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GENERAL NOTES:

- ADDITIONAL INSERT PROVIDED FOR PICK SUPPORT BRACKET AND/OR MISC. USAGE (I.E. ALT. TIE, ANCHOR, ETC.); CONTRACTOR MAY ADD INSERTS FOR INBOARD FORMING COMPATIBILITY.
- DIMENSION INCLUDES 1/4" SACRIFICIAL CONCRETE ON INSIDE SURFACE OF PANEL TO FACILITATE EXPOSED AGGREGATE WASH; AVOID AGGREGATE EXPOSURE IN CLOSE PROXIMITY (5" OFFSET) TO INSERT LOCATIONS.
- USE SWIVEL LIFT TYPE RIGGING COMPONENTS FOR LIFTING; DO NOT USE EYE BOLTS, EYE BOLTS ARE ONLY FOR RESTRAINT OF PANEL IN FINAL POSITION.
- EDGE DISTANCE VARIES, MINIMUM = 0.
- RELOCATE INSERTS FROM HORIZONTAL PLANE TO VERTICAL PLANE OF PANEL ABOVE INBOARD CHAMFERED AREA AT PANEL RETURN WHENEVER SOFFIT WIDTH IS LESS THAN 6"; MAINTAIN SPACING SHOWN IN THE LONGITUDINAL DIRECTION.
- REFER TO HARDWARE GUIDE FOR HARDWARE PARTS AND CONFIGURATIONS; SUBSTITUTIONS ALLOWED PROVIDED SAFE WORKING LOAD (SWL) IS EQUAL OR GREATER.
- CONCRETE SHOULD BE AIR ENTRAINED WITH ANGULAR COARSE AGGREGATE; MIX DESIGN TO BE SUBMITTED TO A/EOR FOR REVIEW & ACCEPTANCE (ALLOW SUFFICIENT TIME FOR TESTING).
- MAINTAIN A MINIMUM OF 1 1/2" CLEAR DISTANCE ALONG OUTBOARD EDGE OF TOP FLANGE OF SUPPORTING MEMBER TO AVOID CONFLICTS (I.E. SHEAR STUDS, SPLICE BOLTS, STRAPPING, ETC.) WITH INBOARD EDGE OF PANEL; USE COUNTERSINK BOLT TYPES ALONG OUTER COLUMN OF SPLICE BOLTS IF MINIMUM BOLT SPACING IS UNOBTAINABLE DUE TO FLANGE WIDTH.
- PRECAST PANEL LOCATED AT FIELD SPLICE, IF APPLICABLE, SHOULD BE INCREASED IN THICKNESS ALONG THE HORIZONTAL PLANE BY THE THICKNESS OF THE TOP FLANGE SPLICE PLATE TO ALLOW FOR BLOCKOUT TO MATCH THE THICKNESS OF ASSOCIATED SPLICE PLATE AND LENGTH PLUS 1/2" AT EACH END FOR CONSTRUCTION TOLERANCES.
- ASSURE SURFACE AREA ALONG EDGE OF SUPPORT MEMBER IS CLEAR OF DEBRIS THAT COULD PREVENT PROPER SEATING OF THE PANEL NOTCH AND CHECK NOTCH FOR FOREIGN MATTER AND STRAIGHTNESS PRIOR TO INSTALLATION; PROVIDE SMOOTH TROWEL FINISH FOR PRECAST CONCRETE GIRDERS ALONG BEARING AREA OF PANEL NOTCH.
- EMPRICAL DATA IS AVAILABLE FOR PANEL TYPES 1 & 2 (SEE TABLE BELOW) UPON REQUEST; TYPE 3 PANELS REQUIRE PROOF TESTING OF 2 TIMES GOVERNING LOAD CASE AS DETERMINED BY A/EOR. PRODUCTION PANELS SHOULD NOT BE MANUFACTURED PRIOR TO ACCEPTANCE OF TEST DATA BY A/EOR; TEST PANELS MAY BE INCORPORATED INTO PRODUCTION PANELS PROVIDED NO SIGNS OF DISTRESS ARE VISABLE AFTER TESTING AND ALLOWED BY A/EOR.
- USE MINIMUM OF 2 HORIZONTAL TIES PER PANEL FOR OVER POUR FORMING UNLESS SLIPFORMING. REFER TO HARDWARE GUIDE FOR VARIOUS TYPES AVAILABLE AND CONFIGURATIONS.
- GO TO WWW.PRECASTEEL.COM FOR INSTALLATION GUIDELINES.

SIPFF PANEL TYPES											
TYPE	SOFFIT		CONCRETE		REINFORCEMENT			INSERTS		LOAD TEST	
	WIDTH	THICK	TYPE	STRENGTH	TYPE	GRADE	SPACING/SIZE	COATING	TYPE		SIZE
S1	0" - 12"	3.25"	Normal or SCC	6500 psi	WWM	70	4x4-W6.5xW6.5	Galv. Or Epoxy	Steel	0.5"	N*
S2	12" - 24"	3.25"	Normal or SCC	7500 psi	WWM	70	4x2-W6.5xW6.5	Galv. Or Epoxy	Steel	0.5"	N*
S3	24" - 36"	3.25"	Normal or SCC	8500 psi	WWM	70	4x2-W6.5xW6.5	Galv. Or Epoxy	Steel	0.5"	Y

*load test required prior to production runs whenever pick support brackets are planned for use; test panels may be used for production panels provided no signs of distress are visible

LEGEND:
 INDICATES PRIMARY TIE LOCATION
 INDUSTRY METHOD OF DESIGNATING STYLE
 EXAMPLE: 6 x 12 - D12 x W5
 LONGITUDINAL WIRE SPACING
 TRANSVERSE WIRE SPACING
 TRANSVERSE WIRE
 LONGITUDINAL WIRE SIZE



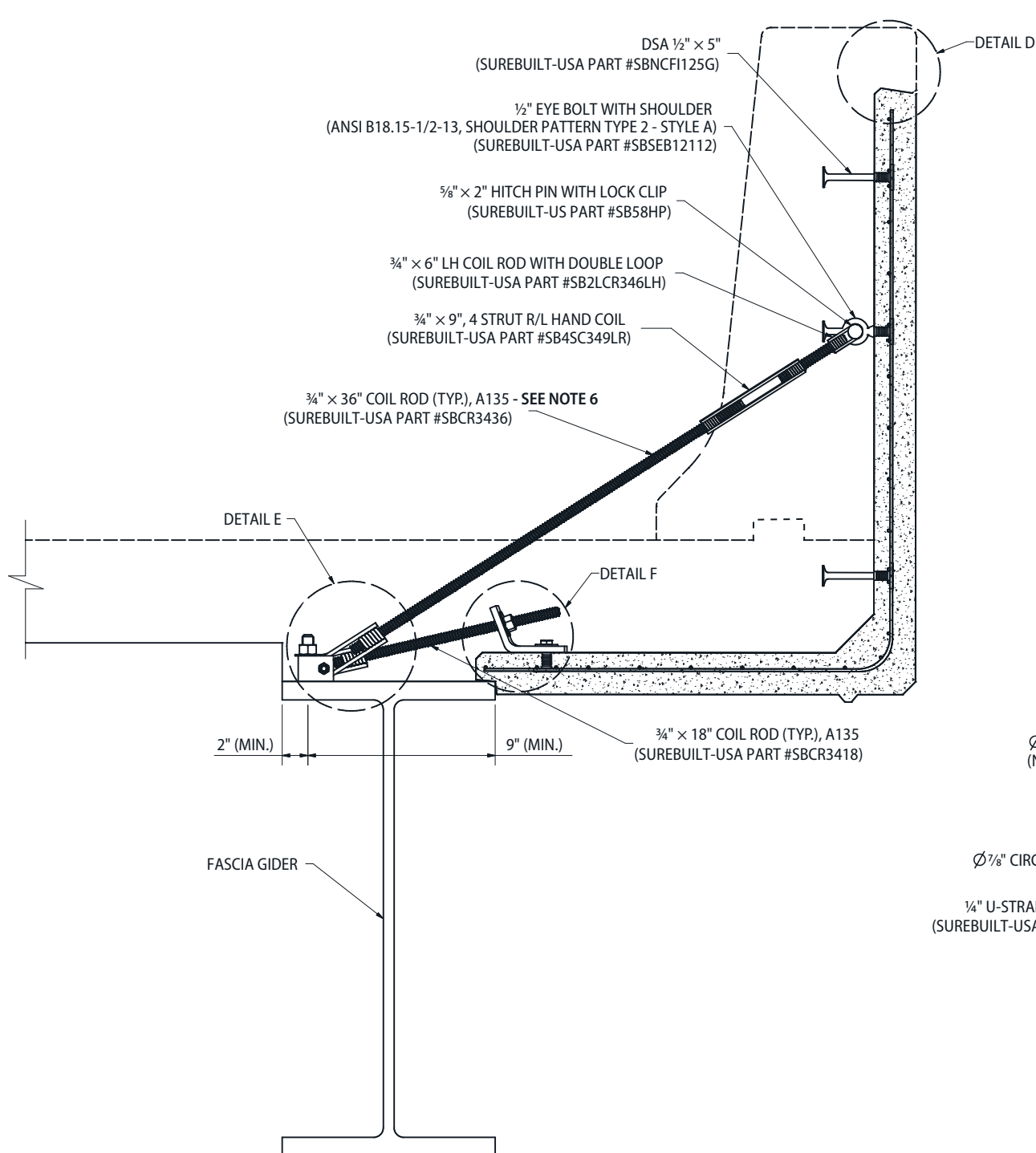
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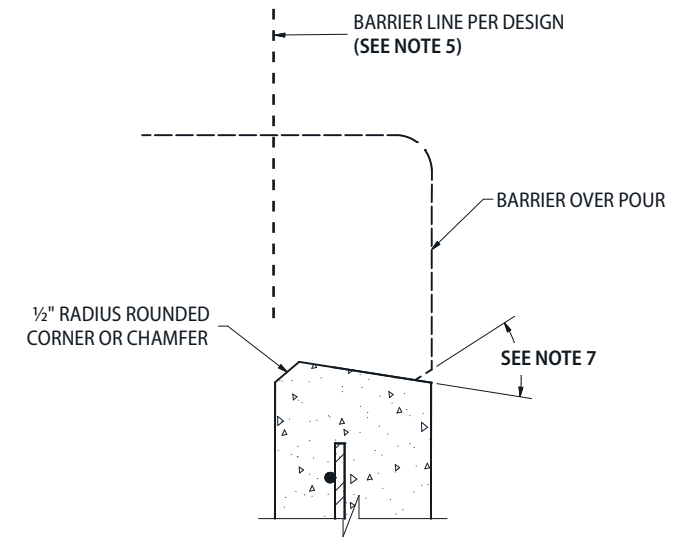


PRECASTEEL
 GENERAL ARRANGEMENT DRAWING
 for
 STAY-IN-PLACE-FASCIA-FORM (SIPFF)

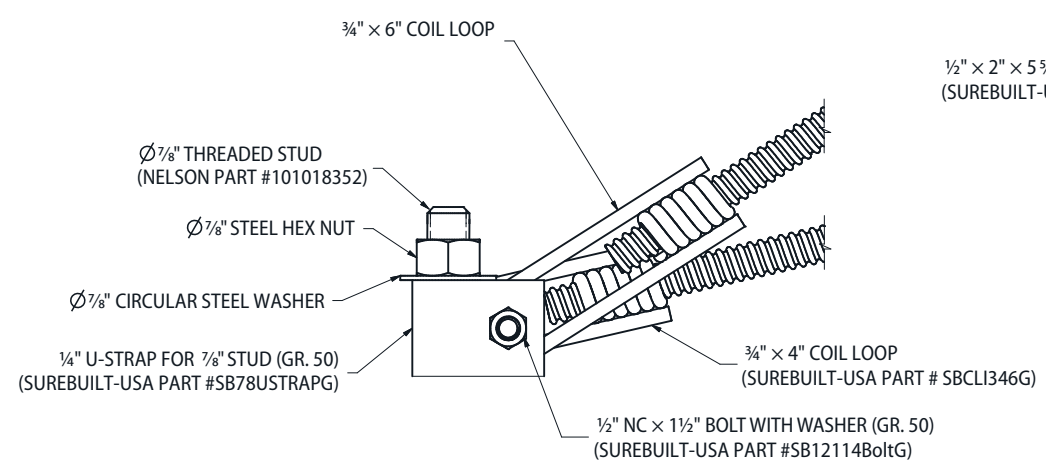
DRAWN BY	MJD	DATE	JAN 31, 2023	SHEET	1 of 9
REV	0	SIZE	D	SCALE	AS NOTED



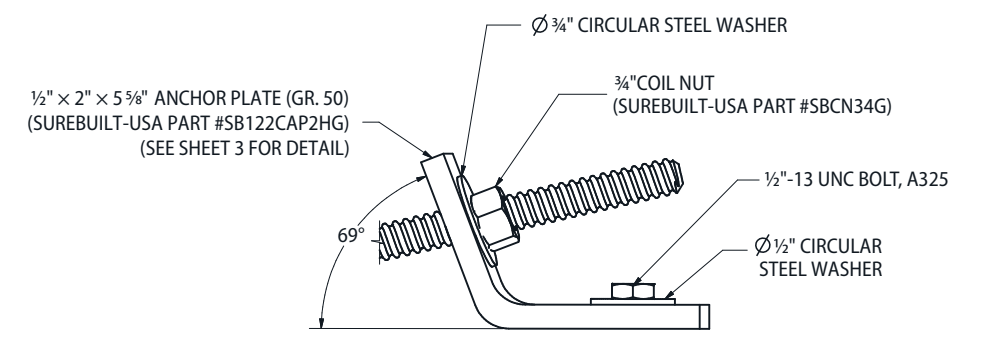
PRECAST UNIT CONNECTION DETAILS
(STEEL GIRDER APPLICATION)
SCALE 6"=3'-0"



DETAIL D - BARRIER OVER POUR
(PRECAST GIRDER SIMILAR)
SCALE 6"=1'-0"



DETAIL E - PRIMARY U-STRAP TIE
(STEEL GIRDER APPLICATION)
SCALE 6"=1'-0"



DETAIL F - SECONDARY BENT PLATE TIE
(STEEL AND PRECAST APPLICATION SIMILAR)
SCALE 6"=1'-0"

NOTES:

1. REFER TO SHEET NO. 1 FOR GENERAL NOTES AND PANEL DETAILS.
2. INSTALL PLASTIC SLEEVE AROUND ROD IN DECK POUR AND/OR USE FORM RELEASE COMPOUND TO FACILITATE HARDWARE REMOVAL.
3. ALL PLATES: GRADE 50
4. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.
5. PROPOSED OUTSIDE FACE OF BARRIER PER DESIGN SHOULD MATCH INSIDE FACE OF SIPFF; CONTRACTOR RESPONSIBLE FOR ADJUSTING GIRDER CAMBER IF REQ'D.
6. LENGTH OF ROD MAY VARY DEPENDING UPON FLANGE AND/OR SOFFIT WIDTH - CONTRACTOR TO FIELD VERIFY PRIOR TO PROCUREMENT OF HARDWARE.
7. TOP OF SIPFF TO BE MODIFIED AS REQ'D BY DESIGN DURING SHOP DRAWING REVIEW PROCESS.



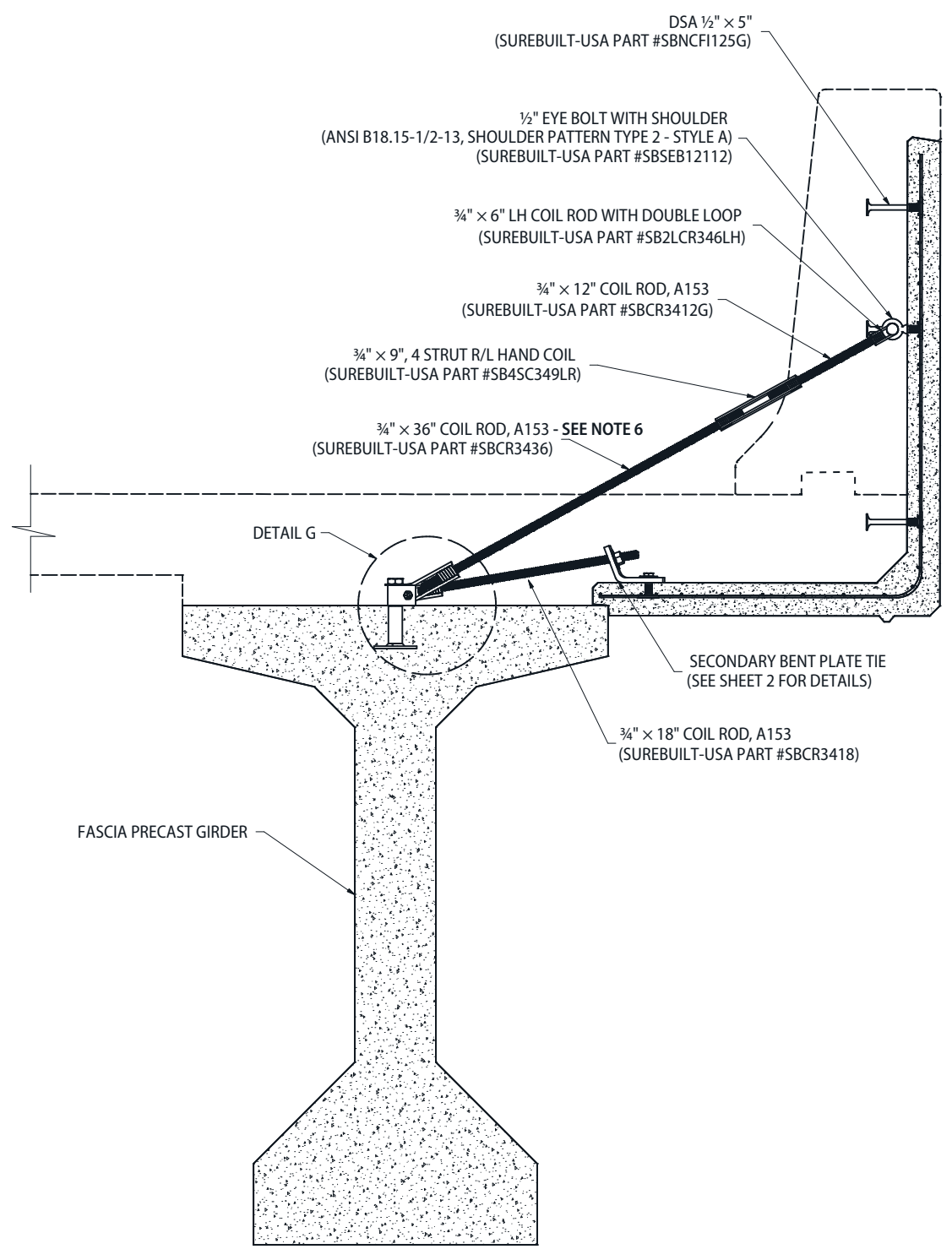
PRECASTEEL
INSTALLATION GUIDELINES
for
STEEL GIRDER APPLICATION
of
STANDARD SIPFF

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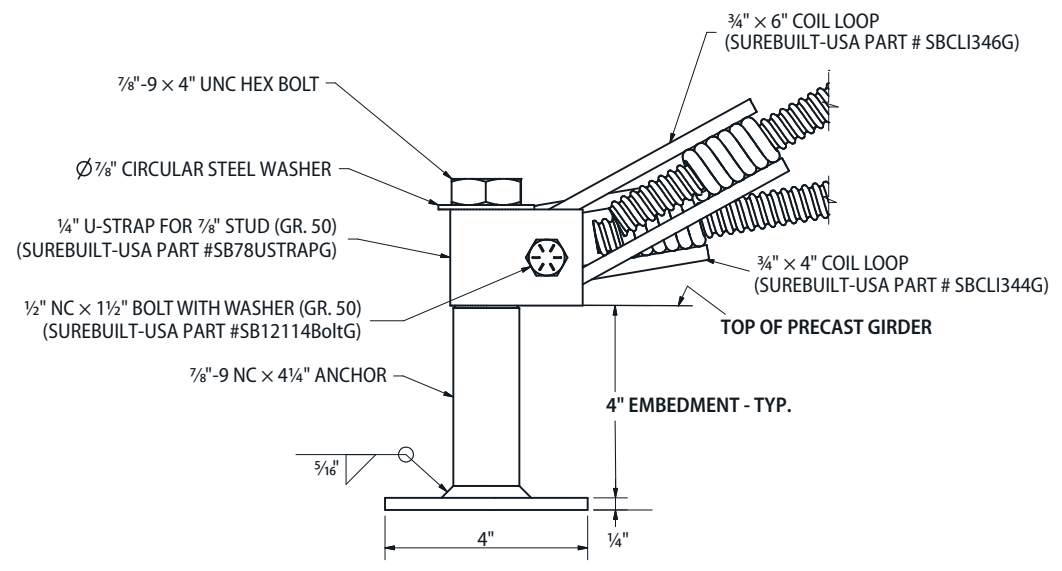


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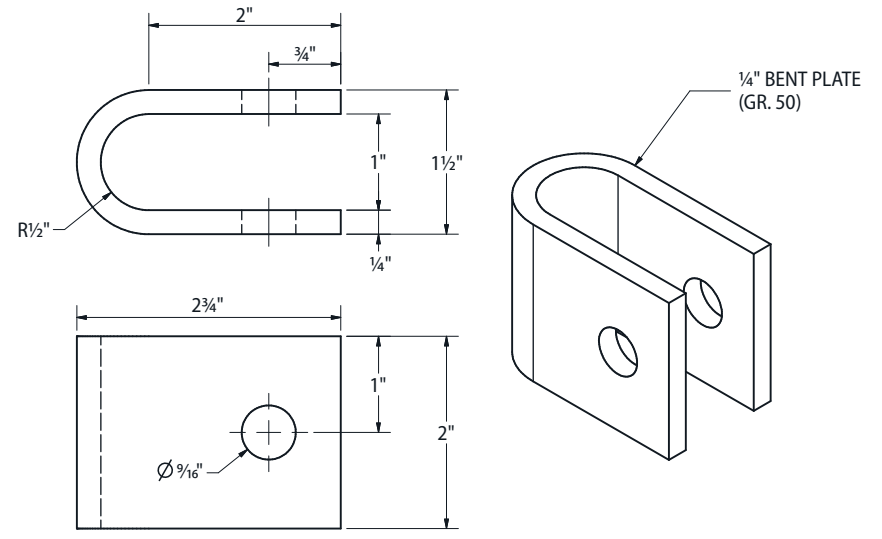
8 7 6 5 4 3 2 1



PRECAST PANEL CONNECTION
(PRECAST GIRDER APPLICATION)
SCALE 6"=4'



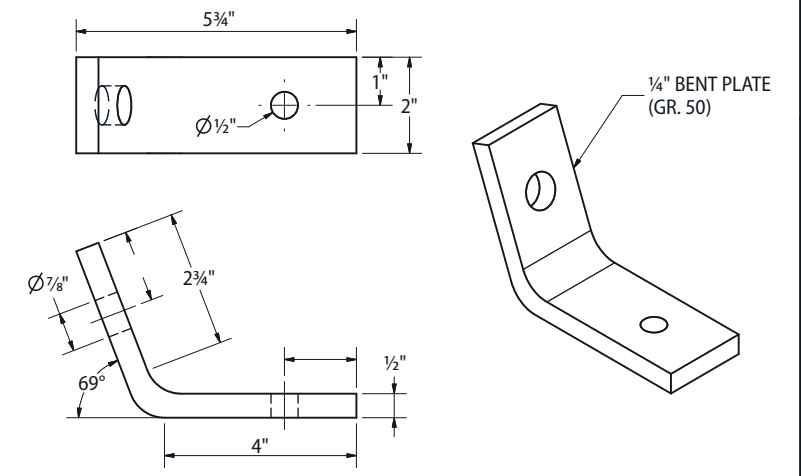
DETAIL G - PRIMARY U-STRAP TIE CONNECTION
(PRECAST GIRDER APPLICATION)



U-STRAP DETAIL
(SUREBUILT-USA PART #SB78USTRAPG)
SCALE 1"=1"

NOTES:

1. REFER TO SHEET NO. 1 FOR GENERAL NOTES AND PANEL DETAILS.
2. REFER TO SHEET 2 FOR STEEL GIRDER APPLICATION.
3. INSTALL PLASTIC SLEEVE AROUND ROD IN DECK POUR AND/OR USE FORM RELEASE COMPOUND TO FACILITATE HARDWARE REMOVAL.
4. ALL PLATES: GRADE 50
5. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.
6. LENGTH OF ROD MAY VARY DEPENDING UPON FLANGE AND/OR SOFFIT WIDTH - CONTRACTOR TO FIELD VERIFY PRIOR TO PROCUREMENT OF HARDWARE.



BENT PLATE DETAIL
(SUREBUILT-USA PART #SB122CAP2HG)
SCALE 1/2"=1"



PRECASTEEL
INSTALLATION GUIDELINES
for
PRECAST GIRDER APPLICATION
of
STANDARD SIPFF

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REV	0	SIZE	D	SCALE	AS NOTED

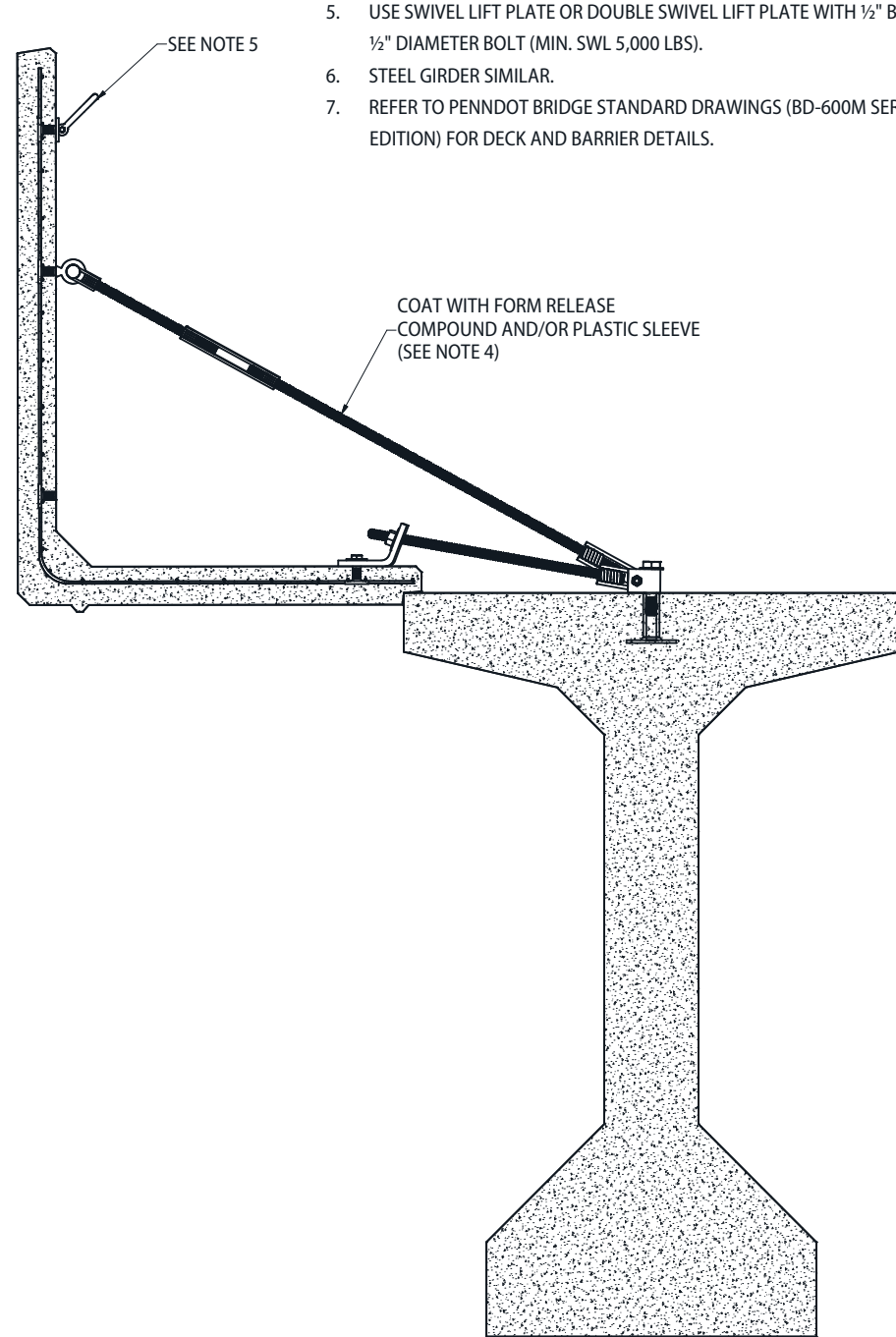
8 7 6 5 4 3 2 1

NOTES:

1. REFER TO SHEET NO. 1 FOR GENERAL NOTES AND PANEL DETAILS.
2. REFER TO SHEET NO. 2 FOR STEEL GIRDER APPLICATION.
3. REFER TO SHEET NO. 3 FOR PANEL CONNECTION DETAILS.
4. INSTALL PLASTIC SLEEVE AROUND ROD IN DECK POUR AND/OR USE FORM RELEASE COMPOUND TO FACILITATE HARDWARE REMOVAL.
5. USE SWIVEL LIFT PLATE OR DOUBLE SWIVEL LIFT PLATE WITH ½" BUSHING AND 150KSI ½" DIAMETER BOLT (MIN. SWL 5,000 LBS).
6. STEEL GIRDER SIMILAR.
7. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.

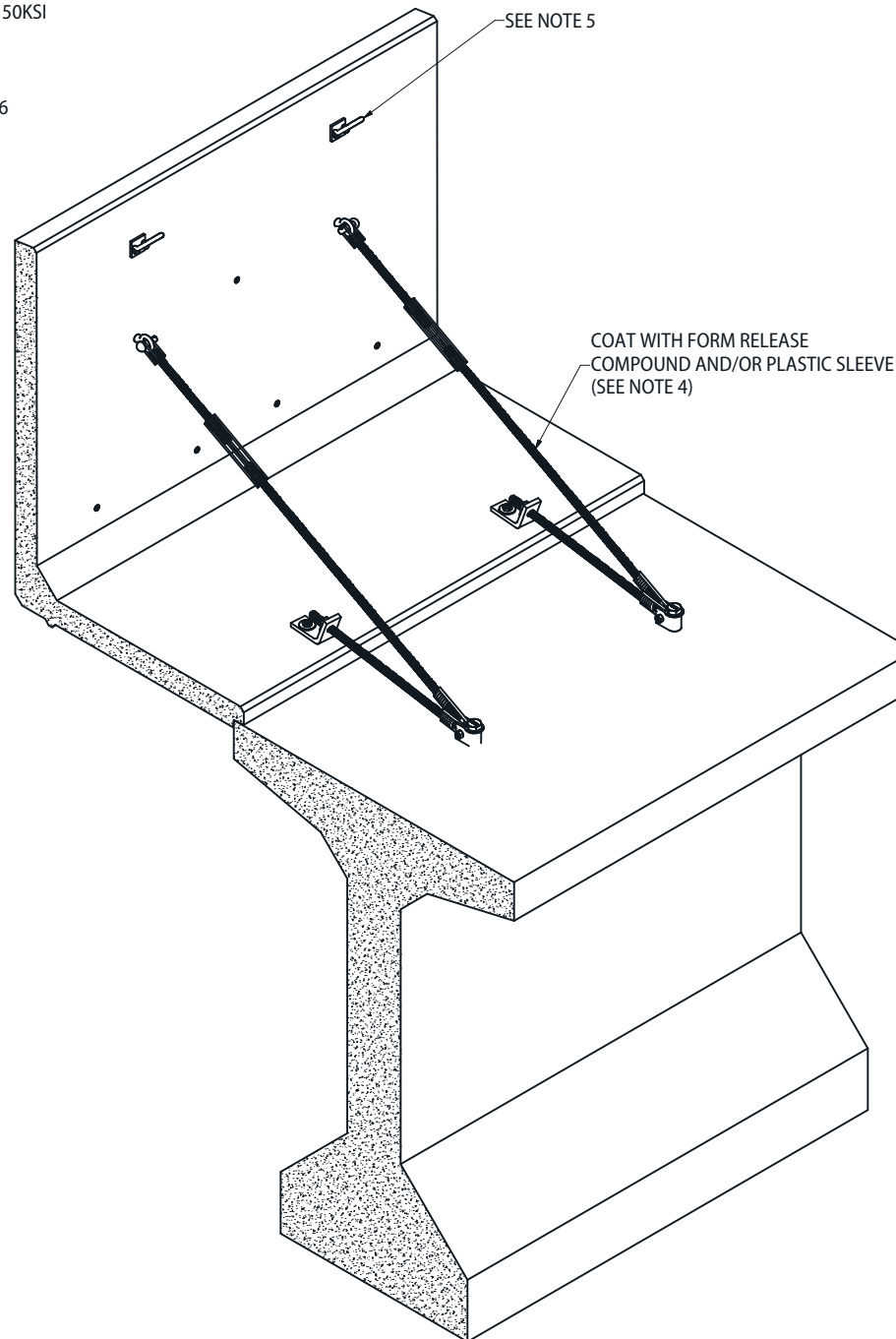
SUGGESTED SEQUENCE:

- 1.)PREP. WORK (precast plant) –
 - a.Palletize panels in reverse order of planned installation and set on truck (see sample drawing and photo for suggested loading configuration).
 - b.Truck strap down panels (dunnage should be positioned close enough to edge of panel so not to damage panel from tightening straps).
- 2.)PREP. WORK (job site) –
 - a.Inspect panels prior to unloading.
 - b.Unload panels (panels can be installed directly from truck or shock out on ground given sufficient lay down area).
 - c.Attach all hardware to panel with exception of studs & U-strap (cross primary ties before being lifted to reduce projected length of tie for ease of handling).
 - d.Attach U-strap to threaded stud (steel) or bolt (precast), whichever applicable.
 - e.Inspect the outboard edge of the fascia beam for any conflicts (strap metal hook over flange in tension zone for pan supports should be cut back after angle is welded to straps and retained by row of shear studs instead of hooked around flange).
 - f.Layout beam for panel installation (preferred layout starts at center of span).
 - g.Adjust hardware length on the ground to minimize adjustments required up top in order to expedite the installation process.
- 3.)PANEL INSTALLATION –
 - a.Attach SWIVEL LIFT hardware to panel inserts designated for lifting/erection (the SWIVEL LIFT is the only acceptable hardware for lifting purposes).
 - b.Attach rigging to SWIVEL LIFT hardware (rigging to be determined by contractor).
 - c.Lift panel in to place and set notch on outboard edge of flange and rock into position; attached secondary ties as soon as possible to keep notch tight to girder edge.
 - d.Lower panel until soffit is approximately level in the transverse direction.
 - e.Use bolt provided with U-strap to connect coil loops for both primary & secondary ties.
 - f.Check notch for full bearing (line load) on flange (notch is not 90 degrees, it opens up slight like a birds beak so the full bearing is concentrated at the inside corner




ERECTION PHASE 1A

SCALE 6"=4'-0"



ERECTION PHASE 1A DETAIL

SCALE 6"=5'-0"

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PRECASTEEL
 SEQUENCE OF CONSTRUCTION
 for
 STANDARD SIPFF
 Phase 1A

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REV	0	SIZE	D	SCALE	AS NOTED

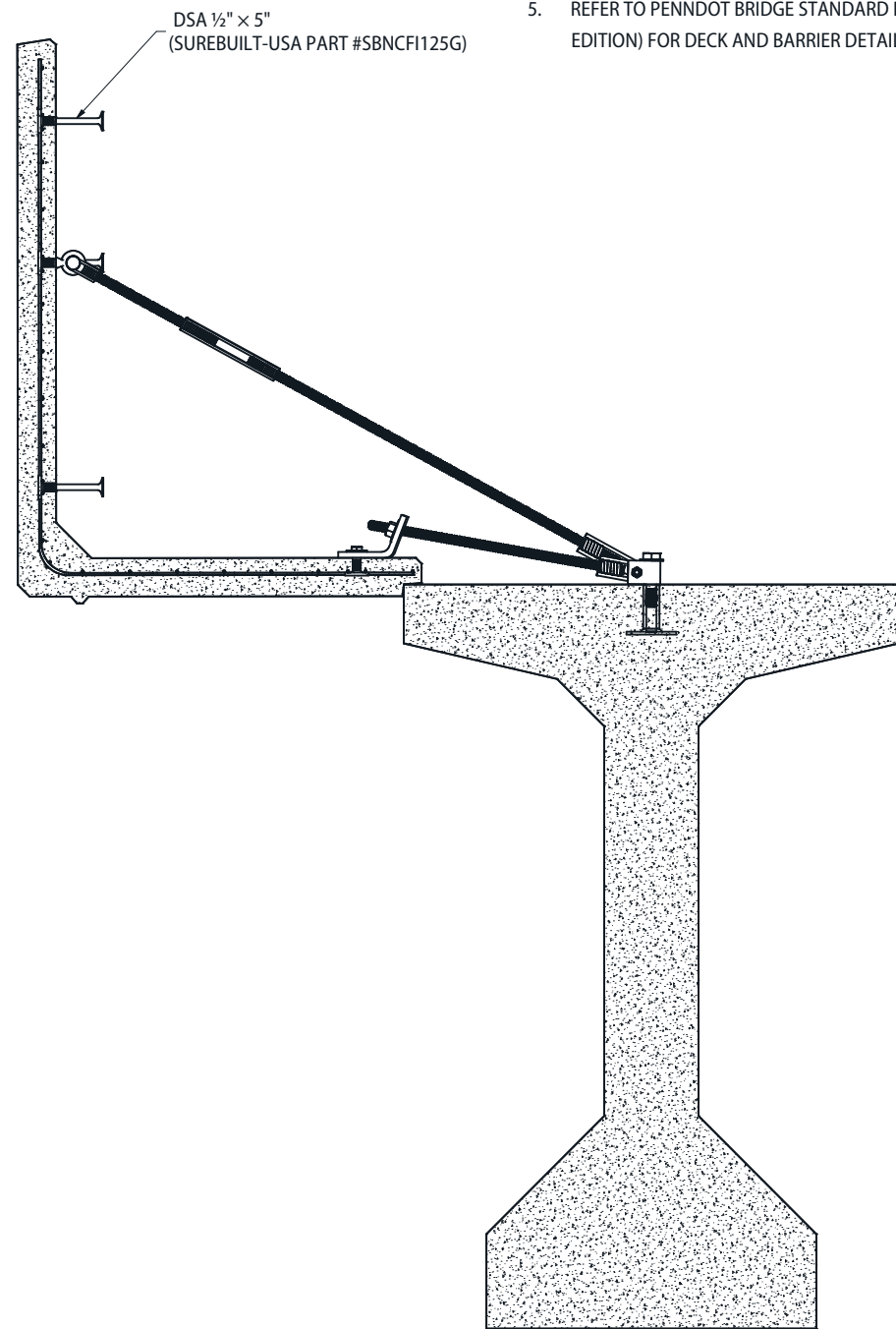
NOTES:

1. REFER TO SHEET NO. 1 FOR GENERAL NOTES AND PANEL DETAILS.
2. REFER TO SHEET NO. 2 FOR STEEL GIRDER APPLICATION.
3. REFER TO SHEET NO. 3 FOR PANEL CONNECTION DETAILS.
4. INSTALL PLASTIC SLEEVE AROUND ROD IN DECK POUR AND/OR USE FORM RELEASE COMPOUND TO FACILITATE HARDWARE REMOVAL.
5. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.

SUGGESTED SEQUENCE (con't):

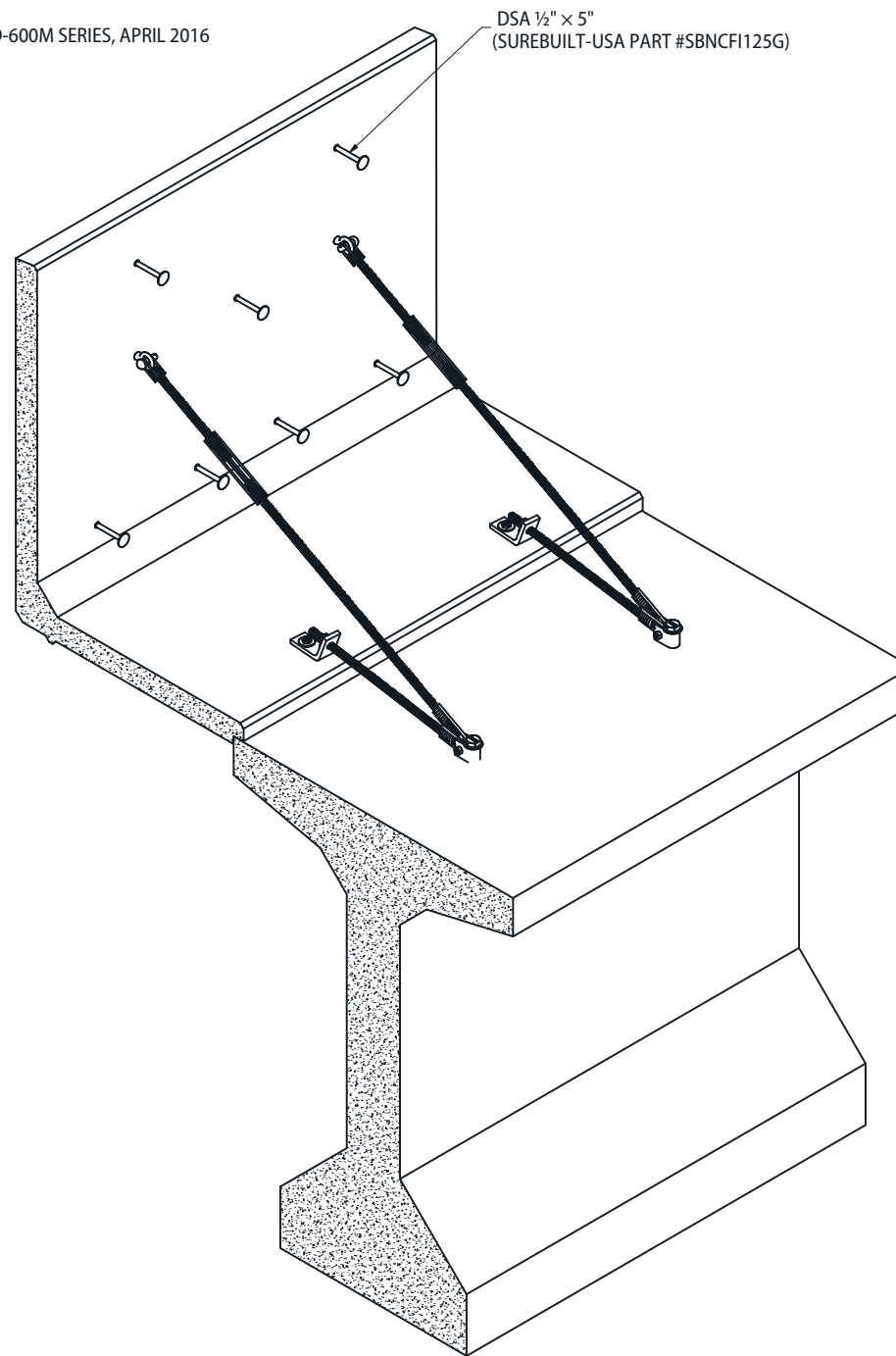
- 4.) PRE-DECK POUR WORK –
 - a. Install anchor studs in bottom row of inserts in vertical face of panel; other available inserts can receive anchor studs as shown but not required at this time.
 - b. Tape butt joint between panels.
 - c. Install pipe rail supports on centerline of fascia beam for concrete paving machine (i.e. GOMACO, BIDWELL, etc.) when using rolling work bridges feed & erect panels.
 - d. Optional - Install pick support brackets and picks, including railing system, when access is required for workers on both sides (front & back) of the concrete paving machine.

- 5.) INSTALL DECK REINFORCEMENT – both top & bottom mats to include barrier tie-ins (not shown for clarity).
 - a. Check panels for levelness and make final adjustments prior to deck pour.




ERECTION PHASE 1B

SCALE 6"=4'-0"




ERECTION PHASE 1B DETAIL

SCALE 6"=5'-0"

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PRECASTEEL

SEQUENCE OF CONSTRUCTION
 for
 STANDARD SIPFF
 Phase 1B

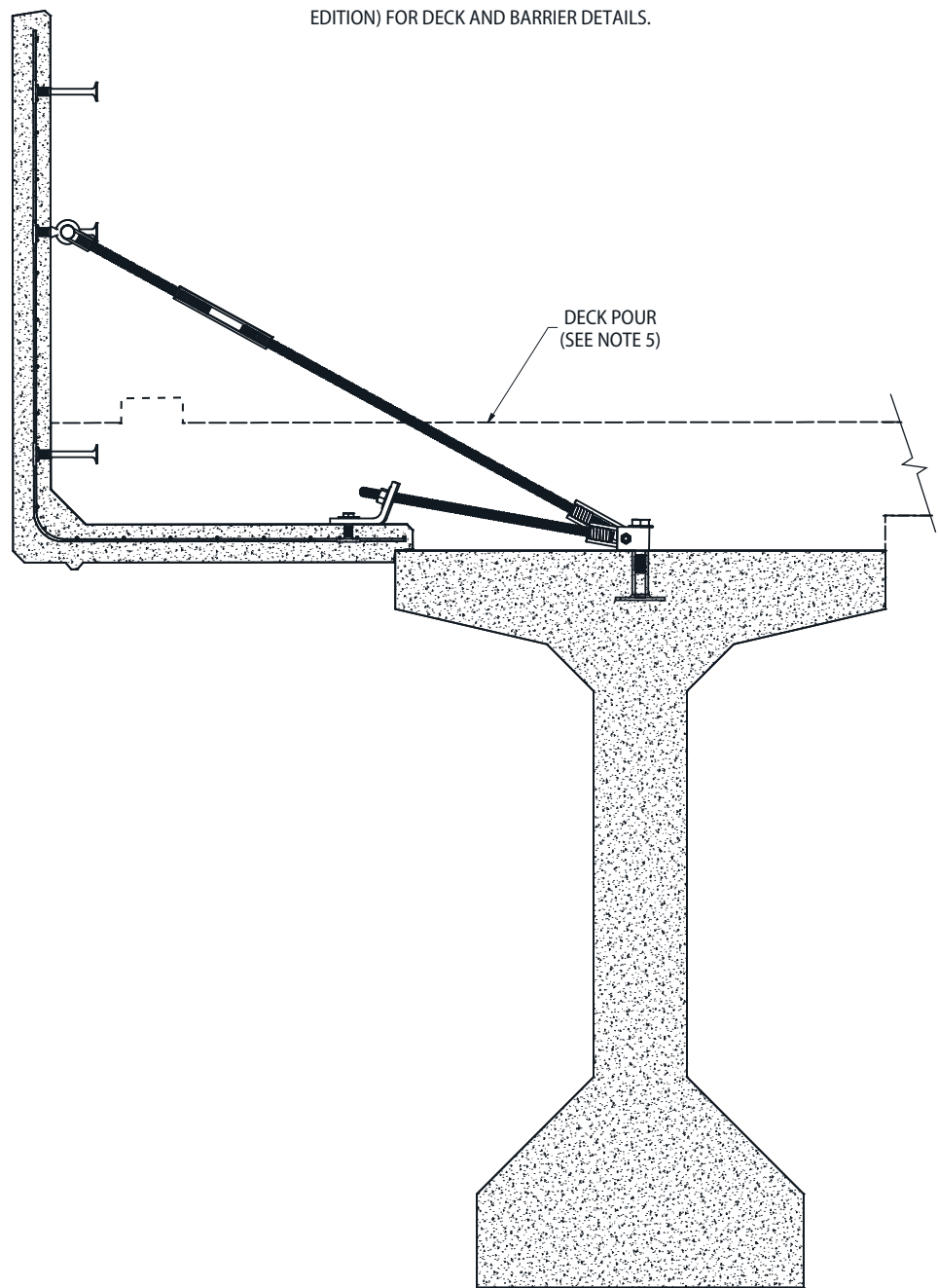
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REV	0	SIZE	D	SCALE	AS NOTED

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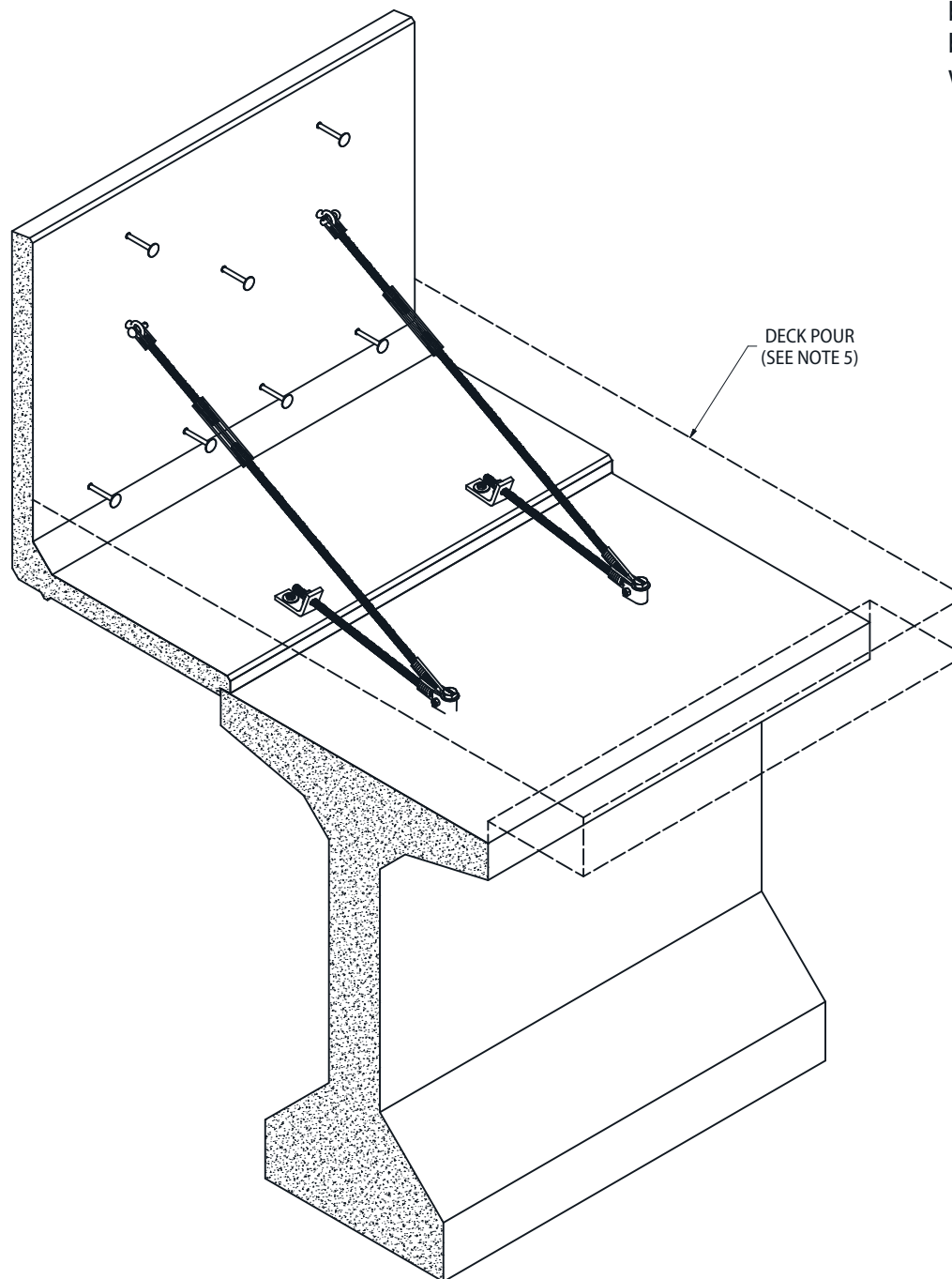
1. REFER TO SHEET NO. 1 FOR GENERAL NOTES AND PANEL DETAILS.
2. REFER TO SHEET NO. 2 FOR STEEL GIRDER APPLICATION.
3. REFER TO SHEET NO. 3 FOR PANEL CONNECTION DETAILS.
4. INSTALL PLASTIC SLEEVE AROUND ROD IN DECK POUR AND/OR USE FORM RELEASE COMPOUND TO FACILITATE HARDWARE REMOVAL.
5. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.

SUGGESTED SEQUENCE (con't):

- 6.)POUR DECK – sub-steps below are suggested; contract may use a multitude of means & methods to pour & finish deck.
- a. Concrete finisher in front of paving machine reaching through machine when screed goes by to allow finishing in areas not accessed by screed, between pipe rail and barrier.
 - b. hand finishing & spraying curing compound/wet burlap on deck from work bridges behind concrete paver as well.



ERECTION PHASE 2A
(DECK REINFORCEMENT NOT SHOWN FOR CLARITY)
SCALE 6"=4'-0"



ERECTION PHASE 2A DETAIL
(DECK REINFORCEMENT NOT SHOWN FOR CLARITY)
SCALE 6"=5'-0"

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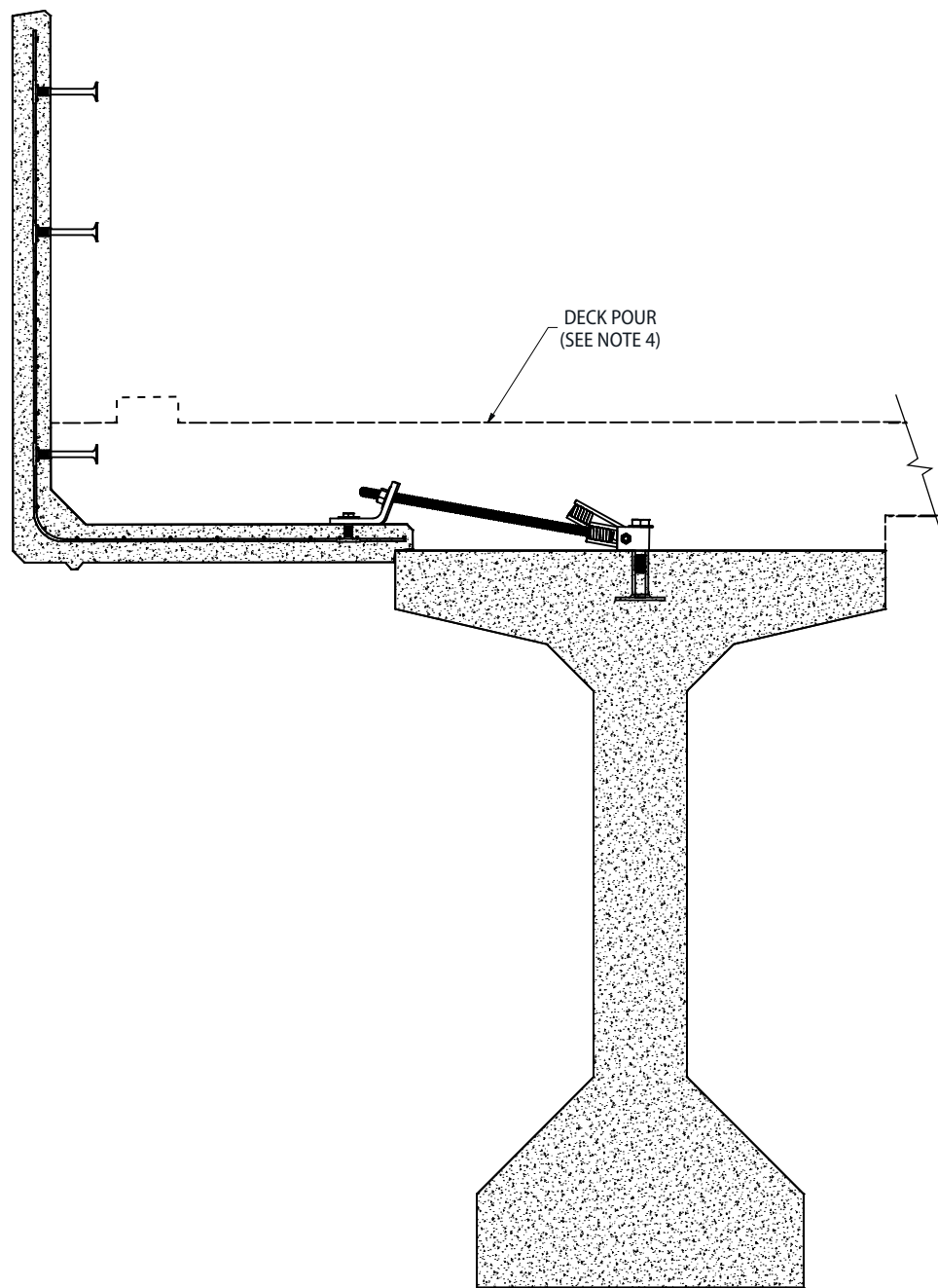


PRECASTEEL
SEQUENCE OF CONSTRUCTION
for
STANDARD SIPFF
Phase 2A

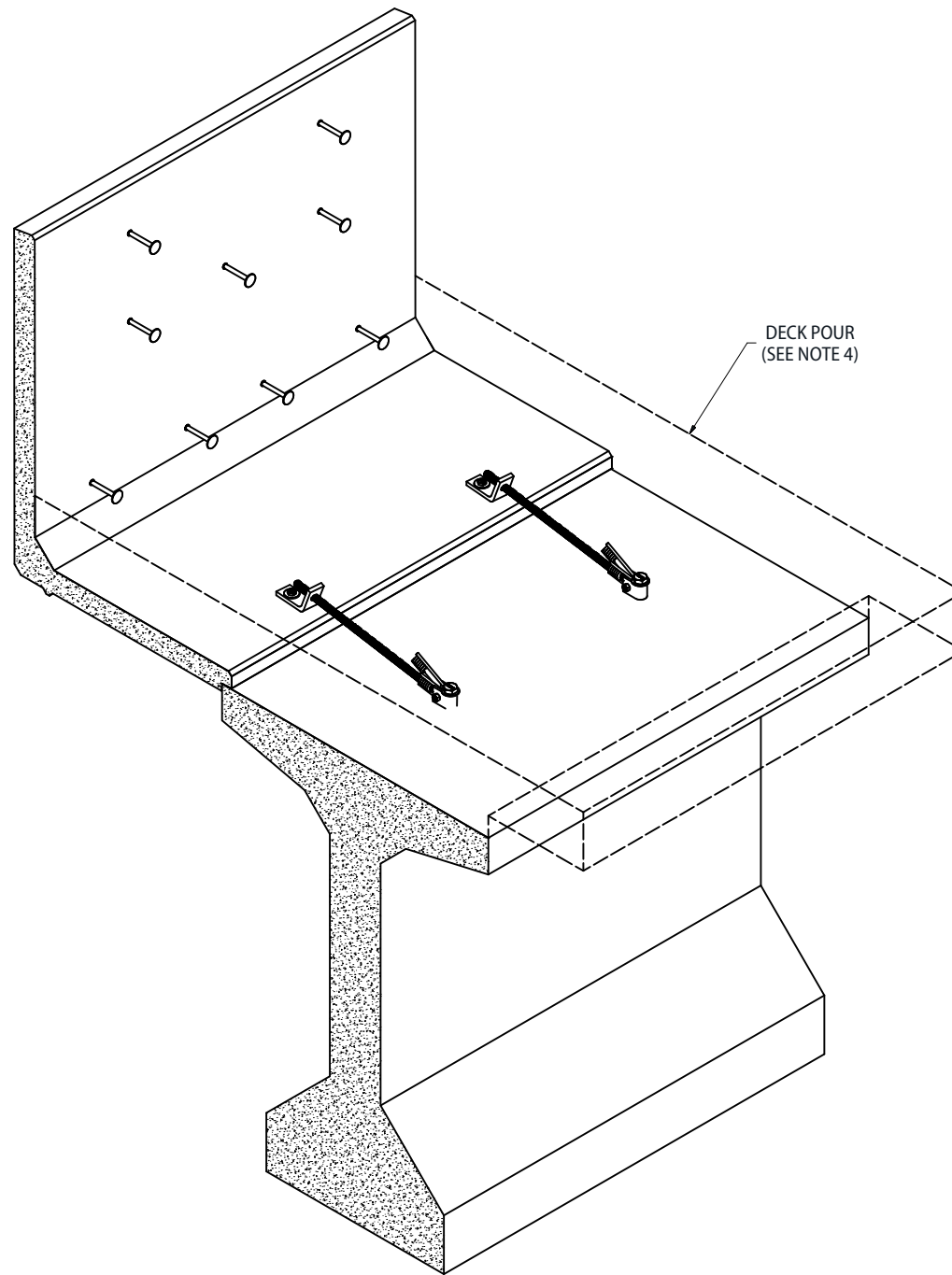
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REV	0	SIZE	D	SCALE	AS NOTED

NOTES:

1. REFER TO SHEET NO. 1 FOR GENERAL NOTES AND PANEL DETAILS.
2. REFER TO SHEET NO. 2 FOR STEEL GIRDER APPLICATION.
3. REFER TO SHEET NO. 3 FOR PANEL CONNECTION DETAILS.
4. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.



ERECTION PHASE 2B
(DECK REINFORCEMENT NOT SHOWN FOR CLARITY)
SCALE 6"=4'-0"



ERECTION PHASE 2B DETAIL
(DECK REINFORCEMENT NOT SHOWN FOR CLARITY)
SCALE 6"=5'-0"

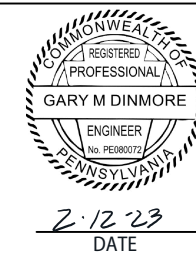
SUGGESTED SEQUENCE (con't):

- 7.) POST DECK POUR WORK AFTER CONCRETE CURING PERIOD -
 - a. Install railing system on top of panels (36" - 42" from top of deck to top of rail per OSHA requirements).
 - b. Remove primary tie hardware not embedded in deck concrete for reuse, including embedded section of coil rod (use plastic sleeve on portion of primary tie coil rod embedded in deck).
 - c. Install anchor studs in middle & top row of inserts, if not already installed.
- 8.) INSTALL BARRIER REINFORCEMENT -
- 9.) PRE-BARRIER POUR WORK -
 - a. Remove railing system.
 - b. Install front barrier formwork.
 - c. Install overpour barrier formwork.
 - d. Barrier can be slip-formed instead of installing formwork; slipform machine follows outside face of panel (no need for survey markers).



SEQUENCE OF CONSTRUCTION
for
STANDARD SIPFF
Phase 2B

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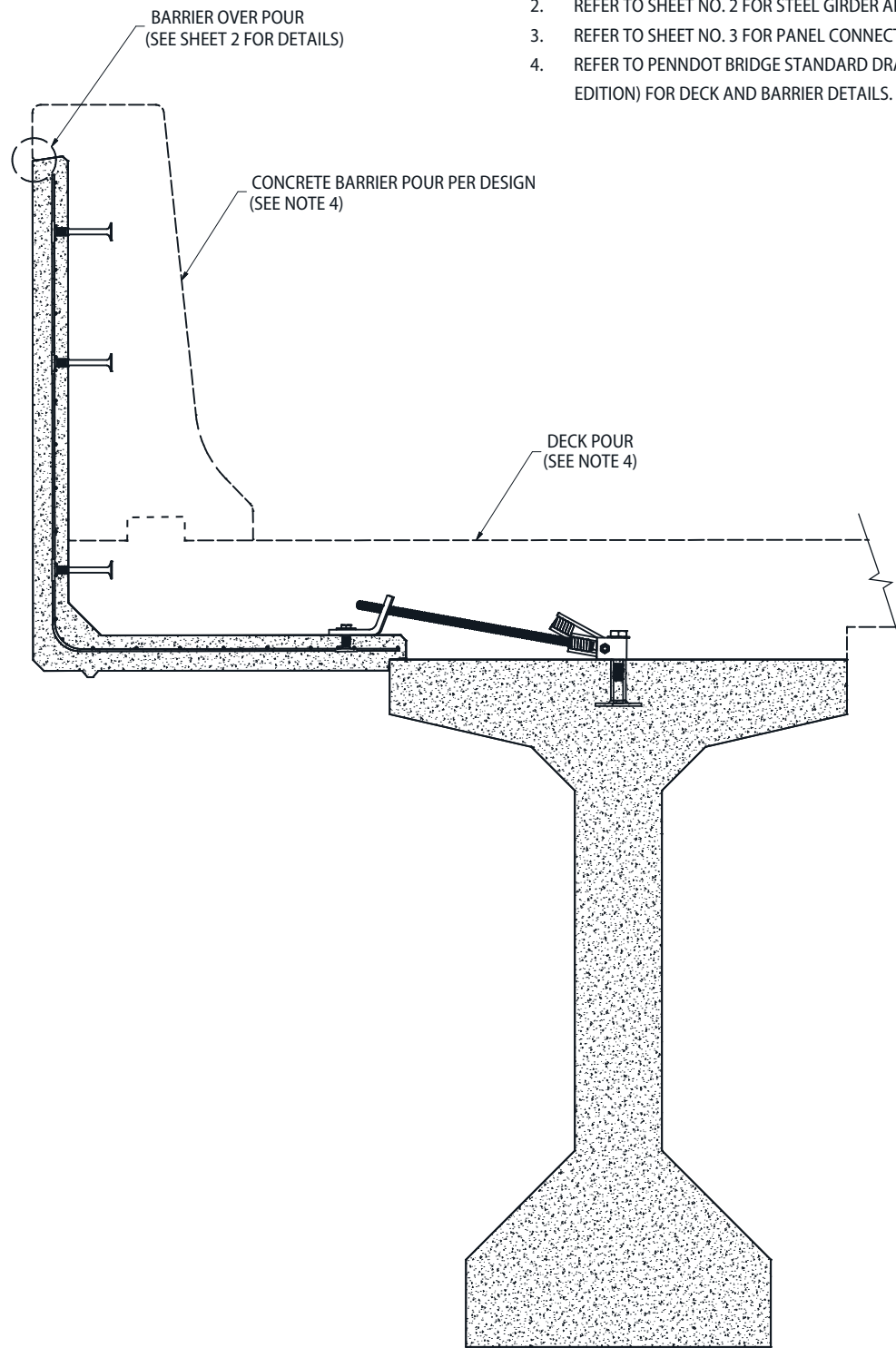
DRAWN BY	MJD	DATE	JAN 31, 2023	SHEET	7 of 9
REV	0	SIZE	D	SCALE	AS NOTED

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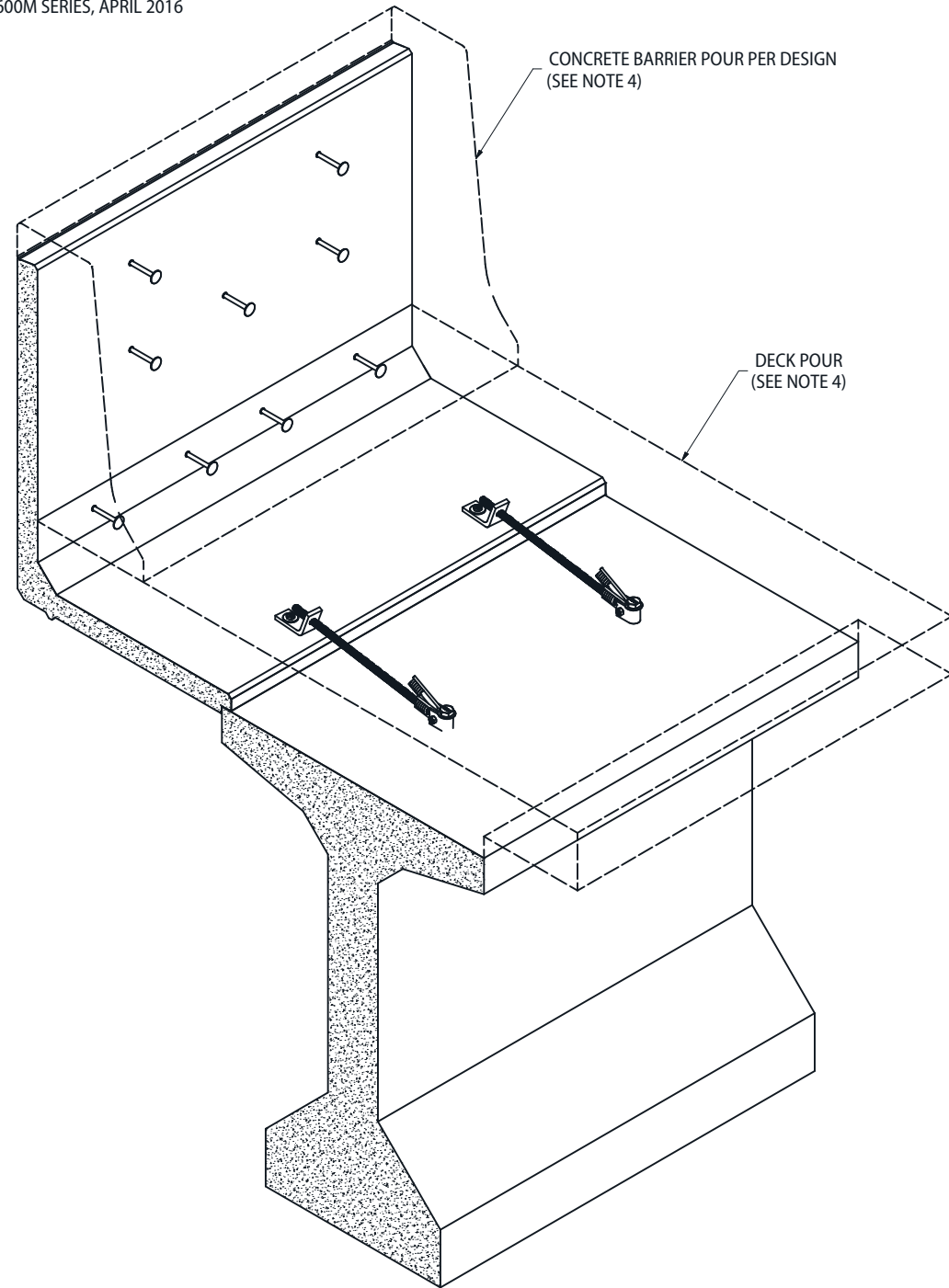
1. REFER TO SHEET NO. 1 FOR GENERAL NOTES AND PANEL DETAILS.
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3. REFER TO SHEET NO. 3 FOR PANEL CONNECTION DETAILS.
4. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.

SUGGESTED SEQUENCE (con't):

- 10.) POUR-BARRIER – both conventional formwork and slip-form.
 - a. Remove formwork.
 - b. Rub out inside face and top of barrier to include overpour (no need to rub-out precast panels).
- 11.) INSTALLATION COMPLETE.



ERECTION PHASE 3
(DECK & BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY)
SCALE 6"=4'-0"



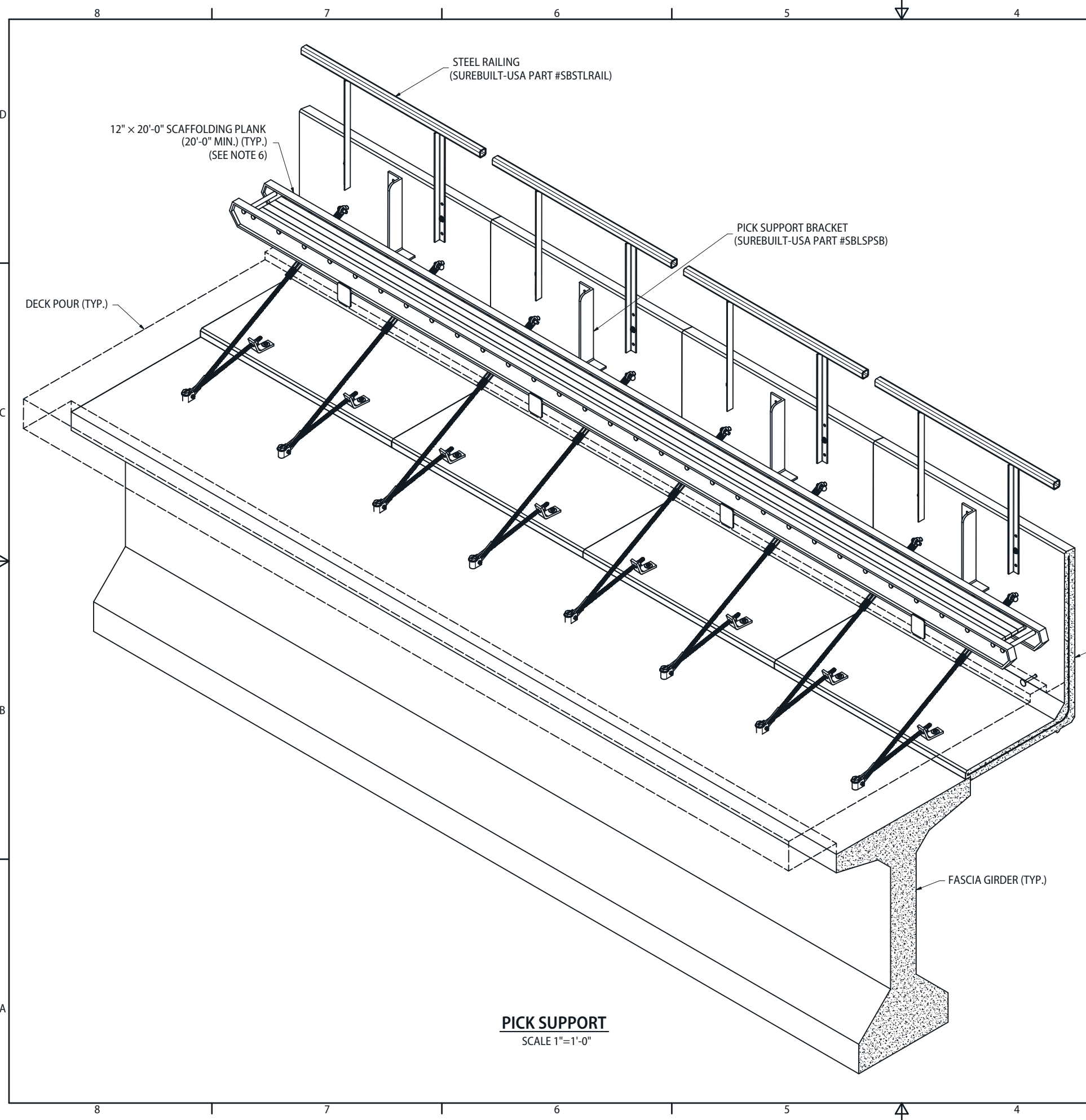
ERECTION PHASE 3 DETAIL
(DECK & BARRIER REINFORCEMENT NOT SHOWN FOR CLARITY)
SCALE 6"=5'-0"

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PRECASTEEL
SEQUENCE OF CONSTRUCTION
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STANDARD SIPFF
Phase 3

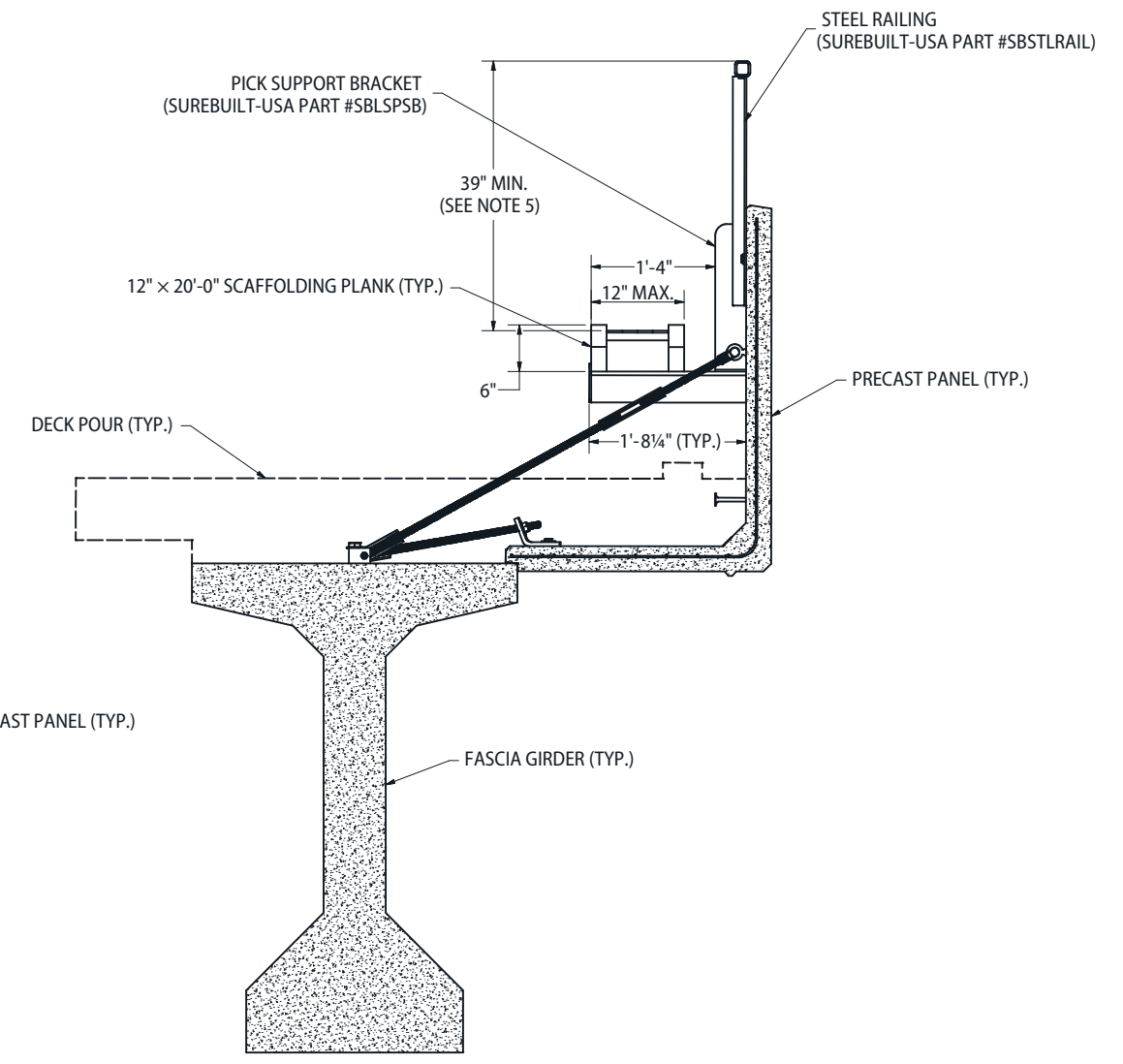
DRAWN BY	MJD	DATE	JAN 31, 2023	SHEET	8 of 9
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PICK SUPPORT
SCALE 1"=1'-0"

NOTES:

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2. REFER TO SHEET NO. 2 FOR STEEL GIRDER APPLICATION.
3. REFER TO SHEET NO. 3 FOR PANEL CONNECTION DETAILS.
4. REFER TO PENNDOT BRIDGE STANDARD DRAWINGS (BD-600M SERIES, APRIL 2016 EDITION) FOR DECK AND BARRIER DETAILS.
5. REFER TO OSHA STANDARD 1926.502(b)(1)
6. REFER TO OSHA STANDARD 1926.451
7. DECK REINFORCEMENT NOT SHOWN FOR CLARITY



PICK SUPPORT DETAIL
SCALE 1"=1'-0"

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PICK BRACKET & RAILING CONFIGURATION (ALT.)

DRAWN BY	MJD	DATE	JAN 31, 2023	SHEET	9 of 9
REV	0	SIZE	D	SCALE	AS NOTED