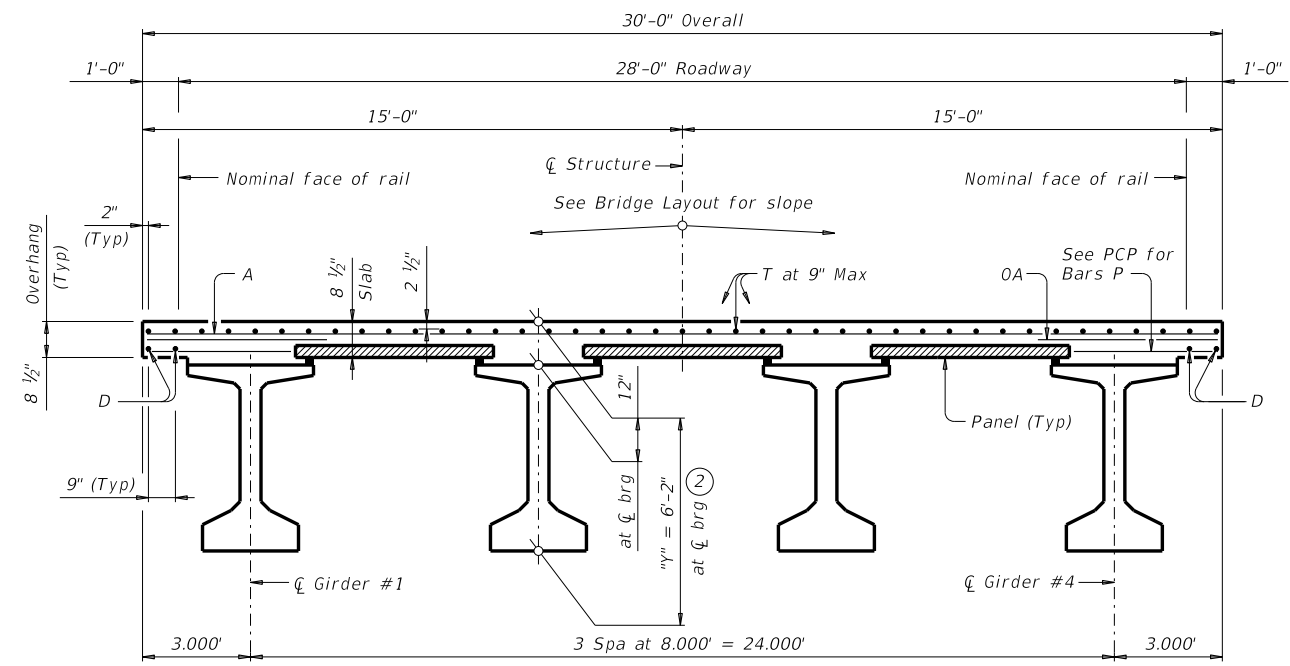
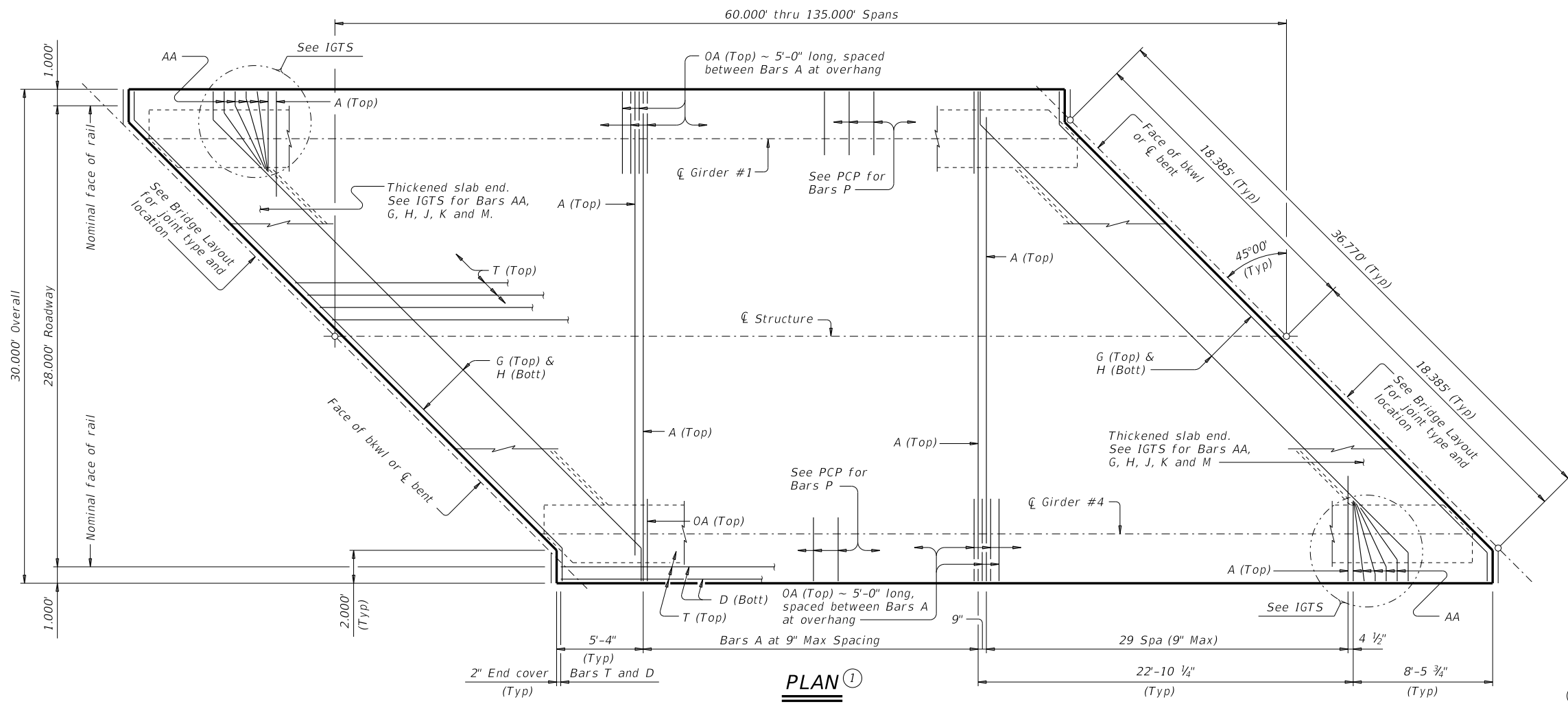


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DATE:  
FILE:



BAR TABLE	
BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#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 "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 and/or if the precast overhang panel (PCP(0)) option is used.

HL93 LOADING SHEET 1 OF 2

Texas Department of Transportation **Bridge Division Standard**

**PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx62)**

**28' ROADWAY 45° SKEW**

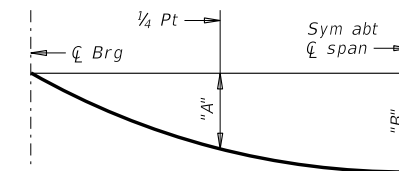
**SIG-62-28-45**

FILE: sig28sts-19.dgn	DN: JMH	CK: GC	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS				
10-19: Increased "X" and "Y" Values				
DIST	COUNTY	SHEET NO.		

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DATE: FILE:

TABLE OF DEAD LOAD DEFLECTIONS		
TYPE Tx62 GIRDERS		
SPAN LENGTH	"A"	"B"
Ft	Ft	Ft
60	0.006	0.008
65	0.008	0.011
70	0.011	0.015
75	0.014	0.020
80	0.018	0.025
85	0.024	0.033
90	0.029	0.041
95	0.036	0.051
100	0.045	0.063
105	0.055	0.077
110	0.067	0.094
115	0.080	0.112
120	0.095	0.133
125	0.113	0.158
130	0.132	0.185
135	0.153	0.215



**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 <sup>(4)</sup>
		ABUT TO INT BT <sup>(3)</sup>	INT BT TO INT BT <sup>(3)</sup>	ABUT TO ABUT <sup>(3)</sup>	
Ft	SF	LF	LF	LF	Lb
60	1,800	237.59	238.00	237.17	4,140
65	1,950	257.59	258.00	257.17	4,485
70	2,100	277.59	278.00	277.17	4,830
75	2,250	297.59	298.00	297.17	5,175
80	2,400	317.59	318.00	317.17	5,520
85	2,550	337.59	338.00	337.17	5,865
90	2,700	357.59	358.00	357.17	6,210
95	2,850	377.59	378.00	377.17	6,555
100	3,000	397.59	398.00	397.17	6,900
105	3,150	417.59	418.00	417.17	7,245
110	3,300	437.59	438.00	437.17	7,590
115	3,450	457.59	458.00	457.17	7,935
120	3,600	477.59	478.00	477.17	8,280
125	3,750	497.59	498.00	497.17	8,625
130	3,900	517.59	518.00	517.17	8,970
135	4,050	537.59	538.00	537.17	9,315

- <sup>(3)</sup> Fabricator will adjust lengths for girder slopes as required.
- <sup>(4)</sup> Reinforcing steel weight is calculated using an approximate factor of 2.3 Lbs/SF.

**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 standard IGCS.  
 See IGTS standard for Thickened Slab End details and quantity adjustments.  
 See PCP and PCP-FAB for panel details not shown.  
 See PCP(O) and PCP(O)-FAB for precast overhang panel details if this option is used.  
 See IGMS standard for miscellaneous details.  
 See applicable rail details for rail anchorage in slab.  
 See 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.

**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, AA, D, OA, P or T unless noted otherwise.

HL93 LOADING

SHEET 2 OF 2

<b>Texas Department of Transportation</b>		<b>Bridge Division Standard</b>		
<p><b>PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx62)</b></p> <p><b>28' ROADWAY      45° SKEW</b></p> <p><b>SIG-62-28-45</b></p>				
FILE: sig28sts-19.dgn	DN: JMH	CK: GC	DW: JTR	CK: TAR
©TxDOT August 2017 <small>REVISIONS</small>		CONT SECT JOB HIGHWAY		
<small>10-19: Increased "X" and "Y" Values</small>		DIST	COUNTY	SHEET NO.