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'	106.0	70.5	13,460	4	4	33.6	10,240
35'	121.6	80.5	14,920	4	4	37.9	11,240
40'	137.1	90.5	17,650	4	4	42.2	12,070
45'	152.7	100.5	20,770	4	4	46.6	13,070
50'	168.2	110.5	25,680	4	4	51.0	13,910
55'	183.8	120.5	32,740	4	4	55.4	14,910
60'	199.4	130.5	38,680	4	4	59.8	15,890
65'	214.9	140.5	42,720	4	4	64.2	16,890
70'	230.5	150.5	49,690	4	4	68.5	17,730
75'	246.0	160.5	58,220	4	4	72.8	18,720
80'	261.6	170.5	68,060	4	4	77.2	19,560
85'	277.1	180.5	77,470	4	4	81.9	20,560
90'	292.7	190.5	87,270	4	4	86.3	21,400
95'	308.2	200.5	104,440	4	4	90.7	22,390
100'	323.8	210.5	109,330	4	4	95.0	23,230

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'	97.9	65.3	13,310	4	4	30.1	9,660
35'	113.5	75.3	14,770	4	4	34.5	10,610
40'	129.0	85.3	17,500	4	4	38.8	11,610
45'	144.6	95.3	20,620	4	4	43.2	12,450
50'	160.1	105.3	25,530	4	4	47.6	13,520
55'	175.7	115.3	32,590	4	4	52.0	14,360
60'	191.2	125.3	38,530	4	4	56.4	15,360
65'	206.8	135.3	42,570	4	4	60.7	16,190
70'	222.4	145.3	49,540	4	4	65.1	17,260
75'	237.9	155.3	58,070	4	4	69.4	18,100
80'	253.5	165.3	67,910	4	4	73.8	19,100
85'	269.0	175.3	77,320	4	4	78.5	19,940
90'	284.6	185.3	87,120	4	4	82.9	20,930
95'	300.1	195.3	104,290	4	4	87.3	21,770
100'	315.7	205.3	109,180	4	4	91.6	22,770

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'	101.5	67.6	13,310	4	4	31.6	9,930
35'	117.1	77.6	14,770	4	4	35.9	10,830
40'	132.6	87.6	17,500	4	4	40.3	11,820
45'	148.2	97.6	20,620	4	4	44.7	12,670
50'	163.8	107.6	25,530	4	4	49.0	13,730
55'	179.3	117.6	32,590	4	4	53.4	14,570
60'	194.9	127.6	38,530	4	4	57.8	15,570
65'	210.4	137.6	42,570	4	4	62.2	16,410
70'	226.0	147.6	49,540	4	4	66.5	17,480
75'	241.5	157.6	58,070	4	4	70.9	18,320
80'	257.1	167.6	67,910	4	4	75.2	19,310
85'	272.6	177.6	77,320	4	4	79.9	20,150
90'	288.2	187.6	87,120	4	4	84.3	21,150
95'	303.8	197.6	104,290	4	4	88.7	21,990
100'	319.3	207.6	109,180	4	4	93.0	22,980

(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 150 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 - 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)

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'	89.8	60.0	13,160	8	26.7	8,950
35'	105.3	70.0	14,620	8	31.1	10,020
40'	120.9	80.0	17,350	8	35.4	11,020
45'	136.5	90.0	20,470	8	39.8	11,850
50'	152.0	100.0	25,380	8	44.2	12,930
55'	167.6	110.0	32,440	8	48.6	13,760
60'	183.1	120.0	38,380	8	53.0	14,760
65'	198.7	130.0	42,420	8	57.3	15,600
70'	214.2	140.0	49,390	8	61.7	16,670
75'	229.8	150.0	57,920	8	66.0	17,510
80'	245.3	160.0	67,760	8	70.4	18,500
85'	260.9	170.0	77,170	8	75.1	19,340
90'	276.5	180.0	86,970	8	79.5	20,340
95'	292.0	190.0	104,140	8	83.9	21,180
100'	307.6	200.0	109,030	8	88.2	22,170

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'	93.4	62.4	13,160	8	28.2	9,220
35'	109.0	72.4	14,620	8	32.5	10,240
40'	124.5	82.4	17,350	8	36.9	11,230
45'	140.1	92.4	20,470	8	41.3	12,070
50'	155.6	102.4	25,380	8	45.6	13,140
55'	171.2	112.4	32,440	8	50.0	13,980
60'	186.8	122.4	38,380	8	54.4	14,980
65'	202.3	132.4	42,420	8	58.8	15,810
70'	217.9	142.4	49,390	8	63.1	16,890
75'	233.4	152.4	57,920	8	67.5	17,720
80'	249.0	162.4	67,760	8	71.8	18,720
85'	264.5	172.4	77,170	8	76.5	19,560
90'	280.1	182.4	86,970	8	80.9	20,550
95'	295.6	192.4	104,140	8	85.3	21,390
100'	311.2	202.4	109,030	8	89.7	22,390

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'	97.1	64.7	13,160	8	29.6	9,490
35'	112.6	74.7	14,620	8	34.0	10,450
40'	128.2	84.7	17,350	8	38.3	11,450
45'	143.7	94.7	20,470	8	42.7	12,290
50'	159.3	104.7	25,380	8	47.1	13,350
55'	174.8	114.7	32,440	8	51.4	14,200
60'	190.4	124.7	38,380	8	55.8	15,190
65'	205.9	134.7	42,420	8	60.2	16,030
70'	221.5	144.7	49,390	8	64.6	17,100
75'	237.1	154.7	57,920	8	68.9	17,940
80'	252.6	164.7	67,760	8	73.3	18,930
85'	268.2	174.7	77,170	8	78.0	19,770
90'	283.7	184.7	86,970	8	82.3	20,770
95'	299.3	194.7	104,140	8	86.7	21,610
100'	314.8	204.7	109,030	8	91.1	22,600

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

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

SUMMARY OF QUANTITIES SEALED EXPANSION JOINT (PER EXPANSION JOINT)

ITEM	UNIT	TOTAL
SEALED EXPANSION JOINT	LF	39.99

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

32' CLEAR ROADWAY - CONVENTIONAL - SKEWED 30°

2009 SPECIFICATIONS | CB32-C-SK30-SPR-QUAN-RB | 01E

CB-633E