

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'	74.6	63.0	8,580	6	37.5	6,010	71.5	61.5	9,280	3	3	3	29.3	7,460	72.4	62.2	9,280	3	3	3	29.6	7,480
35'	86.8	73.0	10,640	6	41.1	6,760	83.8	71.5	11,350	3	3	3	32.9	8,210	84.6	72.2	11,350	3	3	3	33.1	8,240
40'	99.0	83.0	12,710	6	44.6	7,660	96.0	81.5	13,410	3	3	3	36.4	9,110	96.8	82.2	13,410	3	3	3	36.6	9,140
45'	111.3	93.0	15,440	6	48.7	8,410	108.2	91.5	16,130	3	3	3	40.2	9,860	109.0	92.2	16,130	3	3	3	40.4	9,890
50'	123.5	103.0	18,390	6	52.8	9,310	120.4	101.5	19,070	3	3	3	44.0	10,830	121.3	102.2	19,070	3	3	3	44.3	10,850
55'	135.7	113.0	22,630	6	59.4	10,260	132.7	111.5	23,340	3	3	3	49.1	11,770	133.5	112.2	23,340	3	3	3	49.3	11,800
60'	147.9	123.0	27,550	6	63.5	11,290	144.9	121.5	28,280	3	3	3	52.9	12,680	145.7	122.2	28,280	3	3	3	53.2	12,700
65'	160.2	133.0	32,550	6	67.5	12,040	157.1	131.5	33,280	3	3	3	56.7	13,430	157.9	132.2	33,280	3	3	3	56.9	13,460
70'	172.4	143.0	36,970	6	71.1	12,940	169.3	141.5	37,700	3	3	3	60.2	14,390	170.1	142.2	37,700	3	3	3	60.5	14,420
75'	184.6	153.0	44,650	6	75.2	13,690	181.5	151.5	45,430	3	3	3	64.0	15,140	182.4	152.2	45,430	3	3	3	64.3	15,170
80'	196.8	163.0	52,440	6	79.0	14,590	193.8	161.5	53,230	3	3	3	67.8	16,050	194.6	162.2	53,230	3	3	3	68.1	16,070
85'	209.0	173.0	59,560	6	82.4	15,350	206.0	171.5	60,340	3	3	3	71.3	16,790	206.8	172.2	60,340	3	3	3	71.6	16,820
90'	221.3	183.0	72,000	6	86.0	16,250	218.2	181.5	72,780	3	3	3	74.9	17,700	219.0	182.2	72,780	3	3	3	75.1	17,730
95'	233.5	193.0	83,680	6	89.6	17,000	230.4	191.5	84,460	3	3	3	78.4	18,450	231.3	192.2	84,460	3	3	3	78.7	18,480
100'	245.7	203.0	87,900	6	93.2	17,900	242.7	201.5	88,680	3	3	3	82.0	19,350	243.5	202.2	88,680	3	3	3	82.2	19,380

- 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 110 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'	68.5	60.0	9,990	6	6	21.1	8,850	69.3	60.7	9,990	6	6	21.4	8,870	70.1	61.4	9,990	6	6	21.6	8,900
35'	80.7	70.0	12,050	6	6	24.7	9,590	81.5	70.7	12,050	6	6	24.9	9,620	82.3	71.4	12,050	6	6	25.1	9,650
40'	92.9	80.0	14,120	6	6	28.2	10,500	93.8	80.7	14,120	6	6	28.4	10,530	94.6	81.4	14,120	6	6	28.7	10,560
45'	105.2	90.0	16,820	6	6	31.7	11,250	106.0	90.7	16,820	6	6	31.9	11,280	106.8	91.4	16,820	6	6	32.2	11,300
50'	117.4	100.0	19,750	6	6	35.2	12,210	118.2	100.7	19,750	6	6	35.5	12,240	119.0	101.4	19,750	6	6	35.7	12,270
55'	129.6	110.0	24,060	6	6	38.8	13,160	130.4	110.7	24,060	6	6	39.0	13,190	131.2	111.4	24,060	6	6	39.2	13,220
60'	141.8	120.0	29,020	6	6	42.3	14,070	142.6	120.7	29,020	6	6	42.6	14,090	143.5	121.4	29,020	6	6	42.8	14,120
65'	154.0	130.0	34,010	6	6	45.9	14,810	154.9	130.7	34,010	6	6	46.1	14,840	155.7	131.4	34,010	6	6	46.3	14,870
70'	166.3	140.0	38,430	6	6	49.4	15,780	167.1	140.7	38,430	6	6	49.6	15,810	167.9	141.4	38,430	6	6	49.8	15,840
75'	178.5	150.0	46,220	6	6	52.9	16,530	179.3	150.7	46,220	6	6	53.1	16,560	180.1	151.4	46,210	6	6	53.4	16,580
80'	190.7	160.0	54,010	6	6	56.7	17,430	191.5	160.7	54,010	6	6	56.9	17,460	192.3	161.4	53,990	6	6	57.1	17,490
85'	202.9	170.0	61,130	6	6	60.2	18,180	203.8	170.7	61,130	6	6	60.4	18,210	204.6	171.4	61,110	6	6	60.7	18,240
90'	215.2	180.0	73,550	6	6	63.7	19,090	216.0	180.7	73,550	6	6	64.0	19,110	216.8	181.4	73,530	6	6	64.2	19,150
95'	227.4	190.0	85,230	6	6	67.3	19,840	228.2	190.7	85,230	6	6	67.5	19,870	229.0	191.4	85,210	6	6	67.7	19,890
100'	239.6	200.0	89,460	6	6	70.8	20,740	240.4	200.7	89,460	6	6	71.0	20,770	241.2	201.4	89,440	6	6	71.3	20,800

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 70'	80	150
75'	80	160
80'	80	150
85' THRU 95'	80	160
100'	80	170

APPROVED BY BRIDGE ENGINEER *Robert D. Dush* DATE 9-9-2011
 OKLAHOMA DEPARTMENT OF TRANSPORTATION
 COUNTY BRIDGE STANDARD (ENGLISH)
SUPERSTRUCTURE QUANTITIES
ROLLED BEAMS
 26' CLEAR ROADWAY - INTEGRAL - SKEWED 0°
 2009 SPECIFICATIONS CB26-I-SKO-SPR-QUAN-RB 01E
 CB-517E