General Notes:

Design Specifications:
2002 MISSOURI DOT (TFR Division) Standard Specifications
Seismic Design Category B

Design Loading:
- Live Load: HS-20-44, New Construction
- Earth Load: 1200 lb/ft, Equivalent Fluid Pressure 45 lb/ft
- Fatigue Stress - Case III

Design Unit Stresses:
- Reinforcing Steel (Grade 60) \( f_y = 60,000 \text{ psi} \)
- Class B-2 Concrete (End Bents & Superstructure, except Barrier) \( f'_c = 4,000 \text{ psi} \)
- Class B-1 Concrete (Barrier) \( f'_c = 4,000 \text{ psi} \)

Design Loading:
- Earth - 120 lb/cf, Equivalent Fluid Pressure 45 lb/cf
- 35 lb/sf Future Wearing Surface

Details for Slab on Steel:

- "OPTIONAL SHIFTING TOP BARS AT BARRIER"
- Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)
- Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)
- Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)
- Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)

Estimated Quantities for Slab on Steel:

<table>
<thead>
<tr>
<th>Item</th>
<th>Co. 230D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class B-2 Concrete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class B-1 Concrete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class SC 4 and a finish Type I, II or III.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor may shift or leave bars as needed to tie R3 bar in barrier (if necessary, bar holding)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cost of any required excavation for bridge will be considered completely covered by the contract unit price for other items.

The table of Estimated Quantities for Slab on Steel represents the quantities used by the State in preparing the last estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (with the horizontal dimensions as shown on the plan of slab). Payment for stay-in-place corrugated steel forms, conventional forms, all concrete and epoxy coated reinforcing steel will be considered completely covered by the contract unit price. Variations may be awarded in the contractor unit price, but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be all in place as a permanent part of the structure when the concrete has cured. Steel shall be fabricated in accordance with Sec 3003 or ASRM 6002 with a thickness Class SC 4 and a finish Type I, II or III. Slabs shall be cast in place with conventional forming or stay-in-place corrugated steel forms. Precast prestressed panels will not be permitted.

Detailed Notes:
- This drawing is not to scale. Follow dimensions and gage details as per sheet 2.
- For Optional Stay-In-Place Form Details, see Sheet No. 2.
Standard Drawing Guidance (do not show on plans).

1. Remove if not required; may be incorporated into half section slab details.
2. See this note only when specified in Bridge Memo or Design Layout.
3. For skewed bridges, add these items to section when call out varied transverse bars at end bent.
4. Note is required only when shop drawings will be required (for example, expansion device replacement, diaphragm replacement, etc.)

Structural Steel Protective Coating:

Priming Coat: System G in accordance with Sec 1081.10.3.4. The cost of the intermediate field coat will be considered completely covered by the contract lump sum price for Intermediate Field Coat (System G). The cost of the finish field coat will be considered completely covered by the contract lump sum price for Finish Field Coat (System G). Black (Federal Standard #30045)

Brown (Federal Standard #25052)

Dark Blue (Federal Standard #25095)

Gray (Federal Standard #17038)

Gray (Federal Standard #26373)

Protective Coating: System G in accordance with Sec 1081 for Overcoating Structural Steel. Field Coats: The color of the field overcoat shall be Gray (Federal Standard #17038). The cost of the intermediate field coat will be considered completely covered by the contract unit price for Intermediate Field Coat (System G). The cost of the finish field coat will be considered completely covered by the contract unit price for Finish Field Coat (System G).

Existing Bearings at End

Platform and Int. Bent

Structural Steel Protective Coating:

Protective Coating: System G in accordance with Sec 1081. All existing bearings shall be recoated with System G. Surface Preparation: Surface preparation of the existing steel shall be in accordance with Sec 1081.10.4.6 shall be modified such that the word “RECOATED” is replaced by the word “RECOATED - SYSTEM G - BEARINGS ONLY”.

Existing Bearings. Tint of the prime coat for System G shall be similar to the color of the field coat to be used. Epoxy-Mastic Primer. The cost of the intermediate field coat will be considered completely covered by the contract unit price for Intermediate Field Coat (System G). The cost of the finish field coat will be considered completely covered by the contract unit price for Finish Field Coat (System G).

Priming Coat: System G in accordance with Sec 1081. All existing bearings shall be recoated with System G. The intermediate field coat will be coated with one 6-mil thickness of aluminum gray epoxy-mastic primer applied over an SSPC-SP3 surface preparation in accordance with Sec 1081. The bituminous coating shall be applied one foot above and one foot below the existing ground line and in accordance with Sec 702. The intermediate field coat will be considered completely covered by the contract unit price for Intermediate Field Coat (System G). The finish field coat will be considered completely covered by the contract unit price for Finish Field Coat (System G). Sec 1081.10.4.6 shall be modified such that the word “RECOATED” is replaced by the word “RECOATED - SYSTEM G - BEARINGS ONLY”.

Structural Steel Protective Coating:

Priming Coat: System G in accordance with Sec 1081. All existing bearings shall be recoated with System G. Surface Preparation: Surface preparation of the existing steel shall be in accordance with Sec 1081. The cost of the intermediate field coat will be considered completely covered by the contract unit price for Intermediate Field Coat (System G). The cost of the finish field coat will be considered completely covered by the contract unit price for Finish Field Coat (System G).

Memo or Design Layout.

Use when Rock Blanket is specified on BR Memo.

Structures with Exposed Piling

A4a2.1 All exposed surfaces of the existing structural steel piles shall be coated with one 6-mil thickness of aluminum gray epoxy-mastic primer applied over an SSPC-SP3 surface preparation in accordance with Sec 1081. The bituminous coating shall be applied one foot above and one foot below the existing ground line and in accordance with Sec 702. The intermediate field coat will be considered completely covered by the contract lump sum price for Surface Preparation for Applying Epoxy Mastic Primer. The cost of the aluminum gray epoxy-mastic primer and bituminous coating will be considered completely covered by the contract lump sum price for Surface Preparation for Applying epoxy Mastic Primer.

A4a2.2 Use when Bridge Memo or Design Layout specifies on BR Memo.

TYPICAL SECTION THRU SLAB

22'-0" RDWY - 4 BEAMS @ 6'-8"

*** SKewed BRIDGES ***
HALF SECTION NEAR MIDSPAN
HALF SECTION NEAR INT. BENT
TYPICAL SECTION THRU SLAB

22' RDWY-4 BEAMS @ 6'-8"

22' RDWY-4 BEAMS @ 6'-0"

24' RDWY-4 BEAMS @ 6'-8"

24' RDWY-4 BEAMS @ 6'-10"
HALF SECTION NEAR MIDSPAN
TYPICAL SECTION THRU SLAB
HALF SECTION NEAR INT. BENT

28' RDWY-4 BEAMS @ 8'-0''

28' RDWY-4 BEAMS @ 7'-8''
REDECK01_front_sheet  Alternate Details (6 of 7)

**32' RDWY-4 BEAMS @ 9'-4"**

**34' RDWY-5 BEAMS @ 7'-6"**
19'-0" Half Section Near Midspan

19'-0" Half Section Near Int. Bent

TYPICAL SECTION THRU SLAB

38' RDWY - 5 BEAMS @ 8'-6"

Symm. abt. Structure

Crown of Slab

Detail A

Detail B

Exist. Beam

#5-S3 @ 5" cts.

Typ.

ReDeck01_front_sheet Alternate Details (7 of 7)