

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_804	3709	200-yr	15.74	186.32	187.34		187.37	0.002526	0.76	0.45	0.83	22.20	47.33	0.15
34_804	3436	50-yr	11.90	185.74	186.63		186.65	0.001012	0.62	0.31	0.44	22.71	42.11	0.10
34_804	3436	100-yr	13.19	185.74	186.67		186.69	0.001026	0.64	0.31	0.46	24.16	42.75	0.10
34_804	3436	200-yr	15.74	185.74	186.93		186.95	0.001071	0.69	0.33	0.50	26.77	44.24	0.10
34_804	3266	50-yr	11.90	185.38	186.52	186.28	186.58	0.004689	0.95	0.62	0.61	14.75	39.27	0.21
34_804	3266	100-yr	13.19	185.38	186.53	186.30	186.58	0.005217	1.02	0.66	0.66	15.20	39.28	0.22
34_804	3266	200-yr	15.74	185.38	186.55	186.34	186.61	0.006543	1.17	0.75	0.76	15.62	40.62	0.25
34_804	3112	50-yr	11.90	185.04	186.02		186.04	0.002411	0.65	0.43	0.76	18.37	44.17	0.15
34_804	3112	100-yr	13.19	185.04	186.07		186.09	0.002104	0.64	0.42	0.74	20.63	46.46	0.14
34_804	3112	200-yr	15.74	185.04	186.19		186.21	0.001330	0.59	0.36	0.66	26.73	49.77	0.12
34_804	2833	50-yr	11.90	184.45	185.62		185.63	0.000464	0.28	0.23	0.40	36.47	58.98	0.07
34_804	2833	100-yr	13.19	184.45	185.91		185.91	0.000362	0.27	0.21	0.38	42.07	63.09	0.06
34_804	2833	200-yr	15.74	184.45	186.09		186.10	0.000226	0.24	0.18	0.35	56.06	73.09	0.05
34_804	2645	50-yr	11.90	184.05	185.81		185.81	0.000030	0.14	0.07	0.14	90.30	105.09	0.02
34_804	2645	100-yr	13.19	184.05	185.90		185.90	0.000027	0.14	0.07	0.13	100.17	108.60	0.02
34_804	2645	200-yr	15.74	184.05	186.09		186.09	0.000022	0.14	0.07	0.13	121.28	114.40	0.02
34_804	2569	50-yr	11.90	183.88	185.80	184.70	185.80	0.000039	0.14	0.09	0.17	81.50	81.80	0.02
34_804	2569	100-yr	13.19	183.88	185.90	184.72	185.90	0.000039	0.11	0.09	0.18	81.10	112.35	0.02
34_804	2569	200-yr	15.74	183.88	186.09	184.80	186.09	0.000029	0.11	0.08	0.17	113.31	120.42	0.02
34_804	2555	50-yr	11.90	183.80	185.79	184.74	185.80	0.000113	0.35	0.48	0.38	29.88	85.25	0.11
34_804	2555	100-yr	13.19	183.80	185.86	184.76	185.89	0.000113	0.37	0.48	0.39	31.81	86.96	0.11
34_804	2555	200-yr	15.74	183.80	186.07	184.81	186.08	0.000110	0.40	0.50	0.42	35.79	107.61	0.11
34_804	2539	Junction Rd	Culvert											
34_804	2528	50-yr	11.90	183.95	185.56	184.58	185.58	0.000262	0.61	0.22	0.22	19.91	40.31	0.17
34_804	2528	100-yr	13.19	183.95	185.60	184.60	185.62	0.000292	0.66	0.25	0.25	20.53	41.22	0.18
34_804	2528	200-yr	15.74	183.95	185.66	184.68	185.69	0.000356	0.75	0.31	0.31	21.58	51.12	0.20
34_804	2521	50-yr	11.90	183.93	185.56	184.70	185.57	0.002224	0.30	0.58	0.56	21.34	41.97	0.16
34_804	2521	100-yr	13.19	183.93	185.60	184.74	185.61	0.002215	0.30	0.59	0.60	22.97	44.06	0.16
34_804	2521	200-yr	15.74	183.93	185.66	184.82	185.68	0.002244	0.28	0.62	0.68	26.00	48.09	0.16
34_804	2316	50-yr	11.90	183.51	184.83		184.86	0.008611	0.84	0.87	0.54	15.06	32.90	0.26
34_804	2316	100-yr	13.19	183.51	184.87		184.91	0.006485	0.81	0.88	0.58	16.55	36.42	0.26
34_804	2316	200-yr	15.74	183.51	184.95		184.99	0.006190	0.74	0.90	0.65	19.65	45.58	0.26
34_804	2074	50-yr	11.90	183.02	184.27		184.29	0.001930	0.72	0.39	0.51	19.41	35.32	0.12
34_804	2074	100-yr	13.19	183.02	184.30		184.33	0.001632	0.75	0.41	0.54	20.47	36.25	0.13
34_804	2074	200-yr	15.74	183.02	184.36		184.38	0.001793	0.81	0.44	0.61	22.48	38.14	0.13
34_804	1862	50-yr	11.90	182.58	183.94		183.95	0.001983	0.52	0.45	0.55	22.96	68.90	0.14
34_804	1862	100-yr	13.19	182.58	183.97		183.98	0.001915	0.54	0.45	0.56	24.97	71.65	0.14
34_804	1862	200-yr	15.74	182.58	184.02		184.03	0.001794	0.57	0.44	0.58	28.62	74.44	0.13
34_804	1753	50-yr	11.90	182.36	183.78		183.81	0.000916	0.44	0.31	1.44	23.94	53.92	0.10
34_804	1753	100-yr	13.19	182.36	183.81		183.84	0.000903	0.46	0.32	1.48	25.62	54.19	0.09
34_804	1753	200-yr	15.74	182.36	183.86		183.90	0.000949	0.50	0.34	1.59	28.16	54.71	0.10
34_804	1697	50-yr	11.90	182.25	183.75		183.78	0.000633	0.42	0.28	0.62	26.76	67.72	0.08
34_804	1697	100-yr	13.19	182.25	183.78		183.79	0.000689	0.42	0.28	0.67	31.04	68.63	0.08
34_804	1697	200-yr	15.74	182.25	183.83		183.84	0.000680	0.44	0.28	0.76	34.33	69.68	0.08
34_804	1604	50-yr	11.90	182.06	183.51		183.59	0.015485	1.45	1.26	1.17	9.42	21.32	0.39
34_804	1604	100-yr	13.19	182.06	183.53		183.62	0.015935	1.46	1.30	1.29	10.02	22.06	0.39
34_804	1604	200-yr	15.74	182.06	183.58		183.68	0.017152	1.55	1.39	1.45	11.94	23.61	0.41
34_804	1478	50-yr	11.90	181.81	183.20		183.21	0.001097	0.51	0.29	0.24	25.79	59.87	0.10
34_804	1478	100-yr	13.19	181.81	183.22		183.24	0.001096	0.53	0.30	0.23	27.50	61.43	0.10
34_804	1478	200-yr	15.74	181.81	183.28		183.30	0.001098	0.57	0.31	0.28	30.97	62.68	0.10
34_804	1361	50-yr	11.90	181.58	183.07		183.08	0.001420	0.59	0.38	0.19	23.78	54.89	0.12
34_804	1361	100-yr	13.19	181.58	183.10		183.11	0.001388	0.57	0.38	0.19	25.47	55.44	0.12
34_804	1361	200-yr	15.74	181.58	183.16		183.17	0.001352	0.61	0.39	0.20	28.96	58.35	0.11
34_804	1264	50-yr	11.90	181.38	182.92		182.93	0.001861	0.20	0.41	0.61	22.53	48.80	0.13
34_804	1264	100-yr	13.19	181.38	182.95		182.97	0.001841	0.21	0.41	0.63	24.23	50.54	0.13
34_804	1264	200-yr	15.74	181.38	183.01		183.03	0.001803	0.24	0.42	0.66	27.35	54.40	0.13
34_804	1182	50-yr	11.90	181.23	182.83		182.84	0.001272	0.58	0.35	0.59	21.70	44.25	0.10
34_804	1182	100-yr	13.19	181.23	182.86		182.88	0.001245	0.60	0.36	0.60	23.31	45.03	0.10
34_804	1182	200-yr	15.74	181.23	182.92		182.94	0.001230	0.62	0.37	0.64	25.17	46.26	0.10
34_804	1055	50-yr	11.90	180.97	182.68		182.69	0.001278	0.50	0.40	0.61	21.97	42.98	0.11
34_804	1055	100-yr	13.19	180.97	182.71		182.73	0.001295	0.52	0.41	0.63	23.44	44.14	0.11
34_804	1055	200-yr	15.74	180.97	182.77		182.79	0.001304	0.55	0.42	0.67	26.26	46.05	0.11
34_804	916	50-yr	11.90	180.70	182.40		182.49	0.003055	0.68	0.62	0.90	16.49	36.31	0.17
34_804	916	100-yr	13.19	180.70	182.50		182.53	0.002962	0.68	0.62	0.83	17.76	37.28	0.17
34_804	916	200-yr	15.74	180.70	182.56		182.59	0.002623	0.67	0.62	0.89	20.23	38.44	0.18
34_804	789	50-yr	11.90	180.44	182.22		182.25	0.001958	0.65	0.48	0.79	16.62	28.27	0.13
34_804	789	100-yr	13.19	180.44	182.26		182.29	0.001980	0.67	0.49	0.82	17.94	29.05	0.13
34_804	789	200-yr	15.74	180.44	182.32		182.36	0.002098	0.72	0.52	0.89	19.79	30.19	0.13
34_804	701	50-yr	11.90	180.27	182.15		182.15	0.000667	0.42	0.34	0.46	28.93	50.00	0.09
34_804	701	100-yr	13.19	180.27	182.19		182.20	0.000654	0.43	0.35	0.48	30.99	50.76	0.09

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Twp Width (m)	Froude # Crl
34_804	701	200-yr	15.74	180.27	182.25		182.26	0.000688	0.47	0.36	0.52	34.12	51.68	0.08
34_804	661	50-yr	11.90	180.19	182.06		182.09	0.003670	0.63	0.73	0.38	18.48	36.34	0.20
34_804	661	100-yr	13.19	180.19	182.10		182.13	0.003769	0.60	0.76	0.41	20.24	45.11	0.20
34_804	661	200-yr	15.74	180.19	182.16		182.19	0.003948	0.63	0.80	0.46	23.11	51.77	0.21
34_804	576	50-yr	11.90	180.02	181.63		181.67	0.007892	0.58	0.93	0.75	14.84	35.88	0.27
34_804	576	100-yr	13.19	180.02	181.64		181.68	0.008632	0.63	0.99	0.82	15.29	36.05	0.28
34_804	576	200-yr	15.74	180.02	181.78		181.78	0.006289	0.64	0.89	0.82	19.08	38.40	0.24
34_804	253	50-yr	11.90	179.37	181.52		181.52	0.000167	0.09	0.18	0.23	54.49	81.19	0.04
34_804	253	100-yr	13.19	179.37	181.48		181.49	0.000238	0.11	0.21	0.38	51.38	80.74	0.05
34_804	253	200-yr	15.74	179.37	181.62		181.62	0.000199	0.12	0.20	0.36	62.81	82.33	0.05
34_804	102	50-yr	11.90	179.07	181.49		181.49	0.000270	0.17	0.24	0.43	41.29	51.42	0.06
34_804	102	100-yr	13.19	179.07	181.44		181.44	0.000367	0.20	0.29	0.50	38.75	50.05	0.07
34_804	102	200-yr	15.74	179.07	181.58		181.59	0.000349	0.21	0.28	0.52	46.11	54.70	0.08
34_803	3624	50-yr	8.95	186.48	187.67	187.03	187.67	0.000129	0.16	0.11	0.13	45.30	127.16	0.04
34_803	3624	100-yr	7.42	186.48	187.69	187.06	187.69	0.000138	0.17	0.12	0.14	49.16	135.72	0.04
34_803	3624	200-yr	8.95	186.48	187.73	187.08	187.73	0.000148	0.19	0.13	0.15	54.53	148.32	0.04
34_803	3577	50-yr	8.95	186.00	187.65		187.65	0.000063	0.14	0.10	0.05	62.25	112.63	0.03
34_803	3577	100-yr	7.42	186.00	187.67		187.67	0.000071	0.16	0.10	0.05	64.37	114.28	0.03
34_803	3577	200-yr	8.95	186.00	187.71		187.71	0.000067	0.18	0.12	0.06	66.66	117.81	0.03
34_803	3424	50-yr	8.95	185.71	187.64	186.32	187.64	0.000093	0.10	0.14	0.07	66.97	143.38	0.03
34_803	3424	100-yr	7.42	185.71	187.66	186.37	187.66	0.000110	0.11	0.15	0.08	69.62	146.25	0.04
34_803	3424	200-yr	8.95	185.71	187.69	186.42	187.69	0.000145	0.13	0.17	0.10	71.99	161.55	0.04
34_803	3353	50-yr	8.95	185.57	187.64	186.29	187.64	0.000025	0.04	0.07	0.04	146.33	240.32	0.02
34_803	3353	100-yr	7.42	185.57	187.65	186.34	187.65	0.000029	0.05	0.08	0.05	150.27	241.56	0.02
34_803	3353	200-yr	8.95	185.57	187.68	186.42	187.68	0.000036	0.06	0.09	0.05	158.14	244.09	0.02
34_803	3342	50-yr	8.95	185.55	187.64	186.38	187.64	0.000023	0.04	0.07	0.04	150.10	243.05	0.02
34_803	3342	100-yr	7.42	185.55	187.65	186.49	187.65	0.000027	0.05	0.07	0.04	154.08	243.25	0.02
34_803	3342	200-yr	8.95	185.55	187.68	186.54	187.68	0.000034	0.06	0.08	0.05	162.07	248.79	0.02
34_803	3321	Junction Road	Culvert											
34_803	3287	50-yr	8.95	185.51	186.70	186.43	186.70	0.002118	0.26	0.43	0.21	24.16	117.80	0.15
34_803	3287	100-yr	7.42	185.51	186.72	186.46	186.72	0.001919	0.26	0.42	0.21	27.28	124.76	0.14
34_803	3287	200-yr	8.95	185.51	186.77	186.50	186.77	0.001575	0.26	0.39	0.22	33.55	135.28	0.13
34_803	3277	50-yr	8.95	185.49	186.68		186.68	0.001160	0.18	0.30	0.21	31.38	122.38	0.10
34_803	3277	100-yr	7.42	185.49	186.71		186.71	0.001074	0.16	0.30	0.22	34.70	124.77	0.10
34_803	3277	200-yr	8.95	185.49	186.76		186.76	0.000940	0.17	0.29	0.22	41.03	128.95	0.09
34_803	3158	50-yr	8.95	185.27	186.51		186.51	0.002360	0.24	0.47	0.28	20.72	58.45	0.15
34_803	3158	100-yr	7.42	185.27	186.54		186.55	0.002241	0.25	0.48	0.28	22.85	62.37	0.15
34_803	3158	200-yr	8.95	185.27	186.61		186.62	0.002153	0.27	0.48	0.29	27.16	68.65	0.15
34_803	2798	50-yr	8.95	184.58	185.54		185.55	0.001491	0.28	0.38	0.28	21.50	40.83	0.12
34_803	2798	100-yr	7.42	184.58	185.56		185.59	0.001503	0.27	0.39	0.27	23.11	42.00	0.12
34_803	2798	200-yr	8.95	184.58	185.64		185.65	0.001672	0.29	0.42	0.31	25.59	43.73	0.13
34_803	2447	50-yr	8.95	183.90	184.71		184.78	0.010223	1.12	0.71	0.47	7.23	30.53	0.28
34_803	2447	100-yr	7.42	183.90	184.74		184.79	0.010102	1.07	0.73	0.52	8.21	31.74	0.28
34_803	2447	200-yr	8.95	183.90	184.80		184.85	0.008001	1.07	0.68	0.48	10.13	35.49	0.25
34_803	2329	50-yr	8.95	183.68	184.66		184.69	0.000236	0.21	0.13	0.19	33.60	99.20	0.05
34_803	2329	100-yr	7.42	183.68	184.70		184.71	0.000204	0.21	0.12	0.19	37.60	100.66	0.04
34_803	2329	200-yr	8.95	183.68	184.77		184.77	0.000178	0.21	0.12	0.19	44.63	105.21	0.04
34_803	2221	50-yr	8.95	183.47	184.61		184.61	0.001234	0.24	0.33	0.23	26.36	60.50	0.11
34_803	2221	100-yr	7.42	183.47	184.65		184.66	0.001258	0.23	0.35	0.24	29.54	76.26	0.11
34_803	2221	200-yr	8.95	183.47	184.72		184.73	0.001261	0.23	0.36	0.25	36.24	82.89	0.11
34_803	1992	50-yr	8.95	183.03	184.32		184.33	0.001726	0.31	0.41	0.25	20.46	41.36	0.13
34_803	1992	100-yr	7.42	183.03	184.35		184.36	0.001842	0.32	0.44	0.27	21.86	43.91	0.13
34_803	1992	200-yr	8.95	183.03	184.41		184.42	0.001937	0.35	0.46	0.29	24.59	52.00	0.14
34_803	1739	50-yr	8.95	182.58	183.97		183.98	0.002352	0.50	0.45	0.48	13.99	47.48	0.14
34_803	1739	100-yr	7.42	182.58	183.98		184.00	0.002447	0.53	0.48	0.52	14.81	48.14	0.15
34_803	1739	200-yr	8.95	182.58	184.01		184.03	0.002721	0.59	0.50	0.57	16.28	50.81	0.16
34_803	1622	50-yr	8.95	182.31	183.62		183.64	0.003134	0.54	0.50	0.81	12.43	46.42	0.16
34_803	1622	100-yr	7.42	182.31	183.65		183.66	0.002932	0.55	0.49	0.81	13.63	48.54	0.15
34_803	1622	200-yr	8.95	182.31	183.69		183.71	0.002634	0.59	0.48	0.56	15.96	52.05	0.15
34_803	1322	50-yr	8.95	181.74	183.19		183.20	0.001063	0.51	0.34	0.34	15.02	29.43	0.10
34_803	1322	100-yr	7.42	181.74	183.23		183.24	0.001102	0.54	0.35	0.35	16.00	30.08	0.10
34_803	1322	200-yr	8.95	181.74	183.29		183.30	0.001115	0.59	0.36	0.39	17.87	30.93	0.10
34_803	1158	50-yr	8.95	181.42	183.02		183.02	0.001308	0.31	0.37	0.39	19.92	42.67	0.11
34_803	1158	100-yr	7.42	181.42	183.05		183.06	0.001308	0.33	0.38	0.41	21.39	43.09	0.11
34_803	1158	200-yr	8.95	181.42	183.12		183.13	0.001252	0.36	0.38	0.38	24.51	46.62	0.11
34_803	1062	50-yr	8.95	181.24	182.89		182.90	0.002043	0.37	0.48	0.50	16.16	35.01	0.14
34_803	1062	100-yr	7.42	181.24	182.90		182.93	0.002019	0.39	0.49	0.51	17.48	35.54	0.14
34_803	1062	200-yr	8.95	181.24	182.99		183.00	0.002030	0.41	0.51	0.53	20.06	38.35	0.14
34_803	915	50-yr	8.95	180.96	182.60		182.61	0.002679	0.42	0.55	0.22	13.89	26.94	0.16
34_803	915	100-yr	7.42	180.96	182.63		182.65	0.002789	0.45	0.57	0.23	14.94	28.11	0.17

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Ch
34_803	915	200-yr	8.95	180.96	182.70		182.71	0.002919	0.50	0.61	0.27	16.80	29.51	0.17
34_803	703	50-yr	6.64	180.58	182.24		182.24	0.001748	0.38	0.44	0.21	17.28	36.10	0.12
34_803	703	100-yr	7.42	180.55	182.26		182.27	0.001861	0.39	0.46	0.22	18.20	36.61	0.13
34_803	703	200-yr	8.95	180.55	182.31		182.32	0.001950	0.43	0.48	0.24	20.30	41.14	0.13
34_803	586	50-yr	6.64	180.33	181.98		182.00	0.004105	0.31	0.67	0.34	14.11	40.91	0.18
34_803	586	100-yr	7.42	180.33	182.01		182.02	0.004212	0.32	0.69	0.37	15.19	41.45	0.19
34_803	586	200-yr	8.95	180.33	182.05		182.07	0.004570	0.35	0.73	0.42	16.96	42.97	0.20
34_803	431	50-yr	6.64	180.03	181.69		181.70	0.001430	0.24	0.38	0.28	23.04	67.57	0.11
34_803	431	100-yr	7.42	180.03	181.70		181.71	0.001633	0.26	0.42	0.31	23.76	67.74	0.12
34_803	431	200-yr	8.95	180.03	181.79		181.79	0.001227	0.27	0.38	0.30	29.69	69.57	0.11
34_803	318	50-yr	6.64	179.81	181.54		181.55	0.001299	0.29	0.38	0.28	20.82	34.41	0.11
34_803	318	100-yr	7.42	179.81	181.51		181.52	0.001638	0.33	0.45	0.34	19.96	34.06	0.13
34_803	318	200-yr	8.95	179.81	181.65		181.65	0.001447	0.34	0.43	0.35	24.51	35.75	0.11
34_803	164	50-yr	6.64	179.52	181.50		181.50	0.000170	0.20	0.16	0.10	37.89	45.66	0.04
34_803	164	100-yr	7.42	179.52	181.45		181.45	0.000252	0.23	0.19	0.11	35.81	45.05	0.05
34_803	164	200-yr	8.95	179.52	181.59		181.59	0.000222	0.24	0.19	0.12	42.06	46.71	0.05
34_803	84	50-yr	6.64	179.36	181.49		181.49	0.000135	0.18	0.14	0.18	38.73	41.42	0.03
34_803	84	100-yr	7.42	179.36	181.43		181.44	0.000200	0.21	0.17	0.21	36.64	40.85	0.04
34_803	84	200-yr	8.95	179.36	181.58		181.58	0.000185	0.22	0.17	0.21	42.56	42.58	0.04
17_201	1441	50-yr	4.69	181.78	183.13		183.18	0.008519		0.73		6.46	8.78	0.27
17_201	1441	100-yr	5.24	181.78	183.19		183.21	0.008622		0.76	0.06	6.90	9.32	0.28
17_201	1441	200-yr	6.33	181.78	183.26		183.29	0.009125	0.13	0.83	0.15	7.75	11.81	0.29
17_201	1272	50-yr	4.69	180.92	181.76		181.77	0.007929	0.40	0.54	0.44	9.14	23.42	0.25
17_201	1272	100-yr	5.24	180.92	181.79		181.80	0.007964	0.42	0.56	0.46	8.84	23.72	0.25
17_201	1272	200-yr	6.33	180.92	181.84		181.86	0.007962	0.42	0.60	0.50	11.12	24.64	0.26
17_201	1063	50-yr	4.69	179.83	180.51		180.53	0.004727	0.52	0.49	0.70	8.83	22.38	0.20
17_201	1063	100-yr	5.24	179.83	180.54		180.56	0.004704	0.57	0.50	0.72	9.50	23.36	0.29
17_201	1063	200-yr	6.33	179.83	180.59		180.61	0.004700	0.65	0.53	0.78	10.66	24.38	0.20
17_201	876	50-yr	4.69	179.38	180.12		180.13	0.004534	0.68	0.41	0.55	10.98	26.65	0.19
17_201	876	100-yr	5.24	179.38	180.15		180.16	0.004516	0.69	0.42	0.59	11.75	27.08	0.19
17_201	876	200-yr	6.33	179.38	180.20		180.21	0.004626	0.75	0.45	0.66	13.07	27.78	0.20
17_201	792	50-yr	4.69	178.41	179.17		179.19	0.005977	0.68	0.46	0.59	9.85	24.64	0.22
17_201	792	100-yr	5.24	178.41	179.20		179.21	0.005949	0.72	0.48	0.62	10.56	25.17	0.22
17_201	792	200-yr	6.33	178.41	179.26		179.27	0.005759	0.77	0.50	0.66	11.87	26.24	0.22
17_201	597	50-yr	4.69	177.42	178.25	177.98	178.26	0.003878	0.61	0.36	0.48	12.02	38.67	0.17
17_201	597	100-yr	5.24	177.42	178.27	177.98	178.28	0.003933	0.64	0.38	0.51	12.80	39.70	0.18
17_201	597	200-yr	6.33	177.42	178.31	178.00	178.32	0.004175	0.70	0.41	0.57	14.10	41.36	0.18
17_201	491	50-yr	4.69	176.90	177.63		177.64	0.004099	0.48	0.34	0.38	13.33	37.78	0.17
17_201	491	100-yr	5.24	176.90	177.66		177.67	0.003927	0.47	0.35	0.42	14.66	38.49	0.17
17_201	491	200-yr	6.33	176.90	177.92		177.92	0.003531	0.53	0.36	0.49	16.94	39.31	0.17
17_201	408	50-yr	4.69	176.45	177.60		177.60	0.002139	0.48	0.30	0.44	14.81	34.97	0.13
17_201	408	100-yr	5.24	176.45	177.60		177.61	0.002494	0.52	0.32	0.48	14.93	35.17	0.14
17_201	408	200-yr	6.33	176.45	177.56		177.57	0.005392	0.72	0.40	0.62	13.27	34.15	0.21
17_201	300	50-yr	4.69	175.90	176.68		176.62	0.003453		0.86		5.43	32.62	0.68
17_201	300	100-yr	5.24	175.90	176.99		177.01	0.004353	0.60	0.49	0.05	10.65	30.46	0.37
17_201	300	200-yr	6.33	175.90	177.21		177.21	0.002146	0.35	0.24	0.32	29.71	74.03	0.13
17_201	295	50-yr	4.69	175.67	176.68	176.66	176.90	0.000857	0.43	0.75	0.40	9.27	46.43	0.27
17_201	295	100-yr	5.24	175.67	176.99	176.67	177.00	0.000541	0.38	0.65	0.36	11.72	60.95	0.22
17_201	295	200-yr	6.33	175.67	177.20	176.70	177.21	0.000257	0.33	0.52	0.34	16.86	69.24	0.16
17_201	270	Castorville Rd	Culvert											
17_201	249	50-yr	4.69	175.68	176.53	176.25	176.56	0.001253	0.48	0.80	0.32	6.80	22.25	0.33
17_201	249	100-yr	5.24	175.68	176.62	176.27	176.65	0.000695	0.48	0.77	0.31	8.48	34.23	0.28
17_201	249	200-yr	6.33	175.68	176.80	176.32	176.82	0.000495	0.43	0.66	0.34	11.87	40.52	0.22
17_201	240	50-yr	4.69	175.63	176.52		176.54	0.003175	0.51	0.43	0.54	9.50	38.42	0.17
17_201	240	100-yr	5.24	175.63	176.62		176.63	0.003363	0.43	0.31	0.40	13.56	44.75	0.11
17_201	240	200-yr	6.33	175.63	176.81		176.81	0.000396	0.32	0.19	0.28	22.39	48.95	0.06
17_201	140	50-yr	4.69	175.12	176.50		176.50	0.000107	0.22	0.11	0.19	25.58	37.37	0.03
17_201	140	100-yr	5.24	175.12	176.60		176.61	0.000085	0.21	0.11	0.19	29.50	38.93	0.03
17_201	140	200-yr	6.33	175.12	176.80		176.80	0.000060	0.20	0.10	0.17	37.21	41.32	0.03
34_807	8405	50-yr	14.20	190.00	191.21	190.91	191.21	0.001035	0.27	0.29	0.14	55.74	185.23	0.10
34_807	8405	100-yr	15.75	190.00	191.23	190.92	191.23	0.001092	0.28	0.30	0.15	58.82	188.31	0.10
34_807	8405	200-yr	18.63	190.00	191.27	190.95	191.27	0.001167	0.31	0.32	0.16	65.37	178.07	0.11
34_807	8189	50-yr	14.20	189.67	191.16		191.16	0.000117	0.13	0.12	0.20	83.36	196.13	0.03
34_807	8189	100-yr	15.75	189.67	191.17		191.18	0.000130	0.14	0.13	0.21	86.18	198.79	0.04
34_807	8189	200-yr	18.63	189.67	191.21		191.21	0.000151	0.18	0.14	0.24	92.51	209.54	0.04
34_807	8102	50-yr	14.20	189.45	191.18		191.18	0.000034	0.10	0.07	0.11	143.75	277.32	0.02
34_807	8102	100-yr	15.75	189.45	191.17		191.17	0.000038	0.11	0.07	0.12	147.07	277.74	0.02
34_807	8102	200-yr	18.63	189.45	191.20		191.20	0.000045	0.12	0.08	0.13	156.01	278.68	0.02
34_807	8029	50-yr	14.20	189.31	191.16		191.16	0.000002	0.04	0.02	0.03	386.08	397.90	0.00
34_807	8029	100-yr	15.75	189.31	191.17		191.17	0.000002	0.04	0.02	0.03	391.53	398.38	0.00

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Cfl
34_807	8029	200-yr	18.83	189.31	191.20		191.20	0.000003	0.05	0.02	0.04	403.58	399.50	0.01
34_807	8024	50-yr	14.20	189.30	191.18	190.58	191.18	0.000502	0.04	0.05	0.03	375.58	401.02	0.01
34_807	8024	100-yr	15.75	189.30	191.17	190.60	191.17	0.000002	0.04	0.06	0.03	381.05	401.80	0.02
34_807	8024	200-yr	18.83	189.30	191.20	190.67	191.20	0.000003	0.05	0.07	0.04	393.22	405.21	0.02
34_807	7865	Tabor Rd	Culvert											
34_807	7832	50-yr	14.20	189.35	190.35	190.10	190.35	0.000379	0.15	0.48	0.21	60.49	232.82	0.18
34_807	7832	100-yr	15.75	189.35	190.37	190.12	190.38	0.000389	0.16	0.47	0.21	67.43	247.87	0.18
34_807	7832	200-yr	18.83	189.35	190.42	190.17	190.42	0.000336	0.18	0.47	0.22	78.30	262.86	0.17
34_807	7822	50-yr	14.20	189.33	190.34	190.10	190.35	0.000616	0.20	0.21	0.29	53.78	213.72	0.07
34_807	7822	100-yr	15.75	189.33	190.37	190.11	190.38	0.000616	0.21	0.22	0.28	58.84	242.91	0.07
34_807	7822	200-yr	18.83	189.33	190.42	190.12	190.42	0.000561	0.21	0.21	0.28	70.51	268.35	0.07
34_807	7729	50-yr	14.20	189.16	190.22		190.23	0.001202	0.45	0.32	0.48	30.80	83.35	0.11
34_807	7729	100-yr	15.75	189.16	190.24		190.25	0.001197	0.46	0.32	0.50	32.82	83.79	0.11
34_807	7729	200-yr	18.83	189.16	190.29		190.30	0.001189	0.48	0.33	0.53	37.16	87.77	0.11
34_807	7438	50-yr	14.20	188.62	189.92	189.55	189.93	0.000699	0.31	0.30	0.44	35.95	101.50	0.09
34_807	7438	100-yr	15.75	188.62	189.95	189.60	189.96	0.000682	0.32	0.30	0.45	38.73	103.47	0.09
34_807	7438	200-yr	18.83	188.62	190.00	189.65	190.01	0.000686	0.35	0.31	0.47	44.31	110.11	0.09
34_807	7262	50-yr	14.20	188.30	189.72		189.73	0.001485	0.64	0.42	0.39	26.90	77.78	0.12
34_807	7262	100-yr	15.75	188.30	189.74		189.76	0.001487	0.66	0.42	0.40	29.09	81.55	0.12
34_807	7262	200-yr	18.83	188.30	189.79		189.81	0.001483	0.70	0.43	0.43	33.41	88.98	0.12
34_807	6956	50-yr	14.20	187.55	189.13		189.14	0.001520	0.28	0.40	0.43	39.33	115.06	0.11
34_807	6956	100-yr	15.75	187.55	189.16		189.17	0.001519	0.27	0.41	0.44	42.75	119.91	0.11
34_807	6956	200-yr	18.83	187.55	189.21		189.22	0.001546	0.31	0.42	0.45	48.83	128.37	0.12
34_807	6503	50-yr	14.20	186.89	188.34		186.38	0.005158	0.76	0.70	0.88	18.39	80.88	0.22
34_807	6503	100-yr	15.75	186.89	188.37		186.40	0.005106	0.80	0.71	0.91	19.69	81.86	0.22
34_807	6503	200-yr	18.83	186.89	188.42		186.46	0.004941	0.86	0.72	0.97	22.25	83.60	0.22
34_807	6285	50-yr	14.20	186.49	188.25		186.25	0.000186	0.26	0.16	0.17	61.74	128.02	0.04
34_807	6285	100-yr	15.75	186.49	188.27		186.27	0.000208	0.28	0.17	0.19	63.75	129.32	0.05
34_807	6285	200-yr	18.83	186.49	188.30		186.30	0.000248	0.31	0.19	0.22	68.02	132.38	0.05
34_807	6199	50-yr	14.20	186.33	188.24		186.24	0.000122	0.21	0.42	0.20	63.20	113.09	0.10
34_807	6199	100-yr	15.75	186.33	188.25		186.25	0.000141	0.23	0.43	0.22	64.75	114.20	0.11
34_807	6199	200-yr	18.83	186.33	188.28		186.28	0.000180	0.26	0.51	0.24	66.07	116.62	0.13
34_807	5940	50-yr	14.20	185.65	188.23		186.23	0.000012	0.03	0.16	0.05	290.08	435.09	0.04
34_807	5940	100-yr	15.75	185.65	188.25		186.25	0.000014	0.03	0.17	0.05	295.66	435.83	0.04
34_807	5940	200-yr	18.83	185.65	188.27		186.27	0.000018	0.04	0.20	0.06	307.49	437.42	0.05
34_807	5933	50-yr	14.20	185.84	188.23	187.08	186.23	0.000004	0.03	0.10	0.03	429.42	443.85	0.02
34_807	5933	100-yr	15.75	185.84	188.25	187.13	186.25	0.000005	0.03	0.10	0.04	436.12	444.82	0.02
34_807	5933	200-yr	18.83	185.84	188.27	187.20	186.27	0.000007	0.03	0.12	0.04	447.23	446.35	0.03
34_807	5925	Abandon Railway	Culvert											
34_807	5904	50-yr	14.20	186.55	188.11	187.25	188.11	0.000008	0.05	0.10	0.03	391.42	446.13	0.03
34_807	5904	100-yr	15.75	186.55	188.13	187.28	188.13	0.000009	0.05	0.11	0.03	311.70	450.24	0.03
34_807	5904	200-yr	18.83	186.55	188.16	187.33	188.16	0.000012	0.06	0.13	0.03	325.76	456.47	0.04
34_807	5896	Abandon Railway	Culvert											
34_807	5685	50-yr	14.20	186.59	187.66	187.54	187.67	0.000116	0.15	0.30	0.13	89.26	170.11	0.10
34_807	5685	100-yr	15.75	186.59	187.71	187.58	187.71	0.000120	0.16	0.31	0.14	93.86	177.71	0.11
34_807	5685	200-yr	18.83	186.59	187.76	187.63	187.78	0.000129	0.18	0.34	0.16	102.49	184.14	0.11
34_807	5765	50-yr	14.20	186.33	187.62		187.63	0.000709	0.23	0.88	0.43	28.91	51.29	0.26
34_807	5765	100-yr	15.75	186.33	187.66		187.68	0.000723	0.24	0.91	0.44	31.02	53.13	0.27
34_807	5765	200-yr	18.83	186.33	187.73		187.75	0.000613	0.27	1.00	0.47	35.10	61.93	0.25
34_807	5669	50-yr	14.20	186.12	187.48	187.15	187.52	0.002157	0.49	1.59	0.33	24.35	53.59	0.48
34_807	5669	100-yr	15.75	186.12	187.49	187.21	187.56	0.002368	0.53	1.69	0.35	25.56	54.79	0.48
34_807	5669	200-yr	18.83	186.12	187.53	187.26	187.61	0.002957	0.60	1.92	0.41	27.10	58.48	0.54
34_807	5472	50-yr	14.20	185.70	186.96		187.05	0.002876	0.84	1.72	0.49	14.16	45.62	0.83
34_807	5472	100-yr	15.75	185.70	187.03		187.10	0.002417	0.84	1.84	0.42	17.61	56.60	0.49
34_807	5472	200-yr	18.83	185.70	187.13		187.19	0.001702	0.80	1.46	0.46	24.08	62.72	0.42
34_807	5382	50-yr	14.20	185.50	187.00		187.09	0.000097	0.14	0.34	0.23	60.88	85.72	0.10
34_807	5382	100-yr	15.75	185.50	187.05		187.06	0.000098	0.15	0.35	0.23	65.88	88.02	0.10
34_807	5382	200-yr	18.83	185.50	187.15		187.15	0.000102	0.15	0.37	0.25	74.28	96.44	0.10
34_807	5315	50-yr	14.20	185.36	186.99		186.99	0.000061	0.18	0.35	0.23	59.05	88.54	0.09
34_807	5315	100-yr	15.75	185.36	187.05		187.05	0.000063	0.17	0.37	0.24	63.08	91.06	0.10
34_807	5315	200-yr	18.83	185.36	187.14		187.14	0.000069	0.18	0.39	0.26	68.62	93.01	0.10
34_807	5223	50-yr	14.20	185.13	186.93		186.97	0.001018	0.37	1.14	0.45	21.06	47.21	0.31
34_807	5223	100-yr	15.75	185.13	186.99		187.03	0.000900	0.37	1.11	0.46	24.03	47.45	0.29
34_807	5223	200-yr	18.83	185.13	187.09		187.12	0.000821	0.38	1.10	0.50	28.47	47.82	0.28
34_807	5187	50-yr	14.20	185.05	186.93	186.33	186.94	0.000320	0.33	0.73	0.25	41.97	106.47	0.18
34_807	5187	100-yr	15.75	185.05	186.99	186.37	187.00	0.000276	0.32	0.69	0.25	46.95	113.56	0.17
34_807	5187	200-yr	18.83	185.05	187.09	186.45	187.09	0.000225	0.30	0.65	0.26	59.64	114.72	0.16
34_807	5181	50-yr	14.20	185.03	186.93	185.99	186.93	0.000063	0.18	0.34	0.17	71.05	105.28	0.08
34_807	5181	100-yr	15.75	185.03	186.99	186.03	187.00	0.000060	0.16	0.34	0.18	77.31	117.13	0.08

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Cfl
34_807	5181	200-yr	18.83	185.03	187.09	186.11	187.09	0.000061	0.17	0.36	0.19	88.38	131.18	0.08
34_807	5144	Junction Rd	Culvert											
34_807	5130	50-yr	14.20	184.97	186.44	185.58	186.49	0.001037	0.76	1.01	0.77	15.47	57.00	0.32
34_807	5130	100-yr	15.75	184.87	186.51	186.00	186.56	0.000699	0.79	1.04	0.80	16.67	58.95	0.32
34_807	5130	200-yr	18.83	184.87	186.61	186.06	186.66	0.001055	0.87	1.12	0.89	18.28	64.23	0.33
34_807	5116	50-yr	14.20	184.95	186.48		186.48	0.000193	0.36	0.52	0.27	44.95	69.31	0.14
34_807	5116	100-yr	15.75	184.95	186.53		186.53	0.000177	0.36	0.51	0.27	50.04	72.15	0.14
34_807	5116	200-yr	18.83	184.95	186.63		186.63	0.000174	0.38	0.53	0.28	57.32	75.76	0.14
34_807	4965	50-yr	14.20	184.72	186.43	185.71	186.44	0.000170	0.22	0.52	0.28	47.48	69.98	0.13
34_807	4965	100-yr	15.75	184.72	186.50	185.75	186.51	0.000158	0.22	0.52	0.28	52.79	73.44	0.13
34_807	4965	200-yr	18.83	184.72	186.60	185.79	186.61	0.000155	0.22	0.53	0.30	60.25	76.74	0.13
34_807	4786	50-yr	14.20	184.44	186.14	185.78	186.33	0.003417	0.64	1.98	0.31	7.70	12.05	0.58
34_807	4786	100-yr	15.75	184.44	186.21	185.83	186.41	0.003370	0.68	2.04	0.31	9.03	23.11	0.57
34_807	4786	200-yr	18.83	184.44	186.33	185.95	186.52	0.002977	0.69	2.04	0.42	13.42	41.44	0.54
34_807	4489	50-yr	14.20	183.97	185.61	184.77	185.63	0.001519	0.67	0.52	0.47	23.59	66.47	0.13
34_807	4489	100-yr	15.75	183.97	185.66	184.80	185.70	0.001563	0.70	0.54	0.48	24.98	71.95	0.14
34_807	4489	200-yr	18.83	183.97	185.80	184.85	185.83	0.001544	0.76	0.58	0.53	27.58	77.02	0.14
34_807	4115	50-yr	14.20	183.39	184.75		184.77	0.003978	0.68	0.70	0.62	21.72	36.26	0.21
34_807	4115	100-yr	15.75	183.39	184.78		184.80	0.004188	0.73	0.73	0.66	22.83	36.51	0.21
34_807	4115	200-yr	18.83	183.39	184.83		184.86	0.004593	0.79	0.78	0.74	24.82	38.60	0.22
34_807	3935	50-yr	14.20	183.10	184.70	183.97	184.70	0.000109	0.13	0.13	0.13	107.78	171.75	0.04
34_807	3935	100-yr	15.75	183.10	184.73	184.01	184.73	0.000116	0.14	0.14	0.14	112.69	172.23	0.04
34_807	3935	200-yr	18.83	183.10	184.76	184.06	184.78	0.000130	0.16	0.15	0.15	121.36	173.15	0.04
34_807	3654	50-yr	14.20	182.66	184.52	183.94	184.59	0.013974	0.63	1.28	0.58	12.91	145.51	0.37
34_807	3654	100-yr	15.75	182.66	184.54	184.00	184.61	0.014414	0.66	1.32	0.70	14.01	146.67	0.38
34_807	3654	200-yr	18.83	182.66	184.57	184.12	184.65	0.016377	0.74	1.42	0.86	15.48	148.19	0.40
34_807	3416	50-yr	14.20	182.29	183.46	183.00	183.47	0.002390	0.63	0.48	0.32	24.44	39.22	0.15
34_807	3416	100-yr	15.75	182.29	183.51	183.01	183.53	0.002285	0.65	0.48	0.33	26.44	39.31	0.15
34_807	3416	200-yr	18.83	182.29	183.64	183.05	183.66	0.001947	0.66	0.48	0.34	31.12	42.12	0.14
34_807	3252	50-yr	14.20	182.03	183.29		183.30	0.000838	0.36	0.30	0.31	40.28	80.75	0.09
34_807	3252	100-yr	15.75	182.03	183.37		183.37	0.000739	0.36	0.29	0.31	44.70	81.48	0.09
34_807	3252	200-yr	18.83	182.03	183.52		183.53	0.000609	0.35	0.29	0.33	54.71	87.58	0.08
34_807	3187	50-yr	14.20	181.93	183.25		183.28	0.001268	0.47	0.40	0.28	36.80	81.34	0.12
34_807	3187	100-yr	15.75	181.93	183.33		183.34	0.001179	0.48	0.38	0.26	41.68	83.85	0.11
34_807	3187	200-yr	18.83	181.93	183.48		183.50	0.000897	0.45	0.37	0.24	52.65	91.88	0.10
34_807	3147	50-yr	14.20	181.67	183.16	182.69	183.19	0.003284	0.75	0.77	0.59	19.81	82.66	0.23
34_807	3147	100-yr	15.75	181.67	183.25	182.72	183.27	0.004603	0.76	0.76	0.61	22.04	89.94	0.22
34_807	3147	200-yr	18.83	181.67	183.42	182.76	183.45	0.003568	0.76	0.73	0.64	26.53	93.44	0.20
34_807	3132	Abandon Railway	Culvert											
34_807	3115	50-yr	14.20	181.46	182.83	182.30	182.89	0.001194	0.18	1.13	0.22	15.75	46.60	0.35
34_807	3115	100-yr	15.75	181.46	182.87	182.35	182.93	0.001311	0.21	1.20	0.25	16.52	47.49	0.36
34_807	3115	200-yr	18.83	181.46	182.94	182.43	183.03	0.001448	0.25	1.32	0.28	18.33	48.48	0.36
34_807	3111	50-yr	14.20	181.45	182.83		182.89	0.001751	0.15	1.21	0.27	20.97	45.18	0.40
34_807	3111	100-yr	15.75	181.45	182.86		182.93	0.001838	0.17	1.27	0.29	22.55	46.32	0.42
34_807	3111	200-yr	18.83	181.45	182.94		183.01	0.001827	0.19	1.34	0.32	26.51	49.22	0.42
34_807	3041	50-yr	14.20	181.34	182.75		182.78	0.001227	0.42	1.05	0.27	31.27	73.69	0.32
34_807	3041	100-yr	15.75	181.34	182.79		182.81	0.001185	0.44	1.05	0.28	34.06	74.64	0.32
34_807	3041	200-yr	18.83	181.34	182.89		182.91	0.000951	0.44	1.00	0.29	41.71	77.46	0.29
34_807	2869	50-yr	14.20	181.08	182.65		182.67	0.000438	0.23	0.78	0.32	38.97	78.03	0.21
34_807	2869	100-yr	15.75	181.08	182.69		182.71	0.000444	0.24	0.80	0.34	41.96	79.66	0.22
34_807	2869	200-yr	18.83	181.08	182.81		182.82	0.000360	0.25	0.76	0.33	51.96	85.94	0.20
34_807	2655	50-yr	14.20	181.06	182.64	182.17	182.66	0.000546	0.23	0.75	0.18	42.96	141.01	0.23
34_807	2655	100-yr	15.75	181.06	182.66	182.22	182.70	0.000568	0.24	0.79	0.19	45.48	146.25	0.24
34_807	2655	200-yr	18.83	181.06	182.80	182.31	182.82	0.000490	0.25	0.78	0.20	55.35	163.72	0.22
34_807	2648	H D Townline Rd	Culvert											
34_807	2641	50-yr	14.20	181.16	182.59	182.09	182.61	0.000599	0.18	0.85	0.19	43.15	117.59	0.25
34_807	2641	100-yr	15.75	181.16	182.66	182.14	182.68	0.000594	0.18	0.85	0.19	48.17	126.52	0.24
34_807	2641	200-yr	18.83	181.16	182.79	182.27	182.81	0.000468	0.18	0.83	0.20	61.54	143.38	0.22
34_807	2625	50-yr	14.20	181.14	182.59	181.89	182.60	0.000106	0.24	0.38	0.10	66.91	126.83	0.11
34_807	2625	100-yr	15.75	181.14	182.66	181.89	182.67	0.000101	0.24	0.38	0.10	73.44	132.65	0.10
34_807	2625	200-yr	18.83	181.14	182.80	181.92	182.80	0.000098	0.24	0.40	0.11	86.10	147.58	0.10
34_807	2712	50-yr	14.20	180.94	182.55		182.57	0.000551	0.20	0.92	0.25	45.11	85.04	0.24
34_807	2712	100-yr	15.75	180.94	182.62		182.64	0.000526	0.20	0.92	0.25	50.20	88.78	0.24
34_807	2712	200-yr	18.83	180.94	182.76		182.78	0.000494	0.21	0.94	0.26	60.03	94.76	0.23
34_807	2557	50-yr	14.20	180.68	182.27	181.85	182.40	0.003106		1.58		8.93	9.64	0.53
34_807	2557	100-yr	15.75	180.68	182.34	181.91	182.48	0.003142		1.64		9.61	9.86	0.53
34_807	2557	200-yr	18.83	180.68	182.47	182.02	182.63	0.003195		1.73		10.91	10.62	0.54
34_807	2522	50-yr	14.20	180.63	181.61	181.61	182.18	0.012534		2.69		5.27	7.34	1.01
34_807	2522	100-yr	15.75	180.63	181.67	181.67	182.26	0.012264		2.74		5.74	7.65	1.01

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_807	2522	200-yr	18.83	180.63	181.98	181.98	182.40	0.011939			2.84	6.63	8.19	1.01
34_807	2417	50-yr	14.20	180.48	181.85		181.86	0.000271	0.25	0.46	0.03	51.75	87.71	0.15
34_807	2417	100-yr	15.75	180.48	181.93		181.94	0.000249	0.25	0.46	0.04	57.03	88.93	0.15
34_807	2417	200-yr	18.83	180.45	182.07		182.07	0.000232	0.28	0.48	0.05	66.81	76.41	0.15
34_807	2204	50-yr	14.20	180.09	181.37	181.28	181.67	0.008925	0.31	2.42	0.05	5.88	7.96	0.87
34_807	2204	100-yr	15.75	180.09	181.34	181.34	181.73	0.012259	0.25	2.78		5.67	7.55	1.01
34_807	2204	200-yr	18.83	180.09	181.47	181.47	181.88	0.010497	0.62	2.84	0.25	6.82	10.85	0.96
34_807	1993	50-yr	14.20	179.74	181.50		181.51	0.000101	0.29	0.42	0.28	45.21	42.71	0.11
34_807	1993	100-yr	15.75	179.74	181.50		181.51	0.000124	0.32	0.46	0.28	45.27	42.73	0.12
34_807	1993	200-yr	18.83	179.74	181.50		181.51	0.000176	0.38	0.55	0.34	45.41	42.77	0.14
34_807	1816	50-yr	14.20	179.44	181.50		181.50	0.000020	0.12	0.21	0.14	100.16	94.34	0.05
34_807	1816	100-yr	15.75	179.44	181.50		181.50	0.000025	0.13	0.23	0.16	100.23	94.37	0.05
34_807	1816	200-yr	18.83	179.44	181.50		181.50	0.000035	0.16	0.28	0.19	100.41	94.44	0.05
34_807	1522	50-yr	14.20	178.95	181.49		181.49	0.000008	0.06	0.15	0.09	163.74	195.45	0.03
34_807	1522	100-yr	15.75	178.95	181.49		181.50	0.000010	0.07	0.16	0.10	163.80	195.47	0.04
34_807	1522	200-yr	18.83	178.95	181.50		181.50	0.000014	0.08	0.20	0.11	163.93	195.54	0.04
34_807	1420	50-yr	14.20	178.78	181.49		181.49	0.000004	0.05	0.11	0.08	208.38	171.27	0.02
34_807	1420	100-yr	15.75	178.78	181.49		181.49	0.000005	0.06	0.12	0.09	208.41	171.28	0.02
34_807	1420	200-yr	18.83	178.78	181.49		181.50	0.000008	0.07	0.14	0.10	208.50	171.29	0.03
34_807	1311	50-yr	14.20	178.59	181.49		181.49	0.000006	0.06	0.14	0.07	174.52	142.89	0.03
34_807	1311	100-yr	15.75	178.59	181.49		181.49	0.000007	0.08	0.16	0.08	174.53	143.00	0.03
34_807	1311	200-yr	18.83	178.59	181.49		181.49	0.000010	0.10	0.19	0.10	174.58	143.00	0.04
34_807	1257	50-yr	14.20	178.50	181.49		181.49	0.000002	0.06	0.09	0.03	246.95	200.66	0.02
34_807	1257	100-yr	15.75	178.50	181.49		181.49	0.000003	0.06	0.10	0.03	246.96	200.66	0.02
34_807	1257	200-yr	18.83	178.50	181.49		181.49	0.000004	0.08	0.12	0.04	246.99	200.67	0.02
34_807	1025	50-yr	14.20	178.11	181.49		181.49	0.000003	0.05	0.10	0.08	200.52	131.28	0.02
34_807	1025	100-yr	15.75	178.11	181.49		181.49	0.000004	0.05	0.11	0.08	200.52	131.28	0.02
34_807	1025	200-yr	18.83	178.11	181.49		181.49	0.000005	0.06	0.14	0.10	200.50	131.28	0.03
34_807	1012	50-yr	14.20	178.09	181.49	179.22	181.49	0.000002	0.05	0.10	0.07	207.55	119.79	0.02
34_807	1012	100-yr	15.75	178.09	181.49	179.28	181.49	0.000003	0.06	0.11	0.08	207.54	119.79	0.02
34_807	1012	200-yr	18.83	178.09	181.49	179.39	181.49	0.000004	0.07	0.13	0.09	207.52	119.77	0.02
34_807	1002	Darling Rd	Culvert											
34_807	986	50-yr	14.20	178.09	179.15	178.95	179.18	0.000357	0.15	0.54	0.32	42.61	90.12	0.18
34_807	986	100-yr	15.75	178.09	179.19	178.98	179.20	0.000347	0.16	0.55	0.33	46.06	90.91	0.18
34_807	986	200-yr	18.83	178.09	179.27	179.04	179.27	0.000324	0.17	0.58	0.35	53.04	92.56	0.18
34_807	975	50-yr	14.20	178.07	179.15		179.15	0.000180	0.12	0.38	0.27	50.31	96.68	0.13
34_807	975	100-yr	15.75	178.07	179.19		179.19	0.000180	0.14	0.39	0.28	54.04	97.42	0.13
34_807	975	200-yr	18.83	178.07	179.26		179.27	0.000176	0.18	0.40	0.30	61.48	98.58	0.13
34_807	913	50-yr	14.20	177.95	179.11		179.13	0.000760	0.23	0.77	0.35	33.51	89.06	0.27
34_807	913	100-yr	15.75	177.95	179.15		179.17	0.000708	0.23	0.76	0.36	37.08	90.87	0.26
34_807	913	200-yr	18.83	177.95	179.23		179.25	0.000609	0.23	0.75	0.36	44.40	93.96	0.24
34_807	840	50-yr	14.20	177.81	179.03		179.06	0.001137	0.38	1.08	0.48	25.79	46.76	0.33
34_807	840	100-yr	15.75	177.81	179.07		179.10	0.001143	0.40	1.09	0.48	27.70	47.49	0.33
34_807	840	200-yr	18.83	177.81	179.15		179.18	0.001121	0.43	1.13	0.51	31.65	49.24	0.33
34_807	538	50-yr	14.20	177.23	179.90		179.91	0.000336	0.21	0.73	0.17	53.46	66.52	0.19
34_807	538	100-yr	15.75	177.23	179.93		179.95	0.000372	0.22	0.76	0.19	55.51	68.66	0.20
34_807	538	200-yr	18.83	177.23	179.90		179.92	0.000425	0.25	0.85	0.21	60.25	67.90	0.22
34_807	398	50-yr	14.20	176.98	178.89		178.90	0.000087	0.12	0.39	0.20	66.46	70.44	0.09
34_807	398	100-yr	15.75	176.98	178.92		178.93	0.000097	0.13	0.41	0.21	66.96	70.73	0.10
34_807	398	200-yr	18.83	176.96	178.99		179.00	0.000111	0.14	0.46	0.24	73.47	71.44	0.11
34_807	292	50-yr	14.20	176.76	178.89		178.89	0.000094	0.22	0.32	0.21	61.99	56.55	0.08
34_807	292	100-yr	15.75	176.76	178.92		178.92	0.000062	0.24	0.35	0.22	63.63	56.89	0.08
34_807	292	200-yr	18.83	176.76	178.96		178.95	0.000074	0.27	0.39	0.25	67.52	57.64	0.09
34_807	198	50-yr	14.20	176.58	178.89		178.89	0.000022	0.12	0.22	0.06	108.97	82.12	0.05
34_807	198	100-yr	15.75	176.58	178.91		178.92	0.000025	0.13	0.24	0.07	111.34	82.33	0.05
34_807	198	200-yr	18.83	176.58	178.98		178.98	0.000030	0.15	0.27	0.08	116.93	82.69	0.06
34_807	73	50-yr	14.20	176.34	178.68		178.68	0.000042	0.17	0.30	0.08	76.94	55.80	0.08
34_807	73	100-yr	15.75	176.34	178.91		178.91	0.000049	0.19	0.33	0.09	78.51	56.10	0.08
34_807	73	200-yr	18.83	176.34	179.58		179.98	0.000060	0.22	0.37	0.10	82.26	56.78	0.07
17_200	1553	50-yr	52.77	173.83	176.44		176.46	0.000188	0.40	0.73	0.11	107.87	89.35	0.15
17_200	1553	100-yr	57.32	173.83	176.59		176.56	0.000173	0.41	0.72	0.11	117.54	90.48	0.15
17_200	1553	200-yr	66.32	173.83	176.75		176.76	0.000152	0.42	0.72	0.12	135.70	92.68	0.14
17_200	1296	50-yr	52.77	173.72	176.29		176.37	0.000092	0.31	1.34	0.23	59.24	45.28	0.28
17_200	1296	100-yr	57.32	173.72	176.40		176.48	0.000081	0.32	1.37	0.24	64.58	46.53	0.28
17_200	1296	200-yr	66.32	173.72	176.60		176.68	0.000067	0.33	1.42	0.27	74.66	51.66	0.28
17_200	1004	50-yr	52.77	173.61	176.22		176.24	0.000230	0.18	0.81	0.34	147.07	135.23	0.17
17_200	1004	100-yr	57.32	173.61	176.34		176.36	0.000209	0.19	0.79	0.35	163.04	136.66	0.17
17_200	1004	200-yr	66.32	173.61	176.55		176.57	0.000181	0.19	0.78	0.36	192.13	138.96	0.16
17_200	766	50-yr	52.77	173.52	176.19		176.20	0.000198	0.19	0.68	0.18	173.19	125.29	0.14
17_200	766	100-yr	57.32	173.52	176.31		176.32	0.000147	0.19	0.66	0.18	187.69	121.34	0.14

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Twp Width (m)	Froude # Crl
17_200	766	200-yr	66.32	173.52	176.52		176.53	0.000137	0.20	0.68	0.19	213.87	123.72	0.14
17_200	357	50-yr	62.77	173.36	176.12		176.14	0.000168	0.38	0.69	0.12	116.81	103.67	0.15
17_200	357	100-yr	67.32	173.36	176.25		176.26	0.000145	0.35	0.67	0.12	130.13	106.06	0.14
17_200	357	200-yr	66.32	173.36	176.47		176.48	0.000121	0.36	0.65	0.12	154.12	108.81	0.13
17_200	192	50-yr	62.77	173.30	176.11		176.12	0.000053	0.26	0.41	0.07	186.07	122.98	0.08
17_200	192	100-yr	67.32	173.30	176.24		176.25	0.000049	0.27	0.41	0.08	200.79	123.64	0.08
17_200	192	200-yr	66.32	173.30	176.48		176.47	0.000044	0.27	0.41	0.08	228.68	125.54	0.08
34_805	1212	50-yr	19.67	175.97	178.67		178.68	0.000029	0.21	0.29	0.10	101.80	67.92	0.08
34_805	1212	100-yr	21.86	175.97	178.90		178.90	0.000034	0.23	0.32	0.10	103.84	68.26	0.07
34_805	1212	200-yr	26.18	175.97	179.97		179.97	0.000043	0.26	0.37	0.12	106.05	68.99	0.07
34_805	1022	50-yr	19.67	175.81	178.85		178.87	0.000141	0.18	0.67	0.22	73.52	80.12	0.13
34_805	1022	100-yr	21.86	175.81	178.88		178.89	0.000165	0.18	0.73	0.24	75.42	81.15	0.14
34_805	1022	200-yr	26.18	175.81	178.94		178.95	0.000205	0.20	0.83	0.27	80.23	82.34	0.16
34_805	1013	50-yr	19.67	175.80	178.65	177.21	178.66	0.000107	0.15	0.60	0.27	72.48	75.18	0.12
34_805	1013	100-yr	21.86	175.80	178.66	177.28	178.69	0.000126	0.16	0.65	0.29	74.10	76.18	0.13
34_805	1013	200-yr	26.18	175.80	178.94	177.37	178.95	0.000163	0.18	0.75	0.34	78.25	80.27	0.15
34_805	998	Ricker Rd	Culvert											
34_805	979	50-yr	19.67	175.82	177.55	177.28	177.64	0.004806	0.68	1.90	1.02	17.34	38.41	0.57
34_805	979	100-yr	21.86	175.82	177.59	177.30	177.69	0.004820	0.62	2.00	1.08	18.28	39.35	0.58
34_805	979	200-yr	26.18	175.82	177.67	177.37	177.78	0.005188	1.02	2.16	1.18	20.00	41.18	0.61
34_805	968	50-yr	19.67	175.81	177.53		177.61	0.002366	0.31	1.64	0.83	23.02	38.17	0.47
34_805	968	100-yr	21.86	175.81	177.57		177.66	0.002463	0.35	1.71	0.86	24.80	40.38	0.48
34_805	968	200-yr	26.18	175.81	177.66		177.75	0.002626	0.40	1.84	0.71	26.28	43.11	0.50
34_805	907	50-yr	19.67	175.76	177.48		177.50	0.001051	0.38	1.18	0.31	34.23	59.09	0.33
34_805	907	100-yr	21.86	175.76	177.50		177.55	0.001078	0.41	1.23	0.34	36.87	59.51	0.34
34_805	907	200-yr	26.18	175.76	177.59		177.64	0.001102	0.45	1.29	0.38	41.98	60.38	0.34
34_805	859	50-yr	19.67	175.72	177.33		177.43	0.002218	0.47	1.62	0.96	20.31	49.99	0.47
34_805	859	100-yr	21.86	175.72	177.39		177.48	0.001961	0.47	1.57	0.59	23.36	50.83	0.45
34_805	859	200-yr	26.18	175.72	177.50		177.57	0.001674	0.47	1.53	0.65	28.65	52.24	0.42
34_805	783	50-yr	19.67	175.66	177.32		177.34	0.000456	0.48	0.77	0.31	38.27	53.86	0.23
34_805	783	100-yr	21.86	175.66	177.38		177.40	0.000494	0.48	0.79	0.33	39.33	55.68	0.22
34_805	783	200-yr	26.18	175.66	177.48		177.50	0.000453	0.52	0.83	0.37	44.89	57.43	0.22
34_805	554	50-yr	19.67	175.47	177.12		177.18	0.001364	0.31	1.31	0.43	25.54	35.64	0.38
34_805	554	100-yr	21.86	175.47	177.17		177.23	0.001416	0.33	1.37	0.45	27.34	36.23	0.38
34_805	554	200-yr	26.18	175.47	177.25		177.33	0.001540	0.37	1.48	0.51	30.45	37.32	0.41
34_805	344	50-yr	19.67	175.29	176.98		176.99	0.000576	0.27	0.27	0.50	42.96	63.45	0.07
34_805	344	100-yr	21.86	175.29	177.03		177.04	0.000568	0.27	0.27	0.52	46.10	64.53	0.07
34_805	344	200-yr	26.18	175.29	177.11		177.13	0.000585	0.29	0.29	0.56	51.48	67.04	0.07
34_805	248	50-yr	19.67	175.21	176.93		176.96	0.000419	0.43	0.74	0.29	40.97	62.91	0.21
34_805	248	100-yr	21.86	175.21	176.99		177.00	0.000417	0.44	0.76	0.30	44.20	64.35	0.21
34_805	248	200-yr	26.18	175.21	177.07		177.08	0.000438	0.48	0.81	0.30	49.56	66.16	0.21
34_805	180	50-yr	19.67	175.14	176.84		176.80	0.001020	0.58	1.17	0.48	21.23	28.48	0.33
34_805	180	100-yr	21.86	175.14	176.86		176.95	0.001079	0.62	1.24	0.52	22.51	28.80	0.34
34_805	180	200-yr	26.18	175.14	176.95		177.02	0.001255	0.71	1.37	0.62	24.34	29.23	0.37
34_805	81	50-yr	19.67	175.07	176.48	176.48	176.71	0.006782	1.04	2.42	0.61	11.19	27.56	0.78
34_805	81	100-yr	21.86	175.07	176.52	176.52	176.76	0.006830	1.10	2.45	0.55	12.62	33.41	0.77
34_805	81	200-yr	26.18	175.07	176.65	176.61	176.84	0.006968	1.08	2.29	0.58	17.84	47.69	0.68
34_802	4299	50-yr	17.49	179.11	181.47		181.48	0.000087	0.27	0.45	0.21	58.59	54.85	0.10
34_802	4299	100-yr	19.43	179.11	181.41		181.42	0.000124	0.32	0.53	0.24	55.48	53.59	0.12
34_802	4299	200-yr	23.30	179.11	181.55		181.56	0.000126	0.34	0.56	0.26	63.27	56.73	0.13
34_802	4171	50-yr	17.49	179.00	181.47		181.47	0.000037	0.08	0.30	0.13	121.22	94.61	0.06
34_802	4171	100-yr	19.43	179.00	181.41		181.41	0.000051	0.09	0.35	0.15	116.27	83.68	0.08
34_802	4171	200-yr	23.30	179.00	181.55		181.55	0.000055	0.10	0.37	0.17	128.25	85.89	0.08
34_802	4017	50-yr	17.49	178.67	181.46		181.47	0.000024	0.17	0.26	0.09	112.13	78.55	0.06
34_802	4017	100-yr	19.43	178.67	181.40		181.41	0.000033	0.20	0.30	0.11	107.43	77.91	0.06
34_802	4017	200-yr	23.30	178.67	181.54		181.55	0.000038	0.22	0.33	0.12	118.50	79.41	0.07
34_802	4013	50-yr	17.49	178.66	181.46	179.85	181.46	0.000031	0.19	0.30	0.13	72.78	81.18	0.08
34_802	4013	100-yr	19.43	178.66	181.40	179.69	181.40	0.000042	0.22	0.35	0.15	70.18	80.74	0.07
34_802	4013	200-yr	23.30	178.66	181.54	179.77	181.55	0.000028	0.18	0.29	0.11	128.15	82.38	0.06
34_802	3999	Talbot Road	Culvert											
34_802	3980	50-yr	17.49	178.69	181.41	179.69	181.41	0.000021	0.12	0.25	0.11	119.40	104.33	0.05
34_802	3980	100-yr	19.43	178.69	181.32	179.75	181.32	0.000033	0.15	0.30	0.12	109.66	103.64	0.06
34_802	3980	200-yr	23.30	178.69	181.47	179.81	181.47	0.000033	0.15	0.32	0.14	125.40	104.65	0.07
34_802	3975	50-yr	17.49	178.69	181.41		181.41	0.000033	0.12	0.31	0.14	113.39	101.43	0.06
34_802	3975	100-yr	19.43	178.69	181.32		181.32	0.000051	0.14	0.38	0.17	103.89	100.35	0.08
34_802	3975	200-yr	23.30	178.69	181.47		181.47	0.000050	0.15	0.39	0.18	118.18	102.09	0.08
34_802	3922	50-yr	17.49	178.71	181.41		181.41	0.000099	0.19	0.17	0.14	90.95	61.31	0.03
34_802	3922	100-yr	19.43	178.71	181.32		181.32	0.000150	0.23	0.20	0.17	88.14	61.01	0.04
34_802	3922	200-yr	23.30	178.71	181.47		181.47	0.000157	0.25	0.22	0.18	87.38	61.48	0.04

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_802	3881	50-yr	17.48	178.74	181.41		181.41	0.000102	0.22	0.18	0.20	83.16	47.94	0.04
34_802	3881	100-yr	19.43	178.74	181.21		181.21	0.000150	0.26	0.21	0.24	78.52	47.70	0.04
34_802	3881	200-yr	23.30	178.74	181.48		181.48	0.000164	0.28	0.23	0.26	85.71	48.07	0.05
34_802	3747	50-yr	17.48	178.79	181.40		181.40	0.000026	0.10	0.29	0.08	133.48	87.21	0.08
34_802	3747	100-yr	19.43	178.79	181.30		181.31	0.000038	0.12	0.35	0.07	124.86	86.67	0.07
34_802	3747	200-yr	23.30	178.79	181.45		181.46	0.000041	0.14	0.38	0.07	137.93	87.38	0.07
34_802	3744	50-yr	17.48	178.79	181.40	179.72	181.40	0.000031	0.11	0.32	0.07	129.51	86.30	0.08
34_802	3744	100-yr	19.43	178.79	181.30	179.78	181.31	0.000047	0.13	0.39	0.09	120.79	85.01	0.08
34_802	3744	200-yr	23.30	178.79	181.45	179.86	181.46	0.000050	0.15	0.42	0.09	134.02	86.45	0.08
34_802	3727 Tabor Rd	Culvert												
34_802	3714	50-yr	17.48	178.18	181.38	179.28	181.40	0.000029	0.13	0.34	0.08	118.88	109.04	0.06
34_802	3714	100-yr	19.43	178.18	181.24	179.34	181.24	0.000045	0.15	0.43	0.12	104.04	98.26	0.08
34_802	3714	200-yr	23.30	178.18	181.44	179.44	181.44	0.000048	0.17	0.43	0.11	124.43	110.04	0.08
34_802	3710	50-yr	17.48	178.16	181.38	179.26	181.40	0.000026	0.12	0.32	0.09	118.25	94.64	0.06
34_802	3710	100-yr	19.43	178.16	181.24	179.34	181.24	0.000048	0.15	0.41	0.11	103.78	91.97	0.08
34_802	3710	200-yr	23.30	178.16	181.44	179.43	181.44	0.000042	0.18	0.42	0.11	122.29	95.72	0.08
34_802	3648	50-yr	17.48	178.26	181.38		181.38	0.000038	0.24	0.34	0.11	100.23	59.33	0.08
34_802	3648	100-yr	19.43	178.26	181.24		181.24	0.000062	0.29	0.42	0.13	91.02	58.55	0.08
34_802	3648	200-yr	23.30	178.26	181.43		181.44	0.000063	0.31	0.45	0.14	102.81	59.60	0.08
34_802	3608	50-yr	17.48	178.32	181.38		181.38	0.000012	0.14	0.21	0.05	135.38	85.29	0.04
34_802	3608	100-yr	19.43	178.32	181.24		181.24	0.000021	0.17	0.26	0.06	122.13	84.36	0.05
34_802	3608	200-yr	23.30	178.32	181.43		181.43	0.000021	0.18	0.28	0.06	138.81	85.53	0.05
34_802	3606	50-yr	17.48	178.33	181.38	179.44	181.39	0.000014	0.15	0.23	0.05	128.39	83.61	0.04
34_802	3606	100-yr	19.43	178.33	181.21	179.48	181.23	0.000149	0.57	0.72	0.25	32.28	82.40	0.14
34_802	3606	200-yr	23.30	178.33	181.43	179.57	181.43	0.000022	0.19	0.29	0.06	131.74	83.87	0.05
34_802	3591 Tabor Rd	Culvert												
34_802	3575	50-yr	17.48	178.21	180.10	179.09	180.15	0.000611	0.75	0.99	0.24	18.93	53.47	0.24
34_802	3575	100-yr	19.43	178.21	180.15	179.14	180.16	0.000180	0.30	0.57	0.12	50.48	53.95	0.14
34_802	3575	200-yr	23.30	178.21	180.21	179.23	180.22	0.000196	0.35	0.64	0.13	53.48	54.47	0.15
34_802	3571	50-yr	17.48	178.20	180.12		180.13	0.000180	0.32	0.58	0.13	46.57	52.86	0.14
34_802	3571	100-yr	19.43	178.20	180.15		180.16	0.000201	0.34	0.60	0.14	48.21	53.15	0.15
34_802	3571	200-yr	23.30	178.20	180.20		180.22	0.000243	0.39	0.67	0.16	51.16	53.66	0.17
34_802	3488	50-yr	17.48	178.08	180.09		180.11	0.000380	0.30	0.81	0.34	37.36	51.47	0.20
34_802	3488	100-yr	19.43	178.08	180.11		180.14	0.000429	0.33	0.87	0.37	38.76	52.71	0.24
34_802	3488	200-yr	23.30	178.08	180.16		180.19	0.000529	0.38	0.99	0.42	41.29	54.53	0.22
34_802	3373	50-yr	17.48	177.90	180.09		180.09	0.000072	0.15	0.38	0.20	93.52	110.83	0.09
34_802	3373	100-yr	19.43	177.90	180.11		180.12	0.000080	0.16	0.41	0.21	96.54	111.19	0.10
34_802	3373	200-yr	23.30	177.90	180.16		180.17	0.000098	0.19	0.46	0.24	101.87	111.82	0.11
34_802	3380	50-yr	17.48	177.88	180.08	178.89	180.09	0.000107	0.14	0.48	0.25	84.19	72.11	0.11
34_802	3390	100-yr	19.43	177.88	180.11	178.96	180.11	0.000123	0.15	0.52	0.27	66.06	72.49	0.12
34_802	3390	200-yr	23.30	177.88	180.15	179.12	180.16	0.000155	0.17	0.59	0.32	69.34	73.44	0.13
34_802	3339 H D Townline Rd	Culvert												
34_802	3327	50-yr	17.48	177.87	179.55	178.82	179.58	0.000582	0.34	0.95	0.35	29.82	58.41	0.24
34_802	3327	100-yr	19.43	177.87	179.61	178.91	179.64	0.000635	0.36	0.94	0.37	33.77	59.83	0.24
34_802	3327	200-yr	23.30	177.87	179.74	179.02	179.77	0.000455	0.39	0.91	0.40	41.63	62.03	0.22
34_802	3299	50-yr	17.48	177.85	179.54		179.56	0.000314	0.29	0.67	0.30	37.51	58.68	0.18
34_802	3299	100-yr	19.43	177.85	179.61		179.63	0.000301	0.30	0.68	0.32	41.47	60.64	0.18
34_802	3299	200-yr	23.30	177.85	179.74		179.75	0.000274	0.33	0.69	0.33	49.49	63.89	0.18
34_802	3184	50-yr	17.48	177.75	179.43		179.49	0.001223	0.59	1.29	0.51	19.02	28.41	0.35
34_802	3184	100-yr	19.43	177.75	179.50		179.56	0.001168	0.62	1.30	0.53	21.03	29.27	0.34
34_802	3184	200-yr	23.30	177.75	179.63		179.69	0.001092	0.66	1.33	0.57	25.03	31.90	0.33
34_802	2943	50-yr	17.48	177.54	179.39		179.40	0.000170	0.30	0.44	0.22	46.52	53.05	0.13
34_802	2943	100-yr	19.43	177.54	179.46		179.47	0.000165	0.31	0.45	0.23	50.37	53.84	0.13
34_802	2943	200-yr	23.30	177.54	179.60		179.61	0.000160	0.33	0.47	0.23	57.85	57.57	0.13
34_802	2700	50-yr	17.48	177.33	179.33		179.35	0.000313	0.42	0.73	0.28	34.77	39.94	0.18
34_802	2700	100-yr	19.43	177.33	179.40		179.42	0.000307	0.44	0.74	0.29	37.73	40.78	0.18
34_802	2700	200-yr	23.30	177.33	179.54		179.56	0.000297	0.46	0.76	0.31	43.44	42.48	0.18
34_802	2526	50-yr	17.48	177.18	179.23		179.27	0.000790	0.58	1.10	0.44	23.41	30.74	0.26
34_802	2526	100-yr	19.43	177.18	179.30		179.34	0.000761	0.60	1.11	0.46	25.81	32.11	0.26
34_802	2526	200-yr	23.30	177.18	179.44		179.48	0.000714	0.63	1.12	0.48	30.62	35.06	0.25
34_802	2373	50-yr	17.48	177.05	178.84		179.03	0.003195	0.50	2.01	0.04	13.07	19.48	0.53
34_802	2373	100-yr	19.43	177.05	178.89		179.11	0.003480	0.55	2.14	0.05	14.07	20.14	0.55
34_802	2373	200-yr	23.30	177.05	179.96	178.68	179.25	0.003664	0.62	2.39	0.06	15.94	21.57	0.60
34_802	2096	50-yr	17.48	176.81	178.48		178.51	0.001202	0.33	1.21	0.38	26.06	42.27	0.34
34_802	2096	100-yr	19.43	176.81	178.52		178.58	0.001179	0.36	1.24	0.38	28.73	43.05	0.34
34_802	2096	200-yr	23.30	176.81	178.64		178.70	0.001105	0.39	1.27	0.41	34.00	44.64	0.34
34_802	1966	50-yr	17.48	176.70	178.35		178.39	0.000826	0.30	1.03	0.32	28.88	42.26	0.29
34_802	1966	100-yr	19.43	176.70	178.42		178.46	0.000807	0.32	1.05	0.33	31.69	42.88	0.29
34_802	1966	200-yr	23.30	176.70	178.54		178.58	0.000773	0.35	1.09	0.36	37.16	44.37	0.29

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Top Width (m)	Froude # Crl
34_802	1903	50-yr	17.48	176.64	178.23	177.66	178.32	0.001405	0.49	1.39	0.22	14.88	19.38	0.39
34_802	1903	100-yr	19.43	176.64	178.29	177.73	178.39	0.001459	0.53	1.46	0.23	16.05	20.48	0.40
34_802	1903	200-yr	23.30	176.64	178.40	177.84	178.51	0.001571	0.52	1.58	0.26	18.54	25.95	0.42
34_802	1854	50-yr	17.49	176.60	178.22		178.26	0.000669	0.38	0.94	0.15	23.35	33.28	0.27
34_802	1854	100-yr	19.43	176.60	178.28		178.32	0.000666	0.41	0.97	0.16	25.46	34.11	0.27
34_802	1854	200-yr	23.30	176.60	178.40		178.45	0.000655	0.47	1.02	0.18	29.56	35.61	0.27
34_802	1722	50-yr	17.48	176.49	178.12		178.17	0.000743	0.28	0.95	0.14	20.89	30.12	0.28
34_802	1722	100-yr	19.43	176.49	178.18		178.23	0.000797	0.30	0.99	0.15	22.82	33.28	0.28
34_802	1722	200-yr	23.30	176.49	178.30		178.35	0.000743	0.37	1.04	0.17	26.89	35.06	0.28
34_802	1568	50-yr	17.48	176.35	178.08		178.10	0.000299	0.12	0.48	0.16	41.77	48.35	0.16
34_802	1568	100-yr	19.43	176.35	178.15		178.16	0.000258	0.12	0.51	0.17	44.78	48.64	0.16
34_802	1568	200-yr	23.30	176.35	178.27		178.28	0.000253	0.14	0.54	0.18	50.71	49.24	0.18
34_802	1480	50-yr	17.48	176.28	178.05		178.07	0.000348	0.32	0.70	0.18	51.89	68.54	0.19
34_802	1480	100-yr	19.43	176.28	178.12		178.13	0.000344	0.34	0.72	0.19	56.26	70.31	0.19
34_802	1480	200-yr	23.30	176.28	178.24		178.26	0.000333	0.36	0.75	0.21	60.03	72.24	0.19
34_802	1380	50-yr	17.48	176.19	178.02		178.04	0.000487	0.18	0.85	0.21	49.62	65.48	0.22
34_802	1380	100-yr	19.43	176.19	178.06		178.10	0.000486	0.20	0.87	0.22	53.81	66.94	0.23
34_802	1380	200-yr	23.30	176.19	178.20		178.22	0.000472	0.21	0.90	0.24	62.21	67.74	0.23
34_802	1225	50-yr	17.48	176.06	177.90		177.95	0.000821	0.33	1.08	0.34	26.75	35.62	0.29
34_802	1225	100-yr	19.43	176.06	177.96		178.01	0.000834	0.35	1.12	0.38	28.97	36.59	0.29
34_802	1225	200-yr	23.30	176.06	178.09		178.14	0.000828	0.38	1.18	0.44	33.62	38.06	0.30
34_802	1043	50-yr	17.48	175.90	177.70		177.76	0.001549	0.31	1.38	0.44	25.41	38.16	0.35
34_802	1043	100-yr	19.43	175.90	177.77		177.82	0.001497	0.32	1.41	0.46	28.05	40.06	0.35
34_802	1043	200-yr	23.30	175.90	177.91		177.97	0.001296	0.34	1.38	0.49	34.05	41.20	0.33
34_802	882	50-yr	17.48	175.76	177.54		177.58	0.000608	0.38	1.08	0.51	24.36	41.47	0.29
34_802	882	100-yr	19.43	175.76	177.63		177.66	0.000717	0.41	1.05	0.51	27.84	42.79	0.27
34_802	882	200-yr	23.30	175.76	177.81		177.84	0.000535	0.43	0.98	0.52	35.89	46.00	0.24
34_802	714	50-yr	17.48	175.61	177.30		177.40	0.001993	0.22	1.45	0.33	19.20	22.81	0.40
34_802	714	100-yr	19.43	175.61	177.40		177.50	0.001901	0.23	1.50	0.35	20.48	25.26	0.40
34_802	714	200-yr	23.30	175.61	177.61		177.70	0.001263	0.25	1.52	0.33	26.72	33.66	0.37
34_802	579	50-yr	17.48	175.50	177.24		177.26	0.000545	0.21	0.89	0.15	44.98	64.32	0.24
34_802	579	100-yr	19.43	175.50	177.35		177.37	0.000472	0.21	0.87	0.15	52.21	67.56	0.23
34_802	579	200-yr	23.30	175.50	177.58		177.60	0.000340	0.21	0.82	0.14	68.59	71.78	0.20
34_802	408	50-yr	17.48	175.38	177.15		177.17	0.000565	0.24	0.94	0.12	40.64	51.28	0.25
34_802	408	100-yr	19.43	175.35	177.27		177.29	0.000483	0.24	0.91	0.13	47.04	54.81	0.23
34_802	408	200-yr	23.30	175.35	177.52		177.55	0.000369	0.22	0.88	0.14	64.27	73.46	0.21
34_802	178	50-yr	17.48	175.15	177.05		177.07	0.000468	0.30	0.89	0.27	42.04	51.60	0.22
34_802	178	100-yr	19.43	175.15	177.19		177.21	0.000373	0.30	0.84	0.26	49.51	53.36	0.20
34_802	178	200-yr	23.30	175.15	177.47		177.48	0.000265	0.29	0.78	0.24	65.21	60.02	0.17
34_802	86	50-yr	17.48	175.07	177.05		177.08	0.000048	0.12	0.30	0.11	129.71	124.27	0.07
34_802	86	100-yr	19.43	175.07	177.19		177.19	0.000040	0.12	0.29	0.11	147.43	125.20	0.07
34_802	86	200-yr	23.30	175.07	177.47		177.47	0.000029	0.11	0.27	0.11	162.52	126.98	0.06
34_802	32	50-yr	17.48	175.03	177.01	176.02	177.04	0.000374	0.36	0.84	0.37	26.02	123.13	0.21
34_802	32	100-yr	19.43	175.03	177.15	176.06	177.18	0.000345	0.37	0.85	0.38	28.81	124.16	0.20
34_802	32	200-yr	23.30	175.03	177.43	176.14	177.46	0.000300	0.40	0.87	0.40	33.38	126.03	0.18
34_802	19	Darling Rd	Culvert											
34_802	7	50-yr	17.48	175.03	176.39	175.93	176.46	0.001379	0.48	1.23	0.86	16.38	70.99	0.37
34_802	7	100-yr	19.43	175.03	176.47	175.98	176.54	0.001310	0.47	1.25	0.90	17.81	71.99	0.37
34_802	7	200-yr	23.30	175.03	176.66	176.05	176.74	0.001089	0.51	1.28	0.94	21.19	73.90	0.35
17_101	15613	50-yr	13.94	193.95	195.06		195.06	0.002369	0.36	0.44	0.21	39.82	162.46	0.15
17_101	15613	100-yr	15.54	193.95	195.06		195.09	0.002300	0.37	0.44	0.23	43.11	163.28	0.15
17_101	15613	200-yr	18.70	193.95	195.11		195.12	0.002263	0.40	0.45	0.25	48.54	164.85	0.15
17_101	15286	50-yr	13.94	193.43	194.67		194.62	0.000925	0.42	0.28	0.28	40.30	171.58	0.09
17_101	15286	100-yr	15.54	193.43	194.63		194.64	0.000903	0.43	0.29	0.26	44.30	196.74	0.09
17_101	15286	200-yr	18.70	193.43	194.67		194.67	0.000925	0.45	0.29	0.28	51.15	204.64	0.08
17_101	15036	50-yr	13.94	193.04	194.07		194.09	0.000927	0.68	0.69	0.58	20.92	85.44	0.25
17_101	15036	100-yr	15.54	193.04	194.06		194.11	0.000911	1.03	0.70	0.62	22.31	86.62	0.25
17_101	15036	200-yr	18.70	193.04	194.11		194.14	0.000909	1.10	0.73	0.67	24.86	88.95	0.25
17_101	14872	50-yr	13.94	192.78	193.81		193.82	0.000742	0.35	0.74	0.23	36.83	119.26	0.26
17_101	14872	100-yr	15.54	192.78	193.84		193.85	0.000662	0.36	0.73	0.23	40.63	120.68	0.25
17_101	14872	200-yr	18.70	192.78	193.90		193.91	0.000593	0.37	0.71	0.22	48.09	125.52	0.23
17_101	14740	50-yr	13.94	192.58	193.75		193.75	0.000366	0.28	0.58	0.23	41.58	82.06	0.19
17_101	14740	100-yr	15.54	192.58	193.78		193.79	0.000373	0.30	0.60	0.24	44.64	94.42	0.19
17_101	14740	200-yr	18.70	192.58	193.84		193.85	0.000373	0.32	0.62	0.26	50.75	97.82	0.19
17_101	14559	50-yr	13.94	192.29	193.65		193.66	0.000794	0.37	0.27	0.45	33.53	78.67	0.08
17_101	14559	100-yr	15.54	192.29	193.66		193.69	0.000795	0.38	0.27	0.47	36.06	82.10	0.08
17_101	14559	200-yr	18.70	192.29	193.75		193.76	0.000793	0.41	0.28	0.49	41.51	86.62	0.08
17_101	14417	50-yr	13.94	192.07	193.50		193.52	0.001268	0.58	0.38	0.23	31.06	71.52	0.11
17_101	14417	100-yr	15.54	192.07	193.54		193.55	0.001260	0.59	0.39	0.23	33.55	73.96	0.11
17_101	14417	200-yr	18.70	192.07	193.60		193.62	0.001253	0.63	0.40	0.24	38.48	80.78	0.11

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Top Width (m)	Froude # Crl
17_101	14180	50-yr	13.94	191.70	193.18		193.21	0.001880	0.68	0.48	0.72	21.12	45.38	0.13
17_101	14180	100-yr	15.54	191.70	193.21		193.23	0.002024	0.70	0.50	0.77	22.14	46.05	0.14
17_101	14180	200-yr	18.70	191.70	193.25		193.28	0.002312	0.78	0.55	0.88	24.00	47.67	0.15
17_101	14089	50-yr	13.94	191.55	193.17		193.17	0.000107	0.18	0.12	0.17	82.01	160.62	0.03
17_101	14089	100-yr	15.54	191.55	193.19		193.20	0.000118	0.20	0.13	0.18	85.48	161.72	0.03
17_101	14089	200-yr	18.70	191.55	193.23		193.24	0.000140	0.22	0.14	0.20	91.79	164.24	0.04
17_101	14029	50-yr	13.94	191.48	193.14		193.15	0.001590	0.18	0.47	0.64	29.09	82.32	0.13
17_101	14029	100-yr	15.54	191.48	193.15		193.17	0.001903	0.21	0.52	0.67	30.61	85.93	0.14
17_101	14029	200-yr	18.70	191.48	193.19		193.21	0.002247	0.25	0.57	0.74	33.37	91.48	0.15
17_101	13925	50-yr	13.94	191.30	193.13		193.13	0.000063	0.10	0.32	0.10	126.22	237.28	0.08
17_101	13925	100-yr	15.54	191.30	193.14		193.15	0.000072	0.10	0.34	0.11	130.00	239.43	0.09
17_101	13925	200-yr	18.70	191.30	193.17		193.17	0.000090	0.12	0.39	0.12	136.85	242.77	0.10
17_101	13917	50-yr	13.94	191.28	193.13	192.82	193.13	0.000079	0.15	0.32	0.13	100.23	209.44	0.09
17_101	13917	100-yr	15.54	191.28	193.14	192.87	193.15	0.000089	0.16	0.34	0.14	103.55	211.02	0.09
17_101	13917	200-yr	18.70	191.28	193.17	192.79	193.17	0.000108	0.18	0.38	0.16	109.56	213.88	0.10
17_101	13902	Townline Rd E	Culvert											
17_101	13867	50-yr	13.94	191.20	192.59	192.58	192.59	0.000018	0.07	0.13	0.10	134.21	188.49	0.04
17_101	13867	100-yr	15.54	191.20	192.63	192.58	192.63	0.000018	0.08	0.14	0.11	141.34	191.91	0.04
17_101	13867	200-yr	18.70	191.20	192.71	192.58	192.72	0.000020	0.09	0.15	0.12	154.85	194.79	0.04
17_101	13707	50-yr	13.94	190.67	192.56	192.10	192.58	0.000794	0.49	0.31	1.38	27.85	94.40	0.08
17_101	13707	100-yr	15.54	190.67	192.60	192.13	192.62	0.000794	0.51	0.31	1.38	29.81	87.40	0.08
17_101	13707	200-yr	18.70	190.67	192.68	192.21	192.70	0.000766	0.53	0.32	1.43	34.11	92.28	0.08
17_101	13533	50-yr	13.94	190.59	192.23	192.05	192.30	0.004376	0.89	0.69	2.43	14.34	30.64	0.19
17_101	13533	100-yr	15.54	190.59	192.18		192.30	0.007802	1.24	0.90	3.23	12.88	28.66	0.25
17_101	13533	200-yr	18.70	190.59	192.18	192.14	192.35	0.013331	1.50	1.08	3.89	12.68	28.86	0.30
17_101	13328	50-yr	13.94	190.26	191.67		191.69	0.002025	0.59	0.42	1.28	24.48	72.02	0.13
17_101	13328	100-yr	15.54	190.26	191.77		191.78	0.001088	0.50	0.32	1.02	31.73	74.79	0.09
17_101	13328	200-yr	18.70	190.26	191.86		191.87	0.006332	0.50	0.30	0.95	38.48	75.24	0.08
17_101	13119	50-yr	13.94	189.93	191.59		191.60	0.000183	0.14	0.14	0.21	100.06	130.67	0.04
17_101	13119	100-yr	15.54	189.93	191.71		191.72	0.000146	0.13	0.13	0.24	116.10	136.62	0.04
17_101	13119	200-yr	18.70	189.93	191.80		191.81	0.000160	0.15	0.14	0.28	128.70	143.17	0.04
17_101	13106	50-yr	13.94	189.91	191.59		191.59	0.000119	0.11	0.11	0.24	122.20	158.53	0.03
17_101	13106	100-yr	15.54	189.91	191.71		191.71	0.000094	0.11	0.10	0.25	142.48	175.84	0.03
17_101	13106	200-yr	18.70	189.91	191.80		191.80	0.000099	0.12	0.11	0.29	158.81	183.04	0.03
17_101	13094	50-yr	13.94	189.89	191.59		191.59	0.000264	0.17	0.18	0.22	80.52	96.85	0.05
17_101	13094	100-yr	15.54	189.89	191.71		191.71	0.000221	0.17	0.15	0.28	82.86	105.19	0.04
17_101	13094	200-yr	18.70	189.89	191.80		191.80	0.000239	0.18	0.17	0.34	102.43	108.30	0.04
17_101	12752	50-yr	13.94	189.34	191.57		191.57	0.000030	0.13	0.27	0.18	79.99	76.92	0.06
17_101	12752	100-yr	15.54	189.34	191.69		191.69	0.000028	0.13	0.27	0.18	89.70	80.78	0.06
17_101	12752	200-yr	18.70	189.34	191.78		191.78	0.000032	0.14	0.30	0.19	96.82	83.65	0.06
17_101	12586	50-yr	13.94	189.08	191.57	190.01	191.57	0.000005	0.06	0.11	0.08	196.15	181.42	0.02
17_101	12586	100-yr	15.54	189.08	191.69	190.04	191.69	0.000004	0.06	0.11	0.08	221.25	198.40	0.02
17_101	12586	200-yr	18.70	189.08	191.78	190.10	191.78	0.000005	0.07	0.13	0.09	236.82	208.50	0.03
17_101	12569	50-yr	13.94	189.05	191.57	189.95	191.57	0.000004	0.06	0.11	0.07	195.37	194.39	0.02
17_101	12569	100-yr	15.54	189.05	191.69	189.95	191.69	0.000004	0.06	0.11	0.07	222.12	245.14	0.02
17_101	12569	200-yr	18.70	189.05	191.78	190.02	191.78	0.000005	0.07	0.13	0.08	239.38	269.57	0.03
17_101	12552	Highway 56	Culvert											
17_101	12537	50-yr	16.02	189.25	191.52	189.88	191.52	0.000006	0.08	0.12	0.07	246.88	277.70	0.03
17_101	12537	100-yr	21.08	189.25	191.68	189.90	191.68	0.000005	0.07	0.11	0.07	284.81	296.07	0.02
17_101	12537	200-yr	25.35	189.25	191.77	189.93	191.77	0.000005	0.08	0.12	0.07	305.93	305.52	0.03
17_101	12457	50-yr	16.02	188.11	191.52	190.09	191.52	0.000019	0.11	0.23	0.07	354.78	227.33	0.05
17_101	12457	100-yr	21.08	188.11	191.68	190.11	191.68	0.000013	0.09	0.20	0.07	385.89	250.48	0.04
17_101	12457	200-yr	25.35	188.11	191.77	190.15	191.77	0.000014	0.10	0.21	0.07	399.00	265.52	0.04
17_101	12397	50-yr	16.02	189.00	191.51	189.95	191.51	0.000022	0.16	0.25	0.08	127.23	152.51	0.05
17_101	12397	100-yr	21.08	189.00	191.68	190.00	191.68	0.000020	0.15	0.26	0.06	160.72	193.04	0.05
17_101	12397	200-yr	25.35	189.00	191.77	190.05	191.77	0.000024	0.17	0.29	0.07	178.89	219.74	0.06
17_101	12285	50-yr	16.02	188.82	191.51	189.96	191.51	0.000014	0.07	0.21	0.06	241.11	285.55	0.04
17_101	12285	100-yr	21.08	188.82	191.68	189.99	191.68	0.000012	0.07	0.20	0.06	272.70	303.36	0.04
17_101	12285	200-yr	25.35	188.82	191.77	190.02	191.77	0.000008	0.06	0.17	0.06	309.54	315.64	0.03
17_101	12260	50-yr	16.02	188.78	191.47	189.81	191.50	0.000243		0.89	0.33	27.86	290.04	0.18
17_101	12260	100-yr	21.08	188.78	191.68	189.87	191.68	0.000007	0.06	0.18	0.05	337.91	306.97	0.03
17_101	12260	200-yr	25.35	188.78	191.77	189.97	191.77	0.000009	0.07	0.18	0.06	356.89	318.63	0.03
17_101	12248	Abandon Railway	Culvert											
17_101	12241	50-yr	16.02	189.03	190.13	190.13	190.51	0.009586	0.81	2.97	0.88	9.06	152.52	0.96
17_101	12241	100-yr	21.08	189.03	190.16	190.16	190.28	0.003619	0.53	1.90	0.48	27.47	153.12	0.60
17_101	12241	200-yr	25.35	189.03	190.26	190.26	190.28	0.001119	0.24	1.11	0.29	78.00	153.90	0.34
17_101	12224	50-yr	16.02	189.01	190.12		190.15	0.001518	0.49	1.13	0.34	36.01	75.38	0.38
17_101	12224	100-yr	21.08	189.01	190.16		190.19	0.001548	0.51	1.17	0.36	41.74	81.53	0.38
17_101	12224	200-yr	25.35	189.01	190.21		190.24	0.001704	0.55	1.27	0.40	46.26	91.60	0.41

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Twp Width (m)	Froude # Cfd
17_101	11970	50-yr	18.02	188.60	189.67		188.73	0.002857	0.49	1.58	0.37	28.99	92.70	0.52
17_101	11970	100-yr	21.08	188.60	189.70		188.76	0.002782	0.51	1.61	0.37	32.16	97.95	0.52
17_101	11970	200-yr	25.35	188.60	189.76		188.82	0.002650	0.54	1.63	0.38	36.18	106.16	0.51
17_101	11826	50-yr	18.02	188.30	189.44		189.47	0.001163	0.54	1.08	0.52	31.39	72.23	0.34
17_101	11826	100-yr	21.08	188.30	189.47		189.49	0.001227	0.55	1.13	0.56	33.16	72.70	0.35
17_101	11826	200-yr	25.35	188.30	189.51		189.54	0.001323	0.56	1.21	0.62	36.59	73.65	0.37
17_101	11752	50-yr	18.02	188.14	189.38		189.39	0.000692	0.42	0.86	0.20	42.92	125.58	0.26
17_101	11752	100-yr	21.08	188.14	189.40		189.41	0.000744	0.44	0.90	0.22	45.51	128.58	0.27
17_101	11752	200-yr	25.35	188.14	189.44		189.46	0.000830	0.48	0.98	0.22	51.05	142.87	0.29
17_101	11564	50-yr	18.02	187.75	189.37		189.37	0.000022	0.07	0.17	0.10	221.98	287.67	0.05
17_101	11564	100-yr	21.08	187.75	189.39		189.39	0.000025	0.08	0.19	0.11	227.34	299.24	0.05
17_101	11564	200-yr	25.35	187.75	189.43		189.43	0.000032	0.09	0.22	0.13	236.12	292.76	0.06
17_101	11557	50-yr	18.02	187.73	189.37	188.91	189.37	0.000028	0.08	0.17	0.11	214.45	288.77	0.05
17_101	11557	100-yr	21.08	187.73	189.39	188.96	189.39	0.000030	0.08	0.19	0.12	218.83	290.49	0.05
17_101	11557	200-yr	25.35	187.73	189.42	189.02	189.43	0.000038	0.09	0.21	0.13	230.62	293.92	0.06
17_101	11412	Townline Rd E	Culvert											
17_101	11384	50-yr	18.02	187.83	188.85	188.85	188.89	0.001995	0.89	1.18	0.40	24.53	84.00	0.42
17_101	11384	100-yr	21.08	187.83	188.86	188.89	188.91	0.002318	0.75	1.26	0.43	26.12	84.53	0.48
17_101	11384	200-yr	25.35	187.83	188.92	188.85	188.97	0.002258	0.81	1.30	0.50	28.87	85.89	0.45
17_101	11376	50-yr	18.02	187.82	188.79		188.83	0.001940	0.88	1.11	0.53	24.00	85.60	0.42
17_101	11376	100-yr	21.08	187.82	188.85		188.89	0.001641	0.66	1.08	0.53	27.37	86.87	0.39
17_101	11376	200-yr	25.35	187.82	188.91		188.95	0.001718	0.72	1.15	0.58	30.80	88.29	0.40
17_101	11198	50-yr	18.02	187.58	188.62		188.63	0.000748	0.49	0.24	0.45	42.94	92.23	0.08
17_101	11198	100-yr	21.08	187.58	188.66		188.69	0.000841	0.42	0.27	0.50	46.79	112.32	0.09
17_101	11198	200-yr	25.35	187.58	188.74		188.75	0.000808	0.48	0.28	0.53	50.79	118.58	0.09
17_101	10963	50-yr	18.02	187.26	188.38		188.39	0.001704	0.79	0.38	0.42	27.89	71.88	0.13
17_101	10963	100-yr	21.08	187.26	188.39		188.42	0.001747	0.83	0.40	0.45	29.88	77.92	0.13
17_101	10963	200-yr	25.35	187.26	188.45		188.49	0.001811	0.90	0.43	0.52	33.01	87.26	0.13
17_101	10717	50-yr	18.02	186.93	187.93		187.94	0.002412	0.44	0.43	0.47	42.00	95.50	0.15
17_101	10717	100-yr	21.08	186.93	187.96		187.98	0.002335	0.48	0.44	0.49	45.82	98.94	0.15
17_101	10717	200-yr	25.35	186.93	188.20		188.21	0.000857	0.38	0.31	0.38	68.97	107.94	0.09
17_101	10589	50-yr	18.02	186.75	187.78		187.79	0.000688	0.38	0.23	0.39	50.32	95.34	0.08
17_101	10589	100-yr	21.08	186.75	187.82		187.83	0.000688	0.40	0.24	0.41	53.82	98.63	0.08
17_101	10589	200-yr	25.35	186.75	188.15		188.18	0.002121	0.30	0.18	0.30	87.99	108.37	0.05
17_101	10426	50-yr	18.02	186.54	187.61		187.62	0.002019	0.39	0.44	0.50	39.87	79.99	0.14
17_101	10426	100-yr	21.08	186.54	187.65		187.66	0.001878	0.40	0.44	0.51	43.02	82.57	0.14
17_101	10426	200-yr	25.35	186.54	188.11		188.12	0.000345	0.24	0.23	0.29	92.96	150.48	0.06
17_101	10130	50-yr	18.02	186.14	187.60		187.60	0.000023	0.11	0.06	0.08	187.25	277.47	0.02
17_101	10130	100-yr	21.08	186.14	187.64		187.64	0.000024	0.12	0.06	0.09	198.02	283.11	0.02
17_101	10130	200-yr	25.35	186.14	188.11		188.11	0.000007	0.08	0.04	0.06	348.98	342.64	0.01
17_101	9973	50-yr	18.02	185.93	187.58		187.59	0.000027	0.10	0.07	0.12	175.93	270.31	0.02
17_101	9973	100-yr	21.08	185.93	187.63		187.63	0.000028	0.11	0.07	0.12	186.32	273.41	0.02
17_101	9973	200-yr	25.35	185.93	188.11		188.11	0.000007	0.08	0.04	0.06	326.13	301.63	0.01
17_101	9752	50-yr	18.02	185.63	187.59		187.59	0.000025	0.14	0.07	0.07	176.67	190.59	0.02
17_101	9752	100-yr	21.08	185.63	187.63		187.63	0.000028	0.15	0.08	0.08	183.82	193.27	0.02
17_101	9752	200-yr	25.35	185.63	188.11		188.11	0.000011	0.11	0.06	0.06	291.34	267.84	0.01
17_101	9567	50-yr	18.02	185.38	187.58		187.58	0.000014	0.07	0.06	0.08	260.81	203.65	0.01
17_101	9567	100-yr	21.08	185.38	187.62		187.62	0.000016	0.07	0.06	0.09	268.45	205.33	0.01
17_101	9567	200-yr	25.35	185.38	188.11		188.11	0.000008	0.06	0.05	0.08	374.32	231.03	0.01
17_101	9376	50-yr	18.02	185.13	187.58	185.93	187.58	0.000018	0.08	0.21	0.07	215.98	229.68	0.04
17_101	9376	100-yr	21.08	185.13	187.62	185.98	187.62	0.000017	0.08	0.22	0.07	224.55	233.06	0.05
17_101	9376	200-yr	25.35	185.13	188.10	186.00	188.11	0.000007	0.06	0.17	0.07	352.16	288.09	0.03
17_101	9342	50-yr	18.02	185.08	187.58	185.97	187.58	0.000018	0.07	0.22	0.08	201.02	221.75	0.05
17_101	9342	100-yr	21.08	185.08	187.62	186.00	187.62	0.000020	0.07	0.24	0.08	209.29	225.49	0.05
17_101	9342	200-yr	25.35	185.08	188.10	186.08	188.11	0.000008	0.06	0.17	0.07	329.72	275.66	0.03
17_101	9324	Junction Rd	Culvert											
17_101	9311	50-yr	13.55	185.04	186.18	185.73	186.25	0.001802	0.17	1.24		11.87	59.03	0.40
17_101	9311	100-yr	15.06	185.04	186.21	185.77	186.30	0.001758	0.18	1.33		12.21	60.70	0.42
17_101	9311	200-yr	18.05	185.04	186.27	185.84	186.39	0.002059	0.23	1.49		13.21	62.69	0.46
17_101	9292	50-yr	13.55	185.01	186.19		186.21	0.000629	0.41	0.75	0.18	33.07	82.94	0.25
17_101	9292	100-yr	15.06	185.01	186.23		186.25	0.000631	0.42	0.78	0.19	36.05	92.48	0.25
17_101	9292	200-yr	18.05	185.01	186.30		186.32	0.000627	0.42	0.81	0.21	43.88	101.62	0.25
17_101	9155	50-yr	13.55	184.86	186.03		186.08	0.002208	0.39	1.46	0.46	22.36	45.97	0.46
17_101	9155	100-yr	15.06	184.86	186.07		186.12	0.002188	0.40	1.49	0.49	24.27	47.20	0.48
17_101	9155	200-yr	18.05	184.86	186.14		186.19	0.002152	0.42	1.55	0.54	27.80	48.79	0.48
17_101	9013	50-yr	13.55	184.70	185.85		185.87	0.001013	0.28	1.00	0.22	36.16	83.67	0.32
17_101	9013	100-yr	15.06	184.70	185.89		185.91	0.001063	0.30	1.04	0.24	38.43	84.66	0.33
17_101	9013	200-yr	18.05	184.70	185.95		185.97	0.001198	0.33	1.13	0.26	42.94	86.52	0.34
17_101	8835	50-yr	13.55	184.50	185.68		185.71	0.001301	0.24	1.11	0.19	37.44	81.83	0.35
17_101	8835	100-yr	15.06	184.50	185.71		185.74	0.001313	0.25	1.14	0.20	40.47	82.61	0.36

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Trip Width (m)	Froude # Cfl
17_101	8835	200-yr	18.05	184.50	185.77		185.80	0.001348	0.28	1.20	0.23	46.04	97.38	0.37
17_101	8732	50-yr	13.55	184.38	185.53		185.57	0.001531	0.29	1.13	0.25	31.22	83.38	0.38
17_101	8732	100-yr	15.06	184.38	185.56		185.60	0.001540	0.31	1.16	0.26	33.91	85.16	0.38
17_101	8732	200-yr	16.05	184.38	185.62		185.66	0.001575	0.35	1.21	0.28	36.74	86.52	0.39
17_101	8408	50-yr	13.55	184.01	185.29		185.30	0.000647	0.36	0.75	0.32	26.00	69.38	0.25
17_101	8408	100-yr	15.06	184.01	185.33		185.35	0.000608	0.38	0.75	0.33	31.95	70.23	0.24
17_101	8408	200-yr	16.05	184.01	185.41		185.42	0.000560	0.40	0.76	0.35	37.28	71.69	0.23
17_101	8220	50-yr	13.55	183.80	185.19		185.20	0.000557	0.17	0.77	0.20	47.31	86.22	0.24
17_101	8220	100-yr	15.06	183.80	185.23		185.25	0.000572	0.18	0.80	0.21	51.25	91.62	0.24
17_101	8220	200-yr	16.05	183.80	185.31		185.33	0.000613	0.20	0.87	0.21	56.44	99.24	0.25
17_101	8128	50-yr	13.55	183.69	185.03		185.11	0.002730	0.42	1.68	0.32	22.30	60.91	0.60
17_101	8128	100-yr	15.06	183.69	185.07		185.15	0.002788	0.44	1.73	0.34	24.36	52.95	0.61
17_101	8128	200-yr	16.05	183.69	185.13		185.22	0.002863	0.48	1.85	0.38	27.74	55.36	0.63
17_101	7935	50-yr	13.55	183.47	184.65		184.66	0.000700	0.17	0.84	0.29	45.52	107.43	0.25
17_101	7935	100-yr	15.06	183.47	184.66		184.90	0.000740	0.17	0.86	0.31	48.04	110.01	0.26
17_101	7935	200-yr	16.05	183.47	184.94		184.95	0.000762	0.19	0.92	0.34	50.39	111.25	0.27
17_101	7858	50-yr	13.55	183.39	184.76		184.76	0.001898	0.24	1.23	0.36	35.09	85.98	0.36
17_101	7858	100-yr	15.06	183.39	184.79		184.81	0.001724	0.25	1.26	0.37	37.96	88.04	0.36
17_101	7858	200-yr	16.05	183.39	184.84		184.87	0.001726	0.27	1.30	0.40	43.72	101.71	0.36
17_101	7656	50-yr	13.55	183.16	184.52		184.55	0.001513	0.52	1.17	0.33	23.43	61.38	0.36
17_101	7656	100-yr	15.06	183.16	184.55		184.58	0.001514	0.55	1.19	0.34	25.36	62.92	0.36
17_101	7656	200-yr	16.05	183.16	184.60		184.64	0.001578	0.58	1.25	0.37	28.66	66.65	0.37
17_101	7572	50-yr	13.55	183.06	184.42		184.45	0.001389	0.41	1.14	0.32	29.47	83.84	0.35
17_101	7572	100-yr	15.06	183.06	184.46		184.49	0.001344	0.42	1.14	0.34	32.32	85.15	0.34
17_101	7572	200-yr	16.05	183.06	184.51		184.54	0.001309	0.46	1.17	0.37	37.24	88.94	0.34
17_101	7467	50-yr	13.55	182.94	184.38		184.40	0.000534	0.14	0.75	0.38	32.94	75.56	0.22
17_101	7467	100-yr	15.06	182.94	184.42		184.43	0.000540	0.15	0.77	0.40	36.57	78.56	0.22
17_101	7467	200-yr	16.05	182.94	184.47		184.49	0.000567	0.17	0.81	0.43	40.04	80.61	0.23
17_101	7358	50-yr	13.55	182.82	184.12	184.12	184.25	0.000527	0.41	2.19	0.46	18.08	61.50	0.68
17_101	7358	100-yr	15.06	182.82	184.15	184.15	184.29	0.000567	0.43	2.24	0.48	20.17	66.00	0.68
17_101	7358	200-yr	16.05	182.82	184.19	184.19	184.34	0.000707	0.48	2.38	0.48	23.10	68.54	0.71
17_101	7241	50-yr	13.55	182.69	184.04		184.05	0.000484	0.31	0.68	0.15	43.26	105.09	0.21
17_101	7241	100-yr	15.06	182.69	184.07		184.08	0.000480	0.32	0.70	0.15	46.71	106.95	0.21
17_101	7241	200-yr	16.05	182.69	184.13		184.14	0.000470	0.35	0.71	0.16	53.34	110.78	0.21
17_101	7155	50-yr	13.55	182.59	183.93		183.98	0.001686	0.30	1.28	0.28	29.12	80.18	0.39
17_101	7155	100-yr	15.06	182.59	183.97		184.01	0.001655	0.32	1.30	0.29	31.97	81.84	0.39
17_101	7155	200-yr	16.05	182.59	184.03		184.07	0.001625	0.35	1.33	0.31	37.40	87.71	0.39
17_101	6794	50-yr	13.55	182.18	183.63		183.65	0.000612	0.19	0.85	0.39	37.36	86.68	0.25
17_101	6794	100-yr	15.06	182.18	183.67		183.69	0.000612	0.21	0.87	0.40	40.74	89.10	0.25
17_101	6794	200-yr	16.05	182.18	183.74		183.76	0.000612	0.23	0.90	0.42	46.99	92.58	0.25
17_101	6580	50-yr	13.55	181.94	183.47		183.50	0.000662	0.41	1.01	0.19	25.87	90.78	0.29
17_101	6580	100-yr	15.06	181.94	183.51		183.54	0.000697	0.44	1.04	0.20	27.86	92.03	0.30
17_101	6580	200-yr	16.05	181.94	183.57		183.60	0.001057	0.48	1.11	0.22	30.99	93.84	0.31
17_101	6334	50-yr	13.55	181.66	183.18		183.21	0.001665	0.51	1.32	0.45	18.77	53.09	0.38
17_101	6334	100-yr	15.06	181.66	183.19		183.24	0.001604	0.53	1.32	0.47	20.82	54.89	0.38
17_101	6334	200-yr	16.05	181.66	183.26		183.31	0.001590	0.56	1.35	0.52	24.66	60.10	0.38
17_101	6146	50-yr	13.55	181.44	183.00		183.02	0.000709	0.40	0.92	0.39	26.35	58.90	0.26
17_101	6146	100-yr	15.06	181.44	183.04		183.06	0.000720	0.43	0.95	0.40	28.62	61.81	0.26
17_101	6146	200-yr	16.05	181.44	183.10		183.13	0.000723	0.47	0.98	0.42	33.00	65.73	0.27
17_101	5919	50-yr	13.55	181.18	182.67	182.55	182.77	0.002521	0.56	1.57	0.46	13.34	38.29	0.47
17_101	5919	100-yr	15.06	181.18	182.71	182.60	182.80	0.002497	0.59	1.59	0.51	14.84	39.86	0.47
17_101	5919	200-yr	16.05	181.18	182.78	182.65	182.87	0.002452	0.63	1.64	0.56	17.62	42.18	0.48
17_101	5785	50-yr	13.55	181.03	182.36		182.45	0.002558	0.31	1.59	0.46	17.66	46.41	0.49
17_101	5785	100-yr	15.06	181.03	182.40		182.49	0.002574	0.34	1.64	0.48	19.47	47.42	0.50
17_101	5785	200-yr	16.05	181.03	182.47		182.56	0.002650	0.40	1.73	0.52	22.64	49.07	0.51
17_101	5679	50-yr	13.55	180.91	182.30		182.33	0.000585	0.32	0.79	0.42	32.74	86.33	0.24
17_101	5679	100-yr	15.06	180.91	182.35		182.36	0.000558	0.33	0.79	0.42	36.64	92.34	0.23
17_101	5679	200-yr	16.05	180.91	182.42		182.44	0.000482	0.34	0.77	0.39	44.10	96.14	0.23
17_101	5625	50-yr	13.55	180.84	182.26		182.28	0.000524	0.36	0.76	0.35	30.12	83.64	0.23
17_101	5625	100-yr	15.06	180.84	182.31		182.32	0.000504	0.38	0.76	0.36	32.94	84.64	0.22
17_101	5625	200-yr	16.05	180.84	182.38		182.40	0.000477	0.40	0.78	0.38	36.20	86.62	0.22
17_101	5552	50-yr	13.55	180.76	182.22		182.24	0.000943	0.16	0.84	0.42	27.29	80.00	0.25
17_101	5552	100-yr	15.06	180.76	182.26		182.28	0.000622	0.16	0.85	0.44	30.05	82.02	0.25
17_101	5552	200-yr	16.05	180.76	182.34		182.36	0.000609	0.14	0.88	0.46	35.49	75.73	0.25
17_101	5436	50-yr	13.55	180.62	181.97		182.08	0.002755	0.37	1.64	0.41	12.45	31.09	0.51
17_101	5426	100-yr	15.06	180.62	182.01		182.13	0.002618	0.40	1.70	0.44	13.79	34.41	0.52
17_101	5426	200-yr	16.05	180.62	182.09		182.21	0.002716	0.49	1.76	0.49	16.86	38.17	0.52
17_101	5240	50-yr	13.55	180.41	181.82		181.84	0.000688	0.41	0.88	0.43	20.05	49.76	0.26
17_101	5240	100-yr	15.06	180.41	181.87		181.89	0.000650	0.42	0.88	0.44	27.68	51.11	0.26
17_101	5240	200-yr	16.05	180.41	181.97		181.99	0.000572	0.45	0.87	0.44	33.20	54.17	0.24

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Top Width (m)	Froude # Crl
17_101	5085	50-yr	13.55	180.23	181.67		181.72	0.001037	0.18	1.07	0.18	21.10	44.25	0.32
17_101	5085	100-yr	15.06	180.23	181.72		181.77	0.001063	0.19	1.12	0.19	23.41	47.80	0.33
17_101	5085	200-yr	16.05	180.23	181.83		181.89	0.001099	0.20	1.16	0.21	26.28	54.03	0.33
17_101	5010	50-yr	13.55	180.14	181.82		181.85	0.000632	0.15	0.85	0.47	26.28	47.91	0.25
17_101	5010	100-yr	15.06	180.14	181.87		181.70	0.000645	0.16	0.88	0.50	26.74	50.55	0.26
17_101	5010	200-yr	16.05	180.14	181.79		181.82	0.000615	0.17	0.92	0.53	34.92	58.04	0.26
17_101	4846	50-yr	13.55	179.96	181.51		181.54	0.000627	0.21	0.99	0.25	35.11	66.61	0.29
17_101	4846	100-yr	15.06	179.96	181.56		181.59	0.000609	0.22	1.00	0.25	36.68	68.93	0.29
17_101	4846	200-yr	16.05	179.96	181.69		181.72	0.000702	0.23	1.00	0.26	48.10	73.85	0.27
17_101	4640	50-yr	13.55	179.73	181.38		181.41	0.000623	0.22	0.94	0.20	35.61	58.76	0.26
17_101	4640	100-yr	15.06	179.73	181.43		181.46	0.000635	0.23	0.98	0.21	36.73	60.29	0.26
17_101	4640	200-yr	16.05	179.73	181.58		181.61	0.000548	0.23	0.97	0.22	48.08	63.92	0.25
17_101	4573	50-yr	13.55	179.66	181.38		181.38	0.000099	0.09	0.38	0.12	95.49	118.85	0.10
17_101	4573	100-yr	15.06	179.66	181.43		181.44	0.000102	0.09	0.39	0.12	101.77	119.38	0.11
17_101	4573	200-yr	16.05	179.66	181.58		181.59	0.000091	0.10	0.40	0.13	119.95	120.85	0.10
17_101	4477	50-yr	13.55	179.55	181.29	180.64	181.35	0.000935	0.37	1.24	0.27	17.41	73.19	0.32
17_101	4477	100-yr	15.06	179.55	181.33	180.68	181.40	0.001046	0.40	1.34	0.29	18.03	73.53	0.34
17_101	4477	200-yr	16.05	179.55	181.47	180.77	181.55	0.001090	0.45	1.44	0.31	20.20	74.69	0.35
17_101	4486	H D Townline Rd	Bridge											
17_101	4401	50-yr	13.81	179.64	180.74	180.74	181.04	0.000912	0.67	2.52	0.45	6.85	39.34	0.89
17_101	4451	100-yr	15.26	179.64	180.79	180.79	181.11	0.000920	0.73	2.58	0.51	7.35	40.04	0.89
17_101	4451	200-yr	16.13	179.64	180.87	180.87	181.22	0.000936	0.84	2.74	0.60	8.88	41.01	0.90
17_101	4448	50-yr	13.81	179.64	180.81		180.90	0.002457	0.67	1.58	0.37	15.46	48.30	0.49
17_101	4448	100-yr	15.26	179.64	180.84		180.94	0.002630	0.72	1.65	0.40	16.29	48.67	0.51
17_101	4448	200-yr	16.13	179.64	180.90		181.02	0.002944	0.81	1.81	0.45	17.84	49.38	0.52
17_101	4378	50-yr	13.81	179.54	180.74		180.78	0.001034	0.44	1.06	0.20	26.42	63.32	0.32
17_101	4378	100-yr	15.26	179.54	180.78		180.82	0.001004	0.46	1.07	0.21	28.86	63.99	0.32
17_101	4378	200-yr	16.13	179.54	180.85		180.89	0.000949	0.50	1.06	0.23	33.49	65.08	0.31
17_101	4251	50-yr	13.81	179.35	180.44	180.35	180.55	0.003551	0.68	1.74	0.47	13.43	103.38	0.58
17_101	4251	100-yr	15.26	179.35	180.48	180.37	180.60	0.003483	0.71	1.78	0.50	14.70	104.00	0.67
17_101	4251	200-yr	16.13	179.35	180.56	180.43	180.67	0.003367	0.77	1.84	0.56	17.10	105.20	0.67
17_101	4165	50-yr	13.81	179.23	180.31		180.34	0.001496	0.38	1.20	0.49	26.08	44.70	0.38
17_101	4165	100-yr	15.26	179.23	180.35		180.38	0.001490	0.40	1.23	0.50	26.00	45.28	0.38
17_101	4165	200-yr	16.13	179.23	180.43		180.46	0.001485	0.43	1.29	0.53	31.63	46.38	0.39
17_101	3938	50-yr	13.81	178.90	179.95		180.00	0.001681	0.31	1.26	0.27	25.49	47.54	0.41
17_101	3938	100-yr	15.26	178.90	179.99		180.04	0.001748	0.33	1.32	0.29	27.19	48.36	0.42
17_101	3938	200-yr	16.13	178.90	180.05		180.11	0.001864	0.36	1.42	0.31	30.39	50.07	0.44
17_101	3734	50-yr	13.81	178.61	179.71		179.73	0.001126	0.20	0.95	0.28	36.41	89.39	0.32
17_101	3734	100-yr	15.26	178.61	179.74		179.77	0.001128	0.22	0.98	0.27	41.44	89.61	0.33
17_101	3734	200-yr	16.13	178.61	179.80		179.83	0.001142	0.24	1.03	0.30	46.83	90.41	0.33
17_101	3275	50-yr	13.81	177.95	179.18		179.24	0.001518	0.23	1.25	0.26	25.60	61.75	0.39
17_101	3275	100-yr	15.26	177.95	179.23		179.28	0.001479	0.24	1.28	0.27	26.49	63.06	0.39
17_101	3275	200-yr	16.13	177.95	179.32		179.37	0.001389	0.27	1.31	0.27	34.21	65.43	0.38
17_101	2997	50-yr	13.81	177.55	179.96		179.98	0.000631	0.20	0.84	0.20	40.20	69.31	0.25
17_101	2997	100-yr	15.26	177.55	179.91		179.93	0.000603	0.20	0.85	0.21	44.11	68.74	0.25
17_101	2997	200-yr	16.13	177.55	179.12		179.14	0.000598	0.22	0.86	0.23	51.54	70.50	0.24
17_101	2644	50-yr	13.81	177.04	178.56		178.65	0.001773	0.26	1.44	0.20	14.84	25.34	0.42
17_101	2644	100-yr	15.26	177.04	178.61		178.71	0.001795	0.28	1.49	0.21	16.37	27.04	0.42
17_101	2644	200-yr	16.13	177.04	178.71		178.83	0.001883	0.28	1.51	0.24	19.35	33.29	0.44
17_101	2342	50-yr	13.81	176.80	178.11		178.18	0.001373	0.18	1.17	0.09	14.06	26.51	0.37
17_101	2342	100-yr	15.26	176.80	178.16		178.23	0.001433	0.15	1.23	0.10	15.44	33.98	0.38
17_101	2342	200-yr	16.13	176.80	178.24		178.32	0.001504	0.19	1.32	0.13	19.09	50.24	0.39
17_101	1838	50-yr	13.81	175.88	177.53		177.57	0.001182	0.25	1.17	0.18	30.51	62.33	0.32
17_101	1838	100-yr	15.26	175.88	177.56		177.62	0.001151	0.26	1.18	0.19	33.54	62.95	0.32
17_101	1838	200-yr	16.13	175.88	177.65		177.69	0.001166	0.29	1.23	0.21	38.33	63.84	0.33
17_101	1415	50-yr	13.81	175.27	178.97		177.04	0.001478	0.23	1.30	0.54	18.62	37.43	0.37
17_101	1415	100-yr	15.26	175.27	177.02		177.09	0.001479	0.25	1.33	0.58	20.43	38.00	0.37
17_101	1415	200-yr	16.13	175.27	177.12		177.18	0.001437	0.28	1.38	0.65	24.13	39.25	0.37
17_101	1153	50-yr	13.81	174.89	176.42	176.12	176.53	0.002682	0.19	1.63	0.34	15.57	43.52	0.48
17_101	1153	100-yr	15.26	174.89	176.48	176.16	176.59	0.002638	0.21	1.67	0.37	17.22	44.80	0.48
17_101	1153	200-yr	16.13	174.89	176.61	176.25	176.71	0.002357	0.25	1.89	0.39	21.37	48.72	0.48
17_101	1017	50-yr	13.81	174.70	176.25		176.28	0.001140	0.25	1.09	0.19	23.91	55.20	0.33
17_101	1017	100-yr	15.26	174.70	176.34		176.38	0.000904	0.27	1.03	0.19	26.79	58.38	0.30
17_101	1017	200-yr	16.13	174.70	176.53		176.55	0.000694	0.28	0.91	0.20	40.13	62.15	0.25
17_101	822	50-yr	13.81	174.42	176.15		176.17	0.000375	0.34	0.68	0.24	29.86	50.50	0.19
17_101	822	100-yr	15.26	174.42	176.27		176.28	0.000279	0.33	0.62	0.21	36.03	53.89	0.17
17_101	822	200-yr	16.13	174.42	176.48		176.49	0.000178	0.32	0.55	0.21	47.91	57.48	0.14
17_101	409	50-yr	13.81	173.82	176.11		176.11	0.000062	0.15	0.33	0.06	73.66	114.84	0.08
17_101	409	100-yr	15.26	173.82	176.24		176.24	0.000048	0.15	0.31	0.06	88.50	116.72	0.07
17_101	409	200-yr	16.13	173.82	176.48		176.47	0.000034	0.15	0.28	0.06	114.87	118.43	0.06

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Cnl
17_101	228	50-yr	13.81	173.56	176.11		176.11	0.000005	0.02	0.12	0.08	164.04	120.52	0.03
17_101	228	100-yr	15.28	173.56	176.24		176.24	0.000005	0.02	0.12	0.08	179.53	121.63	0.03
17_101	228	200-yr	18.13	173.56	176.48		176.48	0.000005	0.03	0.12	0.08	208.96	123.56	0.02
34_515	1257	50-yr	3.93	192.02	192.82	192.84	192.83	0.002101	0.16	0.30	0.38	8.51	177.23	0.12
34_515	1257	100-yr	3.26	192.02	192.83	192.85	192.84	0.002229	0.19	0.32	0.40	8.98	177.67	0.13
34_515	1257	200-yr	3.92	192.02	193.06	192.67	193.05	0.000008	0.05	0.02	0.03	85.96	215.06	0.01
34_515	1048	50-yr	1.00	191.52	192.12	191.91	192.18	0.031120		0.89		1.13	2.96	0.44
34_515	1048	100-yr	1.00	191.52	192.12	191.91	192.18	0.031120		0.89		1.13	2.96	0.44
34_515	1048	200-yr	1.00	191.52	192.12	191.91	192.18	0.031120		0.89		1.13	2.96	0.44
34_515	748	50-yr	1.00	190.79	192.15		192.15	0.000001	0.01	0.01	0.02	65.36	126.75	0.00
34_515	748	100-yr	1.00	190.79	192.15		192.15	0.000001	0.01	0.01	0.02	65.36	126.75	0.00
34_515	748	200-yr	1.00	190.79	192.15		192.15	0.000001	0.01	0.01	0.02	65.36	126.75	0.00
34_515	589	50-yr	1.00	190.40	192.15		192.15	0.000000	0.01	0.01	0.01	97.35	144.89	0.00
34_515	589	100-yr	1.00	190.40	192.15		192.15	0.000000	0.01	0.01	0.01	97.35	144.89	0.00
34_515	589	200-yr	1.00	190.40	192.15		192.15	0.000000	0.01	0.01	0.01	97.35	144.89	0.00
34_515	370	50-yr	1.00	189.88	192.15	190.17	192.15	0.000000	0.01	0.00	0.01	164.87	223.55	0.00
34_515	370	100-yr	1.00	189.88	192.15	190.17	192.15	0.000000	0.01	0.00	0.01	164.87	223.55	0.00
34_515	370	200-yr	1.00	189.88	192.15	190.17	192.15	0.000000	0.01	0.00	0.01	164.87	223.55	0.00
34_515	360	50-yr	1.00	189.85	192.15	190.13	192.15	0.000000	0.01	0.01	0.01	101.06	195.94	0.00
34_515	360	100-yr	1.00	189.85	192.15	190.13	192.15	0.000000	0.01	0.01	0.01	101.06	195.94	0.00
34_515	360	200-yr	1.00	189.85	192.15	190.13	192.15	0.000000	0.01	0.01	0.01	101.06	195.94	0.00
34_515	345	Dairy Side Rd	Culvert											
34_515	331	50-yr	1.00	190.07	190.49	190.32	190.50	0.006389	0.62	0.38	0.69	2.29	23.43	0.21
34_515	331	100-yr	1.00	190.07	190.49	190.32	190.50	0.006389	0.62	0.38	0.69	2.29	23.43	0.21
34_515	331	200-yr	1.00	190.07	190.49	190.32	190.50	0.006389	0.62	0.38	0.69	2.29	23.43	0.21
34_515	322	50-yr	1.00	190.04	190.25	190.25	190.32	0.217231		1.14		0.88	7.31	1.04
34_515	322	100-yr	1.00	190.04	190.25	190.25	190.32	0.217231		1.14		0.88	7.31	1.04
34_515	322	200-yr	1.00	190.04	190.25	190.25	190.32	0.217231		1.14		0.88	7.31	1.04
34_515	112	50-yr	1.00	189.27	189.84		189.84	0.000496	0.08	0.14	0.14	8.32	29.77	0.06
34_515	112	100-yr	1.00	189.27	189.87		189.87	0.000361	0.08	0.12	0.12	9.27	30.27	0.05
34_515	112	200-yr	1.00	189.27	189.93		189.93	0.000224	0.07	0.10	0.10	10.95	31.64	0.04
34_516	2234	50-yr	4.94	192.29	193.43	193.12	193.48	0.002140	0.19	1.08	0.20	7.72	76.04	0.41
34_516	2234	100-yr	5.48	192.29	193.44	193.19	193.49	0.002131	0.22	1.09	0.23	9.04	79.89	0.42
34_516	2234	200-yr	6.57	192.29	193.48	193.23	193.52	0.001930	0.25	1.08	0.26	12.17	92.09	0.40
34_516	1780	50-yr	4.94	191.57	192.55	192.32	192.58	0.001772	0.24	0.91	0.20	9.81	78.67	0.38
34_516	1780	100-yr	5.48	191.57	192.56	192.35	192.60	0.001842	0.27	0.94	0.22	10.73	77.71	0.38
34_516	1780	200-yr	6.57	191.57	192.58	192.53	192.62	0.002091	0.31	1.01	0.26	12.02	78.14	0.38
34_516	1522	50-yr	4.94	191.15	192.18		192.20	0.001259	0.22	0.80	0.18	10.93	79.69	0.32
34_516	1522	100-yr	5.49	191.15	192.20		192.22	0.001171	0.23	0.79	0.20	12.73	82.63	0.31
34_516	1522	200-yr	6.57	191.15	192.25		192.28	0.000982	0.25	0.76	0.22	16.64	93.14	0.29
34_516	1268	50-yr	5.57	190.73	191.86		191.87	0.001348	0.20	0.91	0.17	26.96	108.02	0.32
34_516	1268	100-yr	7.73	190.73	191.89		191.91	0.001262	0.20	0.91	0.18	30.75	112.95	0.30
34_516	1268	200-yr	9.49	190.73	191.89		191.91	0.001007	0.24	1.11	0.22	30.66	112.82	0.30
34_516	966	50-yr	6.87	190.26	191.28		191.34	0.002678	0.17	1.28	0.25	12.42	45.30	0.48
34_516	966	100-yr	7.73	190.26	191.30		191.37	0.003003	0.18	1.37	0.28	13.28	46.95	0.46
34_516	966	200-yr	9.49	190.26	191.62		191.64	0.000987	0.10	0.77	0.19	41.43	137.26	0.24
34_516	749	50-yr	6.87	189.92	191.06	190.72	191.08	0.000676	0.11	0.89	0.18	23.41	115.88	0.25
34_516	749	100-yr	7.73	189.92	191.24	190.77	191.24	0.000200	0.08	0.43	0.14	43.37	160.89	0.14
34_516	749	200-yr	9.49	189.92	191.62	190.94	191.62	0.000026	0.04	0.19	0.08	125.93	229.16	0.05
34_516	549	50-yr	6.87	189.60	191.04	190.38	191.04	0.000068	0.12	0.27	0.15	41.09	77.32	0.08
34_516	549	100-yr	7.73	189.60	191.23	190.39	191.23	0.000038	0.10	0.22	0.13	50.20	97.74	0.06
34_516	549	200-yr	9.49	189.60	191.61	190.43	191.61	0.000013	0.06	0.16	0.09	108.68	186.34	0.04
34_516	401	50-yr	6.87	189.36	191.04	190.18	191.04	0.000037	0.09	0.23	0.15	47.85	95.95	0.06
34_516	401	100-yr	7.73	189.36	191.22	190.18	191.22	0.000023	0.09	0.20	0.13	62.69	118.35	0.05
34_516	401	200-yr	9.49	189.36	191.61	190.21	191.61	0.000009	0.07	0.15	0.07	124.99	162.35	0.03
34_516	368	50-yr	6.87	189.31	191.02	190.08	191.03	0.000139	0.37	0.47	0.38	16.44	102.72	0.12
34_516	368	100-yr	7.73	189.31	191.21	190.10	191.22	0.000114	0.37	0.46	0.38	18.82	138.61	0.11
34_516	368	200-yr	9.49	189.31	191.61	190.18	191.61	0.000009	0.12	0.15	0.08	106.49	147.32	0.03
34_516	355	Dairy Side Rd	Culvert											
34_516	338	50-yr	6.87	189.37	190.31	190.13	190.38	0.002673	0.67	1.32	0.76	6.32	41.35	0.48
34_516	338	100-yr	7.73	189.37	190.33	190.16	190.41	0.003028	0.96	1.43	0.84	6.57	43.59	0.51
34_516	338	200-yr	9.49	189.37	190.37	190.21	190.48	0.003760	1.12	1.64	1.00	6.98	47.37	0.57
34_516	330	50-yr	5.57	189.36	190.31	190.19	190.35	0.002208	0.42	1.13	0.56	10.93	40.82	0.42
34_516	330	100-yr	7.73	189.36	190.34	190.21	190.37	0.002171	0.44	1.15	0.56	11.95	42.18	0.42
34_516	330	200-yr	9.49	189.36	190.39	190.25	190.42	0.002134	0.50	1.19	0.62	13.96	43.70	0.42
34_516	271	50-yr	6.87	189.24	190.12		190.18	0.003428	0.65	1.39	0.93	8.34	36.00	0.55
34_516	271	100-yr	7.73	189.24	190.14		190.20	0.003738	0.92	1.45	0.97	9.29	43.26	0.56
34_516	271	200-yr	9.49	189.24	190.19		190.25	0.003798	0.35	1.52	0.61	11.71	56.55	0.57
34_516	152	50-yr	6.87	189.00	189.90		189.92	0.001368	0.47	0.86	0.40	13.15	42.73	0.33
34_516	152	100-yr	7.73	189.00	189.93		189.95	0.001288	0.48	0.86	0.41	14.57	43.48	0.33

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_516	152	200-yr	9.49	188.00	189.99		190.01	0.001182	0.51	0.87	0.44	17.22	44.78	0.32
34_516	79	50-yr	8.87	188.86	189.81		188.83	0.001280	0.48	0.91	0.42	11.13	28.48	0.34
34_516	79	100-yr	7.75	188.86	189.84		188.87	0.001290	0.48	0.95	0.43	12.15	30.27	0.34
34_516	79	200-yr	9.49	188.86	189.90		189.93	0.001339	0.53	1.01	0.45	13.83	31.68	0.35
17_100	682	50-yr	62.85	173.21	176.06	174.70	176.09	0.000269	0.32	0.93	0.16	109.34	84.61	0.19
17_100	682	100-yr	68.01	173.21	176.19	174.75	176.22	0.000231	0.35	0.89	0.18	120.88	86.05	0.18
17_100	682	200-yr	78.63	173.21	176.42	174.85	176.45	0.000189	0.40	0.85	0.15	140.31	85.89	0.18
17_100	647	50-yr	62.85	173.18	176.05		176.08	0.000223	0.29	0.85	0.16	110.88	53.20	0.17
17_100	647	100-yr	68.01	173.18	176.18		176.21	0.000218	0.29	0.87	0.17	117.62	53.67	0.17
17_100	647	200-yr	78.63	173.18	176.41		176.44	0.000218	0.30	0.92	0.18	129.69	54.50	0.17
17_100	640	50-yr	62.85	173.18	176.01	174.73	176.07	0.000501	0.43	1.24	0.35	77.89	52.97	0.26
17_100	640	100-yr	68.01	173.18	176.14	174.78	176.20	0.000486	0.44	1.27	0.38	82.99	53.41	0.25
17_100	640	200-yr	78.63	173.18	176.38	174.88	176.43	0.000481	0.47	1.33	0.38	91.70	54.19	0.26
17_100	621	Smithville Rd	Bridge											
17_100	603	50-yr	62.85	173.10	175.91	174.74	175.98	0.000540	0.68	1.25	0.40	66.21	54.84	0.26
17_100	603	100-yr	68.01	173.10	176.04	174.82	176.10	0.000500	0.69	1.24	0.41	71.89	56.01	0.25
17_100	603	200-yr	78.63	173.10	176.26	175.07	176.32	0.000465	0.75	1.27	0.45	81.33	57.81	0.25
17_100	598	50-yr	62.85	173.10	175.92		175.96	0.000322	0.52	1.07	0.44	88.93	54.23	0.21
17_100	598	100-yr	68.01	173.10	176.05		176.09	0.000303	0.54	1.07	0.44	95.94	54.89	0.20
17_100	598	200-yr	78.63	173.10	176.27		176.31	0.000290	0.58	1.10	0.48	107.80	56.06	0.20
17_100	520	50-yr	62.85	173.10	175.92		175.94	0.000199	0.33	0.82	0.17	132.45	72.91	0.18
17_100	520	100-yr	68.01	173.10	176.05		176.07	0.000190	0.34	0.83	0.18	141.89	73.55	0.18
17_100	520	200-yr	78.63	173.10	176.26		176.28	0.000167	0.36	0.86	0.19	157.78	74.83	0.18
17_100	211	50-yr	62.85	173.09	175.88		175.89	0.000138	0.33	0.68	0.12	155.24	135.94	0.13
17_100	211	100-yr	68.01	173.09	176.01		176.02	0.000120	0.33	0.65	0.12	173.89	141.68	0.13
17_100	211	200-yr	78.63	173.09	176.23		176.24	0.000105	0.33	0.64	0.12	206.52	158.38	0.12
34_801	2326	50-yr	25.27	174.99	176.38		176.41	0.001322	0.35	1.17	0.48	43.40	104.36	0.36
34_801	2326	100-yr	28.09	174.99	176.47		176.50	0.000915	0.33	1.03	0.47	53.43	111.71	0.30
34_801	2326	200-yr	33.71	174.99	176.68		176.69	0.000468	0.29	0.82	0.41	77.92	120.09	0.22
34_801	2099	50-yr	25.27	174.78	176.27		176.28	0.000222	0.31	0.55	0.13	78.11	118.49	0.15
34_801	2099	100-yr	28.09	174.78	176.40		176.40	0.000184	0.29	0.50	0.13	92.75	121.39	0.13
34_801	2099	200-yr	33.71	174.78	176.63		176.64	0.000102	0.28	0.44	0.11	122.09	125.21	0.11
34_801	1901	50-yr	25.27	174.27	176.12		176.15	0.000388	0.20	0.81	0.19	98.71	63.68	0.20
34_801	1901	100-yr	28.09	174.27	176.28		176.30	0.000301	0.19	0.79	0.20	89.71	66.13	0.19
34_801	1901	200-yr	33.71	174.27	176.55		176.57	0.000240	0.18	0.78	0.20	88.42	71.88	0.17
34_801	1344	50-yr	25.27	174.13	176.13		176.13	0.000020	0.12	0.19	0.08	203.26	219.94	0.05
34_801	1344	100-yr	28.09	174.13	176.28		176.29	0.000015	0.11	0.18	0.07	238.03	230.26	0.04
34_801	1344	200-yr	33.71	174.13	176.56		176.56	0.000011	0.11	0.17	0.07	304.65	255.09	0.04
34_801	1197	50-yr	25.27	174.00	176.12		176.13	0.000140	0.19	0.54	0.29	87.85	84.94	0.13
34_801	1197	100-yr	28.09	174.00	176.27		176.28	0.000116	0.19	0.52	0.28	101.19	86.26	0.12
34_801	1197	200-yr	33.71	174.00	176.55		176.55	0.000090	0.19	0.50	0.28	125.21	89.18	0.11
34_801	877	50-yr	25.27	173.80	176.11		176.11	0.000039	0.13	0.30	0.11	171.93	140.11	0.07
34_801	877	100-yr	28.09	173.80	176.27		176.27	0.000034	0.13	0.29	0.11	193.86	143.33	0.06
34_801	877	200-yr	33.71	173.80	176.54		176.54	0.000028	0.13	0.29	0.11	234.29	151.09	0.06
34_801	743	50-yr	25.27	173.60	176.11		176.11	0.000018	0.12	0.21	0.14	174.77	128.28	0.05
34_801	743	100-yr	28.09	173.60	176.26		176.27	0.000016	0.11	0.21	0.14	195.19	129.76	0.04
34_801	743	200-yr	33.71	173.60	176.54		176.54	0.000013	0.11	0.21	0.14	231.38	132.89	0.04
34_801	562	50-yr	25.27	173.44	176.10		176.11	0.000009	0.11	0.18	0.09	225.17	153.75	0.03
34_801	562	100-yr	28.09	173.44	176.26		176.26	0.000008	0.11	0.16	0.09	248.85	157.23	0.03
34_801	562	200-yr	33.71	173.44	176.54		176.54	0.000007	0.12	0.16	0.09	293.82	161.40	0.03
34_801	330	50-yr	25.27	173.24	176.10		176.10	0.000017	0.14	0.24	0.16	156.02	105.48	0.05
34_801	330	100-yr	28.09	173.24	176.26		176.26	0.000015	0.14	0.24	0.16	174.85	107.88	0.05
34_801	330	200-yr	33.71	173.24	176.54		176.54	0.000014	0.15	0.24	0.17	205.35	112.35	0.04
34_801	306	50-yr	25.27	173.22	176.09	174.48	176.10	0.000074	0.36	0.48	0.39	60.72	116.27	0.10
34_801	306	100-yr	28.09	173.22	176.25	174.52	176.26	0.000072	0.37	0.51	0.41	66.32	118.40	0.10
34_801	306	200-yr	33.71	173.22	176.52	174.58	176.53	0.000071	0.40	0.54	0.44	73.33	121.81	0.10
34_801	278	Dunville Rd	Culvert											
34_801	253	50-yr	25.27	173.24	175.87	174.44	175.89	0.000215	0.50	0.75	0.39	39.59	94.68	0.16
34_801	253	100-yr	28.09	173.24	176.00	174.51	176.03	0.000208	0.53	0.77	0.42	42.91	96.13	0.16
34_801	253	200-yr	33.71	173.24	176.22	174.71	176.25	0.000207	0.58	0.81	0.47	48.31	98.83	0.16
34_801	238	50-yr	25.27	173.23	175.88		175.88	0.000036	0.18	0.34	0.20	123.22	103.87	0.07
34_801	238	100-yr	28.09	173.23	176.01		176.02	0.000032	0.18	0.33	0.19	137.25	105.02	0.07
34_801	238	200-yr	33.71	173.23	176.23		176.23	0.000029	0.19	0.33	0.19	160.44	107.06	0.06
34_510	4324	50-yr	8.51	186.27	187.38		187.67	0.011024		2.33		2.78	3.58	0.84
34_510	4324	100-yr	7.24	186.27	187.46	187.35	187.75	0.010836		2.38		3.04	3.71	0.84
34_510	4324	200-yr	8.67	186.27	187.58	187.46	187.89	0.010701	0.04	2.49	0.11	3.49	4.43	0.84
34_510	4180	50-yr	6.91	186.02	187.25	186.62	187.30	0.000641	0.36	0.98	0.17	7.25	7.55	0.29
34_510	4180	100-yr	7.24	186.02	187.33	186.68	187.39	0.000624	0.38	1.01	0.18	7.86	7.77	0.29
34_510	4180	200-yr	8.67	186.02	187.48	186.74	187.52	0.000640	0.42	1.09	0.09	8.42	36.03	0.30

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Trip Width (m)	Froude # Cfl
34_510	4042	50-yr	6.51	185.75	186.70	186.66	187.00	0.010008	0.31	2.42	0.34	2.85	4.83	0.89
34_510	4042	100-yr	7.24	185.75	186.71	186.71	187.07	0.011788	0.35	2.65	0.37	2.90	4.88	0.97
34_510	4042	200-yr	8.67	185.75	186.81	186.81	187.20	0.010965	0.41	2.78	0.44	3.42	5.31	0.96
34_510	3779	50-yr	6.51	185.33	186.38		186.40	0.009801	0.24	0.80	0.29	16.70	72.96	0.27
34_510	3779	100-yr	7.24	185.33	186.40		186.42	0.009810	0.26	0.82	0.30	18.34	76.43	0.27
34_510	3779	200-yr	8.67	185.33	186.44		186.46	0.009797	0.29	0.84	0.32	21.34	78.15	0.27
34_510	3689	50-yr	6.51	185.17	186.15	186.12	186.25	0.004430	0.52	1.60	0.43	6.56	31.71	0.59
34_510	3689	100-yr	7.24	185.17	186.18	186.18	186.27	0.003972	0.55	1.56	0.44	7.78	35.25	0.67
34_510	3689	200-yr	8.67	185.17	186.21		186.31	0.004362	0.62	1.57	0.53	8.79	36.53	0.60
34_510	3566	50-yr	6.51	185.00	185.97		186.00	0.001403	0.38	0.97	0.29	12.03	52.20	0.35
34_510	3566	100-yr	7.24	185.00	185.97		186.01	0.001695	0.43	1.07	0.32	12.17	52.74	0.39
34_510	3566	200-yr	8.67	185.00	186.04		186.07	0.001345	0.40	1.01	0.35	16.20	62.96	0.35
34_510	3489	50-yr	6.51	184.82	185.74		185.81	0.003766	0.48	1.43	0.38	8.54	48.20	0.54
34_510	3489	100-yr	7.24	184.82	185.86		185.88	0.001371	0.38	0.95	0.31	14.65	59.94	0.33
34_510	3489	200-yr	8.67	184.82	185.98		185.99	0.000647	0.33	0.72	0.24	22.81	72.38	0.24
34_510	3317	50-yr	6.51	184.52	185.69		185.69	0.000219	0.21	0.42	0.19	26.78	70.69	0.14
34_510	3317	100-yr	7.24	184.52	185.82		185.83	0.000110	0.18	0.33	0.16	37.15	76.67	0.10
34_510	3317	200-yr	8.67	184.52	185.95		185.96	0.000089	0.16	0.32	0.14	48.50	100.52	0.09
34_510	3171	50-yr	6.51	184.29	185.67	185.15	185.67	0.000072	0.06	0.26	0.17	41.85	136.78	0.08
34_510	3171	100-yr	7.24	184.29	185.82	185.17	185.82	0.000038	0.07	0.20	0.12	64.90	148.85	0.06
34_510	3171	200-yr	8.67	184.29	185.95	185.20	185.95	0.000025	0.07	0.18	0.11	84.96	161.09	0.05
34_510	3157	50-yr	6.51	184.27	185.65	184.98	185.67	0.000094	0.38	0.58	0.48	12.70	134.70	0.17
34_510	3157	100-yr	7.24	184.27	185.80	184.91	185.81	0.000024	0.36	0.57	0.45	14.68	154.69	0.15
34_510	3157	200-yr	8.67	184.27	185.95	184.98	185.95	0.000014	0.06	0.15	0.09	101.59	193.22	0.04
34_510	3145	Junction Rd	Culvert											
34_510	3135	50-yr	6.51	184.28	185.14	184.85	185.18	0.001644	0.65	1.00	0.59	7.11	48.57	0.39
34_510	3135	100-yr	7.24	184.28	185.16	184.88	185.21	0.001818	0.70	1.08	0.64	7.36	51.91	0.40
34_510	3135	200-yr	8.67	184.28	185.21	184.94	185.25	0.001507	0.40	1.02	0.31	13.36	61.56	0.37
34_510	3125	50-yr	6.51	184.26	185.13		185.16	0.001421	0.42	0.96	0.24	12.37	82.82	0.35
34_510	3125	100-yr	7.24	184.26	185.16		185.19	0.001375	0.43	0.97	0.27	13.99	86.18	0.35
34_510	3125	200-yr	8.67	184.26	185.20		185.23	0.001313	0.44	0.98	0.29	17.01	72.97	0.35
34_510	3005	50-yr	6.51	184.07	184.89		184.94	0.002599	0.40	1.22	0.55	8.25	28.50	0.47
34_510	3005	100-yr	7.24	184.07	184.91		184.97	0.002630	0.42	1.27	0.58	8.95	29.86	0.48
34_510	3005	200-yr	8.67	184.07	184.96		185.02	0.002507	0.44	1.29	0.62	10.57	32.18	0.47
34_510	2769	50-yr	6.51	183.68	184.63		184.65	0.000686	0.30	0.70	0.34	15.53	45.09	0.25
34_510	2769	100-yr	7.24	183.68	184.67		184.68	0.000696	0.31	0.71	0.35	17.13	46.66	0.24
34_510	2769	200-yr	8.67	183.68	184.73		184.74	0.000627	0.31	0.72	0.37	20.12	50.57	0.24
34_510	2562	50-yr	6.51	183.33	184.36		184.42	0.002025	0.48	1.21	0.21	8.40	23.72	0.42
34_510	2562	100-yr	7.24	183.33	184.41		184.47	0.001981	0.50	1.23	0.21	9.42	25.65	0.42
34_510	2562	200-yr	8.67	183.33	184.46		184.53	0.002049	0.56	1.31	0.23	11.04	28.39	0.43
34_510	2396	50-yr	6.51	183.06	183.99		184.05	0.002754	0.70	1.29	0.40	7.12	20.43	0.47
34_510	2396	100-yr	7.24	183.06	184.02		184.08	0.002781	0.73	1.33	0.44	7.76	21.28	0.48
34_510	2396	200-yr	8.67	183.06	184.07		184.14	0.002820	0.79	1.42	0.47	8.90	23.90	0.48
34_510	2234	50-yr	6.51	182.79	183.64		183.68	0.001875	0.48	1.05	0.48	8.11	27.19	0.40
34_510	2234	100-yr	7.24	182.79	183.67		183.71	0.001932	0.62	1.09	0.51	9.77	27.71	0.41
34_510	2234	200-yr	8.67	182.79	183.73		183.77	0.001773	0.55	1.11	0.54	11.64	29.76	0.40
34_510	1947	50-yr	6.51	182.31	183.32		183.34	0.000609	0.33	0.79	0.27	12.30	34.04	0.27
34_510	1947	100-yr	7.24	182.31	183.40		183.41	0.000605	0.33	0.72	0.27	15.09	37.29	0.24
34_510	1947	200-yr	8.67	182.31	183.55		183.56	0.000370	0.32	0.63	0.26	21.25	42.87	0.19
34_510	1790	50-yr	6.51	182.00	183.28	182.55	183.29	0.000111	0.16	0.35	0.13	29.80	69.18	0.11
34_510	1790	100-yr	7.24	182.00	183.37	182.57	183.37	0.000097	0.15	0.32	0.13	36.21	76.12	0.10
34_510	1790	200-yr	8.67	182.00	183.54	182.62	183.54	0.000058	0.13	0.29	0.13	50.19	107.16	0.08
34_510	1738	50-yr	6.51	181.98	183.27	182.58	183.28	0.000091	0.44	0.56	0.41	12.89	102.90	0.17
34_510	1738	100-yr	7.24	181.98	183.35	182.61	183.37	0.000204	0.45	0.57	0.42	13.80	116.75	0.17
34_510	1738	200-yr	8.67	181.98	183.52	182.65	183.53	0.000238	0.48	0.69	0.45	15.88	138.38	0.16
34_510	1729	Abandon Railway	Culvert											
34_510	1722	50-yr	6.51	182.05	182.66	182.46	182.72	0.003030	0.29	1.11		5.91	40.89	0.49
34_510	1722	100-yr	7.24	182.05	182.67	182.49	182.78	0.003382	0.41	1.20		6.10	41.68	0.52
34_510	1722	200-yr	8.67	182.05	182.70	182.53	182.79	0.004098	0.47	1.36		6.43	44.96	0.58
34_510	1690	50-yr	6.51	182.01	182.61		182.62	0.001753	0.34	0.71	0.13	15.69	84.62	0.36
34_510	1690	100-yr	7.24	182.01	182.62		182.64	0.001720	0.36	0.72	0.14	17.23	85.76	0.36
34_510	1690	200-yr	8.67	182.01	182.66		182.68	0.001622	0.39	0.74	0.16	20.29	87.41	0.35
34_510	1655	50-yr	6.51	181.95	182.56		182.57	0.001321	0.30	0.68	0.37	16.30	75.68	0.32
34_510	1655	100-yr	7.24	181.95	182.58		182.59	0.001329	0.31	0.70	0.38	17.73	80.28	0.32
34_510	1655	200-yr	8.67	181.95	182.62		182.63	0.001186	0.33	0.69	0.39	21.04	84.91	0.31
34_510	1292	50-yr	6.51	181.31	182.16		182.18	0.001099	0.17	0.80	0.18	19.30	57.31	0.21
34_510	1292	100-yr	7.24	181.31	182.22		182.24	0.000891	0.17	0.76	0.18	22.94	59.70	0.28
34_510	1292	200-yr	8.67	181.31	182.35		182.36	0.000610	0.16	0.70	0.16	30.99	66.44	0.24
34_510	1033	50-yr	6.51	180.67	182.05	181.47	182.06	0.000268	0.11	0.49	0.15	23.77	45.07	0.16
34_510	1033	100-yr	7.24	180.67	182.13	181.52	182.14	0.000232	0.11	0.48	0.15	27.46	47.25	0.15

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Top Width (m)	Froude # Crl
34_510	1033	200-yr	8.67	180.87	182.28	181.57	182.29	0.000179	0.12	0.46	0.16	36.05	51.63	0.14
34_510	1021	50-yr	6.51	180.88	182.03	181.47	182.05	0.000555	0.20	0.70	0.20	11.40	47.68	0.23
34_510	1021	100-yr	7.24	180.85	182.10	181.51	182.13	0.000516	0.21	0.71	0.21	12.53	50.46	0.23
34_510	1021	200-yr	8.67	180.85	182.26	181.55	182.28	0.000455	0.23	0.73	0.23	14.68	56.06	0.22
34_510	1009	H D Towline Rd	Culvert											
34_510	994	50-yr	6.51	181.00	181.65	181.59	181.75	0.005747	0.83	1.51	0.37	5.88	69.41	0.67
34_510	994	100-yr	7.24	181.00	181.68	181.61	181.78	0.005603	0.89	1.57	0.40	6.10	70.32	0.68
34_510	994	200-yr	8.67	181.00	181.73	181.65	181.85	0.005647	1.01	1.67	0.45	6.89	72.04	0.69
34_510	982	50-yr	5.51	180.98	181.68		181.69	0.000789	0.26	0.91	0.19	25.03	73.29	0.26
34_510	982	100-yr	7.24	180.98	181.71		181.72	0.000761	0.27	0.92	0.20	27.28	74.38	0.25
34_510	982	200-yr	8.67	180.98	181.76		181.77	0.000711	0.28	0.94	0.21	31.57	76.37	0.25
34_510	930	50-yr	6.51	180.88	181.65	181.40	181.68	0.000459	0.11	0.46	0.28	20.74	64.27	0.19
34_510	930	100-yr	7.24	180.88	181.68	181.41	181.69	0.000429	0.12	0.48	0.30	22.83	66.09	0.19
34_510	930	200-yr	8.67	180.88	181.74	181.44	181.75	0.000384	0.15	0.46	0.31	26.83	68.44	0.18
34_510	817	50-yr	6.51	180.68	181.56		181.58	0.001208	0.25	0.93	0.23	17.62	38.80	0.33
34_510	817	100-yr	7.24	180.68	181.59		181.62	0.001231	0.26	0.97	0.24	18.93	39.25	0.34
34_510	817	200-yr	8.67	180.68	181.65		181.68	0.001267	0.29	1.03	0.26	21.38	40.16	0.34
34_510	696	50-yr	6.51	180.48	181.44		181.46	0.001052	0.16	0.88	0.21	17.38	41.42	0.31
34_510	696	100-yr	7.24	180.48	181.47		181.49	0.001101	0.17	0.92	0.23	18.60	42.09	0.32
34_510	696	200-yr	8.67	180.48	181.52		181.55	0.001179	0.19	1.00	0.25	20.96	43.61	0.33
34_510	560	50-yr	6.51	180.21	181.27	181.14	181.31	0.001656	0.22	1.05	0.33	16.79	52.88	0.36
34_510	560	100-yr	7.24	180.21	181.30	181.15	181.33	0.001686	0.24	1.08	0.36	18.19	53.49	0.36
34_510	560	200-yr	8.67	180.21	181.36	181.19	181.39	0.001681	0.25	1.12	0.42	21.16	55.62	0.38
34_510	420	50-yr	6.51	179.95	181.01	180.91	181.07	0.002532	0.23	1.32	0.47	11.79	42.84	0.45
34_510	420	100-yr	7.24	179.95	181.04	180.93	181.10	0.002397	0.24	1.32	0.50	13.40	43.61	0.44
34_510	420	200-yr	8.67	179.95	181.11	180.99	181.16	0.002258	0.27	1.34	0.54	16.22	45.36	0.43
34_510	301	50-yr	6.51	179.74	180.68		180.76	0.000895	0.22	1.30	0.29	7.79	26.20	0.49
34_510	301	100-yr	7.24	179.74	180.71		180.79	0.001176	0.24	1.39	0.33	8.36	28.30	0.52
34_510	301	200-yr	8.67	179.74	180.75		180.85	0.003593	0.28	1.53	0.35	9.52	31.38	0.56
34_510	194	50-yr	6.51	179.54	180.52		180.55	0.001331	0.37	0.88	0.28	12.30	46.69	0.33
34_510	194	100-yr	7.24	179.54	180.56		180.58	0.001215	0.39	0.88	0.31	13.93	50.41	0.32
34_510	194	200-yr	8.67	179.54	180.62		180.64	0.001025	0.41	0.85	0.32	17.12	53.06	0.30
34_510	77	50-yr	6.51	179.32	180.48		180.48	0.000260	0.21	0.46	0.24	21.91	52.63	0.18
34_510	77	100-yr	7.24	179.32	180.51		180.52	0.000262	0.22	0.48	0.25	23.65	53.61	0.18
34_510	77	200-yr	8.67	179.32	180.57		180.58	0.000263	0.24	0.50	0.27	27.08	56.06	0.16
34_508	3929	50-yr	2.29	192.56	194.06		194.07	0.002573	0.18	0.45	0.19	5.34	12.90	0.14
34_508	3929	100-yr	2.55	192.56	194.09		194.10	0.002763	0.21	0.47	0.20	5.79	18.03	0.15
34_508	3929	200-yr	3.08	192.56	194.14		194.18	0.002678	0.25	0.50	0.24	7.02	31.58	0.15
34_508	3678	50-yr	2.29	192.03	193.48		193.47	0.002199	0.18	0.38	0.14	7.14	46.48	0.13
34_508	3678	100-yr	2.55	192.03	193.48		193.49	0.002148	0.21	0.38	0.17	8.09	56.18	0.12
34_508	3678	200-yr	3.08	192.03	193.51		193.51	0.002215	0.24	0.39	0.20	9.82	73.77	0.13
34_508	3433	50-yr	2.29	191.52	192.57		192.59	0.000935	0.06	0.59	0.11	4.18	17.76	0.24
34_508	3433	100-yr	2.55	191.52	192.60		192.62	0.000708	0.10	0.62	0.15	4.74	20.64	0.24
34_508	3433	200-yr	3.08	191.52	192.67		192.68	0.000623	0.13	0.61	0.17	7.05	45.71	0.22
34_508	3119	50-yr	2.29	190.67	191.88		191.89	0.001061	0.18	0.26	0.15	10.88	29.26	0.10
34_508	3119	100-yr	2.55	190.67	191.92		191.92	0.001075	0.19	0.27	0.16	11.72	29.52	0.10
34_508	3119	200-yr	3.08	190.67	191.95		191.96	0.001204	0.22	0.29	0.18	12.83	30.21	0.10
34_508	2679	50-yr	2.29	189.98	190.64		190.68	0.018140		0.72	0.21	3.23	14.69	0.36
34_508	2679	100-yr	2.55	189.98	190.64		190.67	0.020875		0.78	0.26	3.36	20.44	0.39
34_508	2679	200-yr	3.08	189.98	190.69		190.71	0.013168	0.26	0.67	0.38	5.41	55.35	0.32
34_508	2601	50-yr	2.29	189.79	190.59		190.59	0.000296	0.11	0.12	0.11	20.25	145.21	0.05
34_508	2601	100-yr	2.55	189.79	190.62		190.62	0.000202	0.10	0.10	0.10	24.59	151.41	0.04
34_508	2601	200-yr	3.08	189.79	190.68		190.68	0.000099	0.09	0.08	0.09	34.25	155.47	0.03
34_508	2576	50-yr	2.29	189.74	190.53		190.54	0.006995	0.46	0.46	0.44	4.84	121.90	0.23
34_508	2576	100-yr	2.55	189.74	190.57		190.58	0.004754	0.41	0.42	0.48	5.83	122.66	0.19
34_508	2576	200-yr	3.08	189.74	190.63		190.66	0.002451	0.36	0.34	0.48	7.92	125.84	0.14
34_508	2487	Derry Side Rd	Culvert											
34_508	2447	50-yr	3.66	189.42	190.20	190.05	190.22	0.005268	0.72	0.42	0.74	6.44	61.18	0.20
34_508	2447	100-yr	4.08	189.42	190.21	190.06	190.23	0.005741	0.77	0.44	0.80	6.67	63.71	0.21
34_508	2447	200-yr	4.90	189.42	190.23	190.08	190.26	0.005507	0.87	0.49	0.90	7.13	68.57	0.22
34_508	2442	50-yr	3.66	189.41	190.18		190.19	0.004485	0.47	0.41	0.28	8.48	41.55	0.19
34_508	2442	100-yr	4.08	189.41	190.19		190.20	0.004768	0.51	0.43	0.26	8.89	42.91	0.19
34_508	2442	200-yr	4.90	189.41	190.21		190.22	0.005155	0.57	0.46	0.28	9.76	45.56	0.20
34_508	2325	50-yr	3.66	189.17	189.96	189.84	189.88	0.000914	0.14	0.18	0.24	16.46	100.01	0.08
34_508	2325	100-yr	4.08	189.17	189.99		190.00	0.000672	0.15	0.18	0.25	17.85	100.94	0.08
34_508	2325	200-yr	4.90	189.17	190.00		190.02	0.000620	0.17	0.18	0.26	20.41	103.35	0.08
34_508	2086	50-yr	3.66	188.67	189.73		189.73	0.001500	0.02	0.27	0.17	18.47	76.38	0.11
34_508	2086	100-yr	4.08	188.67	189.75		189.75	0.001501	0.04	0.28	0.18	20.00	80.83	0.11
34_508	2086	200-yr	4.90	188.67	189.79		189.79	0.001471	0.06	0.28	0.20	23.04	86.59	0.11

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_508	1896	50-yr	3.66	187.86	188.80		188.82	0.004561	0.58	0.53	0.66	6.36	22.35	0.20
34_508	1896	100-yr	4.08	187.86	188.82		188.84	0.004551	0.62	0.54	0.67	6.85	23.20	0.20
34_508	1896	200-yr	4.90	187.86	188.86		188.88	0.004648	0.68	0.57	0.63	7.89	27.09	0.20
34_508	1099	50-yr	3.66	186.61	187.55		187.56	0.001293	0.28	0.28	0.37	11.31	45.04	0.11
34_508	1099	100-yr	4.08	186.61	187.57		187.57	0.001308	0.30	0.29	0.39	12.08	46.06	0.11
34_508	1099	200-yr	4.90	186.61	187.60		187.61	0.001309	0.31	0.30	0.41	13.73	49.76	0.11
34_508	707	50-yr	3.66	185.60	186.69		186.71	0.004532	0.58	0.50	0.56	6.94	22.64	0.20
34_508	707	100-yr	4.08	185.60	186.73		186.74	0.004171	0.58	0.50	0.57	7.72	24.73	0.19
34_508	707	200-yr	4.90	185.60	186.77		186.79	0.003846	0.61	0.50	0.58	8.02	27.86	0.19
34_508	277	50-yr	3.66	184.90	185.91	185.60	185.91	0.001028	0.34	0.24	0.22	12.48	45.61	0.09
34_508	277	100-yr	4.08	184.90	185.92	185.61	185.93	0.001095	0.36	0.25	0.23	13.17	47.44	0.10
34_508	277	200-yr	4.90	184.90	185.97	185.62	185.97	0.001165	0.36	0.27	0.24	15.34	58.18	0.10
34_508	103	50-yr	3.66	184.54	185.49		185.49	0.001690	0.34	0.32	0.36	10.72	49.15	0.11
34_508	103	100-yr	4.08	184.54	185.71		185.72	0.001487	0.35	0.32	0.37	11.94	51.90	0.11
34_508	103	200-yr	4.90	184.54	185.75		185.76	0.001251	0.36	0.30	0.36	14.20	55.36	0.10
34_509	2822	50-yr	3.40	190.25	191.73		191.73	0.002497	0.42	0.36	0.33	9.86	77.91	0.11
34_509	2822	100-yr	3.78	190.25	191.74		191.74	0.002544	0.44	0.37	0.34	10.66	86.05	0.12
34_509	2822	200-yr	4.52	190.25	191.76		191.77	0.002641	0.49	0.38	0.33	12.89	98.19	0.12
34_509	2664	50-yr	3.40	189.93	191.29		191.30	0.003448	0.37	0.48	0.43	7.80	41.67	0.17
34_509	2664	100-yr	3.78	189.93	191.31		191.32	0.003269	0.40	0.48	0.44	8.58	43.93	0.16
34_509	2664	200-yr	4.52	189.93	191.34		191.35	0.003227	0.43	0.49	0.32	10.35	55.51	0.16
34_509	2239	50-yr	3.40	189.08	190.30		190.31	0.001739	0.38	0.36	0.38	8.60	40.23	0.12
34_509	2239	100-yr	3.78	189.08	190.32		190.33	0.001762	0.38	0.36	0.37	10.30	41.89	0.12
34_509	2239	200-yr	4.52	189.05	190.35		190.36	0.001804	0.38	0.38	0.40	11.61	45.00	0.13
34_509	1788	50-yr	3.40	188.12	189.24		189.24	0.003602	0.38	0.44	0.44	8.09	55.45	0.18
34_509	1788	100-yr	3.78	188.12	189.25		189.26	0.003559	0.40	0.44	0.45	8.73	56.77	0.16
34_509	1788	200-yr	4.52	188.12	189.27		189.28	0.003554	0.44	0.45	0.48	9.98	59.00	0.16
34_509	1529	50-yr	3.40	187.59	188.85	188.61	188.85	0.000958	0.25	0.25	0.31	12.07	51.92	0.08
34_509	1529	100-yr	3.78	187.59	188.87	188.62	188.87	0.000838	0.26	0.25	0.32	13.08	53.51	0.08
34_509	1529	200-yr	4.52	187.59	188.91		188.91	0.000794	0.28	0.24	0.32	15.20	57.06	0.08
34_509	1123	50-yr	3.40	186.75	188.14		188.15	0.003808	0.40	0.65	0.36	7.24	21.56	0.20
34_509	1123	100-yr	3.78	186.75	188.16		188.17	0.006115	0.42	0.68	0.39	7.73	22.32	0.21
34_509	1123	200-yr	4.52	186.75	188.18		188.20	0.007362	0.47	0.75	0.44	9.29	23.16	0.23
34_509	736	50-yr	3.40	185.96	187.15	186.65	187.15	0.001580	0.15	0.34	0.11	18.77	125.55	0.12
34_509	736	100-yr	3.78	185.96	187.16	186.65	187.16	0.001564	0.16	0.34	0.12	20.53	129.24	0.12
34_509	736	200-yr	4.52	185.96	187.20	186.74	187.20	0.001419	0.16	0.33	0.13	24.57	143.49	0.11
34_509	259	50-yr	3.40	184.97	186.11		186.13	0.003167	0.50	0.36	0.48	7.23	44.15	0.12
34_509	259	100-yr	3.78	184.97	186.13		186.14	0.003259	0.51	0.37	0.50	7.81	47.14	0.12
34_509	259	200-yr	4.52	184.97	186.14		186.16	0.003912	0.56	0.41	0.58	8.41	50.02	0.13
34_509	29	50-yr	3.40	184.50	185.63	185.44	185.64	0.001699	0.28	0.28	0.42	9.92	36.43	0.10
34_509	29	100-yr	3.78	184.50	185.65	185.45	185.66	0.001492	0.27	0.27	0.43	9.81	40.33	0.09
34_509	29	200-yr	4.52	184.50	185.71	185.46	185.71	0.001161	0.23	0.25	0.42	12.26	48.17	0.08
34_507	3971	50-yr	9.61	184.03	185.94	185.27	185.95	0.000633	0.35	0.23	0.28	31.85	120.85	0.07
34_507	3971	100-yr	10.68	184.03	185.97	185.28	185.97	0.000634	0.36	0.23	0.28	34.48	127.28	0.07
34_507	3971	200-yr	12.78	184.03	185.94	185.30	185.65	0.000490	0.34	0.21	0.27	43.98	144.12	0.06
34_507	3857	50-yr	9.61	183.91	185.20	185.19	185.31	0.004771	0.60	1.50	1.47	6.56	29.73	0.51
34_507	3857	100-yr	10.68	183.91	185.28	185.21	185.36	0.015577	0.77	1.07	1.29	9.15	36.33	0.35
34_507	3857	200-yr	12.78	183.91	185.50	185.25	185.53	0.003311	0.58	0.56	0.88	17.14	64.17	0.17
34_507	3585	50-yr	9.61	183.59	185.19	184.60	185.19	0.000071	0.13	0.08	0.08	78.82	235.95	0.03
34_507	3585	100-yr	10.68	183.59	185.29	184.62	185.29	0.000045	0.12	0.08	0.06	89.17	298.80	0.02
34_507	3585	200-yr	12.78	183.59	185.51	184.64	185.51	0.000014	0.07	0.05	0.05	189.06	374.82	0.01
34_507	3541	50-yr	9.61	183.56	185.18	184.20	185.18	0.002155		0.58	1.18	16.47	394.58	0.15
34_507	3541	100-yr	10.68	183.56	185.26	184.23	185.28	0.002106		0.58	1.23	17.65	393.65	0.15
34_507	3541	200-yr	12.78	183.56	185.47	184.30	185.50	0.001847		0.60	1.33	20.38	403.84	0.15
34_507	3530	Junction Rd	Culvert											
34_507	3514	50-yr	9.61	183.67	184.75	184.41	184.81	0.016465	2.26	1.05		8.91	190.92	0.39
34_507	3514	100-yr	10.68	183.67	184.77	184.44	184.85	0.016908	2.47	1.14		9.17	194.60	0.41
34_507	3514	200-yr	12.78	183.67	184.83	184.49	184.94	0.001253	0.89	0.31	0.41	33.34	172.00	0.11
34_507	3486	50-yr	9.61	183.63	184.74		184.75	0.000596	0.10	0.19	0.34	30.72	89.08	0.07
34_507	3486	100-yr	10.68	183.63	184.77		184.78	0.000584	0.10	0.19	0.35	33.10	90.68	0.07
34_507	3486	200-yr	12.78	183.63	184.81		184.82	0.000561	0.10	0.20	0.37	37.32	95.70	0.07
34_507	3170	50-yr	9.61	183.41	184.37		184.39	0.003613	0.28	0.50	0.57	18.85	46.68	0.18
34_507	3170	100-yr	10.68	183.41	184.39		184.41	0.003763	0.30	0.52	0.61	19.98	48.14	0.18
34_507	3170	200-yr	12.78	183.41	184.44		184.46	0.004082	0.32	0.56	0.66	22.09	51.36	0.15
34_507	3023	50-yr	9.61	183.19	183.99		184.00	0.002091	0.53	0.34	0.14	20.95	70.83	0.14
34_507	3023	100-yr	10.68	183.19	184.01		184.02	0.002071	0.55	0.35	0.15	22.45	71.74	0.14
34_507	3023	200-yr	12.78	183.19	184.05		184.07	0.001878	0.59	0.35	0.16	25.53	74.35	0.13
34_507	2854	50-yr	9.61	182.94	183.75		183.76	0.001070	0.45	0.23	0.20	26.81	88.74	0.10
34_507	2854	100-yr	10.68	182.94	183.77		183.78	0.001069	0.47	0.24	0.21	28.82	90.27	0.10
34_507	2854	200-yr	12.78	182.94	183.81		183.82	0.001055	0.50	0.25	0.24	32.67	93.42	0.10

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_507	2666	50-yr	9.61	182.68	183.51	183.31	183.53	0.002419	0.52	0.39	0.63	18.92	57.09	0.15
34_507	2666	100-yr	10.68	182.68	183.54	183.32	183.56	0.002260	0.53	0.39	0.64	20.55	57.89	0.14
34_507	2666	200-yr	12.78	182.68	183.60	183.35	183.61	0.002048	0.58	0.38	0.68	23.64	58.90	0.14
34_507	2374	50-yr	9.61	182.24	183.17	182.78	183.18	0.000794	0.45	0.25	0.47	22.89	52.51	0.09
34_507	2374	100-yr	10.68	182.24	183.20	182.79	183.21	0.000801	0.47	0.26	0.49	24.30	54.62	0.09
34_507	2374	200-yr	12.78	182.24	183.28	182.83	183.29	0.000758	0.48	0.26	0.51	26.16	64.19	0.09
34_507	2226	50-yr	9.61	182.02	183.01		183.02	0.001282	0.55	0.32	0.48	20.18	47.91	0.11
34_507	2226	100-yr	10.68	182.02	183.05		183.06	0.001184	0.56	0.32	0.48	22.18	49.43	0.11
34_507	2226	200-yr	12.78	182.02	183.15		183.16	0.000999	0.54	0.30	0.47	27.30	53.00	0.09
34_507	1845	50-yr	9.61	181.47	182.73		182.74	0.000508	0.38	0.23	0.38	26.13	52.66	0.07
34_507	1845	100-yr	10.68	181.47	182.82		182.83	0.000393	0.36	0.22	0.35	33.09	57.06	0.06
34_507	1845	200-yr	12.78	181.47	183.00		183.00	0.000294	0.32	0.19	0.31	43.81	66.06	0.05
34_507	1663	50-yr	9.61	181.20	182.66		182.66	0.000358	0.30	0.21	0.15	48.35	85.24	0.08
34_507	1663	100-yr	10.68	181.20	182.77		182.77	0.000202	0.29	0.18	0.14	58.93	88.07	0.05
34_507	1663	200-yr	12.78	181.20	182.96		182.97	0.000162	0.26	0.16	0.13	76.48	100.71	0.04
34_507	1524	50-yr	9.61	181.00	182.64		182.64	0.000134	0.14	0.14	0.20	62.70	108.48	0.04
34_507	1524	100-yr	10.68	181.00	182.76		182.76	0.000089	0.13	0.12	0.18	75.87	113.67	0.03
34_507	1524	200-yr	12.78	181.00	182.95		182.95	0.000055	0.12	0.10	0.15	99.52	125.20	0.03
34_507	1376	50-yr	9.61	180.79	182.62	181.67	182.62	0.000070	0.21	0.11	0.16	55.33	66.03	0.03
34_507	1376	100-yr	10.68	180.79	182.74	181.68	182.75	0.000058	0.20	0.10	0.16	63.62	80.54	0.03
34_507	1376	200-yr	12.78	180.79	182.95	181.71	182.95	0.000045	0.19	0.10	0.15	78.40	103.07	0.02
34_507	1349	50-yr	9.61	180.79	182.59	181.54	182.61	0.001859		0.51	1.25	17.54	110.62	0.13
34_507	1349	100-yr	10.68	180.79	182.71	181.56	182.74	0.001489		0.52	1.29	19.00	130.44	0.13
34_507	1349	200-yr	12.78	180.79	182.91	181.61	182.94	0.001409		0.55	1.39	21.39	163.48	0.13
34_507	1338	H D Townline Rd	Culvert											
34_507	1324	50-yr	9.61	181.00	182.30	181.54	182.34	0.003481		0.82	1.42	13.82	132.62	0.19
34_507	1324	100-yr	10.68	181.00	182.35	181.65	182.39	0.003685		0.66	1.52	14.26	146.23	0.29
34_507	1324	200-yr	12.78	181.00	182.38	181.70	182.44	0.004701		0.75	1.77	14.72	153.98	0.22
34_507	1148	50-yr	9.61	180.62	181.87		181.97	0.001332	0.27	0.41	0.29	31.62	57.98	0.12
34_507	1148	100-yr	10.68	180.62	182.10		182.11	0.000959	0.24	0.35	0.26	39.62	62.16	0.09
34_507	1148	200-yr	12.78	180.62	182.33		182.33	0.000480	0.22	0.29	0.23	54.23	66.44	0.07
34_507	1123	50-yr	9.61	180.57	181.93		181.94	0.001468	0.29	0.42	0.29	28.92	49.64	0.12
34_507	1123	100-yr	10.68	180.57	182.08		182.08	0.000929	0.26	0.36	0.26	36.49	53.83	0.10
34_507	1123	200-yr	12.78	180.57	182.32		182.32	0.000533	0.24	0.31	0.21	51.45	70.80	0.08
34_507	1074	50-yr	9.61	180.46	181.92		181.92	0.000105	0.09	0.11	0.18	68.21	118.65	0.03
34_507	1074	100-yr	10.68	180.46	182.07		182.07	0.000060	0.08	0.09	0.16	86.28	120.47	0.03
34_507	1074	200-yr	12.78	180.46	182.31		182.31	0.000033	0.07	0.08	0.15	115.91	125.94	0.02
34_507	1020	50-yr	9.61	180.34	181.88	181.06	181.91	0.000377	0.21	0.74	0.23	19.48	190.68	0.20
34_507	1020	100-yr	10.68	180.34	182.04	181.13	182.06	0.000313	0.22	0.72	0.23	22.27	188.34	0.18
34_507	1020	200-yr	12.78	180.34	182.28	181.20	182.31	0.000263	0.23	0.73	0.25	26.61	187.09	0.17
34_507	1010	Abandon Railway	Culvert											
34_507	1003	50-yr	9.61	180.52	181.66	181.27	181.72	0.001522	0.32	1.19	0.32	11.05	105.58	0.39
34_507	1003	100-yr	10.68	180.52	181.62	181.31	181.67	0.001061	0.32	1.10	0.32	13.46	119.32	0.33
34_507	1003	200-yr	12.78	180.52	182.05	181.38	182.10	0.000781	0.33	1.07	0.33	16.81	129.25	0.29
34_507	996	50-yr	9.61	180.51	181.68	181.31	181.68	0.000454	0.14	0.66	0.16	44.98	95.92	0.21
34_507	996	100-yr	10.68	180.51	181.64	181.33	181.64	0.000264	0.12	0.55	0.16	50.44	95.47	0.16
34_507	996	200-yr	12.78	180.51	182.07	181.36	182.07	0.000153	0.11	0.47	0.14	62.67	105.78	0.13
34_507	852	50-yr	9.61	180.31	181.62		181.63	0.000311	0.32	0.58	0.28	26.37	48.62	0.17
34_507	852	100-yr	10.68	180.31	181.61		181.62	0.000165	0.27	0.46	0.23	36.20	57.01	0.13
34_507	852	200-yr	12.78	180.31	182.05		182.05	0.000104	0.25	0.41	0.17	53.08	65.63	0.11
34_507	519	50-yr	9.61	179.64	181.61		181.61	0.000031	0.14	0.22	0.08	68.50	100.06	0.06
34_507	519	100-yr	10.68	179.64	181.60		181.60	0.000019	0.12	0.19	0.08	88.61	106.57	0.05
34_507	519	200-yr	12.78	179.64	182.04		182.04	0.000013	0.11	0.17	0.08	115.39	114.10	0.04
34_507	311	50-yr	9.61	179.54	181.60		181.60	0.000022	0.13	0.21	0.11	71.37	75.17	0.05
34_507	311	100-yr	10.68	179.54	181.60		181.60	0.000016	0.12	0.19	0.09	86.98	84.68	0.04
34_507	311	200-yr	12.78	179.54	182.04		182.04	0.000012	0.12	0.18	0.08	111.38	120.14	0.04
34_507	117	50-yr	9.61	179.26	181.60		181.60	0.000007	0.09	0.13	0.08	104.88	79.71	0.03
34_507	117	100-yr	10.68	179.26	181.60		181.60	0.000006	0.08	0.13	0.08	121.96	93.94	0.03
34_507	117	200-yr	12.78	179.26	182.04		182.04	0.000005	0.07	0.13	0.06	146.46	105.15	0.03
34_507	111	50-yr	9.61	179.26	181.59	179.95	181.60	0.000051	0.26	0.37	0.28	29.44	81.76	0.08
34_507	111	100-yr	10.68	179.26	181.79	179.99	181.79	0.000045	0.27	0.37	0.28	32.55	96.62	0.08
34_507	111	200-yr	12.78	179.26	182.04	180.09	182.04	0.000009	0.11	0.18	0.14	104.69	103.37	0.03
34_507	98	Crt Rd	Culvert											
34_507	81	50-yr	9.61	179.30	180.47	180.00	180.51	0.000945	0.37	0.99	0.45	12.92	56.64	0.30
34_507	81	100-yr	10.68	179.30	180.50	180.04	180.55	0.001031	0.40	1.05	0.50	13.50	57.62	0.32
34_507	81	200-yr	12.78	179.30	180.58	180.08	180.60	0.000544	0.25	0.80	0.32	31.76	60.63	0.23
34_507	74	50-yr	9.61	179.29	180.48		180.49	0.000700	0.28	0.80	0.32	25.19	57.01	0.24
34_507	74	100-yr	10.68	179.29	180.51		180.53	0.000708	0.30	0.82	0.34	27.12	57.95	0.25
34_507	74	200-yr	12.78	179.29	180.58		180.59	0.000705	0.32	0.85	0.38	30.83	58.61	0.25

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m ³ /s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m ²)	Trip Width (m)	Froude # Cnl
34_507	49	50-yr	9.61	179.24	180.40		180.48	0.000601	0.31	0.75	0.23	23.64	52.17	0.23
34_507	49	100-yr	10.68	179.24	180.50		180.51	0.000623	0.32	0.79	0.26	25.37	53.74	0.24
34_507	49	200-yr	12.78	179.24	180.56		180.58	0.000644	0.33	0.82	0.30	28.80	56.33	0.24
34_513	627	50-yr	1.48	186.49	187.93		187.94	0.005482	0.39	0.55	0.32	2.80	7.54	0.17
34_513	627	100-yr	1.65	186.49	187.96		187.98	0.005485	0.41	0.58	0.39	3.09	9.06	0.17
34_513	627	200-yr	2.00	186.49	188.00		188.02	0.006239	0.46	0.62	0.45	3.46	11.56	0.18
34_513	409	50-yr	1.48	185.71	186.88		186.89	0.004306	0.21	0.49	0.27	3.07	5.22	0.18
34_513	409	100-yr	1.65	185.71	186.92		186.93	0.004245	0.17	0.50	0.34	3.38	9.67	0.18
34_513	409	200-yr	2.00	185.71	187.00		187.01	0.005536	0.28	0.49	0.39	4.53	19.36	0.17
34_513	233	50-yr	1.48	185.09	186.30		186.30	0.002553	0.28	0.40	0.30	3.85	9.53	0.14
34_513	233	100-yr	1.65	185.09	186.31		186.32	0.002941	0.31	0.43	0.33	3.96	10.05	0.15
34_513	233	200-yr	2.00	185.09	186.30		186.32	0.004460	0.38	0.53	0.40	3.92	9.84	0.19
34_513	124	50-yr	1.48	184.70	185.81		185.82	0.009113	0.34	0.83	0.25	2.70	20.32	0.23
34_513	124	100-yr	1.65	184.70	185.84		185.85	0.009609	0.36	0.55	0.24	3.49	27.09	0.25
34_513	124	200-yr	2.00	184.70	185.90		185.91	0.003194	0.36	0.40	0.24	5.39	35.27	0.14
34_517	1193	50-yr	1.24	189.58	190.16		190.17	0.003476	0.23	0.32	0.30	4.10	36.27	0.18
34_517	1193	100-yr	1.38	189.55	190.17		190.18	0.003483	0.23	0.33	0.31	4.47	39.91	0.16
34_517	1193	200-yr	1.66	189.55	190.19	189.98	190.19	0.003548	0.25	0.34	0.33	5.17	45.80	0.16
34_517	832	50-yr	1.24	187.92	188.70		188.70	0.004827	0.12	0.41	0.16	3.10	12.64	0.19
34_517	832	100-yr	1.38	187.92	188.72		188.73	0.004732	0.19	0.42	0.17	3.48	17.95	0.19
34_517	832	200-yr	1.66	187.92	188.78		188.78	0.004555	0.28	0.43	0.24	4.17	22.43	0.19
34_517	899	50-yr	1.24	187.32	188.03		188.04	0.009047	0.27	0.41	0.31	3.14	14.41	0.20
34_517	899	100-yr	1.38	187.32	188.05		188.06	0.009379	0.29	0.43	0.31	3.36	17.19	0.20
34_517	899	200-yr	1.66	187.32	188.07		188.08	0.009827	0.30	0.47	0.35	3.82	21.44	0.21
34_517	541	50-yr	1.24	186.00	187.50		187.50	0.003462	0.26	0.34	0.28	3.87	16.39	0.14
34_517	541	100-yr	1.38	186.00	187.52		187.53	0.003350	0.23	0.34	0.30	4.39	23.78	0.14
34_517	541	200-yr	1.66	186.00	187.55		187.56	0.002217	0.27	0.35	0.29	5.25	28.40	0.13
34_517	402	50-yr	1.24	185.98	186.71		186.74	0.020721		0.80		1.96	3.38	0.38
34_517	402	100-yr	1.38	185.98	186.73		186.76	0.022791		0.85		1.83	3.45	0.39
34_517	402	200-yr	1.66	185.98	186.77		186.81	0.026785		0.94		1.76	3.57	0.43
34_517	320	50-yr	1.24	185.61	186.38		186.38	0.001789	0.19	0.28	0.20	4.86	17.93	0.12
34_517	320	100-yr	1.38	185.61	186.40		186.41	0.001744	0.21	0.27	0.23	6.30	19.65	0.12
34_517	320	200-yr	1.66	185.61	186.44		186.45	0.001585	0.18	0.28	0.25	6.31	28.58	0.12
34_517	200	50-yr	1.24	185.07	185.67		185.74	0.060117		1.18		1.05	2.57	0.59
34_517	200	100-yr	1.38	185.07	185.70		185.78	0.061840		1.23		1.12	2.65	0.61
34_517	200	200-yr	1.66	185.07	185.74	185.60	185.84	0.067764	0.17	1.35	0.39	1.24	2.94	0.64
34_514	2848	50-yr	10.03	188.82	189.72		188.74	0.000668	0.21	0.77	0.38	27.15	68.17	0.28
34_514	2848	100-yr	11.18	188.82	189.76		189.77	0.000858	0.21	0.79	0.40	29.59	71.60	0.28
34_514	2848	200-yr	13.39	188.82	189.82		188.83	0.000635	0.22	0.81	0.43	33.96	75.91	0.28
34_514	2566	50-yr	10.03	188.37	189.45		189.48	0.001359	0.14	0.96	0.19	21.39	81.48	0.35
34_514	2566	100-yr	11.16	188.37	189.48		189.52	0.001351	0.15	0.99	0.20	23.76	94.20	0.35
34_514	2566	200-yr	13.39	188.37	189.56		189.59	0.001265	0.16	1.02	0.23	28.54	95.98	0.35
34_514	2338	50-yr	10.03	188.01	189.27	188.94	189.29	0.000731	0.19	0.79	0.37	22.08	47.72	0.26
34_514	2338	100-yr	11.16	188.01	189.30	188.97	189.33	0.000753	0.20	0.83	0.40	24.44	49.63	0.26
34_514	2338	200-yr	13.39	188.01	189.37	189.01	189.40	0.000633	0.21	0.91	0.40	28.05	58.25	0.29
34_514	1906	50-yr	10.03	187.32	188.58	188.36	188.69	0.003774	0.37	1.46	0.13	9.38	33.75	0.58
34_514	1906	100-yr	11.16	187.32	188.63	188.39	188.73	0.003585	0.42	1.50	0.22	9.70	40.00	0.55
34_514	1906	200-yr	13.39	187.32	188.70		188.79	0.003169	0.48	1.49	0.32	12.94	48.18	0.53
34_514	1614	50-yr	10.03	186.86	188.27		188.29	0.000886	0.23	0.78	0.19	20.88	43.21	0.28
34_514	1614	100-yr	11.16	186.86	188.31		188.34	0.000700	0.25	0.83	0.21	22.46	43.72	0.26
34_514	1614	200-yr	13.39	186.86	188.38		188.41	0.000722	0.27	0.88	0.24	25.90	44.69	0.27
34_514	1430	50-yr	10.03	186.56	188.06		188.12	0.001509	0.28	1.13	0.23	18.88	40.38	0.37
34_514	1430	100-yr	11.16	186.56	188.11		188.18	0.001571	0.30	1.18	0.24	20.14	41.85	0.36
34_514	1430	200-yr	13.39	186.56	188.17		188.23	0.001750	0.34	1.30	0.25	23.02	51.45	0.40
34_514	1245	50-yr	10.03	186.27	187.76		187.82	0.001947	0.30	1.21	0.35	11.26	41.38	0.42
34_514	1245	100-yr	11.16	186.27	187.79		187.86	0.001903	0.34	1.23	0.40	12.81	42.98	0.41
34_514	1245	200-yr	13.39	186.27	187.86		187.92	0.001765	0.42	1.24	0.47	15.77	44.00	0.40
34_514	1021	50-yr	10.03	185.91	187.48		187.51	0.001032	0.23	0.94	0.15	18.87	45.34	0.31
34_514	1021	100-yr	11.16	185.91	187.52		187.56	0.001008	0.25	0.96	0.16	20.96	46.78	0.31
34_514	1021	200-yr	13.39	185.91	187.60		187.64	0.000984	0.29	1.00	0.17	24.63	47.66	0.31
34_514	850	50-yr	10.03	185.64	187.04	186.82	187.19	0.004668	0.47	1.77	0.15	6.46	16.07	0.63
34_514	850	100-yr	11.16	185.64	187.06	186.90	187.24	0.004711	0.54	1.84	0.19	7.27	20.71	0.64
34_514	850	200-yr	13.39	185.64	187.15	187.04	187.32	0.004600	0.59	1.93	0.25	9.22	28.09	0.64
34_514	599	50-yr	10.03	185.24	186.58		186.62	0.001278	0.44	1.00	0.46	13.27	28.48	0.34
34_514	599	100-yr	11.16	185.24	186.61		186.66	0.001314	0.47	1.04	0.50	14.25	28.97	0.35
34_514	599	200-yr	13.39	185.24	186.68		186.73	0.001395	0.49	1.12	0.55	16.22	31.97	0.36
34_514	317	50-yr	10.03	184.80	186.21		186.24	0.001439	0.44	1.04	0.28	17.88	59.46	0.34
34_514	317	100-yr	11.16	184.80	186.23		186.26	0.001491	0.47	1.08	0.28	18.87	60.17	0.35
34_514	317	200-yr	13.39	184.80	186.26		186.30	0.001598	0.53	1.14	0.31	21.07	61.46	0.36
34_514	84	50-yr	10.03	184.43	185.81		185.85	0.002507	0.54	1.25	0.34	14.78	54.17	0.42
34_514	84	100-yr	11.16	184.43	185.84		185.88	0.002273	0.56	1.22	0.31	16.90	54.73	0.40

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_514	84	200-yr	13.39	184.43	185.90		185.93	0.002035	0.60	1.20	0.31	19.43	55.70	0.38
34_512	126	50-yr	9.02	184.23	185.72	185.48	185.73	0.000447	0.30	0.64	0.22	24.73	64.18	0.20
34_512	126	100-yr	10.03	184.23	185.75	185.50	185.76	0.000437	0.31	0.65	0.24	26.36	65.59	0.20
34_512	126	200-yr	12.00	184.23	185.81	185.52	185.82	0.000445	0.34	0.67	0.26	30.57	67.62	0.20
34_512	51	50-yr	9.02	184.11	185.70		185.70	0.000293	0.30	0.62	0.19	29.43	67.94	0.15
34_512	51	100-yr	10.03	184.11	185.73		185.74	0.000297	0.31	0.63	0.21	31.83	70.47	0.15
34_512	51	200-yr	12.00	184.11	185.78		185.79	0.000317	0.33	0.66	0.23	35.65	73.63	0.16
34_800	425	50-yr	76.77	173.11	175.81		175.84	0.000318	0.23	0.68	0.25	184.84	133.57	0.20
34_800	425	100-yr	81.65	173.11	175.95		175.98	0.000277	0.23	0.66	0.25	184.10	137.01	0.19
34_800	425	200-yr	94.12	173.11	176.17		176.20	0.000262	0.23	0.67	0.27	215.75	145.42	0.19
34_800	325	50-yr	76.77	173.09	175.82		175.83	0.000045	0.11	0.39	0.14	492.55	293.24	0.08
34_800	325	100-yr	81.65	173.09	175.96		175.97	0.000040	0.11	0.38	0.14	534.08	294.90	0.07
34_800	325	200-yr	94.12	173.09	176.19		176.19	0.000037	0.11	0.39	0.15	600.30	297.70	0.07
34_800	149	50-yr	76.77	173.06	175.81		175.82	0.000109	0.17	0.59	0.25	308.33	189.68	0.12
34_800	149	100-yr	81.65	173.06	175.95		175.96	0.000097	0.17	0.58	0.25	335.50	191.28	0.11
34_800	149	200-yr	94.12	173.06	176.17		176.18	0.000089	0.18	0.58	0.26	376.57	192.98	0.11
34_503	1310	50-yr	3.25	178.53	179.37		179.37	0.000161	0.20	0.11	0.20	17.73	40.41	0.04
34_503	1310	100-yr	3.61	178.53	179.40		179.41	0.000164	0.21	0.11	0.20	19.16	42.81	0.04
34_503	1310	200-yr	4.32	178.53	179.46		179.46	0.000170	0.22	0.12	0.21	21.77	46.73	0.04
34_503	1119	50-yr	3.25	177.94	179.30		179.30	0.001492	0.49	0.38	0.45	7.63	17.30	0.12
34_503	1119	100-yr	3.61	177.94	179.33		179.34	0.001510	0.51	0.39	0.46	8.23	21.39	0.12
34_503	1119	200-yr	4.32	177.94	179.38		179.39	0.001508	0.53	0.40	0.44	8.86	25.01	0.12
34_503	1025	50-yr	3.25	177.68	179.17		179.18	0.001101	0.45	0.29	0.36	8.45	22.80	0.08
34_503	1025	100-yr	3.61	177.68	179.20		179.21	0.001098	0.46	0.29	0.37	9.19	24.81	0.08
34_503	1025	200-yr	4.32	177.68	179.26		179.27	0.001091	0.47	0.30	0.37	10.71	28.70	0.08
34_503	910	50-yr	3.25	177.30	179.04		179.05	0.001090	0.43	0.31	0.38	11.75	32.78	0.08
34_503	910	100-yr	3.61	177.30	179.06		179.08	0.001074	0.43	0.32	0.38	12.87	34.57	0.08
34_503	910	200-yr	4.32	177.30	179.14		179.14	0.001042	0.44	0.32	0.39	15.03	37.91	0.08
34_503	749	50-yr	3.25	176.80	178.71	177.67	178.73	0.004618	0.40	0.68	0.34	6.79	16.14	0.16
34_503	749	100-yr	3.61	176.80	178.76	177.95	178.77	0.004561	0.41	0.66	0.34	7.66	18.68	0.16
34_503	749	200-yr	4.32	176.80	178.83	178.08	178.84	0.004348	0.42	0.67	0.36	8.05	20.34	0.16
34_503	624	50-yr	3.25	176.42	178.21		178.23	0.003561	0.25	0.58	0.20	6.86	14.58	0.17
34_503	624	100-yr	3.61	176.42	178.25		178.26	0.003567	0.28	0.58	0.23	7.42	14.76	0.17
34_503	624	200-yr	4.32	176.42	178.32		178.34	0.003753	0.33	0.61	0.26	8.56	16.01	0.17
34_503	478	50-yr	3.25	175.97	177.64		177.65	0.004453	0.33	0.62	0.30	6.95	14.91	0.18
34_503	478	100-yr	3.61	175.97	177.66		177.70	0.004329	0.35	0.63	0.33	7.22	15.24	0.18
34_503	478	200-yr	4.32	175.97	177.77		177.79	0.003970	0.35	0.63	0.36	8.58	16.09	0.17
34_503	293	50-yr	3.25	175.40	177.03		177.04	0.002803	0.68	0.50	0.50	6.08	10.38	0.15
34_503	293	100-yr	3.61	175.40	177.05		177.07	0.002845	0.72	0.53	0.54	6.34	10.71	0.15
34_503	293	200-yr	4.32	175.40	177.09		177.11	0.002480	0.82	0.59	0.62	6.70	11.21	0.17
34_503	80	50-yr	3.25	174.74	177.03		177.03	0.000008	0.09	0.04	0.05	49.62	39.86	0.01
34_503	80	100-yr	3.61	174.74	177.06		177.06	0.000010	0.10	0.05	0.06	50.60	40.31	0.01
34_503	80	200-yr	4.32	174.74	177.09		177.09	0.000013	0.11	0.06	0.07	51.96	40.61	0.01
34_503	16	50-yr	3.25	174.55	177.03		177.03	0.000000	0.02	0.01	0.02	193.57	122.84	0.00
34_503	16	100-yr	3.61	174.55	177.06		177.06	0.000000	0.02	0.01	0.02	196.57	123.72	0.00
34_503	16	200-yr	4.32	174.55	177.09		177.09	0.000000	0.02	0.01	0.02	200.77	124.96	0.00
34_504	3028	50-yr	5.06	180.05	181.18	180.79	181.24	0.001705	0.18	1.14	0.25	5.73	98.48	0.39
34_504	3028	100-yr	5.64	180.05	181.23	180.84	181.29	0.001603	0.17	1.15	0.26	6.86	126.78	0.38
34_504	3028	200-yr	6.78	180.05	181.29	180.92	181.32	0.001120	0.13	1.00	0.24	16.90	201.64	0.32
34_504	2848	50-yr	5.06	179.74	180.85	180.46	180.90	0.002060		1.04		4.89	18.73	0.41
34_504	2848	100-yr	5.64	179.74	180.86	180.50	180.95	0.002228		1.10		5.15	22.30	0.43
34_504	2848	200-yr	6.78	179.74	180.95	180.57	181.02	0.002494		1.20		5.86	27.90	0.45
34_504	2652	50-yr	5.06	179.41	180.54	180.10	180.58	0.001337	0.16	0.89	0.16	6.30	91.96	0.34
34_504	2652	100-yr	5.64	179.41	180.64	180.13	180.67	0.000899	0.20	0.90	0.20	9.13	110.34	0.28
34_504	2652	200-yr	6.78	179.41	180.81	180.20	180.83	0.000478	0.13	0.68	0.20	16.47	166.67	0.21
34_504	2450	50-yr	5.06	179.08	180.58	179.78	180.58	0.000003	0.03	0.06	0.03	155.14	346.20	0.02
34_504	2450	100-yr	5.64	179.08	180.66	179.80	180.66	0.000002	0.03	0.05	0.03	186.24	360.91	0.01
34_504	2450	200-yr	6.78	179.08	180.82	179.84	180.82	0.000001	0.03	0.04	0.03	238.75	386.62	0.01
34_504	2311	50-yr	5.06	178.64	180.56		180.56	0.000006	0.04	0.09	0.03	118.58	277.04	0.02
34_504	2311	100-yr	5.64	178.64	180.66		180.66	0.000004	0.04	0.07	0.03	146.94	299.72	0.02
34_504	2311	200-yr	6.78	178.64	180.82		180.82	0.000003	0.04	0.06	0.03	184.89	307.72	0.02
34_504	2306	50-yr	5.06	178.89	180.58		180.58	0.000051	0.14	0.26	0.16	27.18	269.18	0.07
34_504	2306	100-yr	5.64	178.89	180.66		180.66	0.000043	0.14	0.25	0.16	30.75	296.18	0.07
34_504	2306	200-yr	6.78	178.89	180.82		180.82	0.000036	0.15	0.25	0.16	36.47	308.66	0.06
34_504	2283	Abandon Railway	Culvert											
34_504	2262	50-yr	4.66	178.71	180.25	179.34	180.25	0.000045	0.13	0.23	0.14	27.08	184.86	0.07
34_504	2262	100-yr	5.18	178.71	180.31	179.37	180.31	0.000043	0.14	0.23	0.15	29.24	194.11	0.07
34_504	2262	200-yr	6.03	178.71	180.41	179.42	180.41	0.000041	0.15	0.24	0.15	32.89	218.76	0.07
34_504	2252	50-yr	4.66	178.69	180.25		180.25	0.000017	0.07	0.14	0.06	63.91	155.17	0.04
34_504	2252	100-yr	5.18	178.69	180.31		180.31	0.000014	0.07	0.14	0.06	73.64	180.06	0.04

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_504	2252	200-yr	6.03	178.68	180.41		180.41	0.000012	0.07	0.13	0.05	93.47	215.31	0.04
34_504	2205	50-yr	4.66	178.60	180.25		180.25	0.000065	0.09	0.26	0.13	30.53	71.88	0.08
34_504	2205	100-yr	5.18	178.60	180.31		180.31	0.000056	0.09	0.25	0.13	34.93	78.52	0.07
34_504	2205	200-yr	6.03	178.60	180.41		180.41	0.000043	0.09	0.23	0.13	44.28	105.96	0.06
34_504	2079	50-yr	4.66	178.33	180.25		180.25	0.000018	0.05	0.16	0.05	66.05	210.23	0.04
34_504	2079	100-yr	5.18	178.33	180.31		180.31	0.000014	0.05	0.15	0.05	79.19	223.85	0.04
34_504	2079	200-yr	6.03	178.33	180.41		180.41	0.000010	0.04	0.13	0.05	102.77	246.38	0.03
34_504	2065	50-yr	4.66	178.30	180.34		180.25	0.000078	0.17	0.35	0.28	16.18	186.14	0.09
34_504	2065	100-yr	5.18	178.30	180.30		180.31	0.000080	0.19	0.37	0.27	17.10	200.05	0.09
34_504	2065	200-yr	6.03	178.30	180.40		180.41	0.000064	0.21	0.40	0.30	18.61	227.98	0.08
34_504	2050	Abandon Railway	Culvert											
34_504	2038	50-yr	5.43	178.53	179.76	179.03	179.77	0.000252	0.13	0.50	0.10	12.14	27.15	0.18
34_504	2036	100-yr	6.04	178.53	179.78	179.05	179.79	0.000298	0.15	0.55	0.11	12.37	28.51	0.17
34_504	2036	200-yr	7.56	178.53	179.81	179.11	179.83	0.000414	0.18	0.66	0.13	12.95	34.02	0.20
34_504	2024	50-yr	5.43	178.50	179.76	179.10	179.77	0.000360	0.10	0.51	0.11	11.86	30.90	0.18
34_504	2024	100-yr	6.04	178.50	179.77	179.13	179.79	0.000410	0.12	0.55	0.12	12.36	32.12	0.19
34_504	2024	200-yr	7.56	178.50	179.81	179.20	179.83	0.000542	0.18	0.65	0.14	13.51	34.58	0.22
34_504	1972	50-yr	5.43	178.40	179.58	179.34	179.71	0.004858	0.38	1.84	0.34	5.21	36.65	0.55
34_504	1972	100-yr	6.04	178.40	179.64	179.39	179.73	0.004008	0.41	1.53	0.33	7.21	52.00	0.50
34_504	1972	200-yr	7.56	178.40	179.73		179.77	0.002067	0.40	1.18	0.37	12.96	64.33	0.37
34_504	1841	50-yr	5.43	178.15	178.35	178.50	179.38	0.001310	0.38	1.00	0.31	8.49	13.89	0.34
34_504	1841	100-yr	6.04	178.15	178.40	178.55	179.45	0.001280	0.36	1.02	0.30	7.28	15.90	0.34
34_504	1841	200-yr	7.56	178.15	179.51	179.04	179.57	0.001232	0.34	1.09	0.34	9.45	49.77	0.34
34_504	1715	50-yr	5.43	177.80	179.14		179.20	0.001794	0.19	1.08	0.18	8.06	7.35	0.38
34_504	1715	100-yr	6.04	177.90	179.19		179.26	0.001778	0.21	1.13	0.20	5.48	8.18	0.39
34_504	1715	200-yr	7.56	177.90	179.30		179.38	0.001824	0.30	1.24	0.30	8.45	9.99	0.40
34_504	1534	50-yr	5.43	177.55	178.78	178.36	179.85	0.002158	0.19	1.21	0.25	4.81	10.24	0.42
34_504	1534	100-yr	6.04	177.55	178.82	178.41	178.90	0.002180	0.21	1.26	0.33	5.28	11.02	0.43
34_504	1534	200-yr	7.56	177.55	178.92	178.51	179.01	0.002206	0.28	1.38	0.34	6.59	17.18	0.44
34_504	1353	50-yr	5.43	177.19	178.43		178.49	0.001739	0.18	1.11	0.15	5.21	13.02	0.38
34_504	1353	100-yr	6.04	177.19	178.48		178.54	0.001750	0.19	1.15	0.22	5.89	16.72	0.39
34_504	1353	200-yr	7.56	177.19	178.54		178.62	0.002005	0.23	1.29	0.30	7.24	24.79	0.42
34_504	1177	50-yr	5.43	176.85	178.03		178.11	0.002721		1.25		4.34	5.63	0.48
34_504	1177	100-yr	6.04	176.85	178.15		178.21	0.002911	0.11	1.16	0.19	6.25	28.55	0.41
34_504	1177	200-yr	7.56	176.85	178.45		178.46	0.003437	0.13	0.98	0.23	20.20	67.48	0.25
34_504	856	50-yr	5.43	176.23	178.01		178.01	0.000089	0.18	0.35	0.06	24.40	38.18	0.09
34_504	856	100-yr	6.04	176.23	178.13		178.13	0.000067	0.17	0.32	0.06	20.24	39.61	0.08
34_504	856	200-yr	7.56	176.23	178.43		178.43	0.000033	0.15	0.25	0.04	55.69	165.86	0.06
34_504	838	50-yr	5.43	176.20	178.00	176.79	178.01	0.000101	0.25	0.40	0.01	15.08	36.82	0.10
34_504	838	100-yr	6.04	176.20	178.12	176.82	178.13	0.000093	0.27	0.40	0.01	16.56	40.03	0.10
34_504	838	200-yr	7.56	176.20	178.42	176.91	178.43	0.000077	0.29	0.41	0.02	20.25	136.63	0.08
34_504	820	Dunsmuir Rd	Culvert											
34_504	798	50-yr	5.43	175.62	177.14	176.17	177.15	0.000175	0.08	0.45	0.05	12.90	12.21	0.13
34_504	798	100-yr	6.04	175.62	177.18	176.21	177.19	0.000194	0.09	0.48	0.05	12.94	12.30	0.14
34_504	798	200-yr	7.56	175.62	177.25	176.28	177.26	0.000250	0.11	0.57	0.06	13.83	15.57	0.16
34_504	774	50-yr	5.43	175.00	177.10		177.14	0.000688	0.07	0.85	0.12	6.48	8.26	0.28
34_504	774	100-yr	6.04	175.00	177.13		177.17	0.000688	0.09	0.91	0.13	6.74	8.82	0.29
34_504	774	200-yr	7.56	175.00	177.18		177.24	0.001295	0.13	1.08	0.14	7.28	11.44	0.34
34_504	713	50-yr	5.43	175.51	177.07		177.09	0.000501	0.08	0.68	0.28	11.51	26.00	0.21
34_504	713	100-yr	6.04	175.51	177.10		177.12	0.000543	0.09	0.73	0.30	12.27	27.31	0.21
34_504	713	200-yr	7.56	175.51	177.15		177.17	0.000673	0.11	0.84	0.35	13.64	28.98	0.24
34_504	617	50-yr	5.43	175.37	177.04		177.06	0.000240	0.10	0.56	0.08	23.05	54.36	0.15
34_504	617	100-yr	6.04	175.37	177.07		177.08	0.000266	0.11	0.60	0.10	24.46	55.23	0.16
34_504	617	200-yr	7.56	175.37	177.11		177.13	0.000359	0.13	0.71	0.12	26.61	57.66	0.19
34_504	518	50-yr	5.43	175.23	177.04		177.04	0.000078	0.08	0.33	0.14	30.34	58.79	0.09
34_504	518	100-yr	6.04	175.23	177.06		177.06	0.000089	0.09	0.35	0.14	39.81	60.03	0.09
34_504	518	200-yr	7.56	175.23	177.10		177.10	0.000122	0.11	0.42	0.16	41.95	61.30	0.11
34_504	327	50-yr	5.43	174.95	177.03		177.03	0.000011	0.06	0.15	0.09	52.01	58.63	0.04
34_504	327	100-yr	6.04	174.95	177.06		177.06	0.000013	0.07	0.16	0.10	53.95	59.09	0.04
34_504	327	200-yr	7.56	174.95	177.09		177.09	0.000018	0.08	0.20	0.12	55.96	60.28	0.05
34_504	189	50-yr	5.43	174.75	177.03		177.03	0.000003	0.09	0.07	0.04	108.41	80.74	0.02
34_504	189	100-yr	6.04	174.75	177.06		177.06	0.000003	0.05	0.08	0.05	110.63	91.22	0.02
34_504	189	200-yr	7.56	174.75	177.09		177.09	0.000004	0.06	0.10	0.06	113.72	91.70	0.02
34_506	885	50-yr	11.99	179.48	180.43		180.44	0.000663	0.44	0.79	0.48	23.19	52.56	0.28
34_506	885	100-yr	13.29	179.48	180.46		180.47	0.000662	0.43	0.81	0.50	24.89	53.38	0.28
34_506	885	200-yr	15.84	179.48	180.52		180.54	0.000642	0.48	0.84	0.53	26.23	54.64	0.28
34_506	782	50-yr	11.99	179.32	180.28		180.31	0.001982	0.63	1.16	0.58	16.33	44.17	0.42
34_506	782	100-yr	13.29	179.32	180.30		180.34	0.002001	0.65	1.20	0.61	17.57	45.91	0.42
34_506	782	200-yr	15.84	179.32	180.38		180.42	0.001802	0.62	1.20	0.64	21.12	48.39	0.41

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Twp Width (m)	Froude # Cfl
34_506	682	50-yr	11.99	179.18	185.15		180.17	0.001126	0.43	0.87	0.45	22.56	62.70	0.32
34_506	682	100-yr	13.29	179.18	185.18		180.20	0.001075	0.44	0.87	0.47	24.63	63.68	0.31
34_506	682	200-yr	15.84	179.18	185.28		180.30	0.000799	0.44	0.81	0.44	31.41	70.59	0.27
34_506	574	50-yr	11.99	179.04	180.00		180.02	0.001513	0.26	1.01	0.39	26.70	69.95	0.37
34_506	574	100-yr	13.29	179.04	180.05		180.07	0.001318	0.26	0.98	0.39	30.31	72.75	0.35
34_506	574	200-yr	15.84	179.04	180.20		180.21	0.000773	0.25	0.84	0.36	41.55	79.83	0.27
34_506	417	50-yr	11.99	178.83	179.84		179.86	0.000923	0.48	0.79	0.43	23.44	57.73	0.28
34_506	417	100-yr	13.29	178.83	179.94		179.95	0.000603	0.42	0.69	0.40	28.97	59.58	0.23
34_506	417	200-yr	15.84	178.83	180.14		180.15	0.000305	0.38	0.56	0.34	41.48	68.02	0.17
34_506	216	50-yr	11.99	178.56	179.81		179.81	0.000118	0.21	0.35	0.22	51.77	86.23	0.11
34_506	216	100-yr	13.29	178.56	179.91		179.92	0.000089	0.20	0.32	0.21	60.96	89.37	0.10
34_506	216	200-yr	15.84	178.56	180.13		180.13	0.000055	0.18	0.28	0.19	80.42	94.32	0.08
34_506	27	50-yr	11.99	178.30	179.79		179.79	0.000108	0.20	0.36	0.21	52.41	82.28	0.10
34_506	27	100-yr	13.29	178.30	179.90		179.90	0.000082	0.19	0.34	0.20	61.82	86.64	0.09
34_506	27	200-yr	15.84	178.30	180.11		180.12	0.000062	0.19	0.32	0.16	82.82	114.45	0.08
34_511	5081	50-yr	11.65	183.96	185.68		185.69	0.000117	0.12	0.39	0.18	59.85	139.91	0.10
34_511	5081	100-yr	12.94	183.96	185.72		185.72	0.000117	0.13	0.40	0.19	64.80	144.67	0.10
34_511	5081	200-yr	15.44	183.96	185.77		185.77	0.000125	0.13	0.42	0.20	72.55	153.56	0.11
34_511	4902	50-yr	11.65	183.78	185.66		185.67	0.000098	0.21	0.40	0.15	55.83	105.18	0.10
34_511	4902	100-yr	12.94	183.78	185.70		185.70	0.000101	0.22	0.41	0.16	59.49	108.19	0.10
34_511	4902	200-yr	15.44	183.78	185.75		185.75	0.000118	0.24	0.45	0.18	65.01	114.28	0.11
34_511	4748	50-yr	11.65	183.63	185.65		185.65	0.000088	0.18	0.40	0.13	57.09	115.12	0.10
34_511	4748	100-yr	12.94	183.63	185.68		185.69	0.000095	0.18	0.42	0.14	61.00	120.61	0.10
34_511	4748	200-yr	15.44	183.63	185.73		185.73	0.000110	0.20	0.46	0.16	66.92	127.51	0.11
34_511	4709	50-yr	11.65	183.59	185.68		185.68	0.000065	0.18	0.35	0.12	62.47	107.14	0.08
34_511	4709	100-yr	12.94	183.59	185.68		185.68	0.000071	0.17	0.37	0.13	66.04	109.74	0.09
34_511	4709	200-yr	15.44	183.59	185.73		185.73	0.000084	0.19	0.41	0.15	71.28	113.47	0.10
34_511	4694	50-yr	11.65	183.58	185.65	184.54	185.65	0.000041	0.14	0.29	0.05	81.14	124.08	0.07
34_511	4694	100-yr	12.94	183.58	185.66	184.59	185.68	0.000044	0.15	0.30	0.05	85.23	125.69	0.07
34_511	4694	200-yr	15.44	183.58	185.73	184.72	185.73	0.000054	0.17	0.34	0.06	91.19	129.02	0.08
34_511	4681	Junction Rd	Bridge											
34_511	4666	50-yr	11.65	183.63	184.94	184.69	184.96	0.000691	0.23	0.86	0.22	35.70	89.29	0.26
34_511	4666	100-yr	12.94	183.63	184.99	184.74	185.01	0.000649	0.24	0.85	0.23	39.77	90.91	0.25
34_511	4666	200-yr	15.44	183.63	185.07	184.80	185.09	0.000593	0.25	0.85	0.24	47.17	93.78	0.24
34_511	4662	50-yr	11.65	183.63	184.95	184.59	184.96	0.000350	0.17	0.58	0.20	46.40	86.47	0.18
34_511	4662	100-yr	12.94	183.63	184.99	184.61	185.00	0.000340	0.18	0.58	0.20	50.56	88.91	0.18
34_511	4662	200-yr	15.44	183.63	185.07	184.64	185.08	0.000326	0.19	0.60	0.21	59.59	125.06	0.18
34_511	4557	50-yr	11.65	183.54	184.93		184.94	0.000128	0.17	0.38	0.15	67.89	114.49	0.11
34_511	4557	100-yr	12.94	183.54	184.96		184.98	0.000125	0.18	0.39	0.16	72.88	115.21	0.11
34_511	4557	200-yr	15.44	183.54	185.00		185.06	0.000124	0.19	0.40	0.17	82.32	123.66	0.11
34_511	4485	50-yr	11.65	183.48	184.89		184.91	0.000603	0.43	0.85	0.21	23.69	81.64	0.25
34_511	4485	100-yr	12.94	183.48	184.93		184.96	0.000609	0.45	0.88	0.23	26.81	84.60	0.25
34_511	4485	200-yr	15.44	183.48	185.01		185.04	0.000631	0.48	0.93	0.26	29.67	84.10	0.26
34_511	4392	50-yr	11.65	183.40	184.84		184.87	0.000604	0.12	0.73	0.08	17.78	36.12	0.24
34_511	4392	100-yr	12.94	183.40	184.88		184.91	0.000635	0.15	0.77	0.10	19.36	42.55	0.25
34_511	4392	200-yr	15.44	183.40	184.95		184.99	0.000680	0.15	0.83	0.14	22.73	52.36	0.26
34_511	4280	50-yr	11.65	183.31	184.73		184.78	0.001061	0.39	1.11	0.21	18.21	47.20	0.33
34_511	4280	100-yr	12.94	183.31	184.77		184.82	0.001058	0.43	1.13	0.23	20.16	47.47	0.33
34_511	4280	200-yr	15.44	183.31	184.84		184.89	0.001068	0.48	1.18	0.27	23.55	47.91	0.33
34_511	4213	50-yr	11.65	183.26	184.61		184.69	0.001595	0.54	1.29	0.14	11.85	30.46	0.40
34_511	4213	100-yr	12.94	183.26	184.64		184.73	0.001731	0.59	1.37	0.18	12.78	30.89	0.42
34_511	4213	200-yr	15.44	183.26	184.69		184.79	0.002038	0.67	1.53	0.23	14.17	31.20	0.45
34_511	4098	50-yr	11.65	183.16	184.58		184.58	0.000347	0.17	0.57	0.16	55.60	92.91	0.18
34_511	4098	100-yr	12.94	183.16	184.61		184.61	0.000374	0.18	0.60	0.17	58.24	93.23	0.19
34_511	4098	200-yr	15.44	183.16	184.65		184.66	0.000442	0.21	0.67	0.19	62.03	93.68	0.21
34_511	3954	50-yr	11.65	183.04	184.55		184.56	0.000189	0.14	0.48	0.11	68.67	90.88	0.13
34_511	3954	100-yr	12.94	183.04	184.58		184.58	0.000191	0.15	0.53	0.11	71.02	91.78	0.14
34_511	3954	200-yr	15.44	183.04	184.61		184.62	0.000242	0.17	0.60	0.13	74.18	93.04	0.16
34_511	3892	50-yr	11.65	182.99	184.55		184.55	0.000051	0.17	0.27	0.07	75.54	97.60	0.07
34_511	3892	100-yr	12.94	182.99	184.57		184.58	0.000058	0.19	0.29	0.07	78.00	98.68	0.08
34_511	3892	200-yr	15.44	182.99	184.61		184.61	0.000074	0.22	0.34	0.08	81.27	100.32	0.09
34_511	3810	50-yr	11.65	182.82	184.54	183.81	184.55	0.000062	0.16	0.32	0.10	80.88	111.51	0.08
34_511	3810	100-yr	12.94	182.82	184.57	183.83	184.57	0.000071	0.18	0.34	0.11	82.96	113.33	0.09
34_511	3810	200-yr	15.44	182.82	184.60	183.85	184.60	0.000090	0.21	0.36	0.13	85.93	115.67	0.10
34_511	3763	50-yr	11.65	182.89	184.54	183.59	184.54	0.000040	0.16	0.26	0.04	67.23	108.84	0.07
34_511	3763	100-yr	12.94	182.89	184.57	183.61	184.57	0.000046	0.18	0.28	0.04	69.32	107.06	0.07
34_511	3763	200-yr	15.44	182.89	184.60	183.63	184.60	0.000030	0.14	0.23	0.08	125.10	186.53	0.06
34_511	3754	50-yr	11.65	182.88	184.54	183.60	184.54	0.000037	0.20	0.17	0.11	90.68	232.10	0.05
34_511	3754	100-yr	12.94	182.88	184.57	183.60	184.57	0.000019	0.08	0.13	0.08	152.90	239.30	0.03
34_511	3754	200-yr	15.44	182.88	184.60	183.74	184.60	0.000023	0.09	0.14	0.09	180.69	244.70	0.04

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_511	3738	Concession1 Rd S												
		Culvert												
34_511	3720	50-yr	11.65	182.64	183.75	183.44	183.79	0.001897	0.24	0.95	0.04	23.16	158.04	0.34
34_511	3720	100-yr	12.94	182.64	183.75	183.51	183.82	0.001911	0.26	0.96	0.05	25.34	172.32	0.34
34_511	3720	200-yr	15.44	182.64	183.85	183.58	183.89	0.001981	0.28	1.03	0.05	29.14	191.28	0.35
34_511	3712	50-yr	11.65	182.63	183.75	183.31	183.77	0.000688	0.15	0.71	0.12	27.16	84.03	0.25
34_511	3712	100-yr	12.94	182.63	183.79	183.34	183.81	0.000714	0.17	0.74	0.13	29.29	87.15	0.26
34_511	3712	200-yr	15.44	182.63	183.85	183.42	183.87	0.000773	0.18	0.81	0.15	33.08	101.89	0.27
34_511	3636	50-yr	11.65	182.55	183.65	183.48	183.69	0.001936	0.27	1.29	0.29	27.52	68.27	0.42
34_511	3636	100-yr	12.94	182.55	183.69	183.50	183.73	0.001980	0.28	1.33	0.31	29.86	70.54	0.42
34_511	3636	200-yr	15.44	182.55	183.75	183.52	183.79	0.002025	0.30	1.40	0.34	34.00	72.99	0.43
34_511	3529	50-yr	11.65	182.44	183.32	183.25	183.40	0.004047	0.33	1.83	0.47	17.45	54.06	0.60
34_511	3529	100-yr	12.94	182.44	183.35	183.27	183.43	0.004038	0.35	1.87	0.49	19.10	55.77	0.60
34_511	3529	200-yr	15.44	182.44	183.41	183.31	183.49	0.004012	0.38	1.74	0.53	22.13	57.82	0.61
34_511	3472	50-yr	11.65	182.38	183.34		183.34	0.000236	0.29	0.43	0.24	38.48	71.43	0.15
34_511	3472	100-yr	12.94	182.38	183.37		183.37	0.000248	0.31	0.45	0.25	40.59	72.34	0.15
34_511	3472	200-yr	15.44	182.38	183.42		183.43	0.000268	0.34	0.49	0.27	44.49	73.98	0.16
34_511	3410	50-yr	11.65	182.32	183.29		183.31	0.001092	0.24	0.82	0.29	29.96	68.67	0.32
34_511	3410	100-yr	12.94	182.32	183.32		183.34	0.001133	0.25	0.95	0.31	31.86	69.20	0.33
34_511	3410	200-yr	15.44	182.32	183.37		183.40	0.001207	0.27	1.02	0.34	35.34	70.23	0.34
34_511	3239	50-yr	11.65	182.13	183.04		183.08	0.002212	0.54	1.21	0.51	16.50	56.70	0.44
34_511	3239	100-yr	12.94	182.13	183.07		183.11	0.002122	0.59	1.22	0.53	18.19	58.43	0.44
34_511	3239	200-yr	15.44	182.13	183.13		183.17	0.001952	0.59	1.22	0.55	21.47	60.58	0.43
34_511	3117	50-yr	11.65	182.00	182.96		182.97	0.000538	0.29	0.62	0.35	32.39	66.97	0.22
34_511	3117	100-yr	12.94	182.00	182.99		183.00	0.000511	0.30	0.62	0.36	35.37	67.91	0.21
34_511	3117	200-yr	15.44	182.00	183.05		183.06	0.000471	0.31	0.63	0.37	40.95	69.76	0.21
34_511	3045	50-yr	11.65	181.92	182.91		182.92	0.000709	0.34	0.74	0.42	25.91	64.38	0.26
34_511	3045	100-yr	12.94	181.92	182.94		182.96	0.000708	0.35	0.76	0.43	28.20	66.60	0.26
34_511	3045	200-yr	15.44	181.92	183.01		183.02	0.000682	0.36	0.79	0.45	32.60	69.16	0.26
34_511	2916	50-yr	11.65	181.78	182.82		182.84	0.000657	0.35	0.74	0.41	26.39	65.36	0.25
34_511	2916	100-yr	12.94	181.78	182.86		182.87	0.000630	0.36	0.75	0.42	28.84	66.59	0.25
34_511	2916	200-yr	15.44	181.78	182.93		182.94	0.000593	0.38	0.76	0.44	33.60	69.20	0.24
34_511	2783	50-yr	11.65	181.64	182.65		182.70	0.002055	0.34	1.27	0.27	23.48	53.78	0.43
34_511	2783	100-yr	12.94	181.64	182.70		182.74	0.001984	0.35	1.28	0.28	25.74	54.66	0.43
34_511	2783	200-yr	15.44	181.64	182.78		182.82	0.001811	0.38	1.30	0.29	30.29	58.59	0.42
34_511	2573	50-yr	11.65	181.42	182.50		182.51	0.000520	0.38	0.67	0.20	33.83	61.78	0.22
34_511	2573	100-yr	12.94	181.42	182.55		182.56	0.000497	0.39	0.68	0.20	36.90	63.21	0.22
34_511	2573	200-yr	15.44	181.42	182.65		182.66	0.000437	0.40	0.68	0.21	43.34	65.52	0.21
34_511	2444	50-yr	11.65	181.28	182.43		182.44	0.000493	0.39	0.69	0.37	26.77	51.89	0.22
34_511	2444	100-yr	12.94	181.28	182.48		182.50	0.000469	0.40	0.70	0.37	29.53	54.27	0.21
34_511	2444	200-yr	15.44	181.28	182.59		182.61	0.000406	0.41	0.69	0.37	35.47	58.67	0.20
34_511	2338	50-yr	11.65	181.17	182.28		182.35	0.002285	0.68	1.45	0.65	12.00	26.47	0.47
34_511	2338	100-yr	12.94	181.17	182.34		182.41	0.001988	0.67	1.41	0.66	13.81	28.13	0.44
34_511	2338	200-yr	15.44	181.17	182.47		182.53	0.001535	0.63	1.34	0.63	17.94	33.36	0.39
34_511	2242	50-yr	11.65	181.07	182.25		182.28	0.000408	0.37	0.63	0.35	27.65	48.99	0.20
34_511	2242	100-yr	12.94	181.07	182.32		182.33	0.000351	0.37	0.62	0.34	31.24	50.28	0.19
34_511	2242	200-yr	15.44	181.07	182.40		182.47	0.000274	0.37	0.59	0.33	38.52	53.38	0.17
34_511	2145	50-yr	11.65	180.96	182.23		182.23	0.000221	0.25	0.49	0.28	39.17	72.68	0.15
34_511	2145	100-yr	12.94	180.96	182.30		182.31	0.000186	0.24	0.47	0.28	44.85	75.17	0.14
34_511	2145	200-yr	15.44	180.96	182.45		182.45	0.000137	0.24	0.44	0.27	56.33	80.74	0.12
34_511	2064	50-yr	11.65	180.89	182.20		182.21	0.000352	0.20	0.64	0.15	40.92	60.21	0.19
34_511	2064	100-yr	12.94	180.89	182.28		182.29	0.000318	0.20	0.63	0.15	45.79	62.35	0.18
34_511	2064	200-yr	15.44	180.89	182.43		182.44	0.000265	0.21	0.62	0.16	55.49	66.30	0.17
34_511	2054	50-yr	11.65	180.88	182.15	181.68	182.19	0.001098	0.35	0.99	0.32	14.35	58.04	0.33
34_511	2054	100-yr	12.94	180.88	182.22	181.71	182.27	0.001031	0.36	1.01	0.33	15.64	57.66	0.32
34_511	2054	200-yr	15.44	180.88	182.37	181.77	182.42	0.000924	0.38	1.05	0.36	18.09	62.32	0.31
34_511	2042	H D Townline Rd												
		Culvert												
34_511	2031	50-yr	11.65	180.77	181.68	181.53	181.85	0.001852	0.28	1.19	0.30	11.47	39.59	0.42
34_511	2031	100-yr	12.94	180.77	181.91	181.57	181.99	0.001968	0.31	1.27	0.33	12.07	40.31	0.43
34_511	2031	200-yr	15.44	180.77	181.98	181.64	182.08	0.002139	0.36	1.39	0.36	13.22	41.61	0.46
34_511	2023	50-yr	11.65	180.76	181.69		181.92	0.000770	0.36	0.78	0.17	20.81	42.04	0.27
34_511	2023	100-yr	12.94	180.76	181.93		181.96	0.000784	0.38	0.81	0.18	22.48	43.12	0.27
34_511	2023	200-yr	15.44	180.76	182.01		182.03	0.000782	0.43	0.86	0.19	25.86	45.09	0.28
34_511	1977	50-yr	11.65	180.70	181.65		181.88	0.001051	0.24	0.98	0.49	30.51	61.65	0.32
34_511	1977	100-yr	12.94	180.70	181.89		181.92	0.001052	0.25	1.00	0.50	32.98	62.50	0.32
34_511	1977	200-yr	15.44	180.70	181.97		182.00	0.001018	0.27	1.04	0.54	37.97	65.35	0.32
34_511	1931	50-yr	11.65	180.65	181.82		181.84	0.000819	0.23	0.86	0.22	41.64	61.31	0.29
34_511	1931	100-yr	12.94	180.65	181.86		181.88	0.000809	0.24	0.88	0.23	44.93	61.65	0.28
34_511	1931	200-yr	15.44	180.65	181.95		181.96	0.000758	0.26	0.90	0.24	51.63	63.16	0.27
34_511	1796	50-yr	11.65	180.49	181.69		181.73	0.001073	0.24	1.01	1.48	24.86	47.59	0.32
34_511	1796	100-yr	12.94	180.49	181.73		181.77	0.001101	0.26	1.05	1.55	26.63	47.81	0.33

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Cnl
34_511	1736	200-yr	15.44	180.49	181.81		181.86	0.001076	0.28	1.09	1.63	30.90	52.94	0.33
34_511	1736	50-yr	11.65	180.42	181.66		181.69	0.000325	0.31	0.57	1.07	23.88	43.99	0.17
34_511	1736	100-yr	12.94	180.42	181.70		181.73	0.000338	0.33	0.59	1.12	25.51	45.22	0.18
34_511	1736	200-yr	15.44	180.42	181.78		181.82	0.000330	0.34	0.61	1.18	29.47	48.10	0.18
34_511	1689	50-yr	11.65	180.38	181.67		181.67	0.000122	0.23	0.35	0.46	44.66	67.92	0.11
34_511	1689	100-yr	12.94	180.38	181.71		181.71	0.000126	0.24	0.36	0.49	47.20	68.36	0.11
34_511	1689	200-yr	15.44	180.38	181.79		181.80	0.000124	0.26	0.38	0.52	53.11	69.54	0.11
34_511	1680	50-yr	11.65	180.37	181.67	181.21	181.68	0.001092	0.74	1.02	1.46	12.29	74.80	0.33
34_511	1680	100-yr	12.94	180.37	181.71	181.24	181.71	0.000112	0.24	0.35	0.53	50.02	77.17	0.11
34_511	1680	200-yr	15.44	180.37	181.79	181.29	181.80	0.000112	0.25	0.37	0.56	55.92	79.23	0.11
34_511	1689 Darling Rd	Culvert												
34_511	1653	50-yr	11.65	180.40	181.43	181.15	181.46	0.002022	0.34	0.97	0.75	15.37	88.30	0.34
34_511	1653	100-yr	12.94	180.40	181.45	181.17	181.50	0.002144	0.37	1.02	0.80	16.13	89.20	0.35
34_511	1653	200-yr	15.44	180.40	181.51	181.21	181.56	0.002274	0.41	1.12	0.90	17.48	91.45	0.38
34_511	1643	50-yr	11.65	180.39	181.43		181.44	0.000606	0.20	0.76	0.38	36.35	90.07	0.27
34_511	1643	100-yr	12.94	180.39	181.46		181.47	0.000797	0.21	0.77	0.39	38.19	92.62	0.27
34_511	1643	200-yr	15.44	180.39	181.51		181.53	0.000783	0.22	0.80	0.42	43.46	97.26	0.27
34_511	1582	50-yr	11.65	180.30	181.34		181.37	0.001492	0.25	1.03	0.51	24.00	59.45	0.37
34_511	1582	100-yr	12.94	180.30	181.37		181.40	0.001522	0.26	1.07	0.54	25.78	60.30	0.37
34_511	1582	200-yr	15.44	180.30	181.42		181.46	0.001569	0.29	1.13	0.58	28.99	61.51	0.38
34_511	1590	50-yr	11.65	180.18	181.22		181.25	0.001865	0.38	1.18	0.58	20.39	52.15	0.41
34_511	1590	100-yr	12.94	180.18	181.24		181.28	0.001947	0.41	1.23	0.58	21.79	52.91	0.42
34_511	1590	200-yr	15.44	180.18	181.29		181.33	0.002058	0.45	1.31	0.63	24.31	54.05	0.44
34_511	1397	50-yr	11.65	180.04	181.10		181.12	0.001515	0.38	0.91	0.20	26.49	76.08	0.34
34_511	1397	100-yr	12.94	180.04	181.13		181.14	0.001513	0.40	0.94	0.24	28.52	77.27	0.34
34_511	1397	200-yr	15.44	180.04	181.18		181.19	0.001488	0.43	0.97	0.30	32.28	79.63	0.34
34_511	1269	50-yr	11.65	179.86	181.02		181.03	0.000638	0.34	0.68	0.10	28.88	79.60	0.24
34_511	1269	100-yr	12.94	179.86	181.05		181.06	0.000637	0.36	0.69	0.10	31.06	80.27	0.24
34_511	1269	200-yr	15.44	179.86	181.09		181.11	0.000640	0.38	0.72	0.11	35.06	82.03	0.24
34_511	1206	50-yr	11.65	179.77	180.97		180.99	0.001209	0.48	0.97	0.37	19.39	50.09	0.33
34_511	1206	100-yr	12.94	179.77	180.99		181.02	0.001247	0.51	1.00	0.39	20.70	51.67	0.34
34_511	1206	200-yr	15.44	179.77	181.04		181.07	0.001303	0.56	1.06	0.42	23.20	54.46	0.35
34_511	1153	50-yr	11.65	179.69	180.90		180.93	0.001367	0.29	0.98	0.46	21.27	72.74	0.34
34_511	1153	100-yr	12.94	179.69	180.93		180.95	0.001333	0.32	0.99	0.45	23.24	74.05	0.34
34_511	1153	200-yr	15.44	179.69	180.98		181.00	0.001269	0.35	1.00	0.51	26.95	76.34	0.33
34_511	1088	50-yr	11.65	179.60	180.83		180.85	0.001362	0.24	1.05	0.27	29.90	76.13	0.35
34_511	1088	100-yr	12.94	179.60	180.85		180.88	0.001420	0.26	1.09	0.29	31.82	77.07	0.36
34_511	1088	200-yr	15.44	179.60	180.90		180.93	0.001482	0.28	1.15	0.32	35.58	78.38	0.38
34_511	983	50-yr	11.65	179.45	180.69		180.72	0.001920	0.51	1.18	0.48	18.02	60.18	0.40
34_511	983	100-yr	12.94	179.45	180.71		180.75	0.001900	0.54	1.18	0.50	19.53	60.93	0.40
34_511	983	200-yr	15.44	179.45	180.76		180.79	0.001864	0.58	1.21	0.54	22.43	63.10	0.40
34_511	867	50-yr	11.65	179.28	180.56		180.59	0.001111	0.41	0.92	0.34	21.30	62.23	0.31
34_511	867	100-yr	12.94	179.28	180.59		180.62	0.001125	0.43	0.95	0.36	22.94	63.16	0.31
34_511	867	200-yr	15.44	179.28	180.64		180.67	0.001124	0.47	0.98	0.40	26.15	65.03	0.32
34_511	800	50-yr	11.65	179.19	180.50		180.52	0.001243	0.41	0.99	0.40	21.35	60.91	0.33
34_511	800	100-yr	12.94	179.19	180.53		180.55	0.001212	0.43	0.99	0.42	23.31	69.73	0.33
34_511	800	200-yr	15.44	179.19	180.58		180.61	0.001131	0.48	1.00	0.44	27.20	71.51	0.32
34_511	679	50-yr	11.65	179.02	180.34		180.38	0.001645	0.55	1.20	0.52	17.14	47.12	0.37
34_511	679	100-yr	12.94	179.02	180.37		180.41	0.001602	0.56	1.21	0.54	18.75	48.17	0.37
34_511	679	200-yr	15.44	179.02	180.45		180.48	0.001427	0.55	1.19	0.58	22.23	49.86	0.35
34_511	562	50-yr	11.65	178.89	180.17		180.22	0.001718	0.47	1.18	0.34	14.64	41.22	0.40
34_511	562	100-yr	12.94	178.89	180.21		180.26	0.001695	0.50	1.16	0.36	16.51	42.53	0.39
34_511	562	200-yr	15.44	178.89	180.32		180.36	0.001617	0.52	1.11	0.41	21.24	45.81	0.34
34_511	422	50-yr	11.65	178.65	180.02		180.04	0.000822	0.17	0.87	0.23	34.90	75.72	0.28
34_511	422	100-yr	12.94	178.65	180.06		180.10	0.000749	0.19	0.86	0.24	36.37	76.86	0.27
34_511	422	200-yr	15.44	178.65	180.22		180.24	0.000545	0.19	0.80	0.23	50.68	78.72	0.23
34_511	263	50-yr	11.65	178.43	179.66		179.91	0.000971	0.17	0.99	0.48	23.21	56.02	0.20
34_511	263	100-yr	12.94	178.43	179.90		179.99	0.000799	0.18	0.92	0.48	26.00	57.87	0.27
34_511	263	200-yr	15.44	178.43	180.15		180.17	0.000451	0.17	0.78	0.44	39.66	64.01	0.21
34_511	178	50-yr	11.65	178.31	179.84		179.85	0.000499	0.15	0.76	0.33	30.22	68.87	0.22
34_511	178	100-yr	12.94	178.31	179.94		179.95	0.000359	0.13	0.68	0.32	37.09	73.66	0.19
34_511	178	200-yr	15.44	178.31	180.14		180.14	0.000195	0.12	0.55	0.29	52.62	80.17	0.14
34_511	83	50-yr	11.65	178.17	179.80		179.82	0.000367	0.29	0.67	0.36	27.37	49.58	0.15
34_511	83	100-yr	12.94	178.17	179.91		179.92	0.000291	0.29	0.62	0.35	32.71	51.53	0.17
34_511	83	200-yr	15.44	178.17	180.12		180.13	0.000180	0.28	0.54	0.32	44.10	56.06	0.14
34_701	725	50-yr	3.21	177.71	178.76		178.76	0.000421	0.17	0.80	0.21	12.98	30.10	0.19
34_701	725	100-yr	3.56	177.71	178.88		178.89	0.000263	0.16	0.52	0.18	16.91	32.89	0.16
34_701	725	200-yr	4.24	177.71	178.91		178.91	0.000326	0.18	0.58	0.21	17.90	33.44	0.18
34_701	638	50-yr	3.21	177.12	178.76		178.76	0.000019	0.06	0.18	0.07	41.21	49.70	0.05
34_701	638	100-yr	3.56	177.12	178.86		178.86	0.000017	0.06	0.17	0.07	47.94	52.63	0.04

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Twp Width (m)	Froude # Crl
34_701	638	200-yr	4.24	177.12	178.91		178.91	0.000022	0.07	0.20	0.08	48.04	53.19	0.05
34_701	538	50-yr	3.21	176.44	178.78	177.00	178.78	0.000001	0.02	0.04	0.03	117.39	114.63	0.01
34_701	536	100-yr	3.56	176.44	178.86	177.01	178.86	0.000001	0.02	0.04	0.03	131.95	120.96	0.01
34_701	536	200-yr	4.24	176.44	178.91	177.03	178.91	0.000001	0.02	0.05	0.04	135.10	122.38	0.01
34_701	447	50-yr	3.21	175.84	178.78		178.78	0.000001	0.03	0.05	0.03	90.91	53.98	0.01
34_701	447	100-yr	3.56	175.84	178.86		178.86	0.000001	0.03	0.05	0.03	100.88	55.29	0.01
34_701	447	200-yr	4.24	175.84	178.91		178.91	0.000001	0.04	0.06	0.04	102.15	55.54	0.01
34_701	405	50-yr	3.21	175.56	178.78		178.78	0.000000	0.02	0.04	0.03	120.30	69.18	0.01
34_701	405	100-yr	3.56	175.56	178.86		178.86	0.000000	0.03	0.04	0.03	129.15	73.86	0.01
34_701	405	200-yr	4.24	175.56	178.91		178.91	0.000001	0.03	0.05	0.03	131.13	74.77	0.01
34_701	371	50-yr	3.21	175.48	178.78	176.06	178.78	0.000005	0.10	0.14	0.12	25.46	88.30	0.02
34_701	371	100-yr	3.56	175.48	178.86	176.09	178.86	0.000000	0.03	0.03	0.02	159.21	102.44	0.01
34_701	371	200-yr	4.24	175.48	178.91	176.13	178.91	0.000000	0.03	0.04	0.02	161.53	103.81	0.01
34_701	356	Canborough Rd	Culvert											
34_701	340	50-yr	3.21	175.60	178.11	176.11	176.26	0.010290	0.30	1.77	0.75	2.11	37.88	0.87
34_701	340	100-yr	3.56	175.60	178.13	176.13	176.29	0.010140	0.36	1.83	0.77	2.33	38.13	0.87
34_701	340	200-yr	4.24	175.60	178.18	176.18	176.35	0.009820	0.48	1.92	0.81	2.72	38.56	0.87
34_701	328	50-yr	3.21	175.53	175.92	175.92	175.97	0.015018	0.52	1.52	0.20	4.82	34.91	0.95
34_701	328	100-yr	3.56	175.53	175.93	175.91	175.98	0.014518	0.54	1.53	0.24	5.22	35.00	0.94
34_701	328	200-yr	4.24	175.53	176.18		176.18	0.000942	0.27	0.60	0.22	13.99	35.86	0.27
34_701	209	50-yr	3.21	174.47	175.81		175.81	0.000027	0.06	0.17	0.12	28.21	38.69	0.05
34_701	209	100-yr	3.56	174.47	175.95		175.95	0.000019	0.06	0.16	0.11	33.97	41.21	0.04
34_701	209	200-yr	4.24	174.47	176.18		176.18	0.000013	0.05	0.14	0.10	43.48	43.51	0.04
34_701	130	50-yr	3.21	173.76	175.81		175.81	0.000004	0.05	0.09	0.02	56.73	56.73	0.02
34_701	130	100-yr	3.56	173.76	175.95		175.95	0.000003	0.05	0.09	0.02	64.99	59.26	0.02
34_701	130	200-yr	4.24	173.76	176.18		176.18	0.000003	0.05	0.08	0.02	78.73	63.19	0.02
34_700	161	50-yr	75.43	173.02	175.77		175.79	0.000140	0.32	0.70	0.21	162.46	122.67	0.14
34_700	161	100-yr	81.20	173.02	175.92		175.94	0.000127	0.32	0.69	0.21	200.86	129.89	0.13
34_700	161	200-yr	93.36	173.02	176.15		176.16	0.000117	0.33	0.70	0.22	231.22	139.42	0.13
34_700	80	50-yr	75.43	173.00	175.76		175.78	0.000135	0.19	0.89	0.20	213.39	147.32	0.13
34_700	80	100-yr	81.20	173.00	175.91		175.93	0.000122	0.19	0.88	0.20	235.28	152.09	0.13
34_700	80	200-yr	93.36	173.00	176.14		176.15	0.000113	0.20	0.89	0.22	270.70	160.02	0.13
34_505	6425	50-yr	24.03	177.86	179.76		179.77	0.000215	0.37	0.62	0.17	63.14	102.73	0.15
34_505	6425	100-yr	26.65	177.86	179.87		179.86	0.000172	0.35	0.58	0.19	75.15	105.75	0.14
34_505	6425	200-yr	31.69	177.86	180.10		180.10	0.000116	0.33	0.52	0.19	100.11	118.48	0.12
34_505	6180	50-yr	24.03	177.70	179.74		179.74	0.000062	0.09	0.35	0.20	195.39	209.84	0.08
34_505	6180	100-yr	26.65	177.70	179.86		179.86	0.000053	0.09	0.33	0.19	220.34	211.80	0.08
34_505	6180	200-yr	31.69	177.70	180.09		180.09	0.000041	0.09	0.32	0.19	268.31	217.47	0.07
34_505	6099	50-yr	24.03	177.64	179.73		179.73	0.000106	0.20	0.46	0.17	111.82	131.39	0.11
34_505	6099	100-yr	26.65	177.64	179.85		179.85	0.000089	0.20	0.44	0.17	127.90	135.59	0.10
34_505	6099	200-yr	31.69	177.64	180.08		180.08	0.000065	0.20	0.40	0.16	160.02	143.49	0.09
34_505	5945	50-yr	24.03	177.54	179.70		179.71	0.000175	0.14	0.61	0.12	100.90	114.52	0.14
34_505	5945	100-yr	26.65	177.54	179.82		179.83	0.000155	0.14	0.60	0.12	115.28	118.62	0.14
34_505	5945	200-yr	31.69	177.54	180.06		180.07	0.000128	0.14	0.59	0.13	144.63	131.34	0.13
34_505	5767	50-yr	24.03	177.41	179.68		179.69	0.000122	0.10	0.52	0.12	92.07	93.22	0.12
34_505	5767	100-yr	26.65	177.41	179.80		179.81	0.000116	0.10	0.53	0.12	92.88	91.98	0.12
34_505	5767	200-yr	31.69	177.41	180.04		180.05	0.000103	0.11	0.53	0.12	116.48	105.73	0.11
34_505	5611	50-yr	24.03	177.31	179.52		179.63	0.001522	0.01	1.46	0.01	16.43	11.35	0.39
34_505	5611	100-yr	26.65	177.31	179.64		179.76	0.001434	0.07	1.50	0.07	17.83	11.77	0.38
34_505	5611	200-yr	31.69	177.31	179.88		180.00	0.001275	0.13	1.55	0.12	20.69	12.70	0.37
34_505	5290	50-yr	24.03	177.09	179.37	178.38	179.39	0.000335	0.25	0.76	0.09	39.32	293.29	0.19
34_505	5290	100-yr	26.65	177.09	179.51	178.41	179.53	0.000301	0.25	0.76	0.11	44.51	303.71	0.19
34_505	5290	200-yr	31.69	177.09	179.77	178.48	179.80	0.000251	0.28	0.77	0.14	54.25	318.06	0.18
34_505	5275	Abandon Railway	Multi Open											
34_505	5261	50-yr	24.03	177.20	179.25	178.55	179.31	0.000763	0.30	1.13	0.26	34.52	422.20	0.29
34_505	5261	100-yr	26.65	177.20	179.40	178.62	179.45	0.000656	0.31	1.11	0.27	39.49	488.44	0.27
34_505	5261	200-yr	31.69	177.20	179.66	178.74	179.70	0.000519	0.32	1.09	0.29	48.73	550.10	0.25
34_505	5254	50-yr	24.03	177.19	179.28		179.28	0.000038	0.06	0.28	0.04	326.21	521.90	0.07
34_505	5254	100-yr	26.65	177.19	179.42		179.42	0.000027	0.05	0.25	0.04	399.67	525.44	0.06
34_505	5254	200-yr	31.69	177.19	179.68		179.68	0.000016	0.05	0.20	0.04	538.66	539.09	0.04
34_505	5181	50-yr	24.03	177.06	179.27	177.92	179.28	0.000049	0.08	0.33	0.09	191.71	183.87	0.08
34_505	5181	100-yr	26.65	177.06	179.42	177.90	179.42	0.000042	0.08	0.32	0.09	217.71	185.23	0.07
34_505	5181	200-yr	31.69	177.06	179.68	178.07	179.68	0.000033	0.09	0.31	0.09	266.81	188.35	0.06
34_505	5107	50-yr	24.03	176.92	179.27		179.27	0.000063	0.09	0.39	0.10	142.00	145.11	0.09
34_505	5107	100-yr	26.65	176.92	179.41		179.41	0.000055	0.09	0.38	0.10	163.07	152.09	0.08
34_505	5107	200-yr	31.69	176.92	179.67		179.68	0.000043	0.09	0.36	0.10	204.69	164.09	0.08
34_505	5093	50-yr	24.03	176.90	179.26	177.69	179.27	0.000080	0.12	0.44		61.72	131.45	0.10
34_505	5093	100-yr	26.65	176.90	179.40	177.73	179.41	0.000078	0.13	0.45		66.84	135.73	0.10
34_505	5093	200-yr	31.69	176.90	179.66	177.80	179.67	0.000073	0.14	0.47		75.79	146.63	0.10

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Twp Width (m)	Froude # Crl
34_505	3075	Abandon Railway	Bridge											
34_505	5060	50-yr	24.03	177.18	178.49	178.36	178.89	0.004054	0.48	2.09	0.44	17.09	94.58	0.68
34_505	5060	100-yr	26.65	177.16	178.53	178.40	178.74	0.004899	0.53	2.21	0.49	18.03	86.30	0.69
34_505	5060	200-yr	31.69	177.18	178.59	178.48	178.85	0.005516	0.61	2.44	0.57	19.72	92.30	0.74
34_505	5047	50-yr	24.03	177.15	178.54		178.58	0.001030	0.30	1.05	0.17	42.90	80.99	0.32
34_505	5047	100-yr	26.65	177.15	178.59		178.63	0.001035	0.32	1.08	0.18	46.18	81.41	0.33
34_505	5047	200-yr	31.69	177.15	178.67		178.71	0.001040	0.36	1.14	0.18	52.75	82.76	0.33
34_505	4771	50-yr	24.03	176.95	178.42	178.08	178.43	0.000306	0.32	0.58	0.30	70.21	136.15	0.18
34_505	4771	100-yr	26.65	176.95	178.47	178.07	178.48	0.000288	0.33	0.58	0.30	77.15	139.76	0.17
34_505	4771	200-yr	31.69	176.95	178.57	178.11	178.57	0.000298	0.34	0.58	0.31	90.05	144.22	0.16
34_505	4401	50-yr	24.03	176.67	178.32		178.33	0.000336	0.38	0.68	0.38	54.32	77.41	0.19
34_505	4401	100-yr	26.65	176.67	178.37		178.38	0.000334	0.40	0.70	0.40	58.49	78.71	0.19
34_505	4401	200-yr	31.69	176.67	178.47		178.48	0.000330	0.43	0.72	0.42	66.17	81.12	0.18
34_505	3978	50-yr	24.03	176.36	178.14		178.16	0.000689	0.50	0.93	0.29	51.90	96.75	0.25
34_505	3978	100-yr	26.65	176.36	178.20		178.22	0.000663	0.51	0.93	0.30	57.07	89.75	0.24
34_505	3978	200-yr	31.69	176.36	178.31		178.32	0.000630	0.52	0.95	0.32	66.08	95.71	0.24
34_505	3837	50-yr	24.03	176.28	178.06		178.08	0.000587	0.22	1.01	0.27	88.95	86.77	0.26
34_505	3837	100-yr	26.65	176.26	178.12		178.15	0.000580	0.23	1.03	0.28	72.14	88.00	0.26
34_505	3837	200-yr	31.69	176.26	178.23		178.25	0.000594	0.26	1.08	0.30	81.52	92.03	0.26
34_505	3712	50-yr	24.03	176.17	177.96		177.98	0.000697	0.30	1.23	0.36	47.51	55.33	0.33
34_505	3712	100-yr	26.65	176.17	178.01		178.05	0.001030	0.32	1.28	0.38	50.60	55.80	0.33
34_505	3712	200-yr	31.69	176.17	178.11		178.16	0.001088	0.36	1.37	0.42	56.11	58.42	0.35
34_505	3480	50-yr	24.03	175.98	177.78		177.81	0.000667	0.28	1.04	0.45	55.96	79.68	0.27
34_505	3480	100-yr	26.65	175.98	177.83		177.86	0.000693	0.29	1.07	0.46	60.32	81.80	0.28
34_505	3480	200-yr	31.69	175.98	177.93		177.96	0.000702	0.32	1.12	0.48	68.40	86.74	0.28
34_505	3315	50-yr	24.03	175.87	177.48		177.63	0.000363	0.44	1.98	0.37	24.74	45.30	0.58
34_505	3315	100-yr	26.65	175.87	177.52		177.68	0.000239	0.48	2.09	0.40	26.57	47.38	0.58
34_505	3315	200-yr	31.69	175.87	177.59		177.77	0.000471	0.54	2.24	0.45	30.15	50.23	0.61
34_505	3136	50-yr	24.03	175.74	177.36	177.07	177.38	0.000692	0.45	0.89	0.42	43.88	81.35	0.26
34_505	3136	100-yr	26.65	175.74	177.41	177.09	177.43	0.000618	0.47	0.88	0.44	48.27	82.10	0.25
34_505	3136	200-yr	31.69	175.74	177.51	177.12	177.53	0.000546	0.49	0.87	0.46	56.81	83.48	0.24
34_505	3022	50-yr	24.03	175.68	177.29		177.31	0.000499	0.43	0.77	0.23	44.81	65.92	0.23
34_505	3022	100-yr	26.65	175.68	177.35		177.36	0.000479	0.45	0.78	0.25	48.53	68.78	0.22
34_505	3022	200-yr	31.69	175.68	177.45		177.47	0.000445	0.48	0.79	0.26	56.01	71.83	0.22
34_505	2797	50-yr	24.03	175.49	177.15		177.18	0.000706	0.60	0.95	0.38	33.51	42.28	0.27
34_505	2797	100-yr	26.65	175.49	177.21		177.24	0.000707	0.63	0.98	0.41	36.97	42.93	0.27
34_505	2797	200-yr	31.69	175.49	177.32		177.35	0.000709	0.67	1.03	0.45	40.69	44.82	0.28
34_505	2636	50-yr	24.03	175.37	177.09		177.10	0.000288	0.30	0.62	0.17	70.28	91.58	0.17
34_505	2636	100-yr	26.65	175.37	177.15		177.16	0.000284	0.31	0.64	0.18	75.74	92.31	0.17
34_505	2636	200-yr	31.69	175.37	177.26		177.27	0.000274	0.33	0.66	0.20	86.09	93.63	0.17
34_505	2502	50-yr	24.03	175.27	176.99		177.04	0.001021	0.32	1.22	0.56	33.95	44.52	0.33
34_505	2502	100-yr	26.65	175.27	177.04		177.10	0.001040	0.33	1.26	0.59	36.50	45.47	0.34
34_505	2502	200-yr	31.69	175.27	177.15		177.21	0.001036	0.36	1.32	0.65	41.56	48.83	0.34
34_505	2299	50-yr	24.03	175.12	176.81		176.84	0.000687	0.28	1.13	0.35	48.58	80.80	0.32
34_505	2299	100-yr	26.65	175.12	176.87		176.90	0.000640	0.27	1.14	0.36	54.66	82.73	0.31
34_505	2299	200-yr	31.69	175.12	177.00		177.03	0.000608	0.27	1.12	0.36	65.44	84.86	0.29
34_505	2184	50-yr	24.03	175.03	176.87		176.71	0.000692	0.62	1.11	0.27	38.90	60.53	0.31
34_505	2184	100-yr	26.65	175.03	176.79		176.78	0.000687	0.64	1.09	0.28	43.39	61.47	0.30
34_505	2184	200-yr	31.69	175.03	176.90		176.92	0.000711	0.65	1.05	0.27	52.76	63.83	0.27
34_505	2037	50-yr	24.03	174.93	176.58		176.60	0.000698	0.52	0.90	0.49	39.86	61.54	0.26
34_505	2037	100-yr	26.65	174.93	176.66		176.68	0.000583	0.50	0.89	0.50	45.19	63.95	0.25
34_505	2037	200-yr	31.69	174.93	176.83		176.85	0.000436	0.49	0.83	0.49	56.40	67.36	0.22
34_505	1868	50-yr	24.03	174.81	176.50		176.52	0.000376	0.42	0.72	0.29	58.41	73.81	0.20
34_505	1868	100-yr	26.65	174.81	176.60		176.61	0.000330	0.41	0.70	0.28	63.39	75.96	0.19
34_505	1868	200-yr	31.69	174.81	176.78		176.80	0.000258	0.40	0.67	0.28	78.02	81.34	0.17
34_505	1772	50-yr	24.03	174.74	176.45		176.47	0.000580	0.48	0.91	0.28	44.10	48.94	0.25
34_505	1772	100-yr	26.65	174.74	176.54		176.57	0.000535	0.48	0.92	0.29	48.00	51.07	0.24
34_505	1772	200-yr	31.69	174.74	176.74		176.76	0.000465	0.43	0.93	0.30	59.81	60.36	0.23
34_505	1646	50-yr	24.03	174.64	176.41		176.42	0.000314	0.42	0.68	0.25	56.38	67.35	0.18
34_505	1646	100-yr	26.65	174.64	176.51		176.52	0.000273	0.42	0.67	0.25	63.43	68.80	0.17
34_505	1646	200-yr	31.69	174.64	176.71		176.72	0.000213	0.41	0.64	0.25	77.57	71.88	0.16
34_505	1503	50-yr	24.03	174.54	176.34	175.88	176.37	0.000475	0.57	0.88	0.39	41.18	54.71	0.23
34_505	1503	100-yr	26.65	174.54	176.40	175.71	176.48	0.000397	0.55	0.85	0.40	47.46	56.62	0.21
34_505	1503	200-yr	31.69	174.54	176.57	175.76	176.69	0.000282	0.52	0.79	0.41	59.95	59.75	0.19
34_505	1336	50-yr	24.03	174.42	176.30		176.31	0.000221	0.15	0.62	0.42	57.06	63.15	0.18
34_505	1336	100-yr	26.65	174.42	176.42		176.43	0.000192	0.15	0.61	0.42	64.73	65.33	0.15
34_505	1336	200-yr	31.69	174.42	176.64		176.65	0.000154	0.15	0.59	0.41	79.75	71.07	0.14
34_505	1123	50-yr	24.03	174.26	176.27		176.28	0.000138	0.31	0.51	0.29	68.77	71.41	0.13
34_505	1123	100-yr	26.65	174.26	176.39		176.40	0.000118	0.31	0.50	0.29	77.70	73.18	0.12
34_505	1123	200-yr	31.69	174.26	176.62		176.63	0.000093	0.31	0.48	0.28	94.81	76.41	0.11

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Cfl
34_505	948	50-yr	24.03	174.13	176.24		176.25	0.000177	0.34	0.60	0.35	56.71	55.07	0.14
34_505	948	100-yr	26.65	174.13	176.37		176.38	0.000161	0.35	0.60	0.34	63.89	59.01	0.14
34_505	948	200-yr	31.89	174.13	176.60		176.61	0.000135	0.38	0.60	0.33	78.58	66.94	0.13
34_505	758	50-yr	24.03	173.99	176.19	175.58	176.21	0.000301	0.46	0.81	0.48	43.81	42.00	0.19
34_505	758	100-yr	26.65	173.99	176.32	175.40	176.34	0.000261	0.46	0.78	0.47	49.41	43.01	0.18
34_505	758	200-yr	31.89	173.99	176.56	175.47	176.58	0.000211	0.47	0.76	0.46	59.96	45.08	0.16
34_505	644	50-yr	24.03	173.91	176.05		176.14	0.001208	0.29	1.37	0.38	18.60	23.04	0.36
34_505	644	100-yr	26.65	173.91	176.19		176.28	0.001034	0.31	1.35	0.41	22.29	26.68	0.34
34_505	644	200-yr	31.89	173.91	176.46		176.53	0.000763	0.43	1.28	0.42	30.06	31.48	0.30
34_505	630	50-yr	24.03	173.90	176.06	175.01	176.11	0.000614	0.18	1.04	0.32	24.37	22.35	0.26
34_505	630	100-yr	26.65	173.90	176.20	175.06	176.25	0.000552	0.22	1.04	0.33	27.95	27.21	0.25
34_505	630	200-yr	31.89	173.90	176.48	175.18	176.51	0.000448	0.32	1.03	0.38	36.71	31.65	0.23
34_505	801	Cumulative Rd	Culvert											
34_505	575	50-yr	24.03	173.91	175.71	175.12	175.87	0.002338	0.17	1.81	0.22	13.38	10.03	0.48
34_505	575	100-yr	26.65	173.91	175.81	175.19	175.99	0.002262	0.19	1.87	0.26	14.47	10.30	0.48
34_505	575	200-yr	31.89	173.91	176.00	175.33	176.20	0.002161	0.22	1.98	0.28	16.45	11.31	0.48
34_505	569	50-yr	24.03	173.91	175.43	175.33	175.79	0.007948	0.19	2.65	0.19	9.08	9.58	0.85
34_505	569	100-yr	26.65	173.91	175.61		175.93	0.005623	0.30	2.49	0.29	10.83	10.34	0.74
34_505	569	200-yr	31.89	173.91	175.84		176.15	0.004337	0.38	2.46	0.40	13.29	11.29	0.67
34_505	423	50-yr	24.03	173.67	175.64		175.64	0.000589	0.18	0.38	0.25	90.52	96.21	0.10
34_505	423	100-yr	26.65	173.67	175.79		175.80	0.000507	0.15	0.35	0.24	105.98	99.41	0.09
34_505	423	200-yr	31.89	173.67	176.02		176.03	0.000390	0.15	0.33	0.23	120.16	101.59	0.08
34_505	274	50-yr	24.03	173.83	175.62		175.63	0.000101	0.23	0.40	0.29	80.74	79.80	0.10
34_505	274	100-yr	26.65	173.83	175.78		175.78	0.000081	0.22	0.38	0.28	90.55	82.30	0.09
34_505	274	200-yr	31.89	173.83	176.01		176.02	0.000067	0.23	0.38	0.27	113.02	88.78	0.08
34_505	162	50-yr	24.03	173.80	175.61		175.62	0.000077	0.13	0.37	0.25	123.41	138.91	0.09
34_505	162	100-yr	26.65	173.80	175.78		175.78	0.000057	0.12	0.34	0.23	140.04	141.56	0.08
34_505	162	200-yr	31.89	173.80	176.01		176.01	0.000044	0.12	0.33	0.22	179.85	145.00	0.07
34_505	25	50-yr	24.03	173.76	175.61		175.61	0.000045	0.08	0.30	0.20	153.46	143.19	0.07
34_505	25	100-yr	26.65	173.76	175.77		175.77	0.000038	0.08	0.28	0.19	176.94	145.16	0.07
34_505	25	200-yr	31.89	173.76	176.01		176.01	0.000029	0.08	0.27	0.19	211.55	147.78	0.06
34_502	277	50-yr	6.79	174.43	177.03		177.03	0.000000	0.02	0.03	0.02	309.28	189.70	0.01
34_502	277	100-yr	7.77	174.43	177.06		177.06	0.000000	0.02	0.03	0.03	313.89	189.17	0.01
34_502	277	200-yr	9.65	174.43	177.09		177.09	0.000001	0.03	0.04	0.03	320.27	188.82	0.01
34_502	272	50-yr	6.79	174.43	177.03	175.20	177.03	0.000001	0.03	0.04	0.02	232.72	183.01	0.01
34_502	272	100-yr	7.77	174.43	177.06	175.26	177.06	0.000001	0.03	0.05	0.02	236.16	183.34	0.01
34_502	272	200-yr	9.65	174.43	177.09	175.34	177.09	0.000001	0.03	0.05	0.02	266.64	183.81	0.01
34_502	259	Lane Rd	Culvert											
34_502	246	50-yr	6.79	174.26	175.63	175.02	175.63	0.000101	0.10	0.34	0.12	48.42	85.92	0.10
34_502	246	100-yr	7.77	174.26	175.78	175.06	175.79	0.000066	0.09	0.30	0.11	62.60	93.60	0.08
34_502	246	200-yr	9.65	174.26	176.02	175.12	176.02	0.000045	0.08	0.27	0.11	85.74	105.40	0.07
34_502	242	50-yr	6.79	174.26	175.63		175.63	0.000094	0.08	0.25	0.08	59.58	86.67	0.07
34_502	242	100-yr	7.77	174.26	175.78		175.78	0.000037	0.07	0.23	0.08	75.73	106.03	0.06
34_502	242	200-yr	9.65	174.26	176.02		176.02	0.000025	0.07	0.21	0.08	102.05	114.58	0.05
34_502	174	50-yr	6.79	174.24	175.62		175.62	0.000094	0.15	0.25	0.07	53.06	91.96	0.08
34_502	174	100-yr	7.77	174.24	175.78		175.78	0.000039	0.14	0.22	0.06	67.06	93.72	0.06
34_502	174	200-yr	9.65	174.24	176.02		176.02	0.000025	0.13	0.19	0.06	80.11	95.50	0.05
34_502	118	50-yr	6.79	174.23	175.62		175.62	0.000078	0.20	0.30	0.08	35.91	48.95	0.09
34_502	118	100-yr	7.77	174.23	175.78		175.78	0.000066	0.19	0.28	0.07	43.98	51.12	0.08
34_502	118	200-yr	9.65	174.23	176.01		176.01	0.000042	0.19	0.26	0.07	56.80	64.12	0.07
34_801	1005	50-yr	1.62	176.80	180.21		180.23	0.011639		0.72		2.25	2.50	0.24
34_801	1005	100-yr	1.80	176.80	180.24		180.27	0.013150		0.77		2.33	2.54	0.26
34_801	1005	200-yr	2.15	176.80	180.30		180.34	0.015024	0.24	0.86	0.26	2.52	3.81	0.28
34_801	900	50-yr	1.62	176.23	179.53		179.54	0.004273	0.42	0.50	0.56	3.27	10.38	0.16
34_801	900	100-yr	1.80	176.23	179.56		179.57	0.003997	0.47	0.49	0.56	3.82	11.60	0.16
34_801	900	200-yr	2.15	176.23	179.60		179.62	0.003651	0.54	0.50	0.53	4.16	13.07	0.16
34_801	771	50-yr	1.62	177.52	178.63		178.68	0.012576	0.45	0.76	0.56	2.20	5.67	0.28
34_801	771	100-yr	1.80	177.52	178.64		178.67	0.015076	0.51	0.83	0.63	2.23	5.62	0.31
34_801	771	200-yr	2.15	177.52	178.68		178.72	0.015079	0.65	0.87	0.80	2.53	6.71	0.31
34_801	598	50-yr	1.62	176.57	177.47	177.10	177.49	0.004226	0.63	0.47	0.53	3.17	10.17	0.18
34_801	598	100-yr	1.80	176.57	177.51	177.13	177.52	0.003647	0.61	0.45	0.55	3.56	10.78	0.17
34_801	598	200-yr	2.15	176.57	177.55	177.23	177.58	0.003743	0.68	0.47	0.60	3.96	11.37	0.17
34_801	464	50-yr	1.62	175.63	176.35	176.32	176.39	0.021521	0.75	0.83	1.17	1.84	12.68	0.40
34_801	464	100-yr	1.80	175.63	176.33	176.33	176.40	0.024757	0.83	1.03	1.45	1.85	11.58	0.50
34_801	464	200-yr	2.15	175.63	176.36	176.36	176.43	0.023793	0.95	1.05	1.49	1.93	13.22	0.50
34_801	327	50-yr	1.62	175.08	175.89		175.90	0.001372	0.36	0.28	0.24	5.33	23.46	0.11
34_801	327	100-yr	1.80	175.08	176.07		176.07	0.002085	0.18	0.15	0.20	10.19	32.79	0.05
34_801	327	200-yr	2.15	175.08	176.36		176.36	0.000042	0.12	0.07	0.11	20.14	35.66	0.02
34_801	230	50-yr	1.62	174.54	175.69		175.69	0.000011	0.06	0.04	0.07	25.89	37.11	0.01
34_801	230	100-yr	1.80	174.54	176.07		176.07	0.000007	0.05	0.03	0.06	32.94	40.02	0.01

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Cfl
34_501	230	200-yr	2.15	174.54	175.36		176.36	0.000003	0.04	0.03	0.05	44.91	43.92	0.01
34_501	222	50-yr	1.62	174.50	175.69	175.00	175.69	0.000018	0.10	0.14	0.11	13.33	34.83	0.04
34_501	222	100-yr	1.60	174.50	176.07	175.02	176.07	0.000013	0.10	0.13	0.10	16.11	36.59	0.04
34_501	222	200-yr	2.15	174.50	176.36	175.03	176.36	0.000008	0.10	0.12	0.10	20.42	39.62	0.03
34_501	202	Canborough Rd	Culvert											
34_501	179	50-yr	1.62	174.33	175.77	174.77	175.77	0.000019	0.12	0.15	0.07	15.45	47.19	0.04
34_501	179	100-yr	1.60	174.33	175.92	174.79	175.92	0.000015	0.11	0.14	0.07	17.77	49.78	0.04
34_501	179	200-yr	2.15	174.33	176.15	174.84	176.15	0.000012	0.12	0.14	0.07	21.36	53.40	0.04
34_501	171	50-yr	1.62	174.29	175.77		175.77	0.000008	0.03	0.03	0.04	43.92	50.33	0.01
34_501	171	100-yr	1.60	174.29	175.92		175.92	0.000006	0.03	0.03	0.04	51.46	52.72	0.01
34_501	171	200-yr	2.15	174.29	176.15		176.15	0.000004	0.03	0.03	0.04	63.82	56.04	0.01
34_501	112	50-yr	1.62	173.99	175.77		175.77	0.000000	0.01	0.01	0.02	95.98	86.68	0.00
34_501	112	100-yr	1.60	173.99	175.92		175.92	0.000000	0.01	0.01	0.02	105.41	87.99	0.00
34_501	112	200-yr	2.15	173.99	176.15		176.15	0.000000	0.01	0.01	0.02	121.08	89.91	0.00
34_500	2196	50-yr	76.14	172.97	175.75		175.76	0.000114	0.18	0.59	0.35	176.88	119.61	0.12
34_500	2196	100-yr	82.10	172.97	175.90		175.91	0.000103	0.18	0.58	0.35	194.82	123.74	0.12
34_500	2196	200-yr	94.41	172.97	176.12		176.14	0.000094	0.19	0.59	0.35	223.83	130.13	0.11
34_500	2007	50-yr	76.14	172.83	175.74		175.74	0.000055	0.28	0.41	0.14	249.46	166.21	0.09
34_500	2007	100-yr	82.10	172.83	175.89		175.89	0.000048	0.28	0.40	0.15	274.58	169.79	0.08
34_500	2007	200-yr	94.41	172.83	176.12		176.12	0.000043	0.28	0.40	0.15	314.38	178.07	0.08
34_500	1463	50-yr	76.14	172.82	175.73		175.73	0.000022	0.17	0.28	0.05	416.69	277.99	0.05
34_500	1463	100-yr	82.10	172.82	175.88		175.88	0.000019	0.17	0.27	0.05	459.22	294.18	0.05
34_500	1463	200-yr	94.41	172.82	176.11		176.11	0.000017	0.17	0.27	0.05	526.31	297.33	0.05
34_500	1135	50-yr	76.14	172.76	175.71		175.72	0.000099	0.32	0.59	0.11	186.76	126.16	0.12
34_500	1135	100-yr	82.10	172.76	175.86		175.87	0.000088	0.32	0.58	0.11	206.78	133.53	0.11
34_500	1135	200-yr	94.41	172.76	176.09		176.10	0.000079	0.33	0.58	0.11	238.50	139.41	0.11
34_500	962	50-yr	76.14	172.73	175.70		175.70	0.000078	0.33	0.52	0.20	193.28	112.38	0.10
34_500	962	100-yr	82.10	172.73	175.85		175.86	0.000071	0.33	0.52	0.21	210.79	115.16	0.10
34_500	962	200-yr	94.41	172.73	176.06		176.08	0.000068	0.34	0.53	0.20	238.24	120.96	0.10
34_500	619	50-yr	76.14	172.65	175.64		175.66	0.000169	0.31	0.76	0.18	189.33	108.28	0.15
34_500	619	100-yr	82.10	172.65	175.80		175.82	0.000154	0.31	0.75	0.19	188.67	110.55	0.15
34_500	619	200-yr	94.41	172.65	176.03		176.06	0.000148	0.33	0.77	0.20	213.05	114.86	0.14
34_500	160	50-yr	76.14	172.58	175.57		175.59	0.000194	0.23	0.75	0.09	194.94	136.53	0.15
34_500	160	100-yr	82.10	172.58	175.74		175.76	0.000135	0.23	0.73	0.09	218.32	145.25	0.14
34_500	160	200-yr	94.41	172.58	175.98		175.99	0.000122	0.23	0.73	0.10	254.06	151.76	0.13
34_501	1693	50-yr	26.12	173.76	175.60		175.60	0.000080	0.27	0.39	0.13	97.81	78.75	0.10
34_501	1693	100-yr	28.79	173.76	175.76		175.77	0.000068	0.27	0.38	0.12	110.82	80.04	0.09
34_501	1693	200-yr	32.97	173.76	176.00		176.00	0.000053	0.26	0.37	0.12	130.04	82.30	0.08
34_501	1529	50-yr	26.12	173.65	175.59	174.59	175.59	0.000068	0.11	0.38	0.16	156.40	128.58	0.09
34_501	1529	100-yr	28.79	173.65	175.76	174.55	175.76	0.000055	0.10	0.36	0.15	177.65	129.93	0.08
34_501	1529	200-yr	32.97	173.65	175.99	174.57	176.00	0.000044	0.10	0.35	0.15	209.23	132.88	0.07
34_501	1467	50-yr	26.12	173.61	175.58		175.59	0.000077	0.07	0.39	0.19	132.97	110.60	0.09
34_501	1467	100-yr	28.79	173.61	175.75		175.75	0.000065	0.07	0.38	0.19	151.84	114.86	0.09
34_501	1467	200-yr	32.97	173.61	175.99		175.99	0.000054	0.08	0.38	0.18	179.97	118.61	0.08
34_501	1264	50-yr	26.12	173.48	175.58		175.58	0.000011	0.08	0.16	0.07	330.23	213.32	0.04
34_501	1264	100-yr	28.79	173.48	175.75		175.75	0.000010	0.08	0.16	0.07	366.13	215.42	0.04
34_501	1264	200-yr	32.97	173.48	175.99		175.99	0.000008	0.08	0.16	0.07	418.22	217.92	0.03
34_501	1202	50-yr	26.12	173.44	175.58		175.58	0.000035	0.11	0.29	0.10	297.38	171.14	0.07
34_501	1202	100-yr	28.79	173.44	175.75		175.75	0.000029	0.10	0.28	0.09	336.96	177.58	0.06
34_501	1202	200-yr	32.97	173.44	175.99		175.99	0.000024	0.10	0.27	0.09	380.57	187.42	0.06
34_501	1172	50-yr	26.12	173.41	175.58		175.58	0.000018	0.09	0.20	0.06	268.10	162.83	0.04
34_501	1172	100-yr	28.79	173.41	175.74		175.75	0.000014	0.09	0.20	0.06	296.54	164.16	0.04
34_501	1172	200-yr	32.97	173.41	175.99		175.99	0.000012	0.09	0.20	0.06	336.27	165.77	0.04
34_501	908	50-yr	26.12	173.24	175.57		175.57	0.000016	0.13	0.21	0.18	161.33	101.42	0.05
34_501	908	100-yr	28.79	173.24	175.74		175.74	0.000016	0.13	0.22	0.18	179.40	114.41	0.05
34_501	908	200-yr	32.97	173.24	175.98		175.98	0.000014	0.12	0.22	0.18	208.67	129.44	0.04
34_501	525	50-yr	26.12	172.98	175.57		175.57	0.000005	0.06	0.13	0.04	414.61	192.03	0.03
34_501	525	100-yr	28.79	172.98	175.74		175.74	0.000005	0.06	0.13	0.04	447.04	193.58	0.03
34_501	525	200-yr	32.97	172.98	175.98		175.98	0.000005	0.06	0.14	0.04	494.04	195.65	0.03
34_501	394	50-yr	26.12	172.90	175.57		175.57	0.000012	0.10	0.20	0.05	268.27	141.66	0.04
34_501	394	100-yr	28.79	172.90	175.74		175.74	0.000012	0.10	0.21	0.05	292.76	150.41	0.04
34_501	394	200-yr	32.97	172.90	175.98		175.98	0.000011	0.10	0.21	0.05	330.55	162.95	0.04
34_501	35	50-yr	26.12	172.66	175.57		175.57	0.000008	0.08	0.17	0.07	324.42	151.30	0.03
34_501	35	100-yr	28.79	172.66	175.73		175.73	0.000008	0.08	0.17	0.07	350.29	156.19	0.03
34_501	35	200-yr	32.97	172.66	175.98		175.98	0.000007	0.08	0.18	0.08	386.99	161.24	0.03
34_500	4145	50-yr	95.67	172.48	175.55		175.56	0.000040	0.25	0.39	0.14	337.16	190.62	0.07
34_500	4145	100-yr	103.64	172.48	175.72		175.73	0.000036	0.25	0.38	0.15	369.05	192.45	0.07
34_500	4145	200-yr	119.17	172.48	175.97		175.97	0.000033	0.26	0.39	0.15	416.49	195.57	0.07
34_500	3623	50-yr	95.67	172.38	175.54		175.54	0.000042	0.08	0.42	0.14	487.28	264.20	0.08
34_500	3623	100-yr	103.64	172.38	175.71		175.71	0.000039	0.09	0.42	0.14	532.93	271.67	0.07

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Friction # C/I
34_500	3623	200-yr	118.17	172.38	175.96		175.96	0.000036	0.09	0.42	0.15	600.40	282.40	0.07
34_500	2689	50-yr	95.67	172.23	175.53		175.53	0.000005	0.11	0.14	0.02	870.74	379.90	0.03
34_500	2689	100-yr	103.64	172.23	175.70		175.71	0.000004	0.11	0.14	0.02	930.96	361.55	0.03
34_500	2689	200-yr	118.17	172.23	175.96		175.95	0.000004	0.11	0.15	0.03	1029.14	383.92	0.03
34_500	2073	50-yr	95.67	172.07	175.50		175.52	0.000067	0.28	0.65	0.16	190.34	82.74	0.11
34_500	2073	100-yr	103.64	172.07	175.68		175.70	0.000084	0.30	0.68	0.17	204.71	84.99	0.11
34_500	2073	200-yr	118.17	172.07	175.92		175.94	0.000088	0.32	0.70	0.18	225.65	88.48	0.12
34_500	1468	50-yr	95.67	171.95	175.48		175.50	0.000020	0.06	0.31	0.17	446.08	296.86	0.05
34_500	1468	100-yr	103.64	171.95	175.67		175.67	0.000019	0.06	0.32	0.17	492.34	271.39	0.05
34_500	1468	200-yr	118.17	171.95	175.91		175.91	0.000018	0.06	0.32	0.17	559.12	276.84	0.05
34_500	958	50-yr	95.67	171.84	175.47		175.48	0.000090	0.26	0.68	0.27	266.63	121.38	0.11
34_500	958	100-yr	103.64	171.84	175.64		175.65	0.000085	0.26	0.68	0.27	287.85	123.27	0.11
34_500	958	200-yr	118.17	171.84	175.88		175.90	0.000085	0.28	0.70	0.30	318.28	125.93	0.11
34_500	617	50-yr	95.67	171.78	175.40		175.46	0.000030	0.23	0.39	0.13	383.55	209.57	0.07
34_500	617	100-yr	103.64	171.78	175.63		175.64	0.000028	0.23	0.39	0.13	418.31	210.29	0.06
34_500	617	200-yr	118.17	171.78	175.88		175.88	0.000028	0.24	0.40	0.13	472.57	224.77	0.06
34_500	304	50-yr	95.67	171.72	175.45		175.46	0.000022	0.18	0.34	0.14	454.17	208.52	0.08
34_500	304	100-yr	103.64	171.72	175.63		175.63	0.000021	0.18	0.34	0.14	491.25	214.94	0.06
34_500	304	200-yr	118.17	171.72	175.87		175.88	0.000021	0.19	0.35	0.15	544.87	222.68	0.06
34_500	225	50-yr	95.67	171.70	175.45		175.45	0.000039	0.23	0.45	0.19	327.94	151.70	0.08
34_500	225	100-yr	103.64	171.70	175.62		175.63	0.000037	0.23	0.46	0.19	354.88	156.27	0.08
34_500	225	200-yr	118.17	171.70	175.87		175.87	0.000037	0.24	0.48	0.19	394.05	164.10	0.08
34_500	74	50-yr	95.67	171.67	175.44		175.45	0.000047	0.20	0.50	0.19	329.24	177.92	0.08
34_500	74	100-yr	103.64	171.67	175.61		175.62	0.000043	0.20	0.50	0.20	361.08	184.60	0.08
34_500	74	200-yr	118.17	171.67	175.86		175.87	0.000042	0.21	0.51	0.21	407.41	193.62	0.08
34_401	1803	50-yr	7.74	178.92	180.27		180.27	0.000061	0.12	0.27	0.10	59.99	155.35	0.08
34_401	1803	100-yr	8.64	178.92	180.30		180.30	0.000065	0.12	0.28	0.10	63.62	157.60	0.08
34_401	1803	200-yr	10.42	178.92	180.35		180.35	0.000066	0.13	0.29	0.11	72.13	162.52	0.08
34_401	1662	50-yr	7.74	178.41	180.27		180.27	0.000050	0.10	0.28	0.12	63.03	154.75	0.07
34_401	1662	100-yr	8.64	178.41	180.29		180.29	0.000058	0.10	0.30	0.13	66.63	163.95	0.08
34_401	1662	200-yr	10.42	178.41	180.34		180.34	0.000058	0.11	0.31	0.14	75.51	170.73	0.08
34_401	1642	50-yr	7.74	178.34	180.25	179.31	180.26	0.000208	0.24	0.64	0.20	19.88	159.45	0.15
34_401	1642	100-yr	8.64	178.34	180.27	179.37	180.28	0.000294	0.26	0.69	0.21	20.42	162.85	0.17
34_401	1642	200-yr	10.42	178.34	180.31	179.48	180.33	0.000351	0.31	0.77	0.23	22.30	170.10	0.19
34_401	1621	Private Driveway	Culvert											
34_401	1618	50-yr	7.74	178.18	179.51	179.12	179.58	0.001734	0.63	1.31	0.37	7.86	16.46	0.41
34_401	1618	100-yr	8.64	178.18	179.57	179.18	179.64	0.001848	0.64	1.32	0.42	8.94	19.23	0.40
34_401	1618	200-yr	10.42	178.18	179.61	179.26	179.70	0.001878	0.69	1.48	0.51	8.80	20.10	0.44
34_401	1612	50-yr	7.74	178.16	179.48	179.14	179.57	0.002171	0.52	1.37	0.38	8.99	15.34	0.44
34_401	1612	100-yr	8.64	178.16	179.54	179.19	179.62	0.002091	0.56	1.39	0.43	7.88	16.34	0.44
34_401	1612	200-yr	10.42	178.16	179.57	179.34	179.68	0.002621	0.65	1.59	0.52	8.42	16.88	0.49
34_401	1517	50-yr	7.74	177.84	178.99	178.90	179.23	0.007032	0.42	2.12	0.58	4.02	9.48	0.75
34_401	1517	100-yr	8.64	177.84	179.03	178.97	179.27	0.007222	0.48	2.22	0.59	4.48	11.47	0.77
34_401	1517	200-yr	10.42	177.84	179.19	179.19	179.38	0.004555	0.45	1.97	0.66	7.75	29.35	0.63
34_401	1328	50-yr	7.74	177.20	179.29		178.38	0.003004	0.40	1.36	0.81	8.13	22.33	0.48
34_401	1328	100-yr	8.64	177.20	179.32		178.39	0.003076	0.38	1.41	0.86	8.83	24.94	0.49
34_401	1328	200-yr	10.42	177.20	179.37		178.45	0.003198	0.48	1.50	0.94	10.11	26.14	0.51
34_401	1171	50-yr	7.74	176.68	177.91	177.82	177.97	0.002278	0.38	1.29	0.50	9.85	37.12	0.44
34_401	1171	100-yr	8.64	176.68	177.94	177.85	178.00	0.002362	0.41	1.34	0.54	10.74	38.51	0.45
34_401	1171	200-yr	10.42	176.68	177.98	177.89	178.04	0.002522	0.47	1.42	0.60	12.37	40.72	0.47
34_401	1096	50-yr	7.74	176.32	177.43	177.43	177.59	0.006453	0.57	1.90	0.51	5.94	22.93	0.72
34_401	1096	100-yr	8.64	176.32	177.47	177.47	177.62	0.005821	0.62	1.90	0.59	6.57	26.18	0.69
34_401	1096	200-yr	10.42	176.32	177.54	177.54	177.67	0.005101	0.66	1.88	0.69	8.47	28.73	0.65
34_401	795	50-yr	7.74	175.41	177.46		177.46	0.000054	0.20	0.31	0.15	34.90	35.29	0.08
34_401	795	100-yr	8.64	175.41	177.50		177.50	0.000060	0.21	0.34	0.16	36.35	35.81	0.08
34_401	795	200-yr	10.42	175.41	177.53		177.54	0.000060	0.25	0.38	0.18	37.50	36.21	0.08
34_401	667	50-yr	7.74	174.98	177.48		177.48	0.000009	0.10	0.17	0.08	76.20	65.89	0.03
34_401	667	100-yr	8.64	174.98	177.50		177.50	0.000011	0.11	0.18	0.09	78.91	66.88	0.04
34_401	667	200-yr	10.42	174.98	177.53		177.53	0.000014	0.13	0.21	0.10	81.03	67.68	0.04
34_401	483	50-yr	7.74	174.36	177.48		177.46	0.000003	0.05	0.10	0.06	130.43	102.37	0.02
34_401	483	100-yr	8.64	174.36	177.50		177.50	0.000003	0.05	0.11	0.07	134.63	103.73	0.02
34_401	483	200-yr	10.42	174.36	177.53		177.53	0.000004	0.06	0.13	0.08	137.89	104.85	0.02
34_401	474	50-yr	7.74	174.33	177.46	174.96	177.46	0.000003	0.04	0.10	0.06	130.72	107.77	0.02
34_401	474	100-yr	8.64	174.33	177.50	175.00	177.50	0.000003	0.04	0.11	0.07	135.18	110.01	0.02
34_401	474	200-yr	10.42	174.33	177.53	175.06	177.53	0.000004	0.05	0.13	0.08	138.63	111.60	0.02
34_401	457	Private Driveway	Culvert											
34_401	448	50-yr	7.74	174.36	177.46	175.05	177.46	0.000006	0.09	0.16	0.06	87.53	51.35	0.03
34_401	448	100-yr	8.64	174.36	177.50	175.09	177.50	0.000007	0.09	0.17	0.06	89.62	51.65	0.03
34_401	448	200-yr	10.42	174.36	177.53	175.17	177.53	0.000010	0.11	0.20	0.08	91.20	51.87	0.04

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_401	441	50-yr	7.74	174.34	177.46		177.46	0.000010	0.11	0.20	0.07	73.58	46.58	0.04
34_401	441	100-yr	8.64	174.34	177.50		177.50	0.000012	0.12	0.21	0.08	75.48	47.05	0.04
34_401	441	200-yr	10.42	174.34	177.53		177.53	0.000016	0.14	0.25	0.09	76.92	47.53	0.05
34_401	338	50-yr	7.74	173.93	177.46		177.46	0.000007	0.09	0.19	0.10	66.51	42.80	0.03
34_401	338	100-yr	8.64	173.93	177.50		177.50	0.000009	0.10	0.21	0.10	66.24	43.48	0.04
34_401	338	200-yr	10.42	173.93	177.53		177.53	0.000012	0.12	0.24	0.12	69.56	43.98	0.04
34_401	331	50-yr	7.74	173.90	177.48	174.73	177.48	0.000008	0.09	0.19	0.08	64.37	46.69	0.03
34_401	331	100-yr	8.64	173.90	177.50	174.79	177.50	0.000010	0.10	0.21	0.08	66.27	47.97	0.04
34_401	331	200-yr	10.42	173.90	177.53	174.89	177.53	0.000014	0.12	0.25	0.10	67.72	48.99	0.04
34_401	324	Private Driveway	Culvert											
34_401	313	50-yr	7.74	173.41	177.45	174.16	177.45	0.000004	0.06	0.14	0.06	96.85	76.11	0.02
34_401	313	100-yr	8.64	173.41	177.48	174.20	177.48	0.000005	0.06	0.15	0.06	99.17	77.28	0.03
34_401	313	200-yr	10.42	173.41	177.52	174.28	177.52	0.000008	0.07	0.18	0.08	102.28	78.78	0.03
34_401	307	50-yr	7.74	173.38	177.45		177.45	0.000004	0.05	0.13	0.06	109.06	81.66	0.02
34_401	307	100-yr	8.64	173.38	177.48		177.48	0.000004	0.06	0.15	0.06	111.54	82.15	0.02
34_401	307	200-yr	10.42	173.38	177.52		177.52	0.000006	0.07	0.17	0.10	114.80	82.82	0.03
34_401	256	50-yr	7.74	173.18	177.45		177.45	0.000003	0.04	0.13	0.05	132.22	117.90	0.02
34_401	256	100-yr	8.64	173.18	177.48		177.48	0.000004	0.05	0.14	0.06	135.81	119.70	0.02
34_401	256	200-yr	10.42	173.18	177.52		177.52	0.000005	0.06	0.17	0.07	140.98	121.60	0.03
34_401	250	50-yr	7.74	173.15	177.45	174.21	177.45	0.000006	0.05	0.15	0.06	106.43	111.11	0.03
34_401	250	100-yr	8.64	173.15	177.48	174.28	177.48	0.000007	0.05	0.16	0.07	109.82	112.81	0.03
34_401	250	200-yr	10.42	173.15	177.52	174.41	177.52	0.000009	0.06	0.18	0.08	114.31	115.11	0.03
34_401	236	Canborough Rd	Culvert											
34_401	206	50-yr	7.74	173.23	175.45	173.99	175.45	0.000071	0.11	0.38	0.08	33.32	40.17	0.09
34_401	206	100-yr	8.64	173.23	175.52	174.03	175.53	0.000057	0.12	0.36	0.07	40.85	47.31	0.08
34_401	206	200-yr	10.42	173.23	175.57	174.10	175.57	0.000048	0.12	0.35	0.08	53.05	51.71	0.07
34_401	199	50-yr	7.74	173.20	175.45	173.93	175.45	0.000051	0.12	0.35	0.09	41.44	49.55	0.08
34_401	199	100-yr	8.64	173.20	175.52	173.97	175.53	0.000040	0.12	0.33	0.09	50.43	52.83	0.07
34_401	199	200-yr	10.42	173.20	175.57	174.05	175.57	0.000032	0.12	0.32	0.09	64.02	57.69	0.06
34_401	148	50-yr	7.74	172.96	175.45		175.45	0.000003	0.03	0.07	0.04	191.95	188.07	0.01
34_401	148	100-yr	8.64	172.96	175.52		175.52	0.000001	0.03	0.07	0.04	226.12	190.23	0.01
34_401	148	200-yr	10.42	172.96	175.57		175.57	0.000001	0.03	0.06	0.04	272.18	193.30	0.01
34_401	99	50-yr	7.74	172.73	175.44		175.45	0.000040	0.10	0.36	0.10	29.01	17.59	0.07
34_401	99	100-yr	8.64	172.73	175.52		175.52	0.000039	0.10	0.37	0.10	32.23	18.17	0.07
34_401	99	200-yr	10.42	172.73	175.56		175.57	0.000041	0.11	0.40	0.11	37.18	21.45	0.07
34_206	4403	50-yr	15.14	178.92	180.58	180.14	180.09	0.003610	0.43	0.64	0.40	31.24	258.64	0.19
34_206	4403	100-yr	16.86	178.92	180.62	180.41	180.62	0.002070	0.29	0.50	0.36	50.55	291.57	0.14
34_206	4403	200-yr	20.26	178.92	180.66	180.44	180.67	0.001807	0.31	0.49	0.37	58.96	302.89	0.14
34_206	3999	50-yr	15.14	178.53	180.20		180.21	0.009474	0.39	0.24	0.27	47.80	114.18	0.07
34_206	3999	100-yr	16.86	178.53	180.23		180.24	0.004988	0.37	0.25	0.29	50.68	116.65	0.07
34_206	3999	200-yr	20.26	178.53	180.28		180.28	0.00513	0.40	0.26	0.31	56.39	121.12	0.07
34_206	3665	50-yr	15.14	178.28	179.87		179.89	0.004005	0.71	0.69	0.45	25.47	112.57	0.20
34_206	3665	100-yr	16.86	178.28	179.89		179.91	0.004004	0.74	0.70	0.47	27.93	133.06	0.20
34_206	3665	200-yr	20.26	178.28	179.93		179.95	0.003935	0.78	0.70	0.47	33.73	156.25	0.20
34_206	3223	50-yr	15.14	177.90	179.62		179.63	0.000235	0.17	0.18	0.17	87.95	322.32	0.05
34_206	3223	100-yr	16.86	177.90	179.64		179.64	0.000239	0.18	0.18	0.18	93.32	323.19	0.05
34_206	3223	200-yr	20.26	177.90	179.67		179.67	0.000252	0.20	0.19	0.20	102.71	324.66	0.05
34_206	3105	50-yr	15.14	177.79	179.61		179.61	0.000048	0.09	0.08	0.11	136.79	322.26	0.02
34_206	3105	100-yr	16.86	177.79	179.63		179.63	0.000093	0.10	0.09	0.12	142.02	332.70	0.02
34_206	3105	200-yr	20.26	177.79	179.65		179.65	0.000074	0.12	0.11	0.14	150.79	347.75	0.03
34_206	2985	50-yr	15.14	177.68	179.61		179.61	0.000030	0.09	0.07	0.10	159.91	312.85	0.02
34_206	2985	100-yr	16.86	177.68	179.62		179.62	0.000033	0.09	0.07	0.11	164.72	313.50	0.02
34_206	2985	200-yr	20.26	177.68	179.65		179.65	0.000042	0.11	0.08	0.12	172.15	314.50	0.02
34_206	2965	50-yr	15.14	177.59	179.61	178.50	179.61	0.000004	0.06	0.08	0.04	299.74	360.87	0.02
34_206	2965	100-yr	16.86	177.59	179.62	178.53	179.62	0.000004	0.07	0.09	0.05	305.30	363.45	0.02
34_206	2965	200-yr	20.26	177.59	179.65	178.57	179.65	0.000006	0.08	0.11	0.05	313.91	365.35	0.03
34_206	2867	James Rd	Culvert											
34_206	2650	50-yr	15.14	177.00	179.08	178.06	179.09	0.000226	0.17	0.64	0.18	50.77	170.29	0.16
34_206	2650	100-yr	16.86	177.00	179.18	178.13	179.19	0.000160	0.14	0.55	0.17	66.21	200.64	0.13
34_206	2650	200-yr	20.26	177.00	179.26	178.24	179.26	0.000083	0.13	0.42	0.18	107.18	222.61	0.10
34_206	2639	50-yr	15.14	176.99	178.47	178.47	178.95	0.010082	1.06	3.14	1.11	5.32	6.88	0.92
34_206	2639	100-yr	16.86	176.99	178.57	178.57	179.04	0.009121	0.98	3.15	1.18	6.10	8.27	0.89
34_206	2639	200-yr	20.26	176.99	178.70	178.70	179.21	0.008650	1.17	3.31	0.82	7.73	25.35	0.89
34_206	2543	50-yr	15.14	176.74	178.51		178.51	0.000024	0.18	0.61	0.15	72.49	312.86	0.18
34_206	2543	100-yr	16.86	176.74	178.53		178.54	0.000047	0.19	0.61	0.16	79.61	317.28	0.16
34_206	2543	200-yr	20.26	176.74	178.59		178.59	0.000201	0.19	0.58	0.16	89.14	334.71	0.14
34_206	1937	50-yr	15.14	176.23	178.31		178.32	0.000096	0.16	0.80	0.23	57.97	294.44	0.20
34_206	1937	100-yr	16.86	176.23	178.36		178.37	0.000302	0.15	0.71	0.21	76.17	304.82	0.17
34_206	1937	200-yr	20.26	176.23	178.50		178.50	0.000126	0.13	0.49	0.15	128.37	443.51	0.11

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Top Width (m)	Froude # Crl
34_206	1690	50-yr	15.14	176.02	178.31		178.31	0.000007	0.06	0.12	0.05	255.22	407.99	0.03
34_206	1690	100-yr	16.86	176.02	178.36		178.36	0.000007	0.06	0.12	0.05	276.75	413.75	0.03
34_206	1690	200-yr	20.26	176.02	178.49		178.49	0.000006	0.06	0.11	0.05	332.41	427.11	0.03
34_206	1291	50-yr	15.14	175.64	178.30	175.94	178.30	0.000030	0.10	0.26	0.12	114.45	211.31	0.06
34_206	1291	100-yr	16.86	175.64	178.35	177.01	178.36	0.000030	0.11	0.26	0.12	123.58	214.48	0.06
34_206	1291	200-yr	20.26	175.64	178.49	177.14	178.49	0.000027	0.11	0.26	0.13	147.62	230.25	0.06
34_206	1010	50-yr	15.14	175.44	178.30		178.30	0.000013	0.08	0.18	0.07	181.75	293.87	0.04
34_206	1010	100-yr	16.86	175.44	178.35		178.35	0.000013	0.08	0.18	0.08	197.54	318.79	0.04
34_206	1010	200-yr	20.26	175.44	178.48		178.48	0.000011	0.08	0.17	0.07	244.73	376.03	0.04
34_206	1006	50-yr	15.14	175.43	178.30	176.80	178.30	0.000017	0.08	0.21	0.08	166.44	321.33	0.04
34_206	1006	100-yr	16.86	175.43	178.35	176.88	178.35	0.000016	0.09	0.21	0.08	185.94	339.74	0.04
34_206	1006	200-yr	20.26	175.43	178.48	177.00	178.48	0.000013	0.09	0.19	0.07	235.83	360.82	0.04
34_206	894	Merick Rd	Culvert											
34_206	982	50-yr	15.14	175.61	178.04	176.58	178.05	0.000093	0.13	0.41	0.08	110.51	249.79	0.09
34_206	982	100-yr	16.86	175.61	178.12	176.64	178.13	0.000073	0.13	0.40	0.07	134.19	332.75	0.09
34_206	982	200-yr	20.26	175.61	178.48	176.76	178.48	0.000022	0.10	0.24	0.05	271.40	411.73	0.05
34_206	972	50-yr	15.14	175.60	178.04	176.67	178.04	0.000089	0.14	0.38	0.08	119.74	290.33	0.08
34_206	972	100-yr	16.86	175.60	178.12	176.94	178.13	0.000084	0.15	0.35	0.05	146.09	338.90	0.08
34_206	972	200-yr	20.26	175.60	178.48	177.07	178.48	0.000018	0.11	0.21	0.04	262.96	412.06	0.04
34_206	802	50-yr	15.14	175.47	178.01	176.63	178.03	0.000168	0.09	0.68	0.10	79.13	167.84	0.14
34_206	802	100-yr	16.86	175.47	178.10	176.70	178.11	0.000152	0.10	0.65	0.10	92.85	177.21	0.14
34_206	802	200-yr	20.26	175.47	178.47	176.82	178.47	0.000071	0.09	0.49	0.08	164.67	246.19	0.09
34_206	500	50-yr	15.14	175.24	177.58	176.58	177.59	0.000090	0.16	0.48	0.16	70.43	146.43	0.10
34_206	500	100-yr	16.86	175.24	178.07	176.66	178.08	0.000077	0.16	0.46	0.16	82.82	161.77	0.09
34_206	500	200-yr	20.26	175.24	178.48	176.84	178.48	0.000028	0.12	0.31	0.12	150.38	269.00	0.06
34_206	172	50-yr	15.14	174.98	177.96	176.28	177.97	0.000052	0.06	0.36	0.17	99.83	202.29	0.09
34_206	172	100-yr	16.86	174.98	178.05	176.36	178.06	0.000048	0.06	0.35	0.16	117.69	211.30	0.07
34_206	172	200-yr	20.26	174.98	178.45	175.49	178.45	0.000020	0.06	0.26	0.11	201.94	271.26	0.05
34_206	38	50-yr	15.14	174.89	177.96		177.96	0.000026	0.05	0.28	0.12	131.32	205.96	0.06
34_206	38	100-yr	16.86	174.88	178.05		178.05	0.000025	0.06	0.27	0.12	150.46	211.66	0.05
34_206	38	200-yr	20.26	174.88	178.45		178.45	0.000011	0.04	0.20	0.10	247.18	298.89	0.04
34_206	31	50-yr	15.14	174.67	177.96	176.02	177.96	0.000022	0.05	0.26	0.10	139.20	212.49	0.05
34_206	31	100-yr	16.86	174.67	178.05	176.09	178.05	0.000019	0.05	0.26	0.11	159.43	224.03	0.05
34_206	31	200-yr	20.26	174.67	178.45	176.20	178.45	0.000009	0.04	0.18	0.09	260.21	276.26	0.03
34_206	19	Mocta Rd	Culvert											
34_206	8	50-yr	15.14	174.69	177.78	175.70	177.78	0.000021	0.06	0.25	0.10	125.26	227.06	0.05
34_206	8	100-yr	16.86	174.69	178.02	175.77	178.02	0.000009	0.06	0.18	0.08	203.38	267.77	0.03
34_206	8	200-yr	20.26	174.69	178.44	175.89	178.44	0.000004	0.05	0.12	0.06	319.44	285.50	0.02
34_207	1612	50-yr	3.63	176.94	179.18		179.18	0.001925	0.39	0.49	0.27	8.47	27.48	0.12
34_207	1612	100-yr	4.03	176.94	179.22		179.23	0.001894	0.36	0.49	0.30	9.57	31.78	0.12
34_207	1612	200-yr	4.84	176.94	179.30		179.31	0.001406	0.33	0.44	0.34	12.50	38.82	0.10
34_207	1499	50-yr	3.63	176.79	179.06		179.08	0.000622	0.22	0.29	0.26	13.97	46.95	0.07
34_207	1499	100-yr	4.03	176.79	179.13		179.13	0.000471	0.22	0.26	0.24	16.73	51.74	0.06
34_207	1499	200-yr	4.84	176.79	179.25		179.25	0.000273	0.18	0.20	0.21	24.59	82.06	0.05
34_207	1365	50-yr	3.63	176.61	179.92	177.51	179.93	0.002439	0.67	0.55	0.62	6.46	5.81	0.13
34_207	1365	100-yr	4.03	176.61	179.99	177.56	179.91	0.002442	0.69	0.56	0.66	6.91	9.04	0.13
34_207	1365	200-yr	4.84	176.61	179.15	177.66	179.17	0.002373	0.57	0.59	0.68	8.89	37.43	0.13
34_207	1232	50-yr	3.63	176.44	178.59	177.31	178.60	0.002554	0.59	0.55	0.58	6.57	7.57	0.14
34_207	1232	100-yr	4.03	176.44	178.66	177.36	178.69	0.002358	0.62	0.54	0.55	7.34	9.27	0.13
34_207	1232	200-yr	4.84	176.44	178.87	177.46	178.89	0.001833	0.55	0.51	0.45	9.73	19.38	0.12
34_207	1147	50-yr	3.63	176.33	178.19	177.22	178.23	0.008771	0.58	0.84	0.68	4.34	4.03	0.23
34_207	1147	100-yr	4.03	176.33	178.33	177.28	178.37	0.007268	0.72	0.82	0.79	4.94	12.75	0.21
34_207	1147	200-yr	4.84	176.33	178.82	177.37	178.65	0.004884	0.88	0.75	0.80	6.34	35.24	0.18
34_207	967	50-yr	3.63	176.12	178.02		178.04	0.000418	0.17	0.65	0.19	5.86	6.04	0.18
34_207	967	100-yr	4.03	176.12	178.20		178.22	0.000321	0.19	0.62	0.23	7.02	6.82	0.16
34_207	967	200-yr	4.84	176.12	178.54		178.55	0.000205	0.13	0.57	0.18	11.15	25.03	0.13
34_207	893	50-yr	3.63	175.74	177.91	176.62	177.93	0.000347	0.22	0.63	0.24	6.21	5.42	0.18
34_207	893	100-yr	4.03	175.74	178.12	176.67	178.14	0.000274	0.24	0.61	0.25	7.39	9.79	0.14
34_207	893	200-yr	4.84	175.74	178.48	176.77	178.49	0.000204	0.18	0.59	0.20	10.19	37.67	0.13
34_207	559	50-yr	3.63	175.56	177.86	176.48	177.88	0.000405	0.26	0.68	0.29	5.92	5.12	0.18
34_207	559	100-yr	4.03	175.56	178.06	176.53	178.10	0.000322	0.18	0.66	0.30	7.38	11.32	0.15
34_207	559	200-yr	4.84	175.56	178.46	176.84	178.47	0.000120	0.14	0.45	0.15	19.79	102.32	0.09
34_207	447	50-yr	3.63	175.42	177.82		177.84	0.000379	0.22	0.65	0.22	6.09	5.45	0.15
34_207	447	100-yr	4.03	175.42	178.04		178.06	0.000293	0.16	0.61	0.18	8.32	21.56	0.13
34_207	447	200-yr	4.84	175.42	178.48		178.48	0.000057	0.10	0.31	0.11	32.43	76.48	0.06
34_207	217	50-yr	3.63	175.12	177.80		177.80	0.000070	0.10	0.37	0.10	13.51	22.50	0.08
34_207	217	100-yr	4.03	175.12	178.03		178.04	0.000045	0.10	0.32	0.09	20.23	34.71	0.07
34_207	217	200-yr	4.84	175.12	178.45		178.45	0.000018	0.09	0.23	0.08	39.75	55.00	0.04
34_104	1467	50-yr	6.62	175.91	177.53	176.95	177.60	0.001449	0.44	1.17	0.51	7.13	27.87	0.33
34_104	1467	100-yr	7.56	175.91	177.61	177.01	177.67	0.001476	0.42	1.22	0.44	8.06	36.60	0.34

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_104	1467	200-yr	9.12	175.81	177.73	177.14	177.80	0.001486	0.39	1.30	0.29	10.93	68.53	0.34
34_104	1213	50-yr	8.82	175.61	177.59	176.58	177.17	0.001877	0.19	1.28	0.38	5.51	6.96	0.41
34_104	1213	100-yr	7.59	175.61	177.15	176.63	177.24	0.001948	0.25	1.33	0.42	5.99	7.50	0.41
34_104	1213	200-yr	9.12	175.81	177.27	176.73	177.37	0.001910	0.25	1.41	0.48	6.99	23.35	0.41
34_104	832	50-yr	8.82	175.16	176.85	175.95	176.87	0.000377		0.98		12.11	13.00	0.18
34_104	832	100-yr	7.59	175.16	176.93	175.99	176.95	0.000367	0.05	0.58		13.16	14.52	0.19
34_104	832	200-yr	9.12	175.18	177.07	176.07	177.09	0.000343	0.10	0.60	0.01	15.66	20.89	0.18
34_104	440	50-yr	8.82	174.70	176.61	175.70	176.65	0.000805		0.91		7.45	8.52	0.27
34_104	440	100-yr	7.59	174.70	176.68	175.78	176.73	0.000948		0.96		7.94	8.72	0.28
34_104	440	200-yr	9.12	174.70	176.82	175.86	176.87	0.001010		1.03		8.90	7.10	0.29
34_104	84	50-yr	8.82	174.28	176.31		176.34	0.000604		0.88		7.75	8.35	0.25
34_104	84	100-yr	7.59	174.28	176.35		176.40	0.000902		0.94		8.04	8.47	0.27
34_104	84	200-yr	9.12	174.28	176.45		176.51	0.001057	0.01	1.05		8.70	8.72	0.29
34_105	2234	50-yr	3.35	175.74	177.31		177.32	0.000278		0.45	0.06	11.26	94.22	0.14
34_105	2234	100-yr	3.73	175.74	177.37		177.38	0.000207		0.43	0.09	17.19	108.10	0.12
34_105	2234	200-yr	4.48	175.74	177.48		177.49	0.000107		0.32	0.09	31.97	157.74	0.09
34_105	2098	50-yr	3.35	175.72	177.27		177.29	0.000317	0.03	0.53	0.06	6.74	21.66	0.16
34_105	2098	100-yr	3.73	175.72	177.34		177.35	0.000312	0.08	0.53	0.09	8.71	38.60	0.15
34_105	2098	200-yr	4.48	175.72	177.46		177.47	0.000219	0.10	0.47	0.10	16.07	115.48	0.13
34_105	2070	50-yr	3.35	175.72	177.26	176.22	177.28	0.000336		0.54		6.23	14.39	0.18
34_105	2070	100-yr	3.73	175.72	177.33	176.25	177.34	0.000361		0.57		6.57	15.36	0.19
34_105	2070	200-yr	4.48	175.72	177.44	176.32	177.46	0.000383	0.03	0.61	0.08	8.04	48.90	0.17
34_105	1875	50-yr	3.35	175.68	177.21	176.18	177.22	0.000221	0.06	0.46	0.08	7.74	18.03	0.14
34_105	1875	100-yr	3.73	175.68	177.28	176.21	177.29	0.000222	0.06	0.48	0.10	8.67	21.81	0.14
34_105	1875	200-yr	4.48	175.68	177.38	176.27	177.41	0.000210	0.08	0.49	0.10	11.79	53.27	0.14
34_105	1643	50-yr	3.35	175.68	177.14	176.18	177.18	0.000384		0.55		6.08	10.29	0.17
34_105	1643	100-yr	3.73	175.68	177.20	176.19	177.22	0.000391		0.58		6.39	10.66	0.17
34_105	1643	200-yr	4.48	175.68	177.32	176.25	177.34	0.000431		0.63		7.03	11.44	0.18
34_105	1539	50-yr	3.35	175.65	177.10	176.15	177.12	0.000392		0.57		5.87	10.95	0.17
34_105	1539	100-yr	3.73	175.65	177.16	176.18	177.18	0.000424		0.60		6.17	11.36	0.18
34_105	1539	200-yr	4.48	175.65	177.27	176.25	177.29	0.000470		0.66		6.77	11.97	0.19
34_105	1395	50-yr	3.35	175.63	177.05		177.06	0.000375		0.55		6.11	5.82	0.17
34_105	1395	100-yr	3.73	175.63	177.10		177.12	0.000407		0.58		6.41	5.93	0.18
34_105	1395	200-yr	4.48	175.63	177.20		177.22	0.000452		0.63		7.03	6.18	0.19
34_105	1317	50-yr	3.35	175.62	177.02		177.03	0.000329		0.52		6.47	6.43	0.17
34_105	1317	100-yr	3.73	175.62	177.07		177.09	0.000366		0.55		6.79	6.56	0.17
34_105	1317	200-yr	4.48	175.62	177.17		177.19	0.000394		0.60		7.46	6.82	0.18
34_105	1311	50-yr	3.35	175.62	177.02		177.03	0.000282		0.48		6.99	7.19	0.18
34_105	1311	100-yr	3.73	175.62	177.07		177.08	0.000304		0.51		7.36	7.35	0.18
34_105	1311	200-yr	4.48	175.62	177.17		177.19	0.000334		0.55		8.11	7.68	0.17
34_105	1297	Comfort Rd	Culvert											
34_105	1284	50-yr	3.46	175.78	176.99	176.51	177.02	0.000666		0.67		5.17	7.73	0.26
34_105	1284	100-yr	3.80	175.78	177.04	176.54	177.06	0.000667		0.69		5.52	7.91	0.26
34_105	1284	200-yr	4.64	175.78	177.13	176.59	177.16	0.000697		0.74		6.28	8.30	0.27
34_105	1277	50-yr	3.46	175.77	177.00	176.22	177.01	0.000263		0.42		8.29	10.72	0.15
34_105	1277	100-yr	3.80	175.77	177.04	176.25	177.05	0.000271		0.43		8.78	11.01	0.15
34_105	1277	200-yr	4.64	175.77	177.14	176.30	177.15	0.000296		0.47		9.86	11.62	0.16
34_105	1193	50-yr	3.46	175.70	176.98		176.98	0.000232		0.40		8.62	10.70	0.14
34_105	1193	100-yr	3.80	175.70	177.02		177.03	0.000242		0.42		9.10	10.98	0.15
34_105	1193	200-yr	4.64	175.70	177.11		177.12	0.000269		0.46		10.14	11.55	0.16
34_105	1046	50-yr	3.46	175.59	176.93	176.08	176.94	0.000396		0.55		6.25	20.70	0.18
34_105	1046	100-yr	3.80	175.59	176.97	176.11	176.98	0.000425		0.58		6.52	27.03	0.19
34_105	1046	200-yr	4.64	175.59	177.05	176.18	177.07	0.000505		0.65		7.09	36.75	0.21
34_105	1042	50-yr	3.46	175.59	176.90		176.93	0.001218		0.79		4.36	8.35	0.31
34_105	1042	100-yr	3.80	175.59	176.94		176.97	0.001254		0.82		4.63	11.61	0.31
34_105	1042	200-yr	4.64	175.59	177.02		177.06	0.001388		0.90		5.17	18.44	0.33
34_105	1030	Détre Rd	Culvert											
34_105	1018	50-yr	3.98	175.34	176.54	175.92	176.57	0.000670		0.70		5.70	7.76	0.23
34_105	1018	100-yr	4.13	175.34	176.58	175.93	176.60	0.000649		0.70		5.91	8.15	0.23
34_105	1018	200-yr	4.77	175.34	176.68	175.98	176.70	0.000648		0.73		6.52	9.28	0.23
34_105	1013	50-yr	3.98	175.34	176.53	175.90	176.56	0.000931		0.78		5.05	8.01	0.27
34_105	1013	100-yr	4.13	175.34	176.57	175.92	176.60	0.000699		0.79		5.25	8.29	0.27
34_105	1013	200-yr	4.77	175.34	176.66	175.97	176.70	0.000687		0.81		5.86	9.11	0.27
34_105	851	50-yr	3.98	175.15	176.44	175.69	176.46	0.000447		0.56		7.67	10.72	0.20
34_105	851	100-yr	4.13	175.15	176.48	175.70	176.50	0.000425		0.56		7.40	11.29	0.19
34_105	851	200-yr	4.77	175.15	176.58	175.75	176.60	0.000418		0.58		8.20	12.48	0.19
34_105	615	50-yr	3.98	174.67	176.34	175.43	176.38	0.000413		0.58		6.85	8.82	0.19
34_105	615	100-yr	4.13	174.67	176.38	175.45	176.40	0.000398		0.58		7.14	8.94	0.18
34_105	615	200-yr	4.77	174.67	176.48	175.50	176.50	0.000409		0.61		7.85	7.24	0.19

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_105	211	50-yr	3.98	174.40	175.31	174.95	176.31	0.000045		0.22		25.91	45.41	0.06
34_105	211	100-yr	4.13	174.40	176.36	174.97	176.36	0.000039		0.21	0.10	26.05	46.34	0.06
34_105	211	200-yr	4.77	174.40	176.48	175.02	176.48	0.000035		0.20	0.11	33.90	46.41	0.06
34_105	55	50-yr	3.98	174.22	176.29	174.80	176.30	0.000125		0.38		10.41	7.55	0.10
34_105	55	100-yr	4.13	174.22	176.34	174.81	176.35	0.000123		0.38		10.77	7.66	0.10
34_105	55	200-yr	4.77	174.22	176.44	174.87	176.45	0.000135		0.41		11.58	7.91	0.11
34_400	1426	50-yr	95.58	171.63	175.43		175.44	0.000052	0.34	0.53	0.15	350.63	171.43	0.09
34_400	1426	100-yr	103.67	171.63	175.61		175.61	0.000049	0.34	0.53	0.15	381.41	176.37	0.09
34_400	1426	200-yr	119.07	171.63	175.85		175.86	0.000047	0.36	0.54	0.16	426.46	188.13	0.09
34_400	1017	50-yr	95.58	171.49	175.41		175.42	0.000050	0.21	0.51	0.09	269.50	124.61	0.08
34_400	1017	100-yr	103.67	171.49	175.59		175.60	0.000048	0.21	0.52	0.10	311.85	125.08	0.09
34_400	1017	200-yr	119.07	171.49	175.83		175.84	0.000049	0.23	0.55	0.11	343.84	133.17	0.09
34_400	859	50-yr	95.58	171.44	175.40		175.41	0.000053	0.22	0.53	0.11	304.81	118.40	0.09
34_400	859	100-yr	103.67	171.44	175.58		175.59	0.000051	0.23	0.54	0.10	326.08	122.64	0.09
34_400	859	200-yr	119.07	171.44	175.82		175.83	0.000053	0.25	0.57	0.08	357.52	149.29	0.09
34_400	606	50-yr	95.58	171.35	175.38		175.40	0.000044	0.10	0.51	0.19	415.64	216.78	0.08
34_400	606	100-yr	103.67	171.35	175.57		175.58	0.000040	0.10	0.50	0.19	454.65	221.59	0.08
34_400	606	200-yr	119.07	171.35	175.82		175.82	0.000037	0.10	0.50	0.20	506.87	227.44	0.08
34_400	358	50-yr	95.58	171.27	175.38		175.38	0.000126	0.18	0.88	0.23	296.30	165.79	0.14
34_400	358	100-yr	103.67	171.27	175.54		175.56	0.000118	0.19	0.88	0.23	326.47	168.30	0.13
34_400	358	200-yr	119.07	171.27	175.79		175.81	0.000114	0.20	0.88	0.24	368.45	173.25	0.13
34_400	348	50-yr	95.58	171.26	175.31	172.98	175.37	0.000255	0.44	1.20	0.33	132.11	121.36	0.20
34_400	348	100-yr	103.67	171.26	175.54	173.04	175.56	0.000130	0.22	0.89	0.24	280.19	125.48	0.14
34_400	348	200-yr	119.07	171.26	175.78	173.17	175.80	0.000131	0.23	0.93	0.26	311.14	130.20	0.14
34_400	325	Moate Rd	Bridge											
34_400	305	50-yr	95.58	171.33	175.25	172.91	175.29	0.000189	0.36	1.00	0.28	140.53	121.23	0.17
34_400	305	100-yr	103.67	171.33	175.43	172.97	175.45	0.000113	0.23	0.80	0.24	265.01	125.73	0.13
34_400	305	200-yr	119.07	171.33	175.65	173.08	175.67	0.000115	0.24	0.84	0.26	293.21	136.36	0.13
34_400	296	50-yr	95.58	171.33	175.26	172.75	175.27	0.000091	0.19	0.71	0.22	262.82	128.63	0.12
34_400	296	100-yr	103.67	171.33	175.43	172.90	175.45	0.000087	0.20	0.71	0.22	285.31	135.70	0.12
34_400	296	200-yr	119.07	171.33	175.65	172.99	175.67	0.000089	0.21	0.75	0.24	315.95	143.28	0.12
34_400	163	50-yr	95.58	171.28	175.25	172.76	175.26	0.000051	0.22	0.53	0.16	316.34	136.95	0.09
34_400	163	100-yr	103.67	171.28	175.43	172.97	175.43	0.000049	0.23	0.54	0.15	340.39	143.59	0.09
34_400	163	200-yr	119.07	171.28	175.65	173.08	175.68	0.000059	0.23	0.58	0.15	374.72	186.45	0.09
34_301	2985	50-yr	7.14	178.16	178.54	178.94	179.54	0.000183	0.08	0.14	0.11	76.00	195.60	0.04
34_301	2985	100-yr	7.96	178.16	178.56	178.95	178.98	0.000178	0.08	0.14	0.11	83.42	204.02	0.04
34_301	2985	200-yr	9.58	178.16	178.64	178.98	179.64	0.000170	0.08	0.15	0.11	97.42	216.31	0.04
34_301	2804	50-yr	7.14	177.77	179.50	178.83	179.50	0.000261	0.28	0.18	0.08	27.89	144.67	0.05
34_301	2804	100-yr	7.96	177.77	179.53	178.86	179.54	0.000270	0.29	0.18	0.08	29.68	151.62	0.05
34_301	2804	200-yr	9.58	177.77	179.60	178.89	179.60	0.000286	0.31	0.20	0.09	33.29	176.41	0.05
34_301	2529	50-yr	7.14	177.16	179.35	178.21	179.38	0.001499	0.43	0.48	0.44	15.43	110.62	0.12
34_301	2529	100-yr	7.96	177.16	179.36	178.27	179.39	0.001473	0.46	0.50	0.47	16.54	113.18	0.12
34_301	2529	200-yr	9.58	177.16	179.43	178.38	179.45	0.001500	0.52	0.52	0.52	18.47	117.17	0.12
34_301	2295	50-yr	7.14	176.65	179.13		179.13	0.000652	0.21	0.31	0.31	23.51	82.52	0.07
34_301	2295	100-yr	7.96	176.65	179.17		179.17	0.000602	0.22	0.30	0.31	25.96	84.66	0.07
34_301	2295	200-yr	9.58	176.65	179.24		179.24	0.000527	0.14	0.29	0.32	31.81	114.45	0.07
34_301	2134	50-yr	7.14	176.29	178.90	177.44	178.93	0.003206	0.62	0.71	0.49	10.40	32.48	0.18
34_301	2134	100-yr	7.96	176.29	178.95	177.51	178.98	0.003367	0.64	0.74	0.48	11.29	42.99	0.17
34_301	2134	200-yr	9.58	176.29	179.03	177.63	179.06	0.003812	0.69	0.78	0.42	13.55	66.36	0.18
34_301	1892	50-yr	7.14	175.76	178.38		178.40	0.001467	0.22	0.46	0.42	16.59	43.26	0.11
34_301	1892	100-yr	7.96	175.76	178.42		178.43	0.001542	0.26	0.47	0.45	17.68	44.94	0.11
34_301	1892	200-yr	9.58	175.76	178.48		178.48	0.001638	0.30	0.49	0.50	18.81	51.20	0.11
34_301	1725	50-yr	7.14	175.38	178.09		178.10	0.002325	0.29	0.57	0.34	15.29	62.18	0.13
34_301	1725	100-yr	7.96	175.38	178.12		178.13	0.002127	0.33	0.56	0.37	17.32	64.33	0.13
34_301	1725	200-yr	9.58	175.38	178.19		178.20	0.001889	0.37	0.51	0.40	21.77	70.14	0.11
34_301	1541	50-yr	7.14	174.99	177.59		177.61	0.003135	0.47	0.69	0.64	10.90	16.63	0.18
34_301	1541	100-yr	7.96	174.99	177.64		177.67	0.003118	0.53	0.70	0.67	11.92	18.60	0.16
34_301	1541	200-yr	9.58	174.99	177.76		177.81	0.002738	0.47	0.69	0.64	15.46	34.74	0.15
34_301	1364	50-yr	7.14	174.60	176.96		177.00	0.003689	0.69	0.76	0.93	9.01	8.46	0.18
34_301	1364	100-yr	7.96	174.60	177.03		177.07	0.003765	0.64	0.79	0.98	9.81	8.96	0.18
34_301	1364	200-yr	9.58	174.60	177.19		177.23	0.003699	0.64	0.85	0.86	11.29	13.71	0.19
34_301	1224	50-yr	7.14	174.29	176.44		176.47	0.003942	0.83	0.78	0.57	9.62	14.04	0.19
34_301	1224	100-yr	7.96	174.29	176.43		176.46	0.005080	0.94	0.86	0.65	9.47	13.57	0.22
34_301	1224	200-yr	9.58	174.29	176.38		176.45	0.008297	1.16	1.09	0.80	9.04	12.61	0.25
34_301	1046	50-yr	7.14	173.90	175.48		175.52	0.007144	0.80	0.88	0.82	8.33	22.18	0.25
34_301	1046	100-yr	7.96	173.90	175.57		175.60	0.004402	0.77	0.72	0.81	10.40	23.40	0.20
34_301	1046	200-yr	9.58	173.90	175.75		175.77	0.002037	0.57	0.53	0.72	14.89	26.54	0.14
34_301	796	50-yr	7.14	173.35	175.38		175.39	0.000165	0.24	0.18	0.29	28.98	40.32	0.04
34_301	796	100-yr	7.96	173.35	175.50		175.50	0.000128	0.23	0.17	0.27	33.84	42.45	0.04
34_301	796	200-yr	9.58	173.35	175.70		175.71	0.000589	0.23	0.15	0.26	42.91	45.77	0.03

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_301	611	50-yr	7.14	172.94	175.29		175.31	0.001390	0.81	0.53	0.58	12.11	10.29	0.12
34_301	611	100-yr	7.86	172.94	175.43		175.45	0.001229	0.81	0.52	0.59	13.51	11.05	0.11
34_301	611	200-yr	9.58	172.94	175.64		175.66	0.001047	0.83	0.51	0.58	16.08	12.58	0.11
34_301	450	50-yr	7.14	172.59	175.30		175.30	0.000008	0.09	0.05	0.10	80.62	81.12	0.01
34_301	450	100-yr	7.86	172.59	175.43		175.44	0.000008	0.09	0.05	0.10	88.87	84.44	0.01
34_301	450	200-yr	9.58	172.59	175.65		175.65	0.000008	0.09	0.05	0.10	103.63	89.97	0.01
34_301	322	50-yr	7.14	172.31	175.30		175.30	0.000003	0.04	0.03	0.05	165.23	81.04	0.01
34_301	322	100-yr	7.86	172.31	175.43		175.43	0.000003	0.04	0.04	0.05	177.35	93.46	0.01
34_301	322	200-yr	9.58	172.31	175.65		175.65	0.000003	0.04	0.04	0.05	198.35	97.87	0.01
34_301	151	50-yr	7.14	171.93	175.30		175.30	0.000001	0.04	0.02	0.04	187.06	84.68	0.05
34_301	151	100-yr	7.86	171.93	175.43		175.43	0.000001	0.04	0.02	0.05	196.32	86.28	0.05
34_301	151	200-yr	9.58	171.93	175.65		175.65	0.000001	0.05	0.02	0.05	217.58	89.39	0.05
34_301	120	50-yr	7.14	171.67	175.30		175.30	0.000001	0.04	0.02	0.05	178.88	76.11	0.05
34_301	120	100-yr	7.86	171.67	175.43		175.43	0.000001	0.05	0.02	0.05	188.98	77.71	0.05
34_301	120	200-yr	9.58	171.67	175.65		175.65	0.000001	0.05	0.02	0.05	204.36	80.79	0.05
34_301	111	50-yr	7.14	171.65	175.30	172.41	175.30	0.000001	0.04	0.02	0.05	178.39	77.69	0.05
34_301	111	100-yr	7.86	171.65	175.43	172.44	175.43	0.000001	0.04	0.02	0.05	188.72	79.36	0.05
34_301	111	200-yr	9.58	171.65	175.65	172.50	175.65	0.000001	0.05	0.02	0.05	206.51	82.78	0.05
34_301	99	Moote Rd	Culvert											
34_301	83	50-yr	7.14	171.73	175.25	172.25	175.25	0.000501	0.04	0.02	0.03	206.33	90.41	0.05
34_301	83	100-yr	7.86	171.73	175.43	172.27	175.43	0.000501	0.04	0.02	0.04	222.18	93.70	0.05
34_301	83	200-yr	9.58	171.73	175.65	172.31	175.65	0.000501	0.05	0.02	0.04	243.66	98.26	0.05
34_301	74	50-yr	7.14	171.72	175.25		175.25	0.000001	0.04	0.02	0.03	213.04	92.62	0.05
34_301	74	100-yr	7.86	171.72	175.43		175.43	0.000001	0.04	0.02	0.04	226.21	95.27	0.05
34_301	74	200-yr	9.58	171.72	175.65		175.65	0.000501	0.04	0.02	0.04	250.98	98.99	0.05
34_301	11	50-yr	7.14	171.68	175.25		175.25	0.000001	0.02	0.06	0.02	250.29	112.13	0.01
34_301	11	100-yr	7.86	171.68	175.43		175.43	0.000001	0.02	0.06	0.03	269.93	116.02	0.01
34_301	11	200-yr	9.58	171.68	175.65		175.65	0.000001	0.02	0.06	0.03	296.90	124.03	0.01
34_204	3833	50-yr	3.52	179.66	181.52		181.54	0.004212	0.28	0.68	0.57	6.37	12.78	0.18
34_204	3833	100-yr	3.91	179.66	181.54		181.56	0.004879	0.31	0.72	0.63	6.56	14.08	0.20
34_204	3833	200-yr	4.69	179.66	181.58		181.61	0.006804	0.19	0.88	0.76	7.59	39.41	0.24
34_204	3409	50-yr	3.52	179.28	180.92		180.92	0.000730	0.20	0.27	0.16	17.14	126.96	0.08
34_204	3409	100-yr	3.91	179.28	180.93		180.93	0.000695	0.21	0.27	0.16	18.86	133.09	0.07
34_204	3409	200-yr	4.69	179.28	180.95		180.96	0.000698	0.22	0.26	0.16	21.98	143.55	0.07
34_204	3015	50-yr	3.52	178.94	180.60		180.60	0.000948	0.12	0.34	0.11	19.96	135.43	0.09
34_204	3015	100-yr	3.91	178.94	180.61		180.61	0.001015	0.13	0.35	0.12	21.33	141.16	0.10
34_204	3015	200-yr	4.69	178.94	180.63		180.64	0.001061	0.15	0.37	0.13	24.96	175.16	0.10
34_204	2690	50-yr	3.52	178.65	180.39		180.39	0.000487	0.13	0.24	0.16	22.31	162.32	0.07
34_204	2690	100-yr	3.91	178.65	180.41		180.41	0.000419	0.12	0.23	0.16	26.48	175.51	0.06
34_204	2690	200-yr	4.69	178.65	180.45		180.45	0.000341	0.11	0.21	0.16	34.28	197.00	0.06
34_204	2321	50-yr	3.52	178.33	180.17		180.17	0.000747	0.38	0.33	0.46	9.57	14.16	0.08
34_204	2321	100-yr	3.91	178.33	180.20		180.21	0.000838	0.36	0.35	0.49	10.21	16.22	0.09
34_204	2321	200-yr	4.69	178.33	180.25		180.26	0.001005	0.37	0.40	0.56	11.13	19.33	0.10
34_204	2020	50-yr	3.52	178.06	179.90		179.91	0.001047	0.21	0.36	0.23	12.02	56.52	0.09
34_204	2020	100-yr	3.91	178.06	179.93		179.93	0.000984	0.22	0.35	0.21	13.61	64.56	0.09
34_204	2020	200-yr	4.69	178.06	179.97		179.97	0.000999	0.24	0.34	0.26	16.61	76.32	0.09
34_204	1836	50-yr	3.52	177.80	179.67		179.68	0.001515	0.32	0.42	0.35	8.85	19.32	0.12
34_204	1836	100-yr	3.91	177.90	179.70		179.71	0.001573	0.36	0.44	0.35	8.43	20.19	0.12
34_204	1836	200-yr	4.69	177.90	179.74		179.75	0.001782	0.42	0.47	0.38	10.36	22.56	0.13
34_204	1562	50-yr	3.52	177.68	179.01		179.03	0.004143	0.44	0.56	0.60	6.30	22.96	0.17
34_204	1562	100-yr	3.91	177.68	179.05		179.07	0.003793	0.51	0.55	0.50	7.51	30.97	0.16
34_204	1562	200-yr	4.69	177.68	179.10		179.12	0.003037	0.54	0.51	0.50	9.21	34.73	0.15
34_204	1159	50-yr	3.52	177.31	178.54		178.57	0.000527	0.11	0.66	0.12	5.93	16.33	0.22
34_204	1159	100-yr	3.91	177.31	178.59		178.62	0.000623	0.12	0.68	0.14	6.91	22.62	0.22
34_204	1159	200-yr	4.69	177.31	178.67		178.70	0.000511	0.16	0.71	0.14	9.21	39.21	0.22
34_204	903	50-yr	3.52	177.08	178.37	177.88	178.40	0.000630	0.14	0.80	0.18	4.53	6.30	0.26
34_204	903	100-yr	3.91	177.08	178.41	177.72	178.45	0.000684	0.16	0.85	0.21	4.81	7.03	0.27
34_204	903	200-yr	4.69	177.08	178.47	177.79	178.51	0.001040	0.11	0.96	0.25	5.44	15.73	0.29
34_204	667	50-yr	3.52	176.90	178.22		178.24	0.000634	0.15	0.73	0.18	6.59	26.30	0.23
34_204	667	100-yr	3.91	176.90	178.27		178.29	0.000588	0.15	0.72	0.17	8.47	49.99	0.22
34_204	667	200-yr	4.69	176.90	178.34		178.36	0.000494	0.18	0.68	0.16	13.13	75.38	0.20
34_204	513	50-yr	3.52	176.74	178.09	177.35	178.12	0.000781	0.09	0.75	0.12	4.73	7.91	0.24
34_204	513	100-yr	3.91	176.74	178.14	177.38	178.17	0.000619	0.09	0.79	0.13	5.33	16.30	0.25
34_204	513	200-yr	4.69	176.74	178.21	177.46	178.25	0.000614	0.15	0.83	0.12	7.90	40.76	0.25
34_204	194	50-yr	3.52	176.47	177.86	177.07	177.89	0.000241	0.09	0.49	0.08	14.03	46.61	0.14
34_204	194	100-yr	3.91	176.47	177.82	177.10	178.03	0.000243	0.10	0.50	0.08	16.34	58.78	0.15
34_204	194	200-yr	4.69	176.47	178.10	177.17	178.11	0.000239	0.10	0.52	0.07	22.56	83.76	0.15
34_204	27	50-yr	3.52	176.32	177.95	176.90	177.96	0.000146	0.07	0.38	0.07	17.06	41.71	0.11
34_204	27	100-yr	3.91	176.32	177.99	176.93	178.00	0.000148	0.08	0.39	0.08	18.92	44.48	0.12
34_204	27	200-yr	4.69	176.32	178.06	177.00	178.08	0.000154	0.10	0.42	0.08	22.91	54.30	0.12

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m2)	Top Width (m)	Froude # Crl
34_205	3694	50-yr	25.04	174.68	177.77	176.84	177.77	0.000103	0.25	0.56	0.21	92.52	154.56	0.11
34_205	3694	100-yr	27.89	174.68	178.02	176.91	178.02	0.000099	0.22	0.45	0.18	127.07	195.06	0.08
34_205	3694	200-yr	33.53	174.68	178.44	176.98	178.44	0.000028	0.18	0.34	0.13	358.05	271.96	0.06
34_205	3439	50-yr	25.04	174.42	177.74	176.21	177.75	0.000097	0.14	0.53	0.24	111.22	145.07	0.10
34_205	3439	100-yr	27.89	174.42	178.00	176.50	178.00	0.000072	0.12	0.49	0.20	151.85	245.71	0.09
34_205	3439	200-yr	33.53	174.42	178.43	176.59	178.44	0.000030	0.09	0.34	0.13	282.09	288.59	0.06
34_205	3225	50-yr	25.04	174.22	177.74		177.74	0.000021	0.07	0.27	0.14	355.38	196.81	0.05
34_205	3225	100-yr	27.89	174.22	178.00		178.00	0.000015	0.07	0.24	0.13	258.48	215.59	0.04
34_205	3225	200-yr	33.53	174.22	178.43		178.43	0.000010	0.07	0.21	0.10	360.32	261.24	0.04
34_205	3216	50-yr	25.04	174.22	177.72	175.74	177.74	0.000098	0.23	0.58	0.39	55.57	191.53	0.11
34_205	3216	100-yr	27.89	174.22	177.98	175.81	177.99	0.000085	0.23	0.59	0.40	62.37	215.40	0.11
34_205	3216	200-yr	33.53	174.22	178.43	175.95	178.43	0.000024	0.09	0.34	0.25	235.34	253.57	0.06
34_205	3200	Abandon Railway	Culvert											
34_205	3187	50-yr	25.04	174.16	176.54	175.77	176.84	0.001337	0.48	1.45	0.56	20.02	29.38	0.37
34_205	3187	100-yr	27.89	174.16	176.71	175.84	176.80	0.001084	0.47	1.43	0.84	24.07	37.82	0.33
34_205	3187	200-yr	33.53	174.16	177.18	176.01	177.22	0.000541	0.58	1.17	0.87	35.79	88.45	0.25
34_205	3180	50-yr	25.04	174.15	176.57	175.68	176.60	0.000402	0.38	0.90	0.39	41.84	55.51	0.21
34_205	3180	100-yr	27.89	174.15	176.74	175.71	176.76	0.000300	0.36	0.83	0.37	51.52	59.35	0.19
34_205	3180	200-yr	33.53	174.15	177.18	175.78	177.19	0.000145	0.31	0.68	0.31	80.98	75.35	0.14
34_205	2942	50-yr	25.04	173.77	176.49		176.50	0.000308	0.27	0.75	0.42	52.45	83.88	0.19
34_205	2942	100-yr	27.89	173.77	176.66		176.70	0.000216	0.26	0.63	0.37	69.67	91.39	0.15
34_205	2942	200-yr	33.53	173.77	177.16		177.17	0.000078	0.18	0.44	0.24	136.05	168.53	0.09
34_205	2857	50-yr	25.04	173.60	176.45		176.47	0.000393	0.32	0.90	0.37	48.84	76.99	0.20
34_205	2857	100-yr	27.89	173.60	176.66		176.68	0.000231	0.30	0.74	0.33	66.38	86.43	0.16
34_205	2857	200-yr	33.53	173.60	177.15		177.18	0.000063	0.25	0.51	0.25	114.18	107.60	0.10
34_205	2752	50-yr	25.04	173.53	176.40		176.43	0.000379	0.18	0.94	0.33	48.08	81.86	0.21
34_205	2752	100-yr	27.89	173.53	176.63		176.65	0.000259	0.17	0.83	0.33	63.01	88.88	0.18
34_205	2752	200-yr	33.53	173.53	177.14		177.15	0.000124	0.15	0.66	0.29	102.17	87.45	0.13
34_205	2506	50-yr	25.04	173.36	176.34	174.65	176.37	0.000248	0.31	0.84	0.10	42.37	271.79	0.17
34_205	2506	100-yr	27.89	173.36	176.56	174.73	176.60	0.000209	0.32	0.82	0.13	49.73	291.35	0.16
34_205	2506	200-yr	33.53	173.36	177.10	174.88	177.12	0.000147	0.32	0.77	0.16	65.82	309.68	0.14
34_205	2491	Abandon Railway	Bridge											
34_205	2475	50-yr	25.04	173.32	175.81	174.74	175.85	0.000488	0.40	1.06	0.17	36.83	266.29	0.24
34_205	2475	100-yr	27.89	173.32	176.03	174.90	176.06	0.000392	0.40	1.02	0.19	43.96	280.65	0.22
34_205	2475	200-yr	33.53	173.32	176.47	175.01	176.50	0.000265	0.40	0.94	0.22	58.32	318.88	0.18
34_205	2463	50-yr	25.04	173.31	175.77		175.84	0.000637	0.25	1.27	0.20	35.36	69.74	0.30
34_205	2463	100-yr	27.89	173.31	176.02		176.08	0.000488	0.24	1.08	0.23	53.71	77.77	0.24
34_205	2463	200-yr	33.53	173.31	176.47		176.48	0.000218	0.22	0.81	0.22	92.20	91.29	0.18
34_205	2301	50-yr	25.04	173.08	175.72	174.98	175.74	0.000329	0.48	0.85	0.34	44.29	47.52	0.19
34_205	2301	100-yr	27.89	173.08	175.99	175.03	176.00	0.000202	0.42	0.73	0.33	57.39	50.97	0.15
34_205	2301	200-yr	33.53	173.08	176.46	175.13	176.47	0.000107	0.37	0.60	0.29	82.79	97.73	0.11
34_205	2015	50-yr	25.04	172.86	175.60		175.64	0.000418	0.36	1.01	0.48	35.80	38.45	0.21
34_205	2015	100-yr	27.89	172.86	175.91		175.94	0.000261	0.28	0.87	0.45	48.79	54.25	0.17
34_205	2015	200-yr	33.53	172.86	176.42		176.43	0.000122	0.26	0.67	0.38	81.35	70.83	0.13
34_205	1651	50-yr	25.04	172.43	175.61		175.61	0.000054	0.22	0.41	0.21	99.93	93.58	0.08
34_205	1651	100-yr	27.89	172.43	175.92		175.92	0.000033	0.20	0.35	0.19	126.47	87.24	0.06
34_205	1651	200-yr	33.53	172.43	176.42		176.42	0.000019	0.19	0.29	0.17	171.87	82.53	0.05
34_205	1618	50-yr	25.04	172.10	175.58		175.60	0.000051	0.25	0.40	0.18	88.54	81.11	0.08
34_205	1618	100-yr	27.89	172.10	175.91		175.91	0.000036	0.24	0.36	0.16	109.51	66.30	0.07
34_205	1618	200-yr	33.53	172.10	176.42		176.42	0.000024	0.22	0.33	0.12	146.20	80.61	0.06
34_205	1418	50-yr	25.04	171.81	175.58		175.58	0.000058	0.20	0.46	0.18	109.67	76.22	0.08
34_205	1418	100-yr	27.89	171.81	175.90		175.90	0.000041	0.19	0.41	0.17	130.06	83.78	0.07
34_205	1418	200-yr	33.53	171.81	176.41		176.41	0.000027	0.17	0.37	0.15	180.82	97.13	0.06
34_205	1199	50-yr	25.04	171.50	175.57	173.10	175.58	0.000036	0.16	0.38	0.21	98.11	70.06	0.07
34_205	1199	100-yr	27.89	171.50	175.89	173.19	175.90	0.000027	0.14	0.35	0.20	122.32	83.30	0.06
34_205	1199	200-yr	33.53	171.50	176.41	173.33	176.41	0.000018	0.12	0.32	0.18	172.04	110.91	0.05
34_205	1192	50-yr	25.04	171.49	175.55	173.32	175.57	0.000148	0.49	0.73	0.48	37.38	65.43	0.13
34_205	1192	100-yr	27.89	171.49	175.87	173.42	175.89	0.000125	0.50	0.72	0.50	42.09	78.27	0.13
34_205	1192	200-yr	33.53	171.49	176.41	173.61	176.41	0.000026	0.15	0.37	0.20	155.34	107.75	0.06
34_205	1181	Hart Rd	Culvert											
34_205	1165	50-yr	25.04	171.86	175.07	173.28	175.10	0.000156	0.51	0.75	0.58	38.09	61.76	0.14
34_205	1165	100-yr	27.89	171.86	175.27	173.37	175.30	0.000149	0.54	0.76	0.57	41.39	84.62	0.14
34_205	1165	200-yr	33.53	171.86	175.51	173.51	175.52	0.000074	0.31	0.57	0.44	83.36	68.55	0.10
34_205	1161	50-yr	25.04	171.86	175.06	173.47	175.09	0.000057	0.24	0.45	0.25	86.94	63.37	0.09
34_205	1161	100-yr	27.89	171.86	175.28	173.54	175.29	0.000045	0.24	0.43	0.24	99.90	66.42	0.08
34_205	1161	200-yr	33.53	171.86	175.52	173.78	175.52	0.000046	0.25	0.44	0.26	116.01	70.31	0.08
34_205	1063	50-yr	25.04	171.79	175.08	173.65	175.08	0.000057	0.22	0.44	0.27	85.18	58.87	0.08
34_205	1063	100-yr	27.89	171.79	175.28	173.71	175.28	0.000049	0.22	0.42	0.27	97.20	60.90	0.08
34_205	1063	200-yr	33.53	171.79	175.51	173.78	175.52	0.000047	0.23	0.44	0.28	111.84	63.28	0.08

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_205	808	50-yr	25.04	171.60	175.07		175.07	0.000020	0.16	0.28	0.17	131.33	77.61	0.05
34_205	808	100-yr	27.89	171.60	175.27		175.27	0.000018	0.16	0.28	0.17	147.22	80.41	0.05
34_205	808	200-yr	33.53	171.60	175.51		175.51	0.000018	0.17	0.29	0.19	186.98	83.40	0.05
34_205	905	50-yr	25.04	171.42	175.07		175.07	0.000007	0.13	0.18	0.08	191.72	99.25	0.03
34_205	905	100-yr	27.89	171.42	175.27		175.27	0.000007	0.13	0.18	0.08	212.13	103.65	0.03
34_205	905	200-yr	33.53	171.42	175.51		175.51	0.000007	0.14	0.20	0.09	237.31	106.42	0.03
34_205	400	50-yr	25.04	171.30	175.07	172.78	175.07	0.000003	0.08	0.12	0.08	292.32	144.96	0.02
34_205	400	100-yr	27.89	171.30	175.27	172.80	175.27	0.000003	0.09	0.12	0.08	319.20	151.17	0.02
34_205	400	200-yr	33.53	171.30	175.50	172.84	175.51	0.000003	0.09	0.13	0.09	351.24	158.68	0.02
34_205	202	50-yr	25.04	171.16	175.07		175.07	0.000003	0.09	0.11	0.08	292.19	117.65	0.02
34_205	202	100-yr	27.89	171.16	175.27		175.27	0.000003	0.09	0.12	0.08	316.09	119.73	0.02
34_205	202	200-yr	33.53	171.16	175.50		175.50	0.000003	0.10	0.13	0.09	344.66	122.38	0.02
34_203	1249	50-yr	4.27	177.34	178.53	178.18	178.53	0.000018	0.06	0.18	0.07	55.72	348.94	0.04
34_203	1249	100-yr	4.78	177.34	178.54	178.24	178.54	0.000019	0.06	0.17	0.07	57.03	353.89	0.04
34_203	1249	200-yr	5.73	177.34	178.56	178.32	178.56	0.000024	0.08	0.20	0.09	59.68	361.99	0.05
34_203	1124	50-yr	4.27	177.24	178.53	178.23	178.53	0.000003	0.02	0.07	0.03	156.31	467.58	0.02
34_203	1124	100-yr	4.78	177.24	178.54	178.26	178.54	0.000004	0.02	0.08	0.03	161.36	475.99	0.02
34_203	1124	200-yr	5.73	177.24	178.56	178.34	178.56	0.000005	0.03	0.09	0.03	171.58	478.12	0.02
34_203	1118	50-yr	4.27	177.23	178.53	178.08	178.53	0.000004	0.02	0.08	0.03	150.48	455.34	0.02
34_203	1118	100-yr	4.78	177.23	178.54	178.15	178.54	0.000004	0.03	0.08	0.03	155.38	458.69	0.02
34_203	1118	200-yr	5.73	177.23	178.56	178.24	178.56	0.000005	0.03	0.09	0.03	165.30	462.06	0.02
34_203	1104	Monte Rd	Culvert											
34_203	1086	50-yr	4.27	177.19	178.48	178.08	178.56	0.003169		1.31		3.27	4.28	0.48
34_203	1086	100-yr	4.78	177.19	178.53	178.14	178.63	0.003231		1.35		3.52	4.45	0.48
34_203	1086	200-yr	5.73	177.19	178.65	178.22	178.74	0.003186	0.19	1.37		4.94	27.18	0.48
34_203	1079	50-yr	4.27	177.18	178.50		178.54	0.001137		0.91	0.10	4.70	5.00	0.29
34_203	1079	100-yr	4.78	177.18	178.56		178.61	0.001164	0.08	0.96	0.15	5.01	5.40	0.30
34_203	1079	200-yr	5.73	177.18	178.67		178.72	0.001209	0.17	1.04	0.23	5.63	6.20	0.31
34_203	888	50-yr	4.27	177.02	178.29	177.64	178.33	0.001112		0.83		5.13	5.76	0.28
34_203	888	100-yr	4.78	177.02	178.34	177.68	178.38	0.001188		0.88		5.42	5.89	0.29
34_203	888	200-yr	5.73	177.02	178.43	177.75	178.48	0.001330		0.98		5.97	6.14	0.31
34_203	898	50-yr	4.27	176.86	178.06	177.49	178.10	0.001318	0.14	0.95	0.11	4.60	9.13	0.32
34_203	898	100-yr	4.78	176.86	178.07	177.53	178.13	0.001493	0.17	1.03	0.11	4.84	12.64	0.34
34_203	898	200-yr	5.73	176.86	178.12	177.61	178.18	0.001748	0.22	1.16	0.21	5.53	15.60	0.38
34_203	446	50-yr	4.27	176.66	178.04		178.04	0.000064	0.06	0.24	0.08	36.42	153.48	0.08
34_203	446	100-yr	4.78	176.66	178.07		178.07	0.000068	0.07	0.24	0.09	43.28	155.43	0.07
34_203	446	200-yr	5.73	176.66	178.14		178.14	0.000049	0.07	0.22	0.10	53.36	167.55	0.07
34_203	210	50-yr	4.27	176.48	177.99		178.01	0.000385	0.14	0.63	0.12	12.48	71.18	0.18
34_203	210	100-yr	4.78	176.48	178.03		178.04	0.000352	0.15	0.61	0.14	15.12	73.29	0.17
34_203	210	200-yr	5.73	176.48	178.10		178.11	0.000285	0.15	0.57	0.17	20.53	78.68	0.15
34_102	1923	50-yr	2.15	176.77	177.49		177.50	0.000625		0.48		4.36	8.48	0.22
34_102	1923	100-yr	2.39	176.77	177.53		177.54	0.000639		0.51		4.71	8.92	0.22
34_102	1923	200-yr	2.86	176.77	177.61		177.62	0.000642		0.53		5.44	9.80	0.23
34_102	1722	50-yr	2.15	176.63	177.33		177.35	0.000901		0.61		3.50	6.00	0.26
34_102	1722	100-yr	2.39	176.63	177.37		177.39	0.000918		0.64		3.73	6.09	0.26
34_102	1722	200-yr	2.86	176.63	177.44		177.47	0.000944		0.68		4.18	6.24	0.27
34_102	1642	50-yr	2.15	176.57	177.27	176.89	177.29	0.000639	0.12	0.51	0.04	4.27	9.03	0.22
34_102	1642	100-yr	2.39	176.57	177.32	176.91	177.33	0.000614	0.14	0.53	0.05	4.85	9.46	0.22
34_102	1642	200-yr	2.86	176.57	177.39	176.95	177.41	0.000574	0.15	0.55	0.07	5.40	10.58	0.22
34_102	1583	50-yr	2.15	176.53	177.26	176.84	177.26	0.000243	0.15	0.38	0.12	10.22	49.05	0.15
34_102	1583	100-yr	2.39	176.53	177.30	176.88	177.31	0.000195	0.14	0.36	0.12	12.57	55.30	0.13
34_102	1583	200-yr	2.86	176.53	177.38	176.90	177.39	0.000134	0.13	0.32	0.12	17.63	68.52	0.11
34_102	1526	50-yr	2.15	176.49	177.21		177.24	0.001004		0.67		3.22	4.89	0.26
34_102	1526	100-yr	2.39	176.49	177.26		177.28	0.001023		0.69		3.44	4.97	0.27
34_102	1526	200-yr	2.86	176.49	177.34		177.37	0.001061		0.74		3.85	5.11	0.27
34_102	1312	50-yr	2.15	176.33	177.09	176.64	177.10	0.000415		0.43		5.02	8.79	0.18
34_102	1312	100-yr	2.39	176.33	177.14	176.68	177.15	0.000409		0.44		5.43	9.03	0.18
34_102	1312	200-yr	2.86	176.33	177.22	176.68	177.23	0.000403		0.46		6.19	9.46	0.18
34_102	1234	50-yr	2.15	176.22	177.07	176.60	177.08	0.000221	0.14	0.36	0.12	9.96	37.70	0.14
34_102	1234	100-yr	2.39	176.22	177.12	176.62	177.13	0.000179	0.14	0.34	0.13	11.52	41.11	0.12
34_102	1234	200-yr	2.86	176.22	177.21	176.66	177.21	0.000126	0.14	0.31	0.13	15.36	45.88	0.11
34_102	1090	50-yr	2.15	176.17	177.03	176.48	177.04	0.000279		0.38		5.57	8.07	0.15
34_102	1090	100-yr	2.39	176.17	177.09	176.49	177.09	0.000279		0.40		6.00	8.22	0.15
34_102	1090	200-yr	2.86	176.17	177.18	176.52	177.19	0.000283		0.42	0.05	7.03	16.47	0.15
34_102	1046	50-yr	2.15	176.14	177.00		177.02	0.000703		0.59	0.06	3.72	9.89	0.23
34_102	1046	100-yr	2.39	176.14	177.06		177.07	0.000669		0.60	0.10	4.51	20.41	0.23
34_102	1046	200-yr	2.86	176.14	177.15		177.17	0.000525		0.58	0.15	7.00	34.91	0.20
34_102	917	50-yr	2.15	176.05	176.93	176.38	176.94	0.000530	0.01	0.54	0.06	3.96	4.95	0.19
34_102	917	100-yr	2.39	176.05	176.98	176.40	177.00	0.000528	0.03	0.57	0.09	4.23	5.17	0.19
34_102	917	200-yr	2.86	176.05	177.06	176.44	177.10	0.000526	0.05	0.61	0.14	4.76	5.58	0.20

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Twp Width (m)	Froude # Crl
34_102	702	50-yr	2.15	175.89	176.81	176.25	176.83	0.000538	0.05	0.57	0.13	3.82	5.68	0.21
34_102	702	100-yr	2.39	175.89	176.87	176.27	176.89	0.000522	0.04	0.59	0.15	4.34	11.84	0.21
34_102	702	200-yr	2.86	175.89	176.97	176.32	176.99	0.000478	0.09	0.61	0.19	6.02	22.17	0.20
34_102	553	50-yr	2.15	175.79	176.77	176.13	176.78	0.000210	0.01	0.35		6.17	8.46	0.13
34_102	553	100-yr	2.39	175.79	176.83	176.15	176.84	0.000203	0.02	0.36		6.68	8.64	0.13
34_102	553	200-yr	2.86	175.79	176.94	176.19	176.95	0.000192	0.03	0.38		7.63	8.96	0.13
34_102	510	50-yr	2.15	175.76	176.76	176.09	176.77	0.000204		0.37	0.04	6.01	21.02	0.14
34_102	510	100-yr	2.39	175.76	176.82	176.11	176.83	0.000232		0.37	0.08	7.36	23.45	0.14
34_102	510	200-yr	2.86	175.76	176.93	176.16	176.94	0.000185		0.35	0.12	10.17	27.46	0.13
34_102	454	50-yr	2.15	175.72	176.74	176.05	176.75	0.000335		0.45		4.78	5.56	0.15
34_102	454	100-yr	2.39	175.72	176.80	176.06	176.81	0.000335	0.02	0.47	0.01	5.12	5.74	0.16
34_102	454	200-yr	2.86	175.72	176.91	176.10	176.92	0.000329	0.04	0.50	0.07	5.77	6.25	0.18
34_102	447	50-yr	2.15	175.71	176.74		176.75	0.000343		0.44		4.93	7.00	0.17
34_102	447	100-yr	2.39	175.71	176.80		176.81	0.000339		0.45		5.36	7.28	0.17
34_102	447	200-yr	2.86	175.71	176.91		176.92	0.000331		0.46		6.19	8.45	0.17
34_102	429	Dike Rd	Culvert											
34_102	418	50-yr	1.95	175.71	176.30	176.09	176.36	0.003294			1.02	1.91	3.88	0.47
34_102	418	100-yr	2.17	175.71	176.34	176.12	176.40	0.003194		1.05		2.07	3.94	0.46
34_102	418	200-yr	2.63	175.71	176.44	176.16	176.50	0.002896		1.07		2.47	4.21	0.44
34_102	412	50-yr	1.95	175.69	176.29	176.06	176.33	0.002644			0.92	2.11	4.32	0.42
34_102	412	100-yr	2.17	175.69	176.33	176.08	176.38	0.002560		0.95		2.30	4.40	0.42
34_102	412	200-yr	2.63	175.69	176.43	176.12	176.48	0.002232		0.96		2.74	4.58	0.39
34_102	303	50-yr	1.95	175.11	176.09		176.12	0.001444	0.13	0.81	0.06	2.41	4.00	0.32
34_102	303	100-yr	2.17	175.11	176.14		176.17	0.001406	0.17	0.84	0.08	2.61	4.20	0.32
34_102	303	200-yr	2.63	175.11	176.27		176.31	0.001190	0.24	0.85	0.12	3.19	4.73	0.30
34_103	544	50-yr	9.11	174.17	176.23	175.27	176.27	0.000744	0.11	0.90	0.14	10.52	14.21	0.26
34_103	544	100-yr	9.78	174.17	176.28	175.30	176.32	0.000751	0.14	0.92	0.16	11.20	16.11	0.26
34_103	544	200-yr	11.02	174.17	176.38	175.38	176.43	0.000696	0.11	0.94	0.21	13.54	40.47	0.26
34_103	453	50-yr	9.11	174.06	176.13	175.24	176.19	0.001097	0.15	1.12	0.25	8.46	10.91	0.35
34_103	453	100-yr	9.78	174.06	176.17	175.29	176.24	0.001135	0.19	1.16	0.27	8.93	12.01	0.31
34_103	453	200-yr	11.02	174.06	176.28	175.36	176.35	0.001077	0.26	1.19	0.30	10.42	15.41	0.31
34_103	332	50-yr	9.11	173.92	176.10		176.11	0.000307	0.09	0.63	0.19	20.75	49.68	0.17
34_103	332	100-yr	9.78	173.92	176.14		176.16	0.000291	0.09	0.62	0.20	23.15	55.37	0.17
34_103	332	200-yr	11.02	173.92	176.27		176.28	0.000220	0.12	0.57	0.20	31.04	73.92	0.15
34_300	4299	50-yr	97.01	171.23	175.25		175.25	0.000022	0.17	0.35	0.14	543.99	265.53	0.08
34_300	4299	100-yr	105.32	171.23	175.42		175.43	0.000029	0.17	0.34	0.14	590.52	274.67	0.06
34_300	4299	200-yr	121.07	171.23	175.65		175.65	0.000020	0.17	0.36	0.15	653.96	288.45	0.06
34_300	3937	50-yr	97.01	171.12	175.24		175.25	0.000051	0.23	0.53	0.17	310.58	145.18	0.09
34_300	3937	100-yr	105.32	171.12	175.41		175.42	0.000049	0.24	0.53	0.17	336.33	152.38	0.09
34_300	3937	200-yr	121.07	171.12	175.63		175.64	0.000049	0.25	0.56	0.19	371.27	180.28	0.09
34_300	3707	50-yr	97.01	171.04	175.24		175.24	0.000012	0.13	0.26	0.14	652.73	310.01	0.04
34_300	3707	100-yr	105.32	171.04	175.41		175.41	0.000012	0.13	0.27	0.14	707.54	332.12	0.04
34_300	3707	200-yr	121.07	171.04	175.63		175.64	0.000012	0.14	0.28	0.14	785.27	356.73	0.04
34_300	3406	50-yr	97.01	170.93	175.23		175.23	0.000043	0.20	0.49	0.22	351.84	179.01	0.08
34_300	3406	100-yr	105.32	170.93	175.40		175.41	0.000041	0.20	0.50	0.22	384.21	198.62	0.08
34_300	3406	200-yr	121.07	170.93	175.62		175.63	0.000041	0.21	0.52	0.23	430.94	216.67	0.08
34_300	3213	50-yr	97.01	170.86	175.20		175.22	0.000115	0.25	0.82	0.27	228.27	104.21	0.13
34_300	3213	100-yr	105.32	170.86	175.37		175.39	0.000115	0.25	0.84	0.27	247.41	122.54	0.13
34_300	3213	200-yr	121.07	170.86	175.59		175.62	0.000115	0.27	0.87	0.29	275.42	128.33	0.13
34_300	3006	50-yr	97.01	170.79	175.19		175.20	0.000057	0.29	0.57	0.29	275.44	125.15	0.09
34_300	3006	100-yr	105.32	170.79	175.37		175.37	0.000058	0.29	0.59	0.31	298.00	135.81	0.09
34_300	3006	200-yr	121.07	170.79	175.59		175.60	0.000059	0.30	0.62	0.33	329.57	147.57	0.10
34_300	2852	50-yr	97.01	170.74	175.19		175.20	0.000014	0.14	0.28	0.21	492.18	231.63	0.05
34_300	2852	100-yr	105.32	170.74	175.37		175.37	0.000013	0.14	0.28	0.21	533.04	240.72	0.04
34_300	2852	200-yr	121.07	170.74	175.59		175.59	0.000013	0.15	0.30	0.22	587.82	249.97	0.05
34_300	2711	50-yr	97.01	170.69	175.19		175.19	0.000014	0.15	0.29	0.18	564.30	242.89	0.05
34_300	2711	100-yr	105.32	170.69	175.37		175.37	0.000013	0.15	0.29	0.18	607.13	251.89	0.05
34_300	2711	200-yr	121.07	170.69	175.59		175.59	0.000014	0.15	0.31	0.17	664.62	264.34	0.05
34_300	2696	50-yr	97.01	170.68	175.19	172.53	175.19	0.000015	0.16	0.30	0.15	541.36	231.84	0.05
34_300	2696	100-yr	105.32	170.68	175.36	172.60	175.37	0.000015	0.16	0.30	0.15	582.29	240.78	0.05
34_300	2696	200-yr	121.07	170.68	175.59	172.72	175.59	0.000015	0.18	0.32	0.16	637.07	251.72	0.05
34_300	2676	Hart Rd	Bridge											
34_300	2657	50-yr	97.01	170.89	175.13	172.58	175.13	0.000026	0.21	0.37	0.12	455.17	200.73	0.06
34_300	2657	100-yr	105.32	170.89	175.33	172.65	175.33	0.000025	0.20	0.37	0.12	495.79	210.37	0.06
34_300	2657	200-yr	121.07	170.89	175.56	172.76	175.57	0.000025	0.21	0.39	0.13	547.74	224.21	0.06
34_300	2648	50-yr	97.01	170.89	175.13		175.13	0.000026	0.21	0.39	0.12	456.48	202.52	0.06
34_300	2648	100-yr	105.32	170.89	175.33		175.33	0.000025	0.21	0.39	0.12	497.68	213.03	0.06
34_300	2648	200-yr	121.07	170.89	175.56		175.57	0.000026	0.21	0.41	0.13	550.08	227.77	0.06
34_300	2606	50-yr	97.01	170.67	175.13		175.13	0.000032	0.25	0.43	0.26	322.88	145.82	0.07
34_300	2606	100-yr	105.32	170.67	175.32		175.33	0.000031	0.24	0.44	0.26	352.91	156.43	0.07

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_300	2606	200-yr	121.07	170.67	175.56		175.57	0.000032	0.25	0.47	0.28	362.22	172.35	0.07
34_300	2206	50-yr	97.01	170.77	175.12		175.12	0.000017	0.18	0.32	0.14	461.75	216.97	0.05
34_300	2206	100-yr	105.32	170.77	175.32		175.32	0.000016	0.18	0.32	0.15	506.49	230.76	0.05
34_300	2206	200-yr	121.07	170.77	175.56		175.56	0.000016	0.19	0.33	0.15	562.79	243.90	0.05
34_300	1626	50-yr	97.01	170.66	175.09		175.11	0.000065	0.30	0.62	0.17	230.45	88.38	0.10
34_300	1626	100-yr	105.32	170.66	175.29		175.31	0.000063	0.31	0.63	0.17	248.27	91.21	0.10
34_300	1626	200-yr	121.07	170.66	175.53		175.55	0.000067	0.33	0.67	0.18	270.19	95.19	0.10
34_300	1550	50-yr	97.01	170.59	175.09		175.10	0.000022	0.19	0.36	0.16	395.54	196.76	0.06
34_300	1550	100-yr	105.32	170.59	175.29		175.30	0.000020	0.20	0.36	0.16	435.81	208.09	0.06
34_300	1550	200-yr	121.07	170.59	175.53		175.53	0.000021	0.21	0.38	0.16	487.22	228.56	0.06
34_300	1320	50-yr	97.01	170.53	175.09		175.09	0.000009	0.12	0.23	0.13	626.77	285.06	0.04
34_300	1320	100-yr	105.32	170.53	175.29		175.29	0.000008	0.12	0.23	0.13	687.78	297.32	0.04
34_300	1320	200-yr	121.07	170.53	175.53		175.53	0.000008	0.13	0.24	0.14	750.09	305.66	0.04
34_300	967	50-yr	97.01	170.43	175.06		175.09	0.000040	0.14	0.50	0.16	367.91	215.61	0.08
34_300	967	100-yr	105.32	170.43	175.28		175.29	0.000038	0.14	0.49	0.16	412.22	226.01	0.08
34_300	967	200-yr	121.07	170.43	175.52		175.53	0.000034	0.15	0.49	0.20	466.76	234.62	0.07
34_300	568	50-yr	97.01	170.32	175.07		175.08	0.000018	0.11	0.34	0.14	615.30	238.73	0.05
34_300	568	100-yr	105.32	170.32	175.28		175.28	0.000017	0.11	0.34	0.14	683.70	242.96	0.05
34_300	568	200-yr	121.07	170.32	175.51		175.51	0.000018	0.12	0.36	0.15	721.88	249.32	0.05
34_300	299	50-yr	97.01	170.25	175.07		175.07	0.000026	0.19	0.41	0.16	370.52	145.54	0.06
34_300	299	100-yr	105.32	170.25	175.27		175.27	0.000025	0.19	0.41	0.16	400.32	150.55	0.06
34_300	299	200-yr	121.07	170.25	175.50		175.51	0.000026	0.20	0.43	0.16	436.57	157.17	0.07
34_300	109	50-yr	97.01	170.20	175.06		175.07	0.000014	0.14	0.30	0.16	493.15	177.77	0.05
34_300	109	100-yr	105.32	170.20	175.27		175.27	0.000013	0.14	0.30	0.19	489.19	180.09	0.05
34_300	109	200-yr	121.07	170.20	175.50		175.50	0.000014	0.13	0.31	0.20	532.32	185.97	0.05
34_202	3567	50-yr	6.41	176.28	177.94		177.95	0.000202	0.10	0.50	0.14	31.21	141.75	0.14
34_202	3567	100-yr	7.02	176.28	177.99		177.99	0.000162	0.10	0.45	0.14	38.05	157.96	0.12
34_202	3567	200-yr	8.14	176.28	178.07		178.08	0.000107	0.09	0.38	0.13	52.57	167.66	0.10
34_202	3371	50-yr	6.41	176.11	177.88		177.90	0.000310	0.10	0.53	0.19	19.50	62.78	0.16
34_202	3371	100-yr	7.02	176.11	177.94		177.95	0.000265	0.10	0.51	0.19	23.36	80.88	0.15
34_202	3371	200-yr	8.14	176.11	178.04		178.05	0.000206	0.11	0.47	0.17	32.74	118.78	0.13
34_202	3360	50-yr	6.41	176.10	177.87		177.89	0.000399	0.10	0.67	0.21	10.25	45.58	0.19
34_202	3360	100-yr	7.02	176.10	177.92		177.94	0.000414	0.15	0.70	0.22	10.94	55.25	0.19
34_202	3360	200-yr	8.14	176.10	178.01		178.04	0.000435	0.22	0.75	0.19	12.38	77.79	0.20
34_202	3349	Stronger Rd	Mult Open											
34_202	3334	50-yr	6.40	175.94	177.68	175.49	177.69	0.000174		0.45	0.05	14.67	27.40	0.13
34_202	3334	100-yr	6.99	175.94	177.75	176.52	177.76	0.000177		0.46	0.06	16.52	47.24	0.13
34_202	3334	200-yr	7.96	175.94	177.84	176.57	177.85	0.000171		0.47	0.10	20.73	58.65	0.13
34_202	3326	50-yr	6.40	175.93	177.67		177.68	0.000335		0.56	0.07	11.89	23.21	0.18
34_202	3326	100-yr	6.99	175.93	177.74		177.75	0.000329		0.57	0.08	13.86	40.29	0.18
34_202	3326	200-yr	7.96	175.93	177.83		177.85	0.000202	0.01	0.56	0.13	16.09	49.40	0.17
34_202	2960	50-yr	6.40	175.71	177.49	176.53	177.53	0.000576	0.12	0.85	0.20	8.90	15.40	0.23
34_202	2960	100-yr	6.99	175.71	177.56	176.57	177.60	0.000573	0.12	0.87	0.20	10.06	20.20	0.23
34_202	2960	200-yr	7.96	175.71	177.67	176.64	177.70	0.000536	0.11	0.88	0.26	12.87	31.36	0.22
34_202	2677	50-yr	6.40	175.54	177.25	176.38	177.30	0.001113	0.21	1.00	0.15	6.52	6.60	0.29
34_202	2677	100-yr	6.99	175.54	177.32	176.43	177.37	0.001124	0.23	1.04	0.19	6.96	7.92	0.29
34_202	2677	200-yr	7.96	175.54	177.43	176.50	177.49	0.001070	0.21	1.08	0.25	8.12	13.02	0.28
34_202	2357	50-yr	6.40	175.35	177.12	176.09	177.14	0.000278	0.12	0.56	0.11	13.53	33.48	0.16
34_202	2357	100-yr	6.99	175.35	177.20	176.13	177.21	0.000248	0.13	0.55	0.12	16.94	44.73	0.16
34_202	2357	200-yr	7.96	175.35	177.36	176.18	177.37	0.000165	0.12	0.49	0.13	25.69	71.96	0.13
34_202	2152	50-yr	6.40	175.23	177.09		177.10	0.000115	0.10	0.39	0.10	22.14	56.79	0.11
34_202	2152	100-yr	6.99	175.23	177.17		177.18	0.000098	0.11	0.38	0.10	27.23	67.67	0.10
34_202	2152	200-yr	7.96	175.23	177.35		177.35	0.000062	0.11	0.32	0.10	41.03	91.14	0.08
34_202	2124	50-yr	6.40	175.21	177.07		177.09	0.000333	0.51	0.69	0.48	10.41	117.48	0.18
34_202	2124	100-yr	6.99	175.21	177.15		177.17	0.000322	0.53	0.70	0.50	11.11	125.28	0.18
34_202	2124	200-yr	7.96	175.21	177.32		177.34	0.000278	0.54	0.70	0.52	12.61	142.33	0.17
34_202	2114	Abandon Railway	Culvert											
34_202	2090	50-yr	6.70	174.68	176.66	175.65	176.68	0.000353	0.15	0.65	0.06	11.35	21.22	0.18
34_202	2090	100-yr	7.25	174.68	176.75	175.68	176.77	0.000323	0.17	0.65	0.07	12.48	26.37	0.18
34_202	2090	200-yr	8.25	174.68	176.96	175.74	176.88	0.000243	0.19	0.62	0.10	16.10	73.32	0.16
34_202	2072	50-yr	6.70	174.65	176.67	175.52	176.67	0.000085	0.10	0.33	0.08	28.51	62.77	0.09
34_202	2072	100-yr	7.25	174.65	176.76	175.55	176.76	0.000064	0.09	0.30	0.09	36.99	90.21	0.08
34_202	2072	200-yr	8.25	174.65	176.97	175.59	176.97	0.000033	0.04	0.24	0.10	55.66	113.16	0.06
34_202	1818	50-yr	6.70	174.53	176.66	175.19	176.66	0.000019	0.06	0.18	0.08	57.02	84.90	0.05
34_202	1818	100-yr	7.25	174.53	176.75	175.23	176.75	0.000016	0.06	0.18	0.08	64.89	89.06	0.04
34_202	1818	200-yr	8.25	174.53	176.96	175.27	176.96	0.000011	0.06	0.15	0.08	84.24	94.99	0.04
34_202	1632	50-yr	6.70	174.28	176.66	175.07	176.66	0.000018	0.10	0.19	0.10	53.88	60.07	0.04
34_202	1632	100-yr	7.25	174.28	176.75	175.10	176.75	0.000016	0.10	0.18	0.10	59.40	61.96	0.04
34_202	1632	200-yr	8.25	174.28	176.96	175.15	176.96	0.000012	0.10	0.17	0.09	72.96	66.71	0.04

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_202	1502	50-yr	6.70	174.12	176.66		176.66	0.000008	0.07	0.11	0.06	86.03	85.14	0.03
34_202	1502	100-yr	7.25	174.12	176.75		176.75	0.000005	0.07	0.11	0.06	96.83	86.81	0.02
34_202	1502	200-yr	8.25	174.12	176.96		176.96	0.000004	0.07	0.11	0.06	115.51	90.78	0.02
34_202	1494	50-yr	6.70	174.11	176.65		176.66	0.000061	0.22	0.37	0.30	19.00	86.29	0.08
34_202	1494	100-yr	7.25	174.11	176.74		176.75	0.000061	0.23	0.38	0.31	19.95	87.78	0.09
34_202	1494	200-yr	8.25	174.11	176.95		176.96	0.000057	0.24	0.39	0.33	22.15	74.82	0.08
34_202	1479	Abandon Railway	Culvert											
34_202	1465	50-yr	7.18	173.75	175.18	174.45	175.21	0.000591	0.10	0.77	0.11	9.87	14.25	0.23
34_202	1465	100-yr	7.70	173.75	175.32	174.47	175.35	0.000442	0.11	0.72	0.15	11.74	22.73	0.21
34_202	1465	200-yr	8.68	173.75	175.53	174.52	175.55	0.000322	0.16	0.68	0.19	14.51	33.64	0.18
34_202	1481	50-yr	7.18	173.74	175.18	174.46	175.21	0.000565	0.10	0.72	0.08	10.80	19.89	0.23
34_202	1481	100-yr	7.70	173.74	175.32	174.48	175.34	0.000392	0.11	0.68	0.10	14.17	26.70	0.20
34_202	1481	200-yr	8.68	173.74	175.53	174.53	175.54	0.000251	0.07	0.59	0.12	20.98	37.62	0.16
34_202	1232	50-yr	7.18	173.32	175.09		175.10	0.000344	0.27	0.68	0.14	15.17	36.38	0.18
34_202	1232	100-yr	7.70	173.32	175.27		175.28	0.000177	0.24	0.53	0.14	24.03	47.86	0.13
34_202	1232	200-yr	8.68	173.32	175.50		175.51	0.000088	0.21	0.40	0.12	37.94	72.32	0.09
34_202	915	50-yr	7.18	172.72	175.08	173.44	175.08	0.000020	0.10	0.21	0.11	50.52	55.18	0.05
34_202	915	100-yr	7.70	172.72	175.27	173.46	175.27	0.000014	0.09	0.19	0.10	61.07	57.97	0.04
34_202	915	200-yr	8.68	172.72	175.50	173.51	175.50	0.000010	0.09	0.17	0.09	74.93	61.12	0.04
34_202	670	50-yr	7.18	172.28	175.06	173.04	175.08	0.000504	0.07	0.11	0.07	59.23	62.18	0.02
34_202	675	100-yr	7.70	172.28	175.27	173.07	175.27	0.000004	0.07	0.11	0.07	501.09	63.86	0.02
34_202	675	200-yr	8.68	172.28	175.50	173.12	175.50	0.000003	0.07	0.10	0.07	116.08	65.75	0.02
34_202	563	50-yr	7.18	172.07	175.08	172.74	175.08	0.000002	0.05	0.09	0.05	123.50	93.79	0.02
34_202	563	100-yr	7.70	172.07	175.27	172.76	175.27	0.000002	0.04	0.08	0.05	141.42	97.93	0.02
34_202	563	200-yr	8.68	172.07	175.50	172.81	175.50	0.000002	0.04	0.08	0.05	164.85	104.42	0.01
34_202	556	50-yr	7.18	172.06	175.08	172.59	175.08	0.000004	0.06	0.11	0.06	104.02	94.27	0.02
34_202	556	100-yr	7.70	172.06	175.27	172.82	175.27	0.000003	0.05	0.10	0.06	122.09	95.23	0.02
34_202	556	200-yr	8.68	172.06	175.50	172.97	175.50	0.000002	0.05	0.10	0.05	146.00	128.77	0.02
34_202	545	Hart Rd	Culvert											
34_202	534	50-yr	7.18	171.90	175.06	172.98	175.06	0.000004	0.07	0.11	0.04	104.93	87.39	0.02
34_202	534	100-yr	7.70	171.90	175.26	173.02	175.26	0.000003	0.07	0.11	0.04	119.55	112.32	0.02
34_202	534	200-yr	8.68	171.90	175.50	173.06	175.50	0.000003	0.07	0.11	0.02	141.71	186.92	0.02
34_202	514	50-yr	7.18	171.67	175.06	172.59	175.06	0.000003	0.06	0.09	0.03	120.24	111.63	0.02
34_202	514	100-yr	7.70	171.67	175.26	172.63	175.26	0.000002	0.06	0.09	0.01	156.51	193.30	0.02
34_202	514	200-yr	8.68	171.67	175.50	172.89	175.50	0.000002	0.06	0.08	0.02	202.02	195.62	0.01
34_202	420	50-yr	7.18	171.59	175.06	172.32	175.06	0.000000	0.02	0.02	0.01	394.51	202.88	0.00
34_202	420	100-yr	7.70	171.59	175.26	172.36	175.26	0.000000	0.02	0.02	0.01	435.68	204.72	0.00
34_202	420	200-yr	8.68	171.59	175.50	172.42	175.50	0.000000	0.02	0.02	0.01	484.21	206.97	0.00
34_202	311	50-yr	7.18	171.26	175.06		175.06	0.000000	0.02	0.03	0.02	361.11	174.91	0.01
34_202	311	100-yr	7.70	171.26	175.26		175.26	0.000000	0.02	0.03	0.02	397.19	181.86	0.00
34_202	311	200-yr	8.68	171.26	175.50		175.50	0.000000	0.02	0.03	0.02	440.61	195.53	0.00
34_202	263	50-yr	7.18	171.12	175.06	171.72	175.06	0.000000	0.02	0.02	0.02	428.86	147.81	0.00
34_202	263	100-yr	7.70	171.12	175.26	171.74	175.26	0.000000	0.02	0.02	0.02	458.91	149.75	0.00
34_202	263	200-yr	8.68	171.12	175.50	171.78	175.50	0.000000	0.02	0.02	0.02	494.56	152.81	0.00
34_202	194	50-yr	7.18	170.91	175.06		175.06	0.000000	0.02	0.03	0.02	294.26	103.84	0.01
34_202	194	100-yr	7.70	170.91	175.26		175.26	0.000000	0.02	0.03	0.02	315.48	106.43	0.00
34_202	194	200-yr	8.68	170.91	175.50		175.50	0.000000	0.03	0.03	0.02	340.93	109.27	0.01
34_201	283	50-yr	109.67	170.19	175.06	172.43	175.06	0.000017	0.18	0.33	0.14	813.12	274.61	0.05
34_201	283	100-yr	109.46	170.19	175.26	172.46	175.27	0.000016	0.16	0.33	0.14	889.48	293.78	0.05
34_201	283	200-yr	128.08	170.19	175.50	172.46	175.50	0.000016	0.16	0.34	0.14	738.11	298.67	0.05
34_201	182	50-yr	109.67	170.16	175.06		175.06	0.000017	0.18	0.32	0.14	572.57	250.30	0.05
34_201	182	100-yr	109.46	170.16	175.26		175.26	0.000016	0.18	0.32	0.14	624.23	262.14	0.05
34_201	182	200-yr	128.08	170.16	175.50		175.50	0.000016	0.18	0.34	0.15	688.43	282.41	0.05
34_200	2335	50-yr	102.08	170.06	175.06	171.67	175.06	0.000029	0.27	0.45	0.21	295.51	235.35	0.07
34_200	2335	100-yr	111.10	170.06	175.25	171.72	175.26	0.000028	0.28	0.46	0.21	313.19	240.33	0.07
34_200	2335	200-yr	128.17	170.06	175.48	171.83	175.48	0.000031	0.31	0.49	0.23	333.73	264.01	0.07
34_200	2312	Robinson Rd	Bridge											
34_200	2275	50-yr	102.08	170.17	175.03	171.68	175.04	0.000031	0.21	0.47	0.21	349.65	198.46	0.07
34_200	2275	100-yr	111.10	170.17	175.23	171.94	175.23	0.000031	0.22	0.49	0.22	368.20	213.92	0.07
34_200	2275	200-yr	128.17	170.17	175.45	172.05	175.46	0.000035	0.24	0.53	0.24	389.70	221.03	0.08
34_200	2245	50-yr	102.08	170.17	175.03		175.04	0.000028	0.19	0.45	0.17	399.12	137.80	0.07
34_200	2245	100-yr	111.10	170.17	175.23		175.23	0.000028	0.19	0.46	0.17	426.00	139.58	0.07
34_200	2245	200-yr	128.17	170.17	175.45		175.46	0.000030	0.21	0.50	0.19	457.63	142.04	0.07
34_200	2051	50-yr	102.08	170.13	175.02	171.68	175.03	0.000049	0.24	0.60	0.12	274.61	101.72	0.09
34_200	2051	100-yr	111.10	170.13	175.21	171.79	175.22	0.000049	0.25	0.61	0.12	294.44	102.95	0.09
34_200	2051	200-yr	128.17	170.13	175.43	171.94	175.45	0.000053	0.28	0.66	0.13	317.57	104.34	0.09
34_200	1782	50-yr	102.08	170.07	175.02	171.62	175.02	0.000011	0.18	0.28	0.10	509.00	183.54	0.04
34_200	1782	100-yr	111.10	170.07	175.21	171.74	175.22	0.000011	0.18	0.29	0.11	545.30	190.69	0.04
34_200	1782	200-yr	128.17	170.07	175.44	171.92	175.44	0.000014	0.19	0.30	0.13	588.38	218.85	0.05

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Crl
34_200	1203	50-yr	102.08	169.95	175.01		175.02	0.000010	0.13	0.28	0.14	829.32	284.41	0.04
34_200	1203	100-yr	111.10	169.95	175.21		175.21	0.000010	0.13	0.28	0.14	888.61	326.45	0.04
34_200	1203	200-yr	126.17	169.95	175.43		175.43	0.000012	0.14	0.31	0.14	768.05	343.91	0.04
34_200	641	50-yr	102.08	169.83	175.00	171.36	175.01	0.000024	0.27	0.44	0.15	331.34	135.06	0.06
34_200	641	100-yr	111.10	169.83	175.20	171.48	175.20	0.000024	0.27	0.45	0.15	358.81	154.10	0.06
34_200	641	200-yr	126.17	169.83	175.42	171.66	175.42	0.000027	0.30	0.49	0.12	420.31	236.91	0.07
34_200	360	50-yr	102.08	169.77	174.99		175.00	0.000033	0.08	0.51	0.31	298.34	120.03	0.07
34_200	360	100-yr	111.10	169.77	175.18		175.19	0.000033	0.09	0.52	0.32	322.61	131.15	0.07
34_200	360	200-yr	126.17	169.77	175.40		175.41	0.000036	0.10	0.56	0.35	353.53	151.78	0.08
34_200	194	50-yr	102.08	169.73	174.99	171.24	174.99	0.000028	0.12	0.46	0.15	486.84	207.76	0.07
34_200	194	100-yr	111.10	169.73	175.18	171.32	175.19	0.000028	0.13	0.48	0.16	526.79	224.26	0.07
34_200	194	200-yr	126.17	169.73	175.40	171.48	175.41	0.000029	0.14	0.51	0.16	579.77	266.58	0.07
34_101	1620	50-yr	11.87	173.53	176.11		176.13	0.000249	0.20	0.73	0.20	20.84	278.91	0.17
34_101	1620	100-yr	12.74	173.53	176.16		176.19	0.000261	0.21	0.76	0.21	21.31	291.44	0.17
34_101	1620	200-yr	14.35	173.53	176.30		176.33	0.000269	0.23	0.79	0.23	23.16	335.06	0.17
34_101	1610	Abandon Railway	Culvert											
34_101	1781	50-yr	11.87	173.56	175.96	174.78	175.99	0.000089	0.30	0.42	0.29	33.93	115.43	0.10
34_101	1781	100-yr	12.74	173.56	176.02	174.83	176.03	0.000093	0.31	0.44	0.30	34.95	123.54	0.10
34_101	1781	200-yr	14.35	173.56	176.15	174.93	176.16	0.000099	0.33	0.45	0.32	36.20	156.38	0.10
34_101	1769	50-yr	11.87	173.54	175.96		175.98	0.000020	0.09	0.20	0.11	100.90	127.50	0.05
34_101	1769	100-yr	12.74	173.54	176.02		176.02	0.000020	0.09	0.20	0.11	106.21	129.04	0.05
34_101	1769	200-yr	14.35	173.54	176.15		176.16	0.000017	0.09	0.19	0.11	123.41	134.42	0.04
34_101	1530	50-yr	11.87	173.08	175.96	174.12	175.98	0.000011	0.05	0.18	0.11	106.46	74.97	0.04
34_101	1530	100-yr	12.74	173.08	176.02	174.14	176.02	0.000012	0.05	0.19	0.12	109.56	76.26	0.04
34_101	1530	200-yr	14.35	173.08	176.15	174.20	176.15	0.000012	0.05	0.19	0.12	118.67	80.89	0.04
34_101	1258	50-yr	11.87	172.56	175.96	173.72	175.98	0.000013	0.06	0.23	0.07	135.43	117.08	0.04
34_101	1258	100-yr	12.74	172.56	176.02	173.77	176.02	0.000015	0.07	0.24	0.07	136.81	121.20	0.04
34_101	1258	200-yr	14.35	172.56	176.15	173.83	176.15	0.000015	0.07	0.25	0.08	148.03	131.10	0.05
34_101	1244	50-yr	11.87	172.54	175.97		175.98	0.000047	0.13	0.39	0.14	49.84	103.49	0.07
34_101	1244	100-yr	12.74	172.54	176.01		176.02	0.000051	0.14	0.41	0.15	50.71	107.79	0.08
34_101	1244	200-yr	14.35	172.54	176.14		176.15	0.000055	0.15	0.44	0.16	53.54	124.76	0.08
34_101	1225	Abandon Railway	Culvert											
34_101	1209	50-yr	12.09	172.60	175.63	173.79	175.64	0.000106	0.14	0.55	0.16	28.84	103.85	0.11
34_101	1209	100-yr	12.99	172.60	175.63	173.83	175.64	0.000124	0.15	0.60	0.20	29.83	103.81	0.12
34_101	1209	200-yr	14.64	172.60	175.65	173.90	175.67	0.000151	0.17	0.66	0.22	30.28	105.44	0.13
34_101	1201	50-yr	12.09	172.58	175.63	173.79	175.63	0.000027	0.08	0.29	0.08	115.08	83.16	0.06
34_101	1201	100-yr	12.99	172.58	175.63	173.83	175.63	0.000031	0.08	0.31	0.08	115.10	83.16	0.06
34_101	1201	200-yr	14.64	172.58	175.66	174.08	175.66	0.000038	0.09	0.35	0.09	117.62	84.42	0.07
34_101	1086	50-yr	12.09	172.26	175.63	173.36	175.63	0.000006	0.08	0.14	0.09	125.71	81.70	0.03
34_101	1086	100-yr	12.99	172.26	175.63	173.40	175.63	0.000007	0.08	0.15	0.10	125.72	81.70	0.03
34_101	1086	200-yr	14.64	172.26	175.66	173.46	175.66	0.000008	0.09	0.17	0.11	126.18	82.45	0.03
34_101	1065	50-yr	12.09	172.34	175.63		175.63	0.000010	0.09	0.20	0.09	103.69	84.96	0.04
34_101	1065	100-yr	12.99	172.34	175.63		175.63	0.000012	0.10	0.21	0.10	103.69	84.96	0.04
34_101	1065	200-yr	14.64	172.34	175.66		175.66	0.000014	0.11	0.23	0.11	106.25	86.34	0.04
34_101	1050	Carler Rd	Culvert											
34_101	1041	50-yr	12.97	172.13	175.00	172.97	175.00	0.000031	0.12	0.31	0.12	63.15	63.53	0.06
34_101	1041	100-yr	13.89	172.13	175.19	173.00	175.19	0.000023	0.11	0.28	0.12	76.07	69.39	0.06
34_101	1041	200-yr	15.61	172.13	175.41	173.06	175.41	0.000018	0.11	0.27	0.12	81.90	74.70	0.05
34_101	1012	50-yr	12.97	172.08	175.00	173.28	175.00	0.000016	0.12	0.21	0.14	66.61	63.63	0.04
34_101	1012	100-yr	13.89	172.08	175.19	173.33	175.19	0.000012	0.12	0.19	0.13	101.14	65.73	0.04
34_101	1012	200-yr	15.61	172.08	175.41	173.61	175.41	0.000010	0.12	0.19	0.13	115.77	67.77	0.04
34_101	807	50-yr	12.97	171.66	174.99	172.92	175.00	0.000009	0.11	0.17	0.10	111.31	74.68	0.03
34_101	807	100-yr	13.89	171.66	175.19	172.97	175.19	0.000008	0.11	0.18	0.08	127.44	95.18	0.03
34_101	807	200-yr	15.61	171.66	175.41	173.08	175.41	0.000007	0.11	0.17	0.07	149.68	105.02	0.03
34_101	378	50-yr	12.97	170.50	174.99		174.99	0.000006	0.04	0.17	0.06	167.02	80.25	0.03
34_101	378	100-yr	13.89	170.50	175.19		175.19	0.000006	0.04	0.17	0.07	183.24	88.35	0.03
34_101	378	200-yr	15.61	170.50	175.41		175.41	0.000006	0.04	0.18	0.07	204.39	103.08	0.03
34_101	275	50-yr	12.97	170.28	174.99		174.99	0.000003	0.06	0.12	0.06	193.04	91.82	0.02
34_101	275	100-yr	13.89	170.28	175.19		175.19	0.000003	0.06	0.12	0.06	211.32	95.51	0.02
34_101	275	200-yr	15.61	170.28	175.41		175.41	0.000003	0.06	0.12	0.06	233.33	102.83	0.02
34_101	138	50-yr	12.97	169.99	174.99		174.99	0.000002	0.06	0.09	0.06	217.73	117.08	0.01
34_101	135	100-yr	13.89	169.99	175.19		175.19	0.000002	0.05	0.09	0.05	240.91	121.84	0.01
34_101	135	200-yr	15.61	169.99	175.41		175.41	0.000002	0.06	0.09	0.05	260.66	129.63	0.01
34_100	3687	50-yr	105.94	169.69	174.99	171.48	174.99	0.000009	0.08	0.27	0.16	846.79	309.72	0.04
34_100	3687	100-yr	115.41	169.69	175.18	171.51	175.18	0.000009	0.08	0.27	0.16	910.32	322.54	0.04
34_100	3687	200-yr	133.53	169.69	175.40	171.61	175.40	0.000010	0.08	0.29	0.20	983.99	389.60	0.04
34_100	3494	50-yr	105.94	169.65	174.98		174.99	0.000037	0.16	0.55	0.14	391.67	165.65	0.08
34_100	3494	100-yr	115.41	169.65	175.17		175.18	0.000037	0.16	0.56	0.14	425.42	183.44	0.08
34_100	3494	200-yr	133.53	169.65	175.39		175.40	0.000041	0.17	0.61	0.16	468.12	219.36	0.08

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Trip Width (m)	Froude # Crl
34_100	3341	50-yr	105.94	169.62	174.97	171.10	174.08	0.000035	0.15	0.54	0.11	373.07	166.59	0.08
34_100	3341	100-yr	115.41	169.62	175.17	171.21	175.18	0.000035	0.16	0.55	0.12	405.83	182.44	0.08
34_100	3341	200-yr	133.53	169.62	175.38	171.35	175.39	0.000036	0.17	0.60	0.13	448.81	219.28	0.08
34_100	3190	50-yr	105.94	169.59	174.97		174.08	0.000030	0.13	0.50	0.10	450.81	204.41	0.07
34_100	3190	100-yr	115.41	169.59	175.16		175.17	0.000029	0.14	0.50	0.10	491.47	215.03	0.07
34_100	3190	200-yr	133.53	169.59	175.38		175.39	0.000032	0.15	0.54	0.11	541.61	245.73	0.07
34_100	3039	50-yr	105.94	169.56	174.97		174.07	0.000021	0.12	0.42	0.17	497.78	201.21	0.06
34_100	3039	100-yr	115.41	169.56	175.16		175.17	0.000021	0.12	0.43	0.18	538.28	214.46	0.06
34_100	3039	200-yr	133.53	169.56	175.38		175.39	0.000023	0.13	0.46	0.19	587.98	240.29	0.06
34_100	2887	50-yr	105.94	169.53	174.96		174.07	0.000025	0.11	0.46	0.14	533.72	206.54	0.06
34_100	2887	100-yr	115.41	169.53	175.16		175.16	0.000026	0.11	0.48	0.15	575.92	227.90	0.07
34_100	2887	200-yr	133.53	169.53	175.37		175.38	0.000029	0.12	0.52	0.17	627.63	249.06	0.07
34_100	2735	50-yr	105.94	169.49	174.96		174.06	0.000029	0.13	0.47	0.21	426.93	135.78	0.07
34_100	2735	100-yr	115.41	169.49	175.15		175.16	0.000028	0.12	0.50	0.22	483.74	152.01	0.07
34_100	2735	200-yr	133.53	169.49	175.37		175.38	0.000033	0.13	0.55	0.25	487.66	163.97	0.07
34_100	2583	50-yr	105.94	169.46	174.95	170.80	174.06	0.000025	0.12	0.45	0.25	291.21	111.87	0.06
34_100	2583	100-yr	115.41	169.46	175.14	170.87	175.15	0.000025	0.12	0.47	0.25	308.58	118.09	0.07
34_100	2583	200-yr	133.53	169.46	175.36	170.99	175.37	0.000029	0.14	0.52	0.27	328.58	125.88	0.07
34_100	2431	50-yr	105.94	169.43	174.95	170.90	174.06	0.000028	0.11	0.46	0.25	306.78	134.79	0.07
34_100	2431	100-yr	115.41	169.43	175.14	170.97	175.15	0.000027	0.11	0.49	0.24	338.18	167.89	0.07
34_100	2431	200-yr	133.53	169.43	175.36	171.11	175.37	0.000030	0.12	0.52	0.25	377.94	202.19	0.07
34_100	2279	50-yr	105.94	169.40	174.95	170.75	174.05	0.000021	0.10	0.41	0.13	398.65	174.25	0.06
34_100	2279	100-yr	115.41	169.40	175.14	170.81	175.15	0.000029	0.11	0.42	0.13	434.66	197.33	0.06
34_100	2279	200-yr	133.53	169.40	175.35	170.93	175.36	0.000022	0.11	0.46	0.14	480.17	245.15	0.06
34_100	2103	50-yr	105.94	169.36	174.94		174.05	0.000032	0.08	0.52	0.24	342.67	181.66	0.07
34_100	2103	100-yr	115.41	169.36	175.13		175.14	0.000032	0.09	0.54	0.24	378.66	191.30	0.07
34_100	2103	200-yr	133.53	169.36	175.35		175.36	0.000035	0.10	0.58	0.25	422.94	212.65	0.08
34_100	2093	50-yr	105.94	169.36	174.93	170.84	174.05	0.000041	0.18	0.60	0.18	389.23	197.17	0.08
34_100	2093	100-yr	115.41	169.36	175.13	170.92	175.14	0.000042	0.17	0.62	0.19	303.53	205.23	0.08
34_100	2093	200-yr	133.53	169.36	175.34	171.07	175.35	0.000048	0.20	0.69	0.21	318.17	209.98	0.09
34_100	2076	Oswego Park	Bridge											
34_100	2048	50-yr	105.94	169.35	174.92	170.88	174.03	0.000027	0.32	0.48	0.14	314.56	186.90	0.07
34_100	2048	100-yr	115.41	169.35	175.11	170.96	175.12	0.000028	0.34	0.51	0.14	330.85	167.95	0.07
34_100	2048	200-yr	133.53	169.35	175.32	171.11	175.33	0.000032	0.37	0.56	0.16	348.48	178.51	0.07
34_100	2038	50-yr	105.94	169.35	174.92	170.78	174.02	0.000019	0.25	0.41	0.11	368.68	167.64	0.06
34_100	2038	100-yr	115.41	169.35	175.11	170.87	175.12	0.000019	0.25	0.41	0.12	401.44	174.14	0.06
34_100	2038	200-yr	133.53	169.35	175.32	170.99	175.33	0.000021	0.28	0.45	0.13	440.24	196.32	0.06
34_100	1987	50-yr	105.94	169.34	174.92		174.02	0.000014	0.23	0.35	0.14	430.58	184.29	0.05
34_100	1987	100-yr	115.41	169.34	175.11		175.12	0.000014	0.24	0.35	0.15	462.78	174.83	0.05
34_100	1987	200-yr	133.53	169.34	175.32		175.32	0.000015	0.26	0.38	0.16	502.90	206.67	0.05
34_100	1955	50-yr	105.94	169.33	174.91	170.84	174.02	0.000035	0.32	0.55	0.21	317.26	213.59	0.07
34_100	1955	100-yr	115.41	169.33	175.10	170.93	175.11	0.000033	0.33	0.54	0.22	348.56	218.57	0.07
34_100	1955	200-yr	133.53	169.33	175.31	171.10	175.32	0.000035	0.35	0.57	0.24	383.25	225.93	0.07
34_100	1946	Detz Rd	Bridge											
34_100	1931	50-yr	105.94	169.58	174.89	170.96	174.90	0.000048	0.43	0.64	0.11	294.44	196.24	0.09
34_100	1931	100-yr	115.41	169.58	175.08	171.04	175.09	0.000033	0.24	0.55	0.10	414.25	189.80	0.07
34_100	1931	200-yr	133.53	169.58	175.29	171.18	175.30	0.000036	0.27	0.58	0.11	455.42	202.88	0.08
34_100	1900	50-yr	105.94	169.58	174.89		174.90	0.000019	0.10	0.38	0.12	513.12	149.64	0.06
34_100	1900	100-yr	115.41	169.58	175.08		175.09	0.000029	0.10	0.41	0.12	542.14	153.57	0.06
34_100	1900	200-yr	133.53	169.58	175.29		175.30	0.000022	0.11	0.45	0.14	575.73	179.04	0.06
34_100	1823	50-yr	105.94	169.59	174.89		174.90	0.000012	0.15	0.30	0.16	490.11	182.12	0.04
34_100	1823	100-yr	115.41	169.59	175.08		175.09	0.000012	0.16	0.31	0.17	525.66	188.94	0.04
34_100	1823	200-yr	133.53	169.59	175.29		175.30	0.000013	0.18	0.34	0.18	566.74	204.98	0.05
34_100	1671	50-yr	105.94	169.60	174.88		174.89	0.000017	0.23	0.37	0.12	394.98	140.68	0.05
34_100	1671	100-yr	115.41	169.60	175.08		175.09	0.000017	0.24	0.38	0.13	422.56	147.08	0.05
34_100	1671	200-yr	133.53	169.60	175.29		175.30	0.000019	0.26	0.42	0.14	453.94	154.79	0.06
34_100	1497	50-yr	105.94	169.62	174.88		174.89	0.000029	0.21	0.48	0.09	323.88	135.06	0.07
34_100	1497	100-yr	115.41	169.62	175.07		175.08	0.000030	0.20	0.50	0.10	351.87	159.50	0.07
34_100	1497	200-yr	133.53	169.62	175.28		175.29	0.000035	0.20	0.56	0.11	386.84	197.49	0.08
34_100	1367	50-yr	105.94	169.64	174.86		174.89	0.000017	0.13	0.36	0.07	508.43	221.86	0.05
34_100	1367	100-yr	115.41	169.64	175.07		175.08	0.000018	0.14	0.36	0.07	551.78	230.98	0.05
34_100	1367	200-yr	133.53	169.64	175.28		175.29	0.000019	0.14	0.41	0.08	605.10	290.88	0.06
34_100	1206	50-yr	105.94	169.66	174.86		174.88	0.000013	0.14	0.32	0.05	829.00	261.18	0.05
34_100	1206	100-yr	115.41	169.66	175.07		175.08	0.000012	0.14	0.32	0.06	861.36	294.48	0.04
34_100	1206	200-yr	133.53	169.66	175.28		175.29	0.000014	0.14	0.36	0.06	748.00	324.68	0.05
34_100	1039	50-yr	105.94	169.67	174.86		174.88	0.000016	0.17	0.35	0.06	473.23	209.54	0.05
34_100	1039	100-yr	115.41	169.67	175.07		175.07	0.000017	0.17	0.37	0.06	516.90	244.51	0.05
34_100	1039	200-yr	133.53	169.67	175.28		175.28	0.000017	0.18	0.39	0.07	567.91	290.57	0.05
34_100	912	50-yr	105.94	169.69	174.87		174.88	0.000022	0.20	0.42	0.08	364.29	146.05	0.06
34_100	912	100-yr	115.41	169.69	175.06		175.07	0.000025	0.18	0.45	0.08	380.05	184.35	0.06

HEC-RAS Plan: Oswego Watershed NPCA (Continued)

Reach	River Sta	Profile	Q Total (m³/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chf (m/s)	Vel Right (m/s)	Flow Area (m²)	Top Width (m)	Froude # Chf
34_100	912	200-yr	133.53	169.68	175.27		175.28	0.000027	0.20	0.48	0.10	434.27	196.48	0.07
34_100	760	50-yr	105.94	169.70	174.87		174.88	0.000018	0.13	0.38	0.22	404.53	205.98	0.06
34_100	760	100-yr	115.41	169.70	175.06		175.07	0.000018	0.14	0.38	0.22	444.73	214.73	0.05
34_100	760	200-yr	133.53	169.70	175.27		175.27	0.000018	0.15	0.41	0.24	489.68	222.48	0.06
34_100	611	50-yr	105.94	169.72	174.87		174.87	0.000012	0.15	0.30	0.06	542.75	236.48	0.04
34_100	611	100-yr	115.41	169.72	175.06		175.06	0.000012	0.15	0.31	0.06	589.15	247.54	0.04
34_100	611	200-yr	133.53	169.72	175.27		175.27	0.000013	0.18	0.33	0.06	641.06	257.09	0.05
34_100	456	50-yr	105.94	169.74	174.87		174.87	0.000009	0.15	0.27	0.05	622.30	252.73	0.04
34_100	456	100-yr	115.41	169.74	175.06		175.06	0.000009	0.15	0.27	0.05	671.32	260.50	0.04
34_100	456	200-yr	133.53	169.74	175.27		175.27	0.000010	0.16	0.29	0.06	725.68	267.48	0.04
34_100	304	50-yr	105.94	169.75	174.87		174.87	0.000012	0.15	0.30	0.06	567.82	175.58	0.04
34_100	304	100-yr	115.41	169.75	175.06		175.06	0.000012	0.15	0.31	0.07	601.68	180.01	0.04
34_100	304	200-yr	133.53	169.75	175.26		175.27	0.000013	0.17	0.34	0.07	639.14	184.60	0.05
34_100	149	50-yr	105.94	169.77	174.86		174.87	0.000013	0.19	0.32	0.06	435.55	151.02	0.05
34_100	149	100-yr	115.41	169.77	175.05		175.06	0.000013	0.20	0.33	0.06	465.10	158.86	0.05
34_100	149	200-yr	133.53	169.77	175.26		175.26	0.000015	0.21	0.36	0.06	498.53	169.06	0.05
34_100	123	50-yr	105.94	169.77	174.86	171.21	174.87	0.000023	0.23	0.41	0.10	406.05	144.37	0.08
34_100	123	100-yr	115.41	169.77	175.05	171.26	175.06	0.000024	0.24	0.43	0.09	435.40	161.16	0.06
34_100	123	200-yr	133.53	169.77	175.25	171.36	175.26	0.000027	0.27	0.47	0.10	469.38	174.07	0.07
34_100	106	Regional Road 45		Bridge										
34_100	91	50-yr	105.94	169.90	174.82	171.25	174.82	0.000018	0.15	0.35	0.14	438.82	173.16	0.05
34_100	91	100-yr	115.41	169.90	175.02	171.30	175.03	0.000018	0.16	0.36	0.14	474.92	190.49	0.05
34_100	91	200-yr	133.53	169.90	175.23	171.40	175.24	0.000020	0.17	0.39	0.15	516.61	203.55	0.06
34_100	81	50-yr	105.94	169.90	174.82		174.82	0.000018	0.15	0.34	0.14	458.03	187.25	0.05
34_100	81	100-yr	115.41	169.90	175.02		175.02	0.000018	0.16	0.34	0.14	496.97	200.82	0.05
34_100	81	200-yr	133.53	169.90	175.23		175.24	0.000018	0.17	0.37	0.16	539.77	208.53	0.05
34_100	57	50-yr	105.94	169.90	174.82	171.28	174.82	0.000019	0.17	0.37	0.14	484.32	194.94	0.06
34_100	57	100-yr	115.41	169.90	175.02	171.37	175.02	0.000018	0.17	0.37	0.15	524.01	206.70	0.05
34_100	57	200-yr	133.53	169.90	175.23	171.46	175.23	0.000019	0.18	0.39	0.16	566.15	213.66	0.06

APPENDIX C

Sensitivity Analysis Results

Reach	River Sta	Profile	Plan	G Total (m/s)	Min Ch Elev (m)	W.R. Elev (m)	Cut W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chl (m/s)	Vel Right (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Ch
17_500	173	100-yr	SensAr DS WSEL +0.5m	35.78	178.08	178.82	177.50	178.91	0.000840	0.33	1.35	0.44	31.34	95.23	0.28
17_500	173	100-yr	SensAr DS WSEL -0.5m	35.78	178.08	178.82	177.50	178.91	0.000840	0.33	1.35	0.44	31.34	95.23	0.28
17_500	173	100-yr	Oswego Watershed NPCA	35.78	178.08	178.82	177.50	178.91	0.000842	0.33	1.35	0.44	31.30	95.21	0.28
17_500	186	Indiana Rd E		Bridge											
17_500	190	100-yr	SensAr DS WSEL +0.5m	35.78	178.28	178.71	177.81	178.78	0.000332	0.44	1.15	0.80	41.40	143.78	0.25
17_500	190	100-yr	SensAr DS WSEL -0.5m	35.78	178.28	178.71	177.81	178.78	0.000332	0.44	1.15	0.80	41.40	143.78	0.25
17_500	190	100-yr	Oswego Watershed NPCA	35.78	178.28	178.71	177.81	178.78	0.000335	0.44	1.15	0.80	41.33	143.77	0.25
17_500	145	100-yr	SensAr DS WSEL +0.5m	35.78	178.28	178.74	177.77	178.74	0.000553	0.10	0.36	0.23	167.14	143.11	0.08
17_500	145	100-yr	SensAr DS WSEL -0.5m	35.78	178.28	178.74	177.77	178.74	0.000553	0.10	0.36	0.23	167.13	143.11	0.08
17_500	145	100-yr	Oswego Watershed NPCA	35.78	178.28	178.73	177.77	178.74	0.000553	0.10	0.36	0.23	168.80	143.08	0.08
17_400	5033	100-yr	SensAr DS WSEL +0.5m	40.88	178.18	178.70		178.72	0.000208	0.31	0.77	0.16	90.60	85.73	0.18
17_400	5033	100-yr	SensAr DS WSEL -0.5m	40.88	178.18	178.70		178.72	0.000208	0.31	0.77	0.16	90.60	85.73	0.18
17_400	5033	100-yr	Oswego Watershed NPCA	40.88	178.18	178.70		178.72	0.000208	0.31	0.77	0.16	90.43	85.70	0.18
17_400	4847	100-yr	SensAr DS WSEL +0.5m	40.88	178.10	178.70		178.73	0.000344	0.06	0.35	0.16	221.78	214.58	0.07
17_400	4847	100-yr	SensAr DS WSEL -0.5m	40.88	178.10	178.70		178.73	0.000344	0.06	0.35	0.16	221.77	214.58	0.07
17_400	4847	100-yr	Oswego Watershed NPCA	40.88	178.10	178.70		178.73	0.000344	0.06	0.36	0.16	221.23	214.47	0.08
17_400	4777	100-yr	SensAr DS WSEL +0.5m	40.88	178.07	178.70		178.75	0.000254	0.08	0.40	0.17	203.76	183.77	0.08
17_400	4777	100-yr	SensAr DS WSEL -0.5m	40.88	178.07	178.70		178.75	0.000254	0.08	0.40	0.17	203.75	183.77	0.08
17_400	4777	100-yr	Oswego Watershed NPCA	40.88	178.07	178.69		178.75	0.000254	0.08	0.40	0.17	203.29	183.65	0.08
17_400	4674	100-yr	SensAr DS WSEL +0.5m	40.88	178.03	178.68		178.69	0.000125	0.13	0.62	0.16	178.11	166.79	0.13
17_400	4674	100-yr	SensAr DS WSEL -0.5m	40.88	178.03	178.68		178.69	0.000125	0.13	0.62	0.16	178.10	166.79	0.13
17_400	4674	100-yr	Oswego Watershed NPCA	40.88	178.03	178.68		178.69	0.000126	0.13	0.62	0.16	177.98	166.76	0.13
17_400	4522	100-yr	SensAr DS WSEL +0.5m	40.88	178.08	178.62		178.68	0.000374	0.18	1.05	0.21	72.78	86.13	0.22
17_400	4522	100-yr	SensAr DS WSEL -0.5m	40.88	178.08	178.62		178.68	0.000374	0.18	1.05	0.21	72.77	86.13	0.22
17_400	4522	100-yr	Oswego Watershed NPCA	40.88	178.08	178.61		178.68	0.000376	0.18	1.06	0.21	72.58	86.07	0.22
17_400	4424	100-yr	SensAr DS WSEL +0.5m	40.88	178.92	178.59		178.63	0.000304	0.18	0.84	0.26	81.07	35.08	0.20
17_400	4424	100-yr	SensAr DS WSEL -0.5m	40.88	178.92	178.59		178.63	0.000304	0.18	0.84	0.26	81.06	35.08	0.20
17_400	4424	100-yr	Oswego Watershed NPCA	40.88	178.92	178.58		178.62	0.000306	0.18	0.85	0.26	80.89	34.98	0.20
17_400	4316	100-yr	SensAr DS WSEL +0.5m	40.88	178.88	178.60		178.61	0.000542	0.13	0.36	0.17	210.34	185.42	0.07
17_400	4316	100-yr	SensAr DS WSEL -0.5m	40.88	178.88	178.60		178.61	0.000542	0.13	0.36	0.17	210.31	185.42	0.07
17_400	4316	100-yr	Oswego Watershed NPCA	40.88	178.88	178.60		178.60	0.000542	0.13	0.36	0.17	208.92	185.38	0.07
17_400	4148	100-yr	SensAr DS WSEL +0.5m	40.88	178.80	178.58		178.60	0.000591	0.13	0.54	0.16	170.31	120.20	0.11
17_400	4148	100-yr	SensAr DS WSEL -0.5m	40.88	178.80	178.59		178.60	0.000591	0.13	0.54	0.16	170.30	120.20	0.11
17_400	4148	100-yr	Oswego Watershed NPCA	40.88	178.80	178.59		178.59	0.000591	0.13	0.54	0.16	170.12	120.17	0.11
17_400	3871	100-yr	SensAr DS WSEL +0.5m	40.88	178.73	178.57		178.58	0.000127	0.11	0.83	0.21	117.40	78.08	0.13
17_400	3871	100-yr	SensAr DS WSEL -0.5m	40.88	178.73	178.57		178.58	0.000127	0.11	0.83	0.21	117.39	78.08	0.13
17_400	3871	100-yr	Oswego Watershed NPCA	40.88	178.73	178.56		178.58	0.000128	0.11	0.83	0.22	117.13	78.04	0.13
17_400	3708	100-yr	SensAr DS WSEL +0.5m	40.88	178.61	178.55	178.81	178.58	0.000083	0.14	0.52	0.10	182.92	138.08	0.10
17_400	3708	100-yr	SensAr DS WSEL -0.5m	40.88	178.61	178.55	178.81	178.58	0.000083	0.14	0.52	0.10	182.90	138.05	0.10
17_400	3708	100-yr	Oswego Watershed NPCA	40.88	178.61	178.55	178.91	178.55	0.000084	0.15	0.52	0.10	182.43	138.00	0.10
17_400	3385	100-yr	SensAr DS WSEL +0.5m	40.88	178.47	178.48		178.52	0.000226	0.12	0.84	0.16	82.31	85.32	0.17
17_400	3385	100-yr	SensAr DS WSEL -0.5m	40.88	178.47	178.48		178.52	0.000226	0.12	0.84	0.16	82.30	85.30	0.17
17_400	3385	100-yr	Oswego Watershed NPCA	40.88	178.47	178.48		178.51	0.000226	0.12	0.84	0.16	81.99	85.11	0.17
17_400	3215	100-yr	SensAr DS WSEL +0.5m	40.88	178.40	178.48		178.49	0.000090	0.10	0.55	0.10	148.52	136.51	0.11
17_400	3215	100-yr	SensAr DS WSEL -0.5m	40.88	178.40	178.48		178.49	0.000090	0.10	0.55	0.10	148.50	136.50	0.11
17_400	3215	100-yr	Oswego Watershed NPCA	40.88	178.40	178.47		178.48	0.000091	0.10	0.55	0.10	148.00	136.32	0.11
17_400	3014	100-yr	SensAr DS WSEL +0.5m	40.88	178.32	178.44		178.47	0.000138	0.14	0.89	0.14	96.73	84.18	0.14
17_400	3014	100-yr	SensAr DS WSEL -0.5m	40.88	178.32	178.44		178.47	0.000138	0.14	0.89	0.14	96.72	84.17	0.14
17_400	3014	100-yr	Oswego Watershed NPCA	40.88	178.32	178.44		178.46	0.000138	0.14	0.89	0.14	96.47	83.88	0.14
17_400	2838	100-yr	SensAr DS WSEL +0.5m	40.88	178.24	178.44		178.44	0.000076	0.25	0.51	0.11	115.49	83.88	0.10
17_400	2838	100-yr	SensAr DS WSEL -0.5m	40.88	178.24	178.44		178.44	0.000076	0.25	0.51	0.11	115.47	83.88	0.10
17_400	2838	100-yr	Oswego Watershed NPCA	40.88	178.24	178.43		178.44	0.000077	0.25	0.52	0.11	115.14	83.82	0.10
17_400	2828	100-yr	SensAr DS WSEL +0.5m	40.88	178.24	178.43	178.26	178.44	0.000076	0.19	0.52	0.08	117.01	85.21	0.10
17_400	2828	100-yr	SensAr DS WSEL -0.5m	40.88	178.24	178.43	178.26	178.44	0.000076	0.19	0.52	0.08	116.99	85.21	0.10
17_400	2828	100-yr	Oswego Watershed NPCA	40.88	178.24	178.43	178.26	178.44	0.000075	0.19	0.52	0.08	116.88	85.10	0.10
17_400	2813	Townline Rd E		Bridge											
17_400	2798	100-yr	SensAr DS WSEL +0.5m	40.88	178.25	178.29	178.61	178.30	0.000096	0.14	0.55	0.32	188.07	189.49	0.11
17_400	2798	100-yr	SensAr DS WSEL -0.5m	40.88	178.25	178.29	178.61	178.30	0.000096	0.14	0.55	0.32	188.04	189.48	0.11
17_400	2798	100-yr	Oswego Watershed NPCA	40.88	178.25	178.28	178.61	178.30	0.000095	0.14	0.55	0.32	188.25	189.54	0.11
17_400	2793	100-yr	SensAr DS WSEL +0.5m	40.88	178.25	178.29		178.30	0.000091	0.11	0.40	0.20	213.64	201.67	0.09
17_400	2793	100-yr	SensAr DS WSEL -0.5m	40.88	178.25	178.29		178.30	0.000091	0.11	0.40	0.20	213.61	201.67	0.09
17_400	2793	100-yr	Oswego Watershed NPCA	40.88	178.25	178.30		178.30	0.000091	0.11	0.40	0.20	213.86	201.71	0.09
17_400	2504	100-yr	SensAr DS WSEL +0.5m	40.88	178.19	178.22		178.27	0.000353	0.26	1.13	0.37	88.38	48.84	0.22
17_400	2504	100-yr	SensAr DS WSEL -0.5m	40.88	178.19	178.22		178.27	0.000353	0.26	1.13	0.37	88.37	48.83	0.22
17_400	2504	100-yr	Oswego Watershed NPCA	40.88	178.19	178.23		178.27	0.000352	0.26	1.13	0.37	88.44	48.88	0.22
17_400	2438	100-yr	SensAr DS WSEL +0.5m	40.88	178.18	178.22		178.24	0.000192	0.22	0.83	0.30	90.37	66.45	0.16
17_400	2438	100-yr	SensAr DS WSEL -0.5m	40.88	178.18	178.22		178.24	0.000192	0.22	0.83	0.30	90.35	66.44	0.16
17_400	2438	100-yr	Oswego Watershed NPCA	40.88	178.18	178.22		178.25	0.000192	0.22	0.83	0.30	90.45	66.58	0.16
17_400	2433	100-yr	SensAr DS WSEL +0.5m	40.88	178.18	178.20	178.45	178.24	0.000251	0.22	0.91	0.14	71.46	61.98	0.16
17_400	2433	100-yr	SensAr DS WSEL -0.5m	40.88	178.18	178.20	178.45	178.24	0.000251	0.22	0.91	0.14	71.45	61.97	0.16
17_400	2433	100-yr	Oswego Watershed NPCA	40.88	178.18	178.21	178.45	178.24	0.000250	0.22	0.91	0.14	71.54	61.78	0.16
17_400	2421	H D Townline Rd		Bridge											
17_400	2411	100-yr	SensAr DS WSEL +0.5m	40.88	178.23	177.71	178.42	177.78	0.000420	0.59	1.04		40.54	73.18	0.23
17_400	2411	100-yr	SensAr DS WSEL -0.5m	40.88											

Reach	River Sta	Profile	Plan	G Total (ft/m)	Min Ch Elev (ft)	W.R. Elev (ft)	Cut W.R. Elev (ft)	E.G. Elev (ft)	E.G. Slope (ft/m)	Vel Left (ft/s)	Vel Chl (ft/s)	Vel Right (ft/s)	Flow Area (ft ²)	Top Width (ft)	Froude # Ch
17_400	2260	100-yr	SensAr DS WSEL +0.5m	40.86	175.17	177.69		177.71	0.000258	0.35	0.81	0.15	85.89	94.57	0.18
17_400	2260	100-yr	SensAr DS WSEL -0.5m	40.86	175.17	177.68		177.70	0.000265	0.35	0.82	0.13	85.04	94.23	0.18
17_400	2260	100-yr	Oswego Watershed NPCA	40.86	175.17	177.68		177.70	0.000264	0.35	0.82	0.13	85.23	94.35	0.18
17_400	2040	100-yr	SensAr DS WSEL +0.5m	40.86	175.08	177.63		177.88	0.000458	0.36	1.00	0.29	86.42	83.96	0.22
17_400	2040	100-yr	SensAr DS WSEL -0.5m	40.86	175.08	177.62		177.83	0.000471	0.36	1.02	0.30	87.53	83.80	0.22
17_400	2040	100-yr	Oswego Watershed NPCA	40.86	175.08	177.62		177.85	0.000468	0.36	1.01	0.30	87.73	83.83	0.22
17_400	1898	100-yr	SensAr DS WSEL +0.5m	40.86	175.02	177.58		177.80	0.000276	0.21	0.88	0.33	88.19	83.18	0.19
17_400	1898	100-yr	SensAr DS WSEL -0.5m	40.86	175.02	177.57		177.59	0.000284	0.22	0.89	0.34	87.18	82.91	0.19
17_400	1898	100-yr	Oswego Watershed NPCA	40.86	175.02	177.57		177.59	0.000282	0.22	0.89	0.34	87.40	82.97	0.19
17_400	1887	100-yr	SensAr DS WSEL +0.5m	40.86	174.94	177.49		177.53	0.000456	0.30	1.15	0.32	84.87	60.15	0.24
17_400	1887	100-yr	SensAr DS WSEL -0.5m	40.86	174.94	177.47		177.52	0.000476	0.30	1.16	0.32	83.75	58.88	0.25
17_400	1887	100-yr	Oswego Watershed NPCA	40.86	174.94	177.47		177.52	0.000471	0.30	1.16	0.32	83.95	58.92	0.25
17_400	1422	100-yr	SensAr DS WSEL +0.5m	40.86	174.83	177.36		177.42	0.000462	0.21	1.10	0.47	48.25	40.93	0.24
17_400	1422	100-yr	SensAr DS WSEL -0.5m	40.86	174.83	177.35		177.40	0.000476	0.21	1.11	0.48	47.38	38.77	0.24
17_400	1422	100-yr	Oswego Watershed NPCA	40.86	174.83	177.35		177.40	0.000473	0.21	1.10	0.48	47.76	40.02	0.24
17_400	1218	100-yr	SensAr DS WSEL +0.5m	40.86	174.75	177.31		177.33	0.000314	0.25	0.82	0.18	98.60	106.00	0.20
17_400	1218	100-yr	SensAr DS WSEL -0.5m	40.86	174.75	177.29		177.31	0.000335	0.26	0.84	0.19	96.34	107.82	0.20
17_400	1218	100-yr	Oswego Watershed NPCA	40.86	174.75	177.29		177.32	0.000330	0.26	0.83	0.18	96.88	107.99	0.20
17_400	889	100-yr	SensAr DS WSEL +0.5m	40.86	174.65	177.11		177.21	0.000871	0.25	1.42	0.23	42.14	42.29	0.32
17_400	889	100-yr	SensAr DS WSEL -0.5m	40.86	174.65	177.08		177.18	0.000935	0.25	1.45	0.24	40.67	41.70	0.33
17_400	889	100-yr	Oswego Watershed NPCA	40.86	174.65	177.00		177.18	0.000920	0.25	1.44	0.24	41.00	41.83	0.33
17_400	834	100-yr	SensAr DS WSEL +0.5m	40.86	174.52	176.94		176.98	0.000495	0.17	1.04	0.20	76.72	62.72	0.24
17_400	834	100-yr	SensAr DS WSEL -0.5m	40.86	174.52	176.89		176.93	0.000576	0.18	1.09	0.20	65.70	61.40	0.26
17_400	834	100-yr	Oswego Watershed NPCA	40.86	174.52	176.90		176.95	0.000586	0.17	1.08	0.20	66.90	61.71	0.26
17_400	521	100-yr	SensAr DS WSEL +0.5m	40.86	174.48	176.93	175.88	176.95	0.000212	0.13	0.89	0.18	126.07	109.67	0.16
17_400	521	100-yr	SensAr DS WSEL -0.5m	40.86	174.48	176.87	175.88	176.89	0.000248	0.13	0.73	0.19	119.08	106.34	0.17
17_400	521	100-yr	Oswego Watershed NPCA	40.86	174.48	176.88	175.88	176.90	0.000238	0.13	0.72	0.19	120.71	109.42	0.17
17_400	206	100-yr	SensAr DS WSEL +0.5m	40.86	174.35	176.90		176.90	0.000104	0.25	0.53	0.11	135.47	163.27	0.11
17_400	206	100-yr	SensAr DS WSEL -0.5m	40.86	174.35	176.82		176.83	0.000131	0.27	0.58	0.11	124.52	147.11	0.13
17_400	206	100-yr	Oswego Watershed NPCA	40.86	174.35	176.84		176.85	0.000124	0.26	0.58	0.11	127.08	147.81	0.12
17_300	870	100-yr	SensAr DS WSEL +0.5m	55.84	174.15	176.70		176.81	0.000410	0.38	1.07	0.16	56.31	34.17	0.23
17_300	870	100-yr	SensAr DS WSEL -0.5m	55.84	174.15	176.68		176.72	0.000481	0.38	1.12	0.15	53.04	33.13	0.25
17_300	870	100-yr	Oswego Watershed NPCA	55.84	174.15	176.68		176.74	0.000482	0.38	1.11	0.15	53.65	33.38	0.24
17_300	444	100-yr	SensAr DS WSEL +0.5m	55.84	174.08	176.75		176.78	0.000394	0.08	0.53	0.18	252.73	258.89	0.11
17_300	444	100-yr	SensAr DS WSEL -0.5m	55.84	174.08	176.65		176.66	0.000118	0.09	0.58	0.19	237.18	231.78	0.12
17_300	444	100-yr	Oswego Watershed NPCA	55.84	174.08	176.67		176.68	0.000111	0.09	0.58	0.19	233.29	241.19	0.12
17_300	211	100-yr	SensAr DS WSEL +0.5m	55.84	173.96	176.69		176.72	0.000344	0.27	0.88	0.37	83.26	50.27	0.18
17_300	211	100-yr	SensAr DS WSEL -0.5m	55.84	173.96	176.57		176.61	0.000295	0.27	0.92	0.39	77.58	48.75	0.19
17_300	211	100-yr	Oswego Watershed NPCA	55.84	173.96	176.60		176.64	0.000281	0.27	0.90	0.39	79.02	49.90	0.19
17_200	1553	100-yr	SensAr DS WSEL +0.5m	57.32	173.83	176.84		176.88	0.000140	0.38	0.67	0.11	126.21	91.54	0.14
17_200	1553	100-yr	SensAr DS WSEL -0.5m	57.32	173.83	176.52		176.53	0.000186	0.42	0.75	0.12	114.53	80.11	0.16
17_200	1553	100-yr	Oswego Watershed NPCA	57.32	173.83	176.55		176.58	0.000173	0.41	0.72	0.11	117.54	80.48	0.15
17_200	1286	100-yr	SensAr DS WSEL +0.5m	57.32	173.72	176.52		176.59	0.000480	0.30	1.28	0.24	75.54	30.05	0.25
17_200	1286	100-yr	SensAr DS WSEL -0.5m	57.32	173.72	176.35		176.44	0.000625	0.33	1.40	0.24	62.44	49.08	0.29
17_200	1286	100-yr	Oswego Watershed NPCA	57.32	173.72	176.40		176.48	0.000581	0.32	1.37	0.24	64.58	48.53	0.28
17_200	1004	100-yr	SensAr DS WSEL +0.5m	57.32	173.61	176.48		176.48	0.000157	0.17	0.72	0.33	181.63	136.17	0.14
17_200	1004	100-yr	SensAr DS WSEL -0.5m	57.32	173.61	176.29		176.31	0.000234	0.19	0.83	0.36	158.05	136.07	0.17
17_200	1004	100-yr	Oswego Watershed NPCA	57.32	173.61	176.34		176.38	0.000206	0.19	0.79	0.35	163.04	136.68	0.17
17_200	766	100-yr	SensAr DS WSEL +0.5m	57.32	173.52	176.45		176.48	0.000115	0.18	0.81	0.17	205.14	122.83	0.12
17_200	766	100-yr	SensAr DS WSEL -0.5m	57.32	173.52	176.25		176.28	0.000183	0.20	0.89	0.19	181.81	120.90	0.15
17_200	766	100-yr	Oswego Watershed NPCA	57.32	173.52	176.31		176.32	0.000147	0.19	0.86	0.19	187.89	121.34	0.14
17_200	357	100-yr	SensAr DS WSEL +0.5m	57.32	173.38	176.41		176.42	0.000103	0.32	0.58	0.11	147.20	108.77	0.12
17_200	357	100-yr	SensAr DS WSEL -0.5m	57.32	173.38	176.18		176.20	0.000168	0.36	0.71	0.12	123.44	105.01	0.15
17_200	357	100-yr	Oswego Watershed NPCA	57.32	173.38	176.25		176.28	0.000145	0.35	0.67	0.12	130.13	106.08	0.14
17_200	192	100-yr	SensAr DS WSEL +0.5m	57.32	173.30	176.40		176.41	0.000336	0.24	0.37	0.07	226.76	124.93	0.07
17_200	192	100-yr	SensAr DS WSEL -0.5m	57.32	173.30	176.18		176.18	0.000555	0.27	0.43	0.08	192.86	123.41	0.09
17_200	192	100-yr	Oswego Watershed NPCA	57.32	173.30	176.24		176.25	0.000546	0.27	0.41	0.08	200.79	123.84	0.08
17_100	662	100-yr	SensAr DS WSEL +0.5m	66.01	173.21	176.37	174.75	176.38	0.000158	0.35	0.77	0.14	135.54	85.84	0.15
17_100	662	100-yr	SensAr DS WSEL -0.5m	66.01	173.21	176.12	174.75	176.16	0.000272	0.35	0.85	0.17	114.59	84.81	0.18
17_100	662	100-yr	Oswego Watershed NPCA	66.01	173.21	176.19	174.75	176.22	0.000231	0.30	0.88	0.16	120.69	85.08	0.18
17_100	647	100-yr	SensAr DS WSEL +0.5m	66.01	173.18	176.36		176.38	0.000174	0.27	0.81	0.16	128.91	54.32	0.16
17_100	647	100-yr	SensAr DS WSEL -0.5m	66.01	173.18	176.11		176.15	0.000240	0.29	0.90	0.17	113.88	53.41	0.18
17_100	647	100-yr	Oswego Watershed NPCA	66.01	173.18	176.18		176.21	0.000218	0.29	0.87	0.17	117.62	53.67	0.17
17_100	640	100-yr	SensAr DS WSEL +0.5m	66.01	173.18	176.32	174.78	176.37	0.000379	0.41	1.17	0.33	96.11	54.08	0.23
17_100	640	100-yr	SensAr DS WSEL -0.5m	66.01	173.18	176.07	174.78	176.13	0.000540	0.46	1.31	0.37	80.07	53.15	0.27
17_100	640	100-yr	Oswego Watershed NPCA	66.01	173.18	176.14	174.78	176.20	0.000496	0.44	1.27	0.36	82.99	53.41	0.25
17_100	621	Bethells Rd		Bridge											
17_100	603	100-yr	SensAr DS WSEL +0.5m	66.01	173.10	176.24	174.82	176.29	0.000356	0.65	1.11	0.39	80.73	57.85	0.20
17_100	603	100-yr	SensAr DS WSEL -0.5m	66.01	173.10	175.96	174.82	176.03	0.000583	0.71	1.31	0.42	68.13	55.18	0.27
17_100	603	100-yr	Oswego Watershed NPCA	66.01	173.10	176.04	174.82	176.10	0.000500	0.69	1.24	0.41	71.89	56.01	0.25
17_100	586	100-yr	SensAr DS WSEL +0.5m	66.01	173.10	176.25		176.28	0.000222	0.51	0.98	0.40	106.89	55.97	0.18
17_100	586	100-yr	SensAr DS WSEL -0.5m	66.01	173.10	175.97		176.01	0.000349	0.56	1.13	0.47	91.38	54.48	0.22
17_100	586	100-yr	Oswego Watershed NPCA	66.01	173.10	176.05		176.09	0.000303	0.54	1.07	0.44	95.94	54.89	0.20
17_100	520</														

HEC-RAS Profile 100-yr (Continued)

Reach	River Sta	Profile	Plan	G Total (m/s)	Min Ch Elev (m)	W.R. Elev (m)	Crs W.R. Elev (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chl (m/s)	Vel Right (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Ch
17, 100	211	100-yr	Oswego Watershed NPCA	86.81	173.08	175.01		175.22	0.000120	0.33	0.85	0.12	173.89	141.88	5.13
34, 800	425	100-yr	SensAr DS WSEL +0.5m	81.85	173.11	176.18		176.20	0.000188	0.20	0.84	0.23	216.67	145.85	5.16
34, 800	425	100-yr	SensAr DS WSEL -0.5m	81.85	173.11	175.85		175.88	0.000337	0.24	1.02	0.27	169.80	134.42	5.21
34, 800	425	100-yr	Oswego Watershed NPCA	81.85	173.11	175.95		175.98	0.000277	0.23	0.96	0.25	184.10	137.01	5.19
34, 800	325	100-yr	SensAr DS WSEL +0.5m	81.85	173.08	175.18		176.19	0.000228	0.10	0.34	0.13	801.12	207.74	5.05
34, 800	325	100-yr	SensAr DS WSEL -0.5m	81.85	173.08	175.86		175.88	0.000048	0.12	0.41	0.16	803.74	200.67	5.09
34, 800	325	100-yr	Oswego Watershed NPCA	81.85	173.08	175.86		175.97	0.000040	0.11	0.38	0.14	534.08	204.95	5.07
34, 800	149	100-yr	SensAr DS WSEL +0.5m	81.85	173.08	176.18		176.19	0.000067	0.16	0.81	0.21	379.72	195.04	5.10
34, 800	149	100-yr	SensAr DS WSEL -0.5m	81.85	173.08	175.85		175.88	0.000118	0.18	0.81	0.26	315.27	180.01	5.12
34, 800	149	100-yr	Oswego Watershed NPCA	81.85	173.08	175.95		175.98	0.000097	0.17	0.58	0.25	335.30	191.28	5.11
34, 700	181	100-yr	SensAr DS WSEL +0.5m	81.20	173.02	176.16		176.17	0.000087	0.28	0.60	0.19	233.08	138.88	5.11
34, 700	181	100-yr	SensAr DS WSEL -0.5m	81.20	173.02	175.81		175.82	0.000153	0.34	0.74	0.22	188.86	124.34	5.14
34, 700	181	100-yr	Oswego Watershed NPCA	81.20	173.02	175.92		175.94	0.000127	0.32	0.89	0.21	206.86	129.89	5.13
34, 700	80	100-yr	SensAr DS WSEL +0.5m	81.20	173.00	176.15		176.18	0.000083	0.17	0.59	0.19	273.18	181.08	5.11
34, 700	80	100-yr	SensAr DS WSEL -0.5m	81.20	173.00	175.80		175.82	0.000148	0.20	0.73	0.21	218.29	148.09	5.14
34, 700	80	100-yr	Oswego Watershed NPCA	81.20	173.00	175.91		175.93	0.000122	0.18	0.68	0.20	235.20	152.08	5.13
34, 600	2198	100-yr	SensAr DS WSEL +0.5m	82.10	172.97	176.14		176.15	0.000068	0.16	0.51	0.30	226.33	130.63	5.10
34, 600	2198	100-yr	SensAr DS WSEL -0.5m	82.10	172.97	175.78		175.79	0.000126	0.19	0.82	0.37	182.62	119.67	5.13
34, 600	2198	100-yr	Oswego Watershed NPCA	82.10	172.97	175.90		175.91	0.000103	0.18	0.58	0.35	194.62	123.74	5.12
34, 600	2007	100-yr	SensAr DS WSEL +0.5m	82.10	172.93	176.14		176.14	0.000031	0.24	0.35	0.13	318.13	178.94	5.07
34, 600	2007	100-yr	SensAr DS WSEL -0.5m	82.10	172.93	175.77		175.77	0.000060	0.29	0.44	0.15	254.54	166.96	5.05
34, 600	2007	100-yr	Oswego Watershed NPCA	82.10	172.93	175.89		175.89	0.000048	0.28	0.40	0.15	274.58	169.79	5.08
34, 600	1483	100-yr	SensAr DS WSEL +0.5m	82.10	172.82	175.12		176.12	0.000013	0.18	0.23	0.04	530.33	206.19	5.04
34, 600	1483	100-yr	SensAr DS WSEL -0.5m	82.10	172.82	175.75		175.78	0.000034	0.16	0.28	0.05	424.88	279.19	5.06
34, 600	1483	100-yr	Oswego Watershed NPCA	82.10	172.82	175.88		175.88	0.000018	0.17	0.27	0.05	458.22	284.18	5.05
34, 600	1135	100-yr	SensAr DS WSEL +0.5m	82.10	173.78	176.12		176.13	0.000057	0.28	0.49	0.10	342.43	140.49	5.09
34, 600	1135	100-yr	SensAr DS WSEL -0.5m	82.10	173.78	175.73		175.75	0.000108	0.34	0.83	0.12	190.27	128.82	5.12
34, 600	1135	100-yr	Oswego Watershed NPCA	82.10	173.78	175.88		175.87	0.000086	0.32	0.58	0.11	206.78	133.53	5.11
34, 600	982	100-yr	SensAr DS WSEL +0.5m	82.10	172.73	176.11		176.12	0.000048	0.29	0.45	0.18	241.94	121.82	5.08
34, 600	982	100-yr	SensAr DS WSEL -0.5m	82.10	172.73	175.72		175.73	0.000087	0.30	0.55	0.22	195.21	112.83	5.11
34, 600	982	100-yr	Oswego Watershed NPCA	82.10	172.73	175.85		175.86	0.000071	0.33	0.52	0.21	219.79	115.16	5.10
34, 600	819	100-yr	SensAr DS WSEL +0.5m	82.10	172.65	176.00		176.08	0.000104	0.28	0.68	0.17	218.15	110.83	5.12
34, 600	819	100-yr	SensAr DS WSEL -0.5m	82.10	172.65	175.69		175.69	0.000191	0.33	0.81	0.20	171.40	106.56	5.16
34, 600	819	100-yr	Oswego Watershed NPCA	82.10	172.65	175.80		175.82	0.000154	0.31	0.75	0.19	198.67	110.95	5.15
34, 600	180	100-yr	SensAr DS WSEL +0.5m	82.10	172.98	176.04		176.08	0.000084	0.20	0.61	0.08	283.34	152.83	5.11
34, 600	180	100-yr	SensAr DS WSEL -0.5m	82.10	172.98	175.56		175.80	0.000177	0.24	0.80	0.10	188.88	139.95	5.18
34, 600	180	100-yr	Oswego Watershed NPCA	82.10	172.98	175.74		175.78	0.000135	0.23	0.73	0.09	218.32	145.25	5.14
34, 500	4145	100-yr	SensAr DS WSEL +0.5m	103.64	172.48	176.03		176.03	0.000023	0.22	0.32	0.13	429.26	186.38	5.06
34, 500	4145	100-yr	SensAr DS WSEL -0.5m	103.64	172.48	175.50		175.57	0.000047	0.27	0.42	0.16	338.48	180.69	5.08
34, 500	4145	100-yr	Oswego Watershed NPCA	103.64	172.48	175.72		175.73	0.000036	0.25	0.38	0.15	368.05	192.45	5.07
34, 500	3623	100-yr	SensAr DS WSEL +0.5m	103.64	172.38	175.02		176.02	0.000025	0.09	0.38	0.13	820.18	288.85	5.05
34, 500	3623	100-yr	SensAr DS WSEL -0.5m	103.64	172.38	175.54		175.55	0.000050	0.09	0.40	0.16	488.34	264.30	5.09
34, 500	3623	100-yr	Oswego Watershed NPCA	103.64	172.38	175.71		175.71	0.000038	0.09	0.42	0.14	532.83	271.87	5.07
34, 500	2888	100-yr	SensAr DS WSEL +0.5m	103.64	172.23	176.02		176.02	0.000003	0.10	0.12	0.02	1096.21	384.74	5.02
34, 500	2888	100-yr	SensAr DS WSEL -0.5m	103.64	172.23	175.54		175.54	0.000006	0.12	0.15	0.03	872.02	379.81	5.03
34, 500	2888	100-yr	Oswego Watershed NPCA	103.64	172.23	175.70		175.71	0.000004	0.11	0.14	0.02	930.88	381.58	5.03
34, 500	2073	100-yr	SensAr DS WSEL +0.5m	103.64	172.07	176.00		176.01	0.000080	0.27	0.60	0.16	232.71	88.83	5.10
34, 500	2073	100-yr	SensAr DS WSEL -0.5m	103.64	172.07	175.50		175.53	0.000102	0.31	0.71	0.18	190.21	82.72	5.12
34, 500	2073	100-yr	Oswego Watershed NPCA	103.64	172.07	175.68		175.70	0.000084	0.30	0.86	0.17	204.71	84.99	5.11
34, 500	1488	100-yr	SensAr DS WSEL +0.5m	103.64	171.85	175.99		176.00	0.000012	0.05	0.26	0.15	581.80	280.58	5.04
34, 500	1488	100-yr	SensAr DS WSEL -0.5m	103.64	171.85	175.49		175.50	0.000024	0.06	0.34	0.19	445.22	266.44	5.06
34, 500	1488	100-yr	Oswego Watershed NPCA	103.64	171.85	175.67		175.67	0.000019	0.06	0.32	0.17	492.34	271.39	5.05
34, 500	988	100-yr	SensAr DS WSEL +0.5m	103.64	171.84	175.87		175.98	0.000058	0.23	0.88	0.25	328.69	126.95	5.09
34, 500	988	100-yr	SensAr DS WSEL -0.5m	103.64	171.84	175.48		175.47	0.000107	0.28	0.73	0.29	285.59	121.29	5.12
34, 500	988	100-yr	Oswego Watershed NPCA	103.64	171.84	175.64		175.65	0.000085	0.26	0.68	0.27	287.85	123.27	5.11
34, 500	817	100-yr	SensAr DS WSEL +0.5m	103.64	171.78	175.97		175.97	0.000019	0.20	0.34	0.11	490.61	221.47	5.05
34, 500	817	100-yr	SensAr DS WSEL -0.5m	103.64	171.78	175.45		175.45	0.000036	0.25	0.43	0.14	381.54	200.23	5.07
34, 500	817	100-yr	Oswego Watershed NPCA	103.64	171.78	175.63		175.64	0.000028	0.23	0.39	0.13	419.31	210.29	5.06
34, 500	304	100-yr	SensAr DS WSEL +0.5m	103.64	171.72	175.97		175.97	0.000014	0.18	0.30	0.12	585.95	225.78	5.05
34, 500	304	100-yr	SensAr DS WSEL -0.5m	103.64	171.72	175.44		175.43	0.000027	0.20	0.37	0.16	451.81	209.19	5.06
34, 500	304	100-yr	Oswego Watershed NPCA	103.64	171.72	175.63		175.63	0.000021	0.18	0.34	0.14	491.25	214.84	5.09
34, 500	225	100-yr	SensAr DS WSEL +0.5m	103.64	171.70	175.96		175.97	0.000026	0.20	0.40	0.18	406.99	188.88	5.05
34, 500	225	100-yr	SensAr DS WSEL -0.5m	103.64	171.70	175.43		175.44	0.000047	0.25	0.49	0.20	328.06	151.32	5.08
34, 500	225	100-yr	Oswego Watershed NPCA	103.64	171.70	175.62		175.63	0.000037	0.23	0.48	0.19	354.89	158.27	5.08
34, 500	74	100-yr	SensAr DS WSEL +0.5m	103.64	171.67	175.96		175.98	0.000028	0.18	0.42	0.11	428.65	186.88	5.07
34, 500	74	100-yr	SensAr DS WSEL -0.5m	103.64	171.67	175.43		175.43	0.000056	0.21	0.55	0.21	326.76	177.38	5.09
34, 500	74	100-yr	Oswego Watershed NPCA	103.64	171.67	175.61		175.62	0.000043	0.20	0.50	0.20	361.09	184.80	5.08
34, 400	1428	100-yr	SensAr DS WSEL +0.5m	103.67	171.63	175.95		175.96	0.000032	0.30	0.45	0.14	442.83	195.37	5.07
34, 400	1428	100-yr	SensAr DS WSEL -0.5m	103.67	171.63	175.41		175.42	0.000063	0.37	0.88	0.17	347.94	170.90	5.10
34, 400	1428	100-yr	Oswego Watershed NPCA	103.67	171.63	175.61		175.61	0.000049	0.34	0.60	0.15	381.41	178.37	5.09
34, 400	1017	100-yr	SensAr DS WSEL +0.5m	103.67	171.49	175.94		175.98	0.000033	0.19	0.48	0.10	388.46	136.66	5.07
34, 400	1017	100-yr	SensAr DS WSEL -0.5m	103.67	171.49	175.39		175.40	0.000060	0.22	0.58	0.10	287.00	124.28	5.10

HEC-RAS Profile 100-yr (Continued)

Reach	River Sta	Profile	Plan	G Total (m/s)	Min Ch Et (m)	W.B. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chl (m/s)	Vel Right (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Ch
34_400	358	100-yr	SensAr DS WSEL +0.5m	103.67	171.27	175.91		175.92	0.000075	0.17	0.73	0.20	388.96	175.93	0.11
34_400	358	100-yr	SensAr DS WSEL -0.5m	103.67	171.27	175.33		175.35	0.000154	0.20	0.95	0.26	291.18	164.69	0.15
34_400	358	100-yr	Oswego Watershed NPCA	103.67	171.27	175.54		175.56	0.000116	0.19	0.86	0.23	326.47	168.30	0.13
34_400	348	100-yr	SensAr DS WSEL +0.5m	103.67	171.28	175.90	173.04	175.92	0.000887	0.20	0.77	0.22	327.18	131.38	0.12
34_400	348	100-yr	SensAr DS WSEL -0.5m	103.67	171.28	175.27	173.04	175.34	0.000312	0.48	1.32	0.36	130.24	120.05	0.22
34_400	348	100-yr	Oswego Watershed NPCA	103.67	171.28	175.54	173.04	175.56	0.000130	0.20	0.88	0.24	286.19	125.48	0.14
34_400	325	Moore Rd		Bridge											
34_400	305	100-yr	SensAr DS WSEL +0.5m	103.67	171.33	175.81	172.97	175.83	0.000272	0.20	0.68	0.19	317.64	145.08	0.11
34_400	305	100-yr	SensAr DS WSEL -0.5m	103.67	171.33	175.18	172.97	175.24	0.000335	0.28	1.11	0.30	137.88	119.83	0.19
34_400	305	100-yr	Oswego Watershed NPCA	103.67	171.33	175.43	172.97	175.45	0.000113	0.23	0.80	0.24	265.01	125.73	0.13
34_400	296	100-yr	SensAr DS WSEL +0.5m	103.67	171.33	175.81	172.90	175.82	0.000296	0.18	0.61	0.19	338.48	146.68	0.09
34_400	296	100-yr	SensAr DS WSEL -0.5m	103.67	171.33	175.20	172.90	175.23	0.000115	0.21	0.79	0.24	258.00	126.39	0.13
34_400	296	100-yr	Oswego Watershed NPCA	103.67	171.33	175.43	172.90	175.45	0.000287	0.20	0.71	0.22	255.21	135.70	0.12
34_400	163	100-yr	SensAr DS WSEL +0.5m	103.67	171.28	175.81	172.97	175.82	0.000035	0.19	0.48	0.12	402.33	175.82	0.07
34_400	163	100-yr	SensAr DS WSEL -0.5m	103.67	171.28	175.20	172.97	175.21	0.000364	0.25	0.90	0.17	308.91	125.72	0.10
34_400	163	100-yr	Oswego Watershed NPCA	103.67	171.28	175.43	172.97	175.43	0.000048	0.23	0.54	0.15	340.39	143.59	0.08
34_300	4258	100-yr	SensAr DS WSEL +0.5m	105.32	171.23	175.81		175.81	0.000013	0.14	0.29	0.12	790.83	296.82	0.04
34_300	4258	100-yr	SensAr DS WSEL -0.5m	105.32	171.23	175.20		175.28	0.000028	0.16	0.38	0.16	529.43	263.73	0.06
34_300	4258	100-yr	Oswego Watershed NPCA	105.32	171.23	175.42		175.43	0.000030	0.17	0.34	0.14	586.52	274.67	0.06
34_300	3837	100-yr	SensAr DS WSEL +0.5m	105.32	171.12	175.80		175.81	0.000031	0.21	0.45	0.16	398.45	164.51	0.07
34_300	3837	100-yr	SensAr DS WSEL -0.5m	105.32	171.12	175.19		175.19	0.000364	0.26	0.99	0.19	302.07	142.80	0.10
34_300	3837	100-yr	Oswego Watershed NPCA	105.32	171.12	175.41		175.42	0.000048	0.24	0.53	0.17	336.33	152.38	0.09
34_300	3707	100-yr	SensAr DS WSEL +0.5m	105.32	171.04	175.80		175.80	0.000008	0.11	0.20	0.12	843.71	367.68	0.03
34_300	3707	100-yr	SensAr DS WSEL -0.5m	105.32	171.04	175.18		175.18	0.000018	0.14	0.29	0.16	634.55	305.52	0.05
34_300	3707	100-yr	Oswego Watershed NPCA	105.32	171.04	175.41		175.41	0.000012	0.13	0.27	0.14	707.54	332.12	0.04
34_300	3406	100-yr	SensAr DS WSEL +0.5m	105.32	170.93	175.79		175.80	0.000025	0.17	0.41	0.18	488.47	223.82	0.06
34_300	3406	100-yr	SensAr DS WSEL -0.5m	105.32	170.93	175.17		175.17	0.000054	0.22	0.55	0.25	340.91	176.48	0.09
34_300	3406	100-yr	Oswego Watershed NPCA	105.32	170.93	175.40		175.41	0.000041	0.20	0.50	0.22	384.21	186.62	0.08
34_300	3213	100-yr	SensAr DS WSEL +0.5m	105.32	170.86	175.78		175.79	0.000071	0.22	0.71	0.23	306.13	140.93	0.11
34_300	3213	100-yr	SensAr DS WSEL -0.5m	105.32	170.86	175.13		175.16	0.000147	0.27	0.81	0.30	221.18	101.49	0.15
34_300	3213	100-yr	Oswego Watershed NPCA	105.32	170.86	175.37		175.39	0.000115	0.25	0.64	0.27	247.41	122.54	0.13
34_300	3008	100-yr	SensAr DS WSEL +0.5m	105.32	170.79	175.77		175.78	0.000037	0.24	0.51	0.27	357.50	168.54	0.08
34_300	3008	100-yr	SensAr DS WSEL -0.5m	105.32	170.79	175.12		175.13	0.000072	0.33	0.64	0.33	268.64	122.09	0.10
34_300	3008	100-yr	Oswego Watershed NPCA	105.32	170.79	175.37		175.37	0.000056	0.29	0.58	0.31	298.00	135.81	0.08
34_300	2852	100-yr	SensAr DS WSEL +0.5m	105.32	170.74	175.77		175.78	0.000008	0.12	0.24	0.16	834.37	257.83	0.04
34_300	2852	100-yr	SensAr DS WSEL -0.5m	105.32	170.74	175.12		175.13	0.000017	0.16	0.32	0.23	475.86	226.35	0.05
34_300	2852	100-yr	Oswego Watershed NPCA	105.32	170.74	175.37		175.37	0.000015	0.14	0.28	0.21	533.04	240.72	0.04
34_300	2711	100-yr	SensAr DS WSEL +0.5m	105.32	170.69	175.77		175.77	0.000009	0.12	0.25	0.14	714.58	278.78	0.04
34_300	2711	100-yr	SensAr DS WSEL -0.5m	105.32	170.69	175.12		175.13	0.000018	0.17	0.32	0.17	547.03	239.79	0.05
34_300	2711	100-yr	Oswego Watershed NPCA	105.32	170.69	175.37		175.37	0.000013	0.15	0.29	0.16	607.13	251.88	0.05
34_300	2686	100-yr	SensAr DS WSEL +0.5m	105.32	170.68	175.77	172.80	175.77	0.000010	0.13	0.26	0.14	884.87	266.78	0.04
34_300	2686	100-yr	SensAr DS WSEL -0.5m	105.32	170.68	175.12	172.80	175.12	0.000019	0.18	0.34	0.17	524.01	226.80	0.05
34_300	2686	100-yr	Oswego Watershed NPCA	105.32	170.68	175.36	172.80	175.37	0.000015	0.16	0.30	0.15	582.29	240.79	0.05
34_300	2676	Hart Rd		Bridge											
34_300	2657	100-yr	SensAr DS WSEL +0.5m	105.32	170.69	175.75	172.85	175.76	0.000016	0.17	0.32	0.10	881.58	238.93	0.05
34_300	2657	100-yr	SensAr DS WSEL -0.5m	105.32	170.69	174.99	172.85	174.99	0.000037	0.24	0.43	0.14	427.17	195.28	0.07
34_300	2657	100-yr	Oswego Watershed NPCA	105.32	170.69	175.33	172.85	175.33	0.000025	0.20	0.37	0.12	485.79	210.37	0.06
34_300	2648	100-yr	SensAr DS WSEL +0.5m	105.32	170.69	175.75		175.76	0.000016	0.17	0.33	0.11	894.00	237.06	0.05
34_300	2648	100-yr	SensAr DS WSEL -0.5m	105.32	170.69	174.99		174.99	0.000037	0.24	0.45	0.14	428.37	194.11	0.07
34_300	2648	100-yr	Oswego Watershed NPCA	105.32	170.69	175.33		175.33	0.000025	0.21	0.39	0.12	467.68	213.03	0.06
34_300	2606	100-yr	SensAr DS WSEL +0.5m	105.32	170.67	175.75		175.76	0.000020	0.20	0.38	0.23	425.80	180.41	0.06
34_300	2606	100-yr	SensAr DS WSEL -0.5m	105.32	170.67	174.99		174.99	0.000045	0.29	0.50	0.30	302.53	138.64	0.08
34_300	2606	100-yr	Oswego Watershed NPCA	105.32	170.67	175.32		175.33	0.000031	0.24	0.44	0.26	352.91	156.43	0.07
34_300	2208	100-yr	SensAr DS WSEL +0.5m	105.32	170.77	175.75		175.75	0.000010	0.15	0.27	0.12	816.69	251.94	0.04
34_300	2208	100-yr	SensAr DS WSEL -0.5m	105.32	170.77	174.97		174.98	0.000034	0.21	0.37	0.17	430.74	210.49	0.06
34_300	2208	100-yr	Oswego Watershed NPCA	105.32	170.77	175.32		175.32	0.000018	0.18	0.32	0.15	506.49	230.76	0.05
34_300	1826	100-yr	SensAr DS WSEL +0.5m	105.32	170.68	175.73		175.74	0.000042	0.27	0.55	0.15	289.79	96.04	0.08
34_300	1826	100-yr	SensAr DS WSEL -0.5m	105.32	170.68	174.94		174.96	0.000090	0.34	0.71	0.19	217.00	86.37	0.12
34_300	1826	100-yr	Oswego Watershed NPCA	105.32	170.68	175.29		175.31	0.000063	0.31	0.63	0.17	248.27	91.21	0.10
34_300	1500	100-yr	SensAr DS WSEL +0.5m	105.32	170.59	175.73		175.73	0.000013	0.17	0.30	0.14	535.17	244.21	0.05
34_300	1500	100-yr	SensAr DS WSEL -0.5m	105.32	170.59	174.94		174.94	0.000032	0.22	0.42	0.21	365.43	180.23	0.07
34_300	1500	100-yr	Oswego Watershed NPCA	105.32	170.59	175.29		175.30	0.000020	0.20	0.36	0.18	435.81	208.08	0.06
34_300	1320	100-yr	SensAr DS WSEL +0.5m	105.32	170.53	175.73		175.73	0.000005	0.10	0.19	0.11	822.13	318.09	0.03
34_300	1320	100-yr	SensAr DS WSEL -0.5m	105.32	170.53	174.94		174.94	0.000013	0.14	0.27	0.16	585.96	277.64	0.04
34_300	1320	100-yr	Oswego Watershed NPCA	105.32	170.53	175.29		175.29	0.000008	0.12	0.23	0.13	687.75	297.32	0.04
34_300	967	100-yr	SensAr DS WSEL +0.5m	105.32	170.43	175.73		175.73	0.000020	0.12	0.39	0.16	516.25	242.88	0.06
34_300	967	100-yr	SensAr DS WSEL -0.5m	105.32	170.43	174.92		174.93	0.000038	0.16	0.59	0.21	333.99	203.37	0.10
34_300	967	100-yr	Oswego Watershed NPCA	105.32	170.43	175.28		175.29	0.000036	0.14	0.49	0.18	412.22	226.01	0.08
34_300	568	100-yr	SensAr DS WSEL +0.5m	105.32	170.32	175.72		175.72	0.000011	0.10	0.29	0.12	774.73	256.58	0.04
34_300	568	100-yr	SensAr DS WSEL -0.5m	105.32	170.32	174.91		174.91	0.000028	0.12	0.39	0.16	579.38	234.80	0.06
34_300	568	100-yr	Oswego Watershed NPCA	105.32	170.32	175.28		175.28	0.000017	0.11	0.34	0.14	663.70	242.98	0.05
34_300	299	100-yr	SensAr DS WSEL +0.5m	105.32	170.25	175.72		175.72	0.000016	0.16	0.35	0.14	470.62	182.94	0.05
34_300	299	100-yr	SensAr DS WSEL -0.5m												

HEC-RAS Profile 100-yr (Continued)

Reach	River Sta	Profile	Plan	G Total (m/s)	Min Ch Elev (m)	W.R. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Chl (m/s)	Vel Right (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Ch
34_201	283	100-yr	SensAr DS WSEL +0.5m	109.48	175.19	175.71	172.48	175.72	0.000010	0.13	0.28	0.12	804.03	326.18	0.04
34_201	283	100-yr	SensAr DS WSEL -0.5m	109.48	175.19	174.88	172.48	174.95	0.000026	0.18	0.39	0.16	967.23	266.80	0.06
34_201	283	100-yr	Oswego Watershed NPCA	100.48	175.19	175.26	172.48	175.27	0.000018	0.16	0.33	0.14	888.48	281.78	0.05
34_201	192	100-yr	SensAr DS WSEL +0.5m	100.48	175.16	175.71		175.71	0.000010	0.15	0.27	0.12	750.56	266.60	0.04
34_201	192	100-yr	SensAr DS WSEL -0.5m	100.48	175.16	174.88		174.88	0.000025	0.21	0.38	0.17	930.85	242.80	0.06
34_201	192	100-yr	Oswego Watershed NPCA	100.48	175.16	175.26		175.26	0.000016	0.18	0.32	0.14	824.23	262.14	0.05
34_200	2336	100-yr	SensAr DS WSEL +0.5m	111.10	170.08	175.70	171.72	175.71	0.000018	0.26	0.40	0.18	352.96	285.22	0.09
34_200	2336	100-yr	SensAr DS WSEL -0.5m	111.10	170.08	174.87	171.72	174.88	0.000040	0.30	0.51	0.23	280.21	328.50	0.08
34_200	2336	100-yr	Oswego Watershed NPCA	111.10	170.08	175.20	171.72	175.28	0.000028	0.28	0.48	0.21	313.19	240.31	0.07
34_200	2312	Rutgers Rd	Bridge												
34_200	2275	100-yr	SensAr DS WSEL +0.5m	111.10	170.17	175.68	171.84	175.68	0.000010	0.13	0.29	0.12	723.37	230.88	0.04
34_200	2275	100-yr	SensAr DS WSEL -0.5m	111.10	170.17	174.85	171.84	174.88	0.000042	0.24	0.54	0.24	332.51	191.53	0.08
34_200	2275	100-yr	Oswego Watershed NPCA	111.10	170.17	175.23	171.84	175.23	0.000031	0.22	0.48	0.22	368.20	215.92	0.07
34_200	2245	100-yr	SensAr DS WSEL +0.5m	111.10	170.17	175.67		175.68	0.000018	0.17	0.40	0.15	488.88	152.48	0.06
34_200	2245	100-yr	SensAr DS WSEL -0.5m	111.10	170.17	174.85		174.88	0.000039	0.21	0.52	0.19	374.60	135.25	0.08
34_200	2245	100-yr	Oswego Watershed NPCA	111.10	170.17	175.23		175.23	0.000028	0.19	0.48	0.17	426.00	138.58	0.07
34_200	2051	100-yr	SensAr DS WSEL +0.5m	111.10	170.13	175.66	171.78	175.67	0.000033	0.23	0.35	0.11	341.83	105.37	0.07
34_200	2051	100-yr	SensAr DS WSEL -0.5m	111.10	170.13	174.83	171.78	174.85	0.000070	0.28	0.89	0.13	255.94	99.97	0.11
34_200	2051	100-yr	Oswego Watershed NPCA	111.10	170.13	175.21	171.78	175.22	0.000048	0.25	0.81	0.12	294.44	102.95	0.09
34_200	1782	100-yr	SensAr DS WSEL +0.5m	111.10	170.07	175.67	171.74	175.67	0.000008	0.16	0.28	0.10	640.54	228.07	0.04
34_200	1782	100-yr	SensAr DS WSEL -0.5m	111.10	170.07	174.84	171.74	174.84	0.000018	0.21	0.32	0.11	475.80	178.78	0.05
34_200	1782	100-yr	Oswego Watershed NPCA	111.10	170.07	175.21	171.74	175.22	0.000011	0.18	0.29	0.11	545.30	190.88	0.04
34_200	1203	100-yr	SensAr DS WSEL +0.5m	111.10	169.80	175.60		175.68	0.000007	0.11	0.24	0.11	848.98	267.18	0.03
34_200	1203	100-yr	SensAr DS WSEL -0.5m	111.10	169.80	174.83		174.83	0.000018	0.16	0.30	0.16	880.39	252.72	0.04
34_200	1203	100-yr	Oswego Watershed NPCA	111.10	169.80	175.21		175.21	0.000010	0.13	0.28	0.14	888.81	326.45	0.04
34_200	841	100-yr	SensAr DS WSEL +0.5m	111.10	169.80	175.65	171.48	175.68	0.000016	0.23	0.39	0.10	455.14	319.23	0.03
34_200	841	100-yr	SensAr DS WSEL -0.5m	111.10	169.80	174.81	171.48	174.82	0.000035	0.21	0.51	0.17	306.20	127.84	0.07
34_200	841	100-yr	Oswego Watershed NPCA	111.10	169.80	175.20	171.48	175.20	0.000024	0.27	0.45	0.15	358.81	154.10	0.06
34_200	360	100-yr	SensAr DS WSEL +0.5m	111.10	169.77	175.60		175.68	0.000022	0.08	0.45	0.28	394.55	200.18	0.06
34_200	360	100-yr	SensAr DS WSEL -0.5m	111.10	169.77	174.79		174.81	0.000046	0.10	0.58	0.36	275.78	111.48	0.09
34_200	360	100-yr	Oswego Watershed NPCA	111.10	169.77	175.18		175.18	0.000033	0.09	0.52	0.32	322.81	131.15	0.07
34_200	194	100-yr	SensAr DS WSEL +0.5m	111.10	169.73	175.84	171.32	175.85	0.000017	0.11	0.41	0.14	853.07	210.06	0.05
34_200	194	100-yr	SensAr DS WSEL -0.5m	111.10	169.73	174.79	171.32	174.80	0.000042	0.14	0.56	0.17	448.90	186.86	0.08
34_200	194	100-yr	Oswego Watershed NPCA	111.10	169.73	175.16	171.32	175.18	0.000028	0.13	0.48	0.16	528.79	224.28	0.07
34_100	3687	100-yr	SensAr DS WSEL +0.5m	115.41	169.69	175.84	171.51	175.88	0.000006	0.07	0.23	0.16	1091.30	437.28	0.03
34_100	3687	100-yr	SensAr DS WSEL -0.5m	115.41	169.69	174.79	171.51	174.79	0.000013	0.09	0.31	0.21	788.89	299.27	0.05
34_100	3687	100-yr	Oswego Watershed NPCA	115.41	169.69	175.18	171.51	175.18	0.000008	0.08	0.27	0.18	910.32	522.54	0.04
34_100	3494	100-yr	SensAr DS WSEL +0.5m	115.41	169.65	175.84		175.84	0.000024	0.14	0.48	0.12	525.75	243.38	0.06
34_100	3494	100-yr	SensAr DS WSEL -0.5m	115.41	169.65	174.77		174.78	0.000054	0.18	0.85	0.16	359.20	154.37	0.09
34_100	3494	100-yr	Oswego Watershed NPCA	115.41	169.65	175.17		175.18	0.000037	0.16	0.56	0.14	425.42	183.44	0.08
34_100	3341	100-yr	SensAr DS WSEL +0.5m	115.41	169.62	175.83	171.21	175.84	0.000023	0.13	0.47	0.11	506.01	266.25	0.05
34_100	3341	100-yr	SensAr DS WSEL -0.5m	115.41	169.62	174.77	171.21	174.78	0.000051	0.17	0.83	0.13	340.90	154.88	0.09
34_100	3341	100-yr	Oswego Watershed NPCA	115.41	169.62	175.17	171.21	175.18	0.000035	0.16	0.58	0.12	405.83	182.44	0.09
34_100	3180	100-yr	SensAr DS WSEL +0.5m	115.41	169.58	175.83		175.84	0.000018	0.12	0.42	0.09	607.62	275.61	0.05
34_100	3180	100-yr	SensAr DS WSEL -0.5m	115.41	169.58	174.76		174.77	0.000046	0.19	0.88	0.11	409.32	186.83	0.09
34_100	3180	100-yr	Oswego Watershed NPCA	115.41	169.58	175.18		175.17	0.000028	0.14	0.50	0.10	491.47	215.03	0.07
34_100	3038	100-yr	SensAr DS WSEL +0.5m	115.41	169.56	175.83		175.83	0.000014	0.11	0.37	0.16	881.07	258.22	0.05
34_100	3038	100-yr	SensAr DS WSEL -0.5m	115.41	169.56	174.76		174.77	0.000031	0.14	0.50	0.19	457.50	188.18	0.07
34_100	3038	100-yr	Oswego Watershed NPCA	115.41	169.56	175.16		175.17	0.000021	0.12	0.43	0.16	538.26	214.48	0.06
34_100	2887	100-yr	SensAr DS WSEL +0.5m	115.41	169.53	175.83		175.83	0.000018	0.09	0.42	0.14	894.04	269.58	0.05
34_100	2887	100-yr	SensAr DS WSEL -0.5m	115.41	169.53	174.75		174.76	0.000034	0.13	0.52	0.15	498.02	186.43	0.07
34_100	2887	100-yr	Oswego Watershed NPCA	115.41	169.53	175.16		175.16	0.000028	0.11	0.48	0.15	575.92	227.30	0.07
34_100	2735	100-yr	SensAr DS WSEL +0.5m	115.41	169.49	175.82		175.83	0.000021	0.10	0.45	0.21	832.11	181.63	0.06
34_100	2735	100-yr	SensAr DS WSEL -0.5m	115.41	169.49	174.75		174.78	0.000036	0.15	0.54	0.23	388.80	128.89	0.08
34_100	2735	100-yr	Oswego Watershed NPCA	115.41	169.49	175.15		175.16	0.000028	0.12	0.50	0.22	453.74	152.21	0.07
34_100	2583	100-yr	SensAr DS WSEL +0.5m	115.41	169.46	175.82	170.87	175.83	0.000018	0.12	0.43	0.21	354.19	140.76	0.06
34_100	2583	100-yr	SensAr DS WSEL -0.5m	115.41	169.46	174.74	170.87	174.75	0.000035	0.13	0.52	0.28	272.85	104.88	0.08
34_100	2583	100-yr	Oswego Watershed NPCA	115.41	169.46	175.14	170.87	175.15	0.000025	0.12	0.47	0.25	308.58	118.08	0.07
34_100	2431	100-yr	SensAr DS WSEL +0.5m	115.41	169.43	175.82	170.87	175.82	0.000017	0.10	0.41	0.19	435.34	237.17	0.05
34_100	2431	100-yr	SensAr DS WSEL -0.5m	115.41	169.43	174.73	170.87	174.74	0.000041	0.12	0.58	0.29	279.53	114.40	0.09
34_100	2431	100-yr	Oswego Watershed NPCA	115.41	169.43	175.14	170.87	175.15	0.000027	0.11	0.49	0.24	335.18	167.89	0.07
34_100	2278	100-yr	SensAr DS WSEL +0.5m	115.41	169.40	175.82	170.81	175.82	0.000013	0.09	0.36	0.12	843.11	272.53	0.05
34_100	2278	100-yr	SensAr DS WSEL -0.5m	115.41	169.40	174.73	170.81	174.74	0.000030	0.12	0.48	0.15	364.64	142.70	0.07
34_100	2278	100-yr	Oswego Watershed NPCA	115.41	169.40	175.14	170.81	175.15	0.000020	0.11	0.42	0.13	434.06	187.33	0.06
34_100	2103	100-yr	SensAr DS WSEL +0.5m	115.41	169.38	175.81		175.82	0.000021	0.08	0.48	0.19	481.80	238.21	0.06
34_100	2103	100-yr	SensAr DS WSEL -0.5m	115.41	169.38	174.72		174.73	0.000044	0.11	0.60	0.30	307.38	138.84	0.08
34_100	2103	100-yr	Oswego Watershed NPCA	115.41	169.38	175.13		175.14	0.000032	0.09	0.54	0.34	378.66	191.30	0.07
34_100	2093	100-yr	SensAr DS WSEL +0.5m	115.41	169.38	175.80	170.80	175.82	0.000030	0.16	0.58	0.17	338.02	242.83	0.07
34_100	2093	100-yr	SensAr DS WSEL -0.5m	115.41	169.38	174.71	170.80	174.73	0.000057	0.18	0.89	0.20	272.89	186.71	0.10
34_100	2093	100-yr	Oswego Watershed NPCA	115.41	169.38	175.13	170.80	175.14	0.000042	0.17	0.62	0.19	303.53	205.23	0.08
34_100	2078	Oswego Park	Bridge												
34_100	2048	100-yr	SensAr DS WSEL +0.5m	115.41	169.35	175.80									

HEC-RAS Profile 100-yr (Continued)

Reach	River Sta	Profile	Plan	G Total (m/s)	Min Ch Elev (m)	W.B. Elev (m)	Crs W.B. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Left (m/s)	Vel Cht (m/s)	Vel Right (m/s)	Flow Area (m ²)	Top Width (m)	Froude # Cht
34, 100	1887	100-yr	SensAr DS WSEL +0.5m	115.41	188.34	174.89		174.75	0.000321	0.26	0.42	0.15	303.68	162.78	0.06
34, 100	1887	100-yr	Oswego Watershed NPCA	115.41	188.34	175.11		175.12	0.000314	0.24	0.35	0.15	462.78	174.83	0.05
34, 100	1955	100-yr	SensAr DS WSEL +0.5m	115.41	188.33	175.50	170.93	175.60	0.000318	0.16	0.40	0.17	516.52	240.62	0.05
34, 100	1955	100-yr	SensAr DS WSEL -0.5m	115.41	188.33	174.88	170.93	174.79	0.000304	0.26	0.67	0.34	380.69	206.02	0.09
34, 100	1955	100-yr	Oswego Watershed NPCA	115.41	188.33	175.10	170.93	175.11	0.000333	0.33	0.54	0.22	348.36	216.57	0.07
34, 100	1846	010z Rd													
			Bridge												
34, 100	1931	100-yr	SensAr DS WSEL +0.5m	115.41	188.58	175.57	171.04	175.57	0.000321	0.21	0.45	0.09	515.17	229.01	0.06
34, 100	1931	100-yr	SensAr DS WSEL -0.5m	115.41	188.58	174.84	171.04	174.88	0.000372	0.51	0.78	0.12	360.22	182.75	0.11
34, 100	1931	100-yr	Oswego Watershed NPCA	115.41	188.58	175.00	171.04	175.09	0.000333	0.24	0.55	0.10	414.25	189.80	0.07
34, 100	1900	100-yr	SensAr DS WSEL +0.5m	115.41	188.58	175.57		175.57	0.000313	0.00	0.36	0.11	631.23	212.79	0.05
34, 100	1900	100-yr	SensAr DS WSEL -0.5m	115.41	188.58	174.85		174.85	0.000328	0.11	0.48	0.14	476.83	145.14	0.07
34, 100	1900	100-yr	Oswego Watershed NPCA	115.41	188.58	175.08		175.09	0.000320	0.10	0.61	0.12	542.14	153.57	0.06
34, 100	1623	100-yr	SensAr DS WSEL +0.5m	115.41	188.59	175.57		175.57	0.000308	0.14	0.27	0.14	825.27	222.46	0.04
34, 100	1623	100-yr	SensAr DS WSEL -0.5m	115.41	188.59	174.85		174.85	0.000316	0.17	0.34	0.22	446.19	170.22	0.05
34, 100	1623	100-yr	Oswego Watershed NPCA	115.41	188.59	175.09		175.09	0.000312	0.16	0.31	0.17	525.66	188.94	0.04
34, 100	1671	100-yr	SensAr DS WSEL +0.5m	115.41	188.60	175.57		175.57	0.000312	0.20	0.34	0.12	498.37	168.54	0.03
34, 100	1671	100-yr	SensAr DS WSEL -0.5m	115.41	188.60	174.84		174.85	0.000326	0.27	0.44	0.15	361.12	132.22	0.06
34, 100	1671	100-yr	Oswego Watershed NPCA	115.41	188.60	175.05		175.09	0.000317	0.24	0.38	0.13	422.36	147.08	0.05
34, 100	1497	100-yr	SensAr DS WSEL +0.5m	115.41	188.62	175.56		175.57	0.000319	0.16	0.43	0.09	447.22	216.43	0.06
34, 100	1497	100-yr	SensAr DS WSEL -0.5m	115.41	188.62	174.83		174.84	0.000341	0.27	0.55	0.10	292.36	115.80	0.08
34, 100	1497	100-yr	Oswego Watershed NPCA	115.41	188.62	175.07		175.08	0.000330	0.20	0.50	0.10	351.67	158.50	0.07
34, 100	1367	100-yr	SensAr DS WSEL +0.5m	115.41	188.64	175.56		175.58	0.000311	0.11	0.31	0.06	886.32	302.49	0.04
34, 100	1367	100-yr	SensAr DS WSEL -0.5m	115.41	188.64	174.82		174.84	0.000308	0.16	0.42	0.08	494.58	205.82	0.05
34, 100	1367	100-yr	Oswego Watershed NPCA	115.41	188.64	175.07		175.08	0.000316	0.14	0.36	0.07	551.76	230.98	0.05
34, 100	1208	100-yr	SensAr DS WSEL +0.5m	115.41	188.68	175.56		175.58	0.000308	0.11	0.27	0.05	836.21	340.53	0.04
34, 100	1208	100-yr	SensAr DS WSEL -0.5m	115.41	188.68	174.83		174.83	0.000320	0.16	0.39	0.06	564.24	251.78	0.05
34, 100	1208	100-yr	Oswego Watershed NPCA	115.41	188.68	175.07		175.09	0.000312	0.14	0.32	0.06	667.38	294.48	0.04
34, 100	1038	100-yr	SensAr DS WSEL +0.5m	115.41	188.67	175.56		175.58	0.000310	0.14	0.31	0.05	643.67	278.84	0.04
34, 100	1038	100-yr	SensAr DS WSEL -0.5m	115.41	188.67	174.82		174.83	0.000324	0.21	0.42	0.06	422.18	167.83	0.06
34, 100	1038	100-yr	Oswego Watershed NPCA	115.41	188.67	175.07		175.07	0.000317	0.17	0.37	0.06	516.30	244.51	0.05
34, 100	912	100-yr	SensAr DS WSEL +0.5m	115.41	188.69	175.55		175.58	0.000316	0.15	0.38	0.06	492.88	223.56	0.05
34, 100	912	100-yr	SensAr DS WSEL -0.5m	115.41	188.69	174.82		174.83	0.000333	0.24	0.49	0.09	328.91	132.33	0.07
34, 100	912	100-yr	Oswego Watershed NPCA	115.41	188.69	175.06		175.07	0.000325	0.18	0.45	0.09	385.05	184.35	0.06
34, 100	760	100-yr	SensAr DS WSEL +0.5m	115.41	189.70	175.55		175.58	0.000311	0.13	0.32	0.18	554.30	233.99	0.04
34, 100	760	100-yr	SensAr DS WSEL -0.5m	115.41	189.70	174.81		174.82	0.000327	0.18	0.44	0.25	356.34	156.69	0.07
34, 100	760	100-yr	Oswego Watershed NPCA	115.41	189.70	175.06		175.07	0.000318	0.14	0.38	0.22	444.73	214.73	0.05
34, 100	611	100-yr	SensAr DS WSEL +0.5m	115.41	189.72	175.55		175.55	0.000307	0.13	0.25	0.05	716.14	266.52	0.03
34, 100	611	100-yr	SensAr DS WSEL -0.5m	115.41	189.72	174.81		174.81	0.000318	0.18	0.36	0.07	484.52	214.95	0.05
34, 100	611	100-yr	Oswego Watershed NPCA	115.41	189.72	175.06		175.06	0.000312	0.15	0.31	0.06	585.15	247.54	0.04
34, 100	496	100-yr	SensAr DS WSEL +0.5m	115.41	189.74	175.55		175.55	0.000308	0.13	0.23	0.04	805.76	279.38	0.03
34, 100	496	100-yr	SensAr DS WSEL -0.5m	115.41	189.74	174.81		174.81	0.000314	0.18	0.32	0.06	558.20	234.43	0.05
34, 100	496	100-yr	Oswego Watershed NPCA	115.41	189.74	175.06		175.06	0.000309	0.15	0.27	0.05	671.32	260.90	0.04
34, 100	304	100-yr	SensAr DS WSEL +0.5m	115.41	189.75	175.55		175.55	0.000308	0.13	0.28	0.06	665.83	200.90	0.04
34, 100	304	100-yr	SensAr DS WSEL -0.5m	115.41	189.75	174.81		174.81	0.000317	0.17	0.36	0.07	523.06	170.38	0.05
34, 100	304	100-yr	Oswego Watershed NPCA	115.41	189.75	175.06		175.06	0.000312	0.15	0.31	0.07	601.68	180.01	0.04
34, 100	149	100-yr	SensAr DS WSEL +0.5m	115.41	189.77	175.55		175.55	0.000309	0.17	0.29	0.05	551.71	236.13	0.04
34, 100	149	100-yr	SensAr DS WSEL -0.5m	115.41	189.77	174.80		174.81	0.000318	0.22	0.37	0.07	297.44	141.57	0.06
34, 100	149	100-yr	Oswego Watershed NPCA	115.41	189.77	175.05		175.06	0.000313	0.20	0.32	0.06	465.10	158.88	0.05
34, 100	123	100-yr	SensAr DS WSEL +0.5m	115.41	189.77	175.54	171.26	175.55	0.000316	0.21	0.37	0.08	522.94	208.28	0.05
34, 100	123	100-yr	SensAr DS WSEL -0.5m	115.41	189.77	174.80	171.26	174.81	0.000335	0.27	0.48	0.11	369.28	137.61	0.07
34, 100	123	100-yr	Oswego Watershed NPCA	115.41	189.77	175.05	171.26	175.06	0.000329	0.24	0.43	0.09	435.40	181.18	0.06
34, 100	100	Regional Road 45													
			Bridge												
34, 100	91	100-yr	SensAr DS WSEL +0.5m	115.41	189.90	175.52	171.30	175.52	0.000311	0.13	0.30	0.13	580.20	242.72	0.04
34, 100	91	100-yr	SensAr DS WSEL -0.5m	115.41	189.90	174.52	171.30	174.53	0.000329	0.17	0.43	0.17	388.78	181.75	0.07
34, 100	91	100-yr	Oswego Watershed NPCA	115.41	189.90	175.02	171.30	175.03	0.000318	0.16	0.36	0.14	474.92	196.49	0.05
34, 100	81	100-yr	SensAr DS WSEL +0.5m	115.41	189.90	175.52		175.52	0.000309	0.13	0.28	0.13	606.14	258.06	0.04
34, 100	81	100-yr	SensAr DS WSEL -0.5m	115.41	189.90	174.52		174.53	0.000324	0.18	0.40	0.17	406.86	161.16	0.06
34, 100	81	100-yr	Oswego Watershed NPCA	115.41	189.90	175.02		175.02	0.000315	0.16	0.34	0.14	486.97	200.82	0.05
34, 100	57	100-yr	SensAr DS WSEL +0.5m	115.41	189.90	175.52	171.37	175.52	0.000310	0.14	0.30	0.13	637.69	261.14	0.04
34, 100	57	100-yr	SensAr DS WSEL -0.5m	115.41	189.90	174.52	171.37	174.53	0.000330	0.20	0.44	0.17	428.82	175.14	0.07
34, 100	57	100-yr	Oswego Watershed NPCA	115.41	189.90	175.02	171.37	175.02	0.000318	0.17	0.37	0.15	524.01	208.70	0.05

APPENDIX D

Floodline Map Sheets



Legend	
Cross Section	Index and Intermediate Contours at 0.5 m Interval
Study Limit	Crossing Structure Modelled
100-yr Floodline	Possible Overtopping
Base Plan Sources:	
Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013	
Aerial Photo Base: SWOOP 2020 NPCA	
LIDAR:DTM Hamilton-Niagara 2021 Package F	



OSWEGO CREEK WATERSHED
FLOODLINE MAPPING

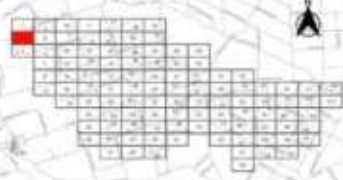
MAP SHEET No. 1

Scale: 1:2000

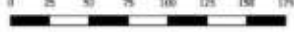
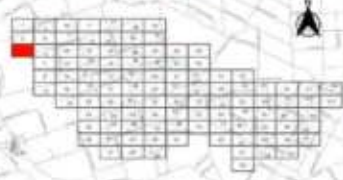
Date: January 2025
Updates:





		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit — 100-yr Floodline — Index and Intermediate Contours at: — 0.5 m Interval — Abandoned Railways — Possible Overtopping — Buildings at Risk — Crossing Structure Modelled Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		 Cross Section  Study Limit  100-yr Floodline  Crossing Structure Modelled Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



Legend

Cross Section	Index and Intermediate Contours at 0.5 m Interval	Abandoned Railways
Study Limit	Crossing Structure Modelled	Possible Overtopping
100-yr Floodline		Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR:DTM Hamilton-Niagara 2021 Package F



**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 5

Scale: 1:2000

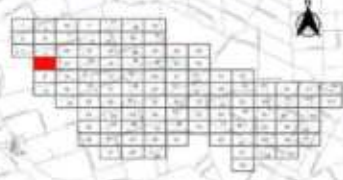
Date: January 2025
Updates:

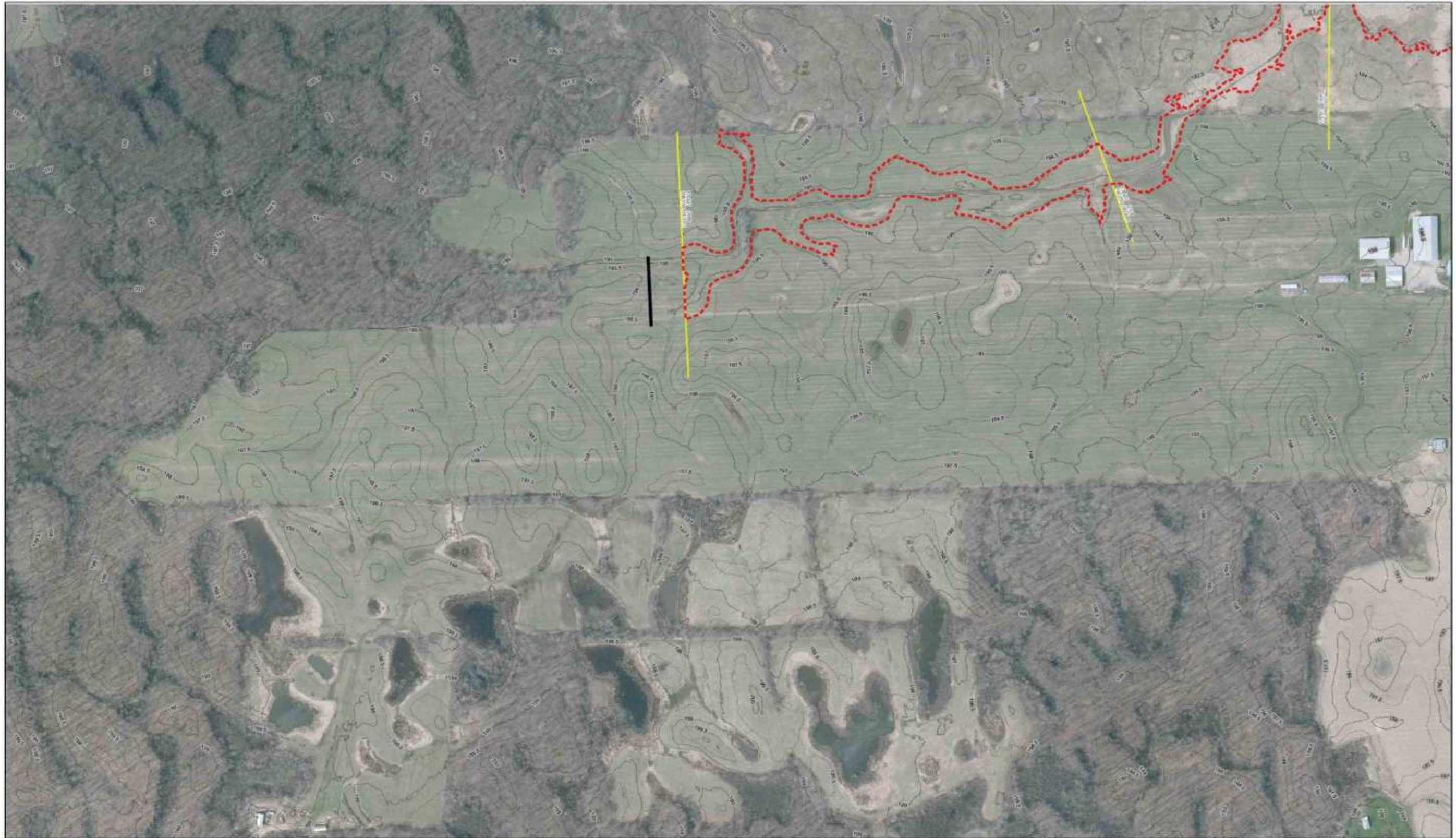




		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		 NIAGARA PENINSULA CONSERVATION AUTHORITY
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F — Index and Intermediate Contours at: — 0.5 m Interval — Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk				



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline — Index and Intermediate Contours at 0.5 m Interval ● Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



Legend

Cross Section	Index and Intermediate Contours at 0.5 m Interval	Possible Overtopping
Study Limit	Crossing Structure Modelled	Buildings at Risk
100-yr Floodline		

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F



**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 8

Scale: 1:2000

Date: January 2025
Updates:





Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F

N

**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 9

Scale: 1:2000

0 25 50 75 100 125 150 175 m

Date: January 2025
Updates:





Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

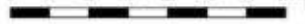
Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
 Aerial Photo Base: SWOOP 2020 NPCA
 LIDAR: DTM Hamilton-Niagara 2021 Package F



**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 10

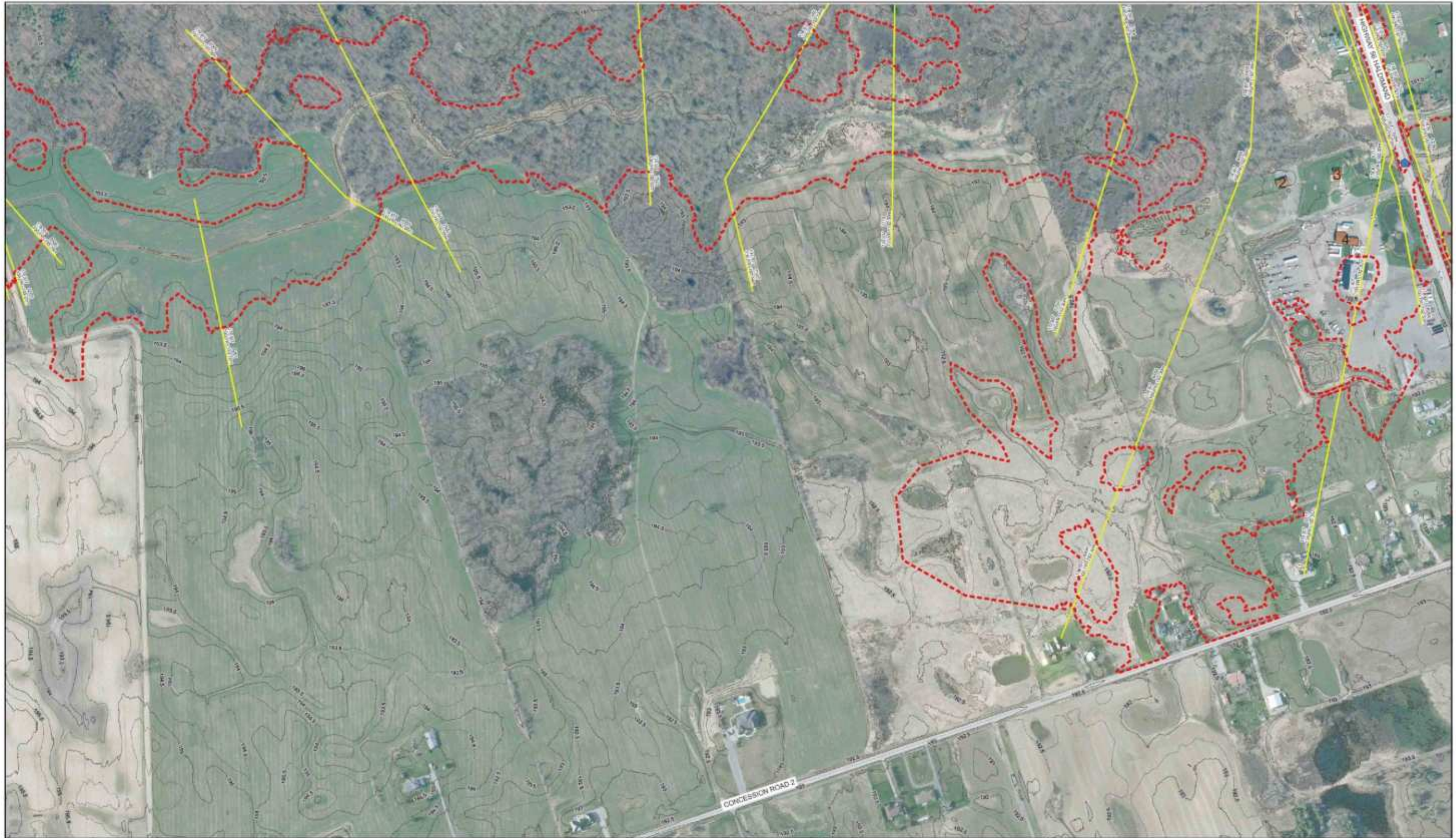
Scale: 1:2000



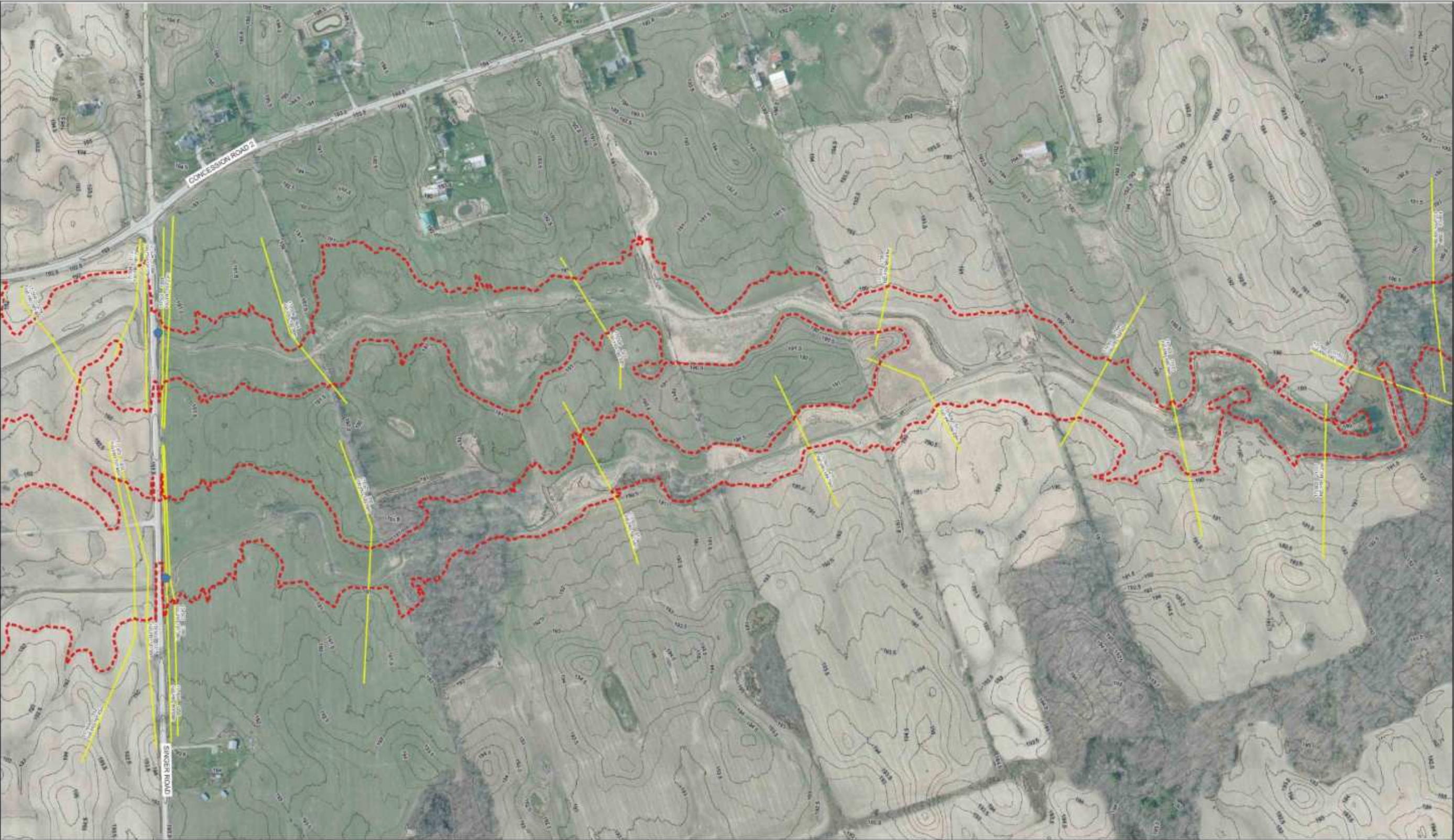
Date: January 2025
 Updates:



**NIAGARA PENINSULA
CONSERVATION
AUTHORITY**



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			 NIAGARA PENINSULA CONSERVATION AUTHORITY
		 Cross Section  Study Limit  100-yr Floodline  Abandoned Railways  Crossing Structure Modelled  Buildings at Risk Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



Legend		
Cross Section	Index and Intermediate Contours at 0.5 m Interval	Abandoned Railways
Study Limit	Crossing Structure Modelled	Possible Overtopping
100-yr Floodline		Buildings at Risk
Base Plan Sources:		
Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013		
Aerial Photo Base: SWOOP 2020 NPCA		
LIDAR: DTM Hamilton-Niagara 2021 Package F		



OSWEGO CREEK WATERSHED
FLOODLINE MAPPING

MAP SHEET No. 12

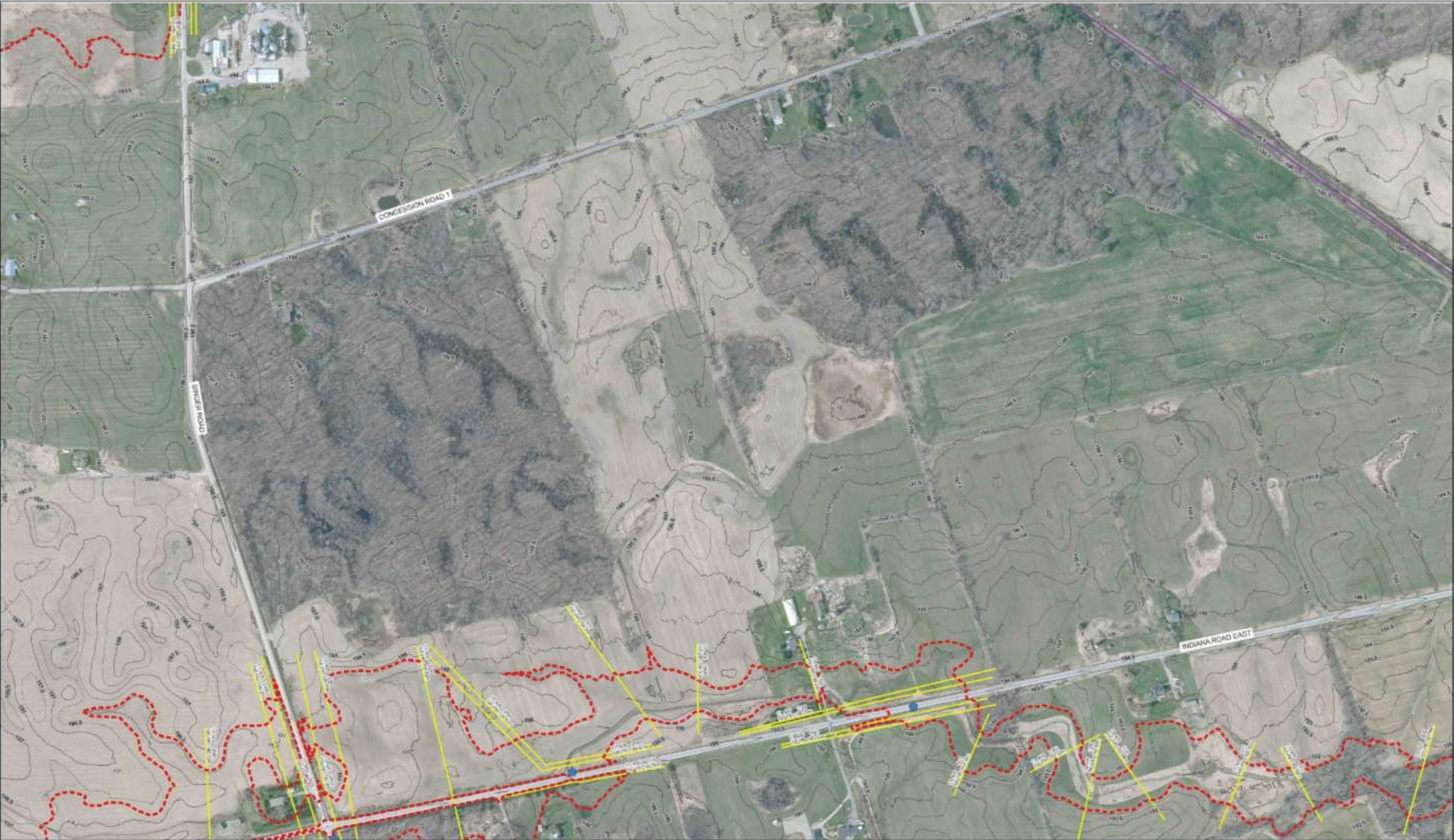
Scale: 1:2000

Date: January 2025
Updates:

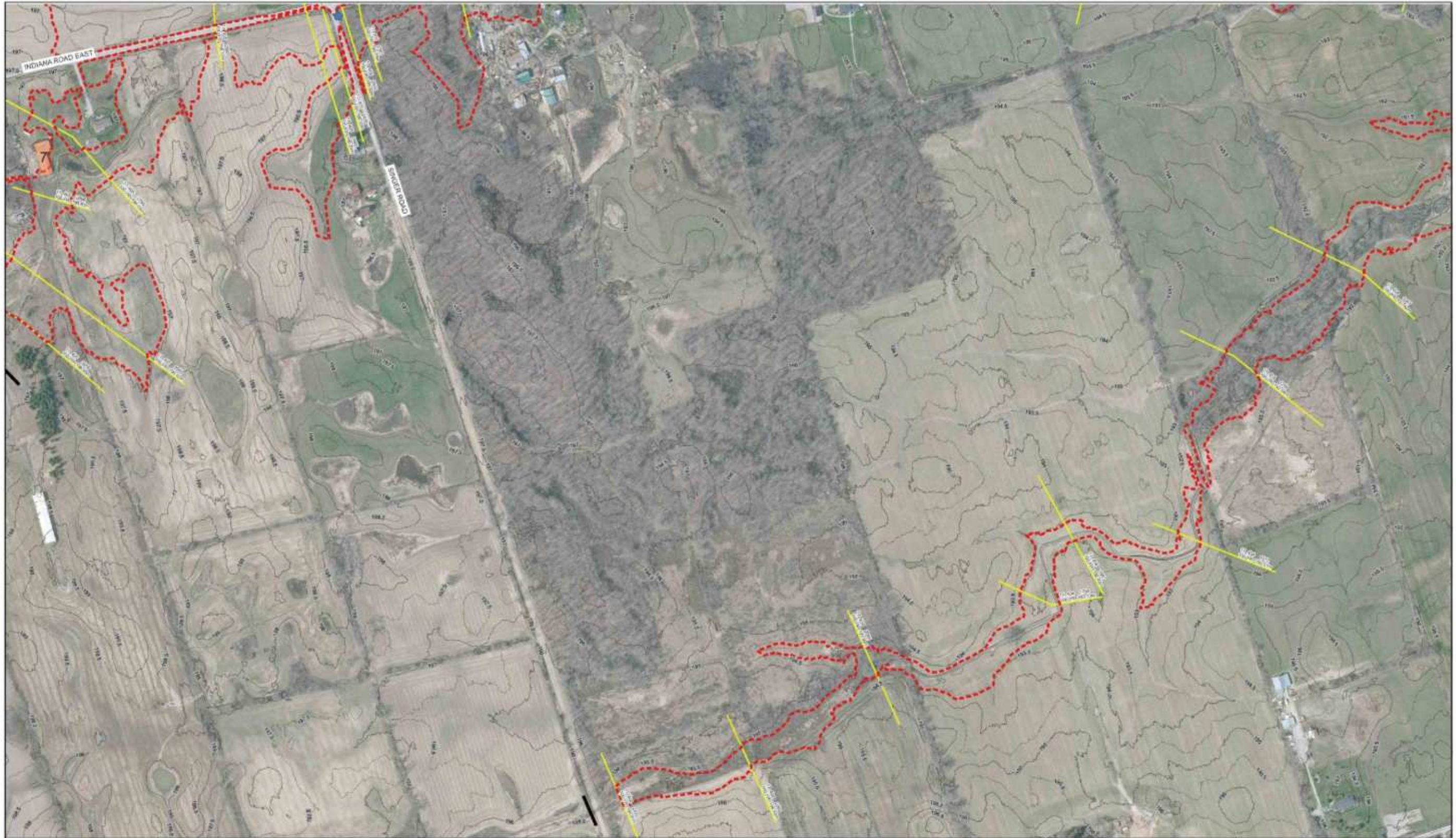




		Legend  Cross Section  Study Limit  100-yr Floodline  Crossing Structure Modelled	 Index and Intermediate Contours at 0.5 m Interval  Crossing Structure Modelled	 Abandoned Railways  Possible Overtopping  Buildings at Risk	OSWEGO CREEK WATERSHED FLOODLINE MAPPING MAP SHEET No. 13	Scale: 1:2000 		
		Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F			Date: January 2025 Updates:			



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F — Index and Intermediate Contours at: — 0.5 m Interval ● Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk					



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		 Cross Section  Study Limit  100-yr Floodline  Crossing Structure Modelled Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F				

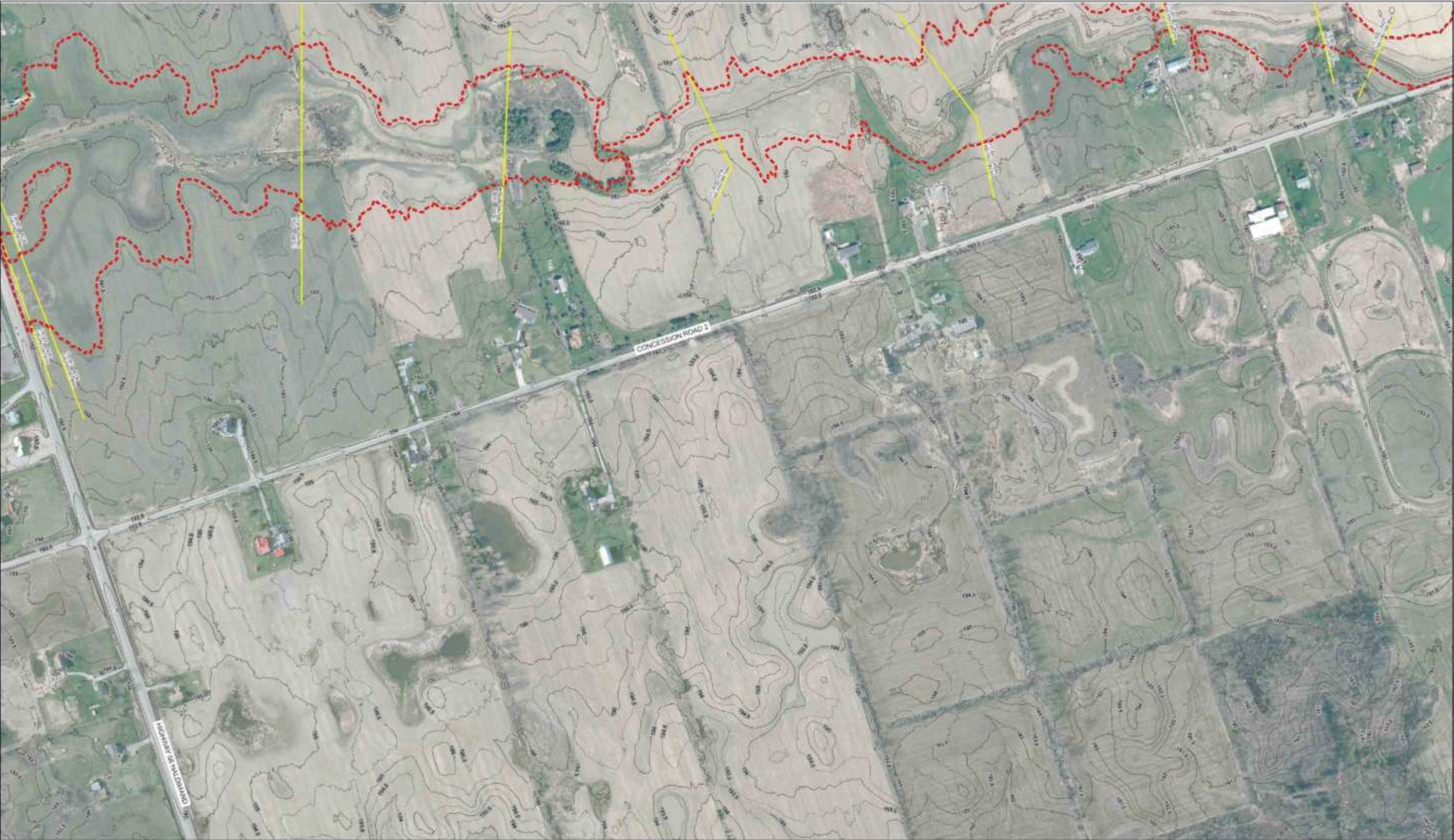


		Legend  Cross Section  Study Limit  100-yr Floodline  Index and Intermediate Contours at 0.5 m Interval  Crossing Structure Modelled  Abandoned Railways  Possible Overtopping  Buildings at Risk	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F		Date: January 2025 Updates:		

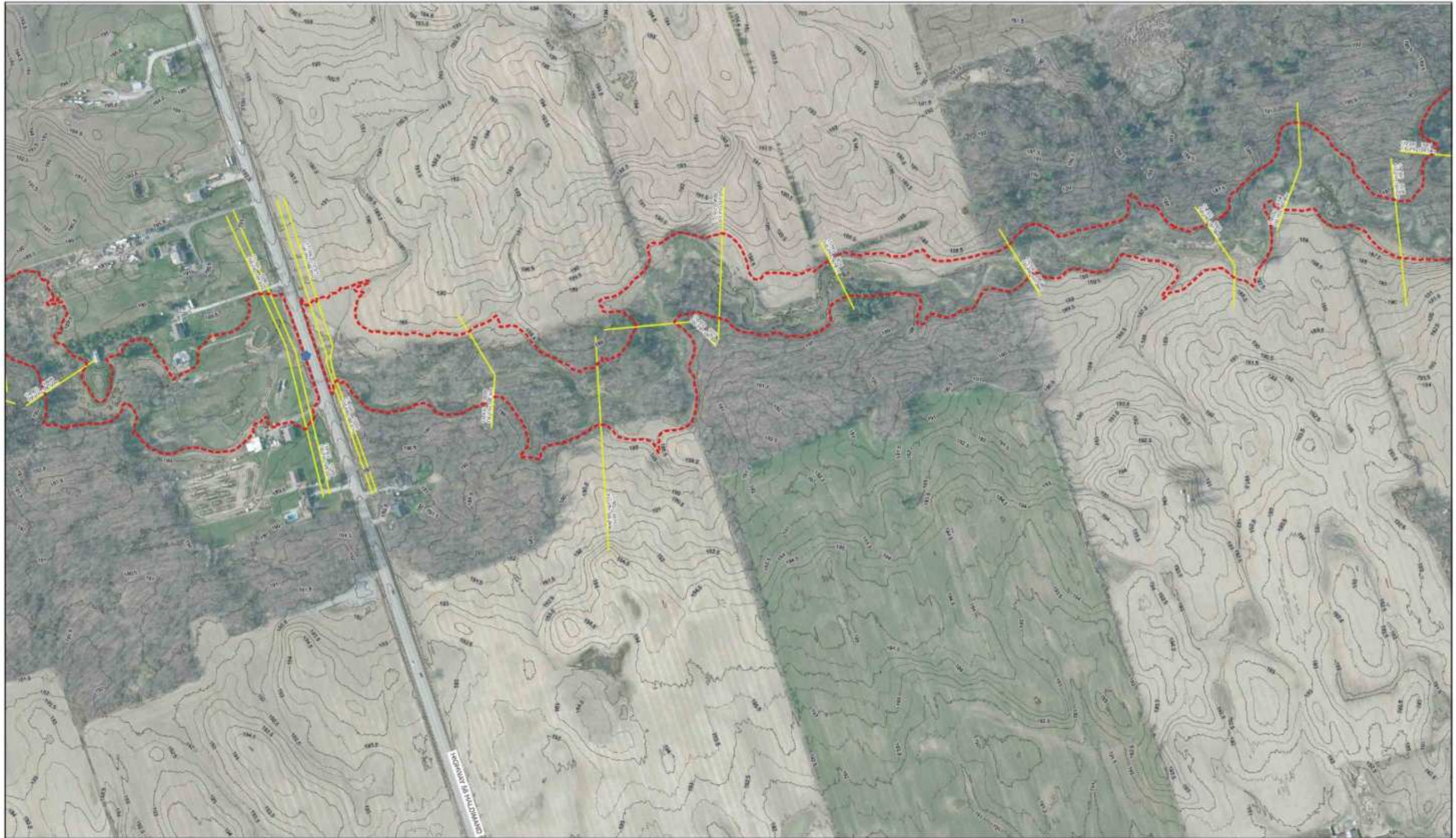
MAP SHEET No. 16



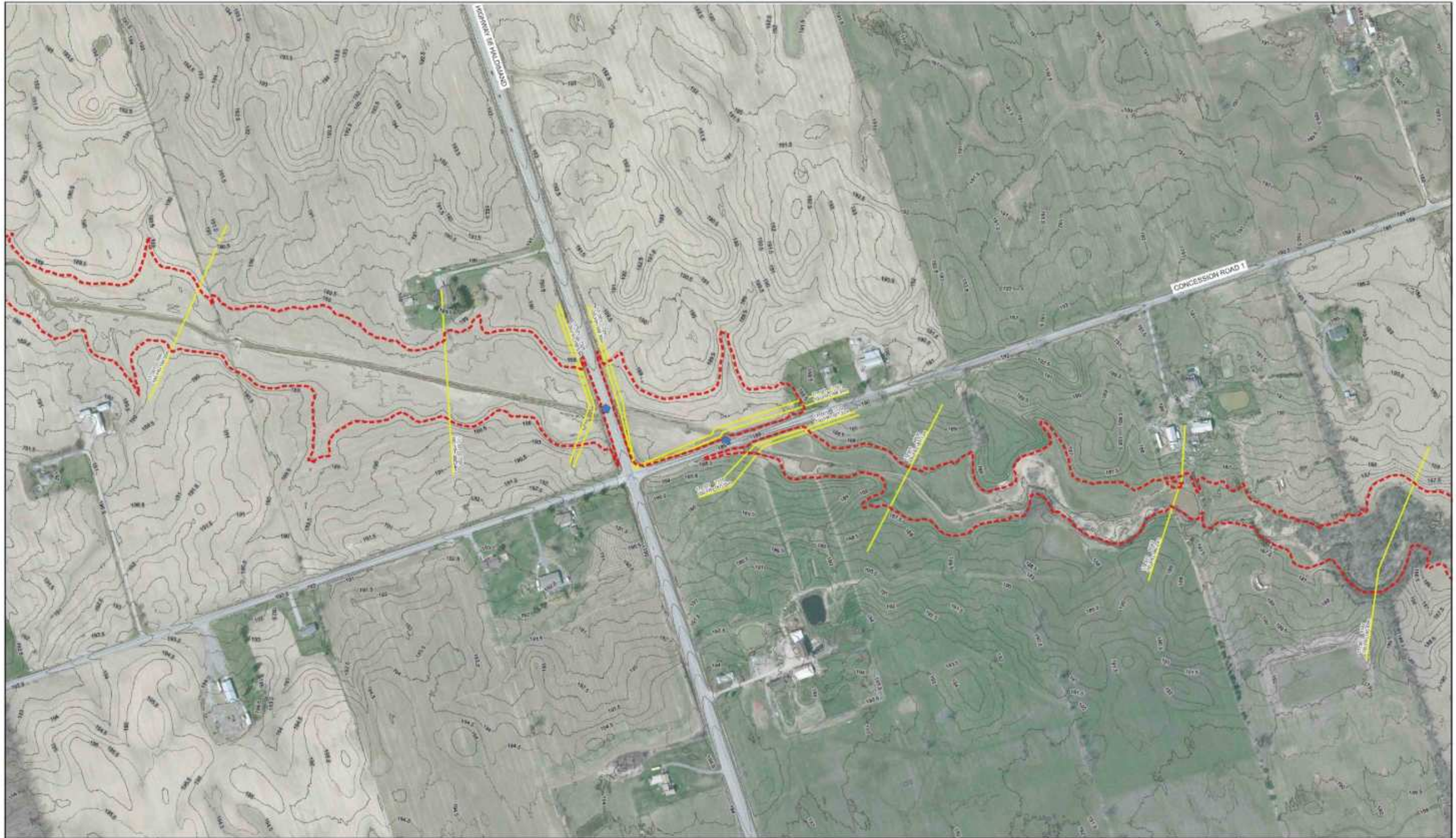
		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		 Cross Section  Study Limit  100-yr Floodline  Base Plan Sources:  Index and Intermediate Contours at 0.5 m Interval  Crossing Structure Modelled  Abandoned Railways  Possible Overtopping  Buildings at Risk					



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline — Index and Intermediate Contours at: — 0.5 m Interval — Abandoned Railways — Possible Overtopping — Buildings at Risk — Crossing Structure Modelled Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		 Cross Section  Study Limit  100-yr Floodline  Crossing Structure Modelled Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F				



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F — Index and Intermediate Contours at: — 0.5 m Interval ● Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk					



Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F

N

**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 21

Scale: 1:2000

Date: January 2025
Updates:





		Legend  Cross Section  Study Limit  100-yr Floodline  Crossing Structure Modelled	 Index and Intermediate Contours at:  0.5 m Interval  Crossing Structure Modelled	 Abandoned Railways  Possible Overtopping  Buildings at Risk	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F		MAP SHEET No. 22	Date: January 2025 Updates:			



Legend	
Cross Section	Index and Intermediate Contours at 0.5 m Interval
Study Limit	Crossing Structure Modelled
100-yr Floodline	Abandoned Railways
Base Plan Sources:	
Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013	
Aerial Photo Base: SWOOP 2020 NPCA	
LIDAR:DTM Hamilton-Niagara 2021 Package F	



OSWEGO CREEK WATERSHED FLOODLINE MAPPING

MAP SHEET No. 23

Scale: 1:2000

Date: January 2025
Updates:





		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit — 100-yr Floodline — Index and Intermediate Contours at: — 0.5 m Interval — Abandoned Railways — Possible Overtopping — Buildings at Risk — Crossing Structure Modelled Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



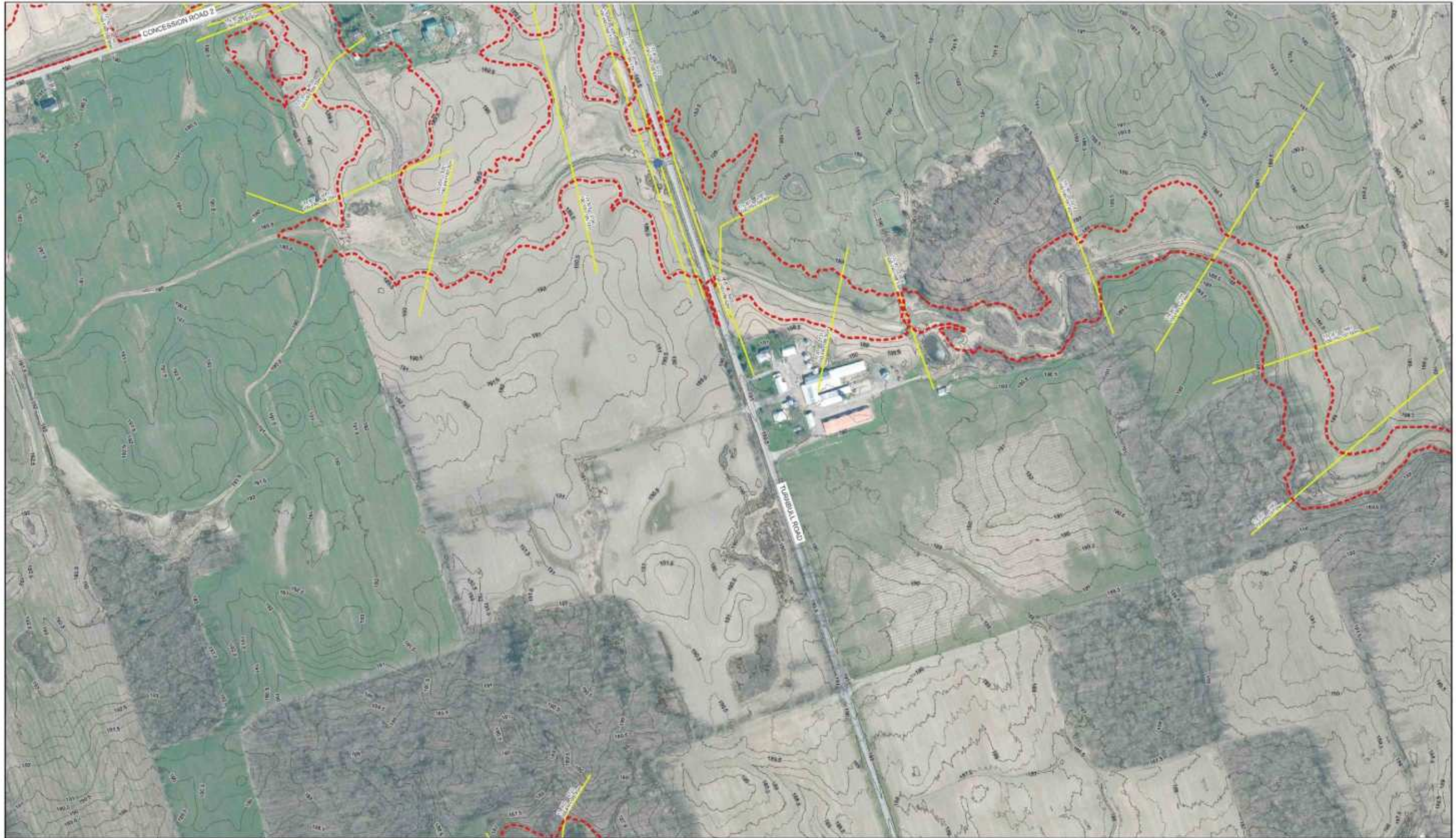
		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit — 100-yr Floodline — Index and Intermediate Contours at: — 0.5 m Interval — Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					

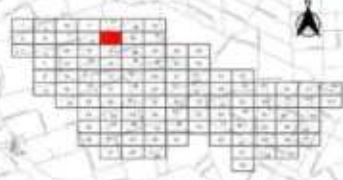


		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		- Cross Section - Study Limit 100-yr Floodline - Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR:DTM Hamilton-Niagara 2021 Package F					

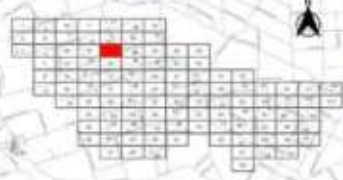


		Legend - Cross Section - Study Limit 100-yr Floodline - Index and Intermediate Contours at 0.5 m Interval - Crossing Structure Modelled - Abandoned Railways - Possible Overtopping - Buildings at Risk Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F	OSWEGO CREEK WATERSHED FLOODLINE MAPPING MAP SHEET No. 27	Scale: 1:2000 Date: January 2025 Updates:		
--	--	--	--	--	--	--



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		- Cross Section - Study Limit 100-yr Floodline - Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR:DTM Hamilton-Niagara 2021 Package F					

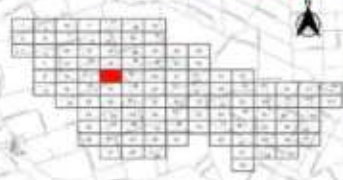


		Legend  Cross Section  Study Limit  100-yr Floodline  Crossing Structure Modelled	 Index and Intermediate Contours at:  0.5 m Interval  Abandoned Railways  Possible Overtopping  Buildings at Risk	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F		MAP SHEET No. 29	Date: January 2025 Updates:		



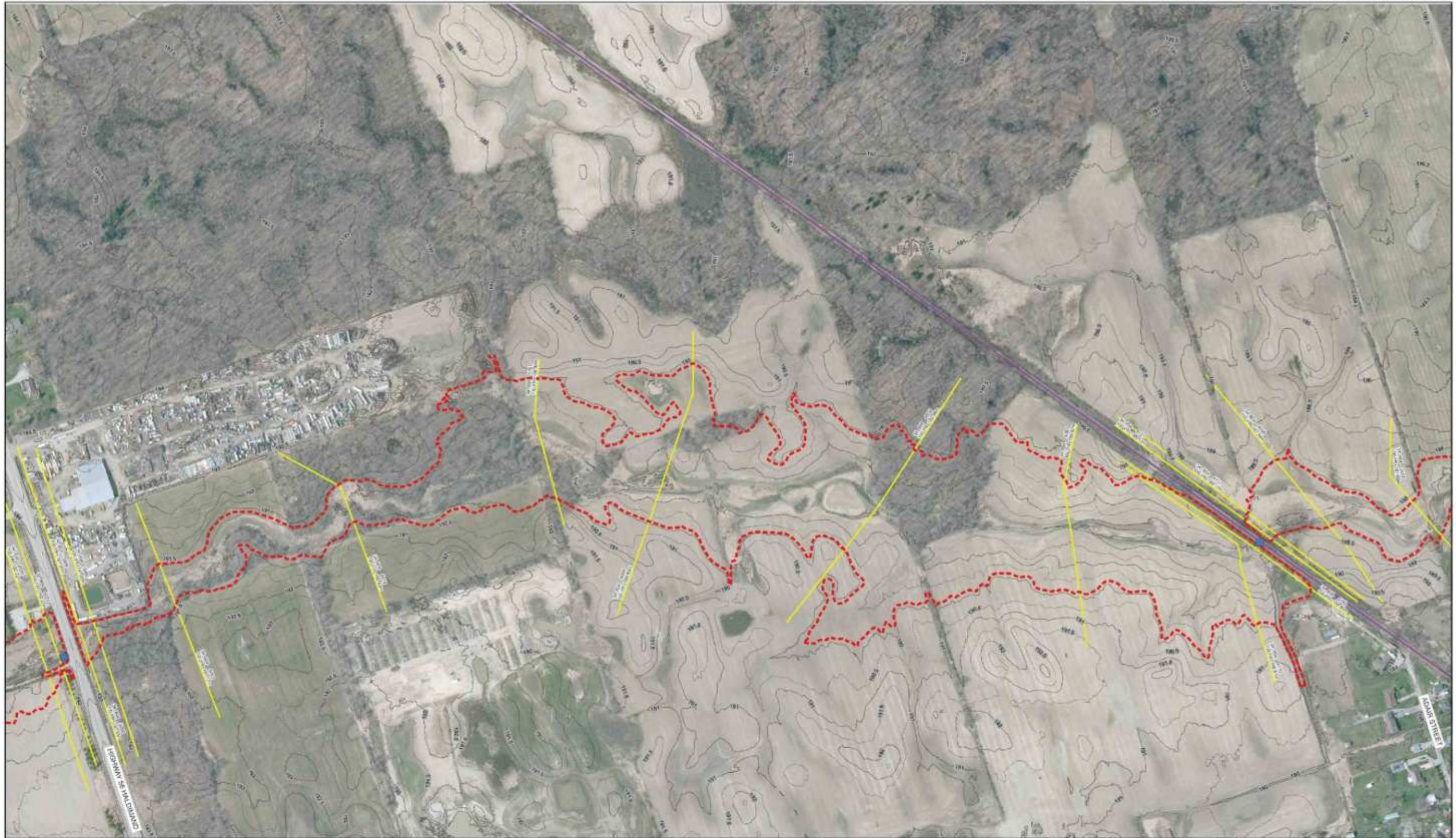
		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					

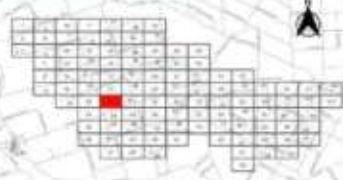


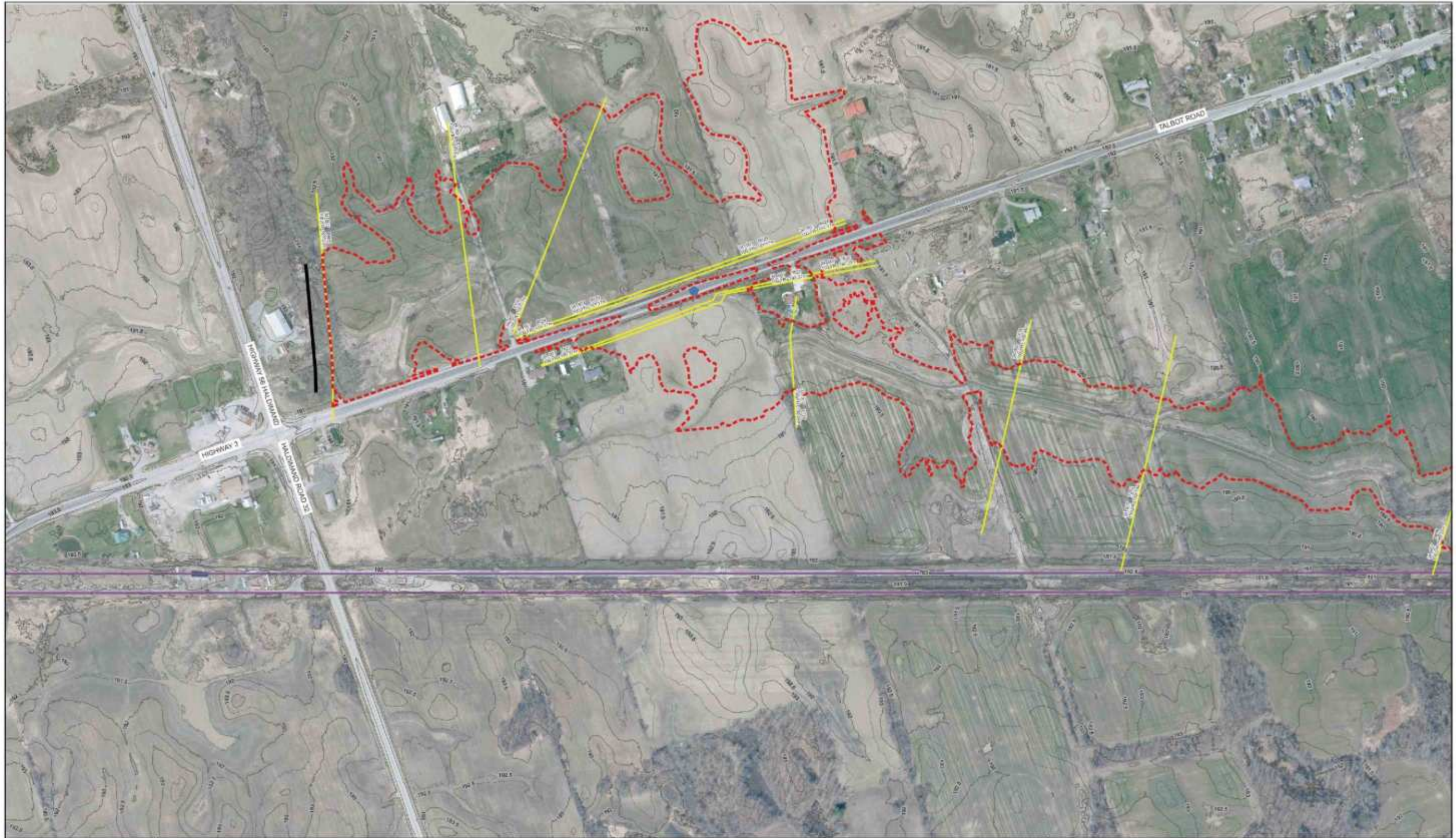
		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



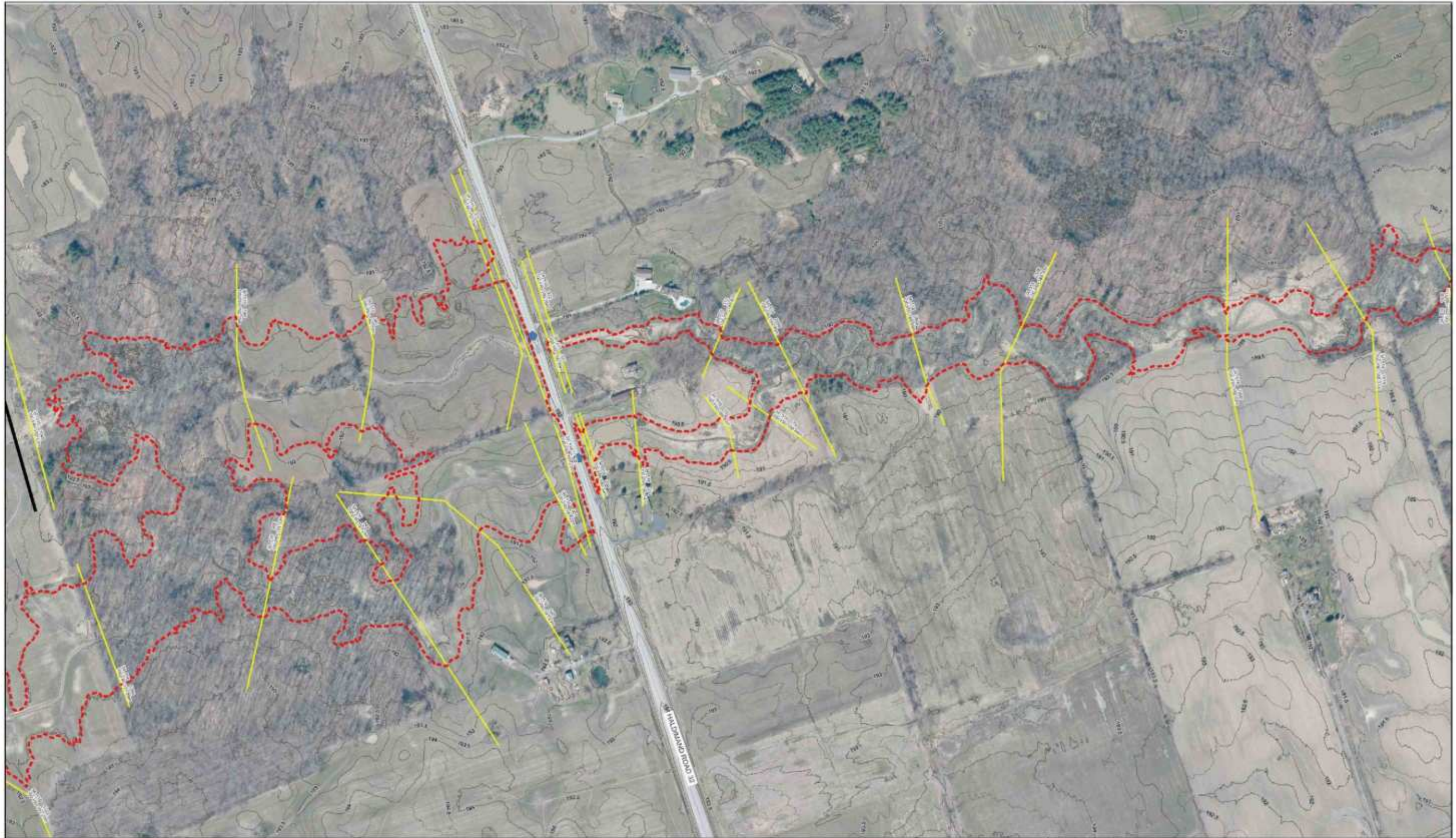
		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F — Index and Intermediate Contours at: — 0.5 m Interval ● Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk				



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



		Legend  Cross Section  Study Limit  100-yr Floodline  Index and Intermediate Contours at 0.5 m Interval  Crossing Structure Modelled  Abandoned Railways  Possible Overtopping  Buildings at Risk	OSWEGO CREEK WATERSHED FLOODLINE MAPPING MAP SHEET No. 34	Scale: 1:2000 		
		Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F	Date: January 2025 Updates:			



Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F



**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 35

Scale: 1:2000

Date: January 2025
Updates:





Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F

**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 36

Scale: 1:2000

Date: January 2025
Updates:

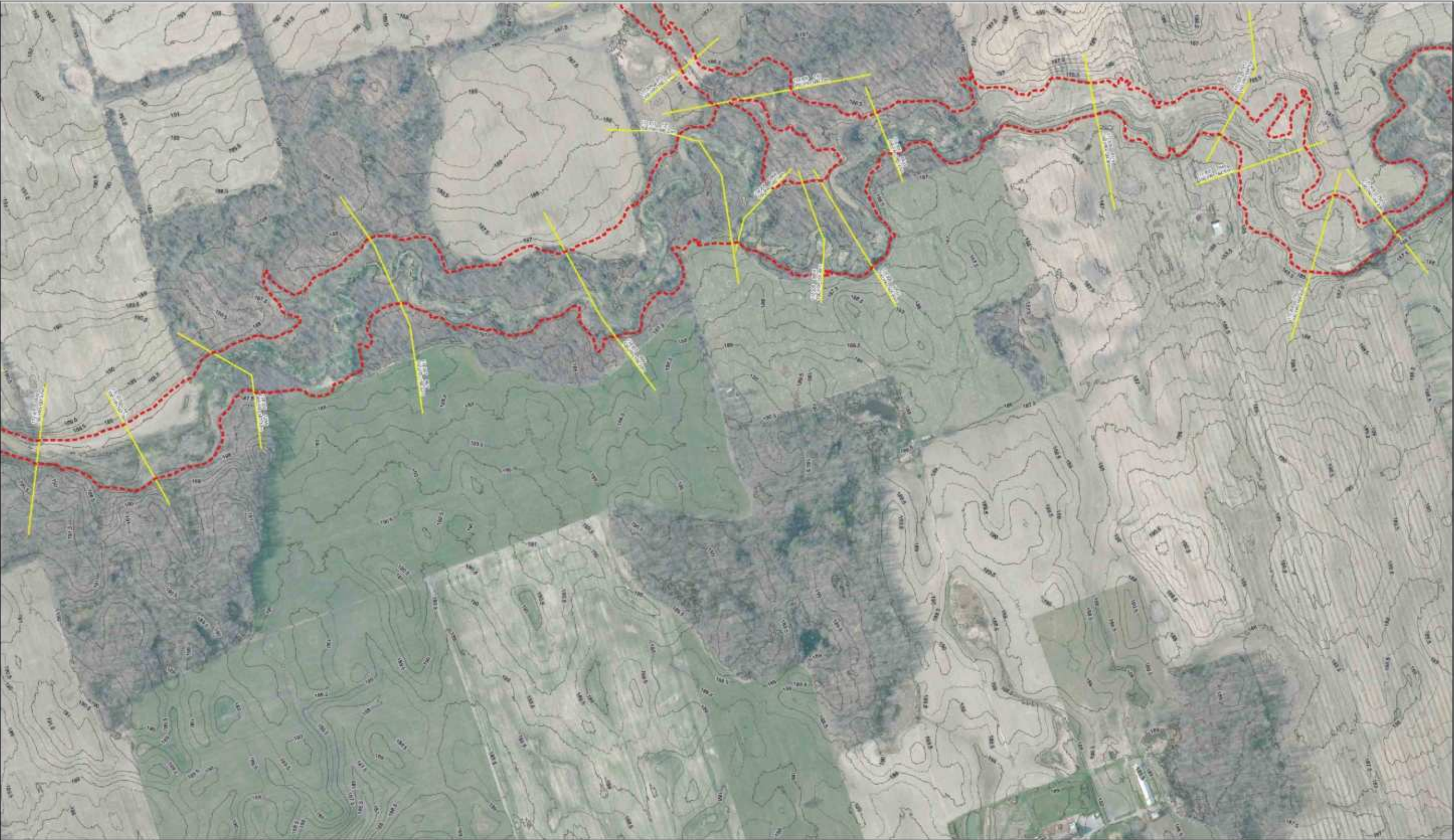




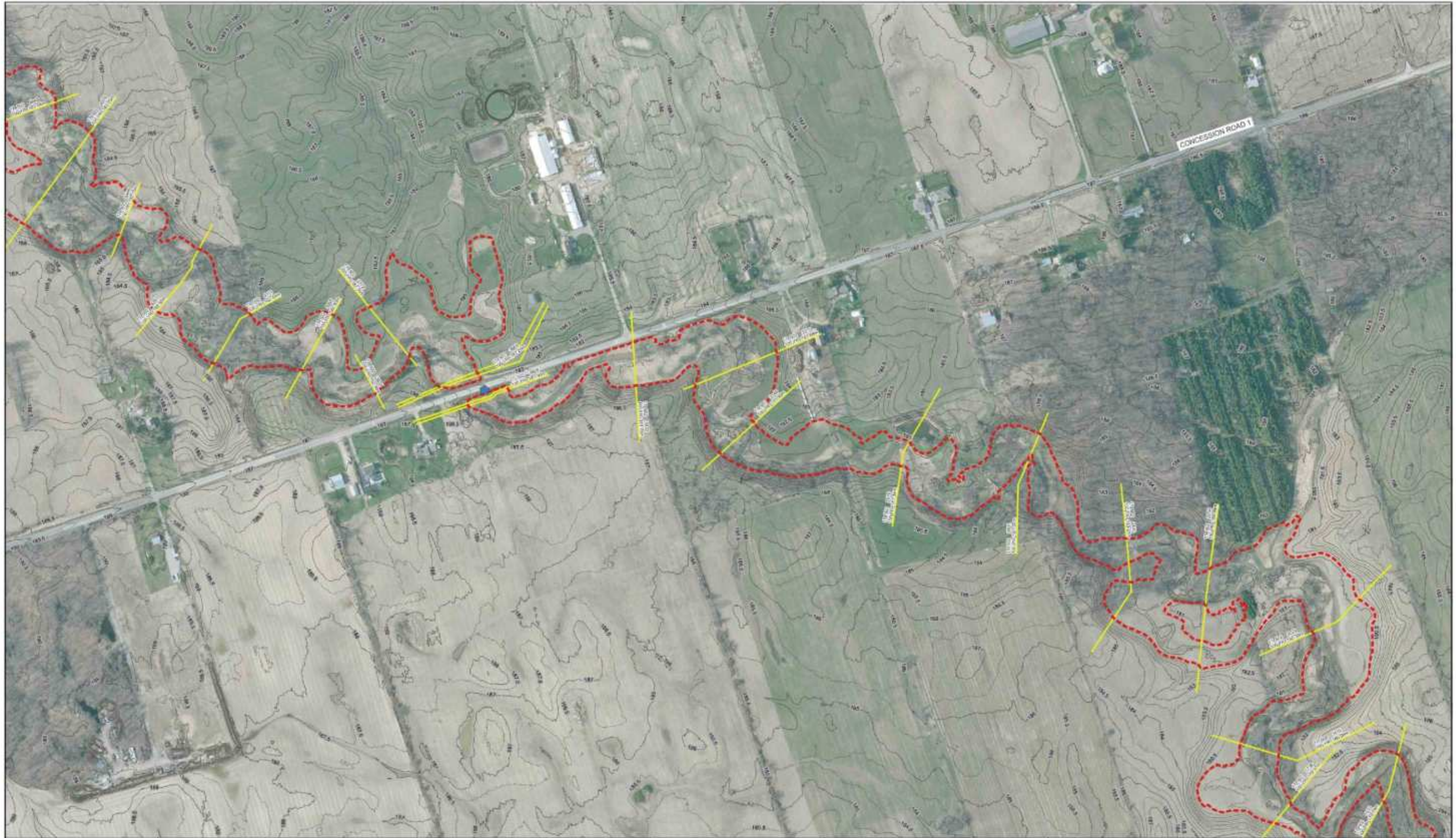
		Legend  Cross Section  Study Limit  100-yr Floodline  Crossing Structure Modelled	 Index and Intermediate Contours at:  0.5 m Interval  Possible Overtopping  Buildings at Risk	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F		MAP SHEET No. 37	Date: January 2025 Updates:		



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline — Index and Intermediate Contours at: — 0.5 m Interval ● Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F					



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR:DTM Hamilton-Niagara 2021 Package F					



Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
 Aerial Photo Base: SWOOP 2020 NPCA
 LIDAR: DTM Hamilton-Niagara 2021 Package F



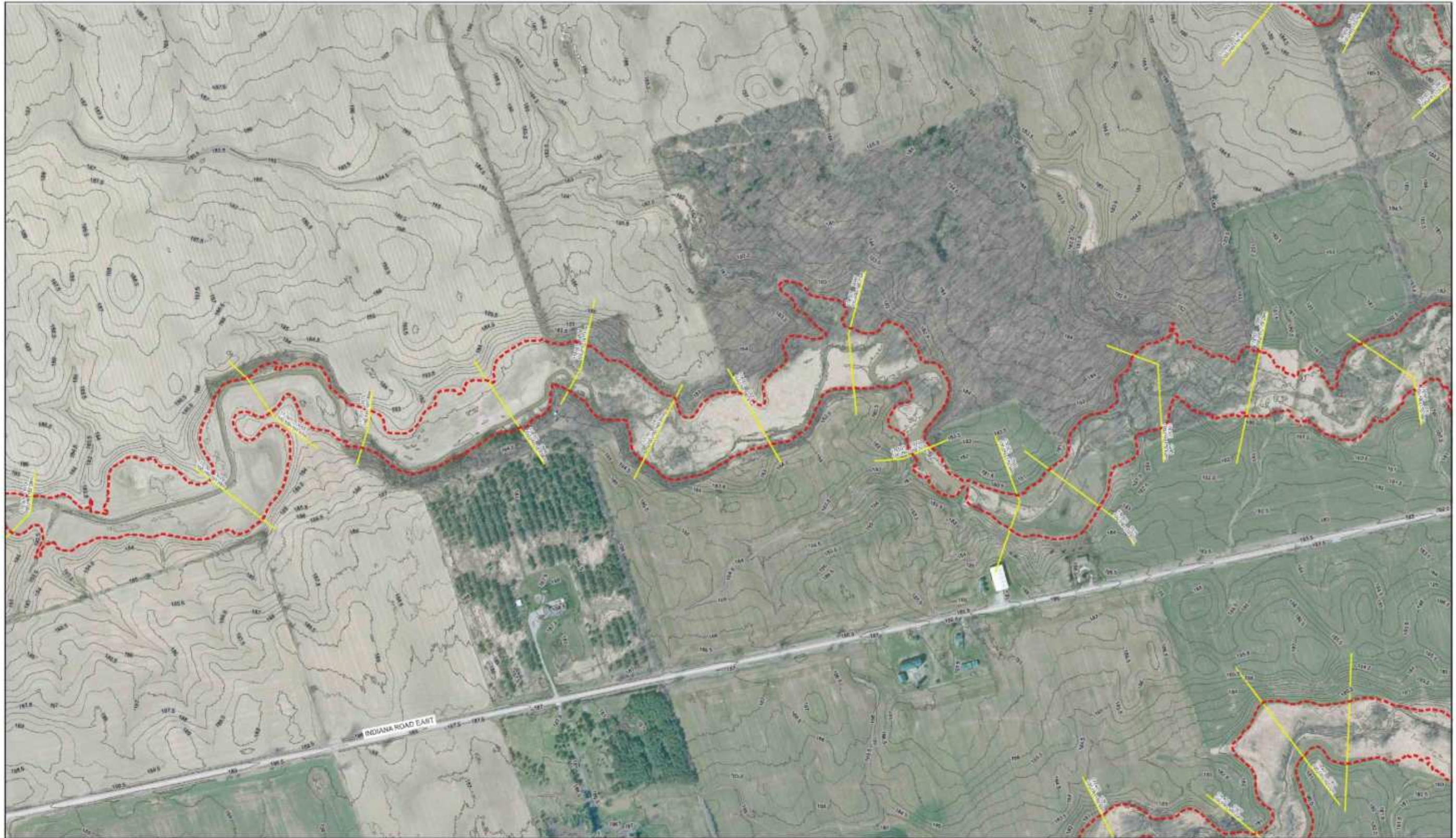
**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 40

Scale: 1:2000

Date: January 2025
 Updates:





Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F



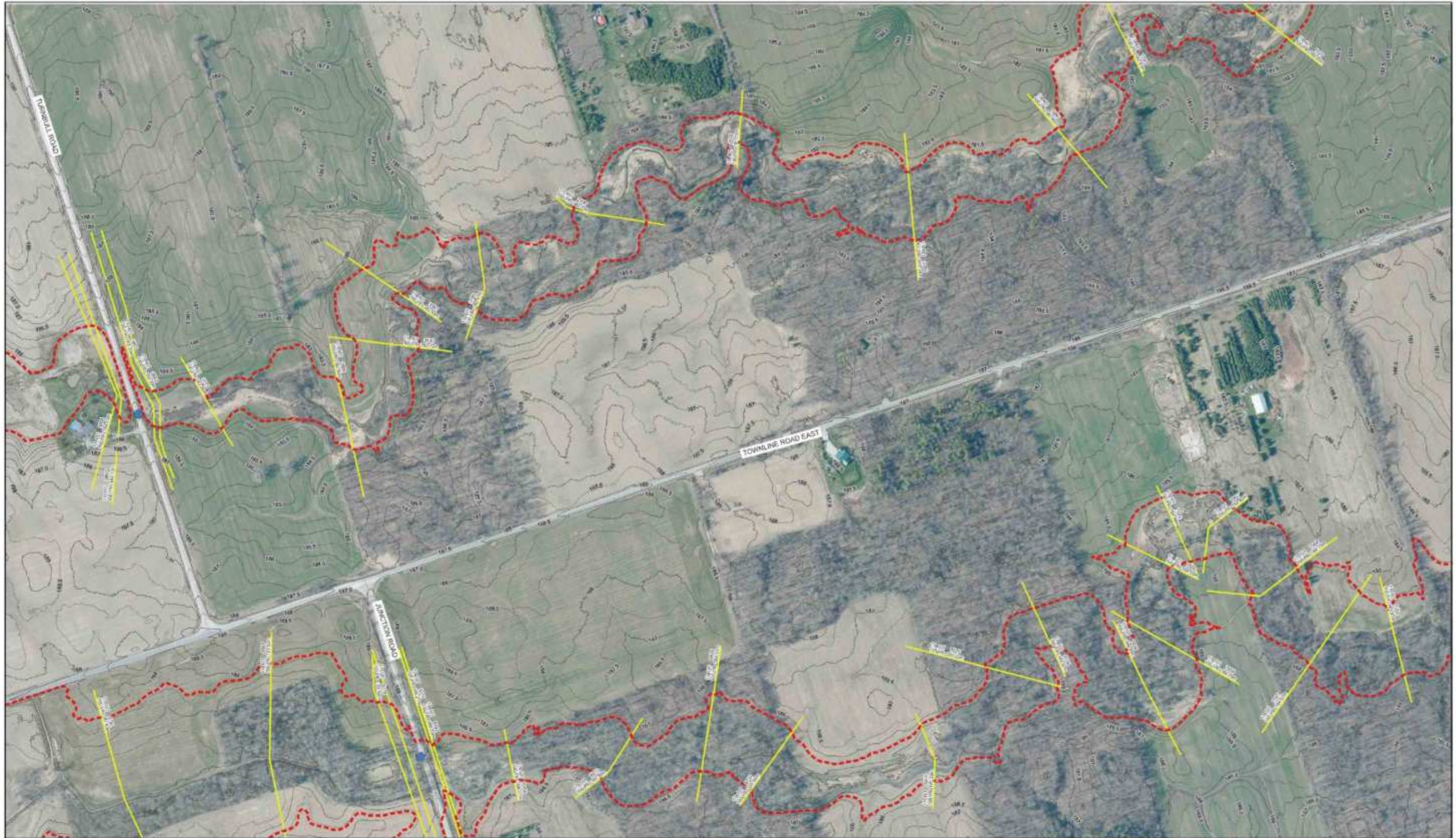
**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 41

Scale: 1:2000

Date: January 2025
Updates:





Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
 Aerial Photo Base: SWOOP 2020 NPCA
 LIDAR:DTM Hamilton-Niagara 2021 Package F



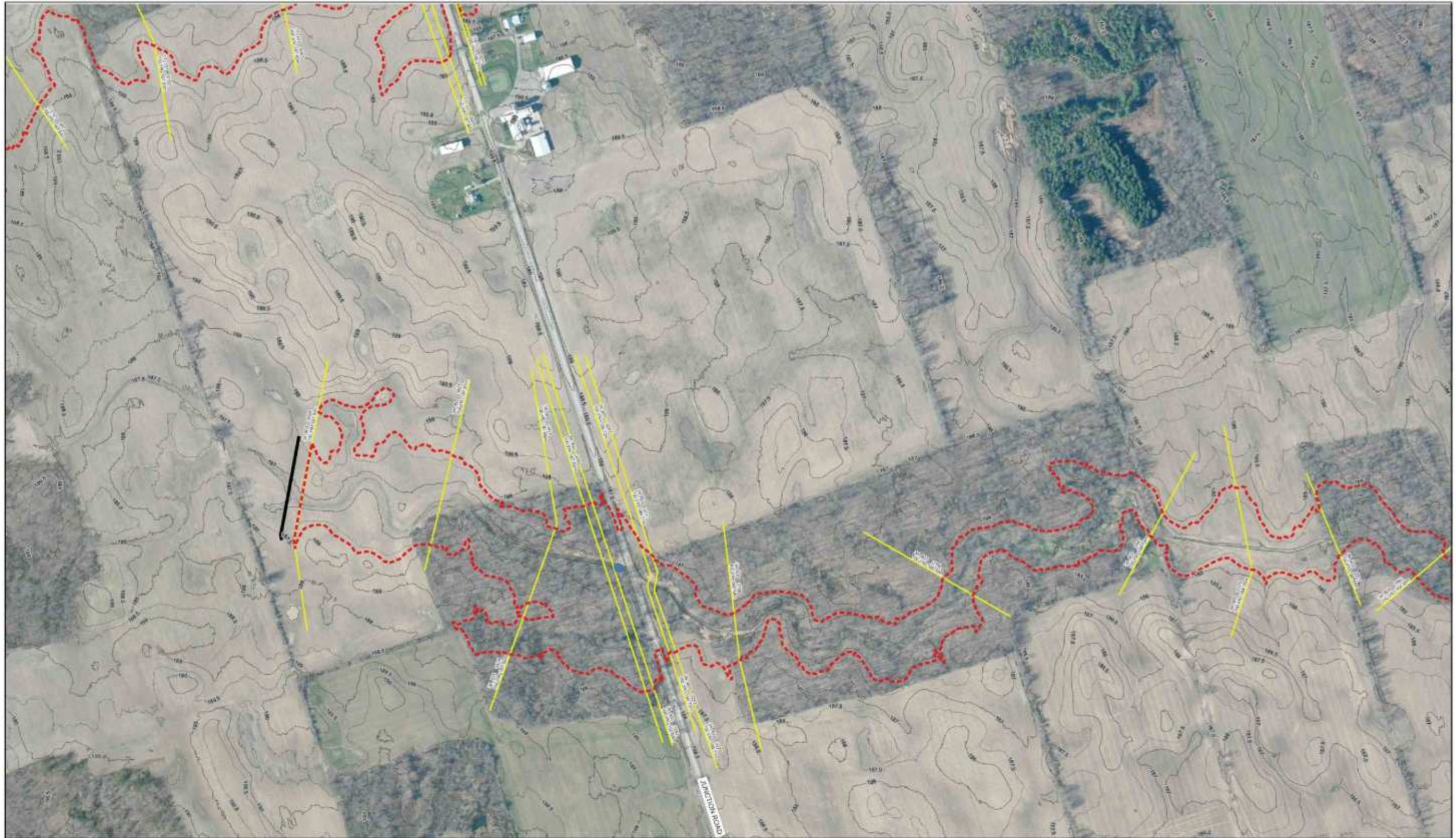
**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

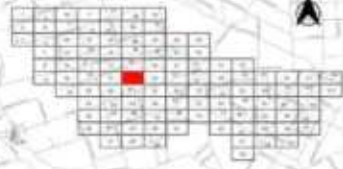
MAP SHEET No. 42

Scale: 1:2000

Date: January 2025
 Updates:





		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 	 	
		— Cross Section — Study Limit - - - 100-yr Floodline Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F				



Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F



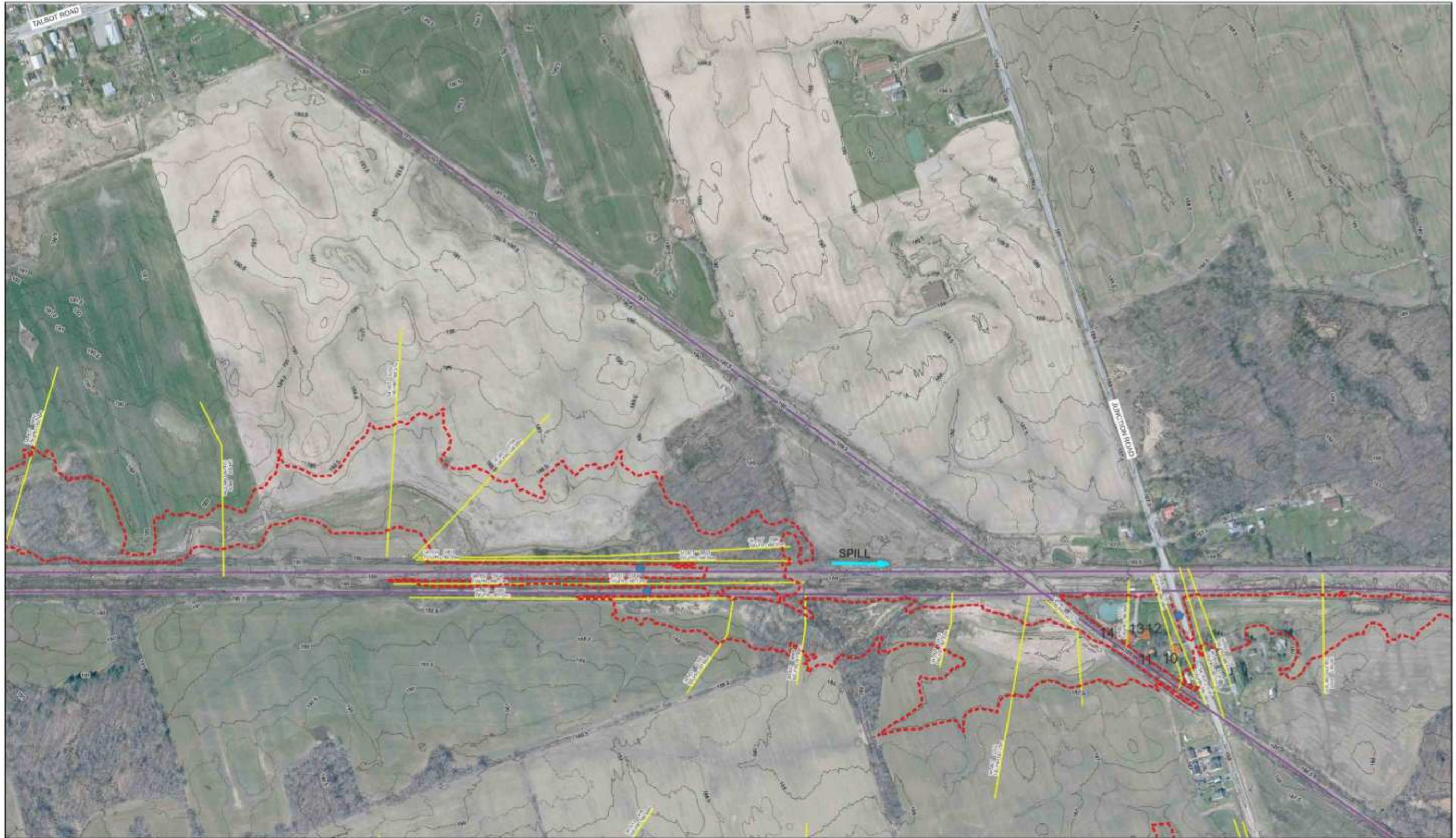
**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 44

Scale: 1:2000

Date: January 2025
Updates:





Legend

- Cross Section
- Study Limit
- 100-yr Floodline
- Index and Intermediate Contours at 0.5 m Interval
- Crossing Structure Modelled
- Abandoned Railways
- Possible Overtopping
- Buildings at Risk

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
 Aerial Photo Base: SWOOP 2020 NPCA
 LIDAR: DTM Hamilton-Niagara 2021 Package F



**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 45

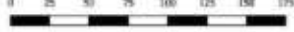
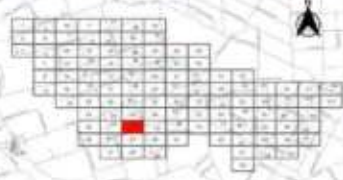
Scale: 1:2000

Date: January 2025
 Updates:

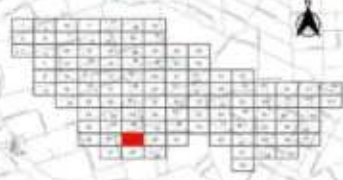


**NIAGARA PENINSULA
CONSERVATION
AUTHORITY**



		Legend  Cross Section  Study Limit  100-yr Floodline  Index and Intermediate Contours at 0.5 m Interval  Crossing Structure Modelled  Abandoned Railways  Possible Overtopping  Buildings at Risk	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 		
		Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F		MAP SHEET No. 46 Date: January 2025 Updates:		



		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 			
		 Cross Section  Study Limit  100-yr Floodline  Index and Intermediate Contours at 0.5 m Interval  Crossing Structure Modelled  Abandoned Railways  Possible Overtopping  Buildings at Risk					

Base Plan Sources:
Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR:DTM Hamilton-Niagara 2021 Package F



Legend

Cross Section	Index and Intermediate Contours at 0.5 m Interval	Possible Overtopping
Study Limit	Crossing Structure Modelled	Buildings at Risk
100-yr Floodline		

Base Plan Sources:

Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013
Aerial Photo Base: SWOOP 2020 NPCA
LIDAR: DTM Hamilton-Niagara 2021 Package F

**OSWEGO CREEK WATERSHED
FLOODLINE MAPPING**

MAP SHEET No. 48

Scale: 1:2000

Date: January 2025
Updates:





		Legend	OSWEGO CREEK WATERSHED FLOODLINE MAPPING	Scale: 1:2000 	 	
		— Cross Section — Study Limit — 100-yr Floodline — Index and Intermediate Contours at: — 0.5 m Interval — Crossing Structure Modelled — Abandoned Railways — Possible Overtopping — Buildings at Risk Base Plan Sources: Datum: EPSG:26917 - NAD83 / UTM zone 17N, CVGD2013 Aerial Photo Base: SWOOP 2020 NPCA LIDAR: DTM Hamilton-Niagara 2021 Package F				