

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 Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Alignment - 1	10585.85	100Yr	51.00	528.46	530.20	531.16	533.90	0.060086	9.87	8.43	9.42	2.69
Alignment - 1	10585.85	10Yr	22.00	528.46	529.72	530.33	532.02	0.060050	7.39	4.29	7.35	2.50
Alignment - 1	10500	100Yr	51.00	525.69	527.11	527.66	528.96	0.043922	8.43	13.08	17.10	2.33
Alignment - 1	10500	10Yr	22.00	525.69	526.73	527.08	527.79	0.034897	5.99	7.28	12.88	1.96
Alignment - 1	10400	100Yr	51.00	518.01	518.91	519.73	522.48	0.098254	8.70	6.92	10.98	3.18
Alignment - 1	10400	10Yr	22.00	518.01	518.55	519.08	521.14	0.160788	7.30	3.33	9.19	3.67
Alignment - 1	10300	100Yr	51.00	511.69	513.30	513.93	515.47	0.047189	8.75	11.58	13.60	2.38
Alignment - 1	10300	10Yr	22.00	511.69	512.92	513.29	514.13	0.035664	6.13	6.79	11.72	1.96
Alignment - 1	10200	100Yr	51.00	507.11	509.20	510.03	511.52	0.033300	7.87	10.41	10.23	2.01
Alignment - 1	10200	10Yr	22.00	507.11	508.55	509.06	510.16	0.043589	6.29	4.85	6.89	2.10
Alignment - 1	10100	100Yr	51.00	504.19	505.76	506.33	507.60	0.043298	8.37	13.12	17.17	2.30
Alignment - 1	10100	10Yr	22.00	504.19	505.39	505.71	506.34	0.030512	5.68	7.58	12.76	1.83
Alignment - 1	10000	100Yr	51.00	494.55	496.26	497.14	499.85	0.164444	18.27	8.10	9.48	4.51
Alignment - 1	10000	10Yr	22.00	494.55	495.70	496.43	499.42	0.241405	16.83	3.64	6.35	5.10
Alignment - 1	9900	100Yr	51.00	491.28	492.57	492.99	493.90	0.025662	6.04	13.68	16.74	1.76
Alignment - 1	9900	10Yr	22.00	491.28	492.14	492.37	492.90	0.024463	4.41	7.41	12.79	1.59
Alignment - 1	9800	100Yr	51.00	484.99	486.60	487.61	490.10	0.053338	9.17	8.21	9.34	2.51
Alignment - 1	9800	10Yr	22.00	484.99	486.02	486.70	488.68	0.078785	7.65	3.64	6.37	2.78
Alignment - 1	9700	100Yr	51.00	479.87	481.80	482.75	485.17	0.045057	8.93	8.57	9.29	2.35
Alignment - 1	9700	10Yr	22.00	479.87	481.30	481.86	483.09	0.038437	6.28	4.60	6.70	2.02
Alignment - 1	9600	100Yr	51.00	474.79	476.33	477.12	479.54	0.070967	11.38	10.28	13.11	2.99
Alignment - 1	9600	10Yr	22.00	474.79	475.88	476.47	478.09	0.066432	8.66	5.28	9.37	2.72
Alignment - 1	9500	100Yr	51.00	470.66	471.79	472.32	473.58	0.044395	6.66	10.93	15.39	2.18
Alignment - 1	9500	10Yr	22.00	470.66	471.43	471.74	472.44	0.043090	4.91	5.96	11.91	2.00
Alignment - 1	9400	100Yr	51.00	464.17	465.44	466.21	468.30	0.061043	8.56	9.11	12.28	2.64
Alignment - 1	9400	10Yr	22.00	464.17	465.01	465.52	466.86	0.072743	6.64	4.53	9.09	2.64
Alignment - 1	9300	100Yr	51.00	459.03	460.25	460.88	462.53	0.051425	7.96	10.53	14.32	2.44
Alignment - 1	9300	10Yr	22.00	459.03	459.89	460.28	461.14	0.043524	5.64	5.94	11.81	2.10
Alignment - 1	9200	100Yr	51.00	453.93	455.23	455.77	457.15	0.054067	8.66	12.38	16.81	2.54
Alignment - 1	9200	10Yr	22.00	453.93	454.86	455.24	456.26	0.054948	6.80	6.53	14.22	2.40
Alignment - 1	9100	100Yr	51.00	448.96	450.32	450.97	452.44	0.041093	7.99	11.09	12.36	2.24
Alignment - 1	9100	10Yr	22.00	448.96	449.83	450.24	451.21	0.046473	6.17	5.66	9.65	2.20
Alignment - 1	9000	100Yr	51.00	443.82	445.12	445.80	447.58	0.057620	9.39	10.99	13.82	2.66
Alignment - 1	9000	10Yr	22.00	443.82	444.72	445.16	446.24	0.052831	6.96	5.95	10.90	2.39
Alignment - 1	8900	100Yr	51.00	439.09	441.00	441.55	442.81	0.037203	8.89	12.96	13.54	2.17
Alignment - 1	8900	10Yr	22.00	439.09	440.44	440.91	441.70	0.038220	6.89	6.33	8.67	2.06
Alignment - 1	8800	100Yr	51.00	434.38	436.03	436.80	438.62	0.045537	8.08	9.37	10.73	2.31
Alignment - 1	8800	10Yr	22.00	434.38	435.52	436.01	437.14	0.054528	6.22	4.66	7.60	2.31
Alignment - 1	8700	100Yr	51.00	430.70	432.45	433.13	434.66	0.032923	6.81	9.07	10.48	1.93
Alignment - 1	8700	10Yr	22.00	430.70	432.01	432.36	433.14	0.028608	4.76	4.96	7.87	1.68
Alignment - 1	8600	100Yr	51.00	426.76	428.33	429.10	430.92	0.042025	8.14	10.31	13.29	2.23
Alignment - 1	8600	10Yr	22.00	426.76	427.85	428.36	429.57	0.044150	6.24	4.93	9.16	2.13
Alignment - 1	8500	100Yr	51.00	423.55	424.97	425.46	426.56	0.039306	6.85	12.28	15.57	2.08
Alignment - 1	8500	10Yr	22.00	423.55	424.62	424.88	425.48	0.033631	4.88	7.09	13.37	1.81
Alignment - 1	8400	100Yr	51.00	419.43	420.85	421.41	422.72	0.036959	6.06	8.48	9.45	1.97
Alignment - 1	8400	10Yr	22.00	419.43	420.37	420.75	421.61	0.044124	4.94	4.45	7.17	2.00
Alignment - 1	8300	100Yr	51.00	413.52	414.82	415.52	417.45	0.078019	8.46	8.73	10.77	2.75
Alignment - 1	8300	10Yr	22.00	413.52	414.45	414.89	416.11	0.069178	6.48	4.93	9.76	2.48
Alignment - 1	8200	100Yr	51.00	406.26	407.89	408.71	410.98	0.053899	9.56	9.67	11.20	2.58
Alignment - 1	8200	10Yr	22.00	406.26	407.37	407.97	409.55	0.061366	7.53	4.69	8.27	2.55
Alignment - 1	8100	100Yr	51.00	401.45	402.87	403.78	405.97	0.046625	8.61	8.68	9.65	2.40
Alignment - 1	8100	10Yr	22.00	401.45	402.39	402.92	404.16	0.045629	6.29	4.60	7.43	2.20
Alignment - 1	8000	100Yr	51.00	395.23	396.85	397.84	400.55	0.062171	9.04	7.11	7.48	2.68
Alignment - 1	8000	10Yr	22.00	395.23	396.37	396.94	398.49	0.071406	6.78	3.83	6.18	2.63
Alignment - 1	7900	100Yr	51.00	389.42	390.68	391.52	393.88	0.068438	8.63	7.89	10.17	2.75
Alignment - 1	7900	10Yr	22.00	389.42	390.34	390.79	391.94	0.057550	5.97	4.62	8.80	2.35
Alignment - 1	7815.51	100Yr	51.00	386.15	387.77	388.36	389.63	0.032556	7.47	12.57	15.06	1.99
Alignment - 1	7815.51	10Yr	22.00	386.15	387.31	387.67	388.44	0.029212	5.47	6.58	11.02	1.77

HEC-RAS Plan: Plan 01 River: Kfira Reach: Alignment - 1 (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 Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Alignment - 1	7700	100Yr	51.00	381.88	383.33	383.94	385.42	0.040697	7.97	11.75	14.42	2.23
Alignment - 1	7700	10Yr	22.00	381.88	382.88	383.30	384.33	0.043367	6.21	5.94	11.55	2.15
Alignment - 1	7600	100Yr	51.00	378.31	379.90	380.31	381.22	0.038675	7.65	14.83	19.19	2.10
Alignment - 1	7600	10Yr	22.00	378.31	379.49	379.75	380.30	0.034188	5.63	7.96	13.95	1.86
Alignment - 1	7500	100Yr	51.00	373.55	375.10	375.64	376.96	0.045727	6.82	10.64	14.02	2.18
Alignment - 1	7500	10Yr	22.00	373.55	374.66	375.07	376.13	0.050300	5.72	5.07	10.43	2.17
Alignment - 1	7400	100Yr	51.00	371.58	373.30	373.63	374.44	0.013865	5.01	13.55	13.72	1.32
Alignment - 1	7400	10Yr	22.00	371.58	372.75	372.92	373.43	0.014613	3.75	6.89	10.22	1.25
Alignment - 1	7300	100Yr	51.00	367.16	368.77	369.54	371.81	0.053827	7.98	8.04	12.65	2.41
Alignment - 1	7300	10Yr	22.00	367.16	368.28	368.89	370.43	0.077696	6.53	3.50	6.70	2.63
Alignment - 1	7200	100Yr	51.00	362.16	363.94	364.67	366.44	0.050433	7.62	8.92	10.43	2.27
Alignment - 1	7200	10Yr	22.00	362.16	363.48	363.91	364.89	0.038752	5.55	4.93	7.46	1.91
Alignment - 1	7100	100Yr	51.00	358.77	360.20	360.76	362.04	0.035543	6.07	9.06	11.28	1.97
Alignment - 1	7100	10Yr	22.00	358.77	359.80	360.11	360.84	0.039975	4.53	4.96	9.31	1.91
Alignment - 1	7000	100Yr	51.00	355.31	356.93	357.56	358.90	0.027736	7.25	11.96	13.15	1.89
Alignment - 1	7000	10Yr	22.00	355.31	356.43	356.81	357.63	0.026042	5.36	6.15	9.88	1.71
Alignment - 1	6900	100Yr	51.00	353.18	354.24	354.60	355.42	0.038302	5.77	12.84	16.89	2.01
Alignment - 1	6900	10Yr	22.00	353.18	353.93	354.08	354.49	0.033562	3.97	7.82	15.48	1.74
Alignment - 1	6800	100Yr	51.00	350.28	351.99	352.20	352.78	0.017887	5.21	18.68	22.69	1.45
Alignment - 1	6800	10Yr	22.00	350.28	351.52	351.63	352.03	0.018660	3.96	9.36	16.10	1.38
Alignment - 1	6704.4	100Yr	51.00	346.98	348.11	348.61	349.74	0.065943	9.17	12.48	17.05	2.78
Alignment - 1	6704.4	10Yr	22.00	346.98	347.73	348.08	348.85	0.071521	7.17	6.55	13.43	2.69
Alignment - 1	6600	100Yr	51.00	342.99	344.74	345.22	346.21	0.020086	5.69	12.11	14.58	1.55
Alignment - 1	6600	10Yr	22.00	342.99	344.23	344.51	345.12	0.020717	4.25	5.92	9.74	1.46
Alignment - 1	6500	100Yr	51.00	339.36	341.83	342.39	343.68	0.031651	6.04	8.46	6.81	1.70
Alignment - 1	6500	10Yr	22.00	339.36	341.14	341.55	342.42	0.035410	5.02	4.38	4.94	1.70
Alignment - 1	6400	100Yr	51.00	334.65	336.48	337.30	339.42	0.056795	8.10	7.84	8.18	2.36
Alignment - 1	6400	10Yr	22.00	334.65	335.95	336.52	337.93	0.056654	6.41	3.96	6.25	2.24
Alignment - 1	6300	100Yr	51.00	330.34	332.30	332.98	334.54	0.039145	6.93	8.68	8.76	2.05
Alignment - 1	6300	10Yr	22.00	330.34	331.80	332.19	333.12	0.038295	5.27	4.73	6.70	1.89
Alignment - 1	6200	100Yr	51.00	325.80	327.08	327.68	329.07	0.078877	7.99	9.52	11.36	2.77
Alignment - 1	6200	10Yr	22.00	325.80	326.71	327.01	327.84	0.075441	6.05	5.56	10.01	2.55
Alignment - 1	6100	100Yr	51.00	322.48	324.84	325.21	326.13	0.013724	6.43	15.75	12.61	1.39
Alignment - 1	6100	10Yr	22.00	322.48	324.10	324.36	325.01	0.014184	4.98	7.74	9.11	1.32
Alignment - 1	6000	100Yr	51.00	318.87	319.65	320.30	322.51	0.205212	11.49	8.69	16.48	4.48
Alignment - 1	6000	10Yr	22.00	318.87	319.37	319.80	321.20	0.255064	8.93	4.53	13.36	4.56
Alignment - 1	5900	100Yr	51.00	314.60	316.05	316.37	317.15	0.021071	5.54	14.94	17.12	1.59
Alignment - 1	5900	10Yr	22.00	314.60	315.65	315.82	316.26	0.018419	3.97	8.41	14.75	1.39
Alignment - 1	5800	100Yr	51.00	310.83	312.40	313.03	314.43	0.033543	7.49	11.58	13.51	2.04
Alignment - 1	5800	10Yr	22.00	310.83	311.84	312.31	313.39	0.046436	6.19	5.21	9.23	2.20
Alignment - 1	5700	100Yr	51.00	307.53	308.83	309.38	310.60	0.042297	7.37	11.40	12.87	2.22
Alignment - 1	5700	10Yr	22.00	307.53	308.46	308.71	309.30	0.032880	4.98	6.95	11.28	1.83
Alignment - 1	5600	100Yr	51.00	304.55	306.18	306.61	307.64	0.020710	6.01	13.10	14.69	1.61
Alignment - 1	5600	10Yr	22.00	304.55	305.65	305.95	306.59	0.022602	4.60	6.42	10.56	1.56
Alignment - 1	5500	100Yr	51.00	300.10	301.68	302.50	304.50	0.047480	7.99	8.39	9.40	2.33
Alignment - 1	5500	10Yr	22.00	300.10	301.17	301.69	303.00	0.061539	6.29	4.19	7.18	2.42
Alignment - 1	5400	100Yr	51.00	299.84	301.83	301.83	302.40	0.009251	4.14	20.53	19.41	1.07
Alignment - 1	5400	10Yr	22.00	299.84	301.23	301.23	301.62	0.011210	3.26	10.26	14.85	1.09
Alignment - 1	5300	100Yr	51.00	295.98	296.74	297.38	299.75	0.161292	10.87	9.32	18.43	4.06
Alignment - 1	5300	10Yr	22.00	295.98	296.49	296.90	298.58	0.177085	8.54	4.90	15.65	3.95
Alignment - 1	5200	100Yr	51.00	291.89	293.46	293.92	294.75	0.020677	5.76	14.33	17.83	1.59
Alignment - 1	5200	10Yr	22.00	291.89	293.00	293.23	293.77	0.019614	4.24	7.37	13.06	1.44
Alignment - 1	5100	100Yr	51.00	289.28	290.40	290.75	291.51	0.055255	8.32	13.97	18.03	2.53
Alignment - 1	5100	10Yr	22.00	289.28	290.05	290.26	290.72	0.052282	6.24	7.99	15.71	2.31
Alignment - 1	5000	100Yr	51.00	285.66	287.51	287.82	288.55	0.018217	6.47	17.36	17.20	1.57
Alignment - 1	5000	10Yr	22.00	285.66	286.92	287.15	287.68	0.019780	5.12	8.63	12.47	1.52
Alignment - 1	4915.16	100Yr	51.00	283.77	285.54	285.83	286.45	0.034081	8.82	16.92	19.64	2.14
Alignment - 1	4915.16	10Yr	22.00	283.77	285.10	285.26	285.67	0.027036	6.48	9.52	14.35	1.82

HEC-RAS Plan: Plan 01 River: Kfira Reach: Alignment - 1 (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 Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Alignment - 1	4800	100Yr	51.00	280.70	281.71	282.02	282.61	0.032560	5.41	15.69	24.38	1.86
Alignment - 1	4800	10Yr	22.00	280.70	281.34	281.51	281.91	0.040363	4.16	7.91	18.06	1.89
Alignment - 1	4700	100Yr	51.00	276.97	278.63	279.14	280.11	0.019045	6.13	14.15	17.13	1.58
Alignment - 1	4700	10Yr	22.00	276.97	278.06	278.39	279.04	0.020894	4.72	6.45	9.67	1.53
Alignment - 1	4600	100Yr	51.00	272.93	274.08	274.75	276.70	0.070006	9.25	10.55	15.77	2.84
Alignment - 1	4600	10Yr	22.00	272.93	273.71	274.18	275.45	0.070648	7.06	5.45	12.22	2.67
Alignment - 1	4500	100Yr	51.00	269.97	271.76	272.20	273.13	0.018250	5.94	13.94	14.76	1.52
Alignment - 1	4500	10Yr	22.00	269.97	271.23	271.48	272.06	0.017501	4.40	7.12	10.88	1.39
Alignment - 1	4400	100Yr	51.00	266.84	268.38	268.91	270.05	0.061248	7.55	11.28	14.56	2.46
Alignment - 1	4400	10Yr	22.00	266.84	267.96	268.26	269.04	0.062871	5.95	5.93	10.56	2.34
Alignment - 1	4300	100Yr	51.00	264.10	265.98	266.29	267.00	0.016463	6.07	18.00	19.07	1.47
Alignment - 1	4300	10Yr	22.00	264.10	265.45	265.66	266.15	0.015575	4.63	9.19	13.96	1.34
Alignment - 1	4200	100Yr	51.00	262.63	264.07	264.41	265.19	0.019692	5.35	15.46	21.04	1.53
Alignment - 1	4200	10Yr	22.00	262.63	263.63	263.86	264.37	0.020440	4.09	7.54	15.28	1.45
Alignment - 1	4100	100Yr	51.00	259.88	260.86	261.27	262.25	0.047436	7.02	14.47	24.37	2.30
Alignment - 1	4100	10Yr	22.00	259.88	260.56	260.83	261.46	0.043944	5.27	7.87	20.33	2.08
Alignment - 1	4000	100Yr	51.00	257.33	258.54	258.68	259.21	0.018644	4.81	20.74	30.39	1.47
Alignment - 1	4000	10Yr	22.00	257.33	258.19	258.31	258.63	0.018191	3.66	10.98	24.47	1.36
Alignment - 1	3900	100Yr	51.00	254.65	255.62	255.92	256.62	0.037366	5.98	20.21	52.01	2.02
Alignment - 1	3900	10Yr	22.00	254.65	255.34	255.59	256.07	0.037676	4.65	8.88	26.28	1.90
Alignment - 1	3800	100Yr	51.00	251.80	252.66	252.81	253.18	0.029228	5.07	22.81	47.37	1.77
Alignment - 1	3800	10Yr	22.00	251.80	252.40	252.49	252.73	0.027791	3.84	12.27	32.86	1.62
Alignment - 1	3700	100Yr	51.00	249.04	249.98	250.13	250.45	0.025365	4.46	23.12	43.33	1.62
Alignment - 1	3700	10Yr	22.00	249.04	249.67	249.71	249.94	0.027642	3.28	11.83	30.65	1.55
Alignment - 1	700	100Yr	30.00	191.90	192.96	192.97	193.11	0.012706	2.49	22.87	65.63	0.99
Alignment - 1	700	10Yr	13.00	191.90	192.88	192.88	192.93	0.004941	1.46	17.70	64.91	0.61
Alignment - 1	600	100Yr	30.00	190.62	191.37	191.41	191.57	0.018673	3.17	21.75	82.75	1.24
Alignment - 1	600	10Yr	13.00	190.62	191.03	191.26	191.60	0.083986	4.27	4.80	21.26	2.34
Alignment - 1	500	100Yr	30.00	188.72	189.77	189.86	190.06	0.012321	2.85	19.47	72.50	1.03
Alignment - 1	500	10Yr	13.00	188.72	189.62	189.64	189.78	0.007071	1.89	10.06	51.73	0.75
Alignment - 1	411.28	100Yr	30.00	187.77	188.89	188.89	188.98	0.005752	1.76	26.27	54.51	0.68
Alignment - 1	411.28	10Yr	13.00	187.77	188.63	188.68	188.87	0.016177	2.30	7.04	20.93	1.08
Alignment - 1	300	100Yr	30.00	186.00	186.64	186.84	187.40	0.063899	5.03	11.62	59.03	2.20
Alignment - 1	300	10Yr	13.00	186.00	186.57	186.67	186.80	0.021581	2.67	8.38	41.42	1.25
Alignment - 1	200	100Yr	30.00	184.96	185.31	185.31	185.31	0.000166	0.17	128.69	166.41	0.10
Alignment - 1	200	10Yr	13.00	184.96	185.27	185.27	185.35	0.023322	1.77	12.19	165.37	1.16
Alignment - 1	89.03	100Yr	30.00	182.86	183.38	183.63	185.07	0.222449	5.85	5.71	60.63	3.64
Alignment - 1	89.03	10Yr	13.00	182.86	183.48	183.49	183.59	0.011413	1.60	11.53	95.76	0.86
Alignment - 1	0	100Yr	30.00	180.53	181.71	181.72	182.07	0.016968	3.07	13.79	33.04	1.17
Alignment - 1	0	10Yr	13.00	180.53	181.32	181.48	181.86	0.037758	3.42	4.82	18.82	1.63