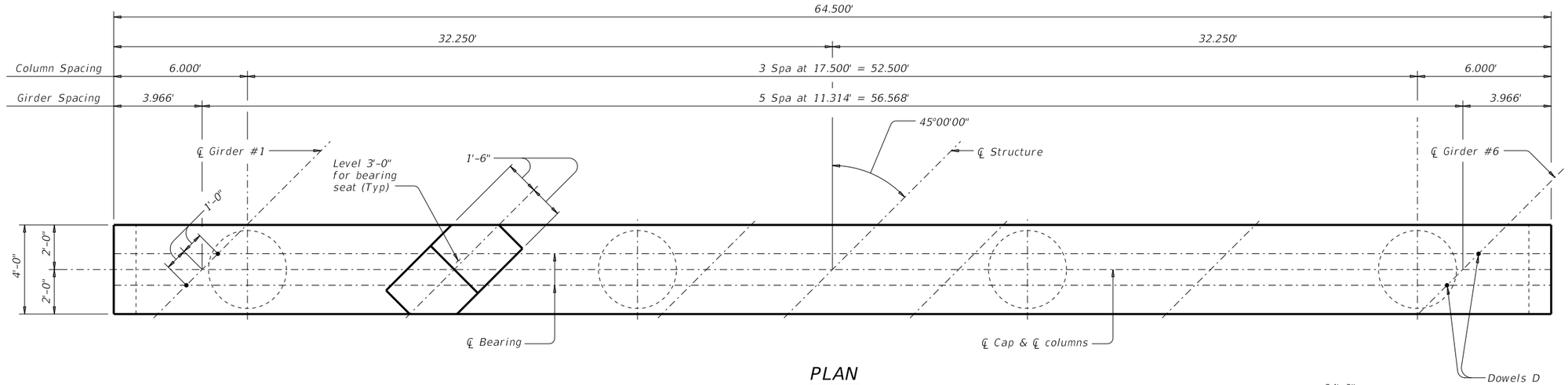
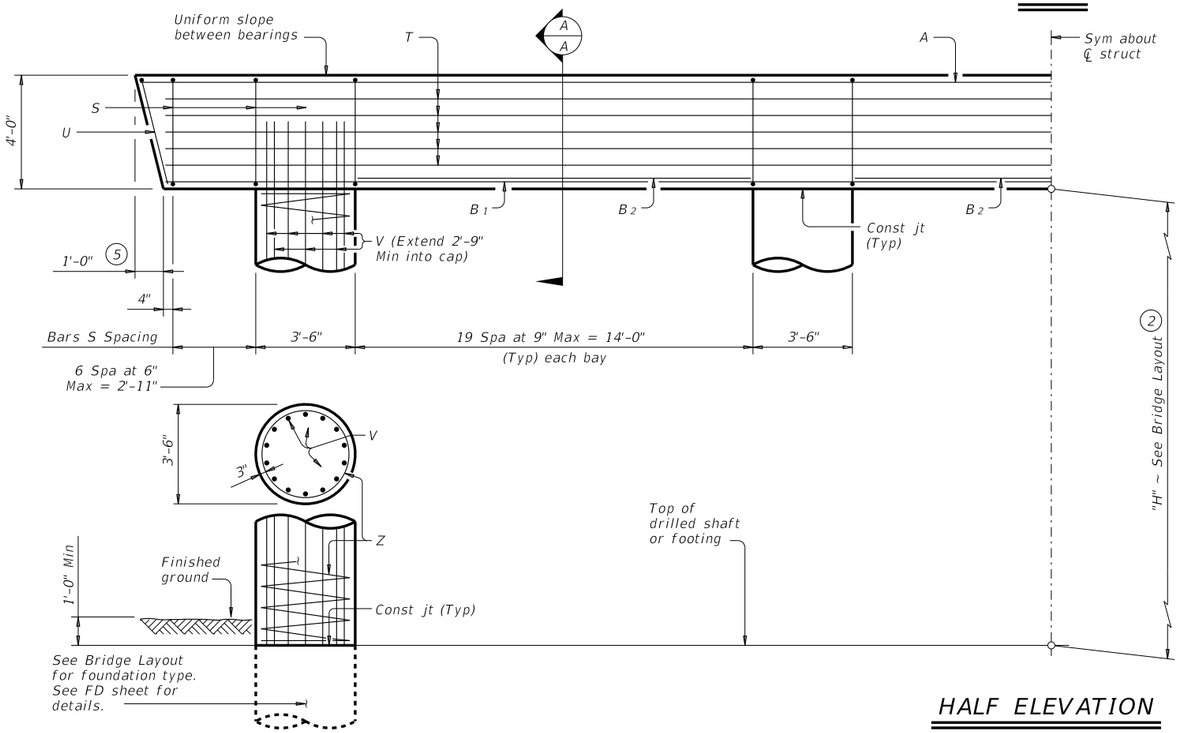
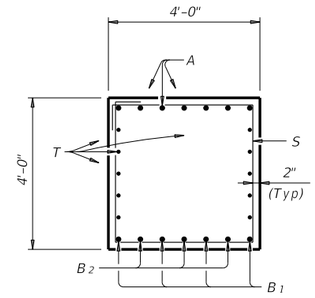
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:

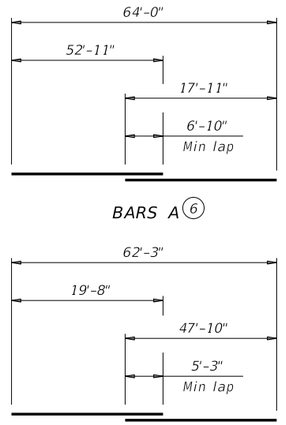


PLAN



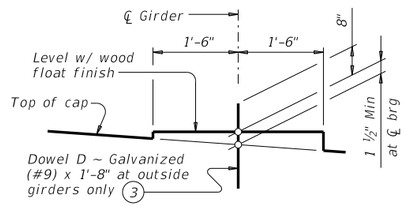


SECTION A-A



BARS A (6)

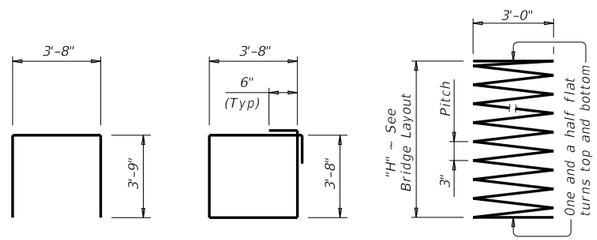
BARS B1 (6)



BEARING SEAT DETAIL

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

HALF ELEVATION



BARS U BARS S BARS Z

(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, 37'-9"
Reinforcing steel, 291 Lb
Class "C" conc (col), 1.43 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.

(6) Alternate lap location between adjacent bars.

(7) Includes one 1'-10" Min lap.

TABLE OF ESTIMATED QUANTITIES (1)

Bar	No.	Size	Length	Weight
A	7	#11	70'-10"	2,634
B 1	4	#11	67'- 6"	1,435
B 2	9	#11	14'- 0"	669
D (3)	4	#9	1'- 8"	23
S	74	#5	15'- 8"	1,209
T (7)	10	#5	64'- 1"	668
U	2	#5	11'- 2"	23
V	56	#9	38'- 9"	7,378
Z	4	#4	1,387'- 3"	3,707
Reinforcing Steel			Lb	17,746
Class "C" Concrete (Cap)			CY	38.1
Class "C" Concrete (Col)			CY	51.3

FOUNDATION LOADS (4)

Span Average	Drilled Shaft Loads	Pile Load (Tons/Pile)	
		4 Pile Ftg	5 Pile Ftg
Ft	Tons/Shaft		
60	169	45	37
65	178	48	39
70	187	50	41
75	196	52	42
80	205	54	44
85	213	56	46
90	222	59	48
95	231	61	49
100	240	63	51
105	249	65	53
110	257	67	55
115	266	70	56
120	275	72	58
125	284	74	60
130	292	76	62
135	301	78	63

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-62-44-45 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 TX62
PRESTR CONC I-GIRDERS
44' ROADWAY 45° SKEW

BIG-62-44-45

FILE: IG-BIG624445-17.dgn	DN: TAR	CK: SDB	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	DIST	COUNTY		SHEET NO.