

HALF ELEVATION AT ABUTMENT

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(1) Provide Elastomeric Pad with a 50 durometer hardness and consisting of a single layer. Extend pad 1/2" beyond the end of the beam as shown.

## **ELEVATION**

	BEAM SCHEDULE																			
SPAN	BEAM	BEAM LENGTH	А	N1	S1	L1	\$2	N3	S3	L3	S4	N5	S5	L5	N6	S6	L6	BEARING STIFFENER	ELASTOMERIC PAD	LFD OPERATING RATING
30,	W27x84	29'-8"	14'-3"	-	-	-	-	28	6"	14'-0"	3"	21	6"	10'-6"	-	-	-	₽ 5/8"x4"	3/4"x10"x2'-10 1/2"	HS 59.2
35'	W30x90	34'-8"	16'-9"	-	-	-	-	33	6"	16'-6"	3"	26	6"	13'-0"	-	-	-	R 3/4"x4 1/2"	3/4"x10 3/8"x2'-10 1/2"	HS 49.7
40'	₩30x99	39'-8"	19'-3"	-	-	-	-	38	6"	19'-0"	3"	31	6"	15'-6"	-	-	-	R 3/4"x4 1/2"	3/4"x10 1/2"x2'-10 1/2"	HS 40.2
45'	W30x116	44'-8"	21'-9"	-	-	-	-	43	6"	21'-6"	3"	36	6"	18'-0"	-	-	-	R 3/4"x4 1/2"	3/4"×10 1/2"×2'-10 1/2"	HS 38.1
50'	W33×130	49'-8"	24'-3"	24	6"	12'-0"	7"	17	8"	11'-4"	4"	17	8"	11'-4"	17	6"	8'-6"	₽ 3/4"x5"	3/4"×11 1/2"×2'-10 1/2"	HS 38.9

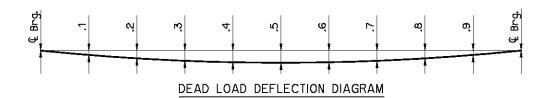
## ROLLED BEAM NOTES

Information shown on this sheet

is applicable only to the standard bridge cross-section with 40' Clear Roadway, 8" Deck Slab and 4 Beams at 11'-10" spacing. Any deviation requires custom design and details with an appropriate
Dead Load Deflection Diagram.

Provide structural steel for Rolled Beam and all stiffener plates in accordance with AASHTO M270 (ASTM A709), Grade 50WT2 (Weathering Steel, Non-Fracture Critical Charpy V-Notch tested for Zone 2). Use Shear Connectors conforming to AASHTO M169 (ASTM A108), Grade 1015, 1018 or 1020. Provide welding with weathering characteristics. Camber Beams to account for vertical curve, if necessary. If cambering is not required, place natural camber up.

The Contractor may substitute Plate Girders using equivalent plate sizes in lieu of the Rolled Beam shape shown at no additional cost to the Department. Provide 5/16" minimum fillet welds between web and flanges. Non-destructive testing will be required as appropriate.



	DEFLECTION SCHEDULE												
SPAN		BEAM A	ND DIAPH	RAGM DEF	LECTION	DECK SLAB, HAUNCH, S.I.P. STEEL DECK FORMS 2							
SPAN	€ BRG.	.1 & .9	.2 & .8	.3 & .7	.4 & .6	.5	€ BRG.	.1 & .9	.2 & .8	.3 & .7	.4 & .6	.5	
30'	0.00"	0.01"	0.01"	0.01"	0.01"	0.02"	0.00"	0.07"	0.13"	0.17"	0.20"	0.21"	
35'	0.00"	0.01"	0.01"	0.02"	0.02"	0.02"	0.00"	0.10"	0.19"	0.26"	0.30"	0.32"	
40'	0.00"	0.01"	0.02"	0.03"	0.04"	0.04"	0.00"	0.16"	0.30"	0.41"	0.48"	0.50"	
45'	0.00"	0.02"	0.04"	0.05"	0.06"	0.07"	0.00"	0.21"	0.39"	0.54"	0.63"	0.66"	
50'	0.00"	0.03"	0.05"	0.07"	0.08"	0.08"	0.00"	0.24"	0.45"	0.62"	0.72"	0.76"	

2 The Dead Load Deflection shown at the tenth points are the deflections due to Deck Slab + Haunch + S.I.P. Steel Deck Form Allowance + Concrete Traffic Rail. It does not include the Beam weight, Diaphragms or Future Wearing Surface.

	Spaces
3 - 7/8"ø x 5" Studs	
SHEAR CONNE	CTOR DETAIL

1 1/2" 2 Equal 1 1/2"

NOTE: For additional details, DIAPHRAGM DETAILS.	see
DIAFTRAGINI DETAILS.	

APPROVED BY BRIDGE ENGINEER	bouth Juck	DATE	4/2/10					
OKLAHOMA DEPT. OF TRANSPORTATION BRIDGE STANDARD (ENGLISH)								
ROLLED BEAM DETAILS								
30' THRU 50' SPANS INTEGRAL								
2009 SPECIFICATIONS	B40-I-RB	-3050	02E					

B-146E