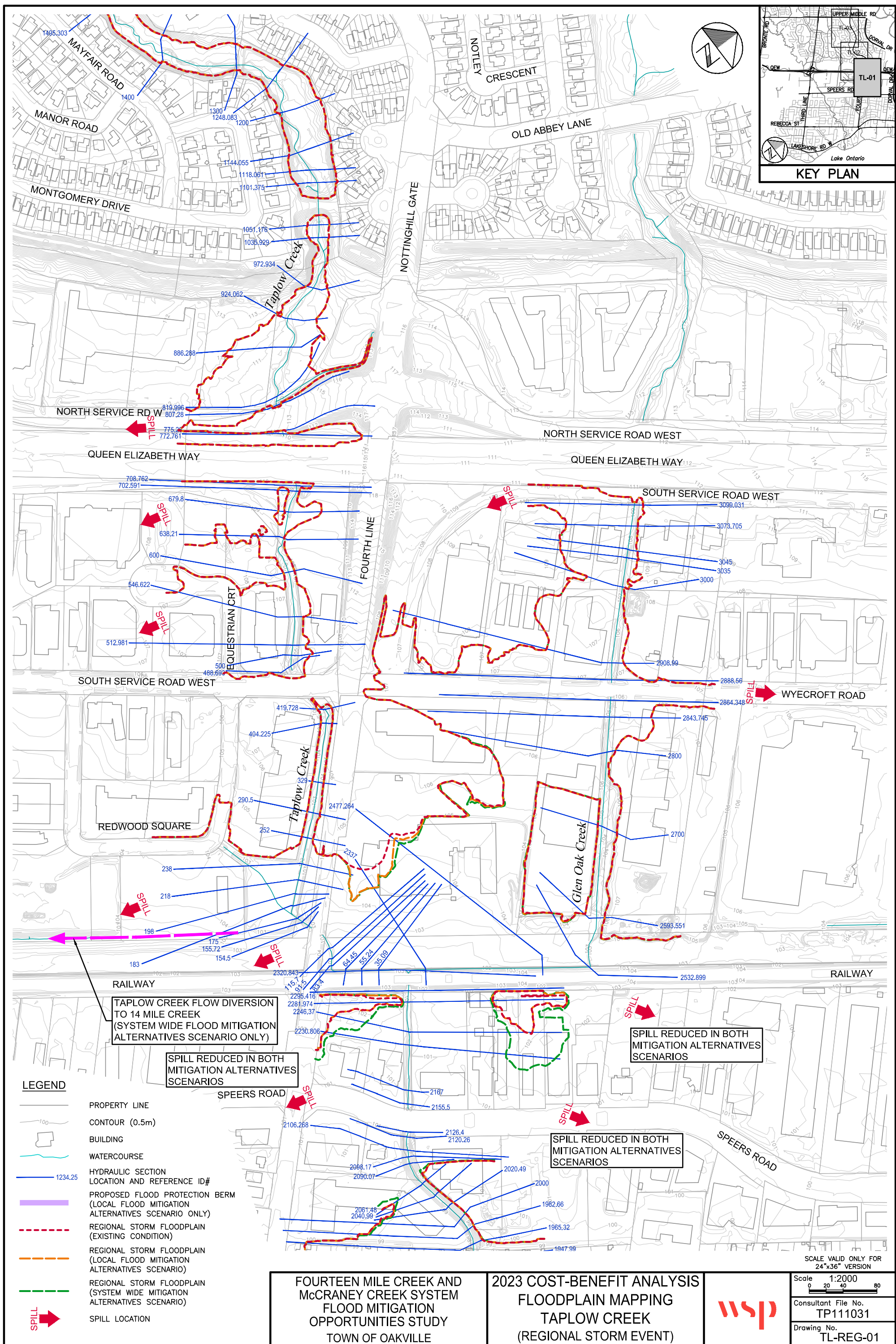
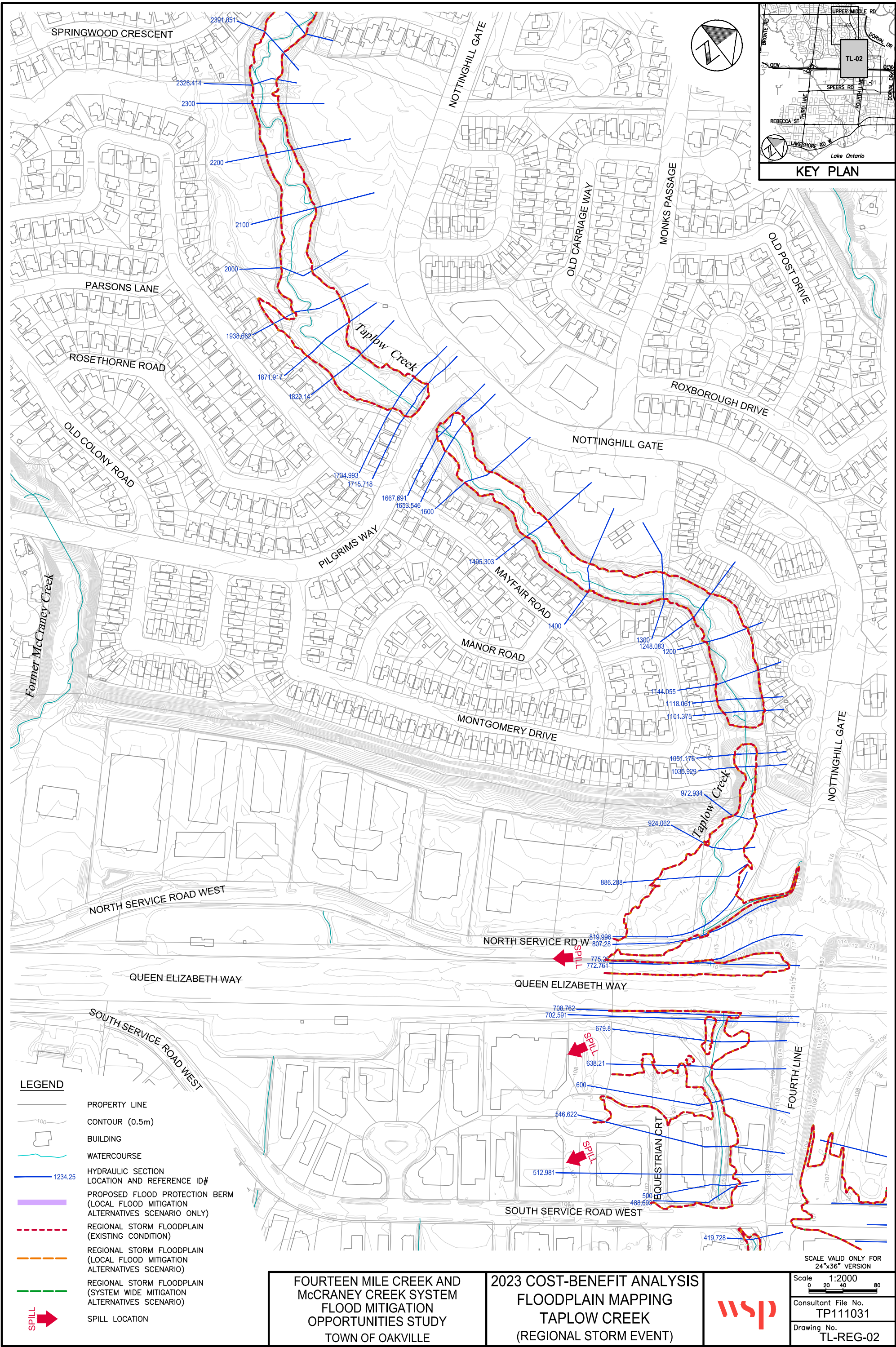
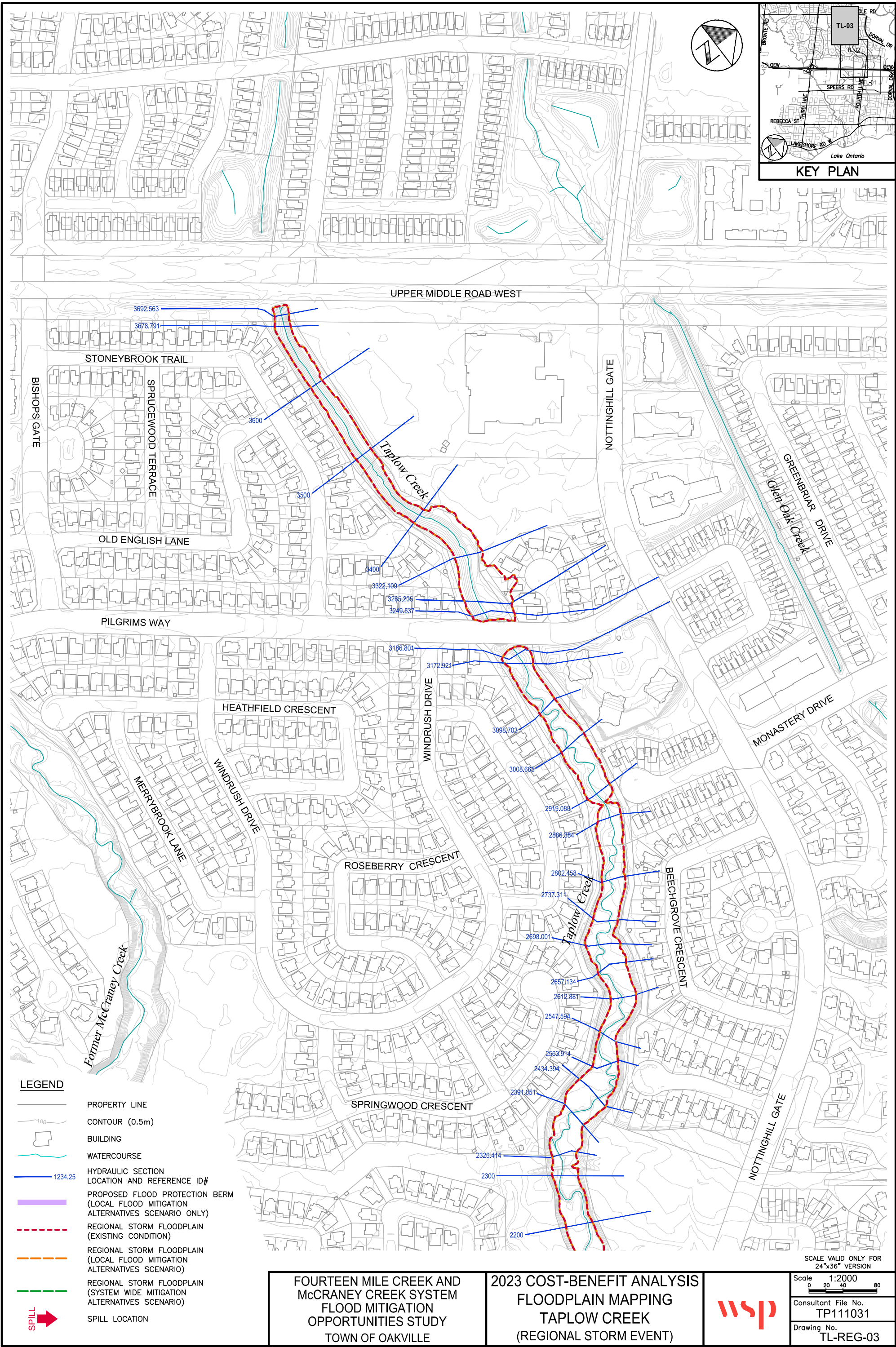




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Plotted By: wds_richard.bortolo
2023-11-06
Last Saved: 2023-11-06
Last Saved: 2023-11-06



LEGEND

- PROPERTY LINE
- CONTOUR (0.5m)
- BUILDING
- WATERCOURSE
- HYDRAULIC SECTION LOCATION AND REFERENCE ID#
- PROPOSED FLOOD PROTECTION BERM (LOCAL FLOOD MITIGATION ALTERNATIVES SCENARIO ONLY)
- REGIONAL STORM FLOODPLAIN (EXISTING CONDITION)
- REGIONAL STORM FLOODPLAIN (LOCAL FLOOD MITIGATION ALTERNATIVES SCENARIO)
- REGIONAL STORM FLOODPLAIN (SYSTEM WIDE MITIGATION ALTERNATIVES SCENARIO)
- SPILL LOCATION

FOURTEEN MILE CREEK AND
McCRANEY CREEK SYSTEM
FLOOD MITIGATION
OPPORTUNITIES STUDY
TOWN OF OAKVILLE

2023 COST-BENEFIT ANALYSIS
FLOODPLAIN MAPPING
TAPLOW CREEK
(REGIONAL STORM EVENT)



SCALE VALID ONLY FOR
24"x36" VERSION

Scale 1:2000
0 20 40 80

Consultant File No.
TP111031

Drawing No.
TL-REG-03

APPENDIX

H-10

November 10, 2023 Cost Benefit
Analysis – Appendix D

Table D4 – Approximate Number of Properties and Buildings at Risk (Existing Scenario) - 2019 Assessment				
Storm Event	Properties		Buildings	
	Fourteen Mile	McCraney	Fourteen Mile	McCraney
10-Year	92	97	12	48
100-Year	130	96	46	86
Regional	132	131	140	149

Table D5 – Proposed Flood Risk Scenario 1: 10-Year, 100-Year and Regional Storm Events								
Storm Event	Properties				Buildings			
	Fourteen Mile		McCraney		Fourteen Mile		McCraney	
	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed
10-Year	81	4	5	2	10	0(1)	0	0
100-Year	87	13	6	4	19	2(15)	0	3
Regional	105	0	55	16	68	5(3)	67	3(11)

Table D6 – Proposed Flood Risk Scenario 2: 10-Year, 100-Year and Regional Storm Events								
Storm Event	Properties				Buildings			
	Fourteen Mile		McCraney		Fourteen Mile		McCraney	
	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed
10-Year	1	6	0	2	10	0	0	0
100-Year	83	15	7	4	19	1(17)	2	3
Regional	88	20	52	16	47	10(24)	68	3(14)

Table D7 – Proposed Flood Risk Scenario 3:10-Year, 100-Year and Regional Storm Events								
Storm Event	Properties				Buildings			
	Fourteen Mile		McCraney		Fourteen Mile		McCraney	
	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed
10-Year	83	0	0	2	9	0	0	0
100-Year	85	9	6	4	22	0(13)	0	3
Regional	41	0	8	0	18	3(2)	1	1(2)

10-Year Event Flood Risk to Properties										
Creek System	Existing	Reduced			Removed			Total Flood Risk Reduction for creek system		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Fourteen Mile Creek	93	81	1	83	4	6	4	85	7	87
McCraney Creek	95	5	0	5	2	2	9	7	2	14
Total Flood Risk Reduction for alternatives								92	9	101

10-Year Event Flood Risk to Buildings										
Creek System	Existing	Reduced			Removed			Total Flood Risk Reduction for creek system		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Fourteen Mile Creek	12	10	10	9	0(1)	0	0	11	10	9
McCraney Creek	47	0	0	0	0	0	0	0	0	0
Total Flood Risk Reduction for alternatives								11	10	9

100-Year Event Flood Risk to Properties										
Creek System	Existing	Reduced			Removed			Total Flood Risk Reduction for creek system		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Fourteen Mile Creek	123	87	83	85	13	15	24	100	98	109
McCraney Creek	91	6	7	6	4	4	16	10	11	22
Total Flood Risk Reduction for alternatives								110	109	131

100-Year Event Flood Risk to Buildings										
Creek System	Existing	Reduced			Removed			Total Flood Risk Reduction for creek system		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Fourteen Mile Creek	43	19	19	22	2(15)	1(17)	1(14)	36	37	36
McCraney Creek	81	0	2	14	3	3	6	3	5	20
Total Flood Risk Reduction for alternatives								39	42	56

Regional Event Flood Risk to Properties										
Creek System	Existing	Reduced			Removed			Total Flood Risk Reduction for creek system		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Fourteen Mile Creek	133	105	88	68	0	20	21	105	108	89
McCraney Creek	124	55	52	13	16	16	14	71	68	27
Total Flood Risk Reduction for alternatives								176	176	116

Regional Event Flood Risk to Buildings										
Creek System	Existing	Reduced			Removed			Total Flood Risk Reduction for creek system		
		Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Fourteen Mile Creek	140	68	47	18	5(3)	10(24)	16(17)	76	81	51
McCraney Creek	145	67	68	10	3(11)	3(14)	4(5)	81	85	19
Total Flood Risk Reduction for alternatives								157	166	70

Table D1 – Approximate Number of Properties and Buildings at Risk (Existing Scenario) - 2023 Assessment				
Storm Event	Properties		Buildings	
	Fourteen Mile	McCraney	Fourteen Mile	McCraney
10-Year	92	97	12	48
100-Year	130	96	46	86
Regional	132	131	140	149

Table D2 – Proposed Flood Risk Scenario 1: Local Approach, 100-Year and Regional Storm Events								
Storm Event	Properties				Buildings			
	Fourteen Mile		McCraney		Fourteen Mile		McCraney	
	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed
10-Year	23	4	5	7	0	0	0	0
100-Year	30	15	2	12	1	1(1)	14	3
Regional	27	21	5	14	0	13(15)	9	3(3)

Table D3 – Proposed Flood Risk Scenario 2: System wide Approach, 100-Year and Regional Storm Events								
Storm Event	Properties				Buildings			
	Fourteen Mile		McCraney		Fourteen Mile		McCraney	
	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed	Reduced Risk	Removed
10-Year	73	3	0	0	8	0(1)	0	0
100-Year	80	19	4	0	17	1(15)	16	0
Regional	70	0	46	20	57	0(1)	70	0(8)

10-Year Event Flood Risk to Properties							
Creek System	Existing	Reduced		Removed		Total Flood Risk Reduction for creek system	
		Local	System	Local	System	Local	System
Fourteen Mile Creek	92	23	73	4	3	27	76
McCraney Creek	97	5	0	7	0	12	0
Total Flood Risk Reduction for alternatives						39	76
10-Year Event Flood Risk to Buildings							
Creek System	Existing	Reduced		Removed		Total Flood Risk Reduction for creek system	
		Local	System	Local	System	Local	System
Fourteen Mile Creek	12	0	8	0	0(1)	0	9
McCraney Creek	48	0	0	0	0	0	0
Total Flood Risk Reduction for alternatives						0	9
100-Year Event Flood Risk to Properties							
Creek System	Existing	Reduced		Removed		Total Flood Risk Reduction for creek system	
		Local	System	Local	System	Local	System
Fourteen Mile Creek	130	30	80	15	19	45	99
McCraney Creek	96	2	4	12	0	14	4
Total Flood Risk Reduction for alternatives						59	103
100-Year Event Flood Risk to Buildings							
Creek System	Existing	Reduced		Removed		Total Flood Risk Reduction for creek system	
		Local	System	Local	System	Local	System
Fourteen Mile Creek	46	1	17	1(1)	1(15)	3	35
McCraney Creek	86	14	16	3	0	17	16
Total Flood Risk Reduction for alternatives						20	51
Regional Event Flood Risk to Properties							
Creek System	Existing	Reduced		Removed		Total Flood Risk Reduction for creek system	
		Local	System	Local	System	Local	System
Fourteen Mile Creek	132	27	70	21	0	48	70
McCraney Creek	131	5	46	14	20	19	66
Total Flood Risk Reduction for alternatives						67	136
Regional Event Flood Risk to Buildings							
Creek System	Existing	Reduced		Removed		Total Flood Risk Reduction for creek system	
		Local	System	Local	System	Local	System
Fourteen Mile Creek	140	0	57	13(15)	0(1)	28	58
McCraney Creek	149	9	70	3(3)	0(8)	15	78
Total Flood Risk Reduction for alternatives						43	136

APPENDIX

H-11

November 10, 2023 Cost Benefit
Analysis – Appendix E

APPENDIX

H-12

Properties Impacted by Berm Construction (March 2025)

Properties Affected by Proposed Berms	
Glen Oaks Creek - Upstream of Rebecca Street - Left Bank looking downstream	
Sr No.	Municipal Address
1	185 Shanley Terrace, Oakville, ON L6K 2H7
2	179 Shanley Terrace, Oakville, ON L6K 2H7
3	175 Shanley Terrace, Oakville, ON L6K 2H7
4	169 Shanley Terrace, Oakville, ON L6K 2H7
5	165 Shanley Terrace, Oakville, ON L6K 2H7
6	161 Shanley Terrace, Oakville, ON L6K 2H7
7	157 Shanley Terrace, Oakville, ON L6K 2H7
8	151 Shanley Terrace, Oakville, ON L6K 2H7
9	145 Shanley Terrace, Oakville, ON L6K 2H7
10	141 Shanley Terrace, Oakville, ON L6K 2H7
11	137 Shanley Terrace, Oakville, ON L6K 2H7
12	133 Shanley Terrace, Oakville, ON L6K 2H7
Glen Oaks Creek - Upstream of Wildwood Dr -Right Bank looking downstream	
Sr No.	Municipal Address
1	585 Stephens Crescent, Oakville, ON L6K 1Y2
2	583 Stephens Crescent, Oakville, ON L6K 1Y2
3	579 Stephens Crescent, Oakville, ON L6K 1Y2
4	577 Stephens Crescent, Oakville, ON L6K 1Y2
5	575 Stephens Crescent, Oakville, ON L6K 1Y2
6	565 Wildwood Dr, Oakville, ON L6K 1V4
7	582 Pinegrove Rd, Oakville, ON L6K 2C6
8	572 Pinegrove Rd, Oakville, ON L6K 2C6
9	568 Pinegrove Rd, Oakville, ON L6K 2C6
14 Mile Creek - Upstream of Bridge Road - Left Bank - looking downstream	
1	1345 Pinegrove Rd, Oakville, ON L6L 2X2
2	1349 Pinegrove Rd, Oakville, ON L6L 2X2
3	1353 Pinegrove Rd, Oakville, ON L6L 2X2
4	1357 Pinegrove Rd, Oakville, ON L6L 2X2
5	1356 Warwick Ave, Oakville, ON L6L 2W1
6	1350 Warwick Ave, Oakville, ON L6L 2W1
7	1346 Warwick Ave, Oakville, ON L6L 2W1
8	1340 Warwick Ave, Oakville, ON L6L 2W1
9	1334 Warwick Ave, Oakville, ON L6L 2W1
10	1330 Warwick Ave, Oakville, ON L6L 2W1
11	1326 Warwick Ave, Oakville, ON L6L 2W1
12	1320 Warwick Ave, Oakville, ON L6L 2W1
13	534 Stafford Dr, Oakville, ON L6L 4M5
14	530 Stafford Dr, Oakville, ON L6L 4M5

15	526 Stafford Dr, Oakville, ON L6L 4M5
16	522 Stafford Dr, Oakville, ON L6L 4M5
17	518 Stafford Dr, Oakville, ON L6L 4M5
18	514 Stafford Dr, Oakville, ON L6L 4M5
19	508 Stafford Dr, Oakville, ON L6L 4M5
20	504 Sandbrook Rd, Oakville, ON L6L 4M7
14 Mile Creek - Upstream of Bridge Road - Right Bank - looking downstream	
1	541 Valley Dr, Oakville, ON L6L 4L9
2	535 Valley Dr, Oakville, ON L6L 4L9
3	531 Valley Dr, Oakville, ON L6L 4L9
4	527 Valley Dr, Oakville, ON L6L 4L9
5	523 Valley Dr, Oakville, ON L6L 4L9
6	519 Valley Dr, Oakville, ON L6L 4L9
7	515 Valley Dr, Oakville, ON L6L 4L9
8	511 Valley Dr, Oakville, ON L6L 4L9
9	507 Valley Dr, Oakville, ON L6L 4L9
10	503 Valley Dr, Oakville, ON L6L 4L9
11	499 Valley Dr, Oakville, ON L6L 4L9
12	1323 Bridge Rd, Oakville, ON L6L 2C6
13	1319 Bridge Rd, Oakville, ON L6L 2C6
14 Mile Creek - Downstream of Bridge Road & Upstream of Warminster Dr - Left Bank - looking downstream	
1	484 Warminster Dr, Oakville, ON L6L 4N3
2	474 Warminster Dr, Oakville, ON L6L 4N3
14 Mile Creek - Downstream of Bridge Road & Upstream of Warminster Dr - Right Bank - looking downstream	
1	477 Valley Dr, Oakville, ON L6L 4L5
2	473 Valley Dr, Oakville, ON L6L 4L5
3	469 Valley Dr, Oakville, ON L6L 4L5
4	463 Valley Dr, Oakville, ON L6L 4L5
5	459 Valley Dr, Oakville, ON L6L 4L5
6	455 Valley Dr, Oakville, ON L6L 4L5
7	449 Valley Dr, Oakville, ON L6L 4L5
8	445 Valley Dr, Oakville, ON L6L 4L5
9	441 Valley Dr, Oakville, ON L6L 4L5
10	435 Valley Dr, Oakville, ON L6L 4L5
11	431 Valley Dr, Oakville, ON L6L 4L5
12	427 Valley Dr, Oakville, ON L6L 4L5
13	423 Valley Dr, Oakville, ON L6L 4L5
14	419 Valley Dr, Oakville, ON L6L 4L5
15	415 Valley Dr, Oakville, ON L6L 4L5
16	409 Valley Dr, Oakville, ON L6L 4L5
17	403 Valley Dr, Oakville, ON L6L 4L5

18	399 Valley Dr, Oakville, ON L6L 4L5
14 Mile Creek - Downstream of Warminster Dr - Left Bank - looking downstream	
1	453 Warminster Dr, Oakville, ON L6L 4N4
2	1252 Wood Pl, Oakville, ON L6L 2R5
3	1248 Wood Pl, Oakville, ON L6L 2R5
4	1244 Wood Pl, Oakville, ON L6L 2R5
5	1240 Wood Pl, Oakville, ON L6L 2R5
6	1236 Wood Pl, Oakville, ON L6L 2R5
7	1230 Wood Pl, Oakville, ON L6L 2R5
8	1226 Wood Pl, Oakville, ON L6L 2R5
9	1220 Wood Pl, Oakville, ON L6L 2R5
10	1216 Wood Pl, Oakville, ON L6L 2R5
11	420 Tower Dr, Oakville, ON L6L 4R2
12	414 Tower Dr, Oakville, ON L6L 4R2
13	408 Tower Dr, Oakville, ON L6L 4R2
14	404 Tower Dr, Oakville, ON L6L 4R2
15	400 Tower Dr, Oakville, ON L6L 4R2
16	1500 Sarta Rd, Oakville, ON L6L2P3
14 Mile Creek - Downstream of Rebecca St - Right Bank - looking downstream	
1	1160 Rebecca St, Oakville, ON L6L 1Y9
2	249 Willowridge Ct, Oakville, ON L6L 5J1
3	247 Willowridge Ct, Oakville, ON L6L 5J1
4	245 Willowridge Ct, Oakville, ON L6L 5J1
5	243 Willowridge Ct, Oakville, ON L6L 5J1
6	241 Willowridge Ct, Oakville, ON L6L 5J1
7	239 Willowridge Ct, Oakville, ON L6L 5J1
8	237 Willowridge Ct, Oakville, ON L6L 5J1
9	235 Willowridge Ct, Oakville, ON L6L 5J1