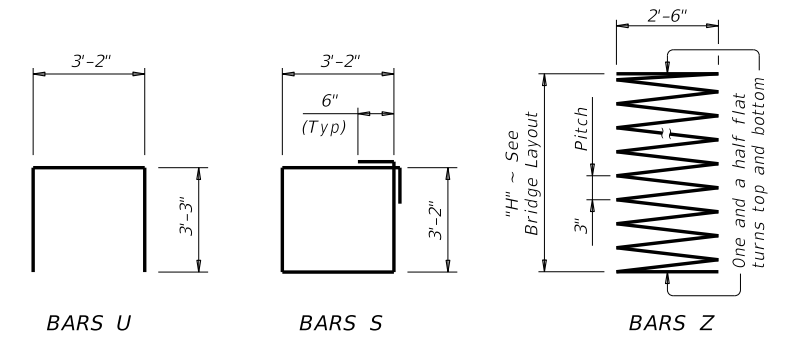
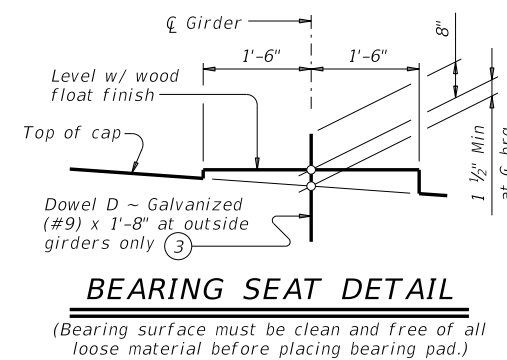
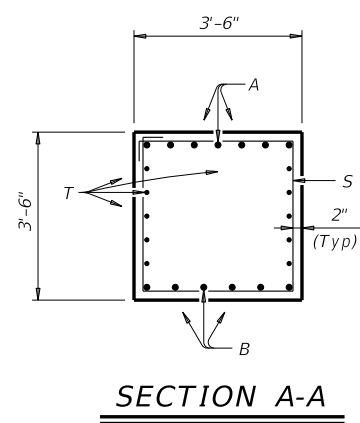
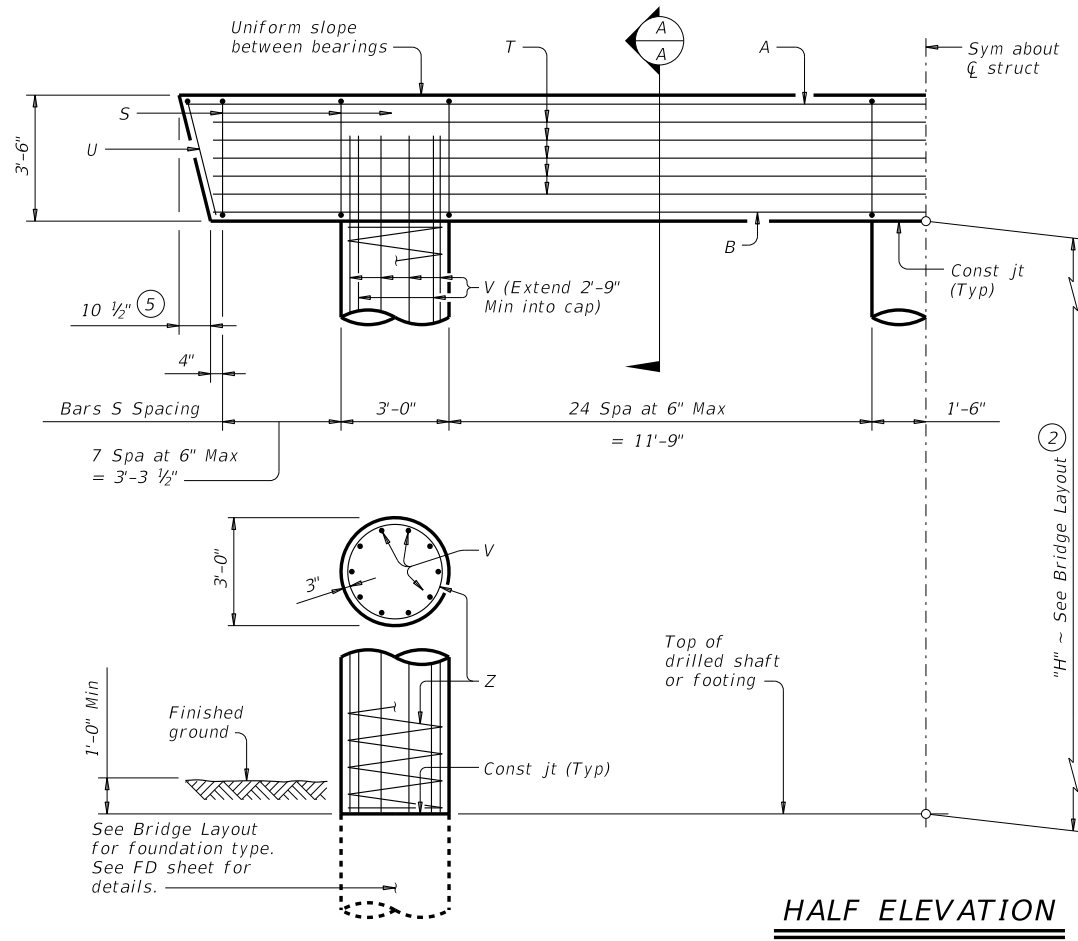
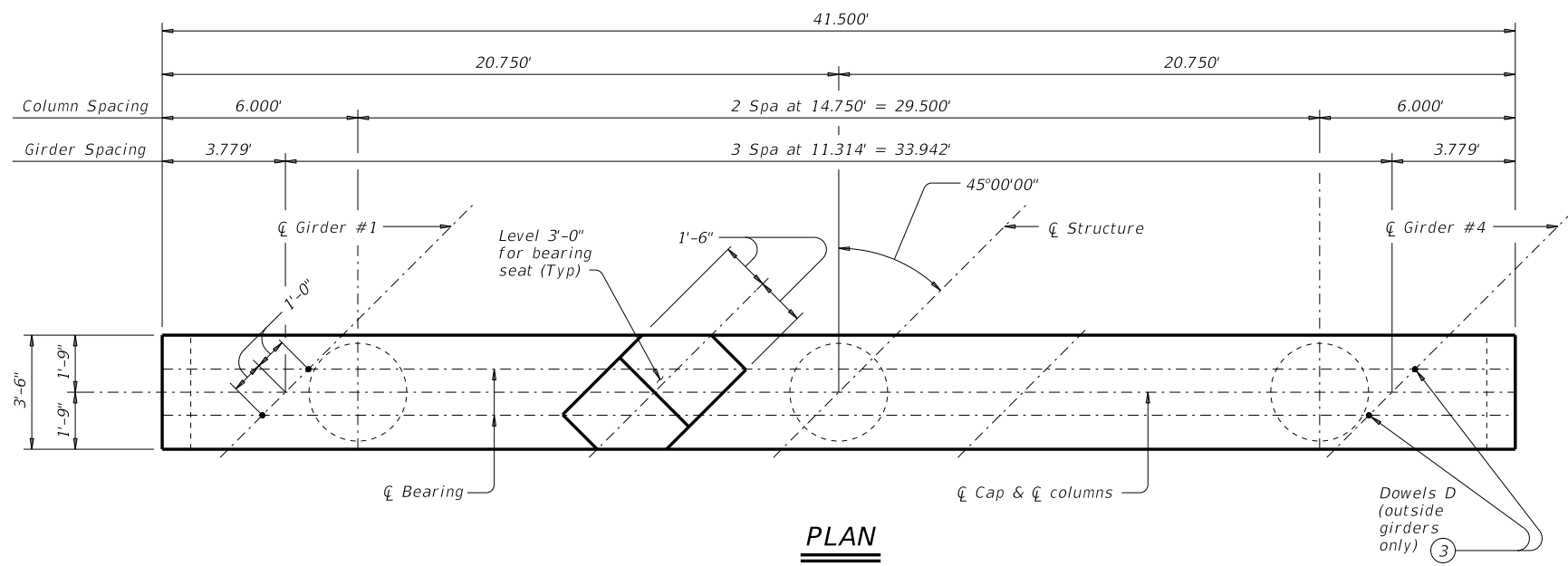


DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE: FILE:



- Quantities shown are based on an "H" value of 36'. For each linear foot variation in "H" value, make the following adjustments:  
 Bars V length, 1'-0"  
 Bars Z length, 31'-5"  
 Reinforcing steel, 165 Lb  
 Class "C" conc (col), 0.78 CY
- This standard may not be used for "H" heights exceeding 36'. In areas of very soft soil or where scour is anticipated, allowable "H" heights must be evaluated by the Engineer prior to the use of this standard.
- Omit Dowels D at end of multi-span units. Adjust reinforcing steel total accordingly.
- Foundation loads based on "H" = 36'.
- Measured parallel to top of cap cross-slope.

TABLE OF ESTIMATED QUANTITIES (1)				
Bar	No.	Size	Length	Weight
A	7	#11	41'- 0"	1,525
B	6	#11	39'- 6"	1,259
D (3)	4	#9	1'- 8"	23
S	66	#5	13'- 8"	941
T	10	#5	39'- 6"	412
U	2	#5	9'- 8"	20
V	30	#9	38'- 9"	3,953
Z	3	#4	1,154'- 7"	2,314
Reinforcing Steel			Lb	10,447
Class "C" Concrete (Cap)			CY	18.7
Class "C" Concrete (Col)			CY	28.3

FOUNDATION LOADS (4)				
Span Average	Drilled Shaft Loads	Pile Load (Tons/Pile)		
		3 Pile Ftg	4 Pile Ftg	5 Pile Ftg
Ft	Tons/Shaft			
40	112	41	31	26
45	121	44	33	27
50	129	46	35	29
55	137	49	37	31
60	145	52	39	32
65	153	54	41	34
70	161	57	43	35
75	168	59	45	37
80	176	62	47	38
85	184	65	49	40
90	192	67	51	42
95	200	70	53	43
100	207	72	55	45
105	215	75	57	46
110	223	78	59	48
115	231	80	61	49
120	239	83	63	51
125	246	85	65	52

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Bridge Design Specifications.  
 See Bridge Layout for foundation type, size and length.  
 See Common Foundation Details (FD) standard sheet for all foundation details and notes.  
 See Shear Key Details (IGSK) standard sheet for all shear key details and notes, if applicable.  
 Bent selected must be based on the average span length rounded up to the next 5 ft increment.  
 Details are drawn showing right forward skew. See Bridge Layout for actual skew direction.  
 These bent details may be used with standard SIG-28-45 only.

Cover dimensions are clear dimensions, unless noted otherwise.  
 Reinforcing bar dimensions shown are out-to-out of bar.

**MATERIAL NOTES:**  
 Provide Class C concrete (f'c = 3,600 psi).  
 Provide Class C (HPC) concrete if shown elsewhere in the plans.  
 Provide Grade 60 reinforcing steel.  
 Galvanize dowel bars D.

HL93 LOADING

Texas Department of Transportation  
 Bridge Division Standard

**INTERIOR BENTS**  
 TYPE TX28 THRU TX54  
 PRESTR CONC I-GIRDERS  
 28' ROADWAY 45° SKEW

**BIG-28-45**

FILE: big08sts-17.dgn	DN: TAR	CK: SDB	DW: JTR	CK: TAR
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REVISIONS	DIST		COUNTY	SHEET NO.