

HDM - 4

Road Sections - Geometry

HIGHWAY DEVELOPMENT & MANAGEMENT

Study Name: D8 Lovosice-Rehlovice

Run Date: 29-05-2019

ID	Name	Speed Flow Type	Rise + Fall	No. of Horizontal Rises & Curvature Falls (deg/km)	Superelevation (%)	Altitude (m)	Sigma adral (m/s2)	Speed Limit (km/h)	Speed Enforcement Factor	Drain Type	NMT Friction (XNMT)	Side Friction (XFR)	MT Friction (XMT)	Length (Km)	Width (m)	
			(m/km)													
001	001	D27.5/130	15.0	3	25	2.50	180	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	8.60	23.00
002	002	D27.5/130	20.0	1	5	2.50	210	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	11.40	23.00
003	003	D27.5/130	15.0	0	5	2.50	190	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	6.14	23.00
004	004	D27.5/130	20.0	1	5	2.50	190	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	10.14	23.00
005	005	D27.5/130	20.0	1	10	2.50	160	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.96	23.00
006	006	D24.5/130	15.0	3	5	2.50	340	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.25	21.50
007	007	D24.5/130	30.0	2	5	2.50	310	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.08	21.50
008	008	D24.5/130	35.0	2	10	2.50	315	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.28	21.50
009	009	D24.5/130	35.0	1	15	2.50	280	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	8.32	21.50
010	010	D24.5/130	45.0	3	0	2.50	260	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	0.34	21.50
011	011	011-S11,5/90 60%	30.0	1	10	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	3.47	10.50
012	012	012-S11,5/90 70%	10.0	1	10	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	3.90	10.50
013	013	013-S9,5/90 90%	30.0	2	25	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.77	8.50
014	014	014-S7,5/90 50%	25.0	2	10	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.60	6.50
015	015	S7,5/50 obec	30.0	3	0	2.50	290	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.14	6.50
016	016	S7,5/50 obec	20.0	3	0	2.50	290	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.20	6.50
017	017	017-S7,5/90 0%_1	20.0	2	10	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.45	6.50
018	018	018-S9,5/90 0%_1	45.0	1	20	2.50	270	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.80	8.50
019	019	019-S9,5/90 0%_1	30.0	1	10	2.50	280	0.10	88	1.00	No drainage effects	1.00	1.00	1.00	1.82	8.50
020	020	020-S9,5/90 0%_1	30.0	1	25	2.50	290	0.10	88	1.00	No drainage effects	1.00	1.00	1.00	1.85	8.50
021	021	021-S9,5/90 50%	25.0	1	5	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.16	8.50
022	022	022-S9,5/90 0%_1	20.0	3	5	2.50	310	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.67	8.50
023	023	S13,5/90 (2+1)	35.0	1	25	2.50	330	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.31	12.00
024	024	S13,5/90 (2+1)	20.0	1	15	2.50	360	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.72	12.00
025	025	025-S9,5/90 0%_1	40.0	3	0	2.50	360	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.12	8.50
026	026	026-S9,5/50 40%_1	15.0	3	10	2.50	370	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.63	8.50
027	027	D25,5/130	20.0	1	5	2.50	360	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.52	22.50
028	028	028-S7,5/90 20%_1	30.0	1	10	2.50	320	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.98	6.50

HDM-4 Road Sections - Geometry

ID	Name	Speed Flow Type	Rise + Fall (m/km)	No. of Rises & Falls (1/km)	Horizontal Curvature (deg/km)	Superelev- ation (%)	Altitude (m)	Sigma adral (m/s2)	Speed Limit (km/h)	Speed Enforcement Factor	Drain Type	MT Friction (XNMT)	Side Friction (XFR)	MT Friction (XMT)	Length (Km)	Width (m)
029	029	029-S7.5/90 100%	30.0	1	0	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.81	6.50
030	030	030-S9.5/90 100%	30.0	3	0	2.50	280	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.40	8.50
031	031	S13.5/90 (2+1)	50.0	2	10	2.50	260	0.10	85	1.00	No drainage effects	1.00	1.00	1.00	0.58	12.00
032	032	032-S9.5/90_0%_1	25.0	2	10	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.56	8.50
033	033	033-S9.5/90 100%	15.0	3	15	2.50	220	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.30	8.50
034	034	034-S9.5/90 100%	10.0	3	25	2.50	220	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.57	8.50
035	035	035-S9.5/90 100%	10.0	3	0	2.50	220	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.10	8.50
036	036	036-S11.5/90 100%	10.0	2	5	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.34	10.50
037	037	037-S11.5/90 80%	20.0	2	5	2.50	220	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.69	10.50
038	038	038-S9.5/80 0% 1	40.0	1	5	2.50	210	0.10	76	1.00	No drainage effects	1.00	1.00	1.00	0.78	8.50
039	039	039-S9.5/90_50%_	25.0	1	5	2.50	190	0.10	88	1.00	No drainage effects	1.00	1.00	1.00	1.98	8.50
040	040	040-S9.5/80 30% 1	5.0	3	5	2.50	190	0.10	82	1.00	No drainage effects	1.00	1.00	1.00	0.74	8.50
041	041	041-S9.5/90 70% 1	20.0	1	5	2.50	220	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	4.14	8.50
042	042	042-S9.5/90 100%	10.0	2	5	2.50	260	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.78	8.50
043	043	043-S9.5/90 50% 1	25.0	1	20	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.03	8.50
044	044	044-S9.5/90 100%	15.0	1	15	2.50	310	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.08	8.50
045	045	S13.5/90 (2+1)	45.0	1	40	2.50	270	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.22	12.00
046	046	046-S9.5/90_0%_1	15.0	1	15	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.14	8.50
047	047	S13.5/90 (2+1)	45.0	1	50	2.50	260	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.46	12.00
048	048	048-S7.5/80_50%_	25.0	1	15	2.50	200	0.10	79	1.00	No drainage effects	1.00	1.00	1.00	4.03	6.50
049	049	049-S9.5/90 80% 1	15.0	2	25	2.50	240	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.70	8.50
050	050	S13.5/90 (2+1)	50.0	1	5	2.50	280	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.56	12.00
051	051	051-S7.5/80 0% 1	35.0	2	10	2.50	300	0.10	82	1.00	No drainage effects	1.00	1.00	1.00	0.56	6.50
052	052	S7.5/50 obec	20.0	2	10	2.50	290	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.49	6.50
053	053	053-S7.5/80_80%_	25.0	1	15	2.50	300	0.10	80	1.00	No drainage effects	1.00	1.00	1.00	3.45	6.50
054	054	054-S7.5/90 40% 1	15.0	1	35	2.50	310	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.27	6.50
055	055	S7.5/50 obec	45.0	2	100	2.50	330	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.49	6.50
056	056	056-S7.5/70 70% 1	25.0	2	40	2.50	330	0.10	73	1.00	No drainage effects	1.00	1.00	1.00	3.25	6.50
057	057	057-S7.5/90 50% 1	45.0	2	15	2.50	350	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	3.06	6.50
058	058	058-S7.5/90 80% 1	30.0	3	60	2.50	360	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.21	6.50
059	059	S7.5/50 obec	25.0	3	15	2.50	370	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.29	6.50
060	060	060-S7.5/90 100%	40.0	2	10	2.50	370	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.05	6.50
061	061	S7.5/50 obec	50.0	3	220	2.50	330	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.78	6.50

HDM-4 Road Sections - Geometry

ID	Name	Speed Flow Type	Rise + Fall (m/km)	No. of Rises & Curvature (deg/km)	Horizontal Superelevation (%)	Altitude (m)	Sigma adral (m/s2)	Speed Limit (km/h)	Speed Enforcement Factor	Drain Type	NMT			Length (km)	Width (m)	
											Friction (XNMT)	Side Friction (XFR)	MT Friction (XMT)			
062	062	062-S7.5/90 80% -	30.0	1	40	2.50	340	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.17	6.50
063	063	D25.5/130	30.0	1	10	2.50	300	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	3.47	21.50
064	064	D25.5/130	10.0	1	10	2.50	300	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	3.90	21.50
065	065	D25.5/130	20.0	1	25	2.50	280	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	8.20	21.50
066	066	D25.5/130	25.0	1	5	2.50	300	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.16	21.50
067	067	D25.5/130	30.0	1	20	2.50	340	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.90	21.50
068	068	D25.5/130	5.0	2	0	2.50	370	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	0.56	21.50
069	069	D25.5/130	35.0	0	20	2.50	290	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	2.80	21.50
070	070	D25.5/130	20.0	1	15	2.50	230	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	1.52	21.50
071	071	D25.5/130	15.0	3	0	2.50	220	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	0.13	21.50
072	072	D25.5/130	10.0	2	5	2.50	220	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	4.01	21.50
073	073	073-S11.5/90 100%	10.0	1	25	2.50	330	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.68	10.50
074	074	074-S11.5/90 100%	10.0	1	30	2.50	320	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	3.22	10.50
075	075	075-S11.5/90 100%	5.0	2	10	2.50	310	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.96	10.50
076	076	076-S11.5/90 100%	5.0	2	10	2.50	310	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.58	10.50
077	077	077-S11.5/90 100%	20.0	0	5	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.92	10.50
078	078	078-S11.5/90 100%	5.0	1	10	2.50	260	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.26	10.50
079	079	079-S11.5/90_100%	50.0	1	5	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.16	10.50
080	080	080-S11.5/90 100%	50.0	3	45	2.50	190	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.34	10.50
081	081	081-S11.5/90_100%	15.0	2	5	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.01	10.50
082	082	082-S9.5/90 50% -	5.0	3	0	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.73	8.50
083	083	083-S9.5/90 0% 1	20.0	2	15	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.29	8.50
084	084	084-S9.5/90 50% -	20.0	2	50	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.17	8.50
085	085	085-S9.5/90 50% -	20.0	2	10	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	8.20	8.50
086	086	086-S9.5/90_50%_ -	5.0	3	5	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.60	8.50
087	087	087-S9.5/90 50% -	15.0	2	50	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.00	8.50
088	088	088-S9.5/90_50%_ -	20.0	2	40	2.50	210	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.10	8.50
089	089	089-S9.5/90 50% -	30.0	2	35	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	5.30	8.50
090	090	090-S9.5/90 0% 1	30.0	3	0	2.50	165	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.32	8.50
091	091	S13.5/90 (2+1)	40.0	1	5	2.50	190	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.00	11.50
092	092	092-S9.5/80 0% 2	50.0	1	15	2.50	250	0.10	80	1.00	No drainage effects	1.00	1.00	1.00	0.90	8.50
093	093	S13.5/90 (2+1)	50.0	2	90	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.45	11.50
094	094	094-S9.5/90 0% 1	25.0	3	130	2.50	310	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.34	8.50

HD M - 4 Road Sections - Geometry

ID	Name	Speed Flow Type	Rise + Fall (m/km)	No. of Rises & Curvature (deg/km)	Super-elev- ation (%)	Altitude (m)	Sigma adral (m/s2)	Speed Limit (km/h)	Speed Enforcement Factor	Drain Type	NMT Friction (XNMT)	Side Friction (XFR)	MT Friction (XMT)	Length (Km)	Width (m)
095	095	095-S9,5/90 70% -	30.0	2	0	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.70 8.50
096	096	S9,5/50 obec	30.0	3	210	2.50	290	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.53 8.50
097	097	S9,5/50 obec	25.0	1	0	2.50	310	0.10	54	1.00	No drainage effects	1.00	1.00	1.00	0.76 8.50
098	098	S13,5/90 (2+1)	50.0	1	50	2.50	410	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	3.30 11.50
099	099	099-S9,5/90 0% 1	45.0	2	210	2.50	410	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.70 8.50
100	100	S9,5/50 obec	50.0	1	145	2.50	350	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.92 8.50
101	101	101-S9,5/90 70% -	50.0	2	40	2.50	280	0.10	86	1.00	No drainage effects	1.00	1.00	1.00	1.80 8.50
102	102	102-S9,5/90 10% -	25.0	1	20	2.50	260	0.10	85	1.00	No drainage effects	1.00	1.00	1.00	1.60 8.50
103	103	S13,5/90 (2+1)	50.0	1	55	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.92 11.50
104	104	104-S9,5/90 50% -	40.0	1	25	2.50	180	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.30 8.50
105	105	105-S9,5/80_20%_-	20.0	2	45	2.50	180	0.10	83	1.00	No drainage effects	1.00	1.00	1.00	1.40 8.50
106	106	S7,5/50 obec	20.0	3	380	2.50	240	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.76 6.50
107	107	107-S7,5/90 60% -	50.0	1	85	2.50	210	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.72 6.50
108	108	S7,5/50 obec	50.0	3	30	2.50	170	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.16 6.50
109	109	109-S6,5/80 80% -	15.0	1	95	2.50	170	0.10	78	1.00	No drainage effects	1.00	1.00	1.00	2.90 6.00
110	110	S7,5/50 obec	20.0	3	425	2.50	165	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.54 6.50
111	111	S7,5/50 obec	20.0	3	355	2.50	165	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.90 6.50
112	112	112-S7,5/90_30%_-	30.0	2	155	2.50	170	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.85 6.50
113	113	113-S7,5/90 0% 1	40.0	3	20	2.50	210	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.50 6.50
114	114	S7,5/50_obec	20.0	3	15	2.50	245	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.55 6.50
115	115	115-S7,5/90 0% 1	45.0	1	30	2.50	270	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.90 6.50
116	116	S7,5/50 obec	40.0	3	265	2.50	290	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.34 6.50
119	119	119-S6,5/90 0% 1	45.0	3	35	2.50	330	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.10 6.00
120	120	120-S7,5/90 30% -	50.0	1	110	2.50	400	0.10	87	1.00	No drainage effects	1.00	1.00	1.00	4.40 6.50
121	121	121-S7,5/60_0%_1	45.0	3	120	2.50	320	0.10	57	1.00	No drainage effects	1.00	1.00	1.00	1.10 6.50
122	122	S9,5/50 obec	20.0	3	0	2.50	155	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.34 8.00
123	123	S9,5/50_obec	15.0	3	0	2.50	150	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.30 8.00
124	124	S9,5/50 obec	10.0	3	0	2.50	150	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.60 8.00
125	125	S9,5/50 obec	15.0	2	65	2.50	150	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	2.70 8.00
126	126	126-S9,5/90 60% -	15.0	1	30	2.50	150	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.80 8.00
127	127	127-S9,5/90 50% -	15.0	1	25	2.50	145	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.90 8.00
128	128	128-S9,5/90 90% -	15.0	2	20	2.50	145	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.70 8.00
129	129	129-S9,5/70 80% -	10.0	1	25	2.50	145	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	3.80 8.00

HDM-4 Road Sections - Geometry

ID	Name	Speed Flow Type	Rise + Fall (m/km)	No. of Rises & Falls (/km)	Horizontal Curvature (deg/km)	Superelev- ation (%)	Altitude (m)	Sigma adral (ms ²)	Speed Limit (km/h)	Speed Enforcement Factor	Drain Type	NMT Friction (XNMT)	Side Friction (XFR)	MT Friction (XMT)	Length (Km)	Width (m)
130	130	130-S9,5/90 60% ^	10.0	2	10	2.50	145	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.70	8.00
131	131	S9,5/50 obec	10.0	2	50	2.50	145	0.10	53	1.00	No drainage effects	1.00	1.00	1.00	1.80	8.00
132	132	S9,5/50 obec	10.0	1	20	2.50	140	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	3.80	8.00
133	133	MS22.5(4p)/50	30.0	3	40	2.50	135	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.60	15.00
134	134	M11(3p)/50	20.0	3	380	2.50	140	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.21	10.00
135	135	M8(2p)/50	35.0	3	15	2.50	140	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.62	8.00
136	136	M8(2p)/50	20.0	3	160	2.50	145	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	1.50	8.00
137	137	S7,5/50 obec	30.0	3	35	2.50	160	0.10	55	1.00	No drainage effects	1.00	1.00	1.00	2.70	7.00
138	138	S7,5/50 obec	35.0	3	45	2.50	160	0.10	49	1.00	No drainage effects	1.00	1.00	1.00	2.20	7.00
139	139	S7,5/50 obec	20.0	1	35	2.50	150	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	2.10	7.00
140	140	S7,5/50 obec	10.0	1	35	2.50	150	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	2.70	7.00
141	141	141-S7,5/70 20% ^	25.0	2	70	2.50	150	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	1.90	7.00
142	142	S7,5/50 obec	25.0	3	135	2.50	160	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.70	7.00
143	143	143-S7,5/90 60% ^	50.0	2	40	2.50	200	0.10	85	1.00	No drainage effects	1.00	1.00	1.00	3.10	7.00
144	144	144-S7,5/90 50% ^	40.0	2	20	2.50	175	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.96	7.00
145	145	S7,5/50 obec	20.0	2	70	2.50	150	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	2.10	7.00
146	146	S7,5/50 obec	10.0	2	5	2.50	155	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.90	7.00
147	147	S7,5/50_obec	25.0	3	20	2.50	160	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	1.90	7.00
148	148	148-S9,5/90 50% ^	30.0	2	50	2.50	150	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.90	8.00
149	149	149-S9,5/90_50%_	25.0	1	20	2.50	150	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.70	8.00
150	150	150-S9,5/90 20% ^	45.0	2	65	2.50	170	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.40	8.00
151	151	151-S9,5/80 50% ^	5.0	1	5	2.50	150	0.10	82	1.00	No drainage effects	1.00	1.00	1.00	2.40	8.00
152	152	M8(2p)/50	10.0	1	25	2.50	150	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	1.50	8.00
153	153	S22.5/90	35.0	3	200	2.50	140	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.15	15.00
154	154	S22.5/70	25.0	2	30	2.50	140	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	2.70	15.00
155	155	S22.5/70	35.0	2	45	2.50	150	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	0.67	15.00
156	156	S22.5/70	10.0	3	200	2.50	160	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	0.25	15.00
157	157	D27.5/130	10.0	1	15	2.50	160	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	4.20	23.00
158	158	S22.5/90	25.0	3	10	2.50	170	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.60	16.00
159	159	S22.5/90	35.0	1	20	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	3.40	16.00
160	160	S22.5/90	25.0	2	20	2.50	240	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.50	16.00
161	161	S22.5/90	40.0	2	45	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.10	16.00
162	162	162-S9,5/90 80% ^	15.0	2	15	2.50	190	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.30	8.00

HD M-4 Road Sections - Geometry

ID	Name	Speed Flow Type	Rise + Fall (m/km)	No. of Rises & Curvature (deg/km)	Superelev- ation (%)	Altitude (m)	Sigma adral (m/s2)	Speed Limit (km/h)	Speed Enforcement Factor	Drain Type	NMT Friction (XNMT)	Side Friction (XFR)	MT Friction (XMT)	Length (Km)	Width (m)
163	163	163-S9,5/90 20% -	30.0	1	35	2.50	220	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.10 8.00
164	164	S22,5/90	40.0	1	45	2.50	280	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.20 16.00
165	165	S24,5/90	20.0	1	20	2.50	130	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	5.10 18.00
166	166	S22,5/90	25.0	1	15	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.90 16.00
167	167	S22,5/90	40.0	2	10	2.50	210	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.60 16.00
168	168	S22,5/90	45.0	2	15	2.50	200	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.70 16.00
169	169	S22,5/70	35.0	2	5	2.50	200	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	1.00 16.00
170	170	M13(3p)/50	10.0	1	5	2.50	200	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	2.00 13.00
171	171	171-S9,5/50 0% 1	10.0	2	60	2.50	200	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.41 9.00
175	175	175-S11,5/90 0% -	20.0	1	20	2.50	260	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	4.90 10.50
176	176	S7,5/50_obec	40.0	2	65	2.50	230	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	1.40 6.50
177	177	177-S7,5/80 30% -	20.0	2	210	2.50	190	0.10	75	1.00	No drainage effects	1.00	1.00	1.00	1.30 6.50
178	178	178-S7,5/80 20% -	35.0	1	0	2.50	200	0.10	79	1.00	No drainage effects	1.00	1.00	1.00	1.40 6.50
179	179	179-S7,5/80 50% -	15.0	3	255	2.50	200	0.10	80	1.00	No drainage effects	1.00	1.00	1.00	0.35 6.50
180	180	S22,5/70	50.0	1	65	2.50	260	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	0.75 15.00
181	181	S22,5/90	15.0	1	5	2.50	240	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.40 16.00
182	182	S22,5/90	5.0	1	10	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.90 16.00
183	183	S22,5/90	15.0	1	30	2.50	235	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.40 16.00
184	184	S22,5/90	50.0	2	25	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.10 16.00
185	185	185-S9,5/70_0%_1	15.0	1	0	2.50	230	0.10	69	1.00	No drainage effects	1.00	1.00	1.00	2.80 8.00
186	186	186-S9,5/70 50% -	20.0	1	35	2.50	270	0.10	71	1.00	No drainage effects	1.00	1.00	1.00	4.10 8.00
187	187	S9,5/50_obec	20.0	3	10	2.50	300	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.26 8.00
188	188	M8(2p)/50	15.0	1	90	2.50	310	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.82 8.00
189	189	M8(2p)/50	15.0	3	15	2.50	310	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.24 8.00
191	191	M8(2p)/50	30.0	3	50	2.50	310	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.39 8.00
192	192	192-S9,5/90 90% -	20.0	2	75	2.50	300	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.20 8.00
193	193	193-S9,5/90_0%_1	30.0	3	60	2.50	310	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.49 8.00
194	194	194-S7,5/70 40% -	15.0	2	25	2.50	310	0.10	73	1.00	No drainage effects	1.00	1.00	1.00	2.60 6.50
195	195	S7,5/50_obec	30.0	2	5	2.50	300	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.45 7.00
196	196	196-S7,5/70 0% 1	15.0	3	0	2.50	300	0.10	70	1.00	No drainage effects	1.00	1.00	1.00	1.10 6.50
197	197	197-S7,5/90 50% -	20.0	1	30	2.50	260	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	5.00 7.00
198	198	198-S7,5/90 50% -	15.0	3	75	2.50	230	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.47 7.00
199	199	S7,5/50_obec	10.0	1	30	2.50	230	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	2.00 6.50

HDM-4 Road Sections - Geometry

ID	Name	Speed Flow Type	Rise + Fall (m/km)	No. of Rises & Falls (km)	Horizontal Curvature (deg/km)	Superelev- ation (%)	Altitude (m)	Sigma adral (m/s2)	Speed Limit (km/h)	Speed Enforcement Factor	Drain Type	NMT Friction (XNMT)	Side Friction (XFRI)	MT Friction (XMT)	Length (km)	Width (m)
200	200	S7.5/50 obec	5.0	1	110	2.50	220	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	1.70	6.50
201	201	201-S7.5/90 50% '	15.0	2	25	2.50	220	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.61	6.50
202	202	S7.5/50 obec	20.0	3	40	2.50	210	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.80	6.50
203	203	203-S7.5/90_20%_ '	20.0	1	25	2.50	200	0.10	88	1.00	No drainage effects	1.00	1.00	1.00	1.50	6.50
204	204	S7.5/50 obec	15.0	2	190	2.50	190	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	1.30	6.50
205	205	205-S7.5/60 50% '	20.0	3	60	2.50	190	0.10	65	1.00	No drainage effects	1.00	1.00	1.00	0.74	6.50
206	206	206-S7.5/80 60% '	30.0	1	80	2.50	220	0.10	76	1.00	No drainage effects	1.00	1.00	1.00	1.40	6.50
207	207	207-S7.5/90 0% 1	50.0	1	95	2.50	280	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.90	6.50
208	208	S7.5/50 obec	40.0	3	20	2.50	320	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.53	6.50
209	209	209-S7.5/90 100%	35.0	2	55	2.50	360	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.30	6.50
210	210	S7.5/50 obec	50.0	2	105	2.50	420	0.10	55	1.00	No drainage effects	1.00	1.00	1.00	1.40	6.50
211	211	211-S7.5/90 50% '	50.0	1	65	2.50	490	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	4.90	6.50
212	212	212-S7.5/60 0% 1	50.0	3	315	2.50	380	0.10	61	1.00	No drainage effects	1.00	1.00	1.00	0.89	6.50
213	213	213-S7.5/90 70% '	30.0	1	20	2.50	340	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.20	6.50
214	214	S7.5/50 obec	30.0	2	90	2.50	300	0.10	50	1.00	No drainage effects	1.00	1.00	1.00	0.51	6.50
Fin 2008-201 Fin 2008-2011		D27.5/130	0.0	0	0	0.00	0	0.10	0	1.10	No drainage effects	1.00	1.00	1.00	1.00	23.00
Fin 2012-201 Fin 2012-2016		D27.5/130	0.0	0	0	0.00	240	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	1.00	23.00
Fin 2017-201 Fin 2017-2019		D27.5/130	20.0	0	20	2.50	160	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	0.32	23.00
N01	N01	D27.5/130	20.0	3	0	2.50	230	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	3.48	23.00
N02	N02	D27.5/130	15.0	0	5	2.50	280	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	3.54	23.00
N03	N03	D27.5/130	15.0	1	35	2.50	290	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	2.66	11.50
N04	N04	S11.5/90 0%	20.0	1	20	2.50	320	0.10	80	1.00	No drainage effects	1.00	1.00	1.00	0.27	11.50
N05	N05	S11.5/80 0%	50.0	3	35	2.50	330	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.22	11.50
N06	N06	S11.5/90 0%	50.0	3	0	2.50	340	0.10	80	1.00	No drainage effects	1.00	1.00	1.00	0.61	11.50
N07	N07	S11.5/80_0%	25.0	3	0	2.50	330	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.41	11.50
N08	N08	S11.5/90 0%	35.0	3	185	2.50	240	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	4.51	23.00
N09	N09	D27.5/130	20.0	0	20	2.50	170	0.10	130	1.00	No drainage effects	1.00	1.00	1.00	0.39	23.00
N10	N10	D27.5/130	15.0	3	15	2.50	185	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.80	6.50
N11	N11	S7.5/90 50%	35.0	1	35	2.50	315	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	0.32	6.50
N12	N12	S7.5/90 0%	10.0	3	95	2.50	0.10	90	1.00	No drainage effects	1.00	1.00	1.00	1.00	0.32	6.50

