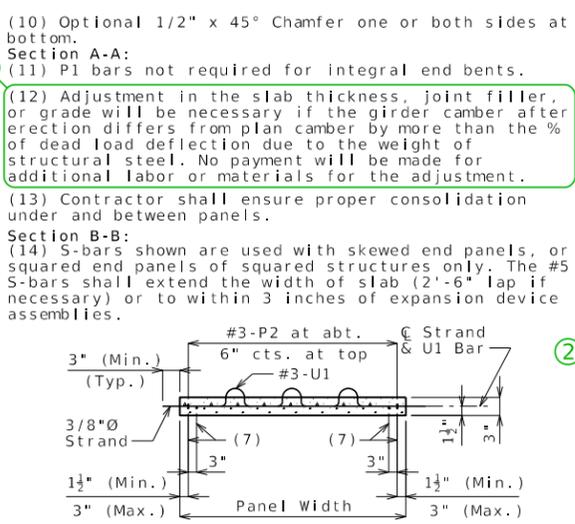
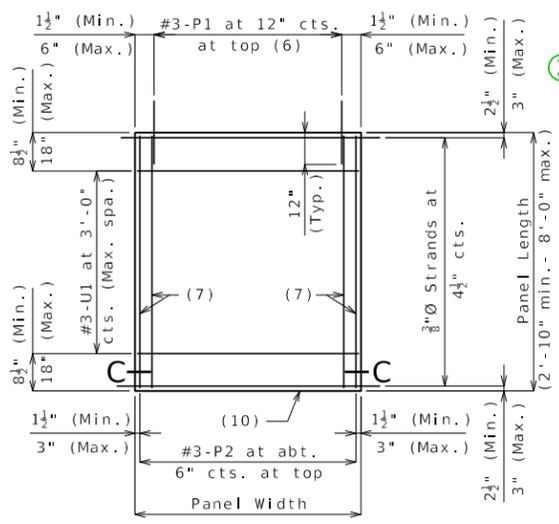
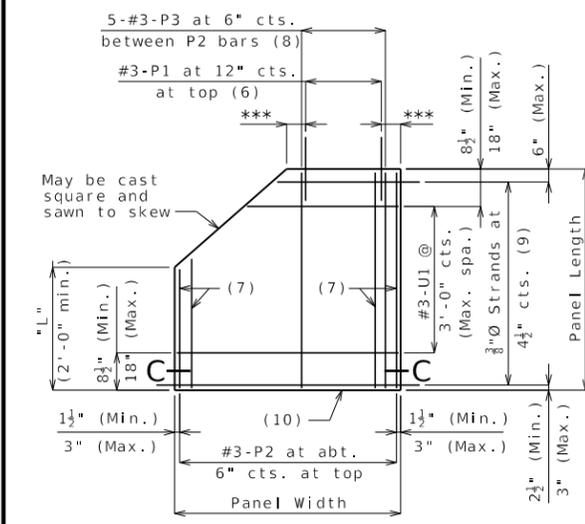
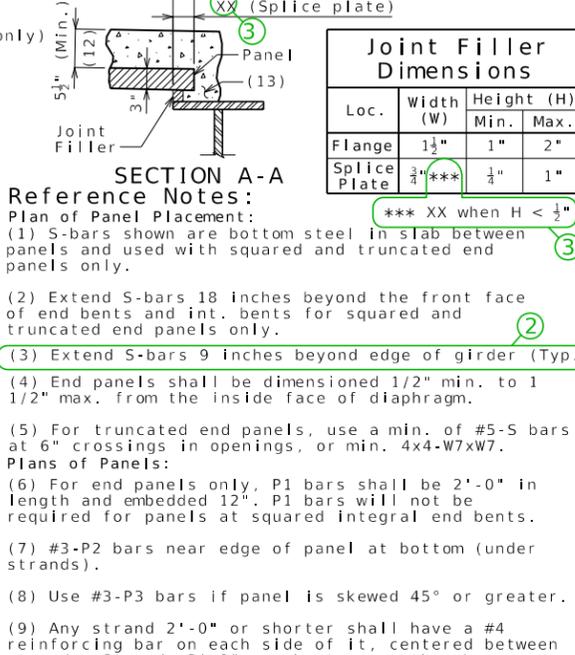
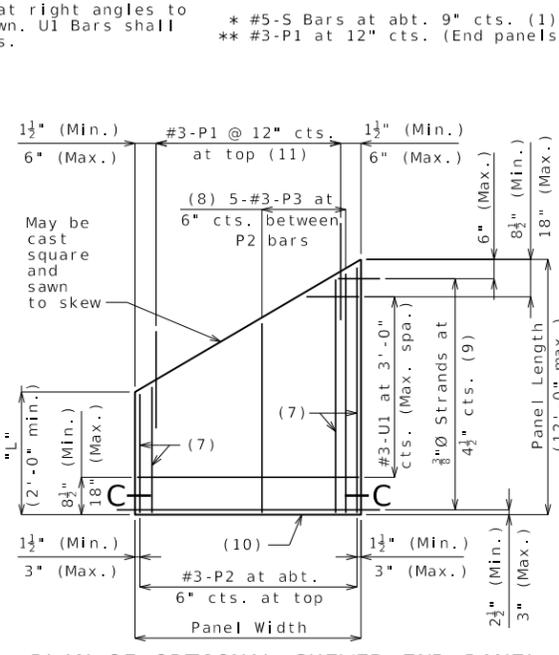
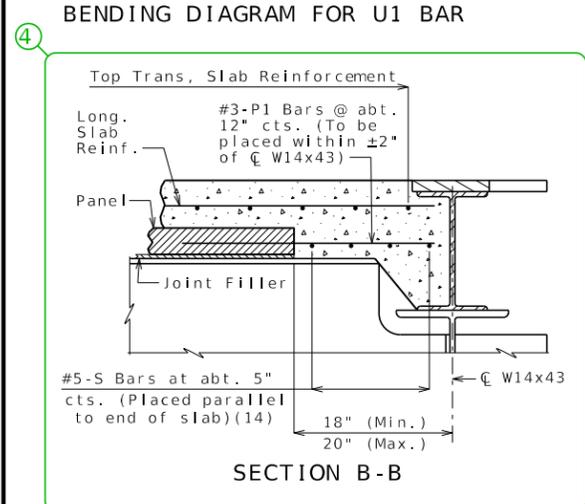
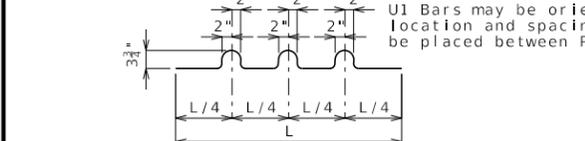


General Notes:
 Prestressed Panels:
 Concrete for prestressed panels shall be Class A-1 with $f'c = 6,000$ psi, $f'ci = 4,000$ psi.
 The top surface of all panels shall receive a scored finish with a depth of scoring of 1/8" perpendicular to the prestressing strands in the panels.
 Prestressing tendons shall be high-tensile strength uncoated seven-wire low-relaxation strands for prestressed concrete in accordance with AASHTO M 203 Grade 270, with nominal diameter of strand = 3/8" and nominal area = 0.085 sq. in. and minimum ultimate strength = 22.95 kips (270 ksi). Larger strands may be used with the same spacing and initial tension.
 Initial prestressing force = 17.2 kips/strand.
 The method and sequence of releasing the strands shall be shown on the shop drawings.
 Suitable anchorage devices for lifting panels may be cast in panels, provided the devices are shown on the shop drawings and approved by the engineer. Panel lengths shall be determined by the contractor and shown on the shop drawings.
 When squared end panels are used at skewed bents, the skewed portion shall be cast full depth. No separate payment will be made for additional concrete and reinforcing required.
 Support from diaphragm forms is required under the optional skewed end until cast-in-place concrete has reached 3,000 psi compressive strength.
 Prestressed panels shall be brought to saturated surface-dry (SSD) condition just prior to the deck pour. There shall be no free standing water on the panels or in the area to be cast.
 The prestressed panel quantities are not included in the table of estimated quantities for slab.
Reinforcing Steel:
 All dimensions are out to out.
 Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.
 Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.
 If U1 bars interfere with placement of slab steel, U1 loops may be bent over, as necessary, to clear slab steel.
 Deformed welded wire reinforcement (WWR) providing a minimum area of reinforcing perpendicular to strands of 0.22 sq. in./ft. with spacing parallel to strands sufficient to ensure proper handling, may be used in lieu of the #3-P2 bars shown. Wire diameter shall not be larger than 0.375 inch. The above alternative reinforcement criteria may be used in lieu of the #3-P3 bars, when required, and placed over a width not less than 2 feet.
 The following reinforcing steel shall be tied securely to the strands with the following maximum spacing in each direction:
 #3-P2 bars at 16 inches.
 WWR at 24 inches.
 The #3-U1 bars shall be tied securely to #3-P2 bars, to WWR or to strands (when placed between P1 bars) at about 3-foot centers.
 Minimum reinforcement steel length shall be 2'-0".
 All reinforcement other than prestressing strands shall be epoxy coated.
 Precast panels may be in contact with stirrup reinforcing in diaphragms.
 S-bars are not listed in the bill of reinforcing.
 Cost of S-bars will be considered completely covered by the contract unit price for the Slab.
Joint Filler:
 Joint filler shall be preformed fiber expansion joint material in accordance with Sec 1057 or expanded or extruded polystyrene bedding material in accordance with Sec 1073.
 The thickness of the joint filler shall be adjusted to achieve the slab haunching dimension found on Sheet No. (XX). These adjustments shall be within the limits noted in the table of Joint Filler Dimensions.
 Thicker material shall be used on one or both sides of the girder to reduce cast-in-place concrete thickness to within tolerances.
 The same thickness of material shall be used under any one edge of any panel except at splices, and the maximum change in thickness between adjacent panels shall be 1/4 inch to correct for variations from Girder Camber Diagram. The polystyrene bedding material may be cut to match haunch height above top of flange.
 Joint filler shall be glued to the girder. When thickness exceeds 1 1/2 inches, the joint filler shall be glued top and bottom. The glue used shall be the type recommended by the joint filler manufacturer.
 Edges of panels shall be uniformly seated on the joint filler before slab reinforcement is placed.



Joint Filler Dimensions

Loc.	Width (W)	Height (H)	
		Min.	Max.
Flange	1 1/2"	1"	2"
Splice Plate	1/4"***	1/4"	1"

*** XX when $H < 1/2"$

Reference Notes:
 Plan of Panel Placement:
 (1) S-bars shown are bottom steel in slab between panels and used with squared and truncated end panels only.
 (2) Extend S-bars 18 inches beyond the front face of end bents and int. bents for squared and truncated end panels only.
 (3) Extend S-bars 9 inches beyond edge of girder (Typ.).
 (4) End panels shall be dimensioned 1/2" min. to 1 1/2" max. from the inside face of diaphragm.
 (5) For truncated end panels, use a min. of #5-S bars at 6" crossings in openings, or min. 4x4-W7xW7.
 Plans of Panels:
 (6) For end panels only, P1 bars shall be 2'-0" in length and embedded 12". P1 bars will not be required for panels at squared integral end bents.
 (7) #3-P2 bars near edge of panel at bottom (under strands).
 (8) Use #3-P3 bars if panel is skewed 45° or greater.
 (9) Any strand 2'-0" or shorter shall have a #4 reinforcing bar on each side of it, centered between strands. Strands 2'-0" or shorter may then be debonded at the fabricator's option.
 (10) Optional 1/2" x 45° Chamfer one or both sides at bottom.
 Section A-A:
 (11) P1 bars not required for integral end bents.
 (12) Adjustment in the slab thickness, joint filler, or grade will be necessary if the girder camber after erection differs from plan camber by more than the % of dead load deflection due to the weight of structural steel. No payment will be made for additional labor or materials for the adjustment.
 (13) Contractor shall ensure proper consolidation under and between panels.
 Section B-B:
 (14) S-bars shown are used with skewed end panels, or squared end panels of squared structures only. The #5 S-bars shall extend the width of slab (2'-6" lap if necessary) or to within 3 inches of expansion device assemblies.

Detailed Checked

*** 3" (Min.), 6" (Max.)

Note: This drawing is not to scale. Follow dimensions.

Sheet No. of

DATE PREPARED: 2/24/2023
 ROUTE: MO
 DISTRICT: 6
 COUNTY: MO
 JOB NO.:
 CONTRACT ID.:
 PROJECT NO.:
 BRIDGE NO.:
 DESCRIPTION:
 DATE:
 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

Standard Drawing Guidance (do not show on plans):

- ① Replace all expansion gaps with integral end bents in "Plan Showing Panel Placement".
- ② For wide flange beams, change "Girder" to "Beam".
- ③ $XX = G - 1\frac{1}{4}"$ ($1\frac{1}{2}"$ max.) If XX equals $\frac{3}{4}"$, remove asterisk and note.
G is from the edge of the splice plate to the centerline of the nearest splice bolt.
- ④ Trade Section B-B as needed or omit if integral end bents.

