

Appendix A: Bus Stop Geographical Data

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Table A.1 Main Street Network Route Data.

Section	Id.	Name of BUS STOP	Stop #	Identical pt.	X coordinate	Y coordinate	distance	Height
A - 0	0	Squires West Bound	1-0		3329684.500	1101217.625	0.000	633.275
	AA	Right	2002		3329585.750	1101146.625	121.625	632.951
A - 1	1	A Brodie	1-1		3329539.250	1101207.125	203.942	629.648
A - 2	2	B Old-Security	1-2		3329478.500	1101360.375	379.726	644.957
A - 3	3	C B-lot	1-3		3329220.250	1101579.875	726.175	623.039
	AB	Signal Right	1002		3329199.000	1101641.500	791.930	625.058
	AC	Signal Left	1003	BH	3329585.250	1101813.750	1223.204	640.108
	AD	Signal Stright	1001	BG	3329561.750	1102087.875	1517.006	632.818
A - 4	4	N. Main past progress	1-4		3329595.000	1102163.125	1599.275	635.300
A - 5	5	N. Main wades	1-5		3329659.000	1102289.250	1740.770	639.623
	AE	Right	2002		3329688.750	1102345.625	1804.514	642.034
A - 6	6	Lucas at Greenbriar Apartment	1-6		3329819.750	1102307.125	1941.054	642.895
A - 7	7	Lucas before Giles	1-7		3329932.250	1102275.000	2058.051	643.541
	AF	Left	2003		3329968.500	1102264.625	2095.756	644.794
A - 8	8	Giles at Northview	1-8		3329995.500	1102497.375	2337.850	647.607
A - 9	9	Giles past Turner	1-9		3330136.250	1102663.625	2559.171	645.994
	AG	Left	2003		3330346.000	1102875.500	2861.152	656.815
A - 10	10	Patrick Henry after Giles	1-10		3330270.500	1102936.500	2958.216	658.405
A - 11	11	Patrick Henry Before North main	1-11		3330157.750	1103027.750	3103.264	664.868
	AH	Signal Right	1002	BB, BF	3330121.000	1103057.375	3150.468	665.710
A - 12	12	N. Main opposite Food Lion	1-12		3330225.500	1103227.250	3349.919	669.728
A - 13	13	N. Main opposite Electro-Tech	1-13		3330323.750	1103377.125	3529.180	670.160
A - 14	14	N. Main before Giles	1-14		3330409.250	1103510.375	3687.580	681.947
	AI	Left	2003		3330523.750	1104145.375	4336.757	677.273
A - 15	15	Givens Lane	1-15		3330485.500	1104130.625	4377.752	682.518
	AJ	Left	2003		3330250.500	1104039.625	4629.756	682.648
B - 0	16	N. Main Time Check	1-16		3330275.250	1103961.750	4711.512	675.266
B - 1	17	Whipple Drive at Main	2-1		3330363.750	1103517.625	452.974	678.755
	BA	Signal Right	1002		3330375.750	1103453.625	518.089	679.003
B - 2	18	N. Main at Food Lion	2-2		3330253.750	1103274.000	735.227	669.818
	BB	Signal Right	1002	AH, BF	3330126.250	1103065.625	979.522	665.304
	BC	Right	2002		3329985.250	1103183.250	1163.143	663.488
B - 3	19	Hunters Ridge before Circle	2-3		3329989.000	1103202.125	1183.130	662.167
	BD	Circle	2002		3329998.250	1103351.500	1355.721	673.530
B - 4	20	Pheasant Run Circle	2-4		3330015.250	1103327.750	1385.936	673.096
B - 5	21	Hunters Ridge after Circle	2-5		3329981.750	1103206.250	1511.969	662.370
	BE	Left	2003		3329974.500	1103179.875	1539.323	664.566
B - 6	22	Patrick Henry before Main	2-6		3330098.000	1103076.625	1700.297	668.748
	BF	Signal Right	1002	AH, BB	3330121.000	1103057.375	1730.290	665.710
B - 7	23	N. Main across "burg Feed & Seed	2-7		3330033.750	1102917.500	1895.146	660.735

Table A.1 Main Street Network Route Data (Cont'd).

B - 8	24	N. Main at Poly Scientific	2-8		3329911.250	1102721.500	2126.279	645.763
B - 9	25	N. Main at Fitness Connection	2-9		3329796.000	1102536.625	2344.135	644.870
B - 10	26	N. Main opposite Wades	2-10		3329623.750	1102222.750	2702.334	636.841
	BG	Signal Stright	1001	AD	3329561.750	1102087.875	2850.833	632.818
	BH	Signal Stright	1001	AC	3329585.250	1101813.750	3144.635	640.108
B - 11	27	N. Main at El Rodeo	2-11		3329670.750	1101726.250	3267.394	639.894
B - 12	28	N. Mian at FNB	2-12		3329808.250	1101605.125	3450.636	642.550
	BI	Right	2002		3329974.500	1101426.375	3696.870	636.825
B - 13	29	BT Entrance	2-13		3329934.000	1101397.250	3746.755	634.800
C - 0	30	Squires West bound	2-14		3329684.500	1101217.625	4054.189	633.275
	CA	Right	2002		3329585.750	1101146.625	121.625	632.951
C - 1	31	Burrus	3-1		3329396.000	1101104.125	344.218	628.596
	CB	Left	2003		3329135.250	1100849.250	719.714	618.102
C - 2	32	Wallace & Litton Reaves	3-2		3329339.500	1100322.375	1287.057	638.527
	CC	Left	2003		3329363.750	1100252.625	1360.902	635.743
C - 3	33	Coliseum	3-3		3329732.500	1100553.250	1836.667	642.014
C - 4	34	Tennis court	3-4		3329926.500	1100711.375	2086.946	642.782
	CD	Left	2003		3329996.250	1100768.250	2176.945	640.756
C - 5	35	Library	3-5		3329636.500	1101100.250	2700.472	632.000
	CE	Right	2002		3329613.250	1101130.000	2738.229	633.007
D - 0	36	Squires East	3-6		3329732.750	1101217.000	2886.044	630.270
	DA	Right	2002	GI	3329984.250	1101397.000	309.280	636.077
	DB	Signal Stright	1001	GH	3330032.000	1101318.000	403.389	631.560
D - 1	37	Davidson's Mens store	4-1		3330148.000	1101181.500	582.540	636.839
	DC	Signal Stright	1001	GG	3330160.750	1101166.125	602.514	634.819
D - 2	38	McCoy on South Main	4-2		3330209.750	1101106.500	679.690	634.897
	DD	Signal Stright	1001	GF	3330292.500	1101005.625	810.163	635.286
D - 3	39	South Main at Municiple Bldg.	4-3		3330322.000	1100968.875	857.289	638.916
D - 4	40	South Main before Eheart	4-4		3330469.500	1100785.125	1092.918	647.889
D - 5	41	South Main past Eakin	4-5		3330629.000	1100589.875	1345.037	643.722
D - 6	42	South Main past Hamlock	4-6		3330716.250	1100483.875	1482.328	646.939
D - 7	43	South Main past Edgewood	4-7		3330774.250	1100418.625	1569.661	649.980
D - 8	44	South Main before Airport Rd.	4-8		3330845.500	1100341.750	1674.477	654.274
D - 9	45	South Main past Olver Corp.	4-9		3331122.250	1100019.625	2099.371	657.396
	DE	Signal Stright	1001	GE	3331178.000	1099930.875	2204.179	660.081
	DF	Signal Stright	1001	GD	3331224.250	1099857.250	2291.125	656.197
D - 10	46	Gables	4-10		3331297.250	1099630.750	2529.181	650.451
D - 11	47	South Main at Lake Motel	4-11		3331377.750	1099198.125	2969.347	635.550
	DG	Left	2003	GC	3331386.500	1099143.500	3024.668	633.142
D - 12	48	Marlington at Grayland	4-12		3331516.250	1099187.500	3161.676	647.005
D - 13	49	Marlington past Charles	4-13		3331764.500	1099271.750	3423.833	653.137
	DH	Right	2002	GB	3331918.250	1099326.375	3586.999	658.555
D - 14	50	Grissom opposite Nellies Cave	4-14		3331937.500	1099273.000	3643.740	656.300
	DI	Right	2002	GA	3331968.500	1099185.250	3736.808	648.857

Table A.1 Main Street Network Route Data (Cont'd).

D - 15	51	New Kent after Grissom	4-15		3331931.000	1099160.875	3781.534	649.182
D - 16	52	New Kent opposite Loudon	4-16		3331735.500	1099026.375	4031.023	639.012
E - 0	53	S. Main Time Check(Southbound)	4-17		3331615.250	1098819.125	4303.711	631.715
	EA	Right	2002	FE	3331574.250	1098792.125	49.092	627.934
	EB	Signal left	1003	FD	3331410.750	1098973.250	293.283	630.412
E - 1	54	S. Main opposite Hill Top Plaza	5-1		3331431.500	1098796.500	471.281	639.050
E - 2	55	S. Main at Poly Scientific	5-2		3331440.000	1098426.250	842.400	641.375
E - 3	56	S. Main opposite Photo Express	5-3		3331298.250	1097870.875	1418.103	625.370
E - 4	57	S. Main opposite 2727	5-4		3331164.750	1097494.250	1817.689	638.575
	EC	Right	1002	FC	3331074.750	1097239.500	2087.869	648.757
E - 5	58	Ind. Park Dr. Before Ramble Rd.	5-5		3330993.000	1097268.375	2174.569	652.284
	ED	Left	2003		3330980.000	1097273.125	2188.410	653.984
	EE	Left	2003		3330957.250	1097081.625	2381.256	658.752
E - 6	59	Yellow Sulphur at Hokie Hoda	5-6		3330999.750	1097068.000	2426.030	659.184
	EF	Signal Right	1002		3331012.250	1097063.500	2439.315	659.548
E - 7	60	High Top Rd. After Grabdview Dr.	5-7		3330488.750	1096730.375	3133.342	635.189
	EG	Left	2003		3330429.500	1096708.500	3196.894	633.149
	EH	Right	2002		3330464.750	1096507.375	3441.964	650.514
F - 0	61	Hospital (Time Check)	5-8		3330378.000	1096504.875	3560.752	652.663
	FA	Left	2003		3330495.750	1096322.375	230.672	654.819
F - 1	62	Back Country before 460	6-1		3330532.250	1096302.625	272.172	657.197
	FB	Signal Left	1003		3330545.500	1096295.375	287.276	657.667
F - 2	63	S. Main opposite Hokie Honda	6-2		3331024.250	1097097.000	1228.098	660.635
	FC	Signal Stright	1001	EC	3331074.750	1097239.500	1379.282	648.757
F - 3	64	S. Main after Industrial Park. Dr.	6-3		3331088.500	1097278.500	1420.635	650.154
F - 4	65	S. Main at 2727	6-4		3331176.250	1097526.500	1683.702	631.174
F - 5	66	S. Main at Photo Express	6-5		3331294.000	1097858.750	2036.200	624.801
F - 6	67	S. Main opposite Poly Scientific	6-6		3331439.250	1098406.375	2604.862	641.207
F - 7	68	South Main opposite Nations Bank	6-7		3331433.500	1098774.500	2973.779	640.352
	FD	Signal Right	1002	EB	3331410.750	1098973.250	3173.868	630.412
	FE	Left	2003	EA	3331574.250	1098792.125	3418.060	627.934
G - 0	69	S. Main Time Check(Northbound)	6-8		3331681.000	1098860.875	3545.109	634.335
G - 1	70	New Kent past Loudon	7-1		3331735.250	1098956.000	123.598	634.754
G - 2	71	New Kent past Sussex	7-2		3331941.000	1099167.250	456.079	649.840
	GA	Left	2003	DI	3331968.500	1099185.250	488.946	648.857
G - 3	72	Grissom at Nellies Cave	7-3		3331942.000	1099260.500	568.729	654.914
	GB	Left	2003	DH	3331918.250	1099326.375	638.755	658.555
G - 4	73	Marlington after Grissom	7-4		3331894.500	1099318.000	663.939	658.971
G - 5	74	Marlington opposite Charles	7-5		3331726.250	1099258.625	842.360	651.991
G - 6	75	Marlington before Grayland	7-6		3331551.000	1099199.250	1027.395	647.733
G - 7	76	Marlington at S. Main	7-7		3331403.250	1099149.125	1183.417	634.288
	GC	Right	2002	DG	3331386.500	1099143.500	1201.086	633.142
G - 8	77	S. Main at Landsdowne	7-8		3331368.750	1099252.875	1311.892	636.004
G - 9	78	S. Main past Ardmore	7-9		3331335.250	1099449.000	1510.893	648.711

Table A.1 Main Street Network Route Data (Cont'd).

G - 10	79	Blacksburg Square	7-10		3331292.000	1099651.625	1718.130	650.442
	GD	Signal Stright	1001	DF	3331224.250	1099857.250	1934.629	656.197
	GE	Signal Stright	1001	DE	3331178.000	1099930.875	2021.575	660.081
G - 11	80	S. Main past Cohee	7-11		3331132.000	1100004.000	2107.966	657.572
G - 12	81	S. Main past Sunset	7-12		3330968.750	1100204.375	2366.673	658.979
G - 13	82	S. Main past Grave	7-13		3330853.500	1100333.000	2539.421	654.559
G - 14	83	S. Main past Upland	7-14		3330729.750	1100467.500	2722.204	649.041
G - 15	84	S. Main past Hemlock	7-15		3330647.250	1100567.875	2852.133	644.887
G - 16	85	S. Main past Eakin	7-16		3330564.000	1100669.250	2983.311	644.519
G - 17	86	Blacksburg Middle School	7-17		3330476.500	1100776.500	3121.729	647.274
G - 18	87	S. Main opposite Miller	7-18		3330363.500	1100917.000	3302.032	642.360
G - 19	88	Food Time	7-19		3330314.500	1100978.125	3380.374	638.743
	GF	Signal Stright	1001	DD	3330292.500	1101005.625	3415.592	635.286
G - 20	89	South Main Café	7-20		3330271.500	1101031.375	3448.819	634.222
	GG	Signal Stright	1001	DC	3330160.750	1101166.125	3623.241	634.819
G - 21	90	Blacksburg Post Office	7-21		3330118.000	1101218.000	3690.461	633.701
	GH	Signal Stright	1001	DB	3330032.000	1101318.000	3822.366	631.560
	GI	left	2003	DA	3329984.250	1101397.000	3916.474	636.077
G - 22	91	VT Entrance	7-22		3329934.000	1101397.250	3997.314	634.800
G - 23	92	Squires West Bound	7-23		3329684.500	1101217.625	4304.748	633.275

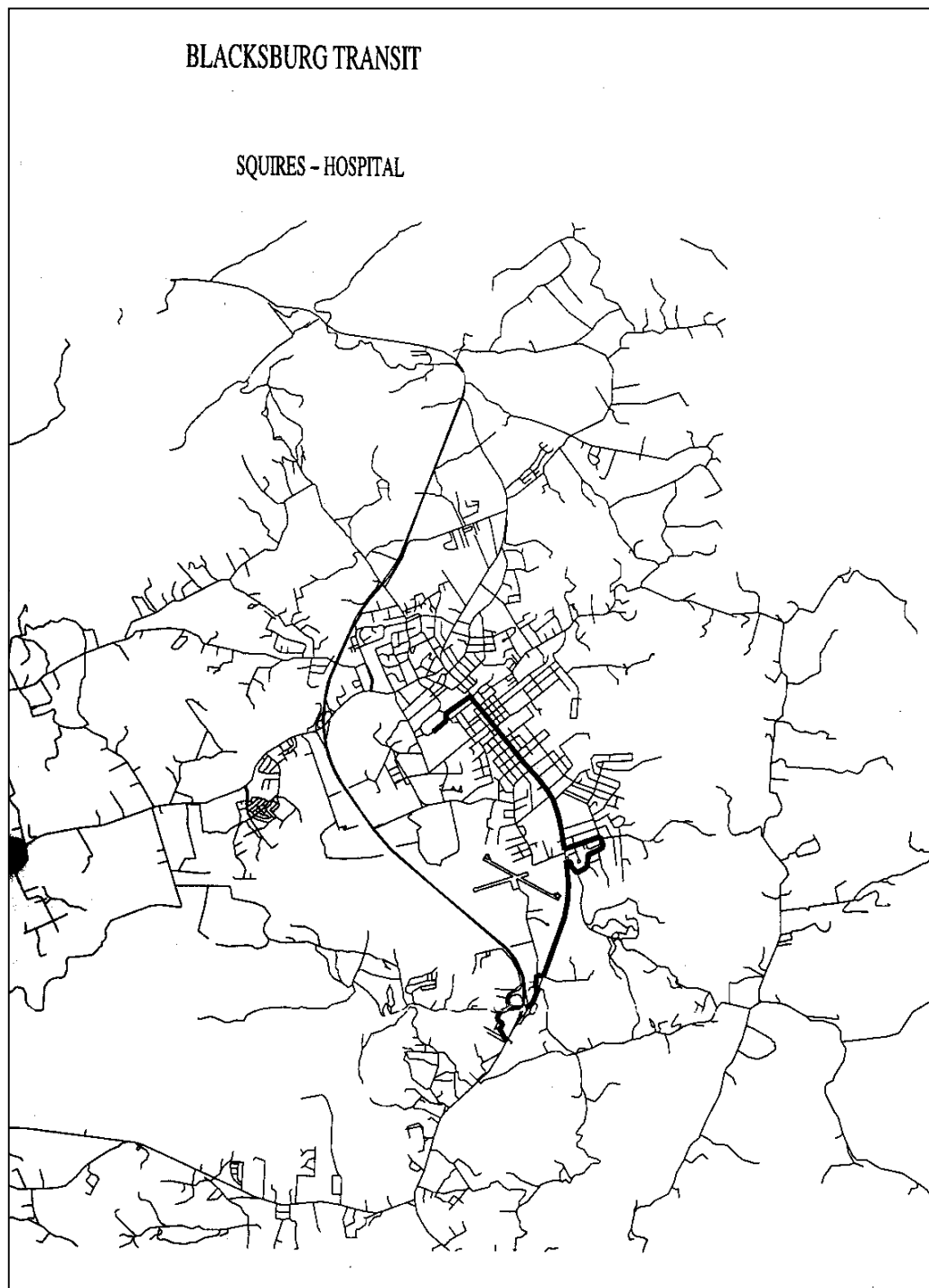


Figure A.1 Blacksburg Network.

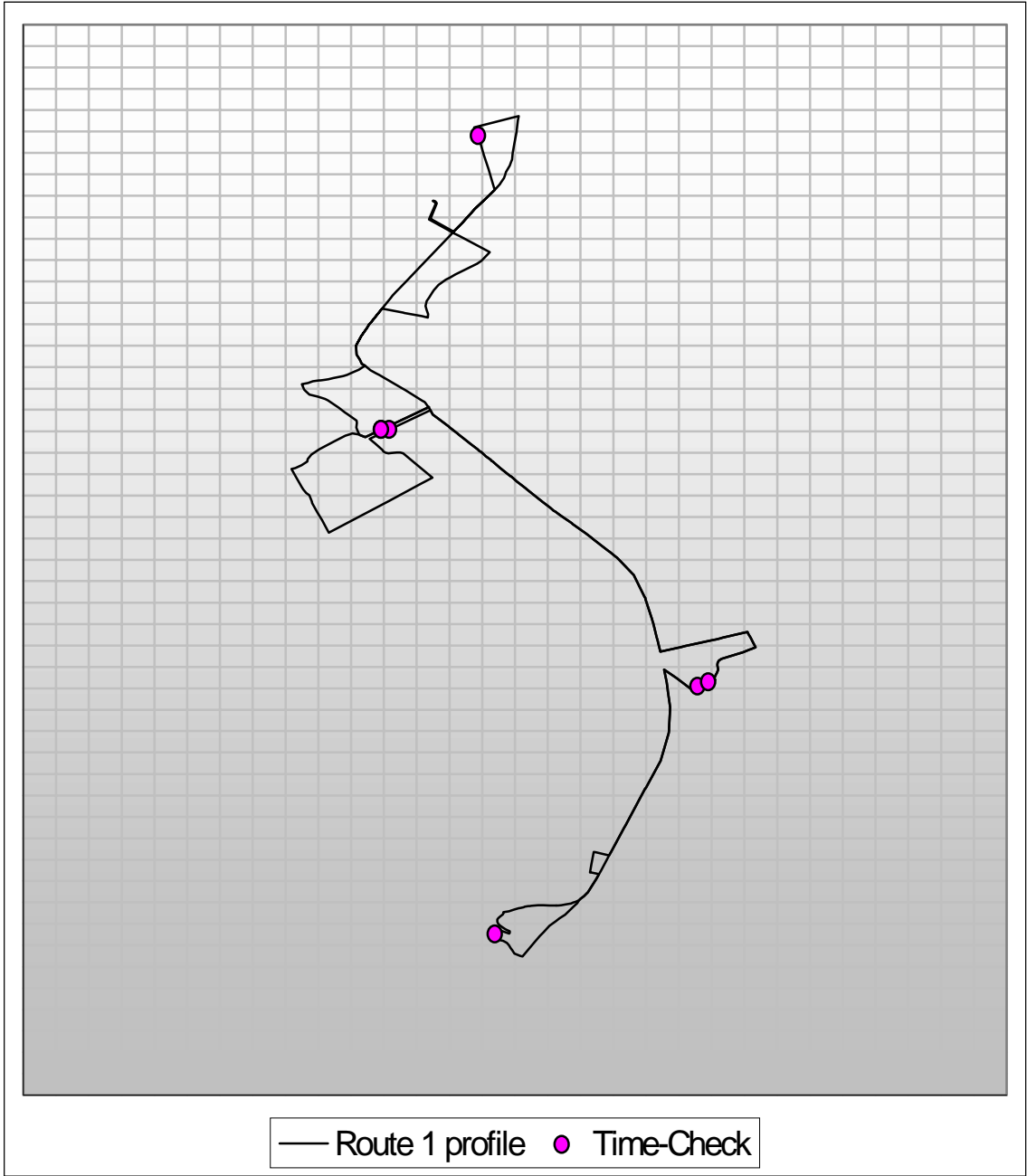


Figure A.2 Outline of the Route 1 for the BT Case Study.

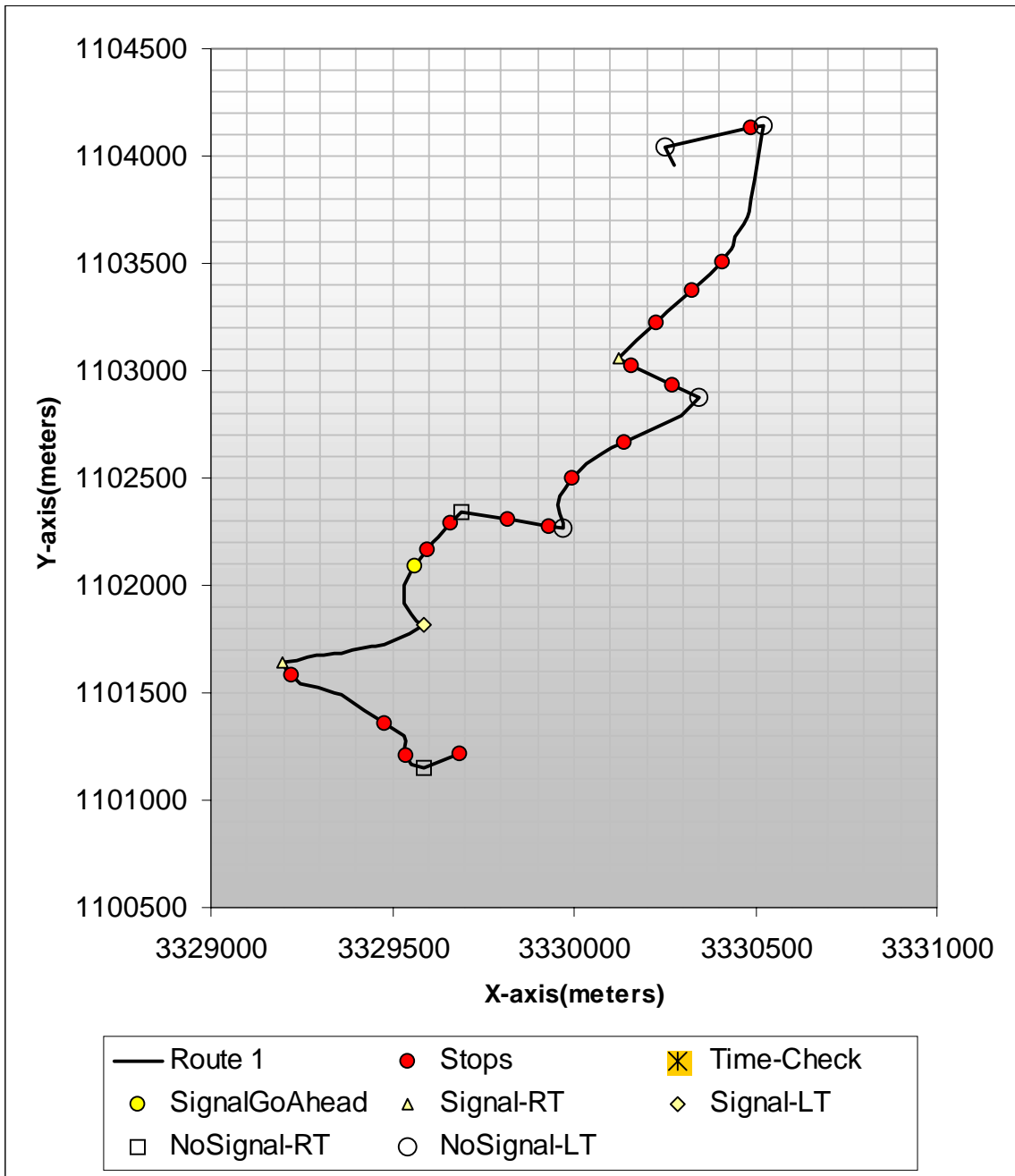


Figure A.3 Network Configuration and Types of Stop/Intersection/Turns of Section 1. (Squires – N. Main)

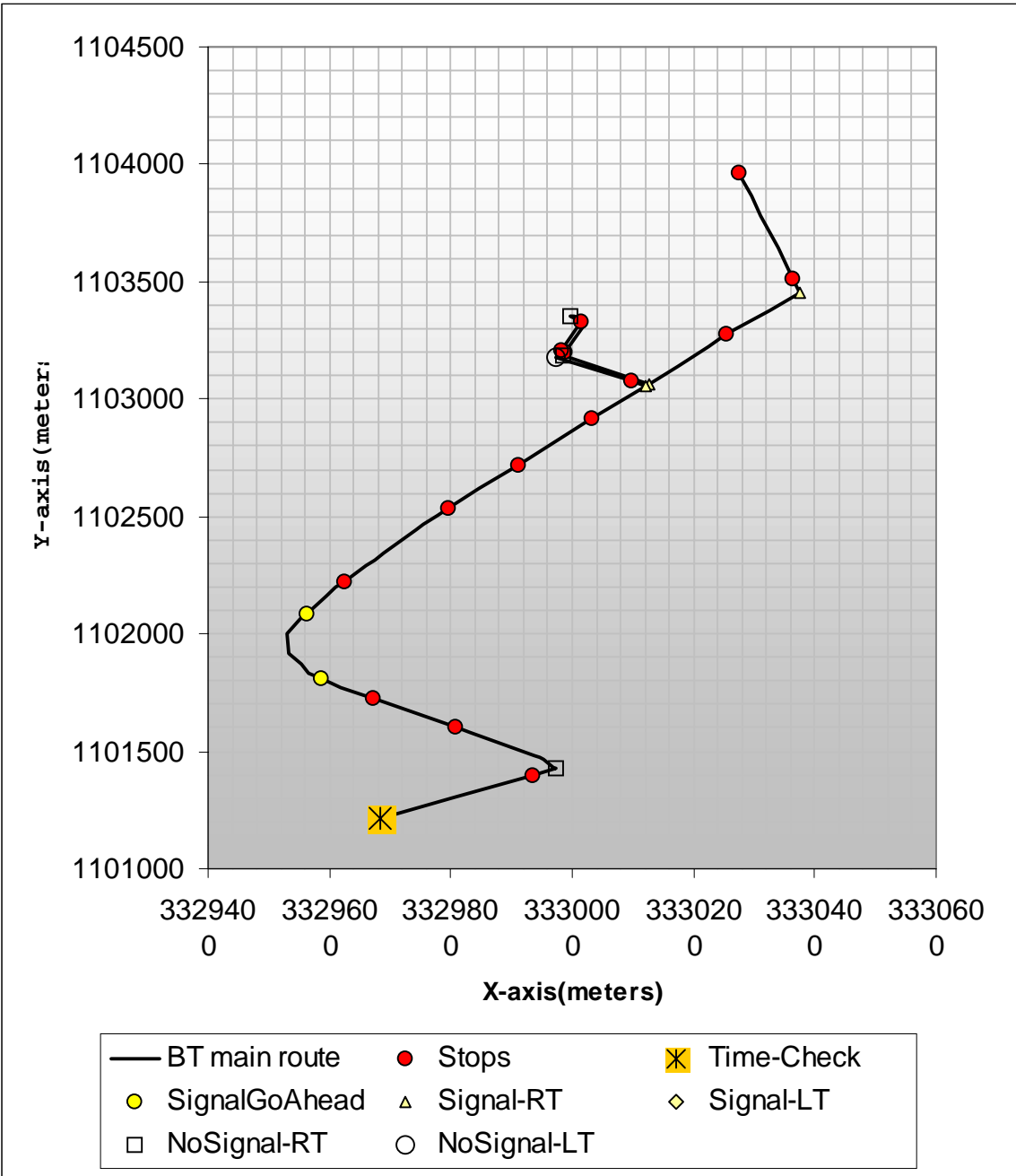


Figure A.4 Network Configuration and Types of Stop/Intersection/Turns of Section 2. (N. Main – Squires)

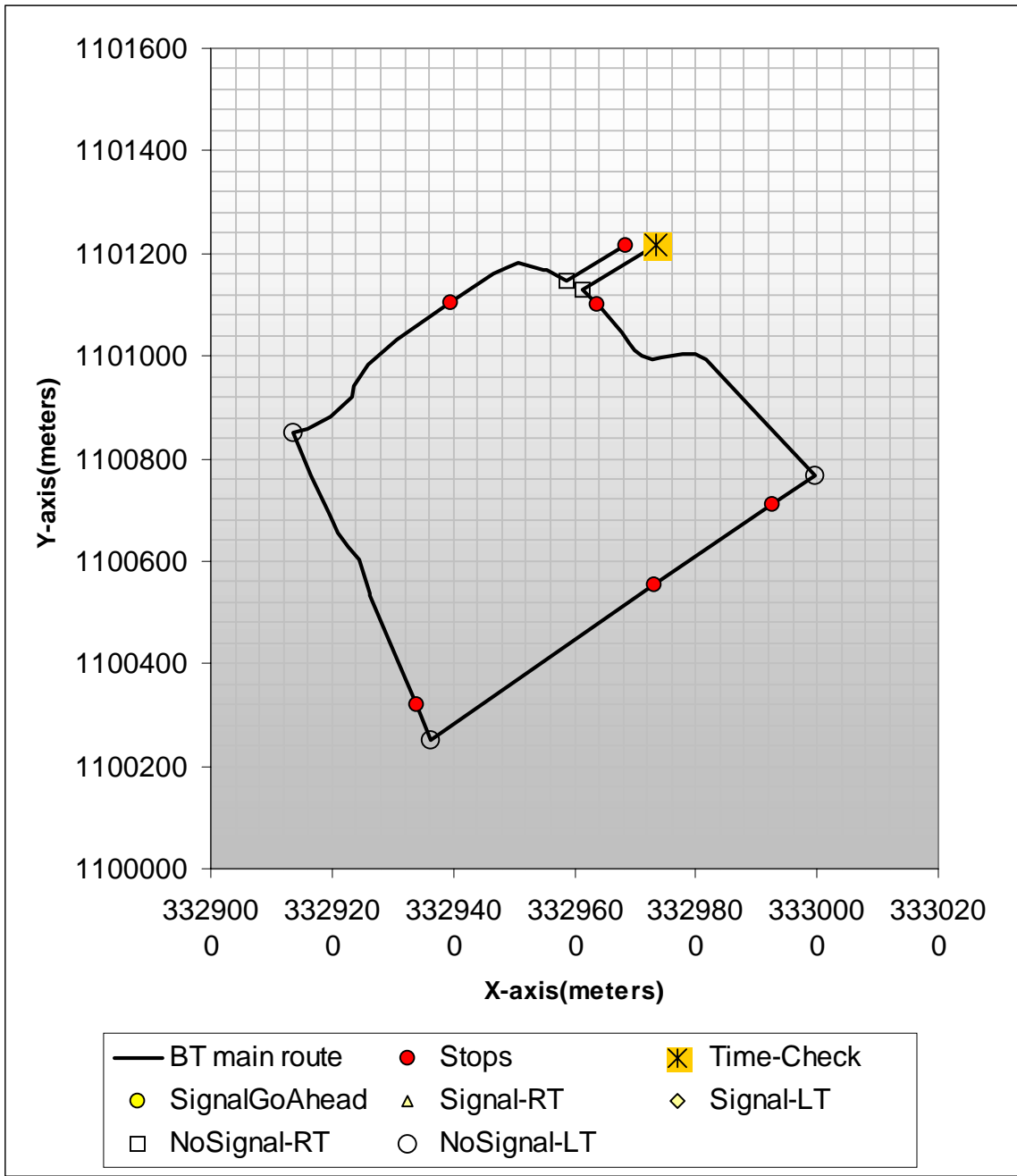


Figure A.5 Network Configuration & Types of Stop/Intersection/Turns of Section 3.
(Squires – Squires)

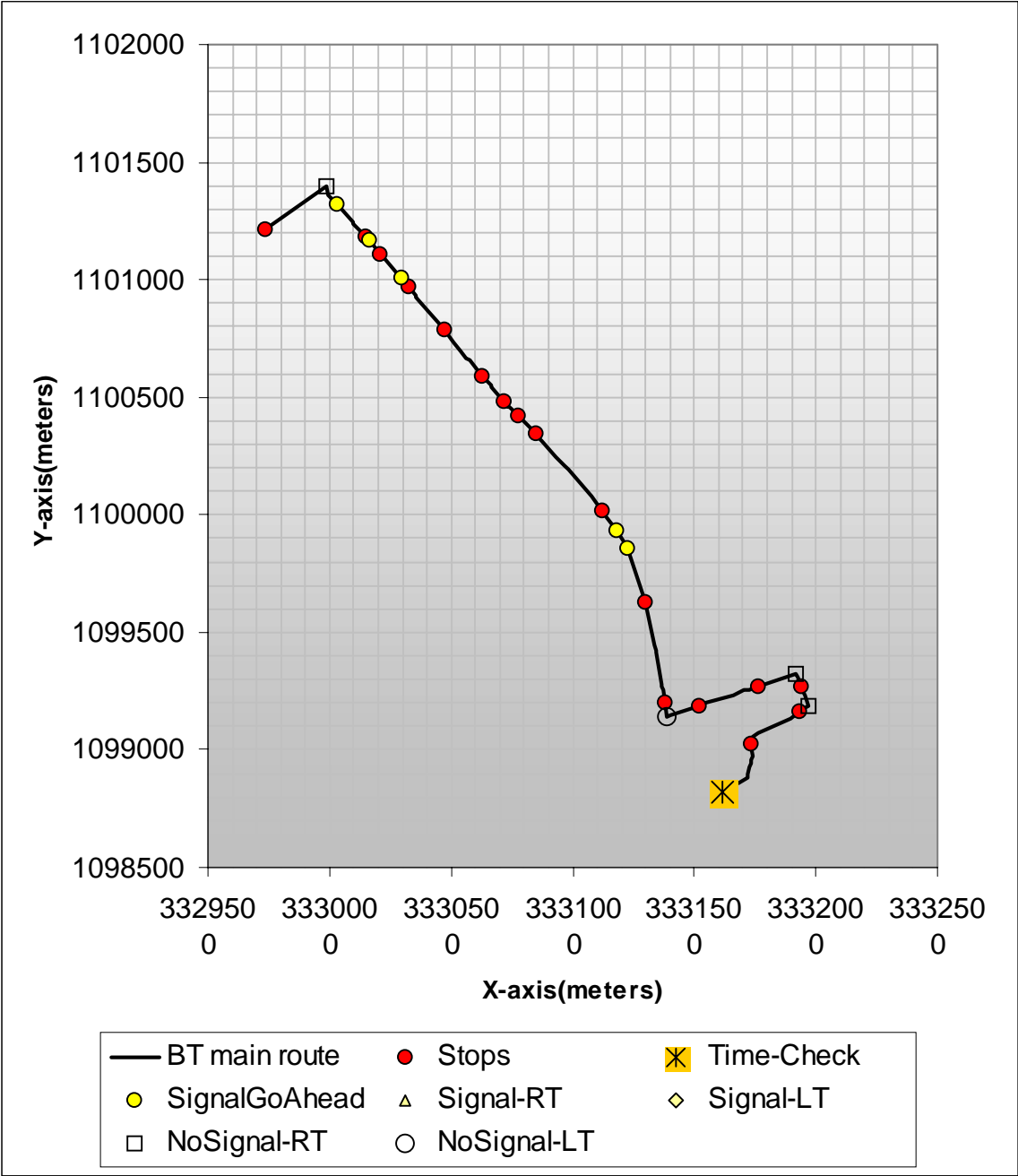


Figure A.6 Network Configuration & Types of Stop/Intersection/Turns of Section 4. (Squires – S. Main)

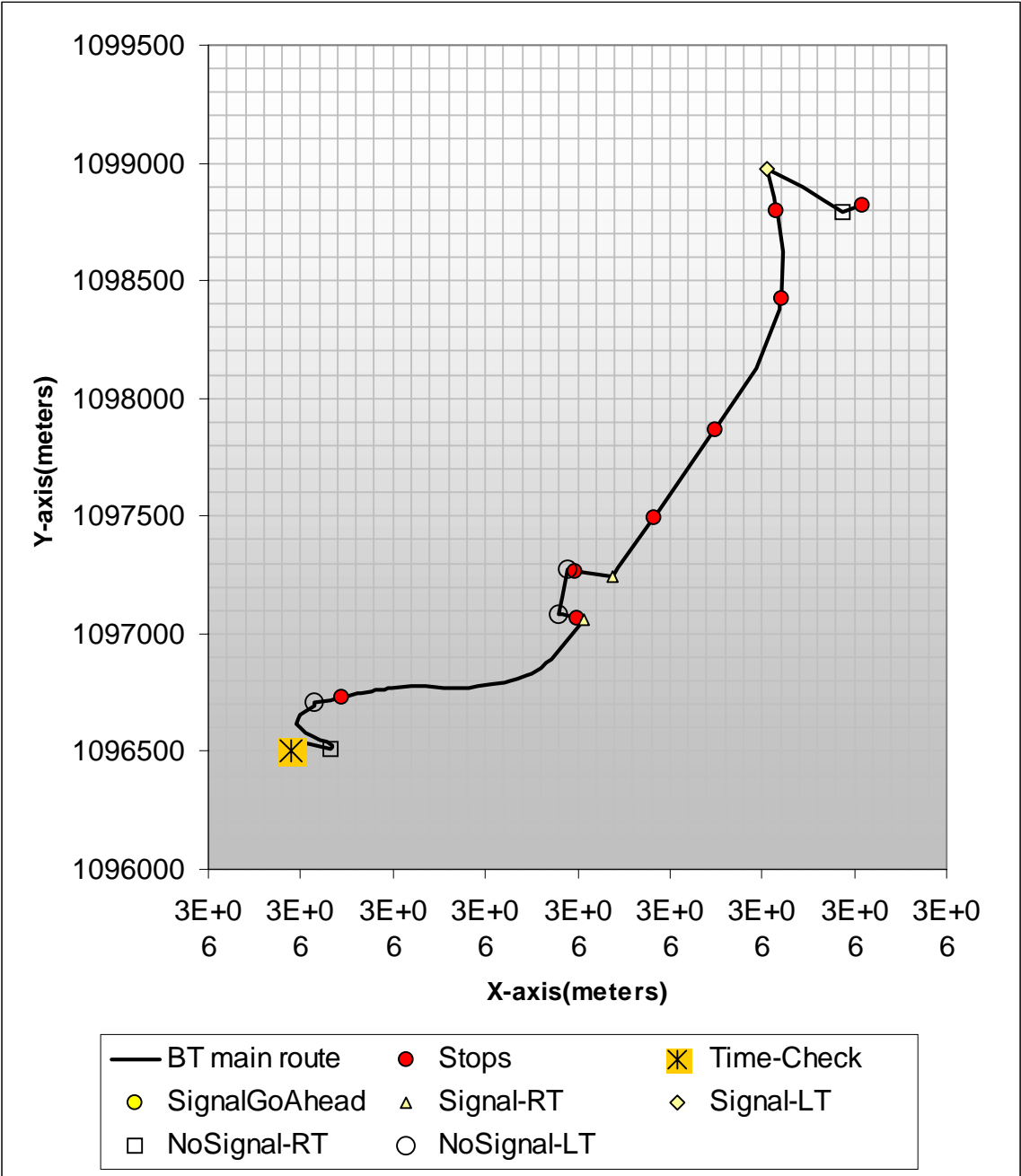


Figure A.7 Network Configuration & Types of Stop/Intersection/Turns of Section 5.
(S. Main – Hospital)

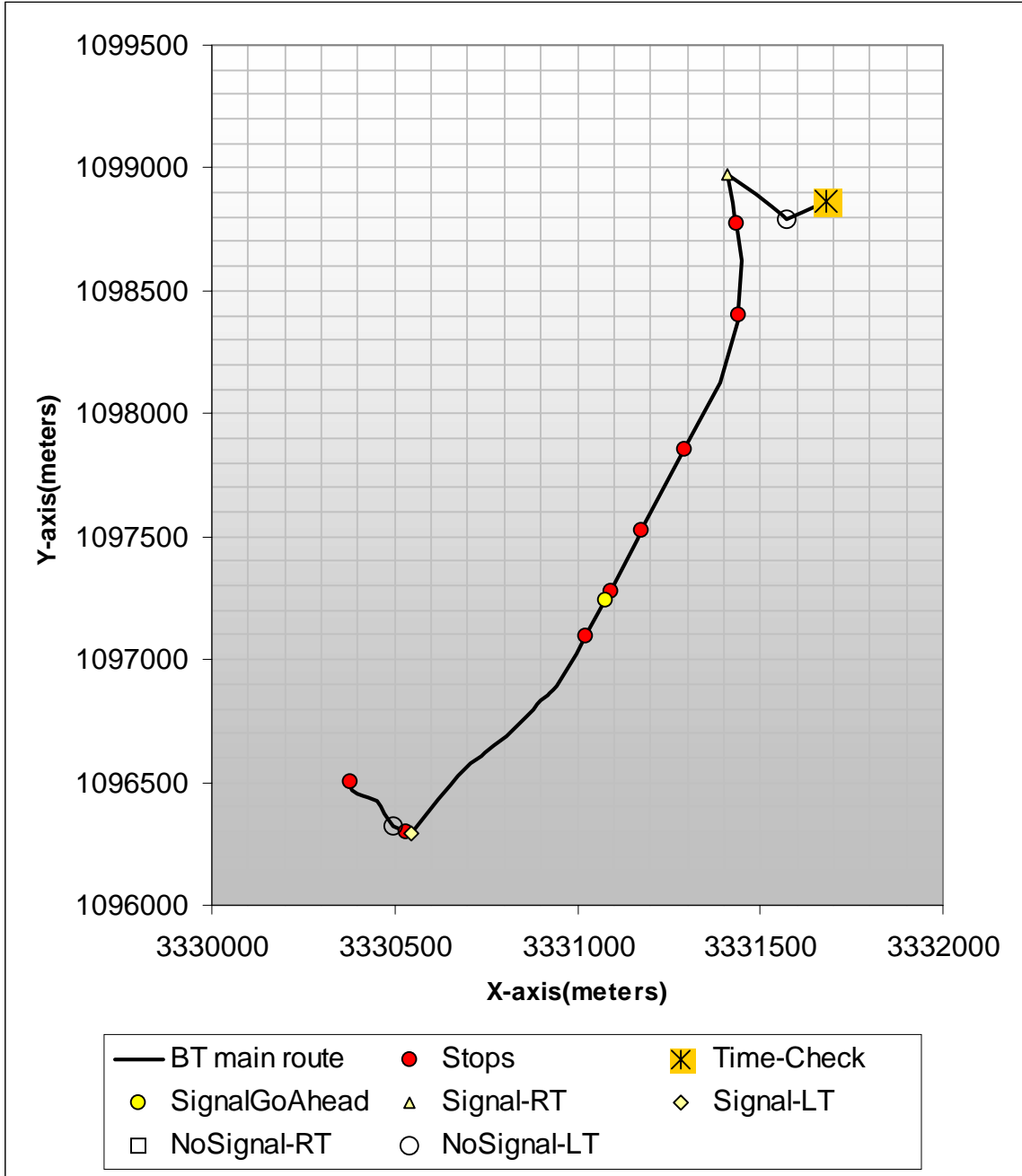


Figure A.8 Network Configuration & Types of Stop/Intersection/Turns of Section 6.
(Hospital – S. Main)

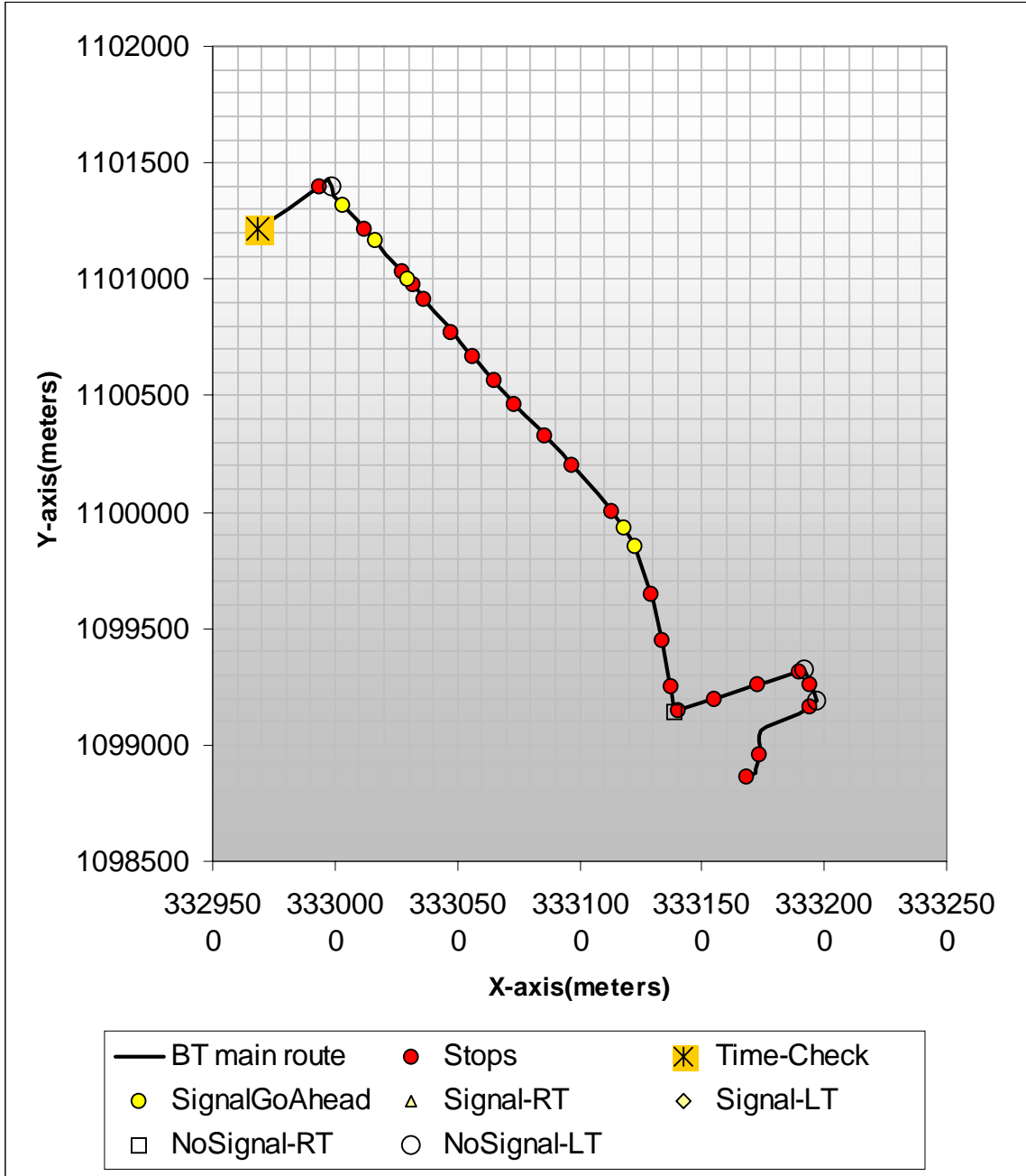


Figure A.9 Network Configuration & Types of Stop/Intersection/Turns of Section 7.
(S. Main – Squires)