SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)

ABUTMENT TO ABUTMENT

SPAN	SAW-CUT GROOVING (SY)	CONCRETE RAIL (TR3) (LF)	STRUCTURAL STEEL ① (LB)	WEATHERING STEEL FIXED BEARING ASSEMBLY ② (EA)	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ② (EA)	CLASS AA CONCRETE (CY)	REINFORCING STEEL ③ (LB)
30'	83.3	70.5	10,820	3	3	27.2	8,810
35'	95.5	80.5	12,910	3	3	30.7	9,710
40'	107.8	90.5	14,910	3	3	34.3	10,460
45'	120.0	100.5	17,750	3	3	37.8	11,370
50'	132.2	110.5	20,700	3	3	41.3	12,110
55'	144.4	120.5	24,990	3	3	44.8	13,020
60'	156.7	130.5	29,950	3	3	48.4	13,890
65'	168.9	140.5	34,950	3	3	51.9	14,790
70'	181.1	150.5	39,380	3	3	55.4	15,540
75'	193.3	160.5	47,300	3	3	58.9	16,450
80'	205.5	170.5	55,090	3	3	62.7	17,190
85'	217.8	180.5	62,210	3	3	66.2	18,100
90'	230.0	190.5	74,650	3	3	69.8	18,850
95'	242.2	200.5	86,330	3	3	73.3	19,760
100'	254.4	210.5	90,550	3	3	76.9	20,500

ABUTMENT TO STANDARD PIER

SPAN	SAW-CUT GROOVING (SY)	CONCRETE RAIL (TR3) (LF)	STRUCTURAL STEEL ① (LB)	WEATHERING STEEL FIXED BEARING ASSEMBLY ② (EA)	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY ② (EA)	CLASS AA CONCRETE (CY)	REINFORCING STEEL ④ (LB)
30'	76.9	65.3	10,690	3	3	24.4	8,400
35'	89.2	75.3	12,780	3	3	27.9	9,150
40'	101.4	85.3	14,930	3	3	31.5	10,060
45'	113.6	95.3	17,620	3	3	35.0	10,800
50'	125.8	105.3	20,570	3	3	38.5	11,770
55'	138.1	115.3	24,860	3	3	42.1	12,520
60'	150.3	125.3	29,820	3	3	45.6	13,420
65'	162.5	135.3	34,820	3	3	49.1	14,170
70'	174.7	145.3	39,250	3	3	52.6	15,140
75'	186.9	155.3	47,170	3	3	56.2	15,890
80'	199.2	165.3	54,960	3	3	59.9	16,790
85'	211.4	175.3	62,080	3	3	63.5	17,540
90'	223.6	185.3	74,520	3	3	67.0	18,450
95'	235.8	195.3	86,200	3	3	70.5	19,190
100'	248.1	205.3	90,420	3	3	74.1	20,100

ABUTMENT TO STEPPED PIER

SPAN	SAW-CUT GROOVING (SY)	CONCRETE RAIL (TR3) (LF)	STRUCTURAL STEEL ① (LB)	WEATHERING STEEL FIXED BEARING ASSEMBLY ② (EA)	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY ② (EA)	CLASS AA CONCRETE (CY)	REINFORCING STEEL ④ (LB)
30'	79.8	67.6	10,690	3	3	25.6	8,600
35'	92.0	77.6	12,780	3	3	29.1	9,350
40'	104.2	87.6	14,930	3	3	32.6	10,250
45'	116.5	97.6	17,620	3	3	36.1	11,000
50'	128.7	107.6	20,570	3	3	39.7	11,960
55'	140.9	117.6	24,860	3	3	43.2	12,710
60'	153.1	127.6	29,820	3	3	46.8	13,620
65'	165.3	137.6	34,820	3	3	50.3	14,370
70'	177.6	147.6	39,250	3	3	53.8	15,330
75'	189.8	157.6	47,170	3	3	57.3	16,080
80'	202.0	167.6	54,960	3	3	61.1	16,980
85'	214.2	177.6	62,080	3	3	64.6	17,740
90'	226.5	187.6	74,520	3	3	68.2	18,640
95'	238.7	197.6	86,200	3	3	71.7	19,390
100'	250.9	207.6	90,420	3	3	75.2	20,290

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 PROVIDE AND INSTALL FIXED OR 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 FIXED OR EXPANSION BEARING ASSEMBLY. ALL COST OF PROVIDING AND INSTALLING THE FIXED OR 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 FIXED BEARING ASSEMBLY" OR "WEATHERING STEEL EXPANSION BEARING ASSEMBLY."

③ 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

④ QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
30' THRU 45' SPANS - ½ LAP SPLICE
50' THRU 65' SPANS - 1 LAP SPLICE
70' THRU 100' SPANS - 1½ 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)

STANDARD PIER TO STANDARD PIER

SPAN	SAW-CUT GROOVING (SY)	CONCRETE RAIL (TR3) (LF)	STRUCTURAL STEEL (LB)	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY ② (EA)	CLASS AA CONCRETE (CY)	REINFORCING STEEL ④ (LB)
30'	70.6	60.0	10,560	6	21.6	7,830
35'	82.8	70.0	12,650	6	25.1	8,620
40'	95.0	80.0	14,800	6	28.7	9,530
45'	107.2	90.0	17,490	6	32.2	10,280
50'	119.4	100.0	20,440	6	35.7	11,250
55'	131.7	110.0	24,730	6	39.3	11,990
60'	143.9	120.0	29,690	6	42.8	12,900
65'	156.1	130.0	34,690	6	46.3	13,650
70'	168.3	140.0	39,120	6	49.9	14,610
75'	180.6	150.0	47,040	6	53.4	15,360
80'	192.8	160.0	54,830	6	57.1	16,270
85'	205.0	170.0	61,950	6	60.7	17,010
90'	217.2	180.0	74,390	6	64.2	17,920
95'	229.4	190.0	86,070	6	67.8	18,670
100'	241.7	200.0	90,290	6	71.3	19,580

STANDARD PIER TO STEPPED PIER

SPAN	SAW-CUT GROOVING (SY)	CONCRETE RAIL (TR3) (LF)	STRUCTURAL STEEL (LB)	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY ② (EA)	CLASS AA CONCRETE (CY)	REINFORCING STEEL ④ (LB)
30'	73.4	62.4	10,560	6	22.8	8,070
35'	85.6	72.4	12,650	6	26.3	8,820
40'	97.9	82.4	14,650	6	29.8	9,730
45'	110.1	92.4	17,490	6	33.4	10,480
50'	122.3	102.4	20,440	6	36.9	11,440
55'	134.5	112.4	24,730	6	40.4	12,190
60'	146.7	122.4	29,690	6	44.0	13,100
65'	159.0	132.4	34,690	6	47.5	13,840
70'	171.2	142.4	39,120	6	51.0	14,810
75'	183.4	152.4	47,040	6	54.5	15,560
80'	195.6	162.4	54,830	6	58.3	16,460
85'	207.9	172.4	61,950	6	61.8	17,210
90'	220.1	182.4	74,390	6	65.4	18,120
95'	232.3	192.4	86,070	6	68.9	18,860
100'	244.5	202.4	90,290	6	72.5	19,770

STEPPED PIER TO STEPPED PIER

SPAN	SAW-CUT GROOVING (SY)	CONCRETE RAIL (TR3) (LF)	STRUCTURAL STEEL (LB)	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY ② (EA)	CLASS AA CONCRETE (CY)	REINFORCING STEEL ④ (LB)
30'	76.3	64.7	10,560	6	23.9	8,270
35'	88.5	74.7	12,650	6	27.5	9,020
40'	100.7	84.7	14,650	6	31.0	9,920
45'	112.9	94.7	17,490	6	34.5	10,670
50'	125.2	104.7	20,440	6	38.0	11,630
55'	137.4	114.7	24,730	6	41.6	12,380
60'	149.6	124.7	29,690	6	45.1	13,290
65'	161.8	134.7	34,690	6	48.7	14,040
70'	174.0	144.7	39,120	6	52.2	15,000
75'	186.3	154.7	47,040	6	55.7	15,750
80'	198.5	164.7	54,830	6	59.5	16,660
85'	210.7	174.7	61,950	6	63.0	17,410
90'	222.9	184.7	74,390	6	66.5	18,310
95'	235.2	194.7	86,070	6	70.1	19,060
100'	247.4	204.7	90,290	6	73.6	19,960

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

SPAN	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY (LB)
30' THRU 70'	150
75'	160
80'	150
85' THRU 95'	160
100'	170

SUMMARY OF QUANTITIES SEALED EXPANSION JOINT (PER EXPANSION JOINT)

ITEM	UNIT	TOTAL
SEALED EXPANSION JOINT	LF	33.06

NOTES

QUANTITY CALCULATIONS ASSUME ALL PIERS ARE FIXED PIERS. ANY ADJUSTMENTS TO THE QUANTITIES OF "SAW-CUT GROOVING", "CONCRETE RAIL (TR3)", "CLASS AA CONCRETE" AND "REINFORCING STEEL" NECESSARY TO ACCOUNT FOR EXPANSION JOINT OPENINGS WITHIN THE BRIDGE ARE MINOR AND HAVE NOT BEEN CONSIDERED. PAYMENT FOR "SAW-CUT GROOVING", "CONCRETE RAIL (TR3)", "CLASS AA CONCRETE" AND "REINFORCING STEEL" WILL BE BASED ON PLAN QUANTITY.

APPROVED BY BRIDGE ENGINEER Robert J. Rusch DATE 9-9-2011

OKLAHOMA DEPARTMENT OF TRANSPORTATION
COUNTY BRIDGE STANDARD (ENGLISH)

SUPERSTRUCTURE QUANTITIES
ROLLED BEAMS

26' CLEAR ROADWAY - CONVENTIONAL - SKEWED 30°

2009 SPECIFICATIONS | CB26-C-SK30-SPR-QUAN-RB | 01E

CB-256E