

10 YEAR DESIGN STORM SUMMARY

GATE CLOSED HOUR 0 - 36

GATE OPEN HOUR 36 - 96

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NOTE:

"The design flow & design velocity on pages C-41 to C-48 are for informational purposes only. Strict interpretation may be misleading."

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

**** EXTENDED TRANSPORT PROGRAM ****

**** ANALYSIS MODULE ****

WATER RESOURCES DIVISION
WILLIAMS HATFIELD & STONER INC.
FORT LAUDERDALE, FLORIDA

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

----- CONTINUITY BALANCE AT END OF RUN -----

VOLUME INITIALLY IN SYSTEM = 75045100. CU FT 1722.8 AC-FT

TOTAL SYSTEM INFLOW VOLUME = 44869220. CU FT 1030.1 AC-FT

JUNCTION OUTFLOWS AND
STREET FLOODING

JUNCTION OUTFLOW

	FT3	AC-FT
190	11154030.	256.1
191	5222947.	119.9
200	5023811.	115.3

TOTAL 21400790. CU FT 491.3 AC-FT

VOLUME LEFT IN SYSTEM = 99354020. CU FT 2280.9 AC-FT

ERROR IN CONTINUITY, PERCENT = -.70

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

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----- CONTINUITY BALANCE AT END OF RUN -----

VOLUME INITIALLY IN SYSTEM = 107427600. CU FT 2466.2 AC-FT

TOTAL SYSTEM INFLOW VOLUME = 1166143000. CU FT 26771.0 AC-FT

JUNCTION OUTFLOWS AND
STREET FLOODING

JUNCTION OUTFLOW

	FT3	AC-FT
190	363689800.	8349.2
191	346316100.	7950.3
200	238644700.	5478.5

TOTAL 948650600. CU FT 21778.0 AC-FT

VOLUME LEFT IN SYSTEM = 332286800. CU FT 7628.3 AC-FT

ERROR IN CONTINUITY, PERCENT = -.58

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

***** TIME HISTORY OF H. G. L. *****

(VALUES IN FEET)

TIME HR . MIN	JUNCTION 9133		JUNCTION 9119		JUNCTION 189		JUNCTION 9159		JUNCTION 8191		JUNCTION 9055	
	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH
36. 0	9.41	6.81	16.35	8.45	3.05	3.05	16.32	9.32	2.69	1.89	16.40	9.70
38. 0	11.57	8.97	13.84	5.94	6.29	6.29	13.21	6.21	7.70	6.90	12.85	6.15
40. 0	11.25	8.65	13.32	5.42	6.28	6.28	12.77	5.77	6.70	5.90	11.50	4.80
42. 0	10.89	8.29	12.80	4.90	5.98	5.98	12.31	5.31	5.79	4.99	10.41	3.71
44. 0	10.63	8.03	12.39	4.49	5.66	5.66	11.87	4.87	5.09	4.29	9.58	2.88
46. 0	10.42	7.82	12.05	4.15	5.34	5.34	11.42	4.42	4.55	3.75	8.99	2.29
48. 0	10.25	7.65	11.76	3.86	5.01	5.01	11.01	4.01	4.16	3.36	8.68	1.98
50. 0	10.12	7.52	11.54	3.64	4.69	4.69	10.65	3.65	3.92	3.12	8.56	1.86
52. 0	10.03	7.43	11.36	3.46	4.43	4.43	10.37	3.37	3.81	3.01	8.55	1.65
54. 0	9.99	7.39	11.26	3.36	4.26	4.26	10.20	3.20	3.85	3.05	8.61	1.91
56. 0	10.06	7.46	11.31	3.41	4.37	4.37	10.20	3.20	4.13	3.33	8.81	2.11
58. 0	10.28	7.68	11.58	3.68	4.97	4.97	10.41	3.41	4.81	4.01	9.37	2.67
60. 0	12.07	9.47	13.25	5.35	8.00	8.00	12.07	5.07	8.28	7.48	12.19	5.49
62. 0	14.03	11.43	16.34	8.44	11.15	11.15	15.73	8.73	11.73	10.93	16.45	9.75
64. 0	15.20	12.60	17.94	10.04	12.50	12.50	17.59	10.59	12.53	11.73	17.45	10.75
66. 0	15.37	12.77	18.21	10.31	12.74	12.74	17.89	10.89	12.57	11.77	17.55	10.85
68. 0	15.40	12.80	18.31	10.41	12.62	12.62	17.86	10.86	12.52	11.72	17.58	10.88
70. 0	15.40	12.80	18.36	10.46	12.33	12.33	17.75	10.75	12.41	11.61	17.58	10.88
72. 0	15.39	12.79	18.39	10.49	12.00	12.00	17.64	10.64	12.28	11.48	17.56	10.86
74. 0	15.36	12.76	18.40	10.50	11.37	11.37	17.51	10.51	12.13	11.33	17.52	10.82
76. 0	15.32	12.72	18.38	10.48	11.06	11.06	17.41	10.41	11.96	11.16	17.46	10.76
78. 0	15.26	12.66	18.33	10.43	10.84	10.84	17.35	10.35	11.80	11.00	17.39	10.69
80. 0	15.20	12.60	18.28	10.38	10.66	10.66	17.29	10.29	11.65	10.85	17.31	10.61
82. 0	15.13	12.53	18.21	10.31	10.50	10.50	17.23	10.23	11.44	10.64	17.21	10.51
84. 0	15.06	12.46	18.13	10.23	10.36	10.36	17.17	10.17	11.19	10.39	17.08	10.38
86. 0	14.98	12.38	18.05	10.15	10.23	10.23	17.11	10.11	11.05	10.25	16.96	10.26
88. 0	14.90	12.30	17.95	10.05	10.12	10.12	17.05	10.05	10.93	10.13	16.83	10.13
90. 0	14.81	12.21	17.85	9.95	10.02	10.02	16.99	9.99	10.82	10.02	16.70	10.00
92. 0	14.71	12.11	17.74	9.84	9.92	9.92	16.93	9.93	10.70	9.90	16.56	9.86
94. 0	14.61	12.01	17.63	9.73	9.82	9.82	16.86	9.86	10.58	9.78	16.41	9.71
96. 0	14.51	11.91	17.50	9.60	9.73	9.73	16.78	9.78	10.45	9.65	16.26	9.56

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

***** TIME HISTORY OF H. G. L. *****

(VALUES IN FEET)

TIME HR . MIN	JUNCTION 9134		JUNCTION 9083		JUNCTION 68		JUNCTION 190		JUNCTION 5		JUNCTION 25	
	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH	GRND ELEV	DEPTH
36. 0	2.45	5.95	19.77	7.77	19.83	4.63	2.00	5.00	19.89	1.89	11.21	4.61
38. 0	3.33	6.83	17.07	5.07	19.38	4.18	2.00	5.00	19.89	1.89	11.31	4.71
40. 0	3.19	6.69	16.31	4.31	18.98	3.78	2.00	5.00	19.86	1.86	11.43	4.83
42. 0	3.02	6.52	15.77	3.77	18.69	3.49	2.00	5.00	19.84	1.84	11.54	4.94
44. 0	2.88	6.38	15.34	3.34	18.48	3.28	2.00	5.00	19.83	1.83	11.63	5.03
46. 0	2.78	6.28	15.01	3.01	18.31	3.11	2.00	5.00	19.82	1.82	11.69	5.09
48. 0	2.70	6.20	14.74	2.74	18.19	2.99	2.00	5.00	19.82	1.82	11.74	5.14
50. 0	2.65	6.15	14.54	2.54	18.09	2.89	2.00	5.00	19.83	1.83	11.77	5.17
52. 0	2.63	6.13	14.40	2.40	18.04	2.84	2.00	5.00	19.86	1.86	11.82	5.22
54. 0	2.63	6.13	14.33	2.33	18.06	2.86	2.00	5.00	19.96	1.96	11.92	5.32
56. 0	2.70	6.20	14.39	2.39	18.22	3.02	2.00	5.00	20.20	2.20	12.12	5.52
58. 0	2.87	6.37	14.68	2.68	18.58	3.38	2.00	5.00	20.68	2.68	12.43	5.83
60. 0	4.81	8.31	16.31	4.31	20.47	5.27	2.00	5.00	22.97	4.97	14.79	8.19
62. 0	5.34	8.84	19.24	7.24	22.77	7.57	2.00	5.00	23.42	5.42	16.25	9.65
64. 0	5.48	8.98	20.83	8.83	23.56	8.36	2.00	5.00	23.36	5.36	16.80	10.20
66. 0	5.49	8.99	21.43	9.43	23.65	8.45	2.00	5.00	23.29	5.29	17.12	10.52
68. 0	5.47	8.97	21.64	9.64	23.64	8.44	2.00	5.00	23.25	5.25	17.15	10.55
70. 0	5.45	8.95	21.67	9.67	23.61	8.41	2.00	5.00	23.20	5.20	16.96	10.36
72. 0	5.43	8.93	21.64	9.64	23.58	8.38	2.00	5.00	23.16	5.16	16.68	10.08
74. 0	5.41	8.91	21.59	9.59	23.52	8.32	2.00	5.00	23.11	5.11	16.36	9.76
76. 0	5.39	8.89	21.51	9.51	23.45	8.25	2.00	5.00	23.06	5.06	16.01	9.41
78. 0	5.36	8.86	21.42	9.42	23.37	8.17	2.00	5.00	23.02	5.02	15.68	9.08

(VALUES IN FEET)

TIME HR. MIN	JUNCTION 9134 GRND 105.00		JUNCTION 9083 GRND 121.50		JUNCTION 58 GRND 123.50		JUNCTION 190 GRND 100.00		JUNCTION 5 GRND 123.50		JUNCTION 25 GRND 117.00	
	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH
80.0	5.35	8.85	21.31	9.31	23.28	8.68	2.00	5.00	22.99	4.99	15.37	3.77
82.0	5.33	8.83	21.20	9.20	23.18	7.98	2.00	5.00	22.95	4.95	14.81	3.21
84.0	5.31	8.81	21.08	9.08	23.08	7.88	2.00	5.00	22.91	4.91	14.25	2.65
86.0	5.29	8.79	20.94	8.94	22.98	7.78	2.00	5.00	22.86	4.86	14.04	2.44
88.0	5.28	8.78	20.82	8.82	22.88	7.68	2.00	5.00	22.76	4.76	13.93	2.33
90.0	5.26	8.76	20.70	8.70	22.78	7.58	2.00	5.00	22.66	4.66	13.84	2.24
92.0	5.24	8.74	20.58	8.58	22.69	7.49	2.00	5.00	22.55	4.55	13.75	2.15
94.0	5.22	8.72	20.46	8.46	22.59	7.39	2.00	5.00	22.44	4.44	13.67	2.07
96.0	5.19	8.69	20.31	8.31	22.50	7.30	2.00	5.00	22.34	4.34	13.59	1.99

ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. ***** EXTENDED TRANSPORT PROGRAM ***** WATER RESOURCES DIVISION WILLIAMS HATFIELD & STONER INC. FORT LAUDERDALE, FLORIDA ***** ANALYSIS MODULE *****

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

***** TIME HISTORY OF H. G. L. *****

(VALUES IN FEET)

TIME HR. MIN	JUNCTION 37 GRND 119.50		JUNCTION 50 GRND 18.50		JUNCTION 86 GRND 118.00		JUNCTION 87 GRND 122.00		JUNCTION 105 GRND 120.00		JUNCTION 127 GRND 119.00	
	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH	ELEV	DEPTH
36.0	16.44	6.84	8.32	1.32	16.43	5.43	17.09	5.09	16.40	6.00	16.39	4.99
38.0	15.34	5.74	9.21	2.21	14.65	3.65	17.09	5.09	16.09	5.69	16.38	4.98
40.0	14.58	4.98	8.29	1.29	13.84	2.84	17.10	5.10	15.50	5.10	15.90	4.50
42.0	14.12	4.52	8.04	1.04	13.36	2.36	17.11	5.11	14.99	4.59	15.45	4.05
44.0	13.80	4.20	8.11	1.11	13.07	2.07	17.13	5.13	14.57	4.17	15.07	3.67
46.0	13.55	3.95	8.17	1.17	12.94	1.94	17.15	5.15	14.22	3.82	14.76	3.36
48.0	13.36	3.76	8.34	1.34	12.89	1.89	17.17	5.17	13.94	3.54	14.50	3.10
50.0	13.26	3.66	8.57	1.57	12.89	1.89	17.19	5.19	13.72	3.32	14.31	2.91
52.0	13.26	3.66	8.73	1.73	12.92	1.92	17.23	5.23	13.55	3.15	14.19	2.79
54.0	13.37	3.77	8.85	1.85	13.00	2.00	17.37	5.37	13.48	3.08	14.18	2.78
56.0	13.65	4.05	8.94	1.94	13.17	2.17	17.68	5.68	13.57	3.17	14.30	2.90
58.0	14.09	4.49	9.05	2.05	13.50	2.50	18.25	6.25	13.91	3.51	14.57	3.17
60.0	16.11	6.51	11.80	4.80	15.42	4.42	21.45	9.45	15.60	5.20	15.96	4.56
62.0	18.73	9.13	14.28	7.28	17.97	6.97	21.94	9.94	18.33	7.93	18.54	7.14
64.0	19.40	9.80	15.12	8.12	18.70	7.70	21.38	9.38	19.86	9.46	20.08	8.68
66.0	19.59	9.99	15.30	8.30	18.94	7.94	20.99	8.99	20.12	9.72	20.34	8.94
68.0	19.65	10.05	15.27	8.27	19.12	8.12	20.60	8.60	20.20	9.80	20.38	8.98
70.0	19.66	10.06	15.13	8.13	19.25	8.25	20.30	8.30	20.20	9.80	20.37	8.97
72.0	19.65	10.05	14.91	7.91	19.35	8.35	20.16	8.16	20.18	9.78	20.35	8.95
74.0	19.63	10.03	14.66	7.66	19.41	8.41	19.99	7.99	20.15	9.75	20.32	8.92
76.0	19.62	10.02	14.39	7.39	19.43	8.43	19.78	7.78	20.11	9.71	20.29	8.89
78.0	19.59	9.99	14.14	7.14	19.42	8.42	19.58	7.58	20.07	9.67	20.26	8.86
80.0	19.55	9.95	13.91	6.91	19.38	8.38	19.38	7.38	20.02	9.62	20.22	8.82
82.0	19.49	9.89	13.53	6.53	19.32	8.32	19.20	7.20	19.98	9.58	20.18	8.78
84.0	19.41	9.81	13.17	6.17	19.24	8.24	19.03	7.03	19.93	9.53	20.14	8.74
86.0	19.33	9.73	12.99	5.99	19.15	8.15	18.87	6.87	19.86	9.46	20.09	8.69
88.0	19.24	9.64	12.85	5.85	19.05	8.05	18.73	6.73	19.80	9.40	20.04	8.64
90.0	19.14	9.54	12.73	5.73	18.93	7.93	18.60	6.60	19.73	9.33	19.99	8.59
92.0	19.03	9.43	12.61	5.61	18.82	7.82	18.48	6.48	19.65	9.25	19.94	8.54
94.0	18.91	9.31	12.48	5.48	18.69	7.69	18.37	6.37	19.57	9.17	19.88	8.48
96.0	18.78	9.18	12.35	5.35	18.56	7.56	18.27	6.27	19.47	9.07	19.81	8.41

ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. ***** EXTENDED TRANSPORT PROGRAM ***** WATER RESOURCES DIVISION WILLIAMS HATFIELD & STONER INC. FORT LAUDERDALE, FLORIDA ***** ANALYSIS MODULE *****

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

***** TIME HISTORY OF H. G. L. *****

(VALUES IN FEET)

TIME	JUNCTION 146 GRND 120.50		JUNCTION 174 GRND 121.00		JUNCTION GRND
	ELEV	DEPTH	ELEV	DEPTH	
36.0	16.38	4.88	16.37	3.17	
38.0	15.99	4.49	16.00	2.80	
40.0	15.52	4.02	15.62	2.42	
42.0	15.09	3.59	15.34	2.14	
44.0	14.72	3.22	15.16	1.96	
46.0	14.45	2.95	15.04	1.84	
48.0	14.24	2.74	14.97	1.77	
50.0	14.12	2.62	14.94	1.74	
52.0	14.05	2.55	14.95	1.75	

TIME HISTORY OF H. G. L. *****

(VALUES IN FEET)

TIME	JUNCTION 146 GRND 120.50	JUNCTION 174 GRND 121.00	JUNCTION GRND
54.0	14.06 2.56	15.12 1.92	
56.0	14.18 2.68	15.60 2.40	
58.0	14.51 3.01	16.43 3.23	
60.0	16.40 4.90	19.82 6.62	
62.0	18.64 7.14	21.55 7.80	
64.0	19.90 8.40	21.35 7.80	
66.0	20.09 8.59	21.08 7.80	
68.0	20.12 8.62	20.88 7.68	
70.0	20.11 8.61	20.68 7.48	
72.0	20.08 8.58	20.49 7.29	
74.0	20.06 8.56	20.33 7.13	
76.0	20.03 8.53	20.21 7.01	
78.0	20.00 8.50	20.11 6.91	
80.0	19.96 8.46	20.05 6.85	
82.0	19.92 8.42	19.98 6.78	
84.0	19.88 8.38	19.92 6.72	
86.0	19.83 8.33	19.87 6.67	
88.0	19.79 8.29	19.81 6.61	
90.0	19.74 8.24	19.76 6.56	
92.0	19.69 8.19	19.70 6.50	
94.0	19.62 8.12	19.62 6.42	
96.0	19.54 8.04	19.54 6.34	

ENVIRONMENTAL PROTECTION AGENCY **** EXTENDED TRANSPORT PROGRAM **** WATER RESOURCES DIVISION
 WASHINGTON, D.C. **** **** WILLIAMS HATFIELD & STONER INC.
 **** ANALYSIS MODULE **** FORT LAUDERDALE, FLORIDA
 INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
 10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

SUMMARY STATISTICS FOR JUNCTIONS

JUNCTION NUMBER	GROUND ELEVATION (FT)	UPPERMOST PIPE CROWN ELEVATION (FT)	MAXIMUM COMPUTED STAGE (FT)	TIME OF OCCURENCE HR. MIN.	FEET OF SURCHARGE AT MAX. DEPTH	FEET MAX. DEPTH IS BELOW GROUND ELEVATION	LENGTH OF SURCHARGE (MIN)
1	123.5	33.5	24.0	62 32	.0	99.5	.0
2	123.0	33.0	23.7	62 47	.0	99.2	.0
3	123.0	33.0	23.8	63 3	.0	99.2	.0
4	124.0	34.0	23.6	61 12	.0	100.4	.0
5	123.5	33.5	23.5	61 9	.0	100.0	.0
6	120.0	30.0	20.0	68 6	.0	100.0	.0
7	118.5	28.4	20.0	68 6	.0	98.5	.0
8	120.0	30.0	20.0	67 33	.0	100.0	.0
9	23.5	23.5	19.9	62 26	.0	3.6	.0
10	116.5	26.5	17.4	62 11	.0	99.1	.0
11	127.0	37.0	26.6	63 39	.0	100.4	.0
12	123.0	33.0	23.5	61 0	.0	99.5	.0
13	124.5	34.5	24.7	60 34	.0	99.8	.0
14	118.5	28.4	20.0	68 8	.0	98.5	.0
15	119.5	29.5	20.1	62 33	.0	99.4	.0
16	122.5	32.5	23.2	60 17	.0	99.3	.0
17	120.5	30.5	21.2	61 26	.0	99.3	.0
18	118.0	28.0	17.5	62 2	.0	100.5	.0
19	123.5	33.5	23.9	61 48	.0	99.6	.0
20	123.0	33.0	23.5	61 0	.0	99.5	.0
21	119.0	29.0	19.9	68 12	.0	99.1	.0
22	121.0	31.0	20.1	62 28	.0	100.9	.0
23	101.5	11.5	2.1	64 41	.0	99.4	.0
24	124.0	34.0	24.2	60 55	.0	99.8	.0
25	117.0	27.0	17.2	67 8	.0	99.8	.0
26	125.0	35.0	25.0	62 7	.0	100.0	.0
27	123.0	33.0	23.4	61 2	.0	99.6	.0
28	123.0	33.0	22.8	62 42	.0	100.2	.0
29	119.0	19.0	19.8	68 29	.8	99.2	2032.0
30	121.0	31.0	20.1	62 23	.0	100.9	.0
31	124.0	34.0	24.4	60 29	.0	99.6	.0
32	124.0	34.0	23.5	61 44	.0	100.5	.0
33	115.0	25.0	17.0	67 20	.0	98.0	.0
34	123.5	33.5	23.9	63 34	.0	99.6	.0
35	122.5	32.5	22.9	60 57	.0	99.6	.0

JUNCTION NUMBER	GROUND ELEVATION (FT)	UPPERMOST PIPE CROWN ELEVATION (FT)	MAXIMUM COMPUTED STAGE (FT)	TIME OF OCCURENCE HR. MIN.	FEET OF SURCHARGE AT MAX. DEPTH	FEET MAX. DEPTH IS BELOW GROUND ELEVATION	LENGTH OF SURCHARGE (MIN)
36	122.0	32.0	22.3	60 31	.0	99.7	.0
37	119.5	29.5	19.7	69 20	.0	99.8	.0
38	119.3	29.3	19.6	67 29	.0	99.7	.0
39	120.0	30.0	19.7	62 41	.0	100.3	.0
40	122.7	32.7	23.1	61 0	.0	99.6	.0
41	20.0	20.0	16.8	67 17	.0	3.2	.0
43	125.5	35.5	24.8	62 18	.0	100.7	.0
44	121.5	31.5	22.2	69 44	.0	99.3	.0
45	121.5	31.5	21.5	63 13	.0	100.0	.0
46	119.5	19.5	19.5	72 8	.0	100.0	254.5
47	120.5	30.5	19.7	68 11	.0	100.8	.0
48	120.5	30.5	19.3	64 22	.0	101.2	.0
49	23.5	23.5	21.2	60 32	.0	2.3	.0
50	18.5	18.5	15.3	66 32	.0	3.2	.0
52	118.5	28.5	19.2	74 40	.0	99.3	.0
53	120.0	30.0	18.6	72 20	.0	101.4	.0
54	20.4	20.4	18.0	69 13	.0	2.4	.0
55	20.0	20.0	17.5	68 47	.0	2.5	.0
56	123.5	33.5	23.6	64 60	.0	99.9	.0
57	123.5	33.5	23.9	63 35	.0	99.6	.0
58	121.5	31.5	22.2	69 46	.0	99.3	.0
59	121.5	31.5	21.9	60 37	.0	99.6	.0
60	118.0	27.9	19.4	76 2	.0	98.6	.0
61	120.0	30.0	20.3	60 52	.0	99.7	.0
62	119.5	29.5	18.1	65 26	.0	101.4	.0
63	123.5	33.5	23.9	60 33	.0	99.6	.0
65	120.0	20.0	14.9	64 55	.0	105.1	.0
66	120.0	20.0	14.4	65 15	.0	105.6	.0
67	124.5	24.5	23.9	65 51	.0	100.6	.0
68	123.5	33.5	23.7	66 18	.0	99.8	.0
69	123.5	33.5	23.5	67 15	.0	100.0	.0
70	123.0	32.9	23.2	70 40	.0	99.8	.0
71	121.5	31.5	22.6	70 7	.0	98.9	.0
72	120.5	30.5	22.0	69 47	.0	98.5	.0
73	122.5	32.5	21.6	62 10	.0	100.9	.0
74	118.0	27.9	19.4	76 9	.0	98.6	.0
75	120.8	30.8	21.5	60 48	.0	99.3	.0
76	121.0	31.0	21.6	60 54	.0	99.4	.0
77	122.7	32.7	23.3	60 20	.0	99.4	.0
78	119.0	29.0	19.1	61 4	.0	99.9	.0
80	125.0	35.0	24.0	65 46	.0	101.0	.0
81	123.5	33.5	24.0	65 47	.0	99.5	.0
82	24.5	24.5	23.2	70 28	.0	1.3	.0
83	24.0	23.7	21.6	69 36	.0	2.4	.0
84	121.5	31.5	21.5	69 31	.0	100.0	.0
85	120.0	30.0	20.4	64 13	.0	99.6	.0
86	118.0	28.0	19.4	76 15	.0	98.6	.0
87	122.0	32.0	22.0	61 2	.0	100.0	.0
88	123.4	33.4	23.8	60 29	.0	99.6	.0
89	120.0	30.0	20.8	60 28	.0	99.2	.0
90	120.2	30.2	20.2	61 10	.0	100.0	.0
92	124.5	34.5	24.6	60 40	.0	99.9	.0
93	125.0	35.0	25.2	62 2	.0	99.8	.0
94	121.0	31.0	20.8	69 2	.0	100.2	.0
95	121.0	31.0	20.8	69 2	.0	100.2	.0
96	120.5	30.5	20.9	60 48	.0	99.6	.0
97	117.7	27.9	19.4	76 22	.0	98.3	.0
98	121.0	31.0	21.7	60 19	.0	99.3	.0
99	120.2	20.2	20.2	60 36	.0	100.0	.0
100	118.0	28.0	19.7	60 28	.0	98.3	39.0
101	27.0	27.0	24.4	62 12	.0	2.6	.0
102	127.0	37.0	27.1	62 4	.0	99.9	.0
103	120.5	30.5	20.7	68 42	.0	99.8	.0
104	121.5	21.5	20.2	69 2	.0	101.3	.0
105	120.0	30.0	20.2	69 4	.0	99.8	.0
106	117.5	27.5	19.4	76 18	.0	98.1	.0
107	122.6	32.6	23.3	60 18	.0	99.3	.0
108	121.0	31.0	19.9	60 53	.0	101.1	.0
109	118.0	28.0	19.2	60 40	.0	98.8	.0
110	120.0	20.0	19.0	74 3	.0	101.0	.0
111	120.5	30.5	18.7	73 32	.0	101.8	.0
112	124.5	34.5	24.5	63 33	.0	100.0	.0
113	121.0	31.0	20.5	68 22	.0	100.5	.0
114	120.5	30.5	21.2	60 29	.0	99.3	.0
115	119.5	29.5	20.2	68 57	.0	99.3	.0

JUNCTION NUMBER	GROUND ELEVATION (FT)	UPPERMOST PIPE CROWN ELEVATION (FT)	MAXIMUM COMPUTED STAGE (FT)	TIME OF OCCURENCE		FEET OF SURCHARGE AT MAX. DEPTH	FEET MAX. DEPTH IS BELOW GROUND ELEVATION	LENGTH OF SURCHARGE (MIN)
				HR.	MIN.			
116	121.0	31.0	21.0	64	3	.0	100.0	.0
117	120.0	30.0	19.9	62	9	.0	100.1	.0
119	123.0	22.5	18.4	73	15	.0	104.6	.0
121	118.5	28.5	19.0	60	51	.0	99.5	.0
122	23.0	23.0	17.9	72	45	.0	5.1	.0
123	124.5	34.5	23.9	64	38	.0	100.6	.0
124	123.0	33.0	23.9	64	38	.0	99.1	.0
125	125.0	35.0	24.5	65	50	.0	100.5	.0
126	124.0	34.0	24.3	65	28	.0	99.7	.0
127	119.0	29.0	20.4	68	19	.0	98.6	.0
128	119.5	29.5	20.3	61	28	.0	99.2	.0
129	119.5	29.4	20.2	68	37	.0	99.3	.0
130	120.5	30.5	16.3	69	35	.0	104.2	.0
131	117.0	27.0	14.4	62	51	.0	102.6	.0
132	113.0	13.0	9.7	62	57	.0	103.3	.0
133	112.5	22.5	7.9	64	44	.0	104.6	.0
134	104.5	14.5	4.7	64	36	.0	99.8	.0
135	119.5	29.5	20.3	68	15	.0	99.2	.0
136	119.5	29.4	20.2	68	34	.0	99.3	.0
137	121.5	31.5	22.6	60	16	.0	98.9	.0
138	120.0	30.0	20.2	68	7	.0	99.8	.0
139	120.0	30.0	20.2	68	28	.0	99.8	.0
140	122.5	32.5	23.1	60	33	.0	99.4	.0
141	120.0	30.0	20.1	67	53	.0	99.9	.0
142	121.5	31.5	20.2	68	20	.0	101.3	.0
143	123.0	33.0	23.6	60	24	.0	99.4	.0
144	117.5	27.5	19.1	60	35	.0	98.4	.0
145	119.5	29.4	20.0	67	32	.0	99.5	.0
146	120.5	20.5	20.1	68	10	.0	100.4	.0
147	123.5	33.5	24.0	60	53	.0	99.5	.0
148	117.5	27.5	19.1	60	31	.0	98.4	.0
149	119.5	29.4	19.9	75	54	.0	99.6	.0
150	121.0	21.0	20.0	67	51	.0	101.0	.0
151	124.0	34.0	22.8	63	33	.0	101.2	.0
152	116.0	26.0	17.0	67	17	.0	99.0	.0
153	119.5	29.5	19.9	76	3	.0	99.6	.0
154	120.5	20.5	19.8	67	19	.0	100.7	.0
155	121.5	31.5	22.4	60	28	.0	99.1	.0
157	119.5	29.5	19.9	76	5	.0	99.6	.0
158	120.0	20.0	19.8	66	58	.0	100.2	.0
159	23.5	23.5	17.8	66	28	.0	5.7	.0
160	18.0	18.0	15.0	66	29	.0	3.0	.0
161	119.5	29.4	19.9	76	41	.0	99.6	.0
162	119.5	29.4	20.0	65	27	.0	99.5	.0
163	122.0	32.0	22.7	60	22	.0	99.3	.0
165	120.0	30.0	19.9	76	55	.0	100.1	.0
166	119.5	29.5	20.4	64	11	.0	99.1	.0
167	122.5	32.5	22.0	62	6	.0	100.5	.0
168	19.5	19.5	16.4	62	11	.0	3.1	.0
169	119.5	29.5	19.9	77	18	.0	99.6	.0
170	120.5	30.5	21.1	62	27	.0	99.4	.0
171	122.5	32.5	23.0	60	45	.0	99.5	.0
172	119.0	29.0	17.2	62	8	.0	101.8	.0
173	118.0	28.0	19.9	77	27	.0	98.1	.0
174	121.0	21.0	21.6	62	8	.6	99.4	366.5
175	124.5	34.5	24.6	62	2	.0	99.9	.0
176	118.0	28.0	17.9	62	9	.0	100.1	.0
177	119.5	29.5	19.9	77	26	.0	99.6	.0
178	121.5	21.5	21.7	62	1	.2	99.8	147.0
179	121.5	31.5	21.8	62	3	.0	99.7	.0
180	119.0	29.0	19.3	61	51	.0	99.7	.0
181	119.0	28.9	19.9	77	29	.0	99.1	.0
182	121.0	31.0	21.9	60	56	.0	99.1	.0
183	123.0	33.0	23.5	60	28	.0	99.5	.0
184	119.0	29.0	19.3	61	52	.0	99.7	.0
185	23.0	23.0	21.1	62	4	.0	1.9	.0
186	118.0	28.0	19.3	61	58	.0	98.7	.0
187	123.5	33.5	23.6	60	22	.0	99.9	.0
188	120.0	30.0	19.6	62	9	.0	100.4	.0
189	114.8	24.8	12.7	66	10	.0	102.1	.0
190	100.0	7.0	2.0	36	1	.0	98.0	.0
191	101.5	8.9	2.0	36	1	.0	99.5	.0
200	100.0	6.0	2.0	36	1	.0	98.0	.0
301	100.0	35.0	19.9	77	31	.0	80.1	.0
302	100.0	35.0	19.9	77	20	.0	80.1	.0

JUNCTION NUMBER	GROUND ELEVATION (FT)	UPPERMOST PIPE CROWN ELEVATION (FT)	MAXIMUM COMPUTED STAGE (FT)	TIME OF OCCURENCE		FEET OF SURCHARGE AT MAX. DEPTH	FEET MAX. DEPTH IS BELOW GROUND ELEVATION	LENGTH OF SURCHARGE (MIN)
				HR.	MIN.			
303	100.0	35.0	19.9	76	51	.0	80.1	.0
304	100.0	35.0	20.1	58	36	.0	79.9	.0
305	100.0	35.0	19.4	76	9	.0	80.6	.0
306	100.0	35.0	20.0	58	7	.0	80.0	.0
307	100.0	35.0	17.9	54	40	.0	82.1	.0
308	100.0	35.0	18.2	56	8	.0	81.8	.0
309	100.0	35.0	17.3	55	52	.0	82.7	.0
310	100.0	35.0	22.4	69	37	.0	77.6	.0
311	100.0	35.0	23.2	75	25	.0	75.8	.0
314	100.0	35.0	19.4	76	23	.0	80.6	.0
400	100.0	35.0	19.9	77	32	.0	80.1	.0
500	100.0	34.3	30.0	0	0	.0	70.0	.0
501	100.0	32.2	30.0	0	0	.0	70.0	.0
8006	122.5	32.5	22.6	61	40	.0	99.9	.0
8007	22.0	22.0	20.0	67	39	.0	2.0	.0
8014	121.5	31.5	22.3	60	19	.0	99.2	.0
8018	123.0	33.0	21.8	62	28	.0	101.2	.0
8020	123.5	33.5	23.9	61	40	.0	99.6	.0
8021	121.5	31.5	21.7	63	41	.0	99.8	.0
8022	121.0	31.0	21.7	60	46	.0	99.3	.0
8024	124.0	34.0	24.2	61	3	.0	99.8	.0
8029	121.0	31.0	21.4	62	29	.0	99.6	.0
8030	120.0	30.0	21.3	60	25	.0	98.7	.0
8034	123.8	33.8	24.0	63	34	.0	99.8	.0
8037	121.0	31.0	21.5	60	45	.0	99.5	.0
8039	121.5	31.5	22.5	60	19	.0	99.0	.0
8044	123.3	33.3	23.8	62	22	.0	99.5	.0
8046	120.5	30.5	20.7	63	32	.0	99.8	.0
8048	121.0	31.0	21.8	60	23	.0	99.2	.0
8056	123.0	33.0	23.7	63	53	.0	99.3	.0
8058	123.5	33.5	23.7	63	47	.0	99.8	.0
8060	121.0	31.0	21.7	60	32	.0	99.3	.0
8068	123.5	33.5	24.0	63	33	.0	99.5	.0
8072	122.0	32.0	22.4	69	38	.0	99.6	.0
8074	120.0	30.0	20.7	60	56	.0	99.3	.0
8078	23.0	23.0	21.0	75	60	.0	2.0	.0
8080	123.5	33.5	24.0	65	37	.0	99.5	.0
8081	124.5	34.5	24.5	65	46	.0	100.0	.0
8084	123.0	33.0	23.3	60	43	.0	99.7	.0
8086	120.5	30.5	20.6	62	7	.0	99.9	.0
8094	122.5	32.5	23.2	60	26	.0	99.3	.0
8097	119.5	29.5	20.3	60	44	.0	99.2	.0
8103	122.0	32.0	23.3	60	45	.0	98.7	.0
8106	121.1	31.1	22.3	60	15	.0	98.8	.0
8113	122.0	32.0	22.8	62	1	.0	99.2	.0
8127	120.5	30.5	21.0	65	58	.0	99.5	.0
8129	121.5	31.5	23.0	60	27	.0	98.5	.0
8139	121.5	31.5	22.1	60	49	.0	99.4	.0
8142	121.5	31.5	22.3	60	33	.0	99.2	.0
8144	121.0	31.0	21.8	60	31	.0	99.2	.0
8146	119.0	29.0	20.7	60	21	.0	98.3	.0
8150	121.5	31.5	22.0	62	18	.0	99.5	.0
8152	122.0	32.0	22.2	62	9	.0	99.8	.0
8160	23.0	23.0	16.4	56	27	.0	6.6	.0
8168	121.0	31.0	21.2	61	1	.0	99.8	.0
8172	123.0	33.0	20.3	64	53	.0	102.7	.0
8176	122.5	32.5	22.8	60	43	.0	99.7	.0
8191	116.0	16.0	12.6	65	18	.0	103.4	.0
8200	108.5	18.5	7.0	66	20	.0	101.5	.0
8668	123.4	33.4	23.8	65	47	.0	99.6	.0
8684	121.0	31.0	21.1	69	52	.0	99.9	.0
8768	123.5	33.5	24.1	62	36	.0	99.4	.0
8813	122.0	32.0	22.4	62	6	.0	99.6	.0
8821	22.5	22.5	21.7	63	50	.0	.8	.0
8827	122.0	32.0	22.2	65	33	.0	99.8	.0
8856	123.7	33.7	23.8	63	17	.0	99.9	.0
8860	120.0	20.0	15.2	66	16	.0	104.8	.0
8868	123.5	33.5	24.1	62	43	.0	99.4	.0
8884	123.0	33.0	23.3	60	42	.0	99.7	.0
8886	120.0	30.0	20.8	61	24	.0	99.2	.0
8891	110.0	10.0	7.7	65	23	.0	102.3	.0
8897	121.4	31.4	22.5	60	16	.0	98.9	.0
9055	20.5	20.5	17.6	68	51	.0	2.9	.0
9083	121.5	31.5	21.7	69	38	.0	99.8	.0
9119	20.5	20.5	18.4	73	17	.0	2.1	.0

JUNCTION NUMBER	GROUND ELEVATION (FT)	UPPERMOST PIPE CROWN ELEVATION (FT)	MAXIMUM COMPUTED STAGE (FT)	TIME OF OCCURENCE HR. MIN.	FEET OF SURCHARGE AT MAX. DEPTH	FEET MAX. DEPTH IS BELOW GROUND ELEVATION	LENGTH OF SURCHARGE (MIN)
9133	117.0	27.0	15.4	68 44	.0	101.6	.0
9134	105.0	15.0	5.5	64 48	.0	99.5	.0
9159	20.5	20.5	17.9	66 30	.0	2.6	.0

ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. **** EXTENDED TRANSPORT PROGRAM **** WATER RESOURCES DIVISION WILLIAMS HATFIELD & STONER INC. FORT LAUDERDALE, FLORIDA

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS 10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

0 ***** TIME HISTORY OF FLOW AND VELOCITY *****

TIME HR. MIN	CONDUIT 3084		CONDUIT84094		CONDUIT81019		CONDUIT81022		CONDUIT81030		CONDUIT 5032	
	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL
36.0	47.60	.2	-1.47	.0	124.46	.7	137.62	1.0	147.25	.5	35.67	1.5
38.0	370.29	1.4	3.35	.0	691.92	1.7	719.31	2.3	736.96	1.6	37.34	.9
40.0	254.75	1.1	34.66	.2	569.95	1.6	603.12	2.1	629.51	1.5	37.81	1.0
42.0	201.27	1.0	34.60	.3	472.66	1.4	502.96	1.9	526.42	1.3	38.53	1.1
44.0	166.24	1.0	29.79	.3	400.39	1.3	428.35	1.8	448.78	1.2	39.01	1.2
46.0	141.85	.9	24.14	.3	345.59	1.2	371.68	1.7	389.98	1.1	39.20	1.3
48.0	124.69	.9	19.63	.2	303.49	1.1	328.14	1.6	345.05	1.0	39.33	1.4
50.0	112.50	.9	16.47	.2	271.00	1.1	294.77	1.5	311.12	.9	39.94	1.4
52.0	104.20	.9	15.46	.2	246.50	1.0	270.20	1.5	287.66	.9	41.98	1.5
54.0	100.24	.9	17.74	.3	229.80	1.0	256.17	1.4	280.93	.8	49.32	1.7
56.0	103.18	.9	25.36	.4	225.53	.9	260.15	1.4	299.70	.9	69.24	2.0
58.0	119.98	.9	43.13	.5	243.65	1.0	297.05	1.5	360.09	1.0	114.51	2.6
60.0	245.05	1.1	157.82	1.0	291.68	.8	472.89	1.5	838.50	1.7	498.68	4.6
62.0	684.43	1.7	74.06	.3	1121.67	1.9	1330.63	2.5	1564.75	2.3	591.02	4.4
64.0	946.40	1.8	68.83	.2	1675.23	2.3	1934.72	3.0	2096.05	2.7	584.94	4.0
66.0	1208.42	2.2	-2.87	.0	1823.95	2.5	2049.80	3.1	2167.37	2.7	530.42	3.7
68.0	1322.88	2.3	-48.73	-1	1909.67	2.6	2098.31	3.1	2187.94	2.7	473.47	3.4
70.0	1342.57	2.4	-66.66	-2	1965.14	2.6	2126.40	3.1	2194.98	2.7	415.23	3.1
72.0	1335.66	2.3	-73.87	-2	1998.74	2.7	2141.61	3.2	2198.49	2.7	362.80	2.8
74.0	1314.82	2.3	-77.52	-2	2019.38	2.7	2148.79	3.2	2190.88	2.7	311.40	2.5
76.0	1283.23	2.3	-75.83	-2	2028.26	2.7	2141.65	3.2	2175.57	2.7	264.61	2.2
78.0	1241.20	2.2	-69.81	-2	2026.22	2.7	2124.45	3.2	2153.52	2.7	225.85	2.0
80.0	1195.82	2.2	-64.54	-2	2015.30	2.7	2101.57	3.2	2127.38	2.7	195.47	1.8
82.0	1148.07	2.1	-59.42	-1	1997.63	2.7	2074.87	3.2	2098.58	2.7	171.87	1.6
84.0	1093.74	2.0	-51.52	-1	1974.54	2.7	2044.86	3.2	2067.18	2.7	153.14	1.4
86.0	1031.22	2.0	-39.04	-1	1945.62	2.7	2010.67	3.1	2032.20	2.6	137.79	1.3
88.0	983.90	1.9	-29.73	-1	1912.51	2.7	1973.20	3.1	1994.05	2.6	125.15	1.2
90.0	939.54	1.8	-17.46	-0	1876.65	2.7	1933.87	3.1	1954.28	2.6	114.49	1.1
92.0	896.25	1.8	-1.97	.0	1837.99	2.6	1892.36	3.1	1912.49	2.6	105.55	1.1
94.0	853.71	1.7	17.36	.0	1796.68	2.6	1848.66	3.1	1868.65	2.6	98.03	1.0
96.0	800.19	1.6	49.08	.1	1752.18	2.6	1802.23	3.0	1822.30	2.5	91.73	1.0

ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. **** EXTENDED TRANSPORT PROGRAM **** WATER RESOURCES DIVISION WILLIAMS HATFIELD & STONER INC. FORT LAUDERDALE, FLORIDA

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS 10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

0 ***** TIME HISTORY OF FLOW AND VELOCITY *****

TIME HR. MIN	CONDUIT81018		CONDUIT82059		CONDUIT82939		CONDUIT70933		CONDUIT 8052		CONDUIT 1000	
	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL
36.0	195.59	.4	60.45	1.0	58.01	1.2	8.22	.1	19.00	1.0	84.75	1.4
38.0	791.80	1.3	426.30	2.0	435.39	2.5	-2.93	-.0	19.03	.3	434.25	2.6
40.0	702.68	1.2	374.58	1.9	384.26	2.3	14.19	.1	19.09	.3	427.27	2.5
42.0	596.82	1.0	326.40	1.8	335.94	2.2	15.13	.1	19.82	.4	381.80	2.4
44.0	515.85	.9	282.28	1.7	291.49	2.1	15.10	.1	20.41	.4	337.66	2.3
46.0	454.69	.8	241.57	1.7	250.36	2.0	14.98	.1	20.76	.5	296.51	2.2
48.0	407.75	.8	205.82	1.6	213.92	1.9	10.77	.1	20.97	.5	256.60	2.1
50.0	373.22	.7	175.11	1.5	182.48	1.8	9.57	.1	21.33	.6	222.39	2.0
52.0	351.26	.7	149.10	1.4	155.96	1.7	10.05	.1	22.39	.7	196.11	1.9
54.0	351.92	.7	130.34	1.4	136.84	1.6	13.24	.2	26.85	.8	181.49	1.9
56.0	391.29	.7	126.13	1.3	131.73	1.5	24.67	.3	39.95	1.1	193.58	1.9
58.0	500.20	.9	148.51	1.4	151.63	1.5	54.17	.4	70.11	1.3	260.27	2.1
60.0	1406.32	1.8	276.36	1.5	281.47	1.4	322.66	1.2	283.32	2.0	781.07	3.2
62.0	2335.08	2.6	679.20	2.0	685.27	1.9	573.49	1.2	376.59	1.7	1611.19	4.0
64.0	2872.41	3.0	998.89	2.3	1044.88	2.3	539.00	1.0	418.90	1.6	2045.78	4.2
66.0	2871.62	3.0	1048.85	2.3	1098.00	2.3	477.50	.8	539.74	1.9	2166.17	4.3
68.0	2804.27	2.9	1048.85	2.3	1094.62	2.3	426.04	.8	570.54	2.0	2150.07	4.3

0 ***** TIME HISTORY OF FLOW AND VELOCITY *****

TIME HR . MIN	CONDUIT81018		CONDUIT82059		CONDUIT82939		CONDUIT70933		CONDUIT 8052		CONDUIT 1000	
	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL
70. 0	2729.22	2.9	1047.98	2.3	1087.67	2.4	372.33	.7	534.10	2.0	2051.18	4.3
72. 0	2662.15	2.8	1048.86	2.4	1082.18	2.5	323.51	.6	478.70	1.9	1935.72	4.2
74. 0	2586.23	2.8	1063.86	2.5	1093.69	2.7	280.00	.6	258.27	1.2	1682.88	4.0
76. 0	2510.82	2.7	1059.79	2.5	1081.41	2.7	229.11	.5	229.53	1.2	1575.90	3.9
78. 0	2440.36	2.7	1054.99	2.6	1072.90	2.8	196.54	.5	206.27	1.1	1505.63	3.9
80. 0	2376.30	2.6	1049.39	2.6	1064.71	2.8	172.48	.4	187.03	1.0	1450.02	3.8
82. 0	2318.21	2.6	1042.70	2.6	1056.23	2.8	154.25	.4	170.76	1.0	1403.93	3.8
84. 0	2263.71	2.5	1034.66	2.6	1046.86	2.9	139.95	.3	157.14	.9	1364.23	3.8
86. 0	2210.19	2.5	1025.88	2.6	1037.00	2.9	127.82	.3	146.42	.9	1329.53	3.7
88. 0	2156.66	2.4	1016.44	2.6	1026.75	2.9	117.23	.3	137.57	.9	1298.37	3.7
90. 0	2104.06	2.4	1006.39	2.6	1016.10	2.9	107.96	.3	129.83	.8	1269.52	3.7
92. 0	2051.61	2.3	995.40	2.6	1004.69	2.9	99.95	.3	123.07	.8	1242.39	3.7
94. 0	1998.91	2.3	982.27	2.6	991.62	2.9	93.18	.3	117.18	.8	1216.10	3.6
96. 0	1945.41	2.2	968.29	2.6	976.94	2.9	87.16	.2	111.90	.8	1189.33	3.6

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

**** EXTENDED TRANSPORT PROGRAM ****

**** ANALYSIS MODULE ****

WATER RESOURCES DIVISION
WILLIAMS HATFIELD & STONER INC.
FORT LAUDERDALE, FLORIDA

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

0 ***** TIME HISTORY OF FLOW AND VELOCITY *****

TIME HR . MIN	CONDUIT 5663		CONDUIT83055		CONDUIT83065		CONDUIT88850		CONDUIT 1200		CONDUIT 4068	
	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL	FLOW	VEL
36. 0	.30	.1	62.29	1.0	74.87	.8	14.62	.9	94.48	1.5	19.25	.1
38. 0	.30	.1	826.10	2.5	877.74	2.3	27.03	.3	928.58	3.3	73.47	.5
40. 0	.41	.1	580.26	2.2	629.16	2.0	27.29	.5	679.80	2.9	63.45	.5
42. 0	.53	.1	415.05	2.0	456.58	1.7	20.66	.5	496.06	2.6	54.92	.5
44. 0	.62	.1	306.47	1.8	341.44	1.5	23.05	.7	379.37	2.4	48.36	.5
46. 0	.66	.1	231.65	1.6	262.41	1.4	25.32	1.0	300.09	2.2	43.43	.4
48. 0	.64	.1	186.36	1.5	213.23	1.3	25.49	1.1	248.68	2.1	39.75	.4
50. 0	.62	.1	160.37	1.4	184.23	1.2	27.34	1.1	220.06	2.0	37.32	.4
52. 0	.63	.1	148.72	1.4	170.41	1.1	29.39	1.2	207.45	2.0	36.19	.4
54. 0	.70	.1	152.42	1.4	173.13	1.1	33.85	1.3	214.59	2.0	37.33	.4
56. 0	.85	.1	181.55	1.5	202.66	1.2	42.74	1.3	252.97	2.1	42.42	.4
58. 0	1.25	.1	260.63	1.7	286.18	1.4	60.77	1.4	353.89	2.4	54.86	.5
60. 0	8.74	.3	624.37	1.9	760.74	1.7	317.60	2.0	1176.79	3.6	163.34	.9
62. 0	19.91	.3	1568.72	2.7	1897.79	2.7	511.10	1.7	2496.61	4.6	344.25	1.2
64. 0	17.05	.3	1878.08	2.9	2180.71	2.8	624.06	1.7	2875.84	4.8	409.61	1.2
66. 0	10.94	.2	1926.70	3.0	2144.36	2.8	700.04	1.9	2894.53	4.8	402.13	1.2
68. 0	7.74	.2	1954.82	3.0	2120.80	2.7	704.57	1.9	2865.26	4.8	382.13	1.1
70. 0	5.82	.1	1974.00	3.1	2107.94	2.8	669.68	1.9	2809.90	4.8	363.42	1.1
72. 0	4.60	.1	1987.01	3.1	2099.30	2.8	614.87	1.8	2741.97	4.7	348.91	1.0
74. 0	3.56	.1	1992.28	3.2	2085.26	2.8	552.81	1.7	2659.99	4.7	336.59	1.0
76. 0	2.74	.1	1988.88	3.2	2065.48	2.8	491.40	1.5	2574.92	4.6	325.76	1.0
78. 0	2.19	.1	1979.11	3.2	2044.60	2.9	436.13	1.4	2496.36	4.6	319.80	1.0
80. 0	1.84	.1	1962.17	3.2	2020.03	2.9	388.82	1.3	2422.92	4.6	319.44	1.0
82. 0	1.60	.1	1943.00	3.3	2004.11	2.9	298.21	1.1	2320.77	4.5	307.44	1.0
84. 0	1.43	.1	1916.88	3.3	1967.20	3.0	227.09	.9	2207.56	4.4	300.19	.9
86. 0	1.31	.1	1881.53	3.3	1926.04	3.0	204.81	.8	2142.29	4.4	294.61	.9
88. 0	1.23	.1	1842.97	3.3	1884.41	2.9	194.59	.8	2089.82	4.3	287.88	.9
90. 0	1.17	.1	1802.29	3.2	1841.69	2.9	187.66	.8	2039.96	4.3	280.84	.9
92. 0	1.12	.1	1759.04	3.2	1797.09	2.9	181.75	.8	1989.43	4.3	274.68	.9
94. 0	1.09	.1	1713.77	3.2	1750.65	2.9	176.08	.8	1937.28	4.2	269.03	.9
96. 0	1.06	.1	1666.22	3.2	1702.31	2.8	170.62	.8	1883.56	4.2	263.53	.9

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

**** EXTENDED TRANSPORT PROGRAM ****

**** ANALYSIS MODULE ****

WATER RESOURCES DIVISION
WILLIAMS HATFIELD & STONER INC.
FORT LAUDERDALE, FLORIDA

INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

0 ***** TIME HISTORY OF FLOW AND VELOCITY *****

TIME	CONDUIT40923		CONDUIT 3058		CONDUIT
	FLOW	VEL	FLOW	VEL	
36. 0	27.90	.1	18.96	.1	
38. 0	166.52	.9	61.95	.7	
40. 0	123.26	.8	40.70	.6	
42. 0	100.07	.8	32.53	.6	
44. 0	84.74	.8	27.45	.6	
46. 0	73.64	.8	26.19	.7	
48. 0	65.64	.8	25.29	.7	
50. 0	60.09	.7	24.86	.8	

0 ***** TIME HISTORY OF FLOW AND VELOCITY *****

TIME	CONDUIT 40923	CONDUIT 3058
52.0	57.22 .7	25.13 .9
54.0	57.82 .8	27.62 .9
56.0	64.50 .8	36.16 1.1
58.0	81.87 .9	58.81 1.3
60.0	207.36 1.2	257.96 2.3
62.0	470.78 1.4	373.00 1.9
64.0	620.94 1.5	338.71 1.4
66.0	574.84 1.2	300.43 1.1
68.0	543.83 1.1	300.43 1.0
70.0	532.80 1.1	298.82 1.0
72.0	534.85 1.1	298.34 1.0
74.0	535.21 1.1	299.58 1.0
76.0	532.52 1.1	304.81 1.1
78.0	528.12 1.1	310.01 1.1
80.0	518.88 1.1	312.43 1.1
82.0	517.01 1.2	308.91 1.2
84.0	506.24 1.2	288.22 1.1
86.0	495.43 1.2	249.99 1.0
88.0	479.49 1.1	242.97 1.0
90.0	466.62 1.1	230.30 1.0
92.0	451.77 1.1	218.89 .9
94.0	436.29 1.1	208.56 .9
96.0	430.04 1.1	202.42 .9

Q(CFS), VEL(FPS)
CONDUIT

ENVIRONMENTAL PROTECTION AGENCY **** EXTENDED TRANSPORT PROGRAM **** WATER RESOURCES DIVISION
 WASHINGTON, D.C. **** **** WILLIAMS HATFIELD & STONER INC.
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INDIAN RIVER FARMS WATER CONTROL DISTRICT - CANAL SYSTEM DRAINAGE ANALYSIS
 10 YEAR DESIGN STORM ; FILENAME - IRFEXT10.DAT ; JOB # 1920.00 ; 8/3/88

***** SUMMARY STATISTICS FOR CONDUITS *****

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	CONDUIT VERTICAL DEPTH (IN)	MAXIMUM COMPUTED FLOW (CFS)	TIME OF OCCURENCE HR. MIN.	MAXIMUM COMPUTED VELOCITY (FPS)	TIME OF OCCURENCE HR. MIN.	RATIO OF MAX. TO DESIGN FLOW	MAXIMUM INVERT AT UPSTREAM (FT)	MAXIMUM DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
10	7645.9	5.1	120.0	49.9	63 44	3.5	60 23	.0	.55	.41
11	6242.9	4.2	120.0	76.0	64 45	2.1	60 12	.0	.75	.41
12	6242.9	4.2	120.0	91.9	64 45	1.6	60 3	.0	.83	.41
13	8828.8	5.9	120.0	.0	0 0	.0	0 0	.0	-.45	.41
15	4414.4	2.9	120.0	-37.3	61 59	-5	61 14	.0	.27	.90
16	13959.5	9.3	120.0	.0	0 0	.0	0 0	.0	-.37	.41
17	15291.9	10.2	120.0	45.8	60 52	1.3	60 52	.0	.25	1.47
18	6242.9	4.2	120.0	99.7	62 33	1.0	62 2	.0	.62	1.47
19	12485.8	8.3	120.0	108.9	60 44	2.4	59 5	.0	.71	1.47
20	11679.4	7.8	120.0	106.4	62 12	1.7	62 8	.0	.70	.27
21	7645.9	5.1	120.0	26.5	62 31	2.3	60 1	.0	.41	.41
22	13243.1	8.8	120.0	132.6	61 37	1.9	61 38	.0	.53	1.47
23	4414.4	2.9	120.0	-84.9	86 20	-6	92 33	-.0	.93	1.47
24	16517.1	11.0	120.0	29.2	62 3	1.2	62 4	.0	.22	.27
25	10813.0	7.2	120.0	1.1	62 7	.2	62 1	.0	.03	.41
26	13243.1	8.8	120.0	106.7	61 27	1.7	61 27	.0	.44	1.47
27	13243.1	8.8	120.0	.0	0 0	.0	0 0	.0	-.22	1.47
28	16517.1	11.0	120.0	.0	0 0	.0	0 0	.0	-.55	.27
29	8828.8	5.9	120.0	34.9	65 51	.6	80 31	.0	.27	2.00
30	13243.1	8.8	120.0	81.3	61 38	1.6	61 38	.0	.38	1.43
31	12485.8	8.3	120.0	48.3	61 13	2.6	59 14	.0	.33	1.43
32	7118.0	4.7	120.0	37.9	67 29	.4	63 25	.0	.32	1.43
33	14904.7	9.9	120.0	47.6	62 5	1.4	62 4	.0	.35	.27
34	11679.4	7.8	120.0	.0	0 0	.0	0 0	.0	-.65	.41
35	11679.4	7.8	120.0	1.4	63 13	.0	63 7	.0	.03	1.43
36	11679.4	7.8	120.0	59.1	61 27	1.3	61 27	.0	.40	1.43
37	8828.8	5.9	120.0	40.6	61 22	.9	61 22	.0	.33	1.43
38	15916.3	10.6	120.0	45.0	60 41	3.0	59 40	.0	.39	.27
39	4414.4	2.9	120.0	-62.0	70 12	-5	70 20	-.0	.41	1.11
40	13243.1	8.8	120.0	.0	0 0	.0	0 0	.0	-.95	1.43
41	10446.3	7.0	120.0	122.2	61 40	1.7	59 10	.0	.75	1.43
42	13534.2	9.0	120.0	94.1	61 19	1.7	60 57	.0	.60	1.43
43	8828.8	5.9	120.0	2.4	61 4	.2	60 60	.0	.05	.27
44	8828.8	5.9	120.0	.0	0 0	.0	0 0	.0	-1.03	.21
45	4414.4	2.9	120.0	22.2	67 37	.6	66 23	.0	.46	.21

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	CONDUIT VERTICAL DEPTH (IN)	MAXIMUM COMPUTED FLOW (CFS)		TIME OF OCCURENCE		MAXIMUM COMPUTED VELOCITY (FPS)		TIME OF OCCURENCE		RATIO OF MAX. TO DESIGN FLOW	MAXIMUM INVERT AT UPSTREAM (FT)	DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
				COMPUTED FLOW (CFS)	TIME OF OCCURENCE	HR.	MIN.	COMPUTED VELOCITY (FPS)	TIME OF OCCURENCE	HR.	MIN.			
46	8828.8	5.9	120.0	74.2	64	13		1.1	61	41		.0	.42	1.43
47	12485.8	8.3	120.0	2.5	61	2		.1	60	59		.0	.04	1.43
48	14507.1	9.7	120.0	62.7	61	11		1.5	61	11		.0	.35	1.43
49	9870.9	6.6	120.0	107.7	60	46		1.5	60	42		.0	.75	.66
50	10258.1	6.8	120.0	.0	0	0		.0	0	0		.0	-.04	.66
51	15916.3	10.6	120.0	11.4	60	40		.7	60	10		.0	.10	1.43
52	16517.1	11.0	120.0	26.5	62	2		.9	60	45		.0	.16	1.43
53	9870.9	6.6	120.0	55.5	61	26		1.1	61	27		.0	.37	1.43
54	3419.4	2.3	120.0	41.2	62	52		.6	62	32		.0	1.43	1.73
55	11679.4	7.8	120.0	114.4	61	3		2.2	57	50		.0	.72	.66
56	4414.4	2.9	120.0	255.0	60	42		1.9	60	33		.1	1.65	.66
57	17096.8	11.4	120.0	23.3	62	4		.8	61	51		.0	.14	.60
58	14098.4	9.4	120.0	140.4	60	56		2.0	60	48		.0	.75	.66
59	11679.4	7.8	120.0	.0	0	0		.0	0	0		.0	-1.12	.66
60	4414.4	2.9	120.0	147.6	60	57		1.4	60	46		.0	1.20	.66
61	13959.5	9.3	120.0	.1	63	33		.0	63	32		.0	.01	.60
62	6242.9	4.2	120.0	64.7	60	46		1.0	60	38		.0	.73	.60
63	197.4	.1	120.0	34.0	69	42		.4	71	6		.2	.70	.60
64	7645.9	5.1	120.0	.0	64	3		.0	64	3		.0	.00	.60
65	6242.9	4.2	120.0	42.6	61	1		.8	60	57		.0	.46	.66
66	7645.9	5.1	120.0	.0	0	0		.0	0	0		.0	-.64	.21
67	6242.9	4.2	120.0	11.7	66	16		.5	65	60		.0	.27	.21
68	4414.4	2.9	120.0	-113.5	68	11		-.8	67	39		-.0	.60	1.38
69	197.4	.1	120.0	60.2	62	9		.7	61	23		.3	.84	.60
71	197.4	.1	120.0	53.3	68	2		.5	66	38		.3	.79	.60
72	8828.8	5.9	120.0	161.6	60	26		13.1	57	4		.0	1.13	.60
73	4414.4	2.9	120.0	8.0	68	28		.2	68	41		.0	.17	.43
74	10813.0	7.2	120.0	90.7	62	3		1.5	60	58		.0	.62	.43
75	4414.4	2.9	120.0	2.9	67	53		.1	68	4		.0	.09	.43
76	8828.8	5.9	120.0	.0	0	0		.0	0	0		.0	-1.34	.43
77	14640.9	9.8	120.0	97.2	60	44		1.8	60	42		1.0	.63	.44
78	197.4	.1	120.0	193.3	60	43		1.5	60	37		1.0	1.59	.44
79	12485.8	8.3	120.0	79.9	61	21		1.5	61	17		.0	.48	.43
80	197.4	.1	120.0	189.6	60	36		1.5	60	33		1.0	1.58	.44
81	13243.1	8.8	120.0	.0	0	0		.0	0	0		.0	-1.23	.43
82	8828.8	5.9	120.0	96.7	60	34		1.4	60	33		.0	.87	.41
83	9870.9	6.6	120.0	79.7	60	25		1.5	58	52		.0	.74	.41
84	197.4	.1	120.0	59.5	64	31		.8	64	12		.3	.87	.41
85	14640.9	9.8	120.0	6.9	62	3		.6	60	51		.0	.07	.92
86	7645.9	5.1	120.0	34.3	62	9		.8	62	10		.0	.30	.44
88	8828.8	5.9	120.0	124.1	62	8		1.6	62	4		.0	.93	.92
89	12485.8	8.3	120.0	52.9	60	42		1.3	60	41		.0	.49	.92
90	4414.4	2.9	120.0	174.1	62	18		1.5	62	5		.0	1.28	.44
91	15291.9	10.2	120.0	7.2	60	28		.6	60	28		.0	.08	.44
92	9870.9	6.6	120.0	.0	0	0		.0	0	0		.0	-.44	.44
96	12485.8	8.3	120.0	4.0	61	40		.1	61	30		.0	.06	1.47
97	10813.0	7.2	120.0	132.6	61	49		8.1	57	49		.0	.81	1.47
98	15291.9	10.2	120.0	.0	0	0		.0	0	0		.0	-1.25	.27
99	7645.9	5.1	120.0	26.9	62	20		.9	59	60		.0	.42	.41
100	10813.0	7.2	120.0	18.2	63	41		.2	63	31		.0	.16	1.47
101	9870.9	6.6	120.0	120.4	61	48		1.5	61	33		.0	.68	1.47
102	14640.9	9.8	120.0	33.7	61	4		1.0	60	48		.0	.19	1.47
103	9870.9	6.6	120.0	78.5	62	29		1.2	61	19		.0	.41	1.47
104	7645.9	5.1	120.0	213.3	60	47		1.9	60	36		.0	1.33	1.47
105	8375.7	5.6	120.0	15.2	63	34		.6	63	22		.0	.17	.41
106	10813.0	7.2	120.0	79.2	61	50		1.4	61	50		.0	.50	1.43
107	11679.4	7.8	120.0	170.3	60	38		3.0	58	34		.0	1.00	1.43
108	7118.0	4.7	120.0	39.2	63	8		1.0	60	9		.0	.50	.41
109	9870.9	6.6	120.0	31.8	63	32		.5	62	53		.0	.24	1.43
110	10813.0	7.2	120.0	125.3	60	42		1.7	60	38		.0	.85	1.43
111	6242.9	4.2	120.0	82.5	66	18		1.1	64	42		.0	.71	.41
112	7645.9	5.1	120.0	15.5	63	48		.6	63	29		.0	.18	.41
113	10813.0	7.2	120.0	99.7	62	2		1.5	60	55		.0	.69	1.43
114	7645.9	5.1	120.0	52.5	65	0		1.0	64	29		.0	.47	.41
115	8828.8	5.9	120.0	109.2	62	10		1.4	61	47		.0	.70	1.43
116	7645.9	5.1	120.0	.0	0	0		.0	0	0		.0	-.03	.21
117	13959.5	9.3	120.0	61.5	61	12		1.4	61	12		.0	.33	1.43
118	9870.9	6.6	120.0	7.6	62	7		.2	62	2		.0	.10	1.43
119	13243.1	8.8	120.0	130.9	60	53		1.9	60	48		.0	.73	1.43
120	7645.9	5.1	120.0	110.4	62	3		1.3	61	7		.0	.80	1.43
121	9870.9	6.6	120.0	232.0	61	17		2.2	61	5		.0	1.28	.60
122	10991.7	7.3	120.0	208.8	60	32		2.2	60	27		.0	1.15	1.43
123	9870.9	6.6	120.0	124.1	62	28		1.6	62	21		.0	.75	.60
124	6242.9	4.2	120.0	58.8	65	58		.8	65	2		.0	.45	.60
125	8828.8	5.9	120.0	258.5	60	35		2.2	60	33		.0	1.47	.60

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	CONDUIT VERTICAL DEPTH (IN)	MAXIMUM COMPUTED FLOW (CFS)	TIME OF OCCURENCE HR. MIN.	MAXIMUM COMPUTED VELOCITY (FPS)	TIME OF OCCURENCE HR. MIN.	RATIO OF MAX. TO DESIGN FLOW	MAXIMUM INVERT AT UPSTREAM (FT)	DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
126	8828.8	5.9	120.0	82.0	61 37	1.3	61 13	.0	.63	.43
127	8828.8	5.9	120.0	115.0	60 59	1.5	60 50	.0	.84	.43
128	11679.4	7.8	120.0	109.1	62 3	1.7	60 51	.0	.75	.44
129	4414.4	2.9	120.0	-178.9	60 26	-1.3	60 20	-.0	.43	1.67
130	8828.8	5.9	120.0	75.6	62 34	1.2	62 30	.0	.48	.43
131	13243.1	8.8	120.0	46.2	62 9	1.2	61 49	.0	.25	.44
132	11679.4	7.8	120.0	33.7	61 37	1.0	61 37	.0	.25	.44
133	7645.9	5.1	120.0	56.6	63 49	1.0	63 11	.0	.59	.41
134	9870.9	6.6	120.0	56.2	62 29	1.1	62 25	.0	.38	.60
135	11679.4	7.8	120.0	18.5	65 33	.2	65 25	.0	.15	1.47
136	8139.7	5.4	120.0	10.6	63 17	.5	63 2	.0	.14	.41
137	7645.9	5.1	120.0	62.7	64 9	1.1	63 31	.0	.61	.41
138	13959.5	9.3	120.0	61.7	61 12	1.4	61 12	.0	.33	1.43
139	8828.8	5.9	120.0	135.5	62 7	1.6	61 54	.0	.77	1.43
140	11511.3	7.7	120.0	196.3	60 31	2.1	60 28	.0	1.09	1.43
141	11679.4	7.8	120.0	21.6	69 38	.2	69 20	.0	.17	1.43
143	10813.0	7.2	120.0	3.9	69 51	.0	69 29	.0	.06	1.43
144	14640.9	9.8	120.0	.0	0 0	.0	0 0	.0	-2.71	.44
145	7645.9	5.1	120.0	.0	68 6	.0	68 6	.0	.00	1.47
146	7645.9	5.1	120.0	.3	67 33	.0	67 33	.0	.02	1.47
147	13243.1	8.8	120.0	128.2	61 36	1.9	61 36	.0	.52	1.47
148	6242.9	4.2	120.0	.0	0 0	.0	0 0	.0	-.47	.27
149	9870.9	6.6	120.0	.0	0 0	.0	0 0	.0	-.87	1.47
150	15916.3	10.6	120.0	84.6	61 20	1.8	61 21	.0	.44	.66
151	7645.9	5.1	120.0	41.9	65 5	.9	64 36	.0	.39	.41
152	7645.9	5.1	120.0	13.0	69 21	.1	68 44	.0	.16	1.43
153	8828.8	5.9	120.0	.0	0 0	.0	0 0	.0	-.27	1.43
154	11679.4	7.8	120.0	229.3	69 43	1.6	68 41	.0	.70	1.43
155	9870.9	6.6	120.0	.0	0 0	.0	0 0	.0	-.75	1.43
156	4414.4	2.9	120.0	-110.8	77 12	-.7	78 55	-.0	.74	1.43
157	7645.9	5.1	120.0	10.7	65 0	.3	64 18	.0	.14	.41
158	7645.9	5.1	120.0	38.3	65 1	.8	64 33	.0	.36	.41
159	4414.4	2.9	120.0	5.4	68 41	.3	68 11	.0	.16	.28
162	10813.0	7.2	120.0	105.8	61 44	1.6	61 28	.0	.64	1.43
163	197.4	.1	120.0	47.0	69 12	-.4	62 30	.2	1.43	1.43
164	6242.9	4.2	120.0	16.6	68 42	.3	68 44	.0	.21	.60
165	8828.8	5.9	120.0	22.0	69 4	.2	68 28	.0	.20	1.43
167	4414.4	2.9	120.0	-8.7	68 37	-.2	68 38	.0	-.14	.60
168	6242.9	4.2	120.0	110.6	65 47	1.3	65 7	.0	.85	.41
169	10813.0	7.2	120.0	.0	0 0	.0	0 0	.0	-.52	.41
171	4414.4	2.9	120.0	10.5	68 8	.2	68 24	.0	.20	.43
174	10813.0	7.2	120.0	.0	0 0	.0	0 0	.0	-.47	.41
175	7645.9	5.1	120.0	68.4	64 36	1.1	62 38	.0	.59	.92
176	11679.4	7.8	120.0	52.3	61 53	1.2	60 57	.0	.49	.92
178	4414.4	2.9	120.0	.0	0 0	.0	0 0	.0	-.08	.44
179	9870.9	6.6	120.0	31.7	62 19	.9	62 18	.0	.29	.92
180	7645.9	5.1	120.0	37.7	62 18	.8	62 15	.0	.32	.44
181	197.4	.1	120.0	-10.6	66 21	-.3	65 34	-.1	.40	.41
182	4414.4	2.9	120.0	24.2	67 28	.6	66 11	.0	.49	.21
183	13959.5	9.3	120.0	34.8	61 28	1.1	61 29	.0	.25	.44
184	3948.4	2.6	120.0	19.2	68 11	.5	66 27	.0	.43	.21
185	13959.5	9.3	120.0	.1	61 9	.0	61 8	.0	.00	1.47
186	197.4	.1	120.0	-5.6	66 12	-.2	65 18	-.0	.16	.27
187	4414.4	2.9	120.0	.0	0 0	.0	0 0	.0	-.02	.21
188	11679.4	7.8	120.0	.0	0 0	.0	0 0	.0	-.00	1.43
190	197.4	.1	120.0	10.1	67 4	.2	65 49	.1	.41	.41
191	197.4	.1	120.0	-7.6	83 39	.2	65 48	-.0	.39	.41
193	4414.4	2.9	120.0	17.9	67 28	.2	67 26	.0	.42	.92
194	4414.4	2.9	120.0	7.3	68 25	.1	66 33	.0	.42	.92
195	7645.9	5.1	120.0	.0	0 0	.0	0 0	.0	-1.38	1.43
196	10813.0	7.2	120.0	.0	0 0	.0	0 0	.0	-.22	1.43
197	10813.0	7.2	120.0	.0	0 0	.0	0 0	.0	-.22	1.43
198	9870.9	6.6	120.0	.0	0 0	.0	0 0	.0	-1.84	1.43
199	4414.4	2.9	120.0	.0	0 0	.0	0 0	.0	-.09	.41
200	7645.9	5.1	120.0	.0	0 0	.0	0 0	.0	-1.76	.44
201	9870.9	6.6	120.0	.0	0 0	.0	0 0	.0	-.91	1.47
202	10813.0	7.2	120.0	.0	0 0	.0	0 0	.0	-4.16	.66
203	9870.9	6.6	120.0	.0	0 0	.0	0 0	.0	-1.22	1.43
204	8828.8	5.9	120.0	.0	0 0	.0	0 0	.0	-1.35	1.43
205	7645.9	5.1	120.0	.0	0 0	.0	0 0	.0	-.52	.60
250	43161.7	4.3	120.0	-261.2	65 22	.4	61 57	.0	.92	1.92
251	13649.0	1.4	120.0	-60.0	65 25	.2	63 7	.0	.92	1.02
252	13649.0	1.4	120.0	-54.7	68 6	.2	96 0	.0	.41	.51
253	13649.0	1.4	120.0	-149.9	65 35	-.4	65 5	-.0	.41	.56
254	13648.8	1.4	120.0	-141.1	68 39	.4	63 15	-.0	.43	.59

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	CONDUIT VERTICAL DEPTH (IN)	MAXIMUM COMPUTED FLOW (CFS)		LIFE OF OCCURENCE		MAXIMUM COMPUTED VELOCITY (FPS)		LIFE OF OCCURENCE		RATIO OF MAX. TO DESIGN FLOW	MAXIMUM INVERT AT UPSTREAM (FT)	DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
						HR.	MIN.			HR.	MIN.			
255	13649.0	1.4	120.0	101.5	63	47		.4	63	26		.0	.43	.54
256	13649.0	1.4	120.0	-203.1	68	27		.3	63	7		-.0	.60	.76
257	13649.0	1.4	120.0	-206.5	68	39		.3	63	11		-.0	.60	.77
258	13649.0	1.4	120.0	195.6	62	42		.4	62	26		.0	1.43	1.53
259	13649.0	1.4	120.0	396.5	79	37		.4	62	23		.0	1.43	1.52
260	13649.0	1.4	120.0	-278.2	62	0		-.4	61	27		-.0	1.47	1.57
261	13649.0	1.4	120.0	209.5	96	0		.4	61	41		.0	1.47	1.57
262	52862.1	5.3	120.0	456.6	65	5		1.0	65	6		.0	.44	.99
263	70921.9	7.1	120.0	212.7	64	40		1.0	64	41		.0	.44	-2.06
265	30519.9	3.1	120.0	252.9	66	7		.8	66	7		.0	.66	-2.57
266	61039.9	6.1	120.0	232.9	65	51		.6	80	31		.0	.27	2.00
267	30519.9	3.1	120.0	-249.8	61	59		-.5	61	14		.0	.27	.90
268	52862.1	5.3	120.0	406.4	69	36		.6	94	29		.0	.41	1.55
269	30519.9	3.1	120.0	234.6	69	36		.5	65	35		.0	.41	.71
270	13648.8	1.4	120.0	198.6	62	53		.5	62	36		.0	1.43	1.53
271	30519.9	3.1	120.0	548.0	78	33		.7	62	40		.0	1.43	1.90
272	13649.0	1.4	120.0	35.4	75	8		.2	77	19		.0	.21	.26
300	6858.9	.1	120.0	151.9	69	13		.1	68	32		.0	.41	.41
301	6858.9	.1	120.0	179.5	68	15		.2	67	16		.0	.41	.41
302	6858.9	.1	120.0	440.9	67	44		.3	66	23		.1	.43	.41
303	6858.9	.1	120.0	1026.0	69	21		.5	68	0		.1	.60	.41
304	6858.9	.1	120.0	-361.3	77	30		-.3	77	30		-.1	-.07	.41
305	6858.9	.1	120.0	613.7	68	32		.4	67	35		.1	.47	.41
306	6858.9	.1	120.0	-361.3	77	30		-.3	77	30		-.1	-.07	.41
400	.2	.1	34.8	.0	0	0		.0	0	0		.0	.00	3.15
401	.1	.1	14.4	.0	0	0		.0	0	0		.0	.00	1.73
402	.1	.1	30.0	.0	0	0		.0	0	0		.0	.00	2.53
403	.2	.1	32.4	.0	0	0		.0	0	0		.0	.00	2.15
404	.0	.0	2.4	.0	0	0		.0	0	0		.0	.00	.58
405	.1	.0	16.8	.0	0	0		.0	0	0		.0	.00	.75
406	.1	.1	19.2	.0	0	0		.0	0	0		.0	.00	.65
407	.1	.0	16.8	.0	0	0		.0	0	0		.0	.00	.37
408	.1	.1	15.6	.0	0	0		.0	0	0		.0	.00	1.34
409	.0	.0	7.2	.0	0	0		.0	0	0		.0	.00	.56
410	.1	.0	18.0	.0	0	0		.0	0	0		.0	.00	1.66
411	.2	.1	42.0	.0	0	0		.0	0	0		.0	.00	3.64
412	.1	.0	14.4	.0	0	0		.0	0	0		.0	.00	1.21
414	.1	.1	28.8	.0	0	0		.0	0	0		.0	.00	1.76
415	.1	.1	14.4	.0	0	0		.0	0	0		.0	.00	2.04
416	.1	.0	14.4	.0	0	0		.0	0	0		.0	.00	1.68
417	.0	.0	2.4	.0	0	0		.0	0	0		.0	.00	.69
418	.1	.1	19.2	.0	0	0		.0	0	0		.0	.00	1.16
419	.3	.1	51.6	.0	0	0		.0	0	0		.0	.00	3.05
420	.1	.1	27.6	.0	0	0		.0	0	0		.0	.00	2.47
421	.1	.1	22.8	.0	0	0		.0	0	0		.0	.00	2.08
422	.1	.1	19.2	.0	0	0		.0	0	0		.0	.00	2.29
423	.3	.1	40.8	.0	0	0		.0	0	0		.0	.00	3.50
424	.1	.1	15.6	.0	0	0		.0	0	0		.0	.00	2.10
425	.2	.1	26.4	.0	0	0		.0	0	0		.0	.00	3.35
426	.1	.1	24.0	.0	0	0		.0	0	0		.0	.00	2.75
427	.2	.1	34.8	.0	0	0		.0	0	0		.0	.00	3.15
428	.3	.1	48.0	.0	0	0		.0	0	0		.0	.00	4.15
429	.1	.1	18.0	.0	0	0		.0	0	0		.0	.00	1.64
430	.1	.1	15.6	.0	0	0		.0	0	0		.0	.00	1.63
431	.1	.1	26.4	.0	0	0		.0	0	0		.0	.00	3.29
432	.1	.1	18.0	.0	0	0		.0	0	0		.0	.00	1.90
434	.0	.0	4.8	.0	0	0		.0	0	0		.0	.00	.56
435	.0	.0	10.8	.0	0	0		.0	0	0		.0	.00	.26
436	.0	.0	4.8	.0	0	0		.0	0	0		.0	.00	.38
437	.0	.0	4.8	.0	0	0		.0	0	0		.0	.00	-3.18
438	.1	.1	18.0	.0	0	0		.0	0	0		.0	.00	1.51
439	.0	.0	8.4	.0	0	0		.0	0	0		.0	.00	-4.87
440	.0	.0	1.2	.0	0	0		.0	0	0		.0	.00	-.12
441	.0	.0	6.0	.0	0	0		.0	0	0		.0	.00	-2.05
442	.1	.1	20.4	.0	0	0		.0	0	0		.0	.00	.40
443	.0	.0	7.2	.0	0	0		.0	0	0		.0	.00	-4.47
444	.1	.1	21.6	.0	0	0		.0	0	0		.0	.00	-.77
445	.0	.1	6.0	.0	0	0		.0	0	0		.0	.00	-4.08
446	.0	.0	3.6	.0	0	0		.0	0	0		.0	.00	-.36
447	.0	.0	4.8	.0	0	0		.0	0	0		.0	.00	.58
448	.0	.0	2.4	.0	0	0		.0	0	0		.0	.00	.69
449	.0	.0	7.2	.0	0	0		.0	0	0		.0	.00	.16
450	.1	.1	19.2	.0	0	0		.0	0	0		.0	.00	-4.95
451	.0	.0	3.6	.0	0	0		.0	0	0		.0	.00	-.54
500	*****	11.8	120.0	.0	0	0		.0	0	0		.0	-4.58	.50

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	CONDUIT VERTICAL DEPTH (IN)	MAXIMUM COMPUTED FLOW (CFS)	TIME OF OCCURENCE HR. MIN.	MAXIMUM COMPUTED VELOCITY (FPS)	TIME OF OCCURENCE HR. MIN.	RATIO OF MAX. TO DESIGN FLOW	MAXIMUM DEPTH ABOVE INVERT AT UPSTREAM (FT)	MAXIMUM DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
501	80748.2	8.1	120.0	862.7	64 49	1.6	64 50	.0	.50	.57
502	74758.3	7.5	120.0	246.0	64 36	.6	64 36	.0	.24	.57
503	91559.8	9.2	120.0	.0	0 0	.0	0 0	.0	-1.60	-4.58
504	*****	10.8	120.0	.0	0 0	.0	0 0	.0	-2.06	-1.55
1000	2316.4	3.8	1377.6	2175.6	66 41	4.4	67 21	.9	13.51	12.74
1001	3383.1	3.3	1200.0	2350.7	66 20	3.6	66 21	.7	6.95	4.50
1002	81.9	.1	1302.0	2351.2	66 11	7.2	66 4	28.7	12.74	6.95
1004	942.0	2.0	1458.0	-310.2	62 49	-.9	60 7	-.3	9.20	9.40
1015	1017.7	3.1	1458.0	282.9	62 46	1.1	60 16	.3	7.60	9.40
1029	618.5	2.2	1434.0	235.4	62 37	1.1	60 16	.4	7.47	9.20
1036	528.9	2.0	1434.0	118.5	63 16	.5	60 5	.2	6.76	7.67
1039	776.6	2.6	1434.0	98.6	64 40	-.3	36 55	.1	5.97	7.36
1042	266.5	.8	1446.0	159.0	71 9	.7	60 27	.6	8.56	8.62
1046	653.5	2.5	1452.0	208.6	70 27	1.0	60 21	.3	6.72	8.01
1050	1048.5	3.1	1448.4	312.0	69 13	1.0	60 22	.3	6.61	8.24
1058	577.6	1.6	1459.2	362.9	68 53	1.0	69 21	.6	8.44	8.56
1062	241.4	1.0	1467.6	668.2	61 46	3.5	60 55	2.8	7.96	7.86
1066	679.1	2.4	1434.0	609.2	62 16	1.9	60 52	.9	7.37	8.76
1070	390.1	1.9	1441.2	435.0	61 35	2.0	61 7	1.1	7.09	7.37
1074	198.4	1.1	1448.4	327.7	60 49	1.7	60 50	1.7	7.55	7.39
1078	114.0	.8	1458.0	-139.7	60 49	-.9	59 25	-1.2	8.35	8.68
1082	5.7	.1	1452.0	-23.2	59 53	-.3	58 56	-4.0	6.98	7.33
1100	1119.1	.1	1200.0	3033.6	64 47	.6	64 48	2.7	5.07	5.00
1103	12.2	.1	1466.4	8.8	68 16	.1	68 5	.7	4.71	8.70
1200	2785.2	3.4	1392.0	2899.0	65 13	4.8	65 11	1.0	12.93	11.78
1214	21.0	.3	1465.2	27.9	61 31	.4	60 10	1.3	4.43	6.60
1216	28.4	.3	1444.8	27.8	62 12	.3	60 41	1.0	5.60	8.30
1217	91.0	.8	1446.0	85.9	62 9	.5	60 18	.9	4.36	10.66
1328	10.8	.1	1434.0	-35.0	60 55	-.4	59 54	-3.2	7.17	7.54
1331	40.6	.3	1458.0	48.7	60 31	.3	63 32	1.2	7.44	7.97
1435	5.7	.1	1464.0	-5.4	65 10	.1	60 49	-1.0	5.76	6.19
1437	14.6	.2	1460.4	20.6	62 19	.3	60 12	1.4	5.13	5.16
1538	16.5	.1	1440.0	12.5	61 5	.1	60 30	.8	8.37	8.80
1540	44.7	.3	1458.0	47.9	60 10	.4	59 15	1.1	5.92	6.53
1641	26.9	.2	1473.6	-5.7	96 0	.1	61 3	-2.2	4.36	6.49
1643	23.8	.3	1458.0	27.4	60 19	.2	60 6	1.2	4.93	5.84
1745	14.4	.2	1447.2	6.2	96 0	-.1	60 37	.4	5.49	8.52
1747	3.6	.1	1428.0	12.5	60 52	.1	61 6	3.4	5.78	4.57
1849	6.1	.1	1476.0	4.0	96 0	.0	96 0	.7	4.94	6.01
1851	47.5	.2	1458.0	30.9	64 4	.1	64 42	.7	5.17	6.28
1953	10.3	.1	1486.8	-8.0	96 0	-.1	96 0	-.8	4.34	4.91
1955	13.4	.2	1495.2	18.1	62 47	.3	60 50	1.4	4.87	4.34
2006	287.1	1.4	1440.0	-176.1	61 18	-.8	61 18	-6.6	6.97	7.40
2014	314.0	1.4	1428.0	315.9	96 0	1.1	96 0	1.0	6.57	7.13
2021	821.7	2.9	1428.0	422.1	93 35	1.2	96 0	.5	6.73	8.42
2029	1156.9	3.9	1434.0	497.2	66 58	1.2	96 0	.4	6.82	10.06
2037	1399.6	3.4	1434.0	610.0	65 47	1.3	62 27	.4	8.26	9.71
2046	870.4	3.1	1450.8	-788.1	65 37	-2.4	62 16	-.9	7.04	8.31
2060	1212.2	3.5	1416.0	-671.2	83 3	-1.6	92 18	-.6	8.04	9.42
2074	955.9	3.1	1416.0	-295.5	96 0	-.8	59 37	-.3	6.62	8.63
2086	841.8	2.7	1412.4	301.4	62 49	.8	62 41	.4	7.43	8.83
2097	218.7	.7	1423.2	438.6	62 6	1.4	36 24	2.0	7.83	7.90
2107	17.3	.1	1453.2	19.1	60 24	.1	64 16	1.1	4.95	6.55
2296	14.5	.1	1434.0	13.3	66 33	.1	87 48	.9	4.87	5.80
2298	5.9	.1	1456.8	-10.9	60 14	-.1	60 13	-1.9	3.22	5.99
2385	13.3	.1	1452.0	-22.1	73 51	.2	60 51	-1.7	4.42	5.66
2387	25.3	.3	1464.0	-46.9	60 40	-.2	60 37	-1.9	4.77	10.04
2388	4.6	.1	1522.8	5.8	60 29	.1	70 31	1.3	4.15	5.14
2473	52.9	.4	1440.0	39.4	62 26	.3	62 41	.7	4.95	6.00
2475	25.1	.2	1444.8	31.8	61 51	.3	60 33	1.3	4.95	6.23
2477	18.0	.2	1485.6	22.5	60 7	.3	58 51	1.2	4.90	6.04
2559	24.6	.4	1452.0	19.0	81 31	.2	81 32	.8	5.10	7.29
2561	29.6	.4	1454.4	33.3	61 51	.6	60 20	1.1	5.13	6.22
2563	67.2	.5	1448.4	77.0	61 15	.6	60 36	1.1	3.89	5.12
2645	70.4	.6	1446.0	55.2	63 5	.4	59 59	.8	4.53	6.24
2647	3.6	.0	1489.2	2.6	68 35	.0	58 42	.7	5.15	5.18
2649	33.8	.3	1452.0	-13.6	60 1	-.2	59 7	-.4	3.24	6.35
2736	17.9	.4	1452.0	20.0	60 4	.3	59 13	1.1	3.33	5.60
2738	37.1	.4	1486.8	57.3	61 6	.8	60 34	1.5	5.22	5.66
2828	67.4	.5	1452.0	57.1	62 44	.4	62 46	.8	5.78	6.51
2830	14.6	.1	1453.2	25.7	61 13	.2	60 32	1.8	6.09	6.32
2832	40.4	.5	1440.0	62.0	61 53	.5	62 15	1.5	5.75	5.93
2921	4.8	.0	1486.8	-21.1	61 26	-.2	60 30	-4.4	5.53	5.83
2991	20.1	.2	1458.0	-16.3	61 16	-.3	60 33	-.8	5.26	5.96
3005	114.6	1.5	1476.0	-54.9	59 52	-.7	59 52	-.5	5.00	6.02

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	CONDUIT VERTICAL DEPTH (IN)	MAXIMUM COMPUTED FLOW (CFS)	TIME OF OCCURENCE HR. MIN.	MAXIMUM COMPUTED VELOCITY (FPS)	TIME OF OCCURENCE HR. MIN.	RATIO OF MAX. TO DESIGN FLOW	MAXIMUM INVERT AT UPSTREAM (FT)	DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
3012	302.0	1.6	1479.6	-80.2	60 7	-4	60 7	-3	6.02	6.83
3020	31.7	.2	1476.0	-27.9	59 51	-2	59 51	-9	6.84	7.13
3027	78.3	.6	1470.0	63.5	61 5	.4	61 7	.8	6.64	7.68
3035	3.3	.0	1479.6	173.5	60 50	2.0	59 50	51.9	5.58	4.90
3044	98.5	.7	1460.4	264.8	61 14	2.3	60 24	2.7	6.70	6.81
3058	641.6	2.9	1465.2	373.0	62 2	2.4	60 24	.6	7.01	8.45
3072	48.9	.1	1458.0	1252.8	70 16	2.6	36 9	25.6	10.05	9.67
3083	2036.9	4.2	288.0	-1367.4	36 7	-4.9	36 7	-.7	9.70	10.11
3084	1243.9	2.2	1452.0	1342.7	70 14	2.4	36 13	1.1	9.70	9.58
3182	3.0	.1	1476.0	-2.7	59 57	-1	59 58	-.9	3.24	6.63
3256	64.2	.5	1482.0	40.1	86 28	.3	96 0	.6	6.06	7.38
3257	20.5	.1	1482.0	34.3	61 37	.1	61 38	1.7	8.86	8.84
3343	51.3	.6	1479.6	41.0	62 17	.5	62 15	.8	4.85	5.60
3434	15.8	.2	1498.8	18.0	63 40	.2	96 0	1.1	5.09	5.28
3526	30.7	.3	1484.4	75.2	62 9	.5	62 12	2.5	7.23	6.14
3619	26.3	.2	1482.0	-15.1	60 29	.1	73 51	-.6	5.71	5.92
3711	25.8	.3	1482.0	21.8	63 39	.2	64 2	.8	3.83	5.52
4067	157.4	.6	1482.0	242.1	64 46	.9	64 32	1.5	8.56	8.46
4068	930.8	3.1	1482.0	414.2	64 28	1.2	64 18	.4	8.06	9.48
4069	247.2	1.2	1477.2	524.8	64 13	2.6	62 12	2.1	9.08	8.86
4070	390.8	1.6	1476.0	-549.7	63 43	-1.5	61 46	-1.4	7.21	8.96
4071	799.8	2.7	1464.0	573.6	63 49	1.6	62 28	.7	8.01	9.40
4081	124.5	.6	1507.2	137.6	65 18	.7	65 4	1.1	7.46	7.46
4303	47.7	.3	1485.6	-44.9	67 41	-2	68 9	-.9	6.23	6.87
4357	78.6	1.4	1506.0	54.7	60 42	.6	60 41	.7	3.09	6.86
4402	35.1	.4	1484.4	-35.1	66 56	-3	67 32	-1.0	5.25	5.64
4456	124.8	.5	1485.6	124.6	61 52	.6	61 11	1.0	8.84	9.18
4482	157.8	.7	1476.0	31.2	64 1	.2	59 35	.2	5.74	8.96
4492	4.7	.1	294.0	15.8	61 50	.3	59 24	3.4	7.00	5.74
4501	66.5	.5	1482.0	-26.2	63 57	-2	64 14	-.4	7.05	7.59
4625	48.6	.7	1494.0	15.4	61 35	.2	61 35	.3	2.48	6.07
4680	100.8	.6	1482.0	63.0	96 0	.4	96 0	.6	7.37	7.46
4724	42.0	.3	1482.0	-26.6	67 17	.2	60 8	-.6	5.85	6.99
5000	29.8	.5	1442.4	-58.5	60 39	-.4	60 57	-2.0	5.05	6.85
5008	399.3	1.5	1422.0	210.4	60 56	.8	72 58	.5	8.48	11.76
5021	343.9	1.0	1405.2	395.5	60 50	1.2	60 43	1.2	11.76	10.53
5031	584.2	2.0	1356.0	585.5	62 52	2.8	62 51	1.0	10.63	7.90
5032	987.1	3.7	1395.6	608.2	62 52	4.6	60 10	.6	7.90	7.12
5078	319.0	.7	1459.2	322.6	61 4	.8	60 32	1.0	8.45	11.13
5089	9.8	.1	1460.4	19.7	59 59	.2	59 13	2.0	7.35	7.16
5090	26.2	.1	1437.6	100.2	61 12	.4	63 8	3.8	8.66	7.65
5099	116.6	1.1	1456.8	82.0	60 11	.9	58 49	.7	6.25	8.08
5207	8.5	.1	1501.2	11.1	60 31	.2	59 32	1.3	5.35	4.38
5209	20.1	.2	1466.4	-33.1	60 58	.3	58 19	-1.6	4.60	7.28
5398	8.8	.4	1456.8	14.6	60 19	.3	89 10	1.7	3.22	5.65
5488	20.0	.2	1452.0	23.3	60 29	.2	72 50	1.2	4.35	6.75
5577	4.6	.1	276.0	6.6	60 27	.1	60 14	1.4	4.90	3.54
5663	21.0	.3	1545.6	21.5	62 42	.3	62 21	1.0	3.89	3.93
5840	9.0	.1	1458.0	8.7	62 42	.1	84 27	1.0	4.05	5.50
7068	1275.2	3.6	1440.0	533.7	62 12	2.2	60 34	.4	4.88	9.10
7072	241.0	.8	234.0	379.2	62 5	2.0	62 3	1.6	6.14	5.38
7076	368.0	1.7	1428.0	262.1	62 10	1.1	62 15	.7	5.62	6.74
7080	68.0	.4	1428.0	-161.2	61 24	-.8	60 22	-2.4	6.12	7.90
7084	164.7	1.0	1428.0	-72.9	68 22	-5	79 7	-.4	7.00	7.32
7086	9.9	.1	1428.0	29.7	79 51	.3	82 49	3.0	7.18	7.32
7088	61.7	.4	1416.0	34.8	62 24	.2	62 30	.6	6.16	7.28
7267	42.1	.5	1452.0	30.6	62 8	.3	62 10	.7	2.83	5.35
7371	11.6	.2	1476.0	14.9	62 2	.3	60 33	1.3	4.39	2.79
7475	5.0	.1	1494.0	-42.1	62 3	-.7	62 4	-8.3	3.05	4.97
7579	21.5	2.1	1452.0	28.8	62 3	1.6	58 59	1.3	2.79	5.90
7683	40.7	.9	1467.6	55.3	60 25	.9	60 11	1.4	5.79	6.03
7785	191.3	2.1	1440.0	38.1	62 4	.5	56 29	.2	1.15	5.28
7887	4.5	.1	1477.2	4.7	60 34	.1	60 26	1.1	2.58	3.06
8044	49.3	.3	1410.0	64.4	82 55	.4	87 58	1.3	8.29	9.29
8048	119.5	.6	1392.0	183.8	60 32	.8	60 7	1.5	7.88	8.59
8052	490.4	2.7	237.6	572.6	67 32	2.0	60 5	1.2	8.29	11.71
8251	42.7	.6	1464.0	20.2	64 10	.3	68 19	.5	2.97	6.35
8347	20.8	.1	1434.0	25.5	60 53	.1	65 18	1.2	6.38	7.28
8443	19.2	.3	1452.0	24.8	60 22	.2	60 12	1.3	4.83	6.75
11061	20.2	.2	1459.2	-26.3	61 60	-3	60 56	-1.3	6.11	6.66
11063	38.2	.4	1453.2	55.5	60 22	.5	59 32	1.5	3.74	7.16
11165	12.8	.1	1434.0	-17.0	62 3	-1	60 52	-1.3	6.61	7.97
11167	120.0	1.9	1441.2	96.6	62 7	1.2	60 3	.8	3.63	7.37
11269	10.4	.1	1446.0	-28.3	62 10	-.2	61 1	-2.7	5.92	7.59
11271	61.1	.4	1458.0	74.0	60 45	.5	59 40	1.2	5.49	6.59

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	CONDUIT VERTICAL DEPTH (IN)	MAXIMUM COMPUTED FLOW (CFS)	TIME OF OCCURENCE HR.	TIME OF OCCURENCE MIN.	MAXIMUM COMPUTED VELOCITY (FPS)	TIME OF OCCURENCE HR.	TIME OF OCCURENCE MIN.	RATIO OF MAX. TO DESIGN FLOW	MAXIMUM INVERT AT UPSTREAM (FT)	DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
11373	19.9	.2	1432.8	36.0	62	1	.3	60	36	1.8	6.85	7.12
11375	53.6	.8	1471.2	55.2	62	3	.7	60	4	1.0	4.97	6.75
11477	23.2	.3	1470.0	61.9	62	32	.8	60	47	2.7	5.28	4.12
11479	22.0	1.0	1482.0	26.6	60	42	.8	59	7	1.2	2.79	6.68
11581	9.4	.1	1446.0	15.1	62	20	.2	60	30	1.6	5.83	5.52
13901	40.6	.3	1440.0	62.4	60	54	.5	60	10	1.5	7.97	7.17
15902	54.2	.4	1466.4	71.1	61	35	.6	60	23	1.3	6.53	6.17
16903	30.4	.3	1491.6	39.4	62	5	.4	60	15	1.3	5.84	5.76
17904	3.6	.1	1476.0	7.7	60	51	.1	60	3	2.1	4.57	6.12
18905	46.4	.2	1473.6	57.2	62	14	.3	61	6	1.2	6.28	6.21
21008	12.2	.1	1426.8	32.2	61	45	.3	61	33	2.6	6.42	6.57
21013	6.5	.1	1458.0	17.3	60	36	.2	67	31	2.7	6.55	5.21
21016	68.1	.6	1458.0	84.9	60	23	.7	59	30	1.2	6.81	7.32
21808	66.7	.7	1458.0	-55.4	60	40	-6	60	14	-8	5.52	7.32
21906	10.0	.1	1453.2	28.8	61	53	.2	60	20	2.9	6.55	5.40
21937	2.2	.1	1458.0	9.1	61	5	.2	60	17	4.1	5.21	3.97
22907	15.7	.1	1441.2	24.8	61	14	.2	60	16	1.6	5.80	6.43
22908	13.1	.2	1453.2	27.0	61	60	.3	60	19	2.1	5.99	5.43
23084	39.0	.2	1472.4	-25.2	69	23	-1	36	12	-6	5.66	8.50
23909	17.9	.2	1452.0	24.6	61	53	.2	60	50	1.4	4.77	5.43
24910	51.0	.4	1440.0	69.1	61	28	.6	60	25	1.4	6.00	6.63
25911	41.0	.4	1440.0	59.7	61	32	.7	60	9	1.5	7.29	7.42
26912	118.6	.7	1460.4	121.0	62	20	.7	61	10	1.0	6.24	7.51
26913	33.8	.3	1476.0	45.0	60	29	.4	59	46	1.3	6.35	6.28
29818	37.3	.4	1452.0	77.0	61	6	.7	62	0	2.1	5.69	4.68
29914	48.3	.5	1472.4	56.7	61	16	.6	60	11	1.2	5.60	6.86
29915	69.6	.5	1444.8	84.0	61	50	.7	60	17	1.2	6.51	7.02
29916	39.7	.5	1468.8	63.6	60	10	.6	59	13	1.6	5.93	6.89
29917	55.6	.4	1440.0	73.6	62	50	.5	60	42	1.3	5.96	6.13
29918	155.2	1.2	1488.0	-33.7	60	4	-2	60	2	-2	5.69	11.22
31919	39.6	.4	1496.4	44.6	62	56	.5	60	31	1.1	6.33	6.50
32920	55.5	.4	1458.0	93.1	62	46	.7	61	57	1.7	7.38	7.01
33921	51.3	.6	1468.8	63.8	62	15	.7	61	36	1.2	5.60	5.80
36912	57.8	.8	1468.8	78.6	60	46	.7	59	28	1.4	4.68	7.33
36922	80.2	.7	1476.0	61.0	62	0	.4	62	3	.8	5.92	7.13
40923	682.1	1.7	1446.0	621.0	63	59	1.5	63	14	.9	9.40	10.05
43924	67.5	.5	1485.6	-43.4	60	57	-3	60	14	-6	5.49	6.87
44925	34.9	.3	1476.0	46.3	61	36	.4	60	18	1.3	5.64	5.71
44926	42.7	.4	1516.8	73.9	60	32	.8	60	27	1.7	5.71	5.94
45101	141.1	1.0	1480.8	52.2	62	13	.6	60	10	.4	2.65	5.13
45927	38.7	.2	1482.0	60.6	60	33	.4	60	33	1.6	7.71	7.87
45928	41.9	.2	1489.2	78.8	61	17	.5	61	16	1.9	7.87	7.86
45929	141.1	1.0	1486.8	68.7	62	30	.3	62	30	.5	5.13	8.06
46930	120.4	.8	1482.0	75.6	65	46	.4	65	47	.6	6.07	7.46
47931	67.4	.3	1500.0	43.7	96	0	.2	96	0	.6	6.99	7.97
55077	12.7	.2	1435.2	5.2	74	42	.1	76	4	.4	3.54	7.85
58932	11.0	.1	1498.8	17.0	60	31	.2	59	48	1.5	5.50	4.23
70933	3269.2	4.4	216.0	577.3	62	23	1.3	60	53	.2	9.10	13.51
71039	404.5	1.4	1484.4	115.3	62	46	.7	60	6	.3	5.97	6.36
71217	3.3	.0	1452.0	-14.7	64	40	-2	65	34	-4.4	4.36	5.60
71331	278.5	1.2	276.0	308.2	60	45	1.3	60	21	1.1	7.44	11.03
72006	529.8	2.2	1410.0	-779.7	79	23	-2.7	36	17	-1.5	8.19	9.00
72074	399.9	1.2	1416.0	168.5	62	48	.5	62	47	.4	8.03	8.43
72385	42.2	.3	1446.0	26.7	91	26	.2	91	26	.6	5.02	7.70
72475	19.8	.3	1485.6	19.0	59	10	.3	59	10	1.0	4.55	6.04
72561	29.6	.2	1444.8	32.8	61	10	.3	60	36	1.1	5.33	5.42
72647	30.5	.3	1478.4	12.9	64	56	.2	59	36	.4	3.75	6.01
72738	96.4	.8	1468.8	-53.3	62	6	-4	62	4	-6	5.12	6.73
72934	91.4	.6	253.2	90.0	61	25	.7	60	46	1.0	5.35	3.78
72938	10.5	.1	1437.6	80.2	61	32	.5	60	47	7.6	7.70	6.63
73172	42.9	.3	1452.0	13.3	64	53	.2	66	26	.3	2.79	4.74
74176	11.5	.4	1440.0	13.6	60	43	.4	60	1	1.2	3.05	4.12
75089	66.1	.5	1416.0	84.5	60	28	.4	60	10	1.3	7.75	8.15
77683	10.8	.2	1468.8	26.8	60	44	.3	59	54	2.5	5.89	3.92
81005	1486.6	4.7	1440.0	1279.9	67	0	3.6	65	8	.9	9.60	11.29
81010	1319.8	2.1	1459.2	1970.1	77	34	3.8	36	15	1.5	9.79	9.56
81011	1688.9	1.6	246.0	2023.0	76	14	3.6	36	9	1.2	10.66	10.50
81018	1004.6	1.3	1260.0	2908.7	64	44	3.0	64	44	2.9	10.92	9.00
81019	1749.9	1.5	276.0	2028.8	76	36	4.3	36	9	1.2	11.37	11.03
81022	2470.2	2.3	1458.0	2148.8	73	54	3.2	76	22	.9	10.93	9.94
81030	5922.0	5.2	1404.0	2198.5	72	3	2.7	72	44	.4	10.94	12.80
81034	1845.1	4.2	1218.0	1925.0	64	36	3.9	64	35	1.0	8.54	9.27
81096	1478.8	2.6	1440.0	1285.9	69	5	2.2	69	6	.9	9.58	9.80
82057	214.1	.5	1448.4	430.4	96	0	.9	96	0	2.0	9.49	9.46
82058	1113.6	2.4	246.0	1023.7	77	29	2.3	83	32	.9	10.16	10.89

CONDUIT NUMBER	DESIGN FLOW (CFS)	DESIGN VELOCITY (FPS)	VERTICAL DEPTH (IN)	COMPUTED FLOW (CFS)	OF OCCURENCE HR. MIN.		COMPUTED VELOCITY (FPS)	OF OCCURENCE HR. MIN.		PERCENT OF MAX. TO DESIGN FLOW	MINIMUM INVERT AT UPSTREAM (FT)	DEPTH ABOVE CONDUIT ENDS DOWNSTREAM (FT)
82059	2756.2	3.4	276.0	1063.9	73	51						
82935	20.2	.4	1447.2	68.5	66	14	3.1	36	11	.4	12.05	12.75
82936	21.6	.3	1430.4	38.6	60	30	.8	62	4	3.4	6.35	3.99
82939	1557.4	2.4	228.0	1098.3	73	14	.3	59	50	1.8	6.75	6.59
83052	1954.6	3.3	1446.0	1393.0	78	55	2.9	93	7	.7	12.75	12.51
83053	1635.1	1.9	1440.0	-1826.7	77	33	1.9	84	16	.7	8.04	10.35
83054	5233.0	4.7	246.0	1982.8	73	45	-2.7	84	15	-1.1	9.90	10.85
83055	2412.6	2.7	1441.2	1992.3	73	58	3.4	36	10	.4	9.50	10.89
83065	4833.7	3.9	1440.0	2180.9	63	56	3.4	36	15	.8	13.48	12.63
83950	15.3	.1	1476.0	-14.3	87	14	3.0	84	8	.5	12.73	12.93
84003	194.9	.8	1468.8	-183.1	71	28	-1.1	87	14	-1.1	6.33	6.63
84013	775.7	2.4	1446.0	-276.2	69	47	-1.2	36	20	-1.1	7.21	7.38
84027	1384.5	3.4	1430.4	381.8	68	40	-1.2	70	5	-1.1	6.48	9.71
84035	266.8	.8	1441.2	312.3	68	57	.9	68	44	.3	7.08	8.78
84038	707.5	2.0	1440.0	330.5	68	56	.9	69	6	1.2	8.69	8.70
84041	844.6	2.2	1434.0	368.3	68	36	.9	69	4	.5	8.80	9.29
84045	275.6	.9	1434.0	288.0	64	5	.9	68	40	.4	8.89	9.39
84049	334.1	.9	1434.0	-313.2	64	12	.9	64	2	1.0	9.39	9.44
84053	1394.3	5.3	1434.0	306.9	64	31	-1.1	64	11	-1.1	9.31	9.44
84061	266.4	.8	1444.8	-182.1	64	21	1.1	58	58	.2	6.91	9.49
84065	266.4	.8	1434.0	-142.0	64	31	-1.1	64	20	-1.1	8.51	8.59
84069	211.2	.7	1452.0	-183.7	64	37	-1.1	62	26	-1.1	8.41	8.51
84073	198.8	.5	1416.0	224.4	64	43	-1.1	64	35	-1.1	7.32	7.41
84077	474.9	2.3	1418.4	121.2	61	57	.5	64	41	1.1	8.32	8.52
84081	107.1	.6	1434.0	-147.5	63	17	.6	61	57	.3	6.92	8.32
84094	1797.2	4.4	1452.0	-267.8	36	14	-1.3	63	16	-1.1	7.02	7.12
84835	262.4	.8	1429.2	-336.9	68	50	-1.3	36	14	-1.1	8.78	9.58
84951	22.6	.1	1482.0	33.6	60	23	-1.3	68	56	-1.1	8.69	8.88
85023	101.0	.6	1476.0	39.9	61	36	.2	60	24	1.5	7.59	7.71
85024	12.5	.1	1476.0	9.2	66	18	.3	60	1	.4	7.76	7.85
85025	52.9	.2	1488.0	18.8	67	3	.0	66	33	.7	3.08	7.85
85026	44.8	.4	1464.0	50.8	65	28	.1	67	59	.4	6.48	8.47
85940	50.4	.2	1464.0	-72.3	65	21	.2	65	27	1.1	3.87	9.25
85941	71.3	.3	1428.0	53.0	63	57	-1.1	65	11	-1.1	6.55	9.25
86054	1042.4	3.6	267.6	437.8	60	36	.2	61	4	.7	6.55	8.98
86062	97.9	.8	1452.0	-201.4	61	21	3.0	60	4	.4	6.32	8.00
86076	163.3	2.0	1494.0	-147.2	61	43	-1.3	60	47	-2.1	3.12	8.84
87007	171.0	.8	1434.0	-206.8	61	59	-1.1	61	44	-1.1	5.14	7.54
87015	549.4	2.1	1452.0	199.1	89	7	-1.1	61	44	-1.1	7.37	9.32
87022	710.2	2.5	1452.0	242.9	88	44	.7	93	15	.4	7.32	8.73
87030	803.4	2.8	1450.8	389.8	61	31	1.0	93	26	.3	7.13	8.29
87039	250.3	.8	1446.0	572.7	61	14	1.5	60	35	.5	7.09	8.23
87048	912.9	4.1	1458.0	637.5	61	20	2.0	60	41	2.3	9.13	8.78
88004	68.5	1.0	1482.0	15.3	61	43	4.2	60	21	.7	8.08	9.35
88006	120.5	1.4	1450.8	120.9	62	18	.2	61	45	.2	3.95	5.50
88007	60.5	.3	1431.6	-35.8	60	15	1.7	60	47	1.0	6.56	6.50
88009	113.5	.5	264.0	-33.3	80	45	-1.3	59	53	-1.1	6.60	8.77
88149	227.1	2.3	265.2	62.9	61	14	-1.3	83	55	-1.1	4.32	5.48
88191	2417.3	4.5	1320.0	2899.0	65	18	1.7	60	50	.3	3.24	4.71
88240	15.9	.1	300.0	17.0	66	59	6.2	65	13	1.2	11.78	9.12
88332	61.9	.7	1382.4	92.0	62	22	.2	62	10	1.1	4.05	3.81
88424	101.0	.8	1437.6	102.5	63	29	.8	61	31	1.5	5.75	6.50
88517	21.7	.2	1476.0	-25.5	62	43	.8	60	37	1.0	7.42	7.76
88809	267.7	2.1	1398.0	79.9	62	26	.2	59	17	-1.2	5.20	7.45
88810	193.1	2.0	1416.0	-97.7	62	0	.8	62	28	.3	2.92	6.40
88818	66.2	.5	1404.0	45.9	62	2	-1.1	61	58	-1.1	4.60	7.33
88825	171.3	1.4	1436.4	-242.8	61	43	.1	96	0	.7	1.93	10.56
88833	771.1	2.3	240.0	530.4	67	39	-1.4	61	15	-1.1	6.70	7.86
88841	1311.2	3.4	222.0	597.6	67	32	.9	67	58	.7	6.70	8.81
88850	1898.1	3.6	1476.0	708.7	67	8	2.5	67	60	.5	7.81	8.31
88891	3435.0	3.3	1218.0	2898.9	65	23	2.0	60	15	.4	8.31	9.93
88942	80.2	1.3	1470.0	69.8	60	56	5.3	65	24	.8	9.12	4.50
88943	219.0	1.1	1422.0	85.1	62	3	1.0	84	35	.9	5.50	7.06
88944	31.1	.3	1444.8	65.2	62	27	.4	61	55	.4	5.48	9.57
89193	42.1	.5	1470.0	54.7	62	13	.5	62	33	2.1	7.45	4.93
89202	38.1	.3	1464.0	87.7	62	3	.5	62	42	1.3	5.66	5.73
89312	40.7	.2	1464.0	43.8	63	51	.4	64	15	2.3	7.64	6.28
89945	63.1	.7	1454.0	76.6	61	52	.2	64	13	1.1	4.31	4.85
89946	41.7	.3	1482.0	59.9	62	20	.8	60	17	1.2	5.73	7.78
89947	40.7	.2	1464.0	36.2	60	10	.5	60	29	1.4	6.28	6.71
89948	77.2	.2	1459.2	96.2	62	17	.2	59	55	.9	4.85	6.78
60055	3986.0	2.8	159.1	4235.8	36	4	.4	61	5	1.2	6.78	6.48
60159	2402.2	1.9	139.0	3085.2	36	3	7.0	36	4	1.1	10.35	10.74
60084	2587.3	2.0	141.0	2398.1	36	4	6.2	36	4	1.3	8.97	9.21
60119	7110.6	3.0	149.9	6348.4	36	4	3.6	36	5	.9	9.42	9.67
							5.8	36	5	.9	10.39	10.87