

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	6456.61	100Yr	25.00	439.23	440.78	440.78	441.27	0.007236	3.32	10.30	12.40	0.93
Alignment -1	6456.61	10Yr	11.00	439.23	440.27	440.27	440.60	0.008911	2.64	4.90	8.63	0.95
Alignment -1	6400	100Yr	25.00	433.93	435.26	435.26	435.64	0.008335	3.11	12.24	17.65	0.97
Alignment -1	6400	10Yr	11.00	433.93	434.86	434.86	435.12	0.009904	2.47	5.99	13.19	0.98
Alignment -1	6300	100Yr	25.00	425.44	427.15	427.15	427.66	0.010272	4.51	12.02	12.92	1.14
Alignment -1	6300	10Yr	11.00	425.44	426.69	426.69	427.01	0.008753	3.32	6.74	10.29	0.99
Alignment -1	6200	100Yr	25.00	413.17	414.67	414.67	415.10	0.008131	3.06	10.47	14.33	0.93
Alignment -1	6200	10Yr	11.00	413.17	414.21	414.21	414.51	0.009942	2.47	4.96	9.75	0.96
Alignment -1	6100	100Yr	25.00	402.27	404.30	404.30	404.85	0.006973	4.09	11.81	11.11	0.97
Alignment -1	6100	10Yr	11.00	402.27	403.69	403.69	404.09	0.007512	3.24	5.83	8.31	0.94
Alignment -1	6000	100Yr	25.00	392.93	394.53	394.53	394.98	0.006861	3.20	10.96	13.67	0.90
Alignment -1	6000	10Yr	11.00	392.93	394.02	394.02	394.35	0.008901	2.60	5.00	9.34	0.94
Alignment -1	5900	100Yr	25.00	382.27	384.00	384.00	384.49	0.007905	3.63	11.51	12.95	0.96
Alignment -1	5900	10Yr	11.00	382.27	383.52	383.52	383.84	0.007994	2.78	5.92	10.12	0.91
Alignment -1	5796.01	100Yr	25.00	374.53	376.27	376.27	376.70	0.010551	4.67	13.09	14.38	1.17
Alignment -1	5796.01	10Yr	11.00	374.53	375.75	375.75	376.13	0.012742	3.97	6.32	10.36	1.20
Alignment -1	5700	100Yr	25.00	367.63	369.83	369.83	370.32	0.008424	4.42	12.53	12.40	1.02
Alignment -1	5700	10Yr	11.00	367.63	369.11	369.11	369.52	0.011094	3.70	5.59	7.53	1.08
Alignment -1	5600	100Yr	25.00	360.87	362.53	362.53	363.05	0.009753	4.42	11.63	11.74	1.12
Alignment -1	5600	10Yr	11.00	360.87	362.00	362.00	362.35	0.009805	3.39	6.18	9.15	1.05
Alignment -1	5500	100Yr	25.00	353.18	355.21	355.21	355.81	0.008412	4.58	11.21	9.79	1.07
Alignment -1	5500	10Yr	11.00	353.18	354.62	354.62	355.01	0.008028	3.48	6.02	7.79	0.98
Alignment -1	5387.26	100Yr	25.00	347.37	349.07	349.07	349.63	0.008704	4.25	11.68	12.55	1.07
Alignment -1	5387.26	10Yr	11.00	347.37	348.55	348.55	348.92	0.008183	3.20	6.11	9.25	0.97
Alignment -1	5296.31	100Yr	25.00	341.94	343.39	343.39	343.92	0.008001	3.38	9.11	9.74	0.97
Alignment -1	5296.31	10Yr	11.00	341.94	342.89	342.89	343.22	0.009708	2.63	4.71	7.86	0.98
Alignment -1	5200	100Yr	25.00	337.67	339.10	339.10	339.60	0.008286	3.68	11.11	11.88	1.02
Alignment -1	5200	10Yr	11.00	337.67	338.59	338.59	338.92	0.009823	2.90	5.64	9.30	1.02
Alignment -1	5100	100Yr	25.00	332.76	334.53	334.53	335.00	0.008703	4.40	12.63	12.77	1.08
Alignment -1	5100	10Yr	11.00	332.76	334.00	334.00	334.35	0.008857	3.46	6.60	9.99	1.02
Alignment -1	5000	100Yr	25.00	329.03	330.38	330.38	330.81	0.009964	3.92	12.38	14.34	1.10
Alignment -1	5000	10Yr	11.00	329.03	329.93	329.93	330.22	0.010891	3.06	6.50	11.47	1.07
Alignment -1	4900	100Yr	25.00	324.77	326.12	326.12	326.56	0.009643	3.83	12.24	14.37	1.08
Alignment -1	4900	10Yr	11.00	324.77	325.70	325.70	325.98	0.009241	2.89	6.76	12.16	0.99
Alignment -1	4800	100Yr	25.00	320.52	322.23	322.23	322.65	0.009217	3.40	11.66	14.08	0.98
Alignment -1	4800	10Yr	11.00	320.52	321.81	321.81	322.09	0.009709	2.64	6.19	11.85	0.94
Alignment -1	4700	100Yr	25.00	316.48	318.05	318.05	318.52	0.007544	3.27	10.40	12.72	0.94
Alignment -1	4700	10Yr	11.00	316.48	317.56	317.56	317.88	0.009191	2.58	5.05	9.28	0.95
Alignment -1	4590.29	100Yr	25.00	311.64	312.92	312.92	313.22	0.006613	2.90	15.85	27.48	0.88
Alignment -1	4590.29	10Yr	11.00	311.64	312.51	312.51	312.76	0.008822	2.45	6.52	14.91	0.94
Alignment -1	4500	100Yr	25.00	307.67	308.78	308.78	309.09	0.011853	3.50	14.06	21.16	1.13
Alignment -1	4500	10Yr	11.00	307.67	308.50	308.50	308.69	0.010382	2.61	8.31	19.64	1.00
Alignment -1	4400	100Yr	25.00	302.95	304.83	304.83	305.35	0.007205	3.96	12.09	12.89	0.97
Alignment -1	4400	10Yr	11.00	302.95	304.23	304.23	304.61	0.008262	3.17	5.71	8.44	0.96
Alignment -1	4300	100Yr	25.00	300.82	302.58	302.58	303.13	0.007551	4.21	11.93	11.65	1.01
Alignment -1	4300	10Yr	11.00	300.82	301.99	301.99	302.37	0.008163	3.31	5.93	8.39	0.98
Alignment -1	4200	100Yr	25.00	297.07	298.85	298.85	299.25	0.007857	3.74	14.58	20.23	0.98
Alignment -1	4200	10Yr	11.00	297.07	298.30	298.30	298.63	0.010054	3.11	6.36	11.04	1.03
Alignment -1	4100	100Yr	25.00	295.12	295.83	295.83	296.20	0.018593	3.46	11.06	16.74	1.35
Alignment -1	4100	10Yr	11.00	295.12	295.51	295.51	295.73	0.026940	2.67	5.89	15.05	1.45
Alignment -1	4000	100Yr	25.00	291.14	292.47	292.47	292.73	0.008731	3.61	17.66	28.18	1.03
Alignment -1	4000	10Yr	11.00	291.14	292.15	292.15	292.36	0.008077	2.87	9.45	22.77	0.94
Alignment -1	3900	100Yr	25.00	287.98	289.24	289.24	289.63	0.007369	3.16	13.27	20.57	0.94
Alignment -1	3900	10Yr	11.00	287.98	288.76	288.76	289.05	0.009928	2.59	5.84	11.64	1.00
Alignment -1	3800	100Yr	25.00	285.05	286.55	286.55	286.90	0.009326	4.13	15.38	20.72	1.09
Alignment -1	3800	10Yr	11.00	285.05	286.18	286.18	286.41	0.007947	3.12	8.44	15.94	0.96
Alignment -1	3700	100Yr	25.00	282.21	283.51	283.51	283.90	0.008749	3.65	13.69	18.57	1.03
Alignment -1	3700	10Yr	11.00	282.21	283.08	283.08	283.36	0.009290	2.85	6.88	13.40	0.99

HEC-RAS Plan: Plan 01 River: Bait hanan 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	3600	100Yr	25.00	279.22	280.90	280.90	281.38	0.007632	3.88	13.35	17.57	0.99
Alignment -1	3600	10Yr	11.00	279.22	280.36	280.36	280.70	0.008149	3.02	6.17	9.86	0.95
Alignment -1	3500	100Yr	25.00	276.97	278.76	278.76	279.08	0.005370	3.32	18.71	34.03	0.83
Alignment -1	3500	10Yr	11.00	276.97	278.17	278.17	278.52	0.008061	3.02	6.01	10.07	0.94
Alignment -1	3400	100Yr	25.00	273.16	275.15	275.15	275.61	0.005847	3.60	13.25	21.68	0.86
Alignment -1	3400	10Yr	11.00	273.16	274.48	274.48	274.87	0.008048	3.07	5.33	8.15	0.93
Alignment -1	3274.92	100Yr	25.00	268.76	270.14	270.14	270.61	0.012840	4.53	12.01	14.51	1.25
Alignment -1	3274.92	10Yr	11.00	268.76	269.69	269.69	270.00	0.012925	3.47	6.37	10.88	1.18
Alignment -1	1200	100Yr	30.00	221.11	221.78	221.78	221.98	0.018348	3.07	17.96	43.27	1.22
Alignment -1	1200	10Yr	13.00	221.11	221.57	221.57	221.70	0.019260	2.43	9.70	35.02	1.17
Alignment -1	1100	100Yr	30.00	218.33	219.10	219.10	219.21	0.011443	2.12	28.40	110.77	0.93
Alignment -1	1100	10Yr	13.00	218.33	218.98	218.98	219.06	0.009253	1.62	16.01	98.47	0.80
Alignment -1	1000	100Yr	30.00	215.55	216.68	216.68	216.80	0.006872	2.13	31.88	118.55	0.76
Alignment -1	1000	10Yr	13.00	215.55	216.50	216.50	216.61	0.006401	1.74	14.38	77.48	0.71
Alignment -1	900	100Yr	30.00	213.13	214.40	214.40	214.55	0.007466	2.05	25.39	93.80	0.78
Alignment -1	900	10Yr	13.00	213.13	214.13	214.13	214.31	0.010615	1.93	8.08	28.14	0.88
Alignment -1	800	100Yr	30.00	210.86	212.26	212.26	212.43	0.005377	2.05	24.42	78.53	0.69
Alignment -1	800	10Yr	13.00	210.86	211.82	211.82	212.07	0.014250	2.22	5.85	11.98	1.02
Alignment -1	700	100Yr	30.00	208.93	210.11	210.11	210.27	0.007597	2.06	25.29	88.15	0.79
Alignment -1	700	10Yr	13.00	208.93	209.91	209.91	210.04	0.007572	1.68	10.70	56.93	0.75
Alignment -1	600	100Yr	30.00	207.13	208.03	208.03	208.16	0.008428	1.94	26.01	89.72	0.81
Alignment -1	600	10Yr	13.00	207.13	207.84	207.84	207.96	0.008570	1.63	11.33	56.13	0.78
Alignment -1	500	100Yr	30.00	204.78	206.14	206.14	206.33	0.005778	2.05	20.96	74.81	0.71
Alignment -1	500	10Yr	13.00	204.78	205.63	205.63	205.88	0.013823	2.18	5.95	12.27	1.00
Alignment -1	400	100Yr	30.00	202.69	204.04	204.04	204.35	0.010023	2.50	13.05	27.71	0.91
Alignment -1	400	10Yr	13.00	202.69	203.63	203.63	203.87	0.014406	2.18	5.96	12.66	1.01
Alignment -1	300	100Yr	30.00	201.53	202.34	202.34	202.57	0.010478	2.17	16.20	43.08	0.90
Alignment -1	300	10Yr	13.00	201.53	202.09	202.09	202.25	0.014403	1.77	7.63	25.23	0.97
Alignment -1	200	100Yr	30.00	199.32	200.80	200.80	201.01	0.005905	2.24	21.62	62.91	0.73
Alignment -1	200	10Yr	13.00	199.32	200.36	200.36	200.60	0.011534	2.19	6.34	17.34	0.93
Alignment -1	89.57	100Yr	30.00	197.88	198.47	198.47	198.56	0.014970	2.06	30.73	149.48	1.02
Alignment -1	89.57	10Yr	13.00	197.88	198.39	198.39	198.44	0.011465	1.54	18.11	139.52	0.86
Alignment -1	0	100Yr	30.00	195.08	196.01	196.01	196.34	0.013143	2.57	11.94	20.53	1.03
Alignment -1	0	10Yr	13.00	195.08	195.70	195.70	195.91	0.014742	2.03	6.41	15.79	1.01