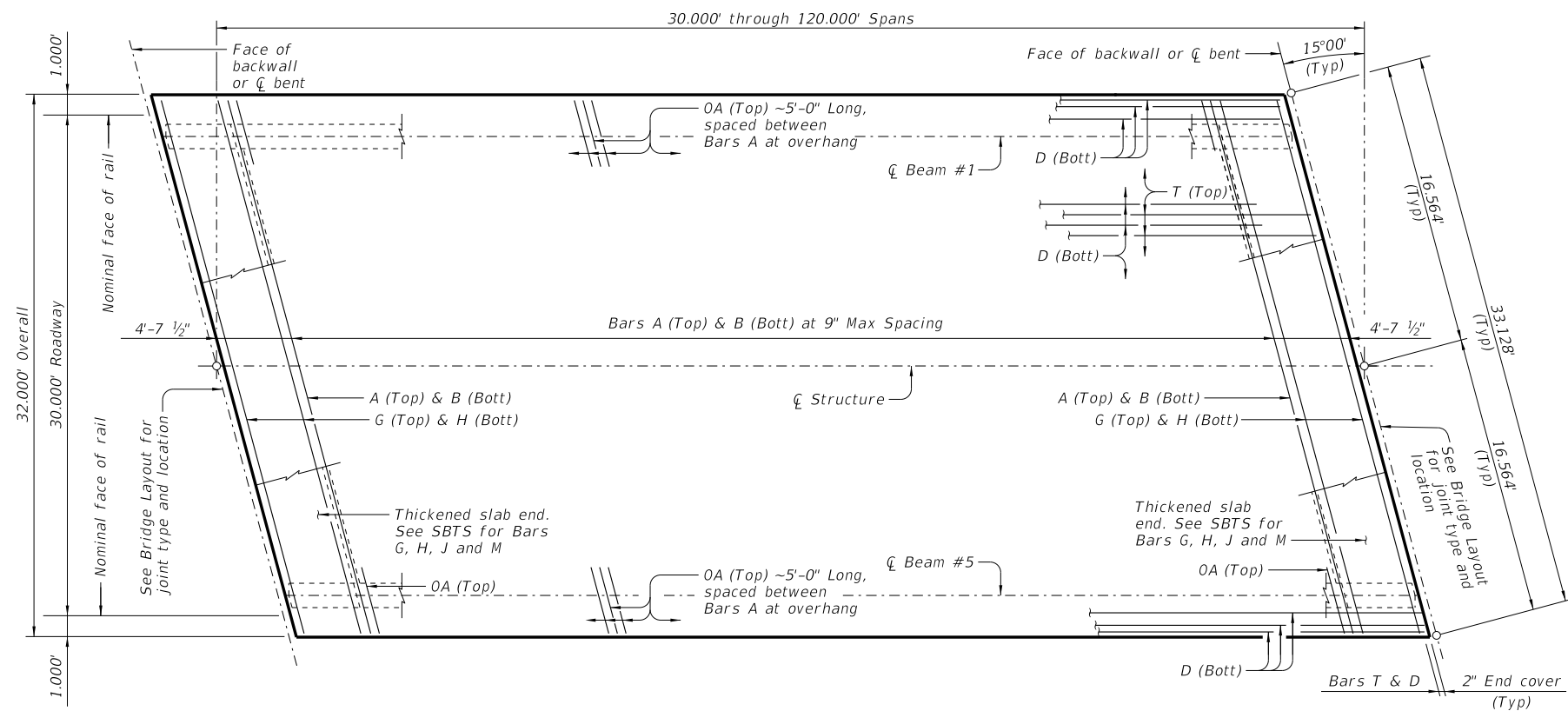


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PLAN 1

BAR TABLE	
Bar	Size
A	#4
B	#4
D	#4
G	#4
H	#4
J	#4
M	#4
OA	#5
T	#4

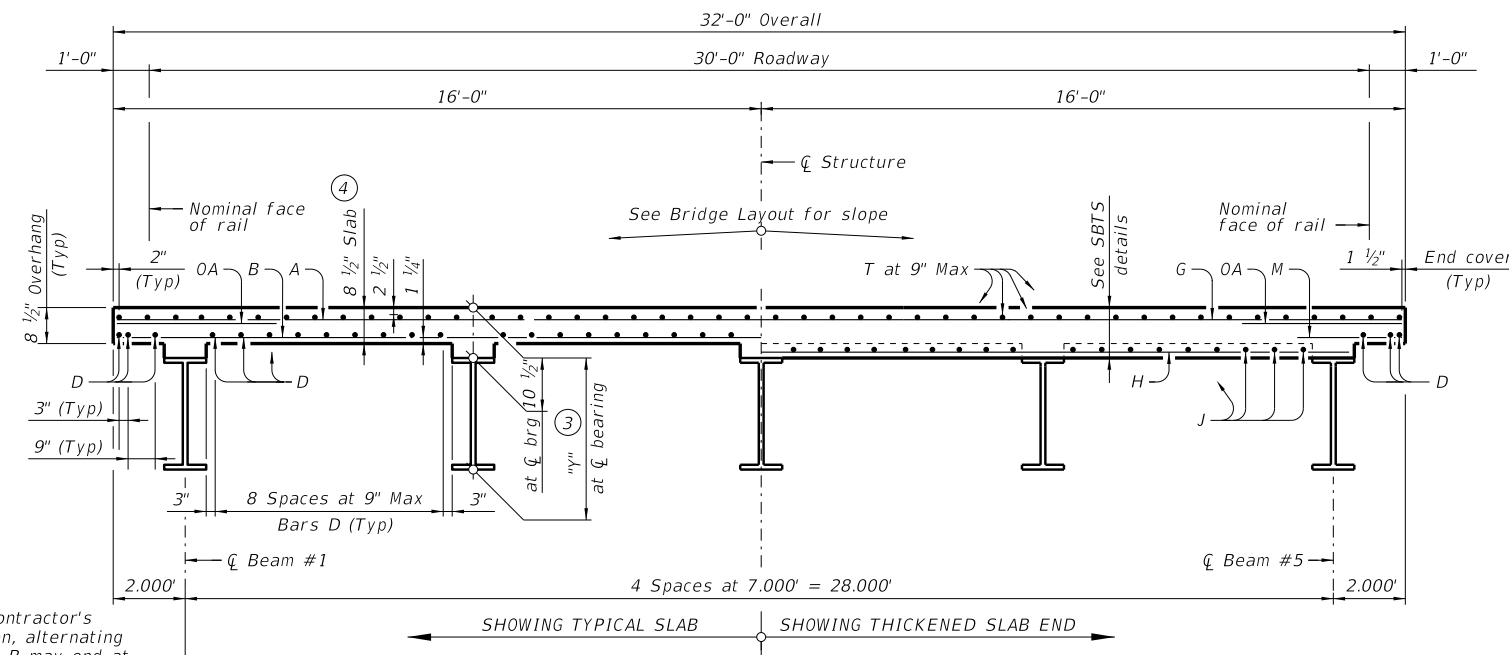
- 1 If multi-span units (with slab continuous over interior bents) are indicated on the Bridge Layout, see SBSC standard for adjustment to slab reinforcement and quantities.
- 2 Reinforcing steel weight is calculated using an approximate factor of 4.4 Lbs/SF.
- 3 See SBSD-30 standard for "A" and "Y" values. Increase "Y" value as necessary for sag roadway vertical curves.
- 4 Tolerance on slab thickness is +1", -0" regardless of forming system used or any other tolerances shown elsewhere.
- 5 See SBSD-30 standard for Structural Steel (Rolled Beam) estimated quantities.

TABLE OF ESTIMATED QUANTITIES 5		
SPAN LENGTH	REINF CONCRETE SLAB	TOTAL REINF STEEL 2
		Lb
Ft	SF	Lb
30	960	6,240
35	1,120	7,280
40	1,280	8,320
45	1,440	9,360
50	1,600	10,400
55	1,760	11,440
60	1,920	12,480
65	2,080	13,520
70	2,240	14,560
75	2,400	15,600
80	2,560	16,640
85	2,720	17,680
90	2,880	18,720
95	3,040	19,760
100	3,200	20,800
105	3,360	21,840
110	3,520	22,880
115	3,680	23,920
120	3,840	24,960

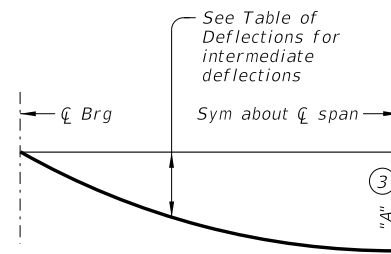
**MATERIAL NOTES:**  
 Provide Class S concrete (f'c = 4,000 psi).  
 Provide Class S (HPC) concrete if shown elsewhere in the plans.  
 Provide Grade 60 reinforcing steel.  
 Provide bar laps, where required, as follows:  
 Uncoated~ #4 = 1'-7"  
 Epoxy coated~ #4 = 2'-5"  
 Deformed Welded Wire Reinforcement (WWR) (ASTM A1064) of equal size and spacing may be substituted for Bars A, B, D, OA, or T unless noted otherwise.

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Bridge Design Specifications.  
 This standard is drawn showing right forward skew. See Bridge Layout for actual skew direction.  
 Multi-span units, with slab continuous over interior bents, may be formed with the details shown on this sheet and Steel Beam Continuous Slab Details (SBSC) standard sheet.  
 See Steel Beam Thickened Slab End (SBTS) standard sheet for thickened slab end details and quantity adjustments.  
 See Prestressed Concrete Panels (PCP) standard sheet or Permanent Metal Deck Forms (PDMF) standard sheet for details and quantity adjustments if either of these options are used.  
 See Steel Beam Miscellaneous Slab Details (SBMS) standard sheet for miscellaneous details.  
 See applicable rail details for rail anchorage in slab.  
 This standard does not support the use of transition bents.

Cover dimensions are clear dimensions, unless noted otherwise.



TYPICAL TRANSVERSE SECTION



DEAD LOAD DEFLECTION DIAGRAM

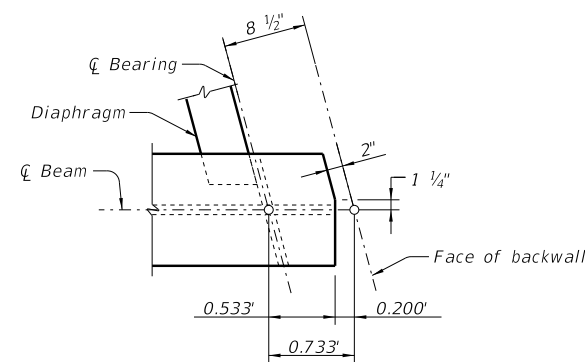
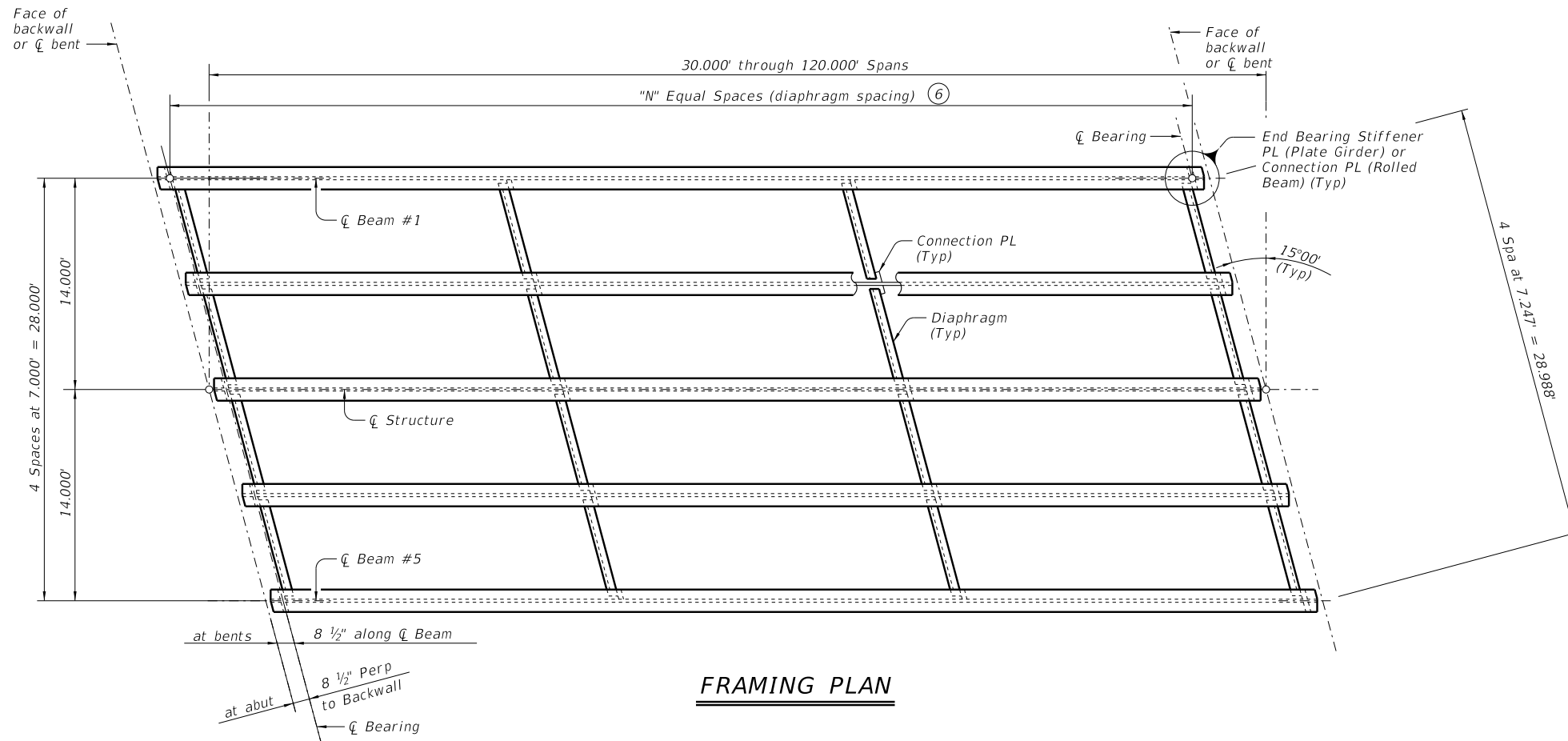
TABLE OF DEFLECTIONS 3	
Location	Deflection
CL Brg	0.0
0.1 Span	0.31 x "A"
0.2 Span	0.59 x "A"
0.3 Span	0.81 x "A"
0.4 Span	0.95 x "A"
CL Span	"A"

HL93 LOADING SHEET 1 OF 2

		<b>Bridge Division Standard</b>	
<h2>STEEL BEAM SPANS</h2> <h3>30' ROADWAY 15° SKEW</h3> <h2>SSB-30-15</h2>			
FILE: SB-SSB3015-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT
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CAMBER TOLERANCE TABLE (11)	
Point	Tolerance
0.1	+ 3/16", -0"
0.2	+ 1", -0"
0.3	+ 1 1/4", -0"
0.4	+ 1 7/16", -0"
0.5	+ 1 1/2", -0"

### FABRICATION NOTES

#### GENERAL:

See Bridge Layout for beam type. See Steel Beam Standard Designs, 30' Roadway (SBSD-30) standard for beam size.  
For unpainted structures, use A709 Grade 50W for all steel. For painted structures, use any of the following steels: A709 Grades 50, 50S, or 50W.  
All dimensions in Framing Plan and Beam Elevation are measured horizontally.  
See standard Steel Beam Miscellaneous Details (SBMD) for details not shown.

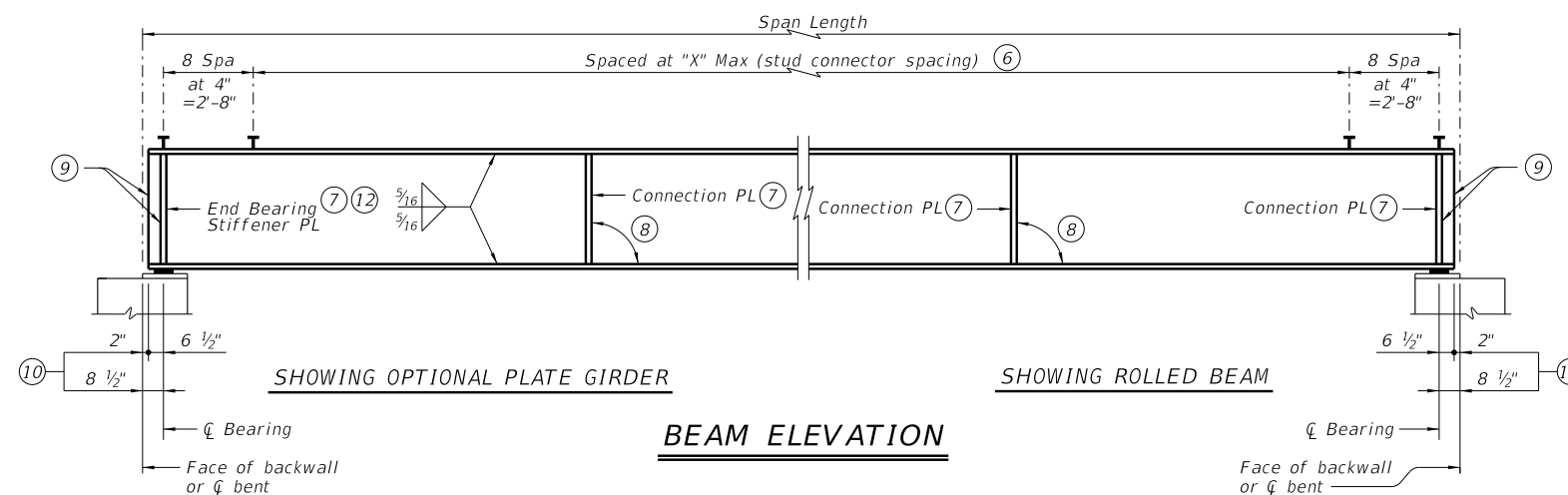
#### ROLLED BEAMS:

Beam bottom flanges and webs are classified as tension components and are subject to the impact testing requirements of Item 442, "Metal for Structures".  
One optional beam splice is permissible for beam lengths in excess of 60'. Make optional beam splices by full penetration groove welds.  
Camber beams for total dead load deflection. Camber tolerance for beams is shown in CAMBER TOLERANCE TABLE.  
Produce camber using heat, pressure, or a combination of heat and pressure.

#### OPTIONAL PLATE GIRDERS:

Girder bottom flanges and webs are classified as tension components and must conform to Item 442.2.1.2.2.  
Camber girders for total dead load deflection and any crest roadway vertical curves. Camber tolerance is shown in CAMBER TOLERANCE TABLE.

- (6) See standard SBSB-30 for "N" and "X" values.
- (7) See standard SBMD for connection plate and bearing stiffener sizes and connection details.
- (8) Connection plates at intermediate locations may be plumb or square to the beam.
- (9) Beam ends, bearing stiffeners, and connection plates at end bearings must be plumb after all dead loads are applied (Tolerance = +/- 1/8" per foot of beam depth).
- (10) Dimensions shown are for interior bents. See Detail "A" for dimensions at abutments.
- (11) Use one-half the values shown when a sag roadway vertical curve is on the span.
- (12) Use End Bearing Stiffener on both sides of exterior girder. See SBMD for additional information.



HL93 LOADING

SHEET 2 OF 2



**STEEL BEAM SPANS**  
30' ROADWAY 15° SKEW

SSB-30-15

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