APPENDIX B
FRANCO WASH DATA

Project: Franco 24-Hour HMS Model Simulation Run: 24-Hour SCS Type I

Start of Run: 06Oct2006, 12:00 Basin Model: Franco Wash
End of Run: 09Oct2006, 00:00 Meteorologic Model: Franco Wash
Compute Time: 23Jun2008, 12:01:10 Control Specifications: 24 Hour SCS Storm

Volume Units: AC-FT

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
2DJ2FR10	11.0540	1111.51	07Oct2006, 02:36	681.17
2DJ2FR16	Not Specified	810.74	07Oct2006, 03:18	454.03
2DJ2FR17	Not Specified	606.45	07Oct2006, 03:18	422.77
2DJ4FLATO	Not Specified	227.25	07Oct2006, 00:12	36.86
2DJ4FR11	3.6970	1048.90	07Oct2006, 00:06	550.52
FR1	4.2010	1368.01	06Oct2006, 23:30	626.70
FR10	1.3400	387.00	07Oct2006, 00:12	213.60
FR11	2.4880	825.27	06Oct2006, 23:36	388.40
FR12	0.4080	201.24	06Oct2006, 22:42	60.09
FR13	0.5050	287.80	06Oct2006, 22:36	79.85
FR14	0.5390	309.43	06Oct2006, 22:30	82.67
FR15	0.3490	176.18	06Oct2006, 22:30	48.41
FR16	1.0680	336.29	06Oct2006, 23:42	162.19
FR17	1.2370	310.03	07Oct2006, 00:18	175.67
FR18	0.4730	307.50	06Oct2006, 22:24	71.73
FR19	0.5850	208.53	06Oct2006, 23:18	86.48
FR2	3.8110	1063.79	07Oct2006, 00:12	604.35
FR20	1.1350	318.65	06Oct2006, 23:54	166.84
FR21	0.5530	351.47	06Oct2006, 22:18	74.44
FR22	0.9970	357.55	06Oct2006, 23:06	136.75
FR23	1.6640	488.65	06Oct2006, 23:42	235.62
FR24	0.5030	246.39	06Oct2006, 22:36	74.27
FR25	0.4730	200.61	06Oct2006, 22:48	69.30
FR26	1.1170	344.42	06Oct2006, 23:30	154.94
FR3	2.0440	735.32	06Oct2006, 23:24	319.53

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
FR4	0.9980	314.60	06Oct2006, 23:42	153.03
FR5	1.8820	510.71	07Oct2006, 00:36	310.01
FR6	2.1240	753.50	06Oct2006, 23:30	337.97
FR7	1.1630	439.18	06Oct2006, 23:24	187.41
FR8	0.4100	175.15	06Oct2006, 23:06	66.28
FR9	0.7980	324.30	06Oct2006, 23:06	127.00
J1	10.0560	2586.39	07Oct2006, 00:42	1550.59
J10	22.1720	2733.92	07Oct2006, 03:24	2410.64
J11	22.7110	2755.46	07Oct2006, 03:48	2493.32
J12	23.0600	2761.02	07Oct2006, 04:06	2541.73
J13	1.7100	741.70	07Oct2006, 04:00	670.17
J13A	1.2370	763.00	07Oct2006, 03:06	598.44
J14	2.7780	1563.22	07Oct2006, 04:12	1286.39
J14A	1.0680	927.37	07Oct2006, 03:18	616.22
J15	3.3630	1551.73	07Oct2006, 04:42	1372.87
J16	4.4980	1650.03	07Oct2006, 04:42	1539.71
J17	5.0510	1669.81	07Oct2006, 05:06	1614.15
J18	28.1110	4298.27	07Oct2006, 04:36	4155.88
J19	29.1080	4353.39	07Oct2006, 04:54	4292.62
J1A	8.0120	2386.18	07Oct2006, 00:06	1231.06
J2	11.0540	2711.94	07Oct2006, 01:00	1703.62
J20	30.7720	4449.18	07Oct2006, 05:24	4528.24
J21	31.2750	4394.40	07Oct2006, 05:48	4602.51
J22	31.7480	4406.45	07Oct2006, 06:06	4671.81
J23	32.8650	4288.37	07Oct2006, 06:48	4826.71
J3	12.3940	1327.66	07Oct2006, 02:30	894.77
J4	3.6970	1281.69	06Oct2006, 23:54	591.66
J5	2.6800	594.02	07Oct2006, 01:06	437.01
J6	6.3770	1597.43	07Oct2006, 00:12	987.53
J7	8.8650	1683.32	07Oct2006, 01:06	1375.93
J8	21.2590	2869.14	07Oct2006, 02:24	2270.71
J9	21.6670	2781.55	07Oct2006, 02:54	2330.79

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
R0FR1	4.2010	1327.40	07Oct2006, 00:06	626.70
R0FR5	1.8820	466.21	07Oct2006, 01:24	310.01
R0FR6	2.1240	736.66	07Oct2006, 00:00	337.97
R0FR7	1.1630	427.25	07Oct2006, 00:00	187.41
R0J1	10.0560	2497.19	07Oct2006, 01:00	1550.59
R0J10	22.1720	2714.28	07Oct2006, 03:48	2410.64
R0J11	22.7110	2735.99	07Oct2006, 04:06	2493.32
R0J13	1.7100	738.88	07Oct2006, 04:12	670.17
R0J13A	1.2370	706.45	07Oct2006, 04:00	598.44
R0J14	2.7780	1507.08	07Oct2006, 04:42	1286.39
R0J14A	1.0680	825.40	07Oct2006, 04:06	616.22
R0J16	4.4980	1633.88	07Oct2006, 05:06	1539.71
R0J18	28.1110	4282.79	07Oct2006, 04:54	4155.88
R0J19	29.1080	4325.18	07Oct2006, 05:24	4292.62
R0J1A	8.0120	2140.01	07Oct2006, 00:48	1231.06
R0J20	30.7720	4361.44	07Oct2006, 05:48	4528.24
R0J21	31.2750	4375.79	07Oct2006, 06:06	4602.51
R0J22	31.7480	4215.94	07Oct2006, 06:48	4671.77
R0J6	6.3770	1232.04	07Oct2006, 01:54	987.53
R0J8	21.2590	2747.40	07Oct2006, 02:54	2270.71
R0J9	21.6670	2693.12	07Oct2006, 03:24	2330.79

Project: Franco 24-Hour HMS Model Simulation Run: 24-Hour SCS Type I

Start of Run: 06Oct2006, 12:00 Basin Model: Franco Wash
End of Run: 09Oct2006, 00:00 Meteorologic Model: Franco Wash
Compute Time: 23Jun2008, 12:01:10 Control Specifications: 24 Hour SCS Storm

Volume Units: IN

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
2DJ2FR10	11.0540	1111.51	07Oct2006, 02:36	1.16
2DJ2FR16	Not Specified	810.74	07Oct2006, 03:18	
2DJ2FR17	Not Specified	606.45	07Oct2006, 03:18	
2DJ4FLATO	Not Specified	227.25	07Oct2006, 00:12	
2DJ4FR11	3.6970	1048.90	07Oct2006, 00:06	2.79
FR1	4.2010	1368.01	06Oct2006, 23:30	2.80
FR10	1.3400	387.00	07Oct2006, 00:12	2.99
FR11	2.4880	825.27	06Oct2006, 23:36	2.93
FR12	0.4080	201.24	06Oct2006, 22:42	2.76
FR13	0.5050	287.80	06Oct2006, 22:36	2.96
FR14	0.5390	309.43	06Oct2006, 22:30	2.88
FR15	0.3490	176.18	06Oct2006, 22:30	2.60
FR16	1.0680	336.29	06Oct2006, 23:42	2.85
FR17	1.2370	310.03	07Oct2006, 00:18	2.66
FR18	0.4730	307.50	06Oct2006, 22:24	2.84
FR19	0.5850	208.53	06Oct2006, 23:18	2.77
FR2	3.8110	1063.79	07Oct2006, 00:12	2.97
FR20	1.1350	318.65	06Oct2006, 23:54	2.76
FR21	0.5530	351.47	06Oct2006, 22:18	2.52
FR22	0.9970	357.55	06Oct2006, 23:06	2.57
FR23	1.6640	488.65	06Oct2006, 23:42	2.65
FR24	0.5030	246.39	06Oct2006, 22:36	2.77
FR25	0.4730	200.61	06Oct2006, 22:48	2.75
FR26	1.1170	344.42	06Oct2006, 23:30	2.60
FR3	2.0440	735.32	06Oct2006, 23:24	2.93

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
FR4	0.9980	314.60	06Oct2006, 23:42	2.88
FR5	1.8820	510.71	07Oct2006, 00:36	3.09
FR6	2.1240	753.50	06Oct2006, 23:30	2.98
FR7	1.1630	439.18	06Oct2006, 23:24	3.02
FR8	0.4100	175.15	06Oct2006, 23:06	3.03
FR9	0.7980	324.30	06Oct2006, 23:06	2.98
J1	10.0560	2586.39	07Oct2006, 00:42	2.89
J10	22.1720	2733.92	07Oct2006, 03:24	2.04
J11	22.7110	2755.46	07Oct2006, 03:48	2.06
J12	23.0600	2761.02	07Oct2006, 04:06	2.07
J13	1.7100	741.70	07Oct2006, 04:00	7.35
J13A	1.2370	763.00	07Oct2006, 03:06	9.07
J14	2.7780	1563.22	07Oct2006, 04:12	8.68
J14A	1.0680	927.37	07Oct2006, 03:18	10.82
J15	3.3630	1551.73	07Oct2006, 04:42	7.65
J16	4.4980	1650.03	07Oct2006, 04:42	6.42
J17	5.0510	1669.81	07Oct2006, 05:06	5.99
J18	28.1110	4298.27	07Oct2006, 04:36	2.77
J19	29.1080	4353.39	07Oct2006, 04:54	2.77
J1A	8.0120	2386.18	07Oct2006, 00:06	2.88
J2	11.0540	2711.94	07Oct2006, 01:00	2.89
J20	30.7720	4449.18	07Oct2006, 05:24	2.76
J21	31.2750	4394.40	07Oct2006, 05:48	2.76
J22	31.7480	4406.45	07Oct2006, 06:06	2.76
J23	32.8650	4288.37	07Oct2006, 06:48	2.75
J3	12.3940	1327.66	07Oct2006, 02:30	1.35
J4	3.6970	1281.69	06Oct2006, 23:54	3.00
J5	2.6800	594.02	07Oct2006, 01:06	3.06
J6	6.3770	1597.43	07Oct2006, 00:12	2.90
J7	8.8650	1683.32	07Oct2006, 01:06	2.91
J8	21.2590	2869.14	07Oct2006, 02:24	2.00
J9	21.6670	2781.55	07Oct2006, 02:54	2.02

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
R0FR1	4.2010	1327.40	07Oct2006, 00:06	2.80
R0FR5	1.8820	466.21	07Oct2006, 01:24	3.09
R0FR6	2.1240	736.66	07Oct2006, 00:00	2.98
R0FR7	1.1630	427.25	07Oct2006, 00:00	3.02
R0J1	10.0560	2497.19	07Oct2006, 01:00	2.89
R0J10	22.1720	2714.28	07Oct2006, 03:48	2.04
R0J11	22.7110	2735.99	07Oct2006, 04:06	2.06
R0J13	1.7100	738.88	07Oct2006, 04:12	7.35
R0J13A	1.2370	706.45	07Oct2006, 04:00	9.07
R0J14	2.7780	1507.08	07Oct2006, 04:42	8.68
R0J14A	1.0680	825.40	07Oct2006, 04:06	10.82
R0J16	4.4980	1633.88	07Oct2006, 05:06	6.42
R0J18	28.1110	4282.79	07Oct2006, 04:54	2.77
R0J19	29.1080	4325.18	07Oct2006, 05:24	2.77
R0J1A	8.0120	2140.01	07Oct2006, 00:48	2.88
R0J20	30.7720	4361.44	07Oct2006, 05:48	2.76
R0J21	31.2750	4375.79	07Oct2006, 06:06	2.76
R0J22	31.7480	4215.94	07Oct2006, 06:48	2.76
R0J6	6.3770	1232.04	07Oct2006, 01:54	2.90
R0J8	21.2590	2747.40	07Oct2006, 02:54	2.00
R0J9	21.6670	2693.12	07Oct2006, 03:24	2.02

Project: Franco 3-Hour Type II Model Simulation Run: Type II 3-hr storm

Start of Run: 06Oct2006, 12:00 Basin Model: Franco Wash
End of Run: 09Oct2006, 00:00 Meteorologic Model: Type II 3-Hour
Compute Time: 23Jun2008, 12:01:48 Control Specifications: Type II 3-Hour

Volume Units: AC-FT

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
2DJ2FR10	11.0540	1723.00	06Oct2006, 17:45	461.21
2DJ2FR16	Not Specified	1170.60	06Oct2006, 18:45	314.11
2DJ2FR17	Not Specified	777.02	06Oct2006, 18:25	258.05
2DJ4FR11	3.6970	1492.83	06Oct2006, 15:40	336.30
FR1	4.2010	2187.92	06Oct2006, 15:10	429.10
FR10	1.3400	583.38	06Oct2006, 15:45	148.68
FR11	2.4880	1309.75	06Oct2006, 15:15	268.76
FR12	0.4080	363.09	06Oct2006, 14:15	40.95
FR13	0.5050	536.42	06Oct2006, 14:10	55.44
FR14	0.5390	580.41	06Oct2006, 14:05	57.06
FR15	0.3490	322.56	06Oct2006, 14:10	32.49
FR16	1.0680	528.80	06Oct2006, 15:20	111.51
FR17	1.2370	458.93	06Oct2006, 15:50	118.60
FR18	0.4730	597.12	06Oct2006, 13:55	49.26
FR19	0.5850	344.05	06Oct2006, 14:50	59.13
FR2	3.8110	1618.23	06Oct2006, 15:50	421.85
FR20	1.1350	495.88	06Oct2006, 15:30	114.23
FR21	0.5530	702.80	06Oct2006, 13:50	49.67
FR22	0.9970	597.06	06Oct2006, 14:40	91.59
FR23	1.6640	774.06	06Oct2006, 15:15	159.48
FR24	0.5030	454.14	06Oct2006, 14:15	51.14
FR25	0.4730	357.22	06Oct2006, 14:25	47.68
FR26	1.1170	550.23	06Oct2006, 15:05	104.05
FR3	2.0440	1199.66	06Oct2006, 15:00	221.46
FR4	0.9980	497.54	06Oct2006, 15:20	105.67

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
FR5	1.8820	741.93	06Oct2006, 16:10	217.58
FR6	2.1240	1213.28	06Oct2006, 15:05	235.04
FR7	1.1630	720.62	06Oct2006, 15:00	130.77
FR8	0.4100	297.11	06Oct2006, 14:40	46.29
FR9	0.7980	548.70	06Oct2006, 14:45	88.47
J1	10.0560	3980.24	06Oct2006, 15:55	1072.41
J10	22.1720	3112.03	06Oct2006, 18:25	1617.39
J11	22.7110	3060.28	06Oct2006, 18:55	1674.45
J12	23.0600	3029.10	06Oct2006, 19:10	1706.93
J13	1.7100	751.77	06Oct2006, 19:10	425.92
J13A	1.2370	885.08	06Oct2006, 18:20	376.66
J14	2.7780	1735.15	06Oct2006, 19:25	851.54
J14A	1.0680	1206.28	06Oct2006, 18:45	425.62
J15	3.3630	1613.94	06Oct2006, 19:55	910.67
J16	4.4980	1632.93	06Oct2006, 19:55	1024.90
J17	5.0510	1598.77	06Oct2006, 20:15	1074.58
J18	28.1110	4239.14	06Oct2006, 19:45	2781.51
J19	29.1080	4215.71	06Oct2006, 20:00	2873.10
J1A	8.0120	3728.38	06Oct2006, 15:35	850.95
J2	11.0540	4132.95	06Oct2006, 16:15	1178.08
J20	30.7720	4180.21	06Oct2006, 20:30	3032.59
J21	31.2750	4060.16	06Oct2006, 20:50	3083.72
J22	31.7480	4027.17	06Oct2006, 21:10	3131.40
J23	32.8650	3865.05	06Oct2006, 21:35	3235.46
J3	12.3940	1932.47	06Oct2006, 17:45	609.89
J4	3.6970	2026.69	06Oct2006, 15:35	412.10
J5	2.6800	750.71	06Oct2006, 16:15	306.04
J6	6.3770	2220.12	06Oct2006, 15:50	642.35
J7	8.8650	2173.39	06Oct2006, 16:20	911.11
J8	21.2590	3611.72	06Oct2006, 17:40	1521.00
J9	21.6670	3300.58	06Oct2006, 18:05	1561.95
R0FR1	4.2010	2138.81	06Oct2006, 15:30	429.10

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (AC-FT)
R0FR5	1.8820	646.70	06Oct2006, 16:55	217.58
R0FR6	2.1240	1169.83	06Oct2006, 15:40	235.04
R0FR7	1.1630	694.81	06Oct2006, 15:35	130.77
R0J1	10.0560	3807.53	06Oct2006, 16:20	1072.41
R0J10	22.1720	3060.28	06Oct2006, 18:55	1617.39
R0J11	22.7110	3029.10	06Oct2006, 19:10	1674.45
R0J13	1.7100	744.17	06Oct2006, 19:25	425.92
R0J13A	1.2370	751.77	06Oct2006, 19:10	376.66
R0J14	2.7780	1612.96	06Oct2006, 19:55	851.54
R0J14A	1.0680	990.98	06Oct2006, 19:25	425.62
R0J16	4.4980	1598.77	06Oct2006, 20:15	1024.90
R0J18	28.1110	4215.50	06Oct2006, 20:00	2781.51
R0J19	29.1080	4171.69	06Oct2006, 20:30	2873.10
R0J1A	8.0120	3316.29	06Oct2006, 16:10	850.95
R0J20	30.7720	4060.16	06Oct2006, 20:50	3032.59
R0J21	31.2750	4027.17	06Oct2006, 21:10	3083.72
R0J22	31.7480	3864.82	06Oct2006, 21:35	3131.40
R0J6	6.3770	1575.80	06Oct2006, 17:00	642.35
R0J8	21.2590	3300.31	06Oct2006, 18:05	1521.00
R0J9	21.6670	3112.03	06Oct2006, 18:25	1561.95

Project: Franco 3-Hour Type II Model Simulation Run: Type II 3-hr storm

Start of Run: 06Oct2006, 12:00 Basin Model: Franco Wash
End of Run: 09Oct2006, 00:00 Meteorologic Model: Type II 3-Hour
Compute Time: 23Jun2008, 13:13:30 Control Specifications: Type II 3-Hour

Volume Units: IN

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
2DJ2FR10	11.0540	1723.00	06Oct2006, 17:45	0.78
2DJ2FR16	Not Specified	1170.60	06Oct2006, 18:45	
2DJ2FR17	Not Specified	777.02	06Oct2006, 18:25	
2DJ4FR11	3.6970	1492.83	06Oct2006, 15:40	1.71
FR1	4.2010	2187.92	06Oct2006, 15:10	1.92
FR10	1.3400	583.38	06Oct2006, 15:45	2.08
FR11	2.4880	1309.75	06Oct2006, 15:15	2.03
FR12	0.4080	363.09	06Oct2006, 14:15	1.88
FR13	0.5050	536.42	06Oct2006, 14:10	2.06
FR14	0.5390	580.41	06Oct2006, 14:05	1.98
FR15	0.3490	322.56	06Oct2006, 14:10	1.75
FR16	1.0680	528.80	06Oct2006, 15:20	1.96
FR17	1.2370	458.93	06Oct2006, 15:50	1.80
FR18	0.4730	597.12	06Oct2006, 13:55	1.95
FR19	0.5850	344.05	06Oct2006, 14:50	1.90
FR2	3.8110	1618.23	06Oct2006, 15:50	2.08
FR20	1.1350	495.88	06Oct2006, 15:30	1.89
FR21	0.5530	702.80	06Oct2006, 13:50	1.68
FR22	0.9970	597.06	06Oct2006, 14:40	1.72
FR23	1.6640	774.06	06Oct2006, 15:15	1.80
FR24	0.5030	454.14	06Oct2006, 14:15	1.91
FR25	0.4730	357.22	06Oct2006, 14:25	1.89
FR26	1.1170	550.23	06Oct2006, 15:05	1.75
FR3	2.0440	1199.66	06Oct2006, 15:00	2.03
FR4	0.9980	497.54	06Oct2006, 15:20	1.99

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
FR5	1.8820	741.93	06Oct2006, 16:10	2.17
FR6	2.1240	1213.28	06Oct2006, 15:05	2.07
FR7	1.1630	720.62	06Oct2006, 15:00	2.11
FR8	0.4100	297.11	06Oct2006, 14:40	2.12
FR9	0.7980	548.70	06Oct2006, 14:45	2.08
J1	10.0560	3980.24	06Oct2006, 15:55	2.00
J10	22.1720	3112.03	06Oct2006, 18:25	1.37
J11	22.7110	3060.28	06Oct2006, 18:55	1.38
J12	23.0600	3029.10	06Oct2006, 19:10	1.39
J13	1.7100	751.77	06Oct2006, 19:10	4.67
J13A	1.2370	885.08	06Oct2006, 18:20	5.71
J14	2.7780	1735.15	06Oct2006, 19:25	5.75
J14A	1.0680	1206.28	06Oct2006, 18:45	7.47
J15	3.3630	1613.94	06Oct2006, 19:55	5.08
J16	4.4980	1632.93	06Oct2006, 19:55	4.27
J17	5.0510	1598.77	06Oct2006, 20:15	3.99
J18	28.1110	4239.14	06Oct2006, 19:45	1.86
J19	29.1080	4215.71	06Oct2006, 20:00	1.85
J1A	8.0120	3728.38	06Oct2006, 15:35	1.99
J2	11.0540	4132.95	06Oct2006, 16:15	2.00
J20	30.7720	4180.21	06Oct2006, 20:30	1.85
J21	31.2750	4060.16	06Oct2006, 20:50	1.85
J22	31.7480	4027.17	06Oct2006, 21:10	1.85
J23	32.8650	3865.05	06Oct2006, 21:35	1.85
J3	12.3940	1932.47	06Oct2006, 17:45	0.92
J4	3.6970	2026.69	06Oct2006, 15:35	2.09
J5	2.6800	750.71	06Oct2006, 16:15	2.14
J6	6.3770	2220.12	06Oct2006, 15:50	1.89
J7	8.8650	2173.39	06Oct2006, 16:20	1.93
J8	21.2590	3611.72	06Oct2006, 17:40	1.34
J9	21.6670	3300.58	06Oct2006, 18:05	1.35
R0FR1	4.2010	2138.81	06Oct2006, 15:30	1.92

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
R0FR5	1.8820	646.70	06Oct2006, 16:55	2.17
R0FR6	2.1240	1169.83	06Oct2006, 15:40	2.07
R0FR7	1.1630	694.81	06Oct2006, 15:35	2.11
R0J1	10.0560	3807.53	06Oct2006, 16:20	2.00
R0J10	22.1720	3060.28	06Oct2006, 18:55	1.37
R0J11	22.7110	3029.10	06Oct2006, 19:10	1.38
R0J13	1.7100	744.17	06Oct2006, 19:25	4.67
R0J13A	1.2370	751.77	06Oct2006, 19:10	5.71
R0J14	2.7780	1612.96	06Oct2006, 19:55	5.75
R0J14A	1.0680	990.98	06Oct2006, 19:25	7.47
R0J16	4.4980	1598.77	06Oct2006, 20:15	4.27
R0J18	28.1110	4215.50	06Oct2006, 20:00	1.86
R0J19	29.1080	4171.69	06Oct2006, 20:30	1.85
R0J1A	8.0120	3316.29	06Oct2006, 16:10	1.99
R0J20	30.7720	4060.16	06Oct2006, 20:50	1.85
R0J21	31.2750	4027.17	06Oct2006, 21:10	1.85
R0J22	31.7480	3864.82	06Oct2006, 21:35	1.85
R0J6	6.3770	1575.80	06Oct2006, 17:00	1.89
R0J8	21.2590	3300.31	06Oct2006, 18:05	1.34
R0J9	21.6670	3112.03	06Oct2006, 18:25	1.35

FRANCO WASH HYDROLOGIC PARAMETERS

Basin	D.A. (sq miles)	D.A. (acres)	CN	Tc (min)	T(lag)	Imp %
FR1	4.201	2689	85.2	152.0	91.2	3.3
FR2	3.811	2439	85.8	214.8	128.9	11.5
FR3	2.044	1308	86.6	141.0	84.6	3.9
FR4	0.998	639	85.6	167.9	100.7	6.1
FR5	1.882	1205	88.7	248.0	148.8	1.0
FR6	2.124	1360	87.6	150.3	90.2	1.0
FR7	1.163	744	88.0	138.5	83.1	1.0
FR8	0.410	263	88.1	113.7	68.2	2.6
FR9	0.798	511	87.0	118.3	71.0	5.1
FR10	1.340	858	87.5	210.5	126.3	2.1
FR11	2.488	1592	87.0	161.8	97.1	1.0
FR12	0.408	261	85.2	73.6	44.2	1.0
FR13	0.505	323	87.4	65.8	39.5	1.0
FR14	0.539	345	85.8	60.6	36.4	5.0
FR15	0.349	223	83.4	62.5	37.5	1.0
FR16	1.068	683	85.9	166.8	100.1	2.5
FR17	1.237	791	84.1	213.9	128.3	1.0
FR18	0.473	303	86.1	47.2	28.3	1.0
FR19	0.585	375	84.6	127.7	76.6	1.0
FR20	1.135	727	83.6	185.0	111.0	9.1
FR21	0.553	354	82.0	36.8	22.1	3.4
FR22	0.997	687	82.8	110.0	66.0	2.3
FR23	1.664	1065	83.1	161.2	96.7	5.6
FR24	0.503	322	82.3	71.1	42.7	15.5
FR25	0.473	418	81.7	89.5	53.7	16.7
FR26	1.117	715	83.2	144.9	86.9	2.0

Total A **32.866**

FRANCO WASH SUBREACH DATA

Reach	Length (ft)	Qp(cfs)	Avg (fps)	L/(V(min)*6)	Modified
ROFR1	11250	1400	7.7	4	
ROJ1A	8900	2400	5.2	5	(1)
ROJ1	5690	2600	4.7	3	(1)
ROFR5	7340	500	2.6	8	(1)
ROFR6	7150	750	3.8	5	
ROFR7	7415	450	3.1	7	
ROJ6	16725	1600	3.9	12	(1)
ROJ8	3510	2800	3.9	2	(1)
ROJ9	5925	2800	3.6	5	(1)
ROJ10	5770	2800	4.3	4	
ROJ11	6590	2800	7.5	2	
ROJ13A	5150	800	3.0	5	(1)
ROJ13	2060	800	3.0	2	
ROJ14A	4510	800	3.6	3	(1)
ROJ14	4130	1600	3.0	4	(1)
ROJ16	5225	1600	5.9	2	
ROJ18	5730	4300	6.2	3	
ROJ19	8195	4300	5.9	4	
ROJ20	3665	4300	4.6	2	(1)
ROJ21	3040	4300	4.8	2	
ROJ22	8890	4300	6.5	4	(1)

(1) - Subreach assumed as one subreach

FRANCO WASH ROUTING REACH DATA

Q (cfs)	R0FR1 Storage (Acre-feet)
100.0	9.6
200.0	15.8
300.0	21.7
400.0	27.1
500.0	32.3
600.0	37.8
800.0	46.8
1000.0	55.1
1200.0	63.5
1400.0	72.2
1600.0	80.9
1800.0	87.8
2000.0	94.5

Q (cfs)	R0FR5 Storage (Acre-feet)
50	8.41
100	14.34
150	18.96
200	22.68
250	26.25
300	29.66
400	36.06
500	42.05
600	48.33
700	54.44
800	59.4

Q (cfs)	R0FR6 Storage (Acre-feet)
75	6.03
150	10.92
225	15.13
300	18.83
375	22.05
450	25.18
525	28.22
600	31.23
675	34.24
750	37.33
900	43.1
1000	46.9

Q (cfs)	R0FR7 Storage (Acre-feet)
50	4.51
100	7.87
150	10.75
200	13.19
250	16.39
300	19.19
350	21.96
400	24.94
450	27.09
500	29.6
600	34.7

Q (cfs)	R0J1 Storage (Acre-feet)	R0J1A Storage (Acre-feet)
200	11.8	20.9
400	21.2	35.6
600	29.1	51.4
800	36.4	64.4
1000	43.3	76.1
1200	50.2	87.1
1400	56.5	105.0
1600	62.8	122.6
2000	75.8	142.1
2400	88.2	152.7
2600	93.3	162.4
2800	98.8	170.9
3000	104.1	180.1

Q (cfs)	R0J6 Storage (Acre-feet)
200	39.55
400	70.00
600	98.23
800	124.49
1000	150.65
1100	163.52
1200	176.62
1300	188.72
1400	194.74
1500	206.98
1600	214.60

Q (cfs)	R0J8 Storage (Acre-feet)	R0J9 Storage (Acre-feet)	R0J10 Storage (Acre-feet)	R0J11 Storage (Acre-feet)
300	13.0	21.0	16.31	11.35
600	23.1	36.7	31.08	18.98
900	32.5	51.0	44.87	25.84
1200	41.4	63.7	57.45	32.20
1500	49.5	75.2	68.88	38.34
1800	57.5	85.8	80.72	44.40
2100	65.4	96.0	91.92	50.16
2300	70.8	102.5	99.41	54.59
2600	77.9	112.1	111.51	60.28
2700	80.9	115.2	114.81	62.59
2800	83.2	118.2	118.72	65.25

FRANCO WASH ROUTING REACH DATA

Q (cfs)	R0J13A Storage (Acre-feet)	R0J13 Storage (Acre-feet)	R0J14A Storage (Acre-feet)
100	7.2	3.5	6.2
200	12.6	6.2	10.9
300	17.7	9.0	15.5
400	22.1	11.4	19.6
500	26.3	13.7	23.3
600	30.0	15.8	26.9
700	33.6	17.6	30.3
800	37.3	19.4	33.5
900	40.5	20.8	36.6
1000	43.8	22.3	39.8
1100	46.9	23.6	43.5

Q (cfs)	R0J14 Storage (Acre-feet)	R0J16 Storage (Acre-feet)
200.0	14.7	6.59
400.0	24.9	11.07
600.0	33.6	15.1
800.0	41.3	19.06
1000.0	48.1	23.28
1200.0	54.9	27.56
1300.0	58.5	30.14
1400.0	61.5	32.88
1500.0	64.4	35.59
1600.0	67.4	38.32
1700.0	70.3	41.2

Q (cfs)	R0J18 Storage (Acre-feet)	R0J19 Storage (Acre-feet)	R0J20 Storage (Acre-feet)	R0J21 Storage (Acre-feet)
400	21.6	26.4	9.6	23.00
800	36.3	50.5	20.2	37.47
1200	48.2	74.2	33.2	49.70
1600	58.9	96.4	50.4	61.38
2000	68.5	116.3	68.7	72.67
2400	78.5	136.2	91.1	85.53
2800	88.7	154.1	120.3	95.86
3200	94.9	171.3	161.0	105.87
3600	103.2	187.7	206.0	116.88
4000	112.1	202.9	217.8	126.01
4500	124.0	221.5	231.3	136.34

Q (cfs)	R0J22 Storage (Acre-feet)
1000	117.81
2000	201.66
2500	236.02
3000	266.52
3500	295.39
4000	323.13
4500	353.18
5000	377.72
5500	401.35
6000	424.29

FRANCO WASH
TIME OF CONCENTRATION DATA

DA	Ovlnd S	Ovlnd n	SC L	SC S	Chnl A	Chnl P	Chnl L	Chnl S	Chnl n	A/P	Reach	Tc	T(lag)
FR1	0.080	0.3	950	0.036	16.0	15.7	1550	0.022	0.035	1.02	1		
					39.0	63.0	3300	0.022	0.045	0.62	2		
					25.0	38.0	7500	0.012	0.045	0.66	3		
					22.0	14.0	6300	0.013	0.045	1.57	4		
					39.0	22.0	5700	0.011	0.045	1.77	5		
					15.0	13.0	3300	0.012	0.05	1.15	6		
					32.0	24.0	3900	0.012	0.045	1.33	7	152	91.2
FR2	0.060	0.15	920	0.059	12.9	17.3	2050	0.026	0.035	0.75	1		
					18.4	27.2	1650	0.017	0.045	0.68	2		
					19.5	29.1	3150	0.012	0.035	0.67	3		
					32.8	125.1	3600	0.016	0.045	0.26	4		
					39.8	58.1	7350	0.012	0.045	0.69	5		
					25.0	50.0	3600	0.013	0.045	0.50	6		
					35.6	76.3	6000	0.009	0.045	0.47	7		
					210.5	67.1	5500	0.007	0.05	3.14	8	214.8	128.9
FR3	0.020	0.15	3020	0.015	20.1	90.0	2300	0.017	0.05	0.22	1		
					20.4	31.7	3700	0.010	0.035	0.64	2		
					82.1	42.9	8900	0.011	0.035	1.91	3		
					122.6	80.3	8300	0.008	0.045	1.53	4	141	84.6
FR4	0.020	0.15	2100	0.010	55.1	173.6	6700	0.006	0.05	0.32	1		
					57.1	108.3	3100	0.008	0.05	0.53	2	167.9	100.7
FR5	0.010	0.15	2860	0.013	25.6	69.0	3700	0.017	0.05	0.37	1		
					12.6	43.0	9700	0.013	0.05	0.29	2		
					10.0	**20.0**	8600	0.011	0.045	0.50	3	248	148.8
FR6	0.010	0.15	2860	0.015	38.5	58.4	1700	0.014	0.05	0.66	1		
					77.8	94.2	7500	0.014	0.05	0.83	2		
					84.3	94.1	5700	0.015	0.045	0.90	3		
					52.4	78.1	5600	0.012	0.045	0.67	4	150.3	90.2
FR7	0.020	0.15	1090	0.017	13.9	40	2700	0.015	0.035	0.35	1		
					16.5	63.2	6100	0.014	0.045	0.26	2		
					15.9	25.6	6000	0.013	0.045	0.62	3	138.5	83.1
FR8	0.015	0.15	1550	0.015	6.8	33	6000	0.010	0.045	0.21	1	113.7	68.2
FR9	0.020	0.15	2910	0.012	19.6	62.3	1160	0.028	0.05	0.31	1		
					10	**20**	3500	0.007	0.03	0.50	2		
					10	**20**	5100	0.009	0.05	0.50	3	118.3	71.0
FR10	0.020	0.15	4550	0.010	21.5	37.6	5800	0.010	0.045	0.57	1		
					18.7	36	6700	0.010	0.045	0.52	2		
					16.4	33	6000	0.009	0.05	0.50	3	210.5	126.3

Area/W. Perimeter in bold - A/P assumed as 0.5 where no channel definition evident from LIDAR data

FRANCO WATERSHED
TIME OF CONCENTRATION DATA

DA	Ovlnd S	Ovlnd n	SC L	SC S	Chnl A	Chnl P	Chnl L	Chnl S	Chnl n	A/P	Reach	Tc	T(lag)
FR11	0.010	0.15	2050	0.010	**10**	**20**	4600	0.010	0.035	0.5	1		
					10	**20**	3800	0.011	0.050	0.5	2		
					49.3	35.3	4000	0.010	0.045	1.397	3		
					28.2	40.6	4900	0.008	0.050	0.695	4	161.8	97.1
FR12	0.013	0.15	1900	0.012	34.7	81.5	2600	0.010	0.050		1		
					38.7	31.5	2400	0.006	0.050	1.229	2	73.6	44.2
FR13	0.060	0.15	1200	0.015	**10**	**20**	4800	0.008	0.050	0.5	1	65.8	39.5
FR14	0.022	0.15	1750	0.015	40	39.6	3100	0.011	0.050	1.01	1		
					36.9	63.5	2400	0.006	0.035	0.581	2	60.6	36.4
FR15	0.014	0.15	2790	0.014	39.8	42.4	5200	0.008	0.035	0.939	1	62.5	37.5
FR16	0.012	0.15	2140	0.013	52.2	76.5	4600	0.010	0.035	0.682	1		
					10	20	4400	0.009	0.050	0.5	2		
					17.6	32.4	8000	0.008	0.045	0.543	3	166.8	100.1
FR17	0.020	0.15	3150	0.011	23.1	40.7	5000	0.008	0.035	0.568	1		
					32.2	83.9	10900	0.010	0.045	0.384	2		
					21.5	39.9	3800	0.007	0.045	0.539	3	213.9	128.3
FR18	0.050	0.15	1920	0.013	56.8	60.7	3600	0.008	0.045	0.936	1	47.2	28.3
FR19	0.010	0.15	2950	0.013	34.2	81.2	6000	0.005	0.050	0.421	1	127.7	76.6
FR20	0.010	0.15	2890	0.009	**10**	**20**	1300	0.008	0.050	0.5	1		
					42.7	69.3	6000	0.009	0.030	0.616	2		
					12.6	50	4500	0.008	0.050	0.252	3		
					43.1	40.5	3900	0.006	0.045	1.064	4	185	111.0
FR21	0.010	0.15	2400	0.030	42.8	25.8	2800	0.017	0.035	1.659	1	36.8	22.1
FR22	0.020	0.15	2590	0.014	19.2	54	5100	0.010	0.050	0.356	1		
					73.3	59.5	2900	0.003	0.035	1.232	2	110	66.0
FR23	0.033	0.15	2940	0.010	**10**	**20**	3300	0.009	0.045	0.5	1		
					13.9	38.8	7000	0.007	0.050	0.358	2	161.2	96.7
FR24	0.015	0.15	3150	0.010	12.4	47.3	1200	0.010	0.050	0.262	1		
					58.2	30	2300	0.005	0.035	1.94	2	71.1	42.7
FR25	0.020	0.15	2820	0.014	**10**	**20**	2700	0.010	0.050	0.5	1		
					42.8	88.5	2200	0.004	0.045	0.484	2	89.5	53.7
FR26	0.003	0.15	2730	0.008	48.6	53.3	1900	0.012	0.045	0.912	1		
					24.5	119.6	3300	0.010	0.050	0.205	2		
					88.7	82.8	4400	0.006	0.040	1.071	3	144.9	86.9

Area/W. Perimeter in bold - A/P assumed as 0.5 where no channel definition evident from LIDAR data

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR1

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .08 ft/ft, n = .3, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 950 ft, S = .036 ft/ft, UNPAVED surface
     Travel time = 5.2 minutes

 Segment 3: CHANNEL FLOW
     A = 16 ft^2, P = 15.7 ft, L = 1550 ft, S = .022 ft/ft, n = .035
     Travel Time = 4 minutes

 Segment 4: CHANNEL FLOW
     A = 39 ft^2, P = 63 ft, L = 3300 ft, S = .022 ft/ft, n = .045
     Travel Time = 15.4 minutes

 Segment 5: CHANNEL FLOW
     A = 25 ft^2, P = 38 ft, L = 7500 ft, S = .012 ft/ft, n = .045
     Travel Time = 45.6 minutes

 Segment 6: CHANNEL FLOW
     A = 22 ft^2, P = 14 ft, L = 6300 ft, S = .013 ft/ft, n = .045
     Travel Time = 20.6 minutes

 Segment 7: CHANNEL FLOW
     A = 39 ft^2, P = 22 ft, L = 5700 ft, S = .011 ft/ft, n = .045
     Travel Time = 18.7 minutes

 Segment 8: CHANNEL FLOW
     A = 15 ft^2, P = 13 ft, L = 3300 ft, S = .012 ft/ft, n = .05
     Travel Time = 15.3 minutes

 Segment 9: CHANNEL FLOW
     A = 32 ft^2, P = 24 ft, L = 3900 ft, S = .012 ft/ft, n = .045
     Travel Time = 14.8 minutes

TOTAL TRAVEL TIME = 152 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR2

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .06 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 8 minutes

 Segment 2: CONCENTRATED FLOW
     L = 920 ft, S = .059 ft/ft, UNPAVED surface
     Travel time = 3.9 minutes

 Segment 3: CHANNEL FLOW
     A = 12.9 ft^2, P = 17.3 ft, L = 2050 ft, S = .026 ft/ft, n = .035
     Travel Time = 6.1 minutes

 Segment 4: CHANNEL FLOW
     A = 18.4 ft^2, P = 27.2 ft, L = 1650 ft, S = .017 ft/ft, n = .045
     Travel Time = 8.3 minutes

 Segment 5: CHANNEL FLOW
     A = 19.5 ft^2, P = 29.1 ft, L = 3150 ft, S = .012 ft/ft, n = .035
     Travel Time = 14.7 minutes

 Segment 6: CHANNEL FLOW
     A = 32.8 ft^2, P = 125.1 ft, L = 3600 ft, S = .016 ft/ft, n = .045
     Travel Time = 35 minutes

 Segment 7: CHANNEL FLOW
     A = 39.8 ft^2, P = 58.1 ft, L = 7350 ft, S = .012 ft/ft, n = .045
     Travel Time = 43.5 minutes

 Segment 8: CHANNEL FLOW
     A = 25 ft^2, P = 50 ft, L = 3600 ft, S = .013 ft/ft, n = .045
     Travel Time = 25.2 minutes

 Segment 9: CHANNEL FLOW
     A = 35.6 ft^2, P = 76.3 ft, L = 6000 ft, S = .009 ft/ft, n = .045
     Travel Time = 52.9 minutes

 Segment 10: CHANNEL FLOW
     A = 210.5 ft^2, P = 67.1 ft, L = 5500 ft, S = .007 ft/ft, n = .05
     Travel Time = 17.1 minutes

TOTAL TRAVEL TIME = 214.8 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR3

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 3020 ft, S = .015 ft/ft, UNPAVED surface
     Travel time = 25.5 minutes

 Segment 3: CHANNEL FLOW
     A = 20.1 ft^2, P = 90 ft, L = 2300 ft, S = .017 ft/ft, n = .05
     Travel Time = 26.8 minutes

 Segment 4: CHANNEL FLOW
     A = 20.4 ft^2, P = 31.7 ft, L = 3700 ft, S = .01 ft/ft, n = .035
     Travel Time = 19.4 minutes

 Segment 5: CHANNEL FLOW
     A = 82.1 ft^2, P = 42.9 ft, L = 8900 ft, S = .011 ft/ft, n = .035
     Travel Time = 21.5 minutes

 Segment 6: CHANNEL FLOW
     A = 122.6 ft^2, P = 80.3 ft, L = 8300 ft, S = .008 ft/ft, n = .045
     Travel Time = 35.2 minutes

TOTAL TRAVEL TIME = 141 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR4

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2100 ft, S = .01 ft/ft, UNPAVED surface
     Travel time = 21.7 minutes

 Segment 3: CHANNEL FLOW
     A = 55.1 ft^2, P = 173.6 ft, L = 6700 ft, S = .006 ft/ft, n = .05
     Travel Time = 104 minutes

 Segment 4: CHANNEL FLOW
     A = 57.1 ft^2, P = 108.3 ft, L = 3100 ft, S = .008 ft/ft, n = .05
     Travel Time = 29.7 minutes

TOTAL TRAVEL TIME = 167.9 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR5

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .01 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 16.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2860 ft, S = .013 ft/ft, UNPAVED surface
     Travel time = 25.9 minutes

 Segment 3: CHANNEL FLOW
     A = 25.6 ft^2, P = 69 ft, L = 3700 ft, S = .017 ft/ft, n = .05
     Travel Time = 30.7 minutes

 Segment 4: CHANNEL FLOW
     A = 12.6 ft^2, P = 43 ft, L = 9700 ft, S = .013 ft/ft, n = .05
     Travel Time = 107.9 minutes

 Segment 5: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 8600 ft, S = .013 ft/ft, n = .05
     Travel Time = 67 minutes

TOTAL TRAVEL TIME = 248 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR6

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .01 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 16.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2860 ft, S = .015 ft/ft, UNPAVED surface
     Travel time = 24.1 minutes

 Segment 3: CHANNEL FLOW
     A = 38.5 ft^2, P = 58.4 ft, L = 1700 ft, S = .014 ft/ft, n = .05
     Travel Time = 10.6 minutes

 Segment 4: CHANNEL FLOW
     A = 77.8 ft^2, P = 94.2 ft, L = 7500 ft, S = .014 ft/ft, n = .05
     Travel Time = 40.3 minutes

 Segment 5: CHANNEL FLOW
     A = 84.3 ft^2, P = 94.1 ft, L = 5700 ft, S = .015 ft/ft, n = .045
     Travel Time = 25.2 minutes

 Segment 6: CHANNEL FLOW
     A = 52.4 ft^2, P = 78.1 ft, L = 5600 ft, S = .012 ft/ft, n = .045
     Travel Time = 33.6 minutes

TOTAL TRAVEL TIME = 150.3 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR7

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1090 ft, S = .017 ft/ft, UNPAVED surface
     Travel time = 8.6 minutes

 Segment 3: CHANNEL FLOW
     A = 13.9 ft^2, P = 40 ft, L = 2700 ft, S = .015 ft/ft, n = .035
     Travel Time = 17.5 minutes

 Segment 4: CHANNEL FLOW
     A = 16.5 ft^2, P = 63.2 ft, L = 6100 ft, S = .014 ft/ft, n = .045
     Travel Time = 63.6 minutes

 Segment 5: CHANNEL FLOW
     A = 15.9 ft^2, P = 25.6 ft, L = 6000 ft, S = .013 ft/ft, n = .045
     Travel Time = 36.4 minutes

TOTAL TRAVEL TIME = 138.5 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR8

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .015 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 14 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1550 ft, S = .015 ft/ft, UNPAVED surface
     Travel time = 13.1 minutes

 Segment 3: CHANNEL FLOW
     A = 6.8 ft^2, P = 33 ft, L = 6000 ft, S = .01 ft/ft, n = .045
     Travel Time = 86.6 minutes

TOTAL TRAVEL TIME = 113.7 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR9

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2910 ft, S = .012 ft/ft, UNPAVED surface
     Travel time = 27.4 minutes

 Segment 3: CHANNEL FLOW
     A = 19.6 ft^2, P = 62.3 ft, L = 1160 ft, S = .028 ft/ft, n = .05
     Travel Time = 8.4 minutes

 Segment 4: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 3500 ft, S = .007 ft/ft, n = .03
     Travel Time = 22.3 minutes

 Segment 5: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 5100 ft, S = .009 ft/ft, n = .05
     Travel Time = 47.7 minutes

TOTAL TRAVEL TIME = 118.3 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR10

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 4550 ft, S = .01 ft/ft, UNPAVED surface
     Travel time = 47 minutes

 Segment 3: CHANNEL FLOW
     A = 21.5 ft^2, P = 37.6 ft, L = 5800 ft, S = .01 ft/ft, n = .045
     Travel Time = 42.4 minutes

 Segment 4: CHANNEL FLOW
     A = 18.7 ft^2, P = 36 ft, L = 6700 ft, S = .01 ft/ft, n = .045
     Travel Time = 52.2 minutes

 Segment 5: CHANNEL FLOW
     A = 16.4 ft^2, P = 33 ft, L = 6000 ft, S = .009 ft/ft, n = .05
     Travel Time = 56.4 minutes

TOTAL TRAVEL TIME = 210.5 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR11

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .01 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 16.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2050 ft, S = .01 ft/ft, UNPAVED surface
     Travel time = 21.2 minutes

 Segment 3: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 4600 ft, S = .01 ft/ft, n = .045
     Travel Time = 36.8 minutes

 Segment 4: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 3800 ft, S = .011 ft/ft, n = .05
     Travel Time = 32.2 minutes

 Segment 5: CHANNEL FLOW
     A = 49.3 ft^2, P = 35.3 ft, L = 4000 ft, S = .01 ft/ft, n = .045
     Travel Time = 16.1 minutes

 Segment 6: CHANNEL FLOW
     A = 28.2 ft^2, P = 40.6 ft, L = 4900 ft, S = .008 ft/ft, n = .05
     Travel Time = 39.1 minutes

TOTAL TRAVEL TIME = 161.8 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR12

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .013 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 14.8 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1900 ft, S = .012 ft/ft, UNPAVED surface
     Travel time = 17.9 minutes

 Segment 3: CHANNEL FLOW
     A = 34.7 ft^2, P = 81.5 ft, L = 2600 ft, S = .01 ft/ft, n = .05
     Travel Time = 25.7 minutes

 Segment 4: CHANNEL FLOW
     A = 38.7 ft^2, P = 31.5 ft, L = 2400 ft, S = .006 ft/ft, n = .05
     Travel Time = 15.1 minutes

TOTAL TRAVEL TIME = 73.6 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR13

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .06 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 8 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1200 ft, S = .015 ft/ft, UNPAVED surface
     Travel time = 10.1 minutes

 Segment 3: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 4800 ft, S = .008 ft/ft, n = .05
     Travel Time = 47.7 minutes

TOTAL TRAVEL TIME = 65.8 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR14

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .022 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1750 ft, S = .015 ft/ft, UNPAVED surface
     Travel time = 14.8 minutes

 Segment 3: CHANNEL FLOW
     A = 40 ft^2, P = 39.6 ft, L = 3100 ft, S = .011 ft/ft, n = .05
     Travel Time = 16.4 minutes

 Segment 4: CHANNEL FLOW
     A = 36.9 ft^2, P = 63.5 ft, L = 2400 ft, S = .006 ft/ft, n = .035
     Travel Time = 17.4 minutes

TOTAL TRAVEL TIME = 60.6 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR15

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .014 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 14.4 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2790 ft, S = .014 ft/ft, UNPAVED surface
     Travel time = 24.4 minutes

 Segment 3: CHANNEL FLOW
     A = 39.8 ft^2, P = 42.4 ft, L = 5200 ft, S = .008 ft/ft, n = .035
     Travel Time = 23.7 minutes

TOTAL TRAVEL TIME = 62.5 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR16

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .012 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 15.3 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2140 ft, S = .013 ft/ft, UNPAVED surface
     Travel time = 19.4 minutes

 Segment 3: CHANNEL FLOW
     A = 52.2 ft^2, P = 76.5 ft, L = 4600 ft, S = .01 ft/ft, n = .035
     Travel Time = 23.2 minutes

 Segment 4: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 4400 ft, S = .009 ft/ft, n = .05
     Travel Time = 41.2 minutes

 Segment 5: CHANNEL FLOW
     A = 17.6 ft^2, P = 32.4 ft, L = 8000 ft, S = .008 ft/ft, n = .045
     Travel Time = 67.6 minutes

TOTAL TRAVEL TIME = 166.8 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR17

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 3150 ft, S = .011 ft/ft, UNPAVED surface
     Travel time = 31 minutes

 Segment 3: CHANNEL FLOW
     A = 23.1 ft^2, P = 40.7 ft, L = 5000 ft, S = .008 ft/ft, n = .035
     Travel Time = 31.9 minutes

 Segment 4: CHANNEL FLOW
     A = 32.2 ft^2, P = 83.9 ft, L = 10900 ft, S = .01 ft/ft, n = .045
     Travel Time = 103.9 minutes

 Segment 5: CHANNEL FLOW
     A = 21.5 ft^2, P = 39.9 ft, L = 3800 ft, S = .007 ft/ft, n = .045
     Travel Time = 34.5 minutes

TOTAL TRAVEL TIME = 213.9 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR18

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .05 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 8.7 minutes

 Segment 2: CONCENTRATED FLOW
     L = 1920 ft, S = .013 ft/ft, UNPAVED surface
     Travel time = 17.4 minutes

 Segment 3: CHANNEL FLOW
     A = 56.8 ft^2, P = 60.7 ft, L = 3600 ft, S = .008 ft/ft, n = .045
     Travel Time = 21.2 minutes

TOTAL TRAVEL TIME = 47.2 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR19

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .01 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 16.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2950 ft, S = .013 ft/ft, UNPAVED surface
     Travel time = 26.7 minutes

 Segment 3: CHANNEL FLOW
     A = 34.2 ft^2, P = 81.2 ft, L = 6000 ft, S = .005 ft/ft, n = .05
     Travel Time = 84.5 minutes

TOTAL TRAVEL TIME = 127.7 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR20

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .01 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 16.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2890 ft, S = .009 ft/ft, UNPAVED surface
     Travel time = 31.5 minutes

 Segment 3: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 1300 ft, S = .008 ft/ft, n = .05
     Travel Time = 12.9 minutes

 Segment 4: CHANNEL FLOW
     A = 42.7 ft^2, P = 69.3 ft, L = 6000 ft, S = .009 ft/ft, n = .03
     Travel Time = 29.3 minutes

 Segment 5: CHANNEL FLOW
     A = 12.6 ft^2, P = 50 ft, L = 4500 ft, S = .008 ft/ft, n = .05
     Travel Time = 70.6 minutes

 Segment 6: CHANNEL FLOW
     A = 43.1 ft^2, P = 40.5 ft, L = 3900 ft, S = .006 ft/ft, n = .045
     Travel Time = 24.3 minutes

TOTAL TRAVEL TIME = 185 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR21

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .01 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 16.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2400 ft, S = .03 ft/ft, UNPAVED surface
     Travel time = 14.3 minutes

 Segment 3: CHANNEL FLOW
     A = 42.8 ft^2, P = 25.8 ft, L = 2800 ft, S = .017 ft/ft, n = .035
     Travel Time = 6 minutes

TOTAL TRAVEL TIME = 36.8 min.
```

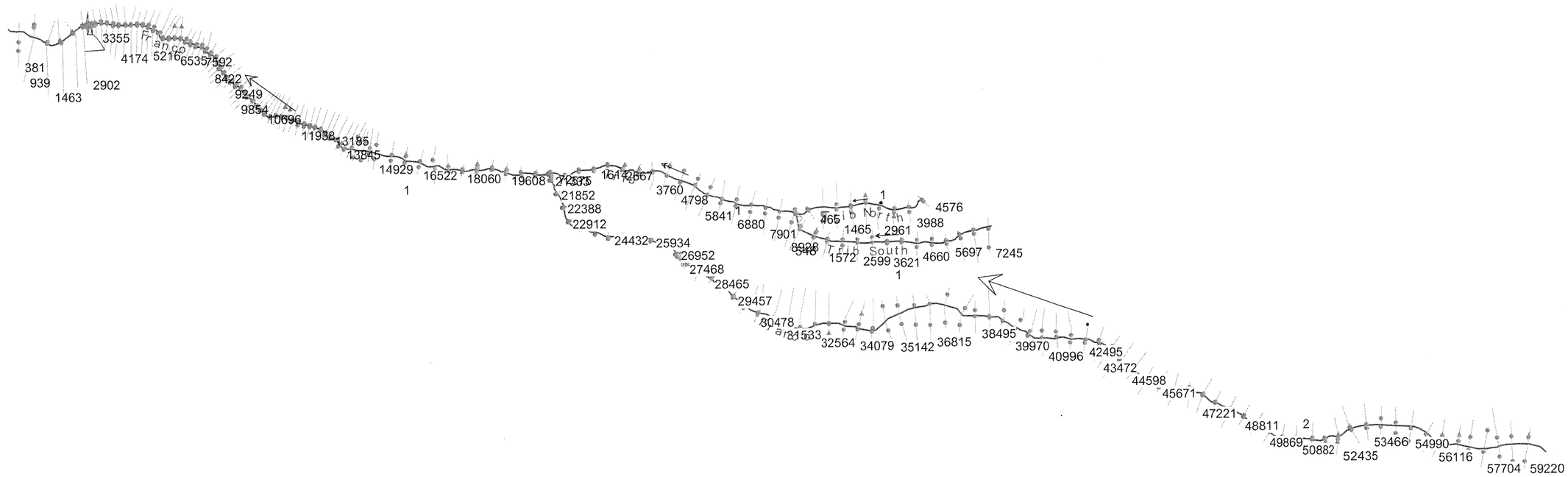
```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR22

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2590 ft, S = .014 ft/ft, UNPAVED surface
     Travel time = 22.6 minutes

 Segment 3: CHANNEL FLOW
     A = 19.2 ft^2, P = 54 ft, L = 5100 ft, S = .01 ft/ft, n = .05
     Travel Time = 56.9 minutes

 Segment 4: CHANNEL FLOW
     A = 73.3 ft^2, P = 59.5 ft, L = 2900 ft, S = .003 ft/ft, n = .035
     Travel Time = 18 minutes

TOTAL TRAVEL TIME = 110 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR23

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .033 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 10.2 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2940 ft, S = .01 ft/ft, UNPAVED surface
     Travel time = 30.4 minutes

 Segment 3: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 3300 ft, S = .009 ft/ft, n = .045
     Travel Time = 27.8 minutes

 Segment 4: CHANNEL FLOW
     A = 13.9 ft^2, P = 38.8 ft, L = 7000 ft, S = .007 ft/ft, n = .05
     Travel Time = 92.8 minutes

TOTAL TRAVEL TIME = 161.2 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR24

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .015 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 14 minutes

 Segment 2: CONCENTRATED FLOW
     L = 3150 ft, S = .01 ft/ft, UNPAVED surface
     Travel time = 32.5 minutes

 Segment 3: CHANNEL FLOW
     A = 12.4 ft^2, P = 47.3 ft, L = 1200 ft, S = .01 ft/ft, n = .05
     Travel Time = 16.4 minutes

 Segment 4: CHANNEL FLOW
     A = 58.2 ft^2, P = 30 ft, L = 2300 ft, S = .005 ft/ft, n = .035
     Travel Time = 8.2 minutes

TOTAL TRAVEL TIME = 71.1 min.
```

```
*********************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*********************************************************************

SUMMARY for FR25

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .02 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 12.5 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2820 ft, S = .014 ft/ft, UNPAVED surface
     Travel time = 24.6 minutes

 Segment 3: CHANNEL FLOW
     A = 10 ft^2, P = 20 ft, L = 2700 ft, S = .01 ft/ft, n = .05
     Travel Time = 24 minutes

 Segment 4: CHANNEL FLOW
     A = 42.8 ft^2, P = 88.5 ft, L = 2200 ft, S = .004 ft/ft, n = .045
     Travel Time = 28.4 minutes

TOTAL TRAVEL TIME = 89.5 min.
```

```
*******************************************************************
* TRAVEL TIME CALCULATIONS - SCS Segmental Approach, TR-55 (1986) *
*******************************************************************

SUMMARY for FR26

Segment 1: OVERLAND FLOW
     L = 100 ft, S = .003 ft/ft, n = .15, P(2yr/24hr) = 1.97 in
     Travel Time = 26.7 minutes

 Segment 2: CONCENTRATED FLOW
     L = 2730 ft, S = .008 ft/ft, UNPAVED surface
     Travel time = 31.5 minutes

 Segment 3: CHANNEL FLOW
     A = 48.6 ft^2, P = 53.3 ft, L = 1900 ft, S = .012 ft/ft, n = .045
     Travel Time = 9.3 minutes

 Segment 4: CHANNEL FLOW
     A = 24.5 ft^2, P = 119.6 ft, L = 3300 ft, S = .01 ft/ft, n = .05
     Travel Time = 53.1 minutes

 Segment 5: CHANNEL FLOW
     A = 88.7 ft^2, P = 82.8 ft, L = 4400 ft, S = .006 ft/ft, n = .04
     Travel Time = 24.3 minutes

TOTAL TRAVEL TIME = 144.9 min.
```



FRANCO WASH
DOWNSTREAM OF FAIRGROUNDS
HEC-RAS SCHEMATIC

HEC-RAS Plan: Plan 01 River: Franco Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	20659	PF 1	4300.00	2685.39	2694.03	2692.95	2695.44	0.010523	9.53	451.35	93.43	0.76
1	20161	PF 1	4300.00	2683.11	2690.39		2691.22	0.006455	7.31	588.25	126.23	0.60
1	19608	PF 1	4300.00	2679.52	2689.48	2684.47	2689.76	0.001200	4.23	1017.18	205.43	0.28
1	19095	PF 1	4300.00	2677.05	2686.21	2685.54	2688.15	0.012665	11.17	385.90	258.96	0.85
1	18576	PF 1	4300.00	2674.48	2682.54	2680.84	2683.37	0.006190	7.41	639.39	353.12	0.59
1	18060	PF 1	4300.00	2672.51	2679.08	2679.08	2679.63	0.008305	6.78	753.80	351.36	0.65
1	17570	PF 1	4300.00	2670.41	2675.33		2675.67	0.004485	5.18	962.51	377.73	0.48
1	17047	PF 1	4300.00	2668.68	2673.02	2672.01	2673.29	0.004484	4.32	1046.45	419.82	0.46
1	16522	PF 1	4300.00	2665.21	2670.30		2670.55	0.004210	4.52	1185.04	639.98	0.45
1	16003	PF 1	4300.00	2662.95	2666.72	2666.18	2667.34	0.009712	6.43	697.93	431.59	0.68
1	15501	PF 1	4300.00	2660.81	2663.99		2664.15	0.004173	3.77	1381.47	848.08	0.43
1	14929	PF 1	4350.00	2658.09	2661.41		2661.58	0.004840	3.46	1326.37	793.48	0.45
1	14713	PF 1	4350.00	2655.64	2660.23		2660.37	0.006526	2.87	1438.73	799.31	0.34
1	14496	PF 1	4350.00	2656.11	2659.01		2659.15	0.004978	3.16	1465.31	919.27	0.41
1	14264	PF 1	4350.00	2654.49	2657.23		2657.48	0.012420	4.17	1119.41	870.80	0.62
1	14078	PF 1	4350.00	2651.50	2656.21		2656.36	0.003391	2.66	1423.11	779.36	0.37
1	13845	PF 1	4350.00	2648.89	2654.73		2655.21	0.009804	7.89	1018.32	754.52	0.71
1	13631	PF 1	4350.00	2649.49	2653.12		2653.38	0.007628	5.13	1205.42	756.00	0.59
1	13399	PF 1	4350.00	2646.62	2651.40		2651.63	0.006739	5.70	1238.74	694.76	0.57
1	13185	PF 1	4350.00	2646.02	2649.67		2649.87	0.007268	4.90	1266.40	771.30	0.57
1	12982	PF 1	4350.00	2645.41	2648.51		2648.69	0.005931	4.22	1352.79	827.50	0.51
1	12762	PF 1	4350.00	2643.48	2647.14		2647.32	0.006489	4.76	1355.12	867.04	0.54
1	12547	PF 1	4350.00	2642.13	2645.75		2645.92	0.006257	4.97	1461.09	858.98	0.54
1	12363	PF 1	4350.00	2641.33	2644.22		2644.45	0.010441	5.32	1221.63	730.17	0.67
1	12159	PF 1	4350.00	2637.49	2642.33		2642.64	0.007270	5.64	1133.45	693.53	0.59
1	11938	PF 1	4350.00	2632.41	2640.98		2641.39	0.004745	6.01	1142.17	679.93	0.51
1	11719	PF 1	4350.00	2631.12	2639.79		2640.15	0.006583	6.57	1112.95	721.12	0.58
1	11524	PF 1	4350.00	2630.53	2638.27	2638.23	2638.78	0.007712	7.86	1041.71	867.04	0.65
1	11323	PF 1	4350.00	2629.52	2636.84	2636.63	2637.21	0.007858	7.06	1051.98	824.71	0.63
1	11132	PF 1	4350.00	2628.40	2635.58		2635.80	0.006050	5.81	1337.61	951.60	0.54
1	10926	PF 1	4350.00	2627.70	2634.54		2634.77	0.005861	5.80	1289.34	796.65	0.54
1	10696	PF 1	4350.00	2625.31	2633.46		2633.68	0.005723	5.89	1308.86	740.98	0.53
1	10512	PF 1	4350.00	2624.47	2632.22		2632.50	0.008304	6.40	1218.59	824.34	0.63
1	10288	PF 1	4350.00	2622.91	2630.74		2631.10	0.006094	6.58	1219.61	807.60	0.57
1	10077	PF 1	4350.00	2621.57	2628.97	2628.97	2629.53	0.009591	8.66	1039.84	811.41	0.71
1	9854	PF 1	4350.00	2618.78	2626.70		2627.16	0.010128	7.47	1035.61	834.67	0.71
1	9662	PF 1	4350.00	2618.31	2625.31		2625.62	0.005983	6.28	1099.86	656.04	0.56
1	9444	PF 1	4350.00	2616.64	2623.75		2624.19	0.007919	7.05	941.58	574.01	0.64
1	9249	PF 1	4350.00	2615.48	2622.29		2622.85	0.006941	6.90	876.82	466.94	0.61

FRANCO WASH
REACH 1
EXISTING CONDITIONS
1/3

HEC-RAS Plan: Plan 01 River: Franco Reach: 1 Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	9032	PF 1	4350.00	2612.89	2621.19		2621.73	0.003968	6.31	1045.56	646.76	0.48
1	8835	PF 1	4350.00	2612.21	2620.41		2620.73	0.005936	6.34	1385.51	849.68	0.56
1	8629	PF 1	4350.00	2611.49	2618.66		2619.19	0.009401	8.29	1100.25	586.00	0.71
1	8422	PF 1	4350.00	2610.57	2617.23		2617.72	0.006154	6.45	1082.16	603.57	0.57
1	8219	PF 1	4350.00	2608.83	2615.79		2616.23	0.008979	7.33	1224.51	970.21	0.68
1	8013	PF 1	4350.00	2606.98	2614.68	2613.98	2614.89	0.004393	4.92	1273.45	704.21	0.47
1	7805	PF 1	4450.00	2605.70	2612.61		2613.26	0.012951	7.88	807.98	554.78	0.79
1	7592	PF 1	4450.00	2604.06	2611.63		2611.78	0.003640	4.19	1572.47	929.22	0.42
1	7389	PF 1	4450.00	2603.17	2610.13		2610.63	0.011713	7.47	1009.62	692.59	0.75
1	7167	PF 1	4450.00	2601.74	2608.70		2609.09	0.004939	5.95	1202.32	851.98	0.51
1	6941	PF 1	4450.00	2600.10	2607.23		2607.79	0.006854	6.69	942.46	639.12	0.60
1	6733	PF 1	4450.00	2599.00	2606.71		2606.97	0.002187	4.56	1441.42	753.62	0.36
1	6535	PF 1	4450.00	2597.33	2605.60	2605.60	2606.21	0.007582	8.37	1178.44	1158.81	0.65
1	6334	PF 1	4450.00	2595.80	2604.83		2605.11	0.004021	6.04	1443.59	728.06	0.47
1	6126	PF 1	4450.00	2594.69	2603.35	2603.30	2603.93	0.009911	7.90	1038.51	849.89	0.71
1	5920	PF 1	4450.00	2594.62	2602.35		2602.69	0.004442	6.27	1526.24	1175.77	0.50
1	5662	PF 1	4450.00	2592.82	2600.82	2600.82	2601.37	0.009083	7.52	1129.74	1216.85	0.68
1	5429	PF 1	4450.00	2591.57	2598.97		2599.37	0.004922	5.76	1121.48	872.04	0.51
1	5216	PF 1	4450.00	2589.66	2597.41		2598.05	0.008290	7.50	980.14	985.11	0.66
1	5013	PF 1	4450.00	2588.17	2596.26		2596.57	0.005688	6.52	1386.06	1227.63	0.55
1	4806	PF 1	4450.00	2586.81	2594.52		2595.04	0.010737	7.85	1109.86	1133.96	0.73
1	4595	PF 1	4450.00	2585.45	2593.53		2593.72	0.003881	5.36	1662.69	1253.03	0.45
1	4402	PF 1	4450.00	2584.67	2591.86	2591.79	2592.20	0.010043	7.04	1199.01	1313.35	0.69
1	4174	PF 1	4450.00	2583.92	2590.13	2589.82	2590.32	0.005806	5.20	1534.23	1385.35	0.53
1	3983	PF 1	4450.00	2583.61	2589.11		2589.28	0.005318	4.31	1769.21	1352.40	0.49
1	3770	PF 1	4450.00	2581.89	2588.51		2588.60	0.002065	3.71	2630.21	1333.17	0.33
1	3769.9		Lat Struct									
1	3567	PF 1	4307.73	2581.67	2588.37		2588.41	0.000558	2.03	3377.68	1174.05	0.17
1	3355	PF 1	2797.67	2580.52	2588.31		2588.32	0.000129	1.14	3501.25	906.21	0.09
1	3230	PF 1	2723.31	2579.93	2587.79	2584.43	2588.18	0.001128	5.03	557.14	443.23	0.34
1	3208		Bridge									
1	3187	PF 1	2723.31	2580.15	2586.42	2585.07	2587.48	0.003165	8.27	333.83	335.57	0.64
1	3152	PF 1	2723.31	2579.75	2586.58	2584.76	2587.29	0.001977	7.04	424.49	743.94	0.52
1	3115	PF 1	2723.31	2579.63	2586.63	2584.34	2587.12	0.001367	5.66	498.60	686.76	0.43
1	3073.5		Culvert									
1	3040	PF 1	2723.31	2579.02	2584.48	2583.40	2585.47	0.003539	7.98	341.07	83.16	0.66
1	2902	PF 1	4450.00	2578.50	2583.08	2583.08	2583.47	0.011545	8.07	1467.70	1626.23	0.83
1	2495	PF 1	4450.00	2577.05	2580.22	2579.45	2580.31	0.006002	4.00	1955.29	1569.50	0.50
1	1968	PF 1	4450.00	2575.28	2577.91	2577.15	2577.99	0.003265	2.57	1952.99	2009.32	0.36

FRANCO - REACH 1
EXISTING CONDITIONS
2/3

HEC-RAS Plan: Plan 01 River: Franco Reach: 1 Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	1463	PF 1	4450.00	2573.84	2575.68	2575.18	2575.77	0.005811	2.37	1805.59	1881.07	0.44
1	939	PF 1	4450.00	2571.44	2573.78		2573.83	0.002038	2.39	2711.87	2127.87	0.30
1	381	PF 1	4450.00	2569.84	2570.77	2570.77	2571.30	0.023639	3.18	799.39	784.27	0.80

FRANCO - REACH 1
EXISTING CONDITIONS
3/3

HEC-RAS Plan: Plan 01 River: Franco Reach: 2 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
2	59220	PF 1	2220.00	3000.04	3002.98	3002.52	3003.09	0.007338	2.68	886.98	1026.51	0.45
2	58678	PF 1	2220.00	2992.71	2996.05	2996.05	2996.45	0.023127	6.11	472.70	573.78	0.86
2	58203	PF 1	2220.00	2989.09	2991.82	2991.27	2991.88	0.003704	1.85	1173.71	1182.92	0.32
2	57169	PF 1	2220.00	2980.32	2983.06	2982.59	2983.13	0.005599	2.23	1010.25	1073.64	0.39
2	56776	PF 1	2220.00	2976.20	2978.34	2978.27	2978.70	0.032833	4.79	463.36	551.97	0.92
2	56116	PF 1	2220.00	2968.97	2972.79	2972.08	2972.87	0.003975	2.37	1014.29	1106.94	0.35
2	54990	PF 1	2220.00	2960.06	2962.34	2962.34	2962.69	0.036641	4.84	471.06	675.29	0.96
2	53987	PF 1	2220.00	2946.11	2950.12		2950.43	0.004180	4.50	493.21	160.52	0.45
2	53466	PF 1	2220.00	2939.48	2945.96	2945.95	2946.72	0.014286	7.28	344.61	798.89	0.81
2	52942	PF 1	2220.00	2934.40	2939.98	2939.67	2940.52	0.009666	6.43	426.89	441.18	0.68
2	52417	PF 1	2220.00	2929.43	2936.16	2935.50	2936.43	0.006214	4.40	549.29	795.34	0.52
2	51892	PF 1	2220.00	2924.46	2931.30	2931.02	2932.19	0.010709	7.87	315.32	468.36	0.73
2	51430	PF 1	2220.00	2921.95	2926.84	2926.84	2927.26	0.012486	6.90	508.08	796.99	0.75
2	50882	PF 1	2220.00	2917.17	2920.94	2920.68	2921.27	0.008405	5.25	550.19	470.72	0.61
2	50381	PF 1	2220.00	2912.39	2915.94	2915.69	2916.33	0.013100	5.48	450.59	383.37	0.73
2	49869	PF 1	2220.00	2908.44	2911.61	2911.21	2911.81	0.007514	4.98	672.34	576.96	0.58
2	49333	PF 1	2220.00	2901.95	2906.38	2906.38	2906.78	0.012155	6.58	540.37	559.79	0.74
2	48811	PF 1	2220.00	2897.07	2901.33	2901.11	2901.65	0.007929	5.68	560.80	450.78	0.61
2	48282	PF 1	2220.00	2894.36	2897.11		2897.28	0.008174	4.04	690.79	630.97	0.57
2	47744	PF 1	2220.00	2890.87	2893.05	2892.75	2893.22	0.008772	4.25	681.75	654.08	0.59
2	47221	PF 1	2220.00	2886.70	2889.45	2889.07	2889.56	0.005507	3.77	848.70	803.51	0.48
2	46722	PF 1	2220.00	2883.03	2885.75	2885.63	2885.98	0.011349	4.58	652.98	811.53	0.66
2	46184	PF 1	2220.00	2879.94	2881.32	2880.92	2881.42	0.006078	2.14	891.34	944.97	0.43
2	45671	PF 1	2220.00	2875.20	2877.64	2877.37	2877.83	0.009240	4.07	670.49	662.76	0.60
2	45145	PF 1	2220.00	2871.01	2873.74	2873.30	2873.87	0.006171	3.68	772.01	679.82	0.50
2	44598	PF 1	2220.00	2867.76	2869.60	2869.33	2869.74	0.010068	2.95	739.09	875.63	0.57
2	43994	PF 1	2220.00	2862.49	2865.60	2865.10	2865.71	0.004803	3.01	908.51	1041.36	0.43
2	43472	PF 1	2220.00	2859.58	2861.38	2861.30	2861.60	0.021675	4.20	614.24	995.70	0.83
2	42996	PF 1	2220.00	2855.04	2857.58		2857.72	0.005247	3.56	793.51	695.91	0.47
2	42495	PF 1	2800.00	2851.11	2853.66		2853.94	0.010440	5.10	710.24	602.18	0.66
2	41998	PF 1	2800.00	2848.23	2849.96	2849.51	2850.07	0.005712	2.95	1067.65	1003.57	0.46
2	41515	PF 1	2800.00	2842.98	2846.38	2846.04	2846.59	0.008927	4.50	861.38	930.15	0.60
2	40996	PF 1	2800.00	2839.51	2841.53	2841.27	2841.66	0.010329	3.13	944.20	1138.99	0.58
2	40496	PF 1	2800.00	2833.74	2838.43		2838.57	0.004716	3.68	1052.58	1030.73	0.45
2	39970	PF 1	2800.00	2831.23	2834.70	2834.49	2834.90	0.012577	3.80	816.21	984.87	0.66
2	39483	PF 1	2800.00	2827.91	2831.10	2830.44	2831.25	0.004357	3.38	986.35	938.39	0.43
2	38987	PF 1	2800.00	2824.44	2828.24		2828.46	0.008115	4.93	825.53	779.91	0.59
2	38495	PF 1	2800.00	2822.31	2824.82		2824.97	0.006219	3.52	960.74	850.39	0.46
2	38006	PF 1	2800.00	2819.32	2821.28		2821.48	0.008435	3.55	802.70	709.26	0.56

FRANCO WASH
REACH 2 1/2

HEC-RAS Plan: Plan 01 River: Franco Reach: 2 Profile: PF 1 (Continued)

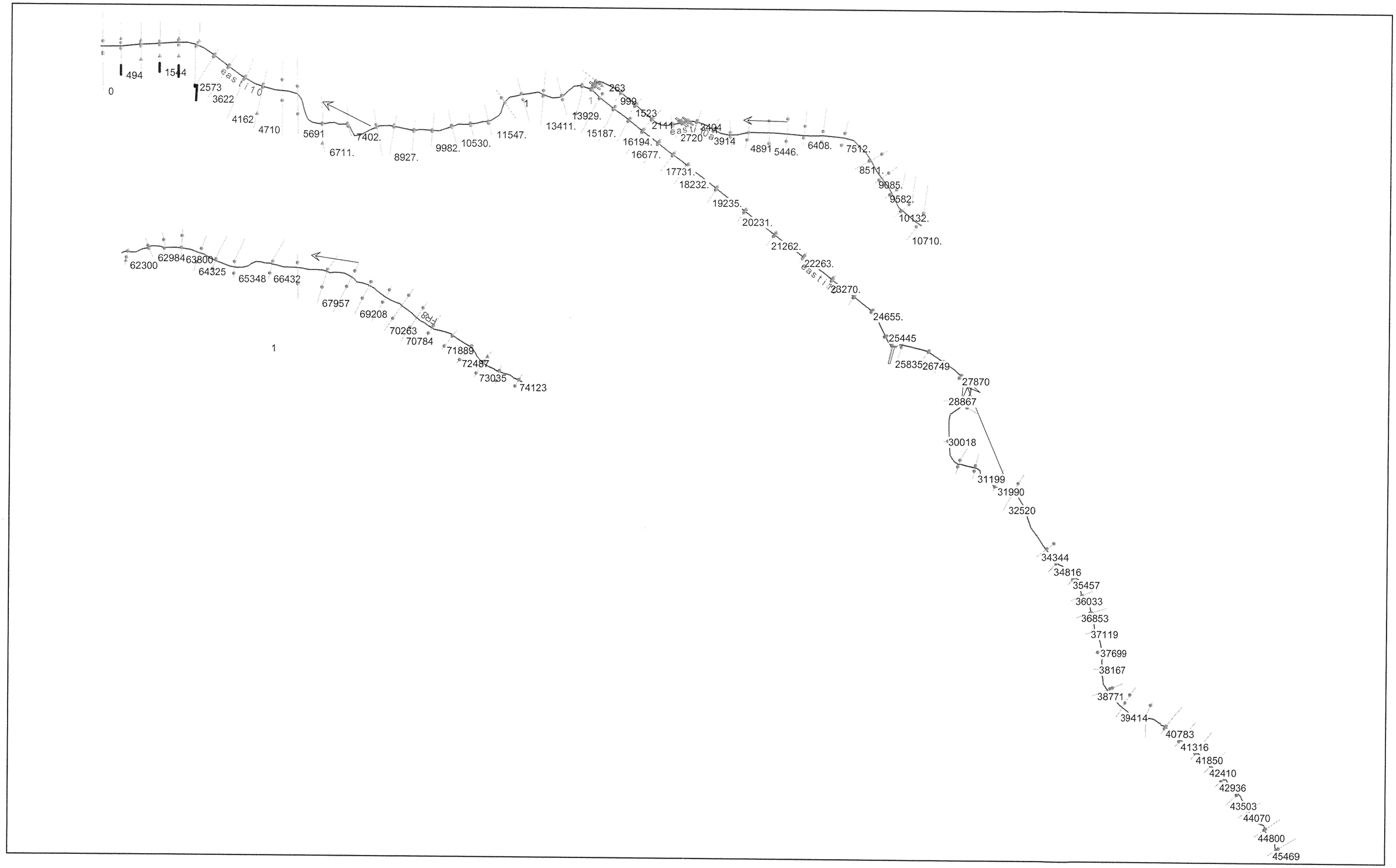
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
2	37331	PF 1	2800.00	2814.77	2816.74	2816.27	2816.84	0.005622	2.56	1114.41	1110.01	0.44
2	36815	PF 1	2800.00	2811.52	2813.82	2813.27	2813.94	0.005346	2.78	1040.75	899.64	0.44
2	36267	PF 1	2800.00	2808.93	2811.10	2810.57	2811.21	0.004773	2.73	1096.91	987.24	0.42
2	35686	PF 1	2800.00	2804.49	2806.96		2807.16	0.011037	3.70	779.91	746.44	0.62
2	35142	PF 1	2800.00	2801.66	2803.34	2802.82	2803.43	0.004660	2.52	1158.71	1122.05	0.41
2	34578	PF 1	2800.00	2794.79	2799.49	2799.38	2799.79	0.009111	5.44	789.40	941.38	0.64
2	34079	PF 1	2800.00	2792.32	2796.01	2795.62	2796.19	0.005791	4.09	957.82	944.96	0.50
2	33604	PF 1	2800.00	2788.90	2792.45	2792.32	2792.70	0.010213	4.64	905.23	1243.59	0.64
2	33064	PF 1	2800.00	2784.46	2787.25	2786.74	2787.38	0.007097	3.11	942.77	950.29	0.50
2	32564	PF 1	2800.00	2782.36	2783.75	2783.32	2783.88	0.007420	1.70	989.86	1093.93	0.44
2	32048	PF 1	2800.00	2776.08	2779.63	2779.47	2779.81	0.011710	4.58	871.42	1128.24	0.67
2	31533	PF 1	2800.00	2772.98	2776.59	2776.07	2776.69	0.004896	3.89	1236.64	1328.78	0.46
2	30992	PF 1	2800.00	2768.65	2772.71	2772.66	2773.03	0.014045	6.87	830.86	1178.24	0.79
2	30478	PF 1	2800.00	2765.51	2768.11	2767.60	2768.22	0.005668	3.33	1089.75	1114.53	0.47
2	29960	PF 1	2800.00	2761.19	2764.50	2764.46	2764.91	0.013286	5.69	631.95	666.01	0.74
2	29457	PF 1	2800.00	2756.23	2760.14	2759.38	2760.29	0.005163	4.06	957.38	659.02	0.48
2	28945	PF 1	2800.00	2749.54	2755.84	2755.84	2756.39	0.013823	7.82	585.23	466.00	0.80
2	28465	PF 1	2800.00	2744.88	2751.83		2752.27	0.003443	5.50	616.71	358.08	0.44
2	27965	PF 1	2800.00	2740.92	2749.21		2749.80	0.007708	8.01	598.10	420.03	0.64
2	27468	PF 1	2800.00	2736.93	2744.96	2744.96	2745.80	0.008246	7.90	500.86	362.35	0.67
2	27378	PF 1	2800.00	2734.10	2743.37	2739.52	2743.61	0.000989	4.16	701.72	207.00	0.24
2	27335.5		Culvert									
2	27293	PF 1	2800.00	2733.80	2741.94	2739.98	2742.48	0.002903	7.40	543.59	99.92	0.46
2	27076	PF 1	2800.00	2732.25	2741.99		2742.12	0.000702	2.91	960.89	162.46	0.21
2	26952	PF 1	2800.00	2731.77	2741.24		2741.89	0.005021	6.60	477.01	184.88	0.53
2	26445	PF 1	2800.00	2728.69	2736.23	2735.65	2737.83	0.013810	10.13	277.74	86.77	0.86
2	25934	PF 1	2800.00	2725.52	2732.92		2733.50	0.005076	6.10	458.71	108.31	0.52
2	25433	PF 1	2800.00	2721.68	2730.82	2727.89	2731.37	0.003594	5.92	473.14	137.56	0.45
2	24941	PF 1	2800.00	2718.24	2725.81	2725.58	2727.89	0.016948	11.58	241.81	52.07	0.95
2	24432	PF 1	2800.00	2714.76	2721.42	2720.18	2722.23	0.007008	7.24	387.41	164.21	0.62
2	23949	PF 1	2800.00	2712.20	2720.15		2720.45	0.001974	4.38	639.86	122.64	0.34
2	23417	PF 1	2800.00	2708.24	2717.76		2718.69	0.006005	7.74	362.00	82.44	0.58
2	22912	PF 1	2800.00	2705.05	2712.57	2712.57	2714.11	0.014542	10.46	305.44	105.32	0.87
2	22388	PF 1	2800.00	2697.57	2706.50		2707.48	0.006991	7.93	353.03	69.91	0.62
2	21852	PF 1	2800.00	2693.18	2703.23		2704.16	0.005472	7.72	362.54	60.58	0.56
2	21333	PF 1	2800.00	2689.47	2699.90		2700.98	0.006801	8.33	336.04	61.27	0.61

REACH 2 2/2

HEC-RAS Plan: Plan 01 Profile: PF 1

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Trib South	1	7245	PF 1	750.00	2822.05	2823.00	2822.78	2823.05	0.007398	1.92	418.64	907.83	0.45
Trib South	1	6720	PF 1	750.00	2816.32	2818.56		2818.70	0.009673	3.47	287.91	550.15	0.58
Trib South	1	6215	PF 1	750.00	2811.16	2813.38		2813.50	0.011617	3.03	281.01	449.24	0.60
Trib South	1	5697	PF 1	750.00	2807.00	2809.09		2809.24	0.006291	3.28	256.52	244.36	0.49
Trib South	1	5190	PF 1	750.00	2803.44	2804.86	2804.65	2805.02	0.011300	3.41	243.30	340.06	0.61
Trib South	1	4660	PF 1	750.00	2798.57	2800.85		2800.96	0.005488	2.67	283.46	273.64	0.44
Trib South	1	4136	PF 1	750.00	2794.95	2796.57	2796.37	2796.79	0.012507	4.08	211.74	259.11	0.67
Trib South	1	3621	PF 1	750.00	2790.64	2792.82		2792.89	0.004959	2.69	376.26	575.67	0.42
Trib South	1	3111	PF 1	750.00	2787.63	2788.80	2788.67	2788.91	0.014119	3.14	297.99	637.14	0.65
Trib South	1	2599	PF 1	750.00	2783.64	2784.98		2785.03	0.004726	1.98	453.07	756.99	0.39
Trib South	1	2096	PF 1	750.00	2779.90	2780.95	2780.80	2781.09	0.015396	3.28	256.77	456.15	0.68
Trib South	1	1572	PF 1	750.00	2773.14	2776.87	2776.50	2776.97	0.004855	3.03	362.05	578.12	0.43
Trib South	1	1085	PF 1	750.00	2770.47	2772.02	2772.02	2772.35	0.026150	4.74	169.38	401.84	0.91
Trib South	1	548	PF 1	750.00	2766.20	2768.09	2767.67	2768.11	0.002190	1.66	625.73	962.03	0.28
Trib North	1	4576	PF 1	925.00	2801.53	2802.65	2802.43	2802.78	0.011443	3.28	325.21	455.57	0.61
Trib North	1	3988	PF 1	925.00	2796.52	2798.70		2798.82	0.004521	2.93	363.36	371.61	0.42
Trib North	1	3481	PF 1	925.00	2792.31	2794.13	2794.11	2794.52	0.020930	5.17	194.84	261.48	0.86
Trib North	1	2961	PF 1	925.00	2789.25	2790.04	2789.65	2790.09	0.004329	1.46	520.80	802.00	0.35
Trib North	1	2455	PF 1	925.00	2784.74	2786.12	2786.04	2786.30	0.018832	4.45	298.84	672.17	0.79
Trib North	1	1948	PF 1	925.00	2779.11	2781.48	2781.10	2781.61	0.005574	3.60	370.66	477.75	0.48
Trib North	1	1465	PF 1	925.00	2775.11	2776.62	2776.57	2776.88	0.020803	4.46	256.91	594.64	0.83
Trib North	1	970	PF 1	925.00	2769.80	2772.67	2772.43	2772.74	0.004401	2.96	499.72	786.37	0.42
Trib North	1	465	PF 1	925.00	2767.01	2769.17	2768.94	2769.42	0.010428	4.76	266.84	315.23	0.65
Trib	1	8928	PF 1	1550.00	2763.70	2765.34	2765.11	2765.47	0.009407	3.03	587.99	1016.77	0.56
Trib	1	8416	PF 1	1550.00	2759.68	2761.94	2761.50	2762.02	0.005086	2.71	706.98	955.93	0.43
Trib	1	7901	PF 1	1550.00	2756.23	2758.04	2757.79	2758.16	0.012927	3.29	573.81	795.97	0.64
Trib	1	7400	PF 1	1550.00	2752.61	2753.90	2753.50	2753.97	0.005702	2.28	773.59	922.04	0.43
Trib	1	6880	PF 1	1550.00	2746.66	2749.01	2748.78	2749.19	0.016444	4.07	506.42	871.13	0.74
Trib	1	6359	PF 1	1550.00	2743.02	2745.09	2744.67	2745.16	0.004474	2.37	763.90	882.22	0.40
Trib	1	5841	PF 1	1550.00	2739.11	2740.58	2740.53	2740.79	0.022260	4.15	439.63	789.79	0.83
Trib	1	5314	PF 1	1550.00	2735.27	2736.65	2736.12	2736.70	0.003846	1.91	878.44	982.38	0.33
Trib	1	4798	PF 1	1550.00	2731.04	2731.71	2731.71	2731.94	0.053417	3.57	404.68	905.38	1.03
Trib	1	4282	PF 1	1650.00	2722.35	2726.32	2724.70	2726.46	0.003306	2.98	554.53	311.56	0.37
Trib	1	3760	PF 1	1650.00	2717.97	2723.97	2723.30	2724.27	0.005664	5.36	466.56	395.20	0.53
Trib	1	3247	PF 1	1650.00	2712.83	2719.46	2718.65	2720.22	0.011414	7.02	235.03	82.19	0.73
Trib	1	2667	PF 1	1650.00	2706.97	2714.81	2713.48	2715.39	0.006319	6.42	296.73	239.43	0.57
Trib	1	2128	PF 1	1650.00	2702.03	2707.79	2707.79	2709.61	0.020417	10.82	152.55	42.02	1.00
Trib	1	1614	PF 1	1650.00	2696.39	2704.87		2705.22	0.002335	4.78	345.39	63.88	0.36
Trib	1	1098	PF 1	1650.00	2695.26	2701.19		2702.60	0.016026	9.53	173.18	48.70	0.89
Trib	1	575	PF 1	1650.00	2691.47	2697.57	2696.14	2698.10	0.004873	5.92	287.22	135.57	0.51
Trib	1	72	PF 1	1650.00	2688.30	2697.12		2697.22	0.000718	2.57	659.80	165.76	0.20

FRANCO
NORTHERN TRIBUTARY



FRANCO
UPSTREAM OF FAIRGROUNDS
HEC-RAS SCHEMATIC

HEC-RAS Plan: p1 River: easti10 Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	14592.	PF 1	2400.00	3137.42	3141.52	3141.34	3141.77	0.010040	5.75	677.67	789.15	0.67
1	13929.	PF 1	2400.00	3132.23	3135.47		3135.78	0.009709	5.23	564.33	432.14	0.65
1	13411.	PF 1	2400.00	3128.82	3131.88	3131.32	3132.09	0.006367	4.27	718.40	594.31	0.52
1	12801.	PF 1	2400.00	3125.94	3128.35	3127.67	3128.51	0.005565	3.57	781.56	555.36	0.44
1	12272.	PF 1	2400.00	3123.09	3124.80	3124.41	3124.98	0.009686	3.61	720.67	672.95	0.54
1	11547.	PF 1	2400.00	3114.28	3117.69	3117.49	3118.06	0.011081	6.29	537.29	411.92	0.71
1	11059.	PF 1	2400.00	3109.34	3114.38	3114.00	3114.65	0.004696	5.22	726.27	536.23	0.49
1	10530.	PF 1	2400.00	3107.60	3111.42	3111.18	3111.62	0.007168	5.19	758.43	708.76	0.57
1	9982.	PF 1	2400.00	3101.64	3106.33	3106.23	3106.86	0.010727	7.46	492.91	355.26	0.73
1	9477.	PF 1	2400.00	3097.18	3102.23	3101.73	3102.60	0.006649	6.13	596.60	416.34	0.58
1	8927.	PF 1	2400.00	3093.90	3097.99		3098.34	0.008903	6.39	649.93	669.25	0.66
1	8427.	PF 1	2400.00	3093.35	3096.73	3095.66	3096.79	0.001658	2.38	1250.86	743.42	0.27
1	7402.	PF 1	2600.00	3086.83	3091.52	3091.35	3092.30	0.012721	7.97	391.57	245.31	0.86
1	6711.	PF 1	2600.00	3083.21	3085.07	3084.61	3085.25	0.007473	3.75	778.23	872.91	0.54
1	5691	PF 1	2600.00	3077.68	3079.04	3078.62	3079.15	0.005577	2.69	1056.78	1193.52	0.44
1	5250	PF 1	2600.00	3072.80	3074.10	3073.91	3074.31	0.030477	3.85	740.50	900.18	0.66
1	4710	PF 1	2600.00	3062.83	3065.86	3065.69	3066.13	0.009263	5.26	731.51	833.82	0.63
1	4162	PF 1	2600.00	3057.33	3059.91	3059.91	3060.25	0.010564	5.47	584.37	935.05	0.73
1	3622	PF 1	2600.00	3052.95	3054.41	3054.25	3054.61	0.005512	2.89	728.86	953.36	0.49
1	3126	PF 1	2600.00	3048.92	3050.28	3050.28	3050.65	0.015057	4.63	531.51	743.54	0.81
1	2573	PF 1	2600.00	3043.68	3046.15	3045.97	3046.48	0.009449	5.55	594.57	984.53	0.78
1	2064	PF 1	2600.00	3039.10	3040.98	3040.85	3041.28	0.010640	5.01	616.56	720.91	0.72
1	1544	PF 1	2600.00	3032.12	3036.40	3036.25	3036.86	0.006835	6.20	551.46	500.10	0.64
1	1035	PF 1	2600.00	3027.44	3032.19	3031.86	3032.76	0.009633	6.67	545.43	449.63	0.63
1	494	PF 1	2600.00	3024.86	3027.28	3027.03	3027.49	0.009478	4.63	875.33	877.59	0.57
1	0	PF 1	2600.00	3021.86	3024.00	3023.43	3024.13	0.005003	3.19	948.21	1221.99	0.41

FRANCO
I-10 THRU FAIRGROUNDS

HEC-RAS Plan: p1 River: easti10 Reach: 2 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
2	45469	PF 1	1000.00	3492.00	3495.91	3495.71	3496.79	0.018996	7.56	132.36	59.76	0.89
2	44800	PF 1	1000.00	3483.00	3486.94	3486.94	3487.35	0.010716	6.07	257.97	334.67	0.69
2	44070	PF 1	1000.00	3472.30	3476.53	3476.12	3477.35	0.013223	7.28	145.11	85.13	0.76
2	43503	PF 1	1000.00	3468.65	3471.04	3470.63	3471.27	0.008471	3.91	272.81	237.69	0.57
2	42936	PF 1	1000.00	3462.03	3463.29	3463.28	3463.63	0.024593	5.27	229.53	332.68	0.92
2	42410	PF 1	1000.00	3453.00	3456.61	3456.61	3456.93	0.007846	5.46	315.78	482.49	0.59
2	41850	PF 1	1000.00	3444.17	3448.80	3448.80	3449.18	0.012728	6.29	257.62	330.42	0.74
2	41316	PF 1	1000.00	3438.60	3440.67	3440.18	3440.81	0.007260	3.50	336.89	329.60	0.52
2	40783	PF 1	1000.00	3430.00	3433.91	3433.91	3434.24	0.025707	5.31	225.60	307.10	0.93
2	40134	PF 1	1000.00	3420.00	3423.51	3422.90	3423.69	0.006932	3.36	297.79	220.28	0.51
2	39414	PF 1	1000.00	3414.19	3416.41	3416.29	3416.62	0.014845	3.80	293.57	531.07	0.70
2	38771	PF 1	1000.00	3402.00	3406.19	3406.10	3406.46	0.015536	5.11	265.02	348.38	0.75
2	38167	PF 1	1000.00	3392.00	3398.13		3398.64	0.010663	6.04	193.33	148.15	0.68
2	37699	PF 1	1000.00	3390.00	3392.76	3392.42	3393.08	0.013031	4.54	220.05	166.04	0.70
2	37119	PF 1	1000.00	3382.00	3386.38	3386.08	3386.62	0.009587	4.13	275.97	314.35	0.60
2	36853	PF 1	1000.00	3374.78	3380.85	3380.85	3381.24	0.010478	6.17	266.42	326.39	0.67
2	36033	PF 1	1000.00	3368.00	3373.22	3373.22	3373.73	0.011286	7.00	219.49	197.38	0.71
2	35457	PF 1	1000.00	3364.00	3367.18	3366.81	3367.49	0.008850	4.69	247.39	217.98	0.60
2	34816	PF 1	1000.00	3359.75	3361.67	3361.28	3361.89	0.008573	3.80	278.64	241.60	0.57
2	34344	PF 1	1700.00	3355.86	3358.24	3357.79	3358.40	0.006702	3.41	570.01	504.44	0.47
2	32520	PF 1	1700.00	3333.07	3335.00	3335.00	3335.48	0.031824	5.54	306.96	336.67	1.02
2	31990	PF 1	1700.00	3326.00	3328.43	3327.72	3328.58	0.005835	3.18	560.05	445.27	0.47
2	31199	PF 1	1700.00	3318.00	3320.52	3320.41	3321.02	0.018295	5.89	317.60	282.64	0.78
2	30749	PF 1	2150.00	3314.00	3317.32	3316.48	3317.51	0.004665	3.75	706.33	567.91	0.42
2	30018	PF 1	2150.00	3304.00	3312.24	3312.24	3312.92	0.011195	7.78	392.53	295.66	0.73
2	28867	PF 1	2150.00	3295.29	3297.17	3296.60	3297.30	0.005994	3.21	788.99	807.63	0.44
2	27870	PF 1	2150.00	3286.00	3289.71	3289.16	3290.32	0.008458	6.52	372.39	181.28	0.65
2	27252	PF 1	2150.00	3282.00	3285.16		3285.49	0.006991	5.43	523.70	345.81	0.58
2	26749	PF 1	2150.00	3277.00	3280.15	3280.15	3280.70	0.013797	8.05	436.01	357.65	0.82
2	26020	PF 1	2150.00	3268.12	3274.60		3274.67	0.000878	2.60	1085.32	432.89	0.24
2	25835	PF 1	2190.00	3263.00	3274.56	3268.90	3274.61	0.000140	2.62	1891.13	528.03	0.14
2	25790		Culvert									
2	25745	PF 1	2190.00	3261.00	3267.20	3267.20	3270.30	0.014120	14.14	154.87	80.69	1.00
2	25445	PF 1	2190.00	3257.80	3263.96	3263.96	3265.71	0.012360	10.63	206.09	59.64	1.01
2	24655.	PF 1	2190.00	3248.40	3253.85	3253.69	3255.46	0.014182	10.17	215.39	60.50	0.95
2	24020.	PF 1	2190.00	3241.20	3245.80	3245.79	3246.74	0.012669	8.38	314.13	169.07	0.87
2	23270.	PF 1	2190.00	3231.73	3236.57	3236.21	3237.70	0.011434	8.53	256.95	82.83	0.84
2	22263.	PF 1	2190.00	3217.28	3222.60	3222.60	3224.14	0.016013	9.94	220.35	70.80	0.99
2	21262.	PF 1	2190.00	3203.98	3209.42	3208.85	3210.35	0.009769	7.73	283.21	102.74	0.78

FRANCO
TRIBUTARY SOUTH OF I-10
1/2

HEC-RAS Plan: p1 River: easti10 Reach: 2 Profile: PF 1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
2	20231.	PF 1	2190.00	3192.67	3198.15	3197.74	3199.42	0.011482	9.06	241.61	69.22	0.86
2	19235.	PF 1	2190.00	3180.68	3187.07	3186.58	3188.31	0.010824	8.93	245.36	68.35	0.83
2	18232.	PF 1	2190.00	3169.69	3175.76	3175.36	3177.00	0.011759	8.92	245.45	73.25	0.86
2	17731.	PF 1	2190.00	3163.91	3169.41	3169.15	3170.82	0.012887	9.54	229.59	66.34	0.90
2	17216.	PF 1	2190.00	3159.32	3164.15	3163.48	3165.09	0.009246	7.77	281.80	87.01	0.76
2	16677.	PF 1	2190.00	3155.02	3159.29	3159.29	3159.94	0.009543	7.10	407.05	330.39	0.76
2	16194.	PF 1	2190.00	3152.29	3155.90		3156.21	0.005975	5.38	612.58	523.20	0.59
2	15672.	PF 1	2190.00	3148.55	3150.99	3150.99	3151.34	0.016710	6.16	525.71	688.93	0.90
2	15187.	PF 1	2190.00	3145.13	3146.02	3145.59	3146.10	0.005345	1.55	988.16	1163.29	0.42

HEC-RAS Plan: p1 River: easti10a Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	10710.	PF 1	1620.00	3233.10	3234.21	3233.81	3234.32	0.006667	2.00	627.23	674.25	0.44
1	10132.	PF 1	1620.00	3226.25	3229.16	3229.03	3229.35	0.012021	3.85	504.11	774.86	0.65
1	9582.	PF 1	1620.00	3221.95	3223.91	3223.54	3224.10	0.007843	3.79	488.67	458.48	0.55
1	9085.	PF 1	1620.00	3217.64	3219.52	3219.20	3219.73	0.009850	3.75	459.59	466.29	0.60
1	8511.	PF 1	1620.00	3211.89	3214.29	3213.74	3214.49	0.008473	3.57	453.60	356.06	0.56
1	7512.	PF 1	1620.00	3203.30	3205.04	3204.82	3205.22	0.009978	3.59	509.81	623.30	0.59
1	6926.	PF 1	1620.00	3197.27	3199.33	3198.97	3199.55	0.009268	3.91	465.34	606.66	0.59
1	6408.	PF 1	1620.00	3193.76	3195.63	3195.30	3195.74	0.005905	2.92	653.41	748.78	0.46
1	5940.	PF 1	1620.00	3190.66	3192.10	3191.81	3192.24	0.009705	2.99	543.27	633.83	0.56
1	5446.	PF 1	1620.00	3184.61	3186.16	3185.98	3186.34	0.015055	3.40	481.34	664.55	0.68
1	4891	PF 1	1620.00	3177.17	3179.58	3179.15	3179.88	0.009212	4.52	392.97	430.04	0.61
1	4405	PF 1	1620.00	3172.67	3175.51	3175.13	3175.77	0.007693	4.59	443.25	369.06	0.57
1	3914	PF 1	1620.00	3166.69	3170.82	3170.82	3171.37	0.011135	6.68	334.59	298.71	0.72
1	3404	PF 1	1620.00	3164.20	3168.12		3168.23	0.001902	3.08	646.47	292.14	0.31
1	3189	PF 1	1620.00	3161.75	3167.65	3164.43	3167.92	0.000750	4.16	398.03	93.39	0.30
1	3167		Culvert									
1	3144	PF 1	1620.00	3161.17	3163.74	3163.74	3165.00	0.018305	9.00	180.02	70.00	0.99
1	3034	PF 1	1620.00	3160.00	3164.02	3161.99	3164.27	0.001122	3.99	406.22	101.20	0.35
1	2986		Culvert									
1	2959	PF 1	1620.00	3159.30	3163.07	3161.28	3163.35	0.002404	4.21	384.84	102.00	0.38
1	2720	PF 1	1620.00	3156.85	3161.45	3161.45	3162.15	0.011279	6.91	278.26	251.82	0.73
1	2111	PF 1	1620.00	3150.35	3155.76		3156.29	0.006924	5.97	286.94	109.72	0.59
1	1523	PF 1	1620.00	3147.49	3152.45		3152.83	0.004936	5.10	389.46	344.47	0.50
1	999	PF 1	1620.00	3145.24	3149.16	3149.04	3149.50	0.008384	5.55	416.58	374.25	0.62
1	263	PF 1	1620.00	3142.37	3146.80	3145.06	3146.92	0.001996	2.85	588.66	750.75	0.28
1	161	PF 1	1620.00	3141.57	3145.42	3145.09	3146.46	0.008462	8.55	205.86	171.20	0.84
1	136		Culvert									
1	111	PF 1	1620.00	3141.17	3144.78	3144.78	3146.11	0.012161	9.37	177.37	169.65	0.98

FRANCO
TRIBUTARY NORTH OF I-10

HEC-RAS Plan: p1 River: FR8 Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	74123	PF 1	1000.00	3176.24	3177.91	3177.91	3178.26	0.032144	4.93	215.73	323.85	1.00
1	73450	PF 1	1000.00	3164.03	3167.62	3167.01	3168.12	0.010125	5.67	176.22	78.41	0.67
1	73035	PF 1	1000.00	3159.41	3162.85	3162.56	3162.96	0.009633	2.74	381.74	597.95	0.55
1	72487	PF 1	1000.00	3153.99	3155.59	3155.44	3155.76	0.018791	3.29	304.79	532.89	0.74
1	71889	PF 1	1000.00	3146.00	3148.40	3148.10	3148.52	0.008416	2.88	373.15	558.90	0.53
1	71291	PF 1	1000.00	3138.02	3140.26	3140.21	3140.49	0.024743	3.28	267.91	479.32	0.82
1	70784	PF 1	1000.00	3131.98	3133.17	3132.92	3133.27	0.009085	1.75	412.14	678.00	0.48
1	70263	PF 1	1000.00	3125.18	3126.46	3126.46	3126.63	0.019070	2.05	353.33	873.80	0.66
1	69760	PF 1	1000.00	3118.86	3120.40		3120.49	0.006794	2.60	423.22	746.00	0.47
1	69208	PF 1	1200.00	3112.01	3113.43	3113.37	3113.65	0.024643	3.79	323.99	583.28	0.84
1	68664	PF 1	1200.00	3106.27	3107.75	3107.50	3107.81	0.005950	2.13	657.25	1228.37	0.43
1	67957	PF 1	1200.00	3099.58	3100.75	3100.70	3100.88	0.021142	3.23	429.13	1032.47	0.77
1	67132	PF 1	1200.00	3089.00	3090.46		3090.57	0.007643	2.82	449.14	636.47	0.61
1	66432	PF 1	1200.00	3081.80	3083.03	3082.92	3083.16	0.016770	2.69	412.97	882.28	0.67
1	65348	PF 1	1200.00	3072.10	3073.39	3073.07	3073.44	0.005600	1.98	652.08	986.48	0.38
1	64801	PF 1	1200.00	3067.01	3067.51	3067.50	3067.70	0.032214	2.23	362.98	931.80	0.76
1	64325	PF 1	1200.00	3061.01	3062.17	3061.88	3062.24	0.005831	1.55	631.69	982.74	0.36
1	63800	PF 1	1200.00	3054.45	3056.04	3056.04	3056.30	0.026488	3.64	301.19	526.47	0.86
1	63335	PF 1	1200.00	3048.12	3051.71	3051.13	3051.83	0.004725	2.95	462.54	519.29	0.43
1	62984	PF 1	1200.00	3044.20	3047.99	3047.98	3048.52	0.013773	6.12	237.87	276.87	0.76
1	62300	PF 1	1200.00	3039.18	3041.22	3040.93	3041.46	0.010000	4.10	322.67	359.14	0.61

FRANCO
FR8 REACH