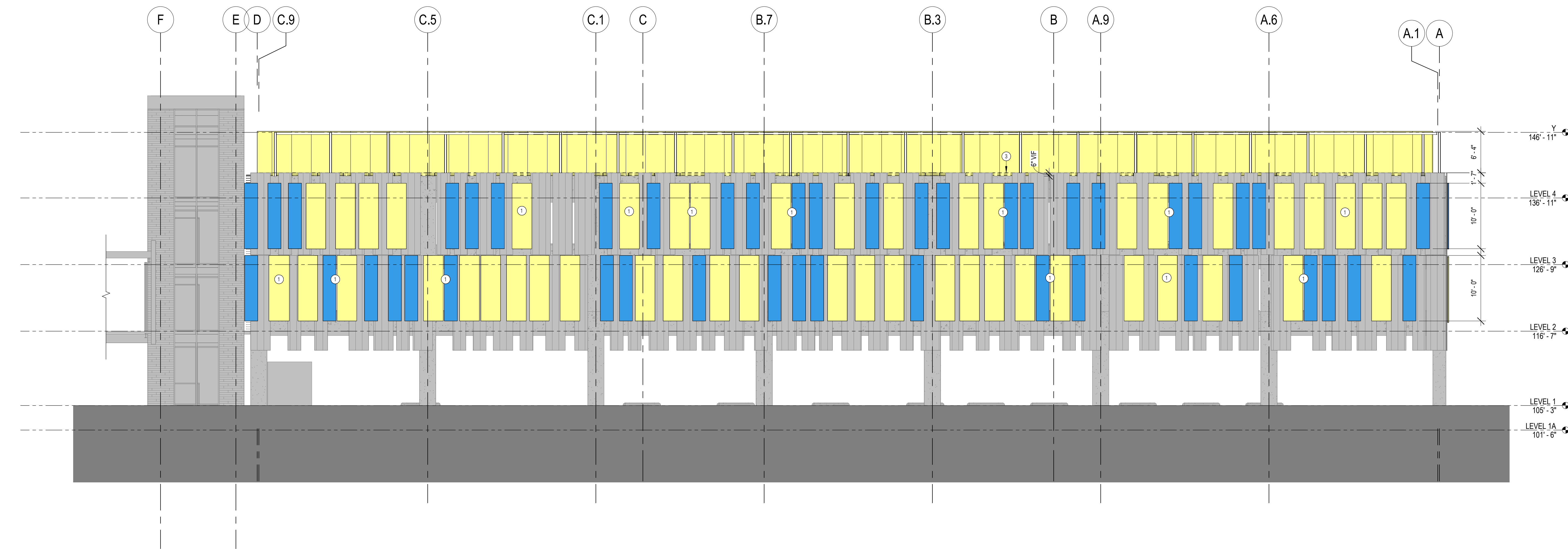
EXTERIOR  
ELEVATIONS

SHEET  
A4.0

DATE  
10/09/2026



MSU-CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION  
MONTANA STATE UNIVERSITY  
PO BOX 171000  
BOZEMAN, MT 59717-1000  
PHONE: 406/954-5411  
FAX: 406/954-5405



1 NORTH ELEVATION  
1/8" = 1'-0"



EXISTING GATE



2 WEST ELEVATION  
1/8" = 1'-0"

**KEY PLAN**

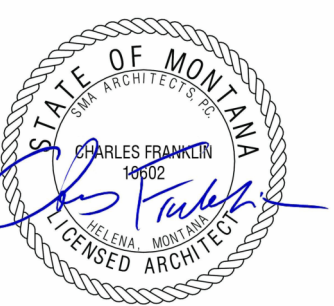
This space reserved for  
Montana State University use  
(cover page only).

100% CONSTRUCTION DOCUMENTS

**MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01  
- ADDENDUM 01 REVIEW SET**



DRAWN BY: Author  
REVIEWED BY: Checker  
REV. 1 DESCRIPTION DATE

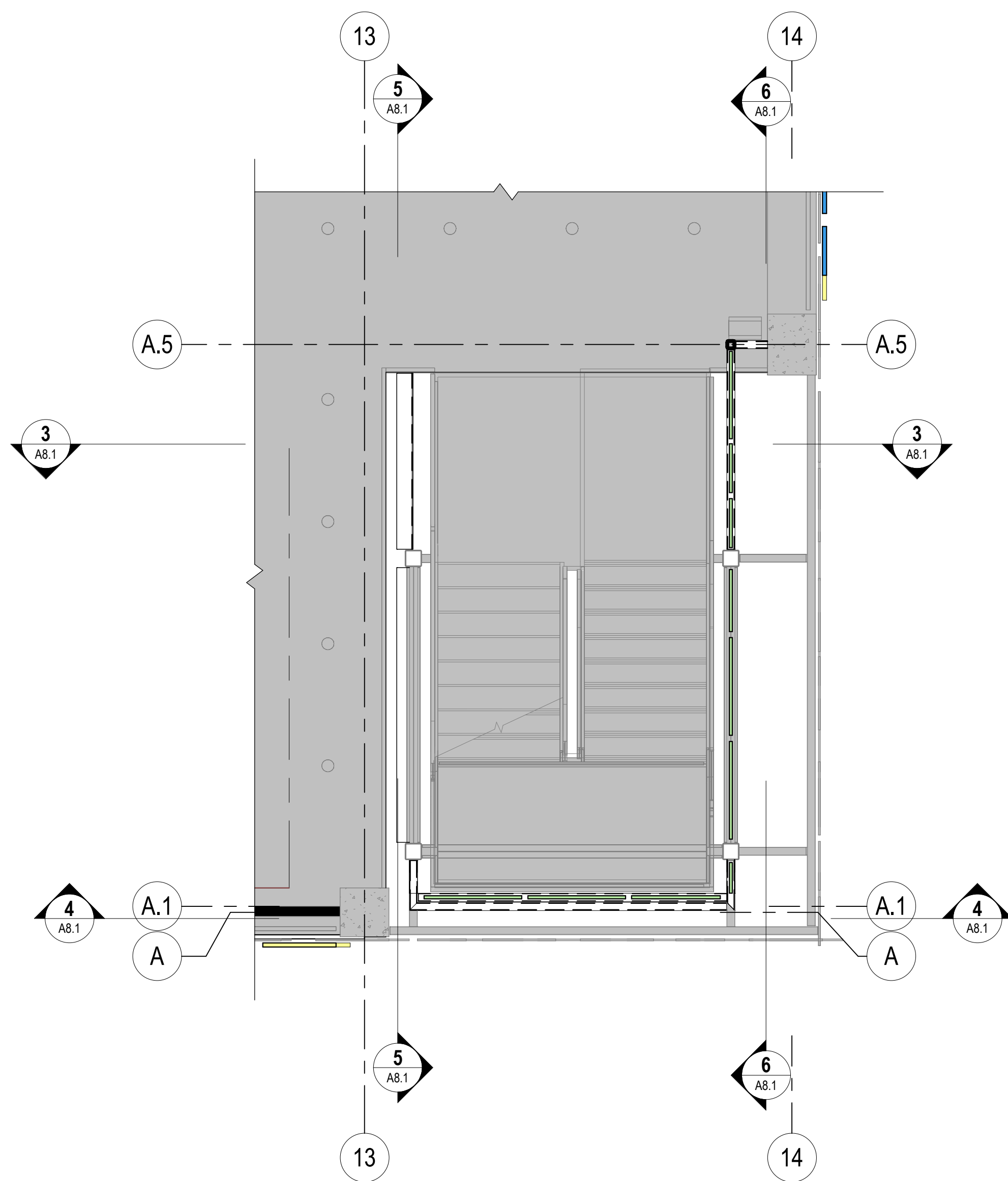


PPA#26-1462  
A/E#26082  
Consultant #:

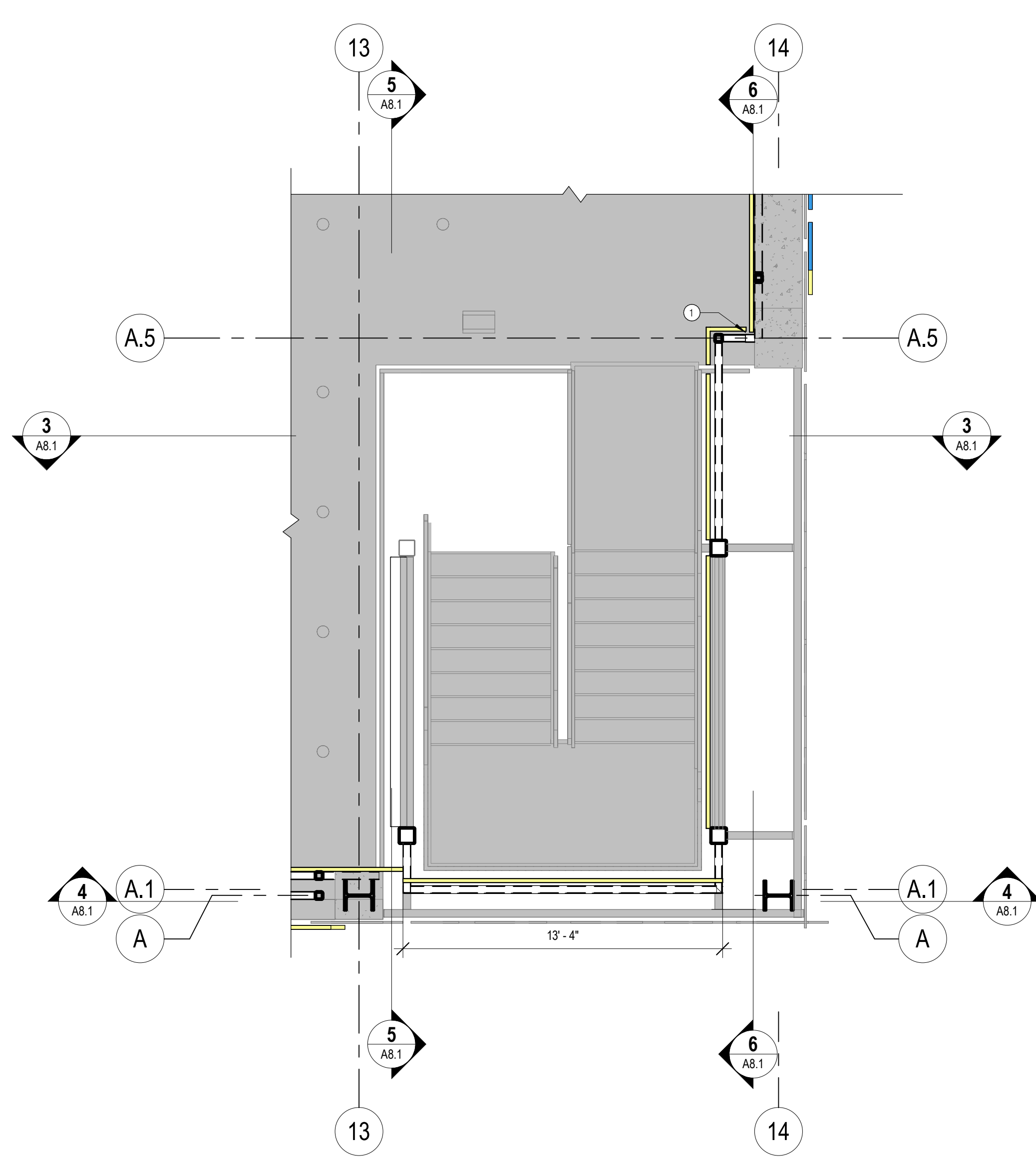
EXTERIOR  
ELEVATIONS

SHEET  
**A4.1**

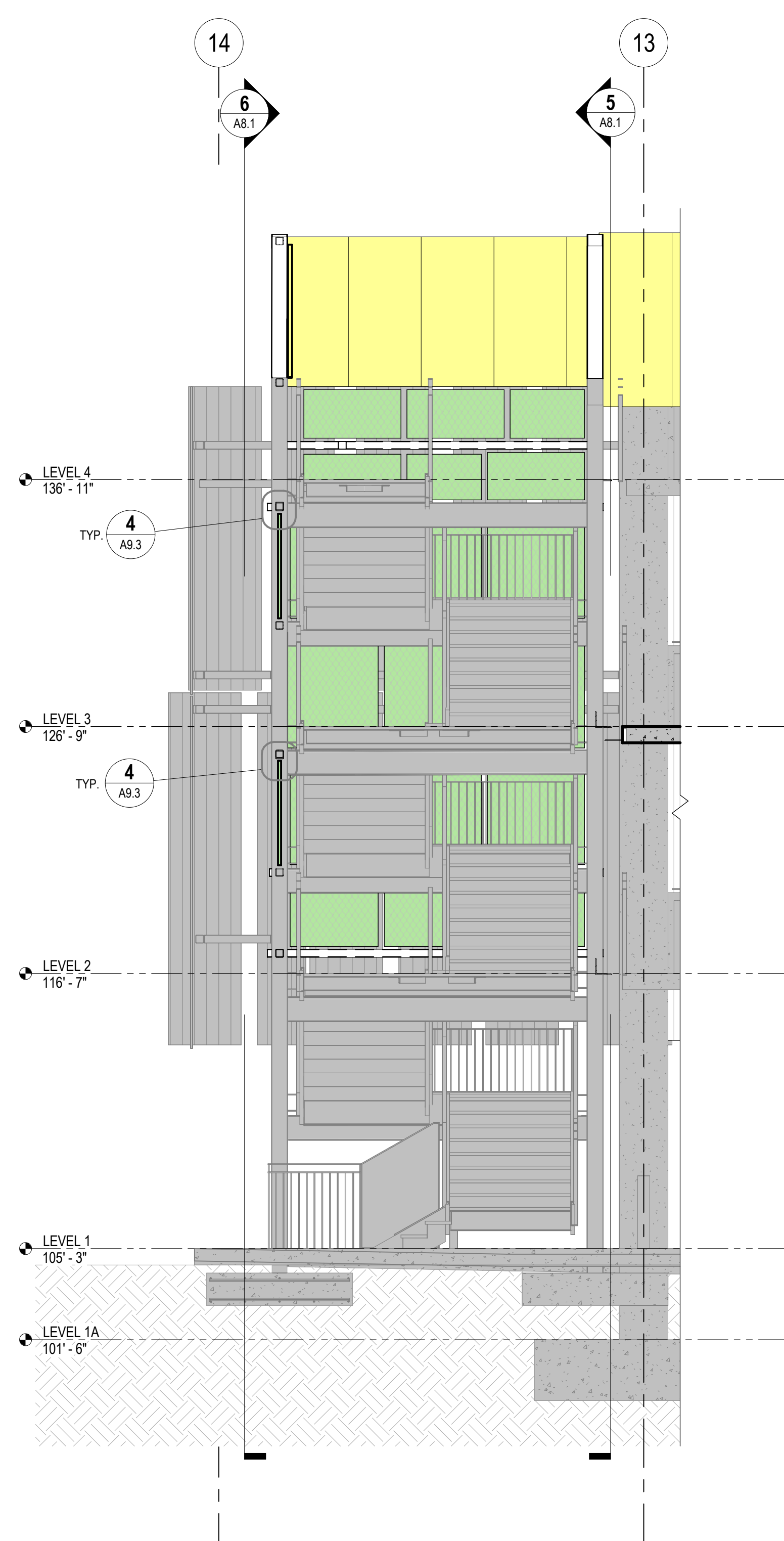
DATE  
10/09/2026



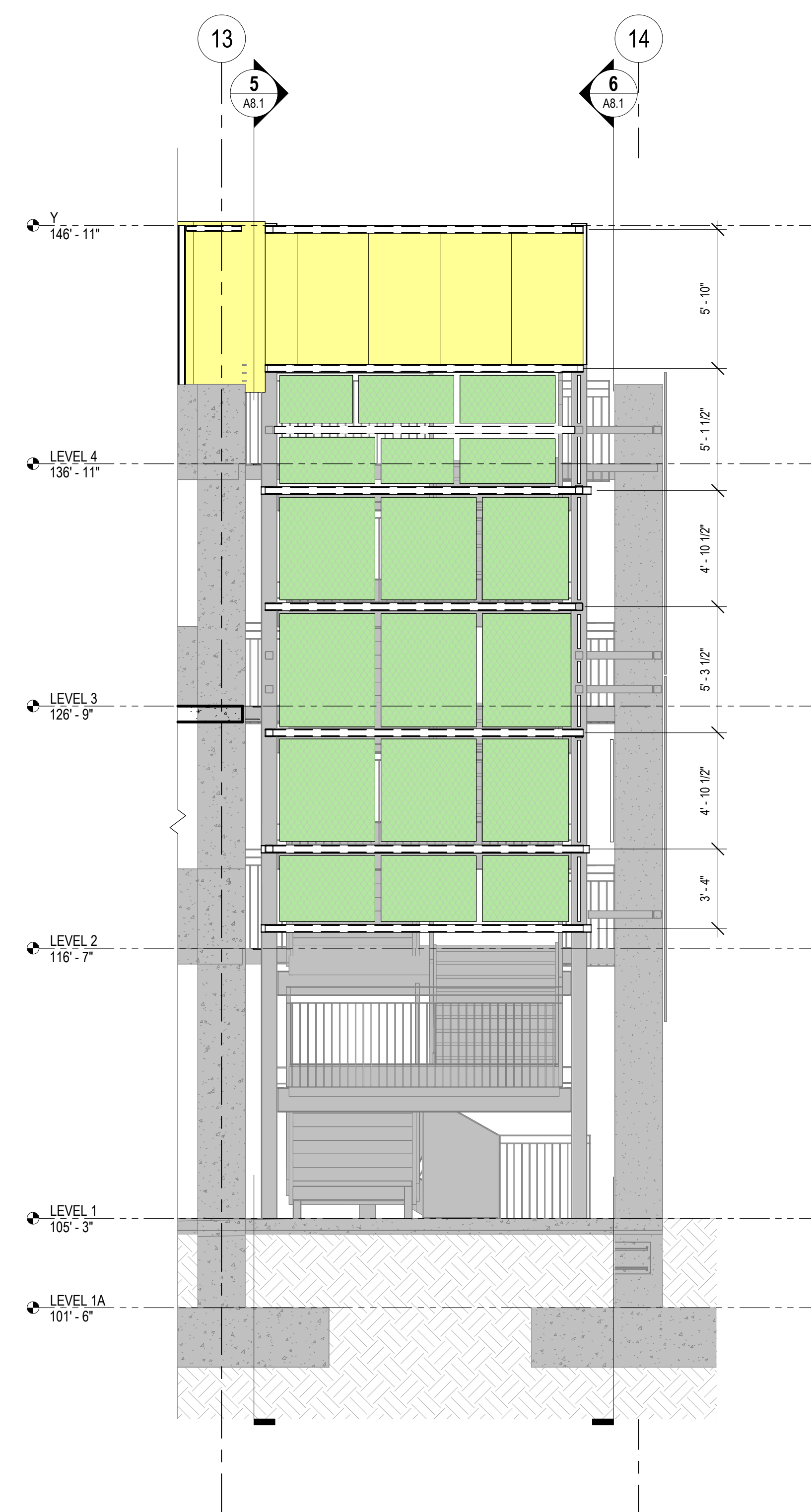
**1** SOUTHWEST STAIR - LEVEL 3  
1/4" = 1'-0"



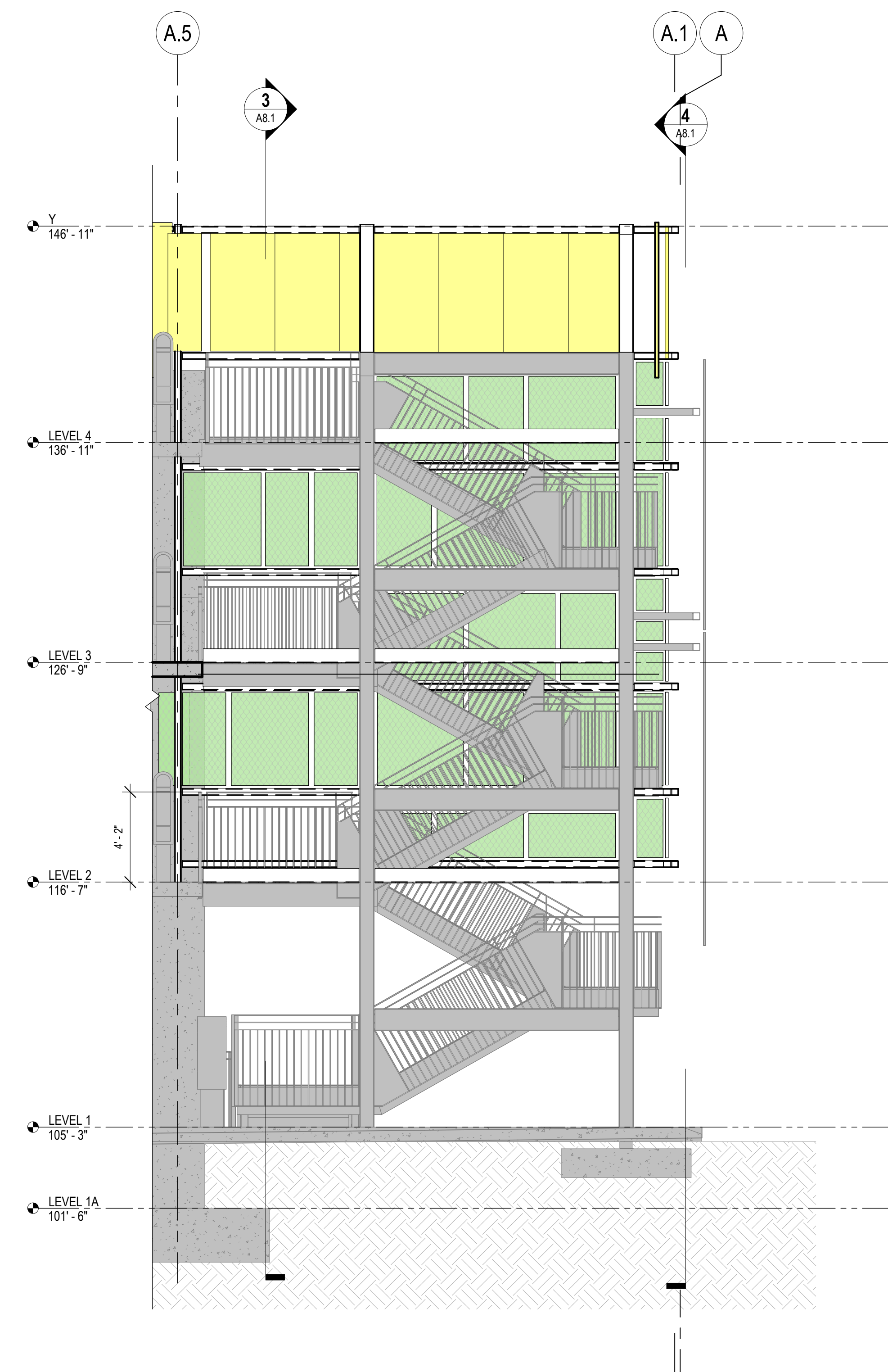
**2** SOUTHWEST STAIR - LEVEL 4  
1/4" = 1'-0"



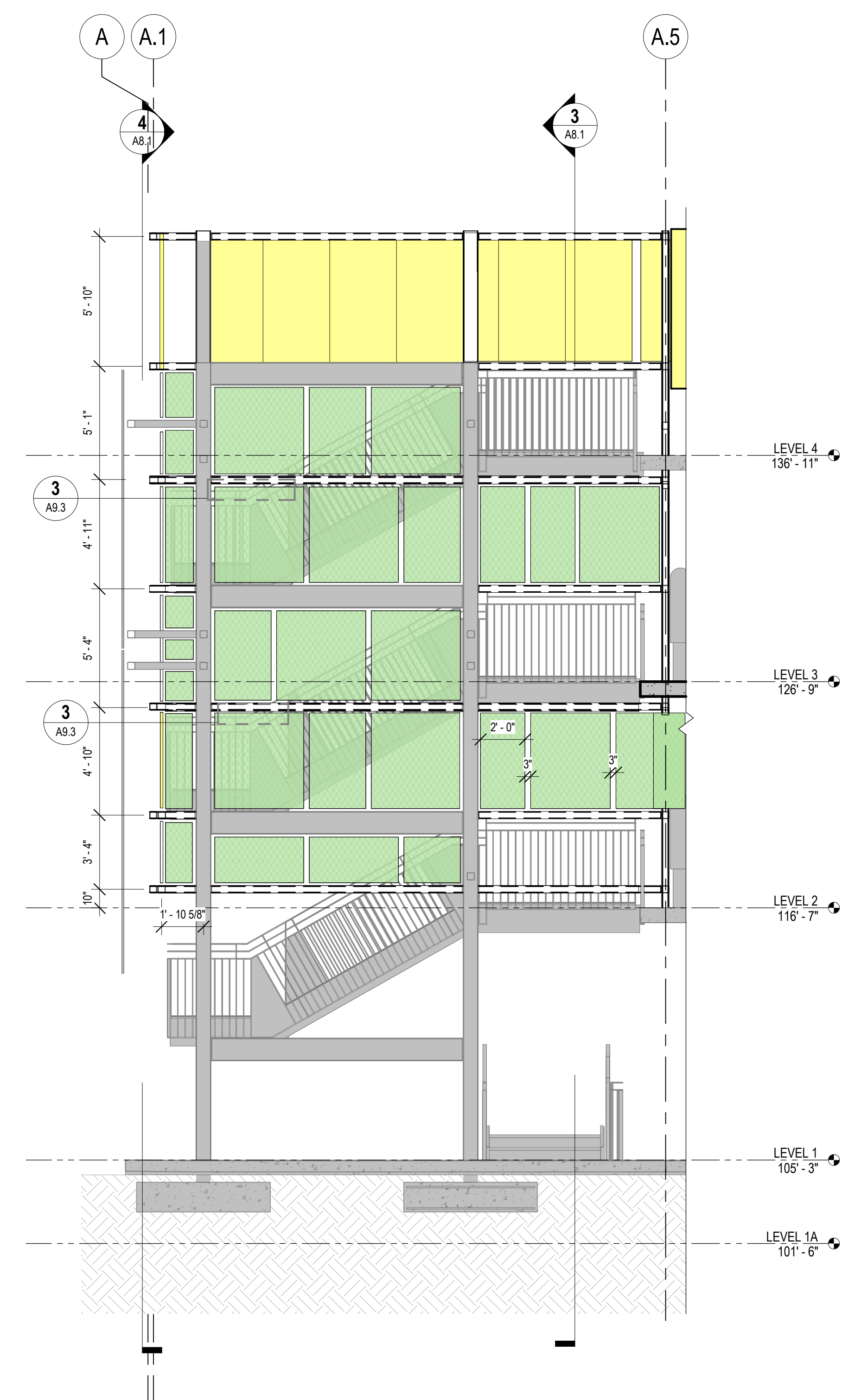
**3** SOUTH WEST STAIR - SECTION 1  
1/4" = 1'-0"



**4** SOUTHWEST STAIR - SECTION 2  
1/4" = 1'-0"



**5** SOUTHWEST STAIR - SECTION 3  
1/4" = 1'-0"



**6** SOUTHWEST STAIR - SECTION 4  
1/4" = 1'-0"

| PANEL LEGEND |                        |
|--------------|------------------------|
|              | 2' x 10' PANEL         |
|              | 3' x 10' PANEL         |
|              | EXISTING PANEL         |
|              | PERFORATED METAL PANEL |

| KEYNOTES - VERTICAL CIRCULATION |                                                                           |
|---------------------------------|---------------------------------------------------------------------------|
| Key #                           | Note                                                                      |
| 1                               | (E) FIRE AND SECURITY EQUIPMENT TO BE RELOCATED TO INTERIOR FACE OF PANEL |

**KEY PLAN**

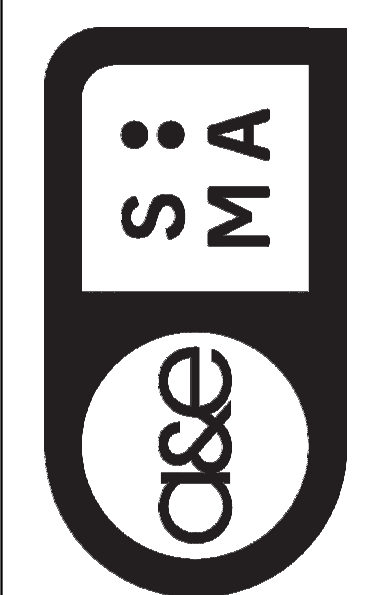
This space reserved for Montana State University use (cover page only).

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

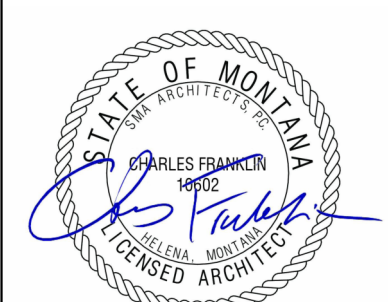
NORTH

100% CONSTRUCTION DOCUMENTS

**MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01  
- ADDENDUM 01 REVIEW SET**



|                  |                      |
|------------------|----------------------|
| DRAWN BY: Author | REVIEWED BY: Checker |
| REV. 1           | Revision 2           |
| 1                | 2026-10-08           |



PPA#26-1462  
A/E#26082  
Consultant #:

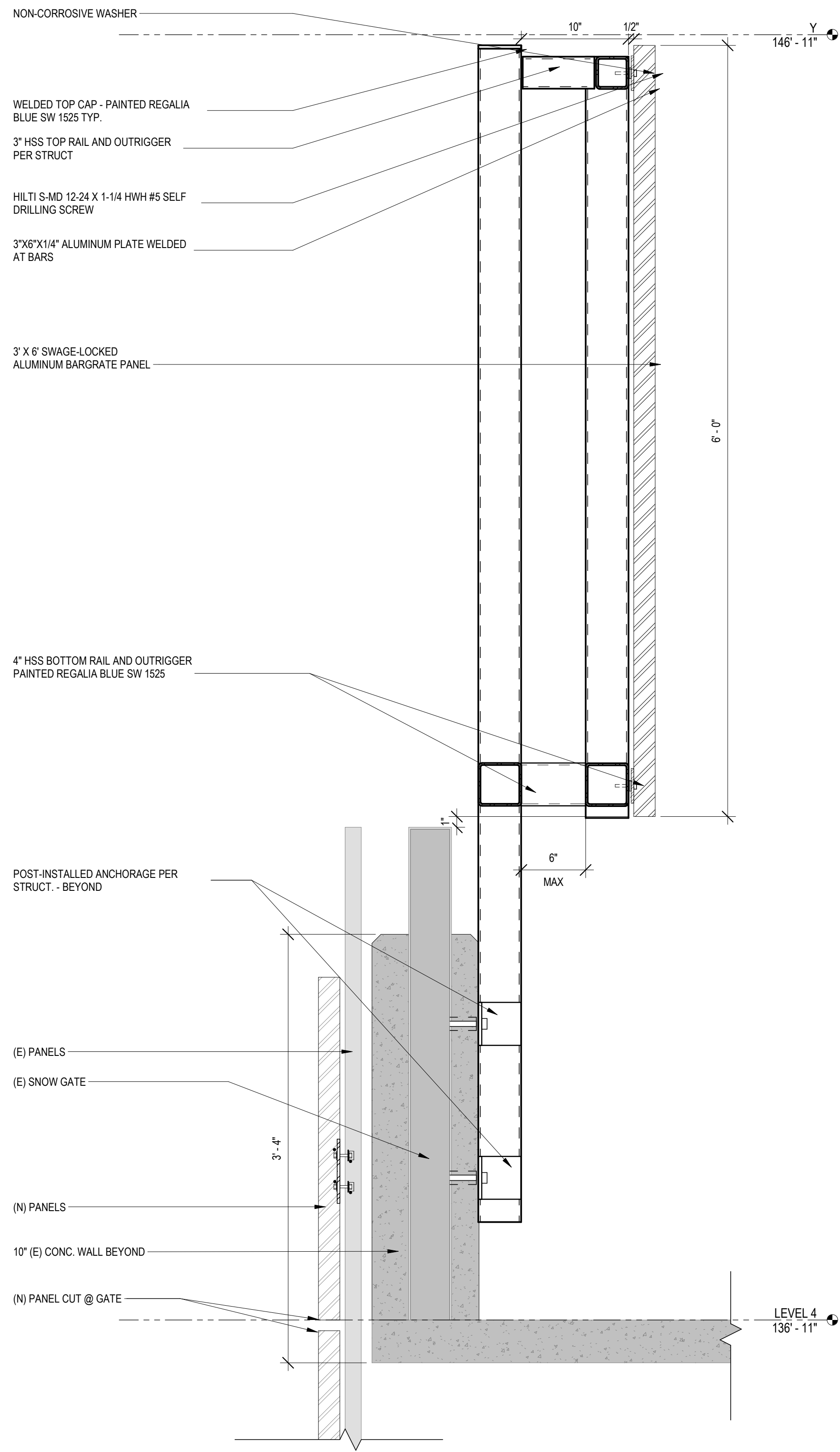
VERTICAL CIRCULATION

SHEET  
**A8.1**

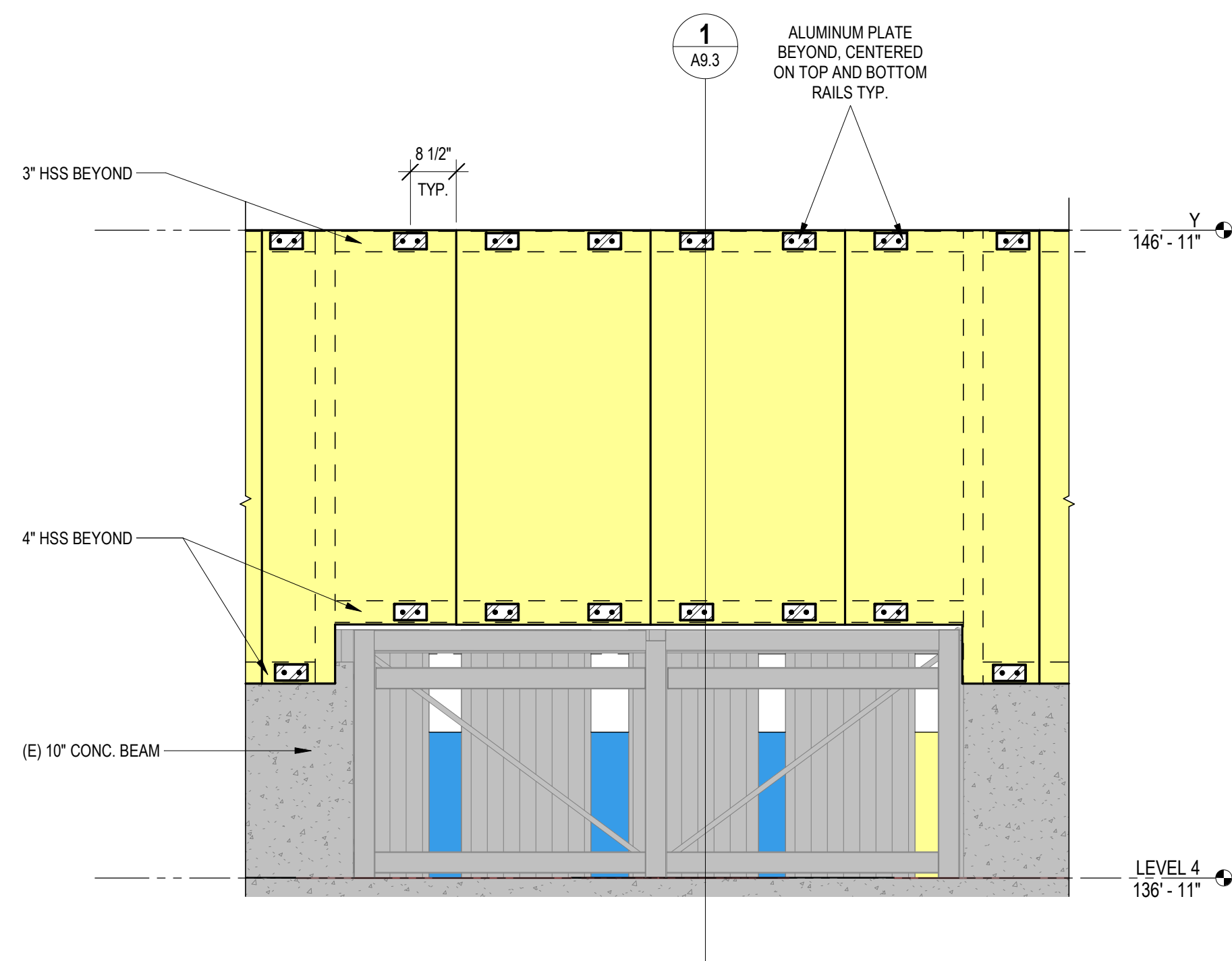
DATE  
10/09/2026



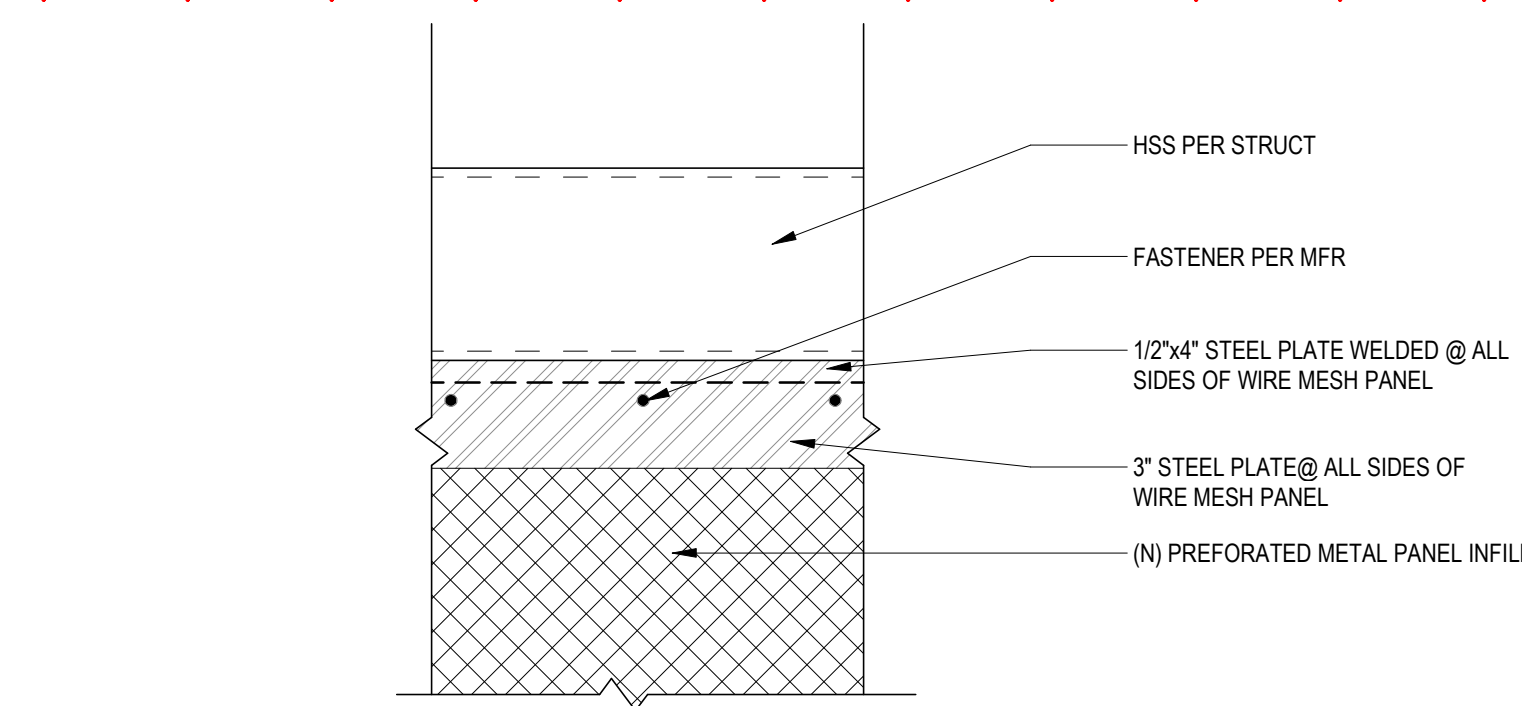
MSU-CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION  
MONTANA STATE UNIVERSITY  
PO BOX 171000  
BOZEMAN, MT 59717-1000  
PHONE: 406.941.5411  
FAX: 406.941.5405



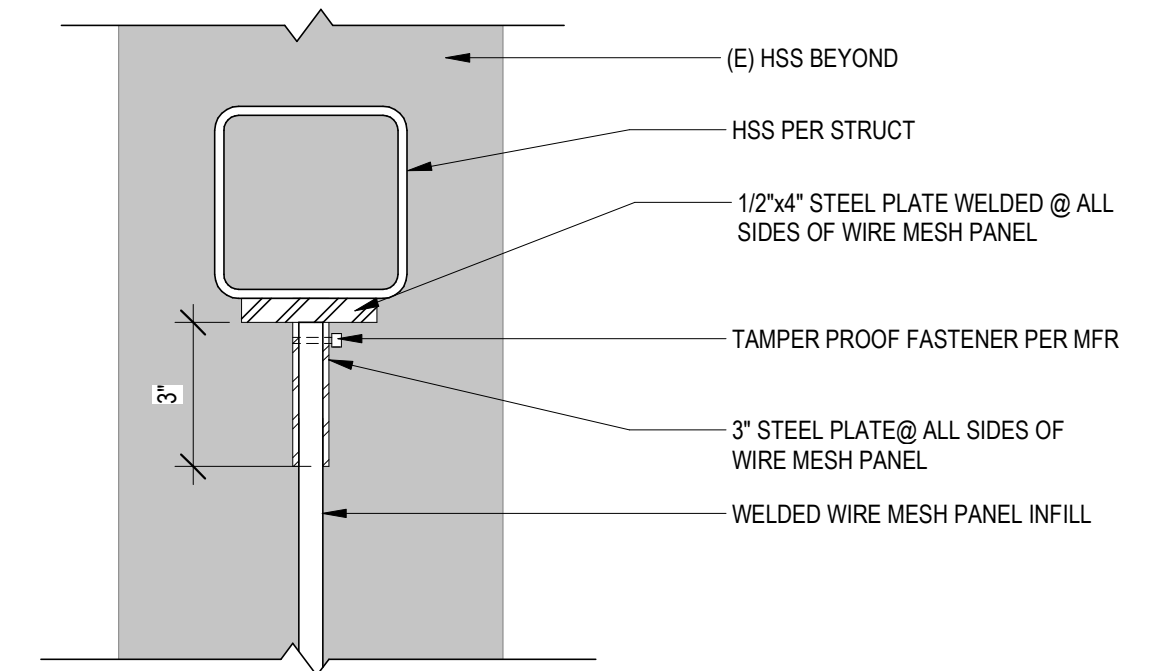
1 WEST GATE/FENCE CONNECTION DETAIL  
1 1/2" = 1'-0"



2 ENLARGED ELEVATION @ FENCE/ WEST GATE DETAIL  
1/2" = 1'-0"



3 PERFORATED PANEL INFILL @STAIR ELEVATION DETAIL  
3" = 1'-0"



4 PERFORATED PANEL INFILL @STAIR SECTION DETAIL  
3" = 1'-0"

KEY PLAN

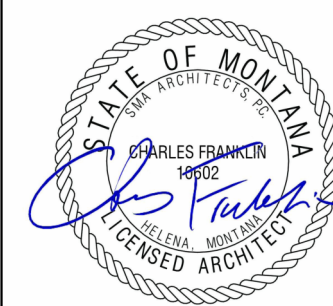
This space reserved for  
Montana State University use  
(cover page only).

100% CONSTRUCTION DOCUMENTS

MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01  
- ADDENDUM 01 REVIEW SET



|                        |                   |               |
|------------------------|-------------------|---------------|
| DRAWN BY: <b>EK</b>    |                   |               |
| REVIEWED BY: <b>JS</b> |                   |               |
| REV.                   | DESCRIPTION       | DATE          |
| <b>1</b>               | <b>Revision 1</b> | <b>Date 1</b> |
|                        |                   |               |



PPA#26-1462  
A/E#26082  
Consultant #:

DETAILS

SHEET  
A9.3

DATE  
10/09/2026



MSU-CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION  
MONTANA STATE UNIVERSITY  
PO BOX 171000  
BOZEMAN, MT 59717-1000  
PHONE: 406/924-5411  
FAX: 406/924-5405

GENERAL STRUCTURAL NOTES:

1. THESE DRAWINGS HAVE BEEN PREPARED SOLELY FOR USE IN THE SAFETY ENHANCEMENTS OF THE MSU NAIC PARKING GARAGE. POSSESSION OF THESE DRAWINGS DOES NOT GRANT A LICENSE TO CONSTRUCT THIS PROJECT IN OTHER LOCATIONS.
2. STRUCTURAL DRAWINGS ARE A PORTION OF THE CONTRACT DOCUMENTS AND ARE INTENDED TO BE USED WITH ARCHITECTURAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS. NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES OR IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN OR NOTED.
3. THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
4. THE CONTRACTOR SHALL FURNISH THE PRODUCTS SPECIFIED ON THE DRAWINGS. SUBSTITUTIONS WILL BE CONSIDERED ONLY IF THE CONTRACTOR PROVIDES DOCUMENTATION TO PROVE THE ALTERNATIVE EQUALS OR EXCEEDS THE STRUCTURAL PERFORMANCE CHARACTERISTICS OF THE SPECIFIED PRODUCT.

CODE REQUIREMENTS:

1. ALL WORK SHALL BE IN STRICT COMPLIANCE WITH:
- A. 2021 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE STATE OF MONTANA (INTERNATIONAL BUILDING CODE, 2021 EDITION, EFFECTIVE JUNE 11, 2022)
  - B. 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC) AS AMENDED BY THE STATE OF MONTANA (INTERNATIONAL EXISTING BUILDING CODE, 2021 EDITION, EFFECTIVE JUNE 11, 2022)
  - C. ALL OTHER STATE AND LOCAL BUILDING REQUIREMENTS THAT APPLY.

TEMPORARY CONDITIONS:

1. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SUPPORT PRIOR TO COMPLETION OF VERTICAL AND LATERAL LOAD SYSTEMS. MORRISON-MARBLE HAS NOT BEEN RETAINED TO PROVIDE ANY SERVICES RELATED TO JOB SITE SAFETY PRECAUTIONS, OR TO REVIEW THE MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES FOR THE CONTRACTOR TO PERFORM WORK, UNLESS WE ARE SPECIFICALLY RETAINED AND COMPENSATED TO DO OTHERWISE. OUR WORK IS LIMITED TO THE FINAL DESIGN OF THE WORK DESCRIBED ON OUR DRAWINGS FOR THIS PROJECT.

2. CONTRACTORS CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

EXISTING CONDITIONS:

1. EXISTING BUILDINGSITE DIMENSIONS AND ASSUMED CONDITIONS ARE TO BE VERIFIED IN THE FIELD AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ALL DISCREPANCIES WHICH REQUIRE A SIGNIFICANT CHANGE IN THE DESIGN AND/OR CONSTRUCTION FROM THAT SHOWN ON THE DRAWINGS.

ASSUMED FUTURE CONSTRUCTION:

1. PHASE 2

DESIGN CRITERIA

1. DESIGN IS BASED ON THE FOLLOWING LOADING FOR THE BASIS OF STRENGTH, PERFORMANCE, AND SERVICEABILITY OF THE STRUCTURE:

DESIGN CRITERIA

| DEAD LOAD CRITERIA                                         |                        |                                    |                                    |
|------------------------------------------------------------|------------------------|------------------------------------|------------------------------------|
| DEAD LOADS:                                                |                        | UNIFORM LOAD                       |                                    |
| ROOF DEAD LOAD:                                            |                        | SELF WEIGHT OF CONCRETE            |                                    |
| FLOOR DEAD LOAD:                                           |                        | SELF WEIGHT OF CONCRETE            |                                    |
| LIVE LOAD CRITERIA (IBC 1603.1.1)                          |                        |                                    |                                    |
| LIVE LOADS:                                                |                        | UNIFORM LOAD                       | CONCENTRATED LOAD                  |
| FOURTH LEVEL                                               | 40 PSF (NON-REDUCABLE) | 3000 LB                            |                                    |
| GUARDRAILS                                                 | 50 PLF                 | 250 LB                             |                                    |
| SNOW LOAD CRITERIA (IBC 1603.1.3)                          |                        |                                    |                                    |
| DESIGN ROOF SNOW LOAD                                      |                        | 36 PSF (STATE OF MT MINIMUM)       |                                    |
| GROUND SNOW LOAD                                           |                        | Pg = 46 PSF                        |                                    |
| FLAT ROOF SNOW LOAD                                        |                        | Pi = 40 PSF                        |                                    |
| SNOW EXPOSURE FACTOR                                       |                        | Ce = 1.0                           |                                    |
| SNOW LOAD IMPORTANCE FACTOR                                |                        | Is = 1.0                           |                                    |
| THERMAL FACTOR                                             |                        | Ct = 1.2                           |                                    |
| WIND LOAD CRITERIA (IBC 1603.1.4)                          |                        |                                    |                                    |
| BASIC DESIGN WIND SPEED                                    |                        | V = 115 MPH                        |                                    |
| RISK CATEGORY                                              |                        | II                                 |                                    |
| WIND EXPOSURE                                              |                        | C                                  |                                    |
| COMPONENT & CLADDING PRESSURE FOR DEFERRED DESIGN ELEMENTS |                        | REF. ASCE 7-16 CH. 30, PART 1      |                                    |
| SEISMIC LOAD CRITERIA (IBC 1603.1.5)                       |                        |                                    |                                    |
| RISK CATEGORY                                              |                        | II                                 |                                    |
| SEISMIC IMPORTANCE FACTOR                                  |                        | Ib = 1.0                           |                                    |
| MAPPED SPECTRAL RESPONSE                                   |                        | Ss = 0.72                          | S1 = 0.21                          |
| SITE CLASS                                                 |                        | D                                  |                                    |
| DESIGN SPECTRAL RESPONSE                                   |                        | Sds = 0.59                         | Sd1 = 0.28                         |
| SEISMIC DESIGN CATEGORY                                    |                        | D                                  |                                    |
| BASIC SEISMIC FORCE RESISTING SYSTEM (SFRS)                |                        | X DIRECTION (E/W)                  | Z DIRECTION (N/S)                  |
| RESPONSE MODIFICATION FACTOR                               |                        | STEEL CANTILEVERED COLUMNS<br>1.25 | STEEL CANTILEVERED COLUMNS<br>1.25 |
| ANALYSIS PROCEDURE USED                                    |                        | EQUIVALENT LATERAL FORCE           | EQUIVALENT LATERAL FORCE           |

MISCELLANEOUS:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING AND CONSTRUCTION.
2. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED. SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT.
3. EXISTING BUILDINGSITE DIMENSIONS AND ASSUMED CONDITIONS ARE TO BE VERIFIED IN THE FIELD AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ALL DISCREPANCIES WHICH REQUIRE A SIGNIFICANT CHANGE IN THE DESIGN AND/OR CONSTRUCTION FROM THAT SHOWN ON THE DRAWINGS.
4. ENGINEER SHALL REVIEW SHOP DRAWINGS ONLY FOR THE CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND FOR COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. DIMENSIONS AND QUANTITIES NOTED ON THE SHOP DRAWINGS ARE NOT GUARANTEED BY THE ENGINEER AND THEREFORE MUST BE VERIFIED BY THE GENERAL CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR INFORMATION THAT PERTAINS TO THE FABRICATION PROCESSES OR TO TECHNIQUES OF CONSTRUCTION, AND FOR COORDINATION OF THE WORK OF ALL TRADES. SHOP DRAWINGS MUST BE REVIEWED, STAMPED, AND SIGNED BUT BY THE CONTRACTOR PROP TO THE REVIEW BY THE ENGINEER.

STRUCTURAL OBSERVATIONS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER OF RECORD A MINIMUM OF 24 HOURS IN ADVANCE OF REQUIRED OBSERVATIONS. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE OBSERVER. APPROVAL BY THE MUNICIPAL INSPECTOR DOES NOT PRECLUDE OBSERVATIONS BY THE ENGINEER OF RECORD AND APPROVAL BY THE ENGINEER OF RECORD DOES NOT PRECLUDE THE INSPECTION PROCESS BY THE MUNICIPAL INSPECTOR AND ANY OTHER CODE REQUIREMENTS FOR INSPECTION.
2. UPON COMPLETION OF WORK THE STRUCTURAL OBSERVER SHALL SUBMIT A REPORT TO THE OWNER AND BUILDING OFFICIAL ATTESTING TO THE VISUAL OBSERVATION MADE. THE REPORT SHALL IDENTIFY ANY REPORTED DEFICIENCIES WHICH HAVE NOT BEEN RESOLVED.
3. STRUCTURAL OBSERVATIONS SHALL BE PERFORMED TO DOCUMENT GENERAL CONFORMANCE OF THE STRUCTURAL DRAWINGS AND SPECIFICATIONS AT THE FOLLOWING STAGES:

STRUCTURAL OBSERVATIONS

| ITEM                                                                                  | OBSERVED BY |      | COMMENTS |
|---------------------------------------------------------------------------------------|-------------|------|----------|
|                                                                                       | AOR         | SEOR |          |
| PRIOR TO INSTALLATION OF POST INSTALLED ANCHORAGE                                     |             | X    |          |
| SUBSTANTIAL COMPLETION OF STEEL CONSTRUCTION AS REQUIRED TO ADDRESS STRUCTURAL ISSUES |             | X    |          |

SUBMITTALS:

1. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION OF ALL STRUCTURAL PRODUCTS, INCLUDING THE FOLLOWING:

SUBMITTALS

| ITEM                       | SUBMITTAL | DEFERRED SUBMITTAL |
|----------------------------|-----------|--------------------|
| CONCRETE ANCHORAGES        | X         |                    |
| STRUCTURAL STEEL           | X         |                    |
| STEEL WELDING PROCEDURES   |           | X                  |
| STRUCTURAL STEEL FASTENERS |           | X                  |
| BAR GRATING                |           | X                  |

2. SHOP DRAWINGS SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION FOR ALL STRUCTURAL PRODUCTS DELIVERED TO THE PROJECT. IF THE SHOP DRAWINGS DEViate FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND ACCEPTANCE OF THE STRUCTURAL ENGINEER OF RECORD.

3. DEFERRED SUBMITTAL DESIGN DRAWINGS, SHOP DRAWINGS, AND CALCULATIONS FOR THE DESIGN AND FABRICATION OF ITEMS THAT ARE DESIGNED BY OTHERS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE DEFERRED SUBMITTAL SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND ARE SUBJECT TO REVIEW AND ACCEPTANCE OF THE STRUCTURAL ENGINEER FOR LOADS IMPOSED ON THE SUPPORTING STRUCTURE. CALCULATIONS SHALL BE INCLUDED FOR ALL CONNECTIONS TO THE STRUCTURE, CONSIDERING LOCALIZED EFFECTS ON STRUCTURAL ELEMENTS INDUCED BY THE CONNECTION LOADS. DESIGN SHALL BE BASED ON THE REQUIREMENTS OF THE CODES AND DESIGN CRITERIA NOTED IN THESE GENERAL STRUCTURAL NOTES.

4. FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DEViate FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.

5. THE USE OF REPRODUCTIONS OR PHOTOCOPIES OF THE CONTRACT DOCUMENTS SHALL NOT BE PERMITTED. WHEN CAD OR REVIT FILES ARE PROVIDED TO THE CONTRACTOR OR SUBCONTRACTORS, IT IS THE RESPONSIBILITY OF THE DETAILERS TO REMOVE ALL INFORMATION NOT DIRECTLY RELEVANT TO THE CREATION OF THE PLACING DRAWINGS AS WELL AS ALL REFERENCES TO THE OUTSIDE SOURCE FILES.

6. SUBMITTAL DOCUMENTS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO BEING SUBMITTED TO THE ARCHITECT FOR REVIEW.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE REVIEWED SUBMITTAL TO THE BUILDING DEPARTMENT FOR DEFERRED PERMIT APPLICATION. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

CONCRETE ANCHORS

1. ALL ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURERS' RECOMMENDATIONS AND PRODUCT EVALUATION REPORTS.
2. EMBEDMENT SPECIFIED ON DRAWINGS ARE EFFECTIVE/ EMBEDMENT REFERENCE MANUFACTURER LITERATURE FOR CORRESPONDING ACTUAL EMBEDMENT DEPTHS.
3. ANCHOR RODS EXPOSED TO EARTH OR WEATHER SHALL BE PROTECTED FROM CORROSION BY HOT-DIP GALVANIZING OR USE OF STAINLESS STEEL.
4. FOR POST-INSTALLED ANCHORS, LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED.
5. CONTRACTOR SHALL FIELD LOCATE EXISTING REINFORCEMENT, POST-TENSIONING TENDONS, AND OTHER EMBEDDED ITEMS USING GPR OR OTHER APPROVED NONDESTRUCTIVE SCANNING METHODS PRIOR TO DRILLING. ANCHOR LOCATIONS SHALL BE ADJUSTED AS REQUIRED TO AVOID EXISTING REINFORCEMENT, PT TENDONS, AND EMBEDDED ITEMS. DO NOT CUT, DRILL, CORE, OR OTHERWISE DAMAGE EXISTING REINFORCEMENT OR PT TENDONS. NOTIFY ENGINEER OF RECORD OF CONFLICTS THAT PREVENT INSTALLATION OF ANCHORS AT THE LOCATIONS SHOWN PRIOR TO DRILLING.
6. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF (2) ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINKING GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, SEE GUIDANCE FROM THE STRUCTURAL ENGINEER OF RECORD.

METALS:

STRUCTURAL STEEL:

1. DESIGN FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AISC SPECIFICATIONS AND AISC CODE OF STANDARD PRACTICE. STRUCTURAL STEEL SHALL BE:

| SHAPE                            | MATERIAL SPECIFICATION AND GRADE |
|----------------------------------|----------------------------------|
| WIDE FLANGE (W-SHAPES)           | ASTM A992, GRADE 50              |
| CHANNELS (C-SHAPES)              | ASTM A36, GRADE 36               |
| ANGLES (L-SHAPES)                | ASTM A36, GRADE 36               |
| STRUCTURAL TEES (WT-SHAPES)      | ASTM A992, GRADE 50              |
| HOLLOW STRUCTURAL SECTIONS (HSS) | ASTM A500, GRADE C               |
| STRUCTURAL PIPES                 | ASTM A53, GRADE B                |
| PLATES                           | ASTM A36, GRADE 36               |
| PLATES NOTED AS "GR 50"          | ASTM A572, GRADE 50              |

2. BOLTS SHALL CONFORM TO THE ASTM AND RCSC SPECIFICATIONS FOR JOINTS USING GROUP A OR GROUP B HIGH STRENGTH BOLTS. BOLTS SHALL BE INSTALLED SNUG-TIGHT UNLESS NOTED OTHERWISE.
3. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 36 UNLESS NOTED OTHERWISE. ANCHOR RODS TO BE WELDED SHALL CONFORM TO ASTM F1554, GRADE 55. THREADED RODS SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE.
4. WELDING SHALL CONFORM TO AWS D1.1, STRUCTURAL WELDING CODE - STEEL WITH PREQUALIFIED WELDING PROCESSES EXCEPT AS MODIFIED BY AISC 368 SECTION J2. WELDING SHALL BE COMPLETED BY AWS-CERTIFIED WELDERS.
5. WELDS SHALL BE MADE USING E70XX ELECTRODES FOR SHIELDED METAL ARC WELDING (SMAW) AND E71TX WIRE FOR FLUX-CORED ARC WELDING (FCAW) PROCESSES. FOR COMPLETE JOINT PENETRATION WELDS ASSOCIATED WITH MEMBER SPLICES AND CONNECTIONS NOT PART OF THE SEISMIC FORCE RESISTING SYSTEM, WELDS SHALL BE MADE WITH FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT 40°F.
6. FIELD WELDING SYMBOLS HAVE NOT NECESSARILY BEEN INDICATED ON THE DRAWING, WHERE SHOWN, PROPER FIELD WELDING PER AWS SHALL BE USED. WHERE NO FIELD WELDING SYMBOLS ARE SHOWN, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE USE OF SHOP AND FIELD WELDS.
7. ERECTION AIDS ARE TO BE DETERMINED AND PROVIDED BY THE CONTRACTOR. THE CONTRACTOR'S ERECTOR AND FABRICATOR SHALL COORDINATE THE TYPE AND QUANTITY OF ERECTION AIDS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ERECTION SEQUENCING, TEMPORARY BRACING, SAFETY OF WORKERS, AND OVERALL COMPLIANCE WITH APPLICABLE OSHA REQUIREMENTS.
8. PROVIDE WEEP HOLES AT EXTERIOR CLOSED SECTIONS WHERE MOISTURE MAY ACCUMULATE.
9. FRAMING THAT IS TO BE PAINTED SHALL HAVE A SHOP APPLIED PRIMER. EXTERIOR FRAMING AND FABRICATED STEEL SHALL BE PAINTED OR HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 AND EXTERIOR FASTENERS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153. REPAIR GALVANIZING AFTER ERECTION IS COMPLETE IN ACCORDANCE WITH ASTM A780.
10. STRUCTURAL STEEL MEMBERS AND THEIR CONNECTIONS THAT ARE IDENTIFIED ON PLAN AS ARCHITECTUALLY EXPOSED STRUCTURAL STEEL (AESS) AND THAT ARE EXPOSED TO VIEW SHALL MEET THE STANDARDS OF AISC 303, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

SEISMIC FORCE RESISTING SYSTEM:

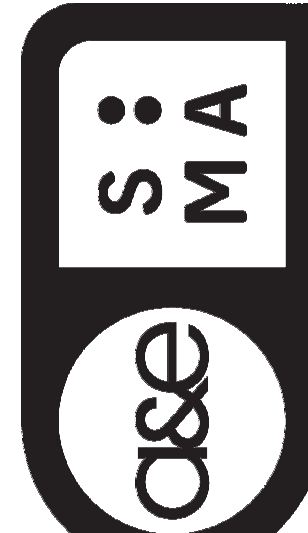
1. MEMBERS AND THEIR CONNECTIONS THAT ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM ARE IDENTIFIED IN THE DRAWINGS AND ARE SUBJECT TO THE FOLLOWING REQUIREMENTS:
2. DISCONTINUITIES RESULTING FROM FABRICATION AND ERECTION PROCEDURES AND FROM OTHER ATTACHMENTS ARE PROHIBITED IN THE AREA OF A MEMBER OR A CONNECTION ELEMENT DESIGNATED AS A PROTECTED ZONE.
3. HIGH STRENGTH BOLTS USED AS PART OF THE SEISMIC FORCE RESISTING SYSTEM (SFRS) SHALL BE FULLY TENSIONED AND ALL FAYING SURFACES SHALL BE PREPARED AS REQUIRED FOR CLASS A OR BETTER SLIP-CRITICAL JOINTS.
4. WELDING OF MEMBERS THAT ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM SHALL CONFORM TO AWS D1.8, STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT. WELDING SHALL BE COMPLETED BY AWS-CERTIFIED WELDERS.
5. ALL WELDS USED IN MEMBERS AND CONNECTIONS THAT ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM (SFRS) SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT 0°F. AS DETERMINED BY AWS CLASSIFICATION OF MANUFACTURER CERTIFICATION. ALL COMPLETE JOINT PENETRATION WELDS DESIGNATED AS DEMAND CRITICAL SHALL BE MADE WITH FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT -20°F AND 40 FT-LBS AT 70°F.

STRUCTURAL ABBREVIATIONS

|           |                                           |         |                            |
|-----------|-------------------------------------------|---------|----------------------------|
| ABV       | ABOVE                                     | J       | JOIST                      |
| AD        | ADHESIVE DOWEL                            | KP      | KNIFE PLATE                |
| AA        | ADHESIVE ANCHOR                           | LAM     | LAMINATED                  |
| AESS      | ARCHITECTUALLY EXPOSED STRUCTURAL STEEL   | LVL     | LAMINATED VENEER LUMBER    |
| ALT       | ALTERNATE                                 | LF      | LINEAR FEET                |
| ACI       | AMERICAN CONCRETE INSTITUTE               | LL      | LIVE LOAD                  |
| ANSI      | AMERICAN INSTITUTE OF STEEL CONSTRUCTION  | LLH     | LONG LEG HORIZONTAL        |
| ANSI      | AMERICAN NATIONAL STANDARDS INSTITUTE     | LLV     | LONG LEG VERTICAL          |
| ASCE      | AMERICAN WOOD ASSOCIATION                 | MFR     | MANUFACTURER               |
| ASCE      | AMERICAN SOCIETY OF CIVIL ENGINEERS       | M       | MASONRY                    |
| ASTM      | AMERICAN SOCIETY OF TESTING AND MATERIALS | MCJ     | MASONRY CONTROL JOINT      |
| AB        | ANCHOR BOLT                               | ML      | MASONRY UNTEL              |
| AR        | ANCHOR ROD                                | MP      | MASONRY TIE                |
| BOLG      | BUILDING                                  | MATL    | MATERIAL                   |
| ARCH      | ARCHITECT                                 | MECH    | MECHANICAL                 |
|           |                                           | MBR     | MEMBER                     |
|           |                                           | MTL     | METAL                      |
| B PL      | BASE PLATE                                | MD      | METAL DECK                 |
| BSMT      | BASEMENT                                  | MEZZ    | MEZZANINE                  |
| BM        | BEAM                                      | MM      | MINIMUM                    |
| BRG       | BEARING                                   | MSC     | MISCELLANEOUS              |
| BLW       | BELOW                                     | NLB     | NON-LOAD BEARING           |
| BTWN      | BETWEEN                                   | N       | NORTH                      |
| BLKG      | BLOCKING                                  | NA      | NOT APPLICABLE             |
| BOT       | BOTTOM                                    | NTS     | NOT TO SCALE               |
| BU        | BOTTOM CHORD                              | NO      | NUMBER                     |
| BULDG     | BUILDING                                  |         |                            |
| BUILT UP  | BUILT UP                                  | OC      | ON CENTER                  |
| CANTIL    | CANTILEVER                                | OPENG   | OPENING                    |
| CB        | CARRIAGE BOLT                             | OWJ     | OPEN WEB JOIST             |
| CIP       | CAST IN PLACE                             | OPP     | OPPOSITE                   |
| CTR       | CENTER                                    | PAR     | PARALLEL                   |
| CTRD      | CENTRAL                                   | PERP    | PERPENDICULAR              |
| CL        | CENTRLINE                                 | PREFAB  | PREFABRICATE               |
| CLR       | CLEAR                                     | PC      | PER CAP/CONCRETE PILE      |
| CTMF      | COLD FORMED METAL FRAMING                 | PLYWD   | PLYWOOD                    |
| COL       | COLUMN                                    | PL      | POUND                      |
| CONC      | CONCRETE                                  | PLF     | POUNDS PER LINEAR FOOT     |
| CONC      | CONCRETE COLUMN                           | PSF     | POUNDS PER SQUARE FOOT     |
| CONN      | CONNECTION                                | PSI     | POUNDS PER SQUARE INCH     |
| CD        | CONSTRUCTION DOCUMENTS                    | PAF     | POWER-ACTUATED FASTENERS   |
| CJ        | CONTINUOUS CONCRETE JOINT                 | PRESTR  | PRESSURE TREATED           |
| CONT      | CONTINUOUS/CONTINUED                      | QA      | QUALITY ASSURANCE          |
| CONTR     | CONTRACTOR                                | R       | RADIUS                     |
| CONTR     | CONTROL JOINT                             | REF     | REFERENCE                  |
| COORD     | COORDINATE                                | REIN    | REINFORCE/REINFORCING      |
| X BRACE   | CROSS BRACE                               | REIN    | REINFORCING STEEL BARS     |
|           |                                           | REQ     | REQUIREMENT                |
|           |                                           | REV     | REVISION                   |
| D         | DEAD LOAD                                 | RT      | RIGHT                      |
| DL        | DEGREE                                    | ROD INS | RIGID INSULATION           |
| DEG       | DEGREE                                    | ROD     | ROUND                      |
| DEMO      | DEMOLITION                                | SCHED   | SCHEDULE                   |
| DET       | DETAIL                                    | SC      | SCREW ANCHOR               |
| DM        | DIMENSION                                 | SHTHG   | SHEATHING                  |
| DN        | DISTANCE                                  | SM      | SIMILAR                    |
| DOUG FIR  | DOUGLAS FIR                               | SCJ     | SLAB CONTRACTION JOINT     |
| DWL       | DOWEL                                     | SQ      | SQUARE                     |
| DWG       | DRAWING                                   | SP      | SQUARE FEET                |
| E         | EACH                                      | SQ INCH | SQUARE INCH                |
| EACH      | EACH WAY                                  | SPEC    | SPECIFICATION              |
| ELEV      | ELEVATOR                                  | STD     | STANDARD                   |
| ENGR      | ENGINEER                                  | STL     | STEEL                      |
| EQU       | EQUAL/EGUALLY                             | STL_JST | STEEL JOIST                |
| EQUIP     | EQUIPMENT                                 | STIF    | STIFFENER                  |
| EXP       | EXPANSION                                 | STRUC   | STRUCTURAL                 |
| EXP-BT    | EXPANSION BOLT                            | SUB FLR | STRUCTURAL INSULATED PANEL |
| EXT       | EXTERIOR                                  | SUB     | SUBSTITUTE                 |
|           |                                           | KIP     | THOUSAND POUNDS            |
|           |                                           | FLR     | FLOOR                      |
| FACE OF   | FACE OF                                   | FTN     | FOUNDATION                 |
| FASTENER  | FASTENER                                  | FTG     | FOOTING                    |
| FEET      | FEET                                      | FS      | FOOTING STEP               |
| FLR       | FLOOR                                     | GALV    | GALVANIZED                 |
| FTN       | FOUNDATION                                | GA      | GALV                       |
| FTG       | FOOTING                                   | GC      | GENERAL CONTRACTOR         |
| FS        | FOOTING STEP                              | GL      | GLUE LAMINATED             |
|           |                                           | GLB     | GLUE LAMINATED BEAM        |
|           |                                           | GR      | GRADE                      |
|           |                                           | GR BM   | GRADE BEAM                 |
|           |                                           | GT      | GROUT                      |
|           |                                           | GYP     | GYPSPUM                    |
| HGR       | HANGER                                    |         |                            |
| HSA       | HEADED STUD ANCHOR                        | UNO     | UNLESS NOTED OTHERWISE     |
| HDR       | HEADER                                    | VIF     | VERIFY IN FIELD            |
| HT        | HEIGHT                                    | VERT    | VERTICAL                   |
| HD        | HIGH                                      |         |                            |
| HOLD-DOWN | HOLD-DOWN                                 | WLD     | WELDED/WELDED              |
| HSS       | HOLLOW STRUCTURAL SECTION                 | WWF     | WELDED WIRE FABRIC         |
| HOOK      | HOOK                                      | W       | WIDE                       |
| HORIZ     | HORIZONTAL                                | WF      | WIDE FLANGE                |
|           |                                           | WLD     | WELD LOAD                  |
|           |                                           | WI      | WITH                       |
|           |                                           | WO      | WITHOUT                    |
| INFO      | INFORMATION                               | WD      | WOOD                       |
| INT       | INTERNAL                                  | WG      | WOOD BEAM HANGER           |
| ISC       | INTERNATIONAL BUILDING CODE               | WP      | WORKING POINT              |

100% CONSTRUCTION DOCUMENTS

MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01



|                           |          |
|---------------------------|----------|
| DRAWN BY:                 | RLS, MPB |
| REVIEWED BY:              | DLF      |
| REV.   DESCRIPTION   DATE |          |

|   |       |            |
|---|-------|------------|
| 1 | ADD 1 | 10/13/2026 |
|---|-------|------------|



PPA#26-1462

Consultant #: \_\_\_\_\_

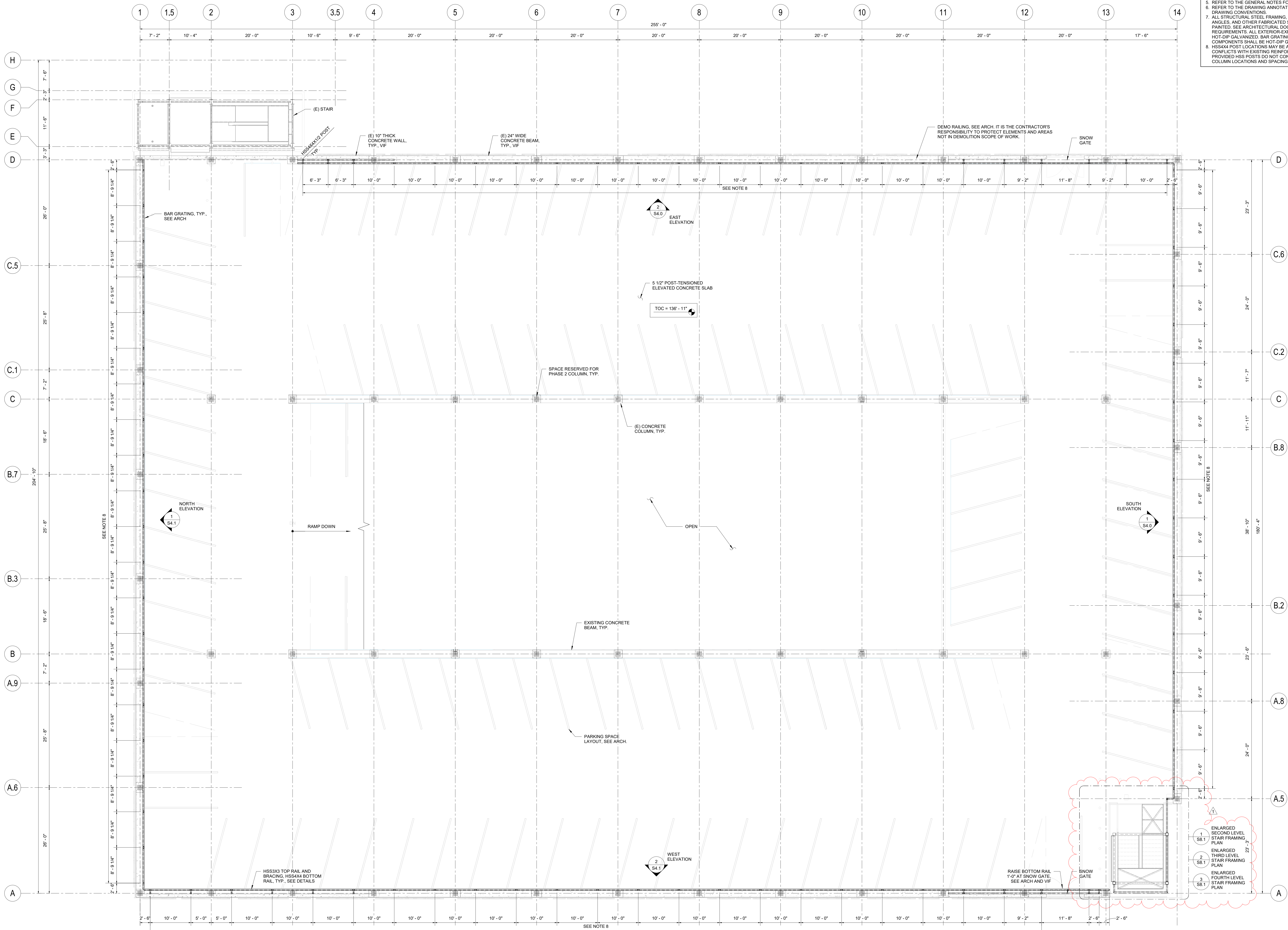
GENERAL  
STRUCTURAL  
NOTES

SHEET  
S0.0

DATE  
09/24/2026



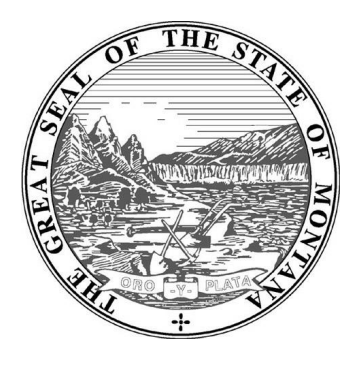
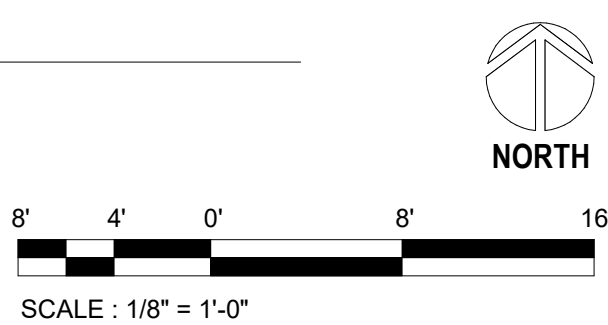
MSU-CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION  
MONTANA STATE UNIVERSITY  
1000 W. GARDEN AVENUE  
BOZEMAN, MT 59717-3100  
PHONE: 406/924-5431  
FAX: 406/924-5465



FOURTH LEVEL PLAN NOTES

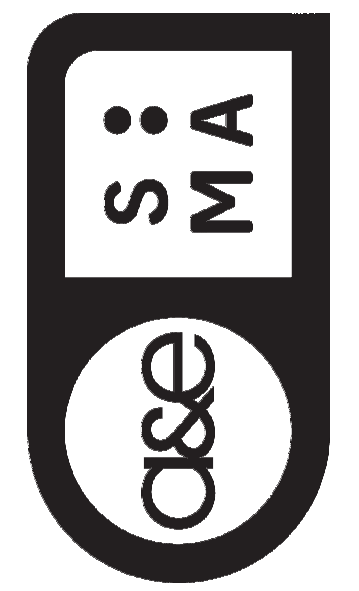
1. CONTRACTOR TO FIELD VERIFY ALL ELEMENTS, DIMENSIONS, AND ELEVATIONS.
2. PROJECT DATUM ELEVATION = 100'-0" AT TOP OF SLAB (SEE CIVIL DRAWINGS FOR ABSOLUTE ELEVATION). ALL SPOT ELEVATIONS ARE IN REFERENCE TO THE DATUM ELEVATION.
3. EXISTING BUILDINGSITE ELEMENTS, ELEVATIONS, DIMENSIONS AND ASSUMED CONDITIONS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR. AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ALL DISCREPANCIES WHICH REQUIRE A SIGNIFICANT CHANGE IN THE DESIGN AND/OR CONSTRUCTION FROM THAT SHOWN ON THE DRAWINGS.
4. IF ON SITE CONDITIONS DIFFER FROM THOSE SHOWN IN THE DRAWING SET, NOTIFY ENGINEER OF RECORD.
5. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
6. REFER TO THE DRAWING ANNOTATIONS & SYMBOLS FOR EXPLANATION OF DRAWING CONVENTIONS.
7. ALL STRUCTURAL STEEL FRAMING, BASE PLATES, CONNECTION PLATES, ANGLES, AND OTHER FABRICATED STEEL CONNECTION MATERIAL SHALL BE PAINTED. SEE ARCHITECTURAL DOCUMENTS FOR COATING AND FINISH REQUIREMENTS. ALL EXTERIOR-EXPOSED BOLTS AND FASTENERS SHALL BE HOT-DIP GALVANIZED. BAR GRATING AND GRATING CONNECTION COMPONENTS SHALL BE HOT-DIP GALVANIZED.
8. HSS/AM POST LOCATIONS MAY BE ADJUSTED AS REQUIRED TO AVOID CONFLICTS WITH EXISTING REINFORCING AND POST-TENSIONED TENDONS. PROVIDED HSS POSTS DO NOT CONFLICT WITH EXISTING CONCRETE COLUMN LOCATIONS AND SPACING DOES NOT EXCEED 10'-0" OC.

FOURTH LEVEL FRAMING PLAN  
1/8" = 1'-0" REF: 1/S4.0



MSU-CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION  
MONTANA STATE UNIVERSITY  
1500 W. GARDEN AVENUE  
BOZEMAN, MT 59717-3100  
PHONE: 406/994-5411  
FAX: 406/994-5605

100% CONSTRUCTION DOCUMENTS  
**MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01**



|                           |                  |
|---------------------------|------------------|
| DRAWN BY: <b>RLS, MPB</b> |                  |
| REVIEWED BY: <b>DLF</b>   |                  |
| REV.   DESCRIPTION        | DATE             |
| 1                         | ADD 1 10/13/2026 |

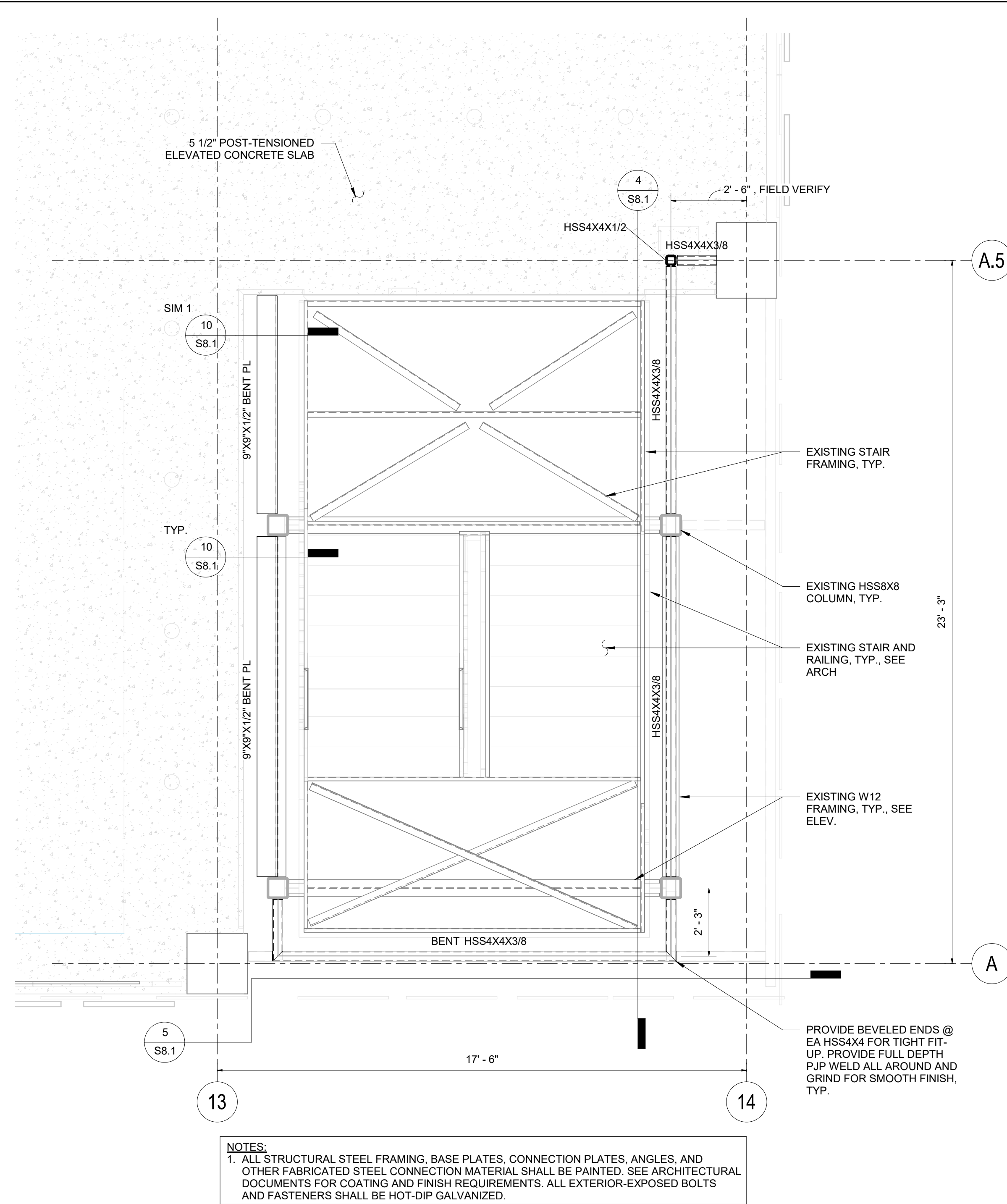


PPA#26-1462

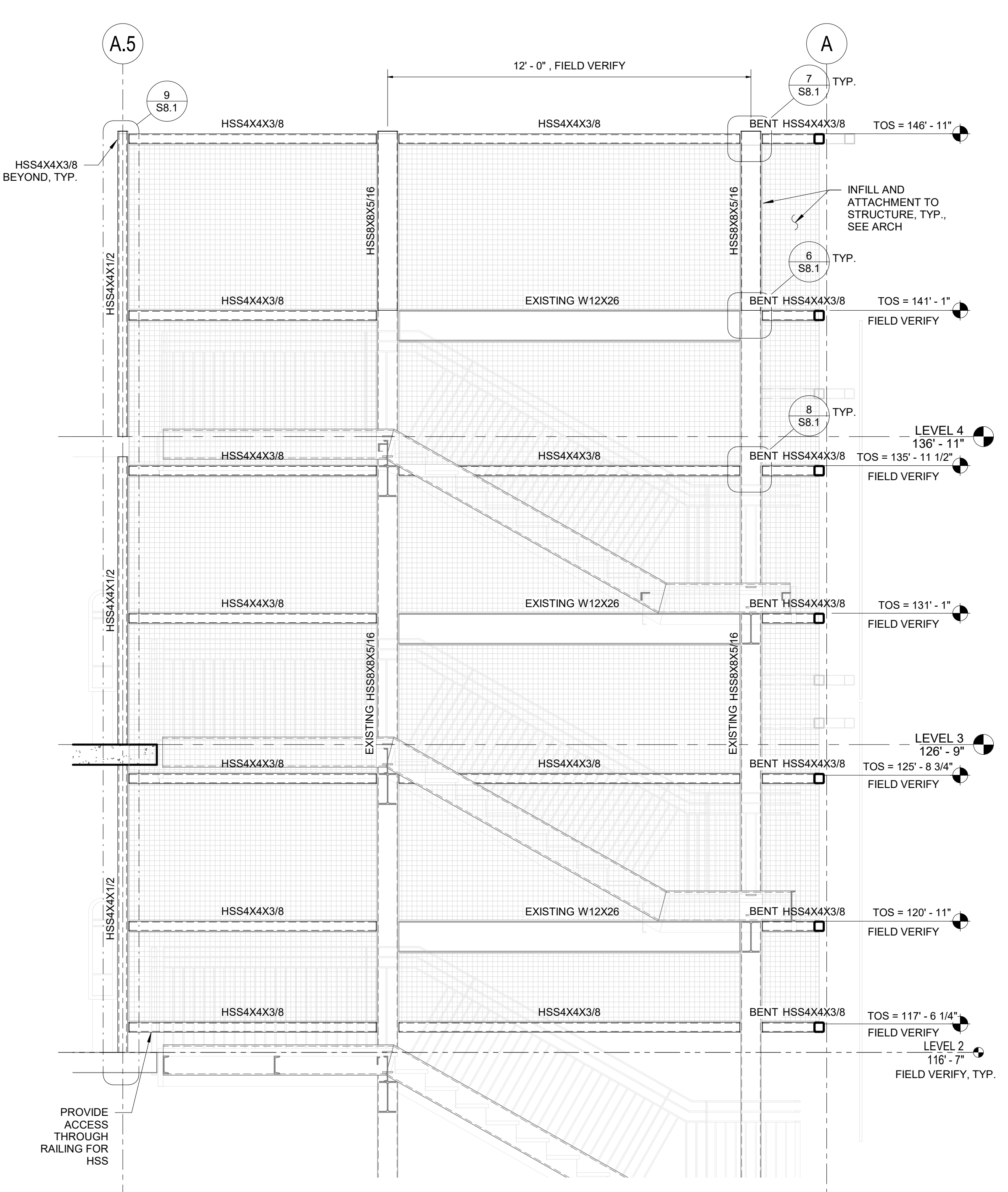
Consultant #:  
**FOURTH LEVEL  
FRAMING PLAN**

SHEET  
**S2.4**

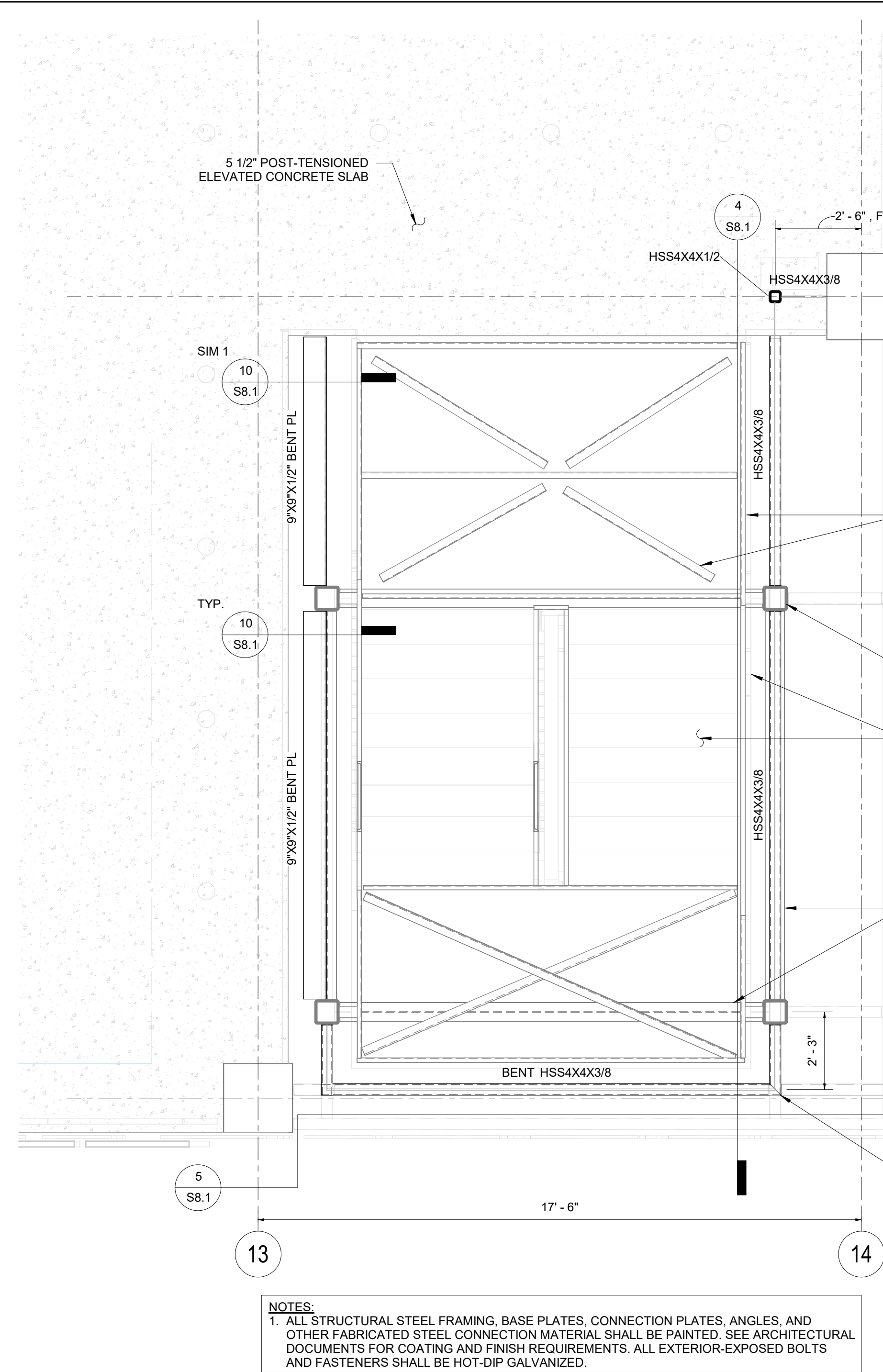
DATE  
**09/24/2026**



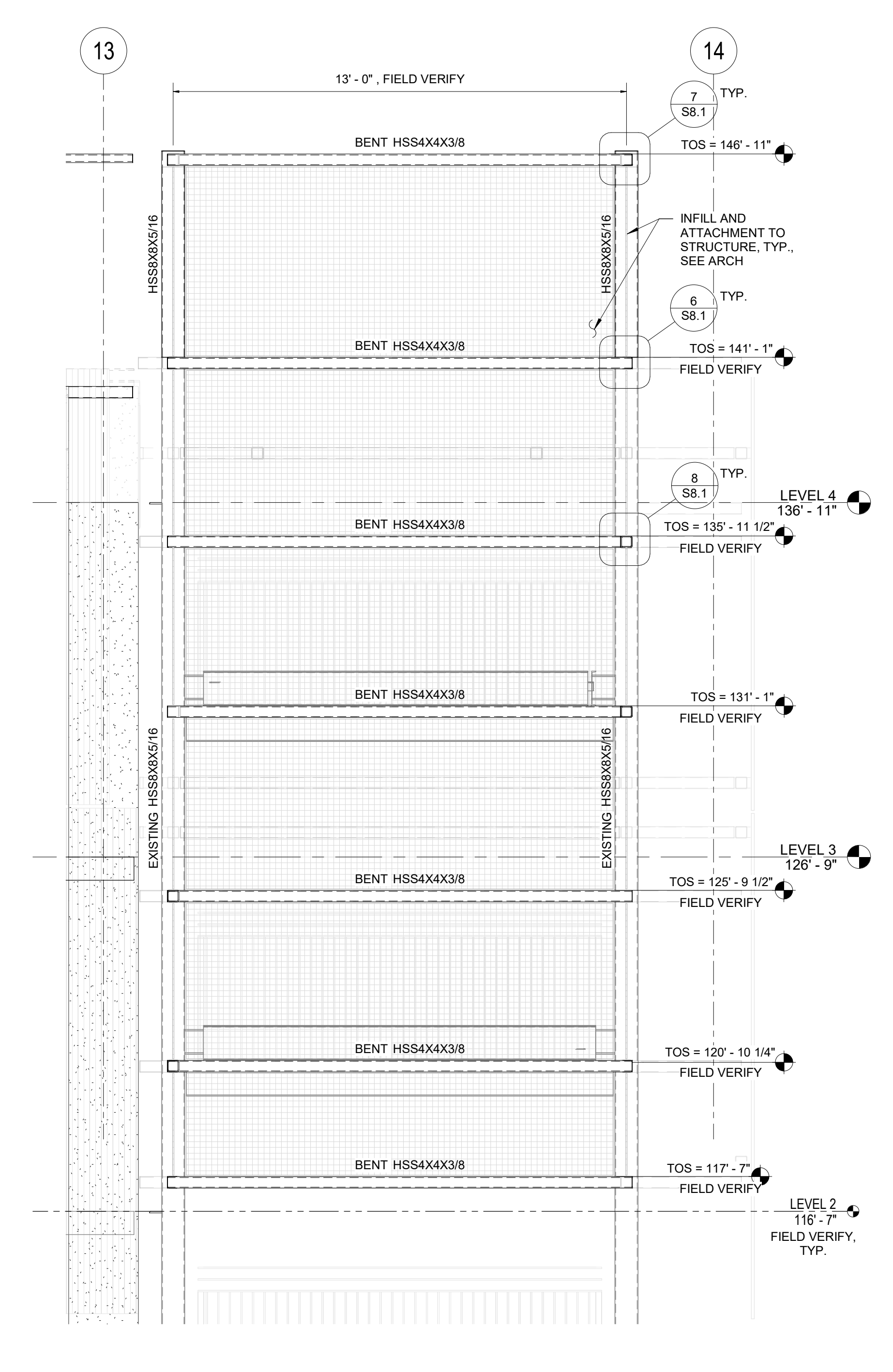
1 ENLARGED SECOND LEVEL STAIR FRAMING PLAN  
3/8" = 1'-0" REF: 1/S2.4



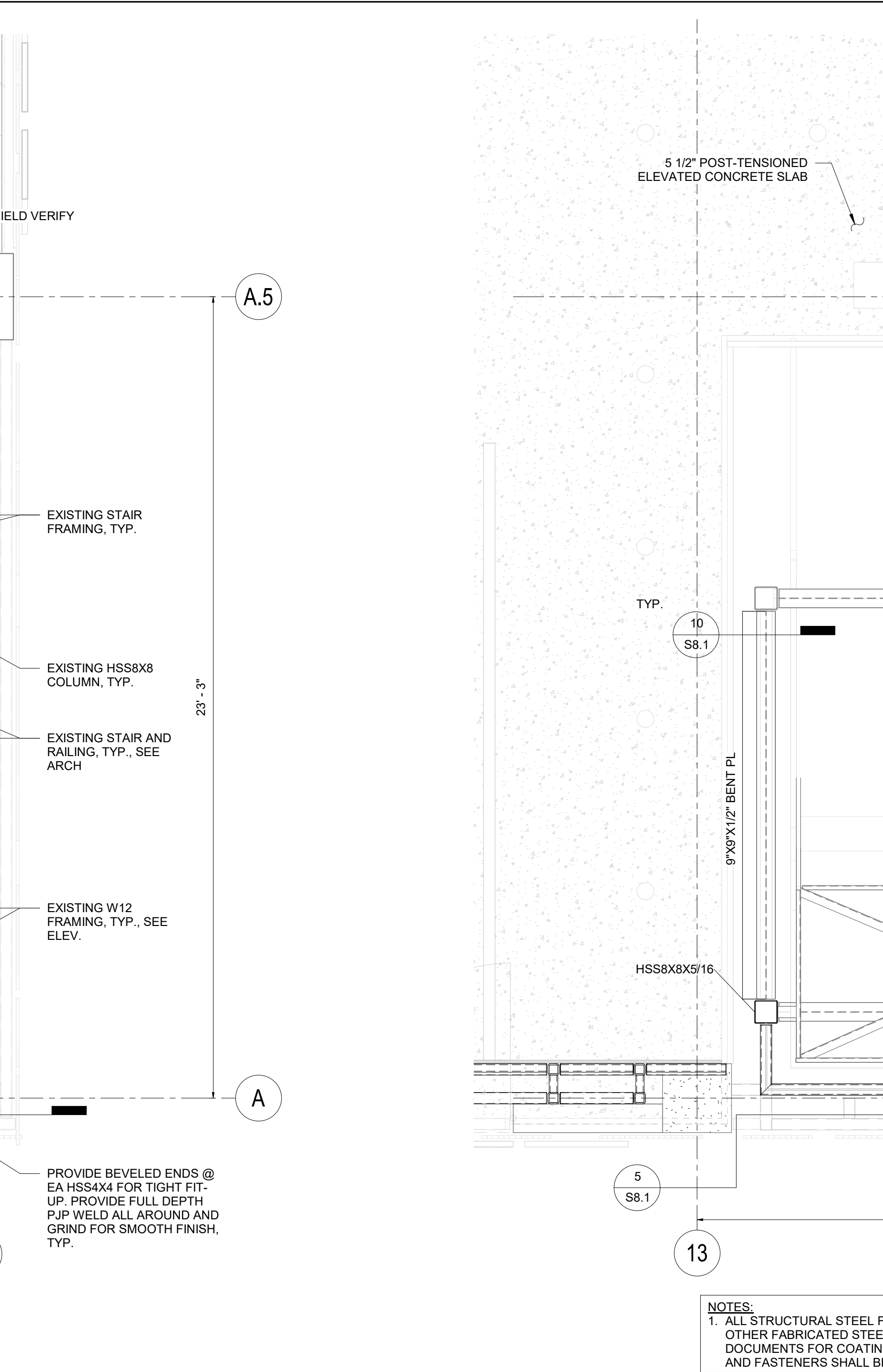
4 STAIR ELEVATION  
3/8" = 1'-0" REF: 1/S8.1



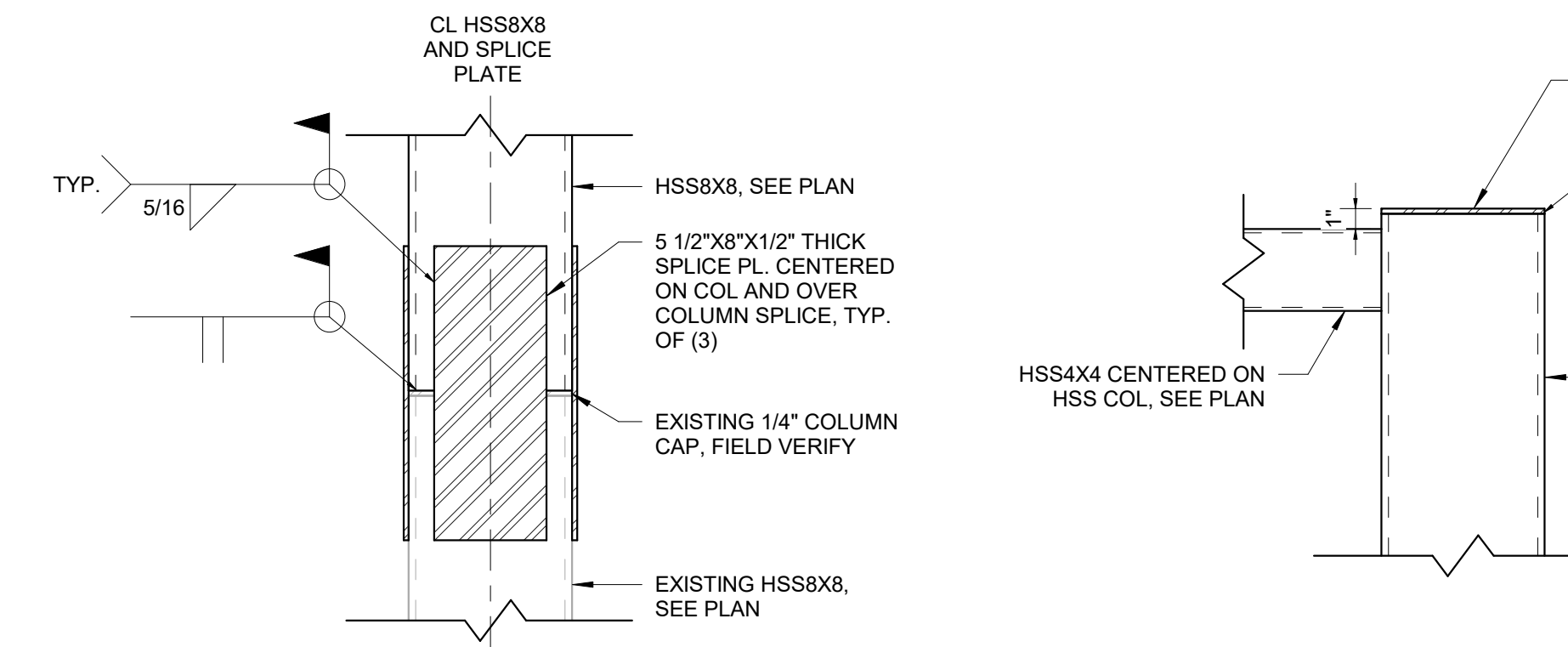
2 ENLARGED THIRD LEVEL STAIR FRAMING PLAN  
3/8" = 1'-0" REF: 1/S2.4



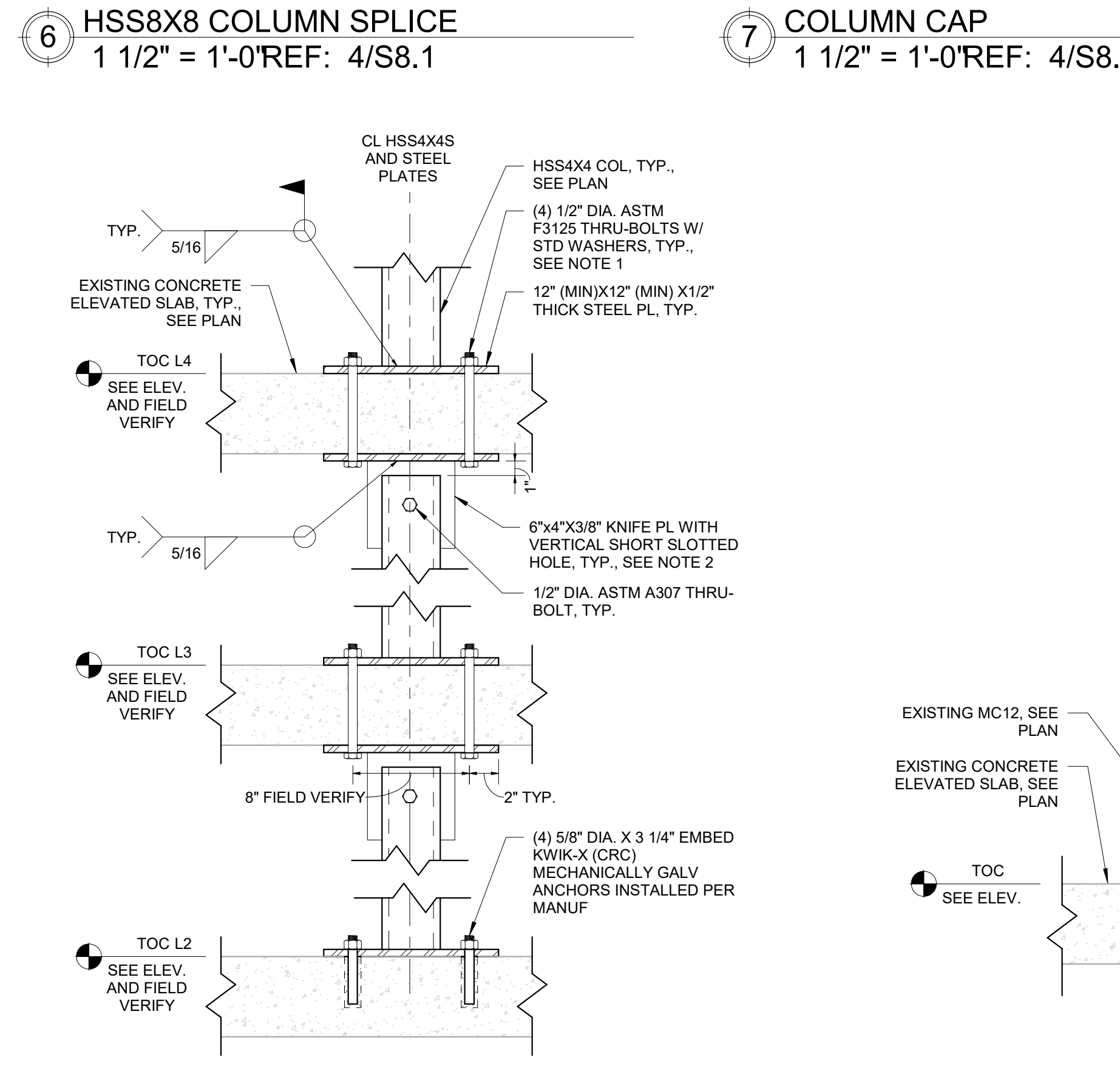
5 STAIR ELEVATION  
3/8" = 1'-0" REF: 1/S8.1



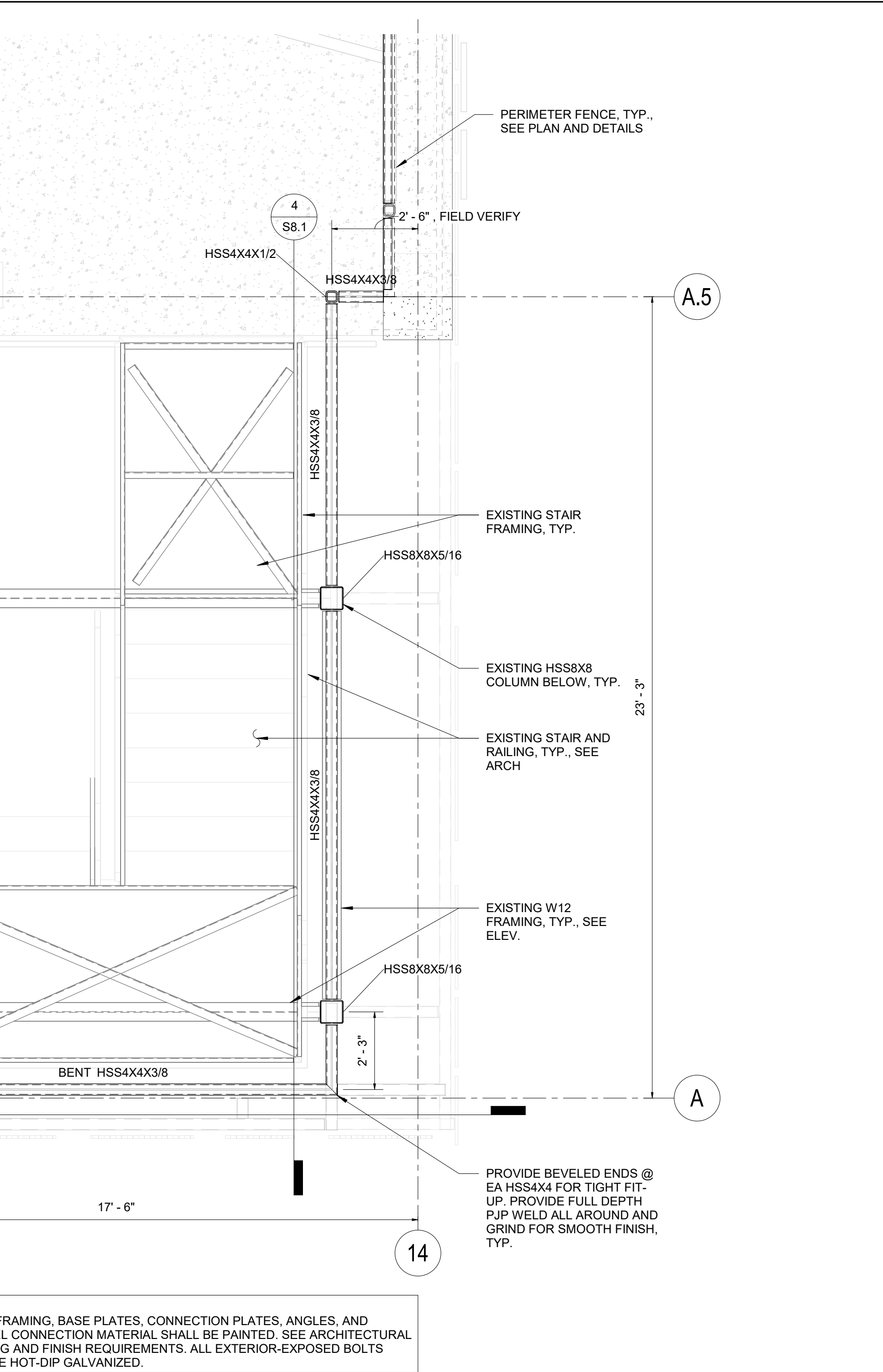
3 ENLARGED FOURTH LEVEL STAIR FRAMING PLAN  
3/8" = 1'-0" REF: 1/2-S2.4



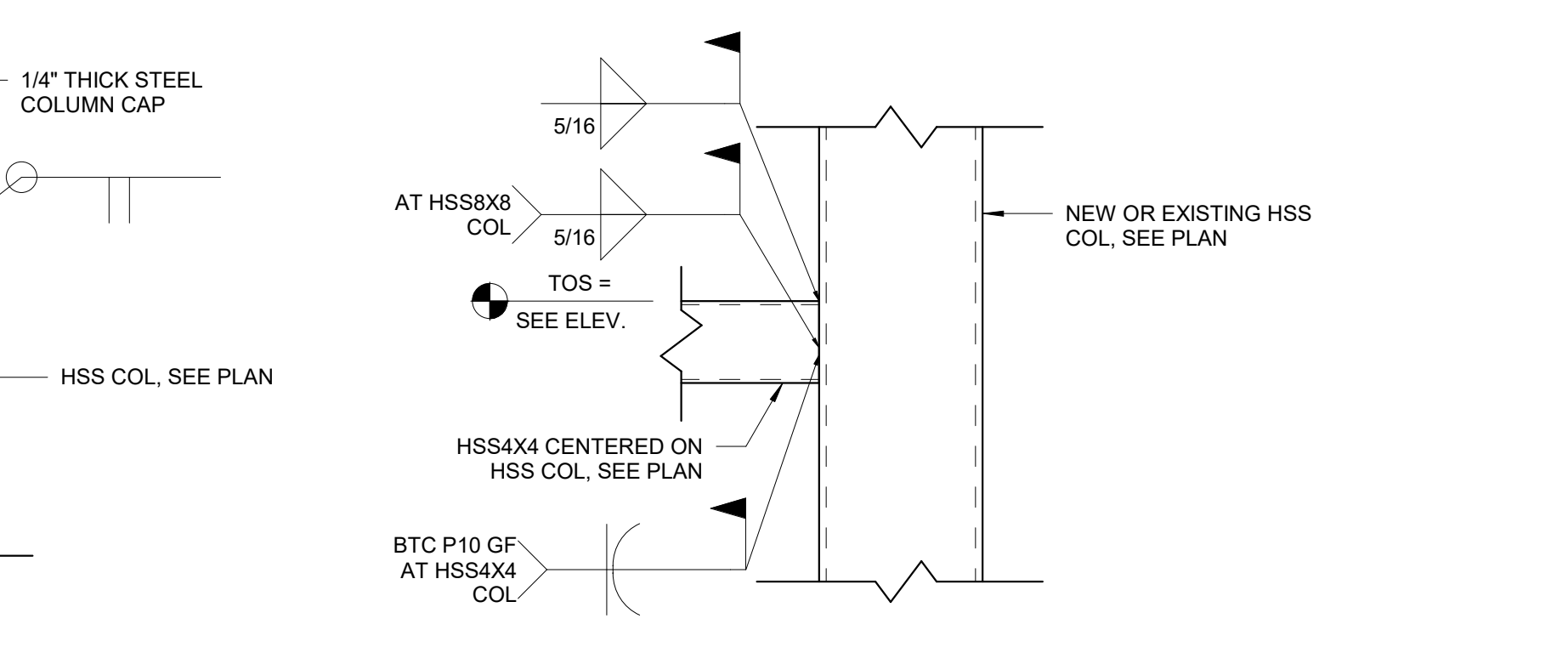
6 HSS8X8 COLUMN SPLICE  
1 1/2" = 1'-0" REF: 4/S8.1



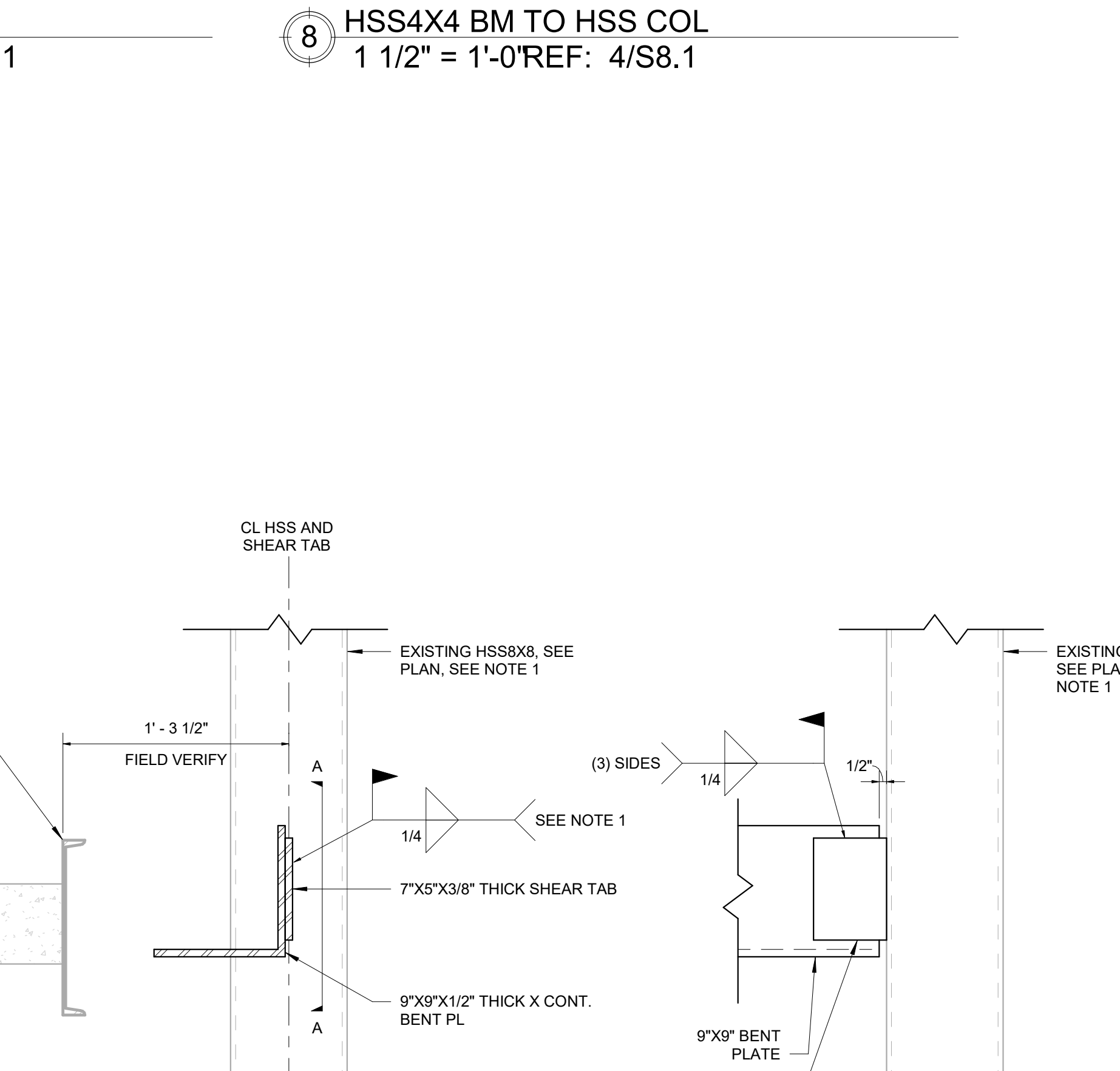
9 HSS4X4 COLUMN BASE/TOP  
1 1/2" = 1'-0" REF: 4/S8.1



10 FRAMING DETAIL  
1 1/2" = 1'-0" REF: 1/S8.1



7 COLUMN CAP  
1 1/2" = 1'-0" REF: 4/S8.1



8 HSS4X4 BM TO HSS COL  
1 1/2" = 1'-0" REF: 4/S8.1

**MSU CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION**

MONTANA STATE UNIVERSITY  
1500 W. GARDEN AVENUE  
BOZEMAN, MT 59717-3100  
PHONE: 406/924-5411  
FAX: 406/924-5465

100% CONSTRUCTION DOCUMENTS

MSU PARKING GARAGE

SAFETY UPGRADES PHASE 01

**DRAWN BY: RLS, MPB**

**REVIEWED BY: DLF**

| REV. | DESCRIPTION | DATE       |
|------|-------------|------------|
| 1    | ADD 1       | 10/13/2026 |

PPA#26-1462

Consultant #:

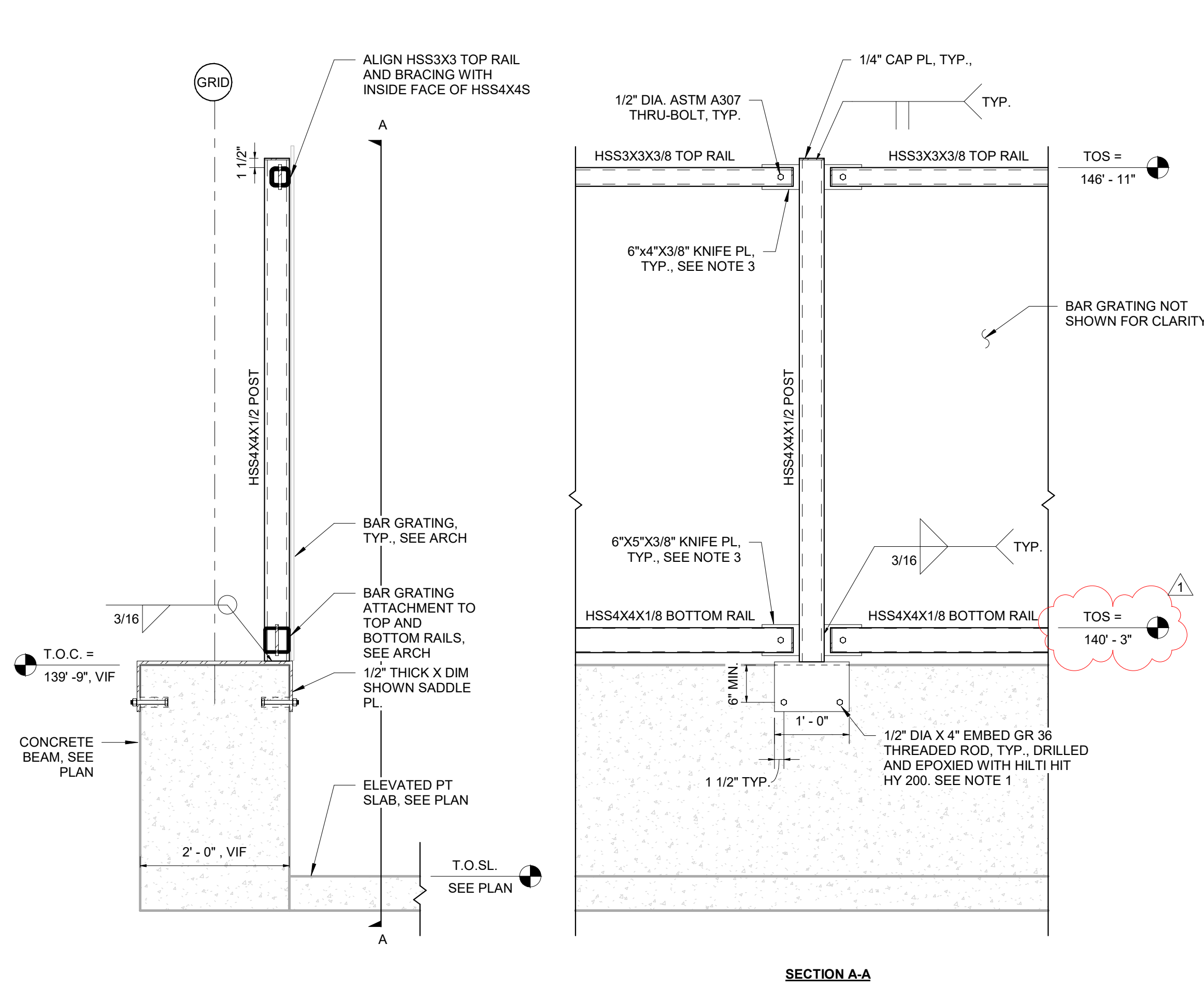
ENLARGED STAIR FRAMING PLANS AND DETAILS

SHEET

S8.1

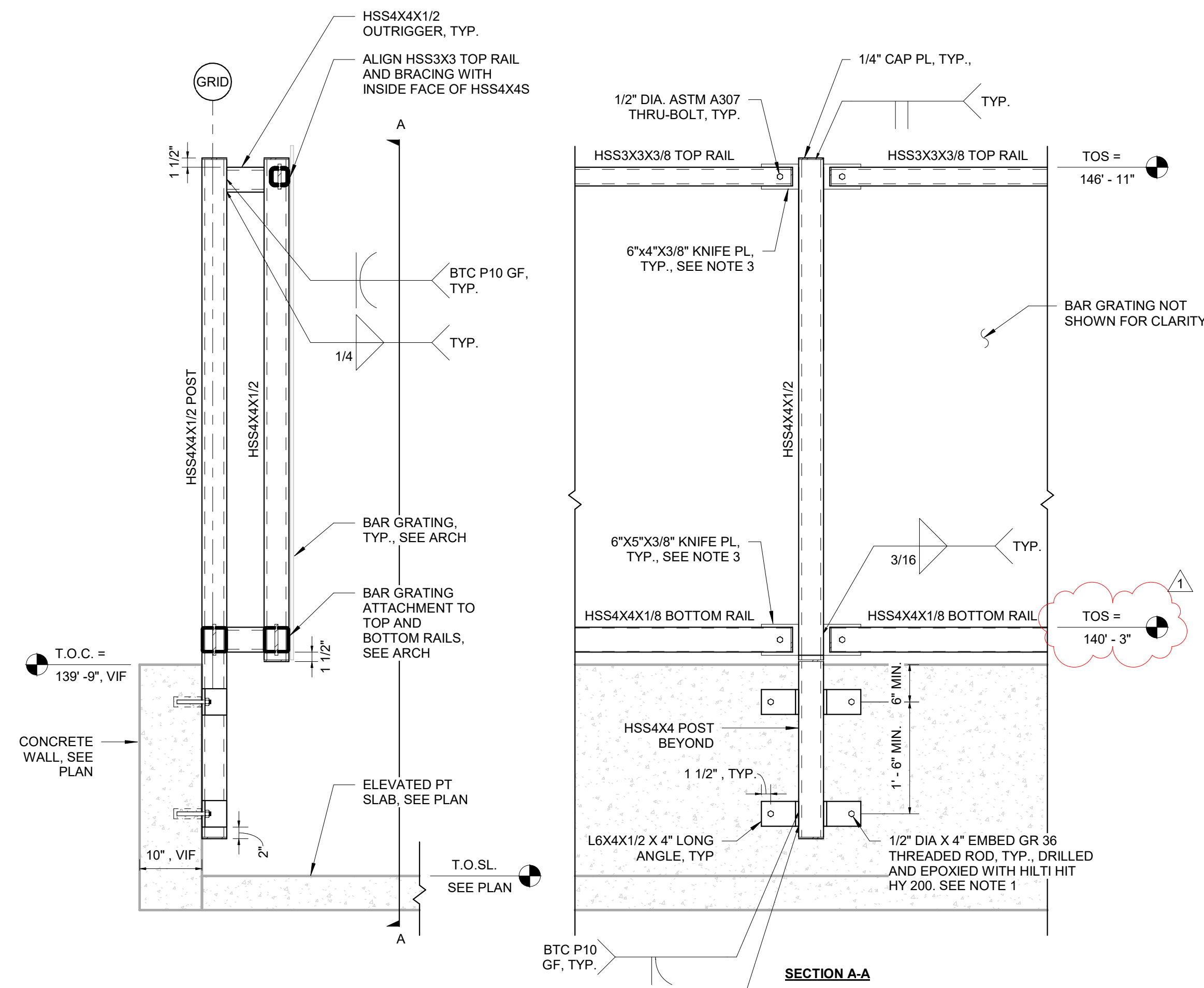
DATE

09/24/2026



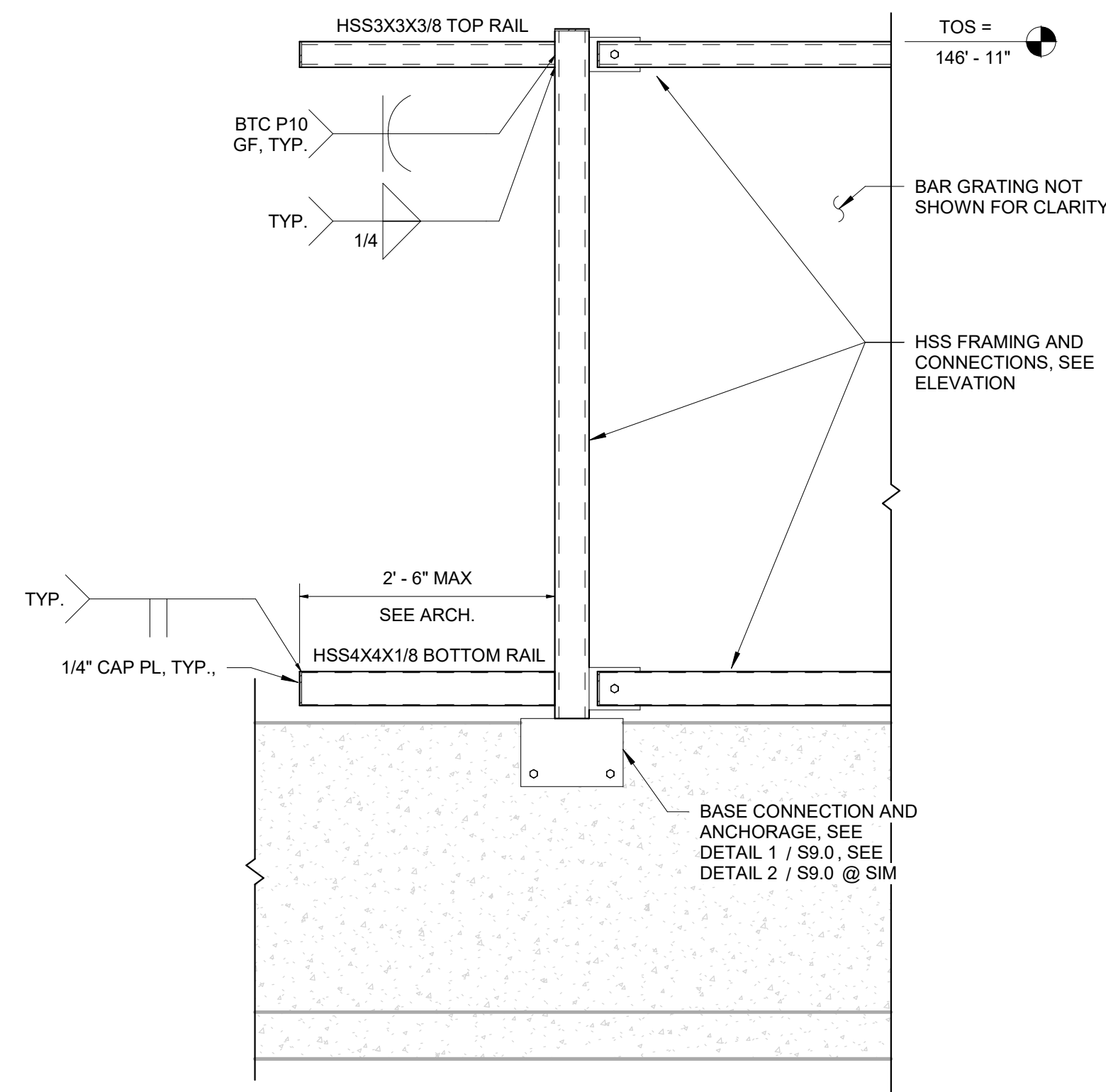
- NOTES:**
- ANCHOR LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BASED ON EXISTING CONDITIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL FIELD LOCATE EXISTING REINFORCEMENT, POST-TENSIONING TENDONS, AND OTHER EMBEDDED ITEMS USING GPR OR OTHER APPROVED NONDESTRUCTIVE SCANNING METHODS PRIOR TO DRILLING. ANCHOR LOCATIONS SHALL BE ADJUSTED AS REQUIRED TO AVOID EXISTING REINFORCEMENT, PT TENDONS, AND EMBEDDED ITEMS. DO NOT CUT, DRILL, CORE, OR OTHERWISE DAMAGE EXISTING REINFORCEMENT OR PT TENDONS. NOTIFY ENGINEER OF RECORD OF CONFLICTS THAT PREVENT INSTALLATION OF ANCHORS AT THE LOCATIONS SHOWN PRIOR TO DRILLING.
  - ALL STRUCTURAL STEEL FRAMING, BASE PLATES, CONNECTION PLATES, ANGLES, AND OTHER FABRICATED STEEL CONNECTION MATERIAL SHALL BE PAINTED. SEE ARCHITECTURAL DOCUMENTS FOR COATING AND FINISH REQUIREMENTS. ALL EXTERIOR-EXPOSED BOLTS AND FASTENERS SHALL BE HOT-DIP GALVANIZED. BAR GRATING AND GRATING CONNECTION COMPONENTS SHALL BE ALUMINUM. (1) SLOT HSS TO FIT 3/8" KNIFE PLATE WITH 1/16" MAX CLEARANCE EA SIDE; PROVIDE 5" MIN PLATE OVERLAP LENGTH BETWEEN KNIFE PL AND HSS.
  -

1 FENCE POST CONDITION AT CONCRETE BEAM  
3/4" = 1'-0" REF: 1/S4.0



- NOTES:**
- ANCHOR LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BASED ON EXISTING CONDITIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL FIELD LOCATE EXISTING REINFORCEMENT, POST-TENSIONING TENDONS, AND OTHER EMBEDDED ITEMS USING GPR OR OTHER APPROVED NONDESTRUCTIVE SCANNING METHODS PRIOR TO DRILLING. ANCHOR LOCATIONS SHALL BE ADJUSTED AS REQUIRED TO AVOID EXISTING REINFORCEMENT, PT TENDONS, AND EMBEDDED ITEMS. DO NOT CUT, DRILL, CORE, OR OTHERWISE DAMAGE EXISTING REINFORCEMENT OR PT TENDONS. NOTIFY ENGINEER OF RECORD OF CONFLICTS THAT PREVENT INSTALLATION OF ANCHORS AT THE LOCATIONS SHOWN PRIOR TO DRILLING.
  - ALL STRUCTURAL STEEL FRAMING, BASE PLATES, CONNECTION PLATES, ANGLES, AND OTHER FABRICATED STEEL CONNECTION MATERIAL SHALL BE PAINTED. SEE ARCHITECTURAL DOCUMENTS FOR COATING AND FINISH REQUIREMENTS. ALL EXTERIOR-EXPOSED BOLTS AND FASTENERS SHALL BE HOT-DIP GALVANIZED. BAR GRATING AND GRATING CONNECTION COMPONENTS SHALL BE ALUMINUM. (1) SLOT HSS TO FIT 3/8" KNIFE PLATE WITH 1/16" MAX CLEARANCE EA SIDE; PROVIDE 5" MIN PLATE OVERLAP LENGTH BETWEEN KNIFE PL AND HSS.
  -

2 FENCE POST CONDITION AT CONCRETE WALL  
3/4" = 1'-0" REF: 2/S4.0



- NOTES:**
- ALL STRUCTURAL STEEL FRAMING, BASE PLATES, CONNECTION PLATES, ANGLES, AND OTHER FABRICATED STEEL CONNECTION MATERIAL SHALL BE PAINTED. SEE ARCHITECTURAL DOCUMENTS FOR COATING AND FINISH REQUIREMENTS. ALL EXTERIOR-EXPOSED BOLTS AND FASTENERS SHALL BE HOT-DIP GALVANIZED. BAR GRATING AND GRATING CONNECTION COMPONENTS SHALL BE ALUMINUM. (1)

3 FENCE POST CONDITION AT CANTILEVERED FENCE  
3/4" = 1'-0" REF: 1/S4.0

100% CONSTRUCTION DOCUMENTS

MSU PARKING GARAGE  
SAFETY UPGRADES PHASE 01



| DRAWN BY: RLS, MPP |             |            |
|--------------------|-------------|------------|
| REVIEWED BY: DJF   |             |            |
| REV                | DESCRIPTION | DATE       |
| 1                  | ADD 1       | 09/13/2024 |



PPA#26-1462

Consultant #:

ANCHORAGE  
AND FRAMING  
DETAILS

SHEET  
S9.0

DATE  
09/24/2026



MSU CAMPUS PLANNING,  
DESIGN, AND CONSTRUCTION  
MONTANA STATE UNIVERSITY  
1000 UNIVERSITY AVENUE  
BOZEMAN, MONTANA 59717-1000  
PHONE: 406.994.5411  
FAX: 406.994.5465