

APPENDIX E

STORMCAD MODEL RESULTS (ONSITE PROJECT)

100yr event

Calculation Detailed Summary

Element Details			
ID	13	Notes	
Label	Base Calculation Options		
Hydraulic Summary			
Flow Profile Method	Backwater Analysis	Average Velocity Method	Actual Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence Test	0.001 ft	Minimum Time of Concentration	5.000 min
Inlets			
Neglect Side Flow?	False	Active Components for Combination Inlets In Sag	Grate and Curb
Neglect Gutter Cross Slope For Side Flow?	True	Active Components for Combination Inlets on Grade	Grate and Curb
HEC-22			
Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged	1.000
Consider Non-Piped Plunging Flow	False	Half Bench Submerged	0.950
Flat Submerged	1.000	Half Bench Unsubmerged	0.150
Flat Unsubmerged	1.000	Full Bench Submerged	0.750
Depressed Submerged	1.000	Full Bench Unsubmerged	0.070
AASHTO			
Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Calculation Detailed Summary

Generic Structure Loss

Governing Upstream Pipe Selection Method Pipe with Maximum QV

Catchment Summary

Label	Area (acres)	Time of Concentration (min)	Rational C	Catchment CA (acres)
DS6	0.340	5.000	0.950	0.323
DS7	0.330	5.000	0.950	0.313
DS8	0.330	5.000	0.950	0.313
DS9	0.250	5.000	0.950	0.237
DS10	0.170	5.000	0.950	0.162
DS1	0.310	5.000	0.950	0.294
DS2	0.310	5.000	0.950	0.294
DS3	0.310	5.000	0.950	0.294
DS4	0.400	5.000	0.950	0.380
DS5	0.320	5.000	0.950	0.304
ES7	0.060	5.000	0.950	0.057
ES8	0.180	5.000	0.950	0.171
ES4	0.100	5.000	0.950	0.095
ES5	0.190	5.000	0.950	0.181
ES2	0.400	5.000	0.950	0.380
ES1	0.160	5.000	0.950	0.152
ES6	0.240	5.000	0.950	0.228
ES3	0.470	5.000	0.950	0.447
FS20	0.190	5.000	0.950	0.181
FS4	0.110	5.000	0.950	0.105
FS1	0.220	5.000	0.950	0.209
FS6	0.280	5.000	0.950	0.266
FS2	0.170	5.000	0.950	0.162
FS7	0.170	5.000	0.950	0.162
FS3	0.220	5.000	0.950	0.209
FS8	0.220	5.000	0.950	0.209
FS9	0.110	5.000	0.950	0.105
FS14	0.270	5.000	0.950	0.257
ES19	0.240	5.000	0.950	0.228
ES21	0.200	5.000	0.950	0.190
ES20a	0.250	5.000	0.950	0.237
ES14	0.060	5.000	0.950	0.057
ES18	0.360	5.000	0.950	0.342
ES10	0.110	5.000	0.950	0.105
ES9	0.110	5.000	0.950	0.105
ES12B	0.060	5.000	0.950	0.057
ES11B	0.060	5.000	0.950	0.057
ES11A	0.060	5.000	0.950	0.057
ES12A	0.060	5.000	0.950	0.057
AS1	0.690	5.000	0.950	0.655
AS6	0.710	5.000	0.950	0.674
AS5	0.410	5.000	0.950	0.389

Calculation Detailed Summary

Catchment Summary

Label	Area (acres)	Time of Concentration (min)	Rational C	Catchment CA (acres)
BS17	0.420	5.000	0.950	0.399
BS43	0.270	5.000	0.950	0.257
BS18	0.280	5.000	0.950	0.266
AS2	0.310	5.000	0.950	0.294
AS3	0.290	5.000	0.950	0.275
BS1	0.160	5.000	0.950	0.152
BS7	0.340	5.000	0.950	0.323
BS2	0.210	5.000	0.950	0.199
BS8	0.330	5.000	0.950	0.313
BS3	0.260	5.000	0.950	0.247
BS9	0.220	5.000	0.950	0.209
BS10	0.230	5.000	0.950	0.219
BS19	0.340	5.000	0.950	0.323
BS44	0.140	5.000	0.950	0.133
BS4	0.270	5.000	0.950	0.257
BS34	0.080	5.000	0.950	0.076
BS33	0.090	5.000	0.950	0.086
BS29	0.200	5.000	0.950	0.190
BS30	0.230	5.000	0.950	0.219
BS32	0.120	5.000	0.950	0.114
BS31	0.280	5.000	0.950	0.266
BS20	0.330	5.000	0.950	0.313
BS5A	0.180	5.000	0.950	0.171
BS5B	0.260	5.000	0.950	0.247
BS28A	0.200	5.000	0.950	0.190
BS28B	0.220	5.000	0.950	0.209
BS42	0.130	5.000	0.950	0.123
BS27	0.250	5.000	0.950	0.237
BS26	0.230	5.000	0.950	0.219
BS36	0.270	5.000	0.950	0.257
BS41	0.190	5.000	0.950	0.181
BS37	0.180	5.000	0.950	0.171
BS38	0.270	5.000	0.950	0.257
BS40	0.350	5.000	0.950	0.333
BS39	0.220	5.000	0.950	0.209
BS21	0.390	5.000	0.950	0.370
BS11	0.330	5.000	0.950	0.313
BS35	0.270	5.000	0.950	0.257
BS12	0.340	5.000	0.950	0.323
BS22	0.510	5.000	0.950	0.484
BS13	0.330	5.000	0.950	0.313
BS23	0.420	5.000	0.950	0.399
BS14	0.330	5.000	0.950	0.313
BS24	0.270	5.000	0.950	0.257
BS25	0.210	5.000	0.950	0.199
BS15	0.220	5.000	0.950	0.209
BS16	0.160	5.000	0.950	0.152

Calculation Detailed Summary

Catchment Summary

Label	Area (acres)	Time of Concentration (min)	Rational C	Catchment CA (acres)
FS11	0.090	5.000	0.950	0.086
FS15	0.090	5.000	0.950	0.086
FS16	0.120	5.000	0.950	0.114
FS12	0.130	5.000	0.950	0.123
FS13	0.120	5.000	0.950	0.114
FS17	0.140	5.000	0.950	0.133
FS18	0.140	5.000	0.950	0.133
FS19	0.130	5.000	0.950	0.123
ES22A	0.240	5.000	0.950	0.228
ES15	0.370	5.000	0.950	0.352
ES17	0.370	5.000	0.950	0.352
FS5B	0.210	5.000	0.950	0.199
FS10B	0.260	5.000	0.950	0.247
FS10A	0.170	5.000	0.950	0.162
FS5A	0.120	5.000	0.950	0.114
ES20B	0.170	5.000	0.950	0.162
ES22B	0.130	5.000	0.950	0.123

Catchment Intensity (in/hr)	Catchment Rational Flow (ft ³ /s)
4.840	1.58
4.840	1.53
4.840	1.53
4.840	1.16
4.840	0.79
4.840	1.44
4.840	1.44
4.840	1.44
4.840	1.85
4.840	1.48
4.840	0.28
4.840	0.83
4.840	0.46
4.840	0.88
4.840	1.85
4.840	0.74
4.840	1.11
4.840	2.18
4.840	0.88
4.840	0.51
4.840	1.02
4.840	1.30
4.840	0.79
4.840	0.79
4.840	1.02
4.840	1.02

Calculation Detailed Summary

Catchment Summary

Catchment Intensity (in/hr)	Catchment Rational Flow (ft ³ /s)
4.840	0.51
4.840	1.25
4.840	1.11
4.840	0.93
4.840	1.16
4.840	0.28
4.840	1.67
4.840	0.51
4.840	0.51
4.840	0.28
4.840	0.28
4.840	0.28
4.840	0.28
4.840	3.20
4.840	3.29
4.840	1.90
4.840	1.95
4.840	1.25
4.840	1.30
4.840	1.44
4.840	1.34
4.840	0.74
4.840	1.58
4.840	0.97
4.840	1.53
4.840	1.21
4.840	1.02
4.840	1.07
4.840	1.58
4.840	0.65
4.840	1.25
4.840	0.37
4.840	0.42
4.840	0.93
4.840	1.07
4.840	0.56
4.840	1.30
4.840	1.53
4.840	0.83
4.840	1.21
4.840	0.93
4.840	1.02
4.840	0.60
4.840	1.16
4.840	1.07
4.840	1.25

Calculation Detailed Summary

Catchment Summary

Catchment Intensity (in/hr)	Catchment Rational Flow (ft ³ /s)
4.840	0.88
4.840	0.83
4.840	1.25
4.840	1.62
4.840	1.02
4.840	1.81
4.840	1.53
4.840	1.25
4.840	1.58
4.840	2.36
4.840	1.53
4.840	1.95
4.840	1.53
4.840	1.25
4.840	0.97
4.840	1.02
4.840	0.74
4.840	0.42
4.840	0.42
4.840	0.56
4.840	0.60
4.840	0.56
4.840	0.65
4.840	0.65
4.840	0.60
4.840	1.11
4.840	1.71
4.840	1.71
4.840	0.97
4.840	1.21
4.840	0.79
4.840	0.56
4.840	0.79
4.840	0.60

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall	Flow (ft ³ /s)
D16-D17	Circular Pipe - 12.0 in	Circular Pipe	20	DO	0.74
D17-D18	Circular Pipe - 12.0 in	Circular Pipe	20	DO	1.62
D18-D19	Circular Pipe - 12.0 in	Circular Pipe	20	DO	2.57
D19-D110	Circular Pipe - 18.0 in	Circular Pipe	20	DO	3.53

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall	Flow (ft ³ /s)
DI10-DM1	Circular Pipe - 12.0 in	Circular Pipe	20	DO	4.23
DI1-DI2	Circular Pipe - 12.0 in	Circular Pipe	21	DO	1.02
DI2-DI3	Circular Pipe - 12.0 in	Circular Pipe	21	DO	1.79
DI3-DI4	Circular Pipe - 12.0 in	Circular Pipe	21	DO	2.67
DI4-DI5	Circular Pipe - 12.0 in	Circular Pipe	21	DO	3.68
DI5-DM1	Circular Pipe - 12.0 in	Circular Pipe	21	DO	4.71
EI6-EI5	Circular Pipe - 12.0 in	Circular Pipe	9	EO	0.58
EI5-EI4	Circular Pipe - 12.0 in	Circular Pipe	9	EO	1.20
EI1-EI2	Circular Pipe - 12.0 in	Circular Pipe	13	EO	0.43
EI3-EI2	Circular Pipe - 12.0 in	Circular Pipe	12	EO	0.93
FI20-FI4	Circular Pipe - 12.0 in	Circular Pipe	1	FO	0.49
FI4-FI5A	Circular Pipe - 24.0 in	Circular Pipe	1	FO	5.27
FI5A-FO	Circular Pipe - 24.0 in	Circular Pipe	1	FO	11.80
FI3-FI4	Circular Pipe - 24.0 in	Circular Pipe	2	FO	4.54
FI6-FI7	Circular Pipe - 12.0 in	Circular Pipe	3	FO	1.70
FI7-FI8	Circular Pipe - 12.0 in	Circular Pipe	3	FO	2.72
FI9-FI8	Circular Pipe - 12.0 in	Circular Pipe	2	FO	0.69
FI10A-FI5	Circular Pipe - 18.0 in	Circular Pipe	5	FO	6.43
FI15-FI16	Circular Pipe - 12.0 in	Circular Pipe	7	FO	0.78
FS16-FS17	Circular Pipe - 12.0 in	Circular Pipe	6	FO	1.77
FI17-FI18	Circular Pipe - 12.0 in	Circular Pipe	5	FO	3.88
FI18-FI19	Circular Pipe - 12.0 in	Circular Pipe	5	FO	4.49
FI13-FI14	Circular Pipe - 12.0 in	Circular Pipe	5	FO	0.92
EI19-EI20A	Circular Pipe - 12.0 in	Circular Pipe	17	EO	0.84
EI21-EI22	Circular Pipe - 12.0 in	Circular Pipe	16	EO	0.73

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall	Flow (ft ³ /s)
EI14-EI15	Circular Pipe - 12.0 in	Circular Pipe	18	EO	0.26
EI17-EI18	Circular Pipe - 12.0 in	Circular Pipe	15	EO	1.17
EI11A-EI12A	Circular Pipe - 12.0 in	Circular Pipe	14	EO	0.54
EI9-EI10	Circular Pipe - 12.0 in	Circular Pipe	11	EO	0.44
DM1-DO	Circular Pipe - 18.0 in	Circular Pipe	20	DO	8.69
EI8-EI7	Circular Pipe - 12.0 in	Circular Pipe	10	EO	0.67
EI15-EI20B	Circular Pipe - 12.0 in	Circular Pipe	18	EO	1.30
EI20A-EI20B	Circular Pipe - 12.0 in	Circular Pipe	17	EO	1.74
EI22A-EI20B	Circular Pipe - 12.0 in	Circular Pipe	16	EO	1.56
EI18-EI20B	Circular Pipe - 12.0 in	Circular Pipe	15	EO	2.44
EI16-EO	Circular Pipe - 24.0 in	Circular Pipe	15	EO	8.77
EI2-EI13	Circular Pipe - 12.0 in	Circular Pipe	12	EO	2.46
EI4-EI13	Circular Pipe - 12.0 in	Circular Pipe	9	EO	1.73
EI13-EO	Circular Pipe - 24.0 in	Circular Pipe	9	EO	8.50
EI10-EI13	Circular Pipe - 12.0 in	Circular Pipe	11	EO	0.93
EI7-EI13	Circular Pipe - 12.0 in	Circular Pipe	10	EO	0.96
AI6-AI5	Circular Pipe - 12.0 in	Circular Pipe	23	AO	1.91
AI5-AI4	Circular Pipe - 12.0 in	Circular Pipe	23	AO	3.46
AI4-AO	Circular Pipe - 18.0 in	Circular Pipe	22	AO	7.02
AI1-AI2	Circular Pipe - 18.0 in	Circular Pipe	22	AO	1.87
AI2-AI3	Circular Pipe - 18.0 in	Circular Pipe	22	AO	2.47
AI3-AI4	Circular Pipe - 12.0 in	Circular Pipe	22	AO	3.46
BI1-BI2	Circular Pipe - 12.0 in	Circular Pipe	31	BO	0.61
BI2-BI3	Circular Pipe - 12.0 in	Circular Pipe	31	BO	1.39
BI3-BI4	Circular Pipe - 12.0 in	Circular Pipe	31	BO	2.31

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall	Flow (ft ³ /s)
BI6-BO	Circular Pipe - 24.0 in	Circular Pipe	24	BO	34.32
BI33-BI34	Circular Pipe - 12.0 in	Circular Pipe	25	BO	0.28
BI34-BI35	Circular Pipe - 12.0 in	Circular Pipe	25	BO	0.59
BI35-BI12	Circular Pipe - 12.0 in	Circular Pipe	25	BO	1.17
BI7-BI8	Circular Pipe - 12.0 in	Circular Pipe	24	BO	1.10
BI8-BI9	Circular Pipe - 12.0 in	Circular Pipe	24	BO	1.89
BI9-BI10	Circular Pipe - 12.0 in	Circular Pipe	24	BO	2.70
BI10-BI11	Circular Pipe - 12.0 in	Circular Pipe	24	BO	3.50
BI11-BI12	Circular Pipe - 12.0 in	Circular Pipe	24	BO	4.36
BI12-BI13	Circular Pipe - 18.0 in	Circular Pipe	24	BO	6.52
BI13-BI14	Circular Pipe - 18.0 in	Circular Pipe	24	BO	7.50
BI14-BI15	Circular Pipe - 18.0 in	Circular Pipe	24	BO	8.43
BI15-BI16	Circular Pipe - 18.0 in	Circular Pipe	24	BO	9.32
BI16-BI6	Circular Pipe - 12.0 in	Circular Pipe	24	BO	10.10
BI26-BI27	Circular Pipe - 12.0 in	Circular Pipe	35	BO	0.81
BI28-BI5	Circular Pipe - 12.0 in	Circular Pipe	33	BO	6.53
BI44-BI30	Circular Pipe - 12.0 in	Circular Pipe	34	BO	0.39
BI29-BI30	Circular Pipe - 12.0 in	Circular Pipe	33	BO	0.73
BI30-BI31	Circular Pipe - 12.0 in	Circular Pipe	33	BO	1.86
BI31-BI32	Circular Pipe - 12.0 in	Circular Pipe	33	BO	2.77
BI32-BI28A	Circular Pipe - 12.0 in	Circular Pipe	33	BO	3.45
BI43-BI18	Circular Pipe - 12.0 in	Circular Pipe	30	BO	0.92
BI17-BI18	Circular Pipe - 12.0 in	Circular Pipe	29	BO	1.29
BI18-BI19	Circular Pipe - 12.0 in	Circular Pipe	29	BO	3.03
BI19-BI20	Circular Pipe - 12.0 in	Circular Pipe	29	BO	3.97

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall	Flow (ft ³ /s)
BI20-BI21	Circular Pipe - 12.0 in	Circular Pipe	29	BO	4.95
BI21-BI22	Circular Pipe - 18.0 in	Circular Pipe	29	BO	5.95
BI22-BI23	Circular Pipe - 18.0 in	Circular Pipe	27	BO	10.94
BI23-BI24	Circular Pipe - 18.0 in	Circular Pipe	27	BO	12.10
BI24-BI25	Circular Pipe - 18.0 in	Circular Pipe	27	BO	13.22
BI25-BI6	Circular Pipe - 18.0 in	Circular Pipe	27	BO	14.22
BI42-BI5	Circular Pipe - 12.0 in	Circular Pipe	32	BO	0.51
BI41-BI37	Circular Pipe - 12.0 in	Circular Pipe	28	BO	0.70
BI36-BI37	Circular Pipe - 12.0 in	Circular Pipe	27	BO	0.92
BI37-BI38	Circular Pipe - 12.0 in	Circular Pipe	27	BO	2.49
BI38-BI39	Circular Pipe - 12.0 in	Circular Pipe	27	BO	3.36
BI39-BI22	Circular Pipe - 12.0 in	Circular Pipe	27	BO	3.84
BI40-BI6	Circular Pipe - 12.0 in	Circular Pipe	26	BO	1.12
BI5-BI6	Circular Pipe - 18.0 in	Circular Pipe	31	BO	11.44
FI11-FI15	Circular Pipe - 12.0 in	Circular Pipe	7	FO	0.37
FI12-FI16	Circular Pipe - 12.0 in	Circular Pipe	6	FO	0.51
FI13-FI17	Circular Pipe - 12.0 in	Circular Pipe	5	FO	1.56
FI19-FI10B	Circular Pipe - 18.0 in	Circular Pipe	5	FO	5.04
FI10B-FI10A	Circular Pipe - 18.0 in	Circular Pipe	5	FO	5.72
FI5B-FI5A	Circular Pipe - 12.0 in	Circular Pipe	8	FO	0.75
FI1-FI6	Circular Pipe - 12.0 in	Circular Pipe	3	FO	0.78
FI2-FI7	Circular Pipe - 12.0 in	Circular Pipe	4	FO	0.79
FI8-FI3	Circular Pipe - 18.0 in	Circular Pipe	2	FO	3.91
BI4-BI5A	Circular Pipe - 12.0 in	Circular Pipe	31	BO	3.28
BI5A-BI5B	Circular Pipe - 12.0 in	Circular Pipe	31	BO	4.00

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall	Flow (ft ³ /s)
BI27-BI28B	Circular Pipe - 12.0 in	Circular Pipe	35	BO	1.74
BI28B-BI28A	Circular Pipe - 12.0 in	Circular Pipe	35	BO	2.62
EI22B-EI20B	Circular Pipe - 12.0 in	Circular Pipe	19	EO	0.51
EI11B-EI11A	Circular Pipe - 12.0 in	Circular Pipe	14	EO	0.26
EI12A-EI12B	Circular Pipe - 12.0 in	Circular Pipe	14	EO	0.81
EI12B-EI13	Circular Pipe - 12.0 in	Circular Pipe	14	EO	1.08

Velocity (Average) (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
5.08	32.36	24.54	0.36	0.54
6.64	24.54	15.69	0.54	0.69
7.21	15.69	12.22	0.69	0.72
5.66	12.22	9.37	0.72	0.87
9.27	9.37	7.14	0.87	1.14
6.31	46.93	38.57	0.43	0.57
6.89	38.57	31.70	0.57	0.70
8.01	31.70	21.32	0.70	0.82
8.65	21.32	13.40	0.82	0.90
12.25	13.40	7.14	0.90	1.14
4.27	15.32	10.96	0.32	0.46
5.84	10.96	7.06	0.46	0.56
4.70	6.27	3.67	0.27	0.67
5.39	12.40	3.67	0.40	0.67
4.63	-0.71	-4.19	0.29	0.81
8.08	-4.19	-5.77	0.81	1.23
9.49	-5.77	-7.12	1.23	0.88
4.57	-3.75	-4.19	0.75	0.81
3.39	8.61	5.71	0.61	0.71
8.31	5.71	-3.24	0.71	0.76
4.95	-2.65	-3.24	0.35	0.76
9.72	-4.02	-5.77	0.98	1.23
6.12	25.37	12.57	0.37	0.57
7.88	12.57	0.84	0.57	0.84
8.88	0.84	-0.11	0.84	0.89
7.52	-0.11	-1.28	0.89	0.72
1.79	3.18	3.03	0.58	0.53
4.29	10.88	6.56	0.38	0.56
4.10	10.86	6.53	0.36	0.53
2.79	12.21	8.98	0.21	0.48
4.70	12.46	8.17	0.46	0.67
5.22	22.20	21.38	0.30	0.38

Calculation Detailed Summary

Conduit Summary

Velocity (Average) (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
5.28	10.28	9.40	0.28	0.40
12.08	7.14	5.74	1.14	0.74
7.97	4.84	2.41	0.34	0.41
9.86	8.98	0.06	0.48	1.06
9.91	6.56	0.06	0.56	1.06
9.08	6.53	0.06	0.53	1.06
11.50	8.17	0.06	0.67	1.06
5.93	0.06	-4.05	1.06	0.95
9.29	3.67	2.04	0.67	1.04
9.30	7.06	2.04	0.56	1.04
6.06	2.04	-4.08	1.04	0.92
5.14	9.40	2.04	0.40	1.04
4.45	2.41	2.04	0.41	1.04
9.02	178.59	124.80	0.59	0.80
25.35	124.80	57.03	0.80	1.03
20.32	57.03	51.43	1.03	0.43
2.16	177.74	176.62	0.74	0.62
3.60	176.62	176.29	0.62	0.79
28.54	176.29	57.03	0.79	1.03
5.92	171.82	160.50	0.32	0.50
8.94	160.50	136.65	0.50	0.65
9.57	136.65	117.78	0.65	0.78
24.25	57.91	52.10	1.91	1.10
4.67	143.22	137.32	0.22	0.32
5.43	137.32	120.96	0.32	0.46
6.61	120.96	114.99	0.46	0.99
6.38	168.44	157.59	0.44	0.59
7.97	157.59	148.70	0.59	0.70
8.66	148.70	139.80	0.70	0.80
9.31	139.80	126.88	0.80	0.88
9.53	126.88	114.99	0.88	0.99
10.80	114.99	102.06	0.99	1.06
11.22	102.06	89.12	1.06	1.12
11.49	89.12	80.68	1.12	1.18
11.87	80.68	73.68	1.18	0.68
23.66	73.99	57.91	0.99	1.91
6.55	146.38	131.56	0.38	0.56
11.34	127.97	115.79	0.97	1.29
7.57	156.26	139.08	0.26	0.58
1.86	139.50	139.08	0.50	0.58
6.63	139.08	133.71	0.58	0.71
12.50	133.71	130.79	0.71	0.79
7.15	130.79	127.97	0.79	0.97
6.49	163.40	161.75	0.40	0.75
6.57	171.98	161.75	0.48	0.75
8.96	161.75	148.85	0.75	0.85

Calculation Detailed Summary

Conduit Summary

Velocity (Average) (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)	Depth (Out) (ft)
9.47	148.85	136.41	0.85	0.91
10.06	136.41	121.44	0.91	0.94
10.38	121.44	109.27	0.94	1.27
12.20	109.27	96.82	1.27	1.32
12.59	96.82	88.36	1.32	1.36
12.40	88.36	82.39	1.36	1.39
22.30	82.39	57.91	1.39	1.91
4.35	121.80	115.79	0.30	1.29
3.63	130.35	130.18	0.35	0.68
6.84	145.40	130.18	0.40	0.68
5.21	130.18	126.78	0.68	0.78
6.25	126.78	122.83	0.78	0.83
9.67	122.83	109.27	0.83	1.27
5.81	96.45	57.91	0.45	1.91
11.76	115.79	57.91	1.29	1.91
3.87	25.75	25.37	0.25	0.37
3.52	12.80	12.57	0.30	0.57
7.81	3.03	0.84	0.53	0.84
6.52	-1.14	-3.88	0.86	0.92
9.47	-3.88	-4.02	0.92	0.98
0.96	-5.76	-5.77	1.04	1.23
3.45	8.87	8.61	0.37	0.61
3.23	5.87	5.71	0.37	0.71
4.70	-3.24	-3.78	0.76	0.72
5.33	117.78	115.88	0.78	1.08
5.09	115.88	115.79	1.08	1.29
5.68	131.56	127.99	0.56	0.69
9.72	127.99	127.97	0.69	0.97
5.57	2.30	0.06	0.30	1.06
2.56	22.21	22.20	0.21	0.30
3.67	21.38	21.34	0.38	0.44
8.63	21.34	2.04	0.44	1.04

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total Surface) (ft ³ /s)	Flow (Total Out) (ft ³ /s)
DI6	CatchBasin	DO	1.58	0.74
DI7	CatchBasin	DO	1.53	1.62
DI8	CatchBasin	DO	1.53	2.57
DI9	CatchBasin	DO	1.16	3.53
DI10	CatchBasin	DO	0.79	4.23
DI5	CatchBasin	DO	1.48	4.71
DI4	CatchBasin	DO	1.85	3.68
DI3	CatchBasin	DO	1.44	2.67
DI2	CatchBasin	DO	1.44	1.79

Calculation Detailed Summary

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total Surface) (ft ³ /s)	Flow (Total Out) (ft ³ /s)
DI1	CatchBasin	DO	1.44	1.02
EI7	CatchBasin	EO	0.28	0.96
EI8	CatchBasin	EO	0.83	0.67
EI4	CatchBasin	EO	0.46	1.73
EI5	CatchBasin	EO	0.88	1.20
EI6	CatchBasin	EO	1.11	0.58
EI3	CatchBasin	EO	2.18	0.93
EI2	CatchBasin	EO	1.85	2.46
EI1	CatchBasin	EO	0.74	0.43
FI20	CatchBasin	FO	0.88	0.49
FI4	CatchBasin	FO	0.51	5.27
FI5A	CatchBasin	FO	0.56	11.80
FI10A	CatchBasin	FO	0.79	6.43
FI9	CatchBasin	FO	0.51	0.69
FI8	CatchBasin	FO	1.02	3.91
FI3	CatchBasin	FO	1.02	4.54
FI2	CatchBasin	FO	0.79	0.79
FI7	CatchBasin	FO	0.79	2.72
FI1	CatchBasin	FO	1.02	0.78
FI6	CatchBasin	FO	1.30	1.70
FI14	CatchBasin	FO	1.25	0.92
FI13	CatchBasin	FO	0.56	1.56
FI12	CatchBasin	FO	0.60	0.51
FI11	CatchBasin	FO	0.42	0.37
FI15	CatchBasin	FO	0.42	0.78
FI16	CatchBasin	FO	0.56	1.77
FI17	CatchBasin	FO	0.65	3.88
FI18	CatchBasin	FO	0.65	4.49
FI19	CatchBasin	FO	0.60	5.04
EI14	CatchBasin	EO	0.28	0.26
EI17	CatchBasin	EO	1.71	1.17
EI15	CatchBasin	EO	1.71	1.30
EI20A	CatchBasin	EO	1.16	1.74
EI22A	CatchBasin	EO	1.11	1.56
EI21	CatchBasin	EO	0.93	0.73
EI19	CatchBasin	EO	1.11	0.84
EI18	CatchBasin	EO	1.67	2.44
EI11A	CatchBasin	EO	0.28	0.54
EI12A	CatchBasin	EO	0.28	0.81
EI9	CatchBasin	EO	0.51	0.44
EI10	CatchBasin	EO	0.51	0.93
DM1	Manhole	DO	0.00	8.69
EI20B	CatchBasin	EO	0.79	8.77
EI13	CatchBasin	EO	0.00	8.50
BI16	CatchBasin	BO	0.74	10.10
BI6	CatchBasin	BO	0.00	34.32
BI25	CatchBasin	BO	0.97	14.22

Calculation Detailed Summary

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total Surface) (ft ³ /s)	Flow (Total Out) (ft ³ /s)
BI15	CatchBasin	BO	1.02	9.32
BI14	CatchBasin	BO	1.53	8.43
BI13	CatchBasin	BO	1.53	7.50
BI24	CatchBasin	BO	1.25	13.22
BI23	CatchBasin	BO	1.95	12.10
BI22	CatchBasin	BO	2.36	10.94
BI12	CatchBasin	BO	1.58	6.52
BI35	CatchBasin	BO	1.25	1.17
BI11	CatchBasin	BO	1.53	4.36
BI21	CatchBasin	BO	1.81	5.95
BI20	CatchBasin	BO	1.53	4.95
BI34	CatchBasin	BO	0.37	0.59
BI10	CatchBasin	BO	1.07	3.50
BI4	CatchBasin	BO	1.25	3.28
BI33	CatchBasin	BO	0.42	0.28
BI9	CatchBasin	BO	1.02	2.70
BI3	CatchBasin	BO	1.21	2.31
BI8	CatchBasin	BO	1.53	1.89
BI2	CatchBasin	BO	0.97	1.39
BI1	CatchBasin	BO	0.74	0.61
AI3	CatchBasin	AO	1.34	3.46
AI5	CatchBasin	AO	1.90	3.46
AI4	CatchBasin	AO	0.00	7.02
AI2	CatchBasin	AO	1.44	2.47
AI1	CatchBasin	AO	3.20	1.87
AI6	CatchBasin	AO	3.29	1.91
BI7	CatchBasin	BO	1.58	1.10
BI17	CatchBasin	BO	1.95	1.29
BI29	CatchBasin	BO	0.93	0.73
BI18	CatchBasin	BO	1.30	3.03
BI43	CatchBasin	BO	1.25	0.92
BI19	CatchBasin	BO	1.58	3.97
BI44	CatchBasin	BO	0.65	0.39
BI30	CatchBasin	BO	1.07	1.86
BI31	CatchBasin	BO	1.30	2.77
BI32	CatchBasin	BO	0.56	3.45
BI28A	CatchBasin	BO	0.93	6.53
BI5B	CatchBasin	BO	1.21	11.44
BI40	CatchBasin	BO	1.62	1.12
BI39	CatchBasin	BO	1.02	3.84
BI38	CatchBasin	BO	1.25	3.36
BI42	CatchBasin	BO	0.60	0.51
BI27	CatchBasin	BO	1.16	1.74
BI37	CatchBasin	BO	0.83	2.49
BI41	CatchBasin	BO	0.88	0.70
BI26	CatchBasin	BO	1.07	0.81
BI36	CatchBasin	BO	1.25	0.92

Calculation Detailed Summary

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total Surface) (ft ³ /s)	Flow (Total Out) (ft ³ /s)
FI10B	CatchBasin	FO	1.21	5.72
FI5B	CatchBasin	FO	0.97	0.75
BI5A	CatchBasin	BO	0.83	4.00
BI28B	CatchBasin	BO	1.02	2.62
EI22B	CatchBasin	EO	0.60	0.51
EI11B	CatchBasin	EO	0.28	0.26
EI12B	CatchBasin	EO	0.28	1.08

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
36.00	32.00	32.49	32.49
28.00	24.00	24.76	24.76
19.00	15.00	16.00	16.00
15.50	11.50	12.50	12.50
12.50	8.50	9.90	9.90
18.50	12.50	14.02	14.02
24.50	20.50	21.76	21.76
35.00	31.00	32.02	32.02
42.00	38.00	38.80	38.80
50.50	46.50	47.09	47.09
8.00	2.00	2.57	2.57
8.50	4.50	4.96	4.96
10.50	6.50	7.29	7.29
14.50	10.50	11.14	11.14
19.00	15.00	15.43	15.43
16.00	12.00	12.56	12.56
7.00	3.00	3.97	3.97
10.00	6.00	6.37	6.37
3.00	-1.00	-0.61	-0.61
0.00	-5.00	-3.89	-3.89
-1.00	-7.00	-5.24	-5.24
-1.00	-5.00	-3.59	-3.59
0.00	-3.00	-2.53	-2.53
1.00	-4.00	-2.95	-2.95
1.00	-4.50	-3.47	-3.47
9.00	5.50	6.01	6.01
9.00	5.00	6.03	6.03
12.00	8.50	9.01	9.01
12.00	8.00	8.79	8.79
6.20	2.60	3.24	3.24
6.00	2.50	3.24	3.24
16.00	12.50	12.90	12.90
29.00	25.50	25.84	25.84
29.00	25.00	25.50	25.50
16.00	12.00	12.80	12.80
5.50	0.00	1.31	1.31

Calculation Detailed Summary

Node Summary

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
4.00	-1.00	0.47	0.47
4.00	-2.00	-0.78	-0.78
18.00	12.00	12.28	12.28
16.00	12.00	12.63	12.63
12.50	8.50	9.17	9.17
10.00	6.00	6.79	6.79
10.00	6.00	6.74	6.74
14.50	10.50	10.99	10.99
14.50	10.50	11.03	11.03
11.50	7.50	8.46	8.46
26.00	21.90	22.31	22.31
26.00	21.00	21.52	21.52
14.00	10.00	10.37	10.37
14.00	9.00	9.56	9.56
10.00	6.00	7.71	7.71
5.00	-1.00	0.48	0.48
5.00	1.00	2.45	2.45
77.00	73.00	76.57	76.57
60.00	56.00	59.83	59.83
84.00	81.00	83.47	83.47
83.50	79.50	81.29	81.29
92.00	88.00	89.67	89.67
105.00	101.00	102.55	102.55
91.00	87.00	89.32	89.32
99.50	95.50	97.66	97.66
112.00	108.00	110.00	110.00
118.00	114.00	115.42	115.42
124.50	120.50	121.13	121.13
130.00	126.00	127.43	127.43
124.50	120.50	121.84	121.84
139.50	135.50	137.09	137.09
141.00	137.00	137.44	137.44
143.00	139.00	140.22	140.22
121.00	117.00	118.17	118.17
147.00	143.00	143.30	143.30
152.00	148.00	149.03	149.03
140.00	136.00	136.93	136.93
161.00	157.00	157.83	157.83
164.00	160.00	160.69	160.69
175.50	171.50	171.94	171.94
179.50	175.50	176.71	176.71
128.00	124.00	125.21	125.21
60.00	56.00	57.49	57.49
180.00	176.00	176.82	176.82
181.00	177.00	177.81	177.81
182.00	178.00	178.83	178.83

Calculation Detailed Summary

Node Summary

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
172.00	168.00	168.61	168.61
175.50	171.50	172.17	172.17
143.00	139.00	139.55	139.55
165.00	161.00	162.11	162.11
167.00	163.00	163.55	163.55
152.00	148.00	149.33	149.33
160.00	156.00	156.35	156.35
142.50	138.50	139.32	139.32
137.00	133.00	134.04	134.04
134.00	130.00	131.21	131.21
131.00	127.00	129.06	129.06
118.50	114.50	116.57	116.57
100.00	96.00	96.62	96.62
126.00	122.00	123.30	123.30
130.00	126.00	127.19	127.19
125.50	121.50	121.90	121.90
135.00	131.00	131.79	131.79
133.50	129.50	130.48	130.48
134.00	130.00	130.48	130.48
150.00	146.00	146.52	146.52
149.00	145.00	145.55	145.55
-1.00	-4.80	-3.49	-3.49
-1.00	-6.80	-5.75	-5.75
118.50	114.80	116.28	116.28
131.00	127.30	128.31	128.31
10.00	2.00	2.40	2.40
26.00	22.00	22.28	22.28
26.00	20.90	21.50	21.50

Inlet Summary

Label	Inlet Type	Inlet Type (Inlet)	Inlet	Flow (Total Intercepted) (ft ³ /s)
DI6	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.74
DI7	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.98
DI8	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.13
DI9	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.14
DI10	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.04
DI5	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.30
DI4	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.23
DI3	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.01
DI2	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.83
DI1	Catalog Inlet	Grate	caltrans Inlet - GO	1.02
EI7	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.30
EI8	Catalog Inlet	Grate	caltrans Inlet - GO	0.67

Calculation Detailed Summary

Inlet Summary

Label	Inlet Type	Inlet Type (Inlet)	Inlet	Flow (Total Intercepted) (ft ³ /s)
EI4	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.61
EI5	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.69
EI6	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.58
EI3	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.93
EI2	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.26
EI1	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.43
FI20	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.49
FI4	Catalog Inlet	Grate	caltrans Inlet - GO	0.64
FI5A	Catalog Inlet	Grate	caltrans Inlet - GO	0.84
FI10A	Catalog Inlet	Grate	caltrans Inlet - GO	0.82
FI9	Catalog Inlet	Grate	caltrans Inlet - GO	0.69
FI8	Catalog Inlet	Grate	caltrans Inlet - GO	0.95
FI3	Catalog Inlet	Grate	caltrans Inlet - GO	0.92
FI2	Catalog Inlet	Grate	caltrans Inlet - GO	0.79
FI7	Catalog Inlet	Grate	caltrans Inlet - GO	0.85
FI1	Catalog Inlet	Grate	caltrans Inlet - GO	0.78
FI6	Catalog Inlet	Grate	caltrans Inlet - GO	0.95
FI14	Catalog Inlet	Grate	caltrans Inlet - GO	0.92
FI13	Catalog Inlet	Grate	caltrans Inlet - GO	0.70
FI12	Catalog Inlet	Grate	caltrans Inlet - GO	0.51
FI11	Catalog Inlet	Grate	caltrans Inlet - GO	0.37
FI15	Catalog Inlet	Grate	caltrans Inlet - GO	0.41
FI16	Catalog Inlet	Grate	caltrans Inlet - GO	0.58
FI17	Catalog Inlet	Grate	caltrans Inlet - GO	0.74
FI18	Catalog Inlet	Grate	caltrans Inlet - GO	0.68
FI19	Catalog Inlet	Grate	caltrans Inlet - GO	0.63
EI14	Catalog Inlet	Grate	caltrans Inlet - GO	0.26
EI17	Catalog Inlet	Grate	caltrans Inlet - GO	1.17
EI15	Catalog Inlet	Grate	caltrans Inlet - GO	1.18
EI20A	Catalog Inlet	Grate	caltrans Inlet - GO	1.02
EI22A	Catalog Inlet	Grate	caltrans Inlet - GO	0.96
EI21	Catalog Inlet	Grate	caltrans Inlet - GO	0.73
EI19	Catalog Inlet	Grate	caltrans Inlet - GO	0.84
EI18	Catalog Inlet	Grate	caltrans Inlet - GO	1.42
EI11A	Catalog Inlet	Grate	caltrans Inlet - GO	0.28
EI12A	Catalog Inlet	Grate	caltrans Inlet - GO	0.28
EI9	Catalog Inlet	Grate	caltrans Inlet - GO	0.44
EI10	Catalog Inlet	Grate	caltrans Inlet - GO	0.49
EI20B	Catalog Inlet	Grate	caltrans Inlet - GO	1.78
EI13	Catalog Inlet	Grate	caltrans Inlet - GO	1.78
BI16	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.21
BI6	Catalog Inlet	Grate	caltrans Inlet - GO	3.03
BI25	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.53
BI15	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.36
BI14	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.46
BI13	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.44

Calculation Detailed Summary

Inlet Summary

Label	Inlet Type	Inlet Type (Inlet)	Inlet	Flow (Total Intercepted) (ft ³ /s)
BI24	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.69
BI23	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.81
BI22	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.77
BI12	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.42
BI35	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.69
BI11	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.12
BI21	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.37
BI20	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.23
BI34	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.33
BI10	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.96
BI4	Catalog Inlet	Grate	caltrans Inlet - GO	1.16
BI33	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.28
BI9	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.92
BI3	Catalog Inlet	Grate	caltrans Inlet - GO	1.05
BI8	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.88
BI2	Catalog Inlet	Grate	caltrans Inlet - GO	0.84
BI1	Catalog Inlet	Grate	caltrans Inlet - GO	0.61
AI3	Catalog Inlet	Grate	caltrans Inlet - GO	1.53
AI5	Catalog Inlet	Grate	caltrans Inlet - GO	1.90
AI4	Catalog Inlet	Grate	caltrans Inlet - GO	1.46
AI2	Catalog Inlet	Grate	caltrans Inlet - GO	1.68
AI1	Catalog Inlet	Grate	caltrans Inlet - GO	1.87
AI6	Catalog Inlet	Grate	caltrans Inlet - GO	1.91
BI7	Catalog Inlet	Grate	caltrans Inlet - GO	1.10
BI17	Catalog Inlet	Grate	caltrans Inlet - GO	1.29
BI29	Catalog Inlet	Grate	caltrans Inlet - GO	0.73
BI18	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.96
BI43	Catalog Inlet	Grate	caltrans Inlet - GO	0.92
BI19	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.13
BI44	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.39
BI30	Catalog Inlet	Grate	caltrans Inlet - GO	1.07
BI31	Catalog Inlet	Grate	caltrans Inlet - GO	1.19
BI32	Catalog Inlet	Grate	caltrans Inlet - GO	0.84
BI28A	Catalog Inlet	Grate	caltrans Inlet - GO	1.12
BI5B	Catalog Inlet	Grate	caltrans Inlet - GO	1.40
BI40	Catalog Inlet	Grate	caltrans Inlet - GO	1.12
BI39	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.72
BI38	Catalog Inlet	Grate	caltrans Inlet - GO	1.13
BI42	Catalog Inlet	Grate	caltrans Inlet - GO	0.51
BI27	Catalog Inlet	Grate	caltrans Inlet - GO	1.01
BI37	Catalog Inlet	Grate	caltrans Inlet - GO	0.98
BI41	Catalog Inlet	Grate	caltrans Inlet - GO	0.70
BI26	Catalog Inlet	Grate	caltrans Inlet - GO	0.81
BI36	Catalog Inlet	Grate	caltrans Inlet - GO	0.92
FI10B	Catalog Inlet	Grate	caltrans Inlet - GO	0.98
FI5B	Catalog Inlet	Grate	caltrans Inlet - GO	0.75

Calculation Detailed Summary

Inlet Summary

Label	Inlet Type	Inlet Type (Inlet)	Inlet	Flow (Total Intercepted) (ft ³ /s)
BI5A	Catalog Inlet	Grate	caltrans Inlet - GO	0.98
BI28B	Catalog Inlet	Grate	caltrans Inlet - GO	1.02
EI22B	Catalog Inlet	Grate	caltrans Inlet - GO	0.51
EI11B	Catalog Inlet	Grate	caltrans Inlet - GO	0.26
EI12B	Catalog Inlet	Grate	caltrans Inlet - GO	0.28

Flow (Total Bypassed) (ft ³ /s)	Bypass Target	Capture Efficiency (Calculated) (%)	Gutter Depth (in)	Gutter Spread (ft)
0.84	DI7	47.0	1.7	6.9
1.38	DI8	41.5	1.9	8.1
1.78	DI9	38.8	2.1	8.7
1.80	DI10	38.7	2.1	8.8
1.55	DO	40.3	2.0	8.4
2.26	DO	36.4	2.3	9.4
2.07	DI5	37.3	2.2	9.2
1.45	DI4	41.0	2.0	8.2
1.02	DI3	44.8	1.8	7.4
0.41	DI2	71.3	1.6	6.7
0.15	EI13	66.8	1.0	4.3
0.17	EI7	80.0	1.3	5.5
0.58	EI13	51.1	1.5	6.3
0.73	EI4	48.6	1.6	6.7
0.53	EI5	52.1	1.5	6.1
1.25	EI2	42.6	1.9	7.8
2.15	EI13	36.9	2.2	9.3
0.31	EI2	58.4	1.3	5.2
0.39	FO	55.7	1.3	5.6
0.21	FO	75.6	1.3	5.5
0.28	FO	75.3	1.5	6.1
0.35	FI5A	70.2	1.5	6.2
0.18	FO	79.4	1.3	5.5
0.35	FI9	72.9	1.6	6.5
0.33	FI4	73.5	1.5	6.4
0.24	FI3	76.8	1.4	5.9
0.28	FI8	75.1	1.5	6.1
0.24	FI2	76.8	1.4	5.9
0.35	FI7	73.0	1.5	6.5
0.33	FI13	73.6	1.5	6.4
0.19	FI17	79.0	1.3	5.6
0.09	FI16	84.8	1.2	4.8
0.04	FI15	89.7	1.0	4.2
0.05	FI16	88.5	1.1	4.4
0.12	FI17	82.6	1.2	5.1
0.21	FI18	77.8	1.4	5.8
0.18	FI19	79.5	1.3	5.5

Calculation Detailed Summary

Inlet Summary

Flow (Total Bypassed) (ft ³ /s)	Bypass Target	Capture Efficiency (Calculated) (%)	Gutter Depth (in)	Gutter Spread (ft)
0.15	FI10B	81.0	1.3	5.3
0.02	EI15	94.2	0.9	3.6
0.54	EI18	68.4	1.7	7.2
0.55	EI20B	68.3	1.7	7.2
0.41	EI20B	71.4	1.6	6.7
0.36	EI20B	72.8	1.6	6.5
0.20	EI22A	78.3	1.4	5.7
0.27	EI20A	75.4	1.5	6.1
0.79	EI20B	64.3	1.9	7.9
0.02	EI12A	93.7	0.9	3.7
0.02	EI12B	93.6	0.9	3.7
0.07	EI10	87.1	1.1	4.5
0.08	EI13	85.4	1.1	4.8
1.21	EO	59.5	2.1	8.8
1.21	EO	59.5	2.1	8.8
1.99	BI6	37.7	2.2	9.1
3.25	BO	48.3	2.8	11.7
3.03	BI6	33.6	2.5	10.3
2.46	BI16	35.6	2.3	9.7
2.80	BI15	34.4	2.4	10.1
2.73	BI14	34.6	2.4	10.0
3.59	BI25	32.0	2.6	10.9
4.03	BI24	31.0	2.7	11.3
3.89	BI23	31.3	2.7	11.2
2.64	BI13	34.9	2.4	9.9
0.74	BI12	48.4	1.6	6.7
1.75	BI12	39.0	2.1	8.7
2.50	BI22	35.4	2.3	9.7
2.07	BI21	37.3	2.2	9.2
0.18	BI35	64.7	1.1	4.5
1.34	BI11	41.9	1.9	8.0
0.53	BI5A	68.8	1.7	7.1
0.13	BI34	67.9	1.0	4.2
1.23	BI10	42.7	1.9	7.8
0.43	BI4	70.9	1.6	6.8
1.13	BI9	43.7	1.8	7.6
0.27	BI3	75.5	1.5	6.1
0.14	BI2	81.8	1.3	5.2
0.90	AI4	62.8	2.0	8.2
1.38	AI4	58.0	2.2	9.1
0.83	AO	63.8	1.9	8.0
1.09	AI3	60.7	2.1	8.6
1.33	AI2	58.4	2.2	9.1
1.38	AI5	58.0	2.2	9.2
0.48	BI8	69.8	1.7	6.9
0.65	BI18	66.4	1.8	7.5

Calculation Detailed Summary

Inlet Summary

Flow (Total Bypassed) (ft ³ /s)	Bypass Target	Capture Efficiency (Calculated) (%)	Gutter Depth (in)	Gutter Spread (ft)
0.20	BI30	78.3	1.4	5.7
1.33	BI19	41.9	1.9	8.0
0.33	BI18	73.6	1.5	6.4
1.77	BI20	38.9	2.1	8.7
0.26	BI30	60.6	1.2	5.0
0.45	BI31	70.4	1.6	6.9
0.56	BI32	68.1	1.7	7.2
0.27	BI28A	75.4	1.5	6.1
0.49	BI5B	69.5	1.7	7.0
0.76	BI6	64.7	1.9	7.8
0.50	BI6	69.3	1.7	7.0
0.80	BI22	47.5	1.6	6.8
0.50	BI39	69.3	1.7	7.0
0.09	BI5B	84.8	1.2	4.8
0.40	BI28B	71.6	1.6	6.7
0.37	BI38	72.3	1.6	6.6
0.18	BI37	79.1	1.3	5.6
0.25	BI27	76.1	1.4	6.0
0.33	BI37	73.6	1.5	6.4
0.37	FI10A	72.3	1.6	6.6
0.22	FI5A	77.6	1.4	5.8
0.38	BI5B	72.2	1.6	6.6
0.41	BI28A	71.5	1.6	6.7
0.09	EI20B	84.8	1.2	4.8
0.02	EI11A	94.2	0.9	3.6
0.02	EI13	93.6	0.9	3.7

25 yr event

Calculation Detailed Summary

Element Details

ID	13	Notes
Label	Base Calculation Options	

Hydraulic Summary

Flow Profile Method	Backwater Analysis	Average Velocity Method	Actual Uniform Flow Velocity
Number of Flow Profile Steps	5	Minimum Structure Headloss	0.00 ft
Hydraulic Grade Convergence Test	0.001 ft	Minimum Time of Concentration	5.000 min

Inlets

Neglect Side Flow?	False	Active Components for Combination Inlets In Sag	Grate and Curb
Neglect Gutter Cross Slope For Side Flow?	True	Active Components for Combination Inlets on Grade	Grate and Curb

HEC-22

Elevations Considered Equal Within	0.50 ft	Depressed Unsubmerged	1.000
Consider Non-Piped Plunging Flow	False	Half Bench Submerged	0.950
Flat Submerged	1.000	Half Bench Unsubmerged	0.150
Flat Unsubmerged	1.000	Full Bench Submerged	0.750
Depressed Submerged	1.000	Full Bench Unsubmerged	0.070

AASHTO

Expansion, Ke	0.350	Shaping Adjustment, Cs	0.500
Contraction, Kc	0.250	Non-Piped Flow Adjustment, Cn	1.300

Bend Angle vs. Bend Loss Curve

Bend Angle (degrees)	Bend Loss Coefficient, Kb
0.00	0.000
15.00	0.190
30.00	0.350
45.00	0.470
60.00	0.560
75.00	0.640
90.00	0.700

Calculation Detailed Summary

Generic Structure Loss

Governing Upstream Pipe with Maximum
 Pipe Selection Method QV

Catchment Summary

Label	Area (acres)	Time of Concentration (min)	Rational C	Catchment CA (acres)	Catchment Intensity (in/hr)
DS6	0.340	5.000	0.950	0.323	3.890
DS7	0.330	5.000	0.950	0.313	3.890
DS8	0.330	5.000	0.950	0.313	3.890
DS9	0.250	5.000	0.950	0.237	3.890
DS10	0.170	5.000	0.950	0.162	3.890
DS1	0.310	5.000	0.950	0.294	3.890
DS2	0.310	5.000	0.950	0.294	3.890
DS3	0.310	5.000	0.950	0.294	3.890
DS4	0.400	5.000	0.950	0.380	3.890
DS5	0.320	5.000	0.950	0.304	3.890
ES7	0.060	5.000	0.950	0.057	3.890
ES8	0.180	5.000	0.950	0.171	3.890
ES4	0.100	5.000	0.950	0.095	3.890
ES5	0.190	5.000	0.950	0.181	3.890
ES2	0.400	5.000	0.950	0.380	3.890
ES1	0.160	5.000	0.950	0.152	3.890
ES6	0.240	5.000	0.950	0.228	3.890
ES3	0.470	5.000	0.950	0.447	3.890
FS20	0.190	5.000	0.950	0.181	3.890
FS4	0.110	5.000	0.950	0.105	3.890
FS1	0.220	5.000	0.950	0.209	3.890
FS6	0.280	5.000	0.950	0.266	3.890
FS2	0.170	5.000	0.950	0.162	3.890
FS7	0.170	5.000	0.950	0.162	3.890
FS3	0.220	5.000	0.950	0.209	3.890
FS8	0.220	5.000	0.950	0.209	3.890
FS9	0.110	5.000	0.950	0.105	3.890
FS14	0.270	5.000	0.950	0.257	3.890
ES19	0.240	5.000	0.950	0.228	3.890
ES21	0.200	5.000	0.950	0.190	3.890
ES20a	0.250	5.000	0.950	0.237	3.890
ES14	0.060	5.000	0.950	0.057	3.890
ES18	0.360	5.000	0.950	0.342	3.890
ES10	0.110	5.000	0.950	0.105	3.890
ES9	0.110	5.000	0.950	0.105	3.890
ES12B	0.060	5.000	0.950	0.057	3.890
ES11B	0.060	5.000	0.950	0.057	3.890
ES11A	0.060	5.000	0.950	0.057	3.890
ES12A	0.060	5.000	0.950	0.057	3.890
AS1	0.690	5.000	0.950	0.655	3.890
AS6	0.710	5.000	0.950	0.674	3.890
AS5	0.410	5.000	0.950	0.389	3.890

Calculation Detailed Summary

Catchment Summary

Label	Area (acres)	Time of Concentration (min)	Rational C	Catchment CA (acres)	Catchment Intensity (in/hr)
BS17	0.420	5.000	0.950	0.399	3.890
BS43	0.270	5.000	0.950	0.257	3.890
BS18	0.280	5.000	0.950	0.266	3.890
AS2	0.310	5.000	0.950	0.294	3.890
AS3	0.290	5.000	0.950	0.275	3.890
BS1	0.160	5.000	0.950	0.152	3.890
BS7	0.340	5.000	0.950	0.323	3.890
BS2	0.210	5.000	0.950	0.199	3.890
BS8	0.330	5.000	0.950	0.313	3.890
BS3	0.260	5.000	0.950	0.247	3.890
BS9	0.220	5.000	0.950	0.209	3.890
BS10	0.230	5.000	0.950	0.219	3.890
BS19	0.340	5.000	0.950	0.323	3.890
BS44	0.140	5.000	0.950	0.133	3.890
BS4	0.270	5.000	0.950	0.257	3.890
BS34	0.080	5.000	0.950	0.076	3.890
BS33	0.090	5.000	0.950	0.086	3.890
BS29	0.200	5.000	0.950	0.190	3.890
BS30	0.230	5.000	0.950	0.219	3.890
BS32	0.120	5.000	0.950	0.114	3.890
BS31	0.280	5.000	0.950	0.266	3.890
BS20	0.330	5.000	0.950	0.313	3.890
BS5A	0.180	5.000	0.950	0.171	3.890
BS5B	0.260	5.000	0.950	0.247	3.890
BS28A	0.200	5.000	0.950	0.190	3.890
BS28B	0.220	5.000	0.950	0.209	3.890
BS42	0.130	5.000	0.950	0.123	3.890
BS27	0.250	5.000	0.950	0.237	3.890
BS26	0.230	5.000	0.950	0.219	3.890
BS36	0.270	5.000	0.950	0.257	3.890
BS41	0.190	5.000	0.950	0.181	3.890
BS37	0.180	5.000	0.950	0.171	3.890
BS38	0.270	5.000	0.950	0.257	3.890
BS40	0.350	5.000	0.950	0.333	3.890
BS39	0.220	5.000	0.950	0.209	3.890
BS21	0.390	5.000	0.950	0.370	3.890
BS11	0.330	5.000	0.950	0.313	3.890
BS35	0.270	5.000	0.950	0.257	3.890
BS12	0.340	5.000	0.950	0.323	3.890
BS22	0.510	5.000	0.950	0.484	3.890
BS13	0.330	5.000	0.950	0.313	3.890
BS23	0.420	5.000	0.950	0.399	3.890
BS14	0.330	5.000	0.950	0.313	3.890
BS24	0.270	5.000	0.950	0.257	3.890
BS25	0.210	5.000	0.950	0.199	3.890
BS15	0.220	5.000	0.950	0.209	3.890

Calculation Detailed Summary

Catchment Summary

Label	Area (acres)	Time of Concentration (min)	Rational C	Catchment CA (acres)	Catchment Intensity (in/hr)
BS16	0.160	5.000	0.950	0.152	3.890
FS11	0.090	5.000	0.950	0.086	3.890
FS15	0.090	5.000	0.950	0.086	3.890
FS16	0.120	5.000	0.950	0.114	3.890
FS12	0.130	5.000	0.950	0.123	3.890
FS13	0.120	5.000	0.950	0.114	3.890
FS17	0.140	5.000	0.950	0.133	3.890
FS18	0.140	5.000	0.950	0.133	3.890
FS19	0.130	5.000	0.950	0.123	3.890
ES22A	0.240	5.000	0.950	0.228	3.890
ES15	0.370	5.000	0.950	0.352	3.890
ES17	0.370	5.000	0.950	0.352	3.890
FS5B	0.210	5.000	0.950	0.199	3.890
FS10B	0.260	5.000	0.950	0.247	3.890
FS10A	0.170	5.000	0.950	0.162	3.890
FS5A	0.120	5.000	0.950	0.114	3.890
ES20B	0.170	5.000	0.950	0.162	3.890
ES22B	0.130	5.000	0.950	0.123	3.890

Catchment Rational Flow (ft ³ /s)
1.27
1.23
1.23
0.93
0.63
1.15
1.15
1.15
1.49
1.19
0.22
0.67
0.37
0.71
1.49
0.60
0.89
1.75
0.71
0.41
0.82
1.04
0.63
0.63

Calculation Detailed Summary

Catchment Summary

Catchment Rational Flow (ft ³ /s)
0.82
0.82
0.41
1.01
0.89
0.75
0.93
0.22
1.34
0.41
0.41
0.22
0.22
0.22
0.22
2.57
2.64
1.53
1.56
1.01
1.04
1.15
1.08
0.60
1.27
0.78
1.23
0.97
0.82
0.86
1.27
0.52
1.01
0.30
0.34
0.75
0.86
0.45
1.04
1.23
0.67
0.97
0.75
0.82
0.48
0.93

Calculation Detailed Summary

Catchment Summary

Catchment Rational Flow (ft ³ /s)
0.86
1.01
0.71
0.67
1.01
1.30
0.82
1.45
1.23
1.01
1.27
1.90
1.23
1.56
1.23
1.01
0.78
0.82
0.60
0.34
0.34
0.45
0.48
0.45
0.52
0.52
0.48
0.89
1.38
1.38
0.78
0.97
0.63
0.45
0.63
0.48

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall
DI6-DI7	Circular Pipe - 12.0 in	Circular Pipe	20	DO
DI7-DI8	Circular Pipe - 12.0 in	Circular Pipe	20	DO
DI8-DI9	Circular Pipe - 12.0 in	Circular Pipe	20	DO
DI9-DI10	Circular Pipe - 18.0 in	Circular Pipe	20	DO
DI10-DM1	Circular Pipe - 12.0 in	Circular Pipe	20	DO
DI1-DI2	Circular Pipe - 12.0 in	Circular Pipe	21	DO

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall
DI2-DI3	Circular Pipe - 12.0 in	Circular Pipe	21	DO
DI3-DI4	Circular Pipe - 12.0 in	Circular Pipe	21	DO
DI4-DI5	Circular Pipe - 12.0 in	Circular Pipe	21	DO
DI5-DM1	Circular Pipe - 12.0 in	Circular Pipe	21	DO
EI6-EI5	Circular Pipe - 12.0 in	Circular Pipe	9	EO
EI5-EI4	Circular Pipe - 12.0 in	Circular Pipe	9	EO
EI1-EI2	Circular Pipe - 12.0 in	Circular Pipe	13	EO
EI3-EI2	Circular Pipe - 12.0 in	Circular Pipe	12	EO
FI20-FI4	Circular Pipe - 12.0 in	Circular Pipe	1	FO
FI4-FI5A	Circular Pipe - 24.0 in	Circular Pipe	1	FO
FI5A-FO	Circular Pipe - 24.0 in	Circular Pipe	1	FO
FI3-FI4	Circular Pipe - 24.0 in	Circular Pipe	2	FO
FI6-FI7	Circular Pipe - 12.0 in	Circular Pipe	3	FO
FI7-FI8	Circular Pipe - 12.0 in	Circular Pipe	3	FO
FI9-FI8	Circular Pipe - 12.0 in	Circular Pipe	2	FO
FI10A-FI5	Circular Pipe - 18.0 in	Circular Pipe	5	FO
FI15-FI16	Circular Pipe - 12.0 in	Circular Pipe	7	FO
FS16-FS17	Circular Pipe - 12.0 in	Circular Pipe	6	FO
FI17-FI18	Circular Pipe - 12.0 in	Circular Pipe	5	FO
FI18-FI19	Circular Pipe - 12.0 in	Circular Pipe	5	FO
FI13-FI14	Circular Pipe - 12.0 in	Circular Pipe	5	FO
EI19-EI20A	Circular Pipe - 12.0 in	Circular Pipe	17	EO
EI21-EI22	Circular Pipe - 12.0 in	Circular Pipe	16	EO
EI14-EI15	Circular Pipe - 12.0 in	Circular Pipe	18	EO
EI17-EI18	Circular Pipe - 12.0 in	Circular Pipe	15	EO
EI11A-EI12A	Circular Pipe - 12.0 in	Circular Pipe	14	EO
EI9-EI10	Circular Pipe - 12.0 in	Circular Pipe	11	EO
DM1-DO	Circular Pipe - 18.0 in	Circular Pipe	20	DO
EI8-EI7	Circular Pipe - 12.0 in	Circular Pipe	10	EO
EI15-EI20B	Circular Pipe - 12.0 in	Circular Pipe	18	EO
EI20A-EI20B	Circular Pipe - 12.0 in	Circular Pipe	17	EO
EI22A-EI20B	Circular Pipe - 12.0 in	Circular Pipe	16	EO
EI18-EI20B	Circular Pipe - 12.0 in	Circular Pipe	15	EO
EI16-EO	Circular Pipe - 24.0 in	Circular Pipe	15	EO
EI2-EI13	Circular Pipe - 12.0 in	Circular Pipe	12	EO
EI4-EI13	Circular Pipe - 12.0 in	Circular Pipe	9	EO
EI13-EO	Circular Pipe - 24.0 in	Circular Pipe	9	EO
EI10-EI13	Circular Pipe - 12.0 in	Circular Pipe	11	EO
EI7-EI13	Circular Pipe - 12.0 in	Circular Pipe	10	EO
AI6-AI5	Circular Pipe - 12.0 in	Circular Pipe	23	AO
AI5-AI4	Circular Pipe - 12.0 in	Circular Pipe	23	AO
AI4-AO	Circular Pipe - 18.0 in	Circular Pipe	22	AO
AI1-AI2	Circular Pipe - 18.0 in	Circular Pipe	22	AO
AI2-AI3	Circular Pipe - 18.0 in	Circular Pipe	22	AO
AI3-AI4	Circular Pipe - 12.0 in	Circular Pipe	22	AO
BI1-BI2	Circular Pipe - 12.0 in	Circular Pipe	31	BO
BI2-BI3	Circular Pipe - 12.0 in	Circular Pipe	31	BO
BI3-BI4	Circular Pipe - 12.0 in	Circular Pipe	31	BO

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall
BI6-BO	Circular Pipe - 24.0 in	Circular Pipe	24	BO
BI33-BI34	Circular Pipe - 12.0 in	Circular Pipe	25	BO
BI34-BI35	Circular Pipe - 12.0 in	Circular Pipe	25	BO
BI35-BI12	Circular Pipe - 12.0 in	Circular Pipe	25	BO
BI7-BI8	Circular Pipe - 12.0 in	Circular Pipe	24	BO
BI8-BI9	Circular Pipe - 12.0 in	Circular Pipe	24	BO
BI9-BI10	Circular Pipe - 12.0 in	Circular Pipe	24	BO
BI10-BI11	Circular Pipe - 12.0 in	Circular Pipe	24	BO
BI11-BI12	Circular Pipe - 12.0 in	Circular Pipe	24	BO
BI12-BI13	Circular Pipe - 18.0 in	Circular Pipe	24	BO
BI13-BI14	Circular Pipe - 18.0 in	Circular Pipe	24	BO
BI14-BI15	Circular Pipe - 18.0 in	Circular Pipe	24	BO
BI15-BI16	Circular Pipe - 18.0 in	Circular Pipe	24	BO
BI16-BI6	Circular Pipe - 12.0 in	Circular Pipe	24	BO
BI26-BI27	Circular Pipe - 12.0 in	Circular Pipe	35	BO
BI28-BI5	Circular Pipe - 12.0 in	Circular Pipe	33	BO
BI44-BI30	Circular Pipe - 12.0 in	Circular Pipe	34	BO
BI29-BI30	Circular Pipe - 12.0 in	Circular Pipe	33	BO
BI30-BI31	Circular Pipe - 12.0 in	Circular Pipe	33	BO
BI31-BI32	Circular Pipe - 12.0 in	Circular Pipe	33	BO
BI32-BI28A	Circular Pipe - 12.0 in	Circular Pipe	33	BO
BI43-BI18	Circular Pipe - 12.0 in	Circular Pipe	30	BO
BI17-BI18	Circular Pipe - 12.0 in	Circular Pipe	29	BO
BI18-BI19	Circular Pipe - 12.0 in	Circular Pipe	29	BO
BI19-BI20	Circular Pipe - 12.0 in	Circular Pipe	29	BO
BI20-BI21	Circular Pipe - 12.0 in	Circular Pipe	29	BO
BI21-BI22	Circular Pipe - 18.0 in	Circular Pipe	29	BO
BI22-BI23	Circular Pipe - 18.0 in	Circular Pipe	27	BO
BI23-BI24	Circular Pipe - 18.0 in	Circular Pipe	27	BO
BI24-BI25	Circular Pipe - 18.0 in	Circular Pipe	27	BO
BI25-BI6	Circular Pipe - 18.0 in	Circular Pipe	27	BO
BI42-BI5	Circular Pipe - 12.0 in	Circular Pipe	32	BO
BI41-BI37	Circular Pipe - 12.0 in	Circular Pipe	28	BO
BI36-BI37	Circular Pipe - 12.0 in	Circular Pipe	27	BO
BI37-BI38	Circular Pipe - 12.0 in	Circular Pipe	27	BO
BI38-BI39	Circular Pipe - 12.0 in	Circular Pipe	27	BO
BI39-BI22	Circular Pipe - 12.0 in	Circular Pipe	27	BO
BI40-BI6	Circular Pipe - 12.0 in	Circular Pipe	26	BO
BI5-BI6	Circular Pipe - 18.0 in	Circular Pipe	31	BO
FI11-FI15	Circular Pipe - 12.0 in	Circular Pipe	7	FO
FI12-FI16	Circular Pipe - 12.0 in	Circular Pipe	6	FO
FI13-FI17	Circular Pipe - 12.0 in	Circular Pipe	5	FO
FI19-FI10B	Circular Pipe - 18.0 in	Circular Pipe	5	FO
FI10B-FI10A	Circular Pipe - 18.0 in	Circular Pipe	5	FO
FI5B-FI5A	Circular Pipe - 12.0 in	Circular Pipe	8	FO
FI1-FI6	Circular Pipe - 12.0 in	Circular Pipe	3	FO
FI2-FI7	Circular Pipe - 12.0 in	Circular Pipe	4	FO
FI8-FI3	Circular Pipe - 18.0 in	Circular Pipe	2	FO

Calculation Detailed Summary

Conduit Summary

Label	Conduit Description	Conduit Shape	Branch ID	Subnetwork Outfall
BI4-BI5A	Circular Pipe - 12.0 in	Circular Pipe	31	BO
BI5A-BI5B	Circular Pipe - 12.0 in	Circular Pipe	31	BO
BI27-BI28B	Circular Pipe - 12.0 in	Circular Pipe	35	BO
BI28B-BI28A	Circular Pipe - 12.0 in	Circular Pipe	35	BO
EI22B-EI20B	Circular Pipe - 12.0 in	Circular Pipe	19	EO
EI11B-EI11A	Circular Pipe - 12.0 in	Circular Pipe	14	EO
EI12A-EI12B	Circular Pipe - 12.0 in	Circular Pipe	14	EO
EI12B-EI13	Circular Pipe - 12.0 in	Circular Pipe	14	EO

Flow (ft ³ /s)	Velocity (Average) (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)
0.64	4.86	32.33	24.50	0.33
1.38	6.34	24.50	15.63	0.50
2.17	6.89	15.63	12.15	0.63
2.95	5.39	12.15	9.30	0.65
3.51	8.86	9.30	7.04	0.80
0.86	6.00	46.89	38.52	0.39
1.51	6.58	38.52	31.64	0.52
2.24	7.65	31.64	21.25	0.64
3.07	8.27	21.25	13.34	0.75
3.92	11.67	13.34	7.04	0.84
0.50	4.08	15.29	10.92	0.29
1.02	5.57	10.92	7.01	0.42
0.37	4.48	6.25	3.62	0.25
0.80	5.16	12.37	3.62	0.37
0.42	4.42	-0.73	-4.28	0.27
4.25	7.59	-4.28	-5.90	0.72
9.45	8.93	-5.90	-7.23	1.10
3.67	4.31	-3.83	-4.28	0.67
1.43	3.25	8.55	5.64	0.55
2.23	7.87	5.64	-3.32	0.64
0.54	4.60	-2.70	-3.32	0.30
5.18	9.16	-4.12	-5.90	0.88
0.64	5.77	25.33	12.51	0.33
1.44	7.44	12.51	0.76	0.51
3.14	8.43	0.76	-0.19	0.76
3.62	7.21	-0.19	-1.39	0.81
0.77	1.72	3.13	2.98	0.53
0.71	4.09	10.85	6.51	0.35
0.61	3.90	10.82	6.48	0.32
0.21	2.63	12.19	8.94	0.19
0.99	4.49	12.42	8.11	0.42
0.44	4.91	22.17	21.34	0.27
0.37	4.99	10.25	9.37	0.25
7.21	11.48	7.04	5.66	1.04
0.56	7.56	4.81	2.37	0.31
1.08	9.34	8.94	-0.05	0.44

Calculation Detailed Summary

Conduit Summary

Flow (ft ³ /s)	Velocity (Average) (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)
1.44	9.40	6.51	-0.05	0.51
1.30	8.60	6.48	-0.05	0.48
2.03	10.91	8.11	-0.05	0.61
7.19	5.63	-0.05	-4.15	0.95
2.09	8.87	3.62	1.94	0.62
1.45	8.84	7.01	1.94	0.51
7.00	5.76	1.94	-4.18	0.94
0.77	4.86	9.37	1.94	0.37
0.80	4.22	2.37	1.94	0.37
1.62	8.61	178.54	124.73	0.54
2.90	24.08	124.73	56.92	0.73
5.71	19.15	56.92	51.38	0.92
1.59	2.07	177.67	176.56	0.67
2.05	3.43	176.56	176.22	0.56
2.84	26.91	176.22	56.92	0.72
0.51	5.61	171.80	160.45	0.30
1.15	8.46	160.45	136.59	0.45
1.90	9.07	136.59	117.70	0.59
27.70	22.93	57.82	51.96	1.82
0.24	4.45	143.20	137.29	0.20
0.50	5.15	137.29	120.92	0.29
0.98	6.29	120.92	114.89	0.42
0.93	6.08	168.40	157.54	0.40
1.59	7.59	157.54	148.64	0.54
2.26	8.26	148.64	139.73	0.64
2.91	8.88	139.73	126.81	0.73
3.62	9.11	126.81	114.89	0.81
5.39	10.25	114.89	101.96	0.89
6.17	10.64	101.96	89.02	0.96
6.91	10.89	89.02	80.57	1.02
7.60	11.26	80.57	73.61	1.07
8.20	22.46	73.99	57.82	0.99
0.68	6.23	146.34	131.51	0.34
5.26	10.85	127.93	115.67	0.93
0.33	7.21	156.24	139.02	0.24
0.61	1.77	139.45	139.02	0.45
1.53	6.29	139.02	133.64	0.52
2.26	11.80	133.64	130.72	0.64
2.79	6.81	130.72	127.93	0.72
0.77	6.17	163.37	161.68	0.37
1.09	6.26	171.94	161.68	0.44
2.54	8.55	161.68	148.78	0.68
3.32	9.05	148.78	136.36	0.78
4.11	9.64	136.36	121.03	0.86
4.93	9.86	121.35	109.16	0.85
8.98	11.59	109.16	96.71	1.16

Calculation Detailed Summary

Conduit Summary

Flow (ft ³ /s)	Velocity (Average) (ft/s)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Depth (In) (ft)
9.91	11.98	96.71	88.26	1.21
10.79	11.82	88.26	82.30	1.26
11.57	21.07	82.30	57.82	1.30
0.43	4.13	121.77	115.67	0.27
0.58	3.45	130.32	130.11	0.32
0.77	6.51	145.37	130.11	0.37
2.05	4.98	130.11	126.71	0.61
2.75	5.99	126.71	122.76	0.71
3.14	9.17	122.76	109.16	0.76
0.95	5.54	96.41	57.82	0.41
9.18	11.14	115.67	57.82	1.17
0.31	3.66	25.73	25.33	0.23
0.43	3.34	12.77	12.51	0.27
1.28	7.39	2.98	0.76	0.48
4.05	6.16	-1.23	-3.98	0.77
4.60	8.92	-3.98	-4.12	0.82
0.63	5.60	-5.90	-5.90	0.90
0.66	3.28	8.84	8.55	0.34
0.64	3.05	5.83	5.64	0.33
3.16	4.44	-3.32	-3.86	0.68
2.68	5.14	117.70	115.70	0.70
3.24	9.09	115.70	115.67	0.90
1.45	5.40	131.51	127.93	0.51
2.16	9.20	127.93	127.93	0.63
0.43	5.27	2.27	-0.05	0.27
0.21	2.42	22.19	22.17	0.19
0.65	3.46	21.34	21.29	0.34
0.87	8.10	21.29	1.94	0.39

Depth (Out) (ft)
0.50
0.63
0.65
0.80
1.04
0.52
0.64
0.75
0.84
1.04
0.42
0.51
0.62
0.62
0.72

Calculation Detailed Summary

Conduit Summary

Depth (Out) (ft)
1.10
0.77
0.72
0.64
0.68
0.68
1.10
0.51
0.76
0.81
0.61
0.48
0.51
0.48
0.44
0.61
0.34
0.37
0.66
0.37
0.95
0.95
0.95
0.95
0.85
0.94
0.94
0.82
0.94
0.94
0.73
0.92
0.38
0.56
0.72
0.92
0.45
0.59
0.70
0.96
0.29
0.42
0.89
0.54
0.64
0.73
0.81

Calculation Detailed Summary

Conduit Summary

Depth (Out) (ft)
0.89
0.96
1.02
1.07
0.61
1.82
0.51
1.17
0.52
0.52
0.64
0.72
0.93
0.68
0.68
0.78
0.86
0.53
1.16
1.21
1.26
1.30
1.82
1.17
0.61
0.61
0.71
0.76
1.16
1.82
1.82
0.33
0.51
0.76
0.82
0.88
1.10
0.55
0.64
0.64
0.90
1.17
0.63
0.93
0.95
0.27
0.39

Calculation Detailed Summary

Conduit Summary

Depth (Out) (ft)
0.94

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total Surface) (ft ³ /s)	Flow (Total Out) (ft ³ /s)
DI6	CatchBasin	DO	1.27	0.64
DI7	CatchBasin	DO	1.23	1.38
DI8	CatchBasin	DO	1.23	2.17
DI9	CatchBasin	DO	0.93	2.95
DI10	CatchBasin	DO	0.63	3.51
DI5	CatchBasin	DO	1.19	3.92
DI4	CatchBasin	DO	1.49	3.07
DI3	CatchBasin	DO	1.15	2.24
DI2	CatchBasin	DO	1.15	1.51
DI1	CatchBasin	DO	1.15	0.86
EI7	CatchBasin	EO	0.22	0.80
EI8	CatchBasin	EO	0.67	0.56
EI4	CatchBasin	EO	0.37	1.45
EI5	CatchBasin	EO	0.71	1.02
EI6	CatchBasin	EO	0.89	0.50
EI3	CatchBasin	EO	1.75	0.80
EI2	CatchBasin	EO	1.49	2.09
EI1	CatchBasin	EO	0.60	0.37
FI20	CatchBasin	FO	0.71	0.42
FI4	CatchBasin	FO	0.41	4.25
FI5A	CatchBasin	FO	0.45	9.45
FI10A	CatchBasin	FO	0.63	5.18
FI9	CatchBasin	FO	0.41	0.54
FI8	CatchBasin	FO	0.82	3.16
FI3	CatchBasin	FO	0.82	3.67
FI2	CatchBasin	FO	0.63	0.64
FI7	CatchBasin	FO	0.63	2.23
FI1	CatchBasin	FO	0.82	0.66
FI6	CatchBasin	FO	1.04	1.43
FI14	CatchBasin	FO	1.01	0.77
FI13	CatchBasin	FO	0.45	1.28
FI12	CatchBasin	FO	0.48	0.43
FI11	CatchBasin	FO	0.34	0.31
FI15	CatchBasin	FO	0.34	0.64
FI16	CatchBasin	FO	0.45	1.44
FI17	CatchBasin	FO	0.52	3.14
FI18	CatchBasin	FO	0.52	3.62
FI19	CatchBasin	FO	0.48	4.05
EI14	CatchBasin	EO	0.22	0.21
EI17	CatchBasin	EO	1.38	0.99
EI15	CatchBasin	EO	1.38	1.08

Calculation Detailed Summary

Node Summary

Label	Element Type	Subnetwork Outfall	Flow (Total Surface) (ft ³ /s)	Flow (Total Out) (ft ³ /s)
EI20A	CatchBasin	EO	0.93	1.44
EI22A	CatchBasin	EO	0.89	1.30
EI21	CatchBasin	EO	0.75	0.61
EI19	CatchBasin	EO	0.89	0.71
EI18	CatchBasin	EO	1.34	2.03
EI11A	CatchBasin	EO	0.22	0.44
EI12A	CatchBasin	EO	0.22	0.65
EI9	CatchBasin	EO	0.41	0.37
EI10	CatchBasin	EO	0.41	0.77
DM1	Manhole	DO	0.00	7.21
EI20B	CatchBasin	EO	0.63	7.19
EI13	CatchBasin	EO	0.00	7.00
BI16	CatchBasin	BO	0.60	8.20
BI6	CatchBasin	BO	0.00	27.70
BI25	CatchBasin	BO	0.78	11.57
BI15	CatchBasin	BO	0.82	7.60
BI14	CatchBasin	BO	1.23	6.91
BI13	CatchBasin	BO	1.23	6.17
BI24	CatchBasin	BO	1.01	10.79
BI23	CatchBasin	BO	1.56	9.91
BI22	CatchBasin	BO	1.90	8.98
BI12	CatchBasin	BO	1.27	5.39
BI35	CatchBasin	BO	1.01	0.98
BI11	CatchBasin	BO	1.23	3.62
BI21	CatchBasin	BO	1.45	4.93
BI20	CatchBasin	BO	1.23	4.11
BI34	CatchBasin	BO	0.30	0.50
BI10	CatchBasin	BO	0.86	2.91
BI4	CatchBasin	BO	1.01	2.68
BI33	CatchBasin	BO	0.34	0.24
BI9	CatchBasin	BO	0.82	2.26
BI3	CatchBasin	BO	0.97	1.90
BI8	CatchBasin	BO	1.23	1.59
BI2	CatchBasin	BO	0.78	1.15
BI1	CatchBasin	BO	0.60	0.51
AI3	CatchBasin	AO	1.08	2.84
AI5	CatchBasin	AO	1.53	2.90
AI4	CatchBasin	AO	0.00	5.71
AI2	CatchBasin	AO	1.15	2.05
AI1	CatchBasin	AO	2.57	1.59
AI6	CatchBasin	AO	2.64	1.62
BI7	CatchBasin	BO	1.27	0.93
BI17	CatchBasin	BO	1.56	1.09
BI29	CatchBasin	BO	0.75	0.61
BI18	CatchBasin	BO	1.04	2.54
BI43	CatchBasin	BO	1.01	0.77
BI19	CatchBasin	BO	1.27	3.32

Calculation Detailed Summary

Node Summary

Label	Element Type	Subnetwork: Outfall	Flow (Total Surface) (ft ³ /s)	Flow (Total Out) (ft ³ /s)
BI44	CatchBasin	BO	0.52	0.33
BI30	CatchBasin	BO	0.86	1.53
BI31	CatchBasin	BO	1.04	2.26
BI32	CatchBasin	BO	0.45	2.79
BI28A	CatchBasin	BO	0.75	5.26
BI5B	CatchBasin	BO	0.97	9.18
BI40	CatchBasin	BO	1.30	0.95
BI39	CatchBasin	BO	0.82	3.14
BI38	CatchBasin	BO	1.01	2.75
BI42	CatchBasin	BO	0.48	0.43
BI27	CatchBasin	BO	0.93	1.45
BI37	CatchBasin	BO	0.67	2.05
BI41	CatchBasin	BO	0.71	0.58
BI26	CatchBasin	BO	0.86	0.68
BI36	CatchBasin	BO	1.01	0.77
FI10B	CatchBasin	FO	0.97	4.60
FI5B	CatchBasin	FO	0.78	0.63
BI5A	CatchBasin	BO	0.67	3.24
BI28B	CatchBasin	BO	0.82	2.16
EI22B	CatchBasin	EO	0.48	0.43
EI11B	CatchBasin	EO	0.22	0.21
EI12B	CatchBasin	EO	0.22	0.87

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
36.00	32.00	32.45	32.45
28.00	24.00	24.69	24.69
19.00	15.00	15.90	15.90
15.50	11.50	12.40	12.40
12.50	8.50	9.72	9.72
18.50	12.50	13.82	13.82
24.50	20.50	21.62	21.62
35.00	31.00	31.92	31.92
42.00	38.00	38.73	38.73
50.50	46.50	47.03	47.03
8.00	2.00	2.51	2.51
8.50	4.50	4.92	4.92
10.50	6.50	7.21	7.21
14.50	10.50	11.08	11.08
19.00	15.00	15.40	15.40
16.00	12.00	12.51	12.51
7.00	3.00	3.88	3.88
10.00	6.00	6.34	6.34
3.00	-1.00	-0.64	-0.64
0.00	-5.00	-4.01	-4.01
-1.00	-7.00	-5.46	-5.46

Calculation Detailed Summary

Node Summary

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
-1.00	-5.00	-3.76	-3.76
0.00	-3.00	-2.59	-2.59
1.00	-4.00	-3.06	-3.06
1.00	-4.50	-3.58	-3.58
9.00	5.50	5.96	5.96
9.00	5.00	5.92	5.92
12.00	8.50	8.96	8.96
12.00	8.00	8.71	8.71
6.20	2.60	3.18	3.18
6.00	2.50	3.16	3.16
16.00	12.50	12.87	12.87
29.00	25.50	25.81	25.81
29.00	25.00	25.45	25.45
16.00	12.00	12.71	12.71
5.50	0.00	1.13	1.13
4.00	-1.00	0.25	0.25
4.00	-2.00	-0.92	-0.92
18.00	12.00	12.26	12.26
16.00	12.00	12.58	12.58
12.50	8.50	9.10	9.10
10.00	6.00	6.71	6.71
10.00	6.00	6.67	6.67
14.50	10.50	10.94	10.94
14.50	10.50	10.98	10.98
11.50	7.50	8.37	8.37
26.00	21.90	22.27	22.27
26.00	21.00	21.46	21.46
14.00	10.00	10.34	10.34
14.00	9.00	9.50	9.50
10.00	6.00	7.51	7.51
5.00	-1.00	0.32	0.32
5.00	1.00	2.30	2.30
77.00	73.00	75.69	75.69
60.00	56.00	59.14	59.14
84.00	81.00	83.09	83.09
83.50	79.50	81.06	81.06
92.00	88.00	89.47	89.47
105.00	101.00	102.38	102.38
91.00	87.00	88.98	88.98
99.50	95.50	97.36	97.36
112.00	108.00	109.74	109.74
118.00	114.00	115.27	115.27
124.50	120.50	121.07	121.07
130.00	126.00	127.25	127.25
124.50	120.50	121.70	121.70
139.50	135.50	136.87	136.87

Calculation Detailed Summary

Node Summary

Elevation (Ground) (ft)	Elevation (Invert) (ft)	Energy Grade Line (In) (ft)	Energy Grade Line (Out) (ft)
141.00	137.00	137.40	137.40
143.00	139.00	140.08	140.08
121.00	117.00	118.02	118.02
147.00	143.00	143.27	143.27
152.00	148.00	148.92	148.92
140.00	136.00	136.83	136.83
161.00	157.00	157.75	157.75
164.00	160.00	160.62	160.62
175.50	171.50	171.90	171.90
179.50	175.50	176.56	176.56
128.00	124.00	125.08	125.08
60.00	56.00	57.31	57.31
180.00	176.00	176.74	176.74
181.00	177.00	177.74	177.74
182.00	178.00	178.76	178.76
172.00	168.00	168.56	168.56
175.50	171.50	172.11	172.11
143.00	139.00	139.50	139.50
165.00	161.00	161.99	161.99
167.00	163.00	163.50	163.50
152.00	148.00	149.18	149.18
160.00	156.00	156.32	156.32
142.50	138.50	139.23	139.23
137.00	133.00	133.92	133.92
134.00	130.00	131.05	131.05
131.00	127.00	128.67	128.67
118.50	114.50	116.27	116.27
100.00	96.00	96.56	96.56
126.00	122.00	123.13	123.13
130.00	126.00	127.04	127.04
125.50	121.50	121.87	121.87
135.00	131.00	131.71	131.71
133.50	129.50	130.37	130.37
134.00	130.00	130.43	130.43
150.00	146.00	146.47	146.47
149.00	145.00	145.50	145.50
-1.00	-4.80	-3.64	-3.64
-1.00	-6.80	-5.89	-5.89
118.50	114.80	115.99	115.99
131.00	127.30	128.20	128.20
10.00	2.00	2.37	2.37
26.00	22.00	22.26	22.26
26.00	20.90	21.44	21.44

Inlet Summary

Calculation Detailed Summary

Inlet Summary

Label	Inlet Type	Inlet Type (Inlet)	Inlet	Flow (Total Intercepted) (ft ³ /s)
DI6	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.64
DI7	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.83
DI8	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.95
DI9	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.94
DI10	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.85
DI5	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.08
DI4	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.03
DI3	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.84
DI2	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.70
DI1	Catalog Inlet	Grate	caltrans Inlet - GO	0.86
EI7	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.24
EI8	Catalog Inlet	Grate	caltrans Inlet - GO	0.56
EI4	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.50
EI5	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.58
EI6	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.50
EI3	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.80
EI2	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.07
EI1	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.37
FI20	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.42
FI4	Catalog Inlet	Grate	caltrans Inlet - GO	0.51
FI5A	Catalog Inlet	Grate	caltrans Inlet - GO	0.66
FI10A	Catalog Inlet	Grate	caltrans Inlet - GO	0.66
FI9	Catalog Inlet	Grate	caltrans Inlet - GO	0.54
FI8	Catalog Inlet	Grate	caltrans Inlet - GO	0.77
FI3	Catalog Inlet	Grate	caltrans Inlet - GO	0.75
FI2	Catalog Inlet	Grate	caltrans Inlet - GO	0.64
FI7	Catalog Inlet	Grate	caltrans Inlet - GO	0.70
FI1	Catalog Inlet	Grate	caltrans Inlet - GO	0.66
FI6	Catalog Inlet	Grate	caltrans Inlet - GO	0.80
FI14	Catalog Inlet	Grate	caltrans Inlet - GO	0.77
FI13	Catalog Inlet	Grate	caltrans Inlet - GO	0.56
FI12	Catalog Inlet	Grate	caltrans Inlet - GO	0.43
FI11	Catalog Inlet	Grate	caltrans Inlet - GO	0.31
FI15	Catalog Inlet	Grate	caltrans Inlet - GO	0.33
FI16	Catalog Inlet	Grate	caltrans Inlet - GO	0.46
FI17	Catalog Inlet	Grate	caltrans Inlet - GO	0.58
FI18	Catalog Inlet	Grate	caltrans Inlet - GO	0.54
FI19	Catalog Inlet	Grate	caltrans Inlet - GO	0.50
EI14	Catalog Inlet	Grate	caltrans Inlet - GO	0.21
EI17	Catalog Inlet	Grate	caltrans Inlet - GO	0.99
EI15	Catalog Inlet	Grate	caltrans Inlet - GO	1.00
EI20A	Catalog Inlet	Grate	caltrans Inlet - GO	0.84
EI22A	Catalog Inlet	Grate	caltrans Inlet - GO	0.79
EI21	Catalog Inlet	Grate	caltrans Inlet - GO	0.61
EI19	Catalog Inlet	Grate	caltrans Inlet - GO	0.71
EI18	Catalog Inlet	Grate	caltrans Inlet - GO	1.18

Calculation Detailed Summary

Inlet Summary

Label	Inlet Type	Inlet Type (Inlet)	Inlet	Flow (Total Intercepted) (ft ³ /s)
EI11A	Catalog Inlet	Grate	caltrans Inlet - GO	0.22
EI12A	Catalog Inlet	Grate	caltrans Inlet - GO	0.22
EI9	Catalog Inlet	Grate	caltrans Inlet - GO	0.37
EI10	Catalog Inlet	Grate	caltrans Inlet - GO	0.40
EI20B	Catalog Inlet	Grate	caltrans Inlet - GO	1.39
EI13	Catalog Inlet	Grate	caltrans Inlet - GO	1.40
BI16	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.96
BI6	Catalog Inlet	Grate	caltrans Inlet - GO	2.28
BI25	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.23
BI15	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.10
BI14	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.20
BI13	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.19
BI24	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.37
BI23	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.49
BI22	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.46
BI12	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.17
BI35	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.59
BI11	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.93
BI21	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.14
BI20	Catalog Inlet	Grate	Caltrans Inlet D - 1	1.02
BI34	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.27
BI10	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.79
BI4	Catalog Inlet	Grate	caltrans Inlet - GO	0.94
BI33	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.24
BI9	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.76
BI3	Catalog Inlet	Grate	caltrans Inlet - GO	0.86
BI8	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.74
BI2	Catalog Inlet	Grate	caltrans Inlet - GO	0.69
BI1	Catalog Inlet	Grate	caltrans Inlet - GO	0.51
AI3	Catalog Inlet	Grate	caltrans Inlet - GO	1.23
AI5	Catalog Inlet	Grate	caltrans Inlet - GO	1.58
AI4	Catalog Inlet	Grate	caltrans Inlet - GO	1.09
AI2	Catalog Inlet	Grate	caltrans Inlet - GO	1.38
AI1	Catalog Inlet	Grate	caltrans Inlet - GO	1.59
AI6	Catalog Inlet	Grate	caltrans Inlet - GO	1.62
BI7	Catalog Inlet	Grate	caltrans Inlet - GO	0.93
BI17	Catalog Inlet	Grate	caltrans Inlet - GO	1.09
BI29	Catalog Inlet	Grate	caltrans Inlet - GO	0.61
BI18	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.79
BI43	Catalog Inlet	Grate	caltrans Inlet - GO	0.77
BI19	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.94
BI44	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.33
BI30	Catalog Inlet	Grate	caltrans Inlet - GO	0.88
BI31	Catalog Inlet	Grate	caltrans Inlet - GO	0.97
BI32	Catalog Inlet	Grate	caltrans Inlet - GO	0.66
BI28A	Catalog Inlet	Grate	caltrans Inlet - GO	0.87

Calculation Detailed Summary

Inlet Summary

Label	Inlet Type	Inlet Type (Inlet)	Inlet	Flow (Total Intercepted) (ft ³ /s)
BI5B	Catalog Inlet	Grate	caltrans Inlet - GO	1.09
BI40	Catalog Inlet	Grate	caltrans Inlet - GO	0.95
BI39	Catalog Inlet	Grate	Caltrans Inlet D - 1	0.59
BI38	Catalog Inlet	Grate	caltrans Inlet - GO	0.92
BI42	Catalog Inlet	Grate	caltrans Inlet - GO	0.43
BI27	Catalog Inlet	Grate	caltrans Inlet - GO	0.84
BI37	Catalog Inlet	Grate	caltrans Inlet - GO	0.79
BI41	Catalog Inlet	Grate	caltrans Inlet - GO	0.58
BI26	Catalog Inlet	Grate	caltrans Inlet - GO	0.68
BI36	Catalog Inlet	Grate	caltrans Inlet - GO	0.77
FI10B	Catalog Inlet	Grate	caltrans Inlet - GO	0.81
FI5B	Catalog Inlet	Grate	caltrans Inlet - GO	0.63
BI5A	Catalog Inlet	Grate	caltrans Inlet - GO	0.78
BI28B	Catalog Inlet	Grate	caltrans Inlet - GO	0.83
EI22B	Catalog Inlet	Grate	caltrans Inlet - GO	0.43
EI11B	Catalog Inlet	Grate	caltrans Inlet - GO	0.21
EI12B	Catalog Inlet	Grate	caltrans Inlet - GO	0.22

Flow (Total Bypassed) (ft ³ /s)	Bypass Target	Capture Efficiency (Calculated) (%)	Gutter Depth (in)	Gutter Spread (ft)
0.63	DI7	50.2	1.5	6.4
1.03	DI8	44.7	1.8	7.4
1.31	DI9	42.1	1.9	7.9
1.29	DI10	42.2	1.9	7.9
1.08	DO	44.2	1.8	7.5
1.63	DO	39.7	2.0	8.5
1.52	DI5	40.5	2.0	8.3
1.06	DI4	44.4	1.8	7.5
0.75	DI3	48.2	1.6	6.7
0.29	DI2	74.8	1.5	6.2
0.10	EI13	71.6	0.9	3.9
0.11	EI7	83.2	1.2	5.0
0.40	EI13	55.4	1.4	5.6
0.53	EI4	52.2	1.5	6.1
0.40	EI5	55.5	1.3	5.6
0.95	EI2	45.5	1.7	7.2
1.60	EI13	39.9	2.0	8.5
0.23	EI2	62.0	1.2	4.8
0.29	FO	59.2	1.2	5.1
0.12	FO	80.5	1.2	4.9
0.16	FO	80.2	1.3	5.4
0.22	FI5A	74.8	1.3	5.6
0.10	FO	83.9	1.2	5.0
0.23	FI9	77.1	1.4	5.9
0.22	FI4	77.6	1.4	5.8

Calculation Detailed Summary

Inlet Summary

Flow (Total Bypassed) (ft ³ /s)	Bypass Target	Capture Efficiency (Calculated) (%)	Gutter Depth (in)	Gutter Spread (ft)
0.15	FI3	80.7	1.3	5.4
0.18	FI8	79.2	1.3	5.6
0.16	FI2	80.2	1.3	5.4
0.25	FI7	76.5	1.4	5.9
0.23	FI13	77.0	1.4	5.9
0.11	FI17	83.1	1.2	5.1
0.06	FI16	87.8	1.1	4.5
0.03	FI15	92.3	0.9	3.9
0.03	FI16	91.5	1.0	4.0
0.07	FI17	86.4	1.1	4.6
0.12	FI18	82.4	1.2	5.1
0.10	FI19	83.8	1.2	5.0
0.09	FI10B	85.1	1.2	4.8
0.01	EI15	96.2	0.8	3.3
0.39	EI18	72.0	1.6	6.6
0.39	EI20B	71.9	1.6	6.6
0.28	EI20B	75.3	1.5	6.1
0.24	EI20B	76.7	1.4	5.9
0.14	EI22A	81.7	1.3	5.2
0.19	EI20A	78.9	1.3	5.6
0.55	EI20B	68.3	1.7	7.2
0.01	EI12A	95.9	0.8	3.4
0.01	EI12B	95.8	0.8	3.4
0.04	EI10	89.9	1.0	4.2
0.05	EI13	88.7	1.0	4.3
0.76	EO	64.8	1.9	7.8
0.76	EO	64.7	1.9	7.8
1.33	BI6	41.9	1.9	8.0
1.93	BO	54.2	2.4	10.0
2.06	BI6	37.4	2.2	9.1
1.69	BI16	39.4	2.1	8.6
1.97	BI15	37.8	2.2	9.0
1.93	BI14	38.0	2.2	9.0
2.50	BI25	35.4	2.3	9.7
2.87	BI24	34.1	2.4	10.2
2.79	BI23	34.4	2.4	10.1
1.89	BI13	38.2	2.1	8.9
0.54	BI12	51.9	1.5	6.1
1.25	BI12	42.6	1.9	7.8
1.80	BI22	38.7	2.1	8.8
1.49	BI21	40.7	2.0	8.3
0.12	BI35	68.9	1.0	4.1
0.95	BI11	45.6	1.7	7.2
0.35	BI5A	73.0	1.5	6.4
0.10	BI34	71.6	0.9	3.9
0.88	BI10	46.4	1.7	7.1

Calculation Detailed Summary

Inlet Summary

Flow (Total Bypassed) (ft ³ /s)	Bypass Target	Capture Efficiency (Calculated) (%)	Gutter Depth (in)	Gutter Spread (ft)
0.29	BI4	74.9	1.5	6.2
0.83	BI9	47.1	1.7	6.9
0.18	BI3	79.3	1.3	5.6
0.09	BI2	85.0	1.2	4.8
0.60	AI4	67.4	1.8	7.3
0.97	AI4	62.0	2.0	8.3
0.47	AO	69.9	1.7	6.9
0.75	AI3	64.9	1.9	7.8
0.98	AI2	61.9	2.0	8.3
1.02	AI5	61.4	2.0	8.4
0.34	BI8	73.4	1.5	6.4
0.47	BI18	69.9	1.7	6.9
0.14	BI30	81.7	1.3	5.2
0.95	BI19	45.6	1.7	7.2
0.23	BI18	77.0	1.4	5.9
1.28	BI20	42.3	1.9	7.9
0.19	BI30	64.2	1.1	4.6
0.30	BI31	74.5	1.5	6.2
0.37	BI32	72.4	1.6	6.5
0.16	BI28A	80.3	1.3	5.4
0.30	BI5B	74.6	1.5	6.2
0.47	BI6	70.0	1.7	6.9
0.35	BI6	72.9	1.6	6.5
0.55	BI22	51.6	1.5	6.2
0.33	BI39	73.6	1.5	6.4
0.06	BI5B	87.8	1.1	4.5
0.27	BI28B	75.5	1.5	6.1
0.24	BI38	76.7	1.4	5.9
0.12	BI37	82.4	1.2	5.1
0.18	BI27	79.5	1.3	5.5
0.23	BI37	77.0	1.4	5.9
0.25	FI10A	76.3	1.4	6.0
0.15	FI5A	80.9	1.3	5.3
0.24	BI5B	76.8	1.4	5.9
0.26	BI28A	75.8	1.5	6.0
0.06	EI20B	87.8	1.1	4.5
0.01	EI11A	96.2	0.8	3.3
0.01	EI13	95.8	0.8	3.4