

SHEET NO.	204 SUBGRADE COMPACTION				204 PROOF ROLLING (1 HOUR/2000 SQ YD)				204 GEOTEXTILE FABRIC			206 CEMENT (0.75 x 115 x 0.05) LB/SY		206 CURING COAT		206 CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP		204 GEOGRID			
	SY				HOUR				SY			TON		SY		SY		SY			
	01/IMS/PV	02/NHS/PV	09/MPO/OT	10/IMS/OT/COL	01/IMS/PV	02/NHS/PV	09/MPO/OT	10/IMS/OT/COL	01/IMS/PV	09/MPO/OT	10/IMS/OT/COL	01/IMS/PV	02/NHS/PV	01/IMS/PV	02/NHS/PV	01/IMS/PV	02/NHS/PV	01/IMS/PV	09/MPO/OT	10/IMS/OT/COL	
2	4304	2870			4.5	3.0						9.9	6.6	4585	3057	4585	3057				
3	545	363			2.2	1.5						8.2	5.5	3775	2517	3775	2517				
4	1575	1575			2.7	2.6						8.2	7.5	3796	3453	3796	3453				
5	1200	2494			1.2	2.3						2.6	4.3	1177	1953	1177	1953				
6	612	6631			0.5	4.5						0.9	5.0	373	2277	373	2277				
7	4068					2.8							3.0			1352					
8	194	2715			0.3	1.7						0.5	1.5	211	661	211	661				
9	2462			906	1.3		0.5	2462		906								2462		906	
10	1939		162	1175	1.0		0.6	1939	162	1175								1939	162	1175	
11	1152	1344			0.8	1.4															
12	1790	1407																			
TOTALS CARRIED TO THE GENERAL SUMMARY	15773	23467	162	2081	15	20	1	2	4401	162	2081	31	34	13917	15270	13917	15270	4401	162	2081	
SHEET NO.	878																				
	INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS																				
	LS																				
	01/IMS/PV	02/NHS/PV																			

CALCULATED C/C	SUBGRADE SUBSUMMARY
CHECKED C/W	
FRA - 70 / 71 - 12.68 / 14.86	
1 12	

STATION	SIDE	LENGTH (L)	AVERAGE WIDTH (W)	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW)	CADD AREA	AREA FOR 16" EXTENSION	AREA FOR 20" EXTENSION	AREA FOR 28" EXTENSION	AREA FOR 56" EXTENSION	204		204		206		206		206		CALCULATED CIC	CHECKED CWL																					
												SUBGRADE COMPACTION	PROOF ROLLING (1 HOUR/2000 SQ. YD)	CEMENT (0.75 x 115 x 0.05) LB/SY	CURING COAT	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	SY	HOUR	TON	SY	SY																							
FROM	TO	FT	FT			SF	SF	SF	SF	SF	SF	SY		HOUR		TON		SY		SY	SY																							
EASTBOUND I.R. 70																																01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV			
FULL DEPTH LANES																																												
125+96.00	126+95.71	LT	99.71	24.00	1.0021	2398.07									0.080	0.053	0.345	0.230	159.87	106.58	159.87	106.58																						
128+27.86	129+50.00	LT	122.14	24.00	1.0021	2937.52									0.098	0.065	0.422	0.282	195.83	130.56	195.83	130.56																						
4169+93.98	4172+00.00	LT	206.02	24.00	1.0031	4959.81									0.165	0.110	0.713	0.475	330.65	220.44	330.65	220.44																						
4172+00.00	4175+58.73	LT	358.73	24.00	1.0031	8636.21						575.75	383.83	0.288	0.192																													
4177+15.67	4177+77.84	LT	62.17	24.00	1.0031	1496.71						99.78	66.52	0.050	0.033																													
4177+77.84	4180+82.06	LT	304.22	24.00		7301.28						486.75	324.50	0.243	0.162																													
4180+82.06	4186+04.15	LT	522.09	24.00		12530.16								0.418	0.278	1.801	1.201	835.34	556.90	835.34	556.90																							
4186+04.15	4186+25.00	LT	20.85	24.00	0.9959	498.35								0.017	0.011	0.072	0.048	33.22	22.15	33.22	22.15																							
4186+25.00	4186+72.06	LT	CADD					81.99					5.47	3.64	0.003	0.002																												
125+96.00	126+95.68	RT	99.68	12.00	0.9990	1194.96								0.040	0.027	0.172	0.115	79.66	53.11	79.66	53.11																							
128+28.25	129+50.00	RT	121.75	12.00	0.9990	1459.54								0.049	0.032	0.210	0.140	97.30	64.87	97.30	64.87																							
4169+93.98	4172+00.00	RT	206.02	24.00	0.9969	4929.15								0.164	0.110	0.709	0.472	328.61	219.07	328.61	219.07																							
4172+00.00	4175+64.56	RT	364.56	24.00	0.9969	8722.32						581.49	387.66	0.291	0.194																													
4177+25.72	4177+77.84	RT	52.12	41.43	0.9946	2147.67						143.18	95.45	0.072	0.048																													
4177+77.84	4180+82.06	RT	304.22	37.81		11502.56						766.84	511.22	0.383	0.256																													
4180+82.06	4186+04.15	RT	522.09	29.55		15427.76								0.514	0.343	2.218	1.478	1028.52	685.68	1028.52	685.68																							
4186+04.15	4186+20.50	RT	16.35	24.16	1.0042	396.68								0.013	0.009	0.057	0.038	26.45	17.63	26.45	17.63																							
4186+20.50	4186+25.00	RT	4.50	24.00	1.0041	108.44								0.004	0.002	0.016	0.010	7.23	4.82	7.23	4.82																							
4186+25.00	4186+72.06	RT	47.06	24.00	1.0041	1134.07						75.60	50.40	0.038	0.025																													
4186+72.06	4196+03.94	RT	CADD					10272.67					684.84	456.56	0.342	0.228																												
4196+03.94	4197+98.56	RT	194.62	5.40		1050.95						70.06	46.71	0.035	0.023																													
FULL DEPTH SHOULDER																																												
125+96.00	126+33.00	LT	37.00	12.74	1.0053	1.0064	473.88				86.89			0.019	0.012	0.081	0.054	37.38	24.92	37.38	24.92																							
126+33.00	126+95.75	LT	62.75	12.00	1.0052	1.0063	756.92				147.34			0.030	0.020	0.130	0.087	60.28	40.19	60.28	40.19																							
128+27.50	128+95.00	LT	67.50	12.00	1.0052	1.0063	814.21			113.21				0.031	0.021	0.133	0.089	61.83	41.22	61.83	41.22																							
128+95.00	129+50.00	LT	55.00	11.39	1.0052	1.0062	629.71			92.24				0.024	0.016	0.104	0.069	48.13	32.09	48.13	32.09																							
4158+50.35	4166+01.56	LT	CADD					7502.84							0.250	0.167	1.079	0.719	500.19	333.46	500.19	333.46																						
4169+82.17	4170+02.21	LT	20.04	14.00	1.0081		282.83							0.009	0.006	0.041	0.027	18.86	12.57	18.86	12.57																							
4170+02.21	4170+41.79	LT	39.58	14.80	1.0082		590.59							0.020	0.013	0.085	0.057	39.37	26.25	39.37	26.25																							
4170+41.79	4170+51.68	LT	9.89	15.30	1.0083		152.57							0.005	0.003	0.022	0.015	10.17	6.78	10.17	6.78																							
4170+51.68	4170+91.16	LT	39.48	16.85	1.0085		670.89							0.022	0.015	0.096	0.064	44.73	29.82	44.73	29.82																							
4170+91.16	4172+00.00	LT	108.84	15.00	1.0082	1.0102	1645.99		146.60					0.060	0.040	0.258	0.172	119.51	79.67	119.51	79.67																							
4172+00.00	4173+50.00	LT	150.00	15.00	1.0082	1.0102	2268.45		202.04			164.70	109.80	0.082	0.055																													
4173+50.00	4174+01.00	LT	51.00	15.20	1.0083	1.0103	781.63		68.70			56.69	37.79	0.028	0.019																													
4174+01.00	4174+45.96	LT	44.96	14.65	1.0082		664.07					44.27	29.51	0.022	0.015																													
4174+45.96	4174+55.95	LT	9.99	13.90	1.0081		139.99					9.33	6.22	0.005	0.003																													
4174+55.95	4174+95.93	LT	39.98	14.20	1.0081		572.31					38.15	25.44	0.019	0.013																													
4174+95.93	4175+53.86	LT	57.93	14.20	1.0081		829.27					55.28	36.86	0.028	0.018																													
4177+10.18	4177+57.34	LT	47.16	13.14	1.0080	1.0097	624.64				222.21	56.46	37.64	0.028	0.019																													
4177+57.34	4177+77.84	LT	20.50	13.73	1.0081	1.0099	283.74				96.61	25.36	16.90	0.013	0.008																													
4177+77.84	4180+77.93	LT	300.09	13.28			3985.20				1400.42	359.04	239.36	0.180	0.120																													
4180+77.93	4180+82.06	LT	4.13	12.79			52.82				19.27	4.81	3.20	0.002	0.002																													
4180+82.06	4181+17.91	LT	35.85	11.79			422.67				167.30			0.020	0.013	0.085	0.057	39.33	26.22	39.33	26.22																							
4181+17.91	4186+04.15	LT	486.24	10.21			4964.51				2269.12			0.241	0.161	1.040	0.693	482.24	321.49	482.24	321.49																							
TOTALS CARRIED TO PAVEMENT SUBSUMMARY												4304	2870	4.5	3.0	9.9	6.6	4585	3057	4585	3057																							

SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 16" EXTENSION SF	AREA FOR 20" EXTENSION SF	AREA FOR 22" EXTENSION SF	AREA FOR 42" EXTENSION SF	204 SUBGRADE COMPACTION SY		204 PROOF ROLLING (1 HOUR/2000 SQ. YD) HOUR		206 CEMENT (0.75 x 115 x 0.05) LB/SY TON		206 CURING COAT SY		206 CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP SY	
FROM	TO												01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV		
EASTBOUND I.R. 70																						
FULL DEPTH SHOULDER CONT'D																						
4186+04.15	4186+25.00	LT	20.85	9.59	0.9901	0.9884	197.97					96.17		0.010	0.007	0.042	0.028	19.61	13.07	19.61	13.07	
4186+25.00	4186+39.42	LT	14.42	9.44	0.9901	0.9885	134.78					66.52		0.007	0.004	0.029	0.019	13.42	8.95	13.42	8.95	
4186+39.42	4187+90.00	LT	150.58		CADD			1483.72				702.71		0.073	0.049	0.314	0.210	145.76	97.17	145.76	97.17	
4187+90.00	4188+87.48	LT	97.48	10.26	0.9900		990.14							0.033	0.022	0.142	0.095	66.01	44.01	66.01	44.01	
4188+87.48	4190+40.00	LT	152.52	8.67	0.9909		1310.32							0.044	0.029	0.188	0.126	87.35	58.24	87.35	58.24	
4190+40.00	4191+54.37	LT	114.37	7.95	0.9917		901.69							0.030	0.020	0.130	0.086	60.11	40.08	60.11	40.08	
4191+54.37	4192+63.51	LT	109.14	7.16	0.9917		774.96							0.026	0.017	0.111	0.074	51.66	34.44	51.66	34.44	
4192+63.51	4193+45.18	LT	81.67	7.82	0.9912		633.04							0.021	0.014	0.091	0.061	42.20	28.14	42.20	28.14	
4193+45.18	4196+99.64	LT	354.46	8.90			3154.69							0.105	0.070	0.453	0.302	210.31	140.21	210.31	140.21	
4196+99.64	4198+63.49	LT	163.85	9.08			1487.76							0.050	0.033	0.214	0.143	99.18	66.12	99.18	66.12	
4198+63.49	4199+26.94	LT	63.45	8.35			529.81							0.018	0.012	0.076	0.051	35.32	23.55	35.32	23.55	
4199+26.94	4200+19.90	LT	92.96	7.54			700.92							0.023	0.016	0.101	0.067	46.73	31.15	46.73	31.15	
4200+19.90	4200+83.38	LT	63.48	8.42			534.50							0.018	0.012	0.077	0.051	35.63	23.76	35.63	23.76	
4200+83.38	4203+42.95	LT	259.57	9.16			2377.66							0.079	0.053	0.342	0.228	158.51	105.67	158.51	105.67	
4203+42.95	4203+82.95	LT	40.00	8.41			336.40							0.011	0.007	0.048	0.032	22.43	14.95	22.43	14.95	
4203+82.95	4205+38.70	LT	155.75	7.77			1210.18							0.040	0.027	0.174	0.116	80.68	53.79	80.68	53.79	
4205+38.70	4205+78.69	LT	39.99	8.54			341.51							0.011	0.008	0.049	0.033	22.77	15.18	22.77	15.18	
4205+78.69	4208+14.77	LT	236.08	9.30			2195.54							0.073	0.049	0.316	0.210	146.37	97.58	146.37	97.58	
128+28.25	133+80.04	RT	551.79	12.00	0.9969	0.9958	6600.95				915.79			0.251	0.167	1.081	0.720	501.12	334.08	501.12	334.08	
133+80.04	134+05.00	RT	24.96	11.90	0.9969	0.9958	296.10				41.43			0.011	0.008	0.049	0.032	22.50	15.00	22.50	15.00	
4157+88.17	4158+18.15	RT	30.00		CADD			317.74			50.00			0.012	0.008	0.053	0.035	24.52	16.34	24.52	16.34	
4158+18.15	4159+84.50	RT	166.35	12.68			2109.32		221.80					0.078	0.052	0.335	0.223	155.41	103.61	155.41	103.61	
4159+84.50	4161+44.10	RT	159.60	10.72	0.9845	0.9817	1684.39		208.91					0.063	0.042	0.272	0.181	126.22	84.15	126.22	84.15	
4161+44.10	4163+70.78	RT	226.68	10.00	0.9847	0.9821	2232.12		296.83					0.084	0.056	0.364	0.242	168.60	112.40	168.60	112.40	
4163+70.78	4164+98.77	RT	127.99	10.37	0.9846	0.9819	1306.82		167.56					0.049	0.033	0.212	0.141	98.29	65.53	98.29	65.53	
4164+98.77	4165+91.66	RT	92.89	11.14			1034.79		123.85					0.039	0.026	0.167	0.111	77.24	51.50	77.24	51.50	
4165+91.66	4166+21.70	RT	30.00		CADD			326.70			50.00			0.013	0.008	0.054	0.036	25.11	16.74	25.11	16.74	
4170+04.52	4170+85.14	RT	80.62	7.22	0.9928	0.9918	577.89				133.26			0.024	0.016	0.102	0.068	47.41	31.61	47.41	31.61	
4170+85.14	4171+05.03	RT	19.89	13.66	0.9919	0.9901	269.50							0.009	0.006	0.039	0.026	17.97	11.98	17.97	11.98	
4171+05.03	4171+61.45	RT	56.42	12.70	0.9921	0.9904	710.87							0.024	0.016	0.102	0.068	47.39	31.59	47.39	31.59	
4171+61.45	4172+00.00	RT	38.55	11.75	0.9922	0.9906	449.43							0.015	0.010	0.065	0.043	29.96	19.97	29.96	19.97	
4172+00.00	4172+63.03	RT	63.03	11.25	0.9922	0.9908	703.56					46.90	31.27	0.023	0.016							
4172+63.03	4173+97.24	RT	134.21	8.75	0.9926	0.9914	1165.65					77.71	51.81	0.039	0.026							
4177+32.47	4177+77.84	RT	45.37	15.52	0.9917	0.9897	698.30				82.32	52.04	34.69	0.026	0.017							
4177+77.84	4180+82.06	RT	304.22	16.30			4958.79				557.74	367.77	245.18	0.184	0.123							
4180+82.06	4182+00.31	RT	118.25	17.10			2022.08				216.79			0.075	0.050	0.322	0.215	149.26	99.51	149.26	99.51	
4182+00.31	4183+25.00	RT	124.69	18.80			2344.17				228.60			0.086	0.057	0.370	0.247	171.52	114.35	171.52	114.35	
4183+25.00	4183+88.93	RT	63.93	19.20			1227.46				117.20			0.045	0.030	0.193	0.129	89.64	59.76	89.64	59.76	
4183+88.93	4186+04.15	RT	215.22	14.33			3084.10			358.70				0.115	0.077	0.495	0.330	229.52	153.01	229.52	153.01	
4186+04.15	4186+20.50	RT	16.35	10.29	1.0101	1.0119	169.94			27.57				0.007	0.004	0.028	0.019	13.17	8.78	13.17	8.78	
4186+20.50	4186+25.00	RT	4.50	10.00	1.0100	1.0117	45.45			7.59				0.002	0.001	0.008	0.005	3.54	2.36	3.54	2.36	
4186+25.00	4189+50.00	RT	325.00	10.00	1.0100	1.0117	3282.50			548.00				0.128	0.085	0.551	0.367	255.37	170.24	255.37	170.24	
4189+50.00	4191+20.51	RT	170.51	7.22	1.0094	1.0106	1242.65			287.20				0.051	0.034	0.220	0.147	101.99	67.99	101.99	67.99	
4191+20.51	4191+57.05	RT	36.54	4.43	1.0088	1.0088	163.30			61.44				0.007	0.005	0.032	0.022	14.98	9.99	14.98	9.99	
4191+57.05	4192+72.36	RT	115.31	4.22	1.0088	1.0088	490.89				407.14			0.030	0.020	0.129	0.086	59.87	39.91	59.87	39.91	

SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

TOTALS CARRIED TO PAVEMENT SUBSUMMARY

545 363 2.2 1.5 8.2 5.5 3775 2517 3775 2517

CALCULATED
CJC
CHECKED
CWL

STATION	SIDE	LENGTH (L)	AVERAGE WIDTH (W)	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW)	CADD AREA	AREA FOR 16" EXTENSION	AREA FOR 20" EXTENSION	AREA FOR 22" EXTENSION	AREA FOR 42" EXTENSION	204		204		206		206		206		CALCULATED C/C	CHECKED C/W	
												SUBGRADE COMPACTION	PROOF ROLLING (1 HOUR/2000 SQ. YD)	CEMENT (0.75 x 115 x 0.05) LB/SY	CURING COAT	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	SY	HOUR	TON	SY	SY			
FROM	TO	FT	FT			SF	SF	SF	SF	SF	SF	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV			
EASTBOUND I.R. 70																								
FULL DEPTH SHOULDER CONT'D																								
4192+72.36	4192+82.76	RT	10.40	4.25	1.0088	1.0088	44.60				17.49			0.002	0.001	0.009	0.006	4.14	2.76	4.14	2.76			
4192+82.76	4193+32.76	RT	50.00	7.13	1.0093	1.0093	359.82				84.11			0.015	0.010	0.064	0.043	29.60	19.73	29.60	19.73			
4193+32.76	4193+45.18	RT	12.42	10.00	1.0098	1.0098	125.42				20.90			0.005	0.003	0.021	0.014	9.75	6.50	9.75	6.50			
4193+45.18	4195+94.13	RT	248.95	10.00			2489.50				414.92			0.097	0.065	0.418	0.278	193.63	129.09	193.63	129.09			
4195+94.13	4197+44.64	RT	150.51	9.92			1493.06				250.85			0.058	0.039	0.251	0.167	116.26	77.51	116.26	77.51			
4197+44.64	4197+98.56	RT	53.92	9.90			533.81				188.72			0.024	0.016	0.104	0.069	48.17	32.11	48.17	32.11			
4197+98.56	4200+64.05	RT	265.49	9.97			2646.94							0.088	0.059	0.380	0.254	176.46	117.64	176.46	117.64			
4200+64.05	4200+89.05	RT	25.00	11.48			287.00				41.67			0.011	0.007	0.047	0.031	21.91	14.61	21.91	14.61			
4200+89.05	4205+28.94	RT	439.89	13.00			5718.57				733.15			0.215	0.143	0.927	0.618	430.11	286.74	430.11	286.74			
NORTHBOUND I.R. 71																								
FULL DEPTH LANES																								
252+86.40	254+00.38	LT	113.98	24.00			2735.52							0.076	0.076	0.328	0.328	151.97	151.97	151.97	151.97			
254+00.38	262+00.00	LT	799.62	24.00	1.0031		19250.37							0.535	0.535	2.306	2.306	1069.47	1069.47	1069.47	1069.47			
262+00.00	264+34.96	LT	234.96	24.00	1.0031		5656.52					314.25	314.25	0.157	0.157									
264+34.96	266+34.96	LT	200.00	24.00	1.0110		4852.80					269.60	269.60	0.135	0.135									
266+34.96	269+00.00	LT	265.04	24.00	1.0188		6480.55					360.03	360.03	0.180	0.180									
269+00.00	271+02.18	LT	202.18	24.00	1.0188		4943.54							0.137	0.137	0.592	0.592	274.64	274.64	274.64	274.64			
271+02.18	272+46.34	LT	144.16	24.00	1.0010		3463.30							0.096	0.096	0.415	0.415	192.41	192.41	192.41	192.41			
272+46.34	273+78.43	LT	132.09	24.00	1.0168		3223.42							0.090	0.090	0.386	0.386	179.08	179.08	179.08	179.08			
252+86.40	254+00.38	RT	113.98	6.00			683.88							0.019	0.019	0.082	0.082	37.99	37.99	37.99	37.99			
254+00.38	257+13.02	RT	312.64	12.00	0.9984		3745.68							0.104	0.104	0.449	0.449	208.09	208.09	208.09	208.09			
264+34.96	266+34.96	RT	200.00	2.25	0.9990		449.55					24.98	24.98	0.012	0.012									
266+34.96	269+00.00	RT	265.04	4.50	0.9965		1188.51					66.03	66.03	0.033	0.033									
269+00.00	269+78.10	RT	78.10	4.50	0.9965		350.22							0.010	0.010	0.042	0.042	19.46	19.46	19.46	19.46			
269+78.10	271+02.18	RT	124.08	3.30	0.9974		408.40							0.011	0.011	0.049	0.049	22.69	22.69	22.69	22.69			
271+02.18	271+78.10	RT	75.92	1.05	1.0000		79.72							0.002	0.002	0.010	0.010	4.43	4.43	4.43	4.43			
FULL DEPTH SHOULDER																								
258+66.99	258+90.12	LT	25.00	10.00			250.00				41.67			0.008	0.008	0.035	0.035	16.20	16.20	16.20	16.20			
258+66.99	262+00.00	LT	333.01	4.00	1.0068	1.0073	1341.10				447.25			0.050	0.050	0.214	0.214	99.35	99.35	99.35	99.35			
262+00.00	264+34.96	LT	234.96	4.00	1.0068	1.0073	946.23				315.57			0.035	0.035									
264+34.96	266+34.96	LT	200.00	4.00	1.0238	1.0257	819.04				273.52			0.030	0.030									
266+34.96	269+00.00	LT	265.04	4.00	1.0408	1.0440	1103.41				368.94			0.041	0.041									
269+00.00	271+02.18	LT	202.18	4.00	1.0408	1.0440	841.72				281.43			0.031	0.031	0.135	0.135	62.40	62.40	62.40	62.40			
271+02.18	271+82.90	LT	80.72	4.00	1.0023	1.0024	323.62				107.88			0.012	0.012	0.052	0.052	23.97	23.97	23.97	23.97			
271+82.90	272+01.00	LT	18.10	4.00	1.0023	1.0024	72.57				30.24			0.003	0.003	0.012	0.012	5.71	5.71	5.71	5.71			
272+01.00	272+46.34	LT	45.34	4.00	1.0023	1.0024	181.78				159.07			0.009	0.009	0.041	0.041	18.94	18.94	18.94	18.94			
272+46.34	272+50.00	LT	3.66	4.00	1.0363	1.0391	15.17				13.31			0.001	0.001	0.003	0.003	1.58	1.58	1.58	1.58			
272+50.00	273+98.00	LT	148.00	4.00	1.0363	1.0391	613.49				205.05			0.023	0.023	0.098	0.098	45.47	45.47	45.47	45.47			
252+86.40	253+86.40	RT	100.00	12.00			1200.00							0.033	0.033	0.144	0.144	66.67	66.67	66.67	66.67			
253+86.40	254+00.38	RT	13.98	10.00			139.80							0.004	0.004	0.017	0.017	7.77	7.77	7.77	7.77			
254+00.38	257+13.02	RT	312.64	10.00	0.9987		3122.34							0.087	0.087	0.374	0.374	173.46	173.46	173.46	173.46			
260+86.40	262+00.00	RT	113.60	12.00	0.9984	0.9969	1361.02				151.00			0.042	0.042	0.181	0.181	84.00	84.00	84.00	84.00			
262+00.00	264+34.96	RT	234.96	12.00	0.9984	0.9969	2815.01				312.31			0.087	0.087									
264+34.96	265+60.00	RT	125.04	12.00	0.9924	0.9869	1489.08				164.54			0.046	0.046									
265+60.00	266+10.00	RT	50.00	13.00	0.9920	0.9860	644.80				65.73			0.020	0.020									
266+10.00	266+34.96	RT	24.96	14.00	0.9915	0.9851	346.47				40.98			0.011	0.011									
TOTALS CARRIED TO PAVEMENT SUBSUMMARY												1575	1575	2.7	2.6	8.2	7.5	3796	3453	3796	3453			

SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

STATION	SIDE	LENGTH (L)	AVERAGE WIDTH (W)	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW)	CADD AREA	AREA FOR 16" EXTENSION	AREA FOR 20" EXTENSION	AREA FOR 22" EXTENSION	AREA FOR 42" EXTENSION	204		204		206		206		206		CALCULATED C/C	CHECKED C/WL																				
												SUBGRADE COMPACTION	PROOF ROLLING (1 HOUR/2000 SQ. YD)	CEMENT (0.75 x 115 x 0.05) LB/SY	CURING COAT	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP	SY	HOUR	TON	SY	SY																						
FROM	TO	FT	FT			SF	SF	SF	SF	SF	SF	SY	SY	TON	SY	SY	SY	SY	SY	SY																							
NORTHBOUND I.R. 71																						01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV												
FULL DEPTH SHOULDER CONT'D																																											
266+34.96	269+00.00	RT	265.04	14.00	0.9819	0.9709	3643.40				428.88	226.24	226.24	0.113	0.113																												
269+00.00	269+78.10	RT	78.10	14.00	0.9819	0.9709	1073.61				126.38			0.033	0.033	0.144	0.144	66.67	66.67	66.67	66.67																						
269+78.10	270+80.00	RT	101.90	14.00	0.9855	0.9745	1405.91				165.50			0.044	0.044	0.188	0.188	87.30	87.30	87.30	87.30																						
270+80.00	270+85.00	RT	5.00	14.00	0.9855	0.9745	68.99					17.05		0.002	0.002	0.010	0.010	4.78	4.78	4.78	4.78																						
270+85.00	271+02.18	RT	17.18	13.66	0.9857	0.9750	231.32					58.63		0.008	0.008	0.035	0.035	16.11	16.11	16.11	16.11																						
271+02.18	271+35.00	RT	32.82	12.66	0.9993	0.9987	415.21					114.72		0.015	0.015	0.063	0.063	29.44	29.44	29.44	29.44																						
271+35.00	271+78.10	RT	43.10	12.00	0.9993	0.9988	516.84					150.67		0.019	0.019	0.080	0.080	37.08	37.08	37.08	37.08																						
271+78.10	272+46.34	RT	68.24	12.00	0.9995	0.9990	818.47					238.60		0.029	0.029	0.127	0.127	58.73	58.73	58.73	58.73																						
272+46.34	272+46.93	RT	0.59	12.00	0.9916	0.9832	7.02					2.03		0.000	0.000	0.001	0.001	0.50	0.50	0.50	0.50																						
272+46.93	273+05.93	RT	59.00	13.75	0.9904	0.9808	803.46					202.54		0.028	0.028	0.121	0.121	55.89	55.89	55.89	55.89																						
273+05.93	273+56.18	RT	50.25	13.70	0.9904	0.9809	681.82					172.52		0.024	0.024	0.102	0.102	47.46	47.46	47.46	47.46																						
RAMP A5																																											
FULL DEPTH LANES																																											
5003+23.96	5004+66.41	LT	142.45	12.00	1.0039		1716.07										0.411		190.67		190.67																						
5004+66.41	5006+94.28	LT	227.87	14.00	1.0046		3204.85										0.768		356.09		356.09																						
5006+94.28	5007+72.64	LT	78.36	16.00	1.0052		1260.28										0.302		140.03		140.03																						
5007+72.64	5008+50.00	LT	77.36	16.00			1237.76										0.297		137.53		137.53																						
5008+50.00	5012+18.10	LT	368.10	16.00			5889.60					654.40					0.327																										
5012+18.10	5015+06.97	LT	288.87	16.00	1.0158		4694.95					521.66					0.261																										
FULL DEPTH SHOULDER																																											
5006+94.28	5007+72.64	LT	78.36	4.00	1.0092	1.0105	316.32		105.58								0.101		46.88		46.88																						
5007+72.64	5008+50.00	LT	77.36	4.00			309.44		103.15								0.099		45.84		45.84																						
5008+50.00	5012+18.10	LT	368.10	4.00			1472.40		490.80			218.13					0.109																										
5012+18.10	5015+07.72	LT	289.62	4.00	1.0277	1.0316	1190.57		398.36			176.55					0.088																										
5003+23.96	5004+50.00	RT	126.04	10.00	0.9967	0.9935	1256.24		166.96								0.341		158.13		158.13																						
5004+50.00	5004+66.41	RT	16.41	10.00	0.9967	0.9935	163.56		21.74								0.044		20.59		20.59																						
5004+66.41	5006+94.28	RT	227.87	10.00	0.9967	0.9935	2271.18		301.85								0.616		285.89		285.89																						
5006+94.28	5007+44.28	RT	50.00	9.00	0.9971	0.9941	448.70		66.27								0.123		57.22		57.22																						
5007+44.28	5007+72.64	RT	28.36	8.00	0.9974	0.9948	226.29		37.62								0.063		29.32		29.32																						
5007+72.64	5008+50.00	RT	77.36	8.00			618.88		103.15								0.173		80.23		80.23																						
5008+50.00	5012+18.10	RT	368.10	8.00			2944.80		490.80			381.73					0.191																										
5012+18.10	5013+90.00	RT	171.90	8.00	0.9921	0.9842	1364.34		225.58			176.66					0.088																										
5013+90.00	5014+34.17	RT	44.17	8.00	0.9921	0.9842	350.57		72.45			47.00					0.024																										
5014+34.17	5015+05.98	RT	71.81	8.00	0.9921	0.9842	569.94					247.36					0.045																										
RAMP C3																																											
FULL DEPTH LANES																																											
3000+16.87	3002+46.97	LT	230.10	14.00	1.0009		3224.30					358.26					0.179																										
3002+46.97	3002+88.88	LT	41.91	16.00	1.0010		671.23					74.58					0.037																										
3002+88.88	3004+13.88	LT	125.00	16.00	1.0108		2021.60					224.62					0.112																										
3004+13.88	3005+50.00	LT	136.12	16.00	1.0164		2213.64					245.96					0.123																										
3005+50.00	3007+82.91	LT	232.91	16.00	1.0164		3787.68										0.210		420.85		420.85																						
3007+82.91	3009+00.00	LT	117.09	16.00			1873.44										0.104		208.16		208.16																						
FULL DEPTH SHOULDER																																											
3004+35.94	3005+50.00	LT	114.06	4.00	1.0369	1.0410	473.08		158.32			70.16					0.035																										
3005+50.00	3007+82.91	LT	232.91	4.00	1.0369	1.0410	966.02		323.28								0.072		143.26		143.26																						
TOTALS CARRIED TO PAVEMENT SUBSUMMARY												1200	2494	1.2	2.3	2.6	4.3	1177	1953	1177	1953																						

SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 16" EXTENSION SF	AREA FOR 20" EXTENSION SF	AREA FOR 22" EXTENSION SF	AREA FOR 42" EXTENSION SF	204		204		206		206		206		CALCULATED C/C	CHECKED CWL														
													SUBGRADE COMPACTION SY	PROOF ROLLING (1 HOUR/2000 SQ. YD) HOUR	CEMENT (0.75 x 115 x 0.05) LB/SY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP SY																					
FROM	TO		FT	FT			SF	SF	SF	SF	SF	SF	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV																
RAMP C3																																						
FULL DEPTH SHOULDER CONT'D																																						
3007+82.91	3008+75.00	LT	92.09	4.00			368.36									0.027		0.118		54.57		54.57																
3008+75.00	3009+00.00	LT	25.00	3.54			88.50									0.007		0.029		13.54		13.54																
3000+16.87	3002+88.88	RT	272.01	10.00	0.9993	0.9987	2718.20						302.02		0.151																							
3002+88.88	3003+50.00	RT	61.12	10.00	0.9932	0.9865	607.04						67.45		0.034																							
3003+50.00	3004+13.88	RT	63.88	10.00	0.9932	0.9865	634.46				220.56		95.00		0.048																							
3004+13.88	3004+35.94	RT	22.06	10.00	0.9897	0.9795	218.33				75.63		32.66		0.016																							
3004+35.94	3005+35.94	RT	100.00	8.00	0.9918	0.9836	793.44				131.15		102.73		0.051																							
3005+35.94	3005+50.00	RT	14.06	6.00	0.9938	0.9877	83.84				18.52		11.37		0.006																							
3005+50.00	3007+82.91	RT	232.91	6.00	0.9938	0.9877	1388.80				306.73				0.094		0.406		188.39		188.39																	
3007+82.91	3008+00.00	RT	17.09	6.00			102.54				22.79				0.007		0.030		13.93		13.93																	
3008+00.00	3009+00.00	RT	100.00	7.86			786.00				133.33				0.051		0.220		102.15		102.15																	
RAMP C5																																						
FULL DEPTH LANES																																						
5024+38.21	5028+92.28	LT	454.07	6.00	1.0006		2726.05										0.151		0.653		302.89		302.89															
5028+92.28	5031+34.48	LT	242.20	12.00	1.0012		2909.89										0.162		0.697		323.32		323.32															
5032+67.33	5034+97.48	LT	230.15	12.00	1.0012		2765.11						307.23		0.154																							
5034+97.48	5036+30.43	LT	132.95	12.00			1595.40						177.27		0.089																							
5036+30.43	5039+05.43	LT	275.00	14.00			3850.00						427.78		0.214																							
5039+05.43	5041+17.78	LT	212.35	16.00			3397.60						377.51		0.189																							
5041+17.78	5041+57.96	LT	40.18	16.00	0.9965		640.63						71.18		0.036																							
5062+27.15	5064+00.00	LT	172.85	24.00	1.0042		4165.82								0.231		0.998		462.87		462.87																	
5064+00.00	5069+27.87	LT	527.87	24.00	1.0042		12722.09						1413.57		0.707																							
5069+27.87	5069+99.95	LT	72.08	12.00	1.0021		866.78						96.31		0.048																							
5069+99.95	5071+16.53	LT	116.58	12.00	1.0016		1401.20						155.69		0.078																							
5074+42.45	5076+08.84	LT	166.39	12.00	1.0016		1999.87						222.21		0.111																							
5076+08.84	5079+12.85	LT	304.01	12.00			3648.12						405.35		0.203																							
5079+12.85	5080+13.82	LT	100.97	12.00	1.0031		1215.40						135.04		0.068																							
5081+70.91	5081+98.63	LT	27.72	12.00	1.0031		333.67						37.07		0.019																							
5081+98.63	5083+86.06	LT	187.43	12.00			2249.16						249.91		0.125																							
5083+86.06	5084+20.00	LT	33.94	16.07			545.42						60.60		0.030																							
5084+20.00	5084+36.06	LT	16.06	22.07	1.0202		361.60						40.18		0.020																							
5084+36.06	5084+56.78	LT	20.72	24.00	1.0220		508.22						56.47		0.028																							
5024+38.21	5031+36.49	RT	698.28	12.00	0.9988		8369.30								0.465		2.005		929.92		929.92																	
5032+65.33	5034+83.90	RT	218.57	12.00	0.9988		2619.69						291.08		0.146																							
5062+06.35	5064+00.00	RT	193.65	12.00	0.9979		2318.92								0.129		0.556		257.66		257.66																	
5064+00.00	5069+99.95	RT	599.95	12.00	0.9979		7184.28						798.25		0.399																							
5069+99.95	5071+18.62	RT	118.67	12.00	0.9984		1421.76						157.97		0.079																							
5074+40.30	5076+08.84	RT	168.54	12.00	0.9984		2019.24						224.36		0.112																							
5076+08.84	5079+12.85	RT	304.01	12.00			3648.12						405.35		0.203																							
5079+12.85	5080+15.86	RT	103.01	12.00	0.9969		1232.29						136.92		0.068																							
5081+68.82	5081+98.63	RT	29.81	12.00	0.9969		356.61						39.62		0.020																							
5081+98.63	5084+20.00	RT	221.37	12.00			2656.44						295.16		0.148																							
5084+20.00	5084+56.78	RT	36.78	12.00	0.9890		436.51						48.50		0.024																							
TOTALS CARRIED TO PAVEMENT SUBSUMMARY													612	6631	0.5	4.5	0.9	5.0	373	2277	373	2277																

SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 16" EXTENSION SF	AREA FOR 20" EXTENSION SF	AREA FOR 22" EXTENSION SF	AREA FOR 42" EXTENSION SF	204	204	206	206	206	CALCULATED C/C	CHECKED C/WL
FROM	TO												SUBGRADE COMPACTION SY	PROOF ROLLING (1 HOUR/2000 SQ YD) HOUR	CEMENT (0.75 x 115 x 0.05) LB/SY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP SY		
RAMP C5													02/IMS/PV	02/IMS/PV	02/IMS/PV	02/IMS/PV	02/IMS/PV		
FULL DEPTH SHOULDER																			
5032+63.73	5034+97.48	LT	233.75	10.00	1.0035	1.0045	2345.68			391.34			304.11	0.152					
5034+97.48	5036+25.00	LT	127.52	10.00			1275.20			212.53			165.30	0.083					
5036+25.00	5036+30.43	LT	5.43	10.00			54.30		7.24				6.84	0.003					
5036+30.43	5039+05.43	LT	275.00	8.00			2200.00		366.67				285.19	0.143					
5039+05.43	5041+17.78	LT	212.35	6.00			1274.10		283.13				173.03	0.087					
5041+17.78	5041+34.21	LT	16.43	6.00	0.9935	0.9921	97.94		21.73				13.30	0.007					
5041+34.21	5041+57.96	LT	23.75	6.00	0.9935	0.9921	141.57			39.27			20.09	0.010					
5062+50.38	5062+68.89	LT	18.51					227.95		30.85				0.014	0.007	3.43		3.43	
5062+68.89	5064+00.00	LT	131.11	10.00	1.0101	1.0119	1324.34		176.89					0.083	0.360	166.80		166.80	
5064+00.00	5069+27.87	LT	527.87	10.00	1.0101	1.0119	5332.01		712.20				671.58	0.336					
5074+89.25	5076+08.84	LT	119.59	4.00	1.0037	1.0042	480.13		160.12				71.14	0.036					
5076+08.84	5079+00.00	LT	291.16	4.00			1164.64		388.21				172.54	0.086					
5079+00.00	5079+12.85	LT	12.85	4.00			51.40						5.71	0.003					
5079+12.85	5080+10.75	LT	97.90	4.00	1.0073	1.0084	394.46						43.83	0.022					
5081+66.63	5081+98.63	LT	32.00	4.00	1.0073	1.0084	128.93			53.78			20.30	0.010					
5081+98.63	5084+20.00	LT	221.37	4.00			885.48		368.95				139.38	0.070					
5084+20.00	5084+36.06	LT	16.06	4.00	1.0331	1.0368	66.37		27.75				10.46	0.005					
5084+36.06	5084+56.78	LT	20.72	4.00	1.0476	1.0513	86.83						9.65	0.005					
5024+38.21	5025+38.21	RT	100.00	10.95	0.9964	0.9953	1091.06		132.71					0.068	0.293	135.97		135.97	
5025+38.21	5030+50.04	RT	511.83	10.00	0.9965	0.9955	5100.39		679.37					0.321	1.385	642.20		642.20	
5030+50.04	5031+00.04	RT	50.00	14.00	0.9961	0.9947	697.27		66.31					0.042	0.183	84.84		84.84	
5031+00.04	5031+23.25	RT	23.21	17.45	0.9958	0.9940	403.31			38.45				0.025	0.106	49.08		49.08	
5031+23.25	5031+35.85	RT	12.60	16.61	0.9959	0.9942	208.43							0.012	0.050	23.16		23.16	
5032+69.04	5033+86.76	RT	117.72	10.94	0.9964	0.9953	1283.22						142.58	0.071					
5033+86.76	5034+83.94	RT	97.18	10.00	0.9965	0.9955	968.40						107.60	0.054					
5039+05.43	5041+17.78	RT	212.35	6.00			1274.10		283.13				173.03	0.087					
5041+17.78	5041+32.96	RT	15.18	6.00	1.0013	1.0026	91.20		20.29				12.39	0.006					
5041+32.96	5041+57.96	RT	25.00	6.00	1.0013	1.0026	150.20			41.78			21.33	0.011					
5061+87.48	5062+01.26	RT	13.78					78.03		22.97				0.006	0.006	2.55		2.55	
5062+01.26	5063+64.00	RT	162.74	10.00	0.9941	0.9923	1617.80		215.32					0.102	0.439	203.68		203.68	
5063+64.00	5064+00.00	RT	36.00	10.00	0.9941	0.9923	357.88							0.020	0.086	39.76		39.76	
5064+00.00	5066+50.00	RT	250.00	10.00	0.9941	0.9923	2485.25						276.14	0.138					
5066+50.00	5069+99.95	RT	349.95	10.00	0.9941	0.9923	3478.85		463.01				437.98	0.219					
5069+99.95	5070+95.32	RT	95.37	10.00	0.9955	0.9942	949.41		126.42				119.54	0.060					
5070+95.32	5071+25.49	RT	30.17					263.63		50.28			34.88	0.017					
5074+49.39	5076+08.84	RT	159.45	10.00	0.9955	0.9942	1587.32						176.37	0.088					
5076+08.84	5079+12.85	RT	304.01	10.00			3040.10						337.79	0.169					
5079+12.85	5080+17.60	RT	104.75	10.00	0.9911	0.9885	1038.18						115.35	0.058					
TOTALS CARRIED TO PAVEMENT SUBSUMMARY													4068	2.8	3.0	1352	1352		

SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 6" EXTENSION SF	AREA FOR 16" EXTENSION SF	AREA FOR 20" EXTENSION SF	AREA FOR 22" EXTENSION SF	204		204		206		206		206		CALCULATED C/C	CHECKED C/W																					
FROM	TO												SUBGRADE COMPACTION SY	PROOF ROLLING (1 HOUR/2000 SQ YD) HOUR	CEMENT (0.75 x 115 x 0.05) LBS/Y TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP SY																												
RAMP C5																							01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV	01/IMS/PV	02/IMS/PV											
FULL DEPTH SHOULDER CONTD.																																													
5081+76.21	5081+98.63	RT	22.42	10.00	0.9911	0.9885	222.20							24.69	0.012																														
5081+98.63	5084+20.00	RT	221.37	10.00			2213.70							245.97	0.123																														
5084+20.00	5084+56.78	RT	36.78	10.00	0.9688	0.9597	356.32							39.59	0.020																														
RAMP C6																																													
FULL DEPTH LANES																																													
6000+00.00	6001+83.07	LT	183.07	12.00			2196.84							244.09	0.122																														
6005+03.02	6010+12.24	LT	509.22	12.00	1.0022		6124.08							680.45	0.340																														
6010+12.24	6010+81.51	LT	69.27	12.00	1.0016		832.57							92.51	0.046																														
6010+81.51		RT						17.50						1.94	0.001																														
FULL DEPTH SHOULDER																																													
6000+00.00	6000+50.00	LT	50.00	9.00			450.00							0.00	0.000																														
6000+50.00	6001+51.38	LT	101.38	8.00			811.04			66.67				57.41	0.029																														
6001+51.38	6001+80.33	LT	28.95	8.00			231.60			38.60				105.13	0.053																														
														30.02	0.015																														
6004+99.82	6005+66.44	LT	66.62	8.00	1.0059	1.0074	536.10				111.85			71.99	0.036																														
6005+66.44	6006+03.73	LT	37.29	8.00	1.0059	1.0074	300.08				62.61			40.30	0.020																														
6006+03.73	6006+78.48	LT	74.75	8.00	1.0059	1.0074	601.53							66.84	0.033																														
6006+78.48	6007+78.48	LT	100.00	6.00	1.0055	1.0066	603.30							67.03	0.034																														
6007+78.48	6009+10.70	LT	132.22	4.00	1.0052	1.0059	531.63							59.07	0.030																														
6005+65.11	6005+66.44	RT	1.33	8.00			10.64			1.77				1.38	0.001																														
6005+66.44	6009+00.00	RT	333.56	8.00	0.9985	0.9970	2664.48			443.41				345.32	0.173																														
6009+00.00	6010+12.24	RT	112.24	10.23	0.9981	0.9962	1146.03			149.08				143.90	0.072																														
6010+12.24	6010+36.04	RT	23.80	12.92	0.9983	0.9966	306.97			31.63				37.62	0.019																														
6010+36.04	6010+81.51	RT	45.47	13.61	0.9982	0.9964	617.73			60.41				75.35	0.038																														
6010+81.51		RT	8.32					63.38		11.09				1.23	0.001																														
GORE AREAS																																													
EB I.R. 70/ RAMP C5																																													
5028+92.28	5031+36.49	LT						1800.55									0.100		0.431		200.06		200.06																						
RAMP C5/ RAMP C3																																													
3002+46.97	3004+35.94	LT						1000.90					111.21		0.056																														
NB S.R. 315/ NB I.R. 71																																													
254+00.38	258+66.99	LT						3796.96							0.105	0.105	0.455	0.455	210.94	210.94	210.94	210.94																							
NB I.R. 71/ RAMP A5																																													
5004+66.41	5006+94.28	LT						2244.83							0.125	0.538			249.43	249.43	249.43	249.43																							
RAMP C5/ RAMP C6																																													
5069+27.87	5071+18.62	LT						208.55						23.17	0.012																														
5074+40.30	5074+89.25	LT						1221.47						135.72	0.068																														
RAMP C6/ EB I.R. 70																																													
6009+10.70	6010+81.51	LT						1852.00						82.31	123.47	0.041	0.062																												
TOTALS CARRIED TO PAVEMENT SUBSUMMARY													194	2715	0.3	1.7	0.5	1.5	211	661	211	661																							

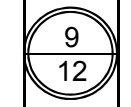
SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

STATION	SIDE	LENGTH (L)	AVERAGE WIDTH (W)	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW)	CADD AREA	AREA FOR 6" EXTENSION	AREA FOR 12" EXTENSION	204		204		204		GEOGRID	204	CALCULATED C/C	CHECKED C/W
										SUBGRADE COMPACTION	PROOF ROLLING (1 HOUR/2000 SQ YD)	GEOTEXTILE FABRIC	SY	HOUR	SY				
FROM	TO	FT	FT			SF	SF	SF	SF	SY	10/IMS/ OT/COL	10/IMS/ OT/COL	10/IMS/ OT/COL	10/IMS/ OT/COL	10/IMS/ OT/COL	10/IMS/ OT/COL	10/IMS/ OT/COL	10/IMS/ OT/COL	10/IMS/ OT/COL
LIVINGSTON AVE																			
FULL DEPTH																			
200+04.62	200+28.61	LT	23.99	3.75		89.96		23.99	12.66	0.006	12.66						12.66		
200+28.61	200+41.49	LT	12.88	8.52	0.9782	0.9564	107.35	12.32	13.30	0.007	13.30						13.30		
200+41.49	200+81.85	LT	40.36	10.00	0.9744	0.9488	393.27	38.29	47.95	0.024	47.95						47.95		
200+81.85	200+88.85	LT	7.00	13.50			94.50	7.00	11.28	0.006	11.28						11.28		
200+88.85	202+09.96	LT	121.11	17.00			2058.87	121.11	242.22	0.121	242.22						242.22		
202+09.96	202+16.96	LT	7.00	13.50			94.50	7.00	11.28	0.006	11.28						11.28		
202+16.96	202+44.29	LT	27.33	10.98	0.9808	0.9617	294.32	26.28	35.62	0.018	35.62						35.62		
202+44.29	202+45.02	LT	0.73	11.98			8.75	0.73	1.05	0.001	1.05						1.05		
204+02.13	207+31.89	LT	329.76	23.00			7584.48	329.76	879.36	0.440	879.36						879.36		
207+31.89	207+47.00	LT	15.11	14.82			223.93	15.11	26.56	0.013	26.56						26.56		
200+04.62	200+28.61	RT	23.99	11.00			263.89	23.99	31.99	0.016	31.99						31.99		
200+28.61	200+81.85	RT	53.24	11.00	1.0282	1.0563	602.16	56.24	73.16	0.037	73.16						73.16		
200+81.85	201+01.09	RT	19.24	10.00			192.40	19.24	23.52	0.012	23.52						23.52		
200+28.61	201+01.09	RT	77.16			CADD	781.95	77.16	95.46	0.048	95.46						95.46		
201+01.09	202+16.99	RT	115.90	10.00			1159.00	115.90	141.66	0.071	141.66						141.66		
202+16.99	202+44.29	RT	27.30	11.40	1.0199	1.0398	317.41	28.39	38.42	0.019	38.42						38.42		
202+44.29	202+45.02	RT	0.73	12.80			9.34	0.73	1.12	0.001	1.12						1.12		
204+02.13	206+33.97	RT	231.84	16.00			3709.44	231.84	437.92	0.219	437.92						437.92		
206+33.97	207+00.26	RT	66.29	19.50			1292.65	66.29	150.99	0.075	150.99						150.99		
207+00.26	207+47.00	RT	46.74	24.12			1127.37	46.74	130.46	0.065	130.46						130.46		
FRONT ST																			
FULL DEPTH																			
147+75.00	147+87.46	LT	12.46	23.50			292.81	12.46	33.92	0.017	33.92						33.92		
147+87.46	148+19.22	LT	31.76	24.30			771.77	31.76	89.28	0.045	89.28						89.28		
148+19.22	148+21.47	LT	8.95			CADD	108.13	8.95	13.01	0.007	13.01						13.01		
148+21.47	148+60.51	LT	47.88			CADD	941.35	47.88	109.91	0.055	109.91						109.91		
151+19.35	151+40.35	LT	23.78			CADD	637.04	23.78	2.64	0.001	2.64						2.64		
151+40.35	151+44.35	LT	4.00	28.25			113.00	4.00	13.00	0.007	13.00						13.00		
151+44.35	152+50.00	LT	105.65	27.17			2870.51	105.65	330.68	0.165	330.68						330.68		
147+75.00	147+78.00	RT	3.00	22.79			68.37	3.00	7.93	0.004	7.93						7.93		
147+78.00	148+10.77	RT	32.77	22.75			745.52	32.77	86.48	0.043	86.48						86.48		
148+10.77	148+21.47	RT	5.20			CADD	182.64	5.20	20.87	0.010	20.87						20.87		
148+21.47	148+61.92	RT	45.47			CADD	1409.37	45.47	161.65	0.081	161.65						161.65		
151+19.35	151+44.35	RT	25.00	26.60			665.00	25.00	76.67	0.038	76.67						76.67		
151+44.35	152+18.08	RT	73.73	26.54			1956.79	36.86	4.10	0.002	4.10						4.10		
151+40.35	152+18.08	RT	84.20	7.50			631.50	84.20	9.36	0.005	9.36						9.36		
152+18.08	152+35.63	RT	17.55	26.38			462.97	17.55	1.95	0.001	1.95						1.95		
TOTALS CARRIED TO PAVEMENT SUBSUMMARY										2462	906	1.3	0.5	2462	906		2462	906	

SUBGRADE CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86



STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	CURVE CORRECTION RATIO	CURB CURVE CORRECTION RATIO	SURFACE AREA (A=LxW) SF	CADD AREA SF	AREA FOR 6" EXTENSION SF	AREA FOR 16" EXTENSION SF	AREA FOR 20" EXTENSION SF	AREA FOR 22" EXTENSION SF	204		204	206	206	206	CALCULATED C/C	CHECKED C/W			
FROM	TO												SUBGRADE COMPACTION SY	PROOF ROLLING (1 HOUR/2000 SQ YD) HOUR							CEMENT (0.75 x 115 x 0.05) LB/SY TON	CURING COAT SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP SY
BIKE PATH													01/IMS/PV	02/IMS/PV	02/IMS/PV	02/IMS/PV	02/IMS/PV	02/IMS/PV					
FULL DEPTH																							
8+48.00	11+53.75	LT/RT	305.75	10.00		3057.50							190.24	149.48									
8+48.00	11+53.75	LT	305.75	4.00		1223.00							76.10	59.79									
8+48.00	11+53.75	RT	305.75	4.00		1223.00							76.10	59.79									
8+48.00	11+53.75	LT	305.75		CADD		955.12						59.43	46.69									
8+48.00	11+53.75	RT	305.75		CADD		1869.40						116.32	91.39									
BIKE PATH DETOUR																							
FULL DEPTH																							
3+62.36	15+00.62	LT	1138.26	5.00		5691.30		569.13					389.54	306.07									
15+00.62	15+56.56	LT	55.94	5.00		279.70							17.40	13.67									
15+56.56	19+39.59	LT	383.03	5.00		1915.15							119.16	93.63									
19+39.59	22+57.27	LT	317.68	5.00		1588.40		158.84					108.72	85.42									
3+62.36	15+00.62	RT	1138.26	5.00		5691.30		569.13					389.54	306.07									
15+00.62	15+56.56	RT	55.94	5.00		279.70		27.97					19.14	15.04									
15+56.56	19+39.59	RT	383.03	5.00		1915.15							119.16	93.63									
19+39.59	22+57.27	RT	317.68	5.00		1588.40		158.84					108.72	85.42									
TOTALS CARRIED TO PAVEMENT SUBSUMMARY													1790	1407									

PAVEMENT CALCULATIONS

FRA - 70 / 71 - 12.68 / 14.86

