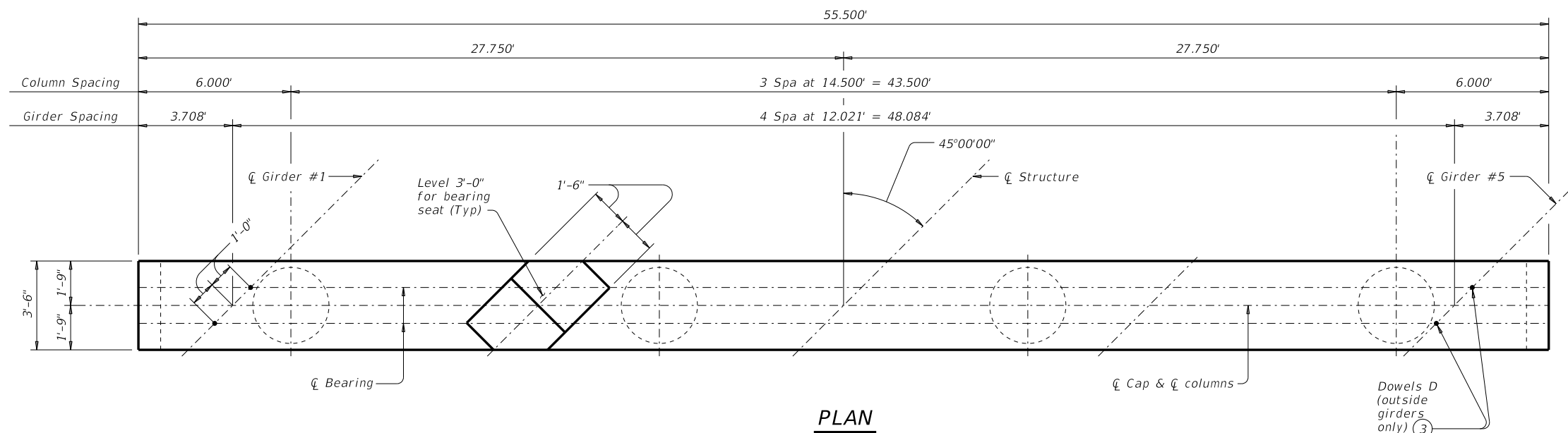
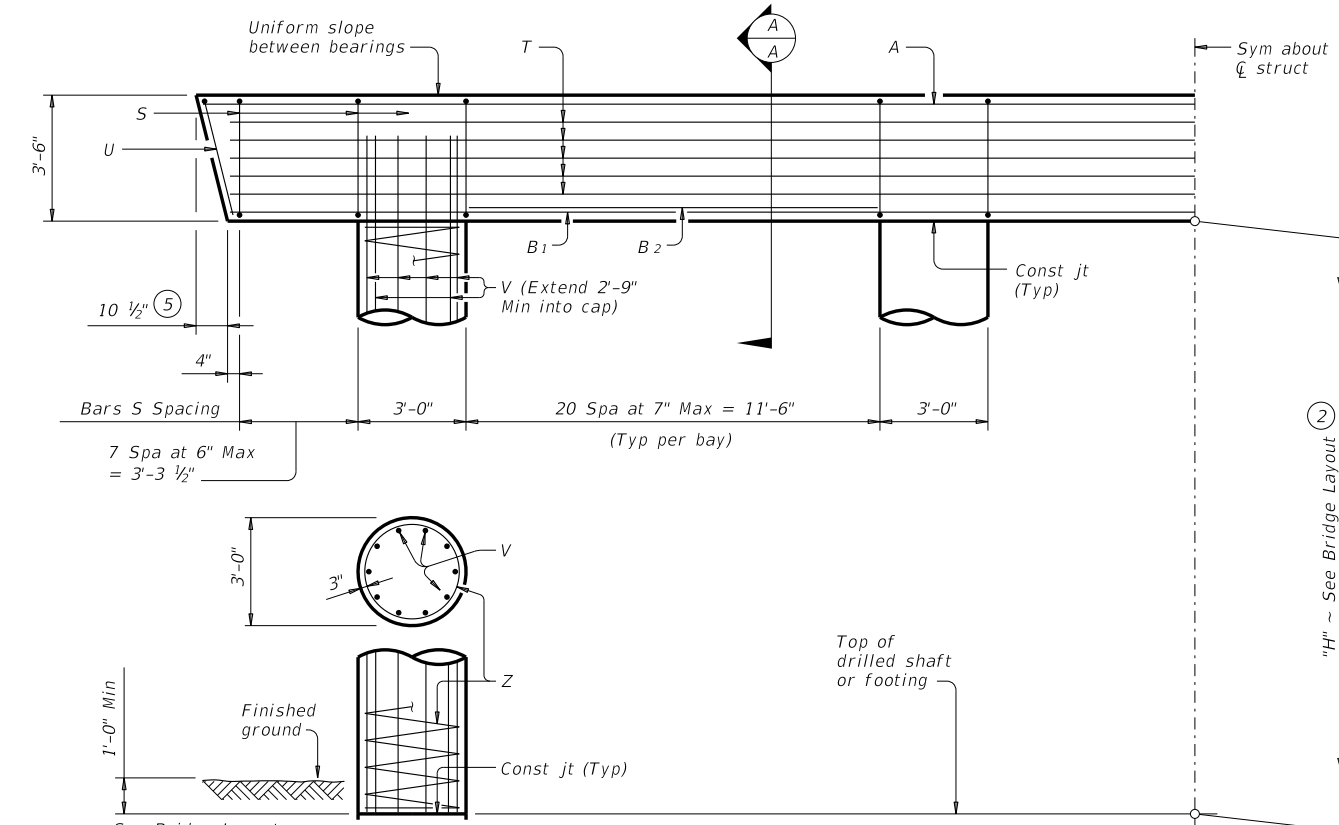


DISCLAIMER: This standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

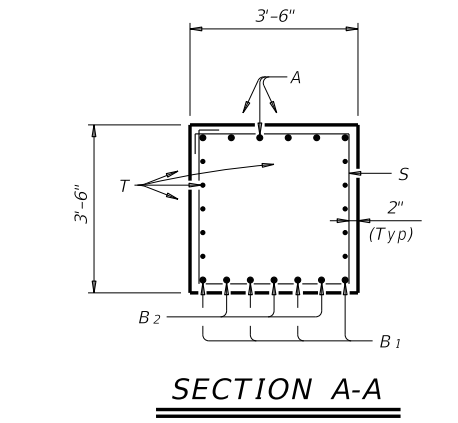
DATE: FILE:



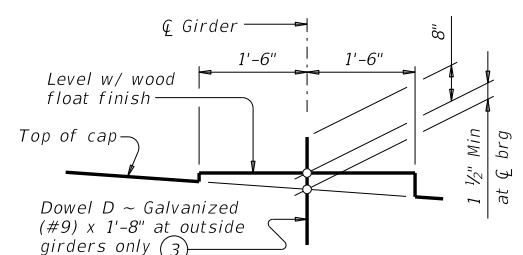
PLAN



HALF ELEVATION

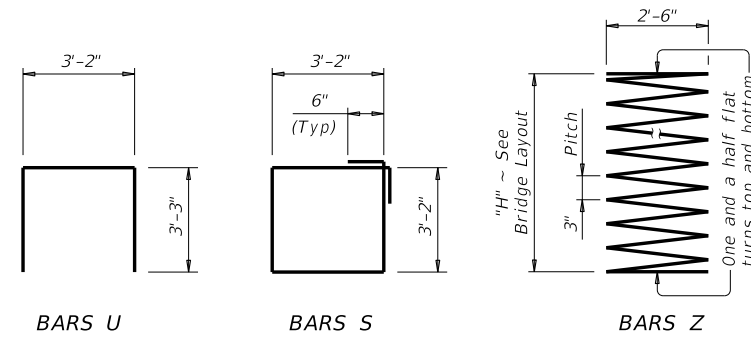


SECTION A-A



BEARING SEAT DETAIL

(Bearing surface must be clean and free of all loose material before placing bearing pad.)



- 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, 220 Lb
 Class "C" conc (col), 1.05 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.

Bar	No.	Size	Length	Weight	
A	6	#11	55'- 0"	1,753	
B ₁	4	#11	53'- 6"	1,137	
B ₂	9	#11	11'-6"	550	
D ③	4	#9	1'- 8"	23	
S	79	#5	13'- 8"	1,126	
T	10	#5	53'- 6"	558	
U	2	#5	9'- 8"	20	
V	40	#9	38'- 9"	5,270	
Z	4	#4	1154'- 7"	3,085	
Reinforcing Steel				Lb	13,522
Class "C" Concrete (Cap)				CY	25.0
Class "C" Concrete (Col)				CY	37.7

Span Average	Drilled Shaft Loads	Pile Load (Tons/Pile)		
		3 Pile Ftg	4 Pile Ftg	5 Pile Ftg
Ft	Tons/Shaft			
40	108	39	30	25
45	116	42	32	26
50	124	45	34	28
55	132	47	36	30
60	139	50	38	31
65	147	52	40	33
70	154	55	42	34
75	162	57	44	36
80	169	60	45	37
85	177	62	47	39
90	184	65	49	40
95	191	67	51	41
100	199	70	53	43
105	206	72	55	44
110	214	75	57	46
115	221	77	58	47
120	228	79	60	49
125	236	82	62	50

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 (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-38-45 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 is 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
 38' ROADWAY 45° SKEW

BIG-38-45

FILE: big16sts-17.dgn	DN: TAR	CK: SDB	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	