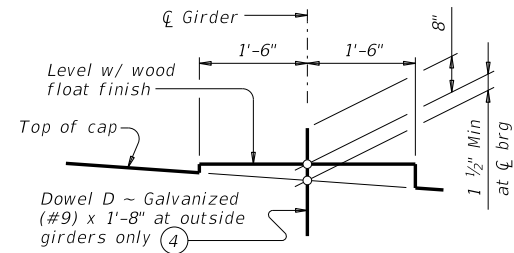


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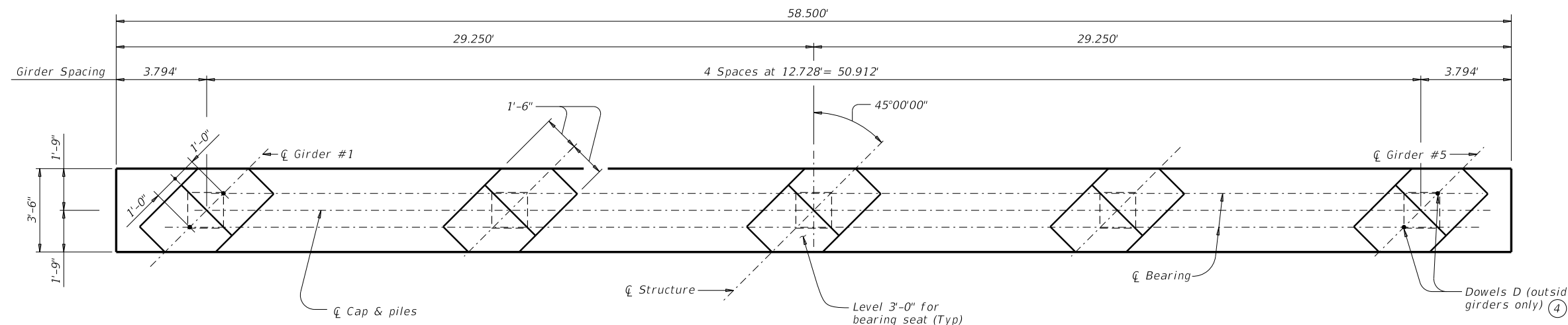
BEARING SEAT DETAIL
 (Bearing surface must be clean and free of all loose material before placing bearing pad.)

TABLE OF MAXIMUM ALLOWABLE EXPOSED PILE HEIGHTS AND PILE LOADS (2)			
Pile Type		Max Ht	Max Load
Concrete	Steel	Ft	Tons/Pile
18" Sq	HP14x117 (5)	20	90
20" Sq	HP18x135	24	110
24" Sq	(3)	24	140

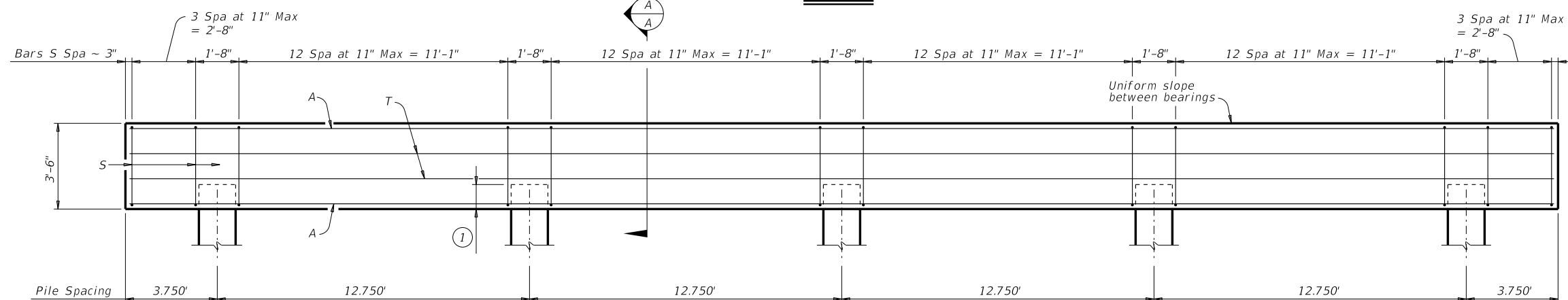
FOUNDATION LOADS			
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS	Tx46 & Tx54 GIRDERS
		Pile Loads	Pile Loads
Ft	In.	(Tons/Pile)	(Tons/Pile)
40	18	70	73
45		76	79
50		82	86
55		88	92
60	20	93	98
65		99	104
70		105	110
75	24	110	116
80		116	123
85		122	129

TABLE OF ESTIMATED QUANTITIES				
40' THRU 85' SPANS				
Bar	No.	Size	Length	Weight
A	8	#9	58'-2"	1,582
D (4)	4	#9	1'-8"	23
S	60	#5	13'-8"	855
T	4	#5	58'-2"	243
Reinforcing Steel			Lb	2,703
Class "C" Concrete			CY	26.9

- (1) See FD standard.
- (2) In areas of very soft soil or where scour is anticipated, maximum allowable exposed pile heights must be evaluated by the Engineer prior to use of this standard.
- (3) Where no steel HP section is shown, a suitable HP equivalent to the square concrete pile has not been evaluated.
- (4) Omit dowels at end of multi-span units. Adjust reinforcing steel total accordingly.
- (5) When HP14x117 steel piling is specified in the plans, the Contractor has the option of furnishing either HP14x117 or HP16x101 steel piling.

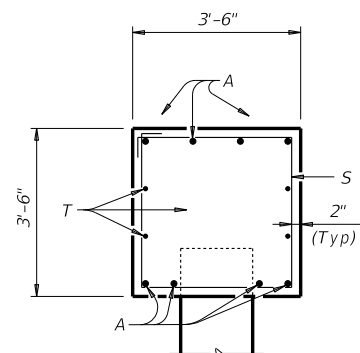


PLAN

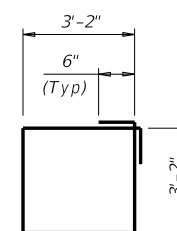


ELEVATION

Note: For piling larger than 18", adjust Bars S as required to avoid piling.



SECTION A-A



BARS S

GENERAL NOTES:
 Designed according to AASHTO LRFD Bridge Design Specifications. For bents supporting unequal spans, the shorter span cannot be less than 80 percent of the longer span. These details are limited to an 85' maximum span length. See Bridge Layout for piling size and length. See Common Foundation Details (FD) standard sheet for all foundation details and notes. 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-40-45 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

		Bridge Division Standard	
INTERIOR TRESTLE BENTS TY TX28 THRU TX54 PRESTR CONC I-GIRDERS 40' ROADWAY 45° SKEW BTIG-40-45			
FILE: IG-BTIG4045-17.dgn	DN: TAR	CK: SDB	DW: JTR
©TxDOT August 2017	CON: SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY
		SHEET NO.	

DATE:
FILE: