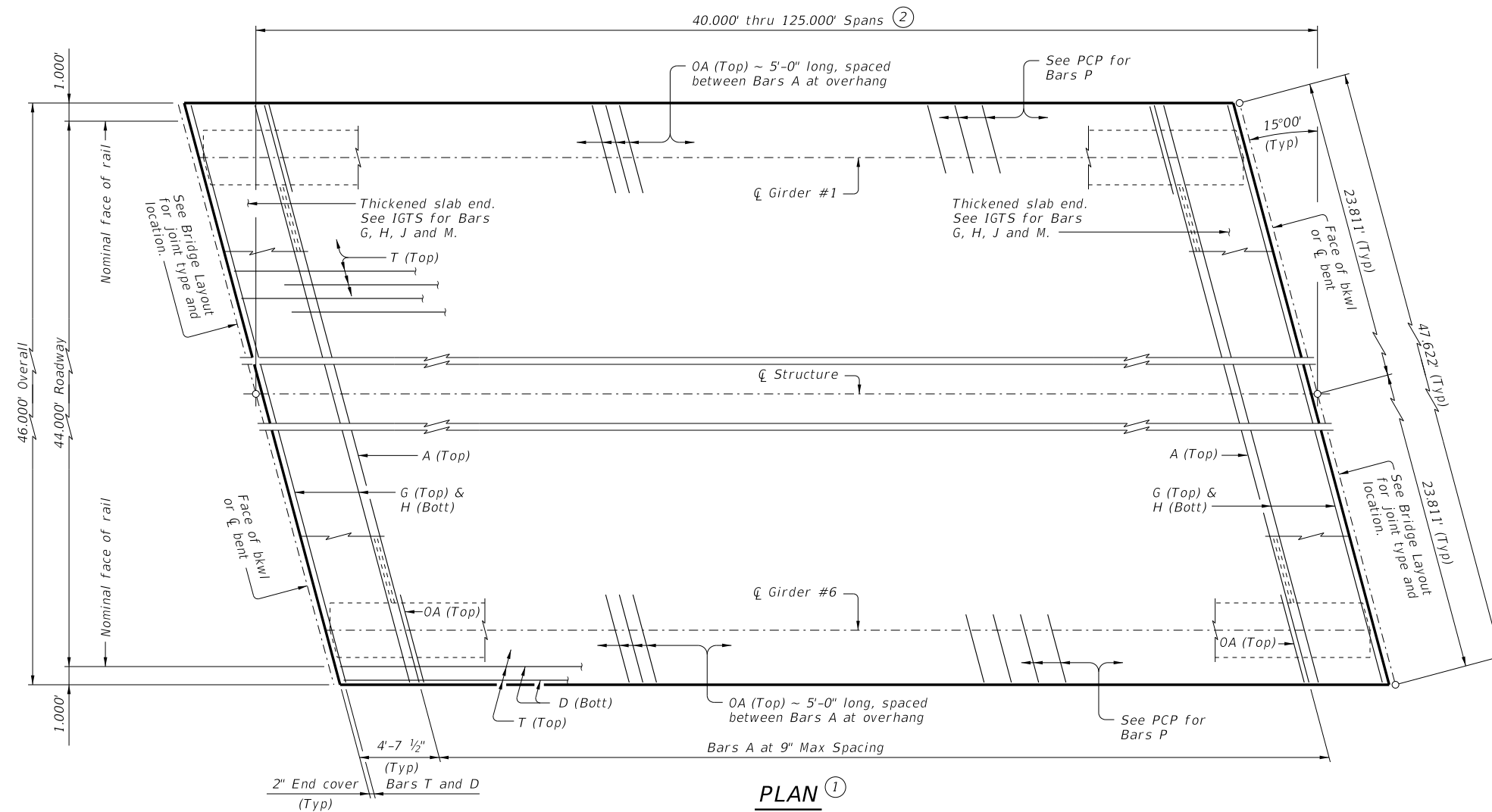


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BAR TABLE

| BAR | SIZE |
|-----|------|
| A | #4 |
| D | #4 |
| G | #4 |
| H | #4 |
| J | #4 |
| M | #4 |
| OA | #5 |
| P | #4 |
| T | #4 |



- ① If multi-span units (with slab continuous over interior bents) are indicated on the Bridge Layout, see standard IGCS for adjustment to slab reinforcement and quantities.
- ② Span lengths for prestressed concrete I-Girder type:
 Type Tx28 for spans lengths 40,000' thru 70,000'.
 Type Tx34 for spans lengths 40,000' thru 85,000'.
 Type Tx40 for spans lengths 40,000' thru 95,000'.
 Type Tx46 for spans lengths 40,000' thru 110,000'.
 Type Tx54 for spans lengths 40,000' thru 125,000'.
- ③ "Y" value shown is based on theoretical girder camber, dead load deflection from an 8 1/2" concrete slab, a constant roadway grade, and using precast panels (PCP). The Contractor will adjust this value as necessary for any roadway vertical curve.

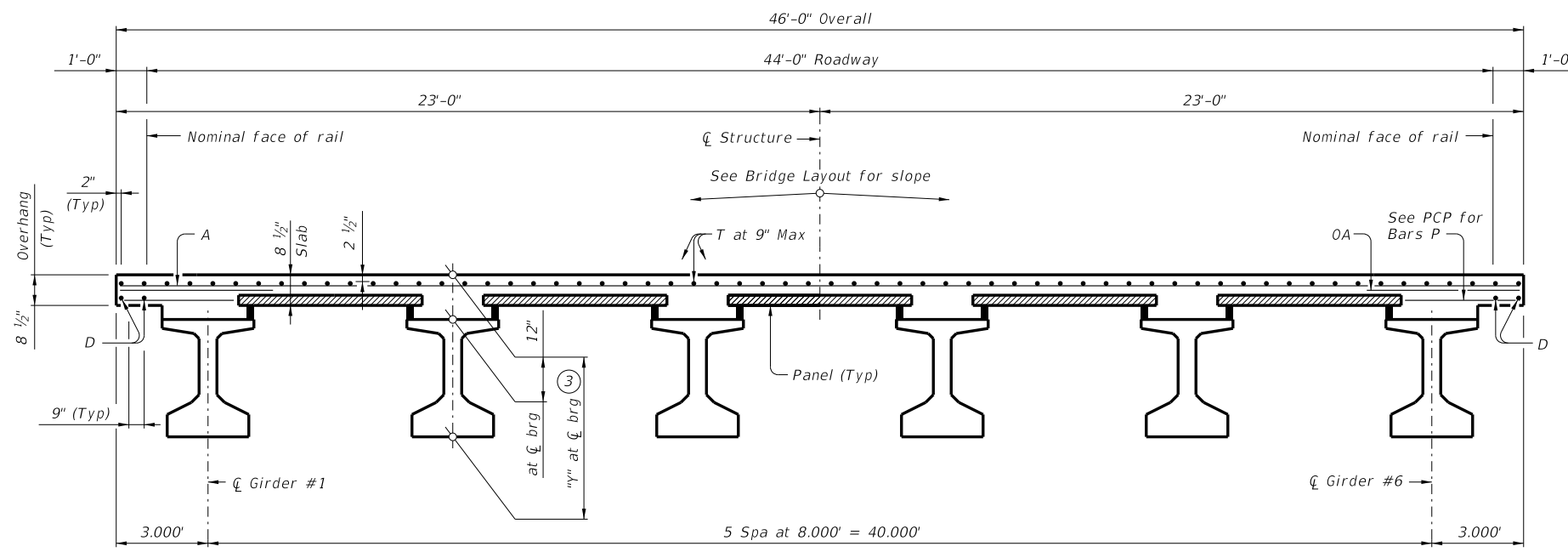


TABLE OF SECTION DEPTHS

| GIRDER TYPE | "Y" AT \bar{C} BRG (3) |
|-------------|--------------------------|
| | Ft/In |
| Tx28 | 3'-4" |
| Tx34 | 3'-10" |
| Tx40 | 4'-4" |
| Tx46 | 4'-10" |
| Tx54 | 5'-6" |

TYPICAL TRANSVERSE SECTION
(Showing girder type Tx46)

HL93 LOADING SHEET 1 OF 2

Texas Department of Transportation Bridge Division Standard

PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx28 THRU Tx54) 44' ROADWAY 15° SKEW

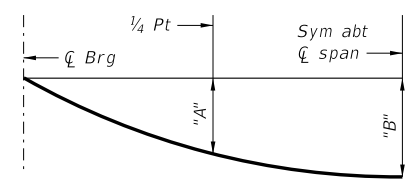
SIG-44-15

| | | | | |
|--------------------------------------|---------|---------|---------|-----------|
| FILE: IG-SIG4415-23.dgn | DN: JMH | CK: NRN | DW: JTR | CK: TAR |
| ©TxDOT August 2017 | CONT | SECT | JOB | HIGHWAY |
| REVISIONS | | | | |
| 10-19: Increased "X" and "Y" Values. | DIST | | COUNTY | SHEET NO. |
| 01-23: Removed PCP(O) reference. | | | | |

DATE: FILE:

TABLE OF DEAD LOAD DEFLECTIONS

| TYPE T _x 28 GIRDERS | | | TYPE T _x 34 GIRDERS | | | TYPE T _x 40 GIRDERS | | | TYPE T _x 46 GIRDERS | | | TYPE T _x 54 GIRDERS | | |
|--------------------------------|-------|-------|--------------------------------|-------|-------|--------------------------------|-------|-------|--------------------------------|-------|-------|--------------------------------|-------|-------|
| SPAN LENGTH | "A" | "B" | SPAN LENGTH | "A" | "B" | SPAN LENGTH | "A" | "B" | SPAN LENGTH | "A" | "B" | SPAN LENGTH | "A" | "B" |
| Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft | Ft |
| 40 | 0.009 | 0.013 | 40 | 0.006 | 0.008 | 40 | 0.004 | 0.005 | 40 | 0.002 | 0.003 | 40 | 0.001 | 0.002 |
| 45 | 0.015 | 0.021 | 45 | 0.009 | 0.012 | 45 | 0.006 | 0.008 | 45 | 0.004 | 0.006 | 45 | 0.003 | 0.004 |
| 50 | 0.023 | 0.032 | 50 | 0.014 | 0.019 | 50 | 0.009 | 0.013 | 50 | 0.006 | 0.009 | 50 | 0.004 | 0.006 |
| 55 | 0.034 | 0.048 | 55 | 0.020 | 0.028 | 55 | 0.014 | 0.019 | 55 | 0.009 | 0.013 | 55 | 0.006 | 0.008 |
| 60 | 0.048 | 0.068 | 60 | 0.029 | 0.041 | 60 | 0.019 | 0.027 | 60 | 0.013 | 0.018 | 60 | 0.009 | 0.012 |
| 65 | 0.068 | 0.095 | 65 | 0.041 | 0.057 | 65 | 0.026 | 0.037 | 65 | 0.018 | 0.025 | 65 | 0.012 | 0.017 |
| 70 | 0.092 | 0.129 | 70 | 0.055 | 0.077 | 70 | 0.036 | 0.050 | 70 | 0.024 | 0.034 | 70 | 0.016 | 0.023 |
| | | | 75 | 0.073 | 0.102 | 75 | 0.048 | 0.067 | 75 | 0.033 | 0.046 | 75 | 0.021 | 0.030 |
| | | | 80 | 0.095 | 0.134 | 80 | 0.062 | 0.087 | 80 | 0.043 | 0.060 | 80 | 0.028 | 0.039 |
| | | | 85 | 0.122 | 0.171 | 85 | 0.080 | 0.112 | 85 | 0.054 | 0.076 | 85 | 0.036 | 0.050 |
| | | | | | | 90 | 0.101 | 0.142 | 90 | 0.068 | 0.096 | 90 | 0.046 | 0.064 |
| | | | | | | 95 | 0.126 | 0.177 | 95 | 0.085 | 0.120 | 95 | 0.057 | 0.080 |
| | | | | | | | | | 100 | 0.105 | 0.148 | 100 | 0.070 | 0.098 |
| | | | | | | | | | 105 | 0.129 | 0.181 | 105 | 0.085 | 0.120 |
| | | | | | | | | | 110 | 0.156 | 0.219 | 110 | 0.103 | 0.145 |
| | | | | | | | | | 115 | | | 115 | 0.123 | 0.173 |
| | | | | | | | | | 120 | | | 120 | 0.147 | 0.206 |
| | | | | | | | | | 125 | | | 125 | 0.173 | 0.243 |



DEAD LOAD DEFLECTION DIAGRAM

Calculated deflections shown are due to the concrete slab on interior girders only ($E_c = 5000$ ksi). Adjust values as required for exterior girders and if optional slab forming is used. These values may require field verification.

TABLE OF ESTIMATED QUANTITIES

| SPAN LENGTH | REINF CONCRETE SLAB | Prestressed Concrete Girders | | | TOTAL REINF STEEL ⁽⁵⁾ |
|-------------|---------------------|-------------------------------|---------------------------------|-----------------------------|----------------------------------|
| | | ABUT TO INT BT ⁽⁴⁾ | INT BT TO INT BT ⁽⁴⁾ | ABUT TO ABUT ⁽⁴⁾ | |
| Ft | SF | LF | LF | LF | Lb |
| 40 | 1,840 | 236.95 | 237.00 | 236.89 | 4,232 |
| 45 | 2,070 | 266.95 | 267.00 | 266.89 | 4,761 |
| 50 | 2,300 | 296.95 | 297.00 | 296.89 | 5,290 |
| 55 | 2,530 | 326.95 | 327.00 | 326.89 | 5,819 |
| 60 | 2,760 | 356.95 | 357.00 | 356.89 | 6,348 |
| 65 | 2,990 | 386.95 | 387.00 | 386.89 | 6,877 |
| 70 | 3,220 | 416.95 | 417.00 | 416.89 | 7,406 |
| 75 | 3,450 | 446.95 | 447.00 | 446.89 | 7,935 |
| 80 | 3,680 | 476.95 | 477.00 | 476.89 | 8,464 |
| 85 | 3,910 | 506.95 | 507.00 | 506.89 | 8,993 |
| 90 | 4,140 | 536.95 | 537.00 | 536.89 | 9,522 |
| 95 | 4,370 | 566.95 | 567.00 | 566.89 | 10,051 |
| 100 | 4,600 | 596.95 | 597.00 | 596.89 | 10,580 |
| 105 | 4,830 | 626.95 | 627.00 | 626.89 | 11,109 |
| 110 | 5,060 | 656.95 | 657.00 | 656.89 | 11,638 |
| 115 | 5,290 | 686.95 | 687.00 | 686.89 | 12,167 |
| 120 | 5,520 | 716.95 | 717.00 | 716.89 | 12,696 |
| 125 | 5,750 | 746.95 | 747.00 | 746.89 | 13,225 |

- Fabricator will adjust lengths for girder slopes as required.
- Reinforcing steel weight is calculated using an approximate factor of 2.3 lbs/SF.

MATERIAL NOTES:

GENERAL NOTES:

See Prestressed Concrete Panels (PCP) standard and Prestressed Concrete Panel Fabrication Details (PCP-FAB) standard for panel details not shown.
 See I-Girder Miscellaneous Slab Details (IGMS) standard for miscellaneous details.
 See applicable rail details for rail anchorage in slab.
 See Permanent Metal Deck Forms (PMDf) standard for details and quantity adjustments if this option is used.
 This standard is drawn showing right forward skew.
 See Bridge Layout for actual skew direction.
 This standard does not support the use of transition bents.

Cover dimensions are clear dimensions, unless noted otherwise.

| | |
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| <p>Texas Department of Transportation</p> | <p>Bridge Division Standard</p> |
| <p>PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE T_x28 THRU T_x54) 44' ROADWAY 15° SKEW</p> | |
| <p>SIG-44-15</p> | |
| FILE: | DN: JMH CK: NRN DW: JTR CK: TAR |
| CONT | SECT JOB HIGHWAY |
| REVISIONS | DIST COUNTY SHEET NO. |

DATE:
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