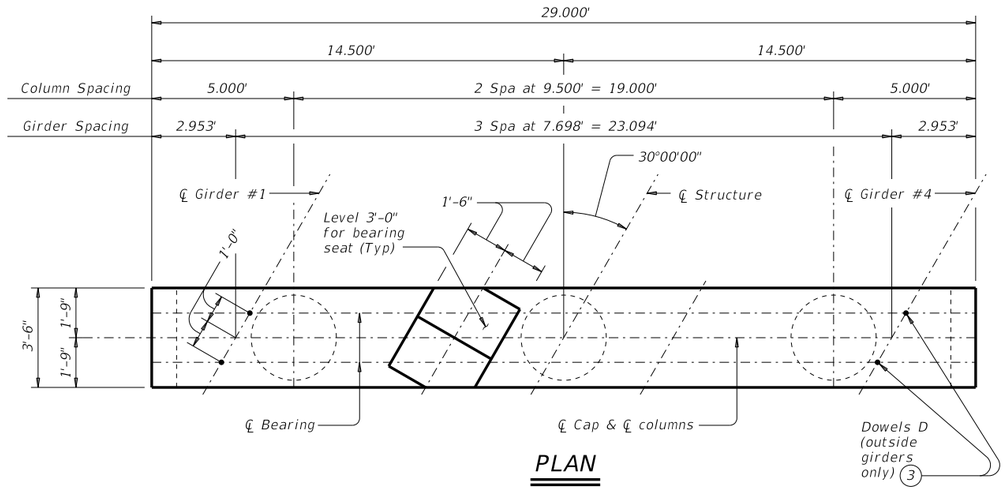
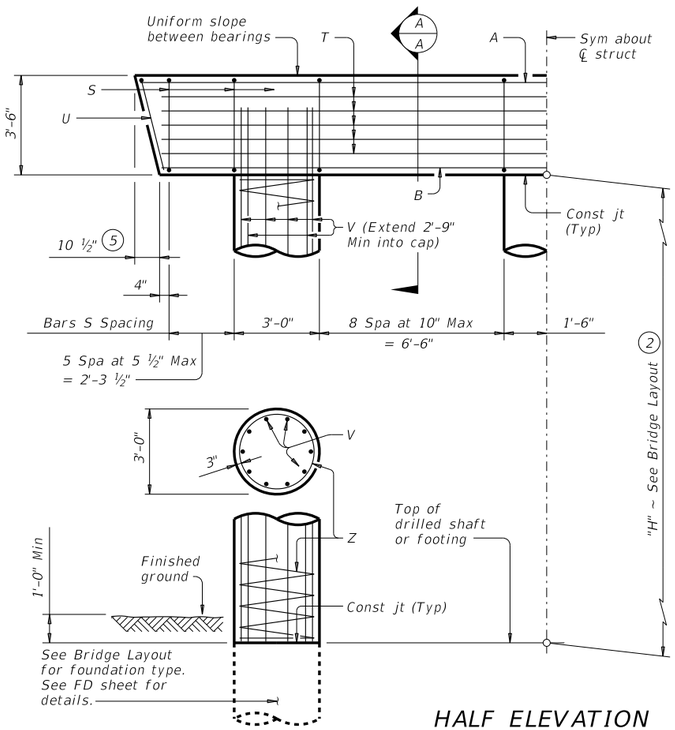
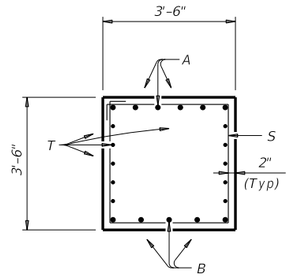
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



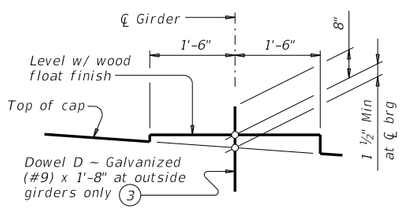
PLAN



HALF ELEVATION

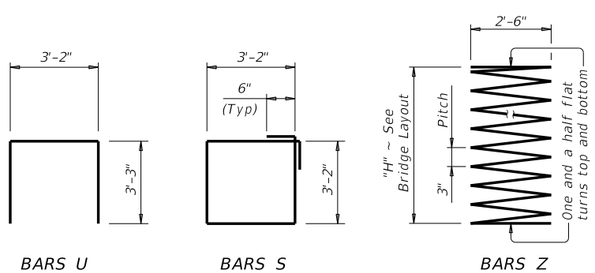


SECTION A-A



BEARING SEAT DETAIL

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



1. 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
2. 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.
3. Omit Dowels D at end of multi-span units. Adjust reinforcing steel total accordingly.
4. Foundation Loads based on "H" = 36'.
5. Measured parallel to top of cap cross-slope.

TABLE OF ESTIMATED QUANTITIES 1

Bar	No.	Size	Length	Weight
A	6	#11	28'- 6"	909
B	5	#11	27'- 0"	718
D 3	4	#9	1'- 8"	23
S	30	#5	13'- 8"	428
T	10	#5	27'- 0"	282
U	2	#5	9'- 8"	20
V	30	#9	38'- 9"	3,953
Z	3	#4	1,154'- 7"	2,314
Reinforcing Steel			Lb	8,647
Class "C" Concrete (Cap)			CY	13.0
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
Ft	Tons/Shaft		
40	105	38	29
45	113	41	31
50	121	44	33
55	128	46	35
60	136	49	37
65	143	51	39
70	151	54	41
75	158	56	43
80	166	59	45
85	173	61	46
90	181	64	48
95	188	66	50
100	195	68	52
105	203	71	54
110	210	73	56
115	218	76	58
120	225	78	59
125	232	81	61

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-24-30 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
24' ROADWAY 30° SKEW

BIG-24-30

FILE: IG-BIG2430-17.dgn	DN: TAR	CK: SDB	DW: JTR	CK: TAR
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REVISIONS				
	DIST	COUNTY		SHEET NO.

DATE:
FILE: