



DEAD LOAD DEFLECTION DIAGRAM

| TABLE OF<br>DEFLECTIONS <sup>3</sup> |            |  |  |  |  |
|--------------------------------------|------------|--|--|--|--|
| Location                             | Deflection |  |  |  |  |
| CL Brg                               | 0.0        |  |  |  |  |
| 0.1 Span                             | 0.31 x "A" |  |  |  |  |
| 0.2 Span                             | 0.59 x "A" |  |  |  |  |
| 0.3 Span                             | 0.81 x "A" |  |  |  |  |
| 0.4 Span                             | 0.95 x "A" |  |  |  |  |
| CL Span                              | "A"        |  |  |  |  |

Generation Generation Generation (4)Nominal face Nominal See Bridge Layout for slope qe verhang (Typ) face of rail of rai End cover T at 9" (Тур) (Typ)2." . . \_\_\_\_\_ • • • • . . . . . 8 D Н D 3" (Typ) 9" (Typ) θ 8 Spaces at 9" Max Bars D (Typ) └**---** ♀ Beam #1 € Beam #4---2.000' 3 Spaces at 7.333' = 22.000' 2.000 At Contractor's SHOWING TYPICAL SLAB SHOWING THICKENED SLAB END option, alternating Bars B may end at € outside beam (Typ) ----TYPICAL TRANSVERSE SECTION

e whatso its use.

No warranty of any kind is made by TxDOT for any purpose formats or for incorrect results or damages resulting from

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". TXDDT assumes no responsibility for the conversion of this standard to other.

## BAR TABLE

| Bar | Size |
|-----|------|
| 4   | #4   |
| В   | #4   |
| D   | #4   |
| G   | #4   |
| 4   | #4   |
| J   | #4   |
| M   | #4   |
| A   | #5   |
| Т   | #4   |

| TABLE OF5ESTIMATED QUANTITIES |                           |                          |  |  |  |
|-------------------------------|---------------------------|--------------------------|--|--|--|
| SPAN<br>LENGTH                | REINF<br>CONCRETE<br>SLAB | TOTAL<br>REINF<br>STEEL2 |  |  |  |
| Ft                            | SF                        | Lb                       |  |  |  |
| 30                            | 780                       | 5,070                    |  |  |  |
| 35                            | 910                       | 5,915                    |  |  |  |
| 40                            | 1,040                     | 6,760                    |  |  |  |
| 45                            | 1,170                     | 7,605                    |  |  |  |
| 50                            | 1,300                     | 8,450                    |  |  |  |
| 55                            | 1,430                     | 9,295                    |  |  |  |
| 60                            | 1,560                     | 10,140                   |  |  |  |
| 65                            | 1,690                     | 10,985                   |  |  |  |
| 70                            | 1,820                     | 11,830                   |  |  |  |
| 75                            | 1,950                     | 12,675                   |  |  |  |
| 80                            | 2,080                     | 13,520                   |  |  |  |
| 85                            | 2,210                     | 14,365                   |  |  |  |
| 90                            | 2,340                     | 15,210                   |  |  |  |
| 95                            | 2,470                     | 16,055                   |  |  |  |
| 100                           | 2,600                     | 16,900                   |  |  |  |
| 105                           | 2,730                     | 17,745                   |  |  |  |
| 110                           | 2,860                     | 18,590                   |  |  |  |
| 115                           | 2,990                     | 19,435                   |  |  |  |
| 120                           | 3,120                     | 20,280                   |  |  |  |

## MATERIAL NOTES:

Provide Class S concrete (f'c = 4,000 psi). Provide Class S (HPC) concrete if shown elsewhere in the plans.

Provide Grade 60 reinforcing steel.

Provide bar laps, where required, as follows:

Uncoated~ #4 = 1'-7"Epoxy coated~ #4 = 2'-5"Deformed Welded Wire Reinforcement (WWR) (ASTM A1064) of equal size and spacing may be substituted for Bars A, B, D, 0A, or T unless noted otherwise.

## GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design

Specifications. Multi-span units, with slab continuous over interior bents, may be formed with the details shown on this sheet and Steel Beam

Continuous Slab Details (SBCS) standard sheet. See Steel Beam Thickened Slab End (SBTS) standard sheet for thickened slab end details and quantity adjustments.

See Steel Beam Miscellaneous Slab Details (SBMS) standard

sheet for miscellaneous details. See applicable rail details for rail anchorage in slab. This standard does not support the use of transition bents.

Cover dimensions are clear dimensions, unless noted otherwise.

| HL93 [                             | OADING        |        |      | S         | HE                             | EET 1   | OF 2      |
|------------------------------------|---------------|--------|------|-----------|--------------------------------|---------|-----------|
| Texas Department of Transportation |               |        |      |           | Bridge<br>Division<br>Standard |         |           |
| STEEL BEAM<br>SPANS<br>24' ROADWAY |               |        |      |           |                                |         |           |
| SSB-24                             |               |        |      |           |                                |         |           |
| FILE: SB-SS                        | B2400-21.dgn  | DN: TX | DOT  | ск: ТхДОТ | DW:                            | T x D0T | ск: ТхD0Т |
| (C)T x DOT                         | November 2021 | CONT   | SECT | JOB       |                                | Н       | IGHWAY    |
|                                    | REVISIONS     |        |      |           |                                |         |           |
|                                    |               | DIST   |      | COUNTY    |                                |         | SHEET NO. |
|                                    |               |        |      |           |                                |         |           |





## FABRICATION NOTES

ROLLED BEAMS:

OPTIONAL PLATE GIRDERS:

6
7
8
9
7

(1) Use End Be girder. See SBMD for additional information.

| CAMBER<br>TOLERANCE<br>TABLE 10 |               |  |  |  |  |
|---------------------------------|---------------|--|--|--|--|
| Point Tolerance                 |               |  |  |  |  |
| 0.1                             | + %16",-0"    |  |  |  |  |
| 0.2                             | + 1",-0"      |  |  |  |  |
| 0.3                             | +1 1/4",-0"   |  |  |  |  |
| 0.4                             | + 1 1/16",-0" |  |  |  |  |
| 0.5                             | + 1 ½",-0"    |  |  |  |  |

| HL93 LOADING                       |        |           | S                              | ΗE   | ET 2  | OF 2      |
|------------------------------------|--------|-----------|--------------------------------|------|-------|-----------|
| Texas Department of Transportation |        |           | Bridge<br>Division<br>Standard |      |       |           |
|                                    |        |           |                                |      |       |           |
|                                    |        |           |                                |      |       |           |
|                                    |        |           |                                |      |       |           |
| FILE:                              | DN: TX | 707       | CK: TXDOT                      | DW:  | TXDOT | CK: TXDOT |
| (C)TxDOT November 2021             | CONT   | SECT      | JOB                            | - 01 | HI    | GHWAY     |
| REVISIONS                          |        |           |                                |      |       |           |
|                                    | DIST   | ST COUNTY |                                |      |       | SHEET NO. |
|                                    |        |           |                                |      |       |           |