

ภาคผนวก ก.

ตารางแสดงข้อมูลที่ได้จากการสำรวจข้อมูล

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่ราบ							
No.	Slope	Spacing	Grade	Width (m)	Width (m) Slope	Area (sq.m)	Length (m)
1	1890	125.07	0.000	3.50	2.50	15.30	92
2	2830	107.04	0.000	3.50	2.50	17.26	94
3	2860	105.58	0.000	3.50	2.35	19.11	74
4	4150	108.65	0.000	3.50	2.35	17.18	90
5	4230	98.73	0.000	3.50	2.30	17.62	67
6	4240	86.97	0.000	3.50	2.20	17.95	83
7	4580	110.31	-1.429	3.50	2.00	14.46	81
8	4820	84.51	1.015	3.50	2.00	14.14	86
9	4910	110.00	1.015	3.50	2.00	9.66	71
10	4910	108.99	1.015	3.50	2.00	9.22	88
11	5130	113.37	-1.600	3.50	2.00	9.52	111
12	5480	106.22	0.000	3.50	2.00	13.72	59
13	5630	109.37	0.000	3.50	2.00	15.80	77
14	5640	104.61	0.000	3.50	2.00	9.92	96
15	5640	100.72	0.000	3.50	2.00	9.60	94
16	5900	109.60	2.250	3.50	1.50	19.16	96
17	5900	80.28	2.250	3.50	1.50	17.33	95
18	5930	128.04	2.250	3.50	1.40	14.08	84
19	5940	94.81	-2.250	3.50	1.40	13.29	107
20	5960	99.72	-2.250	3.50	1.40	13.11	78
21	6060	134.29	-2.286	3.50	1.40	11.34	112
22	6120	106.47	-2.286	3.45	1.40	12.16	101
23	6120	108.97	-2.286	3.45	1.40	9.99	87
24	6130	107.14	-2.286	3.45	1.35	13.36	108
25	6140	121.19	2.286	3.40	1.35	15.00	109
26	6380	108.78	0.884	3.40	1.35	18.08	88
27	6410	78.32	0.884	3.40	1.35	15.12	114
28	6510	116.50	0.884	3.40	1.35	15.24	99
29	6520	109.33	0.884	3.35	1.35	14.78	99
30	6530	111.32	0.884	3.35	1.35	14.92	109
31	6780	114.37	-0.182	3.35	1.35	14.24	76
32	6830	108.98	-0.182	3.35	1.35	18.35	89
33	6860	107.08	0.182	3.35	1.35	9.68	79

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่ราบ							
NO.	Station	Station	Grade	Width (m)	Width (m)	Grade (m)	Width (m)
34	6860	109.82	0.182	3.35	1.35	13.75	78
35	6860	107.21	0.182	3.35	1.35	17.74	76
36	7250	108.91	1.477	3.35	1.35	9.30	102
37	7320	115.45	-1.477	3.35	1.35	18.86	98
38	7340	108.70	-1.477	3.35	1.35	14.34	54
39	7620	106.55	-0.875	3.35	1.35	12.32	76
40	7710	91.90	0.875	3.35	1.35	16.03	93
41	7720	119.23	0.875	3.35	1.35	19.89	78
42	7720	81.26	0.875	3.35	1.35	14.15	73
43	7890	131.56	-2.800	3.30	1.35	14.49	85
44	7950	109.67	2.800	3.30	1.00	18.97	97
45	7950	96.74	2.800	3.30	1.00	15.76	86
46	7970	108.87	2.800	3.30	1.00	15.44	90
47	8300	79.31	-0.200	3.30	1.00	14.18	77
48	8320	129.03	0.200	3.30	1.00	15.39	82
49	8360	106.23	0.200	3.25	1.00	11.99	89
50	8380	106.47	0.200	3.25	1.00	16.14	91
51	8540	106.80	2.480	3.25	1.00	17.29	99
52	8610	105.91	2.480	3.25	1.00	14.70	108
53	8610	105.23	2.480	3.25	1.05	17.26	106
54	8620	130.56	2.480	3.25	1.05	10.21	81
55	9200	106.47	0.824	3.25	1.05	13.70	73
56	9220	126.06	0.824	3.25	1.05	14.15	96
57	9350	109.99	0.824	3.25	1.05	12.72	101
58	9790	137.47	0.824	3.25	1.10	14.53	97
59	9800	107.19	2.653	3.25	1.10	13.96	81
60	9800	107.23	2.653	3.25	1.10	18.12	111
61	9820	106.13	-2.653	3.25	1.10	14.29	87
62	10070	93.83	2.653	3.25	1.10	16.06	79
63	10110	109.74	2.653	3.25	1.15	19.16	85
64	10120	123.13	2.653	3.25	1.15	10.01	114
65	10120	97.73	2.653	3.25	1.15	14.49	78
66	10370	107.02	2.653	3.20	1.15	18.35	81

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่ราบ							
No.	Station	Spot	Elev.	Width (m) Road	Width (m) Shoulder	Percentage of Road	Length (m) Section
67	10380	105.66	-2.653	3.20	1.15	15.89	103
68	10390	108.95	2.653	3.20	1.15	11.83	84
69	10410	101.65	2.457	3.20	1.15	16.32	94
70	10600	83.54	2.457	3.20	1.15	19.19	77
71	10620	105.76	2.457	3.20	1.15	19.63	104
72	10630	105.98	-1.200	3.20	1.20	15.02	84
73	10950	105.19	-1.200	3.20	1.20	9.60	72
74	10960	122.16	1.200	3.15	1.20	17.19	97
75	11120	105.56	0.416	3.15	1.20	9.79	83
76	11120	106.64	0.416	3.15	1.20	9.77	77
77	11130	106.24	0.416	3.15	1.20	15.70	86
78	11860	135.31	-0.416	3.15	1.20	15.41	92
79	11890	108.85	-0.416	3.15	1.20	19.65	93
80	11890	108.84	0.416	3.15	1.20	15.23	109
81	11900	136.35	-0.300	3.15	1.20	17.20	79
82	12290	117.50	-0.300	3.15	1.20	18.86	82
83	12350	90.91	1.857	3.10	1.20	15.84	94
84	12370	109.23	1.857	3.10	1.20	10.01	95
85	12820	87.97	1.857	3.10	1.25	9.48	112
86	12920	108.93	0.000	3.10	1.25	12.93	114
87	13110	105.05	0.000	3.10	1.25	10.63	78
88	13160	105.28	1.400	3.10	1.25	7.59	142
89	13400	107.10	1.400	3.10	1.25	19.90	92
90	13420	127.04	2.255	3.10	1.25	9.85	102
91	13430	132.58	2.255	3.10	1.25	13.15	75
92	13990	107.23	-1.138	3.10	1.25	8.35	88
93	14000	108.86	-1.138	3.10	1.25	17.67	97
94	15070	109.59	0.929	3.10	1.25	14.46	97
95	15070	106.43	0.929	3.10	1.25	14.20	113
96	15270	89.96	0.929	3.10	1.25	16.55	77
97	15300	106.25	0.929	3.10	1.25	10.77	98
98	15310	109.28	-1.250	3.05	1.25	17.28	86
99	15600	112.35	1.877	3.05	1.30	9.34	82

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่ราบ							
No.	Station	Spot Elevation	Grade	Width of Road	Width of Shoulder	Percentage of Slope	Volume of Fill (cu.m)
100	15610	107.10	1.877	3.00	1.30	9.08	95
101	16340	107.16	1.877	3.00	1.30	14.36	107
102	16440	118.52	1.143	3.00	1.30	15.17	95
103	16660	133.62	1.143	3.00	1.30	9.88	94
104	16730	107.18	0.914	3.00	1.30	11.39	91
105	17060	106.30	-0.600	3.00	1.30	13.75	85
106	17260	102.65	2.900	3.00	1.30	18.35	104
107	17320	124.10	2.900	3.00	1.30	13.83	69
108	17760	106.06	1.964	3.00	1.30	15.80	91
109	17810	106.11	1.964	3.00	1.30	10.67	86
110	18000	106.52	-1.700	3.50	1.30	11.53	105
111	18340	105.31	2.200	3.50	1.30	19.63	92
112	18340	106.40	2.200	3.50	1.30	16.51	60
113	27440	120.23	0.000	3.50	1.30	13.77	77
114	30600	105.17	2.815	3.50	1.30	14.41	78
115	30690	103.64	2.815	3.50	1.30	15.30	101
116	32100	82.55	0.000	3.50	1.30	11.55	84
117	32150	133.28	0.000	3.50	1.30	15.99	125
118	33590	92.87	1.269	3.50	1.45	9.51	98
119	33600	77.43	-1.269	3.50	1.45	10.65	98
120	35780	88.96	3.000	3.50	1.50	13.11	73
121	35880	105.52	3.000	3.60	1.50	9.61	105
122	36300	106.47	1.414	3.60	1.50	13.75	91
123	36400	85.50	1.414	3.65	1.50	17.73	87
124	36700	95.78	1.414	3.70	1.50	16.04	85
	Avg.	107.626	1.371	3.295	1.361	14.285	91
	Std.	12.575	0.959	0.173	0.326	3.154	14
	Min	77.434	0.000	3.000	1.000	7.590	54
	Max	137.474	3.000	3.650	2.500	19.900	142

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่เนินเขา							
No.	Station	Speed	Grade	Width (m)	Width (m) Standard	Width (m) Actual	Width (m) Required
1	41600	103.90	4.233	3.50	2.00	20.25	90
2	41700	105.77	-4.233	3.50	2.00	24.77	88
3	41890	93.46	-4.233	3.50	2.00	19.06	88
4	41990	117.65	4.233	3.50	2.00	17.08	89
5	42000	103.01	4.233	3.50	2.00	17.09	89
6	42100	104.57	-4.233	3.50	2.00	23.54	90
7	47150	105.27	-5.783	3.50	1.45	29.68	89
8	47250	125.86	5.783	3.50	1.45	29.99	90
9	47400	120.62	-5.783	3.50	1.40	22.50	86
10	48400	104.81	4.500	3.50	1.50	25.93	87
11	48500	104.78	5.783	3.50	1.50	16.13	88
12	48510	104.67	-4.500	3.50	1.50	16.17	88
13	48600	82.60	-5.783	3.50	1.50	11.94	88
14	48620	103.94	4.500	3.50	1.50	17.98	88
15	48700	104.94	5.783	3.50	1.45	11.20	88
16	48720	103.06	-4.500	3.50	1.50	28.56	90
17	48820	104.45	4.500	3.50	1.50	32.27	88
18	48920	104.91	-4.500	3.50	1.50	26.59	86
19	49800	104.94	-5.333	3.50	1.40	23.73	86
20	49900	113.86	-5.333	3.50	1.40	19.35	90
21	50000	90.47	5.333	3.50	1.40	16.49	92
22	50100	103.96	5.333	3.50	1.40	22.21	87
23	50150	104.56	-5.333	3.50	1.40	13.31	88
24	50200	79.29	5.333	3.50	1.40	23.31	87
25	50250	104.01	3.062	3.40	1.35	9.77	94
26	50350	104.75	-3.062	3.40	1.35	16.80	86
27	50450	100.34	3.062	3.40	1.35	16.39	90
28	50550	132.23	-3.062	3.35	1.35	15.64	85
29	50650	87.50	3.062	3.35	1.35	15.92	85
30	50750	130.19	-3.062	3.35	1.35	21.35	88
31	51250	104.09	3.350	3.35	1.35	16.01	90
32	51550	104.66	-3.350	3.35	1.35	23.65	86
33	51890	85.55	3.350	3.35	1.35	17.45	87

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่เนินเขา							
No.	Station	Elevation	Grade	Width (m) Road	Width (m) Shoulder	Volume (m ³ /m)	Volume (m ³ /m)
34	51990	104.99	-3.350	3.35	1.35	22.40	94
35	52090	114.73	-3.350	3.30	1.35	18.43	84
36	52200	103.00	3.350	3.35	1.35	30.97	88
37	52440	111.84	-5.595	3.30	1.35	21.07	92
38	52540	78.30	-5.595	3.30	1.35	22.95	85
39	52640	104.96	5.595	3.30	1.35	11.72	89
40	52750	104.31	5.595	3.30	1.35	13.01	91
41	52850	103.93	-5.595	3.30	1.35	13.53	91
42	52950	104.00	5.595	3.25	1.35	20.69	92
43	53100	103.02	-5.595	3.25	1.30	18.55	89
44	53140	103.14	3.629	3.25	1.30	15.73	89
45	53210	95.43	-5.595	3.25	1.30	20.96	92
46	53240	115.69	-3.629	3.25	1.00	15.33	94
47	53310	104.08	5.595	3.25	1.30	22.63	90
48	53350	103.14	3.629	3.25	1.30	24.77	88
49	53410	104.37	-5.595	3.25	1.30	16.61	91
50	53450	102.84	-3.629	3.25	1.30	15.13	88
51	53510	77.14	5.595	3.25	1.30	17.75	92
52	53520	104.59	-3.782	3.25	1.00	24.11	87
53	53550	105.07	3.629	3.25	1.00	15.85	87
54	53620	103.94	5.595	3.25	1.30	19.78	90
55	53620	109.82	3.782	3.25	1.00	12.44	90
56	53650	104.50	-3.629	3.25	1.00	15.21	89
57	53720	102.32	-3.782	3.20	1.00	21.20	93
58	53830	104.70	3.782	3.25	1.00	15.17	89
59	53930	88.49	3.782	3.25	1.00	18.49	93
60	53950	104.10	-5.233	3.20	1.05	15.00	83
61	54030	107.80	-3.782	3.25	1.00	23.11	85
62	54050	105.76	5.233	3.20	1.05	22.52	85
63	54160	104.95	5.233	3.20	1.05	15.84	85
64	54260	97.35	5.233	3.20	1.05	17.95	87
65	54360	81.26	-5.233	3.20	1.05	15.72	89
66	54460	104.15	-5.233	3.20	1.05	9.24	85

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่เนินเขา							
No.	Station	Spire	Elevate	Width of road	Width of sidewalk	Grade of road	Width of drainage
67	56080	122.62	-3.943	3.15	1.05	21.32	89
68	56180	84.56	-3.943	3.15	1.10	19.16	85
69	56190	103.98	5.548	3.15	1.15	14.55	93
70	56280	119.63	3.943	3.15	1.10	22.47	90
71	56290	104.85	-5.548	3.15	1.15	17.68	87
72	56380	103.07	-3.943	3.15	1.10	18.83	88
73	56390	104.96	-5.548	3.15	1.15	20.79	87
74	56490	108.81	3.943	3.15	1.10	25.28	89
75	56490	80.27	-5.548	3.10	1.20	24.99	88
76	56590	116.65	3.943	3.15	1.10	15.67	88
77	56600	91.47	5.548	3.15	1.15	18.53	89
78	56700	83.59	5.548	3.15	1.20	28.63	84
79	57700	99.35	-5.333	3.10	1.20	26.83	92
80	57800	121.62	5.333	3.10	1.20	21.91	84
81	57900	104.30	-5.333	3.10	1.20	15.86	90
82	58000	104.82	5.333	3.00	1.20	24.45	88
83	58100	103.92	-5.333	3.00	1.20	11.29	88
84	58210	76.19	5.333	3.10	1.20	15.36	84
85	58880	102.13	-5.407	3.00	1.20	22.14	90
86	58980	128.89	5.407	3.05	1.25	13.41	88
87	59080	101.36	-5.407	3.05	1.25	11.16	87
88	59190	100.86	5.407	3.00	1.20	22.69	85
89	59290	103.02	-5.407	3.00	1.20	15.62	84
90	59390	101.99	5.407	3.00	1.20	12.83	90
91	73390	131.21	3.422	3.10	1.25	15.94	90
92	73500	102.57	-3.422	3.05	1.25	14.73	88
93	73580	103.00	4.800	3.10	1.25	15.61	84
94	73600	124.61	3.422	3.05	1.25	10.27	86
95	73690	94.44	-4.800	3.10	1.25	9.61	85
96	73700	133.26	-3.422	3.05	1.25	19.37	90
97	73790	98.35	4.800	3.10	1.25	17.09	87
98	73800	126.87	-3.422	3.10	1.25	27.33	92
99	73890	104.14	-4.800	3.10	1.25	12.31	89

ข้อมูลแนวทางตรงสภาพภูมิประเทศพื้นที่เนินเขา							
No.	Station	Spot	Grade	Width of Road	Width of Shoulder	Percent of Slope	Yard/Direction
100	73900	102.56	3.422	3.10	1.25	22.47	85
101	73990	74.22	4.800	3.45	1.25	14.67	83
102	74090	118.63	-4.800	3.45	1.25	18.65	84
103	75070	75.20	-4.800	3.50	1.30	11.34	88
104	75170	104.20	4.800	3.50	1.30	23.14	85
105	75270	103.02	-4.800	3.50	1.30	18.47	94
106	75280	86.50	-4.800	3.50	1.30	15.16	94
107	75380	92.46	4.800	3.45	1.25	15.99	85
108	75380	104.69	-4.800	3.50	1.30	30.35	86
109	75390	104.04	4.080	3.50	1.30	15.41	87
110	75480	123.61	4.800	3.50	1.30	15.70	94
111	75490	73.23	4.800	3.50	1.30	31.46	88
112	75500	104.44	-4.080	3.50	1.30	28.53	92
113	75580	101.34	-4.800	3.50	1.30	15.90	85
114	75590	104.89	4.800	3.50	1.30	11.21	88
115	75600	127.88	4.080	3.50	1.30	16.73	90
116	75690	103.12	-4.800	3.50	1.30	31.89	89
117	75700	106.79	-4.080	3.50	1.30	17.96	88
118	75790	89.48	4.800	3.50	1.30	23.77	86
119	75800	110.83	-4.080	3.50	1.30	28.93	88
120	75900	104.92	4.080	3.50	2.00	18.07	89
121	76370	129.15	-5.911	3.50	2.00	15.19	87
122	76480	96.36	-5.911	3.50	2.00	17.54	83
123	76580	112.85	5.911	3.50	2.00	24.41	87
124	76690	103.96	5.911	3.50	2.00	14.78	88
	Avg.	103.755	4.653	3.312	1.327	19.092	88
	Std.	12.488	0.866	0.171	0.247	5.391	3
	Min	73.231	3.062	3.000	1.000	9.240	83
	Max	133.260	5.911	3.500	2.000	32.270	94

ข้อมูลแนวทางโครงสร้างภูมิประเทศพื้นที่ราบ								
ร.ร.	พื้นที่ (ไร่)	พื้นที่ (ไร่)	ค่าเฉลี่ย (ไร่)	ค่าเฉลี่ย (ไร่)	ค่าเฉลี่ย (ไร่)	ค่าเฉลี่ย (ไร่)	ค่าเฉลี่ย (ไร่)	ค่าเฉลี่ย (ไร่)
1	8090	125.67	8.000	2.800	3.50	2.00	18.31	86
2	9170	109.44	19.000	2.512	3.50	2.00	13.47	86
3	9590	123.58	10.000	-0.062	3.50	2.00	18.49	86
4	9880	122.70	10.000	2.653	3.50	2.00	17.24	88
5	10220	121.68	10.000	2.457	3.50	2.00	18.15	78
6	10470	126.74	6.000	-1.200	3.50	2.00	15.97	89
7	11490	117.39	12.000	2.229	3.50	2.00	8.52	63
8	11670	116.40	12.000	-0.300	3.50	1.50	15.74	65
9	11970	115.41	12.000	-0.300	3.50	1.50	21.97	77
10	12100	114.42	12.000	1.857	3.50	1.50	13.98	81
11	13610	120.67	10.000	0.436	3.50	1.50	20.17	100
12	14170	127.77	5.000	2.360	3.50	1.50	19.86	83
13	14510	119.31	10.000	0.929	3.50	1.50	16.07	86
14	15910	113.43	12.000	0.260	3.50	1.50	11.92	85
15	16810	124.64	8.000	0.914	3.50	1.45	16.63	85
16	16920	123.72	8.000	-0.600	3.50	1.45	10.29	79
17	17900	118.38	10.000	-1.700	3.50	1.40	18.89	76
18	18180	112.43	12.000	2.200	3.50	1.40	12.36	80
19	18400	103.51	28.000	-2.489	3.50	1.40	9.05	90
20	18530	102.49	35.000	-2.489	3.50	1.40	23.97	89
21	18730	106.62	25.000	2.180	3.50	1.40	13.29	68
22	18900	107.65	20.000	0.462	3.50	1.40	11.46	83
23	19090	98.79	50.000	2.436	3.50	1.40	22.63	95
24	19220	98.95	46.000	2.436	3.50	1.35	21.55	96
25	19580	99.62	40.000	2.183	3.50	1.35	15.47	92
26	19900	98.73	52.000	2.867	3.50	1.35	13.82	86
27	20050	97.53	52.000	2.558	3.50	1.35	18.38	98
28	20360	95.86	57.000	2.915	3.50	1.35	17.94	86
29	20470	101.45	37.432	1.999	3.50	1.35	10.48	105
30	20820	111.44	14.200	1.999	3.50	1.35	17.94	99
31	20930	108.67	19.000	1.999	3.45	1.35	14.19	85
32	21060	99.57	40.050	1.999	3.45	1.35	1.08	84
33	21220	98.95	45.000	1.999	3.45	1.35	6.80	94
34	21360	95.83	57.000	1.999	3.45	1.35	14.02	92
35	21470	97.46	52.065	1.999	3.45	1.35	23.16	81
36	21690	96.67	55.000	1.921	3.45	1.35	15.74	85
37	21840	98.82	47.081	1.921	3.40	1.35	15.81	89

ข้อมูลแนวทางโค้งสภาพภูมิประเทศพื้นที่ราบ								
No.	Station	Grade	Horizontal Curve	Clearance	Width of Road	Width of Shoulder	Clearance of Bridge	Value of Design
38	21920	98.78	50.000	1.921	3.40	1.35	27.42	88
39	22000	97.39	52.415	1.921	3.40	1.35	14.16	88
40	22220	95.74	57.000	2.418	3.40	1.35	15.25	84
41	22310	98.85	46.472	1.418	3.40	1.35	18.42	99
42	22460	90.00	60.000	1.991	3.40	1.35	15.23	91
43	22620	93.92	57.141	1.999	3.35	1.30	11.57	89
44	22870	89.02	60.000	1.991	3.35	1.30	15.22	90
45	22980	96.34	55.522	0.991	3.35	1.30	26.88	92
46	23180	88.03	60.000	0.991	3.35	1.30	14.24	88
47	23240	97.39	52.444	1.991	3.35	1.30	23.69	91
48	23400	87.05	60.000	1.991	3.35	1.30	23.69	89
49	23470	97.35	54.000	2.608	3.35	1.30	12.09	87
50	23630	99.34	43.556	1.451	3.35	1.30	14.77	90
51	24040	86.07	60.000	1.676	3.35	1.30	24.20	83
52	24290	97.34	54.000	0.746	3.35	1.30	11.57	94
53	24430	90.98	59.191	0.963	3.35	1.30	10.56	89
54	24580	97.33	54.000	0.963	3.35	1.30	10.50	85
55	24690	97.32	54.000	1.563	3.35	1.30	1.56	88
56	24760	97.29	54.000	1.563	3.25	1.30	15.83	75
57	24790	97.42	52.293	1.563	3.25	1.30	14.69	96
58	24980	85.13	60.000	1.563	3.25	1.30	25.31	89
59	25140	98.93	46.000	2.283	3.25	1.30	21.54	93
60	25330	97.29	54.000	2.254	3.25	1.30	21.56	90
61	25620	68.68	102.000	-1.476	3.25	1.30	21.61	93
62	25810	105.61	26.000	2.059	3.00	1.30	13.19	78
63	25930	104.56	26.000	2.000	3.00	1.30	24.77	92
64	26110	110.44	18.490	1.956	3.00	1.30	11.53	93
65	26260	97.28	54.000	0.000	3.05	1.25	14.25	89
66	26400	71.53	60.445	0.000	3.05	1.25	11.06	103
67	26550	98.78	50.581	0.811	3.10	1.25	16.32	88
68	26880	84.15	60.000	1.461	3.10	1.25	28.99	63
69	27040	96.53	55.490	1.461	3.10	1.25	11.59	97
70	27200	98.91	46.375	1.461	3.10	1.25	12.58	85
71	27480	83.21	60.000	2.125	3.15	1.25	18.94	94
72	27790	82.25	60.000	1.696	3.15	1.25	23.66	93
73	27970	100.45	39.343	1.696	3.15	1.00	10.55	85
74	28340	95.67	57.000	1.390	3.15	1.00	17.85	94

ข้อมูลแนวทางโครงสร้างภูมิประเทศพื้นที่ราบ								
ลำดับ	พื้นที่ (ไร่)	ความสูง (ม.)	ความสูงเดิม (ม.)	ความสูงใหม่ (ม.)	ความสูงเดิม (ม.)	ความสูงใหม่ (ม.)	ความสูงเดิม (ม.)	ความสูงใหม่ (ม.)
75	28500	81.27	60.000	1.986	3.15	1.00	18.93	88
76	28680	80.29	60.000	1.986	3.15	1.00	23.65	96
77	28910	98.79	49.501	1.986	3.20	1.00	21.06	77
78	29400	79.29	60.000	-1.961	3.20	1.00	13.64	98
79	29520	97.42	52.173	-1.961	3.20	1.00	21.05	99
80	29680	98.80	48.253	-1.961	3.20	1.00	14.22	91
81	30090	96.41	55.521	-1.412	3.20	1.00	15.81	91
82	30270	69.67	98.000	-1.142	3.20	1.00	14.19	83
83	30490	97.48	52.024	2.815	3.20	1.05	12.62	92
84	30760	97.28	54.000	-1.188	3.20	1.05	19.42	96
85	31140	78.30	60.000	-2.400	3.20	1.05	16.27	74
86	31420	77.30	60.000	1.976	3.20	1.05	13.71	94
87	31570	96.26	56.055	-1.562	3.25	1.05	17.86	92
88	31700	96.10	56.104	-1.502	3.25	1.10	16.84	88
89	31810	96.31	55.595	1.825	3.25	1.10	16.87	87
90	32000	94.87	57.006	0.000	3.25	1.10	12.68	83
91	32210	96.07	56.402	0.000	3.25	1.10	16.88	95
92	32290	97.38	53.133	0.000	3.25	1.10	15.22	86
93	32410	75.78	60.000	0.000	3.25	1.10	16.82	84
94	32790	96.92	54.203	0.000	3.25	1.10	23.66	93
95	32900	92.96	58.012	0.846	3.25	1.10	20.50	85
96	32980	96.84	54.272	0.846	3.25	1.15	24.22	62
97	33110	91.97	58.194	-1.297	3.25	1.15	18.37	97
98	33250	96.81	54.333	-1.297	3.30	1.15	17.94	83
99	33380	97.24	54.000	0.000	3.30	1.15	16.81	85
100	33660	74.80	60.000	-1.209	3.30	1.15	11.53	86
101	33780	98.82	48.213	-1.209	3.30	1.15	21.02	90
102	33920	99.45	43.263	-1.046	3.30	1.15	17.88	95
103	34110	70.63	70.000	-1.976	3.30	1.15	20.53	90
104	34380	67.76	105.000	0.000	3.30	1.15	19.42	86
105	34570	98.96	44.545	-2.200	3.30	1.15	22.65	89
106	34650	101.21	39.000	-1.138	3.35	1.15	15.83	88
107	34890	97.21	54.000	-1.497	3.35	1.20	24.17	85
108	35100	73.81	60.000	-1.803	3.35	1.20	13.12	92
109	35180	97.20	54.000	2.109	3.35	1.20	17.39	93
110	35300	97.19	54.000	1.820	3.50	1.20	12.09	92
111	35580	99.49	43.000	-1.320	3.50	1.20	12.62	68

ข้อมูลแนวทางโค้งสภาพภูมิประเทศพื้นที่ราบ								
No.	Station	Grade	Clearance (m)	Grade	Width (m)	Width (m)	Grade (m)	Width (m)
112	35980	72.83	60.000	-1.067	3.50	1.20	7.91	92
113	36100	97.19	54.000	-1.169	3.50	1.20	15.83	87
114	36680	97.13	54.000	-1.441	3.50	1.20	12.63	87
115	37020	97.44	52.084	0.000	3.50	1.20	16.82	83
116	37100	95.65	57.000	-0.992	3.50	1.20	11.10	94
117	37170	97.50	52.000	-0.992	3.50	1.20	21.61	81
118	37230	95.61	57.000	-0.992	3.50	1.20	13.97	87
119	37420	99.05	44.000	-0.992	3.50	1.20	16.05	81
120	37500	97.10	54.000	-0.992	3.50	1.20	12.63	82
121	37730	95.39	57.000	-0.992	3.50	1.25	21.55	85
122	37810	97.09	54.000	-0.992	3.50	1.25	14.73	98
123	38130	99.00	44.000	-1.548	3.50	1.25	15.77	87
124	38220	95.37	57.000	1.076	3.50	1.25	18.97	88
125	38360	98.97	44.000	1.076	3.50	1.25	13.66	93
126	38550	96.29	56.000	1.000	3.50	2.00	12.11	86
	Avg.	97.640	46.636	1.517	3.353	1.290	16.449	88
	Std.	12.232	18.965	0.737	0.144	0.216	4.903	8
	Min	67.759	5.000	0.000	3.000	1.000	1.080	62
	Max	127.769	105.000	2.915	3.500	2.000	28.990	105

ข้อมูลแนวทางโครงสร้างภูมิประเทศพื้นที่เนินเขา								
ลำดับ	พื้นที่ (ไร่)	ความสูง (ม.)	ความลาดชัน (%)	ความสูง (ม.)	ความลาดชัน (%)	ความสูง (ม.)	ความลาดชัน (%)	ความสูง (ม.)
1	38660	91.39	55.353	3.000	3.50	2.50	20.90	86
2	38770	92.98	52.000	-3.400	3.50	2.50	12.80	86
3	39200	92.05	51.000	-3.244	3.50	2.35	17.57	86
4	39740	93.53	54.000	-4.800	3.50	2.35	21.38	88
5	39870	92.89	42.000	-3.891	3.50	2.30	17.25	88
6	40010	92.22	54.000	-4.354	3.50	2.20	15.17	89
7	40240	92.86	46.000	-5.200	3.50	2.00	13.09	83
8	40350	93.85	43.275	-3.804	3.50	2.00	14.96	85
9	40570	100.44	52.000	-4.400	3.50	2.00	20.87	87
10	40770	98.30	53.000	-4.400	3.50	2.00	13.29	81
11	41030	92.01	53.365	-3.500	3.50	1.35	19.16	80
12	41220	93.25	52.000	-3.502	3.50	1.35	18.87	83
13	41770	98.12	47.303	-3.502	3.50	1.35	15.27	86
14	41460	91.97	41.254	-4.889	3.50	1.35	11.32	85
15	41550	90.95	46.434	-3.975	3.50	1.35	15.80	85
16	41610	91.83	32.494	-3.974	3.50	1.35	19.78	89
17	41700	93.68	39.000	-3.974	3.50	1.30	17.95	86
18	42060	98.08	54.000	-4.133	3.50	1.30	21.75	80
19	42600	92.71	48.113	4.844	3.50	1.30	13.60	90
20	42690	92.50	39.585	-4.844	3.50	1.30	23.77	89
21	42850	92.46	54.000	4.844	3.50	1.30	12.63	88
22	42920	93.15	56.284	4.844	3.50	1.30	10.89	83
23	43030	93.25	54.000	-4.145	3.50	1.30	21.50	98
24	43170	98.64	42.096	-4.145	3.50	1.30	20.48	96
25	43300	92.33	41.000	-4.145	3.50	1.30	14.70	82
26	43410	98.36	52.000	-4.145	3.50	1.30	13.13	86
27	43690	103.51	52.000	4.249	3.50	1.30	17.47	88
28	45070	120.87	52.000	4.249	3.50	1.30	17.05	86
29	45510	119.95	50.495	-3.959	3.50	1.25	19.96	105
30	46150	124.05	48.315	-3.959	3.50	1.25	17.05	89
31	46500	123.01	36.474	3.298	3.45	1.25	13.49	85
32	46740	107.83	52.000	-3.643	3.45	1.25	11.03	84
33	47160	99.64	38.443	-3.636	3.45	1.25	11.46	94
34	47640	119.85	30.000	-4.111	3.40	1.25	10.98	82
35	48230	116.56	22.000	4.000	3.40	1.25	22.00	81
36	48490	115.69	22.000	4.500	3.40	1.25	10.46	85
37	48710	114.80	13.000	-4.235	3.40	1.25	15.02	89

ข้อมูลแนวทางโค้งสภาพภูมิประเทศพื้นที่เนินเขา								
No	Station	Grade	Drainage (mm)	Grade	Width (mm)	Width (mm)	Percent (%)	Vent/Direction
38	49010	113.88	13.000	5.783	3.40	1.20	26.05	81
39	49170	113.05	28.000	-5.330	3.35	1.20	13.46	88
40	49490	102.47	33.000	4.277	3.35	1.20	14.49	84
41	49810	99.42	22.000	3.851	3.35	1.20	8.00	99
42	49960	98.25	22.000	3.062	3.35	1.20	14.97	91
43	50060	98.41	22.000	3.062	3.35	1.20	11.00	89
44	50160	99.99	22.000	3.062	3.35	1.20	14.46	80
45	50250	99.21	22.000	3.620	3.35	1.20	25.54	82
46	50530	99.03	22.000	-3.998	3.30	1.20	13.53	88
47	50760	98.81	30.000	-3.998	3.30	1.20	22.51	91
48	51560	122.00	33.000	4.259	3.30	1.20	22.51	89
49	51980	112.19	39.000	3.350	3.30	1.20	11.49	87
50	52230	111.24	38.353	4.310	3.30	1.20	14.54	90
51	52530	98.60	32.551	-3.595	3.30	1.15	22.99	83
52	52720	98.97	33.000	-3.595	3.30	1.15	10.99	84
53	52910	106.82	33.000	-3.595	3.30	1.15	10.03	89
54	53110	109.28	33.042	4.629	3.25	1.15	3.93	85
55	54430	98.93	19.000	4.000	3.25	1.15	4.48	98
56	54590	98.92	22.000	4.400	3.25	1.15	20.48	96
57	54810	98.90	22.000	4.400	3.25	1.15	15.04	85
58	55390	66.00	38.000	-3.081	3.25	1.15	13.96	86
59	55490	87.49	33.000	-3.081	3.25	1.15	24.04	89
60	55910	98.09	28.000	-3.942	3.25	1.15	20.47	93
61	56090	93.33	26.000	-4.943	3.25	1.15	20.48	90
62	56430	90.90	33.000	5.458	3.25	1.15	20.53	93
63	56560	90.19	33.000	-4.289	3.25	1.10	12.53	78
64	56710	108.26	33.000	4.000	3.25	1.10	23.53	82
65	57030	90.31	80.000	-3.522	3.25	1.10	4.96	93
66	57170	98.74	64.231	-3.522	3.00	1.10	4.04	89
67	57290	98.70	40.000	3.355	3.00	1.10	10.51	103
68	57590	93.38	48.000	3.355	3.00	1.10	15.51	88
69	57710	98.70	57.000	3.355	3.00	1.00	27.55	83
70	58160	98.53	59.590	3.355	3.00	1.00	11.01	87
71	58670	77.25	27.196	3.355	3.00	1.00	11.96	85
72	58960	110.27	59.430	5.405	3.00	1.00	8.50	94
73	59310	92.27	33.575	3.897	3.00	1.00	22.48	93
74	59500	72.13	33.575	3.897	3.05	1.00	6.05	95

ข้อมูลแนวทางโค้งสภาพภูมิประเทศพื้นที่เนินเขา								
No.	Station	Grade	Prop. (m)	Grade	Width (m)	Width (m)	Grade (1/100)	Width (m)
75	59650	71.17	47.000	3.543	3.10	1.00	16.96	84
76	59910	86.53	35.000	3.979	3.10	1.00	17.99	88
77	60000	93.30	38.000	3.979	3.10	1.00	22.47	86
78	60100	98.53	72.000	3.979	3.10	1.05	20.01	87
79	60400	105.79	24.000	3.979	3.10	1.05	19.97	90
80	60620	93.43	52.000	3.979	3.15	1.05	12.96	98
81	60930	104.69	76.000	3.979	3.15	1.05	20.00	89
82	61070	67.94	76.000	-3.101	3.15	1.05	4.01	91
83	64410	93.29	65.255	3.344	3.20	1.10	21.52	89
84	64580	88.47	48.000	3.344	3.20	1.10	5.52	91
85	64730	93.75	38.000	3.344	3.20	1.25	8.98	83
86	64910	83.60	28.000	-4.125	3.20	1.25	7.49	92
87	65050	84.80	46.041	3.688	3.20	1.25	15.46	94
88	65170	79.16	28.000	3.688	3.20	1.25	13.02	94
89	65330	80.82	78.471	3.688	3.25	1.30	7.47	92
90	65520	64.02	48.000	3.688	3.25	1.30	6.50	88
91	65720	76.28	63.525	-3.999	3.25	1.30	16.03	87
92	65870	69.29	41.482	-3.999	3.25	1.30	12.05	93
93	65950	70.25	67.232	3.988	3.25	1.30	6.54	85
94	66070	90.96	65.482	3.988	3.50	1.30	14.46	86
95	66200	82.60	71.591	4.516	3.50	1.30	6.48	84
96	66370	65.00	71.261	4.516	3.50	1.30	22.48	83
97	66550	78.19	88.060	4.536	3.50	1.30	19.48	85
98	66690	92.07	72.101	4.697	3.50	1.35	23.01	92
99	66800	89.42	77.303	4.697	3.50	1.35	17.45	87
100	66900	74.40	76.180	-3.769	3.50	1.35	17.04	83
101	67010	79.97	56.252	-3.769	3.50	1.35	6.47	95
102	67120	85.57	68.064	-3.769	3.50	1.35	10.96	86
103	67360	90.42	80.000	3.597	3.50	1.35	19.97	90
104	67580	90.41	71.596	3.597	3.50	1.35	16.99	95
105	67740	93.24	53.122	-4.231	3.50	1.35	19.51	90
106	67970	98.15	63.000	3.927	3.50	1.35	18.45	36
107	68350	101.47	74.121	-3.824	3.50	1.35	21.52	69
108	68490	98.44	71.360	3.958	3.50	1.35	13.02	87
109	68620	91.54	65.273	3.958	3.50	1.40	15.04	88
110	68740	81.76	57.000	-3.125	3.50	1.40	22.96	88
111	68900	93.38	57.132	-3.125	3.50	1.40	2.96	89

ข้อมูลแนวทางโครงสร้างภูมิประเทศพื้นที่เนินเขา								
No.	Station	Speed	Degree of Curve	Grade	Width of Road	Width of Shoulder	Percent of Truck	Veh./h/Direction
112	69100	93.45	50.000	3.298	3.50	1.40	7.03	88
113	69280	93.38	39.300	-4.770	3.50	1.40	6.99	92
114	69420	84.51	31.415	-4.770	3.50	1.40	11.99	88
115	69660	84.58	38.000	3.965	3.50	1.40	12.51	82
116	69980	75.34	55.274	3.898	3.50	1.45	15.04	89
117	70160	66.96	68.355	3.979	3.50	1.45	12.50	100
118	70260	91.37	47.300	3.979	3.50	1.50	11.48	83
119	70680	90.40	44.000	3.341	3.50	1.50	10.55	84
120	71070	98.76	46.355	-3.431	3.50	1.50	23.03	81
121	71260	109.20	66.401	4.000	3.50	1.50	13.50	87
122	72520	123.00	66.395	-3.980	3.50	1.50	20.50	82
123	73380	98.90	70.162	-3.422	3.50	1.50	12.50	82
124	73900	98.88	74.036	4.800	3.50	2.00	20.47	98
125	74280	98.88	73.164	4.143	3.50	2.00	10.49	97
126	75370	98.82	52.586	4.800	3.50	2.00	18.02	88
127	75800	121.91	79.145	-4.080	3.50	2.00	17.98	83
128	76320	120.968	55.473	-4.103	3.50	2.00	16.020	86
	Avg.	95.234	47.625	3.999	3.366	1.332	15.179	88
	Std.	13.068	17.382	0.553	0.161	0.291	5.576	7
	Min	64.019	13.000	3.062	3.000	1.000	2.96	36
	Max	124.054	88.060	5.783	3.500	2.350	27.55	105

ภาคผนวก ข.

ตารางค่าโมดูลัสทางเรขาคณิตจากคอมพิวเตอร์โปรแกรม

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
1	0.000	3775.000	0.000	0.000	3775.000	107.63		
2	3775.000	3975.000	0.000	3.500	200.000	103.76	0.27%	4.693
3	3975.000	4300.000	0.000	0.000	325.000	107.63	0.44%	4.656
4	4300.000	4650.000	0.000	-1.429	350.000	107.63	0.48%	4.656
5	4650.000	4975.000	0.000	1.015	325.000	107.63	0.44%	4.656
6	4975.000	5150.000	0.000	-1.600	175.000	107.63	0.24%	4.656
7	5150.000	5775.000	0.000	0.000	625.000	107.63	0.85%	4.656
8	5775.000	5975.000	0.000	2.250	200.000	107.63	0.27%	4.656
9	5975.000	6150.000	0.000	-2.286	175.000	107.63	0.24%	4.656
10	6150.000	6625.000	0.000	0.884	475.000	107.63	0.65%	4.656
11	6625.000	6900.000	0.000	0.182	275.000	107.63	0.38%	4.656
12	6900.000	7075.000	0.000	3.943	175.000	103.76	0.24%	4.693
13	7075.000	7400.000	0.000	-1.477	325.000	107.63	0.44%	4.656
14	7400.000	7800.000	0.000	0.875	400.000	107.63	0.55%	4.656
15	7800.000	7985.000	0.000	2.800	185.000	107.63	0.25%	4.656
16	7985.000	8197.000	8.000	2.800	212.000	106.63	0.29%	6.059
17	8197.000	8400.000	0.000	0.200	203.000	107.63	0.28%	6.050
18	8400.000	8650.000	0.000	2.480	250.000	107.63	0.34%	6.050
19	9650.000	9040.000	0.000	0.824	-610.000	107.63	0.83%	6.050
20	9040.000	9319.322	19.000	4.512	279.322	97.97	0.38%	3.751
21	9319.322	9454.961	0.000	4.512	135.639	103.76	0.19%	4.185
22	9454.961	9734.533	10.000	-0.062	279.572	105.98	0.38%	5.219
23	9734.533	9811.650	0.000	2.653	77.117	107.63	0.11%	5.542
24	9811.650	9957.261	10.000	2.653	145.611	105.98	0.20%	5.557
25	9957.261	10148.996	0.000	2.653	191.735	107.63	0.26%	5.542
26	10148.996	10308.996	10.000	4.457	160.000	101.58	0.22%	4.238
27	10308.996	10398.559	0.000	4.457	89.563	103.76	0.12%	5.221
28	10398.559	10548.374	6.000	-1.200	149.815	107.27	0.20%	4.753
29	10548.374	10625.000	0.000	-1.200	76.626	107.63	0.10%	7.101
30	10625.000	11250.000	0.000	0.416	625.000	107.63	0.85%	7.101
31	11250.000	11375.000	0.000	3.360	125.000	103.76	0.17%	4.693

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
32	11375.000	11448.094	0.000	6.229	73.094	103.76	0.10%	4.693
33	11448.094	11550.000	12.000	6.229	101.906	100.78	0.14%	4.923
34	11550.000	11793.001	12.000	-0.300	243.001	105.33	0.33%	4.461
35	11793.001	11890.829	0.000	-0.300	97.828	107.63	0.13%	5.201
36	11890.829	12050.000	12.000	-0.300	159.171	105.33	0.22%	5.223
37	12050.000	12154.000	12.000	1.857	104.000	105.33	0.14%	5.223
38	12154.000	12400.000	0.000	1.857	246.000	107.63	0.34%	5.201
39	12400.000	12625.000	0.000	-3.067	225.000	107.63	0.31%	5.201
40	12625.000	13000.000	0.000	0.000	375.000	107.63	0.51%	5.201
41	13000.000	13200.000	0.000	1.400	200.000	107.63	0.27%	5.201
42	13200.000	13462.253	0.000	2.255	262.253	107.63	0.36%	5.201
43	13462.253	13761.420	10.000	0.436	299.167	105.98	0.41%	5.557
44	13761.420	14050.000	0.000	-1.138	288.580	107.63	0.39%	5.542
45	14050.000	14295.311	0.000	4.360	245.311	103.76	0.34%	4.693
46	14295.311	14740.561	10.000	0.929	445.250	105.98	0.61%	5.219
47	14740.561	15150.000	0.000	0.929	409.439	107.63	0.56%	5.542
48	15150.000	15350.000	0.000	-1.250	200.000	107.63	0.27%	5.542
49	15350.000	15660.375	0.000	1.877	310.375	107.63	0.42%	5.542
50	15660.375	16162.040	12.000	0.260	501.665	105.33	0.69%	5.223
51	16162.040	16525.000	0.000	1.143	362.960	107.63	0.50%	5.201
52	16525.000	16752.618	0.000	0.914	227.618	107.63	0.31%	5.201
53	16752.618	16875.000	8.000	0.914	122.382	106.63	0.17%	6.059
54	16875.000	16984.319	8.000	-0.600	109.319	106.63	0.15%	6.059
55	16984.319	17075.000	0.000	-0.600	90.681	107.63	0.12%	6.050
56	17075.000	17400.000	0.000	2.900	325.000	107.63	0.44%	6.050
57	17400.000	17650.000	0.000	3.800	250.000	103.76	0.34%	4.693
58	17650.000	17838.340	0.000	1.964	188.340	107.63	0.26%	4.656
59	17838.340	17978.340	10.000	-1.700	140.000	105.98	0.19%	5.557
60	17978.340	18001.519	0.000	-1.700	23.179	107.63	0.03%	5.542
61	18001.519	18125.000	12.000	-1.700	123.481	105.33	0.17%	5.223
62	18125.000	18243.186	12.000	5.200	118.186	100.78	0.16%	4.506

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
63	18243.186	18349.956	0.000	5.200	106.770	103.76	0.15%	4.894
64	18349.956	18466.412	28.000	-2.489	116.456	100.15	0.16%	4.727
65	18466.412	18598.536	35.000	-2.489	132.124	97.88	0.18%	5.163
66	18598.536	18668.484	0.000	4.218	69.948	103.76	0.10%	4.168
67	18668.484	18809.528	25.000	42.180	141.044	95.55	0.19%	3.884
68	18809.528	18850.000	25.000	4.218	40.472	95.55	0.06%	3.884
69	18850.000	18963.046	20.000	0.462	113.046	102.74	0.15%	3.936
70	18963.046	19076.174	0.000	4.436	113.128	103.76	0.15%	5.996
71	19076.174	19120.246	50.000	4.436	44.072	85.50	0.06%	3.032
72	19120.246	19325.000	46.000	4.436	204.754	87.11	0.28%	5.350
73	19325.000	19371.659	44.000	6.156	46.659	87.92	0.06%	6.067
74	19371.659	19449.623	0.000	6.156	77.964	103.76	0.11%	3.006
75	19449.623	19660.873	40.000	9.183	161.250	89.52	0.22%	3.302
76	19660.873	19832.967	0.000	7.400	172.094	103.76	0.24%	3.142
77	19832.967	19970.520	52.000	5.867	137.553	84.70	0.19%	2.985
78	19970.520	20143.259	52.000	5.558	172.739	84.70	0.24%	2.985
79	20143.259	20315.907	0.000	5.558	172.648	103.76	0.24%	2.759
80	20315.907	20419.416	57.000	6.915	103.509	82.69	0.14%	2.874
81	20419.416	20530.000	37.432	9.999	110.584	90.56	0.15%	3.690
82	20530.000	20660.000	39.000	9.999	130.000	89.93	0.18%	6.350
83	20660.000	20775.000	14.200	9.999	115.000	99.89	0.16%	3.529
84	20775.000	20880.000	14.200	9.999	105.000	99.89	0.14%	3.529
85	20880.000	20985.000	19.000	9.999	105.000	97.97	0.14%	5.323
86	20985.000	21140.000	40.050	9.999	155.000	89.50	0.21%	3.791
87	21140.000	21300.000	45.000	9.999	160.000	87.51	0.22%	5.181
88	21300.000	21430.373	57.000	9.999	130.373	82.69	0.18%	4.257
89	21430.373	21522.799	52.065	9.999	92.426	84.67	0.13%	5.104
90	21522.799	21660.053	0.000	9.999	137.254	103.76	0.19%	2.757
91	21660.053	21735.944	55.000	4.921	75.891	83.49	0.10%	2.917
92	21735.944	21948.373	47.081	4.921	212.429	86.68	0.29%	4.634
93	21948.373	22067.793	52.415	4.921	119.420	84.53	0.16%	5.073

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
94	22067.793	22165.000	0.000	4.921	97.207	103.76	0.13%	2.747
95	22165.000	22191.262	0.000	6.418	26.262	103.76	0.04%	2.747
96	22191.262	22255.803	57.000	6.418	64.541	82.69	0.09%	2.874
97	22255.803	22375.000	46.472	6.418	119.197	86.92	0.16%	4.333
98	22375.000	22550.000	60.000	9.991	175.000	81.48	0.24%	4.126
99	22550.000	22691.637	57.141	9.999	141.637	82.63	0.19%	5.641
100	22691.637	22808.540	0.000	9.991	116.903	103.76	0.16%	2.614
101	22808.540	22933.084	60.000	9.991	124.544	81.48	0.17%	2.811
102	22933.084	23037.095	55.522	9.991	104.011	83.28	0.14%	5.188
103	23037.095	23153.936	0.000	9.991	116.841	103.76	0.16%	2.658
104	23153.969	23225.802	60.000	9.991	71.833	81.48	0.10%	2.811
105	23225.802	23272.743	52.444	9.991	46.941	84.52	0.06%	4.657
106	23272.743	23354.173	0.000	6.606	81.430	103.76	0.11%	2.746
107	23354.173	23448.486	60.000	9.991	94.313	81.48	0.13%	2.811
108	23448.486	23504.042	54.000	6.608	55.556	83.90	0.08%	4.891
109	23504.042	23574.853	0.000	6.608	70.811	103.76	0.10%	2.701
110	23574.853	23689.975	43.556	6.451	115.122	88.09	0.16%	3.199
111	23689.975	23999.959	0.000	6.451	309.984	103.76	0.42%	3.020
112	23999.959	24087.015	60.000	5.676	87.056	81.48	0.12%	2.811
113	24087.015	24240.938	0.000	7.670	153.923	103.76	0.21%	2.536
114	24240.938	24349.606	54.000	0.746	108.668	91.72	0.15%	3.481
115	24349.606	24530.000	59.191	6.963	180.394	81.81	0.25%	3.556
116	24530.000	24630.000	54.000	9.963	100.000	83.90	0.14%	5.042
117	24630.000	24763.654	54.000	3.563	133.654	83.90	0.18%	5.042
118	24763.654	24763.654	54.000	3.563	0.000	83.90	0.00%	5.042
119	24763.654	24824.006	52.293	3.563	60.352	84.58	0.08%	6.189
120	24824.006	24952.572	0.000	3.563	128.566	103.76	0.18%	2.750
121	24952.572	25015.289	60.000	3.563	62.717	81.48	0.09%	2.811
122	25015.289	25098.718	0.000	4.283	83.429	103.76	0.11%	2.536
123	25098.718	25199.225	46.000	4.283	100.507	87.11	0.14%	3.133
124	25199.225	25296.616	0.000	4.283	97.391	103.76	0.13%	2.941

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
125	25296.616	25370.947	54.000	8.254	74.331	83.90	0.10%	2.939
126	25370.947	25485.076	0.000	8.254	114.129	103.76	0.16%	2.701
127	25485.076	25770.000	102.000	-9.476	284.924	76.17	0.39%	2.568
128	25770.000	25850.000	26.000	8.059	80.000	95.15	0.11%	2.643
129	25850.000	26028.839	26.000	2.000	178.839	100.79	0.24%	4.181
130	26028.839	26200.000	18.490	4.956	171.161	98.17	0.23%	5.022
131	26200.000	26327.000	54.000	0.000	127.000	91.72	0.17%	4.076
132	26327.000	26481.755	60.445	0.000	154.755	89.63	0.21%	5.157
133	26481.755	26623.297	50.581	5.811	141.542	85.27	0.19%	4.384
134	26623.297	26825.203	0.000	5.811	201.906	103.76	0.28%	2.800
135	26825.203	26950.735	60.000	1.461	125.532	89.78	0.17%	3.321
136	26950.735	27141.281	55.490	1.461	190.546	91.24	0.26%	5.496
137	27141.281	27263.574	46.375	1.461	122.293	94.19	0.17%	4.801
138	27263.574	27468.990	0.000	0.000	205.416	107.63	0.28%	3.260
139	27468.990	27507.074	60.000	3.125	38.084	81.48	0.05%	2.672
140	27507.074	27751.436	0.000	3.125	244.362	103.76	0.33%	2.536
141	27751.436	27830.203	60.000	3.696	78.767	81.48	0.11%	2.811
142	27830.203	27884.770	0.000	3.696	54.567	103.76	0.07%	2.536
143	27884.770	28074.605	39.343	3.696	189.835	89.79	0.26%	3.322
144	28074.605	28275.654	0.000	3.696	201.049	103.76	0.27%	3.166
145	28275.654	28412.321	57.000	8.390	136.667	82.69	0.19%	2.874
146	28412.321	28591.488	60.000	9.986	179.167	81.48	0.24%	5.607
147	28591.488	28772.044	60.000	9.986	180.556	81.48	0.25%	5.607
148	28772.044	29064.895	49.501	9.986	292.851	85.70	0.40%	4.321
149	29064.895	29225.000	0.000	-3.656	160.105	107.63	0.22%	2.613
150	29225.000	29357.179	0.000	4.240	132.179	103.76	0.18%	4.693
151	29357.179	29450.535	60.000	-9.961	93.356	89.78	0.13%	3.321
152	29450.535	29608.624	52.173	-9.961	158.089	92.31	0.22%	4.939
153	29608.624	29755.372	48.253	-9.961	146.748	93.58	0.20%	5.665
154	29755.372	30044.531	0.000	-3.961	289.159	107.63	0.39%	3.205
155	30044.531	30148.368	55.521	-3.412	103.837	91.23	0.14%	3.189

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
156	30148.368	30406.901	98.000	-3.142	258.533	77.47	0.35%	3.199
157	30406.901	30588.545	52.024	2.815	181.644	92.36	0.25%	2.934
158	30588.545	30698.974	0.000	2.815	110.429	107.63	0.15%	3.100
159	30698.974	30836.905	54.000	-4.188	137.931	91.72	0.19%	3.222
160	30836.905	31045.284	0.000	8.786	208.379	103.76	0.28%	3.349
161	31045.284	31249.213	60.000	-5.400	203.929	89.78	0.28%	3.321
162	31249.213	31336.862	0.000	9.976	87.649	103.76	0.12%	3.165
163	31336.862	31506.906	60.000	9.976	170.044	81.48	0.23%	2.811
164	31506.906	31643.652	56.055	-3.562	136.746	91.06	0.19%	3.467
165	31643.652	31762.663	56.104	-3.502	119.011	91.04	0.16%	10.035
166	31762.663	31874.945	55.595	9.825	112.282	83.25	0.15%	3.802
167	31874.945	31985.567	0.000	9.825	110.622	103.76	0.15%	2.656
168	31985.567	32032.200	57.006	0.000	46.633	90.75	0.06%	3.398
169	32032.200	32180.000	0.000	0.000	147.800	107.63	0.20%	2.971
170	32180.000	32256.238	56.402	0.000	76.238	90.94	0.10%	3.170
171	32256.238	32326.088	53.133	0.000	69.850	92.00	0.10%	5.833
172	32326.088	32506.224	60.000	0.000	180.136	89.78	0.25%	5.096
173	32506.224	32737.432	105.000	0.000	231.208	75.20	0.32%	3.119
174	32737.432	32855.194	54.203	0.000	117.762	91.66	0.16%	2.790
175	32855.194	32948.062	58.012	0.846	92.868	90.42	0.13%	5.687
176	32948.062	33022.842	54.272	0.846	74.780	91.63	0.10%	5.692
177	33022.842	33209.088	58.194	-9.297	186.246	90.36	0.25%	5.657
178	33209.088	33294.130	54.333	-9.297	85.042	91.61	0.12%	5.659
179	33294.130	33364.916	0.000	-9.297	70.786	107.63	0.10%	3.039
180	33364.916	33405.844	54.000	0.000	40.928	91.72	0.06%	3.222
181	33405.844	33630.684	0.000	-1.269	224.840	107.63	0.31%	3.048
182	33630.684	33706.247	60.000	-1.209	75.563	89.78	0.10%	3.096
183	33706.247	33856.339	48.213	-1.209	150.092	93.60	0.20%	4.522
184	33856.339	33984.616	43.263	-5.046	128.277	95.20	0.18%	5.444
185	33984.616	34250.000	70.000	-1.976	265.384	86.54	0.36%	3.737
186	34250.000	34524.000	105.000	0.000	274.000	75.20	0.37%	3.351

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
187	34524.980	34630.000	44.545	-5.200	105.020	94.78	0.14%	2.592
188	34630.000	34686.323	39.000	-6.138	56.323	96.58	0.08%	5.342
189	34686.323	34886.432	0.000	-3.497	200.109	107.63	0.27%	3.496
190	34886.432	34911.531	54.000	-3.497	25.099	91.72	0.03%	3.222
191	34911.531	35065.410	0.000	-5.803	153.879	107.63	0.21%	3.048
192	35065.410	35145.000	60.000	-5.803	79.590	89.78	0.11%	3.096
193	35145.000	35234.266	54.000	3.109	89.266	83.90	0.12%	4.078
194	35234.266	35371.720	54.000	8.820	137.454	83.90	0.19%	4.078
195	35371.720	35518.409	0.000	8.820	146.689	103.76	0.20%	2.701
196	35518.409	35646.032	43.000	-5.320	127.623	95.29	0.17%	3.850
197	35646.032	35915.443	0.000	3.001	269.411	103.76	0.37%	3.761
198	35915.443	36050.000	60.000	-3.067	134.557	89.78	0.18%	3.321
199	36050.000	36150.000	54.000	-6.169	100.000	91.72	0.14%	5.208
200	36150.000	36230.000	54.000	-6.169	80.000	91.72	0.11%	5.208
201	36230.000	36300.000	26.400	-6.169	70.000	100.66	0.10%	3.664
202	36300.000	36425.000	0.000	1.414	125.000	107.63	0.17%	4.022
203	36425.000	36645.017	0.000	-9.441	220.017	107.63	0.30%	4.022
204	36645.017	36720.943	54.000	-9.441	75.926	91.72	0.10%	3.222
205	36720.943	36894.494	54.000	-9.441	173.551	91.72	0.24%	3.222
206	36894.494	36968.644	57.000	-9.441	74.150	90.75	0.10%	5.928
207	36968.644	37083.708	52.084	0.000	115.064	92.34	0.16%	5.420
208	37083.708	37134.585	57.000	-9.992	50.877	90.75	0.07%	5.438
209	37134.585	37205.739	52.000	-9.992	71.154	92.37	0.10%	5.403
210	37205.739	37261.295	57.000	-9.992	55.556	90.75	0.08%	5.421
211	37261.295	37408.847	0.000	-9.992	147.552	107.63	0.20%	2.971
212	37408.847	37450.000	44.000	-9.992	41.153	94.96	0.06%	3.465
213	37450.000	37562.854	54.000	-9.992	112.854	91.72	0.15%	4.747
214	37562.854	37697.738	0.000	-9.992	134.884	107.63	0.18%	3.048
215	37697.739	37765.000	57.000	-9.992	67.261	90.75	0.09%	3.157
216	37765.000	37864.097	54.000	-9.992	99.097	91.72	0.14%	5.917
217	37864.097	38123.968	0.000	-9.992	259.871	107.63	0.35%	3.048

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
218	38123.968	38150.000	44.000	-7.548	26.032	94.96	0.04%	3.465
219	38150.000	38300.000	57.000	8.076	150.000	82.69	0.20%	3.366
220	38300.000	38439.227	44.000	8.076	139.227	87.92	0.19%	4.116
221	38439.227	38498.075	0.000	8.076	58.848	103.76	0.08%	3.006
222	38498.075	38612.335	56.000	10.000	114.260	83.09	0.16%	2.895
223	38612.335	38725.000	55.353	0.000	112.665	91.28	0.15%	3.653
224	38725.000	38815.568	52.000	-7.400	90.568	92.37	0.12%	5.812
225	38815.568	38985.601	0.000	-7.400	170.033	107.63	0.23%	3.101
226	38985.601	39123.362	51.000	-9.244	137.761	92.69	0.19%	3.289
227	39123.362	39176.651	0.000	-9.244	53.289	107.63	0.07%	3.128
228	39176.651	39227.381	54.000	-9.244	50.730	91.72	0.07%	3.222
229	39227.381	39295.669	0.000	-9.314	68.288	107.63	0.09%	3.048
230	39295.669	39335.125	42.000	-9.134	39.456	95.61	0.05%	3.521
231	39335.125	39454.899	0.000	-9.134	119.774	107.63	0.16%	3.395
232	39454.899	39600.000	54.000	-9.134	145.101	91.72	0.20%	3.222
233	39600.000	39696.515	46.000	-9.134	96.515	94.31	0.13%	4.938
234	39696.515	39800.000	43.275	-4.800	103.485	95.20	0.14%	6.053
235	39800.000	39958.574	52.000	-0.891	158.574	92.37	0.22%	4.888
236	39958.574	40068.951	53.000	-9.354	110.377	92.05	0.15%	7.037
237	40068.951	40123.139	53.365	-9.354	54.188	91.93	0.07%	8.042
238	40123.139	40228.306	0.000	-9.354	105.167	107.63	0.14%	3.064
239	40228.306	40264.364	52.000	-5.200	36.058	92.37	0.05%	3.266
240	40264.364	40307.516	47.303	-9.804	43.152	93.89	0.06%	5.484
241	40307.516	40408.739	41.254	-9.804	101.223	95.85	0.14%	5.245
242	40408.739	40545.000	46.434	-9.946	136.261	94.17	0.19%	5.423
243	40545.000	40610.576	32.494	-6.400	65.576	98.69	0.09%	4.399
244	40610.000	40720.634	0.000	-6.400	110.634	107.63	0.15%	3.742
245	40720.634	40833.201	39.000	-6.400	112.567	96.58	0.15%	3.610
246	40833.201	40929.530	0.000	-9.500	96.329	107.63	0.13%	3.496
247	40929.530	41150.000	54.000	-9.500	220.470	91.72	0.30%	3.222
248	41150.000	41205.517	0.000	-8.100	55.517	107.63	0.08%	3.048

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
249	41205.517	41245.428	48.113	-3.502	39.911	93.63	0.05%	3.359
250	41245.428	42313.290	39.585	-3.502	1067.862	96.39	1.46%	4.895
251	41313.290	41403.657	0.000	-6.889	90.367	107.63	0.12%	3.476
252	41403.657	41528.357	54.000	-6.889	124.700	91.72	0.17%	3.222
253	41528.357	41580.000	56.284	-9.975	51.643	90.98	0.07%	6.202
254	41580.000	41640.000	54.000	-9.974	60.000	91.72	0.08%	6.194
255	41640.128	41766.209	42.096	-9.974	126.081	95.58	0.17%	4.534
256	41766.209	42025.547	0.000	-4.233	259.338	107.63	0.35%	3.392
257	42025.547	42103.575	41.000	-4.133	78.028	95.93	0.11%	3.550
258	42103.575	42556.933	0.000	-1.700	453.358	107.63	0.62%	3.428
259	42556.933	42650.000	52.000	6.844	93.067	84.70	0.13%	2.820
260	42650.000	42747.048	52.000	6.844	97.048	84.70	0.13%	2.820
261	42747.048	42830.640	0.000	6.877	83.592	103.76	0.11%	2.759
262	42830.640	42884.188	52.000	6.844	53.548	84.70	0.07%	2.985
263	42884.188	42973.510	50.495	6.844	89.322	85.30	0.12%	6.324
264	42973.510	43099.346	48.315	-7.145	125.836	93.56	0.17%	3.672
265	43099.346	43260.000	36.474	-7.145	160.654	97.40	0.22%	4.560
266	43260.000	43358.343	52.000	-7.145	98.343	92.37	0.13%	4.323
267	43358.343	43465.866	38.443	-7.145	107.523	96.76	0.15%	4.408
268	43465.866	43550.000	0.000	-7.145	84.134	107.63	0.11%	3.515
269	43550.000	43664.757	0.000	1.249	114.757	107.63	0.16%	3.515
270	43664.757	43734.211	30.000	1.249	69.454	99.50	0.09%	3.931
271	43734.211	45000.000	0.000	1.249	1265.789	107.63	1.73%	3.849
272	45000.000	45145.455	22.000	1.249	145.455	102.09	0.20%	4.327
273	45145.455	45444.732	0.000	-1.400	299.277	107.63	0.41%	4.273
274	45444.732	45593.709	22.000	-1.959	148.977	102.09	0.20%	4.327
275	45593.709	46106.151	0.000	-1.959	512.442	107.63	0.70%	4.273
276	46106.151	46198.459	13.000	-1.959	92.308	105.01	0.13%	5.089
277	46198.459	46350.000	0.000	-1.959	151.541	107.63	0.21%	5.064
278	46350.000	46425.068	0.000	9.298	75.068	103.76	0.10%	4.693
279	46425.068	46580.000	13.000	9.298	154.932	100.38	0.21%	4.795

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
280	46580.000	46905.670	28.000	-9.643	325.670	100.15	0.44%	7.455
281	46905.670	47075.000	0.000	-9.643	169.330	107.63	0.23%	3.942
282	47075.000	47250.000	33.000	-8.636	175.000	98.53	0.24%	3.813
283	47250.000	47573.113	0.000	-1.111	323.113	107.63	0.44%	3.721
284	47573.113	47716.623	22.000	-1.111	143.510	102.09	0.20%	4.327
285	47716.623	48050.000	0.000	-1.111	333.377	107.63	0.46%	4.273
286	48050.000	48182.377	0.000	0.000	132.377	107.63	0.18%	4.273
287	48182.377	48282.377	22.000	0.000	100.000	102.09	0.14%	4.327
288	48282.377	48414.086	0.000	0.000	131.709	107.63	0.18%	4.273
289	48414.186	48569.566	22.000	4.500	155.380	96.76	0.21%	3.627
290	48569.566	48659.190	0.000	4.500	89.624	103.76	0.12%	3.976
291	48659.190	48766.602	22.000	-7.235	107.412	102.09	0.15%	5.510
292	48766.602	48870.000	0.000	-7.235	103.398	107.63	0.14%	4.273
293	48870.000	48925.807	0.000	5.783	55.807	103.76	0.08%	4.693
294	48928.807	49100.000	22.000	5.783	171.193	96.76	0.23%	4.049
295	49100.000	49244.481	22.000	-5.330	144.481	102.09	0.20%	4.257
296	49244.481	49380.014	0.000	-5.333	135.533	107.63	0.19%	4.273
297	49380.014	49615.015	30.000	2.277	235.001	99.50	0.32%	3.931
298	49615.014	49709.174	0.000	7.851	94.160	103.76	0.13%	4.516
299	49709.174	49913.905	33.000	7.851	204.731	92.34	0.28%	3.537
300	49913.905	50023.437	39.000	3.062	109.532	89.93	0.15%	5.018
301	50023.437	50114.178	38.353	3.062	90.741	90.18	0.12%	7.231
302	50114.178	50212.621	32.551	3.062	98.443	92.52	0.13%	5.028
303	50212.621	50299.904	33.000	3.620	87.283	92.34	0.12%	7.624
304	50299.904	50391.517	0.000	3.062	91.613	103.76	0.13%	3.413
305	50391.517	50678.038	33.000	-9.998	286.521	98.53	0.39%	4.348
306	50678.038	50850.290	33.042	-9.998	172.252	98.51	0.24%	10.286
307	50850.290	50915.000	0.000	-9.990	64.710	107.63	0.09%	3.719
308	50915.000	51175.000	0.000	2.115	260.000	107.63	0.36%	3.719
309	51175.000	51465.321	0.000	1.259	290.321	107.63	0.40%	3.719
310	51465.321	51664.868	19.000	1.259	199.547	103.06	0.27%	4.525

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
311	51664.868	51850.000	0.000	1.259	185.132	107.63	0.25%	4.481
312	51850.000	51928.643	0.000	3.350	78.643	103.76	0.11%	4.693
313	51925.643	52037.734	22.000	3.350	112.091	96.76	0.15%	4.049
314	52037.734	52171.229	0.000	2.310	133.495	107.63	0.18%	3.515
315	52171.229	52299.663	22.000	2.310	128.434	102.09	0.18%	4.327
316	52229.663	52464.196	0.000	2.310	234.533	107.63	0.32%	4.273
317	52464.196	52601.433	38.000	-6.595	137.237	96.91	0.19%	3.642
318	52601.433	52680.859	0.000	-6.595	79.426	107.63	0.11%	3.531
319	52680.859	52772.936	33.000	-6.595	92.077	98.53	0.13%	3.813
320	52772.936	53835.088	0.000	-6.595	1062.152	107.63	1.45%	3.721
321	52835.088	53000.000	28.000	-6.595	164.912	100.15	0.23%	4.017
322	53000.000	53230.000	26.000	0.629	230.000	100.79	0.31%	6.424
323	53230.000	53450.000	0.000	0.629	220.000	107.63	0.30%	4.043
324	53450.000	54000.000	0.000	3.782	550.000	103.76	0.75%	4.693
325	54000.000	54300.000	0.000	5.233	300.000	103.76	0.41%	4.693
326	54300.000	54391.870	0.000	0.000	91.870	107.63	0.13%	4.656
327	54391.870	54474.113	33.000	0.000	82.243	98.53	0.11%	3.813
328	54474.113	54725.878	33.000	8.400	251.765	92.34	0.34%	4.122
329	54724.878	54903.893	33.000	8.400	179.015	92.34	0.24%	4.122
330	54903.893	55070.000	0.000	8.400	166.107	103.76	0.23%	3.413
331	55070.000	55359.000	0.000	-6.081	289.000	107.63	0.39%	4.656
332	55359.283	55432.477	80.000	-6.081	73.194	83.30	0.10%	2.753
333	55432.477	55554.557	64.231	-6.081	122.080	88.41	0.17%	4.147
334	55554.557	55816.000	0.000	-8.247	261.443	107.63	0.36%	2.797
335	55816.000	56020.000	40.000	-9.942	204.000	96.26	0.28%	3.580
336	56020.000	56174.000	48.000	-1.943	154.000	93.67	0.21%	4.987
337	56174.000	56380.000	0.000	-1.943	206.000	107.63	0.28%	3.212
338	56380.000	56396.480	0.000	5.548	16.480	103.76	0.02%	4.693
339	56396.480	56480.000	57.000	5.458	83.520	82.69	0.11%	2.874
340	56480.000	56650.000	59.590	-6.289	170.000	89.91	0.23%	3.780
341	56650.000	56780.000	27.196	0.000	130.000	100.41	0.18%	3.474

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
342	56780.000	56963.415	0.000	0.000	183.415	107.63	0.25%	3.982
343	56963.415	57100.000	59.430	-3.522	136.585	89.96	0.19%	3.108
344	57100.000	57250.000	33.575	-3.522	150.000	98.34	0.20%	3.712
345	57250.000	57335.384	33.575	0.355	85.384	98.34	0.12%	3.712
346	57335.384	57548.571	0.000	0.355	213.187	107.63	0.29%	3.698
347	57548.571	57650.000	47.000	0.355	101.429	93.99	0.14%	3.387
348	57650.000	57786.664	35.000	0.350	136.664	97.88	0.19%	4.551
349	57786.664	58007.580	0.000	5.333	220.916	103.76	0.30%	4.168
350	58007.580	58315.190	38.000	0.000	307.610	96.91	0.42%	4.071
351	58315.190	59629.912	0.000	0.000	1314.722	107.63	1.80%	3.531
352	58629.912	58721.317	72.000	0.000	91.405	85.89	0.12%	2.879
353	58721.317	58925.000	0.000	0.000	203.683	107.63	0.28%	2.625
354	58925.000	59014.715	24.000	5.405	89.715	95.96	0.12%	3.552
355	59017.715	59145.000	0.000	5.407	127.285	103.76	0.17%	3.855
356	59145.000	59210.000	0.000	1.897	65.000	107.63	0.09%	4.656
357	59210.000	59415.000	52.000	1.897	205.000	92.37	0.28%	3.266
358	59415.000	59600.000	76.000	1.897	185.000	84.59	0.25%	3.818
359	59600.000	59704.750	76.000	8.543	104.750	75.05	0.14%	3.510
360	59704.750	59880.228	0.000	-8.972	175.478	107.63	0.24%	1.976
361	59880.228	59950.000	65.255	9.979	69.772	79.37	0.10%	2.583
362	59950.000	60050.000	48.000	9.979	100.000	86.31	0.14%	3.779
363	60050.000	60153.487	38.000	9.979	103.487	90.33	0.14%	4.429
364	60153.487	60300.671	0.000	9.979	147.184	103.76	0.20%	3.215
365	60300.671	60515.000	28.000	6.979	214.329	94.35	0.29%	3.740
366	60515.000	60729.560	46.041	9.976	214.560	87.09	0.29%	3.913
367	60729.560	60864.035	0.000	9.979	134.475	103.76	0.18%	2.940
368	60864.035	61000.000	28.000	9.979	135.965	94.35	0.19%	3.740
369	61000.000	61158.659	78.471	-7.101	158.659	83.79	0.22%	3.519
370	61158.659	64345.393	0.000	-7.101	3186.734	107.63	4.35%	2.490
371	64345.393	64479.803	48.000	6.344	134.410	86.31	0.18%	2.901
372	64479.803	64697.295	63.525	6.344	217.492	80.07	0.30%	3.976

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
373	64697.295	64782.445	41.482	6.344	85.150	88.93	0.12%	3.531
374	64782.445	64859.621	0.000	6.311	77.176	103.76	0.11%	3.091
375	64859.621	64980.315	67.232	-8.125	120.694	87.43	0.16%	3.154
376	64980.315	65130.338	65.482	8.688	150.023	79.28	0.20%	3.711
377	65130.338	65229.579	71.591	8.688	99.241	76.82	0.14%	4.845
378	65229.579	65449.291	71.261	8.688	219.694	76.96	0.30%	7.746
379	65448.291	65601.442	88.060	8.688	153.151	70.20	0.21%	3.775
380	65601.442	65850.000	72.101	-8.999	248.558	85.86	0.34%	2.769
381	65850.000	65902.996	77.303	-8.999	52.996	84.17	0.07%	5.307
382	65902.996	66012.595	76.180	9.988	109.599	74.98	0.15%	3.545
383	66012.595	66143.145	56.252	9.988	130.550	82.99	0.18%	3.568
384	66143.145	66263.183	68.064	4.516	120.038	78.24	0.16%	4.218
385	66263.183	66480.406	80.000	4.516	217.223	73.44	0.30%	4.147
386	66480.406	66633.555	71.596	9.536	153.149	76.82	0.21%	4.442
387	66633.555	66750.000	53.122	9.697	116.445	84.25	0.16%	3.673
388	66750.000	66854.047	63.000	9.697	104.047	80.28	0.14%	4.417
389	66854.047	66950.000	74.121	-0.769	95.953	85.20	0.13%	4.146
390	66950.000	67076.763	71.360	-0.769	126.763	86.10	0.17%	5.937
391	67076.763	67178.161	65.273	-0.769	101.398	88.07	0.14%	5.151
392	67178.161	67276.726	0.000	-8.378	98.565	107.63	0.13%	2.773
393	67276.726	67453.977	57.000	7.597	177.251	82.69	0.24%	2.725
394	67453.977	67543.270	0.000	7.597	89.293	103.76	0.12%	2.617
395	67543.270	67624.301	57.132	7.597	81.031	82.64	0.11%	2.871
396	67624.301	67860.000	50.000	-4.231	235.699	93.02	0.32%	3.396
397	67860.000	68087.427	39.300	9.927	227.427	89.80	0.31%	4.735
398	68087.427	68277.838	0.000	9.927	190.411	103.76	0.26%	3.168
399	68277.838	68424.394	31.415	-3.824	146.556	99.04	0.20%	4.454
400	68424.394	68570.264	38.000	7.958	145.870	90.33	0.20%	3.772
401	68570.264	68679.165	55.274	7.958	108.901	83.38	0.15%	3.913
402	68679.165	68806.443	68.355	-7.125	127.278	87.07	0.17%	4.482
403	68806.443	69000.000	47.300	-7.125	193.557	93.89	0.26%	3.893

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
404	69000.000	69218.287	44.000	7.298	218.287	87.92	0.30%	4.108
405	69218.287	69355.143	46.355	-9.770	136.856	94.20	0.19%	3.988
406	69355.143	69494.427	66.401	-9.770	139.284	87.70	0.19%	4.026
407	69494.427	69621.777	0.000	9.965	127.350	103.76	0.17%	2.988
408	69621.777	69716.027	66.395	9.965	94.250	78.91	0.13%	2.688
409	69716.027	69814.163	70.162	9.965	98.136	77.40	0.13%	5.330
410	69814.163	69993.108	74.036	9.965	178.945	75.84	0.24%	5.282
411	69993.108	69979.355	73.164	6.898	-13.753	76.19	0.02%	6.762
412	69979.355	70112.134	52.586	6.898	132.779	84.46	0.18%	3.551
413	70112.134	70207.907	79.145	9.979	95.773	73.79	0.13%	3.389
414	70207.907	70323.287	55.473	9.979	115.380	83.30	0.16%	3.368
415	70323.287	70427.427	0.000	9.979	104.140	103.76	0.14%	2.660
416	70427.427	70950.000	58.395	9.341	522.573	82.13	0.71%	2.844
417	70950.000	71200.000	33.300	-6.431	250.000	98.43	0.34%	2.899
418	71200.000	71337.773	26.000	0.000	137.773	100.79	0.19%	5.103
419	71337.773	71551.200	0.000	-10.000	213.427	107.63	0.29%	4.043
420	71551.200	71810.367	22.000	-10.000	259.167	102.09	0.35%	4.327
421	71810.367	72489.630	0.000	-1.980	679.263	107.63	0.93%	4.273
422	72489.630	72558.519	16.000	-1.980	68.889	104.03	0.09%	4.769
423	72558.519	73010.000	0.000	-10.000	451.481	107.63	0.62%	4.735
424	73010.880	73122.900	33.000	-10.000	112.020	98.53	0.15%	3.813
425	73122.900	73304.738	0.000	-10.000	181.838	107.63	0.25%	3.721
426	73304.738	73458.475	33.000	-3.422	153.737	98.53	0.21%	3.813
427	73458.475	73725.000	0.000	-3.422	266.525	107.63	0.36%	3.721
428	73725.000	73837.993	0.000	4.800	112.993	103.76	0.15%	4.693
429	73837.993	73967.412	33.000	4.800	129.419	92.34	0.18%	3.537
430	73967.412	74196.684	0.000	1.143	229.272	107.63	0.31%	3.098
431	74196.684	74380.000	33.000	1.143	183.316	98.53	0.25%	3.813
432	74380.000	74471.860	40.553	-8.629	91.860	96.08	0.13%	5.069
433	74471.860	74674.252	0.000	-6.831	202.392	107.63	0.28%	3.443
434	74674.252	74745.388	26.024	-6.831	71.136	100.79	0.10%	4.110

Alignment Geometric Modulus

4.344

Geometric Modulus Data Sheet

No.	Begin Station	End Station	Degree	Grade	Length	Speed	Weight	Geometric Modulus
435	74745.388	74953.714	0.000	-8.659	208.326	107.63	0.28%	4.042
436	74953.714	75000.000	33.000	-8.659	46.286	98.53	0.06%	3.813
437	75000.000	75250.000	0.000	-8.659	250.000	107.63	0.34%	3.721
438	75250.000	75289.000	0.000	4.800	39.000	103.76	0.05%	4.693
439	75289.605	75461.432	33.000	4.800	171.827	92.34	0.23%	3.537
440	75461.432	75500.000	0.000	4.800	38.568	103.76	0.05%	3.413
441	75500.000	75679.077	0.000	-4.080	179.077	107.63	0.24%	4.656
442	75679.077	75921.273	20.000	-4.080	242.196	102.74	0.33%	4.455
443	75921.273	76244.359	0.000	0.000	323.086	107.63	0.44%	4.407
444	76244.359	76409.879	20.000	-4.103	165.520	102.74	0.23%	4.455
445	76409.879	76744.452	0.000	-6.911	334.573	107.63	0.46%	4.407
446	76744.452	76850.000	40.000	-9.976	105.548	96.26	0.14%	3.580
447	76850.000	77000.000	60.000	-9.976	150.000	89.78	0.20%	4.050

ภาคผนวก ก.

ข้อมูลอุบัติเหตุ

ทางหลวงหมายเลข 105

ตอน ตาก -แม่สอด

ปี พ.ศ.2538 ถึง ปี พ.ศ.2540

ข้อมูลอุบัติเหตุที่เกิดขึ้นในทางหลวงหมายเลข 105 ตอน ตาก - แม่สอด

	2538	2539	2540		2538	2539	2540
1	11+395	11+650	16+875	36	40+675	40+725	40+820
2	12+225	12+375	16+975	37	40+870	41+275	41+080
3	13+645	13+265	17+350	38	41+125	43+325	41+480
4	13+790	13+435	17+435	39	42+560	50+775	42+370
5	13+905	15+475	17+875	40	42+600	51+500	42+375
6	13+919	15+500	18+085	41	56+060	52+390	57+210
7	17+750	15+670	18+105	42	56+875	52+560	57+225
8	17+875	17+765	18+115	43	57+000	54+600	57+230
9	20+145	19+325	20+015	44	58+745	54+625	57+240
10	20+145	19+450	20+050	45	59+000	54+795	57+280
11	20+520	19+670	20+100	46	59+090	56+890	58+975
12	21+605	22+495	21+695	47	59+270	58+350	59+175
13	22+500	22+530	22+425	48	59+270	58+380	59+175
14	22+535	22+675	22+480	49	59+325	58+450	59+225
15	22+925	22+835	22+525	50	59+725	59+375	59+225
16	24+925	22+975	22+675	51	60+730	61+620	60+820
17	25+650	23+225	22+975	52	61+625	61+655	61+550
18	26+905	23+255	23+090	53	61+660	61+800	61+605
19	27+450	24+830	23+850	54	62+050	61+960	61+650
20	27+600	25+550	24+960	55	66+030	62+100	61+800
21	27+625	25+650	25+080	56	66+575	62+350	62+100
22	27+910	26+250	25+100	57	66+725	62+380	62+215
23	29+775	29+875	25+875	58	66+750	65+375	62+975
24	31+550	29+935	25+965	59	67+035	69+000	65+000
25	32+050	29+975	29+150	60	68+900	69+060	65+090
26	33+425	31+605	29+525	61	69+075	69+100	65+325
27	33+475	31+650	30+525	62	69+100	69+105	66+752
28	34+290	33+280	31+550	63	70+660	69+200	66+770
29	35+775	33+625	31+800	64	70+675	69+200	68+275
30	38+900	39+000	32+100	65	72+600	71+525	68+470
31	39+075	39+060	32+215	66	73+415		68+650
32	39+100	39+100	33+350	67	74+900		69+650
33	39+550	39+105	38+925	68	78+675		70+640
34	39+550	39+200	39+050	69			70+925
35	40+660	39+200	39+540				

ประวัติผู้เขียน

ชื่อ	นายจิระพงศ์ เทพพิทักษ์
วัน เดือน ปี เกิด	3 พฤษภาคม 2516
ประวัติการศึกษา	สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนเบญจมราชรังสฤษฎิ์ ปี 2534 สำเร็จการศึกษาปริญญาวิศวกรรมศาสตรบัณฑิต สาขาวิศวกรรมโยธา มหาวิทยาลัยเชียงใหม่ ปี 2538
ประวัติการทำงาน	2538 วิศวกรประจำบริษัทปิโตรทรีทซ์ จำกัด 2539 วิศวกรโยธา 3 ประจำสำนักสำรวจและออกแบบ กรมทางหลวง 2541 วิศวกรโยธา 4 ประจำส่วนสำรวจและออกแบบ สำนักทางหลวงที่ 4 (พิษณุโลก) กรมทางหลวง 2544 วิศวกรโยธา 5 ประจำส่วนแผนงาน สำนักทางหลวงที่ 4 (พิษณุโลก) กรมทางหลวง