

Appendix B

As Built Geometrics Review



West Three Forks to Bear Canyon

Table 1: As Builts Used

ID	As-built
B	1963, I-IG-90-6(5)276
D	1964, I-IG-90-6(10)282
G	1966, I-IG-90-6(14)287 U1
H	1966, I-90-6(13)296
N	1969, I-IG-90-6(21)275
O	1969, I-90-5(16)272
P	1971, I-IG-90-6(27)305
Q	1971, I-IG-90-6(23)304 U2
R	1971, I-IG-90-6(23)304 U1
U	1985, IR-90-6(45)307
W	1990, IR 90-6(49)301
Z	1995, HDP - IR 9113(001) F
2	1999, IM HDP 9240(001)F
5	2013, 6865000
7	2014, IM 90-6(113)306
8	2016, IM-MT STPU 90-6(112)300
11	1962, I-IG-90-6(2)309

Mainline Horizontal Alignment

Table 2: Horizontal Alignment Design Standards

Design Speed (mph):	80	75	65
SSD (ft):	910	820	645
Radius (ft):	2670	2210	1480
Length (ft)	1200	-	-
Superelevation Rate:	8%	8%	8%

Table 3: Mainline Horizontal Alignment Summary

ID	STATION	RP	RADIUS (FT)	LENGTH (FT)	DEFLECTION ANGLE	SUPER-ELEVATION	MIN. SIGHT. OBST. (FT)	POSTED SPEED (MPH)	DESIGN SPEED MET (MPH) BASED ON RADIUS	DESIGN SPEED MET (MPH) BASED ON LENGTH (RURAL)	UNDER 8% SUPER-ELEVATION	DESIGN SPEED MET (MPH)	MEETS OTHER STANDARDS
O	1085+90.30	276.86	4584.00	4881.30	61°01'	0.04	22.57	80	80	80	Yes	80	Yes
N	1142+79.00	277.90	3819.72	2566.67	38°30'	0.04	27.07	80	80	80	Yes	80	Yes
B	160+16.65	279.07	7640.00	2871.05	21°32'58"	0.02	13.55	80	80	80	Yes	80	Yes
B	194+74.26	279.70	11460.00	2609.23	13°02'46"	0.02	9.03	80	80	80	Yes	80	Yes
2	347+40.68	280.89	4583.99	4387.73	69°45'	0.035	22.57	80	80	80	Yes	80	Yes
B	318+85.83	282.03	4584.00	2683.29	33°32'28"	0.035	22.57	80	80	80	Yes	80	Yes
B	355+39.28	282.72	4584.00	3701.89	46°16'25"	0.035	22.57	80	80	80	Yes	80	Yes
B	406+07.97	283.73	4584.00	1426.72	17°50'03"	0.035	22.57	80	80	80	Yes	80	Yes
D	522+69.02	285.93	7640.00	1266.39	9°29'52"	0.02	13.55	80	80	80	Yes	80	Yes
D	622+43.87	287.82	4584.00	2192.17	27°24'08"	0.035	22.57	80	80	80	Yes	80	Yes
D	659+67.33	288.52	4584.00	3630.30	45°22'44"	0.035	22.57	80	80	80	Yes	80	Yes
G	729+26.33	289.84	5730.00	2701.01	27°00'37"	0.03	18.06	80	80	80	Yes	80	Yes
G	1088+26.32	296.64	4584.00	3599.66	44°59'45"	0.035	22.57	80	80	80	Yes	80	Yes
G	1139+78.93	297.61	4584.00	4387.39	54°50'33"	0.035	22.57	75	80	-	Yes	80	Yes
W	1356+60.40	301.73	11460.00	1968.30	9°50'30"	- (a)	9.03	75	80	-	-	80	Yes
Z	1545+97.93	305.30	4297.18	2747.85	36°38'17"	0.03	24.07	65	80	-	Yes	80	Yes
W	1598+33.00	306.31	4297.50	5231.50	69°45'	- (a)	24.07	65	80	-	-	80	Yes
U	68+12.90	307.32	22920.00	1367.00	3°25'03"	- (a)	4.52	65	80	-	-	80	Yes
U	113+82.90	308.15	5730.00	3767.90	37°40'45"	- (a)	18.06	65	80	-	-	80	Yes
U	151+58.10	308.86	1910.00	1203.60	27°06'30"	- (a)	53.95	65	70	-	-	70	Yes
U	179+93.40	309.44	2292.00	2866.50	65°24'45"	- (a)	45.02	65	75	-	-	75	Yes
U	281+91.10	311.37	5730.00	665.00	6°39'	- (a)	18.06	65	80	-	-	80	Yes
R	337+66.10	313.02	2449.20	1810.00	41°31'30"	- (a)	42.15	65	75	-	-	75	Yes
R	351+61.00	313.27	11460.00	500.00	02°30'	- (a)	9.03	65	80	-	-	80	Yes

(a) Information unavailable

Mainline Vertical Alignment

Table 4: Mainline Vertical Alignment Design Standards

Design Speed (mph):		80	75	65
SSD (ft):		910	820	645
K-Value:	Crest	84	151	247
	Sag	96	136	181
Maximum Grade (%):	Level	3%	5%	5%
	Rolling	4%	6%	6%
	Mountainous	5%	7%	7%
Length (ft):		240	-	-

Table 5: Mainline Vertical Alignment Summary

ID	STATION	RP	TYPE	LENGTH (FT)	GRADE BACK	GRADE AHEAD	SSD	K-VALUE	TERRAIN BASED ON MAXIMUM GRADE	POSTED SPEED	DESIGN SPEED MET (MPH) PER K VALUE	DESIGN SPEED MET (MPH) PER SSD	DESIGN SPEED MET (MPH)	DIRECTION OF TRAVEL
O	987+00.00	274.90	crest	800	-1.00%	-1.64%	2085.94	1250.00	Level	80	80	80	80	BOTH
O	1007+00.00	275.26	sag	800	-1.64%	-0.20%	-	555.56	Level	80	80	-	80	BOTH
O	1042+00.00	276.11	crest	800	-0.20%	-1.52%	1214.95	604.23	Level	80	80	80	80	BOTH
O	1101+12.50	277.13	sag	800	-1.52%	0.25%	-	450.96	Level	80	80	-	80	BOTH
N	1129+40.00	277.66	sag	1000	0.25%	2.00%	-	571.43	Level	80	80	-	80	BOTH
N	1143+77.00	277.92	crest	1600	2.00%	-3.06%	825.81	316.02	Level	80	75	75	75	WESTBOUND
N	1143+77.00	277.92	crest	1600	2.00%	-2.94%	836.20	324.02	Level	80	75	75	75	EASTBOUND
N	1158+50.00	278.19	sag	1000	-3.06%	0.21%	-	305.90	Level	80	80	-	80	WESTBOUND
N	1158+50.00	278.19	sag	1000	-2.94%	0.21%	-	318.07	Level	80	80	-	80	EASTBOUND
N	1174+50.00	278.49	sag	800	0.21%	2.66%	-	326.00	Level	80	80	-	80	BOTH
B	147+25.00	278.80	crest	1400	2.66%	-2.71%	750.07	260.71	Level	80	70	70	70	BOTH
B	162+70.00	279.11	sag	900	-2.71%	0.40%	-	289.39	Level	80	80	-	80	BOTH
B	185+25.00	279.52	crest	800	0.40%	-0.41%	1732.10	987.65	Level	80	80	80	80	BOTH
B	200+00.00	279.79	sag	800	-0.41%	0.40%	-	987.65	Level	80	80	-	80	BOTH
B	218+75.00	280.14	sag	800	0.40%	1.98%	-	506.33	Level	80	80	-	80	BOTH
B	229+00.00	280.33	crest	1200	1.98%	-2.41%	768.04	273.35	Level	80	70	70	70	BOTH
B	238+25.00	280.51	sag	650	-2.41%	0.24%	-	244.89	Level	80	80	-	80	BOTH
B	267+00.00	281.06	crest	800	0.24%	-0.20%	2829.09	1800.99	Level	80	80	80	80	BOTH
B	279+00.00	281.29	sag	800	-0.20%	0.53%	-	1095.89	Level	80	80	-	80	BOTH
B	316+50.00	281.98	sag	1000	0.53%	2.20%	-	598.80	Level	80	80	-	80	WESTBOUND
B	317+00.00	281.99	sag	1000	0.53%	2.30%	-	564.97	Level	80	80	-	80	EASTBOUND
B	354+50.00	282.70	crest	1000	2.20%	-1.36%	778.58	280.90	Level	80	70	70	70	WESTBOUND
B	355+25.00	282.72	crest	1400	2.30%	-1.53%	888.16	365.54	Level	80	75	75	75	EASTBOUND
B	384+75.00	283.35	sag	1600	-1.53%	2.80%	-	369.52	Level	80	80	-	80	EASTBOUND
B	385+50.00	283.35	sag	1500	-1.36%	3.00%	-	344.04	Level	80	80	-	80	WESTBOUND
B	404+25.00	283.70	sag	1200	2.80%	3.00%	-	6000.00	Level	80	80	-	80	EASTBOUND
B	421+00.00	284.00	crest	1600	3.00%	-3.00%	758.60	266.67	Level	80	70	70	70	BOTH
B	439+25.00	284.35	sag	900	-3.00%	2.64%	-	159.57	Level	80	65	-	65	WESTBOUND
B	439+25.00	284.35	sag	950	-3.00%	2.48%	-	173.36	Level	80	65	-	65	EASTBOUND
D	452+75.00	284.60	crest	1400	2.64%	-2.68%	753.59	263.16	Level	80	70	70	70	WESTBOUND
D	453+00.00	284.61	crest	1400	2.48%	-2.80%	756.44	265.15	Level	80	70	70	70	EASTBOUND
D	470+00.00	284.93	sag	1000	-2.80%	2.48%	-	189.39	Level	80	70	-	70	EASTBOUND
D	470+75.00	284.94	sag	900	-2.68%	2.43%	-	176.13	Level	80	65	-	65	WESTBOUND
D	500+50.00	285.51	crest	2300	2.48%	-1.61%	1101.61	562.35	Level	80	80	80	80	EASTBOUND
D	500+50.00	285.51	crest	2400	2.43%	-1.47%	1152.39	615.38	Level	80	80	80	80	WESTBOUND
D	518+00.00	285.84	sag	900	-1.61%	0.35%	-	459.18	Level	80	80	-	80	EASTBOUND
D	518+00.00	285.84	sag	800	-1.47%	0.35%	-	439.56	Level	80	80	-	80	WESTBOUND
D	537+00.00	286.20	crest	800	0.35%	-0.80%	1338.26	695.65	Level	80	80	80	80	BOTH
D	549+00.00	286.43	sag	800	-0.80%	1.21%	-	398.01	Level	80	80	-	80	BOTH
D	574+00.00	286.90	crest	1000	1.21%	-1.47%	897.01	372.86	Level	80	75	75	75	BOTH
D	589+00.00	287.18	sag	800	-1.47%	0.50%	-	405.68	Level	80	80	-	80	BOTH
D	608+50.00	287.55	crest	800	0.50%	-0.20%	1941.43	1142.86	Level	80	80	80	80	BOTH
D	636+50.00	288.08	sag	800	-0.20%	0.90%	-	727.27	Level	80	80	-	80	BOTH
D	653+50.00	288.40	crest	800	0.90%	0.20%	1941.43	1142.86	Level	80	80	80	80	BOTH
D	679+00.00	288.89	sag	800	0.20%	2.82%	-	305.34	Level	80	80	-	80	BOTH
D	687+00.00	289.04	crest	800	2.82%	0.00%	782.43	283.69	Level	80	70	70	70	BOTH
D	700+00.00	289.29	crest	800	0.00%	-3.00%	758.60	266.67	Level	80	70	70	70	BOTH
G	708+75.00	289.45	sag	800	-3.00%	0.15%	-	253.97	Level	80	80	-	80	BOTH

ID	STATION	RP	TYPE	LENGTH (FT)	GRADE BACK	GRADE AHEAD	SSD	K-VALUE	TERRAIN BASED ON MAXIMUM GRADE	POSTED SPEED	DESIGN SPEED MET (MPH) PER K VALUE	DESIGN SPEED MET (MPH) PER SSD	DESIGN SPEED MET (MPH)	DIRECTION OF TRAVEL
G	722+50.00	289.71	sag	800	-0.15%	0.48%	-	1269.84	Level	80	80	-	80	BOTH
G	750+00.00	290.23	crest	800	0.48%	-0.23%	1919.72	1126.76	Level	80	80	80	80	BOTH
G	784+00.00	290.88	sag	800	-0.23%	0.32%	-	1454.55	Level	80	80	-	80	BOTH
G	813+25.00	291.43	sag	800	0.32%	2.96%	-	303.03	Level	80	80	-	80	BOTH
G	824+00.00	291.63	crest	1300	2.96%	-1.92%	758.05	266.28	Level	80	70	70	70	BOTH
G	834+50.00	291.83	sag	800	-1.92%	0.54%	-	324.94	Level	80	80	-	80	BOTH
G	860+00.00	292.32	no curve, grade break	-	0.54%	0.70%	-	-	Level	80	-	-	-	BOTH
G	880+00.00	292.69	no curve, grade break	-	0.70%	0.60%	-	-	Level	80	-	-	-	BOTH
G	896+50.00	293.01	sag	800	0.60%	2.81%	-	361.99	Level	80	80	-	80	BOTH
G	907+50.00	293.22	crest	1250	2.81%	-1.95%	752.87	262.66	Level	80	70	70	70	BOTH
G	917+50.00	293.40	sag	700	-1.95%	0.52%	-	283.52	Level	80	80	-	80	BOTH
G	950+00.00	294.02	no curve, grade break	-	0.52%	0.50%	-	-	Level	80	-	-	-	BOTH
G	985+00.00	294.68	no curve, grade break	-	0.50%	0.40%	-	-	Level	80	-	-	-	BOTH
G	995+00.00	294.87	no curve, grade break	-	0.40%	0.50%	-	-	Level	80	-	-	-	BOTH
G	1021+00.00	295.36	no curve, grade break	-	0.50%	0.37%	-	-	Level	80	-	-	-	BOTH
G	1035+00.00	295.63	sag	800	0.37%	0.70%	-	2424.24	Level	80	80	-	80	BOTH
G	1048+00.00	295.88	crest	800	0.70%	0.40%	3996.67	2666.67	Level	80	80	80	80	BOTH
G	1068+00.00	296.26	sag	800	0.40%	0.66%	-	3076.92	Level	80	80	-	80	BOTH
G	1081+00.00	296.50	no curve, grade break	-	0.66%	0.59%	-	-	Level	80	-	-	-	BOTH
G	1107+00.00	296.99	no curve, grade break	-	0.59%	0.56%	-	-	Level	80	-	-	-	BOTH
G	1127+25.00	297.38	sag	800	0.56%	0.78%	-	3636.36	Level	75	80	-	80	BOTH
G	1154+50.00	297.89	crest	800	0.78%	0.45%	3669.70	2424.24	Level	75	80	80	80	BOTH
G	1183+00.00	298.43	no curve, grade break	-	0.45%	0.30%	-	-	Level	75	-	-	-	BOTH
G	1203+00.00	298.81	no curve, grade break	-	0.30%	0.25%	-	-	Level	75	-	-	-	BOTH
H	1224+00.00	299.21	no curve, grade break	-	0.25%	0.35%	-	-	Level	75	-	-	-	BOTH
H	1244+00.00	299.59	no curve, grade break	-	0.35%	0.20%	-	-	Level	75	-	-	-	BOTH
H	1269+00.00	300.07	crest	800	0.20%	0.00%	5795.00	4000.00	Level	75	80	80	80	BOTH
H	1293+50.00	300.53	no curve, grade break	-	0.00%	0.15%	-	-	Level	75	-	-	-	BOTH
H	1307+70.00	300.80	no curve, grade break	-	0.15%	0.00%	-	-	Level	75	-	-	-	BOTH
H	1341+50.00	301.44	sag	800	0.00%	0.50%	-	1600.00	Level	75	80	-	80	BOTH
H	1356+00.00	301.71	no curve, grade break	-	0.50%	0.65%	-	-	Level	75	-	-	-	BOTH
H	1386+00.00	302.28	sag	800	0.65%	1.15%	-	1600.00	Level	75	80	-	80	BOTH
H	1426+50.00	303.05	crest	800	1.15%	0.30%	1669.41	941.18	Level	75	80	80	80	BOTH
H	1443+00.00	303.36	sag	800	0.30%	3.00%	-	296.30	Level	75	80	-	80	BOTH
H	1456+50.00	303.62	crest	1250	3.00%	-1.62%	764.53	270.86	Level	65	70	70	70	BOTH
H	1468+25.00	303.84	sag	800	-1.62%	0.88%	-	320.77	Level	65	80	-	80	BOTH
H	1503+00.00	304.50	crest	800	0.88%	0.34%	2398.15	1481.48	Level	65	80	80	80	BOTH
H	1527+50.00	304.96	sag	800	0.34%	1.09%	-	1065.87	Level	65	80	-	80	BOTH
H	1599+50.00	306.33	crest	800	1.09%	0.56%	2437.54	1510.69	Level	65	80	80	80	BOTH
H	1621+00.00	306.73	crest	800	0.56%	0.39%	6747.06	4705.88	Level	65	80	80	80	BOTH
H	1632+10.00	306.94	crest	800	0.39%	0.00%	3166.67	2051.28	Level	65	80	80	80	BOTH
R	69+18.60	307.34	sag	800	0.00%	2.98%	-	268.46	Level	65	80	-	80	BOTH
R	86+58.60	307.66	crest	1300	2.98%	-1.43%	797.59	294.78	Level	65	70	70	70	BOTH
R	115+18.60	308.18	sag	800	-1.43%	0.60%	-	394.09	Level	65	80	-	80	BOTH
R	142+00.00	308.68	sag	1050	0.60%	3.27%	-	393.11	Level	65	80	-	80	BOTH
R	159+75.00	309.06	crest	1700	3.27%	-0.20%	1028.07	489.77	Level	65	80	80	80	BOTH
R	173+00.00	309.31	crest	900	-0.20%	-1.50%	1280.00	692.31	Level	65	80	80	80	EASTBOUND
R	176+00.00	309.37	crest	1200	-0.20%	-1.50%	1430.00	923.08	Level	65	80	80	80	WESTBOUND
R	185+00.00	309.54	sag	800	-1.50%	0.63%	-	375.23	Level	65	80	-	80	EASTBOUND

ID	STATION	RP	TYPE	LENGTH (FT)	GRADE BACK	GRADE AHEAD	SSD	K-VALUE	TERRAIN BASED ON MAXIMUM GRADE	POSTED SPEED	DESIGN SPEED MET (MPH) PER K VALUE	DESIGN SPEED MET (MPH) PER SSD	DESIGN SPEED MET (MPH)	DIRECTION OF TRAVEL
R	187+00.00	309.58	sag	800	-1.50%	0.69%	-	365.30	Level	65	80	-	80	WESTBOUND
R	201+00.00	309.84	sag	800	0.63%	2.90%	-	352.73	Level	65	80	-	80	EASTBOUND
R	204+00.00	309.90	sag	800	0.69%	2.05%	-	588.24	Level	65	80	-	80	WESTBOUND
R	214+00.00	310.09	crest	1000	2.90%	0.85%	1026.34	487.80	Level	65	80	80	80	EASTBOUND
R	216+00.00	310.12	crest	900	2.05%	0.55%	1169.33	600.00	Level	65	80	80	80	WESTBOUND
R	225+00.00	310.30	sag	900	0.55%	3.57%	-	298.51	Level	65	80	-	80	WESTBOUND
R	226+00.00	310.31	sag	1000	0.85%	2.53%	-	593.82	Level	65	80	-	80	EASTBOUND
R	239+00.00	310.56	crest	1000	2.53%	0.95%	1181.19	631.31	Level	65	80	80	80	EASTBOUND
R	239+00.00	310.56	crest	1000	3.57%	0.95%	908.43	382.41	Level	65	75	75	75	WESTBOUND
R	267+00.00	311.09	sag	800	0.95%	1.66%	-	1126.76	Level	65	80	-	80	BOTH
R	287+08.00	312.12	crest	800	1.66%	0.80%	1654.65	930.23	Level	65	80	80	80	WESTBOUND
R	292+00.00	312.21	sag	800	1.66%	0.55%	-	720.72	Level	65	80	-	80	EASTBOUND
R	309+00.00	312.51	crest	800	0.55%	-1.41%	950.51	408.16	Level	65	80	80	80	EASTBOUND
R	309+00.00	312.51	crest	800	0.80%	-1.41%	888.24	361.99	Level	65	75	75	75	WESTBOUND
R	324+00.00	312.78	sag	800	-1.41%	0.24%	-	484.85	Level	65	80	-	80	EASTBOUND
R	324+00.00	312.78	sag	800	-1.41%	0.23%	-	486.74	Level	65	80	-	80	WESTBOUND
R	343+70.00	313.13	sag	800	0.24%	2.53%	-	349.34	Level	65	80	-	80	EASTBOUND
R	344+20.00	313.14	sag	800	0.23%	2.53%	-	348.42	Level	65	80	-	80	WESTBOUND
11	220+00.00	313.25	crest	940	2.53%	1.50%	1517.57	912.62	Level	65	80	80	80	BOTH
11	231+00.00	313.45	crest	300	1.50%	0.03%	881.53	203.39	Level	65	65	75	65	BOTH

Interchange Horizontal Alignment

Table 6: Interchange Horizontal Alignment Design Standards

Design Speed (mph):	15	25	30	45	55	60
SSD (ft):	80	155	200	360	495	570
Radius (ft):	80	140	220	590	960	1200
Superelevation Rate:	8%	8%	8%	8%	8%	8%

Table 7: Interchange Horizontal Alignment Summary

ID	INTERCHANGE	TYPE OF RAMP	DESIGN SPEED	LEG OF INTERCHANGE	RADIUS (FT)	LENGTH OF CURVE (FT)	DEFLECTION ANGLE	SUPERELEVATION	MIN. SIGHT. OBST. (FT)	UNDER 8% SUPERELEVATION	DESIGN SPEED MET (MPH) BASED ON RADIUS
O	West Three Forks Interchange	Diagonal	60	Westbound On	1528.00	512.90	19°14'00"	0.05	67.25	Yes	65
O	West Three Forks Interchange	Diagonal	60	Westbound Off	2292.00	858.80	14°38'45"	0.04	45.02	Yes	75
O	West Three Forks Interchange	Diagonal	60	Eastbound On	1637.10	486.80	17°02'15"	0.05	62.83	Yes	65
O	West Three Forks Interchange	Diagonal	60	Eastbound Off	2083.60	652.10	17°56'01"	0.04	49.49	Yes	70
N	Three Forks Interchange	Diagonal	60	Westbound On	573.00	306.70	30°40'00"	0.04	171.38	Yes	40
N	Three Forks Interchange	Diagonal	60	Westbound On	1146.00	442.20	22°06'37"	0.07	89.16	Yes	55
N	Three Forks Interchange	Diagonal	60	Westbound Off	1146.00	527.20	26°31'35"	0.05	89.16	Yes	55
N	Three Forks Interchange	Diagonal	60	Eastbound On	1041.80	400.00	22°00'00"	0.07	97.80	Yes	55

ID	INTERCHANGE	TYPE OF RAMP	DESIGN SPEED	LEG OF INTERCHANGE	RADIUS (FT)	LENGTH OF CURVE (FT)	DEFLECTION ANGLE	SUPERELEVATION	MIN. SIGHT. OBST. (FT)	UNDER 8% SUPERELEVATION	DESIGN SPEED MET (MPH) BASED ON RADIUS
N	Three Forks Interchange	Diagonal	60	Eastbound On	764.00	344.50	25°50'08"	0.03	131.55	Yes	50
N	Three Forks Interchange	Diagonal	60	Eastbound Off	3820.00	460.00	6°54'00"	0.04	27.07	Yes	80
N	Three Forks Interchange	Diagonal	60	Eastbound Off	1146.00	436.60	21°49'51"	0.07	89.16	Yes	55
B	Logan Interchange	Diagonal	60	Westbound On	1637.14	365.92	12°48'26"	0.04	62.83	Yes	65
B	Logan Interchange	Diagonal	60	Westbound On	2292.00	660.01	16°30'01"	0.04	45.02	Yes	75
B	Logan Interchange	Diagonal	60	Westbound On	4584.00	889.14	11°06'51"	0.035	22.57	Yes	80
B	Logan Interchange	Diagonal	60	Westbound Off	5730.00	366.80	03°40'05"	0.02	18.06	Yes	80
B	Logan Interchange	Diagonal	60	Eastbound On	310.00	249.75	46°09'48"	0.08	278.14	Yes	30
B	Logan Interchange	Diagonal	60	Eastbound On	764.00	306.67	23°00'00"	0.08	131.55	Yes	50
B	Logan Interchange	Diagonal	60	Eastbound Off	1910.00	560.05	16°48'06"	0.05	53.95	Yes	70
D	Manhattan Interchange	Diagonal	60	Westbound On	1146.00	767.00	38°21'00"	0.07	89.16	Yes	55
D	Manhattan Interchange	Diagonal	60	Westbound On	4584.00	889.15	11°06'52"	0.035	22.57	Yes	80
D	Manhattan Interchange	Diagonal	60	Westbound Off	1146.00	549.79	27°29'22"	0.07	89.16	Yes	55
D	Manhattan Interchange	Diagonal	60	Eastbound On	1146.00	260.45	13°01'20"	0.07	89.16	Yes	55
D	Manhattan Interchange	Diagonal	60	Eastbound Off	2292.00	325.17	08°07'45"	0.04	45.02	Yes	75
D	Manhattan Interchange	Diagonal	60	Eastbound Off	881.54	401.04	26°04'04"	0.06	114.86	Yes	50
5	Amsterdam Rd Interchange	Semidirectional	55	Eastbound On	136.00	199.29	83°57'38"	0.04	269.17	Yes	20
5	Amsterdam Rd Interchange	Semidirectional	55	Eastbound On	395.00	294.85	42°46'08"	0.04	234.36	Yes	35
5	Amsterdam Rd Interchange	Semidirectional	55	Eastbound On	4800.00	474.75	5°40'01"	- (a)	21.55	-	80
5	Amsterdam Rd Interchange	Semidirectional	55	Eastbound On	4200.00	1010.74	13°47'18"	- (a)	24.63	-	80
5	Amsterdam Rd Interchange	Semidirectional	55	Eastbound On	7900.00	636.78	4°37'06"	- (a)	13.10	-	80
5	Amsterdam Rd Interchange	Diagonal	30	Eastbound Off	825.00	680.04	36°48'39"	0.06	122.34	Yes	50
2	Jackrabbit Ln Interchange	Diagonal	55	Westbound On	2864.63	1376.57	12°58'28"	0.04	36.06	Yes	80
2	Jackrabbit Ln Interchange	Diagonal	55	Westbound On	4525.20	974.84	12°42'24"	0.04	22.86	Yes	80
2	Jackrabbit Ln Interchange	Diagonal	55	Westbound Off	1558.40	514.99	13°30'23"	0.06	65.96	Yes	65
2	Jackrabbit Ln Interchange	Diagonal	55	Westbound Off	820.21	594.32	24°19'21"	0.04	123.02	Yes	50
2	Jackrabbit Ln Interchange	Loop	25	Eastbound On	393.70	1868.96	271°59'36"	0.08	234.96	Yes	35
5	Jackrabbit Ln Interchange	Loop	25	Eastbound On	1106.00	394.15	20°25'07"	0.08	92.29	Yes	55
5	Jackrabbit Ln Interchange	Diagonal	55	Eastbound On	2400.00	1230.00	29°21'51"	0.06	43.01	Yes	75
8	Airway Blvd Interchange	Diagonal	55	Westbound On	506.00	202.37	22°54'52"	0.02	191.18	Yes	40
8	Airway Blvd Interchange	Diagonal	55	Westbound On	2040.00	598.68	13°46'53"	0.05	50.54	Yes	70
8	Airway Blvd Interchange	Diagonal	55	Westbound Off	5050.00	1171.60	13°17'33"	0.04	20.49	Yes	80
9	Airway Blvd Interchange	Diagonal	55	Westbound Off	375.00	221.49	33°50'28"	0.02	243.82	Yes	35
8	Airway Blvd Interchange	Diagonal	55	Westbound Off	106.50	64.16	34°30'58"	0.02	151.84	Yes	20
8	Airway Blvd Interchange	Diagonal	55	Eastbound On	656.00	278.59	24°09'29"	- (a)	151.59	-	45
8	Airway Blvd Interchange	Diagonal	55	Eastbound On	5050.00	765.76	8°41'17"	0.04	20.49	Yes	80
8	Airway Blvd Interchange	Diagonal	55	Eastbound Off	5050.00	1016.84	11°32'12"	0.04	20.49	Yes	80
8	Airway Blvd Interchange	Diagonal	55	Eastbound Off	750.00	289.83	22°08'29"	0.02	133.85	Yes	45
8	Airway Blvd Interchange	Diagonal	55	Eastbound Off	96.50	49.14	29°10'29"	0.02	96.21	Yes	20
8	Airway Blvd Interchange	-	15	Alaska Rd	250.00	93.59	21°26'58"	- (a)	311.69	-	30
8	Airway Blvd Interchange	-	15	Alaska Rd	225.00	112.66	28°41'20"	- (a)	323.19	-	30
Z	N 19th Ave Interchange	Diagonal	45	Westbound On	2864.79	399.99	7°59'59"	0.04	36.06	Yes	80
Z	N 19th Ave Interchange	Diagonal	45	Westbound On	11459.16	226.11	1°07'50"	0.02	9.03	Yes	80
Z	N 19th Ave Interchange	Diagonal	45	Westbound Off	4297.18	450.00	6°00'00"	0.03	24.07	Yes	80
Z	N 19th Ave Interchange	Diagonal	45	Westbound Off	2291.83	265.71	6°38'34"	0.04	45.02	Yes	75
Z	N 19th Ave Interchange	Diagonal	45	Westbound Off	763.94	281.27	21°05'43"	0.07	131.56	Yes	50
Z	N 19th Ave Interchange	Diagonal	45	Westbound Off	477.46	297.96	35°45'20"	0.07	200.91	Yes	40
Z	N 19th Ave Interchange	Diagonal	45	Eastbound On	954.93	679.15	40°44'55"	0.06	106.38	Yes	50

ID	INTERCHANGE	TYPE OF RAMP	DESIGN SPEED	LEG OF INTERCHANGE	RADIUS (FT)	LENGTH OF CURVE (FT)	DEFLECTION ANGLE	SUPERELEVATION	MIN. SIGHT. OBST. (FT)	UNDER 8% SUPERELEVATION	DESIGN SPEED MET (MPH) BASED ON RADIUS
Z	N 19th Ave Interchange	Diagonal	45	Eastbound Off	1637.02	400.00	14°00'00"	0.06	62.84	Yes	65
Z	N 19th Ave Interchange	Diagonal	45	Eastbound Off	1145.92	565.33	28°16'00"	0.06	89.16	Yes	55
Z	N 19th Ave Interchange	Diagonal	45	Eastbound Off	790.29	275.86	20°00'00"	0.06	127.42	Yes	50
Z	N 19th Ave Interchange	Diagonal	45	Eastbound Off	572.96	368.85	36°53'05"	0.06	171.39	Yes	40
H	N 7th Ave Interchange	Diagonal	45	Westbound On	818.60	368.00	25°03'45"	- (a)	123.25	-	50
H	N 7th Ave Interchange	Diagonal	45	Westbound Off	818.60	234.50	16°24'50"	- (a)	123.25	-	50
H	N 7th Ave Interchange	Diagonal	45	Westbound Off	2865.00	371.30	7°25'30"	- (a)	36.06	-	80
H	N 7th Ave Interchange	Diagonal	45	Eastbound On	958.40	350.40	20°57'31"	- (a)	106.01	-	50
H	N 7th Ave Interchange	Diagonal	45	Eastbound Off	3784.00	189.30	5°02'	- (a)	27.33	-	80
H	N 7th Ave Interchange	Diagonal	45	Eastbound Off	1146.00	286.20	14°18'42"	- (a)	89.16	-	55
H	N 7th Ave Interchange	Diagonal	45	Eastbound Off	220.20	201.40	50°21'17"	- (a)	324.93	-	30
P/Q	Main Street Interchange	Semidirectional	45	Westbound On	301.56	472.60	89°48'47"	- (a)	282.92	-	30
P/Q	Main Street Interchange	Semidirectional	45	Westbound On	347.25	454.10	74°55'35"	- (a)	257.84	-	35
P/Q	Main Street Interchange	Loop	25	Westbound Off	763.94	- (a)	- (a)	- (a)	131.56	-	50
P/Q	Main Street Interchange	Loop	25	Westbound Off	301.56	- (a)	- (a)	- (a)	282.92	-	30
P/Q	Main Street Interchange	Loop	25	Westbound Off	409.26	- (a)	- (a)	- (a)	227.95	-	35
P/Q	Main Street Interchange	Diagonal	55	Eastbound On	2291.83	1150.00	28°46'21"	- (a)	45.02	-	75
P/Q	Main Street Interchange	Semidirectional	25	Eastbound Off	301.56	756.60	143°45'14"	- (a)	282.92	-	30
P/Q	Main Street Interchange	-	- (a)	Frontage Rd	1145.92	952.90	57°10'30"	- (a)	89.16	-	55
11	Bear Canyon Interchange	Diagonal	45	Westbound On	1910.00	194.00	5°49'11"	- (a)	53.95	-	70
11	Bear Canyon Interchange	Diagonal	45	Westbound Off	5730.00	184.80	1°50'54"	- (a)	18.06	-	80
11	Bear Canyon Interchange	Diagonal	45	Eastbound On	1910.00	251.30	7°32'20"	- (a)	53.95	-	70
11	Bear Canyon Interchange	Diagonal	45	Eastbound Off	5730.00	325.40	3°15'14"	- (a)	18.06	-	80

(a) Information unavailable

Interchange Vertical Alignment

Table 8: Interchange Vertical Alignment Design Standards

Design Speed (mph):		25	30	45	55	60
SSD (ft):		155	200	360	495	570
K-Value:	Crest	12	19	61	114	151
	Sag	26	37	181	115	136
Maximum Grade (%):		7%	7%	5%	5%	5%

Table 9: Interchange Vertical Alignment Summary

ID	DESIGN SPEED	INTERCHANGE	TYPE OF RAMP	LEG OF INTERCHANGE	CURVE TYPE	CURVE LENGTH (FT)	GRADE BACK	GRADE AHEAD	A	SSD	K-VALUE	DESIGN SPEED MET (MPH) PER K VALUE	DESIGN SPEED MET (MPH) PER SSD	DESIGN SPEED BASED ON MAXIMUM GRADE	DESIGN SPEED MET (MPH)
O	45	West Three Forks Interchange	Diagonal	Westbound On	crest	300	0.00	-0.04	3.71	441.15	80.95	45	50	80	45
O	60	West Three Forks Interchange	Diagonal	Westbound On	sag	500	-0.04	0.01	5.06	-	98.83	50	-	80	50
O	60	West Three Forks Interchange	Diagonal	Westbound Off	sag	500	0.01	0.04	3.35	-	149.08	60	-	80	60
O	45	West Three Forks Interchange	Diagonal	Westbound Off	crest	300	0.04	0.00	4.21	406.05	71.19	45	45	80	45
O	60	West Three Forks Interchange	Diagonal	Eastbound On	crest	300	0.00	-0.05	5.11	361.15	58.71	40	45	40	40
O	45	West Three Forks Interchange	Diagonal	Eastbound On	sag	500	-0.05	-0.01	4.26	-	117.37	55	-	40	40
O	45	West Three Forks Interchange	Diagonal	Eastbound Off	sag	500	-0.01	0.03	4.64	-	107.71	50	-	80	50
O	60	West Three Forks Interchange	Diagonal	Eastbound Off	crest	300	0.03	0.00	3.37	469.80	88.92	50	50	80	50
O	45	West Three Forks Interchange	Bridge over interstate	US 287	crest	1000	0.03	-0.02	5.00	656.96	200.00	65	65	80	65
N	60	Three Forks Interchange	Diagonal	Westbound On	crest	200	0.00	-0.04	3.97	371.51	50.33	40	45	80	40
N	60	Three Forks Interchange	Diagonal	Westbound On	sag	400	-0.04	0.02	5.99	-	66.79	40	-	80	40
N	60	Three Forks Interchange	Diagonal	Westbound Off	sag	350	-0.01	0.04	5.30	-	66.04	40	-	80	40
N	60	Three Forks Interchange	Diagonal	Westbound Off	crest	200	0.04	0.00	4.00	369.75	50.00	40	45	80	40
N	60	Three Forks Interchange	Diagonal	Eastbound On	crest	200	0.00	-0.03	3.31	426.18	60.46	40	50	80	40
N	60	Three Forks Interchange	Diagonal	Eastbound On	sag	300	-0.03	0.01	4.62	-	64.91	40	-	80	40
N	60	Three Forks Interchange	Diagonal	Eastbound Off	sag	300	-0.02	0.03	5.28	-	56.82	35	-	80	35
N	60	Three Forks Interchange	Diagonal	Eastbound Off	crest	200	0.03	0.00	2.90	472.20	68.99	45	50	80	45
B	60	Logan Interchange	Diagonal	Westbound On	sag	200	0.00	0.05	4.85	-	41.24	30	-	80	30
B	60	Logan Interchange	Diagonal	Westbound On	crest	400	0.05	0.01	3.40	517.35	117.65	55	55	80	55
B	60	Logan Interchange	Diagonal	Westbound Off	crest	400	-0.03	-0.05	2.00	739.50	200.00	65	70	80	65

ID	DESIGN SPEED	INTERCHANGE	TYPE OF RAMP	LEG OF INTERCHANGE	CURVE TYPE	CURVE LENGTH (FT)	GRADE BACK	GRADE AHEAD	A	SSD	K-VALUE	DESIGN SPEED MET (MPH) PER K VALUE	DESIGN SPEED MET (MPH) PER SSD	DESIGN SPEED BASED ON MAXIMUM GRADE	DESIGN SPEED MET (MPH)
B	60	Logan Interchange	Diagonal	Westbound Off	sag	200	-0.05	0.00	5.00	-	40.00	30	-	80	30
B	60	Logan Interchange	Diagonal	Eastbound On	sag	200	0.01	0.02	1.88	-	106.38	50	-	80	50
B	60	Logan Interchange	Diagonal	Eastbound Off	sag	200	-0.02	0.02	4.35	-	45.98	30	-	80	30
D	60	Manhattan Interchange	Diagonal	Westbound On	crest	200	0.00	-0.04	4.41	344.67	45.35	40	40	80	40
D	60	Manhattan Interchange	Diagonal	Westbound On	sag	500	-0.04	0.00	4.14	-	120.77	55	-	80	55
D	60	Manhattan Interchange	Diagonal	Westbound Off	sag	400	-0.01	0.03	4.31	-	92.81	45	-	80	45
D	60	Manhattan Interchange	Diagonal	Westbound Off	crest	200	0.03	0.00	2.96	464.53	67.57	45	50	80	45
D	60	Manhattan Interchange	Diagonal	Eastbound On	crest	150	-0.02	-0.05	3.26	405.98	46.01	40	45	80	40
D	60	Manhattan Interchange	Diagonal	Eastbound On	sag	400	-0.05	0.01	5.52	-	72.46	40	-	80	40
D	60	Manhattan Interchange	Diagonal	Eastbound Off	sag	400	0.00	0.04	4.47	-	89.49	45	-	80	45
D	60	Manhattan Interchange	Diagonal	Eastbound Off	crest	200	0.04	0.00	4.47	341.39	44.74	40	40	80	40
5	55	Amsterdam Rd Interchange	Semidirectional	Eastbound On	crest	130	0.00	-0.03	2.64	473.09	49.17	40	50	80	40
5	55	Amsterdam Rd Interchange	Semidirectional	Eastbound On	sag	250	-0.03	0.03	5.70	-	43.87	30	-	80	30
5	55	Amsterdam Rd Interchange	Semidirectional	Eastbound On	crest	110	0.03	0.01	2.13	560.62	51.55	40	55	80	40
5	30	Amsterdam Rd Interchange	Diagonal	Eastbound Off	crest	290	0.01	0.00	0.61	1919.67	476.97	80	80	80	80
5	30	Amsterdam Rd Interchange	Diagonal	Eastbound Off	sag	140	0.00	0.02	1.58	-	88.61	45	-	80	45
5	30	Amsterdam Rd Interchange	Diagonal	Eastbound Off	crest	130	0.02	0.00	2.18	560.64	59.72	40	55	80	40
2	55	Jackrabbit Ln Interchange	Diagonal	Westbound On	crest	328	-0.03	-0.04	1.37	952.21	239.65	65	80	80	65
2	55	Jackrabbit Ln Interchange	Diagonal	Westbound On	sag	525	-0.04	0.00	4.13	-	127.26	55	-	80	55
2	55	Jackrabbit Ln Interchange	Diagonal	Westbound Off	sag	459	-0.01	0.03	3.70	-	124.14	55	-	80	55
2	55	Jackrabbit Ln Interchange	Diagonal	Westbound Off	crest	328	0.03	0.01	2.00	703.54	164.04	60	65	80	60
2	25	Jackrabbit Ln Interchange	Loop	Eastbound On	sag	656	-0.03	0.00	2.20	-	298.80	80	-	80	80
2	25	Jackrabbit Ln Interchange	Loop	Eastbound On	crest	262	0.00	-0.01	0.32	3461.48	810.08	80	80	80	80
5	55	Jackrabbit Ln Interchange	Diagonal	Eastbound On	sag	780	-0.03	0.01	3.53	-	221.21	75	-	80	75
2	- (a)	Jackrabbit Ln Interchange	-	Jackrabbit Ln	crest	1247	0.03	-0.04	6.42	647.61	194.34	65	65	80	65

ID	DESIGN SPEED	INTERCHANGE	TYPE OF RAMP	LEG OF INTERCHANGE	CURVE TYPE	CURVE LENGTH (FT)	GRADE BACK	GRADE AHEAD	A	SSD	K-VALUE	DESIGN SPEED MET (MPH) PER K VALUE	DESIGN SPEED MET (MPH) PER SSD	DESIGN SPEED BASED ON MAXIMUM GRADE	DESIGN SPEED MET (MPH)
8	55	Airway Blvd Interchange	Semidirectional	Westbound On	crest	1220	0.03	0.00	3.28	896.06	372.06	75	75	80	75
8	55	Airway Blvd Interchange	Semidirectional	Westbound Off	crest	600	-0.01	-0.03	2.01	835.75	297.91	70	75	80	70
8	55	Airway Blvd Interchange	Semidirectional	Eastbound On	crest	900	0.03	0.00	2.80	832.85	321.43	75	75	80	75
8	55	Airway Blvd Interchange	Semidirectional	Eastbound Off	crest	1000	0.00	-0.02	1.84	1088.01	544.96	80	80	80	80
Z	45	N 19th Ave Interchange	Diagonal	Westbound On	crest	200	-0.04	-0.05	1.36	893.38	147.06	55	75	80	55
Z	45	N 19th Ave Interchange	Diagonal	Westbound On	sag	500	-0.05	-0.01	4.13	-	121.21	55	-	80	55
Z	45	N 19th Ave Interchange	Diagonal	Westbound Off	sag	600	-0.02	0.03	4.35	-	137.93	60	-	80	60
Z	45	N 19th Ave Interchange	Diagonal	Westbound Off	crest	300	0.03	0.01	1.99	691.39	150.53	55	65	80	55
Z	45	N 19th Ave Interchange	Diagonal	Eastbound On	sag	500	-0.02	0.01	3.54	-	141.08	60	-	80	60
Z	45	N 19th Ave Interchange	Diagonal	Eastbound Off	sag	600	0.00	0.02	2.36	-	254.13	80	-	80	80
H	45	N 7th Ave Interchange	Diagonal	Westbound On	crest	200	-0.02	-0.04	1.80	698.12	110.86	50	65	80	50
H	45	N 7th Ave Interchange	Diagonal	Westbound On	sag	300	-0.04	0.00	3.63	-	82.64	45	-	80	45
H	45	N 7th Ave Interchange	Diagonal	Westbound Off	sag	400	-0.01	0.03	4.04	-	99.01	50	-	80	50
H	45	N 7th Ave Interchange	Diagonal	Westbound Off	crest	200	0.03	0.00	3.44	413.66	58.14	40	45	80	40
H	45	N 7th Ave Interchange	Diagonal	Eastbound On	crest	200	-0.02	-0.04	1.97	647.72	101.52	50	65	80	50
H	45	N 7th Ave Interchange	Diagonal	Eastbound On	sag	400	-0.04	0.01	5.20	-	76.92	40	-	80	40
H	45	N 7th Ave Interchange	Diagonal	Eastbound Off	sag	300	0.00	0.03	3.24	-	92.59	45	-	80	45
H	45	N 7th Ave Interchange	Diagonal	Eastbound Off	crest	300	0.03	0.01	2.34	610.32	127.99	55	60	80	55
7	- (a)	N 7th Ave Interchange	-	N 7th Ave	crest	240	0.01	0.00	0.72	1618.61	333.33	75	80	80	75
7	- (a)	N 7th Ave Interchange	-	N 7th Ave	crest	280	0.00	-0.02	2.19	632.69	127.85	55	60	80	55
7	- (a)	N 7th Ave Interchange	-	N 7th Ave	crest	220	-0.02	0.03	4.52	348.72	48.67	40	40	80	40
R	45	Main St Interchange	Semidirectional	Westbound On	crest	400	0.00	-0.03	2.32	665.09	172.41	60	65	80	60
R	25	Main St Interchange	Loop	Westbound Off	crest	400	0.00	-0.02	2.00	739.50	200.00	65	70	80	65
R	25	Main St Interchange	Loop	Westbound Off	sag	400	-0.02	0.00	1.80	-	222.22	75	-	80	75
R	55	Main St Interchange	Diagonal	Eastbound On	crest	300	0.02	0.00	1.40	920.71	214.29	65	80	80	65

ID	DESIGN SPEED	INTERCHANGE	TYPE OF RAMP	LEG OF INTERCHANGE	CURVE TYPE	CURVE LENGTH (FT)	GRADE BACK	GRADE AHEAD	A	SSD	K-VALUE	DESIGN SPEED MET (MPH) PER K VALUE	DESIGN SPEED MET (MPH) PER SSD	DESIGN SPEED BASED ON MAXIMUM GRADE	DESIGN SPEED MET (MPH)
R	25	Main St Interchange	Diagonal	Eastbound Off	crest	500	0.01	-0.05	5.46	444.54	91.58	50	50	80	50
R	25	Main St Interchange	Diagonal	Eastbound Off	sag	200	-0.05	0.02	6.96	-	28.74	25	-	80	25
R	25	Main St Interchange	Semidirectional	Eastbound Off (right bypass)	sag	300	-0.04	0.00	4.24	-	70.75	40	-	80	40
R	- (a)	Main St Interchange	-	Frontage Rd	crest	500	-0.01	-0.02	1.38	1034.73	363.64	75	80	80	75
R	- (a)	Main St Interchange	-	Frontage Rd	sag	400	-0.02	0.01	2.80	-	142.65	60	-	80	60
R	- (a)	Main St Interchange	-	Frontage Rd	crest	400	0.01	0.00	0.52	2259.16	763.36	80	80	80	80
R	- (a)	Main St Interchange	-	Frontage Rd	sag	400	0.00	0.01	0.82	-	490.80	80	-	80	80
11	45	Bear Canyon Interchange	Diagonal	Westbound On	sag	150	0.00	0.03	3.31	-	45.32	30	-	80	30
11	45	Bear Canyon Interchange	Diagonal	Westbound On	crest	200	0.03	-0.02	5.31	303.20	37.66	35	35	80	35
11	45	Bear Canyon Interchange	Diagonal	Westbound Off	crest	200	0.00	-0.04	4.24	354.48	47.17	40	40	80	40
11	45	Bear Canyon Interchange	Diagonal	Westbound Off	sag	150	-0.04	0.00	4.44	-	33.78	25	-	80	25
11	45	Bear Canyon Interchange	Diagonal	Eastbound On	sag	150	0.00	0.04	4.10	-	36.59	25	-	80	25
11	45	Bear Canyon Interchange	Diagonal	Eastbound On	crest	200	0.04	0.00	3.90	376.67	51.28	40	45	80	40
11	45	Bear Canyon Interchange	Diagonal	Eastbound Off	crest	200	0.02	-0.03	4.92	319.31	40.65	35	40	80	35
11	45	Bear Canyon Interchange	Diagonal	Eastbound Off	sag	150	-0.03	0.00	2.92	-	51.37	35	-	80	35
11	- (a)	Bear Canyon Interchange	-	Moffit Gulch Rd	sag	150	0.00	0.03	3.00	-	50.00	35	-	80	35

(a) Information unavailable

Interchange Ramp Alignment

Table 10: Interchange Standards

METRIC	VALUE
Loop Lane Width	26 ft
Diamond Lane width	25 ft
Parallel exit ramp taper	2-5 degrees
Taper exit ramp taper length	220 ft
Parallel entrance ramp taper	50:1 - 70:1
Taper entrance ramp taper length	350 ft
Parallel entrance ramp gap acceptance rate	350
Taper entrance ramp gap acceptance rate	300-500

Table 11: Acceleration Lane Length when Grade is <3%

DESIGN SPEED OF CONTROLLING FEATURE (MPH)	65 MPH INTERSTATE DESIGN SPEED	75 MPH INTERSTATE DESIGN SPEED	80 MPH INTERSTATE DESIGN SPEED
Stop Condition	1410	1790	2000
15	2350	1730	1900
20	1310	1630	1800
25	1220	1580	1750
30	1120	1510	1680
35	1000	1420	1600
40	770	1160	1340
45	600	1040	1240
50	370	780	980

Table 12: Deceleration Lane Length when Grade is <3%

DESIGN SPEED OF CONTROLLING FEATURE (MPH)	65 MPH INTERSTATE DESIGN SPEED	75 MPH INTERSTATE DESIGN SPEED	80 MPH INTERSTATE DESIGN SPEED
Stop Condition	570	660	705
15	540	635	680
20	520	620	665
25	500	600	645
30	470	575	620
35	440	535	580
40	390	490	535
45	340	440	490
50	280	390	440

Table 13: Interchange Alignment Summary

INTER-CHANGE	RAMP	RAMP DESIGN SPEED (MPH)	TYPE OF RAMP	TYPE OF MERGE	TAPER RATE	INTER-STATE DESIGN SPEED (MPH)	DESIGN SPEED OF CONTROLING FEATURE	ACCELERATION/ DECELERATION LENGTH (a)	GAP ACCEPTANCE RATE (a)	WIDTH (FT)	ACCELERATION/DECELERATION LENGTH REQUIREMENT	MEETS LENGTH STANDARDS?	REQUIRED GAP ACCEPTANCE RATE	MEETS GAP ACCEPTANCE RATE STANDARD?	MEETS TAPER RATE STANDARDS?
West Three Forks	Westbound On	60	Diagonal	Taper	1:50	80	0	1310	160	25	1200	Yes	300	No	Yes
West Three Forks	Westbound Off	60	Diagonal	Taper	3°30'36"	80	0	1310	-	25	635	Yes	-	-	Yes
West Three Forks	Eastbound On	60	Diagonal	Taper	1:50	80	0	1310	160	25	1000	Yes	300	No	Yes
West Three Forks	Eastbound Off	60	Diagonal	Taper	3°30'36"	80	0	1250	-	25	846	Yes	-	-	Yes
Three Forks	Westbound On	60	Diagonal	Taper	1:50	80	40	980	270	27	804	Yes	300	No	Yes
Three Forks	Westbound Off	60	Diagonal	Taper	4°30'	80	0	1170	-	26	635	Yes	-	-	Yes
Three Forks	Eastbound On	60	Diagonal	Taper	1:50	80	50	850	130	27	588	Yes	300	No	Yes
Three Forks	Eastbound Off	60	Diagonal	Taper	-(b)	80	0	1100	-	26	705	Yes	-	-	-
Logan	Westbound On	60	Diagonal	Taper	-(b)	80	0	1560	270	25	4200	No	300	No	-
Logan	Westbound Off	60	Diagonal	Taper	1°02'15.76"	80	0	1410	-	25	952	Yes	-	-	Yes
Logan	Eastbound Off	60	Diagonal	Taper	-(b)	80	0	920	-	25	705	Yes	-	-	-
Logan	Eastbound On	60	Diagonal	Taper	-(b)	80	50	260	220	26	980	No	300	No	-
Manhattan	Westbound On	60	Diagonal	Taper	-(b)	80	0	1230	150	25	1200	Yes	300	No	-
Manhattan	Westbound Off	60	Diagonal	Taper	4°25'	80	0	1200	-	25	705	Yes	-	-	Yes
Manhattan	Eastbound Off	60	Diagonal	Taper	-(b)	80	50	750	-	25	396	Yes	-	-	-
Manhattan	Eastbound On	60	Diagonal	Taper	-(b)	80	0	900	200	25	1000	No	300	No	-
Amsterdam Rd	Eastbound On	55	Semidirectional	Parallel	-(b)	75	35	1476	1350	26	1420	Yes	350	Yes	-
Amsterdam Rd	Eastbound Off	30	Diagonal	Taper	-(b)	75	50	640	-	33	390	Yes	-	-	-
Jackrabbit Ln	Westbound On	55	Diagonal	Parallel	-(b)	75	0	1810	800	26	1074	Yes	350	Yes	-
Jackrabbit Ln	Westbound Off	55	Diagonal	Taper	4°34'26"	75	50	980	-	27	252	Yes	-	-	Yes
Jackrabbit Ln	Eastbound On	25	Loop	Parallel	-(b)	75	35	3100	730	30	1470	Yes	350	Yes	-
Jackrabbit Ln	Eastbound On	55	Diagonal	Parallel	-(b)	75	0	2340	700	26	1790	Yes	350	Yes	-

INTER-CHANGE	RAMP	RAMP DESIGN SPEED (MPH)	TYPE OF RAMP	TYPE OF MERGE	TAPER RATE	INTER-STATE DESIGN SPEED (MPH)	DESIGN SPEED OF CONTROLLING FEATURE	ACCELERATION/ DECELERATION LENGTH (a)	GAP ACCEPTANCE RATE (a)	WIDTH (FT)	ACCELERATION/DECELERATION LENGTH REQUIREMENT	MEETS LENGTH STANDARDS?	REQUIRED GAP ACCEPTANCE RATE	MEETS GAP ACCEPTANCE RATE STANDARD?	MEETS TAPER RATE STANDARDS?
Airway Blvd	Westbound On	55	Semidirectional	Taper	- (b)	75	40	2740	430	26	1160	Yes	300	Yes	-
Airway Blvd	Westbound Off	55	Semidirectional	Parallel	- (b)	75	35	1380	-	26	535	Yes	-	-	-
Airway Blvd	Eastbound On	55	Semidirectional	Parallel	- (b)	75	45	2290	1180	26	1040	Yes	350	Yes	-
Airway Blvd	Eastbound Off	55	Semidirectional	Parallel	- (b)	75	45	1430	-	26	440	Yes	-	-	-
N 19th Ave	Westbound On	45	Diagonal	Taper	- (b)	65	0	1620	270	24	846	Yes	300	No	-
N 19th Ave	Westbound Off	45	Diagonal	Taper	4°34'26"	65	50	1180	-	25	280	Yes	-	-	Yes
N 19th Ave	Eastbound On	45	Diagonal	Taper	- (b)	65	50	100	270	25	370	No	300	No	-
N 19th Ave	Eastbound Off	45	Diagonal	Taper	4°34'26"	65	50	1600	-	25	280	Yes	-	-	Yes
N 7th Ave	Westbound On	45	Diagonal	Parallel	1:50	65	50	3180	3180	26	222	Yes	350	Yes	Yes
N 7th Ave	Westbound Off	45	Diagonal	Taper	4°30'47"	65	50	300	-	25	252	Yes	-	-	Yes
N 7th Ave	Eastbound On	45	Diagonal	Parallel	1:50	65	50	320	250	26	222	Yes	350	No	Yes
N 7th Ave	Eastbound Off	45	Diagonal	Taper	4°30'47"	65	30	1280	-	25	423	Yes	-	-	Yes
Main St	Westbound On	45	Semidirectional	Taper	- (b)	65	35	140	130	24	1000	No	300	No	-
Main St	Westbound Off	25	Loop	Taper	- (b)	65	50	150	-	25	280	No	-	-	-
Main St	Westbound (right bypass) Off	25	Loop	Taper	- (b)	65	50	150	-	25	280	No	-	-	-
Main St	Eastbound On	55	Directional	Taper	- (b)	65	0	2080	270	25	1410	Yes	300	No	-
Main St	Eastbound Off	25	Diagonal	Taper	- (b)	65	0	1250	-	25	684	Yes	-	-	-
Main St	Eastbound (right bypass) Off	25	Semidirectional	Taper	- (b)	65	30	700	-	25	564	Yes	-	-	-
Bear Canyon	Westbound On	45	Diagonal	Taper	- (b)	65	0	920	120	25	2397	No	300	No	-
Bear Canyon	Westbound Off	45	Diagonal	Taper	- (b)	65	0	960	-	25	684	Yes	-	-	-
Bear Canyon	Eastbound On	45	Diagonal	Taper	- (b)	65	0	900	180	25	2397	No	300	No	-
Bear Canyon	Eastbound Off	45	Diagonal	Taper	- (b)	65	0	850	-	25	570	Yes	-	-	-

(a) Estimated based on aerial photography

(b) Information unavailable