

SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)

SPAN	ABUTMENT TO ABUTMENT						ABUTMENT TO STANDARD PIER						ABUTMENT TO STEPPED PIER									
	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL ①	WEATHERING STEEL FIXED BEARING ASSEMBLY ②	CLASS AA CONCRETE	REINFORCING STEEL ⑤	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL ①	WEATHERING STEEL FIXED BEARING ASSEMBLY ②	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	ELASTOMERIC BEARING PADS ④	CLASS AA CONCRETE	REINFORCING STEEL ⑥	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL ①	WEATHERING STEEL FIXED BEARING ASSEMBLY ②	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	ELASTOMERIC BEARING PADS ④	CLASS AA CONCRETE	REINFORCING STEEL ⑥
	(SY)	(LF)	(LB)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(EA)	(CY)	(LB)
30'	94.9	63.0	10,180	8	45.7	6,660	91.0	61.5	11,410	4	4	4	35.9	8,580	92.1	62.2	11,410	4	4	4	36.2	8,610
35'	110.5	73.0	11,640	8	50.1	7,500	106.6	71.5	12,860	4	4	4	40.3	9,420	107.6	72.2	12,860	4	4	4	40.5	9,450
40'	126.0	83.0	14,370	8	54.4	8,500	122.2	81.5	15,580	4	4	4	44.6	10,420	123.2	82.2	15,580	4	4	4	44.9	10,450
45'	141.6	93.0	17,490	8	59.6	9,340	137.7	91.5	18,500	4	4	4	49.4	11,250	138.8	92.2	18,500	4	4	4	49.7	11,290
50'	157.2	103.0	22,280	8	64.7	10,330	153.3	101.5	23,290	4	4	4	54.2	12,320	154.3	102.2	23,290	4	4	4	54.4	12,360
55'	172.7	113.0	29,340	8	72.3	11,370	168.8	111.5	30,320	4	4	4	60.1	13,360	169.9	112.2	30,320	4	4	4	60.4	13,400
60'	188.3	123.0	35,220	8	77.6	12,520	184.4	121.5	36,200	4	4	4	64.9	14,360	185.4	122.2	36,200	4	4	4	65.2	14,390
65'	203.8	133.0	39,190	8	82.6	13,360	199.9	131.5	40,200	4	4	4	69.7	15,200	201.0	132.2	40,200	4	4	4	69.9	15,230
70'	219.4	143.0	46,170	8	87.0	14,350	215.5	141.5	47,220	4	4	4	74.1	16,270	216.5	142.2	47,220	4	4	4	74.3	16,300
75'	234.9	153.0	54,330	8	92.1	15,190	231.0	151.5	55,400	4	4	4	78.8	17,110	232.1	152.2	55,400	4	4	4	79.0	17,140
80'	250.5	163.0	64,160	8	96.5	16,190	246.6	161.5	65,220	4	4	4	83.2	18,110	247.6	162.2	65,220	4	4	4	83.5	18,140
85'	266.0	173.0	73,570	8	101.1	17,030	262.2	171.5	74,600	4	4	4	87.8	18,940	263.2	172.2	74,600	4	4	4	88.1	18,980
90'	281.6	183.0	83,370	8	105.6	18,020	277.7	181.5	84,380	4	4	4	92.2	19,940	278.8	182.2	84,380	4	4	4	92.5	19,970
95'	297.2	193.0	100,550	8	110.0	18,860	293.3	191.5	101,550	4	4	4	96.6	20,780	294.3	192.2	101,550	4	4	4	96.9	20,810
100'	312.7	203.0	105,440	8	114.4	19,850	308.8	201.5	106,470	4	4	4	101.0	21,770	309.9	202.2	106,470	4	4	4	101.3	21,810

- ① QUANTITIES SHOWN INCLUDE WEIGHT OF STEEL ANGLE BUMPERS AT ABUTMENT ENDS OF DECK SLAB. FOR EACH STEEL ANGLE BUMPER OMITTED FROM END OF DECK SLAB, DEDUCT 130 POUNDS FROM THE QUANTITIES SHOWN.
- ② AT THE ABUTMENTS, PROVIDE AND INSTALL FIXED BEARING ASSEMBLIES OF THE SIZE, SHAPE AND LOCATION AS DETAILED IN THE PLANS. SEE SUMMARY FOR THE ESTIMATED TOTAL AMOUNT OF STRUCTURAL STEEL PER EACH FIXED BEARING ASSEMBLY. ALL COST OF PROVIDING AND INSTALLING THE FIXED BEARING ASSEMBLIES INCLUDING THE COST OF ANCHOR PLATES, ANCHOR BARS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "WEATHERING STEEL FIXED BEARING ASSEMBLY."
- ③ AT THE PIERS, PROVIDE AND INSTALL EXPANSION BEARING ASSEMBLIES OF THE SIZE, SHAPE AND LOCATION AS DETAILED IN THE PLANS. SEE SUMMARY FOR THE ESTIMATED TOTAL AMOUNT OF STRUCTURAL STEEL PER EACH EXPANSION BEARING ASSEMBLY. ALL COST OF PROVIDING AND INSTALLING THE EXPANSION BEARING ASSEMBLIES INCLUDING THE COST OF STEEL REINFORCED ELASTOMERIC BEARING PADS, ANCHOR PLATES, CONTACT PLATES, ANCHOR BOLTS, NUTS, WASHERS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "WEATHERING STEEL EXPANSION BEARING ASSEMBLY."
- ④ PROVIDE AND INSTALL ELASTOMERIC BEARING PADS BETWEEN THE TOP SURFACE OF THE ROLLED BEAMS AND THE BOTTOM SURFACE OF THE DECK SLAB. THE ELASTOMERIC BEARING PADS ARE TO BE OF THE SIZE AND SHAPE AS DETAILED IN THE PLANS AND LOCATED AT EACH BEAM END ABOVE THE PIERS. ALL COST OF PROVIDING AND INSTALLING THE ELASTOMERIC BEARING PADS INCLUDING THE COST OF ELASTOMERIC BEARING PADS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "ELASTOMERIC BEARING PADS."
- ⑤ QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
30' THRU 55' SPANS - NO LAP SPLICES
60' THRU 100' SPANS - 1 LAP SPLICE
- ⑥ QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
30' THRU 45' SPANS - 1/2 LAP SPLICE
50' THRU 65' SPANS - 1 LAP SPLICE
70' THRU 100' SPANS - 1 1/2 LAP SPLICES
LAP SPLICES ACCOUNT FOR ADJACENT SPAN COMBINATIONS AND ARE APPROXIMATE. PAYMENT FOR "REINFORCING STEEL" WILL BE BASED ON PLAN QUANTITY.

SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)

SPAN	STANDARD PIER TO STANDARD PIER						STANDARD PIER TO STEPPED PIER						STEPPED PIER TO STEPPED PIER								
	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	ELASTOMERIC BEARING PADS ④	CLASS AA CONCRETE	REINFORCING STEEL ⑥	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	ELASTOMERIC BEARING PADS ④	CLASS AA CONCRETE	REINFORCING STEEL ⑥	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	ELASTOMERIC BEARING PADS ④	CLASS AA CONCRETE	REINFORCING STEEL ⑥
	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)
30'	87.2	60.0	12,380	8	8	26.1	10,420	88.2	60.7	12,640	8	8	26.4	10,450	89.2	61.4	12,380	8	8	26.7	10,490
35'	102.7	70.0	13,810	8	8	30.5	11,260	103.8	70.7	14,070	8	8	30.7	11,290	104.8	71.4	13,810	8	8	31.0	11,330
40'	118.3	80.0	16,520	8	8	34.8	12,260	119.3	80.7	16,780	8	8	35.1	12,290	120.3	81.4	16,520	8	8	35.4	12,320
45'	133.8	90.0	19,470	8	8	39.2	13,090	134.9	90.7	19,730	8	8	39.5	13,130	135.9	91.4	19,470	8	8	39.8	13,160
50'	149.4	100.0	24,270	8	8	43.6	14,170	150.4	100.7	24,530	8	8	43.8	14,200	151.5	101.4	24,270	8	8	44.1	14,230
55'	164.9	110.0	31,310	8	8	47.9	15,210	166.0	110.7	31,570	8	8	48.2	15,240	167.0	111.4	31,310	8	8	48.5	15,270
60'	180.5	120.0	37,210	8	8	52.3	16,200	181.5	120.7	37,470	8	8	52.6	16,230	182.6	121.4	37,210	8	8	52.9	16,270
65'	196.0	130.0	41,240	8	8	56.7	17,040	197.1	130.7	41,500	8	8	57.0	17,080	198.1	131.4	41,240	8	8	57.3	17,110
70'	211.6	140.0	48,340	8	8	61.1	18,110	212.6	140.7	48,600	8	8	61.4	18,140	213.7	141.4	48,340	8	8	61.6	18,180
75'	227.2	150.0	56,540	8	8	65.4	18,950	228.2	150.7	56,800	8	8	65.7	18,980	229.2	151.4	56,540	8	8	66.0	19,020
80'	242.7	160.0	66,350	8	8	69.8	19,950	243.8	160.7	66,610	8	8	70.1	19,980	244.8	161.4	66,350	8	8	70.4	20,010
85'	258.3	170.0	75,720	8	8	74.5	20,780	259.3	170.7	75,980	8	8	74.8	20,820	260.3	171.4	75,720	8	8	75.1	20,850
90'	273.8	180.0	85,500	8	8	78.9	21,780	274.9	180.7	85,760	8	8	79.1	21,810	275.9	181.4	85,500	8	8	79.4	21,850
95'	289.4	190.0	102,680	8	8	83.2	22,620	290.4	190.7	102,940	8	8	83.5	22,650	291.5	191.4	102,680	8	8	83.8	22,680
100'	304.9	200.0	107,600	8	8	87.6	23,620	306.0	200.7	107,860	8	8	87.9	23,650	307.0	201.4	107,600	8	8	88.2	23,680

SUMMARY OF QUANTITIES BEARING ASSEMBLY STRUCTURAL STEEL (PER EACH ASSEMBLY)

SPAN	WEATHERING STEEL FIXED BEARING ASSEMBLY (LB)	WEATHERING STEEL EXPANSION BEARING ASSEMBLY (LB)
30' THRU 90'	80	150
95' AND 100'	80	160

APPROVED BY BRIDGE ENGINEER *Robert D. Smith* DATE 9-9-2011

OKLAHOMA DEPARTMENT OF TRANSPORTATION
COUNTY BRIDGE STANDARD (ENGLISH)

**SUPERSTRUCTURE QUANTITIES
ROLLED BEAMS**

32' CLEAR ROADWAY - INTEGRAL - SKEWED 0°

2009 SPECIFICATIONS CB32-I-SKO-SPR-QUAN-RB 01E
CB-900E