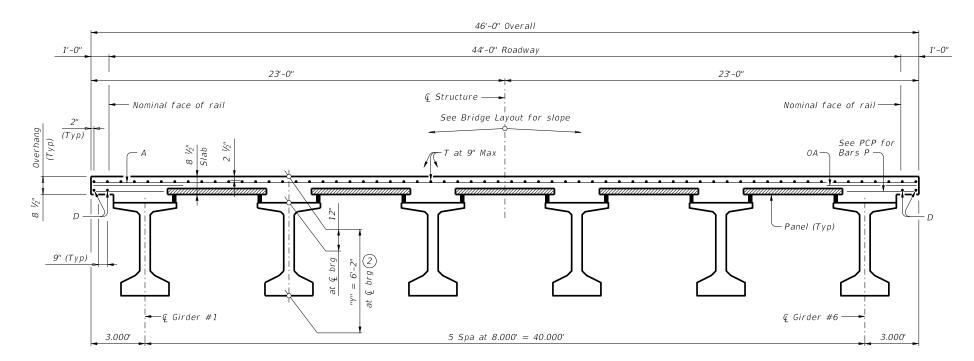


2 "Y" value shown is based on theoretical girder camber, dead load deflection from an 8 ½" concrete slab, a constant roadway grade, and using precast panels (PCP). The Contractor will adjust this value as necessary for any roadway vertical curve and/or if the precast overhang panel (PCP(0)) option is used.



HL93 LOADING SHEET 1 OF 2



Texas Department of Transportation

PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx62)

44' ROADWAY

45° SKEW

BAR TABLE

SIZE #4

#4

#4

#4

#4

#5

#4

BAR

AA D

Н

М

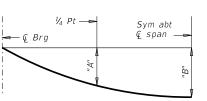
0A

SIG-62-44-45

TLE: SIG4USTS-19.agn	DN: JM	IH	CK: GL	DW:	JIR		CK: I AK
CTxDOT August 2017	CONT	SECT	JOB			HIG	HWAY
REVISIONS							
10-19: Increased "X" and "Y" Values	DIST	COUNTY			SHEET NO.		

TABLE OF DEAD LOAD **DEFLECTIONS** TVDE TV62 CIDDEDS

IYPE	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 (Ec = 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

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
		Prestres					
SPAN LENGTH	REINF CONCRETE SLAB	ABUT TO 3 INT BT	INT BT TO 3 INT BT	ABUT TO 3 ABUT	TOTAL ⁴ REINF STEEL		
Ft	SF	LF	LF	LF	Lb		
60	2,760	356.38	357.00	355.76	6,348		
65	2,990	386.38	387.00	385.76	6,877		
70	3,220	416.38	417.00	415.76	7,406		
75	3,450	446.38	447.00	445.76	7,935		
80	3,680	476.38	477.00	475.76	8,464		
85	3,910	506.38	507.00	505.76	8,993		
90	4,140	536.38	537.00	535.76	9,522		
95	4,370	566.38	567.00	565.76	10,051		
100	4,600	596.38	597.00	595.76	10,580		
105	4,830	626.38	627.00	625.76	11,109		
110	5,060	656.38	657.00	655.76	11,638		
115	5,290	686.38	687.00	685.76	12,167		
120	5,520	716.38	717.00	715.76	12,696		
125	5,750	746.38	747.00	745.76	13,225		
130	5,980	776.38	777.00	775.76	13,754		
135	6,210	806.38	807.00	805.76	14,283		

3 Fabricator will adjust lengths for girder slopes as required.

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(0) and PCP(0)-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

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 $\sim \#4 = 1'-7''$ Epoxy coated $\sim \#4 = 2'-5''$ 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



Bridge Division Standard

PRESTRESSED CONCRETE I-GIRDER SPANS $(TYPE\ Tx62)$

44' ROADWAY

45° SKEW

SIG-62-44-45

FILE: sig40sts-19.dgn	DN: JN	1H	ck: GC	DW:	JTR	ck: TAR		
©TxD0T August 2017	CONT	SECT	JOB		HIGHWAY			
REVISIONS								
10-19: Increased "X" and "Y" Values	DIST	COUNTY				SHEET NO.		