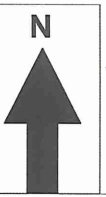
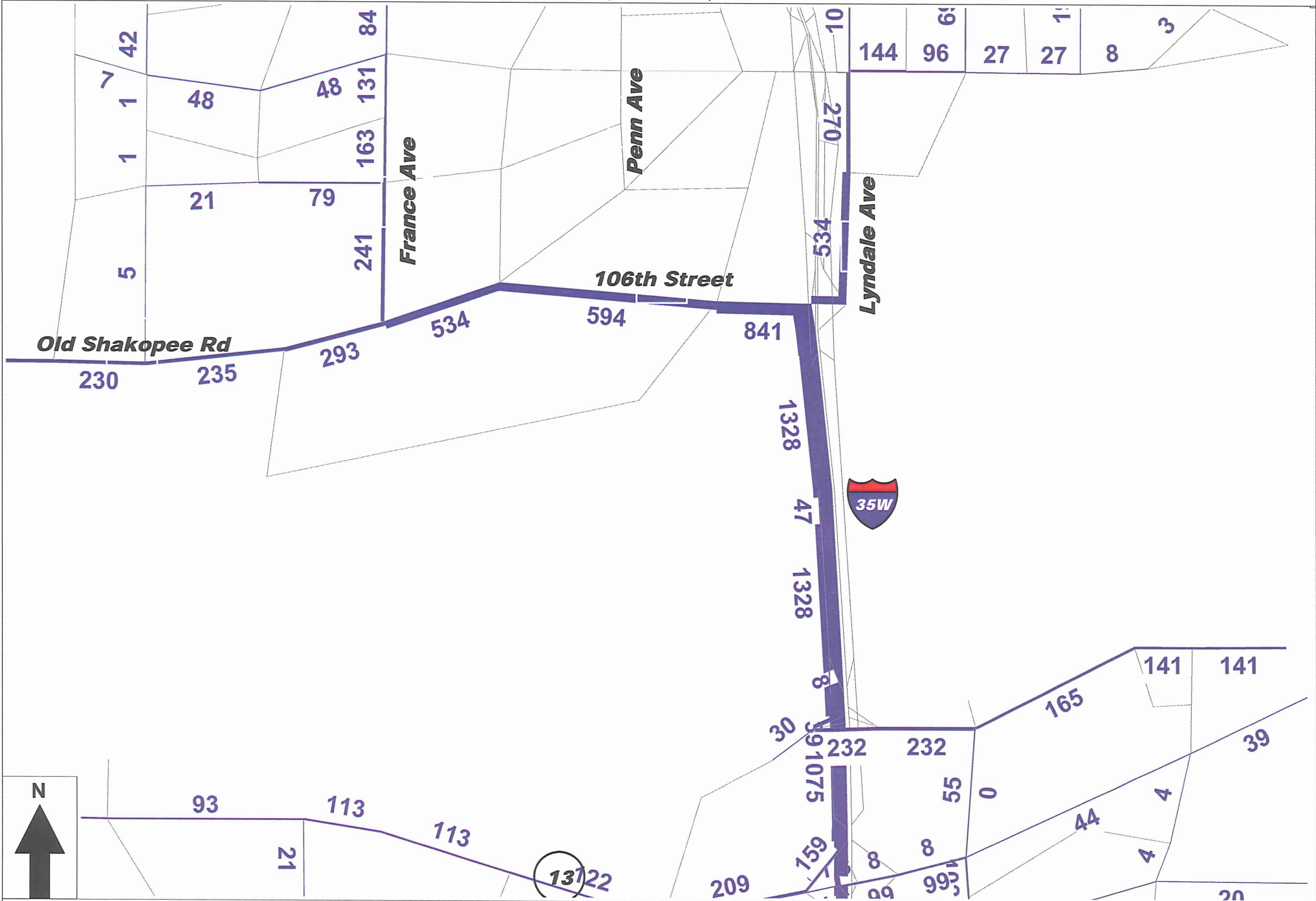

Appendix A

Traffic Forecasting

Regional Model Selected Link on the SB I-35W/106th Street Entrance Ramp
(2030 PM)



Appendix B

Traffic Operations

B-1 – Existing Conditions Traffic Operations Analysis

B-2 – 2030 No Build Conditions Traffic Operations Analysis

B-3 – 2030 Build Scenario 1 Conditions Traffic Operations Analysis

B-4 – 2030 Build Scenario 2 Conditions Traffic Operations Analysis

B-5 – 2030 Build Scenario 3 Conditions Traffic Operations Analysis

B-6 – 2030 Build Scenario 4 Conditions Traffic Operations Analysis

B-1

Existing Conditions Traffic Operations Analysis

Time Period	Intersection	Approach	Demand Volumes (Veh/Hour)				Delay (s/veh)						LOS By Approach		LOS By Intersection		Through	Left Turn		Right Turn	
			Left	Thru	Right	Total	Left		Thru		Right		Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Max Queue	Storage	Max Queue	Storage	Max Queue
							Delay	LOS	Delay	LOS	Delay	LOS									
Segment 1 (Humboldt Avenue to Lyndale Avenue)																					
AM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	30	13	29	72	19.1	B	17.2	B	7.0	A	13.6	B	6.7	A	57	0	0	200	48
		SB	50	8	14	72	17.5	B	16.4	B	3.0	A	14.5	B			83	0	0	0	0
		EB	12	624	6	642	11.7	B	6.6	A	3.4	A	6.7	A			143	0	0	0	0
		WB	10	471	25	506	10.8	B	4.4	A	3.5	A	4.5	A			118	0	0	0	0
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	50	0	59	109	19.8	C	0.0	A	8.0	A	13.4	B	3.6	A	122	0	0	0	0
		EB	115	588	0	703	9.0	A	2.6	A	0.0	A	3.7	A			170	0	0	0	0
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	3	1	67	71	18.6	C	16.9	C	7.7	A	8.2	A	2.1	A	42	0	0	0	0
		SB	76	1	4	81	16.9	C	14.1	B	6.0	A	16.3	C			74	0	0	0	0
		EB	3	624	7	634	4.7	A	1.6	A	0.8	A	1.6	A			96	0	0	0	0
	I-35W West Ramp at 106th Street (SB Stop Control)	WB	10	600	58	668	3.5	A	0.3	A	0.1	A	0.3	A	2.3	A	42	0	0	0	0
		SB	43	1	135	179	15.9	C	0.0	A	10.7	B	12.0	B			68	0	0	300	91
		EB	0	510	257	767	0.0	A	0.5	A	0.4	A	0.5	A			35	0	0	0	50
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	WB	97	533	0	630	5.8	A	1.0	A	0.0	A	1.7	A	14.0	B	83	0	0	0	0
		NB	345	3	98	446	27.3	C	17.5	B	8.0	A	22.8	C			177	200	220	0	0
		EB	273	280	0	553	14.8	B	8.9	A	0.0	A	11.6	B			197	0	0	0	0
	Lyndale Avenue at 106th Street (EB Stop Control)	WB	0	285	67	352	0.0	A	8.1	A	1.4	A	6.7	A	4.2	A	96	0	0	0	45
		NB	7	8	0	15	4.7	A	5.9	A	0.0	A	5.4	A			36	0	0	0	0
		SB	0	25	334	359	0.0	A	6.2	A	3.2	A	3.4	A			46	0	0	0	0
PM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	11	8	21	40	19.4	B	20.4	C	10.3	B	14.7	B	8.4	A	77	0	67	0	0
		SB	69	20	15	104	19.1	B	19.5	B	4.8	A	17.0	B			44	0	0	200	47
		EB	17	977	16	1,010	12.3	B	8.8	A	8.2	A	8.8	A			87	0	0	0	0
		WB	18	464	10	492	17.8	B	4.9	A	4.1	A	5.3	A			189	0	0	0	0
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	38	0	15	53	20.6	C	0.0	A	9.0	A	16.9	C	1.9	A	121	0	0	0	0
		EB	12	1055	0	1,067	4.0	A	1.6	A	0.0	A	1.6	A			86	0	0	0	0
		WB	0	477	8	485	0.0	A	0.8	A	0.9	A	0.8	A			78	0	0	0	0
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	0	1	28	29	0.0	A	0.0	A	23.3	C	23.3	C	5.6	A	0	0	0	0	0
		SB	77	0	9	86	45.7	E	0.0	A	24.4	C	43.4	E			62	0	0	0	0
		EB	16	970	0	986	5.5	A	4.1	A	0.0	A	4.1	A			168	0	0	0	0
	I-35W West Ramp at 106th Street (SB Stop Control)	WB	48	425	78	551	12.2	B	0.6	A	0.1	A	1.4	A	2.5	A	98	0	0	0	0
		SB	31	1	50	82	15.3	C	21.2	C	10.1	B	12.4	B			56	0	0	300	54
		EB	0	276	799	1,075	0.0	A	0.7	A	1.3	A	1.1	A			39	0	0	0	108
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	WB	195	501	0	696	8.6	A	1.6	A	0.0	A	3.5	A	11.6	B	155	0	0	0	0
		NB	265	4	126	395	24.1	C	14.4	B	7.6	A	18.9	B			27	200	200	0	0
		EB	132	175	0	307	13.9	B	7.6	A	0.0	A	10.2	B			114	0	0	0	0
	Lyndale Avenue at 106th Street (EB Stop Control)	WB	0	431	80	511	0.0	A	7.6	A	1.3	A	6.6	A	4.5	A	151	0	0	0	32
		NB	91	48	0	139	5.6	A	6.8	A	0.0	A	6.0	A			72	0	0	0	0
SB		0	22	420	442	0.0	A	6.5	A	3.6	A	3.7	A	36			0	0	0	0	
EB	281	0	14	295	5.2	A	1.0	A	3.8	A	5.1	A	71	0	60	0	0				
Segment 2 (Xerxes Avenue to Humboldt Avenue)																					
AM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	NB	0	64	130	194	0.0	A	0.7	A	0.6	A	0.6	A	4.4	A	29	0	0	0	0
		SB	258	39	0	297	2.8	A	0.4	A	0.0	A	2.4	A			54	0	0	0	0
	Penn Avenue at 106th Street (NB/SB Stop Control)	WB	56	0	380	436	10.3	B	1.0	A	7.4	A	7.5	A	2.9	A	0	0	66	0	123
		NB	11	3	117	131	8.7	A	15.2	C	9.4	A	9.5	A			31	0	0	75	84
PM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	SB	4	1	0	5	7.7	A	16.3	C	0.0	A	9.4	A	5.3	A	31	0	0	0	0
		EB	3	464	4	471	3.8	A	1.5	A	1.4	A	1.5	A			31	0	0	0	0
	Penn Avenue at 106th Street (NB/SB Stop Control)	WB	28	437	4	469	5.4	A	2.1	A	2.4	A	2.3	A	3.1	A	33	0	0	0	0
		NB	0	36	93	129	0.0	A	0.9	A	0.6	A	0.7	A			31	0	0	0	0
	Xerxes Avenue at 106th Street (WB Stop Control)	SB	730	60	0	790	5.1	A	0.6	A	0.0	A	4.7	A	3.1	A	100	0	0	0	0
		WB	48	0	210	258	35.3	E	1.1	A	5.9	A	8.5	A			0	0	95	0	84
Penn Avenue at 106th Street (NB/SB Stop Control)	NB	5	0	60	65	15.6	C	0.0	A	10.6	B	11.1	B	3.1	A	31	0	0	75	56	
	SB	2	2	1	5	9.5	A	18.9	C	2.6	A	10.3	B			31	0	0	0	0	
	EB	2	815	12	829	0.0	A	2.5	A	3.1	A	2.5	A			10	0	0	0	0	
	WB	68	334	1	403	8.4	A	2.3	A	1.5	A	3.1	A			67	0	0	0	0	

B-2

2030 No Build Conditions Traffic Operations Analysis

Time Period	Intersection	Approach	Demand Volumes (Veh/Hour)				Delay (s/veh)						LOS By Approach		LOS By Intersection		Through Max Queue	Left Turn		Right Turn	
							Left		Thru		Right		Delay (S/Veh)	LOS	Delay (S/Veh)	LOS		Max Queue	Storage	Max Queue	Storage
			Left	Thru	Right	Total	Delay	LOS	Delay	LOS	Delay	LOS									
Segment 1 (Humboldt Avenue to Lyndale Avenue)																					
AM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	40	20	40	100	18.1	B	17.6	B	9.1	A	14.6	B	8.9	A	91	0	0	200	57
		SB	70	20	20	110	18.7	B	17.9	B	4.0	A	15.4	B			95	0	0	0	0
		EB	20	840	10	870	16.8	B	9.0	A	6.7	A	9.1	A			190	0	0	0	0
		WB	20	620	40	680	16.9	B	6.6	A	4.2	A	6.7	A			150	0	0	0	0
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	70	0	80	150	119.2	F	0.0	A	85.7	F	101.6	F	11.2	B	329	0	0	0	0
		EB	160	790	0	950	17.3	C	4.7	A	0.0	A	6.8	A			300	0	0	0	0
		WB	0	600	280	880	0.0	A	2.2	A	2.7	A	2.4	A			40	0	0	0	0
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	10	10	90	110	60.2	F	67.3	F	41.8	E	46.0	E	16.6	C	214	0	0	0	0
		SB	110	10	10	130	193.5	F	202.4	F	187.7	F	193.7	F			387	0	0	0	0
		EB	10	830	10	850	9.3	A	3.1	A	1.2	A	3.1	A			230	0	0	0	0
		WB	20	800	80	900	5.4	A	0.6	A	0.2	A	0.7	A			57	0	0	0	0
	I-35W West Ramp at 106th Street (SB Stop Control)	SB	60	0	190	250	52.4	F	0.0	A	17.7	C	26.2	D	4.8	A	133	0	0	300	164
		EB	0	680	350	1,030	0.0	A	1.6	A	0.5	A	1.2	A			66	0	0	0	59
		WB	130	710	0	840	12.0	B	1.4	A	0.0	A	3.0	A			142	0	0	0	0
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	NB	460	10	140	610	38.6	D	29.9	C	11.6	B	32.5	C	22.5	C	386	200	224	300	322
		EB	360	380	0	740	30.7	C	14.6	B	0.0	A	22.6	C			244	0	0	0	0
		WB	0	380	90	470	0.0	A	11.6	B	1.6	A	9.6	A			129	0	0	0	69
	Lyndale Avenue at 106th Street (EB Stop Control)	NB	10	20	0	30	5.4	A	6.2	A	0.0	A	5.9	A	4.6	A	36	0	0	0	0
SB		0	40	450	490	0.0	A	6.3	A	3.8	A	4.0	A	54			0	0	0	0	
EB		410	0	70	480	5.7	A	1.3	A	4.9	A	5.2	A	96			0	80	0	0	
PM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	20	20	30	70	17.9	B	17.9	B	13.8	B	16.2	B	13.3	B	73	0	0	200	53
		SB	100	30	20	150	20.0	C	19.3	B	5.0	A	17.8	B			118	0	0	0	0
		EB	30	1300	30	1,360	22.6	C	14.7	B	15.2	B	14.9	B			354	0	0	0	0
		WB	30	610	20	660	27.8	C	7.8	A	3.9	A	8.6	A			143	0	0	0	0
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	60	0	20	80	36.1	E	0.0	A	13.6	B	30.8	D	3.0	A	133	0	0	0	0
		EB	20	1410	0	1,430	5.3	A	2.2	A	0.0	A	2.2	A			76	0	0	0	0
		WB	0	640	20	660	0.0	A	1.2	A	1.3	A	1.2	A			0	0	0	0	0
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	0	10	40	50	0.0	A	+300	F	+300	F	+300	F	108.9	F	277	0	0	0	0
		SB	110	0	20	130	+300	F	0.0	A	+300	F	+300	F			691	0	0	0	0
		EB	30	1290	0	1,320	10.6	B	9.3	A	0.0	A	9.3	A			465	0	0	0	0
		WB	70	570	110	750	27.2	D	1.4	A	0.2	A	3.8	A			64	0	0	0	0
	I-35W West Ramp at 106th Street (SB Stop Control)	SB	50	0	70	120	26.1	D	0.0	A	22.7	C	24.1	C	6.5	A	72	0	0	300	111
		EB	0	370	1070	1,440	0.0	A	1.1	A	2.2	A	2.0	A			47	0	0	0	121
		WB	260	680	0	940	26.4	D	4.9	A	0.0	A	10.6	B			248	0	0	0	0
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	NB	360	10	170	540	31.0	C	22.2	C	9.3	A	24.3	C	17.3	B	113	200	224	0	0
		EB	180	240	0	420	24.1	C	9.3	A	0.0	A	15.7	B			174	0	0	0	0
		WB	0	580	110	690	0.0	A	15.0	B	1.4	A	12.8	B			262	0	0	0	28
	Lyndale Avenue at 106th Street (EB Stop Control)	NB	130	70	0	200	6.5	A	7.6	A	0.0	A	6.9	A	5.3	A	88	0	0	0	0
SB		0	30	560	590	0.0	A	6.8	A	4.6	A	4.7	A	39			0	0	0	60	
EB		380	0	20	400	5.7	A	1.1	A	3.4	A	5.4	A	84			0	68	0	0	
Segment 2 (Xerxes Avenue to Humboldt Avenue)																					
AM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	NB	0	90	180	270	0.0	A	0.8	A	0.9	A	0.9	A	5.7	A	24	0	0	0	0
		SB	350	60	0	410	3.4	A	0.6	A	0.0	A	3.0	A			92	0	0	0	0
		WB	80	0	510	590	13.4	B	1.4	A	9.6	A	9.6	A			0	0	82	0	199
	Penn Avenue at 106th Street (NB/SB Stop Control)	NB	20	10	160	190	15.3	C	18.7	C	11.6	B	12.3	B	3.9	A	68	0	0	75	94
		SB	10	10	10	30	10.7	B	15.8	C	5.7	A	10.7	B			52	0	0	0	0
		EB	10	620	10	640	5.0	A	1.7	A	2.0	A	1.8	A			44	0	0	0	0
PM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	NB	0	50	130	180	0.0	A	1.2	A	0.8	A	0.9	A	22.2	C	31	0	0	0	0
		SB	980	90	0	1,070	7.4	A	0.8	A	0.0	A	6.8	A			288	0	0	0	0
		WB	70	0	280	350	+300	F	1.4	A	8.5	A	65.5	F			0	0	404	0	352
	Penn Avenue at 106th Street (NB/SB Stop Control)	NB	10	0	80	90	21.9	C	0.0	A	14.1	B	15.0	C	4.2	A	45	0	0	75	82
		SB	10	10	10	30	16.7	C	26.3	D	4.6	A	14.8	B			66	0	0	0	0
		EB	10	1090	20	1,120	5.7	A	2.9	A	0.0	A	2.9	A			52	0	0	0	0
WB	100	450	10	560	11.4	B	3.2	A	2.6	A	4.4	A	104	0	0	0	0				

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2030 Build Scenario 1 Conditions Traffic Operations Analysis

Time Period	Intersection	Approach	Demand Volumes (Veh/Hour)				Delay (s/veh)						LOS By Approach		LOS By Intersection		Through	Left Turn		Right Turn	
			Left	Thru	Right	Total	Left		Thru		Right		Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Max Queue	Storage	Max Queue	Storage	Max Queue
							Delay	LOS	Delay	LOS	Delay	LOS									
Segment 1 (Humboldt Avenue to Lyndale Avenue)																					
AM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	40	20	40	100	19.6	B	20.1	C	9.6	A	15.2	B	9.0	A	95	0	0	200	62
		SB	70	20	20	110	19.0	B	19.7	B	3.0	A	16.3	B			99	0	0	0	0
		EB	20	840	10	870	14.6	B	8.2	A	4.7	A	8.3	A			213	0	0	0	0
		WB	20	620	40	680	20.8	C	7.8	A	2.4	A	7.8	A			211	0	0	0	0
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	70	0	80	150	69.4	F	0.0	A	46.5	E	57.1	F	7.7	A	266	0	0	0	0
		EB	160	790	0	950	13.3	B	4.4	A	0.0	A	5.9	A			275	0	0	0	0
		WB	0	600	280	880	0.0	A	1.8	A	2.2	A	1.9	A			42	0	0	0	0
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	0	0	90	90	0.0	A	0.0	A	53.9	F	53.9	F	5.8	A	0	0	0	0	207
		SB	0	0	10	10	0.0	A	0.0	A	5.7	A	5.7	A			0	0	0	0	28
		EB	0	940	10	950	0.0	A	6.2	A	1.2	A	6.1	A			400	0	0	0	0
		WB	0	820	80	900	0.0	A	0.4	A	0.2	A	0.4	A			12	0	0	0	0
	I-35W West Ramp at 106th Street (SB Stop Control)	SB	60	0	190	250	51.8	F	0.0	A	15.7	C	24.1	C	4.6	A	128	0	0	300	130
		EB	0	680	350	1,030	0.0	A	2.1	A	0.5	A	1.6	A			65	0	0	0	56
		WB	130	710	0	840	11.2	B	1.3	A	0.0	A	2.8	A			113	0	0	0	0
I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	NB	460	10	140	610	37.7	D	26.2	C	10.7	B	31.7	C	23.1	C	410	200	224	300	260	
	EB	360	380	0	740	32.6	C	16.1	B	0.0	A	24.1	C			246	0	0	0	0	
	WB	0	380	90	470	0.0	A	12.6	B	1.5	A	10.5	B			132	0	0	0	55	
Lyndale Avenue at 106th Street (EB Stop Control)	NB	10	20	0	30	4.4	A	6.5	A	0.0	A	5.8	A	4.7	A	36	0	0	0	0	
	SB	0	40	450	490	0.0	A	6.5	A	3.7	A	3.9	A			53	0	0	0	0	
	EB	410	0	70	480	5.9	A	1.4	A	5.0	A	5.4	A			99	0	78	0	0	
PM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	20	20	30	70	21.9	C	21.1	C	12.7	B	17.7	B	11.4	B	61	0	0	200	57
		SB	100	30	20	150	20.5	C	18.2	B	4.1	A	17.7	B			108	0	0	0	0
		EB	30	1300	30	1,360	17.2	B	10.0	B	6.5	A	10.1	B			270	0	0	0	0
		WB	30	610	20	660	34.5	C	11.2	B	1.4	A	12.0	B			316	0	0	0	0
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	60	0	20	80	36.5	E	0.0	A	22.0	C	32.6	D	3.1	A	130	0	0	0	0
		EB	20	1410	0	1,430	5.7	A	2.3	A	0.0	A	2.4	A			110	0	0	0	0
		WB	0	640	20	660	0.0	A	1.2	A	1.0	A	1.2	A			32	0	0	0	0
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	0	0	40	40	0.0	A	0.0	A	93.5	F	93.5	F	7.9	A	0	0	0	0	134
		SB	0	0	20	20	0.0	A	0.0	A	5.4	A	5.4	A			0	0	0	0	36
		EB	0	1400	0	1,400	0.0	A	9.5	A	0.0	A	9.5	A			543	0	0	0	0
		WB	0	640	110	750	0.0	A	0.6	A	0.2	A	0.5	A			0	0	0	0	0
	I-35W West Ramp at 106th Street (SB Stop Control)	SB	50	0	70	120	38.2	E	0.0	A	13.0	B	23.0	C	5.1	A	122	0	0	300	77
		EB	0	370	1070	1,440	0.0	A	1.2	A	2.4	A	2.1	A			71	0	0	0	125
		WB	260	680	0	940	20.4	C	1.8	A	0.0	A	7.1	A			226	0	0	0	0
I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	NB	360	10	170	540	30.3	C	20.5	C	9.0	A	23.2	C	14.4	B	171	200	220	0	0	
	EB	180	240	0	420	21.3	C	9.4	A	0.0	A	14.1	B			166	0	0	0	0	
	WB	0	580	110	690	0.0	A	8.9	A	1.4	A	7.7	A			168	0	0	0	51	
Lyndale Avenue at 106th Street (EB Stop Control)	NB	130	70	0	200	6.5	A	7.8	A	0.0	A	7.0	A	5.4	A	92	0	0	0	0	
	SB	0	30	560	590	0.0	A	7.0	A	4.5	A	4.6	A			44	0	0	0	0	
	EB	380	0	20	400	6.0	A	1.0	A	4.6	A	5.8	A			90	0	93	0	0	
Segment 2 (Xerxes Avenue to Humboldt Avenue)																					
AM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	NB	0	90	180	270	0.0	A	0.9	A	1.1	A	1.0	A	8.0	A	34	0	0	0	0
		SB	350	60	0	410	5.8	A	0.7	A	0.0	A	5.0	A			156	0	0	0	0
		WB	80	0	510	590	19.5	C	2.4	A	12.7	B	13.1	B			0	1000	87	0	190
	Penn Avenue at 106th Street (NB/SB Stop Control)	NB	20	10	160	190	21.3	C	18.7	C	14.0	B	15.0	C	5.1	A	90	0	0	75	88
		SB	10	10	10	30	16.2	C	15.5	C	8.5	A	14.0	B			58	0	0	0	0
		EB	10	620	10	640	7.5	A	4.1	A	2.8	A	4.1	A			11	300	31	0	0
PM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	NB	0	50	130	180	0.0	A	1.4	A	1.1	A	1.2	A	40.1	E	47	0	0	0	0
		SB	980	90	0	1,070	15.3	C	1.0	A	0.0	A	14.1	B			511	0	0	0	0
		WB	70	0	280	350	+300	F	2.2	A	8.4	A	119.4	F			0	1000	685	0	221
	Penn Avenue at 106th Street (NB/SB Stop Control)	NB	10	0	80	90	34.1	D	0.0	A	23.5	C	24.7	C	6.9	A	31	0	0	75	95
		SB	10	10	10	30	44.9	E	38.1	E	6.6	A	28.8	D			68	0	0	0	0
		EB	10	1090	20	1,120	9.0	A	6.7	A	0.0	A	6.7	A			6	300	31	0	0
WB	100	450	10	560	13.1	B	2.2	A	2.1	A	3.8	A	0	300	86	0	0				
Notes:																					
1. Segment 1: Right in/right out access at W. Bloomington Fwy/River Terrace																					
2. Segment 2: 2-lane road with CLTL from Xerxes Avenue to River (Just west of Humboldt Avenue)																					

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2030 Build Scenario 2 Conditions Traffic Operations Analysis

Time Period	Intersection	Approach	Demand Volumes (Veh/Hour)				Delay (s/veh)						LOS By Approach		LOS By Intersection		Through	Left Turn		Right Turn		
							Left		Thru		Right		Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Max Queue	Storage	Max Queue	Storage	Max Queue	
			Left	Thru	Right	Total	Delay	LOS	Delay	LOS	Delay	LOS										
Segment 1 (Humboldt Avenue to Lyndale Avenue)																						
AM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	40	20	40	100	28.8	C	30.6	C	17.2	B	24.1	C	14.3	B	95	0	0	200	61	
		SB	70	20	20	110	28.9	C	23.3	C	11.2	B	24.6	C			104	0	0	0	0	
		EB	20	840	10	870	23.4	C	16.2	B	14.1	B	16.3	B			429	300	62	0	0	
	School Entrance/Exit at 106th Street (SB Stop Control)	WB	20	620	40	680	27.6	C	8.1	A	5.7	A	8.6	A	308	200	60	0	0			
		SB	70	0	80	150	+300	F	0.0	A	+300	F	+300	F	512	0	0	0	0			
		EB	160	790	0	950	23.6	C	1.7	A	0.0	A	5.4	A	0	200	177	0	0			
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	WB	0	600	280	880	0.0	A	5.6	A	3.7	A	5.0	A	61	0	0	0	0			
		NB	0	0	90	90	0.0	A	0.0	A	49.7	E	49.7	E	0	0	0	0	202			
		SB	0	0	10	10	0.0	A	0.0	A	3.7	A	3.7	A	0	0	0	0	28			
	I-35W West Ramp at 106th Street (SB Stop Control)	EB	0	940	10	950	0.0	A	4.5	A	0.3	A	4.5	A	346	0	0	0	0			
		WB	0	820	80	900	0.0	A	0.9	A	0.2	A	0.8	A	21	0	0	0	0			
		SB	60	0	190	250	185.8	F	0.0	A	11.6	B	56.6	F	255	0	0	300	138			
I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	EB	0	680	350	1,030	0.0	A	3.1	A	0.4	A	2.2	A	66	0	0	0	55				
	WB	130	710	0	840	13.3	B	4.0	A	0.0	A	5.5	A	225	0	0	0	0				
	NB	460	10	140	610	39.3	D	24.7	C	10.8	B	32.6	C	421	200	224	300	260				
Lyndale Avenue at 106th Street (EB Stop Control)	EB	360	380	0	740	43.3	D	17.9	B	0.0	A	30.3	C	247	0	0	0	0				
	WB	0	380	90	470	0.0	A	14.0	B	1.6	A	11.7	B	206	0	0	0	62				
	NB	10	20	0	30	4.8	A	6.8	A	0.0	A	6.1	A	41	0	0	0	0				
PM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	SB	0	40	450	490	0.0	A	6.7	A	3.9	A	4.1	A	54	0	0	0	0			
		EB	410	0	70	480	6.0	A	1.5	A	5.5	A	5.6	A	112	0	71	0	0			
		NB	20	20	30	70	65.0	E	66.0	E	57.8	E	62.0	E	90	0	0	200	77			
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	100	30	20	150	67.9	E	60.9	E	17.0	B	59.7	E	180	0	0	0	0			
		EB	30	1300	30	1,360	62.7	E	56.0	E	49.2	D	56.0	E	1505	300	219	0	0			
		WB	30	610	20	660	88.7	F	5.8	A	3.3	A	10.0	B	294	200	98	0	0			
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	SB	60	0	20	80	+300	F	0.0	A	+300	F	+300	F	417	0	0	0	0			
		EB	20	1410	0	1,430	5.8	A	1.8	A	0.0	A	1.9	A	0	200	31	0	0			
		WB	0	640	20	660	0.0	A	1.2	A	0.7	A	1.2	A	15	0	0	0	0			
	I-35W West Ramp at 106th Street (SB Stop Control)	NB	0	0	40	40	0.0	A	0.0	A	172.6	F	172.6	F	0	0	0	0	179			
		SB	0	0	20	20	0.0	A	0.0	A	4.2	A	4.2	A	0	0	0	0	28			
		WB	0	1400	0	1,400	0.0	A	5.0	A	0.0	A	5.0	A	382	0	0	0	0			
I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	WB	0	640	110	750	0.0	A	1.1	A	0.2	A	1.0	A	19	0	0	0	0				
	SB	50	0	70	120	45.3	E	0.0	A	10.1	B	24.6	C	117	0	0	300	72				
	EB	0	370	1070	1,440	0.0	A	1.2	A	2.3	A	2.0	A	61	0	0	0	123				
Lyndale Avenue at 106th Street (EB Stop Control)	WB	260	680	0	940	24.0	C	9.0	A	0.0	A	13.2	B	267	0	0	0	0				
	NB	360	10	170	540	37.5	D	27.4	C	9.9	A	28.1	C	394	200	224	300	195				
	EB	180	240	0	420	34.4	C	11.9	B	0.0	A	21.4	C	209	0	0	0	0				
Segment 2 (Xerxes Avenue to Humboldt Avenue)	Xerxes Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	0	90	180	270	0.0	A	17.7	B	8.4	A	11.4	B	12.2	B	147	0	0	0	0	
		SB	350	60	0	410	13.7	B	6.9	A	0.0	A	12.6	B			66	0	229	0	0	
		WB	80	0	510	590	22.6	C	2.9	A	11.2	B	12.2	B			0	300	120	0	182	
Penn Avenue at 106th Street (NB/SB Stop Control)	NB	20	10	160	190	20.8	C	21.7	C	15.2	C	16.1	C	6.5	A	104	0	0	75	94		
	SB	10	10	10	30	23.6	C	15.5	C	7.8	A	16.4	C			61	0	0	0	0		
	EB	10	620	10	640	8.7	A	4.7	A	4.4	A	4.8	A			0	300	30	0	0		
Xerxes Avenue at 106th Street (Signal) (Traffic Signal Control)	WB	40	590	10	640	9.2	A	4.7	A	4.6	A	4.9	A	0	300	30	0	0				
	NB	0	50	130	180	0.0	A	25.5	C	17.0	B	19.4	B	32.1	C	129	0	0	0	0		
	SB	980	90	0	1,070	46.8	D	10.9	B	0.0	A	43.5	D			860	0	904	0	0		
WB	70	0	280	350	33.8	C	2.5	A	8.5	A	10.6	B	0			300	104	0	114			
Penn Avenue at 106th Street (NB/SB Stop Control)	NB	10	0	80	90	39.5	E	0.0	A	26.1	D	27.6	D	8.5	A	35	0	0	75	92		
	SB	10	10	10	30	30.4	D	31.6	D	7.5	A	23.4	C			62	0	0	0	0		
	EB	10	1090	20	1,120	8.5	A	7.6	A	0.0	A	7.6	A			0	300	31	0	0		
		WB	100	450	10	560	18.3	C	4.2	A	4.4	A	6.4	A	0	300	117	0	0			

- Notes:
1. Segment 1: Right in/right out access at W. Bloomington Fwy/River Terrace
 2. Segment 1: Optimized Timing at Humboldt Avenue (Synchro Optimized Cycle Length is 90 seconds for AM and 150 seconds for PM peak)
 3. Segment 1: 2-lane road with CLTL from Humboldt Avenue to East of School Access
 4. Segment 2: Traffic Signal Control at Xerxes Avenue with designated southbound left turn lane and one through lane
 5. Segment 2: 2-lane road with CLTL from Xerxes Avenue to Humboldt Avenue

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2030 Build Scenario 3 Conditions Traffic Operations Analysis

Time Period	Intersection	Approach	Demand Volumes (Veh/Hour)				Delay (s/veh)						LOS By Approach		LOS By Intersection		Through		Left Turn		Right Turn		
							Left		Thru		Right		Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Max Queue	Storage	Max Queue	Storage	Max Queue		
			Left	Thru	Right	Total	Delay	LOS	Delay	LOS	Delay	LOS											
Segment 1 (Humboldt Avenue to Lyndale Avenue)																							
AM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	40	20	40	100	19.4	B	19.6	B	9.4	A	15.0	B	9.5	A	90	0	0	200	64		
		SB	70	20	20	110	19.2	B	20.2	C	3.7	A	16.5	B			86	0	0	0	0		
		EB	20	840	10	870	16.6	B	8.6	A	5.2	A	8.7	A			209	0	0	0	0		
		WB	20	620	40	680	20.3	C	8.5	A	2.5	A	8.5	A			227	0	0	0	0		
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	70	0	80	150	82.5	F	0.0	A	62.0	F	71.6	F	9.5	A	317	0	0	0	0		
		EB	160	790	0	950	15.0	C	5.0	A	0.0	A	6.6	A			262	0	0	0	0		
		WB	0	600	280	880	0.0	A	1.8	A	2.3	A	2.0	A			47	0	0	0	0		
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	0	0	90	90	0.0	A	0.0	A	40.5	E	40.5	E	4.9	A	0	0	0	0	198		
		SB	0	0	10	10	0.0	A	0.0	A	6.6	A	6.6	A			0	0	0	0	28		
		EB	0	940	10	950	0.0	A	5.6	A	1.6	A	5.6	A			401	0	0	0	0		
	I-35W West Ramp at 106th Street (SB Stop Control)	WB	0	820	80	900	0.0	A	0.4	A	0.2	A	0.4	A	5.1	A	0	0	0	0	0		
		SB	60	0	190	250	65.0	F	0.0	A	15.7	C	27.9	D			140	0	0	300	120		
		EB	0	680	350	1,030	0.0	A	2.2	A	0.5	A	1.6	A			66	0	0	0	58		
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	WB	130	710	0	840	13.5	B	1.2	A	0.0	A	3.2	A	23.1	C	150	0	0	0	0		
		NB	460	10	140	610	38.2	D	25.9	C	11.0	B	32.2	C			443	200	224	300	322		
		EB	360	380	0	740	32.1	C	16.1	B	0.0	A	23.9	C			247	0	0	0	0		
	Lyndale Avenue at 106th Street (EB Stop Control)	WB	0	380	90	470	0.0	A	12.4	B	1.6	A	10.3	B	143	0	0	0	63				
		NB	10	20	0	30	4.8	A	6.3	A	0.0	A	5.9	A	40	0	0	0	0				
SB		0	40	450	490	0.0	A	6.6	A	3.8	A	4.0	A	50	0	0	0	0					
PM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	20	20	30	70	19.2	B	17.2	B	12.3	B	15.7	B	12.0	B	62	0	0	200	60		
		SB	100	30	20	150	20.9	C	17.8	B	5.5	A	18.2	B			99	0	0	0	0		
		EB	30	1300	30	1,360	19.1	B	11.2	B	8.5	A	11.3	B			317	0	0	0	0		
		WB	30	610	20	660	30.2	C	11.3	B	2.2	A	11.8	B			276	0	0	0	0		
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	60	0	20	80	46.5	E	0.0	A	25.1	D	41.5	E	3.6	A	150	0	0	0	0		
		EB	20	1410	0	1,430	5.8	A	2.4	A	0.0	A	2.5	A			121	0	0	0	0		
		WB	0	640	20	660	0.0	A	1.1	A	1.0	A	1.1	A			0	0	0	0	0		
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	NB	0	0	40	40	0.0	A	0.0	A	167.8	F	167.8	F	10.0	B	0	0	0	0	191		
		SB	0	0	20	20	0.0	A	0.0	A	6.6	A	6.6	A			0	0	0	0	36		
		EB	0	1400	0	1,400	0.0	A	10.9	B	0.0	A	10.9	B			580	0	0	0	0		
	I-35W West Ramp at 106th Street (SB Stop Control)	WB	0	640	110	750	0.0	A	0.6	A	0.2	A	0.5	A	5.3	A	24	0	0	0	0		
		SB	50	0	70	120	48.9	E	0.0	A	12.7	B	26.9	D			126	0	0	300	66		
		EB	0	370	1070	1,440	0.0	A	1.4	A	2.6	A	2.3	A			64	0	0	0	125		
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	WB	260	680	0	940	20.6	C	1.9	A	0.0	A	7.0	A	14.9	B	244	0	0	0	0		
		NB	360	10	170	540	29.6	C	20.4	C	9.1	A	23.2	C			240	200	224	300	65		
		EB	180	240	0	420	22.6	C	10.4	B	0.0	A	15.5	B			174	0	0	0	0		
	Lyndale Avenue at 106th Street (EB Stop Control)	WB	0	580	110	690	0.0	A	9.6	A	1.4	A	8.2	A	5.4	A	183	0	0	0	55		
		NB	130	70	0	200	6.6	A	8.0	A	0.0	A	7.1	A			97	0	0	0	0		
SB		0	30	560	590	0.0	A	7.3	A	4.5	A	4.6	A	51			0	0	0	0			
Segment 2 (Xerxes Avenue to Humboldt Avenue)	AM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	NB	0	90	180	270	0.0	A	1.0	A	1.1	A	1.1	8.5	A	45	0	0	0	0		
			SB	350	60	0	410	6.2	A	0.6	A	0.0	A	5.3			A	158	0	0	0	0	
			WB	80	0	510	590	23.7	C	2.4	A	13.0	B	14.0			B	0	500	100	0	218	
		Penn Avenue at 106th Street (NB/SB Stop Control)	NB	20	10	160	190	23.6	C	16.7	C	14.3	B	15.3	C	5.3	A	82	0	0	75	89	
			SB	10	10	10	30	20.5	C	17.0	C	8.9	A	16.0	C			62	0	0	0	0	
			EB	10	620	10	640	7.6	A	4.1	A	3.6	A	4.1	A			11	100	31	0	0	
	PM Peak Hour	Xerxes Avenue at 106th Street (WB Stop Control)	WB	40	590	10	640	7.3	A	2.9	A	2.8	A	3.2	A	73.4	F	0	100	53	0	0	
			NB	0	50	130	180	0.0	A	1.4	A	1.2	A	1.3	A			53	0	0	0	0	
			SB	980	90	0	1,070	15.2	C	1.2	A	0.0	A	14.1	B			574	0	0	0	0	
		Penn Avenue at 106th Street (NB/SB Stop Control)	WB	70	0	280	350	+300	F	62.3	F	190.3	F	272.3	F	12.1	B	0	500	517	0	1861	
			NB	10	0	80	90	75.8	F	0.0	A	22.6	C	27.0	D			51	0	0	75	88	
			SB	10	10	10	30	34.4	D	52.7	F	39.5	E	42.1	E			81	0	0	0	0	
				EB	10	1090	20	1,120	10.2	B	6.8	A	0.0	A	6.8	A	5.4	A	4	100	29	0	0
				WB	100	450	10	560	29.6	D	16.4	C	8.1	A	18.2	C			500	100	102	0	0

Notes:
 1. Segment 1: Right in/right out access at W. Bloomington Fwy/River Terrace
 2. Segment 2: 2-lane road with from Xerxes Avenue to River (Just west of Humboldt Avenue)
 a. 100 ft left turn lanes provided at Penn Avenue
 b. 500 ft left turn lane provided at Xerxes Avenue

B-6 2030 Build Scenario 4 Conditions Traffic Operations Analysis

Time Period	Intersection	Approach	Demand Volumes (Veh/Hour)				Delay (s/veh)						LOS By Approach		LOS By Intersection		Through	Left Turn		Right Turn		
							Left		Thru		Right		Delay (S/Veh)	LOS	Delay (S/Veh)	LOS		Max Queue	Storage	Max Queue	Storage	Max Queue
			Left	Thru	Right	Total	Delay	LOS	Delay	LOS	Delay	LOS										
Segment 1 (Humboldt Avenue to Lyndale Avenue)																						
AM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	40	20	40	100	21.4	C	22.6	C	8.9	A	16.3	B	9.2	A	90	0	0	200	53	
		SB	70	20	20	110	21.7	C	20.6	C	8.9	A	19.1	B			100	0	0	0	0	
		EB	20	840	10	870	19.5	B	6.9	A	3.0	A	7.1	A			203	300	56	0	0	
		WB	20	620	40	680	19.9	B	9.3	A	7.0	A	9.4	A			322	150	72	0	0	
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	70	0	80	150	+300	F	0.0	A	+300	F	280.6	F	25.2	D	460	0	0	0	0	
		EB	160	790	0	950	31.5	D	1.8	A	0.0	A	6.9	A			273	150	174	0	0	
		WB	0	600	280	880	0.0	A	5.5	A	3.9	A	5.0	A			57	0	0	0	0	
		NB	0	0	90	90	0.0	A	0.0	A	40.4	E	40.4	E			0	0	0	0	192	
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	SB	0	0	10	10	0.0	A	0.0	A	3.4	A	3.4	A	5.0	A	0	0	0	0	32	
		EB	0	940	10	950	0.0	A	5.9	A	0.6	A	5.8	A			420	0	0	0	0	
		WB	0	820	80	900	0.0	A	0.9	A	0.1	A	0.8	A			5	0	0	0	0	
		NB	60	0	190	250	135.8	F	0.0	A	10.6	B	42.1	E			221	0	0	300	134	
	I-35W West Ramp at 106th Street (SB Stop Control)	EB	0	680	350	1,030	0.0	A	3.0	A	0.5	A	2.1	A	8.0	A	66	0	0	0	54	
		WB	130	710	0	840	12.6	B	3.4	A	0.0	A	4.8	A			213	0	0	0	0	
		NB	460	10	140	610	40.4	D	27.2	C	12.1	B	34.1	C			449	200	224	300	322	
		EB	360	380	0	740	40.8	D	17.0	B	0.0	A	28.8	C			248	0	0	0	0	
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	WB	0	380	90	470	0.0	A	13.1	B	1.6	A	11.0	B	25.9	C	189	0	0	0	77	
		NB	10	20	0	30	5.2	A	6.7	A	0.0	A	6.2	A			44	0	0	0	0	
SB		0	40	450	490	0.0	A	6.6	A	3.9	A	4.1	A	63			0	0	0	0		
EB		410	0	70	480	5.9	A	1.3	A	5.3	A	5.4	A	112			0	88	0	0		
PM Peak Hour	Humboldt Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	20	20	30	70	26.2	C	22.4	C	13.7	B	20.3	C	10.0	B	70	0	0	200	57	
		SB	100	30	20	150	25.0	C	23.4	C	7.7	A	22.9	C			118	0	0	0	0	
		EB	30	1300	30	1,360	18.4	B	8.1	A	5.8	A	8.2	A			221	300	49	0	0	
		WB	30	610	20	660	25.7	C	9.0	A	5.9	A	9.6	A			343	150	147	0	0	
	School Entrance/Exit at 106th Street (SB Stop Control)	SB	60	0	20	80	33.2	D	0.0	A	25.6	D	31.4	D	2.6	A	130	0	0	0	0	
		EB	20	1410	0	1,430	6.3	A	1.5	A	0.0	A	1.6	A			0	150	44	0	0	
		WB	0	640	20	660	0.0	A	1.4	A	0.8	A	1.4	A			45	0	0	0	0	
		NB	0	0	40	40	0.0	A	0.0	A	168.7	F	168.7	F			0	0	0	0	187	
	W. Bloomington Fwy/River Terrace at 106th Street (NB/SB Stop Control)	SB	0	0	20	20	0.0	A	0.0	A	4.1	A	4.1	A	8.7	A	0	0	0	0	28	
		EB	0	1400	0	1,400	0.0	A	8.2	A	0.0	A	8.2	A			548	0	0	0	0	
		WB	0	640	110	750	0.0	A	1.1	A	0.2	A	1.0	A			6	0	0	0	0	
		NB	50	0	70	120	33.8	D	0.0	A	9.4	A	19.4	C			91	0	0	300	72	
	I-35W West Ramp at 106th Street (SB Stop Control)	EB	0	370	1070	1,440	0.0	A	1.5	A	2.4	A	2.2	A	7.0	A	60	0	0	0	124	
		WB	260	680	0	940	24.3	C	8.7	A	0.0	A	12.9	B			254	0	0	0	0	
		NB	360	10	170	540	38.3	D	19.3	B	10.0	B	28.8	C			387	200	224	300	128	
		EB	180	240	0	420	36.1	D	12.0	B	0.0	A	22.4	C			217	0	0	0	0	
	I-35W East Ramp at 106th Street (Signal) (Traffic Signal Control)	WB	0	580	110	690	0.0	A	18.2	B	1.4	A	15.4	B	21.7	C	287	0	0	0	45	
		NB	130	70	0	200	7.2	A	8.1	A	0.0	A	7.5	A			105	0	0	0	0	
SB		0	30	560	590	0.0	A	6.8	A	5.6	A	5.7	A	50			0	0	0	106		
EB		380	0	20	400	6.0	A	1.2	A	5.3	A	5.8	A	84			0	76	0	0		
Segment 2 (Xerxes Avenue to Humboldt Avenue)	AM Peak Hour	Xerxes Avenue at 106th Street (Signal) (Traffic Signal Control)	NB	0	90	180	270	0.0	A	14.2	B	7.5	A	9.8	A	10.8	B	150	0	0	0	0
			SB	350	60	0	410	10.0	B	2.9	A	0.0	A	8.9	A			54	0	175	0	0
			WB	80	0	510	590	21.3	C	3.0	A	11.8	B	12.5	B			0	600	81	0	187
		Penn Avenue at 106th Street (NB/SB Stop Control)	NB	20	10	160	190	17.3	C	17.5	C	15.1	C	15.4	C	5.8	A	78	0	0	75	98
			SB	10	10	10	30	19.2	C	18.4	C	7.3	A	15.2	C			61	0	0	0	0
			EB	10	620	10	640	7.5	A	4.4	A	2.8	A	4.4	A			0	300	31	0	0
	PM Peak Hour	Xerxes Avenue at 106th Street (Signal) (Traffic Signal Control)	WB	40	590	10	640	9.1	A	3.7	A	3.7	A	4.0	A	18.6	B	0	300	50	0	0
			NB	0	50	130	180	0.0	A	33.4	C	24.7	C	27.2	C			172	0	0	0	0
			SB	980	90	0	1,070	21.9	C	3.0	A	0.0	A	20.4	C			512	0	677	0	0
		Penn Avenue at 106th Street (NB/SB Stop Control)	WB	70	0	280	350	38.6	D	2.5	A	8.5	A	11.4	B	8.1	A	0	600	110	0	114
			NB	10	0	80	90	35.9	E	0.0	A	26.0	D	27.2	D			86	0	0	75	89
			SB	10	10	10	30	36.6	E	33.2	D	7.8	A	24.8	C			69	0	0	0	0
		EB	10	1090	20	1,120	10.7	B	7.5	A	0.0	A	7.5	A	8.1	A	4	300	31	0	0	
		WB	100	450	10	560	16.3	C	3.5	A	2.2	A	5.5	A			0	300	124	0	0	

- Notes:
- Segment 1: Right in/right out access at W. Bloomington Fwy/River Terrace
 - Segment 1: Optimized Timing at Humboldt Avenue
 - Segment 1: Eastbound 2-thru lanes from Humboldt Avenue to I-35W West Ramp
 - Segment 1: Westbound 1-lane from just east of school access to Humboldt Avenue
 - Segment 2: Traffic Signal Control at Xerxes Avenue with designated southbound left turn lane and one through lane
 - Segment 2: 2-lane road with CLTL from Xerxes Avenue to just west of Humboldt Avenue

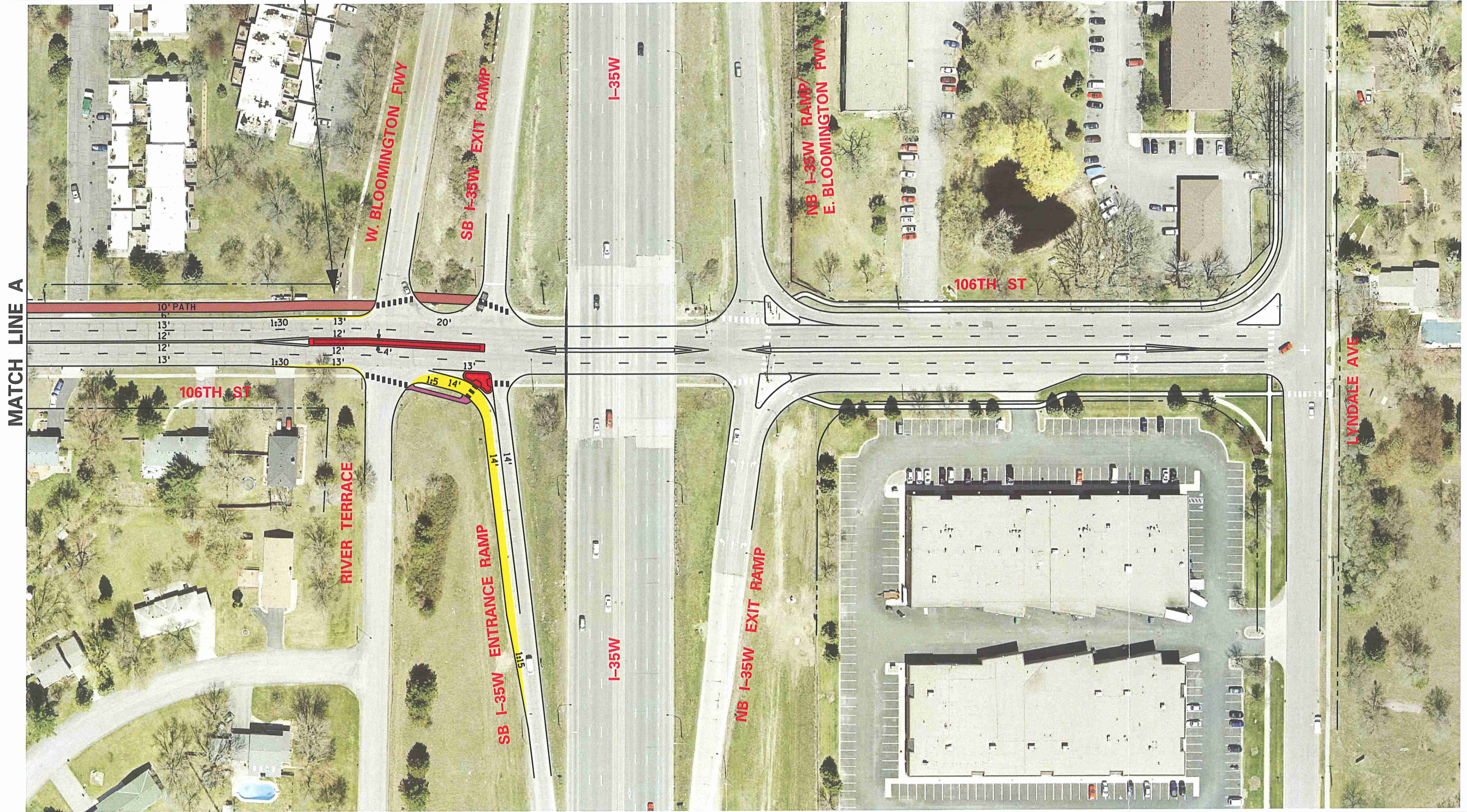
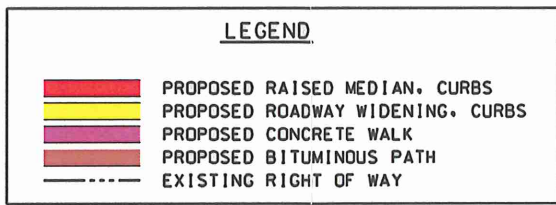
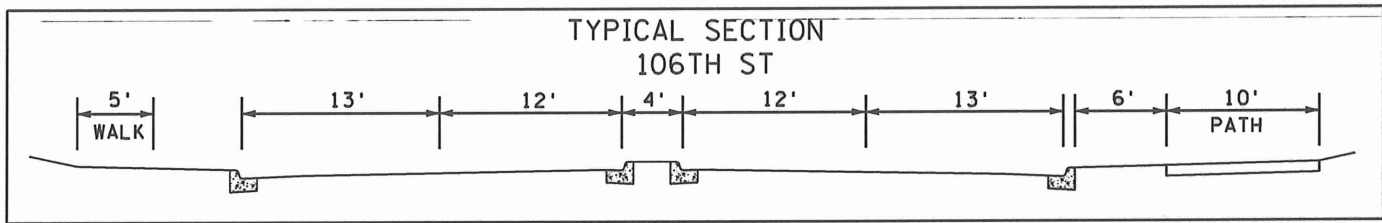
Appendix C

Alternative Concept Layouts

C-1 – Segment 1, Concept 1

C-2 – Segment 1, Concept 2

C-3 – Segment 2, Concept 1



sht1

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1/6/2011

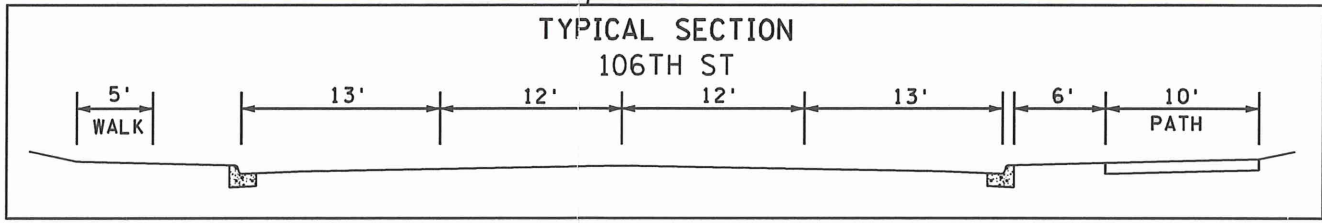
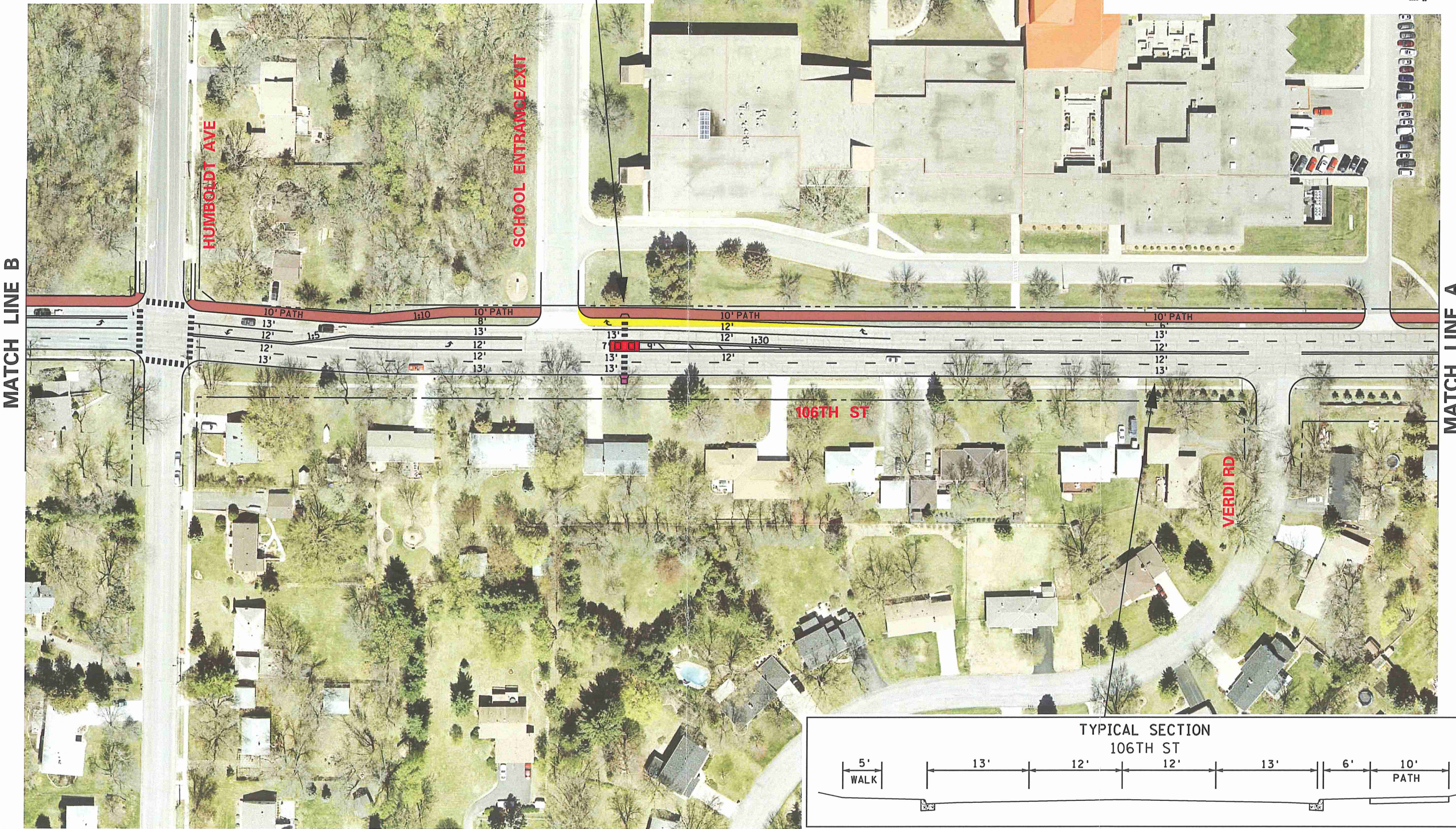
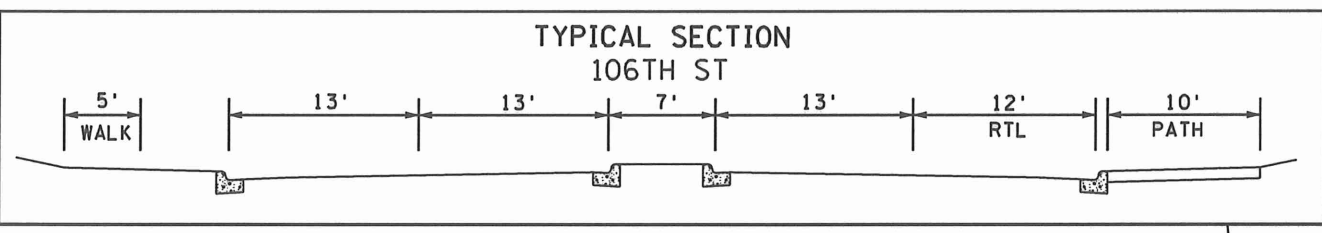


106th STREET STUDY
Bloomington, Minnesota



LEGEND

	PROPOSED RAISED MEDIAN, CURBS
	PROPOSED ROADWAY WIDENING, CURBS
	PROPOSED CONCRETE WALK
	PROPOSED BITUMINOUS PATH
	EXISTING RIGHT OF WAY



sht2

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**106th STREET STUDY
Bloomington, Minnesota**

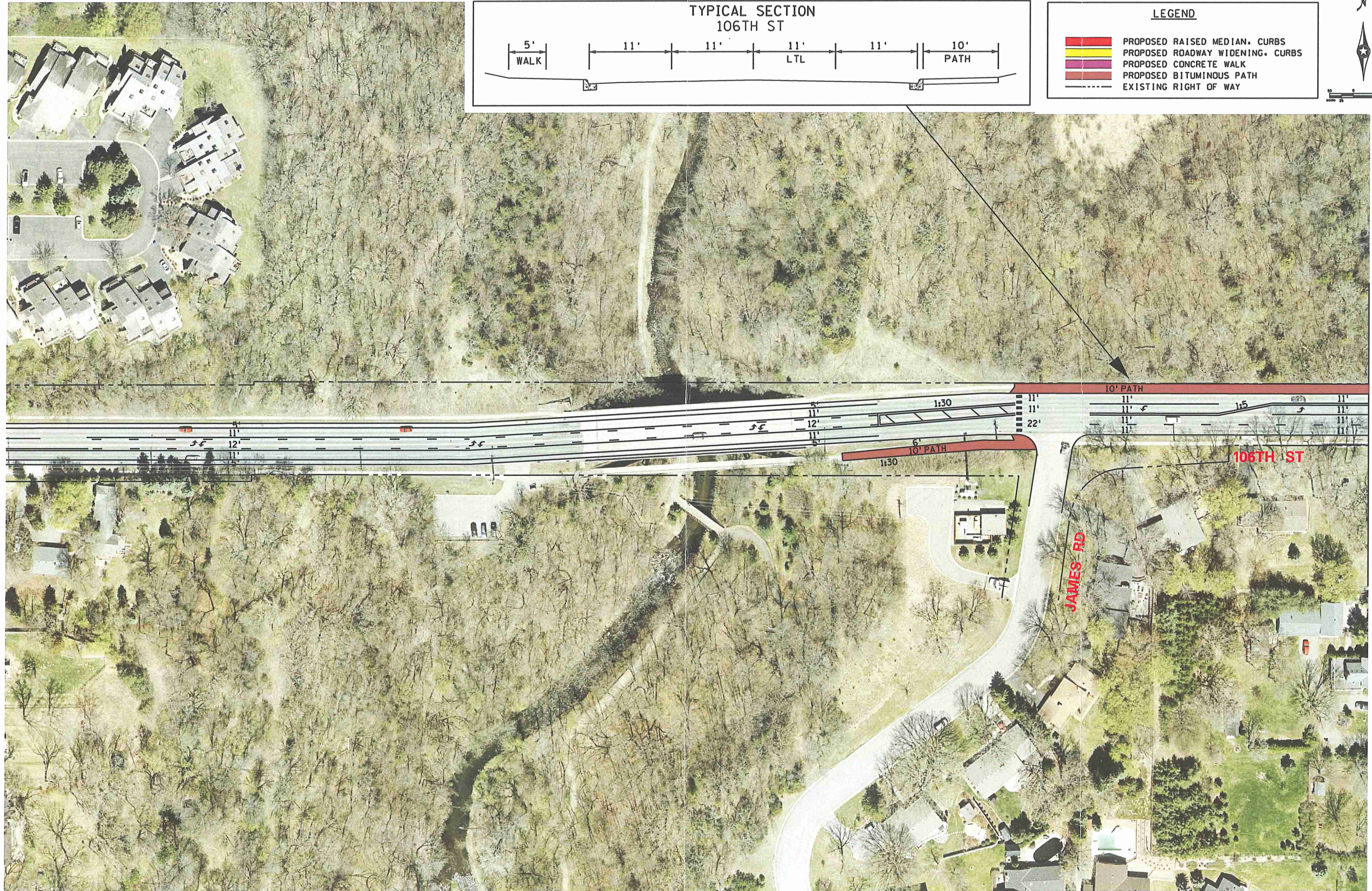
APPENDIX C-1.2
Alternative Concept Layout
Segment 1 - Humbolt Avenue to Lyndale Avenue
Concept 1 - Off-Street Path

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1/6/2011



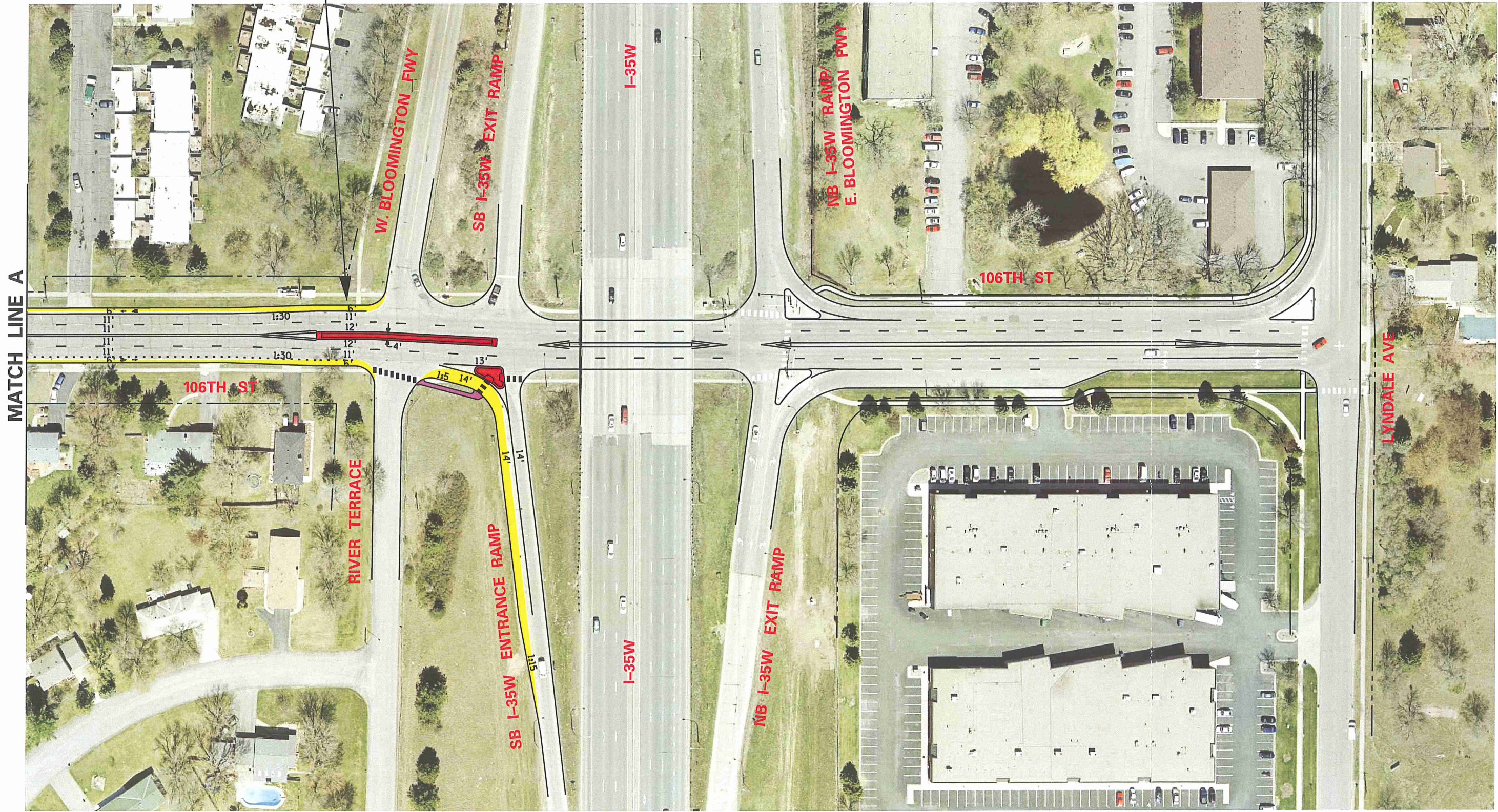
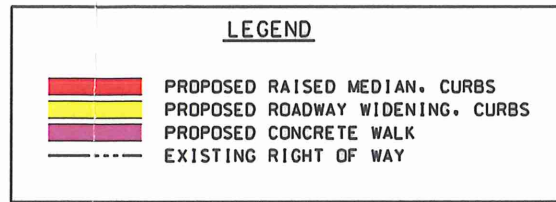
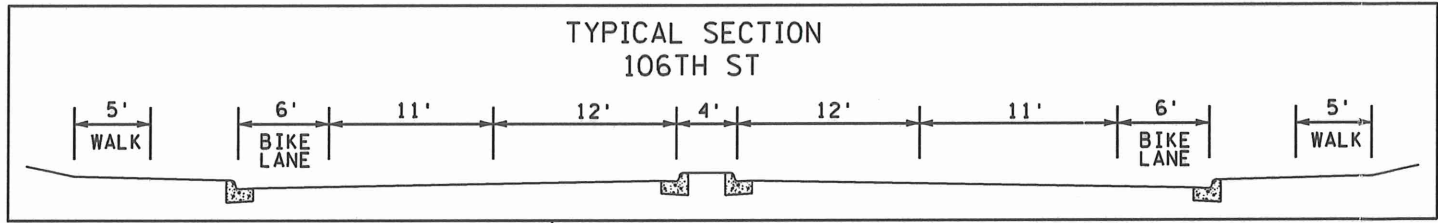
106th STREET STUDY Bloomington, Minnesota

APPENDIX C-1.3
Alternative Concept Layout
Segment 1 - Humbolt Avenue to Lyndale Avenue
Concept 1 - Off-Street Path



sht 3

MATCH LINE B



sht1

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1/6/2011



**106th STREET STUDY
Bloomington, Minnesota**

APPENDIX C-2.1
Alternative Concept Layout
Segment 1 - Humbolt Avenue to Lyndale Avenue
Concept 2 - On-Street Bike Lane

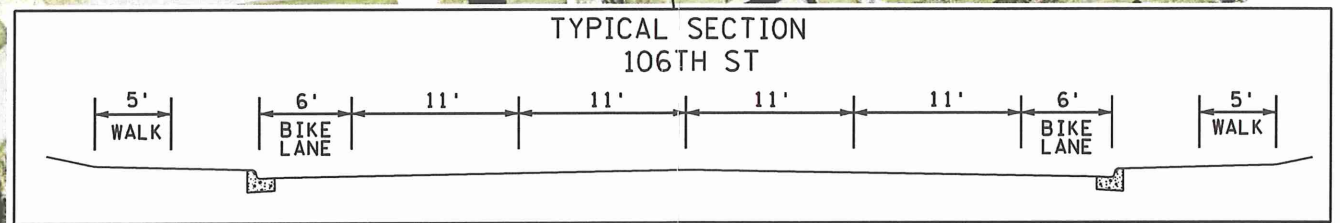
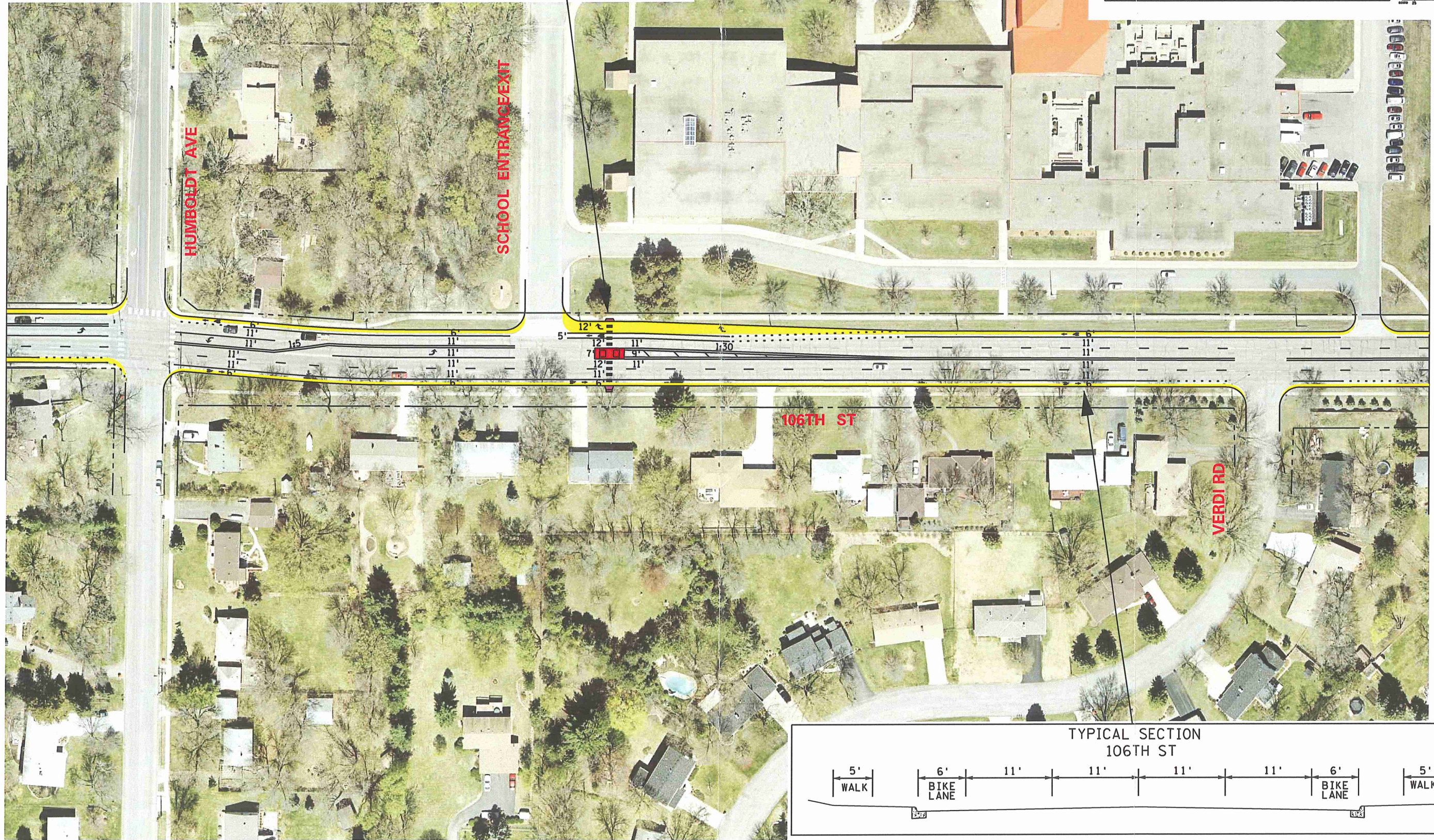
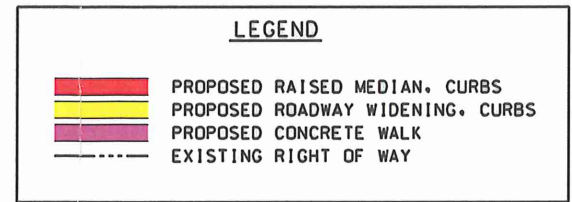
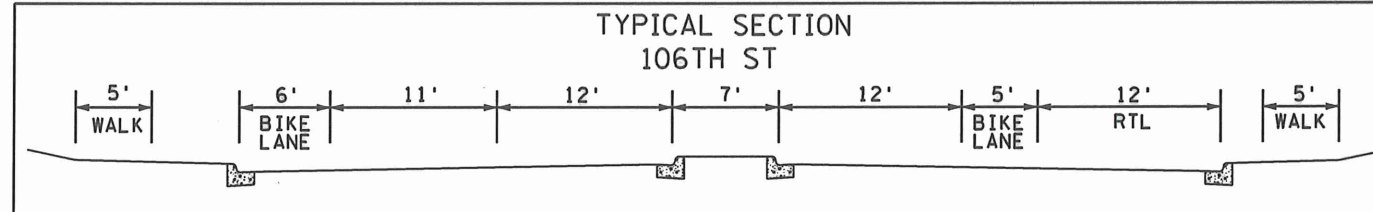
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sht2

MATCH LINE B

MATCH LINE A



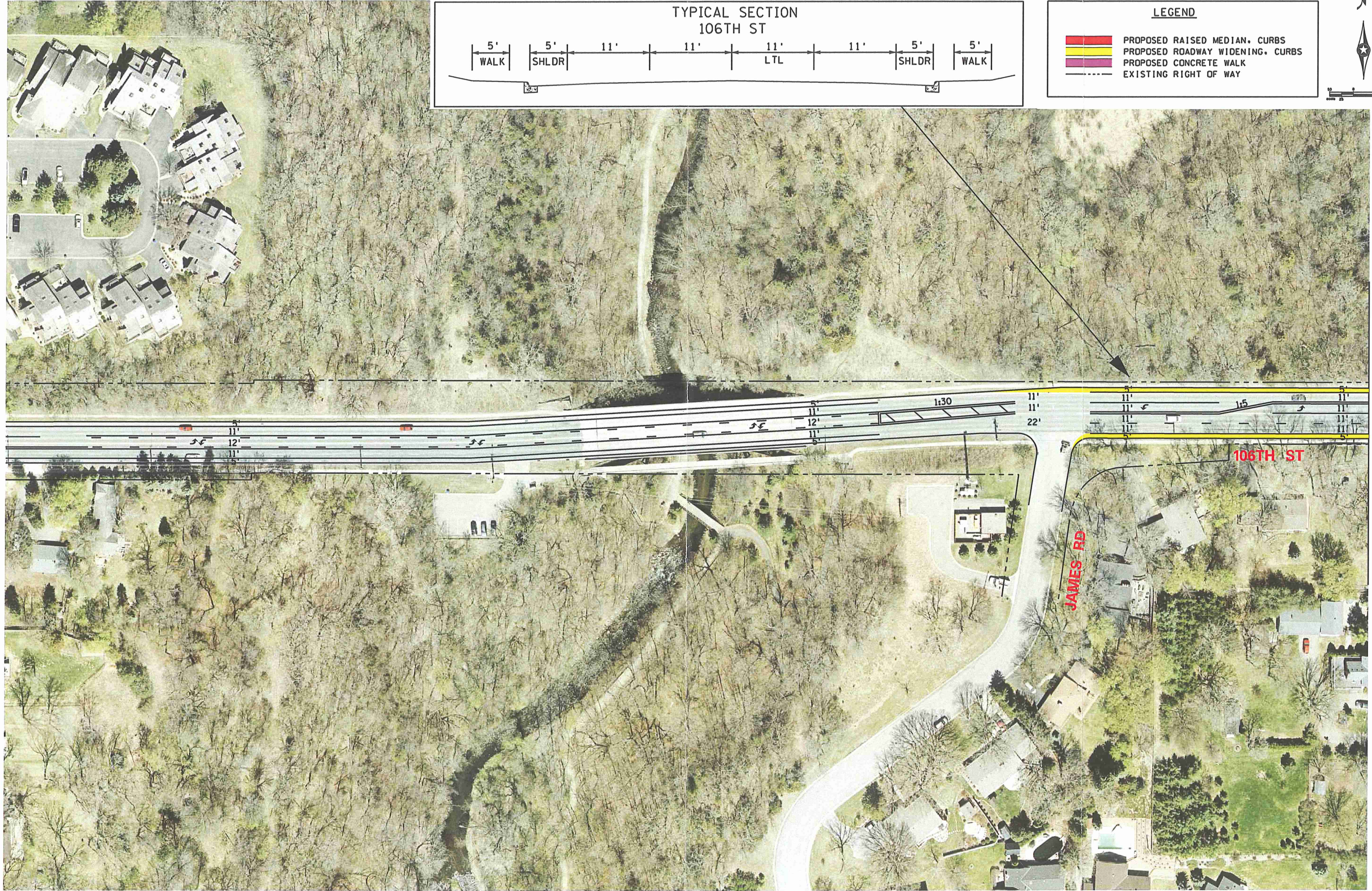
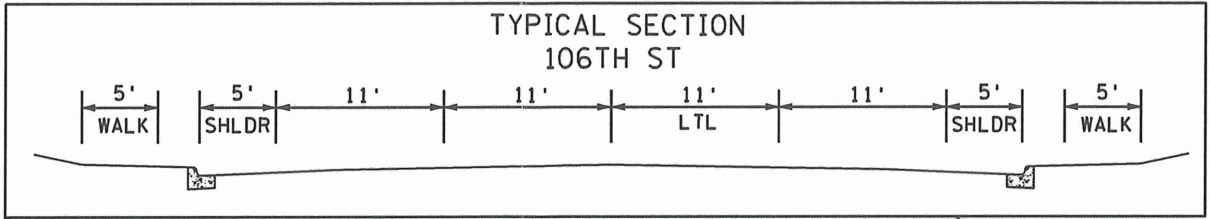
106th STREET STUDY
Bloomington, Minnesota

APPENDIX C-2.2
Alternative Concept Layout
Segment 1 - Humboldt Avenue to Lyndale Avenue
Concept 2 - On-Street Bike Lane



LEGEND

	PROPOSED RAISED MEDIAN, CURBS
	PROPOSED ROADWAY WIDENING, CURBS
	PROPOSED CONCRETE WALK
	EXISTING RIGHT OF WAY



MATCH LINE B

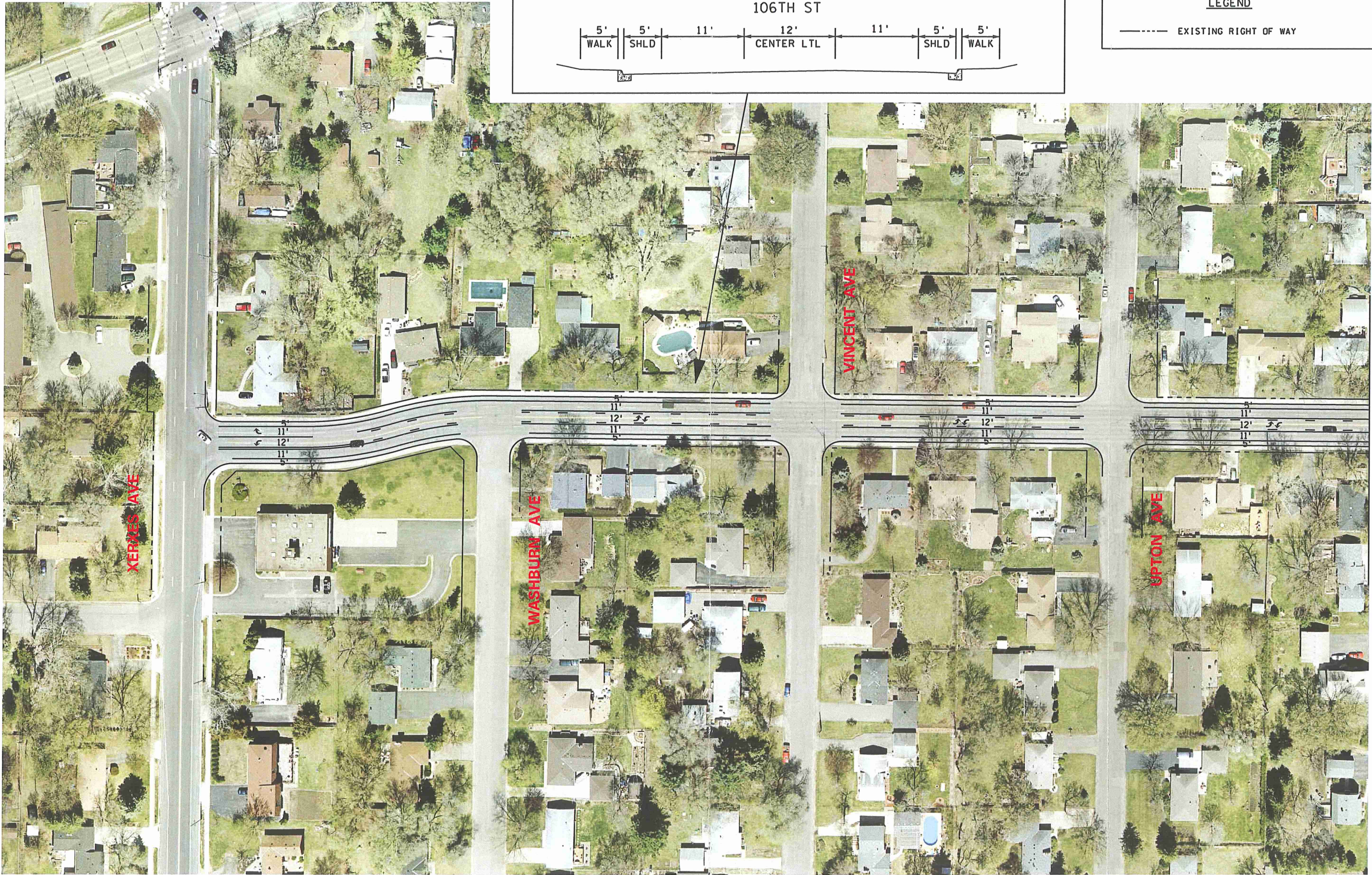
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**106th STREET STUDY
Bloomington, Minnesota**

APPENDIX C-2.3
Alternative Concept Layout
Segment 1 - Humbolt Avenue to Lyndale Avenue
Concept 2 - On-Street Bike Lane



sht1

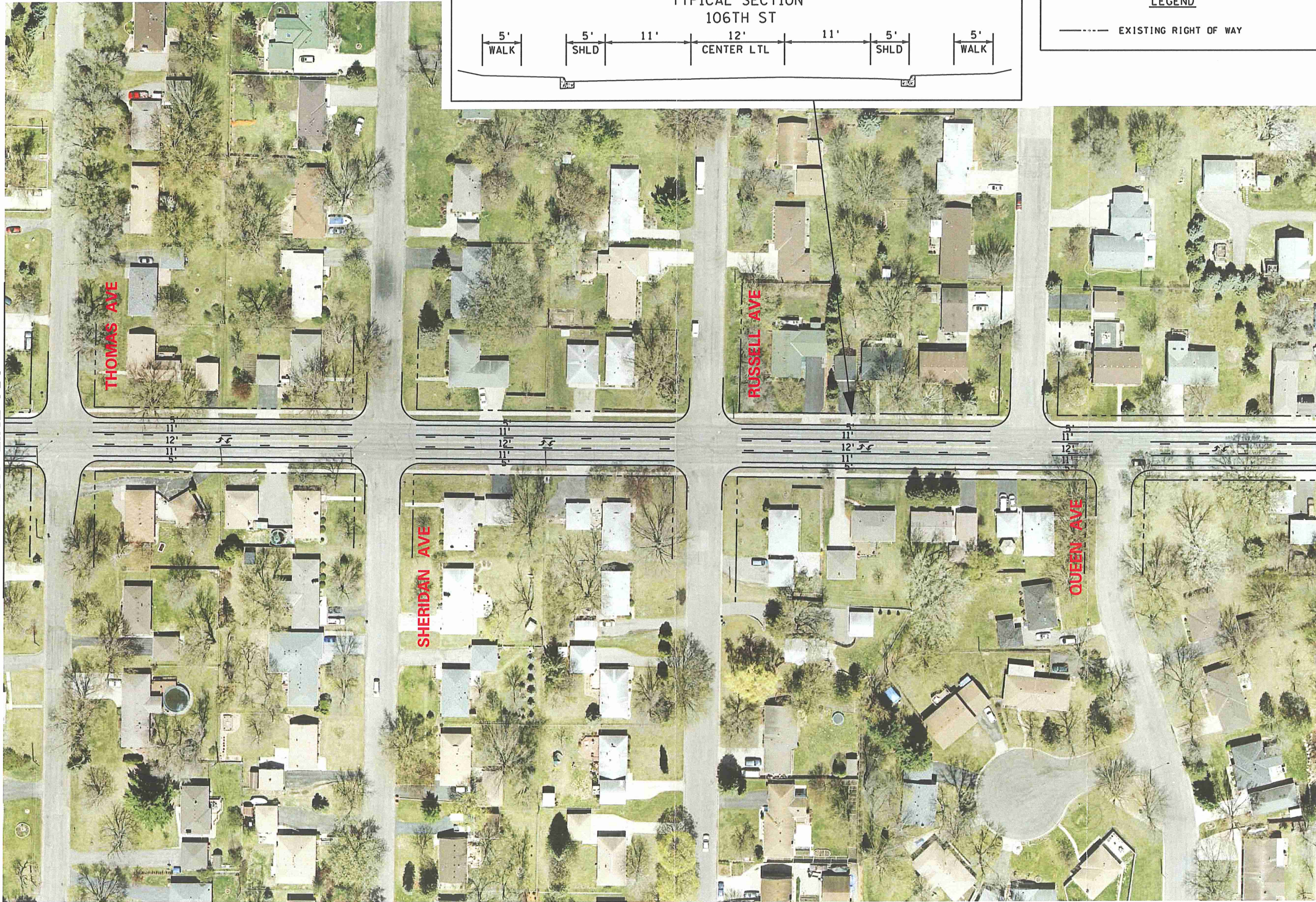
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1/6/2011



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Bloomington, Minnesota

APPENDIX C-3.1
Alternative Concept Layout
Segment 2 - Xerxes Avenue to Humbolt Avenue
Three-Lane Concept

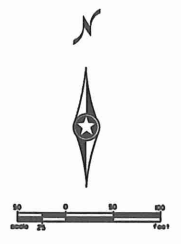
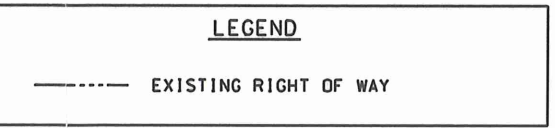
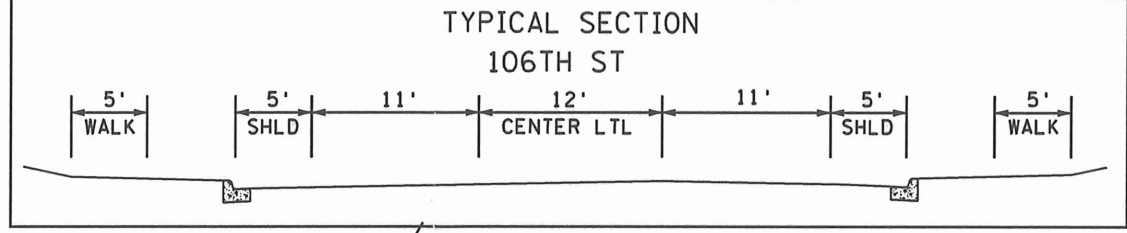
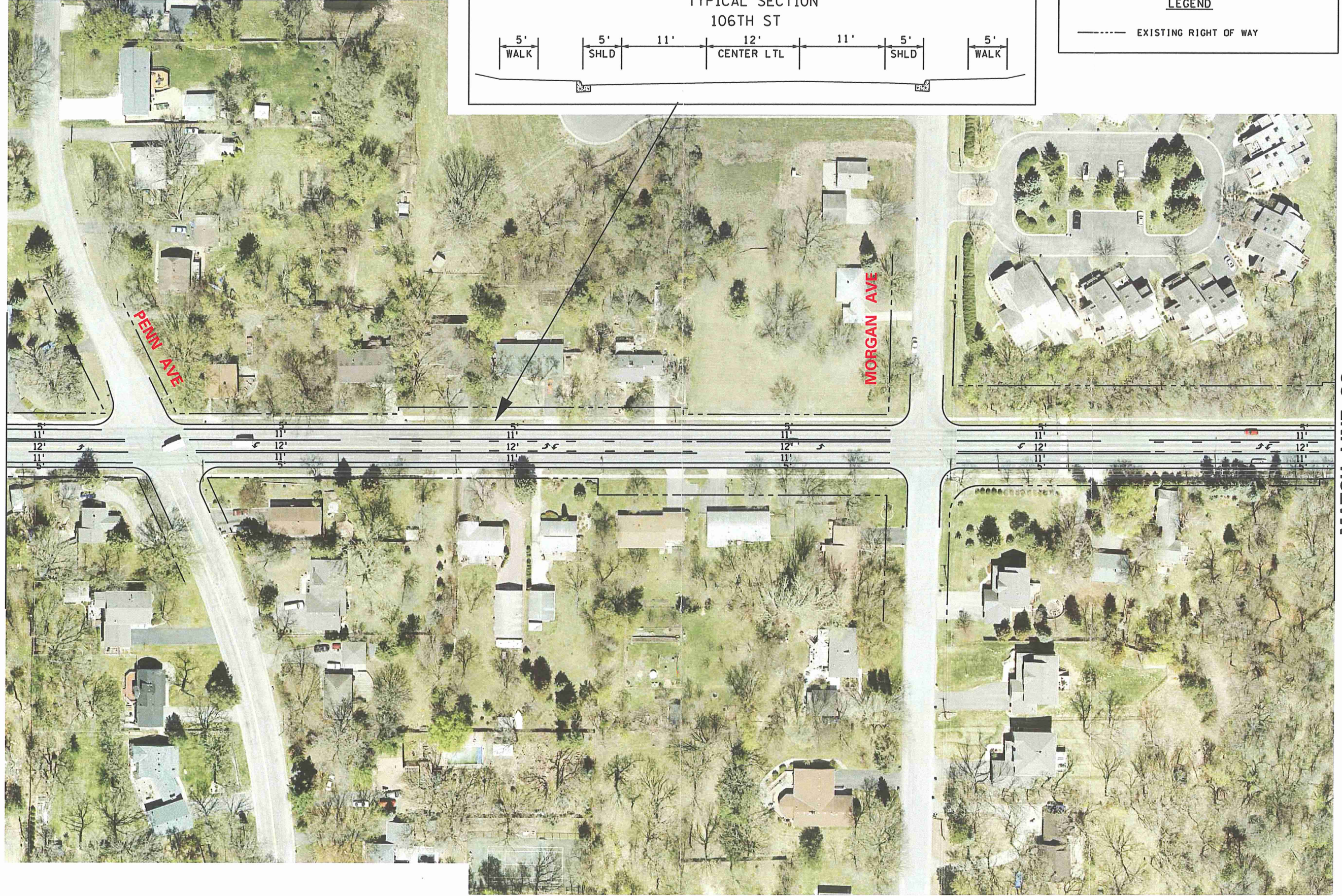
MATCH LINE AA



106th STREET STUDY
Bloomington, Minnesota



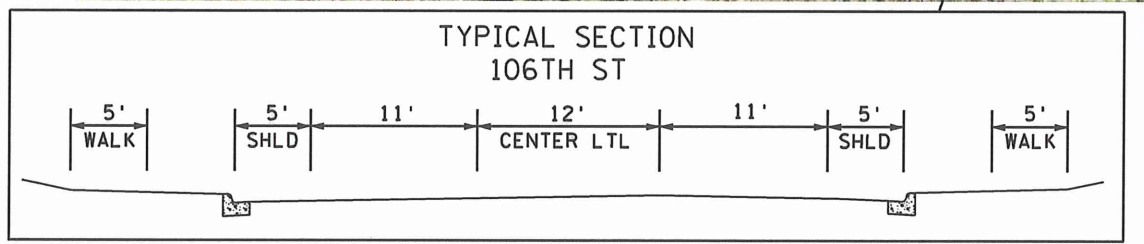
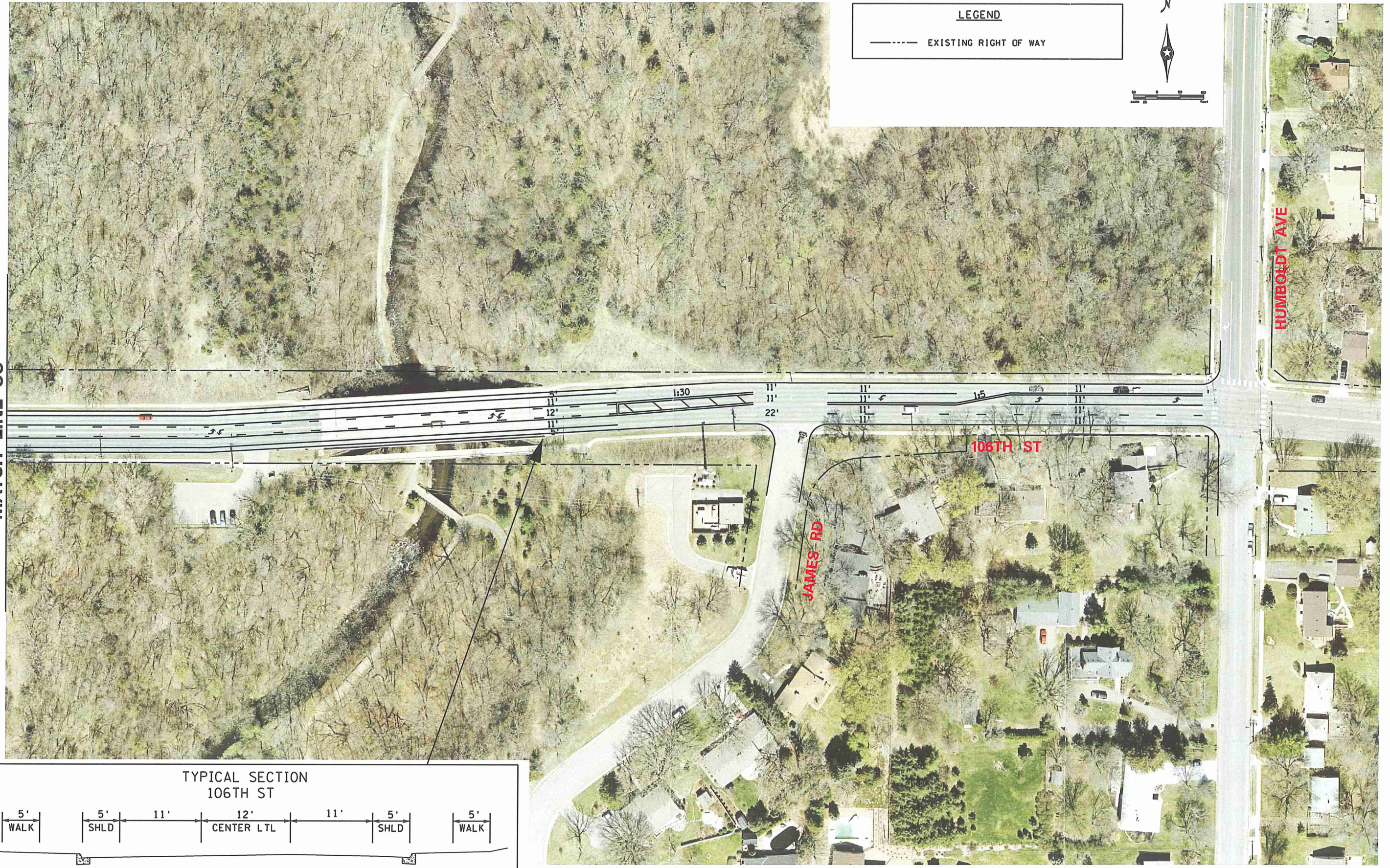
MATCH LINE BB



MATCH LINE CC

106th STREET STUDY
Bloomington, Minnesota

MATCH LINE CC



106th STREET STUDY
Bloomington, Minnesota