

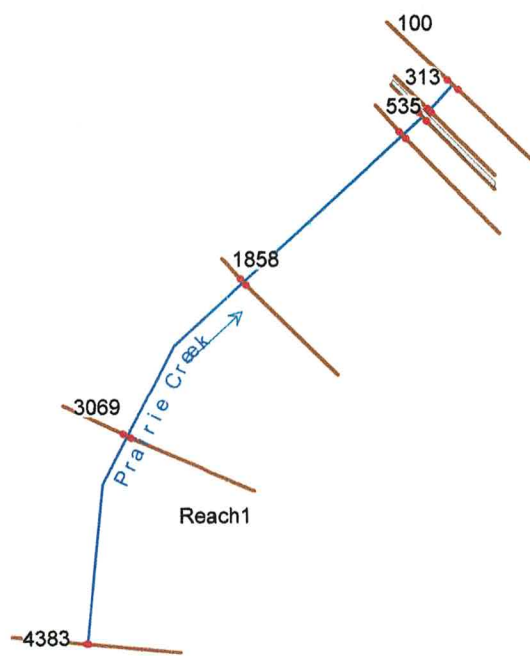


**SPECK
ENGINEERING**

**8500 BETHEL ROAD
SHAWNEE, OK 74804**

EXHIBIT B

EXISTING HEC ANALYSIS



Some schematic data outside default extents (see View/Set Schematic Plot Extents...)

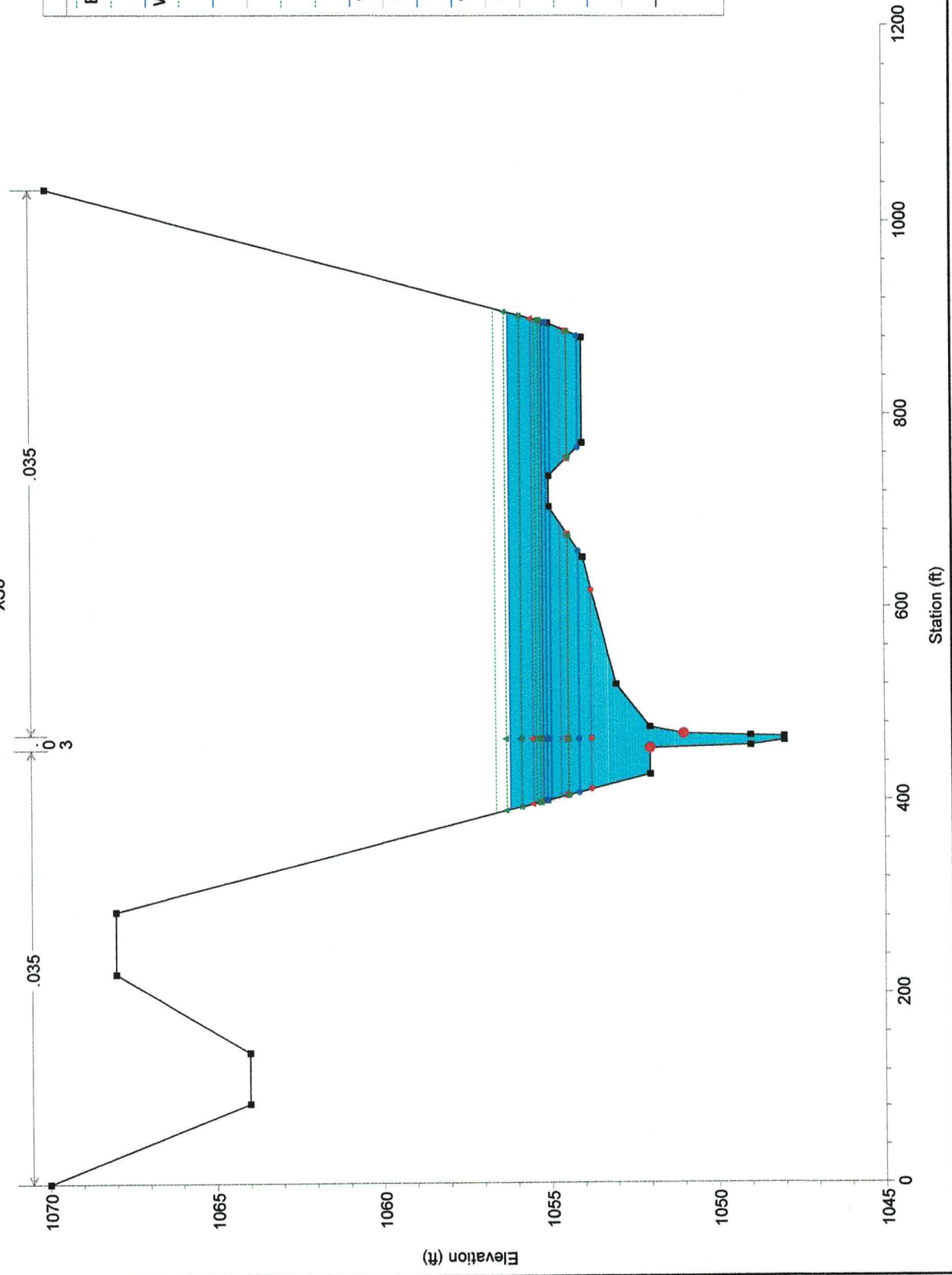
HEC-RAS Plan: Existing River: Prairie Creek Reach: Reach1

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach1	4383	100 yr	5870.00	1048.00	1056.18		1056.61	0.002928	9.00	1298.19	514.62	0.59
Reach1	4383	50yr	4990.00	1048.00	1055.84	1055.50	1056.29	0.003238	9.17	1125.39	508.56	0.62
Reach1	4383	25 yr	3780.00	1048.00	1055.19	1055.19	1055.85	0.004961	10.62	798.54	496.89	0.75
Reach1	4383	10 yr	2650.00	1048.00	1054.95	1054.67	1055.40	0.003388	8.55	679.92	455.87	0.62
Reach1	4383	5 yr	1890.00	1048.00	1055.08	1054.46	1055.28	0.001508	5.78	743.33	494.90	0.41
Reach1	4383	2 yr	1000.00	1048.00	1054.13	1053.75	1054.43	0.002043	6.02	344.03	366.13	0.47
Reach1	3069	100 yr	5870.00	1043.00	1051.58	1051.58	1052.24	0.003764	9.13	1353.11	902.45	0.69
Reach1	3069	50yr	4990.00	1043.00	1051.49	1051.49	1052.05	0.003201	8.32	1268.73	899.90	0.64
Reach1	3069	25 yr	3780.00	1043.00	1051.49	1051.27	1051.81	0.001830	6.29	1270.60	899.95	0.48
Reach1	3069	10 yr	2650.00	1043.00	1050.89	1050.89	1051.43	0.002697	7.06	751.93	774.65	0.57
Reach1	3069	5 yr	1890.00	1043.00	1049.63	1049.48	1051.27	0.008075	10.27	183.95	50.48	0.95
Reach1	3069	2 yr	1000.00	1043.00	1047.88	1047.88	1049.26	0.009834	9.42	106.11	38.47	1.00
Reach1	1858	100 yr	5870.00	1035.00	1047.47	1047.47	1048.39	0.002433	9.26	1221.34	697.03	0.57
Reach1	1858	50yr	4990.00	1035.00	1047.32	1047.32	1048.13	0.002099	8.49	1113.56	693.40	0.53
Reach1	1858	25 yr	3780.00	1035.00	1044.46	1044.46	1047.43	0.008381	13.84	273.14	46.58	1.01
Reach1	1858	10 yr	2650.00	1035.00	1042.94	1042.94	1045.50	0.008750	12.81	206.80	41.09	1.01
Reach1	1858	5 yr	1890.00	1035.00	1043.06		1044.30	0.004182	8.93	211.58	41.51	0.70
Reach1	1858	2 yr	1000.00	1035.00	1042.88		1043.25	0.001290	4.90	204.15	40.85	0.39
Reach1	535	100 yr	5870.00	1033.20	1044.90		1044.97	0.000281	3.19	3229.71	894.09	0.20
Reach1	535	50yr	4990.00	1033.20	1044.61		1044.67	0.000260	2.99	2969.40	884.43	0.19
Reach1	535	25 yr	3780.00	1033.20	1044.20		1044.25	0.000219	2.64	2607.08	870.81	0.17
Reach1	535	10 yr	2650.00	1033.20	1043.79		1043.82	0.000164	2.20	2252.06	857.25	0.15
Reach1	535	5 yr	1890.00	1033.20	1043.42		1043.44	0.000127	1.87	1939.00	845.11	0.13
Reach1	535	2 yr	1000.00	1033.20	1042.88		1042.90	0.000072	1.32	1489.04	822.29	0.10
Reach1	370	100 yr	5870.00	1033.70	1044.79	1041.86	1044.91	0.000342	3.78	2612.76	675.03	0.22
Reach1	370	50yr	4990.00	1033.70	1044.52	1041.54	1044.62	0.000299	3.46	2428.27	658.89	0.21
Reach1	370	25 yr	3780.00	1033.70	1044.13	1041.04	1044.21	0.000227	2.92	2177.44	636.27	0.18
Reach1	370	10 yr	2650.00	1033.70	1043.75	1038.79	1043.79	0.000149	2.29	1937.93	607.28	0.14
Reach1	370	5 yr	1890.00	1033.70	1043.39	1037.85	1043.43	0.000100	1.82	1729.84	577.78	0.12
Reach1	370	2 yr	1000.00	1033.70	1042.87	1036.50	1042.89	0.000043	1.14	1439.89	533.96	0.08
Reach1	338		Culvert									
Reach1	313	100 yr	5870.00	1033.00	1042.72	1042.72	1043.65	0.003355	10.27	1116.13	531.50	0.62

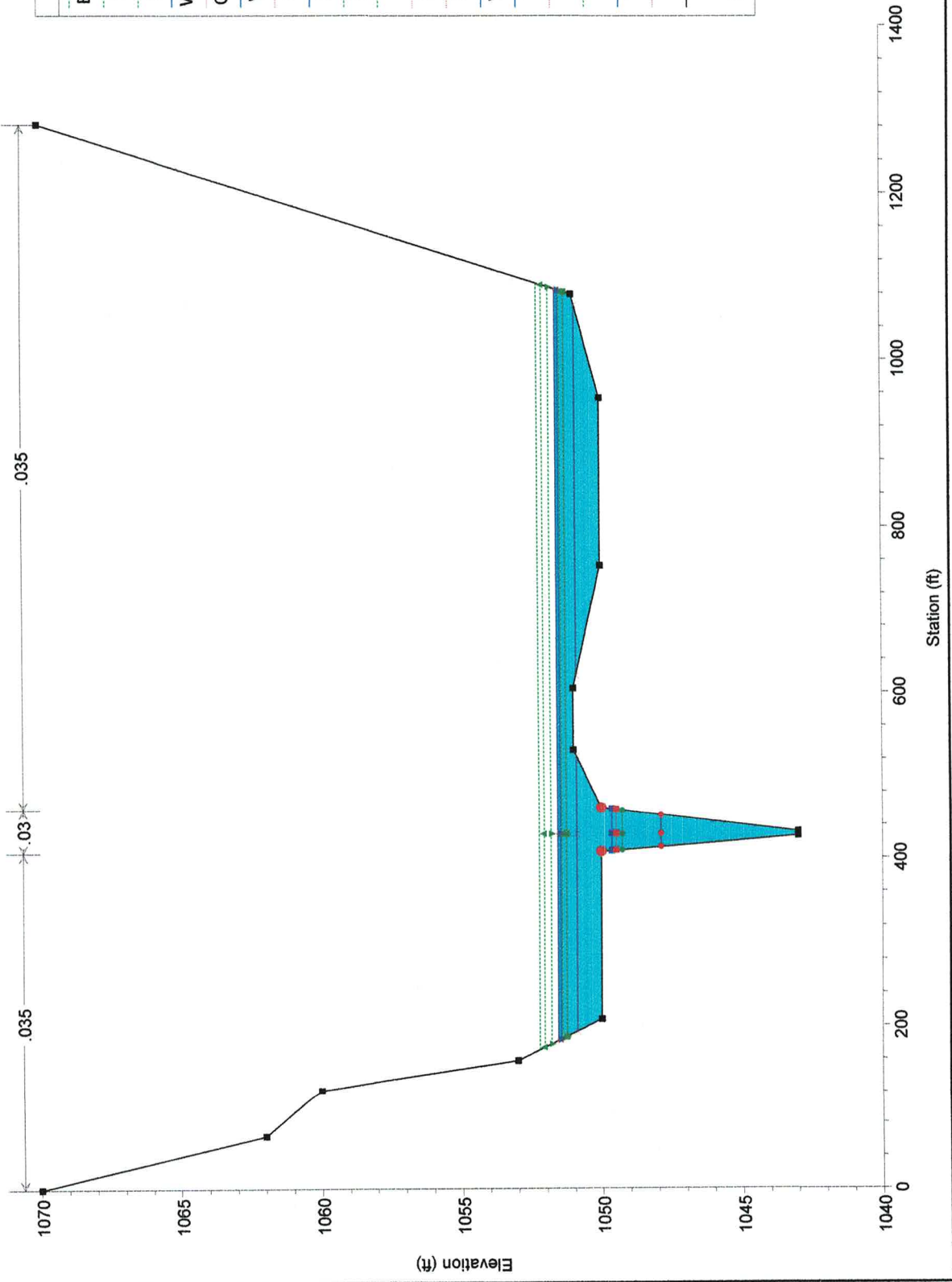
HEC-RAS Plan: Existing River: Prairie Creek Reach: Reach1 (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach1	313	50yr	4990.00	1033.00	1042.48	1042.48	1043.37	0.003152	9.76	988.86	508.52	0.60
Reach1	313	25 yr	3780.00	1033.00	1042.08	1042.08	1042.91	0.002822	8.94	794.04	471.18	0.56
Reach1	313	10 yr	2650.00	1033.00	1039.76	1039.76	1042.80	0.010020	13.98	189.60	32.88	1.03
Reach1	313	5 yr	1890.00	1033.00	1038.95	1038.61	1041.04	0.007926	11.58	163.18	32.30	0.91
Reach1	313	2 yr	1000.00	1033.00	1038.03		1038.90	0.004009	7.47	133.81	31.63	0.64
Reach1	100	100 yr	5870.00	1033.00	1041.04	1040.93	1042.02	0.003976	9.20	954.02	492.69	0.71
Reach1	100	50yr	4990.00	1033.00	1040.73	1040.53	1041.67	0.003982	8.82	807.00	440.99	0.71
Reach1	100	25 yr	3780.00	1033.00	1040.19	1039.81	1041.06	0.003976	8.15	602.59	303.79	0.69
Reach1	100	10 yr	2650.00	1033.00	1039.45	1038.97	1040.24	0.003978	7.54	427.79	201.85	0.68
Reach1	100	5 yr	1890.00	1033.00	1038.73	1037.95	1039.47	0.003983	7.05	302.13	150.33	0.67
Reach1	100	2 yr	1000.00	1033.00	1037.39	1036.52	1037.96	0.003979	6.06	165.10	60.18	0.64

City Submittal Plan: Existing 12/10/2024
XS8

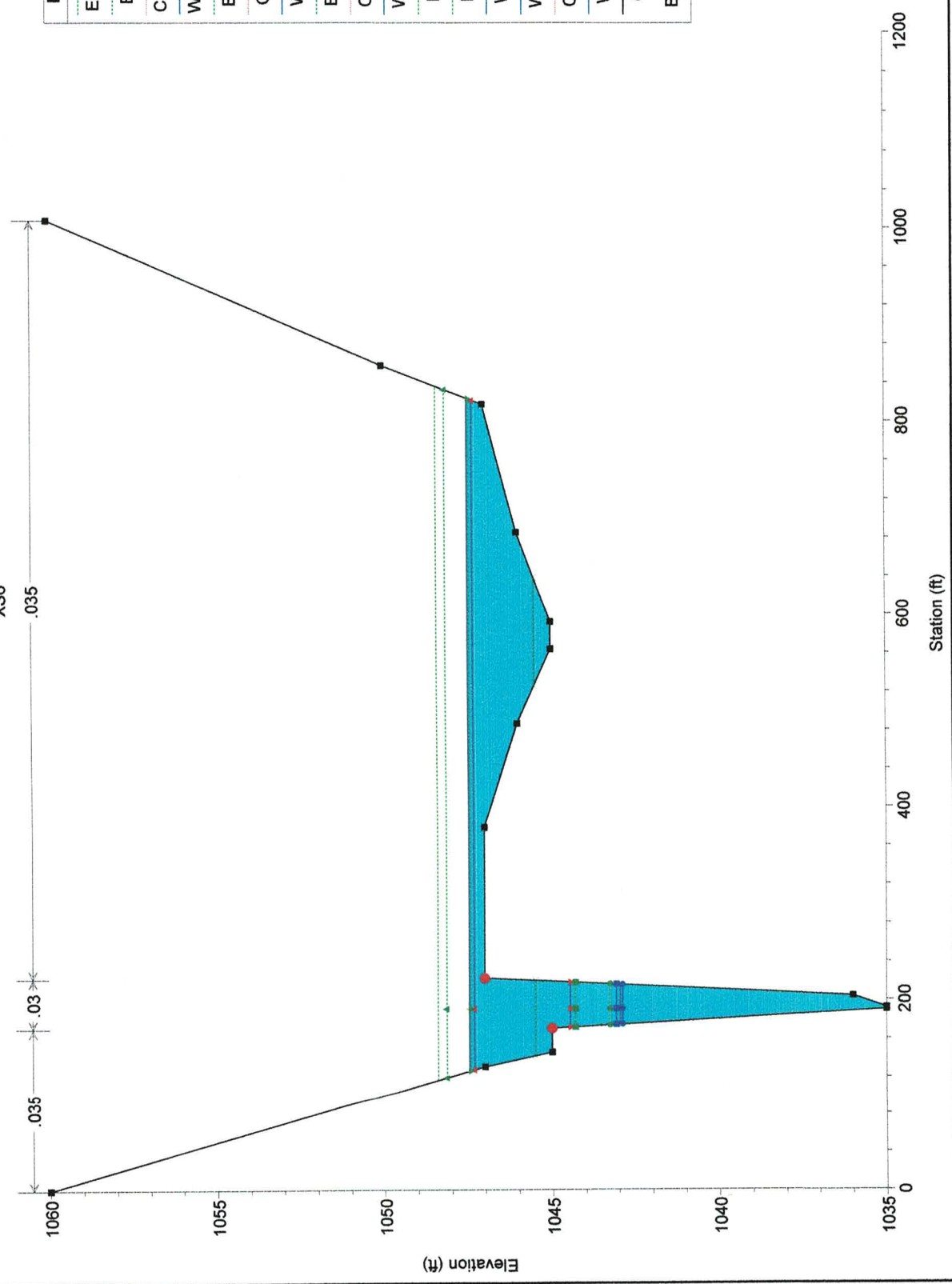


City Submittal Plan: Existing 12/10/2024
XS7



Legend	
EG 100 yr	▲
EG 50 yr	▲
EG 25 yr	▲
WS 100 yr	▲
Crit 100 yr	▲
WS 25 yr	▲
Crit 50 yr	▲
WS 50 yr	▲
EG 10 yr	▲
EG 5 yr	▲
Crit 25 yr	▲
Crit 10 yr	▲
WS 10 yr	▲
WS 5 yr	▲
Crit 5 yr	▲
EG 2 yr	▲
WS 2 yr	▲
Crit 2 yr	▲
Ground	■
Bank Sta	●

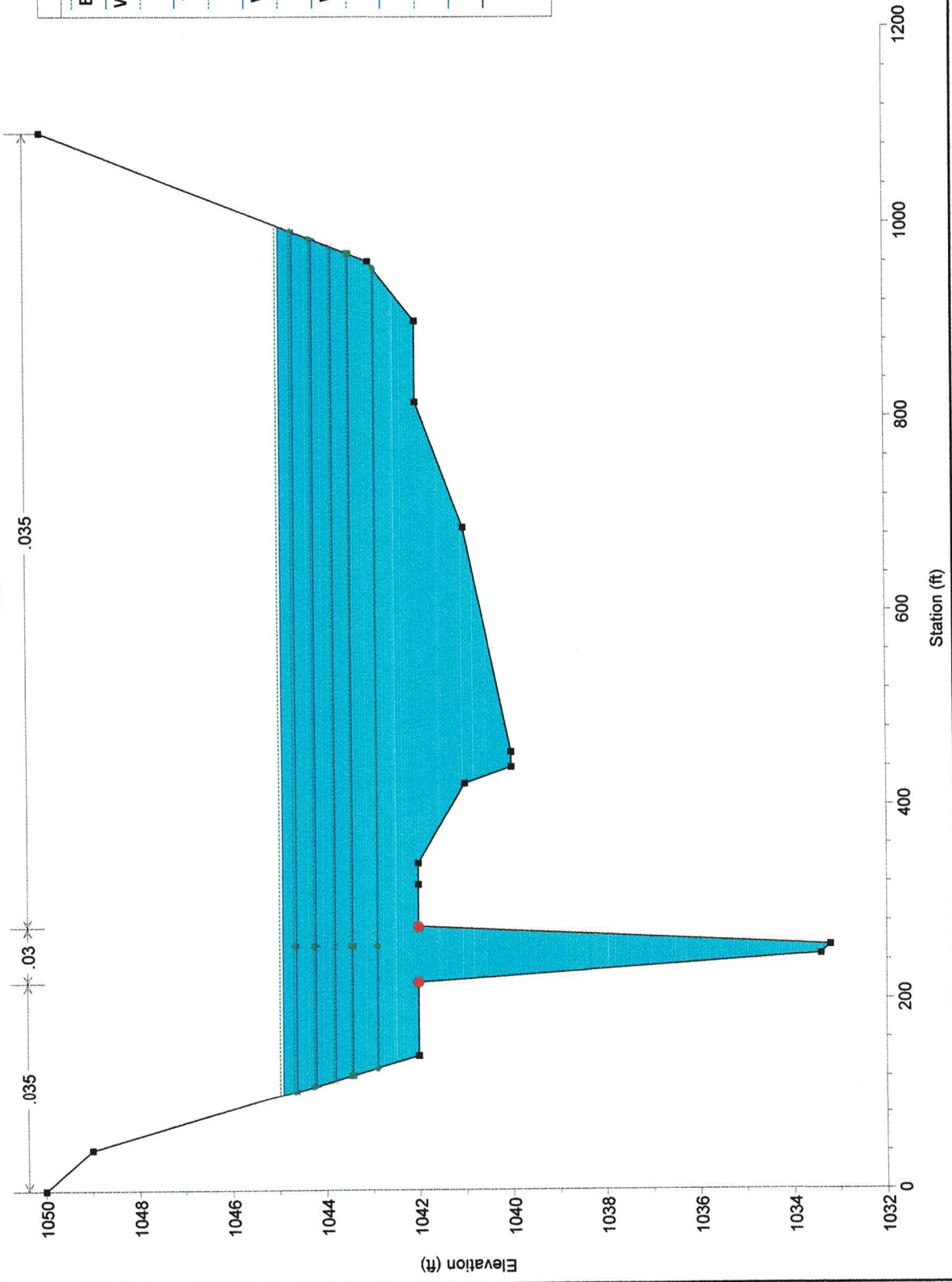
City Submittal Plan: Existing 12/10/2024 XS6



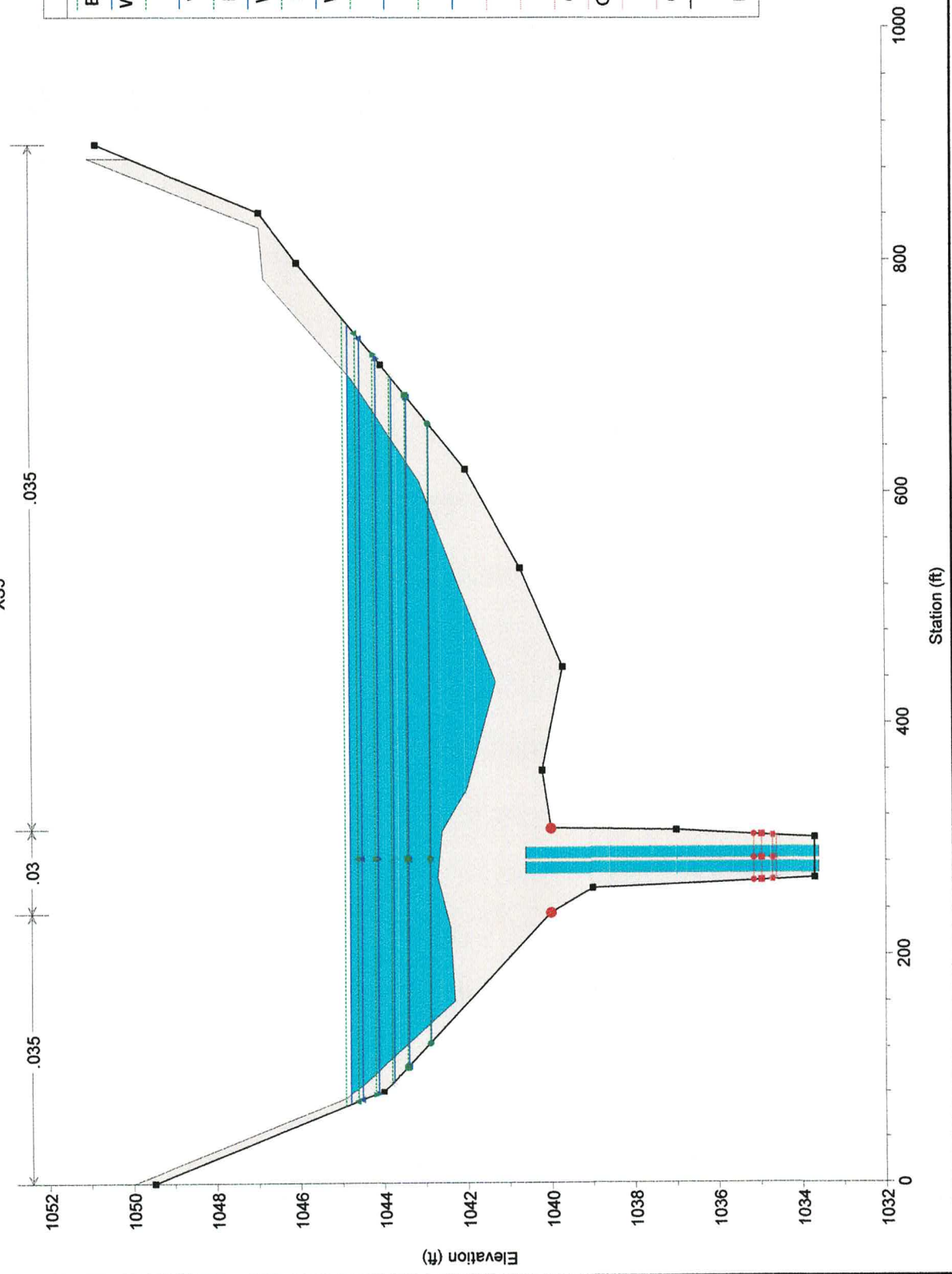
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City Submittal Plan: Existing 12/10/2024

XS5

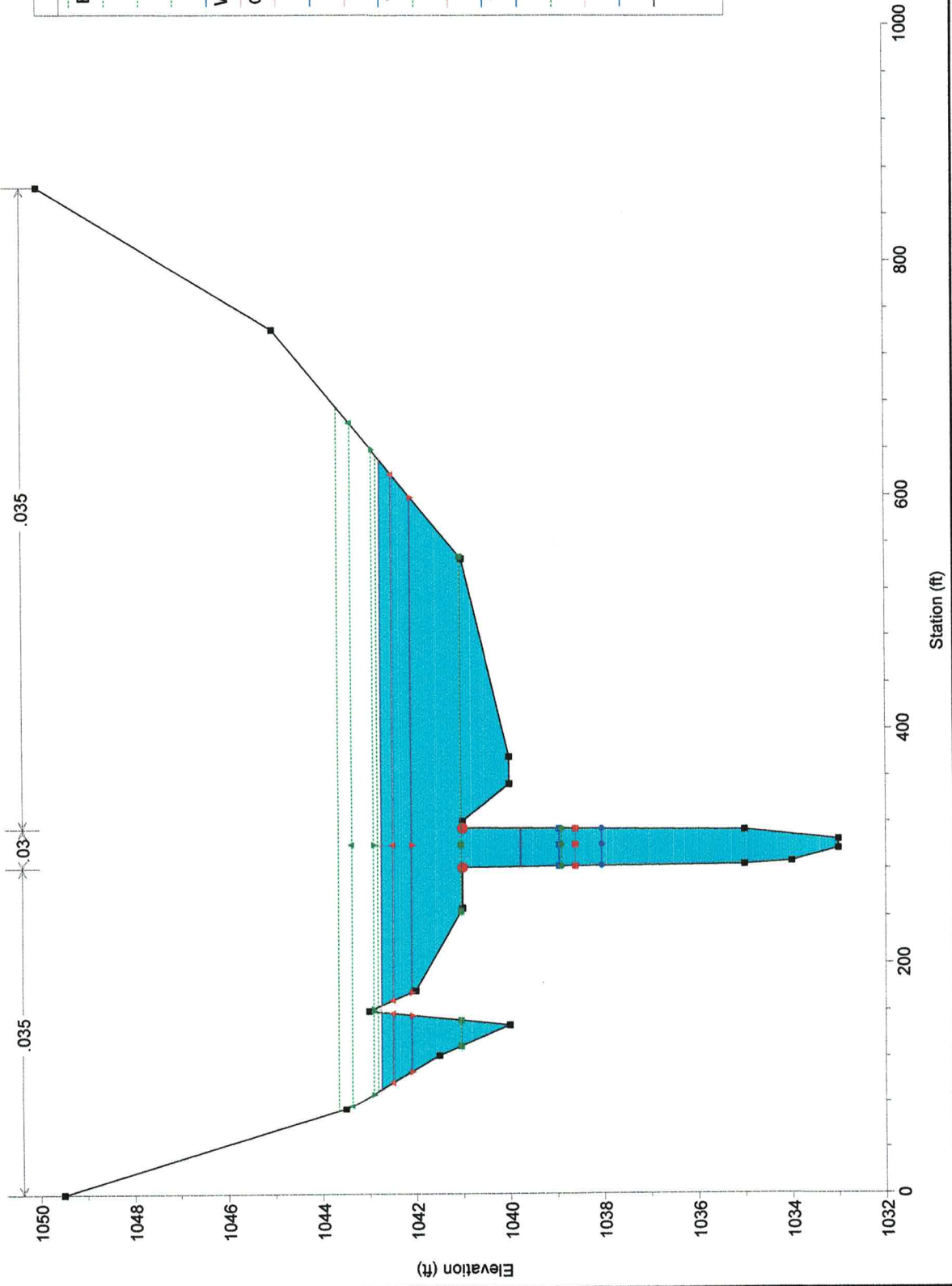


City Submittal Plan: Existing 12/10/2024
XS3

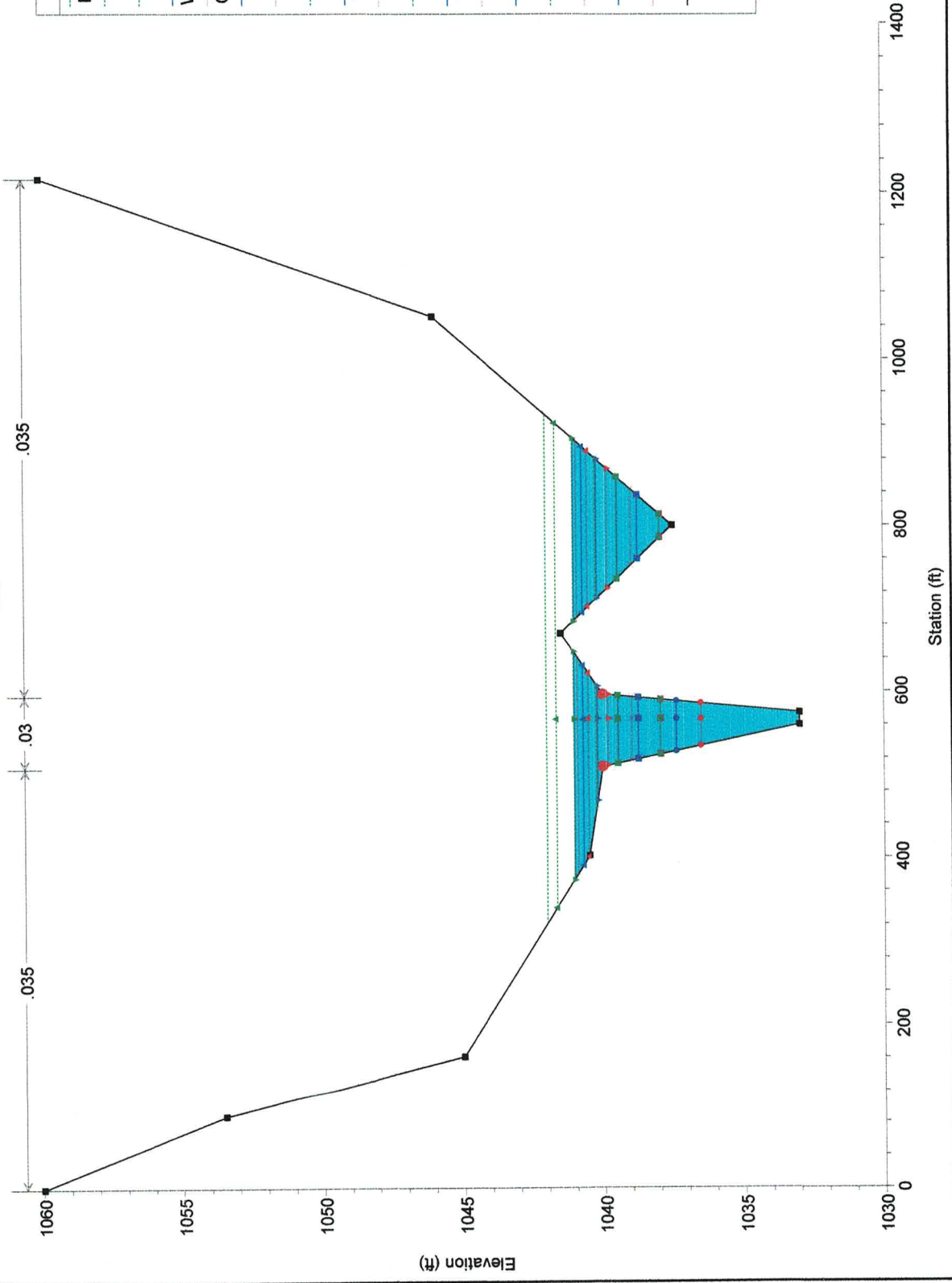


City Submittal Plan: Existing 12/10/2024

XS2



City Submittal Plan: Existing 12/10/2024
XS1



Legend
EG 100 yr
EG 50yr
EG 25 yr
WS 100 yr
Crit 100 yr
WS 50yr
Crit 50yr
EG 10 yr
WS 25 yr
Crit 25 yr
EG 5 yr
WS 10 yr
Crit 10 yr
WS 5 yr
EG 2 yr
Crit 5 yr
WS 2 yr
Crit 2 yr
Ground
Bank Sta