

SHEET NO.	204*	PROOF ROLLING (1 HOUR/2000 SY)	206	CEMENT (0.75 X T X 115 X 0.05)	206	CURING COAT	206	CEMENT STABILIZED SUBGRADE, 14" DEEP	254	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5')	302	7" ASPHALT CONCRETE BASE, PG64- 22 (449)	304	4" AGGREGATE BASE	304	6" AGGREGATE BASE	407	NON-TRACKING TACK COAT (0.065 GAL/SY - 2 APPLICATIONS)	442	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M	442	1.34" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	442	ANTI-SEGREGATION EQUIPMENT	452	10.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC'P WITH OC/QA	609	CURB, TYPE 4-C	609	CURB, TYPE 6	CALCULATED BY	CHECKED NRB		
																																	204*	206
	HOUR	TON	SY	SY	SY	SY	CY	CY	CY	GAL	CY	CY	CY	GAL	CY	CY	CY	SY	FT	FT														
2	17	982	32506	32506			6138						5403				3470			1279	1532	2811					4571							
3	6	355	11733	11733			2225						1942				1256			475	554	1029					780							
4	19	1093	36182	36182			7036						6031				3981			1508	1759	3267												
5	5	256	8450	8450			1490						1396				840			316	370	686					3738							
6	5	253	8356	8356			62						1389				872			331	383	710					2625							
7	5	280	9248	9248			1716						1530				969			366	427	793					1666							
8	3	124	4085	4085			725						679				410			153	181	334					1973							
9	4	198	6545	6545			79						1052				44			17	20	36			5660			729						
10	2	76	2499	2499									406												2235			977						
11	3	157	5183	5183			1637						843				688			257	222	410			161		400	190						
12	2	113	3742	3742			851						612				487			183	173	320					37							
13	3	171	5658	5658			1023						913				573			214	251	464					33	141						
14	4	200	6621	6621			1213						1079				682			255	299	554					263	180						
15	2	63	2067	2067			2388						335				475			180	93	173					51							
16	2	99	3279	3279			543						535				305			115	134	249			310		48	167						
23																				-101														
24							147						142				81				35	35												
25	-1	-9	-293	-293									25																					
TOTALS CARRIED TO THE GENERAL SUMMARY	81	4411	145861	145861	4938	25848	24312						15133						5548	6433	11871			8366			16185	2384						
SHEET NO.	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	408	PRIME COAT, AS PER PLAN (0.4 GAL/SY)	441	3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	601	CONCRETE SLOPE PROTECTION	609	4" CONCRETE TRAFFIC ISLAND	617	WATER (A*0.500)/1000	617	COMPACTED AGGREGATE, AS PER PLAN (T=2')	617	SHOULDER PREPARATION	618*	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	622	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	622	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	622	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN	622	CONCRETE BARRIER END SECTION, TYPE B1	622	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1	622	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1	622	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN	622	BARRIER TRANSITION
	STA	GAL	CY	SY	MGAL	CY	SY	MILE	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		
17	58					278																												
18	42					194																												
19	33					152																												
20	12					55																												
21		749						6	104	1873																								
22		607						5	102	1872																								
23																																		
24							1457														720	4930	30	1	6	61	8	34						
25										218																								
* QUANTITY CARRIED TO GENERAL NOTES																																		
TOTALS CARRIED TO THE GENERAL SUMMARY	145	1356	679	1457	218	11	206	3745	5.58	720	4930	30	1	6	61	8	34																	

PAVEMENT SUBSUMMARY

CUY-490-0.00

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF	AREA FOR 12" EXTENSION SF	AREA FOR 18" EXTENSION SF	AREA FOR 20" EXTENSION SF	302	304	407	442	442	442	609	254	204	206	206	206	CALCULATED BY	CHECKED BY																	
FROM	TO														7" ASPHALT CONCRETE BASE, PG64-22 (448) CY	6" AGGREGATE BASE CY	NON-TRACKING TACK COAT (0.055 GAL/SY - 2 APPLICATIONS) GAL	ASPHALT CONCRETE SURFACE COURSE 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M CY	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (448) CY	ANTI-SEGREGATION EQUIPMENT CY	CURB, TYPE 4-C FT	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5') SY	PROOF ROLLING (1 HOUR/2000 SY) HOUR	CEMENT (0.75 X T X 115 X 0.09) LBS/SY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14" DEEP SY																			
EASTBOUND I-490 BL																																													
FULL DEPTH LANES																																													
2035+00.00	2037+00.00	RT	200.00	24.00	1.0021	4810.08									103.92	89.08	58.79	22.27	25.98	48.25																									
2037+00.00	2038+14.67	RT	114.67	24.00		2752.08									59.46	50.96	33.64	12.74	14.86	27.60			0.267	16.13	534.45	534.45																			
2038+14.67	2050+87.73	RT	1273.06	24.00	1.0008	30577.88									660.63	566.26	373.73	141.56	165.16	306.72			1.699	102.56	3397.54	3397.54																			
FULL DEPTH SHOULDER																																													
2035+00.00	2037+00.00	LT/IN	200.00	6.00	0.9995	1199.40									25.91	22.21	14.66	5.55	6.48	12.03																									
2037+00.00	2038+00.00	LT/IN	100.00	6.00		600.00							150.00		12.96	13.89	7.33	2.78	3.24	6.02			0.042	2.52	83.33	83.33																			
2038+00.00	2038+14.67	LT/IN	14.67	5.71		83.69							22.01		1.81	1.96	1.02	0.39	0.45	0.84			0.006	0.35	11.74	11.74																			
2038+14.67	2039+00.00	LT/IN	85.33	3.71	0.9999	316.12							127.97		6.83	8.22	3.86	1.46	1.71	3.17			0.025	1.49	49.34	49.34																			
2039+00.00	2049+00.00	LT/IN	1000.00	2.00	0.9999	1999.80							1499.85		43.21	64.81	24.44	9.26	10.80	20.06			0.194	11.74	388.85	388.85																			
2049+00.00	2050+00.00	LT/IN	100.00	1.00	1.0000	100.00							149.99		2.16	4.63	1.22	0.46	0.54	1.00			0.014	0.84	27.78	27.78																			
2050+00.00	2050+87.73	LT/IN	87.73	0.00	1.0000	0.00							131.60		0.00	2.44	0.00	0.00	0.00	0.00			0.007	0.44	14.62	14.62																			
2035+00.00	2037+00.00	RT/OUT	200.00	10.00	0.9949	1989.80		66.27					115.98		44.42	40.22	24.72	9.21	10.75	19.96			0.127	7.67	254.23	254.23																			
2037+00.00	2038+14.67	RT/OUT	114.67	7.71		883.53		38.22					66.89		19.91	18.31	11.03	4.09	4.77	8.86			0.059	3.54	117.28	117.28																			
2038+14.67	2038+51.14	RT/OUT	36.47	4.68	1.0017	170.97		12.18					21.31		3.96	3.79	2.16	0.79	0.92	1.71			0.013	0.76	25.09	25.09																			
2038+51.14	2039+00.00	RT/OUT	48.86	2.98	1.0017	145.61							73.42		3.15	4.06	1.78	0.67	0.79	1.46			0.012	0.73	24.34	24.34																			
2039+00.00	2049+00.00	RT/OUT	1000.00	2.00	1.0016	2003.20							1502.55		43.28	64.92	24.48	9.27	10.82	20.09			0.195	11.76	389.53	389.53																			
2049+00.00	2050+00.00	RT/OUT	100.00	1.00	1.0016	100.16							150.24		2.16	4.64	1.22	0.46	0.54	1.00			0.014	0.84	27.82	27.82																			
2050+00.00	2050+87.73	RT/OUT	87.73	0.00	1.0016	0.00							131.81		0.00	2.44	0.00	0.00	0.00	0.00			0.007	0.44	14.65	14.65																			
GORE AREAS																																													
WESTBOUND I-490 CL / RAMP E-S (I-71)																																													
958+62.77	963+34.02	LT					6128.23								132.40	113.49	74.90	28.37	33.10	61.47			0.340	20.55	680.91	680.91																			
EASTBOUND I-490 CL / RAMP S-E (I-71)																																													
953+50	958+00.00	RT					6070.50								131.15	112.42	74.20	28.10	32.79	60.89			0.337	20.36	674.50	674.50																			
EASTBOUND I-490 CL / RAMP 7-7C																																													
979+02.34	980+59.02	RT					2080.12								44.94	38.52	25.42	9.63	11.24	20.87			0.116	6.98	231.12	231.12																			
EASTBOUND I-490 CL / RAMP W-S (I-77)																																													
1020+90.90	1021+87.40	RT					1727.59								37.32	31.99	21.11	8.00	9.33	17.33			0.096	5.79	191.95	191.95																			
RAMP E-N (I-77) / RAMP E-S (I-77)																																													
739+15.85	740+95.22	RT					1550.30								33.49	28.71	18.95	7.18	8.37	15.55			0.086	5.20	172.26	172.26																			
RAMP E-N (I-77) / RAMP W-N (I-77)																																													
733+41.84	734+00.31	RT					557.02										6.81	2.58					61.89																						
RAMP N-E (I-77) / RAMP S-E (I-77)																																													
442+93.82	445+70.00	RT					2500.09								54.01	46.30	30.56	11.57	13.50	25.07			0.139	8.39	277.79	277.79																			
RAMP N-W (I-77) / RAMP S-W (I-77)																																													
125+73.83	126+61.20	RT					917.44								19.82	16.99	11.21	4.25	4.96	9.21			0.051	3.08	101.94	101.94																			
RAMP W-N (I-77) / RAMP W-S (I-77)																																													
625+84.24	627+98.91	RT					2025.57								43.76	37.51	24.76	9.38	10.94	20.32			0.113	6.79	225.06	225.06																			
TOTALS CARRIED TO PAVEMENT SUBSUMMARY															1531	1389		872	331	383	710		2625		62	5	253	8356	8356																

PAVEMENT CALCULATIONS

CUY-490-0.00

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF	AREA FOR 12" EXTENSION SF	AREA FOR 18" EXTENSION SF	AREA FOR 20" EXTENSION SF	302	304	407	442	442	442	452	609	204	206	206	206			
FROM	TO														7" ASPHALT CONCRETE BASE, PG64-22 (448) CY	6" AGGREGATE BASE CY	NON-TRACKING TACK COAT (0.055 GAL/SY - 2 APPLICATIONS) GAL	ASPHALT CONCRETE SURFACE COURSE 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M CY	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (448) CY	ANTI-SEGREGATION EQUIPMENT CY	10.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS GC 1P WITH GC/CA SY	CURB, TYPE 6 FT	PROOF ROLLING (1 HOUR/2000 SY) HOUR	CEMENT (0.75 X T X 115 X 0.09) LBS/SY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14" DEEP SY			
RAMP 7-7C BL																													
FULL DEPTH LANES																													
68+37.92	69+80.36						8868.95								99.63														
69+80.36	69+82.85	LT	2.49	16.00		39.84									166.08						985.44	66.42	0.498	30.08	996.51	996.51			
69+82.85	70+06.56	LT	23.71	16.00		379.36									0.74						4.43		0.002	0.13	4.43	4.43			
70+06.56	73+06.56	LT	300.00	16.00	1.0279	4933.92									91.37						42.15		0.021	1.27	42.15	42.15			
73+06.56	77+59.02	LT	452.46	16.00	1.0342	7486.95									138.65						548.21		0.274	16.55	548.21	548.21			
77+59.02	79+00.64	LT	141.62	16.00	1.0185	2307.84									42.74						831.88		0.416	25.11	831.88	831.88			
79+00.64	80+59.02	LT	158.38	16.00	1.0185	2580.96									55.76	47.80	31.55	11.95	13.94	25.89			0.128	7.74	258.43	258.43			
69+80.36	69+82.85	RT	2.49	12.00		29.88															3.32		0.002	0.10	3.32	3.32			
69+82.85	70+06.56	RT	23.71	12.00		284.52									5.27						31.61		0.016	0.95	31.61	31.61			
70+06.56	72+80.36	RT	273.80	12.00	0.9791	3216.93									59.57						357.44		0.179	10.79	357.44	357.44			
72+80.36	73+06.56	RT	26.20	11.13	0.9806	285.82									5.29						31.76		0.016	0.96	31.76	31.76			
73+06.56	74+60.36	RT	153.80	5.13	0.9890	779.55									14.44						86.62		0.043	2.61	86.62	86.62			
FULL DEPTH SHOULDER																													
68+37.92	69+12.29																181.56												
69+12.29	69+45.01						65.56								16.36						7.28	121.04	0.010	0.61	20.17	20.17			
69+45.01	70+06.56	LT/IN	61.55	3.00		184.65									30.78						20.52		0.006	0.38	12.74	12.74			
70+06.56	73+06.56	LT/IN	300.00	3.00	1.0611	954.99									159.95						106.11		0.080	4.81	159.43	159.43			
73+06.56	77+59.02	LT/IN	452.46	3.00	1.0748	1458.91									244.60						162.10		0.122	7.35	243.63	243.63			
77+59.02	79+00.64	LT/IN	141.62	3.00	1.0404	442.02									73.92						49.11		0.037	2.23	73.75	73.75			
68+37.92	68+92.37						590.59										224.64												
68+92.37	69+80.36						523.88								43.99		131.99				58.21	149.76	0.036	2.20	72.87	72.87			
69+80.36	70+06.56	RT/OUT	26.20	6.00		157.20									13.10		39.30				17.47		0.011	0.66	21.83	21.83			
70+06.56	73+06.56	RT/OUT	300.00	6.00	0.9895	1781.10									146.87		440.60				197.90		0.123	7.45	246.86	246.86			
73+06.56	77+59.02	RT/OUT	452.46	6.00	0.9872	2680.01									220.42		661.25				297.78		0.186	11.21	371.25	371.25			
77+59.02	79+00.64	RT/OUT	141.62	6.00	0.9931	843.86									69.83		209.50				93.76		0.059	3.53	117.04	117.04			
79+00.64	80+08.90	RT/OUT	108.26	6.00	0.9931	645.08									35.59		160.15						0.045	2.70	89.47	89.47			
80+08.90	80+58.90	RT/OUT	50.00	7.00	0.9919	347.17									16.40	62.28	73.79	8.10	2.99	3.48	6.47		0.023	1.41	46.77	46.77			
80+58.90	80+59.02	RT/OUT	0.12	8.00	0.9908	0.95									0.04	0.07	0.18	0.01	0.00	0.01	0.01		0.000	0.00	0.13	0.13			
RAMP C-7 BL																													
FULL DEPTH LANES																													
81+98.55	82+50.48						2161.76										124.09												
82+50.48	85+50.00	LT	299.52	12.00		3594.24																							
82+50.48	85+50.00	RT	299.52	16.00		4792.32																							
85+50.00	85+61.97						342.99																						
FULL DEPTH SHOULDER																													
82+50.48	82+60.00	LT/OUT	9.52	0.00		0.00											14.28				0.00		0.001	0.05	1.59	1.59			
82+60.00	82+90.00	LT/OUT	30.00	3.00		90.00											45.00				10.00	30.00	0.008	0.45	15.00	15.00			
82+90.00	85+10.00	LT/OUT	220.00	6.00		1320.00											330.00				146.67	220.00	0.092	5.53	183.33	183.33			
85+10.00	85+39.31	LT/OUT	29.31	6.59		193.01											43.96				21.45	29.31	0.013	0.79	26.33	26.33			
85+39.31	85+50.00	LT/OUT	10.69	7.17		76.65											16.04				8.52	10.69	0.005	0.31	10.30	10.30			
85+50.00	85+60.27						70.06										13.88				7.78	9.25	0.005	0.28	9.33	9.33			
TOTALS CARRIED TO PAVEMENT SUBSUMMARY																													
															79	1052		44	17	20	36	5660		729		4	198	6545	6545

PAVEMENT CALCULATIONS

9
25

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF	AREA FOR 12" EXTENSION SF	AREA FOR 18" EXTENSION SF	AREA FOR 20" EXTENSION SF	302	304	407	442	442	442	452	609	204	206	206	206	CALCULATED BY	CHECKED BY															
FROM	TO														7" ASPHALT CONCRETE BASE, PG64-22 (44)	6" AGGREGATE BASE	NON-TRACKING TACK COAT (0.055 GAL/SY - 2 APPLICATIONS)	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	ANTI-SEGREGATION EQUIPMENT	10.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS GC 1P WITH GC/0A	CURB, TYPE 6	PROOF ROLLING (1 HOUR/2000 SY)	CEMENT (0.75 X T X 115 X 0.09) LBS/SY	CURING COAT	CEMENT STABILIZED SUBGRADE, 14" DEEP																	
RAMP C-7 BL CONTD.																																											
FULL DEPTH SHOULDER																																											
81+96.55	82+26.06							CADD																																			
82+26.06	82+44.11							CADD																																			
82+44.11	83+60.00	RT/IN	115.89	8.00			927.12																																				
83+60.00	84+10.00	RT/IN	50.00	5.50			275.00																																				
84+10.00	85+50.00	RT/IN	140.00	3.00			420.00																																				
85+50.00	85+64.23							CADD																																			
RAMP B-C BL																																											
FULL DEPTH LANES																																											
14+96.55	15+00.00							CADD																																			
15+00.00	15+32.54	RT	32.54	16.00	1.0056		523.56																																				
15+32.54	17+45.01	RT	212.47	16.00	1.0112		3437.59																																				
17+45.01	18+15.00	RT	69.99	16.00			1119.84																																				
18+15.00	18+18.79							CADD																																			
17+04.96	18+18.79							CADD																																			
FULL DEPTH SHOULDER																																											
14+96.55	15+00.00							CADD																																			
15+00.00	15+32.54	LT/OUT	32.54	7.25	0.9975	0.9949	235.33																																				
15+32.54	15+42.69	LT/OUT	10.15	7.25	0.9949	0.9899	73.21																																				
15+42.69	15+61.55	LT/OUT	18.86	7.63	0.9947	0.9894	143.05																																				
15+61.55	16+64.96	LT/OUT	103.41	8.00	0.9944	0.9888	822.65																																				
16+64.96	17+04.96	LT/OUT	40.00	4.00	0.9972	0.9944	159.55																																				
14+93.83	15+00.00							CADD																																			
15+00.00	15+01.91	RT/IN	1.91	3.04	1.0122	1.0133	5.87																																				
15+01.91	15+32.54	RT/IN	30.63	3.00	1.0122	1.0133	93.01																																				
15+32.54	17+45.01	RT/IN	212.47	3.00	1.0244	1.0265	652.96																																				
17+45.01	17+71.99	RT/IN	26.98	3.00			80.94																																				
17+71.99	18+00.00	RT/IN	28.01	3.00			84.03																																				
18+00.00	18+15.00	RT/IN	15.00	1.50			22.50																																				
RAMP C-B BL																																											
FULL DEPTH LANES																																											
14+51.44	14+75.44							CADD																																			
14+75.44	15+44.93	LT	69.49	24.00			1667.76																																				
15+44.93	17+34.86							CADD																																			
16+79.88	17+82.11							CADD																																			
FULL DEPTH SHOULDER																																											
14+48.85	14+51.44							CADD																																			
14+51.44	14+56.66	LT/IN	5.22	2.59			13.51																																				
14+56.66	14+60.77	LT/IN	4.11	2.80			11.49																																				
14+60.77	15+44.93	LT/IN	84.16	3.00			252.48																																				
15+44.93	15+94.81							CADD																																			
TOTALS CARRIED TO PAVEMENT SUBSUMMARY															406																												

PAVEMENT CALCULATIONS

CUY-490-0.00

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF	AREA FOR 12" EXTENSION SF	AREA FOR 18" EXTENSION SF	AREA FOR 20" EXTENSION SF	302	304	407	442	442	442	609	609	204	206	206	206	CALCULATED	CHECKED														
FROM	TO														7" ASPHALT CONCRETE BASE, PG64-22 (448) CY	6" AGGREGATE BASE CY	NON-TRACKING TACK COAT (0.055 GAL/SY - 2 APPLICATIONS) GAL	ASPHALT CONCRETE SURFACE COURSE 12.5 MM TYPE A (447), AS PER PLAN, PG76-22M CY	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (448) CY	ANTI-SEGREGATION EQUIPMENT CY	CURB, TYPE 4-C FT	CURB, TYPE 6 FT	PROOF ROLLING (1 HOUR/2000 SY) HOUR	CEMENT (0.75 X T X 115 X 0.09) LBSY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14" DEEP SY	BY	INR														
RAMP N-E (I-77) BL CONTD.																																										
FULL DEPTH SHOULDER																																										
440+30.00	440+77.67	LT/IN	47.67	10.00	0.9965	0.9930	475.03		15.78		27.61		71.00		10.60	9.60		5.90	2.20	2.57	4.77								0.030	1.83	60.67	60.67										
440+77.67	442+50.00	LT/IN	172.33	10.00	0.9983	0.9965	1720.37		57.24		100.17		257.59		38.41	34.77		21.38	7.96	9.29	17.25							0.110	6.63	219.77	219.77											
442+50.00	442+77.67	LT/IN	27.67	9.73	0.9983	0.9966	268.63		9.19		16.09		41.36		6.00	5.44		3.34	1.24	1.45	2.69						0.017	1.04	34.44	34.44												
442+77.67	443+04.72	LT/IN	27.05	9.18			248.32		9.02		15.78		40.58		5.56	5.06		3.09	1.15	1.34	2.49						0.016	0.97	32.10	32.10												
443+04.72	443+22.87	LT/IN	18.15	8.73			158.36						27.23		3.42	3.44		1.94	0.73	0.86	1.59	18.15				0.010	0.62	20.62	20.62													
443+22.87	444+29.84	LT/IN	106.97	7.66			818.86		35.66	53.48	62.40			178.28	23.47	21.27		13.06	3.79	5.67	9.46					0.084	3.85	127.63	127.63													
444+29.84	444+75.00	LT/IN	45.16	5.95			268.70						67.74		5.81	6.23		3.28	1.24	1.45	2.69	45.16				0.019	1.13	37.38	37.38													
444+75.00	445+70.00	LT/IN	95.00	3.60			342.00						142.50		7.39	8.97		4.18	1.58	1.85	3.43		95.00			0.027	1.62	53.83	53.83													
437+48.65	437+50.00							7.44	0.45	0.79		2.02		0.17	0.16		0.09	0.03	0.04	0.07							0.001	0.03	1.05	1.05												
437+50.00	437+93.52	RT/OUT	43.52	7.82	1.0139	1.0166	345.06		14.75		25.81		66.36		7.77	7.14		4.31	1.60	1.86	3.46					0.023	1.38	45.71	45.71													
437+93.52	440+00.00	RT/OUT	206.48	10.00	1.0147	1.0182	2095.15		70.08		122.64		315.36		46.78	42.37		26.04	9.70	11.32	21.02					0.134	8.09	267.83	267.83													
440+00.00	440+77.67	RT/OUT	77.67	8.45	1.0141	1.0171	665.17		26.33		46.08		118.50		14.94	13.66		8.29	3.08	3.59	6.67					0.044	2.63	87.07	87.07													
440+77.67	441+50.00	RT/OUT	72.33	5.45	1.0065	1.0075	396.40		24.29		42.51		109.31		9.09	8.58		4.99	1.84	2.14	3.98					0.028	1.70	56.19	56.19													
441+50.00	442+77.67	RT/OUT	127.67	4.00	1.0063	1.0070	513.90		42.85		75.00		192.85		12.03	11.70		6.54	2.38	2.78	5.16					0.039	2.37	78.53	78.53													
442+77.67	442+93.82	RT/OUT	16.15	4.00			64.60		5.38		9.42		24.23		1.51	1.47		0.82	0.30	0.35	0.65					0.005	0.30	9.87	9.87													
442+93.82	442+94.41							1.19	0.20		0.34		0.89		0.03	0.03		0.02	0.01	0.01	0.02					0.000	0.01	0.23	0.23													
RAMP N-W (I-77) BL																																										
FULL DEPTH LANES																																										
120+13.58	120+27.89							178.59							3.86	3.31		2.18	0.83	0.96	1.79						0.010	0.60	19.84	19.84												
120+27.89	124+14.63	RT	386.74	28.49			11016.29								238.01	204.01		134.64	51.00	59.50	110.50					0.612	36.95	1224.03	1224.03													
124+14.63	124+65.73	RT	51.10	16.00			817.60								17.66	15.14		9.99	3.79	4.42	8.21					0.045	2.74	90.84	90.84													
124+65.73	127+15.73	RT	250.00	16.00	1.0077		4030.80								87.09	74.64		49.27	18.66	21.77	40.43					0.224	13.52	447.87	447.87													
127+15.73	131+35.00	RT	419.27	16.00	1.0154		6811.63								147.16	126.14		83.25	31.54	36.79	68.33					0.378	22.85	756.85	756.85													
131+35.00	131+37.70							42.53							0.92	0.79		0.52	0.20	0.23	0.43					0.002	0.14	4.73	4.73													
FULL DEPTH SHOULDER																																										
120+07.33	120+13.58							32.08				8.82			0.69	0.76		0.39	0.15	0.17	0.32		5.88				0.002	0.14	4.54	4.54												
120+13.58	120+21.64	LT/OUT	8.06	10.92			88.02					12.09			1.90	1.85		1.08	0.41	0.48	0.89		8.06			0.006	0.34	11.12	11.12													
120+21.64	120+52.66	LT/OUT	31.02	10.92			338.74		10.34		18.10		46.53		7.54	6.80		4.20	1.57	1.83	3.40					0.021	1.29	42.81	42.81													
120+52.66	120+75.57	LT/OUT	22.91	10.46			239.64		7.64	10.46	13.36		34.36		5.34	4.83		2.98	1.11	1.29	2.40					0.015	0.92	30.44	30.44													
120+75.57	124+14.63	LT/OUT	339.06	10.00			3390.60		113.02		197.79		508.59		75.70	68.54		42.13	15.70	18.31	34.01					0.217	13.08	433.24	433.24													
124+14.63	124+65.73	LT/OUT	51.10	10.00			511.00		17.03		29.81		76.65		11.41	10.33		6.35	2.37	2.76	5.13					0.033	1.97	65.29	65.29													
124+65.73	127+15.73	LT/OUT	250.00	10.00	0.9952	0.9904	2488.00		82.53		144.43		371.40		55.54	50.28		30.91	11.52	13.44	24.96					0.159	9.59	317.71	317.71													
127+15.73	131+35.00	LT/OUT	419.27	10.00	0.9904	0.9808	4152.45		137.07		239.88		616.83		92.67	83.88		51.59	19.22	22.43	41.65					0.265	16.00	529.92	529.92													
131+35.00	131+37.52							24.50	0.84		1.47		3.78		0.55	0.50		0.30	0.11	0.13	0.24					0.002	0.09	3.14	3.14													
120+27.89	120+30.28							4.78							0.10	0.09		0.06	0.02	0.03	0.05					0.000	0.02	0.53	0.53													
120+30.28	124+14.63	RT/IN	384.35	4.00			1537.40		128.12		224.20		576.52		35.98	34.99		19.57	7.12	8.30	15.42					0.117	7.09	234.88	234.88													
126+61.20	127+15.73	RT/IN	54.53	4.00	1.0173	1.0192	221.89		18.53		32.42		83.37		5.19	5.05		2.83	1.03	1.20	2.23					0.017	1.02	33.92	33.92													
127+15.73	130+85.59	RT/IN	369.86	4.00	1.0346	1.0384	1530.63		128.02		224.04		576.09		35.84	34.86		19.49	7.09	8.27	15.36					0.117	7.07	234.08	234.08													
130+85.59	131+35.00	RT/IN	49.41	4.99	1.0355	1.0403	255.05		17.13		29.98		77.10		5.88	5.60		3.22	1.18	1.38	2.56					0.018	1.11	36.91	36.91													
131+35.00	131+37.76							17.09	0.92		1.61		4.14		0.39	0.36		0.21	0.08	0.09	0.17					0.001	0.07	2.36	2.36													
TOTALS CARRIED TO PAVEMENT SUBSUMMARY															1023	913		573	214	251	464												33	141					3	171	5658	5658

STATION	SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF	AREA FOR 12" EXTENSION SF	AREA FOR 18" EXTENSION SF	AREA FOR 20" EXTENSION SF	302	304	407	442	442	442	452	609	609	254	204	206	206	206
														7" ASPHALT CONCRETE BASE, PG64-22 (448) CY	6" AGGREGATE BASE CY	NON-TRACKING TACK COAT (0.055 GALS/SY - 2 APPLICATIONS) GAL	ASPHALT CONCRETE SURFACE COURSE 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M CY	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (448) CY	ANTI-SEGREGATION EQUIPMENT CY	10" NON-REINFORCED CONCRETE PAVEMENT CLASS QC 1P WITH QC/QA SY	CURB, TYPE 4-C FT	CURB, TYPE 6 FT	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5') SY	PROOF ROLLING (1 HOUR/2000 SY) HOUR	CEMENT (0.75 X T X 115 X 0.09) LBS/SY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14" DEEP SY
FROM	TO																										
RAMP S-E (I-77) BL																											
FULL DEPTH LANES																											
336+00.00	342+69.52	LT	669.52	16.00	1.0129	10850.51								234.42	200.94	132.62	50.23	58.61	108.84					0.603	36.39	1205.61	1205.61
342+69.52	344+69.52	LT	200.00	16.00	1.0065	3220.80								69.59	59.64	39.37	14.91	17.40	32.31				0.179	10.80	357.87	357.87	
344+69.52	345+70.00	LT	100.48	16.00		1607.68								34.73	29.77	19.65	7.44	8.68	16.12				0.089	5.39	178.63	178.63	
345+70.00	347+00.00	LT	130.00	34.20		4446.00								96.06	82.33	54.34	20.58	24.01	44.59				0.247	14.91	494.00	494.00	
FULL DEPTH SHOULDER																											
336+00.00	336+05.00	LT/IN	5.00	11.99	1.0355	62.05		1.74		3.05				1.38	1.24	0.77	0.29	0.34	0.63				0.004	0.23	7.77	7.77	
336+05.00	342+69.52	LT/IN	664.52	12.00	1.0355	8257.33		231.52		405.16		1041.83		183.40	164.70	102.34	38.23	44.60	82.83				0.517	31.19	1033.24	1033.24	
342+69.52	342+97.40	LT/IN	27.88	12.00	1.0178	340.52		9.50		16.63		42.77		7.56	6.79	4.22	1.58	1.84	3.42				0.021	1.29	42.59	42.59	
345+70.00	346+12.48	LT/IN	42.48	0.85		36.11						63.72		0.78	1.85	0.44	0.17	0.20	0.37				0.006	0.33	11.09	11.09	
346+12.48	347+00.00	LT/IN	87.52	0.00		0.00						131.28		0.00	2.43	0.00	0.00	0.00	0.00			42.48	0.007	0.44	14.59	14.59	
336+00.00	336+53.42	RT/OUT	53.42	11.07	0.9911	586.10		17.49		30.60		78.70		13.04	11.74	7.27	2.71	3.17	5.88				0.037	2.23	73.87	73.87	
336+53.42	342+69.52	RT/OUT	616.10	10.00	0.9919	6111.10		202.06		353.61		909.27		136.40	123.46	75.93	28.29	33.01	61.30				0.390	23.55	780.04	780.04	
342+69.52	343+23.44	RT/OUT	53.92	10.00	0.9960	537.04		17.83		31.20		80.22		11.99	10.85	6.67	2.49	2.90	5.39				0.034	2.07	68.58	68.58	
343+23.44	343+41.79	RT/OUT	18.35	10.00	0.9960	182.77						27.30		3.95	3.89	2.23	0.85	0.99	1.84				0.012	0.70	23.34	23.34	
343+41.79	344+69.52	RT/OUT	127.73	10.00	0.9960	1272.19		42.23	63.35	73.91		1272.19	211.16	34.33	30.79	19.16	5.89	8.35	14.24		18.35		0.092	5.58	184.76	184.76	
344+69.52	345+02.48	RT/OUT	32.96	10.00		329.60		10.99	16.48	19.23		54.93		8.90	7.99	4.97	1.53	2.17	3.70				0.024	1.45	47.91	47.91	
345+02.48	345+14.23	RT/OUT	11.75	10.00		117.50		3.92		6.85		17.63		2.62	2.38	1.46	0.54	0.63	1.17				0.008	0.45	15.01	15.01	
345+14.23	345+70.00	RT/OUT	55.77	8.89		495.52		18.59	8.89	32.53		83.65		11.11	10.12	6.17	2.29	2.68	4.97				0.032	1.94	64.35	64.35	
345+70.00	346+50.06	RT/OUT	80.06	6.17		493.97		26.69		46.70		120.09		11.25	10.51	6.20	2.29	2.67	4.96				0.034	2.06	68.23	68.23	
346+50.06	347+00.00	RT/OUT	49.94	3.57		178.29						74.91		3.85	4.69	2.18	0.83	0.96	1.79		49.94		0.014	0.85	28.13	28.13	
RAMP S-W (I-77) BL																											
FULL DEPTH LANES																											
224+14.63	226+14.63	LT	200.00	16.00	1.0028	3208.96								69.33	59.43	39.22	14.86	17.33	32.19				0.178	10.76	356.55	356.55	
226+14.63	228+90.53	LT	275.90	16.00	1.0056	4439.12								95.91	82.21	54.26	20.55	23.98	44.53				0.247	14.89	493.24	493.24	
228+90.53	230+18.15	LT	127.62	16.00	1.0098	2061.93								44.55	38.18	25.20	9.55	11.14	20.69				0.115	6.92	229.10	229.10	
FULL DEPTH SHOULDER																											
226+62.50	226+64.52					CADD	8.22	0.67		1.18		3.03		0.19	0.19	0.10	0.04	0.04	0.08				0.001	0.04	1.25	1.25	
226+64.52	228+90.53	LT/OUT	226.01	8.00	1.0140	1833.39		76.60		134.05		344.71		41.27	37.85	22.88	8.49	9.90	18.39				0.121	7.31	242.01	242.01	
228+90.53	229+91.64	LT/OUT	101.11	8.00	1.0244	828.62		34.69		60.71		156.11		18.65	17.11	10.34	3.84	4.48	8.32				0.055	3.30	109.41	109.41	
229+91.64	230+18.15	LT/OUT	26.51	6.68	1.0236	181.13		9.08		15.89		40.87		4.11	3.82	2.27	0.84	0.98	1.82				0.012	0.74	24.67	24.67	
224+14.63	225+54.00	RT/IN	139.37	4.00	0.9993	557.09		46.39		81.19		208.76		13.04	12.68	7.09	2.58	3.01	5.59				0.043	2.57	85.09	85.09	
225+54.00	226+04.00	RT/IN	50.00	5.00	0.9991	249.78		16.64		29.12		74.87		5.76	5.47	3.15	1.16	1.35	2.51				0.018	1.09	36.07	36.07	
226+04.00	226+14.63	RT/IN	10.63	6.00	0.9990	63.72						15.91		1.38	1.47	0.78	0.30	0.34	0.64		10.61		0.004	0.27	8.85	8.85	
226+14.63	228+49.08	RT/IN	234.45	6.00	0.9979	1403.75						350.20		30.33	32.48	17.16	6.50	7.58	14.08		233.47		0.097	5.88	194.88	194.88	
228+49.08	228+90.53	RT/IN	41.45	6.00	0.9979	248.18		13.76		24.08		61.91		5.66	5.30	3.12	1.15	1.34	2.49				0.017	1.04	34.45	34.45	
228+90.53	230+02.65	RT/IN	112.12	6.00	0.9963	670.23		37.10		64.93		166.95		15.28	14.30	8.42	3.10	3.62	6.72				0.047	2.81	93.02	93.02	
230+02.65	230+18.15	RT/IN	15.50	5.69	0.9965	87.89		5.13		8.98		23.09		2.01	1.89	1.11	0.41	0.47	0.88				0.006	0.37	12.33	12.33	
TOTALS CARRIED TO PAVEMENT SUBSUMMARY														1213	1079	682	255	299	554		263	180		4	200	6621	6621

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF	AREA FOR 12" EXTENSION SF	AREA FOR 18" EXTENSION SF	AREA FOR 20" EXTENSION SF	302	304	407	442	442	442	452	609	254	204	206	206	206	CALCULATED / CHECKED					
FROM	TO														CY	CY	GAL	CY	CY	CY	SY	FT	SY	HOUR	TON	SY	SY	BY	INR				
RAMP W-N (I-77) BL																																	
FULL DEPTH LANES																																	
625+00.00	625+84.24	RT	84.24	12.00		1010.88									21.84	18.72	12.36	4.68	5.46	10.14					0.056	3.39	112.32	112.32					
625+84.24	626+84.05	RT	99.81	12.93		1290.54									27.88	23.90	15.77	5.97	6.97	12.94					0.072	4.33	143.39	143.39					
626+84.05	627+98.91	RT	114.86	14.93	1.0072	1727.21									37.32	31.99	21.11	8.00	9.33	17.33					0.096	5.79	191.91	191.91					
627+98.91	629+84.05	RT	185.14	16.00	1.0077	2985.05									64.49	55.28	36.48	13.82	16.12	29.94					0.166	10.01	331.67	331.67					
629+84.05	631+44.12	RT	160.07	16.00	1.0154	2600.56									56.18	48.16	31.78	12.04	14.05	26.09					0.144	8.72	288.95	288.95					
631+44.12	631+73.96	CADD							250.37							5.41	4.64	3.06	1.16	1.35	2.51					0.014	0.84	27.82	27.82				
631+73.96	634+99.60	SUSPEND AND RESUME EXISTING BRIDGE TO REMAIN																															
634+99.60	635+06.36	CADD							54.06									0.66	0.25														
635+06.36	638+92.34	RT	385.98	16.00	1.0154	6270.79											76.64	29.03															
638+92.34	639+11.61	RT	19.27	16.00	1.0077	310.69											3.80	1.44															
639+11.61	639+69.85	RT	58.24	15.97	1.0077	936.96											11.45	4.34															
639+69.85	641+92.34	RT	222.49	15.94	1.0077	3573.80											43.68	16.55															
FULL DEPTH SHOULDER																																	
625+00.00	626+84.05	LT/IN	184.05	4.00		736.20		61.35		107.36			276.08		17.23	16.76	9.37	3.41	3.98	7.39						0.056	3.40	112.48	112.48				
626+84.05	628+88.66	LT/IN	204.61	4.00	0.9981	816.88		67.94		118.90			305.75		19.12	18.59	10.40	3.78	4.41	8.19						0.062	3.77	124.74	124.74				
628+88.66	629+84.05	LT/IN	95.39	5.92	0.9972	562.65		31.62		55.33			142.27		12.84	12.03	7.07	2.60	3.04	5.64						0.039	2.36	78.32	78.32				
629+84.05	630+06.69	LT/IN	22.64	8.28	0.9921	185.98		7.43		13.00			33.42		4.18	3.82	2.32	0.86	1.00	1.86						0.012	0.74	24.38	24.38				
630+06.69	630+47.42	LT/IN	40.73	9.55	0.9908	385.19							59.98		8.32	8.24	4.71	1.78	2.08	3.86		40.73			0.025	1.49	49.46	49.46					
630+47.42	631+15.22	LT/IN	67.80	11.72	0.9888	785.38									16.97	14.54	9.60	3.64	4.24	7.88					0.044	2.63	87.26	87.26					
631+15.22	631+44.12	CADD							192.63							4.16	3.57	2.35	0.89	1.04	1.93					0.011	0.65	21.40	21.40				
631+44.12	634+93.15	SUSPEND AND RESUME EXISTING BRIDGE TO REMAIN																															
634+93.15	634+99.60	CADD							48.04									0.59	0.22														
634+99.60	635+01.18	LT/IN	1.58	14.02	0.9865	21.85											0.27	0.10															
635+01.18	635+50.00	LT/IN	48.82	14.00	0.9866	674.32											8.24	3.12															
635+50.00	636+97.00	LT/IN	147.00	12.00	0.9885	1743.71											21.31	8.07															
636+97.00	637+02.50	LT/IN	5.50	9.00	0.9914	49.07											0.60	0.23															
637+02.50	638+92.34	LT/IN	189.84	8.00	0.9923	1507.03											18.42	6.98															
638+92.34	640+25.00	LT/IN	132.66	6.50	0.9969	859.62											10.51	3.98															
640+25.00	641+92.34	LT/IN	167.34	5.00	0.9976	834.69											10.20	3.86															
627+96.30	627+98.91	CADD							13.30									0.31	0.29		0.13												
627+98.91	629+84.05	RT/OUT	185.14	10.00	1.0202	1888.80			63.26		110.70		284.65		42.17	38.20	23.47	8.74	10.20	18.94						0.001	0.06	1.91	1.91				
629+84.05	630+64.64	RT/OUT	80.59	10.00	1.0403	838.38			28.20		49.36		126.92		18.72	16.96	10.42	3.88	4.53	8.41						0.054	3.24	107.26	107.26				
630+64.64	631+73.27	RT/OUT	108.63	7.83	1.0382	883.06			37.87		66.27		170.41		19.90	18.28	11.02	4.09	4.77	8.86						0.059	3.53	117.05	117.05				
631+73.27	631+73.96	RT/OUT	0.69	5.64	1.0361	4.03							1.08		0.09	0.09	0.05	0.02	0.02	0.04		0.72				0.000	0.02	0.57	0.57				
631+73.96	631+82.79	CADD							25.26									0.55	0.72		0.26		9.25			0.002	0.13	4.35	4.35				
631+82.79	635+06.36	SUSPEND AND RESUME EXISTING BRIDGE TO REMAIN																															
635+06.36	635+08.05	CADD							3.62									0.04	0.02														
635+08.05	635+47.23	RT/OUT	39.18	8.09	1.0385	328.97											4.02	1.52															
635+47.23	637+50.00	RT/OUT	202.77	12.00	1.0422	2535.92											30.99	11.74															
637+50.00	637+94.08	RT/OUT	44.08	11.00	1.0413	504.91											6.17	2.34															
637+94.08	638+92.34	RT/OUT	98.26	10.00	1.0403	1022.20											12.49	4.73															
638+92.34	639+11.61	RT/OUT	19.27	10.00	1.0202	196.59											2.40	0.91															
639+11.61	639+14.10	CADD							13.01									0.16	0.06														
TOTALS CARRIED TO PAVEMENT SUBSUMMARY															378	335	475	180	93	173	51	2388	2	63	2067	2067							

PAVEMENT CALCULATIONS

CUY-490-0.00

15/25

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF	AREA FOR 12" EXTENSION SF	AREA FOR 18" EXTENSION SF	AREA FOR 20" EXTENSION SF	302	304	407	442	442	442	452	609	609	204	206	206	206				
FROM	TO														7" ASPHALT CONCRETE BASE, PG64-22 (448) CY	6" AGGREGATE BASE CY	NON-TRACKING TACK COAT (0.055 GALS/SY - 2 APPLICATIONS) GAL	ASPHALT CONCRETE SURFACE COURSE 12.5 MM TYPE A (447), AS PER PLAN, PG76-22M CY	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) CY	ANTI-SEGREGATION EQUIPMENT CY	10" NON-REINFORCED CONCRETE PAVEMENT CLASS QC-1P WITH QC/QA SY	CURB, TYPE 4-C FT	CURB, TYPE 6 FT	PROOF ROLLING (1 HOUR/2000 SY) HOUR	CEMENT (0.75 X T X 115 X 0.09) LBS/SY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14" DEEP SY				
RAMP W-S (I-77) BL																															
FULL DEPTH LANES																															
520+97.52	521+19.22						263.99								5.70	4.89		3.23	1.22												
521+19.22	525+00.00	LT	380.78	24.00	1.0052	9186.24								198.47	170.12		112.28	42.53	49.62	92.15				0.015	0.89	29.33	29.33				
525+00.00	525+28.74	LT	28.74	12.00	1.0026	345.78								7.47	6.40		4.23	1.60	1.87	3.47				0.019	1.16	38.42	38.42				
525+28.74	525+83.53	LT	54.79	12.00	1.0045	660.44								14.27	12.23		8.07	3.06	3.57	6.63				0.037	2.22	73.38	73.38				
525+83.53	527+62.72	LT	179.19	13.71	1.0051	2469.22								53.35	45.73		30.18	11.43	13.34	24.77				0.137	8.28	274.36	274.36				
527+62.72	527+92.98	LT	30.26	15.71	1.0082	479.28								10.35	8.88		5.86	2.22	2.59	4.81				0.027	1.61	53.25	53.25				
527+92.98	528+83.00	LT	90.02	16.00	1.0084	1452.42								31.38	26.90		17.75	6.72	7.84	14.56				0.081	4.87	161.38	161.38				
FULL DEPTH SHOULDER																															
521+81.23	521+85.00						14.31	1.26		2.20			5.65	0.34	0.33		0.18	0.07	0.08	0.15					0.001	0.07	2.22	2.22			
521+85.00	525+00.00	LT/IN	315.00	4.00	1.0113	1274.24			106.28	185.99			478.26	29.83	29.01		16.22	5.90	6.88	12.78					0.097	5.88	194.72	194.72			
527+92.98	528+77.46	LT/IN	84.48	10.00	1.0220	863.39			28.93	50.62			130.17	19.28	17.46		10.73	4.00	4.66	8.66					0.055	3.33	110.40	110.40			
528+77.46	528+83.00	LT/IN	5.54	10.56	1.0223	59.78			1.90	3.32			8.54	1.33	1.20		0.74	0.28	0.32	0.60					0.004	0.23	7.59	7.59			
521+19.22	521+30.10						63.99							1.38	1.19		0.78	0.30	0.35	0.65					0.004	0.21	7.11	7.11			
521+30.10	521+55.75	RT/OUT	25.65	11.77	0.9974	301.12							38.28	6.51	6.29		3.68	1.39	1.63	3.02		25.52			0.019	1.14	37.71	37.71			
521+55.75	521+78.33	RT/OUT	22.58	11.32	0.9975	254.89							33.70	5.51	5.34		3.12	1.18	1.38	2.56		22.47			0.016	0.97	32.07	32.07			
521+78.33	522+00.00	RT/OUT	21.67	10.43	0.9977	225.53		7.19		12.58			32.36	5.03	4.54		2.80	1.04	1.22	2.26					0.014	0.86	28.65	28.65			
522+00.00	525+00.00	RT/OUT	300.00	10.00	0.9978	2993.40		99.56		174.23			448.02	66.82	60.50		37.19	13.86	16.17	30.03					0.191	11.54	382.38	382.38			
525+00.00	525+28.74	RT/OUT	28.74	10.00	0.9978	286.77		9.54		16.69			42.92	6.40	5.80		3.56	1.33	1.55	2.88					0.018	1.11	36.63	36.63			
525+28.74	527+62.72	RT/OUT	233.98	10.00	0.9963	2331.14		77.42		135.48			348.37	52.04	47.11		28.96	10.79	12.59	23.38					0.149	8.99	297.72	297.72			
527+62.72	528+62.20	RT/OUT	99.48	10.00	0.9948	989.63		32.81		57.42			147.65	22.09	20.00		12.30	4.58	5.35	9.93					0.063	3.81	126.36	126.36			
528+62.20	528+83.00	RT/OUT	20.80	10.42	0.9945	215.44		6.86		12.00			30.86	4.80	4.34		2.68	1.00	1.16	2.16					0.014	0.83	27.37	27.37			
W. 7TH STREET CL																															
FULL DEPTH LANE																															
12+86.12	13+22.92	LT	36.80	12.00		441.60																									
13+22.92	14+45.00	LT	122.08	12.00	1.0188	1492.50																				0.025	1.48	49.07	49.07		
14+45.00	14+48.31						36.51																			0.002	0.12	4.06	4.06		
FULL DEPTH SHOULDER																															
12+86.12	13+22.92	LT/OUT	36.80	4.00		147.20							55.20		3.75					16.36		36.80				0.011	0.68	22.49	22.49		
13+22.92	13+82.36	LT/OUT	59.44	4.00	1.0272	244.23							91.77		6.22					27.14		61.18				0.019	1.13	37.33	37.33		
13+82.36	14+45.00	LT/OUT	62.64	6.09	1.0283	391.95							96.92		9.05					43.55		64.61				0.027	1.64	54.32	54.32		
14+45.00	14+48.77						30.30						0.00		0.56					3.37		3.97				0.002	0.10	3.37	3.37		
TOTALS CARRIED TO PAVEMENT SUBSUMMARY															543	535		305	115	134	249	310	48	167				2	99	3279	3279

CALCULATED BY: _____ CHECKED BY: _____

PAVEMENT CALCULATIONS

CUY-490-0.00

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STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=L*W) SF	CADD AREA SF													209	441	CALCULATED BY	CHECKED BY																						
FROM	TO																				RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA			3" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 1 (449), (UNDER GUARDRAIL), AS PER PLAN	CY																				
PAVING UNDER GUARDRAIL CONTD.																																														
RAMP S-W (I-77) BL																																														
224+14.63	225+54.00	RT/IN	139.37	5.00	0.9977	695.25															1.39	6.42																								
225+54.00	226+04.00	RT/IN	50.00	5.00	0.9974	249.35															0.50	2.30																								
226+04.00	226+14.63	RT/IN	10.63	5.00	0.9970	52.99															0.11	0.49																								
226+14.63	228+90.53	RT/IN	275.90	5.00	0.9941	1371.36															2.74	12.62																								
228+90.53	230+02.65	RT/IN	112.12	5.00	0.9896	554.77															1.11	5.08																								
230+02.65	230+18.15	RT/IN	15.50	5.00	0.9900	76.73															0.15	0.70																								
RAMP W-N (I-77) BL																																														
628+21.02	629+84.05	LT/IN	163.03	5.00	0.9938	810.10															1.62	7.45																								
629+84.05	630+47.42	LT/IN	63.37	5.00	0.9776	309.75															0.62	2.80																								
629+70.37	629+84.05	RT/OUT	13.68	5.00	1.0274	70.27															0.14	0.67																								
629+84.05	630+64.64	RT/OUT	80.59	5.00	1.0547	424.99															0.85	4.15																								
630+64.64	631+94.49	RT/OUT	129.85	5.00	1.0501	681.78															1.36	6.63																								
RAMP W-S (I-77) BL																																														
521+30.10	521+55.75	RT/OUT	25.65	5.00	0.9938	127.45															0.25	1.17																								
521+55.75	522+00.00	RT/OUT	44.25	5.00	0.9942	219.97															0.44	2.02																								
522+00.00	522+41.11	RT/OUT	41.11	5.00	0.9945	204.42															0.41	1.88																								
TOTALS CARRIED TO PAVEMENT SUBSUMMARY												12		55																																

PAVEMENT CALCULATIONS

CUY-490-0.00

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF																		CALCULATED BY	CHECKED BY												
																												FROM	TO	PRIME COAT, AS PER PLAN (0.4 GAL/SY)	WATER ((A*0.300)/1000) MGAL	COMPACTED AGGREGATE, AS PER PLAN (I=2") CY	SHOULDER PREPARATION SY						
SHOULDER PREPARATION/COMPACTED AGGREGATE CONTD.																																							
RAMP E-N (I-77) (CONTD.)																																							
739+00.00	739+73.67	RT/OUT	73.67	5.00	0.9825		361.90										15.80	0.11	2.19	40.21																			
739+73.67	740+26.99	RT/OUT	53.32	5.00			266.60										11.85	0.08	1.65	29.62																			
745+50.00	746+47.57	RT/OUT	97.57	5.00	0.9978		486.78										0.00	0.00	0.00	54.09																			
RAMP N-E (I-77)																																							
438+00.00	440+00.00	RT/OUT	200.00	5.00	0.9801		980.10										42.69	0.29	5.93	108.90																			
440+00.00	440+77.67	RT/OUT	77.67	5.00	0.9822		381.44										16.65	0.11	2.31	42.38																			
440+77.67	441+50.00	RT/OUT	72.33	5.00			361.65										16.07	0.11	2.23	40.18																			
RAMP N-W (I-77)																																							
120+50.00	121+50.00	LT/IN	100.00	5.00			500.00										22.22	0.15	3.09	56.56																			
121+50.00	122+98.85	LT/IN	148.85	2.00			297.70										13.23	0.09	1.84	33.08																			
126+61.20	127+15.73	LT/IN	54.53	5.00			272.65										12.12	0.08	1.68	30.29																			
127+15.73	127+50.00	LT/IN	34.27	5.00	1.0432		178.75										8.29	0.06	1.15	19.86																			
127+50.00	128+50.00	LT/IN	100.00	2.00	1.0403		208.06										9.62	0.06	1.34	23.12																			
128+50.00	130+85.59	LT/IN	130+85.59	2.00	1.0403		490.17										22.66	0.15	3.15	54.46																			
130+85.59	131+37.76	LT/IN	52.17	5.00	1.0452		272.64										12.67	0.09	1.76	30.29																			
129+00.00	131+00.00	RT/OUT	200.00	5.00	0.9760		976.00										42.34	0.29	5.88	108.44																			
RAMP S-E (I-77)																																							
336+50.00	340+00.00	LT/IN	350.00	5.00	1.0492		1836.10										85.62	0.58	11.89	204.01																			
340+00.00	340+80.75	LT/IN	80.75	2.00	1.0468		169.06										7.87	0.05	1.09	18.78																			
345+02.47	347+00.00	LT/IN	197.53	2.00			395.06										17.56	0.12	2.44	43.90																			
336+50.00	336+53.43	RT/OUT	3.43	5.00	0.9781		16.77										0.00	0.00	0.10	1.86																			
336+53.43	341+50.00	RT/OUT	496.57	5.00	0.9788		2432.70										0.00	0.72	14.71	270.30																			
342+00.00	342+69.52	RT/OUT	69.52	5.00	0.9798		340.58										0.00	0.10	2.06	37.84																			
342+69.52	342+97.40	RT/OUT	27.88	5.00			139.40										6.20	0.04	0.86	15.49																			
RAMP W-N (I-77)																																							
625+00.00	625+50.00	LT/IN	50.00	5.00			250.00										11.11	0.08	1.54	27.78																			
625+50.00	627+50.00	LT/IN	200.00	2.00			400.00										17.78	0.12	2.47	44.44																			
628+00.00	628+21.02	LT/IN	21.02	2.00			42.04										1.87	0.01	0.26	4.67																			
628+50.00	629+70.34	RT/OUT	120.34	5.00			601.70										26.74	0.18	3.71	66.86																			
RAMP W-S (I-77)																																							
521+81.23	522+50.00	LT/IN	68.77	5.00	1.0133		348.42										15.69	0.11	2.18	38.71																			
522+50.00	524+00.00	LT/IN	150.00	2.00	1.0127		303.81										13.67	0.09	1.90	33.76																			
524+00.00	525+00.00	LT/IN	100.00	5.00	1.0133		506.65										22.82	0.15	3.17	56.29																			
522+40.19	525+28.74	RT/OUT	288.55	5.00	0.9945		1434.81										63.42	0.43	8.81	159.42																			
525+28.74	527+62.72	RT/OUT	233.98	5.00	0.9907		1159.02										51.03	0.34	7.09	128.78																			
527+62.72	528+50.00	RT/OUT	87.28	5.00	0.9869		430.68										18.89	0.13	2.62	47.85																			
TOTALS CARRIED TO PAVEMENT SUBSUMMARY													607	5	102	1872																							

PAVEMENT CALCULATIONS

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22
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STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF												618	442																		CALCULATED BY:	CHECKED BY:																										
FROM	TO																			RUMBLE STRIPS SHOULDER (ASPHALT CONCRETE) MILE																					ASPHALT CONCRETE SURFACE COURSE 12.5 MM TYPE A (447) AS PER PLAN PG76-22M CY																									
RUMBLE STRIPS																																																																		
WESTBOUND I-490 CL																																																																		
933+23.03	964+34.02	LT/OUT	3110.99																		0.589																																													
964+34.02	985+64.31	LT/OUT	2130.29																		0.403																																													
1020+43.75	1022+51.23	LT/OUT	207.48																	0.039																																														
1022+51.23	1023+49.97	STATION EQUATION																																																																
1023+49.97	1035+00.00	LT/OUT	1150.03																	0.218																																														
933+23.03	985+65.38	LT/IN	5242.35																	0.993																																														
1020+65.71	1022+51.23	LT/IN	185.52																	0.035																																														
1022+51.23	1023+49.97	STATION EQUATION																																																																
1023+49.97	1035+00.00	LT/IN	1150.03																	0.218																																														
WESTBOUND I-490 BL																																																																		
3035+00.00	3048+63.44	LT/OUT	1363.44																	0.258																																														
3035+00.00	3045+83.99	RT/IN	1083.99																	0.205																																														
EASTBOUND I-490 CL																																																																		
933+23.03	959+00.00	RT/OUT	2576.97																	0.488																																														
959+00.00	981+59.02	RT/OUT	2259.02																	0.428																																														
981+59.02	985+66.83	RT/OUT	407.81																	0.077																																														
1020+90.89	1022+51.23	RT/OUT	160.34																	0.030																																														
1022+51.23	1023+49.97	STATION EQUATION																																																																
1023+49.97	1035+00.00	RT/OUT	1150.03																	0.218																																														
933+23.03	985+65.60	RT/IN	5242.57																	0.993																																														
1020+73.09	1022+51.23	RT/IN	178.14																	0.034																																														
1022+51.23	1023+49.97	STATION EQUATION																																																																
1023+49.97	1035+00.00	RT/IN	1150.03																	0.218																																														
EASTBOUND I-490 BL																																																																		
2035+00.00	2038+50.84	LT/IN	350.84																	0.066																																														
2035+00.00	2038+49.33	RT/OUT	349.33																	0.066																																														
BARRIER DEDUCTIONS																																																																		
WESTBOUND/EASTBOUND I-490 CL																																																																		
933+23.03	985+65.44	LT/RT	5242.41	2.81																																																														
1020+67.19	1035+00.00	LT/RT	1432.81	2.81																																																														
WESTBOUND I-490 BL																																																																		
1035+00.00	1045+04.87	CTR	1004.87	2.81																																																														
EASTBOUND I-490 BL																																																																		
2036+24.84	2037+00.00	CTR	75.16	1.90																																																														
TOTALS CARRIED TO PAVEMENT SUBSUMMARY																				5.58																																														

PAVEMENT CALCULATIONS

CUY-490-0.00

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	EDGE EXT. CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	EACH	AREA FOR 4" EXTENSION SF	AREA FOR 6" EXTENSION SF	AREA FOR 7" EXTENSION SF			302	304	407	442	442	601		622	622	622	622	622	622	622	622	CALCULATED BY	CHECKED BY	
FROM	TO														7" ASPHALT CONCRETE BASE, PG64-22 (448) CY	6" AGGREGATE BASE CY	NON-TRACKING TACK COAT (0.055 GAL/SY - 2 APPLICATIONS) GAL	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) CY	ANTI-SEGREGATION EQUIPMENT CY	CONCRETE SLOPE PROTECTION SY	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1 FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1, AS PER PLAN FT	CONCRETE BARRIER END SECTION, TYPE B1 EACH	CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1 EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1 EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN EACH	BARRIER TRANSITION EACH				
BARRIER																																
WESTBOUND/EASTBOUND I-490																																
933+23.03	985+65.44	LT/RT	5242.41																													
1020+67.19	1022+51.23	LT/RT	184.04																													
1022+51.23	1023+49.97	LT/RT																														
1023+49.97	1035+00.00	LT/RT	1150.03																													
1035+00.00	1037+00.00	LT/RT	200.00																													
WESTBOUND I-490 BL																																
3037+00.00	3045+05.00	RT	805.00	2.70			2173.50			268.33	402.50	469.58			61.45	61.37	33.12	13.91	13.91													
EASTBOUND I-490 CL																																
940+05.22	945+59.41	RT/OUT	554.19	2.70	1.0152	1.0156	1519.06			187.61	281.42	328.32			42.95	42.90	23.15	9.72	9.72													
951+37.42	952+50.00	RT/OUT	112.58	2.70	1.0152	1.0156	308.59			38.11	57.17	66.70			8.73	8.71	4.70	1.98	1.98													
952+50.00	953+50.00	RT/OUT	100.00												11.37	9.74	6.43	2.84	2.84													
DEDUCTIONS																																
OVERHEAD SIGN FOUNDATIONS/HIGH MAST LIGHT			10.00																													
MEDIAN INLETS			20.00																													
LIGHT POLE FOUNDATION / PULLBOXES			8.00																													
END ANCHORAGES, TYPE B1			15.00																													
END ANCHORAGES, TYPE C1			15.00																													
END ANCHORAGES, TYPE C1, AS PER PLAN (8 TOTAL)			133.41																													
CONCRETE SLOPE PROTECTION																																
1037+00.22	1045+05.00	RT	804.78																													
TOTALS CARRIED TO PAVEMENT SUBSUMMARY															147	142	81	35	35	1457			720	4930	30	1	6	61	8	34		

PAVEMENT CALCULATIONS

CUY-490-0.00

