Standard Division Bridge of this standard to other formats or incorrect results or damages resulting from its use.

The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for whatever purpose. TxDOT assumes no responsibility for the conversion.

DISCLAIMER:

FILE:  
DATE:  
DN:  
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DW:  
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FILE:  
JOB:  
COUNTY:  
SECT:  
DIST:  
REVISIONS:  
HIGHWAY:  
SHEET NO:  
CTxDOT:  
CONT:  

PRESTRESSED CONCRETE DECKED SLAB BEAM SPANS  
(TYPE 6DS20 OR 6DS23)  
24' ROADWAY

TYPICAL TRANSVERSE SECTION

TABLE OF VARIABLE VALUES

<table>
<thead>
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<th>DEAD LOAD DEFORMATIONS</th>
<th>SECTION DEPTHS</th>
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1. Based on theoretical beam camber, dead load deflections of two-course surface treatment and 2" ACP overlay, and a constant grade.
2. This standard does not provide for changes in roadway cross-slopes within the structure.
3. See Lateral Connector Details.

DEAD LOAD DEFLECTION DIAGRAM

MATERIAL NOTES:

Provide Grade 36 or 50 lateral connector rods (LCR).

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.

See applicable railing details and standards Prestressed Concrete Decked Slab Beams Rail Anchorage Details (DSBRA) for rail anchorages.

This standard does not support the use of transition bents. It is recommended, with crown cross-slope, to erect beams adjacent to crown point first. For structures without a crown point, it is recommended to erect beams on the high side of crest slope first and progress to the low side.

Payment for the following is considered subsidiary to the bid items:

- Concrete Decked Slab Beams Rail Anchorage Details (DSBRA)
- Other bid items: packaged non-metallic, non-shrink cementitious grout; corrosion inhibiting bonding agent; fabric underlay; work performed; materials furnished; and curing time.

Payment for the following is considered subsidiary to other bid items:

Concrete Decked Slab Beams Rail Anchorage Details (DSBRA)

SECTIONS:

• Beam #1

• Beam #4

• Beam #3

• Beam #2

Fabric joint seal is considered subsidiary to other bid items.

Material Notes:

Provide Grade 36 or 50 lateral connector rods (LCR).

General Notes:

Designed according to AASHTO LRFD Bridge Design Specifications.

See applicable railing details and standards for rail anchorages. This standard does not support the use of transition bents. It is recommended, with crown cross-slope, to erect beams adjacent to crown point first. For structures without a crown point, it is recommended to erect beams on the high side of crest slope first and progress to the low side.

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- Concrete Decked Slab Beams Rail Anchorage Details (DSBRA)
- Other bid items: packaged non-metallic, non-shrink cementitious grout; corrosion inhibiting bonding agent; fabric underlay; work performed; materials furnished; and curing time.

Payment for the following is considered subsidiary to other bid items:

Concrete Decked Slab Beams Rail Anchorage Details (DSBRA)
The use of this standard is governed by the "Texas Engineering Practice Act." No warranty of any kind shall be implied from the use of this standard to other formats or for incorrect results or damages resulting from its use.

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**Decked Slab Beam**

**Standard Beam End Elevations**

- **Section:** 1" Dia x 11" smooth lateral connector rod (LCR) as per Item 356, "Fabric Underseal."
- **Plan:** Use reinforced fabric joint underseal meeting the requirements of Item 356, "Fabric Underseal." When using the self-adhesive type fabric underseal, pressure roll fabric underseal to improve adhesion. Apply binder to fabric joint underseal as required by the manufacturer's installation instructions.
- **Lateral Connector Rod Details:**
  - **2'-0" Fabric underseal:** Use fabric underseal meeting the requirements of Item 356, "Fabric Underseal." Place backer rod in joint opening prior to placing binder. Backer rods must be suitable for contact with hot asphalt.
  - **1" Dia x 11" smooth lateral connector rod (LCR):** Use forming material between lateral connectors. Maintain a uniform grout depth along length of beams.

**At Abutment**

- **Joint Sealant:** Seal flush with the top of the asphaltic concrete pavement.
- **Bar Anchors:** Use bar anchors meeting the requirements of Item 348, "Bar Anchors." Coat steel surfaces in contact with grout with a 3-component, water-based, epoxy-modified cement bonding agent including a corrosion inhibitor (BASF Emaco P24, Euclid Corr-Bond, Sika Armafix 150 Easton or approved equal). Submit material data sheet to Engineer for approval prior to use. Apply in accordance with manufacturer's specifications and not prior to 12 hours before grout placement.
- **Lateral Connector Rods:** Lateral connector rods are subsidiary to other pertinent bid items. After the specified cure times for the grout is reached, apply fabric underseal to the units shown. Use fabric underseal meeting the requirements of Item 356, "Fabric Underseal."
- **Joint Opening:** Use reinforced fabric joint underseal meeting the requirements of Item 356, "Fabric Underseal." When using the self-adhesive type fabric underseal, pressure roll fabric underseal to improve adhesion. Apply binder to fabric joint underseal as required by the manufacturer's installation instructions.

**At Interior Bent**

- **Curing:** Curing compounds are hot applied. Cure 3 days, minimum, prior to placing surface treatments and overlay. Approximate y area quantity for 24" beams joint = 0.33% of joint per foot of span length.
- **Surface Treatment:** Use forming material between lateral connectors. Maintain a uniform grout depth along length of beams.
- **Bearing Pad:** Place backer rod in joint opening prior to placing binder. Backer rods must be suitable for contact with hot asphalt.

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**Supplementary Notes:**

- Fabricator must adjust beam lengths for beam slopes as required.
- Seals and certain 3" diameter smooth lateral connector rod (LCR) in the bottom of the flange connection "free" prior to welding to minimize joint leakage. Caulk where necessary between sections.
- Cast shear surfaces in contact with grout with a 3-component, water-based, easy-modified concrete bonding agent including a corrosion inhibitor (BASF Emaco P24, Euclid Corr-Bond, Sika Armafix 150 Easton or approved equal). Submit material data sheet to Engineer for approval prior to use. Apply in accordance with manufacturer's specifications and not prior to 12 hours before grout placement.

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**TABLE OF ESTIMATED QUANTITIES**

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**Notes:**

- August 2020
- Revisions
- ESTIMATED QUANTITIES
- 24' ROADWAY