

STRUCTURAL NOTES

- Design Live Loads:
- A. Roofs 85 psf
 - B. Floors 40 psf
 - C. Wind 120 mph, Exposure B, ASCE 7-10
 - D. Seismic Design Category B, Soil Type D, 2009 IBC

- Foundation Criteria:
- A. In lieu of a soils report, The Engineer of Record shall use local knowledge to approximate the soil conditions on site and a test pile shall be advanced near the location of the proposed pile installation(s) to determine the approximate depth and helix diameter(s) required to achieve the desired minimum torque(s).
 - B. The helical pile foundations and tiebacks are designed in accordance with the Practical Design and Inspection Guide for Helical Piles and Helical Tension Anchors Compiled and Prepared by John S. Pack, P.E. for I.M.R., Inc., Denver, Colorado, Revision 2, July 27, 2009.
 - C. The helical piles and tension anchors shall be installed to the minimum torques and lengths specified herein.
 - D. The installation of the helical piles and tension anchors shall be monitored and recorded by a representative of SEAD, Inc. or approved independent testing agency.

- Reinforced Concrete:
- A. Structural concrete shall be Type I, and have a minimum 28 day strength of 4,000 psi, w/ min 6% entrained air for durability.
 - B. Reinforcing bars shall conform to ASTM spec. A615-79 and shall be Grade 60.
 - C. All concrete work shall conform to the requirements of ACI318 and 301, latest edition.
 - D. At splices, lap bars a minimum of 34 diameters. At corners and intersections, make horizontal continuous or provide matching corner bars. Around openings in walls and slabs, provide (2) #5 bars extending a minimum of 2 feet beyond the edge of the opening.
 - E. Concrete cover shall conform to ACI 318-08, 7.7. Unless a greater cover is required, concrete cast against earth shall have 3in. min. cover, concrete exposed to earth or weather shall have 1 1/2in. min. cover for No. 5 bars & smaller & 2in. min. cover for No. 6 bars & greater. Concrete not exposed to weather shall have 3/4" min. cover for No. 11 bars & smaller.

- Structural Steel:
- A. All bolts, including anchor bolts, shall conform to ASTM spec. A307.
 - B. Structural steel rolled shapes, including plates and angles, shall be ASTM A36.
 - C. Expansion bolts called for on the drawings shall be Simpson "Weg-All", "Strong-Bolt 2" or approved wedge type anchors with the following minimum embedments: 3/4" diameter bolts - 3 3/8", 5/8" diameter bolts - 2 3/4", 1/2" diameter bolts - 2 1/4".
 - D. All epoxy shall be Simpson "Set-XP" and shall be installed per the "Anchoring and Fastening Systems For Concrete and Masonry" Simpson catalog RC-SAS-2012 by qualified personnel.
 - E. Field welded connections must be inspected by the Engineer Of Record or approved 3rd party.
 - F. Fillet welds indicated on the plans shall be of E70xx electrodes and shall be the minimum size specified in the AISC Manual of Steel Construction, Table J2.4.

- Structural Wood Framing:
- A. Unless noted otherwise, all 2" lumber shall be Douglas Fir S4S No. 2 and better. All solid timber beams and posts shall be DF-L No. 1 or better.
 - B. Unless noted otherwise, minimum nailing shall be provided as specified in Table No. 2304.9.1, "Fastening Schedule", of the 2009 IBC or Table No. R602.3(1), "Fastener Schedule For Structural Members", of the 2009 IRC.
 - C. Wall and floor sheathing shall be APA rated with exterior glue and graded in accordance with APA standards. Panel identification and thickness shall be as noted on the drawings.
 - D. Where light gauge framing anchors are shown or required, they shall be Simpson "Strong Tie" (or equal approved by ICEO). They shall be installed with the number and type of fasteners recommended by the manufacturer to develop the rated capacity.
 - E. Laminated Veneer Lumber shall be of such stress grade to provide an allowable bending stress of 2,600 psi, allowable shear stress parallel to the glue line of 285 psi and a modulus of elasticity of 1,900,000 psi.

STRUCTURE LEGEND

- = COLUMN BELOW
- ▣ = COLUMN ABOVE
- = COLUMN CONTINUOUS THIS LEVEL
- ▲— = RAFTER
- ▲— = JOIST
- — — = BEAM
- — — = RIM
- — — = LEDGER
- — — = TYPICAL HEADER
- ▲— = CLOSURE WALL
- ▲— = HANGER
- ▲— = CLIP

NOTE:

ALL EXTERIOR WALLS SHALL BE 1hr. FIRE RATED PER GA FILE NO. WP8105
Re: SHEET A-1

CEILING SHALL BE 1 hr. FIRE RATED PER GA FILE NO. RC2601
Re: SHEET A-1

GRADE BEAM SCHEDULE

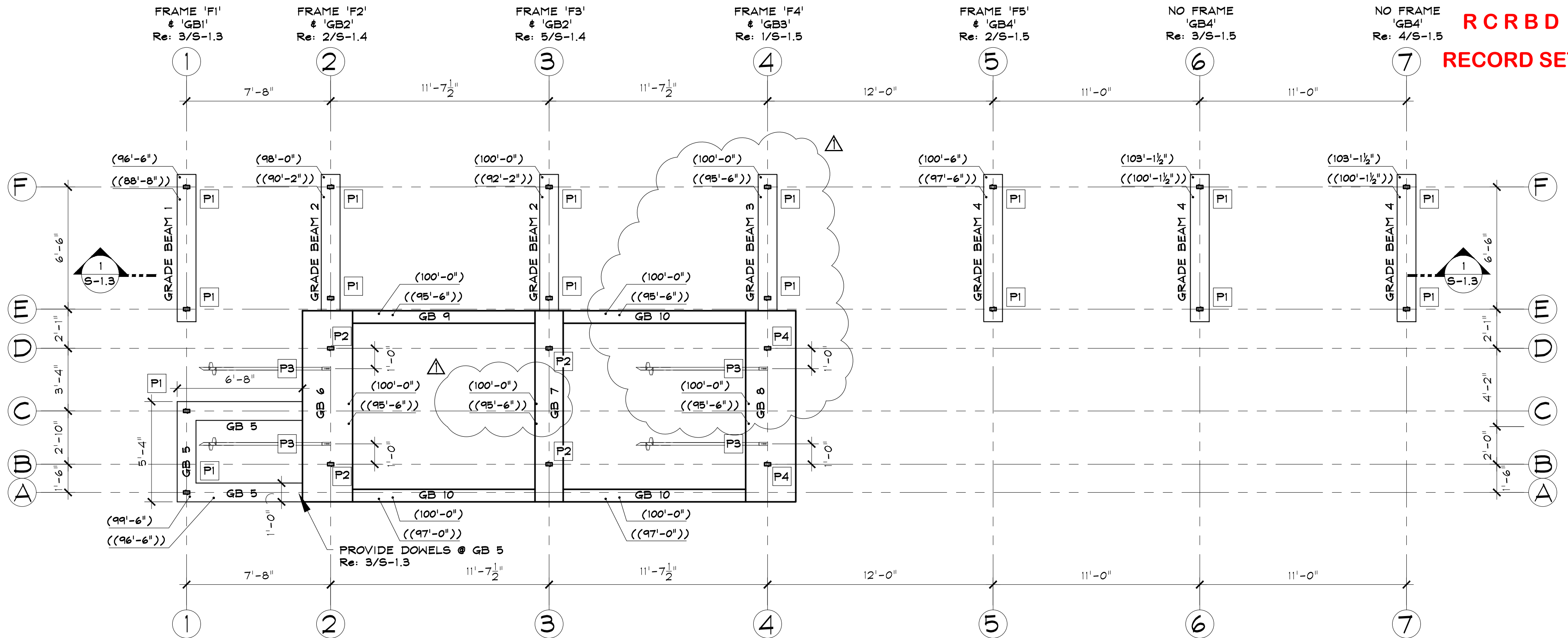
BEAM I.D.	SIZE (lwxh)	REINF.	BEAM I.D.	SIZE (lwxh)	REINF.
GB 1	7'-10"x11'-0" X7'-10"	(2) #5 BARS @ 18" O.C. w/ STIRRUP 'A' @ 12" O.C., T4B & #5 VERTS @ 12" O.C.	GB 6	10'-2"x2'-8" X4'-6"	(4) #5 BARS @ T4B w/ (2) #5 BARS @ 14" O.C. w/ STIRRUP 'B' @ 12" O.C. & #4 TIES
GB 2	7'-3"x11'-0" X7'-10"	(2) #5 BARS @ 18" O.C. w/ STIRRUP 'A' @ 12" O.C., T4B & #5 VERTS @ 12" O.C.	GB 7	10'-2"x11'-6" X4'-6"	(2) #5 BARS @ 12" O.C. w/ STIRRUP 'C' @ 12" O.C. & #4 TIES
GB 3	7'-13"x11'-0" X4'-6"	(2) #5 BARS @ 16" O.C. w/ STIRRUP 'A' @ 12" O.C., T4B & #4 TIES	GB 8	10'-2"x2'-8" X4'-6"	(2) #5 BARS @ 12" O.C. w/ STIRRUP 'D' @ 12" O.C. & #4 TIES
GB 4	7'-10"x11'-0" X3'-0"	(2) #5 BARS @ 16" O.C. w/ STIRRUP 'A' @ 12" O.C., T4B & #4 TIES	GB 9	9'-8 1/2"x0'-8" X4'-6"	(2) #5 BARS @ TOP & BOTTOM w/ #4 DOWELS @ 18" O.C. INTO SLAB
GB 5	PER PLAN	(2) #5 BARS @ 16" O.C. w/ STIRRUP 'A' @ 12" O.C., T4B & #4 TIES	GB 10	9'-8 1/2"x0'-8" X4'-6"	(2) #5 BARS @ TOP & BOTTOM w/ #4 DOWELS @ 18" O.C. INTO SLAB

HELICAL PILE SCHEDULE

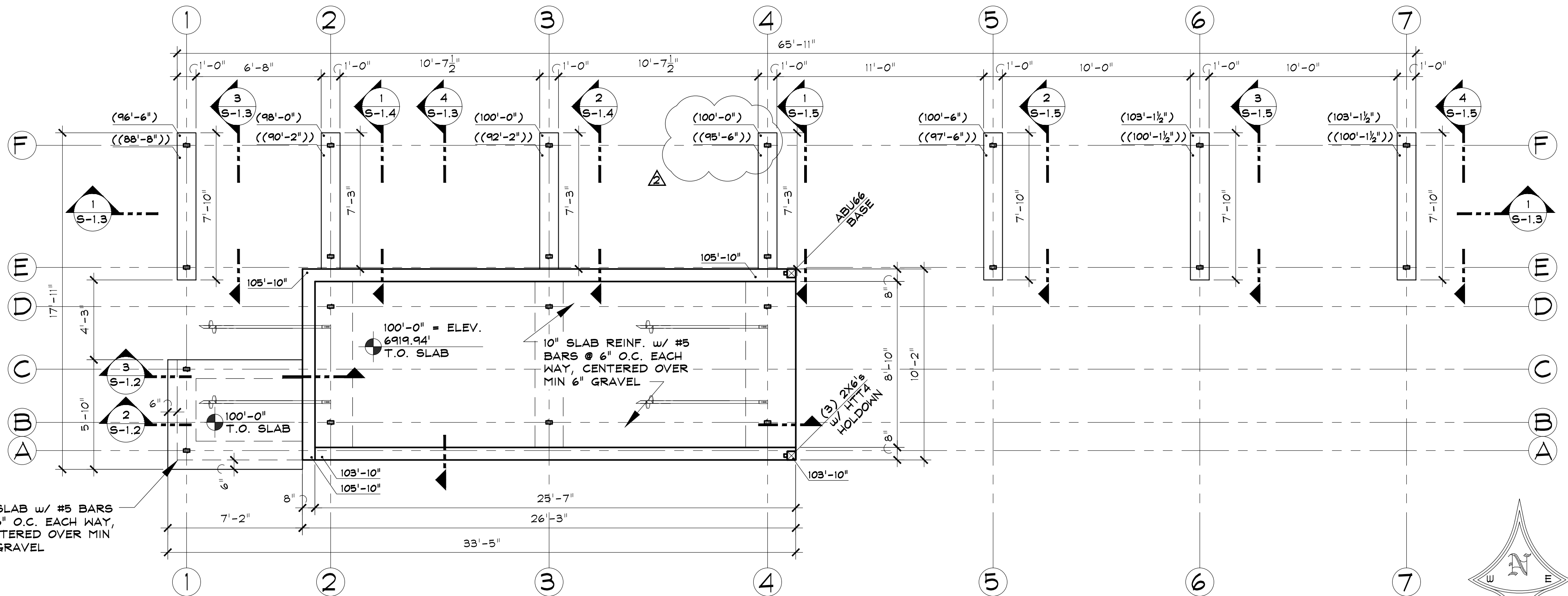
PILE I.D.	PILE TYPE	ORIENTATION	MIN. LENGTH Feet	MIN. TORQUE Ft. - Lbs.	QUANTITY
P1	HPC15	VERTICAL	7	3,000	(16)
P2	HPC15	VERTICAL	7	5,000	(4)
P3	HPC15	BATTERED 30°	8	5,000	(4)
P4	HPC15	VERTICAL	7	4,000	(2)

- NOTES:
1. MINIMUM TORQUE INCLUDES F.S. = 2 FOR HELICAL PILES
 2. PROVIDE RC150 PILE CAP FOR ALL PILES

RCRBD
RECORD SET



2 HELICAL PILE / GRADE BEAM PLAN - GRADE BEAMS 6-10 TO BE POURED MONOLITHICALLY
TYPICAL - ELEVATION @ TOP OF CONCRETE GRADE BEAM INDICATED THUS: (ELEV.)
TYPICAL - ELEVATION @ BOTTOM OF CONCRETE GRADE BEAM INDICATED THUS: ((ELEV.))
SCALE: 1/4" = 1'-0"



1 FOUNDATION PLAN - POUR SLAB MONOLITHICALLY w/ GRADE BEAMS 6,7,8,9 & 10
TYPICAL - ELEVATION @ TOP OF CONCRETE WALL INDICATED THUS: ELEV.
TYPICAL - ELEVATION @ TOP OF CONCRETE GRADE BEAM INDICATED THUS: (ELEV.)
TYPICAL - ELEVATION @ BOTTOM OF CONCRETE GRADE BEAM INDICATED THUS: ((ELEV.))
TYPICAL - COLUMNS THAT BEGIN THIS LEVEL ARE INDICATED ON PLAN
SCALE: 1/4" = 1'-0"

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TENSIONING STATION
2305 MT. WERNER CIRCLE
STEAMBOAT SPRINGS, COLORADO
A NEW STRUCTURE FOR:
SSRC - STEAMBOAT SKI & RESORT CORP.

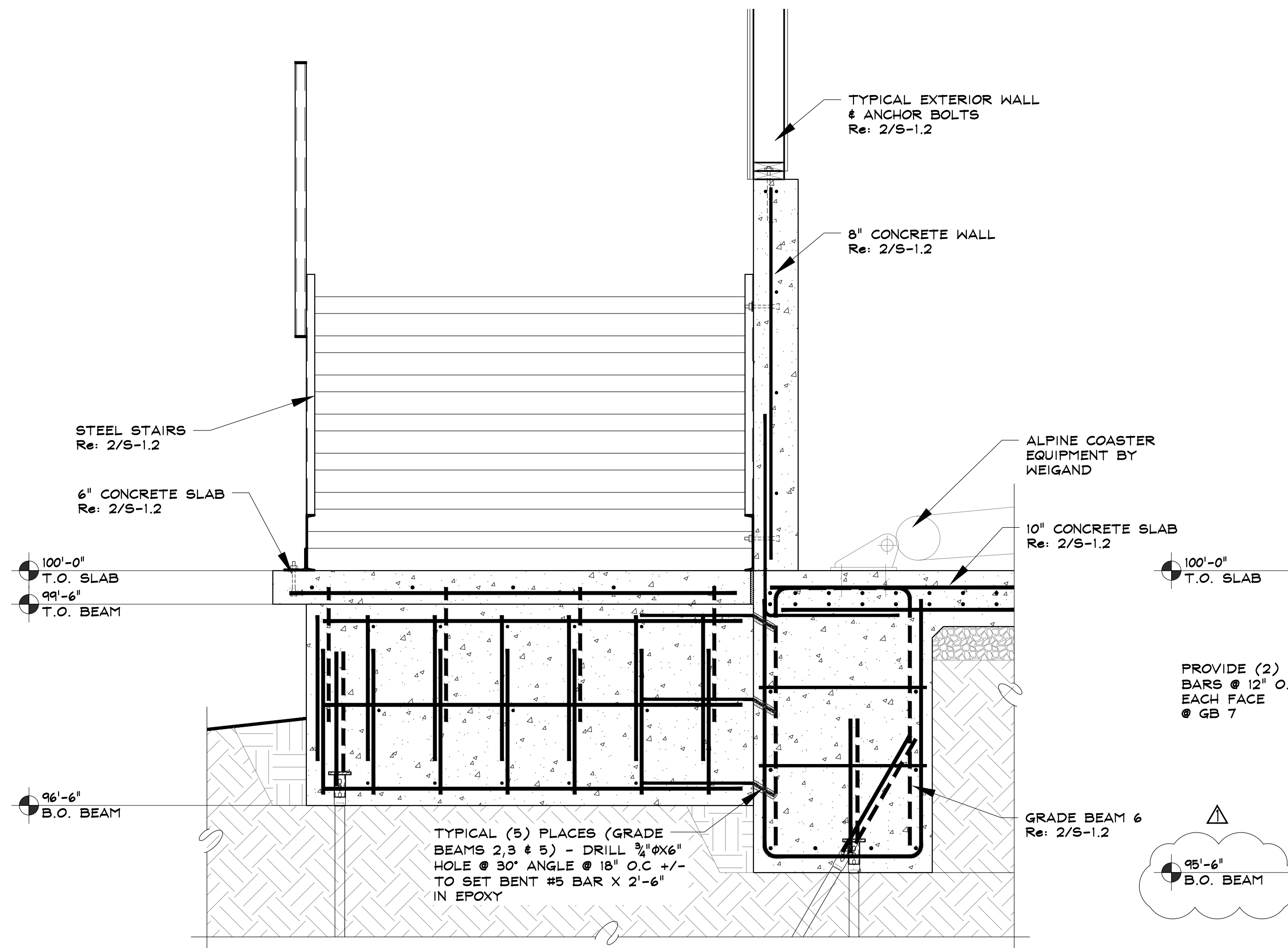
ISSUE DATES
PROGRESS
08 . 03 . 16
PRICING SET
08 . 10 . 16
PERMIT
08 . 11 . 16
09 . 01 . 16
09 . 07 . 16

DRAWN BY:
SJM/JEM
PROJECT # 16020

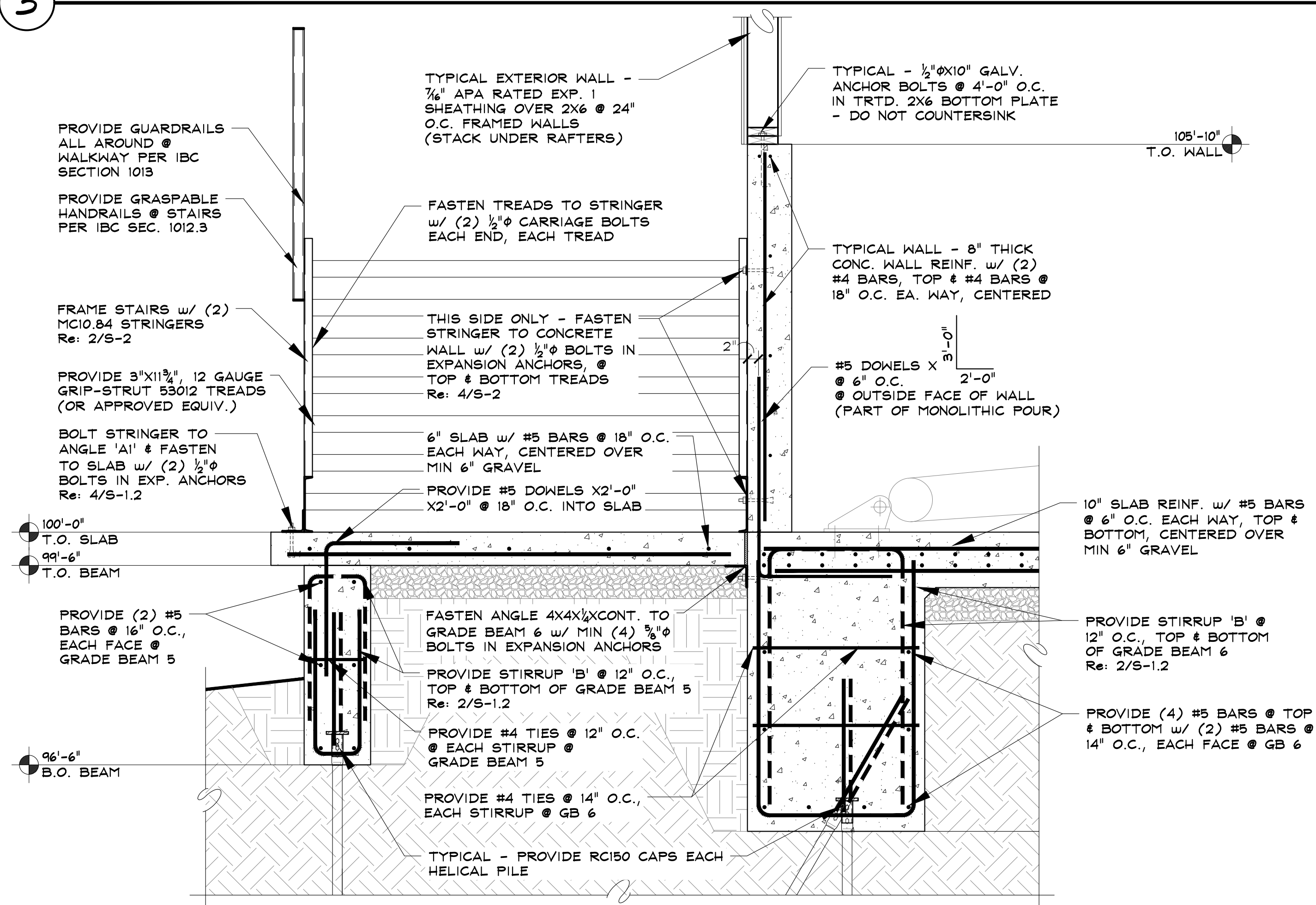
FOUNDATION
PLAN & NOTES

S-1
SHEET 4 of 10

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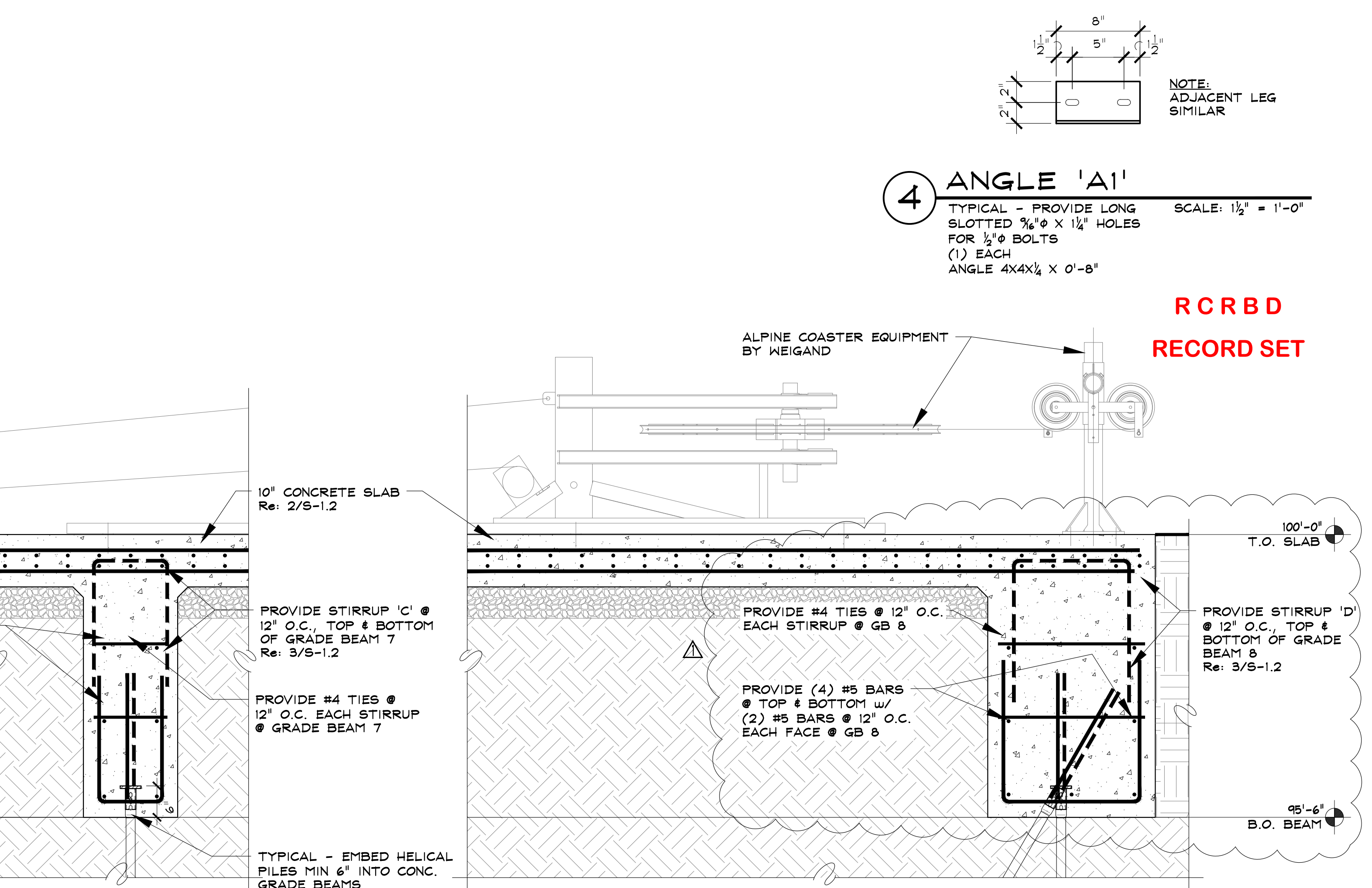


3 ENHANCED SECTION THROUGH STRUCTURE



2 ENHANCED SECTION THROUGH STAIRS

SCALE: 3/4" = 1'-0"



1 LONGITUDINAL SECTION THROUGH STRUCTURE

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

4 ANGLE 'A1'
TYPICAL - PROVIDE LONG SLOTTED 3/4" Ø X 1 1/4" HOLES FOR 1/2" Ø BOLTS (1) EACH ANGLE 4X4X1/4 X 0'-8"
SCALE: 1 1/2" = 1'-0"

RCRBD
RECORD SET

TENSIONING STATION

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A NEW STRUCTURE FOR:

SSRC - STEAMBOAT SKI & RESORT CORP.

ISSUE DATES	
PROGRESS	08 . 03 . 16
PRICING SET	08 . 10 . 16
PERMIT	08 . 11 . 16
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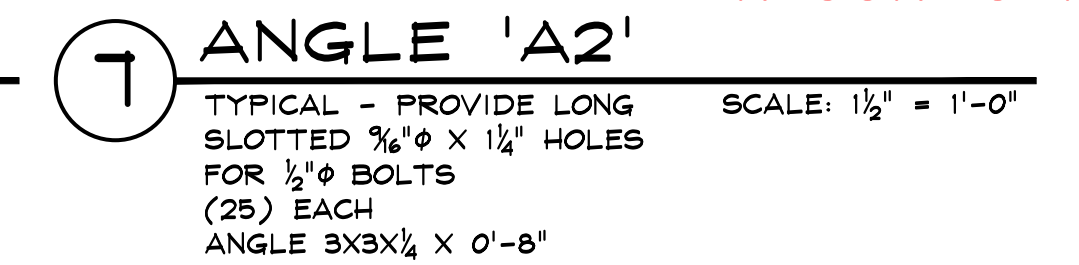
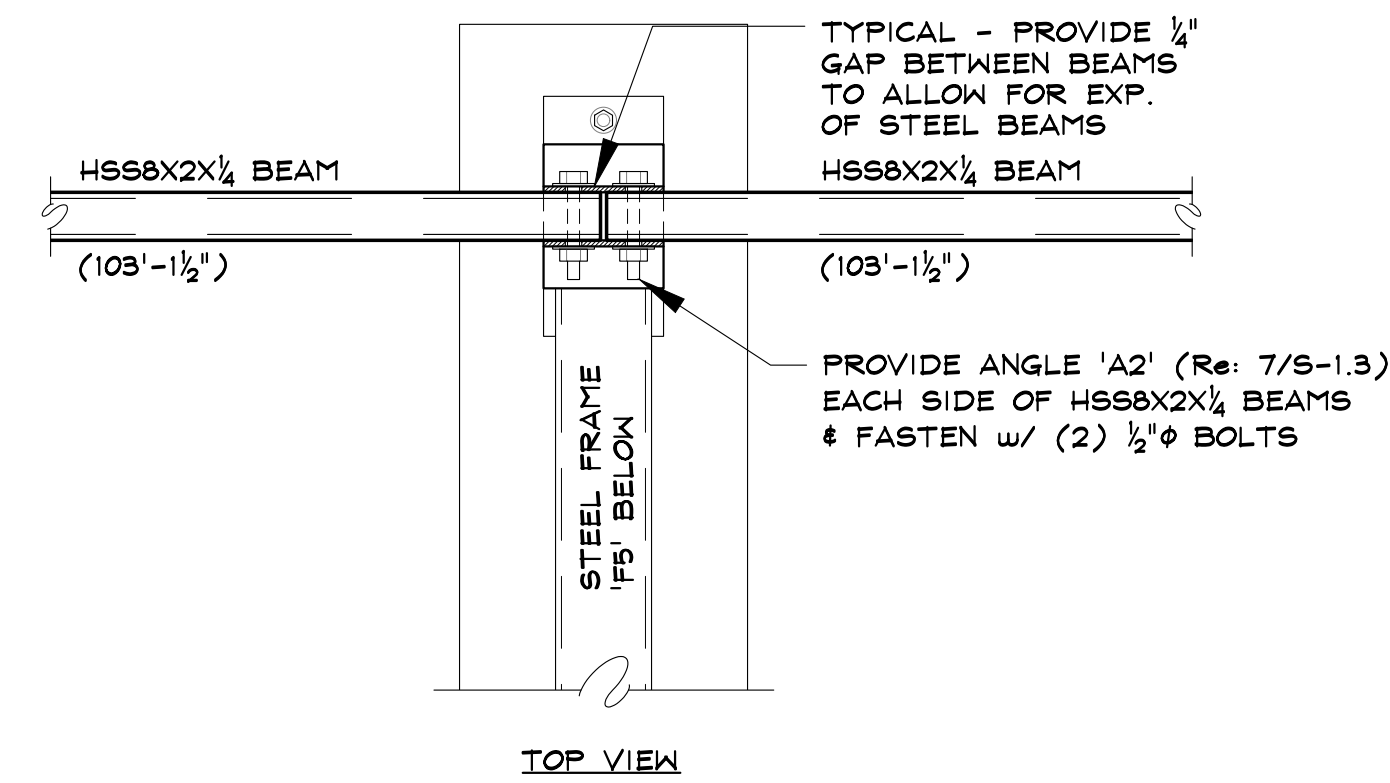
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PROJECT # 16020

FOUNDATION
SECTIONS

S-1.2

SHEET 6 of 10

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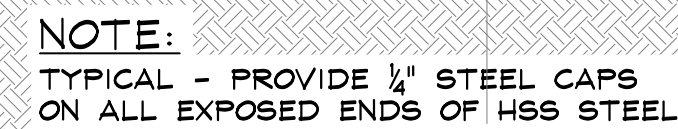
SCALE: $1\frac{1}{2}" = 1'-0"$

SCALE: $\frac{1}{2}" = 1'-0"$

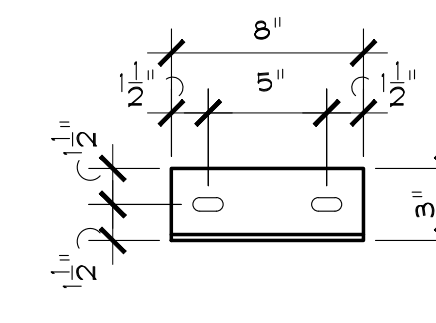
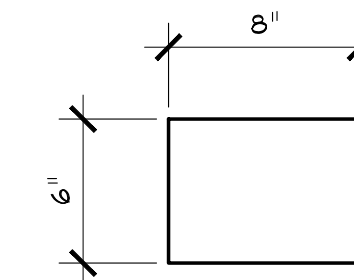


SCALE: $\frac{3}{4}" = 1'-0"$

SCALE: $\frac{1}{2}" = 1'-0"$



SCALE: $\frac{1}{4}" = 1'-0"$



R C R B D
RECORD SET



TENSIONING STATION
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A NEW STRUCTURE FOR:
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ISSUE DATES

PROGRESS
08 . 03 . 16

PRICING SET
08 . 10 . 16

PERMIT
08 . 11 . 16

△ 09 . 01 . 16

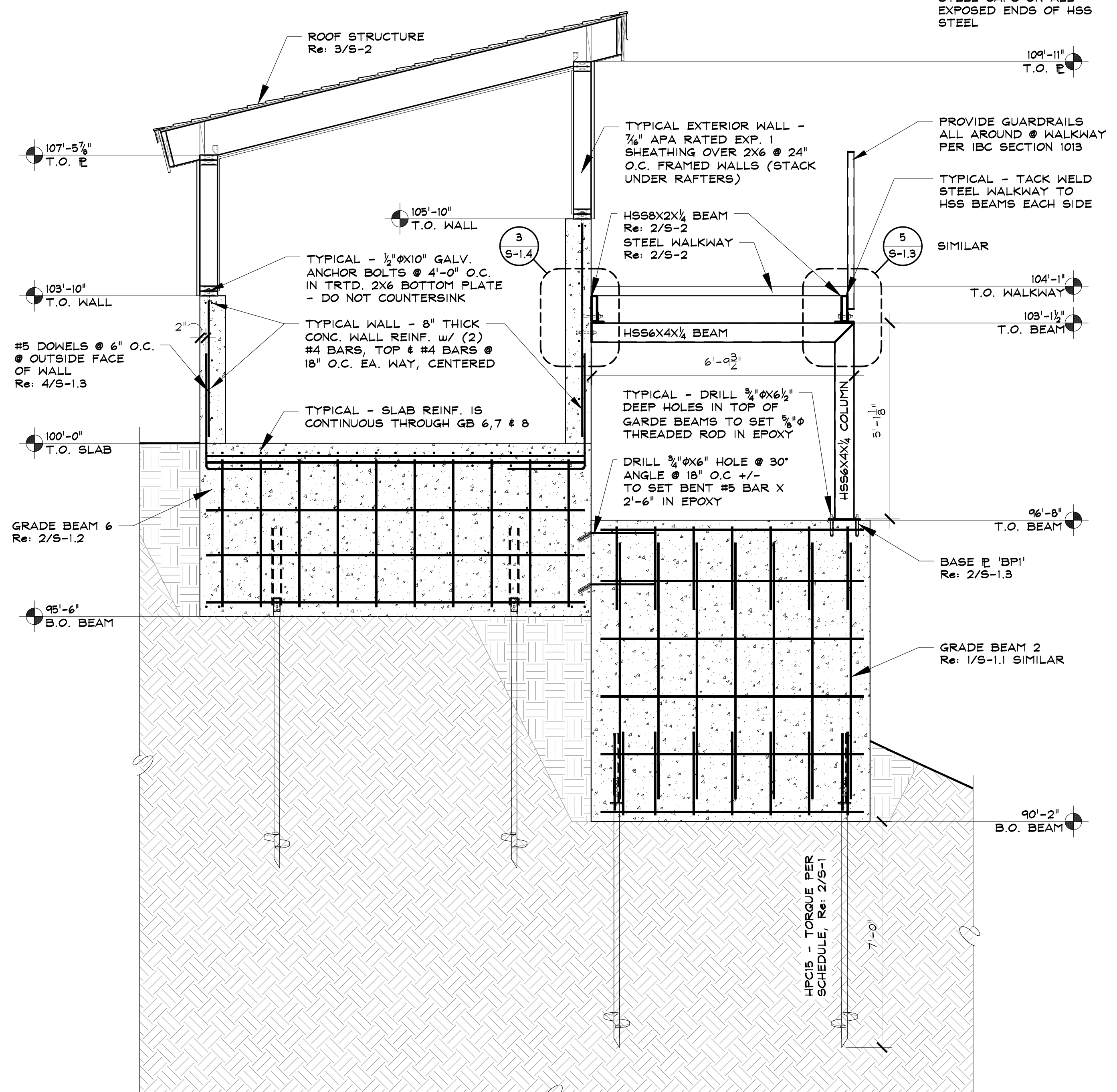
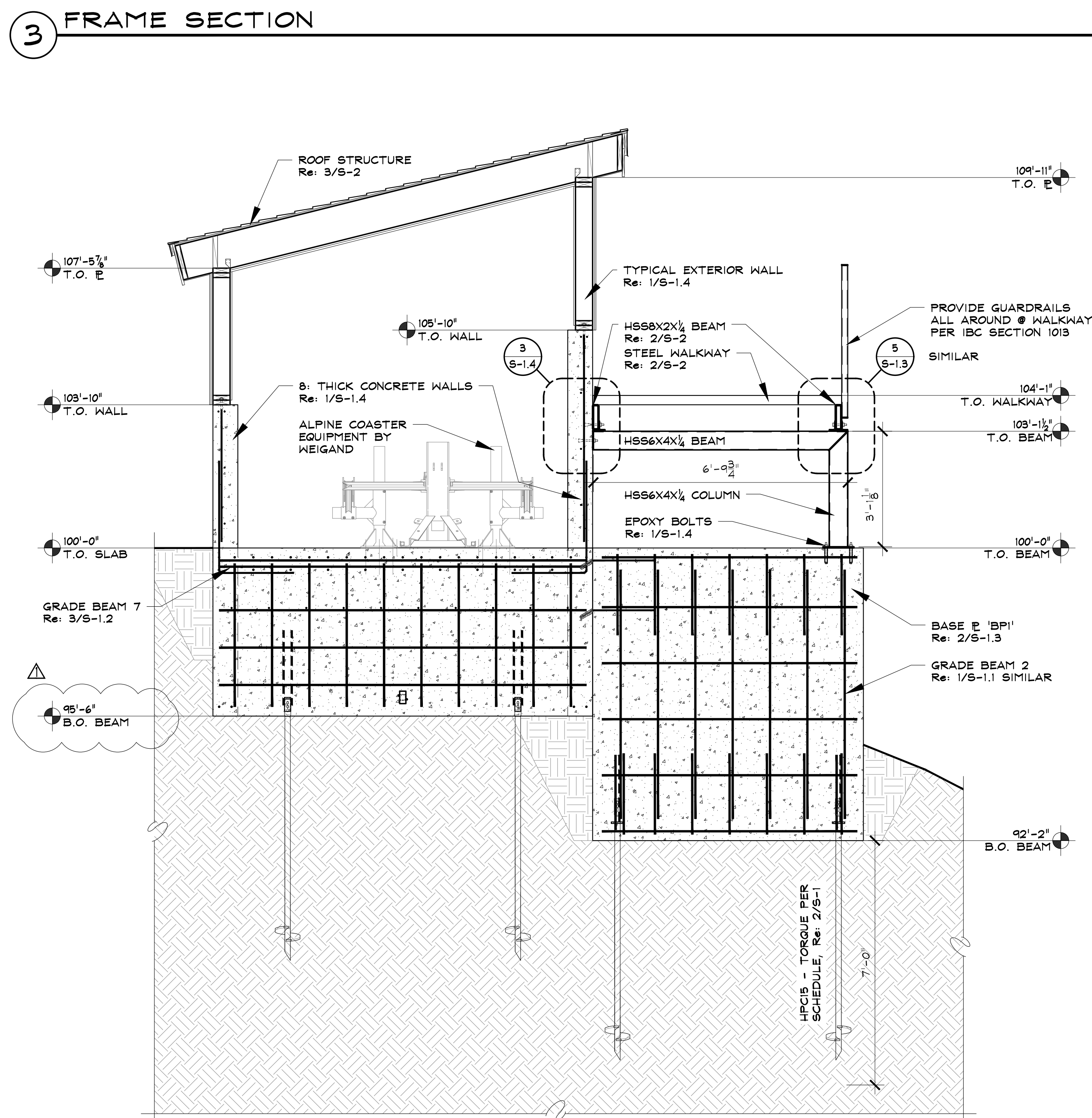
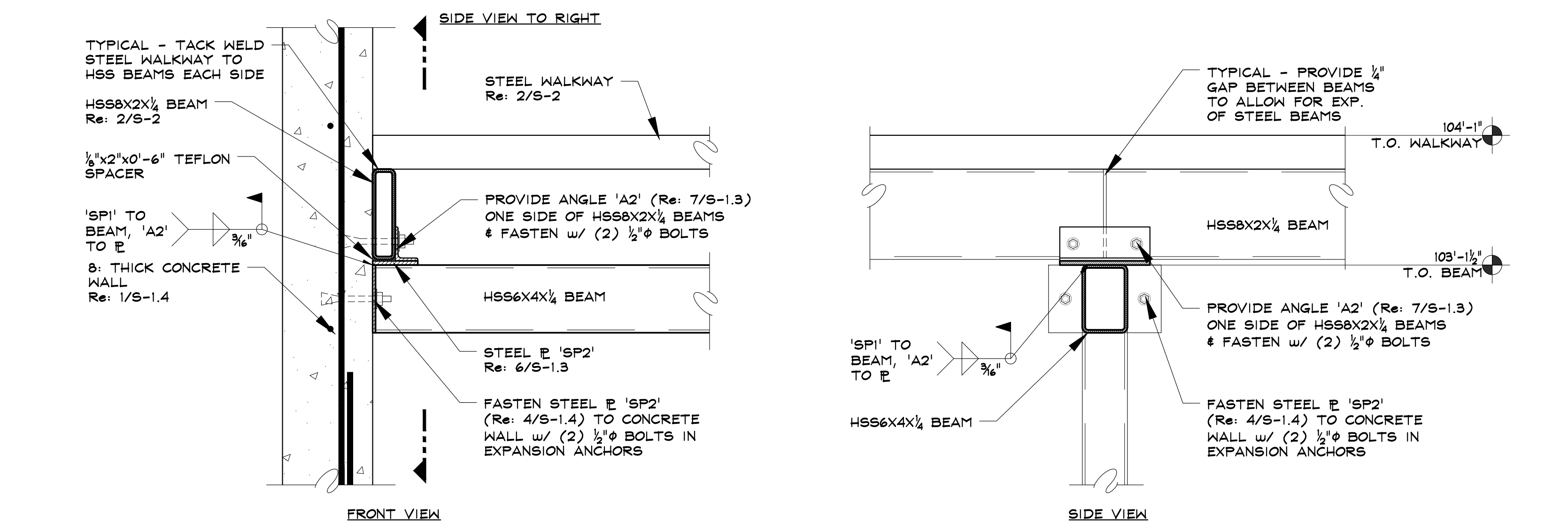
△ 2 09 . 07 . 16

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PROJECT # 16020

FOUNDATION
SECTIONS

S-1.3

SHEET 7 of 10



NOTE:

ALL EXTERIOR WALLS SHALL
BE 1hr. FIRE RATED PER GA
FILE NO. WP8105
Re: SHEET A-1

CEILING SHALL BE 1 hr. FIRE
RATED PER GA FILE NO.
RC2601
Re: SHEET A-1

R C R B D
RECORD SET



NOTE:

TYPICAL - PROVIDE 1/4" STEEL CAPS ON ALL EXPOSED ENDS OF HSS STEEL

TENSIONING STATION

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ISSUE DATES

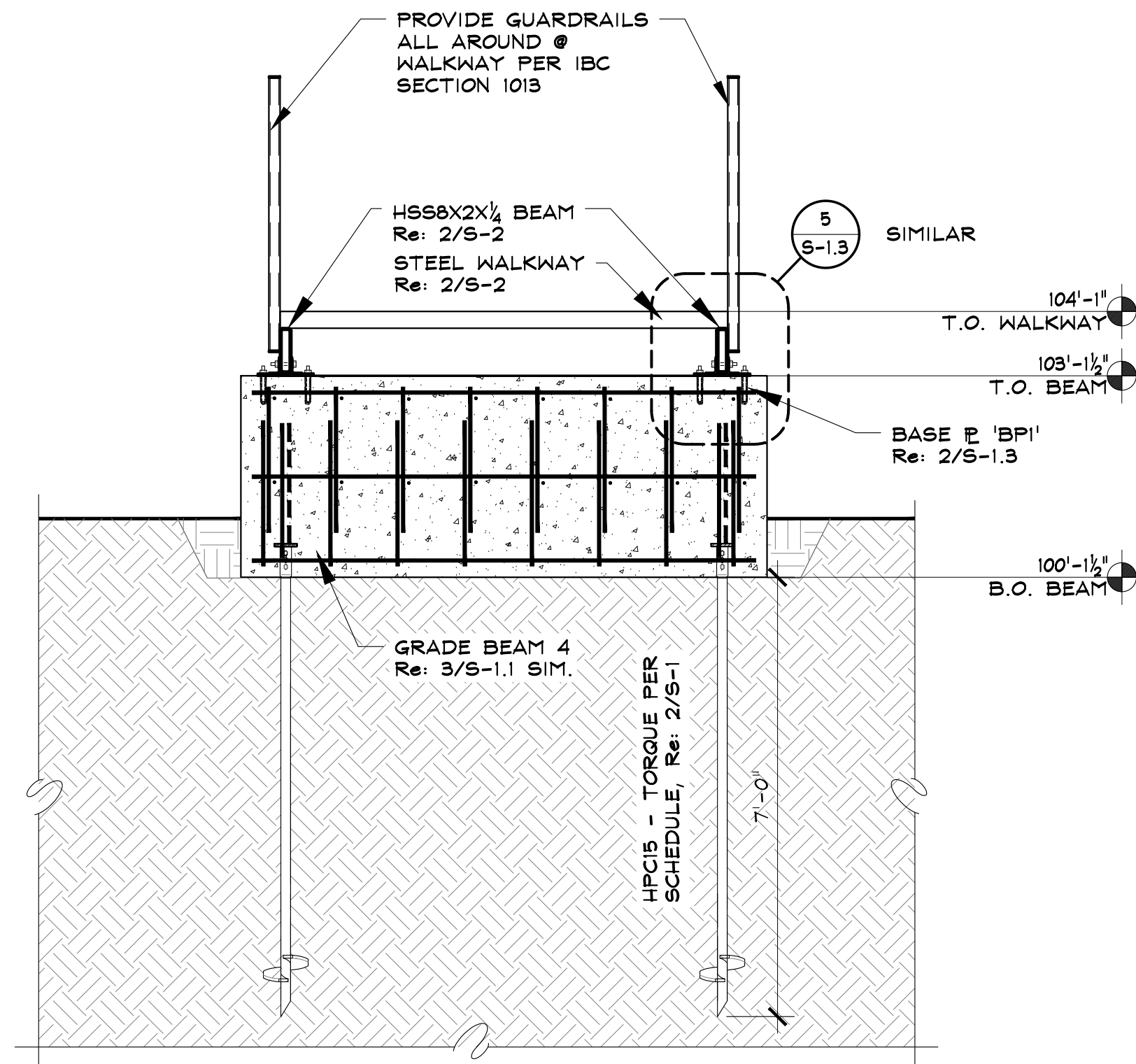
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PROJECT # 16020

FOUNDATION SECTIONS

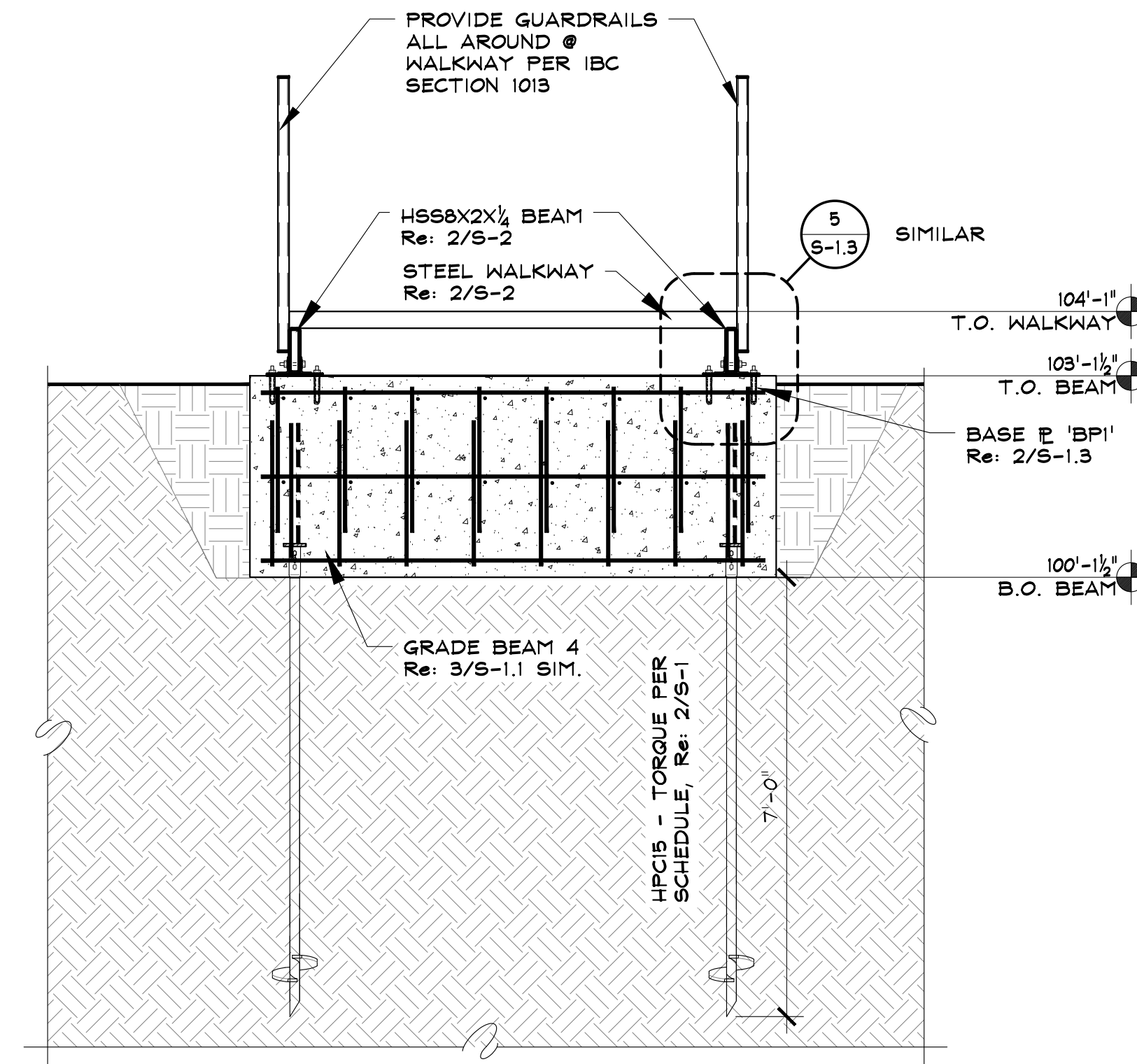
S-1.4

SHEET 8 of 10



3 WALKWAY SECTION

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



4 WALKWAY SECTION

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

RCRBD
RECORD SET

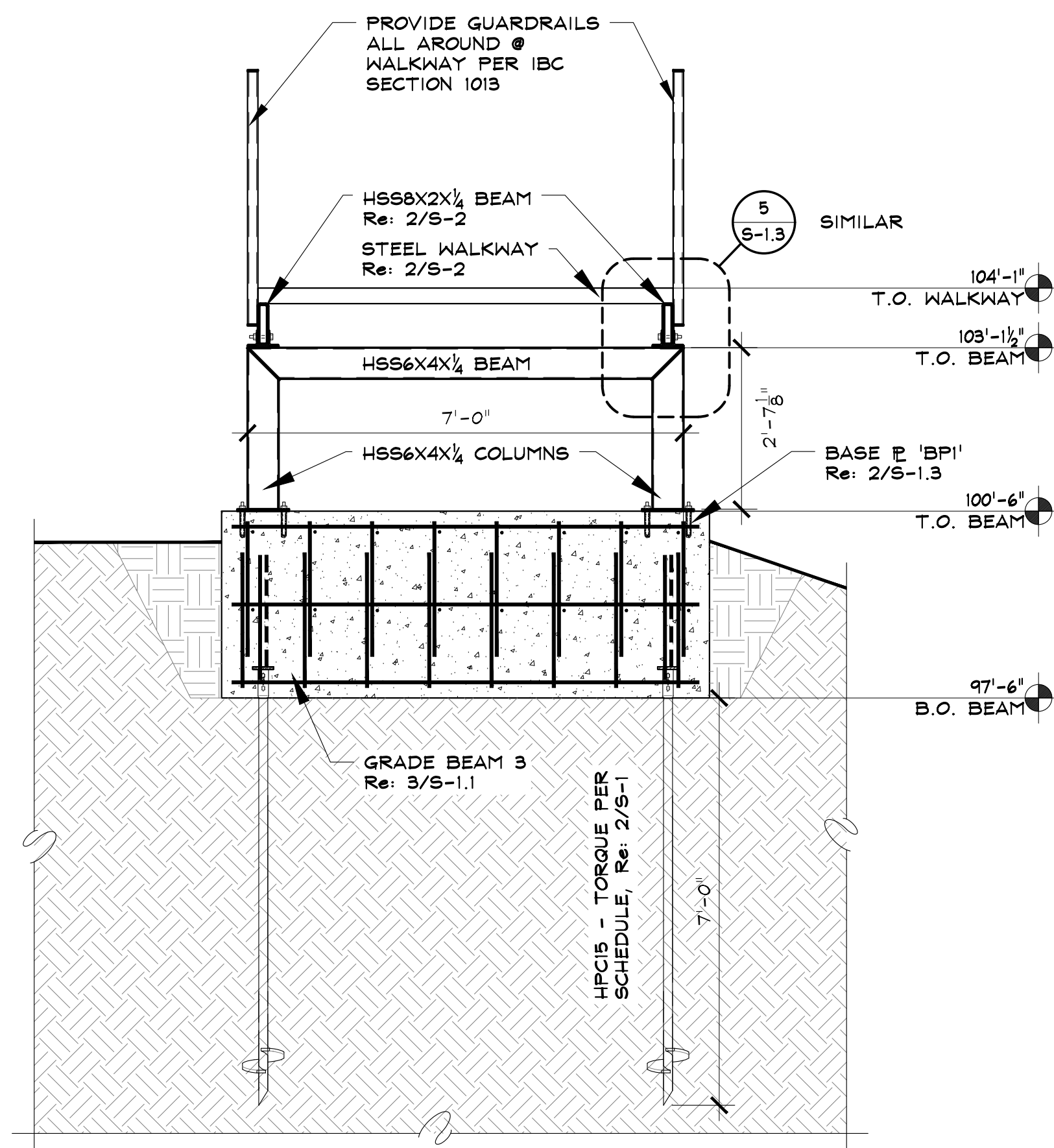
NOTE:

ALL EXTERIOR WALLS SHALL BE 1hr. FIRE RATED PER GA FILE NO. WP8105 Re: SHEET A-1

CEILING SHALL BE 1 hr. FIRE RATED PER GA FILE NO. RC2601 Re: SHEET A-1

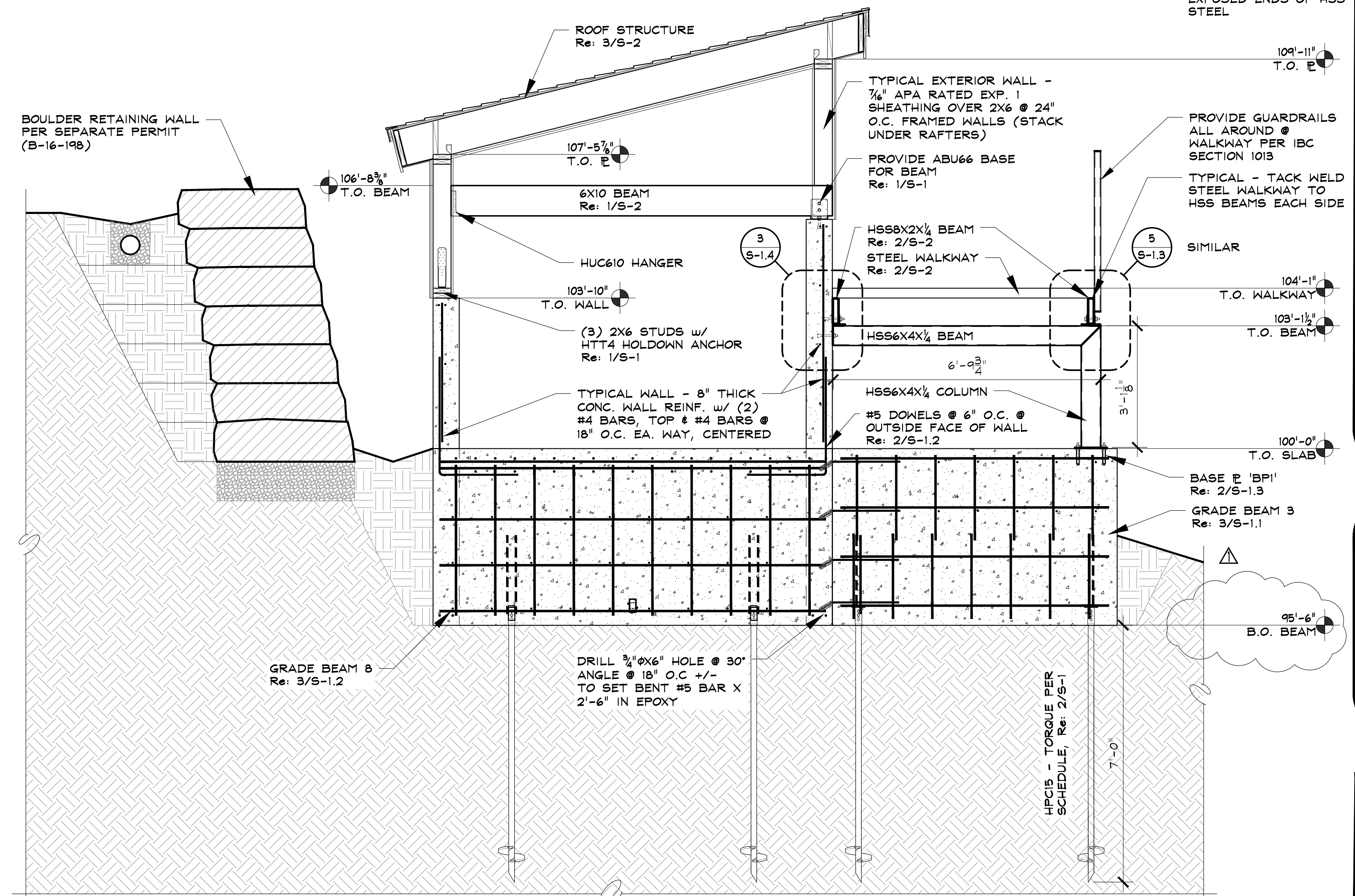
NOTE:

TYPICAL - PROVIDE 1/4" STEEL CAPS ON ALL EXPOSED ENDS OF HSS STEEL



2 FRAME 'F5' SECTION

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



1 FRAME 'F4' SECTION

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

TENSIONING STATION

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PROJECT # 16020

FOUNDATION
SECTIONS

S-1.5

SHEET 9 of 10

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