PERIODIC RUN-ON AND RUN-OFF CONTROL SYSTEM PLAN
391.3-4-.10(5) and 40 C.F.R. § 257.81
HUFFAKER ROAD (PLANT HAMMOND) PRIVATE INDUSTRIAL LANDFILL
(HUFFAKER ROAD LANDFILL)
GEORGIA POWER COMPANY

The Federal CCR Rule, and, for Existing CCR Landfills where applicable, the Georgia CCR Rule (391-3-4-.10) require the owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill to prepare a run-on and run-off control system plan to document how these control systems have been designed and constructed to meet the applicable requirements of this section of the Rule. *See* 40 C.F.R. § 257.81; Ga. Comp. R. & Regs. r. 391.3-4-.10(5)(a). In addition, the Rules require periodic run-on and run-off control system plans every five years. *See* 40 C.F.R. § 257.81(c)(4); Ga. Comp. R. & Regs. r. 391.3-4-.10(5)(a). The previous Periodic Run-on and Run-off Control System Plan was placed in the Operating Record on February 12, 2025.

The CCR landfill known as the Huffaker Road Landfill is located in Floyd County, west of Rome, Georgia on Plant Hammond property. Huffaker Road Landfill is comprised of Active Cells A, B, and E and future Cell F. Cells A & B are undergoing closure and final cover is completed. Cell E was permitted and constructed with a minimum 2-ft. compacted clay liner. The facility consists of the CCR storage cells, a leachate pond for Cells A & B, and separate stormwater runoff ponds and clear pools. Cell F construction is planned to begin in early to mid 2027. The final cover system will consist of either soil cover or engineered turf. The facility will consist of the CCR storage cells, a leachate collection system, and separate stormwater runoff ponds and clear pools.

The storm water flows have been calculated using the Natural Resources Conservation Service (NRCS) method (also known as the Soil Conservation Service (SCS) method) using the 25-yr, 24-hr storm event. The storm water detention system has been designed in accordance with the Georgia Soil and Water Conservation Commission requirements as well as other local, city, and government codes. The post developed storm water discharge was designed to be less than the pre-developed storm water discharge in accordance with the requirements of the State of Georgia.

Storm Basin calculation data was determined from the existing topography for Cells A, B, and E, from the proposed landfill configuration for Cell F, and from the Urban Hydrology for Small Watersheds (TR-55). In accordance with TR-55, a Type II Rainfall Distribution was determined to be appropriate for this site. Precipitation values were determined from National Oceanic and Atmospheric Administration (NOAA) Atlas 14.

The NRCS provides information on soil characteristics and hydrologic groups present at the site. It was determined that the hydrological group “B” should be used to best reflect the

characteristics of the soils on site for Cell E. A composite hydrologic soil group "B/C" was used to best represent the characteristics of the final cover system for Cells A and B. A hydrologic soil group of "C" was used for the design of Cell F.

Stormwater features for Cells A, B, and F were designed using the Computational Hydraulics Institute PCSWMM design software. The program was used to compute the peak flows and hydraulic capacity of the ditches and ponds at the site.

For Cell E, Storm and Sanitary Sewer Analysis 2019 was used to evaluate the site and generate appropriate precipitation curves, runoff curve numbers, and storm basin runoff values.

Huffaker Road Landfill Cells A, B, and E are designed and constructed with perimeter berms and drainage ditches around the cells that prevent stormwater run-on during the peak discharge of a 24-hr, 25-yr storm from flowing onto the active portion of the landfill. The leachate pond collects and controls the anticipated amount of leachate generated from the leachate collection system of Cells A & B over a period of 7 days as well as the quantity of rainfall from a 24-hr, 100-yr storm event (original facility design) that falls directly into the leachate pond. Storm water run-off from Cells A, B and E is routed through their respective sedimentation/clarifying ponds, also designed originally to convey the run-off from a 24-hr, 100-yr storm event, without overtopping.

Cell F is designed to prevent stormwater run-on during the peak discharge of a 24-hr, 25-yr storm from flowing onto the active portion of the landfill. The leachate system is designed to collect and control the anticipated amount of leachate generated from Cell F. Storm water run-off from Cell F will be routed through sedimentation/clarifying ponds, designed to convey the run-off from a 24-hr, 100-yr storm event, without overtopping.

This plan is supported by appropriate engineering calculations which are attached to show compliance with the 24-hr, 25-yr storm event specified in 40 C.F.R. § 257.81. The facility is operated subject to and in accordance with § 257.3-3 of EPA's regulations.

I hereby certify that the run-on and run-off control system plan meets the requirements of 40 C.F.R. § 257.81.



_____

Matthew Vaughan, P.E.

Licensed State of GA, PE No. PE044791

Run-on and Run-off Control System Plan for Landfills:
Calculation Summary

for

Plant Hammond Huffaker Road Parcels A and B

Prepared by:

Stantec Consulting Services Inc.

1. BACKGROUND AND DESIGN CRITERIA

Parcels A and B are used to contain the coal combustion residual (CCR) materials from Plant Hammond Ash Pond 1(AP-1) and Ash Pond 2 (AP-2). The bottom lining system, leachate collection system, leachate pond, Sedimentation Pond 1, Clearing Pool 1, and perimeter drainage ditches have been constructed, placement of ash has occurred, and the final cover has been constructed. These features can be seen in Figure 1.

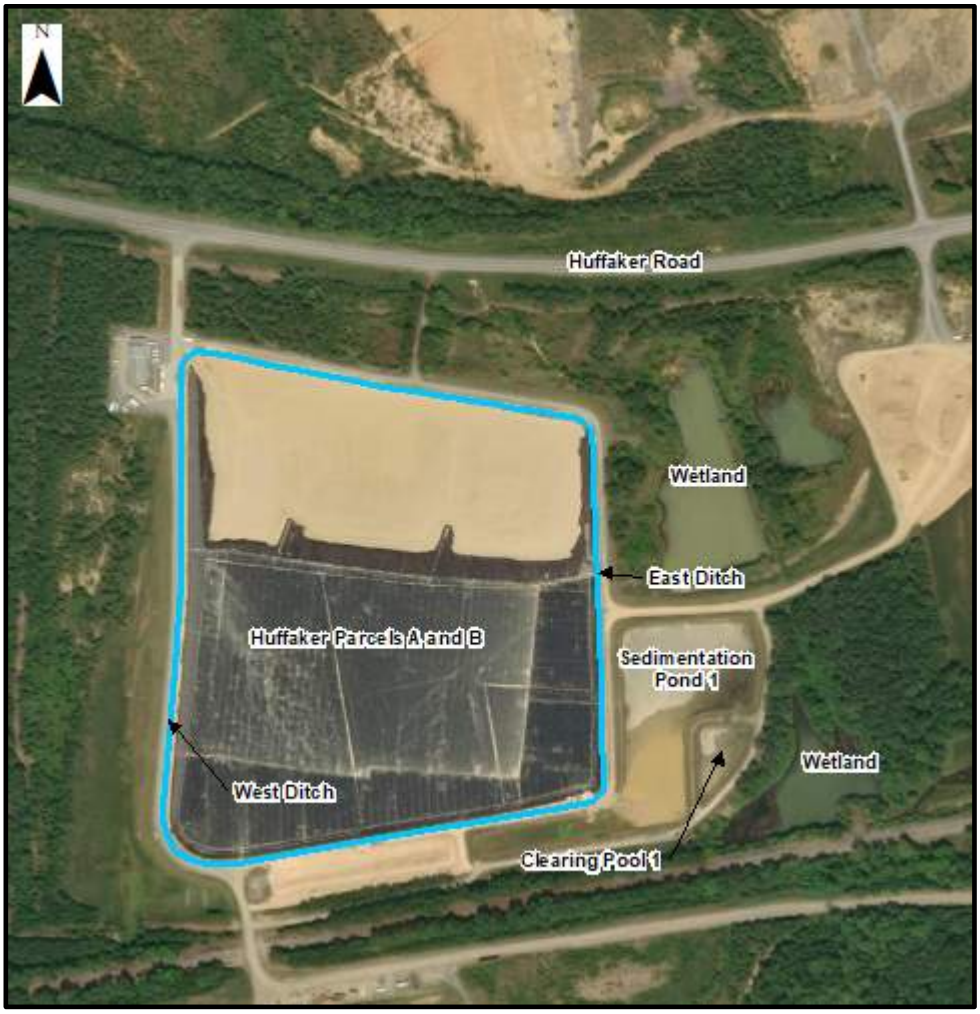


Figure 1 Huffaker Road Landfill Property Layout

The existing ditches, spillways, and ponds will be used to convey the stormwater runoff from the landfill to Sedimentation Pond 1.

The purpose of this report is to analyze the hydrologic and hydraulic performance of drainage features during future conditions of the constructed CCR landfill, including the following:

1. Evaluate the ditches for the 25-year, 24-hour storm event and the 100-year, 24-hour storm event. Minimum federal criteria require conveying the 25-year, 24-hour storm event without overtopping. Criteria for the project is more stringent and includes conveying the 25-year, 24-hour storm event with ½ foot of freeboard and conveying the 100-year, 24-hour storm event without overtopping.
2. Evaluate if Sedimentation Pond 1 and Clearing Pool 1 can contain the 100-year, 24-hour storm event without overtopping the berm;
3. Analyze existing spillway capacity during the 100-year, 24-hour storm event; and
4. Evaluate the stormwater runoff flumes for the proposed CCR stack to convey the 25-year, 24-hour event.

2. METHODOLOGY

The United States Department of Agriculture (USDA) Soil Conservation Service (SCS) curve number method was used in creating a stormwater management model (with the Computational Hydraulics Institute PCSWMM design software) to compute the peak flows and the capacity of the ditches and ponds on the site. Esri ArcGIS software was used to create multiple features and measurements used in the PCSWMM model. An overview figure of the PCSWMM model is included in Attachment A. The following were applied for this analysis:

- The drainage areas were delineated by using the post construction conditions contours following construction of the proposed CCR stack. The total area that drains into the ditches is 32.1 acres.
- Existing drainage ditches channel geometry as stated in design calculations titled *Plant Hammond Huffaker Road Coal Combustions By-Product Storage Site Application #ALPI0571* (dated September 27, 2004):
    - Vegetated trapezoidal channel
    - 4-feet bottom width
    - 2H:1V side slopes
    - 2-foot total depth
- The proposed CCR Stack stormwater flume layout and dimensions were from the IFC drawing set, that corresponds with this analysis, and were used in order to calculate longest flowpath, channel slopes, and drainage areas. The dimensions of proposed stormwater flumes are:
    - Riprap trapezoidal channel with a 4-foot bottom width
    - 3H:1V side slopes
    - 1.5-foot total depth.
- NOAA Atlas 14 rainfall depths were used for all storm events evaluated.
    - 25-year, 24-hour: 6.29 inches
    - 100-year, 24-hour: 7.85 inches
- An SCS Type-II rainfall distribution was used along with the rainfall depths listed above.
- A composite curve number was calculated for each drainage subcatchment based on future CCR stack closure conditions. A SCS hydrologic soil group composite classification of Type B-C (poorly drained to moderately drained) was

assigned for the following land covers. The SCS hydrologic soil group classification of Type B/C was determined to better fit the configuration of the closure surface cross section than Type C since silt loam or loam type soils will be used in the top 6 inches of the cap and underlying protective cover will likely be lean clay:
    - Closure vegetated surface and vegetated ditches – 58 & 71 for a composite of 64.5
    - Wooded area – 70
    - Rock-lined stormwater flumes and crushed stone roads – 89
    - Open water surface – 98.
- Manning's roughness coefficient "n" values were based on *Open Channel Hydraulics* (Chow, 1959) and the *Georgia Stormwater Management Manual* (current edition dated 2016). The values used were:
    - 0.01 – new schedule 40 steel pipe
    - 0.015 – concrete lined channels
    - 0.022 – Bituminous-Coated Corrugated Metal Pipe (BCCMP)
    - 0.03 – vegetated ditch
    - 0.069 – riprap with a 6-inch D_{50}
    - 0.078 – riprap with a 12-inch D_{50}
- Sedimentation Pond 1 and Clearing Pool 1 stage-area curves were developed based on the IFC closure drawings. The elevation-area curves are included in Attachment B.
- Sedimentation Pond 1 and Clearing Pool 1 existing primary spillway structure configuration was referenced from a design drawing titled *Plant Hammond-Huffaker Road Coal Combustion By-Products Disposal Facility Erosion Control Sections & Details* (Drawing No. H5915 dated September 27, 2004):
    - 48-inch diameter, 5-foot tall BCCMP riser with trash rack
    - Risers perforated with ½-inch diameter holes spaced 3-inches on center
    - 36-inch diameter BCCMP barrel
    - Rim and invert elevation values referenced from Table 1, Drawing No. H5915
    - A perforated riser rating curve calculation is included in Attachment C.
- Sedimentation Pond 1 and Clearing Pool 1 emergency spillway channel referenced from Drawing No. H5915:
    - Concrete-lined trapezoidal channel
    - Bottom width 20-feet
    - 3H:1V side-slopes
    - Sedimentation Pond 1 emergency spillway channel total depth 1.5-feet
    - Clearing Pool 1 emergency spillway channel total depth 2.0-feet

3. INTERMEDIATE ISSUES AND FIXES

In running the PCSWMM model, there were capacity issues with the existing drainage ditches. The ditches convey the 25-year, 24-hour storm without overtopping (minimum federal criteria), but did not initially meet the more stringent criteria established for the project including conveying the 25-year, 24-hour event with ½ foot freeboard and

conveying the 100-year, 24-hour storm without overtopping. In order to resolve these issues, the following adjustments were made to the model:

- Approximately 775 feet of the drainage ditch, located in the southeastern corner of the stack, was modeled as lined with concrete (i.e. Type B ditch) instead of vegetation.

- Approximately 300 feet of the road that separates the closure stack and Sedimentation Pond 1 was raised 6 inches.

With these changes incorporated, the 100-year, 24-hour storm was contained in the ditches and the ½ foot freeboard criteria was met for the 25-year, 24-hour storm.

For both Sedimentation Pond 1 and Clearing Pool 1, the 25-year, 24-hour and the 100-year, 24-hour storms were contained, and the emergency spillway was not utilized.

4. RESULTS

Detailed PCSWMM reports are included in Attachment D. A summary of results is included in Tables 1-3.

Table 1 Vegetated Cover Ditch Results

Scenario[1]	Peak Water Surface Depth (ft)	Ditch Height (ft)	Freeboard (ft)
West Side Ditch - 25-year storm	1.5	2.0	0.5
West Side Ditch - 100-year storm	2.0	2.0	0.0
East Side Ditch – 25-year storm	2.0	2.5	0.5
East Side Ditch – 100-year storm	2.5	2.5	0.0

[1]For each ditch listed, the segment with the largest resulting peak water surface depth is shown.

Table 2 Vegetated Cover Pond Results

Scenario	Starting Water Surface Elevation (WSE) (ft)	Peak WSE (ft)	Top of Berm Elevation (ft)	Freeboard (ft)	Emergency Spillway Elevation (ft)	Riser Elevation (ft)	Overflow Riser Peak Flow (cfs)	Riser Perforation Peak Flow (cfs)
Sedimentation Pond 1 - 25-year storm	643.5	646.2	650.0	3.8	648.5	648.0	0.00	5.3
Sedimentation Pond 1 - 100-year storm	643.5	647.0	650.0	3.0	648.5	648.0	0.00	7.2
Clearing Pool 1 – 25-year storm	642.5	645.1	650.0	4.9	648.0	647.0	0.00	5.1
Clearing Pool 1 – 100-year storm	642.5	645.9	650.0	4.1	648.0	647.0	0.00	6.9

Table 3 Flume Results

Scenario*	Peak Water Surface Depth (ft)	Flume Height (ft)	Freeboard (ft)
Grass Closure - 25-year storm	1.0	1.5	0.5
Grass Closure - 100-year storm	1.0	1.5	0.5

*For each scenario listed, the segment with the largest resulting peak water surface depth is shown.

5. CONCLUSION

Based on the PCSWMM-calculated results with the modifications described in Section 3, the following are concluded for the vegetated cover closure:

1. The existing drainage ditches meet the minimum federal criteria (convey the 25-year, 24-hour storm event without overtopping).
2. The existing drainage ditches on the west side of the stack will be able to convey the 25-year, 24-hour storm with the minimum half a foot of freeboard, but not the ditches on the east side. A portion of the road in this area will need to be raised 0.5 feet as noted on the Drawings and ditches will need to be lined with concrete (Type B Ditch) as shown in the Drawings in order to achieve the results shown in Table 1.
3. Sedimentation Pond 1 will contain the 100-year, 24-hour storm without utilizing the emergency spillway.
4. The existing configuration of Clearing Pool 1 will not be overtopped by the 100-year, 24-hour storm nor does it utilize the emergency spillway for that storm.

For the flumes:

1. The designed flumes contain sufficient capacity for both the 25-year and 100-year, 24-hour storms.

6. REFERENCES

Chow, Ven Te (1959). *Open Channel Hydraulics*. Caldwell, New Jersey: The Blackburn Press.

Computational Hydraulics International (CHI) (2019). *PCSWMM 2019 Professional 2D* software. Version 7.2.2785.

Esri Inc. (2017). *ArcGIS Desktop 10.5.1* software. Version 10.5.1.7333.

Georgia Power Company. (September 2004). *Plant Hammond – Huffaker Road – Coal Combustion By-Products Disposal Facility Erosion Control Sections and Details*. Drawing H9155.

Georgia Power Company. (September 2004). *Plant Hammond Huffaker Road Coal Combustion By-Products Storage Site: D&O Plan Application #ALPIO571*. Design Calculations.

Georgia Stormwater Management Manual: 2016 Edition: Volumes 1 and 2.

List of Attachments

A: PCSWMM Model Overview

B: Pond Elevation-Area Curves

C: Perforated Riser Rating Curve Calculation

D: PCSWMM Results

Attachment A

PCSWMM Model Overview


Legend
Junctions
Outfalls
Storages
Conduits
Weirs
Outlets
Subcatchments
N

Attachment B

Pond Elevation-Area Curves

Sedimentation Pond 1		
Depth	**Elevation**	**Area**
(ft)	**(ft)**	**(ft^2)**
0	642	3113
1	643	30855
2	644	80929
3	645	137926
4	646	162266
5	647	168465
6	648	174703
7	649	180984
8	650	187301

Clear Pool 1		
Depth	**Elevation**	**Area**
(ft)	**(ft)**	**(ft^2)**
0	642	1266
1	643	15304
2	644	17081
3	645	18464
4	646	19884
5	647	21344
6	648	22844
7	649	24383
8	650	25963

Attachment C

Perforated Riser Rating Curve Calculation

HUFFAKER LANDFILL POND PIPE RATING CURVE

0.5" PIPE

Pipe Material:		CMP									
Manning's n:		0.022			Inlet Elev:	643	ft				
Barrel Diameter:		48	in		Pipe I.D.	0.500	in.				
Barrel Length:		1	ft		Area of Orifice(ag):	0.001364	ft				
					Cd (gate):	0.6					
					Length of Weir (L):	0.1309	ft				
	Cw:	3.1			Note:						
	Cd:	0.6			Rating Curve developed for N-12 HDPE Pipe						
					Outlet						
Invert Pipe Outlet		641.35	ft (Tailwater :3')								

$$\frac{2}{3} Cw\sqrt{2g}\,Lh^{3/2} \qquad Cd \cdot a \cdot \sqrt{2gh} \qquad \frac{0.463}{n} d^{\frac{8}{3}} s^{\frac{1}{2}}$$

		Calculated Discharge -0.5"Pipe									
Elevation	Head	Weir	Orifice	Pipe	Total					Sed Pond 1	
(ft)	(ft)	(cfs)	(cfs)	(cfs)	(cfs)					Elevation	Total Discharge
643	0.00	0.00	0.00	1089.92	0.0000	0		0	0	643	0.000
643.25	0.25	0.27	0.00	1169.58	0.0033	0.164135		0.164135	0.25	643.25	0.164
643.5	0.50	0.77	0.00	1244.14	0.0046	0.232122		0.396258	0.5	643.5	0.396
643.75	0.75	1.41	0.01	1314.49	0.0057	0.284291		0.680548	0.75	643.75	0.681
644	1.00	2.17	0.01	1381.26	0.0066	0.328271	1.313083	1.008819	1	644	1.009
644.25	1.25	3.03	0.01	1444.94	0.0073	0.367018		1.375837	1.25	644.25	1.376
644.5	1.50	3.99	0.01	1505.94	0.0080	0.402048		1.777885	1.5	644.5	1.778
644.75	1.75	5.03	0.01	1564.56	0.0087	0.434261		2.212146	1.75	644.75	2.212
645	2.00	6.14	0.01	1621.06	0.0093	0.464245		2.676391	2	645	2.676
645.25	2.25	7.33	0.01	1675.65	0.0098	0.492406		3.168797	2.25	645.25	3.169
645.5	2.50	8.58	0.01	1728.53	0.0104	0.519042		3.687838	2.5	645.5	3.688
645.75	2.75	9.90	0.01	1779.83	0.0109	0.544375		4.232214	2.75	645.75	4.232
646	3.00	11.28	0.01	1829.69	0.0114	0.568581		4.800795	3	646	4.801
646.25	3.25	12.72	0.01	1878.23	0.0118	0.591798		5.392594	3.25	646.25	5.393
646.5	3.50	14.22	0.01	1925.55	0.0123	0.614138		6.006732	3.5	646.5	6.007
646.75	3.75	15.77	0.01	1971.73	0.0127	0.635693		6.642425	3.75	646.75	6.642
647	4.00	17.37	0.01	2016.86	0.0131	0.656541		7.298967	4	647	7.299
647.25	4.25	19.02	0.01	2061.00	0.0135	0.676747		7.975714	4.25	647.25	7.976
647.5	4.50	20.72	0.01	2104.21	0.0139	0.696367		8.672081	4.5	647.5	8.672
647.75	4.75	22.47	0.01	2146.55	0.0143	0.715449		9.38753	4.75	647.75	9.388
648	5.00	24.27	0.01	2188.08	0.0147						
648.25	5.25	26.12	0.02	2228.83	0.0150						
648.5	5.50	28.00	0.02	2268.84	0.0154						
648.75	5.75	29.93	0.02	2308.17	0.0157					Clear Pool 1	
649	6.00	31.91	0.02	2346.83	0.0161					Elevation	Total Discharge
649.25	6.25	33.92	0.02	2384.87	0.0164					642	0
649.5	6.50	35.98	0.02	2422.31	0.0167					642.25	0.164135336
649.75	6.75	38.07	0.02	2459.19	0.0171					642.5	0.396257754
650	7.00	40.21	0.02	2495.51	0.0174					642.75	0.680548495
650.25	7.25	42.38	0.02	2531.32	0.0177					643	1.008819167
650.5	7.50	44.59	0.02	2566.62	0.0180					643.25	1.375836936
										643.5	1.777884758
										643.75	2.212146038
										644	2.676390874
										644.25	3.168796882
										644.5	3.687838388
										644.75	4.232213712
										645	4.800795195
										645.25	5.392593565
										645.5	6.006731757
		C=130	C=100							645.75	6.64242518
										646	7.298966523
	HAZWil	2764.31	2126.39							646.25	7.97571385
		2966.35								646.5	8.672081105
		3155.47								646.75	9.387530447
		3333.88									
		3503.22									
		3664.75									
		3819.44									
		3968.12									
		4111.41									
		4249.89									
		4383.98									
		4514.10									
Hazwill (VxA)		5078.96									

Stormwater Stage-Storage-Discharge Calculation
Huffaker Landfill at Plant Hammond
Plant Hammond, Rome, GA

Sedimentation Pond 1

Primary Spillway

RIM: 648.0'
48" Riser
TOP: 648.0'
36" BCCMP
~50LF @ 0.6%
INV: 642.0'

Elevation (FT)	Area (SF)	Incremental Storage (AC-FT)	Cumulative Storage (AC-FT)	Primary Spillway (48" Riser)			Minimum (CFS)
				Head (FT)	Orifice[4] (CFS)	Weir[5] (CFS)	
642.0	3113.2	0.0	0.0				0.0
643.0	30855.3	0.4	0.4				0.0
644.0	80928.5	1.3	1.7				0.0
645.0	137926.0	2.5	4.2				0.0
646.0	162266.0	3.4	7.6				0.0
647.0	168465.0	3.8	11.4				0.0
648.0	174703.0	3.9	15.4	0.0	0.0	0.0	0.0
648.5	177843.5	4.0	19.4	0.5	42.8	13.7	13.7
649.0	180984.0	4.1	23.5	1.0	60.5	38.8	38.8
650.0	187301.0	4.1	27.6	2.0	85.6	109.7	85.6
651.0	193724.0	4.4	32.0	3.0	104.8	201.6	104.8

(1) Discharge estimated with sand-filter equation

$$Q = \frac{K(h_{sf} + d)}{d} A_{sf}$$

(2) Discharge estimated with Dodson Hydrocalc

(3) Discharge estimated with orifice equation (12-inch pipe):

$$Q = 0.6 \cdot A \cdot \sqrt{2gh}$$

(4) Discharge estimated with broad-crested weir equation (8-inch riser):

$$Q = 3.087 \cdot L \cdot H^{3/2}$$

(5) Discharge estimated with Manning's Equation

dia 36 inches

radius 1.5 ft
area 7.068583471 sf

Stormwater Stage-Storage-Discharge Calculation
Huffaker Landfill at Plant Hammond
Plant Hammond, Rome, GA

Sedimentation Pond 1

Primary Spillway

RIM: 647.0'
48" Riser
TOP: 648.0'
36" BCCMP
~50LF @ 0.6%
INV: 642.0'

Elevation (FT)	Area (SF)	Incremental Storage (AC-FT)	Cumulative Storage (AC-FT)	Primary Spillway (48" Riser)			Composite (CFS)
				Head (FT)	Orifice[4] (CFS)	Weir[5] (CFS)	
642.0	1266.5	0.0	0.0				0.0
643.0	15303.9	0.2	0.2				0.0
644.0	17081.3	0.4	0.6				0.0
645.0	18463.6	0.4	1.0				0.0
646.0	19883.9	0.4	1.4				0.0
647.0	21343.9	0.5	1.9	0.0	0.0	0.0	0.0
648.0	22844.3	0.5	2.4	1.0	60.5	38.8	38.8
649.0	24383.0	0.5	2.9	2.0	85.6	109.7	85.6
650.0	25963.4	0.5	3.5	3.0	104.8	201.6	104.8

(1) Discharge estimated with sand-filter equation

$$Q = \frac{K(h_{sf} + d)}{d} A_{sf}$$

(2) Discharge estimated with Dodson Hydrocalc

(3) Discharge estimated with orifice equation (12-inch pipe):

$$Q = 0.6 \cdot A \cdot \sqrt{2gh}$$

(4) Discharge estimated with broad-crested weir equation (8-inch riser):

$$Q = 3.087 \cdot L \cdot H^{3/2}$$

(5) Discharge estimated with Manning's Equation

dia 36 inches

radius 1.5 ft
area 7.068583471 sf

Attachment D

PCSWMM Results

```
  EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
  --------------------------------------------------------------

  Final SWMM Model for Georgia Power Plant Hammond Huffaker Road Landfill
Grass Closure - Includes B/C soils for closure resulting in a 64.5 CN.
Concrete lining was added to the channels in the southeastern corner of
the site.  The structures for both Sediment Pond 1 and Clear Pool 1 have
perforations.  The starting WSE for Sediment Pond 1 is 643.5 and for Clear
Pool 1 is 642.5.

  WARNING 02: maximum depth increased for Node J1
  WARNING 02: maximum depth increased for Node J19

  *************
  Element Count
  *************
  Number of rain gages ...... 5
  Number of subcatchments ... 65
  Number of nodes ........... 140
  Number of links ........... 143
  Number of pollutants ...... 0
  Number of land uses ....... 0


  ****************
  Raingage Summary
  ****************
                                                          Data       Recording
  Name                 Data Source                        Type       Interval
  ----------------------------------------------------------------------------
  SCS_Type_II_0.1in    SCS_Type_II_0.1in                  INTENSITY    6 min.
  SCS_Type_II_100-year_24-hour_7.85in SCS_Type_II_100-year_24-hour_7.85in
INTENSITY    6 min.
  SCS_Type_II_10-year_5.32in SCS_Type_II_10-year_5.32in     INTENSITY    6
min.
  SCS_Type_II_25-year_24-hour_6.29in SCS_Type_II_25-year_24-hour_6.29in
INTENSITY    6 min.
  SCS_Type_II_2-year_24-hour_3.82in SCS_Type_II_3.82in
INTENSITY    6 min.


  ********************
  Subcatchment Summary
  ********************
  Name                        Area     Width   %Imperv    %Slope Rain Gage
Outlet
  ----------------------------------------------------------------------------
-----------------------------------
  B2_E                        0.60     89.26      0.00    6.8800
SCS_Type_II_25-year_24-hour_6.29in J110
  B2_ENE                      0.24     69.54      0.00   12.9400
SCS_Type_II_25-year_24-hour_6.29in J100
```

B2_NE	0.28	70.99	0.00	11.5400
SCS_Type_II_25-year_24-hour_6.29in J81				
B3_E	0.44	101.99	0.00	10.7400
SCS_Type_II_25-year_24-hour_6.29in J108				
B3_ENE	0.37	84.08	0.00	9.8400
SCS_Type_II_25-year_24-hour_6.29in J98				
B3_ESE	0.31	71.44	0.00	10.7400
SCS_Type_II_25-year_24-hour_6.29in J120				
B3_N	0.50	116.06	0.00	10.5900
SCS_Type_II_25-year_24-hour_6.29in J76				
B3_NE	0.43	96.10	0.00	9.7400
SCS_Type_II_25-year_24-hour_6.29in J83				
B3_S	0.54	117.38	0.00	10.2700
SCS_Type_II_25-year_24-hour_6.29in J31				
B3_SE	0.33	77.75	0.00	10.7700
SCS_Type_II_25-year_24-hour_6.29in J121				
B3_SW	0.42	91.19	0.00	9.8000
SCS_Type_II_25-year_24-hour_6.29in J33				
B3_WSW	0.53	97.03	0.00	8.7700
SCS_Type_II_25-year_24-hour_6.29in J48				
B4_E	0.44	102.00	0.00	10.7000
SCS_Type_II_25-year_24-hour_6.29in J106				
B4_ENE	0.53	88.48	0.00	7.6600
SCS_Type_II_25-year_24-hour_6.29in J96				
B4_ESE	0.45	104.70	0.00	10.6700
SCS_Type_II_25-year_24-hour_6.29in J118				
B4_N	0.49	114.31	0.00	10.6900
SCS_Type_II_25-year_24-hour_6.29in J74				
B4_NNE	0.58	97.67	0.00	7.7800
SCS_Type_II_25-year_24-hour_6.29in J85				
B4_S	0.54	116.94	0.00	10.0000
SCS_Type_II_25-year_24-hour_6.29in J29				
B4_SE	0.45	105.53	0.00	10.6900
SCS_Type_II_25-year_24-hour_6.29in J123				
B4_SSW	0.66	94.78	0.00	6.2400
SCS_Type_II_25-year_24-hour_6.29in J35				
B4_SW	0.72	106.88	0.00	6.4700
SCS_Type_II_25-year_24-hour_6.29in J46				
B4_W	0.70	138.24	0.00	9.1000
SCS_Type_II_25-year_24-hour_6.29in J53				
B5_E	0.30	65.48	0.00	6.9800
SCS_Type_II_25-year_24-hour_6.29in J104				
B5_ENE	0.65	59.91	0.00	2.5400
SCS_Type_II_25-year_24-hour_6.29in J94				
B5_ESE	0.44	69.28	0.00	5.8500
SCS_Type_II_25-year_24-hour_6.29in J116				
B5_N	0.28	50.04	0.00	2.4300
SCS_Type_II_25-year_24-hour_6.29in J72				
B5_N2	0.27	51.22	0.00	3.5200
SCS_Type_II_25-year_24-hour_6.29in J87				
B5_S	0.48	80.29	0.00	5.7300
SCS_Type_II_25-year_24-hour_6.29in J27				
B5_SE	0.66	125.62	0.00	7.8200
SCS_Type_II_25-year_24-hour_6.29in J129				

B5_SSE	0.38	66.53	0.00	6.8600
SCS_Type_II_25-year_24-hour_6.29in J125				
B5_SW	0.72	73.42	0.00	3.2700
SCS_Type_II_25-year_24-hour_6.29in J37				
B5_W	0.41	58.01	0.00	2.7800
SCS_Type_II_25-year_24-hour_6.29in J51				
B5_WSW	0.62	82.01	0.00	3.0100
SCS_Type_II_25-year_24-hour_6.29in J44				
Bench_1_E	0.57	78.39	0.00	3.1500
SCS_Type_II_25-year_24-hour_6.29in J112				
Bench_1_S	0.75	80.66	0.00	2.2200
SCS_Type_II_25-year_24-hour_6.29in J32				
Bench_2_N	0.61	84.11	0.00	3.1600
SCS_Type_II_25-year_24-hour_6.29in J80				
Bench_2_NW	0.58	74.72	0.00	5.6600
SCS_Type_II_25-year_24-hour_6.29in J78				
Bench_2_S	0.92	110.20	0.00	5.4900
SCS_Type_II_25-year_24-hour_6.29in J22				
Bench_2_W	1.00	85.76	0.00	5.3000
SCS_Type_II_25-year_24-hour_6.29in J57				
Bench_3_NW	0.35	80.92	0.00	11.1800
SCS_Type_II_25-year_24-hour_6.29in J68				
Bench_3_W	0.87	141.03	0.00	5.4100
SCS_Type_II_25-year_24-hour_6.29in J55				
Bench_4_NW	0.58	77.75	0.00	5.8500
SCS_Type_II_25-year_24-hour_6.29in J66				
Bench_4_WNW	0.57	113.97	0.00	9.6000
SCS_Type_II_25-year_24-hour_6.29in J61				
Bench_5_NNW	0.28	55.69	0.00	5.2600
SCS_Type_II_25-year_24-hour_6.29in J59				
Bench_5_NW	0.22	36.62	0.00	4.4900
SCS_Type_II_25-year_24-hour_6.29in J64				
Clear1_42	0.74	827.71	0.00	27.0100
SCS_Type_II_25-year_24-hour_6.29in Clear_Pool1				
D_43	0.60	345.20	0.00	28.4000
SCS_Type_II_25-year_24-hour_6.29in J11				
D_44	1.14	745.95	0.00	26.9800
SCS_Type_II_25-year_24-hour_6.29in J10				
D_47	0.52	529.86	0.00	25.5800
SCS_Type_II_25-year_24-hour_6.29in J9				
D_48	0.38	463.72	0.00	29.0500
SCS_Type_II_25-year_24-hour_6.29in J8				
D_49	0.41	246.87	0.00	28.2600
SCS_Type_II_25-year_24-hour_6.29in J13				
D_50	0.07	35.77	0.00	24.8100
SCS_Type_II_25-year_24-hour_6.29in J20				
D_53	0.46	278.18	0.00	31.0900
SCS_Type_II_25-year_24-hour_6.29in J19				
D_55	0.48	281.65	0.00	30.0700
SCS_Type_II_25-year_24-hour_6.29in J18				
D_57	0.34	188.18	0.00	27.8000
SCS_Type_II_25-year_24-hour_6.29in J17				
D_58	1.10	459.75	0.00	20.4200
SCS_Type_II_25-year_24-hour_6.29in J16				

D_60	0.34	294.61	0.00	29.9700	
SCS_Type_II_25-year_24-hour_6.29in	J15				
D_62	0.33	298.54	0.00	29.4100	
SCS_Type_II_25-year_24-hour_6.29in	J14				
Ditch_18	0.55	312.83	0.00	28.0500	
SCS_Type_II_25-year_24-hour_6.29in	J12				
Ditch_61	0.87	300.56	0.00	3.1800	
SCS_Type_II_25-year_24-hour_6.29in	J7				
Ditch_63	0.56	108.19	0.00	2.2100	
SCS_Type_II_25-year_24-hour_6.29in	J7				
Road_Ditch_Lower	0.26	508.74	0.00	23.2300	
SCS_Type_II_25-year_24-hour_6.29in	J136				
Road_Ditch_Middle	0.41	415.00	0.00	33.5600	
SCS_Type_II_25-year_24-hour_6.29in	J134				
Road_Ditch_Upper	0.68	318.33	0.00	3.2100	
SCS_Type_II_25-year_24-hour_6.29in	J6				
Sed1_41	5.20	2897.24	0.00	12.7900	
SCS_Type_II_25-year_24-hour_6.29in	SED_Pond1				

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	651.90	2.50	0.0	
J10	JUNCTION	666.80	2.00	0.0	
J100	JUNCTION	728.00	1.50	0.0	
J101	JUNCTION	662.00	1.50	0.0	
J102	JUNCTION	673.00	1.50	0.0	
J103	JUNCTION	675.00	1.50	0.0	
J104	JUNCTION	686.00	1.50	0.0	
J105	JUNCTION	688.00	1.50	0.0	
J106	JUNCTION	705.00	1.50	0.0	
J107	JUNCTION	706.00	1.50	0.0	
J108	JUNCTION	723.00	1.50	0.0	
J109	JUNCTION	725.00	1.50	0.0	
J11	JUNCTION	658.00	2.00	0.0	
J110	JUNCTION	742.00	1.50	0.0	
J111	JUNCTION	743.00	1.50	0.0	
J112	JUNCTION	746.50	1.50	0.0	
J113	JUNCTION	661.00	1.50	0.0	
J114	JUNCTION	671.00	1.50	0.0	
J115	JUNCTION	673.00	1.50	0.0	
J116	JUNCTION	686.00	1.50	0.0	
J117	JUNCTION	688.00	1.50	0.0	
J118	JUNCTION	705.00	1.50	0.0	
J119	JUNCTION	706.00	1.50	0.0	
J12	JUNCTION	655.70	2.00	0.0	
J120	JUNCTION	709.50	1.50	0.0	

J121	JUNCTION	709.50	1.50	0.0
J122	JUNCTION	706.00	1.50	0.0
J123	JUNCTION	705.00	1.50	0.0
J124	JUNCTION	688.00	1.50	0.0
J125	JUNCTION	686.00	1.50	0.0
J126	JUNCTION	672.00	1.50	0.0
J127	JUNCTION	671.00	1.50	0.0
J128	JUNCTION	661.00	1.50	0.0
J129	JUNCTION	673.50	1.50	0.0
J13	JUNCTION	652.90	2.00	0.0
J130	JUNCTION	670.00	1.50	0.0
J131	JUNCTION	669.00	1.50	0.0
J132	JUNCTION	661.00	1.50	0.0
J133	JUNCTION	706.00	2.00	0.0
J134	JUNCTION	727.00	2.00	0.0
J135	JUNCTION	680.00	2.00	0.0
J136	JUNCTION	703.00	2.00	0.0
J14	JUNCTION	676.20	2.00	0.0
J15	JUNCTION	670.80	2.00	0.0
J16	JUNCTION	665.90	2.00	0.0
J17	JUNCTION	656.00	2.00	0.0
J18	JUNCTION	654.50	2.00	0.0
J19	JUNCTION	653.00	2.50	0.0
J2	JUNCTION	642.00	5.00	0.0
J20	JUNCTION	652.00	2.50	0.0
J21	JUNCTION	743.00	1.50	0.0
J22	JUNCTION	742.00	1.50	0.0
J23	JUNCTION	725.00	1.50	0.0
J24	JUNCTION	672.00	1.50	0.0
J25	JUNCTION	662.00	1.50	0.0
J26	JUNCTION	674.00	1.50	0.0
J27	JUNCTION	686.00	1.50	0.0
J28	JUNCTION	688.00	1.50	0.0
J29	JUNCTION	705.00	1.50	0.0
J3	JUNCTION	641.35	3.00	0.0
J30	JUNCTION	706.00	1.50	0.0
J31	JUNCTION	723.00	1.50	0.0
J32	JUNCTION	746.50	1.50	0.0
J33	JUNCTION	709.50	1.50	0.0
J34	JUNCTION	706.00	1.50	0.0
J35	JUNCTION	705.00	1.50	0.0
J36	JUNCTION	688.00	1.50	0.0
J37	JUNCTION	686.00	1.50	0.0
J38	JUNCTION	675.00	1.50	0.0
J39	JUNCTION	674.00	1.50	0.0
J4	JUNCTION	643.00	5.00	0.0
J40	JUNCTION	664.00	1.50	0.0
J41	JUNCTION	673.00	1.50	0.0
J42	JUNCTION	677.00	1.50	0.0
J43	JUNCTION	678.00	1.50	0.0
J44	JUNCTION	686.00	1.50	0.0
J45	JUNCTION	688.00	1.50	0.0
J46	JUNCTION	705.00	1.50	0.0
J47	JUNCTION	706.00	1.50	0.0

J48	JUNCTION	709.50	1.50	0.0
J49	JUNCTION	680.00	1.50	0.0
J5	JUNCTION	681.00	2.00	0.0
J50	JUNCTION	681.00	1.50	0.0
J51	JUNCTION	686.00	1.50	0.0
J52	JUNCTION	688.00	1.50	0.0
J53	JUNCTION	705.00	1.50	0.0
J54	JUNCTION	706.00	1.50	0.0
J55	JUNCTION	723.00	1.50	0.0
J56	JUNCTION	725.00	1.50	0.0
J57	JUNCTION	728.00	1.50	0.0
J58	JUNCTION	685.00	1.50	0.0
J59	JUNCTION	686.00	1.50	0.0
J6	JUNCTION	751.00	2.00	0.0
J60	JUNCTION	688.00	1.50	0.0
J61	JUNCTION	691.00	1.50	0.0
J62	JUNCTION	682.00	1.50	0.0
J63	JUNCTION	684.00	1.50	0.0
J64	JUNCTION	686.00	1.50	0.0
J65	JUNCTION	688.00	1.50	0.0
J66	JUNCTION	705.00	1.50	0.0
J67	JUNCTION	706.00	1.50	0.0
J68	JUNCTION	709.50	1.50	0.0
J69	JUNCTION	677.00	1.50	0.0
J7	JUNCTION	683.00	2.00	0.0
J70	JUNCTION	681.00	1.50	0.0
J71	JUNCTION	682.00	1.50	0.0
J72	JUNCTION	686.00	1.50	0.0
J73	JUNCTION	688.00	1.50	0.0
J74	JUNCTION	705.00	1.50	0.0
J75	JUNCTION	706.00	1.50	0.0
J76	JUNCTION	723.00	1.50	0.0
J77	JUNCTION	725.00	1.50	0.0
J78	JUNCTION	742.00	1.50	0.0
J79	JUNCTION	743.00	1.50	0.0
J8	JUNCTION	678.20	2.00	0.0
J80	JUNCTION	746.50	1.50	0.0
J81	JUNCTION	728.00	1.50	0.0
J82	JUNCTION	725.00	1.50	0.0
J83	JUNCTION	723.00	1.50	0.0
J84	JUNCTION	706.00	1.50	0.0
J85	JUNCTION	705.00	1.50	0.0
J86	JUNCTION	688.00	1.50	0.0
J87	JUNCTION	686.00	1.50	0.0
J88	JUNCTION	681.00	1.50	0.0
J89	JUNCTION	679.00	1.50	0.0
J9	JUNCTION	672.70	2.00	0.0
J90	JUNCTION	672.00	1.50	0.0
J91	JUNCTION	663.00	1.50	0.0
J92	JUNCTION	674.00	1.50	0.0
J93	JUNCTION	676.00	1.50	0.0
J94	JUNCTION	686.00	1.50	0.0
J95	JUNCTION	688.00	1.50	0.0
J96	JUNCTION	705.00	1.50	0.0

J97	JUNCTION	706.00	1.50	0.0
J98	JUNCTION	723.00	1.50	0.0
J99	JUNCTION	725.00	1.50	0.0
O1	OUTFALL	641.00	3.00	0.0
O2	OUTFALL	637.00	12.59	0.0
Clear_Pool1	STORAGE	642.00	8.00	0.0
SED_Pond1	STORAGE	642.00	8.00	0.0

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C10	J11	J12	CONDUIT	275.0	0.8363	0.0300
C100	J107	J106	CONDUIT	37.3	2.6855	0.0780
C101	J106	J105	CONDUIT	51.2	35.1769	0.0780
C102	J105	J104	CONDUIT	40.3	4.9714	0.0780
C103	J104	J103	CONDUIT	33.3	34.9505	0.0780
C104	J103	J102	CONDUIT	40.3	4.9701	0.0780
C105	J102	J101	CONDUIT	33.2	35.0685	0.0780
C106	J101	J18	CONDUIT	29.4	26.3831	0.0780
C107	J121	J122	CONDUIT	9.9	37.7507	0.0780
C108	J122	J123	CONDUIT	27.4	3.6588	0.0780
C109	J123	J124	CONDUIT	51.2	35.1692	0.0780
C11	J10	J11	CONDUIT	693.7	1.2687	0.0300
C110	J124	J125	CONDUIT	40.3	4.9726	0.0780
C111	J125	J126	CONDUIT	42.3	35.1202	0.0780
C112	J126	J127	CONDUIT	37.3	2.6855	0.0780
C113	J127	J128	CONDUIT	30.1	35.2101	0.0780
C114	J128	J13	CONDUIT	35.6	23.3934	0.0780
C115	J32	J21	CONDUIT	9.9	37.7507	0.0780
C116	J21	J22	CONDUIT	27.4	3.6588	0.0780

C117		J22	J23	CONDUIT
51.2	35.1692	0.0780		
C118		J23	J31	CONDUIT
40.3	4.9726	0.0780		
C119		J31	J30	CONDUIT
51.2	35.1692	0.0780		
C12		J9	J10	CONDUIT
352.5	1.6742	0.0300		
C120		J30	J29	CONDUIT
37.3	2.6855	0.0780		
C121		J29	J28	CONDUIT
51.2	35.1692	0.0780		
C122		J28	J27	CONDUIT
40.3	4.9726	0.0780		
C123		J27	J26	CONDUIT
36.2	35.0923	0.0780		
C124		J26	J24	CONDUIT
40.4	4.9615	0.0780		
C125		J24	J25	CONDUIT
31.6	33.3249	0.0780		
C126		J25	J12	CONDUIT
30.4	21.2127	0.0780		
C127		J33	J34	CONDUIT
9.9	37.7942	0.0780		
C128		J34	J35	CONDUIT
27.4	3.6588	0.0780		
C129		J35	J36	CONDUIT
51.2	35.1692	0.0780		
C13		J8	J9	CONDUIT
316.4	1.7385	0.0300		
C130		J36	J37	CONDUIT
40.3	4.9726	0.0780		
C131		J37	J38	CONDUIT
33.2	35.0685	0.0780		
C132		J38	J39	CONDUIT
37.3	2.6834	0.0780		
C133		J39	J40	CONDUIT
31.1	33.9577	0.0780		
C134		J40	J11	CONDUIT
29.4	20.8174	0.0780		
C135		J134	J133	CONDUIT
262.4	8.0273	0.0690		
C136		J7	J135	CONDUIT
135.1	2.2212	0.0300		
C137		J5	J135	CONDUIT
19.2	5.2280	0.0690		
C138		J135	J14	CONDUIT
170.9	2.2238	0.0300		
C139		J133	J136	CONDUIT
37.7	7.9807	0.0100		
C14		J136	J5	CONDUIT
213.4	10.3625	0.0690		
C15		J14	J15	CONDUIT
251.3	2.1489	0.0300		

```
  C16              J15              J16              CONDUIT
225.0    2.1781    0.0300
  C17              J16              J17              CONDUIT
605.8    1.6343    0.0300
  C18              J17              J18              CONDUIT
174.9    0.8577    0.0300
  C19              J18              J19              CONDUIT
250.1    0.5997    0.0150
  C2               SED_Pond1        Clear_Pool1      CONDUIT
8.0    0.1250    0.0150
  C20              J19              J20              CONDUIT
256.1    0.3904    0.0150
  C21              J20              J1               CONDUIT
46.6    0.2147    0.0150
  C22              J13              J1               CONDUIT
220.6    0.4533    0.0150
  C23              J68              J67              CONDUIT
10.0   37.3632    0.0780
  C24              J67              J66              CONDUIT
27.4    3.6588    0.0780
  C25              J66              J65              CONDUIT
51.2   35.1692    0.0780
  C26              J65              J64              CONDUIT
39.5    5.0659    0.0780
  C27              J64              J63              CONDUIT
4.1   55.7017    0.0780
  C28              J63              J62              CONDUIT
39.4    5.0892    0.0780
  C29              J62              J14              CONDUIT
30.5   19.3567    0.0780
  C3               Clear_Pool1      O2               CONDUIT
13.0    3.1554    0.0150
  C30              J80              J79              CONDUIT
10.0   37.3632    0.0780
  C31              J79              J78              CONDUIT
27.4    3.6588    0.0780
  C32              J78              J77              CONDUIT
51.2   35.1692    0.0780
  C33              J77              J76              CONDUIT
40.3    4.9726    0.0780
  C34              J76              J75              CONDUIT
51.2   35.1692    0.0780
  C35              J75              J74              CONDUIT
37.3    2.6855    0.0780
  C36              J74              J73              CONDUIT
51.2   35.1692    0.0780
  C37              J73              J72              CONDUIT
40.3    4.9689    0.0780
  C38              J72              J71              CONDUIT
12.2   34.7053    0.0780
  C39              J71              J70              CONDUIT
37.3    2.6848    0.0780
  C4               J2               J3               CONDUIT
65.0    1.0001    0.0220
```

C40		J70	J69	CONDUIT
12.2	34.6099	0.0780		
C41		J69	J15	CONDUIT
28.0	22.7065	0.0780		
C42		J90	J16	CONDUIT
28.8	21.6723	0.0780		
C43		J89	J90	CONDUIT
20.9	35.6226	0.0780		
C44		J88	J89	CONDUIT
40.3	4.9689	0.0780		
C45		J87	J88	CONDUIT
15.3	34.6290	0.0780		
C46		J86	J87	CONDUIT
40.3	4.9689	0.0780		
C47		J85	J86	CONDUIT
51.2	35.1692	0.0780		
C48		J81	J82	CONDUIT
8.5	37.7217	0.0780		
C49		J82	J83	CONDUIT
30.3	6.6217	0.0780		
C5		J3	O1	CONDUIT
28.0	1.2501	0.0230		
C50		J83	J84	CONDUIT
51.2	35.1692	0.0780		
C51		J84	J85	CONDUIT
37.3	2.6855	0.0780		
C52		J100	J99	CONDUIT
8.5	37.7217	0.0780		
C53		J99	J98	CONDUIT
30.3	6.6217	0.0780		
C54		J98	J97	CONDUIT
51.2	35.1692	0.0780		
C55		J97	J96	CONDUIT
37.3	2.6855	0.0780		
C56		J96	J95	CONDUIT
51.2	35.1692	0.0780		
C57		J95	J94	CONDUIT
40.3	4.9714	0.0780		
C58		J94	J93	CONDUIT
30.2	35.0792	0.0780		
C59		J93	J92	CONDUIT
40.3	4.9714	0.0780		
C6		J4	Clear_Pool1	CONDUIT
50.0	0.6000	0.0220		
C60		J92	J91	CONDUIT
33.2	35.1517	0.0780		
C61		J91	J17	CONDUIT
28.5	25.3660	0.0780		
C62		J129	J130	CONDUIT
9.8	38.1467	0.0780		
C63		J130	J131	CONDUIT
27.8	3.6059	0.0780		
C64		J131	J132	CONDUIT
37.6	21.7873	0.0780		

C65		J132	J20	CONDUIT
34.7	26.8805	0.0780		
C66		J120	J119	CONDUIT
10.0	37.3632	0.0780		
C67		J119	J118	CONDUIT
27.4	3.6588	0.0780		
C68		J118	J117	CONDUIT
51.2	35.1692	0.0780		
C69		J117	J116	CONDUIT
40.3	4.9714	0.0780		
C7		J7	J8	CONDUIT
299.8	1.6015	0.0300		
C70		J116	J115	CONDUIT
39.3	35.0923	0.0780		
C71		J115	J114	CONDUIT
40.4	4.9603	0.0780		
C72		J114	J113	CONDUIT
32.1	32.8180	0.0780		
C73		J113	J19	CONDUIT
31.4	26.3113	0.0780		
C74		J61	J60	CONDUIT
8.5	37.7217	0.0780		
C75		J60	J59	CONDUIT
30.3	6.6085	0.0780		
C76		J59	J58	CONDUIT
3.1	34.2031	0.0780		
C77		J58	J8	CONDUIT
65.6	10.4204	0.0780		
C78		J57	J56	CONDUIT
8.5	37.7217	0.0780		
C79		J56	J55	CONDUIT
30.3	6.6217	0.0780		
C8		J6	J134	CONDUIT
296.6	8.1176	0.0690		
C80		J55	J54	CONDUIT
51.2	35.1692	0.0780		
C81		J54	J53	CONDUIT
37.3	2.6855	0.0780		
C82		J53	J52	CONDUIT
51.2	35.1769	0.0780		
C83		J52	J51	CONDUIT
40.3	4.9677	0.0780		
C84		J51	J50	CONDUIT
15.3	34.5278	0.0780		
C85		J50	J49	CONDUIT
21.8	4.5836	0.0780		
C86		J49	J9	CONDUIT
46.6	15.8506	0.0780		
C87		J48	J47	CONDUIT
9.9	37.7507	0.0780		
C88		J47	J46	CONDUIT
27.4	3.6588	0.0780		
C89		J46	J45	CONDUIT
51.2	35.1769	0.0780		

C9		J12	J13	CONDUIT	
250.2	1.1192	0.0300			
C90		J45	J44	CONDUIT	
40.3	4.9714	0.0780			
C91		J44	J43	CONDUIT	
24.2	35.0760	0.0780			
C92		J43	J42	CONDUIT	
35.9	2.7858	0.0780			
C93		J42	J41	CONDUIT	
13.5	30.9975	0.0780			
C94		J41	J10	CONDUIT	
28.4	22.3375	0.0780			
C95		J112	J111	CONDUIT	
9.9	37.7507	0.0780			
C96		J111	J110	CONDUIT	
27.4	3.6588	0.0780			
C97		J110	J109	CONDUIT	
51.2	35.1692	0.0780			
C98		J109	J108	CONDUIT	
40.3	4.9726	0.0780			
C99		J108	J107	CONDUIT	
51.2	35.1692	0.0780			
C1		J1	SED_Pond1	WEIR	
OL1		SED_Pond1	J4	OUTLET	
OL2		Clear_Pool1	J2	OUTLET	
OR_1		Clear_Pool1	J2	OUTLET	
W1		SED_Pond1	J4	OUTLET	

****
Cross Section Summary
****

No. of Barrels	Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	Full Flow
1	C10	TRAPEZOIDAL	2.00	16.00	1.24	12.00	83.48
1	C100	TRAPEZOIDAL	1.50	19.50	0.88	22.00	55.76
1	C101	TRAPEZOIDAL	1.50	12.75	0.95	13.00	138.77
1	C102	TRAPEZOIDAL	1.50	19.50	0.88	22.00	75.86
1	C103	TRAPEZOIDAL	1.50	12.75	0.95	13.00	138.32
1	C104	TRAPEZOIDAL	1.50	19.50	0.88	22.00	75.85
1	C105	TRAPEZOIDAL	1.50	12.75	0.95	13.00	138.56
1	C106	TRAPEZOIDAL	1.50	19.50	0.88	22.00	174.76

C107	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C108	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C109	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C11	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 102.81						
C110	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C111	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.66						
C112	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C113	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.84						
C114	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 164.56						
C115	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C116	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C117	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C118	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C119	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C12	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 118.11						
C120	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C121	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C122	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C123	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.60						
C124	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.79						
C125	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 135.07						
C126	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 156.70						
C127	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.84						
C128	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C129	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C13	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 120.36						
C130	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						

C131	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.56						
C132	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.73						
C133	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 136.34						
C134	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 155.24						
C135	RoadsideDitch	2.00	10.00	0.92	10.00	
1 57.82						
C136	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 136.04						
C137	RoadsideDitch	2.00	10.00	0.92	10.00	
1 46.66						
C138	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 136.12						
C139	CIRCULAR	1.00	0.79	0.25	1.00	
1 13.08						
C14	RoadsideDitch	2.00	10.00	0.92	10.00	
1 65.70						
C15	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 133.81						
C16	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 134.71						
C17	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 116.69						
C18	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 84.54						
C19	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 141.38						
C2	TRAPEZOIDAL	1.50	36.75	1.25	29.00	
1 149.07						
C20	TRAPEZOIDAL	2.50	22.50	1.48	14.00	
1 181.05						
C21	TRAPEZOIDAL	2.50	22.50	1.48	14.00	
1 134.27						
C22	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 122.92						
C23	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.02						
C24	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C25	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C26	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 76.58						
C27	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 174.62						
C28	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 76.76						
C29	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 149.69						
C3	TRAPEZOIDAL	2.00	52.00	1.59	32.00	
1 1248.00						

C30	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.02						
C31	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C32	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C33	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C34	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C35	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C36	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C37	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.84						
C38	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.84						
C39	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.75						
C4	CIRCULAR	3.00	7.07	0.75	3.00	
1 39.41						
C40	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.65						
C41	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 162.13						
C42	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 158.39						
C43	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 139.65						
C44	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.84						
C45	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.69						
C46	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.84						
C47	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C48	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.70						
C49	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 87.55						
C5	TRAPEZOIDAL	3.00	45.00	2.01	21.00	
1 517.30						
C50	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C51	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C52	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.70						
C53	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 87.55						
C54	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						

C55	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	55.76					
C56	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	138.76					
C57	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	75.86					
C58	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	138.58					
C59	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	75.86					
C6	CIRCULAR	3.00	7.07	0.75	3.00	
1	30.53					
C60	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	138.72					
C61	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	171.36					
C62	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	144.51					
C63	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	64.61					
C64	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	109.21					
C65	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	176.40					
C66	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	143.02					
C67	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	65.08					
C68	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	138.76					
C69	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	75.86					
C7	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1	115.52					
C70	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	138.60					
C71	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	75.78					
C72	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	134.04					
C73	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	174.52					
C74	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	143.70					
C75	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	87.47					
C76	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	136.84					
C77	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	109.83					
C78	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1	143.70					
C79	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1	87.55					

C8	RoadsideDitch	2.00	10.00	0.92	10.00	
1 58.15						
C80	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C81	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C82	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.77						
C83	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.83						
C84	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.48						
C85	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 72.84						
C86	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 135.46						
C87	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C88	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C89	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.77						
C9	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 96.57						
C90	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.86						
C91	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.57						
C92	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 56.79						
C93	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 130.27						
C94	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 160.81						
C95	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C96	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C97	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C98	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C99	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						

****
Transect Summary
****

Transect RoadsideDitch
Area:

0.0004	0.0016	0.0036	0.0064	0.0100	

```
            0.0144     0.0196     0.0256     0.0324     0.0400
            0.0484     0.0576     0.0676     0.0784     0.0900
            0.1024     0.1156     0.1296     0.1444     0.1600
            0.1764     0.1936     0.2116     0.2304     0.2500
            0.2704     0.2916     0.3136     0.3364     0.3600
            0.3844     0.4096     0.4356     0.4624     0.4900
            0.5184     0.5476     0.5776     0.6084     0.6400
            0.6724     0.7056     0.7396     0.7744     0.8100
            0.8464     0.8836     0.9216     0.9604     1.0000
Hrad:
            0.0200     0.0400     0.0600     0.0800     0.1000
            0.1200     0.1400     0.1600     0.1800     0.2000
            0.2200     0.2400     0.2600     0.2800     0.3000
            0.3200     0.3400     0.3600     0.3800     0.4000
            0.4200     0.4400     0.4600     0.4800     0.5000
            0.5200     0.5400     0.5600     0.5800     0.6000
            0.6200     0.6400     0.6600     0.6800     0.7000
            0.7200     0.7400     0.7600     0.7800     0.8000
            0.8200     0.8400     0.8600     0.8800     0.9000
            0.9200     0.9400     0.9600     0.9800     1.0000
Width:
            0.0200     0.0400     0.0600     0.0800     0.1000
            0.1200     0.1400     0.1600     0.1800     0.2000
            0.2200     0.2400     0.2600     0.2800     0.3000
            0.3200     0.3400     0.3600     0.3800     0.4000
            0.4200     0.4400     0.4600     0.4800     0.5000
            0.5200     0.5400     0.5600     0.5800     0.6000
            0.6200     0.6400     0.6600     0.6800     0.7000
            0.7200     0.7400     0.7600     0.7800     0.8000
            0.8200     0.8400     0.8600     0.8800     0.9000
            0.9200     0.9400     0.9600     0.9800     1.0000


***********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
***********************************************************

****************
Analysis Options
****************
Flow Units ..............  CFS
Process Models:
  Rainfall/Runoff ........  YES
  RDII ...................  NO
  Snowmelt ...............  NO
  Groundwater ............  NO
  Flow Routing ...........  YES
  Ponding Allowed ........  NO
  Water Quality ..........  NO
Infiltration Method ......  CURVE_NUMBER
Flow Routing Method ......  DYNWAVE
Surcharge Method .........  EXTRAN
```

Vegetated Cover - 25 Year Results

```
Starting Date ..... 01/01/2020 00:00:00
Ending Date ..... 01/08/2020 00:00:00
Antecedent Dry Days ..... 0.0
Report Time Step ..... 00:01:00
Wet Time Step ..... 00:05:00
Dry Time Step ..... 00:05:00
Routing Time Step ..... 5.00 sec
Variable Time Step ..... YES
Maximum Trials ..... 8
Number of Threads ..... 4
Head Tolerance ..... 0.005000 ft
```

Runoff Quantity Continuity	Volume acre-feet	Depth inches
Total Precipitation	20.189	6.290
Evaporation Loss	0.000	0.000
Infiltration Loss	7.977	2.485
Surface Runoff	12.073	3.762
Final Storage	0.159	0.050
Continuity Error (%)	-0.103	

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	12.093	3.941
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	12.620	4.112
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.943	0.307
Final Stored Volume	0.417	0.136
Continuity Error (%)	-0.009	

```
**************************
Time-Step Critical Elements
**************************
Link C76 (30.65%)
Link C5 (5.55%)


*******************************
Highest Flow Instability Indexes
*******************************
Link OL2 (14)
Link OL1 (7)
Link C4 (7)
```

Link C6 (2)

****
Routing Time Step Summary
****

Minimum Time Step	:	0.50 sec
Average Time Step	:	3.87 sec
Maximum Time Step	:	5.00 sec
Percent in Steady State	:	0.00
Average Iterations per Step	:	2.00
Percent Not Converging	:	0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Precip 10^6 gal	Total Runon CFS	Peak Runoff CFS	Runoff Coeff	Total Infil in
B2_E	0.00	3.35	3.35	6.29	0.05	0.00	2.24	0.532	2.90
B2_ENE	0.00	3.36	3.36	6.29	0.02	0.00	1.10	0.535	2.88
B2_NE	0.00	3.33	3.33	6.29	0.03	0.00	1.22	0.530	2.91
B3_E	0.00	3.39	3.39	6.29	0.04	0.00	1.88	0.539	2.85
B3_ENE	0.00	3.41	3.41	6.29	0.03	0.00	1.58	0.542	2.84
B3_ESE	0.00	3.34	3.34	6.29	0.03	0.00	1.29	0.531	2.91
B3_N	0.00	3.38	3.38	6.29	0.05	0.00	2.14	0.537	2.87
B3_NE	0.00	3.40	3.40	6.29	0.04	0.00	1.81	0.540	2.85
B3_S	0.00	3.38	3.38	6.29	0.05	0.00	2.25	0.537	2.87
B3_SE	0.00	3.34	3.34	6.29	0.03	0.00	1.40	0.531	2.91
B3_SW	0.00	3.32	3.32	6.29	0.04	0.00	1.69	0.528	2.92
B3_WSW	0.00	3.31	3.31	6.29	0.05	0.00	2.08	0.526	2.93
B4_E	0.00	3.39	3.39	6.29	0.04	0.00	1.87	0.538	2.86

Vegetated Cover - 25 Year Results

B4_ENE			6.29	0.00	0.00	2.87
0.00	3.37	3.37	0.05	2.07	0.536	
B4_ESE			6.29	0.00	0.00	2.86
0.00	3.39	3.39	0.04	1.93	0.538	
B4_N			6.29	0.00	0.00	2.87
0.00	3.38	3.38	0.05	2.10	0.537	
B4_NNE			6.29	0.00	0.00	2.88
0.00	3.36	3.36	0.05	2.25	0.535	
B4_S			6.29	0.00	0.00	2.87
0.00	3.38	3.38	0.05	2.23	0.537	
B4_SE			6.29	0.00	0.00	2.86
0.00	3.39	3.39	0.04	1.94	0.538	
B4_SSW			6.29	0.00	0.00	2.90
0.00	3.34	3.34	0.06	2.44	0.532	
B4_SW			6.29	0.00	0.00	2.91
0.00	3.34	3.34	0.07	2.68	0.531	
B4_W			6.29	0.00	0.00	2.90
0.00	3.35	3.35	0.06	2.79	0.532	
B5_E			6.29	0.00	0.00	2.84
0.00	3.41	3.41	0.03	1.22	0.542	
B5_ENE			6.29	0.00	0.00	2.92
0.00	3.32	3.32	0.06	1.76	0.528	
B5_ESE			6.29	0.00	0.00	2.92
0.00	3.32	3.32	0.04	1.62	0.529	
B5_N			6.29	0.00	0.00	2.88
0.00	3.36	3.36	0.03	0.98	0.534	
B5_N2			6.29	0.00	0.00	2.90
0.00	3.34	3.34	0.02	1.00	0.532	
B5_S			6.29	0.00	0.00	2.88
0.00	3.36	3.36	0.04	1.83	0.534	
B5_SE			6.29	0.00	0.00	2.89
0.00	3.35	3.35	0.06	2.62	0.533	
B5_SSE			6.29	0.00	0.00	2.89
0.00	3.36	3.36	0.03	1.47	0.534	
B5_SW			6.29	0.00	0.00	2.94
0.00	3.31	3.31	0.06	2.14	0.526	
B5_W			6.29	0.00	0.00	2.91
0.00	3.33	3.33	0.04	1.34	0.530	
B5_WSW			6.29	0.00	0.00	2.92
0.00	3.32	3.32	0.06	2.01	0.528	
Bench_1_E			6.29	0.00	0.00	2.29
0.00	3.95	3.95	0.06	2.32	0.629	
Bench_1_S			6.29	0.00	0.00	2.27
0.00	3.97	3.97	0.08	2.67	0.632	
Bench_2_N			6.29	0.00	0.00	2.62
0.00	3.63	3.63	0.06	2.24	0.577	
Bench_2_NW			6.29	0.00	0.00	2.89
0.00	3.35	3.35	0.05	2.06	0.533	
Bench_2_S			6.29	0.00	0.00	2.92
0.00	3.32	3.32	0.08	3.17	0.529	
Bench_2_W			6.29	0.00	0.00	2.93
0.00	3.31	3.31	0.09	3.06	0.527	
Bench_3_NW			6.29	0.00	0.00	2.91
0.00	3.34	3.34	0.03	1.47	0.531	

Bench_3_W		6.29	0.00	0.00	2.91	
0.00	3.33	3.33	0.08	3.22	0.530	
Bench_4_NW		6.29	0.00	0.00	2.89	
0.00	3.35	3.35	0.05	2.09	0.532	
Bench_4_WNW		6.29	0.00	0.00	2.93	
0.00	3.31	3.31	0.05	2.27	0.527	
Bench_5_NNW		6.29	0.00	0.00	2.87	
0.00	3.37	3.37	0.03	1.09	0.536	
Bench_5_NW		6.29	0.00	0.00	2.88	
0.00	3.37	3.37	0.02	0.80	0.535	
Clear1_42		6.29	0.00	0.00	1.48	
0.00	4.77	4.77	0.10	5.54	0.758	
D_43		6.29	0.00	0.00	2.69	
0.00	3.56	3.56	0.06	3.30	0.566	
D_44		6.29	0.00	0.00	2.71	
0.00	3.53	3.53	0.11	6.31	0.562	
D_47		6.29	0.00	0.00	2.48	
0.00	3.76	3.76	0.05	3.13	0.598	
D_48		6.29	0.00	0.00	2.42	
0.00	3.82	3.82	0.04	2.33	0.608	
D_49		6.29	0.00	0.00	2.79	
0.00	3.46	3.46	0.04	2.22	0.551	
D_50		6.29	0.00	0.00	2.52	
0.00	3.73	3.73	0.01	0.42	0.593	
D_53		6.29	0.00	0.00	2.73	
0.00	3.52	3.52	0.04	2.54	0.560	
D_55		6.29	0.00	0.00	2.75	
0.00	3.50	3.50	0.05	2.64	0.556	
D_57		6.29	0.00	0.00	2.73	
0.00	3.52	3.52	0.03	1.88	0.559	
D_58		6.29	0.00	0.00	2.78	
0.00	3.47	3.47	0.10	5.67	0.551	
D_60		6.29	0.00	0.00	2.68	
0.00	3.57	3.57	0.03	1.92	0.567	
D_62		6.29	0.00	0.00	2.65	
0.00	3.60	3.60	0.03	1.89	0.572	
Ditch_18		6.29	0.00	0.00	2.69	
0.00	3.56	3.56	0.05	3.05	0.566	
Ditch_61		6.29	0.00	0.00	1.56	
0.00	4.69	4.69	0.11	5.20	0.746	
Ditch_63		6.29	0.00	0.00	2.09	
0.00	4.16	4.16	0.06	2.51	0.661	
Road_Ditch_Lower		6.29	0.00	0.00	1.93	
0.00	4.32	4.32	0.03	1.82	0.686	
Road_Ditch_Middle		6.29	0.00	0.00	2.22	
0.00	4.02	4.02	0.04	2.61	0.640	
Road_Ditch_Upper		6.29	0.00	0.00	1.93	
0.00	4.32	4.32	0.08	3.99	0.687	
Sed1_41		6.29	0.00	0.00	1.06	
0.00	5.20	5.20	0.73	40.36	0.827	

****

Node Depth Summary

****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	0.09	1.95	653.85	0 12:01	1.95
J10	JUNCTION	0.07	1.11	667.91	0 12:00	1.11
J100	JUNCTION	0.01	0.10	728.10	0 11:54	0.10
J101	JUNCTION	0.02	0.37	662.37	0 12:00	0.37
J102	JUNCTION	0.02	0.37	673.37	0 12:00	0.37
J103	JUNCTION	0.05	0.63	675.63	0 12:00	0.63
J104	JUNCTION	0.02	0.36	686.36	0 12:00	0.36
J105	JUNCTION	0.04	0.59	688.59	0 12:00	0.59
J106	JUNCTION	0.02	0.34	705.34	0 12:00	0.34
J107	JUNCTION	0.05	0.67	706.67	0 12:00	0.67
J108	JUNCTION	0.02	0.29	723.29	0 12:00	0.29
J109	JUNCTION	0.03	0.44	725.44	0 12:00	0.44
J11	JUNCTION	0.09	1.39	659.39	0 12:01	1.39
J110	JUNCTION	0.01	0.24	742.24	0 12:00	0.24
J111	JUNCTION	0.02	0.34	743.34	0 12:00	0.34
J112	JUNCTION	0.01	0.16	746.66	0 12:00	0.16
J113	JUNCTION	0.01	0.26	661.26	0 12:00	0.26
J114	JUNCTION	0.01	0.26	671.26	0 12:00	0.26
J115	JUNCTION	0.03	0.47	673.47	0 12:00	0.47
J116	JUNCTION	0.01	0.25	686.25	0 12:00	0.25
J117	JUNCTION	0.02	0.37	688.37	0 11:54	0.37

J118	JUNCTION	0.01	0.20	705.20	0	11:54
0.20						
J119	JUNCTION	0.01	0.23	706.23	0	11:54
0.23						
J12	JUNCTION	0.10	1.51	657.21	0	12:01
1.51						
J120	JUNCTION	0.01	0.11	709.61	0	11:54
0.11						
J121	JUNCTION	0.01	0.12	709.62	0	11:54
0.12						
J122	JUNCTION	0.01	0.24	706.24	0	11:54
0.24						
J123	JUNCTION	0.01	0.20	705.20	0	11:54
0.20						
J124	JUNCTION	0.02	0.38	688.38	0	11:54
0.38						
J125	JUNCTION	0.01	0.25	686.25	0	11:55
0.25						
J126	JUNCTION	0.04	0.62	672.62	0	11:55
0.62						
J127	JUNCTION	0.01	0.25	671.25	0	11:55
0.25						
J128	JUNCTION	0.02	0.26	661.26	0	11:56
0.26						
J129	JUNCTION	0.01	0.17	673.67	0	12:00
0.17						
J13	JUNCTION	0.09	1.42	654.32	0	12:01
1.42						
J130	JUNCTION	0.02	0.39	670.39	0	12:00
0.39						
J131	JUNCTION	0.01	0.21	669.21	0	12:00
0.21						
J132	JUNCTION	0.01	0.18	661.18	0	12:00
0.18						
J133	JUNCTION	0.03	0.49	706.49	0	11:56
0.49						
J134	JUNCTION	0.10	0.96	727.96	0	11:55
0.96						
J135	JUNCTION	0.03	0.55	680.55	0	11:56
0.55						
J136	JUNCTION	0.08	0.90	703.90	0	11:56
0.90						
J14	JUNCTION	0.04	0.69	676.89	0	11:57
0.69						
J15	JUNCTION	0.05	0.89	671.69	0	11:58
0.89						
J16	JUNCTION	0.07	1.14	667.04	0	11:58
1.14						
J17	JUNCTION	0.10	1.50	657.50	0	12:00
1.50						
J18	JUNCTION	0.08	1.29	655.79	0	12:00
1.29						
J19	JUNCTION	0.09	1.52	654.52	0	12:00
1.52						

J2	JUNCTION	0.31	0.74	642.74	0	19:44
0.74						
J20	JUNCTION	0.11	1.91	653.91	0	12:01
1.91						
J21	JUNCTION	0.03	0.35	743.35	0	12:00
0.35						
J22	JUNCTION	0.02	0.28	742.28	0	12:00
0.28						
J23	JUNCTION	0.04	0.50	725.50	0	12:00
0.50						
J24	JUNCTION	0.03	0.43	672.43	0	12:00
0.43						
J25	JUNCTION	0.03	0.44	662.44	0	12:00
0.44						
J26	JUNCTION	0.05	0.71	674.71	0	12:00
0.70						
J27	JUNCTION	0.03	0.42	686.42	0	12:00
0.42						
J28	JUNCTION	0.05	0.65	688.65	0	12:00
0.65						
J29	JUNCTION	0.02	0.38	705.38	0	12:00
0.38						
J3	JUNCTION	0.08	0.22	641.57	0	19:44
0.22						
J30	JUNCTION	0.06	0.74	706.74	0	12:00
0.74						
J31	JUNCTION	0.02	0.33	723.33	0	12:00
0.33						
J32	JUNCTION	0.01	0.17	746.67	0	12:00
0.17						
J33	JUNCTION	0.01	0.13	709.63	0	11:54
0.13						
J34	JUNCTION	0.02	0.27	706.27	0	11:54
0.27						
J35	JUNCTION	0.01	0.23	705.23	0	12:00
0.23						
J36	JUNCTION	0.03	0.42	688.42	0	12:00
0.42						
J37	JUNCTION	0.02	0.29	686.29	0	12:00
0.29						
J38	JUNCTION	0.05	0.69	675.69	0	12:00
0.69						
J39	JUNCTION	0.02	0.29	674.29	0	12:00
0.29						
J4	JUNCTION	0.61	2.13	645.13	0	19:43
2.13						
J40	JUNCTION	0.02	0.32	664.32	0	12:00
0.32						
J41	JUNCTION	0.02	0.32	673.32	0	12:00
0.32						
J42	JUNCTION	0.02	0.32	677.32	0	12:00
0.32						
J43	JUNCTION	0.05	0.69	678.69	0	12:00
0.69						

J44	JUNCTION	0.02	0.30	686.30	0	12:00
0.30						
J45	JUNCTION	0.03	0.45	688.45	0	12:00
0.45						
J46	JUNCTION	0.01	0.25	705.25	0	12:00
0.25						
J47	JUNCTION	0.02	0.31	706.31	0	12:00
0.31						
J48	JUNCTION	0.01	0.15	709.65	0	12:00
0.15						
J49	JUNCTION	0.03	0.44	680.44	0	12:00
0.44						
J5	JUNCTION	0.11	1.05	682.05	0	11:56
1.05						
J50	JUNCTION	0.05	0.66	681.66	0	12:00
0.66						
J51	JUNCTION	0.02	0.39	686.39	0	12:00
0.39						
J52	JUNCTION	0.05	0.62	688.62	0	12:00
0.62						
J53	JUNCTION	0.02	0.36	705.36	0	12:00
0.36						
J54	JUNCTION	0.05	0.66	706.66	0	12:00
0.66						
J55	JUNCTION	0.02	0.29	723.29	0	12:00
0.29						
J56	JUNCTION	0.02	0.30	725.30	0	12:00
0.29						
J57	JUNCTION	0.01	0.19	728.19	0	12:00
0.19						
J58	JUNCTION	0.02	0.27	685.27	0	12:00
0.27						
J59	JUNCTION	0.01	0.21	686.21	0	12:00
0.21						
J6	JUNCTION	0.07	0.73	751.73	0	11:54
0.73						
J60	JUNCTION	0.02	0.27	688.27	0	12:00
0.27						
J61	JUNCTION	0.01	0.16	691.16	0	12:00
0.16						
J62	JUNCTION	0.02	0.26	682.26	0	12:00
0.26						
J63	JUNCTION	0.03	0.44	684.44	0	12:00
0.43						
J64	JUNCTION	0.01	0.21	686.21	0	12:00
0.21						
J65	JUNCTION	0.03	0.40	688.40	0	12:00
0.40						
J66	JUNCTION	0.01	0.21	705.21	0	12:00
0.21						
J67	JUNCTION	0.01	0.26	706.26	0	11:54
0.26						
J68	JUNCTION	0.01	0.12	709.62	0	11:54
0.12						

J69	JUNCTION	0.02	0.38	677.38	0	12:00
0.38						
J7	JUNCTION	0.02	0.29	683.29	0	11:55
0.29						
J70	JUNCTION	0.02	0.37	681.37	0	12:00
0.37						
J71	JUNCTION	0.06	0.80	682.80	0	12:00
0.80						
J72	JUNCTION	0.02	0.36	686.36	0	12:00
0.36						
J73	JUNCTION	0.04	0.60	688.60	0	12:00
0.60						
J74	JUNCTION	0.02	0.34	705.34	0	12:00
0.34						
J75	JUNCTION	0.05	0.67	706.67	0	12:00
0.67						
J76	JUNCTION	0.02	0.29	723.29	0	12:00
0.29						
J77	JUNCTION	0.03	0.43	725.43	0	12:00
0.43						
J78	JUNCTION	0.01	0.23	742.23	0	12:00
0.23						
J79	JUNCTION	0.02	0.33	743.33	0	12:00
0.33						
J8	JUNCTION	0.03	0.49	678.69	0	11:56
0.49						
J80	JUNCTION	0.01	0.16	746.66	0	12:00
0.16						
J81	JUNCTION	0.01	0.11	728.11	0	11:54
0.11						
J82	JUNCTION	0.01	0.18	725.18	0	11:54
0.18						
J83	JUNCTION	0.01	0.19	723.19	0	11:54
0.19						
J84	JUNCTION	0.03	0.45	706.45	0	11:55
0.45						
J85	JUNCTION	0.01	0.26	705.26	0	12:00
0.26						
J86	JUNCTION	0.03	0.48	688.48	0	11:56
0.48						
J87	JUNCTION	0.02	0.29	686.29	0	12:00
0.29						
J88	JUNCTION	0.04	0.53	681.53	0	12:00
0.53						
J89	JUNCTION	0.02	0.29	679.29	0	12:00
0.29						
J9	JUNCTION	0.05	0.82	673.52	0	12:00
0.82						
J90	JUNCTION	0.02	0.31	672.31	0	12:00
0.31						
J91	JUNCTION	0.02	0.30	663.30	0	12:00
0.30						
J92	JUNCTION	0.02	0.30	674.30	0	12:00
0.30						

```
  J93                   JUNCTION      0.04      0.53    676.53      0  12:00
0.53
  J94                   JUNCTION      0.02      0.29    686.29      0  12:00
0.29
  J95                   JUNCTION      0.03      0.45    688.45      0  11:55
0.45
  J96                   JUNCTION      0.01      0.25    705.25      0  11:56
0.25
  J97                   JUNCTION      0.02      0.42    706.42      0  11:55
0.42
  J98                   JUNCTION      0.01      0.18    723.18      0  11:54
0.18
  J99                   JUNCTION      0.01      0.17    725.17      0  11:54
0.17
  O1                    OUTFALL       0.07      0.21    641.21      0  19:44
0.21
  O2                    OUTFALL       0.00      0.00    637.00      0  00:00
0.00
  Clear_Pool1           STORAGE       1.03      3.13    645.13      0  19:44
3.13
  SED_Pond1             STORAGE       2.10      4.21    646.21      0  15:51
4.21


  ********************
  Node Inflow Summary
  ********************

  -------------------------------------------------------------------------
-------------------------
                                  Maximum  Maximum
Lateral       Total        Flow
                                  Lateral    Total  Time of Max
Inflow      Inflow     Balance
                                   Inflow   Inflow   Occurrence
Volume      Volume       Error
  Node                  Type           CFS      CFS  days hr:min    10^6
gal    10^6 gal     Percent
  -------------------------------------------------------------------------
-------------------------
  J1                    JUNCTION      0.00   127.15     0  12:01
0        3.11       0.001
  J10                   JUNCTION      6.31    32.52     0  12:00
0.11         0.8      -0.022
  J100                  JUNCTION      1.10     1.10     0  11:54
0.022       0.022      -0.002
  J101                  JUNCTION      0.00     9.27     0  12:00
0       0.224      -0.004
  J102                  JUNCTION      0.00     9.27     0  12:00
0       0.224      -0.000
  J103                  JUNCTION      0.00     9.27     0  12:00
0       0.224      -0.000
  J104                  JUNCTION      1.22     9.28     0  12:00
0.028       0.224      -0.001
```

J105		JUNCTION	0.00	8.08	0	12:00
0	0.196	0.001				
J106		JUNCTION	1.87	8.09	0	12:00
0.0403	0.196	-0.002				
J107		JUNCTION	0.00	6.31	0	12:00
0	0.156	0.003				
J108		JUNCTION	1.88	6.32	0	12:00
0.0403	0.156	-0.003				
J109		JUNCTION	0.00	4.54	0	12:00
0	0.116	0.003				
J11		JUNCTION	3.30	41.01	0	12:00
0.0578	1.02	0.023				
J110		JUNCTION	2.24	4.55	0	12:00
0.0542	0.116	-0.002				
J111		JUNCTION	0.00	2.32	0	12:00
0	0.0614	0.001				
J112		JUNCTION	2.32	2.32	0	12:00
0.0614	0.0614	-0.001				
J113		JUNCTION	0.00	4.71	0	12:00
0	0.109	-0.015				
J114		JUNCTION	0.00	4.71	0	12:00
0	0.109	-0.000				
J115		JUNCTION	0.00	4.72	0	12:00
0	0.109	0.000				
J116		JUNCTION	1.62	4.72	0	12:00
0.0394	0.109	0.001				
J117		JUNCTION	0.00	3.20	0	11:54
0	0.0693	-0.002				
J118		JUNCTION	1.93	3.21	0	11:54
0.0415	0.0693	-0.001				
J119		JUNCTION	0.00	1.29	0	11:54
0	0.0277	0.001				
J12		JUNCTION	3.05	54.51	0	12:00
0.0534	1.38	0.001				
J120		JUNCTION	1.29	1.29	0	11:54
0.0277	0.0277	-0.001				
J121		JUNCTION	1.40	1.40	0	11:54
0.0301	0.0301	-0.001				
J122		JUNCTION	0.00	1.40	0	11:54
0	0.0301	0.001				
J123		JUNCTION	1.94	3.33	0	11:54
0.0418	0.0719	-0.001				
J124		JUNCTION	0.00	3.33	0	11:54
0	0.0719	-0.001				
J125		JUNCTION	1.47	4.71	0	11:55
0.0345	0.106	0.000				
J126		JUNCTION	0.00	4.71	0	11:55
0	0.106	0.000				
J127		JUNCTION	0.00	4.71	0	11:55
0	0.106	-0.000				
J128		JUNCTION	0.00	4.71	0	11:56
0	0.106	-0.021				
J129		JUNCTION	2.62	2.62	0	12:00
0.0605	0.0605	-0.001				

J13	JUNCTION	2.22	60.49	0	12:00	
0.0388	1.53	0.001				
J130	JUNCTION	0.00	2.62	0	12:00	
0	0.0605	-0.001				
J131	JUNCTION	0.00	2.62	0	12:00	
0	0.0605	-0.000				
J132	JUNCTION	0.00	2.62	0	12:00	
0	0.0605	-0.028				
J133	JUNCTION	0.00	6.27	0	11:55	
0	0.125	0.007				
J134	JUNCTION	2.61	6.43	0	11:54	
0.0445	0.125	0.003				
J135	JUNCTION	0.00	11.85	0	11:56	
0	0.25	-0.005				
J136	JUNCTION	1.82	7.89	0	11:55	
0.031	0.156	-0.012				
J14	JUNCTION	1.89	17.57	0	11:56	
0.0324	0.387	-0.005				
J15	JUNCTION	1.92	28.04	0	11:57	
0.0329	0.649	0.000				
J16	JUNCTION	5.67	39.01	0	11:57	
0.103	0.896	-0.019				
J17	JUNCTION	1.88	46.49	0	11:59	
0.033	1.09	0.019				
J18	JUNCTION	2.64	57.61	0	12:00	
0.0461	1.36	-0.000				
J19	JUNCTION	2.54	64.17	0	12:00	
0.0443	1.52	-0.005				
J2	JUNCTION	0.00	5.10	0	19:44	
0	4.11	-0.104				
J20	JUNCTION	0.42	67.04	0	12:00	
0.00739	1.58	0.007				
J21	JUNCTION	0.00	2.67	0	12:00	
0	0.0811	0.002				
J22	JUNCTION	3.17	5.83	0	12:00	
0.0833	0.164	-0.002				
J23	JUNCTION	0.00	5.81	0	12:00	
0	0.164	0.003				
J24	JUNCTION	0.00	11.87	0	12:00	
0	0.307	-0.000				
J25	JUNCTION	0.00	11.86	0	12:00	
0	0.307	-0.004				
J26	JUNCTION	0.00	11.87	0	12:00	
0	0.307	-0.000				
J27	JUNCTION	1.83	11.87	0	12:00	
0.0441	0.307	-0.000				
J28	JUNCTION	0.00	10.09	0	12:00	
0	0.263	0.001				
J29	JUNCTION	2.23	10.10	0	12:00	
0.0493	0.263	-0.002				
J3	JUNCTION	0.00	5.10	0	19:44	
0	4.11	0.003				
J30	JUNCTION	0.00	7.96	0	12:00	
0	0.214	0.003				

J31		JUNCTION	2.25	7.97	0	12:00
0.0495	0.214	-0.003				
J32		JUNCTION	2.67	2.67	0	12:00
0.0811	0.0811	-0.000				
J33		JUNCTION	1.69	1.69	0	11:54
0.0376	0.0376	-0.001				
J34		JUNCTION	0.00	1.69	0	11:54
0	0.0376	-0.005				
J35		JUNCTION	2.44	4.12	0	12:00
0.0603	0.0979	0.002				
J36		JUNCTION	0.00	4.11	0	12:00
0	0.0979	-0.003				
J37		JUNCTION	2.14	6.24	0	12:00
0.0648	0.163	0.002				
J38		JUNCTION	0.00	6.23	0	12:00
0	0.163	0.000				
J39		JUNCTION	0.00	6.22	0	12:00
0	0.163	-0.000				
J4		JUNCTION	0.00	5.29	0	15:51
0	3.99	-0.153				
J40		JUNCTION	0.00	6.22	0	12:00
0	0.163	-0.005				
J41		JUNCTION	0.00	6.74	0	12:00
0	0.17	-0.001				
J42		JUNCTION	0.00	6.74	0	12:00
0	0.17	-0.000				
J43		JUNCTION	0.00	6.74	0	12:00
0	0.17	0.000				
J44		JUNCTION	2.01	6.75	0	12:00
0.0564	0.17	0.001				
J45		JUNCTION	0.00	4.75	0	12:00
0	0.113	-0.002				
J46		JUNCTION	2.68	4.76	0	12:00
0.0653	0.113	0.001				
J47		JUNCTION	0.00	2.08	0	12:00
0	0.048	-0.002				
J48		JUNCTION	2.08	2.08	0	12:00
0.048	0.048	-0.001				
J49		JUNCTION	0.00	10.29	0	12:00
0	0.269	0.002				
J5		JUNCTION	0.00	7.87	0	11:56
0	0.156	0.012				
J50		JUNCTION	0.00	10.29	0	12:00
0	0.269	-0.000				
J51		JUNCTION	1.34	10.29	0	12:00
0.0369	0.269	0.000				
J52		JUNCTION	0.00	8.99	0	12:00
0	0.233	0.000				
J53		JUNCTION	2.79	9.00	0	12:00
0.0635	0.233	-0.003				
J54		JUNCTION	0.00	6.26	0	12:00
0	0.169	0.004				
J55		JUNCTION	3.22	6.27	0	12:00
0.0786	0.169	-0.003				

J56		JUNCTION	0.00	3.06	0	12:00	
0	0.0904	0.003					
J57		JUNCTION	3.06	3.06	0	12:00	
0.0904	0.0904	-0.000					
J58		JUNCTION	0.00	3.36	0	12:00	
0	0.0772	-0.001					
J59		JUNCTION	1.09	3.36	0	12:00	
0.0256	0.0772	-0.000					
J6		JUNCTION	3.99	3.99	0	11:54	
0.0802	0.0802	-0.010					
J60		JUNCTION	0.00	2.27	0	12:00	
0	0.0516	-0.000					
J61		JUNCTION	2.27	2.27	0	12:00	
0.0516	0.0516	-0.001					
J62		JUNCTION	0.00	4.29	0	12:00	
0	0.104	0.003					
J63		JUNCTION	0.00	4.30	0	12:00	
0	0.104	-0.001					
J64		JUNCTION	0.80	4.30	0	12:00	
0.0197	0.104	-0.001					
J65		JUNCTION	0.00	3.51	0	12:00	
0	0.0845	0.001					
J66		JUNCTION	2.09	3.51	0	12:00	
0.0528	0.0845	0.002					
J67		JUNCTION	0.00	1.47	0	11:54	
0	0.0317	-0.007					
J68		JUNCTION	1.47	1.47	0	11:54	
0.0317	0.0317	-0.001					
J69		JUNCTION	0.00	9.24	0	12:00	
0	0.23	0.001					
J7		JUNCTION	7.47	7.47	0	11:54	
0.174	0.174	-0.005					
J70		JUNCTION	0.00	9.24	0	12:00	
0	0.23	-0.000					
J71		JUNCTION	0.00	9.24	0	12:00	
0	0.23	-0.000					
J72		JUNCTION	0.98	9.24	0	12:00	
0.0259	0.23	0.000					
J73		JUNCTION	0.00	8.29	0	12:00	
0	0.204	0.000					
J74		JUNCTION	2.10	8.29	0	12:00	
0.0452	0.204	-0.002					
J75		JUNCTION	0.00	6.31	0	12:00	
0	0.159	0.004					
J76		JUNCTION	2.14	6.32	0	12:00	
0.0462	0.159	-0.003					
J77		JUNCTION	0.00	4.28	0	12:00	
0	0.113	0.004					
J78		JUNCTION	2.06	4.29	0	12:00	
0.0525	0.113	-0.002					
J79		JUNCTION	0.00	2.24	0	12:00	
0	0.0602	0.001					
J8		JUNCTION	2.33	8.92	0	11:54	
0.0397	0.197	-0.016					

```
  J80                 JUNCTION      2.24     2.24     0  12:00
0.0602      0.0602       -0.001
  J81                 JUNCTION      1.22     1.22     0  11:54
0.0256      0.0256       -0.002
  J82                 JUNCTION      0.00     1.22     0  11:54
0      0.0256      -0.000
  J83                 JUNCTION      1.81     3.02     0  11:54
0.0398      0.0654       -0.001
  J84                 JUNCTION      0.00     3.02     0  11:54
0      0.0654      -0.001
  J85                 JUNCTION      2.25     5.18     0  12:00
0.0527       0.118        0.001
  J86                 JUNCTION      0.00     5.18     0  12:00
0       0.118      -0.000
  J87                 JUNCTION      1.00     6.18     0  12:00
0.0249       0.143        0.000
  J88                 JUNCTION      0.00     6.17     0  12:00
0       0.143      -0.000
  J89                 JUNCTION      0.00     6.17     0  12:00
0       0.143      -0.000
  J9                  JUNCTION      3.13    21.04     0  12:00
0.0536        0.52       -0.002
  J90                 JUNCTION      0.00     6.17     0  12:00
0       0.143      -0.003
  J91                 JUNCTION      0.00     6.36     0  12:00
0       0.164      -0.004
  J92                 JUNCTION      0.00     6.36     0  12:00
0       0.164      -0.000
  J93                 JUNCTION      0.00     6.37     0  12:00
0       0.164      -0.000
  J94                 JUNCTION      1.76     6.37     0  12:00
0.0586       0.164        0.003
  J95                 JUNCTION      0.00     4.62     0  11:56
0       0.105      -0.004
  J96                 JUNCTION      2.07     4.62     0  11:55
0.0486       0.105        0.002
  J97                 JUNCTION      0.00     2.66     0  11:54
0      0.0565      -0.002
  J98                 JUNCTION      1.58     2.67     0  11:54
0.0345      0.0565       -0.001
  J99                 JUNCTION      0.00     1.10     0  11:54
0       0.022      -0.001
  O1                  OUTFALL       0.00     5.10     0  19:44
0        4.11        0.000
  O2                  OUTFALL       0.00     0.00     0  00:00
0           0        0.000 gal
  Clear_Pool1         STORAGE       5.54     7.36     0  11:54
0.0957        4.11        0.094
  SED_Pond1           STORAGE      40.36   155.31     0  12:00
0.735        4.14        0.146


  **********************
  Node Surcharge Summary
```

****

No nodes were surcharged.

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
Clear_Pool1	12.312	8	0	0	44.576	29	0 19:44	5.10
SED_Pond1	117.085	11	0	0	366.049	35	0 15:51	5.29

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
O1	100.00	1.42	5.10	4.112
O2	0.00	0.00	0.00	0.000
System	50.00	1.42	0.00	4.112

****
Link Flow Summary
****

Vegetated Cover - 25 Year Results

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days	hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C10	CONDUIT	40.53	0	12:01	4.05	0.49	0.73
C100	CONDUIT	6.29	0	12:00	1.77	0.11	0.34
C101	CONDUIT	8.08	0	12:00	3.23	0.06	0.31
C102	CONDUIT	8.07	0	12:00	2.46	0.11	0.32
C103	CONDUIT	9.27	0	12:00	3.38	0.07	0.33
C104	CONDUIT	9.27	0	12:00	2.64	0.12	0.33
C105	CONDUIT	9.27	0	12:00	4.92	0.07	0.25
C106	CONDUIT	9.27	0	12:00	1.36	0.05	0.55
C107	CONDUIT	1.40	0	11:54	1.70	0.01	0.12
C108	CONDUIT	1.39	0	11:54	1.17	0.02	0.15
C109	CONDUIT	3.33	0	11:54	2.35	0.02	0.19
C11	CONDUIT	32.30	0	12:00	4.03	0.31	0.62
C110	CONDUIT	3.32	0	11:55	1.79	0.04	0.21
C111	CONDUIT	4.71	0	11:55	2.06	0.03	0.29
C112	CONDUIT	4.71	0	11:55	1.65	0.08	0.29
C113	CONDUIT	4.71	0	11:56	3.84	0.03	0.17
C114	CONDUIT	4.71	0	11:56	0.75	0.03	0.56
C115	CONDUIT	2.67	0	12:00	2.13	0.02	0.17
C116	CONDUIT	2.66	0	12:00	1.44	0.04	0.21
C117	CONDUIT	5.81	0	12:00	2.89	0.04	0.26
C118	CONDUIT	5.79	0	12:00	2.14	0.08	0.28
C119	CONDUIT	7.96	0	12:00	2.64	0.06	0.36
C12	CONDUIT	20.95	0	12:00	3.71	0.18	0.48

C120	CONDUIT	7.94	0	12:00	1.92	0.14
0.37						
C121	CONDUIT	10.09	0	12:00	3.51	0.07
0.34						
C122	CONDUIT	10.08	0	12:00	2.61	0.13
0.36						
C123	CONDUIT	11.87	0	12:00	3.72	0.09
0.37						
C124	CONDUIT	11.87	0	12:00	2.83	0.16
0.38						
C125	CONDUIT	11.86	0	12:00	5.14	0.09
0.29						
C126	CONDUIT	11.86	0	12:00	1.33	0.08
0.65						
C127	CONDUIT	1.69	0	11:54	1.83	0.01
0.14						
C128	CONDUIT	1.69	0	11:54	1.24	0.03
0.17						
C129	CONDUIT	4.11	0	12:00	2.56	0.03
0.22						
C13	CONDUIT	8.70	0	11:56	2.55	0.07
0.33						
C130	CONDUIT	4.10	0	12:00	1.89	0.05
0.24						
C131	CONDUIT	6.23	0	12:00	2.33	0.04
0.33						
C132	CONDUIT	6.22	0	12:00	1.82	0.11
0.33						
C133	CONDUIT	6.22	0	12:00	4.14	0.05
0.20						
C134	CONDUIT	6.22	0	12:00	0.87	0.04
0.57						
C135	CHANNEL	6.27	0	11:55	4.77	0.11
0.36						
C136	CONDUIT	4.01	0	11:55	2.04	0.03
0.21						
C137	CHANNEL	7.85	0	11:56	4.91	0.17
0.40						
C138	CONDUIT	11.82	0	11:56	3.65	0.09
0.31						
C139	CONDUIT	6.26	0	11:56	10.74	0.48
0.69						
C14	CHANNEL	7.87	0	11:56	3.31	0.12
0.49						
C15	CONDUIT	17.52	0	11:57	3.99	0.13
0.39						
C16	CONDUIT	27.98	0	11:58	4.59	0.21
0.51						
C17	CONDUIT	38.74	0	11:58	4.46	0.33
0.66						
C18	CONDUIT	46.36	0	12:00	4.92	0.55
0.70						
C19	CONDUIT	57.61	0	12:00	6.04	0.41
0.70						

C2	CONDUIT	0.00	0	00:00	0.00	0.00
0.00						
C20	CONDUIT	64.17	0	12:00	5.07	0.35
0.69						
C21	CONDUIT	66.71	0	12:01	4.43	0.50
0.77						
C22	CONDUIT	60.45	0	12:01	4.88	0.49
0.84						
C23	CONDUIT	1.47	0	11:54	1.72	0.01
0.13						
C24	CONDUIT	1.47	0	11:54	1.19	0.02
0.15						
C25	CONDUIT	3.51	0	12:00	2.33	0.03
0.20						
C26	CONDUIT	3.50	0	12:00	1.97	0.05
0.20						
C27	CONDUIT	4.30	0	12:00	2.70	0.02
0.21						
C28	CONDUIT	4.29	0	12:00	2.01	0.06
0.23						
C29	CONDUIT	4.29	0	12:00	1.34	0.03
0.32						
C3	CONDUIT	0.00	0	00:00	0.00	0.00
0.00						
C30	CONDUIT	2.24	0	12:00	1.92	0.02
0.16						
C31	CONDUIT	2.24	0	12:00	1.38	0.03
0.19						
C32	CONDUIT	4.28	0	12:00	2.59	0.03
0.22						
C33	CONDUIT	4.26	0	12:00	1.92	0.06
0.24						
C34	CONDUIT	6.31	0	12:00	2.41	0.05
0.32						
C35	CONDUIT	6.29	0	12:00	1.77	0.11
0.34						
C36	CONDUIT	8.29	0	12:00	3.25	0.06
0.31						
C37	CONDUIT	8.28	0	12:00	2.49	0.11
0.32						
C38	CONDUIT	9.24	0	12:00	2.76	0.07
0.39						
C39	CONDUIT	9.24	0	12:00	2.10	0.17
0.39						
C4	CONDUIT	5.10	0	19:44	7.08	0.13
0.16						
C40	CONDUIT	9.24	0	12:00	4.81	0.07
0.25						
C41	CONDUIT	9.24	0	12:00	1.88	0.06
0.42						
C42	CONDUIT	6.17	0	12:00	1.08	0.04
0.48						
C43	CONDUIT	6.17	0	12:00	4.19	0.04
0.20						

C44	CONDUIT	6.17	0	12:00	2.34	0.08
0.27						
C45	CONDUIT	6.17	0	12:00	2.89	0.04
0.27						
C46	CONDUIT	5.17	0	12:00	2.13	0.07
0.26						
C47	CONDUIT	5.18	0	12:00	2.72	0.04
0.25						
C48	CONDUIT	1.22	0	11:54	1.92	0.01
0.10						
C49	CONDUIT	1.22	0	11:54	1.29	0.01
0.12						
C5	CONDUIT	5.10	0	19:44	2.53	0.01
0.07						
C50	CONDUIT	3.02	0	11:54	1.90	0.02
0.21						
C51	CONDUIT	3.01	0	11:55	1.37	0.05
0.24						
C52	CONDUIT	1.10	0	11:54	1.85	0.01
0.09						
C53	CONDUIT	1.09	0	11:54	1.26	0.01
0.11						
C54	CONDUIT	2.66	0	11:54	1.82	0.02
0.20						
C55	CONDUIT	2.65	0	11:55	1.32	0.05
0.22						
C56	CONDUIT	4.62	0	11:56	2.64	0.03
0.23						
C57	CONDUIT	4.62	0	11:56	2.01	0.06
0.25						
C58	CONDUIT	6.37	0	12:00	2.93	0.05
0.28						
C59	CONDUIT	6.36	0	12:00	2.35	0.08
0.28						
C6	CONDUIT	5.29	0	15:53	3.31	0.17
0.76						
C60	CONDUIT	6.36	0	12:00	4.31	0.05
0.20						
C61	CONDUIT	6.36	0	12:00	0.81	0.04
0.60						
C62	CONDUIT	2.62	0	12:00	1.91	0.02
0.19						
C63	CONDUIT	2.62	0	12:00	1.50	0.04
0.20						
C64	CONDUIT	2.62	0	12:00	2.91	0.02
0.13						
C65	CONDUIT	2.61	0	12:00	0.36	0.01
0.56						
C66	CONDUIT	1.29	0	11:54	1.67	0.01
0.11						
C67	CONDUIT	1.28	0	11:54	1.14	0.02
0.14						
C68	CONDUIT	3.20	0	11:54	2.32	0.02
0.19						

C69	CONDUIT	3.20	0	11:55	1.76	0.04
0.21						
C7	CONDUIT	3.41	0	11:55	1.84	0.03
0.20						
C70	CONDUIT	4.72	0	12:00	2.61	0.03
0.24						
C71	CONDUIT	4.71	0	12:00	2.12	0.06
0.24						
C72	CONDUIT	4.71	0	12:00	3.86	0.04
0.17						
C73	CONDUIT	4.71	0	12:00	0.68	0.03
0.59						
C74	CONDUIT	2.27	0	12:00	2.26	0.02
0.14						
C75	CONDUIT	2.27	0	12:00	1.74	0.03
0.16						
C76	CONDUIT	3.36	0	12:00	2.97	0.02
0.16						
C77	CONDUIT	3.36	0	12:00	1.41	0.03
0.26						
C78	CONDUIT	3.06	0	12:00	2.68	0.02
0.16						
C79	CONDUIT	3.05	0	12:00	1.81	0.03
0.20						
C8	CHANNEL	3.91	0	11:54	2.21	0.07
0.42						
C80	CONDUIT	6.26	0	12:00	2.43	0.05
0.32						
C81	CONDUIT	6.23	0	12:00	1.74	0.11
0.34						
C82	CONDUIT	8.99	0	12:00	3.36	0.06
0.33						
C83	CONDUIT	8.97	0	12:00	2.53	0.12
0.34						
C84	CONDUIT	10.29	0	12:00	3.53	0.07
0.35						
C85	CONDUIT	10.29	0	12:00	2.56	0.14
0.37						
C86	CONDUIT	10.28	0	12:00	2.10	0.08
0.42						
C87	CONDUIT	2.08	0	12:00	1.95	0.01
0.15						
C88	CONDUIT	2.08	0	12:00	1.33	0.03
0.18						
C89	CONDUIT	4.75	0	12:00	2.68	0.03
0.23						
C9	CONDUIT	54.37	0	12:01	5.36	0.56
0.73						
C90	CONDUIT	4.74	0	12:00	2.00	0.06
0.25						
C91	CONDUIT	6.74	0	12:00	2.46	0.05
0.33						
C92	CONDUIT	6.74	0	12:00	1.89	0.12
0.34						

C93	CONDUIT	6.74	0	12:00	4.23	0.05
0.21						
C94	CONDUIT	6.73	0	12:00	1.15	0.04
0.48						
C95	CONDUIT	2.32	0	12:00	1.96	0.02
0.17						
C96	CONDUIT	2.31	0	12:00	1.39	0.04
0.19						
C97	CONDUIT	4.54	0	12:00	2.63	0.03
0.23						
C98	CONDUIT	4.52	0	12:00	1.98	0.06
0.25						
C99	CONDUIT	6.31	0	12:00	2.40	0.05
0.32						
C1	WEIR	127.09	0	12:01		
0.78						
OL1	DUMMY	5.29	0	15:51		
OL2	DUMMY	5.10	0	19:44		
OR_1	DUMMY	0.00	0	00:00		
W1	DUMMY	0.00	0	00:00		

****
Flow Classification Summary
****

	Adjusted	---------- Fraction of Time in Flow Class ----------							
	/Actual		Up	Down	Sub	Sup	Up	Down	Norm Inlet
Conduit	Length	Dry	Dry	Dry	Crit	Crit	Crit	Crit	Ltd Ctrl
C10	1.00	0.52	0.01	0.00	0.47	0.00	0.00	0.00	0.96 0.00
C100	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.00 0.00
C101	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00	0.96 0.00
C102	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00 0.00
C103	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00	0.96 0.00
C104	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00 0.00
C105	1.00	0.64	0.01	0.00	0.07	0.28	0.00	0.00	0.06 0.00
C106	1.00	0.42	0.22	0.00	0.36	0.00	0.00	0.00	0.97 0.00
C107	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96 0.00

C108	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00
0.00	0.00							
C109	1.00	0.68	0.01	0.00	0.31	0.00	0.00	0.00
0.96	0.00							
C11	1.00	0.53	0.04	0.00	0.43	0.00	0.00	0.00
0.96	0.00							
C110	1.00	0.68	0.00	0.00	0.32	0.00	0.00	0.00
0.00	0.00							
C111	1.00	0.66	0.01	0.00	0.32	0.00	0.00	0.00
0.96	0.00							
C112	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00
0.00	0.00							
C113	1.00	0.67	0.01	0.00	0.18	0.15	0.00	0.00
0.12	0.00							
C114	1.00	0.52	0.15	0.00	0.33	0.00	0.00	0.00
0.96	0.00							
C115	1.00	0.66	0.00	0.00	0.33	0.00	0.00	0.00
0.97	0.00							
C116	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00
0.00	0.00							
C117	1.00	0.65	0.01	0.00	0.34	0.00	0.00	0.00
0.97	0.00							
C118	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00
0.00	0.00							
C119	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00
0.97	0.00							
C12	1.00	0.57	0.04	0.00	0.39	0.00	0.00	0.00
0.96	0.00							
C120	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00
0.00	0.00							
C121	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00
0.96	0.00							
C122	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00
0.00	0.00							
C123	1.00	0.64	0.01	0.00	0.36	0.00	0.00	0.00
0.96	0.00							
C124	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00
0.00	0.00							
C125	1.00	0.64	0.01	0.00	0.09	0.27	0.00	0.00
0.16	0.00							
C126	1.00	0.53	0.11	0.00	0.36	0.00	0.00	0.00
0.96	0.00							
C127	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00
0.96	0.00							
C128	1.00	0.68	0.00	0.00	0.31	0.00	0.00	0.00
0.86	0.00							
C129	1.00	0.68	0.01	0.00	0.32	0.00	0.00	0.00
0.96	0.00							
C13	1.00	0.61	0.02	0.00	0.37	0.00	0.00	0.00
0.96	0.00							
C130	1.00	0.68	0.00	0.00	0.32	0.00	0.00	0.00
0.01	0.00							
C131	1.00	0.66	0.01	0.00	0.32	0.00	0.00	0.00
0.96	0.00							

Vegetated Cover - 25 Year Results

C132	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00
0.00									
C133	1.00	0.66	0.01	0.00	0.17	0.16	0.00	0.00	0.13
0.00									
C134	1.00	0.53	0.13	0.00	0.34	0.00	0.00	0.00	0.96
0.00									
C135	1.00	0.02	0.00	0.00	0.64	0.34	0.00	0.00	0.00
0.00									
C136	1.00	0.45	0.21	0.00	0.34	0.00	0.00	0.00	0.97
0.00									
C137	1.00	0.02	0.00	0.00	0.64	0.34	0.00	0.00	0.06
0.00									
C138	1.00	0.37	0.08	0.00	0.55	0.00	0.00	0.00	0.81
0.00									
C139	1.00	0.02	0.63	0.00	0.12	0.22	0.00	0.00	0.97
0.00									
C14	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.97
0.00									
C15	1.00	0.35	0.02	0.00	0.63	0.00	0.00	0.00	0.69
0.00									
C16	1.00	0.29	0.06	0.00	0.65	0.00	0.00	0.00	0.91
0.00									
C17	1.00	0.22	0.08	0.00	0.71	0.00	0.00	0.00	0.89
0.00									
C18	1.00	0.22	0.00	0.00	0.78	0.00	0.00	0.00	0.01
0.00									
C19	1.00	0.23	0.19	0.00	0.55	0.02	0.00	0.00	0.44
0.00									
C2	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C20	1.00	0.19	0.05	0.00	0.76	0.00	0.00	0.00	0.96
0.00									
C21	1.00	0.19	0.00	0.00	0.81	0.00	0.00	0.00	0.01
0.00									
C22	1.00	0.43	0.08	0.00	0.48	0.00	0.00	0.00	0.64
0.00									
C23	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96
0.00									
C24	1.00	0.68	0.00	0.00	0.31	0.00	0.00	0.00	0.86
0.00									
C25	1.00	0.67	0.01	0.00	0.32	0.00	0.00	0.00	0.96
0.00									
C26	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00									
C27	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.96
0.00									
C28	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00
0.00									
C29	1.00	0.37	0.30	0.00	0.33	0.00	0.00	0.00	0.96
0.00									
C3	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C30	1.00	0.67	0.01	0.00	0.32	0.00	0.00	0.00	0.96
0.00									

C31	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00
C32	1.00	0.66	0.01	0.00	0.33	0.00	0.00	0.00	0.96
C33	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00
C34	1.00	0.65	0.01	0.00	0.33	0.00	0.00	0.00	0.96
C35	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.00
C36	1.00	0.65	0.01	0.00	0.34	0.00	0.00	0.00	0.96
C37	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.00
C38	1.00	0.65	0.01	0.00	0.35	0.00	0.00	0.00	0.96
C39	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.00
C4	1.00	0.00	0.00	0.00	0.26	0.74	0.00	0.00	0.00
C40	1.00	0.65	0.01	0.00	0.08	0.27	0.00	0.00	0.14
C41	1.00	0.35	0.29	0.00	0.35	0.00	0.00	0.00	0.96
C42	1.00	0.29	0.37	0.00	0.34	0.00	0.00	0.00	0.96
C43	1.00	0.66	0.01	0.00	0.16	0.17	0.00	0.00	0.13
C44	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00
C45	1.00	0.66	0.01	0.00	0.33	0.00	0.00	0.00	0.96
C46	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00
C47	1.00	0.67	0.01	0.00	0.33	0.00	0.00	0.00	0.96
C48	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96
C49	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96
C5	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
C50	1.00	0.67	0.02	0.00	0.31	0.00	0.00	0.00	0.96
C51	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00
C52	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96
C53	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96
C54	1.00	0.67	0.02	0.00	0.31	0.00	0.00	0.00	0.96
C55	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00

C56	1.00	0.67	0.01	0.00	0.32	0.00	0.00	0.00	0.96	0.00
C57	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.02	0.00
C58	1.00	0.66	0.01	0.00	0.33	0.00	0.00	0.00	0.96	0.00
C59	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00
C6	1.00	0.00	0.00	0.00	0.37	0.00	0.00	0.63	0.04	0.00
C60	1.00	0.66	0.00	0.00	0.07	0.26	0.00	0.00	0.04	0.00
C61	1.00	0.22	0.45	0.00	0.34	0.00	0.00	0.00	0.96	0.00
C62	1.00	0.68	0.00	0.00	0.31	0.00	0.00	0.00	0.96	0.00
C63	1.00	0.68	0.00	0.00	0.32	0.00	0.00	0.00	0.84	0.00
C64	1.00	0.68	0.00	0.00	0.27	0.04	0.00	0.00	0.85	0.00
C65	1.00	0.19	0.49	0.00	0.32	0.00	0.00	0.00	0.96	0.00
C66	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96	0.00
C67	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00
C68	1.00	0.68	0.01	0.00	0.31	0.00	0.00	0.00	0.96	0.00
C69	1.00	0.68	0.00	0.00	0.32	0.00	0.00	0.00	0.01	0.00
C7	1.00	0.63	0.03	0.00	0.34	0.00	0.00	0.00	0.96	0.00
C70	1.00	0.67	0.01	0.00	0.32	0.00	0.00	0.00	0.96	0.00
C71	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
C72	1.00	0.67	0.01	0.00	0.16	0.16	0.00	0.00	0.03	0.00
C73	1.00	0.24	0.43	0.00	0.33	0.00	0.00	0.00	0.96	0.00
C74	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.96	0.00
C75	1.00	0.69	0.00	0.00	0.31	0.00	0.00	0.00	0.85	0.00
C76	1.00	0.68	0.00	0.00	0.29	0.02	0.00	0.00	0.96	0.00
C77	1.00	0.63	0.06	0.00	0.32	0.00	0.00	0.00	0.96	0.00
C78	1.00	0.68	0.00	0.00	0.31	0.01	0.00	0.00	0.96	0.00
C79	1.00	0.68	0.00	0.00	0.32	0.00	0.00	0.00	0.85	0.00
C8	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.97	0.00

C80	1.00	0.66	0.02	0.00	0.32	0.00	0.00	0.00	0.96	0.00
C81	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00
C82	1.00	0.66	0.01	0.00	0.34	0.00	0.00	0.00	0.96	0.00
C83	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00
C84	1.00	0.65	0.00	0.00	0.34	0.00	0.00	0.00	0.96	0.00
C85	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00
C86	1.00	0.61	0.05	0.00	0.34	0.00	0.00	0.00	0.96	0.00
C87	1.00	0.68	0.00	0.00	0.31	0.00	0.00	0.00	0.96	0.00
C88	1.00	0.68	0.00	0.00	0.32	0.00	0.00	0.00	0.85	0.00
C89	1.00	0.67	0.01	0.00	0.32	0.00	0.00	0.00	0.96	0.00
C9	1.00	0.51	0.01	0.00	0.47	0.00	0.00	0.00	0.85	0.00
C90	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.01	0.00
C91	1.00	0.67	0.01	0.00	0.32	0.00	0.00	0.00	0.96	0.00
C92	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
C93	1.00	0.67	0.00	0.00	0.16	0.16	0.00	0.00	0.10	0.00
C94	1.00	0.57	0.10	0.00	0.33	0.00	0.00	0.00	0.96	0.00
C95	1.00	0.67	0.01	0.00	0.33	0.00	0.00	0.00	0.97	0.00
C96	1.00	0.67	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
C97	1.00	0.66	0.01	0.00	0.33	0.00	0.00	0.00	0.97	0.00
C98	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00
C99	1.00	0.65	0.01	0.00	0.34	0.00	0.00	0.00	0.97	0.00

****
Conduit Surcharge Summary
****

										Hours	
			--------- Hours Full --------						Above Full		
											Capacity

Vegetated Cover - 25 Year Results

Conduit	Both Ends	Upstream	Dnstream	Normal Flow Limited
C126	0.01	0.01	0.04	0.01
0.01				
C65	0.01	0.01	0.22	0.01
0.01				
C73	0.01	0.01	0.06	0.01
0.01				

Analysis begun on: Thu May 21 13:42:24 2020
Analysis ended on: Thu May 21 13:42:36 2020
Total elapsed time: 00:00:12

```
  EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
  --------------------------------------------------------------

  Final SWMM Model for Georgia Power Plant Hammond Huffaker Road Landfill
Grass Closure - Includes B/C soils for closure resulting in a 64.5 CN.
Concrete lining was added to the channels in the southeastern corner of
the site.  The structures for both Sediment Pond 1 and Clear Pool 1 have
perforations.  The starting WSE for Sediment Pond 1 is 643.5 and for Clear
Pool 1 is 642.5.

  WARNING 02: maximum depth increased for Node J1
  WARNING 02: maximum depth increased for Node J19

  *************
  Element Count
  *************
  Number of rain gages ...... 5
  Number of subcatchments ... 65
  Number of nodes ........... 140
  Number of links ........... 143
  Number of pollutants ...... 0
  Number of land uses ....... 0


  ****************
  Raingage Summary
  ****************
                                                          Data       Recording
  Name                 Data Source                        Type       Interval
  ----------------------------------------------------------------------------
  SCS_Type_II_0.1in    SCS_Type_II_0.1in                  INTENSITY    6 min.
  SCS_Type_II_100-year_24-hour_7.85in SCS_Type_II_100-year_24-hour_7.85in
INTENSITY    6 min.
  SCS_Type_II_10-year_5.32in SCS_Type_II_10-year_5.32in     INTENSITY    6
min.
  SCS_Type_II_25-year_24-hour_6.29in SCS_Type_II_25-year_24-hour_6.29in
INTENSITY    6 min.
  SCS_Type_II_2-year_24-hour_3.82in SCS_Type_II_3.82in
INTENSITY    6 min.


  ********************
  Subcatchment Summary
  ********************
  Name                        Area     Width   %Imperv    %Slope Rain Gage
Outlet
  ----------------------------------------------------------------------------
-----------------------------------
  B2_E                        0.60     89.26      0.00    6.8800
SCS_Type_II_100-year_24-hour_7.85in J110
  B2_ENE                      0.24     69.54      0.00   12.9400
SCS_Type_II_100-year_24-hour_7.85in J100
```

B2_NE	0.28	70.99	0.00	11.5400
SCS_Type_II_100-year_24-hour_7.85in J81				
B3_E	0.44	101.99	0.00	10.7400
SCS_Type_II_100-year_24-hour_7.85in J108				
B3_ENE	0.37	84.08	0.00	9.8400
SCS_Type_II_100-year_24-hour_7.85in J98				
B3_ESE	0.31	71.44	0.00	10.7400
SCS_Type_II_100-year_24-hour_7.85in J120				
B3_N	0.50	116.06	0.00	10.5900
SCS_Type_II_100-year_24-hour_7.85in J76				
B3_NE	0.43	96.10	0.00	9.7400
SCS_Type_II_100-year_24-hour_7.85in J83				
B3_S	0.54	117.38	0.00	10.2700
SCS_Type_II_100-year_24-hour_7.85in J31				
B3_SE	0.33	77.75	0.00	10.7700
SCS_Type_II_100-year_24-hour_7.85in J121				
B3_SW	0.42	91.19	0.00	9.8000
SCS_Type_II_100-year_24-hour_7.85in J33				
B3_WSW	0.53	97.03	0.00	8.7700
SCS_Type_II_100-year_24-hour_7.85in J48				
B4_E	0.44	102.00	0.00	10.7000
SCS_Type_II_100-year_24-hour_7.85in J106				
B4_ENE	0.53	88.48	0.00	7.6600
SCS_Type_II_100-year_24-hour_7.85in J96				
B4_ESE	0.45	104.70	0.00	10.6700
SCS_Type_II_100-year_24-hour_7.85in J118				
B4_N	0.49	114.31	0.00	10.6900
SCS_Type_II_100-year_24-hour_7.85in J74				
B4_NNE	0.58	97.67	0.00	7.7800
SCS_Type_II_100-year_24-hour_7.85in J85				
B4_S	0.54	116.94	0.00	10.0000
SCS_Type_II_100-year_24-hour_7.85in J29				
B4_SE	0.45	105.53	0.00	10.6900
SCS_Type_II_100-year_24-hour_7.85in J123				
B4_SSW	0.66	94.78	0.00	6.2400
SCS_Type_II_100-year_24-hour_7.85in J35				
B4_SW	0.72	106.88	0.00	6.4700
SCS_Type_II_100-year_24-hour_7.85in J46				
B4_W	0.70	138.24	0.00	9.1000
SCS_Type_II_100-year_24-hour_7.85in J53				
B5_E	0.30	65.48	0.00	6.9800
SCS_Type_II_100-year_24-hour_7.85in J104				
B5_ENE	0.65	59.91	0.00	2.5400
SCS_Type_II_100-year_24-hour_7.85in J94				
B5_ESE	0.44	69.28	0.00	5.8500
SCS_Type_II_100-year_24-hour_7.85in J116				
B5_N	0.28	50.04	0.00	2.4300
SCS_Type_II_100-year_24-hour_7.85in J72				
B5_N2	0.27	51.22	0.00	3.5200
SCS_Type_II_100-year_24-hour_7.85in J87				
B5_S	0.48	80.29	0.00	5.7300
SCS_Type_II_100-year_24-hour_7.85in J27				
B5_SE	0.66	125.62	0.00	7.8200
SCS_Type_II_100-year_24-hour_7.85in J129				

B5_SSE		0.38	66.53	0.00	6.8600
SCS_Type_II_100-year_24-hour_7.85in	J125				
B5_SW		0.72	73.42	0.00	3.2700
SCS_Type_II_100-year_24-hour_7.85in	J37				
B5_W		0.41	58.01	0.00	2.7800
SCS_Type_II_100-year_24-hour_7.85in	J51				
B5_WSW		0.62	82.01	0.00	3.0100
SCS_Type_II_100-year_24-hour_7.85in	J44				
Bench_1_E		0.57	78.39	0.00	3.1500
SCS_Type_II_100-year_24-hour_7.85in	J112				
Bench_1_S		0.75	80.66	0.00	2.2200
SCS_Type_II_100-year_24-hour_7.85in	J32				
Bench_2_N		0.61	84.11	0.00	3.1600
SCS_Type_II_100-year_24-hour_7.85in	J80				
Bench_2_NW		0.58	74.72	0.00	5.6600
SCS_Type_II_100-year_24-hour_7.85in	J78				
Bench_2_S		0.92	110.20	0.00	5.4900
SCS_Type_II_100-year_24-hour_7.85in	J22				
Bench_2_W		1.00	85.76	0.00	5.3000
SCS_Type_II_100-year_24-hour_7.85in	J57				
Bench_3_NW		0.35	80.92	0.00	11.1800
SCS_Type_II_100-year_24-hour_7.85in	J68				
Bench_3_W		0.87	141.03	0.00	5.4100
SCS_Type_II_100-year_24-hour_7.85in	J55				
Bench_4_NW		0.58	77.75	0.00	5.8500
SCS_Type_II_100-year_24-hour_7.85in	J66				
Bench_4_WNW		0.57	113.97	0.00	9.6000
SCS_Type_II_100-year_24-hour_7.85in	J61				
Bench_5_NNW		0.28	55.69	0.00	5.2600
SCS_Type_II_100-year_24-hour_7.85in	J59				
Bench_5_NW		0.22	36.62	0.00	4.4900
SCS_Type_II_100-year_24-hour_7.85in	J64				
Clear1_42		0.74	827.71	0.00	27.0100
SCS_Type_II_100-year_24-hour_7.85in	Clear_Pool1				
D_43		0.60	345.20	0.00	28.4000
SCS_Type_II_100-year_24-hour_7.85in	J11				
D_44		1.14	745.95	0.00	26.9800
SCS_Type_II_100-year_24-hour_7.85in	J10				
D_47		0.52	529.86	0.00	25.5800
SCS_Type_II_100-year_24-hour_7.85in	J9				
D_48		0.38	463.72	0.00	29.0500
SCS_Type_II_100-year_24-hour_7.85in	J8				
D_49		0.41	246.87	0.00	28.2600
SCS_Type_II_100-year_24-hour_7.85in	J13				
D_50		0.07	35.77	0.00	24.8100
SCS_Type_II_100-year_24-hour_7.85in	J20				
D_53		0.46	278.18	0.00	31.0900
SCS_Type_II_100-year_24-hour_7.85in	J19				
D_55		0.48	281.65	0.00	30.0700
SCS_Type_II_100-year_24-hour_7.85in	J18				
D_57		0.34	188.18	0.00	27.8000
SCS_Type_II_100-year_24-hour_7.85in	J17				
D_58		1.10	459.75	0.00	20.4200
SCS_Type_II_100-year_24-hour_7.85in	J16				

D_60	0.34	294.61	0.00	29.9700	
SCS_Type_II_100-year_24-hour_7.85in					J15
D_62	0.33	298.54	0.00	29.4100	
SCS_Type_II_100-year_24-hour_7.85in					J14
Ditch_18	0.55	312.83	0.00	28.0500	
SCS_Type_II_100-year_24-hour_7.85in					J12
Ditch_61	0.87	300.56	0.00	3.1800	
SCS_Type_II_100-year_24-hour_7.85in					J7
Ditch_63	0.56	108.19	0.00	2.2100	
SCS_Type_II_100-year_24-hour_7.85in					J7
Road_Ditch_Lower	0.26	508.74	0.00	23.2300	
SCS_Type_II_100-year_24-hour_7.85in					J136
Road_Ditch_Middle	0.41	415.00	0.00	33.5600	
SCS_Type_II_100-year_24-hour_7.85in					J134
Road_Ditch_Upper	0.68	318.33	0.00	3.2100	
SCS_Type_II_100-year_24-hour_7.85in					J6
Sed1_41	5.20	2897.24	0.00	12.7900	
SCS_Type_II_100-year_24-hour_7.85in					SED_Pond1

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	651.90	2.50	0.0	
J10	JUNCTION	666.80	2.00	0.0	
J100	JUNCTION	728.00	1.50	0.0	
J101	JUNCTION	662.00	1.50	0.0	
J102	JUNCTION	673.00	1.50	0.0	
J103	JUNCTION	675.00	1.50	0.0	
J104	JUNCTION	686.00	1.50	0.0	
J105	JUNCTION	688.00	1.50	0.0	
J106	JUNCTION	705.00	1.50	0.0	
J107	JUNCTION	706.00	1.50	0.0	
J108	JUNCTION	723.00	1.50	0.0	
J109	JUNCTION	725.00	1.50	0.0	
J11	JUNCTION	658.00	2.00	0.0	
J110	JUNCTION	742.00	1.50	0.0	
J111	JUNCTION	743.00	1.50	0.0	
J112	JUNCTION	746.50	1.50	0.0	
J113	JUNCTION	661.00	1.50	0.0	
J114	JUNCTION	671.00	1.50	0.0	
J115	JUNCTION	673.00	1.50	0.0	
J116	JUNCTION	686.00	1.50	0.0	
J117	JUNCTION	688.00	1.50	0.0	
J118	JUNCTION	705.00	1.50	0.0	
J119	JUNCTION	706.00	1.50	0.0	
J12	JUNCTION	655.70	2.00	0.0	
J120	JUNCTION	709.50	1.50	0.0	

J121	JUNCTION	709.50	1.50	0.0
J122	JUNCTION	706.00	1.50	0.0
J123	JUNCTION	705.00	1.50	0.0
J124	JUNCTION	688.00	1.50	0.0
J125	JUNCTION	686.00	1.50	0.0
J126	JUNCTION	672.00	1.50	0.0
J127	JUNCTION	671.00	1.50	0.0
J128	JUNCTION	661.00	1.50	0.0
J129	JUNCTION	673.50	1.50	0.0
J13	JUNCTION	652.90	2.00	0.0
J130	JUNCTION	670.00	1.50	0.0
J131	JUNCTION	669.00	1.50	0.0
J132	JUNCTION	661.00	1.50	0.0
J133	JUNCTION	706.00	2.00	0.0
J134	JUNCTION	727.00	2.00	0.0
J135	JUNCTION	680.00	2.00	0.0
J136	JUNCTION	703.00	2.00	0.0
J14	JUNCTION	676.20	2.00	0.0
J15	JUNCTION	670.80	2.00	0.0
J16	JUNCTION	665.90	2.00	0.0
J17	JUNCTION	656.00	2.00	0.0
J18	JUNCTION	654.50	2.00	0.0
J19	JUNCTION	653.00	2.50	0.0
J2	JUNCTION	642.00	5.00	0.0
J20	JUNCTION	652.00	2.50	0.0
J21	JUNCTION	743.00	1.50	0.0
J22	JUNCTION	742.00	1.50	0.0
J23	JUNCTION	725.00	1.50	0.0
J24	JUNCTION	672.00	1.50	0.0
J25	JUNCTION	662.00	1.50	0.0
J26	JUNCTION	674.00	1.50	0.0
J27	JUNCTION	686.00	1.50	0.0
J28	JUNCTION	688.00	1.50	0.0
J29	JUNCTION	705.00	1.50	0.0
J3	JUNCTION	641.35	3.00	0.0
J30	JUNCTION	706.00	1.50	0.0
J31	JUNCTION	723.00	1.50	0.0
J32	JUNCTION	746.50	1.50	0.0
J33	JUNCTION	709.50	1.50	0.0
J34	JUNCTION	706.00	1.50	0.0
J35	JUNCTION	705.00	1.50	0.0
J36	JUNCTION	688.00	1.50	0.0
J37	JUNCTION	686.00	1.50	0.0
J38	JUNCTION	675.00	1.50	0.0
J39	JUNCTION	674.00	1.50	0.0
J4	JUNCTION	643.00	5.00	0.0
J40	JUNCTION	664.00	1.50	0.0
J41	JUNCTION	673.00	1.50	0.0
J42	JUNCTION	677.00	1.50	0.0
J43	JUNCTION	678.00	1.50	0.0
J44	JUNCTION	686.00	1.50	0.0
J45	JUNCTION	688.00	1.50	0.0
J46	JUNCTION	705.00	1.50	0.0
J47	JUNCTION	706.00	1.50	0.0

J48	JUNCTION	709.50	1.50	0.0
J49	JUNCTION	680.00	1.50	0.0
J5	JUNCTION	681.00	2.00	0.0
J50	JUNCTION	681.00	1.50	0.0
J51	JUNCTION	686.00	1.50	0.0
J52	JUNCTION	688.00	1.50	0.0
J53	JUNCTION	705.00	1.50	0.0
J54	JUNCTION	706.00	1.50	0.0
J55	JUNCTION	723.00	1.50	0.0
J56	JUNCTION	725.00	1.50	0.0
J57	JUNCTION	728.00	1.50	0.0
J58	JUNCTION	685.00	1.50	0.0
J59	JUNCTION	686.00	1.50	0.0
J6	JUNCTION	751.00	2.00	0.0
J60	JUNCTION	688.00	1.50	0.0
J61	JUNCTION	691.00	1.50	0.0
J62	JUNCTION	682.00	1.50	0.0
J63	JUNCTION	684.00	1.50	0.0
J64	JUNCTION	686.00	1.50	0.0
J65	JUNCTION	688.00	1.50	0.0
J66	JUNCTION	705.00	1.50	0.0
J67	JUNCTION	706.00	1.50	0.0
J68	JUNCTION	709.50	1.50	0.0
J69	JUNCTION	677.00	1.50	0.0
J7	JUNCTION	683.00	2.00	0.0
J70	JUNCTION	681.00	1.50	0.0
J71	JUNCTION	682.00	1.50	0.0
J72	JUNCTION	686.00	1.50	0.0
J73	JUNCTION	688.00	1.50	0.0
J74	JUNCTION	705.00	1.50	0.0
J75	JUNCTION	706.00	1.50	0.0
J76	JUNCTION	723.00	1.50	0.0
J77	JUNCTION	725.00	1.50	0.0
J78	JUNCTION	742.00	1.50	0.0
J79	JUNCTION	743.00	1.50	0.0
J8	JUNCTION	678.20	2.00	0.0
J80	JUNCTION	746.50	1.50	0.0
J81	JUNCTION	728.00	1.50	0.0
J82	JUNCTION	725.00	1.50	0.0
J83	JUNCTION	723.00	1.50	0.0
J84	JUNCTION	706.00	1.50	0.0
J85	JUNCTION	705.00	1.50	0.0
J86	JUNCTION	688.00	1.50	0.0
J87	JUNCTION	686.00	1.50	0.0
J88	JUNCTION	681.00	1.50	0.0
J89	JUNCTION	679.00	1.50	0.0
J9	JUNCTION	672.70	2.00	0.0
J90	JUNCTION	672.00	1.50	0.0
J91	JUNCTION	663.00	1.50	0.0
J92	JUNCTION	674.00	1.50	0.0
J93	JUNCTION	676.00	1.50	0.0
J94	JUNCTION	686.00	1.50	0.0
J95	JUNCTION	688.00	1.50	0.0
J96	JUNCTION	705.00	1.50	0.0

J97	JUNCTION	706.00	1.50	0.0
J98	JUNCTION	723.00	1.50	0.0
J99	JUNCTION	725.00	1.50	0.0
O1	OUTFALL	641.00	3.00	0.0
O2	OUTFALL	637.00	12.59	0.0
Clear_Pool1	STORAGE	642.00	8.00	0.0
SED_Pond1	STORAGE	642.00	8.00	0.0

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C10	J11	J12	CONDUIT	275.0	0.8363	0.0300
C100	J107	J106	CONDUIT	37.3	2.6855	0.0780
C101	J106	J105	CONDUIT	51.2	35.1769	0.0780
C102	J105	J104	CONDUIT	40.3	4.9714	0.0780
C103	J104	J103	CONDUIT	33.3	34.9505	0.0780
C104	J103	J102	CONDUIT	40.3	4.9701	0.0780
C105	J102	J101	CONDUIT	33.2	35.0685	0.0780
C106	J101	J18	CONDUIT	29.4	26.3831	0.0780
C107	J121	J122	CONDUIT	9.9	37.7507	0.0780
C108	J122	J123	CONDUIT	27.4	3.6588	0.0780
C109	J123	J124	CONDUIT	51.2	35.1692	0.0780
C11	J10	J11	CONDUIT	693.7	1.2687	0.0300
C110	J124	J125	CONDUIT	40.3	4.9726	0.0780
C111	J125	J126	CONDUIT	42.3	35.1202	0.0780
C112	J126	J127	CONDUIT	37.3	2.6855	0.0780
C113	J127	J128	CONDUIT	30.1	35.2101	0.0780
C114	J128	J13	CONDUIT	35.6	23.3934	0.0780
C115	J32	J21	CONDUIT	9.9	37.7507	0.0780
C116	J21	J22	CONDUIT	27.4	3.6588	0.0780

C117		J22	J23	CONDUIT
51.2	35.1692	0.0780		
C118		J23	J31	CONDUIT
40.3	4.9726	0.0780		
C119		J31	J30	CONDUIT
51.2	35.1692	0.0780		
C12		J9	J10	CONDUIT
352.5	1.6742	0.0300		
C120		J30	J29	CONDUIT
37.3	2.6855	0.0780		
C121		J29	J28	CONDUIT
51.2	35.1692	0.0780		
C122		J28	J27	CONDUIT
40.3	4.9726	0.0780		
C123		J27	J26	CONDUIT
36.2	35.0923	0.0780		
C124		J26	J24	CONDUIT
40.4	4.9615	0.0780		
C125		J24	J25	CONDUIT
31.6	33.3249	0.0780		
C126		J25	J12	CONDUIT
30.4	21.2127	0.0780		
C127		J33	J34	CONDUIT
9.9	37.7942	0.0780		
C128		J34	J35	CONDUIT
27.4	3.6588	0.0780		
C129		J35	J36	CONDUIT
51.2	35.1692	0.0780		
C13		J8	J9	CONDUIT
316.4	1.7385	0.0300		
C130		J36	J37	CONDUIT
40.3	4.9726	0.0780		
C131		J37	J38	CONDUIT
33.2	35.0685	0.0780		
C132		J38	J39	CONDUIT
37.3	2.6834	0.0780		
C133		J39	J40	CONDUIT
31.1	33.9577	0.0780		
C134		J40	J11	CONDUIT
29.4	20.8174	0.0780		
C135		J134	J133	CONDUIT
262.4	8.0273	0.0690		
C136		J7	J135	CONDUIT
135.1	2.2212	0.0300		
C137		J5	J135	CONDUIT
19.2	5.2280	0.0690		
C138		J135	J14	CONDUIT
170.9	2.2238	0.0300		
C139		J133	J136	CONDUIT
37.7	7.9807	0.0100		
C14		J136	J5	CONDUIT
213.4	10.3625	0.0690		
C15		J14	J15	CONDUIT
251.3	2.1489	0.0300		

```
  C16              J15              J16              CONDUIT
225.0    2.1781    0.0300
  C17              J16              J17              CONDUIT
605.8    1.6343    0.0300
  C18              J17              J18              CONDUIT
174.9    0.8577    0.0300
  C19              J18              J19              CONDUIT
250.1    0.5997    0.0150
  C2               SED_Pond1        Clear_Pool1      CONDUIT
8.0    0.1250    0.0150
  C20              J19              J20              CONDUIT
256.1    0.3904    0.0150
  C21              J20              J1               CONDUIT
46.6    0.2147    0.0150
  C22              J13              J1               CONDUIT
220.6    0.4533    0.0150
  C23              J68              J67              CONDUIT
10.0   37.3632    0.0780
  C24              J67              J66              CONDUIT
27.4    3.6588    0.0780
  C25              J66              J65              CONDUIT
51.2   35.1692    0.0780
  C26              J65              J64              CONDUIT
39.5    5.0659    0.0780
  C27              J64              J63              CONDUIT
4.1   55.7017    0.0780
  C28              J63              J62              CONDUIT
39.4    5.0892    0.0780
  C29              J62              J14              CONDUIT
30.5   19.3567    0.0780
  C3               Clear_Pool1      O2               CONDUIT
13.0    3.1554    0.0150
  C30              J80              J79              CONDUIT
10.0   37.3632    0.0780
  C31              J79              J78              CONDUIT
27.4    3.6588    0.0780
  C32              J78              J77              CONDUIT
51.2   35.1692    0.0780
  C33              J77              J76              CONDUIT
40.3    4.9726    0.0780
  C34              J76              J75              CONDUIT
51.2   35.1692    0.0780
  C35              J75              J74              CONDUIT
37.3    2.6855    0.0780
  C36              J74              J73              CONDUIT
51.2   35.1692    0.0780
  C37              J73              J72              CONDUIT
40.3    4.9689    0.0780
  C38              J72              J71              CONDUIT
12.2   34.7053    0.0780
  C39              J71              J70              CONDUIT
37.3    2.6848    0.0780
  C4               J2               J3               CONDUIT
65.0    1.0001    0.0220
```

C40		J70	J69	CONDUIT
12.2	34.6099	0.0780		
C41		J69	J15	CONDUIT
28.0	22.7065	0.0780		
C42		J90	J16	CONDUIT
28.8	21.6723	0.0780		
C43		J89	J90	CONDUIT
20.9	35.6226	0.0780		
C44		J88	J89	CONDUIT
40.3	4.9689	0.0780		
C45		J87	J88	CONDUIT
15.3	34.6290	0.0780		
C46		J86	J87	CONDUIT
40.3	4.9689	0.0780		
C47		J85	J86	CONDUIT
51.2	35.1692	0.0780		
C48		J81	J82	CONDUIT
8.5	37.7217	0.0780		
C49		J82	J83	CONDUIT
30.3	6.6217	0.0780		
C5		J3	O1	CONDUIT
28.0	1.2501	0.0230		
C50		J83	J84	CONDUIT
51.2	35.1692	0.0780		
C51		J84	J85	CONDUIT
37.3	2.6855	0.0780		
C52		J100	J99	CONDUIT
8.5	37.7217	0.0780		
C53		J99	J98	CONDUIT
30.3	6.6217	0.0780		
C54		J98	J97	CONDUIT
51.2	35.1692	0.0780		
C55		J97	J96	CONDUIT
37.3	2.6855	0.0780		
C56		J96	J95	CONDUIT
51.2	35.1692	0.0780		
C57		J95	J94	CONDUIT
40.3	4.9714	0.0780		
C58		J94	J93	CONDUIT
30.2	35.0792	0.0780		
C59		J93	J92	CONDUIT
40.3	4.9714	0.0780		
C6		J4	Clear_Pool1	CONDUIT
50.0	0.6000	0.0220		
C60		J92	J91	CONDUIT
33.2	35.1517	0.0780		
C61		J91	J17	CONDUIT
28.5	25.3660	0.0780		
C62		J129	J130	CONDUIT
9.8	38.1467	0.0780		
C63		J130	J131	CONDUIT
27.8	3.6059	0.0780		
C64		J131	J132	CONDUIT
37.6	21.7873	0.0780		

C65		J132	J20	CONDUIT
34.7	26.8805	0.0780		
C66		J120	J119	CONDUIT
10.0	37.3632	0.0780		
C67		J119	J118	CONDUIT
27.4	3.6588	0.0780		
C68		J118	J117	CONDUIT
51.2	35.1692	0.0780		
C69		J117	J116	CONDUIT
40.3	4.9714	0.0780		
C7		J7	J8	CONDUIT
299.8	1.6015	0.0300		
C70		J116	J115	CONDUIT
39.3	35.0923	0.0780		
C71		J115	J114	CONDUIT
40.4	4.9603	0.0780		
C72		J114	J113	CONDUIT
32.1	32.8180	0.0780		
C73		J113	J19	CONDUIT
31.4	26.3113	0.0780		
C74		J61	J60	CONDUIT
8.5	37.7217	0.0780		
C75		J60	J59	CONDUIT
30.3	6.6085	0.0780		
C76		J59	J58	CONDUIT
3.1	34.2031	0.0780		
C77		J58	J8	CONDUIT
65.6	10.4204	0.0780		
C78		J57	J56	CONDUIT
8.5	37.7217	0.0780		
C79		J56	J55	CONDUIT
30.3	6.6217	0.0780		
C8		J6	J134	CONDUIT
296.6	8.1176	0.0690		
C80		J55	J54	CONDUIT
51.2	35.1692	0.0780		
C81		J54	J53	CONDUIT
37.3	2.6855	0.0780		
C82		J53	J52	CONDUIT
51.2	35.1769	0.0780		
C83		J52	J51	CONDUIT
40.3	4.9677	0.0780		
C84		J51	J50	CONDUIT
15.3	34.5278	0.0780		
C85		J50	J49	CONDUIT
21.8	4.5836	0.0780		
C86		J49	J9	CONDUIT
46.6	15.8506	0.0780		
C87		J48	J47	CONDUIT
9.9	37.7507	0.0780		
C88		J47	J46	CONDUIT
27.4	3.6588	0.0780		
C89		J46	J45	CONDUIT
51.2	35.1769	0.0780		

```
  C9                J12               J13               CONDUIT
250.2    1.1192    0.0300
  C90               J45               J44               CONDUIT
40.3    4.9714    0.0780
  C91               J44               J43               CONDUIT
24.2   35.0760    0.0780
  C92               J43               J42               CONDUIT
35.9    2.7858    0.0780
  C93               J42               J41               CONDUIT
13.5   30.9975    0.0780
  C94               J41               J10               CONDUIT
28.4   22.3375    0.0780
  C95               J112              J111              CONDUIT
9.9   37.7507    0.0780
  C96               J111              J110              CONDUIT
27.4    3.6588    0.0780
  C97               J110              J109              CONDUIT
51.2   35.1692    0.0780
  C98               J109              J108              CONDUIT
40.3    4.9726    0.0780
  C99               J108              J107              CONDUIT
51.2   35.1692    0.0780
  C1                J1                SED_Pond1         WEIR
  OL1               SED_Pond1         J4                OUTLET
  OL2               Clear_Pool1       J2                OUTLET
  OR_1              Clear_Pool1       J2                OUTLET
  W1                SED_Pond1         J4                OUTLET


  **********************
  Cross Section Summary
  **********************
                                        Full      Full      Hyd.      Max.
No. of     Full
  Conduit           Shape               Depth     Area      Rad.     Width
Barrels     Flow
  ------------------------------------------------------------------------
---------------
  C10               TRAPEZOIDAL          2.00    16.00     1.24    12.00
1    83.48
  C100              TRAPEZOIDAL          1.50    19.50     0.88    22.00
1    55.76
  C101              TRAPEZOIDAL          1.50    12.75     0.95    13.00
1   138.77
  C102              TRAPEZOIDAL          1.50    19.50     0.88    22.00
1    75.86
  C103              TRAPEZOIDAL          1.50    12.75     0.95    13.00
1   138.32
  C104              TRAPEZOIDAL          1.50    19.50     0.88    22.00
1    75.85
  C105              TRAPEZOIDAL          1.50    12.75     0.95    13.00
1   138.56
  C106              TRAPEZOIDAL          1.50    19.50     0.88    22.00
1   174.76
```

C107	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C108	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C109	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C11	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 102.81						
C110	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C111	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.66						
C112	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C113	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.84						
C114	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 164.56						
C115	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C116	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C117	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C118	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C119	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C12	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 118.11						
C120	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C121	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C122	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C123	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.60						
C124	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.79						
C125	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 135.07						
C126	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 156.70						
C127	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.84						
C128	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C129	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C13	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 120.36						
C130	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						

C131	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.56						
C132	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.73						
C133	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 136.34						
C134	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 155.24						
C135	RoadsideDitch	2.00	10.00	0.92	10.00	
1 57.82						
C136	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 136.04						
C137	RoadsideDitch	2.00	10.00	0.92	10.00	
1 46.66						
C138	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 136.12						
C139	CIRCULAR	1.00	0.79	0.25	1.00	
1 13.08						
C14	RoadsideDitch	2.00	10.00	0.92	10.00	
1 65.70						
C15	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 133.81						
C16	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 134.71						
C17	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 116.69						
C18	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 84.54						
C19	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 141.38						
C2	TRAPEZOIDAL	1.50	36.75	1.25	29.00	
1 149.07						
C20	TRAPEZOIDAL	2.50	22.50	1.48	14.00	
1 181.05						
C21	TRAPEZOIDAL	2.50	22.50	1.48	14.00	
1 134.27						
C22	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 122.92						
C23	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.02						
C24	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C25	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C26	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 76.58						
C27	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 174.62						
C28	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 76.76						
C29	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 149.69						
C3	TRAPEZOIDAL	2.00	52.00	1.59	32.00	
1 1248.00						

C30	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.02						
C31	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C32	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C33	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C34	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C35	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C36	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C37	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.84						
C38	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.84						
C39	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.75						
C4	CIRCULAR	3.00	7.07	0.75	3.00	
1 39.41						
C40	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.65						
C41	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 162.13						
C42	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 158.39						
C43	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 139.65						
C44	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.84						
C45	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.69						
C46	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.84						
C47	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C48	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.70						
C49	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 87.55						
C5	TRAPEZOIDAL	3.00	45.00	2.01	21.00	
1 517.30						
C50	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C51	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C52	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.70						
C53	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 87.55						
C54	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						

C55	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C56	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C57	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.86						
C58	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.58						
C59	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.86						
C6	CIRCULAR	3.00	7.07	0.75	3.00	
1 30.53						
C60	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.72						
C61	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 171.36						
C62	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 144.51						
C63	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 64.61						
C64	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 109.21						
C65	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 176.40						
C66	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.02						
C67	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C68	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C69	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.86						
C7	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 115.52						
C70	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.60						
C71	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.78						
C72	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 134.04						
C73	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 174.52						
C74	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.70						
C75	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 87.47						
C76	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 136.84						
C77	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 109.83						
C78	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.70						
C79	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 87.55						

C8	RoadsideDitch	2.00	10.00	0.92	10.00	
1 58.15						
C80	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C81	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 55.76						
C82	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.77						
C83	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.83						
C84	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 137.48						
C85	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 72.84						
C86	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 135.46						
C87	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C88	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C89	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.77						
C9	TRAPEZOIDAL	2.00	16.00	1.24	12.00	
1 96.57						
C90	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.86						
C91	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.57						
C92	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 56.79						
C93	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 130.27						
C94	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 160.81						
C95	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 143.76						
C96	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 65.08						
C97	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						
C98	TRAPEZOIDAL	1.50	19.50	0.88	22.00	
1 75.87						
C99	TRAPEZOIDAL	1.50	12.75	0.95	13.00	
1 138.76						

****
Transect Summary
****

Transect RoadsideDitch
Area:

0.0004	0.0016	0.0036	0.0064	0.0100	

```
            0.0144     0.0196     0.0256     0.0324     0.0400
            0.0484     0.0576     0.0676     0.0784     0.0900
            0.1024     0.1156     0.1296     0.1444     0.1600
            0.1764     0.1936     0.2116     0.2304     0.2500
            0.2704     0.2916     0.3136     0.3364     0.3600
            0.3844     0.4096     0.4356     0.4624     0.4900
            0.5184     0.5476     0.5776     0.6084     0.6400
            0.6724     0.7056     0.7396     0.7744     0.8100
            0.8464     0.8836     0.9216     0.9604     1.0000
Hrad:
            0.0200     0.0400     0.0600     0.0800     0.1000
            0.1200     0.1400     0.1600     0.1800     0.2000
            0.2200     0.2400     0.2600     0.2800     0.3000
            0.3200     0.3400     0.3600     0.3800     0.4000
            0.4200     0.4400     0.4600     0.4800     0.5000
            0.5200     0.5400     0.5600     0.5800     0.6000
            0.6200     0.6400     0.6600     0.6800     0.7000
            0.7200     0.7400     0.7600     0.7800     0.8000
            0.8200     0.8400     0.8600     0.8800     0.9000
            0.9200     0.9400     0.9600     0.9800     1.0000
Width:
            0.0200     0.0400     0.0600     0.0800     0.1000
            0.1200     0.1400     0.1600     0.1800     0.2000
            0.2200     0.2400     0.2600     0.2800     0.3000
            0.3200     0.3400     0.3600     0.3800     0.4000
            0.4200     0.4400     0.4600     0.4800     0.5000
            0.5200     0.5400     0.5600     0.5800     0.6000
            0.6200     0.6400     0.6600     0.6800     0.7000
            0.7200     0.7400     0.7600     0.7800     0.8000
            0.8200     0.8400     0.8600     0.8800     0.9000
            0.9200     0.9400     0.9600     0.9800     1.0000


**********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
**********************************************************

****************
Analysis Options
****************
Flow Units ..............  CFS
Process Models:
  Rainfall/Runoff ........  YES
  RDII ...................  NO
  Snowmelt ...............  NO
  Groundwater ............  NO
  Flow Routing ...........  YES
  Ponding Allowed ........  NO
  Water Quality ..........  NO
Infiltration Method ......  CURVE_NUMBER
Flow Routing Method ......  DYNWAVE
Surcharge Method .........  EXTRAN
```

Vegetated Cover - 100 Year Results

```
Starting Date ............ 01/01/2020 00:00:00
Ending Date .............. 01/08/2020 00:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 00:01:00
Wet Time Step ............ 00:05:00
Dry Time Step ............ 00:05:00
Routing Time Step ........ 5.00 sec
Variable Time Step ....... YES
Maximum Trials ........... 8
Number of Threads ........ 4
Head Tolerance ........... 0.005000 ft
```

Runoff Quantity Continuity	Volume acre-feet	Depth inches
Total Precipitation	25.196	7.850
Evaporation Loss	0.000	0.000
Infiltration Loss	8.700	2.710
Surface Runoff	16.368	5.100
Final Storage	0.159	0.050
Continuity Error (%)	-0.123	

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	16.394	5.342
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	16.919	5.513
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.943	0.307
Final Stored Volume	0.418	0.136
Continuity Error (%)	-0.006	

```
**************************
Time-Step Critical Elements
**************************
Link C76 (33.21%)
Link C5 (5.37%)
Link C6 (3.44%)
```

```
******************************
Highest Flow Instability Indexes
******************************
Link OL2 (12)
Link OL1 (7)
```

Link C4 (6)
Link C6 (2)

****
Routing Time Step Summary
****
Minimum Time Step : 0.50 sec
Average Time Step : 3.69 sec
Maximum Time Step : 5.00 sec
Percent in Steady State : 0.00
Average Iterations per Step : 2.00
Percent Not Converging : 0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Precip 10^6 gal	Total Runon CFS	Peak Runoff CFS	Runoff Coeff	Total Evap in	Total Infil in
B2_E	0.00	4.62	4.62	7.85	0.07	0.00	3.18	0.589	3.18
B2_ENE	0.00	4.64	4.64	7.85	0.03	0.00	1.58	0.591	3.17
B2_NE	0.00	4.60	4.60	7.85	0.04	0.00	1.77	0.586	3.21
B3_E	0.00	4.68	4.68	7.85	0.06	0.00	2.72	0.596	3.13
B3_ENE	0.00	4.69	4.69	7.85	0.05	0.00	2.30	0.598	3.12
B3_ESE	0.00	4.61	4.61	7.85	0.04	0.00	1.88	0.587	3.20
B3_N	0.00	4.66	4.66	7.85	0.06	0.00	3.11	0.594	3.15
B3_NE	0.00	4.68	4.68	7.85	0.05	0.00	2.64	0.597	3.13
B3_S	0.00	4.66	4.66	7.85	0.07	0.00	3.28	0.594	3.15
B3_SE	0.00	4.61	4.61	7.85	0.04	0.00	2.04	0.587	3.20
B3_SW	0.00	4.59	4.59	7.85	0.05	0.00	2.48	0.585	3.22
B3_WSW	0.00	4.58	4.58	7.85	0.07	0.00	2.98	0.583	3.23

Vegetated Cover - 100 Year Results

B4_E			7.85	0.00	0.00	3.14
0.00	4.67	4.67	0.06	2.73	0.595	
B4_ENE			7.85	0.00	0.00	3.16
0.00	4.65	4.65	0.07	2.91	0.592	
B4_ESE			7.85	0.00	0.00	3.14
0.00	4.67	4.67	0.06	2.80	0.595	
B4_N			7.85	0.00	0.00	3.15
0.00	4.66	4.66	0.06	3.05	0.594	
B4_NNE			7.85	0.00	0.00	3.17
0.00	4.64	4.64	0.07	3.17	0.591	
B4_S			7.85	0.00	0.00	3.15
0.00	4.66	4.66	0.07	3.26	0.593	
B4_SE			7.85	0.00	0.00	3.14
0.00	4.67	4.67	0.06	2.82	0.595	
B4_SSW			7.85	0.00	0.00	3.19
0.00	4.62	4.62	0.08	3.49	0.588	
B4_SW			7.85	0.00	0.00	3.19
0.00	4.61	4.61	0.09	3.82	0.588	
B4_W			7.85	0.00	0.00	3.19
0.00	4.62	4.62	0.09	4.05	0.589	
B5_E			7.85	0.00	0.00	3.11
0.00	4.70	4.70	0.04	1.77	0.598	
B5_ENE			7.85	0.00	0.00	3.21
0.00	4.59	4.59	0.08	2.67	0.585	
B5_ESE			7.85	0.00	0.00	3.21
0.00	4.60	4.60	0.05	2.31	0.585	
B5_N			7.85	0.00	0.00	3.17
0.00	4.64	4.64	0.04	1.43	0.591	
B5_N2			7.85	0.00	0.00	3.19
0.00	4.62	4.62	0.03	1.44	0.588	
B5_S			7.85	0.00	0.00	3.17
0.00	4.64	4.64	0.06	2.60	0.591	
B5_SE			7.85	0.00	0.00	3.18
0.00	4.63	4.63	0.08	3.74	0.590	
B5_SSE			7.85	0.00	0.00	3.17
0.00	4.63	4.63	0.05	2.07	0.590	
B5_SW			7.85	0.00	0.00	3.23
0.00	4.57	4.57	0.09	3.20	0.583	
B5_W			7.85	0.00	0.00	3.20
0.00	4.61	4.61	0.05	1.96	0.587	
B5_WSW			7.85	0.00	0.00	3.21
0.00	4.59	4.59	0.08	2.96	0.585	
Bench_1_E			7.85	0.00	0.00	2.46
0.00	5.34	5.34	0.08	3.27	0.681	
Bench_1_S			7.85	0.00	0.00	2.44
0.00	5.37	5.37	0.11	3.85	0.684	
Bench_2_N			7.85	0.00	0.00	2.85
0.00	4.96	4.96	0.08	3.22	0.632	
Bench_2_NW			7.85	0.00	0.00	3.17
0.00	4.63	4.63	0.07	2.96	0.590	
Bench_2_S			7.85	0.00	0.00	3.21
0.00	4.60	4.60	0.12	4.61	0.585	
Bench_2_W			7.85	0.00	0.00	3.22
0.00	4.59	4.59	0.12	4.55	0.584	

Vegetated Cover - 100 Year Results

Bench_3_NW		7.85	0.00	0.00	3.20	
0.00	4.61	4.61	0.04	2.15	0.587	
Bench_3_W		7.85	0.00	0.00	3.20	
0.00	4.60	4.60	0.11	4.60	0.586	
Bench_4_NW		7.85	0.00	0.00	3.18	
0.00	4.63	4.63	0.07	3.01	0.589	
Bench_4_WNW		7.85	0.00	0.00	3.23	
0.00	4.58	4.58	0.07	3.32	0.584	
Bench_5_NNW		7.85	0.00	0.00	3.16	
0.00	4.65	4.65	0.04	1.53	0.592	
Bench_5_NW		7.85	0.00	0.00	3.16	
0.00	4.64	4.64	0.03	1.14	0.592	
Clear1_42		7.85	0.00	0.00	1.55	
0.00	6.26	6.26	0.13	7.20	0.797	
D_43		7.85	0.00	0.00	2.93	
0.00	4.88	4.88	0.08	4.56	0.621	
D_44		7.85	0.00	0.00	2.97	
0.00	4.84	4.84	0.15	8.71	0.617	
D_47		7.85	0.00	0.00	2.69	
0.00	5.12	5.12	0.07	4.26	0.652	
D_48		7.85	0.00	0.00	2.62	
0.00	5.18	5.18	0.05	3.16	0.660	
D_49		7.85	0.00	0.00	3.05	
0.00	4.76	4.76	0.05	3.07	0.606	
D_50		7.85	0.00	0.00	2.74	
0.00	5.07	5.07	0.01	0.57	0.646	
D_53		7.85	0.00	0.00	2.99	
0.00	4.83	4.83	0.06	3.51	0.615	
D_55		7.85	0.00	0.00	3.01	
0.00	4.80	4.80	0.06	3.65	0.612	
D_57		7.85	0.00	0.00	2.99	
0.00	4.86	4.86	0.05	2.66	0.619	
D_58		7.85	0.00	0.00	3.05	
0.00	4.76	4.76	0.14	7.94	0.607	
D_60		7.85	0.00	0.00	2.92	
0.00	4.88	4.88	0.04	2.63	0.622	
D_62		7.85	0.00	0.00	2.89	
0.00	4.92	4.92	0.04	2.59	0.627	
Ditch_18		7.85	0.00	0.00	2.94	
0.00	4.88	4.88	0.07	4.21	0.621	
Ditch_61		7.85	0.00	0.00	1.64	
0.00	6.18	6.18	0.15	7.07	0.787	
Ditch_63		7.85	0.00	0.00	2.23	
0.00	5.58	5.58	0.09	3.47	0.711	
Road_Ditch_Lower		7.85	0.00	0.00	2.05	
0.00	5.75	5.75	0.04	2.41	0.733	
Road_Ditch_Middle		7.85	0.00	0.00	2.39	
0.00	5.42	5.42	0.06	3.50	0.690	
Road_Ditch_Upper		7.85	0.00	0.00	2.05	
0.00	5.76	5.76	0.11	5.48	0.734	
Sed1_41		7.85	0.00	0.00	1.09	
0.00	6.73	6.73	0.95	52.06	0.857	

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	0.12	2.47	654.37	0 12:01	2.47
J10	JUNCTION	0.08	1.34	668.14	0 11:58	1.34
J100	JUNCTION	0.01	0.13	728.13	0 11:54	0.13
J101	JUNCTION	0.03	0.44	662.44	0 11:56	0.44
J102	JUNCTION	0.03	0.45	673.45	0 11:56	0.45
J103	JUNCTION	0.06	0.74	675.74	0 11:56	0.74
J104	JUNCTION	0.03	0.44	686.44	0 11:55	0.44
J105	JUNCTION	0.05	0.69	688.69	0 11:55	0.69
J106	JUNCTION	0.02	0.41	705.41	0 11:55	0.41
J107	JUNCTION	0.06	0.77	706.77	0 12:00	0.77
J108	JUNCTION	0.02	0.36	723.36	0 12:00	0.36
J109	JUNCTION	0.04	0.52	725.52	0 12:00	0.52
J11	JUNCTION	0.11	1.67	659.67	0 12:00	1.67
J110	JUNCTION	0.02	0.30	742.30	0 12:00	0.30
J111	JUNCTION	0.03	0.40	743.40	0 12:00	0.40
J112	JUNCTION	0.01	0.20	746.70	0 12:00	0.20
J113	JUNCTION	0.02	0.31	661.31	0 11:55	0.31
J114	JUNCTION	0.02	0.32	671.32	0 11:55	0.32
J115	JUNCTION	0.04	0.55	673.55	0 11:55	0.55
J116	JUNCTION	0.02	0.31	686.31	0 11:54	0.31

J117	JUNCTION	0.03	0.45	688.45	0	11:54
0.44						
J118	JUNCTION	0.01	0.25	705.25	0	11:54
0.25						
J119	JUNCTION	0.02	0.28	706.28	0	11:54
0.28						
J12	JUNCTION	0.12	1.80	657.50	0	12:00
1.80						
J120	JUNCTION	0.01	0.14	709.64	0	11:54
0.14						
J121	JUNCTION	0.01	0.15	709.65	0	11:54
0.15						
J122	JUNCTION	0.02	0.30	706.30	0	11:54
0.30						
J123	JUNCTION	0.01	0.25	705.25	0	11:54
0.25						
J124	JUNCTION	0.03	0.46	688.46	0	11:54
0.45						
J125	JUNCTION	0.02	0.31	686.31	0	11:54
0.31						
J126	JUNCTION	0.05	0.71	672.71	0	11:55
0.71						
J127	JUNCTION	0.02	0.31	671.31	0	11:55
0.31						
J128	JUNCTION	0.02	0.32	661.32	0	11:55
0.32						
J129	JUNCTION	0.01	0.21	673.71	0	11:54
0.21						
J13	JUNCTION	0.11	1.98	654.88	0	12:00
1.98						
J130	JUNCTION	0.03	0.46	670.46	0	11:54
0.46						
J131	JUNCTION	0.01	0.26	669.26	0	11:54
0.26						
J132	JUNCTION	0.01	0.22	661.22	0	11:54
0.22						
J133	JUNCTION	0.04	0.59	706.59	0	11:55
0.59						
J134	JUNCTION	0.11	1.07	728.07	0	11:55
1.07						
J135	JUNCTION	0.04	0.65	680.65	0	11:56
0.65						
J136	JUNCTION	0.10	1.01	704.01	0	11:55
1.01						
J14	JUNCTION	0.05	0.83	677.03	0	11:56
0.83						
J15	JUNCTION	0.06	1.07	671.87	0	11:57
1.07						
J16	JUNCTION	0.08	1.37	667.27	0	11:57
1.37						
J17	JUNCTION	0.12	1.77	657.77	0	11:58
1.77						
J18	JUNCTION	0.10	1.55	656.05	0	11:58
1.55						

J19	JUNCTION	0.11	1.84	654.84	0	11:59
1.84						
J2	JUNCTION	0.36	0.84	642.84	0	19:20
0.84						
J20	JUNCTION	0.14	2.40	654.40	0	12:00
2.40						
J21	JUNCTION	0.03	0.42	743.42	0	12:00
0.42						
J22	JUNCTION	0.02	0.35	742.35	0	12:00
0.35						
J23	JUNCTION	0.05	0.59	725.59	0	12:00
0.59						
J24	JUNCTION	0.03	0.52	672.52	0	12:00
0.52						
J25	JUNCTION	0.04	0.53	662.53	0	12:00
0.53						
J26	JUNCTION	0.07	0.82	674.82	0	12:00
0.82						
J27	JUNCTION	0.03	0.51	686.51	0	12:00
0.51						
J28	JUNCTION	0.06	0.76	688.76	0	12:00
0.76						
J29	JUNCTION	0.03	0.47	705.47	0	12:00
0.47						
J3	JUNCTION	0.10	0.26	641.61	0	19:20
0.26						
J30	JUNCTION	0.07	0.86	706.86	0	12:00
0.86						
J31	JUNCTION	0.03	0.41	723.41	0	12:00
0.41						
J32	JUNCTION	0.01	0.22	746.72	0	12:00
0.22						
J33	JUNCTION	0.01	0.17	709.67	0	11:54
0.17						
J34	JUNCTION	0.02	0.33	706.33	0	11:54
0.33						
J35	JUNCTION	0.02	0.28	705.28	0	12:00
0.28						
J36	JUNCTION	0.03	0.49	688.49	0	11:55
0.49						
J37	JUNCTION	0.02	0.36	686.36	0	12:00
0.36						
J38	JUNCTION	0.06	0.79	675.79	0	12:00
0.79						
J39	JUNCTION	0.02	0.36	674.36	0	12:00
0.36						
J4	JUNCTION	0.85	2.87	645.87	0	19:18
2.87						
J40	JUNCTION	0.02	0.38	664.38	0	12:00
0.38						
J41	JUNCTION	0.02	0.39	673.39	0	12:00
0.39						
J42	JUNCTION	0.02	0.39	677.39	0	12:00
0.39						

J43	JUNCTION	0.06	0.80	678.80	0	12:00
0.80						
J44	JUNCTION	0.02	0.37	686.37	0	12:00
0.37						
J45	JUNCTION	0.04	0.53	688.53	0	12:00
0.53						
J46	JUNCTION	0.02	0.30	705.30	0	12:00
0.30						
J47	JUNCTION	0.02	0.37	706.37	0	11:54
0.37						
J48	JUNCTION	0.01	0.19	709.69	0	11:54
0.19						
J49	JUNCTION	0.04	0.53	680.53	0	12:00
0.53						
J5	JUNCTION	0.13	1.17	682.17	0	11:56
1.17						
J50	JUNCTION	0.06	0.77	681.77	0	12:00
0.77						
J51	JUNCTION	0.03	0.48	686.48	0	12:00
0.48						
J52	JUNCTION	0.06	0.73	688.73	0	12:00
0.73						
J53	JUNCTION	0.03	0.44	705.44	0	12:00
0.44						
J54	JUNCTION	0.06	0.77	706.77	0	12:00
0.77						
J55	JUNCTION	0.02	0.36	723.36	0	12:00
0.36						
J56	JUNCTION	0.03	0.36	725.36	0	12:00
0.36						
J57	JUNCTION	0.02	0.24	728.24	0	12:00
0.24						
J58	JUNCTION	0.02	0.33	685.33	0	11:54
0.33						
J59	JUNCTION	0.01	0.25	686.25	0	11:54
0.25						
J6	JUNCTION	0.08	0.82	751.82	0	11:54
0.82						
J60	JUNCTION	0.02	0.33	688.33	0	11:54
0.33						
J61	JUNCTION	0.01	0.20	691.20	0	11:54
0.20						
J62	JUNCTION	0.02	0.32	682.32	0	12:00
0.32						
J63	JUNCTION	0.04	0.51	684.51	0	12:00
0.51						
J64	JUNCTION	0.01	0.25	686.25	0	12:00
0.25						
J65	JUNCTION	0.03	0.47	688.47	0	12:00
0.47						
J66	JUNCTION	0.01	0.26	705.26	0	12:00
0.26						
J67	JUNCTION	0.02	0.31	706.31	0	11:54
0.31						

J68	JUNCTION	0.01	0.15	709.65	0	11:54
0.15						
J69	JUNCTION	0.03	0.46	677.46	0	12:00
0.46						
J7	JUNCTION	0.02	0.36	683.36	0	11:54
0.36						
J70	JUNCTION	0.03	0.45	681.45	0	12:00
0.45						
J71	JUNCTION	0.07	0.92	682.92	0	12:00
0.92						
J72	JUNCTION	0.03	0.44	686.44	0	12:00
0.44						
J73	JUNCTION	0.05	0.70	688.70	0	12:00
0.70						
J74	JUNCTION	0.02	0.42	705.42	0	12:00
0.42						
J75	JUNCTION	0.06	0.78	706.78	0	12:00
0.77						
J76	JUNCTION	0.02	0.36	723.36	0	12:00
0.36						
J77	JUNCTION	0.04	0.51	725.51	0	12:00
0.51						
J78	JUNCTION	0.02	0.29	742.29	0	12:00
0.29						
J79	JUNCTION	0.03	0.40	743.40	0	12:00
0.40						
J8	JUNCTION	0.03	0.60	678.80	0	11:55
0.60						
J80	JUNCTION	0.01	0.20	746.70	0	12:00
0.20						
J81	JUNCTION	0.01	0.14	728.14	0	11:54
0.14						
J82	JUNCTION	0.01	0.22	725.22	0	11:54
0.22						
J83	JUNCTION	0.01	0.24	723.24	0	11:54
0.24						
J84	JUNCTION	0.03	0.54	706.54	0	11:54
0.54						
J85	JUNCTION	0.02	0.32	705.32	0	11:55
0.32						
J86	JUNCTION	0.04	0.57	688.57	0	11:55
0.57						
J87	JUNCTION	0.02	0.36	686.36	0	11:55
0.36						
J88	JUNCTION	0.05	0.62	681.62	0	11:55
0.62						
J89	JUNCTION	0.02	0.36	679.36	0	11:55
0.36						
J9	JUNCTION	0.06	0.99	673.69	0	11:57
0.99						
J90	JUNCTION	0.02	0.38	672.38	0	11:55
0.38						
J91	JUNCTION	0.02	0.37	663.37	0	12:00
0.37						

```
  J92                JUNCTION     0.02     0.37   674.37     0  12:00
0.37
  J93                JUNCTION     0.05     0.63   676.63     0  12:00
0.63
  J94                JUNCTION     0.02     0.36   686.36     0  12:00
0.36
  J95                JUNCTION     0.03     0.54   688.54     0  11:55
0.54
  J96                JUNCTION     0.02     0.30   705.30     0  11:55
0.30
  J97                JUNCTION     0.03     0.51   706.51     0  11:54
0.50
  J98                JUNCTION     0.01     0.22   723.22     0  11:54
0.22
  J99                JUNCTION     0.01     0.20   725.20     0  11:54
0.20
  O1                 OUTFALL      0.09     0.26   641.26     0  19:20
0.26
  O2                 OUTFALL      0.00     0.00   637.00     0  00:00
0.00
  Clear_Pool1        STORAGE      1.32     3.86   645.86     0  19:20
3.86
  SED_Pond1          STORAGE      2.40     4.96   646.96     0  15:40
4.96


  ********************
  Node Inflow Summary
  ********************

  -------------------------------------------------------------------------
-------------------------
                                  Maximum  Maximum
Lateral       Total        Flow
                                  Lateral    Total  Time of Max
Inflow      Inflow     Balance
                                   Inflow   Inflow   Occurrence
Volume      Volume       Error
  Node                 Type           CFS      CFS  days hr:min    10^6
gal    10^6 gal     Percent
  -------------------------------------------------------------------------
-------------------------
  J1                 JUNCTION      0.00   180.71     0  12:00
0        4.27       0.001
  J10                JUNCTION      8.71    46.82     0  11:56
0.151         1.1      -0.022
  J100               JUNCTION      1.58     1.58     0  11:54
0.0304      0.0304      -0.002
  J101               JUNCTION      0.00    13.12     0  11:56
0       0.307      -0.004
  J102               JUNCTION      0.00    13.12     0  11:56
0       0.307      -0.000
  J103               JUNCTION      0.00    13.12     0  11:55
0       0.307      -0.000
```

J104		JUNCTION	1.77	13.12	0	11:55
0.0385	0.307	-0.000				
J105		JUNCTION	0.00	11.38	0	11:55
0	0.269	0.001				
J106		JUNCTION	2.73	11.38	0	11:55
0.0556	0.269	-0.002				
J107		JUNCTION	0.00	8.89	0	12:00
0	0.213	0.003				
J108		JUNCTION	2.72	8.90	0	12:00
0.0555	0.213	-0.003				
J109		JUNCTION	0.00	6.44	0	12:00
0	0.158	0.003				
J11		JUNCTION	4.56	58.54	0	11:58
0.0791	1.4	0.022				
J110		JUNCTION	3.18	6.44	0	12:00
0.0748	0.158	-0.002				
J111		JUNCTION	0.00	3.27	0	12:00
0	0.083	0.001				
J112		JUNCTION	3.27	3.27	0	12:00
0.083	0.083	-0.000				
J113		JUNCTION	0.00	6.85	0	11:55
0	0.15	-0.011				
J114		JUNCTION	0.00	6.85	0	11:55
0	0.15	-0.000				
J115		JUNCTION	0.00	6.85	0	11:54
0	0.15	0.000				
J116		JUNCTION	2.31	6.85	0	11:54
0.0544	0.15	0.001				
J117		JUNCTION	0.00	4.66	0	11:54
0	0.0956	-0.002				
J118		JUNCTION	2.80	4.66	0	11:54
0.0572	0.0956	-0.001				
J119		JUNCTION	0.00	1.88	0	11:54
0	0.0383	0.000				
J12		JUNCTION	4.21	78.15	0	12:00
0.0731	1.9	-0.001				
J120		JUNCTION	1.88	1.88	0	11:54
0.0383	0.0383	-0.001				
J121		JUNCTION	2.04	2.04	0	11:54
0.0416	0.0416	-0.001				
J122		JUNCTION	0.00	2.04	0	11:54
0	0.0416	0.000				
J123		JUNCTION	2.82	4.84	0	11:54
0.0576	0.0991	-0.001				
J124		JUNCTION	0.00	4.84	0	11:54
0	0.0991	-0.001				
J125		JUNCTION	2.07	6.87	0	11:54
0.0477	0.147	0.000				
J126		JUNCTION	0.00	6.87	0	11:54
0	0.147	0.000				
J127		JUNCTION	0.00	6.86	0	11:55
0	0.147	-0.000				
J128		JUNCTION	0.00	6.86	0	11:55
0	0.147	-0.019				

J129		JUNCTION	3.74	3.74	0	11:54
0.0836	0.0836	-0.001				
J13		JUNCTION	3.07	86.69	0	12:00
0.0532	2.1	0.002				
J130		JUNCTION	0.00	3.74	0	11:54
0	0.0836	-0.001				
J131		JUNCTION	0.00	3.73	0	11:54
0	0.0836	-0.000				
J132		JUNCTION	0.00	3.73	0	11:54
0	0.0836	-0.018				
J133		JUNCTION	0.00	8.59	0	11:55
0	0.167	0.008				
J134		JUNCTION	3.50	8.79	0	11:54
0.0599	0.167	0.001				
J135		JUNCTION	0.00	16.18	0	11:56
0	0.333	-0.004				
J136		JUNCTION	2.41	10.76	0	11:55
0.0413	0.208	-0.010				
J14		JUNCTION	2.59	24.46	0	11:56
0.0443	0.521	-0.005				
J15		JUNCTION	2.63	39.65	0	11:56
0.045	0.883	0.000				
J16		JUNCTION	7.94	55.37	0	11:56
0.142	1.22	-0.017				
J17		JUNCTION	2.66	66.09	0	11:57
0.0456	1.49	0.017				
J18		JUNCTION	3.65	81.60	0	11:58
0.0632	1.86	-0.001				
J19		JUNCTION	3.51	90.97	0	11:58
0.0607	2.08	-0.007				
J2		JUNCTION	0.00	6.92	0	19:20
0	5.51	-0.080				
J20		JUNCTION	0.57	95.07	0	11:59
0.0101	2.17	0.010				
J21		JUNCTION	0.00	3.85	0	12:00
0	0.11	0.002				
J22		JUNCTION	4.61	8.44	0	12:00
0.115	0.225	-0.002				
J23		JUNCTION	0.00	8.43	0	12:00
0	0.225	0.003				
J24		JUNCTION	0.00	16.95	0	12:00
0	0.422	-0.000				
J25		JUNCTION	0.00	16.94	0	12:00
0	0.422	-0.003				
J26		JUNCTION	0.00	16.95	0	12:00
0	0.422	-0.000				
J27		JUNCTION	2.60	16.96	0	12:00
0.0609	0.422	-0.000				
J28		JUNCTION	0.00	14.40	0	12:00
0	0.361	0.001				
J29		JUNCTION	3.26	14.41	0	12:00
0.068	0.361	-0.002				
J3		JUNCTION	0.00	6.92	0	19:20
0	5.51	0.002				

J30	JUNCTION	0.00	11.42	0	12:00	
0	0.293	0.003				
J31	JUNCTION	3.28	11.44	0	12:00	
0.0682	0.293	-0.003				
J32	JUNCTION	3.85	3.85	0	12:00	
0.11	0.11	-0.000				
J33	JUNCTION	2.48	2.48	0	11:54	
0.052	0.052	-0.001				
J34	JUNCTION	0.00	2.48	0	11:54	
0	0.052	-0.005				
J35	JUNCTION	3.49	5.82	0	12:00	
0.0833	0.135	0.002				
J36	JUNCTION	0.00	5.82	0	12:00	
0	0.135	-0.004				
J37	JUNCTION	3.20	9.01	0	12:00	
0.0898	0.225	0.002				
J38	JUNCTION	0.00	9.00	0	12:00	
0	0.225	0.000				
J39	JUNCTION	0.00	8.99	0	12:00	
0	0.225	-0.000				
J4	JUNCTION	0.00	7.19	0	15:40	
0	5.37	-0.106				
J40	JUNCTION	0.00	8.99	0	12:00	
0	0.225	-0.004				
J41	JUNCTION	0.00	9.68	0	12:00	
0	0.235	-0.002				
J42	JUNCTION	0.00	9.68	0	12:00	
0	0.235	-0.000				
J43	JUNCTION	0.00	9.69	0	12:00	
0	0.235	0.000				
J44	JUNCTION	2.96	9.70	0	12:00	
0.078	0.235	0.001				
J45	JUNCTION	0.00	6.74	0	12:00	
0	0.157	-0.002				
J46	JUNCTION	3.82	6.74	0	12:00	
0.0903	0.157	0.001				
J47	JUNCTION	0.00	2.98	0	11:54	
0	0.0664	-0.003				
J48	JUNCTION	2.98	2.98	0	11:54	
0.0664	0.0664	-0.001				
J49	JUNCTION	0.00	14.88	0	12:00	
0	0.372	0.002				
J5	JUNCTION	0.00	10.73	0	11:55	
0	0.208	0.010				
J50	JUNCTION	0.00	14.88	0	12:00	
0	0.372	-0.000				
J51	JUNCTION	1.96	14.89	0	12:00	
0.051	0.372	0.000				
J52	JUNCTION	0.00	12.96	0	12:00	
0	0.321	-0.000				
J53	JUNCTION	4.05	12.97	0	12:00	
0.0877	0.321	-0.002				
J54	JUNCTION	0.00	9.12	0	12:00	
0	0.234	0.004				

J55	JUNCTION	4.60	9.14	0	12:00	
0.109	0.234	-0.003				
J56	JUNCTION	0.00	4.55	0	12:00	
0	0.125	0.003				
J57	JUNCTION	4.55	4.55	0	12:00	
0.125	0.125	-0.000				
J58	JUNCTION	0.00	4.83	0	11:54	
0	0.107	-0.002				
J59	JUNCTION	1.53	4.83	0	11:54	
0.0354	0.107	0.000				
J6	JUNCTION	5.48	5.48	0	11:54	
0.107	0.107	-0.010				
J60	JUNCTION	0.00	3.32	0	11:54	
0	0.0714	-0.000				
J61	JUNCTION	3.32	3.32	0	11:54	
0.0714	0.0714	-0.001				
J62	JUNCTION	0.00	6.10	0	12:00	
0	0.144	0.002				
J63	JUNCTION	0.00	6.10	0	12:00	
0	0.144	-0.001				
J64	JUNCTION	1.14	6.11	0	12:00	
0.0272	0.144	-0.000				
J65	JUNCTION	0.00	4.97	0	12:00	
0	0.117	0.000				
J66	JUNCTION	3.01	4.97	0	12:00	
0.0729	0.117	0.002				
J67	JUNCTION	0.00	2.15	0	11:54	
0	0.0438	-0.007				
J68	JUNCTION	2.15	2.15	0	11:54	
0.0438	0.0438	-0.001				
J69	JUNCTION	0.00	13.14	0	12:00	
0	0.317	0.001				
J7	JUNCTION	10.36	10.36	0	11:54	
0.231	0.231	-0.005				
J70	JUNCTION	0.00	13.14	0	12:00	
0	0.317	-0.000				
J71	JUNCTION	0.00	13.15	0	12:00	
0	0.317	-0.000				
J72	JUNCTION	1.43	13.15	0	12:00	
0.0357	0.317	0.000				
J73	JUNCTION	0.00	11.74	0	12:00	
0	0.281	0.000				
J74	JUNCTION	3.05	11.75	0	12:00	
0.0623	0.281	-0.002				
J75	JUNCTION	0.00	8.99	0	12:00	
0	0.219	0.003				
J76	JUNCTION	3.11	9.00	0	12:00	
0.0638	0.219	-0.003				
J77	JUNCTION	0.00	6.17	0	12:00	
0	0.155	0.004				
J78	JUNCTION	2.96	6.18	0	12:00	
0.0725	0.155	-0.002				
J79	JUNCTION	0.00	3.22	0	12:00	
0	0.0823	0.001				

J8		JUNCTION	3.16	12.60	0	11:54
0.0538	0.266	-0.016				
J80		JUNCTION	3.22	3.22	0	12:00
0.0823	0.0823	-0.000				
J81		JUNCTION	1.77	1.77	0	11:54
0.0354	0.0354	-0.001				
J82		JUNCTION	0.00	1.77	0	11:54
0	0.0354	-0.000				
J83		JUNCTION	2.64	4.40	0	11:54
0.0548	0.0902	-0.001				
J84		JUNCTION	0.00	4.39	0	11:54
0	0.0902	-0.001				
J85		JUNCTION	3.17	7.52	0	11:54
0.0728	0.163	0.001				
J86		JUNCTION	0.00	7.51	0	11:55
0	0.163	-0.000				
J87		JUNCTION	1.44	8.88	0	11:55
0.0344	0.197	0.000				
J88		JUNCTION	0.00	8.88	0	11:55
0	0.197	-0.000				
J89		JUNCTION	0.00	8.88	0	11:55
0	0.197	-0.000				
J9		JUNCTION	4.26	30.19	0	11:55
0.0728	0.712	-0.002				
J90		JUNCTION	0.00	8.88	0	11:55
0	0.197	-0.004				
J91		JUNCTION	0.00	9.09	0	12:00
0	0.226	-0.002				
J92		JUNCTION	0.00	9.09	0	12:00
0	0.226	0.000				
J93		JUNCTION	0.00	9.09	0	12:00
0	0.226	-0.000				
J94		JUNCTION	2.67	9.10	0	12:00
0.0811	0.226	0.003				
J95		JUNCTION	0.00	6.72	0	11:55
0	0.145	-0.004				
J96		JUNCTION	2.91	6.72	0	11:54
0.067	0.145	0.002				
J97		JUNCTION	0.00	3.85	0	11:54
0	0.0779	-0.002				
J98		JUNCTION	2.30	3.86	0	11:54
0.0476	0.0779	-0.001				
J99		JUNCTION	0.00	1.58	0	11:54
0	0.0304	-0.002				
O1		OUTFALL	0.00	6.92	0	19:20
0	5.51	0.000				
O2		OUTFALL	0.00	0.00	0	00:00
0	0	0.000 gal				
Clear_Pool1		STORAGE	7.20	9.75	0	11:54
0.126	5.51	0.074				
SED_Pond1		STORAGE	52.06	217.87	0	12:00
0.951	5.51	0.101				

****
Node Surcharge Summary
****

No nodes were surcharged.

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
Clear_Pool1	17.106	11	0	0	58.573	38	0 19:20	6.92
SED_Pond1	159.375	15	0	0	490.674	48	0 15:40	7.19

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
O1	100.00	2.00	6.92	5.513
O2	0.00	0.00	0.00	0.000
System	50.00	2.00	0.00	5.513

****
Link Flow Summary
****

Vegetated Cover - 100 Year Results

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days	hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C10	CONDUIT	58.11	0	12:00	4.48	0.70	0.87
C100	CONDUIT	8.88	0	12:00	1.99	0.16	0.39
C101	CONDUIT	11.38	0	11:55	3.67	0.08	0.37
C102	CONDUIT	11.38	0	11:55	2.72	0.15	0.38
C103	CONDUIT	13.12	0	11:55	3.86	0.09	0.39
C104	CONDUIT	13.12	0	11:56	2.92	0.17	0.40
C105	CONDUIT	13.12	0	11:56	5.52	0.09	0.30
C106	CONDUIT	13.12	0	11:56	1.44	0.08	0.65
C107	CONDUIT	2.04	0	11:54	1.96	0.01	0.15
C108	CONDUIT	2.03	0	11:54	1.31	0.03	0.18
C109	CONDUIT	4.84	0	11:54	2.71	0.03	0.24
C11	CONDUIT	46.15	0	11:58	4.45	0.45	0.75
C110	CONDUIT	4.82	0	11:54	2.01	0.06	0.25
C111	CONDUIT	6.87	0	11:54	2.43	0.05	0.34
C112	CONDUIT	6.86	0	11:55	1.89	0.12	0.34
C113	CONDUIT	6.86	0	11:55	4.38	0.05	0.21
C114	CONDUIT	6.86	0	11:55	0.79	0.04	0.61
C115	CONDUIT	3.85	0	12:00	2.46	0.03	0.21
C116	CONDUIT	3.84	0	12:00	1.60	0.06	0.25
C117	CONDUIT	8.43	0	12:00	3.32	0.06	0.31
C118	CONDUIT	8.41	0	12:00	2.39	0.11	0.33
C119	CONDUIT	11.42	0	12:00	3.06	0.08	0.42

C12	CONDUIT	29.97	0	11:57	4.12	0.25
0.58						
C120	CONDUIT	11.40	0	12:00	2.17	0.20
0.44						
C121	CONDUIT	14.40	0	12:00	4.01	0.10
0.41						
C122	CONDUIT	14.39	0	12:00	2.89	0.19
0.42						
C123	CONDUIT	16.95	0	12:00	4.24	0.12
0.44						
C124	CONDUIT	16.95	0	12:00	3.13	0.22
0.45						
C125	CONDUIT	16.94	0	12:00	5.78	0.13
0.35						
C126	CONDUIT	16.94	0	12:00	1.66	0.11
0.68						
C127	CONDUIT	2.48	0	11:54	2.10	0.02
0.17						
C128	CONDUIT	2.48	0	11:54	1.40	0.04
0.20						
C129	CONDUIT	5.82	0	12:00	2.93	0.04
0.26						
C13	CONDUIT	12.27	0	11:55	2.80	0.10
0.40						
C130	CONDUIT	5.81	0	12:00	2.11	0.08
0.28						
C131	CONDUIT	9.00	0	12:00	2.73	0.06
0.38						
C132	CONDUIT	8.99	0	12:00	2.08	0.16
0.39						
C133	CONDUIT	8.99	0	12:00	4.69	0.07
0.25						
C134	CONDUIT	8.99	0	12:00	0.99	0.06
0.63						
C135	CHANNEL	8.59	0	11:55	4.99	0.15
0.42						
C136	CONDUIT	5.55	0	11:54	2.27	0.04
0.25						
C137	CHANNEL	10.70	0	11:56	5.15	0.23
0.46						
C138	CONDUIT	16.15	0	11:56	3.98	0.12
0.37						
C139	CONDUIT	8.57	0	11:55	12.80	0.65
0.80						
C14	CHANNEL	10.73	0	11:55	3.61	0.16
0.55						
C15	CONDUIT	24.38	0	11:56	4.36	0.18
0.47						
C16	CONDUIT	39.55	0	11:57	5.06	0.29
0.61						
C17	CONDUIT	54.90	0	11:57	4.92	0.47
0.78						
C18	CONDUIT	65.75	0	11:58	5.40	0.78
0.83						

C19	CONDUIT	81.66	0	11:59	6.52	0.58
0.85						
C2	CONDUIT	0.00	0	00:00	0.00	0.00
0.00						
C20	CONDUIT	90.96	0	11:59	5.32	0.50
0.85						
C21	CONDUIT	94.44	0	12:00	4.53	0.70
0.97						
C22	CONDUIT	86.46	0	12:01	5.46	0.70
0.99						
C23	CONDUIT	2.15	0	11:54	1.98	0.02
0.15						
C24	CONDUIT	2.14	0	11:54	1.34	0.03
0.19						
C25	CONDUIT	4.97	0	12:00	2.68	0.04
0.24						
C26	CONDUIT	4.97	0	12:00	2.21	0.06
0.24						
C27	CONDUIT	6.10	0	12:00	3.10	0.03
0.26						
C28	CONDUIT	6.10	0	12:00	2.25	0.08
0.28						
C29	CONDUIT	6.10	0	12:00	1.48	0.04
0.38						
C3	CONDUIT	0.00	0	00:00	0.00	0.00
0.00						
C30	CONDUIT	3.22	0	12:00	2.22	0.02
0.20						
C31	CONDUIT	3.22	0	12:00	1.54	0.05
0.23						
C32	CONDUIT	6.17	0	12:00	2.98	0.04
0.27						
C33	CONDUIT	6.15	0	12:00	2.15	0.08
0.29						
C34	CONDUIT	8.99	0	12:00	2.78	0.06
0.38						
C35	CONDUIT	8.97	0	12:00	1.99	0.16
0.40						
C36	CONDUIT	11.74	0	12:00	3.71	0.08
0.37						
C37	CONDUIT	11.73	0	12:00	2.76	0.15
0.38						
C38	CONDUIT	13.15	0	12:00	3.19	0.10
0.45						
C39	CONDUIT	13.14	0	12:00	2.37	0.24
0.46						
C4	CONDUIT	6.92	0	19:20	7.77	0.18
0.18						
C40	CONDUIT	13.14	0	12:00	5.40	0.10
0.30						
C41	CONDUIT	13.14	0	12:00	2.05	0.08
0.51						
C42	CONDUIT	8.87	0	11:55	1.17	0.06
0.58						

C43	CONDUIT	8.88	0	11:55	4.74	0.06
0.24						
C44	CONDUIT	8.88	0	11:55	2.62	0.12
0.33						
C45	CONDUIT	8.88	0	11:55	3.32	0.06
0.33						
C46	CONDUIT	7.51	0	11:55	2.38	0.10
0.31						
C47	CONDUIT	7.51	0	11:55	3.15	0.05
0.30						
C48	CONDUIT	1.77	0	11:54	2.20	0.01
0.12						
C49	CONDUIT	1.76	0	11:54	1.44	0.02
0.15						
C5	CONDUIT	6.92	0	19:20	2.81	0.01
0.09						
C50	CONDUIT	4.39	0	11:54	2.20	0.03
0.26						
C51	CONDUIT	4.36	0	11:54	1.53	0.08
0.29						
C52	CONDUIT	1.58	0	11:54	2.11	0.01
0.11						
C53	CONDUIT	1.57	0	11:54	1.40	0.02
0.14						
C54	CONDUIT	3.85	0	11:54	2.10	0.03
0.24						
C55	CONDUIT	3.83	0	11:54	1.47	0.07
0.27						
C56	CONDUIT	6.72	0	11:55	3.04	0.05
0.28						
C57	CONDUIT	6.72	0	11:55	2.25	0.09
0.30						
C58	CONDUIT	9.09	0	12:00	3.36	0.07
0.33						
C59	CONDUIT	9.09	0	12:00	2.62	0.12
0.33						
C6	CONDUIT	7.19	0	15:42	2.99	0.24
0.98						
C60	CONDUIT	9.09	0	12:00	4.86	0.07
0.24						
C61	CONDUIT	9.08	0	12:00	1.01	0.05
0.62						
C62	CONDUIT	3.74	0	11:54	2.21	0.03
0.22						
C63	CONDUIT	3.73	0	11:54	1.69	0.06
0.24						
C64	CONDUIT	3.73	0	11:54	3.30	0.03
0.16						
C65	CONDUIT	3.73	0	11:54	0.47	0.02
0.57						
C66	CONDUIT	1.88	0	11:54	1.93	0.01
0.14						
C67	CONDUIT	1.87	0	11:54	1.28	0.03
0.18						

C68	CONDUIT	4.66	0	11:54	2.68	0.03
0.23						
C69	CONDUIT	4.64	0	11:54	1.97	0.06
0.25						
C7	CONDUIT	4.71	0	11:54	2.02	0.04
0.24						
C70	CONDUIT	6.85	0	11:54	3.02	0.05
0.29						
C71	CONDUIT	6.85	0	11:55	2.38	0.09
0.29						
C72	CONDUIT	6.85	0	11:55	4.39	0.05
0.21						
C73	CONDUIT	6.85	0	11:55	0.80	0.04
0.60						
C74	CONDUIT	3.32	0	11:54	2.61	0.02
0.18						
C75	CONDUIT	3.31	0	11:54	1.96	0.04
0.20						
C76	CONDUIT	4.83	0	11:54	3.39	0.04
0.20						
C77	CONDUIT	4.82	0	11:54	1.56	0.04
0.31						
C78	CONDUIT	4.55	0	12:00	3.09	0.03
0.20						
C79	CONDUIT	4.54	0	12:00	2.03	0.05
0.24						
C8	CHANNEL	5.37	0	11:54	2.42	0.09
0.47						
C80	CONDUIT	9.12	0	12:00	2.83	0.07
0.38						
C81	CONDUIT	9.09	0	12:00	1.97	0.16
0.40						
C82	CONDUIT	12.96	0	12:00	3.85	0.09
0.39						
C83	CONDUIT	12.94	0	12:00	2.81	0.17
0.40						
C84	CONDUIT	14.88	0	12:00	4.05	0.11
0.42						
C85	CONDUIT	14.88	0	12:00	2.88	0.20
0.44						
C86	CONDUIT	14.88	0	12:00	2.30	0.11
0.51						
C87	CONDUIT	2.98	0	11:54	2.23	0.02
0.18						
C88	CONDUIT	2.98	0	11:54	1.48	0.05
0.22						
C89	CONDUIT	6.74	0	12:00	3.07	0.05
0.28						
C9	CONDUIT	77.97	0	12:00	5.53	0.81
0.94						
C90	CONDUIT	6.73	0	12:00	2.22	0.09
0.30						
C91	CONDUIT	9.69	0	12:00	2.87	0.07
0.39						

C92	CONDUIT	9.68	0	12:00	2.15	0.17
0.40						
C93	CONDUIT	9.68	0	12:00	4.78	0.07
0.26						
C94	CONDUIT	9.68	0	12:00	1.26	0.06
0.57						
C95	CONDUIT	3.27	0	12:00	2.25	0.02
0.20						
C96	CONDUIT	3.26	0	12:00	1.54	0.05
0.23						
C97	CONDUIT	6.44	0	12:00	3.00	0.05
0.27						
C98	CONDUIT	6.42	0	12:00	2.20	0.08
0.29						
C99	CONDUIT	8.89	0	12:00	2.76	0.06
0.38						
C1	WEIR	180.64	0	12:01		
0.99						
OL1	DUMMY	7.19	0	15:40		
OL2	DUMMY	6.92	0	19:20		
OR_1	DUMMY	0.00	0	00:00		
W1	DUMMY	0.00	0	00:00		

****
Flow Classification Summary
****

	Adjusted	---------- Fraction of Time in Flow Class ----------							
	/Actual		Up	Down	Sub	Sup	Up	Down	Norm Inlet
Conduit	Length	Dry	Dry	Dry	Crit	Crit	Crit	Crit	Ltd Ctrl
C10	1.00	0.49	0.01	0.00	0.50	0.00	0.00	0.00	0.97 0.00
C100	1.00	0.61	0.00	0.00	0.39	0.00	0.00	0.00	0.00 0.00
C101	1.00	0.61	0.01	0.00	0.38	0.00	0.00	0.00	0.97 0.00
C102	1.00	0.61	0.00	0.00	0.39	0.00	0.00	0.00	0.00 0.00
C103	1.00	0.61	0.01	0.00	0.38	0.01	0.00	0.00	0.97 0.00
C104	1.00	0.61	0.00	0.00	0.39	0.00	0.00	0.00	0.00 0.00
C105	1.00	0.61	0.01	0.00	0.08	0.31	0.00	0.00	0.05 0.00
C106	1.00	0.40	0.21	0.00	0.39	0.00	0.00	0.00	0.97 0.00

Vegetated Cover - 100 Year Results

C107	1.00	0.66	0.01	0.00	0.34	0.00	0.00	0.00
0.97	0.00							
C108	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00
0.00	0.00							
C109	1.00	0.65	0.01	0.00	0.34	0.00	0.00	0.00
0.97	0.00							
C11	1.00	0.50	0.04	0.00	0.46	0.00	0.00	0.00
0.96	0.00							
C110	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00
0.00	0.00							
C111	1.00	0.63	0.01	0.00	0.35	0.00	0.00	0.00
0.97	0.00							
C112	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00
0.00	0.00							
C113	1.00	0.64	0.01	0.00	0.16	0.20	0.00	0.00
0.12	0.00							
C114	1.00	0.49	0.15	0.00	0.36	0.00	0.00	0.00
0.97	0.00							
C115	1.00	0.63	0.01	0.00	0.37	0.00	0.00	0.00
0.97	0.00							
C116	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00
0.00	0.00							
C117	1.00	0.62	0.01	0.00	0.37	0.00	0.00	0.00
0.97	0.00							
C118	1.00	0.62	0.00	0.00	0.38	0.00	0.00	0.00
0.00	0.00							
C119	1.00	0.61	0.01	0.00	0.38	0.00	0.00	0.00
0.97	0.00							
C12	1.00	0.54	0.04	0.00	0.43	0.00	0.00	0.00
0.97	0.00							
C120	1.00	0.61	0.00	0.00	0.39	0.00	0.00	0.00
0.00	0.00							
C121	1.00	0.61	0.01	0.00	0.38	0.01	0.00	0.00
0.97	0.00							
C122	1.00	0.61	0.00	0.00	0.39	0.00	0.00	0.00
0.00	0.00							
C123	1.00	0.60	0.01	0.00	0.38	0.01	0.00	0.00
0.97	0.00							
C124	1.00	0.60	0.00	0.00	0.40	0.00	0.00	0.00
0.00	0.00							
C125	1.00	0.60	0.01	0.00	0.09	0.30	0.00	0.00
0.17	0.00							
C126	1.00	0.50	0.10	0.00	0.40	0.00	0.00	0.00
0.97	0.00							
C127	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00
0.97	0.00							
C128	1.00	0.65	0.00	0.00	0.34	0.00	0.00	0.00
0.86	0.00							
C129	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00
0.97	0.00							
C13	1.00	0.57	0.02	0.00	0.41	0.00	0.00	0.00
0.97	0.00							
C130	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00
0.02	0.00							

C131	1.00	0.63	0.01	0.00	0.35	0.00	0.00	0.00
0.97	0.00							
C132	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00
0.00	0.00							
C133	1.00	0.63	0.01	0.00	0.15	0.21	0.00	0.00
0.14	0.00							
C134	1.00	0.50	0.13	0.00	0.37	0.00	0.00	0.00
0.97	0.00							
C135	1.00	0.02	0.00	0.00	0.61	0.37	0.00	0.00
0.00	0.00							
C136	1.00	0.43	0.20	0.00	0.37	0.00	0.00	0.00
0.97	0.00							
C137	1.00	0.02	0.00	0.00	0.61	0.37	0.00	0.00
0.06	0.00							
C138	1.00	0.35	0.08	0.00	0.57	0.00	0.00	0.00
0.82	0.00							
C139	1.00	0.02	0.61	0.00	0.08	0.30	0.00	0.00
0.97	0.00							
C14	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00
0.97	0.00							
C15	1.00	0.33	0.02	0.00	0.65	0.00	0.00	0.00
0.70	0.00							
C16	1.00	0.28	0.06	0.00	0.66	0.00	0.00	0.00
0.91	0.00							
C17	1.00	0.20	0.08	0.00	0.72	0.00	0.00	0.00
0.89	0.00							
C18	1.00	0.20	0.00	0.00	0.80	0.00	0.00	0.00
0.01	0.00							
C19	1.00	0.22	0.19	0.00	0.57	0.03	0.00	0.00
0.44	0.00							
C2	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							
C20	1.00	0.18	0.05	0.00	0.78	0.00	0.00	0.00
0.96	0.00							
C21	1.00	0.18	0.00	0.00	0.82	0.00	0.00	0.00
0.00	0.00							
C22	1.00	0.41	0.08	0.00	0.51	0.00	0.00	0.00
0.01	0.00							
C23	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00
0.97	0.00							
C24	1.00	0.65	0.00	0.00	0.34	0.00	0.00	0.00
0.86	0.00							
C25	1.00	0.64	0.02	0.00	0.35	0.00	0.00	0.00
0.97	0.00							
C26	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00
0.00	0.00							
C27	1.00	0.64	0.01	0.00	0.36	0.00	0.00	0.00
0.97	0.00							
C28	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00
0.00	0.00							
C29	1.00	0.35	0.28	0.00	0.36	0.00	0.00	0.00
0.97	0.00							
C3	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00							

Vegetated Cover - 100 Year Results

C30	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00	0.97	0.00
C31	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00
C32	1.00	0.63	0.01	0.00	0.36	0.00	0.00	0.00	0.97	0.00
C33	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00
C34	1.00	0.62	0.01	0.00	0.37	0.00	0.00	0.00	0.97	0.00
C35	1.00	0.62	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00
C36	1.00	0.62	0.01	0.00	0.38	0.00	0.00	0.00	0.97	0.00
C37	1.00	0.62	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00
C38	1.00	0.61	0.01	0.00	0.38	0.00	0.00	0.00	0.97	0.00
C39	1.00	0.61	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.00
C4	1.00	0.00	0.00	0.00	0.23	0.77	0.00	0.00	0.00	0.00
C40	1.00	0.61	0.01	0.00	0.09	0.30	0.00	0.00	0.14	0.00
C41	1.00	0.34	0.28	0.00	0.39	0.00	0.00	0.00	0.97	0.00
C42	1.00	0.28	0.36	0.00	0.37	0.00	0.00	0.00	0.97	0.00
C43	1.00	0.63	0.00	0.00	0.14	0.22	0.00	0.00	0.14	0.00
C44	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00
C45	1.00	0.63	0.01	0.00	0.36	0.00	0.00	0.00	0.97	0.00
C46	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00
C47	1.00	0.63	0.01	0.00	0.36	0.00	0.00	0.00	0.97	0.00
C48	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.97	0.00
C49	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.97	0.00
C5	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
C50	1.00	0.64	0.02	0.00	0.34	0.00	0.00	0.00	0.97	0.00
C51	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00
C52	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.97	0.00
C53	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.97	0.00
C54	1.00	0.64	0.02	0.00	0.34	0.00	0.00	0.00	0.97	0.00

Vegetated Cover - 100 Year Results

C55	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00
C56	1.00	0.64	0.01	0.00	0.36	0.00	0.00	0.00	0.97
C57	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.02
C58	1.00	0.63	0.01	0.00	0.36	0.00	0.00	0.00	0.97
C59	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00	0.00
C6	1.00	0.00	0.00	0.00	0.42	0.00	0.00	0.58	0.04
C60	1.00	0.63	0.00	0.00	0.07	0.29	0.00	0.00	0.04
C61	1.00	0.20	0.43	0.00	0.37	0.00	0.00	0.00	0.97
C62	1.00	0.65	0.01	0.00	0.34	0.00	0.00	0.00	0.97
C63	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.84
C64	1.00	0.65	0.00	0.00	0.29	0.05	0.00	0.00	0.85
C65	1.00	0.18	0.48	0.00	0.35	0.00	0.00	0.00	0.97
C66	1.00	0.66	0.01	0.00	0.34	0.00	0.00	0.00	0.97
C67	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.00
C68	1.00	0.65	0.01	0.00	0.34	0.00	0.00	0.00	0.97
C69	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.01
C7	1.00	0.59	0.03	0.00	0.37	0.00	0.00	0.00	0.97
C70	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00	0.97
C71	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00
C72	1.00	0.64	0.00	0.00	0.14	0.21	0.00	0.00	0.02
C73	1.00	0.22	0.42	0.00	0.36	0.00	0.00	0.00	0.97
C74	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.97
C75	1.00	0.66	0.00	0.00	0.34	0.00	0.00	0.00	0.85
C76	1.00	0.65	0.00	0.00	0.31	0.03	0.00	0.00	0.97
C77	1.00	0.59	0.06	0.00	0.35	0.00	0.00	0.00	0.97
C78	1.00	0.65	0.00	0.00	0.34	0.01	0.00	0.00	0.97
C79	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.85

C8	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.97	0.00
C80	1.00	0.63	0.02	0.00	0.35	0.00	0.00	0.00	0.97	0.00
C81	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00
C82	1.00	0.62	0.01	0.00	0.36	0.01	0.00	0.00	0.97	0.00
C83	1.00	0.62	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00
C84	1.00	0.62	0.00	0.00	0.37	0.01	0.00	0.00	0.97	0.00
C85	1.00	0.62	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00
C86	1.00	0.57	0.05	0.00	0.38	0.00	0.00	0.00	0.97	0.00
C87	1.00	0.65	0.00	0.00	0.34	0.00	0.00	0.00	0.97	0.00
C88	1.00	0.65	0.00	0.00	0.35	0.00	0.00	0.00	0.85	0.00
C89	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00	0.97	0.00
C9	1.00	0.49	0.01	0.00	0.50	0.00	0.00	0.00	0.85	0.00
C90	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.01	0.00
C91	1.00	0.64	0.01	0.00	0.35	0.00	0.00	0.00	0.97	0.00
C92	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00
C93	1.00	0.64	0.00	0.00	0.14	0.21	0.00	0.00	0.09	0.00
C94	1.00	0.54	0.10	0.00	0.36	0.00	0.00	0.00	0.97	0.00
C95	1.00	0.64	0.01	0.00	0.36	0.00	0.00	0.00	0.97	0.00
C96	1.00	0.64	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00
C97	1.00	0.63	0.01	0.00	0.36	0.00	0.00	0.00	0.97	0.00
C98	1.00	0.63	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00
C99	1.00	0.61	0.01	0.00	0.37	0.00	0.00	0.00	0.97	0.00

****
Conduit Surcharge Summary
****

	Hours	Hours

Run-on and Run-off Control System Plan for Landfills:
Calculation Summary

for

Plant Hammond Huffaker Road Parcel E

Prepared by:

Southern Company Services
T&PS Environmental Solutions

Originator: _____ 10/11/21
Curtis R. Upchurch Date

Reviewer: Jonathan J Martin 10/12/21
J. Grant Martin Date

Approval: _____ 10/12/2021
James C. Pegues, P.E. Date

1.0 Purpose of Calculation

The Federal CCR Rule, and, for Existing CCR Landfills where applicable, the Georgia CCR Rule (391-3-4-.10) require the owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill to prepare a run-on and run-off control system plan to document how these control systems have been designed and constructed to meet the applicable requirements of this section of the Rule.

The purpose of this report is to provide data that demonstrates the Plant Hammond Combustion By-Product (CCB) Storage Facility for Cell E is designed to meet the requirements in the rules listed above from a 24-hour, 25-year storm.

2.0 Summary of Conclusions

2.1 Site Overview

The Huffaker CCB Storage Facility is located on GPC property approximately 4 miles northeast of the Plant. This facility was constructed in 2004-05 and is currently active to receive ash from the Plant. Parcels A & B were retrofitted in 2013-14 with a new liner and leachate collection system and ash that was in these cells was relocated to Parcel E. The stack is currently filled to elevation 660 (approx.) with intermediate cover and grassed slopes.

The landfill is sited in an area covering approximately 42.2 acres and the Parcel E cell area is approximately 21.1 acres. There are no off-site areas draining into the cell or the sediment pond and clear pool downstream and only stormwater run-off from rain falling directly in the cell, ponds and aggregate surfaced perimeter roads must be collected and controlled.

An overview of Parcel E is provided in Table 1 below.

Table 1—Landfill site characteristics

Pond Description	Parcel E Cell	Sediment Pond No. 3	Clear Pool No. 3
Size (Acres)	23.42	2.87	1.09
Outlet Type	12’ Flat bottom ditch, S=4.0%, w/2.5:1 S.S.	48” Riser with 36” dia. outlet pipe (CMP) & 20’ auxiliary spillway	48” Riser with 36” dia. outlet pipe (CMP) & 20’ auxiliary spillway
Outlets To	Sediment Pond	Clear Pool	Ditch to Smith Creek

2.2 Run-on Control System Plan

There is no contributory stormwater run-on into Parcel E because a series of perimeter ditches, spillways, and roadways prevent overland flow from migrating into the Parcel E Cell, Sediment Pond No. 3, and Clear Pool No. 3. For further information on this hydraulic design, see SCS Calculation No. C-HM-01208-01, Plant Hammond, Huffaker Road Coal Combustion By-Products Storage Site, 9/27/04.

2.3 Run-off Control System Plan

A hydrologic and hydraulic model was developed for Plant Hammond Parcel E to determine the hydraulic capacity of the Cell. The design storm for the purposes of run-off control system plans is the 24-hour, 25-year rainfall event. The results of routing the design storm event through the landfill are presented in Table 2 below:

Table 2-Flood Routing Results for Huffaker Road Landfill Parcel E

Storage Area	Normal Pool Elevation (feet, NAVD88)	Maximum 25-year WSEL elevation (feet, NAVD88)	Spillway/Top of Dike Elevation (feet, NAVD88)	Freeboard (feet, NAVD88)*	Peak Inflow (cfs)	Peak Outflow (cfs)
Parcel E riprap Outfall Flume	No pool	634.3	635.0	0.7	113	113
Sediment Pond	626.0 (dry pond)	630.4	633.0	2.6	126.6	8.2
Clear Pool	623.0 (dry pond)	629.2	633.0	3.8	19.7	2.6

*Freeboard is measured from the top of embankment to the peak water surface elevation

3.0 Methodology

3.1 HYDROLOGIC ANALYSES

The design storm for all run-on/run-off analyses is a 24-hour, 25-year rainfall event. A summary of the design storm parameters and rainfall distribution methodology for these calculations is summarized below in Table 3.

Table 3. Plant Hammond CCR Landfill Design Storm Distribution

Return Frequency (years)	Storm Duration (hours)	Rainfall Total (Inches)	Rainfall Source	Storm Distribution
25	24	6.29	NOAA Atlas 14	SCS Type II

The drainage area for Plant Hammond Parcel E was delineated based on survey data acquired for the Plant in December of 2020. Runoff characteristics were developed based on the Soil Conservation Service (SCS) methodologies as outlined in TR-55. An overall SCS curve number for the drainage area was developed based on methods prescribed in TR-55. Soil types were obtained from the Natural Resources Conservation Service. Land use areas were delineated based on aerial photography. A conservative time of concentration was assumed as there are not any contributory drainage areas or overland flow beyond simply the footprint of the Parcel E Cell, Sediment Pond No. 3 and Clear Pool No. 3.

A table of the pertinent basin characteristics of the landfill is provided below in Table(s) 4(a) through 4(c).

Table 4(a) - Landfill Hydrologic Information (Parcel E Cell)

Drainage Basin Area (acres)	23.42 Acres
Hydrologic Curve Number, CN	86.0
Hydrologic Methodology	SCS Method
Time of Concentration (minutes)	25.3
Hydrologic Software	Autodesk SSA (Storm and Sanitary Sewer Analysis) 2019

Table 4(a) - Landfill Hydrologic Information (Sediment Pond No. 3 Area)

Drainage Basin Area (acres)	2.87
Hydrologic Curve Number, CN	96.6
Hydrologic Methodology	SCS Method
Time of Concentration (minutes)	6.0
Hydrologic Software	Autodesk SSA (Storm and Sanitary Sewer Analysis) 2019

Table 4(c) - Landfill Hydrologic Information (Clear Pool No. 3 Area)

Drainage Basin Area (acres)	1.09
Hydrologic Curve Number, CN	95.6
Hydrologic Methodology	SCS Method
Time of Concentration (minutes)	6.0
Hydrologic Software	Autodesk SSA (Storm and Sanitary Sewer Analysis) 2019

Run-off characteristics were developed based on the Soil Conservation Service (SCS) methodologies as outlined in TR-55.

Time of Concentration calculations were developed based on the Soil Conservation Service (SCS) methodologies as outlined in TR-55.

Run-off values were determined by importing the characteristics developed above into a hydrologic model in Autodesk SSA (Storm and Sanitary Analysis) 2019.

3.2 HYDRAULIC ANALYSES

Storage values for the landfill were determined by developing a stage-storage relationship utilizing contour data. The spillway system at the Plant Hammond Huffaker Road CCB Storage Facility – Parcel E consists of a spillway from the Parcel E Cell proper draining into Sediment Pond No. 3. The spillway is a trapezoidal riprap weir that drains the Cell's perimeter ditch into Sediment Pond No. 3.

The Sediment Pond No. 3 drainage system consists of a principal 48" diameter corrugated metal riser (with trash rack) with a top elevation of 630.00. This riser is drained by a 61.7-ft long, 36" diameter corrugated metal culvert that discharges into Clear Pool No. 3. A 20-foot wide trapezoidal auxiliary spillway also handles overflow from Sediment Pond No. 3 into Clear Pool No. 3.

The Clear Pool No. 3 drainage system consists of a principal spillway with 48" diameter corrugated metal riser (and trash rack) with a top elevation of 629.00. This riser is drained by a 87.3 foot long - 36" diameter corrugated metal culvert that discharges into a swale that feeds into Smith Creek. A 20-foot wide auxiliary trapezoidal spillway also handles overflow from Clear Pool No. 3 into the same swale that feeds into Smith Creek.

A summary of spillway information is presented below in Table 5.

Table 5—Spillway Attribute Table*

Spillway Component	US Invert El (feet)	DS Invert El (feet)	Dimension (ft)	Slope (%)	Length (ft)
Parcel E Cell Spillway	633.00	632.00	12	6.2	16
Sed. Pond No. 3 riser (principal spillway)	630.00	623.59	4 ft (diameter) 6.4 ft (height)	0.00	N/A
Sed. Pond No. 3 culvert (principal spillway)	623.59	622.62	3 ft (diameter)	1.57	61.7
Sed. Pond No. 3 auxiliary spillway	631.00	631.00	32 ft (Top width) 20 ft (Bottom width)	0.00	15.5
Clear Pool No. 3 riser (principal spillway)	629.00	621.68	4 ft (diameter) 7.3 ft (height)	0.00	N/A
Clear Pool No. 3 culvert (principal spillway)	621.68	618.34	3 ft (diameter)	3.83	87.3
Clear Pool No. 3 auxiliary spillway	631.00	631.00	32 ft (Top width) 20 ft (Bottom width)	0.00	20.5

*All spillway design information can be found on Drawing H9155 and As-built Survey 3553HAM Rev. 1, 4/2/2008.

Based on the spillway attributes listed above, a rating curve was developed and inserted into Auto Desk's Storm and Sanitary Sewer Analysis software, Version 2019 to analyze performance during the design storm. Results are shown in Table 2.

4.0 Supporting Information

4.1 Curve Number

Table 6. Curve Number Data

Location	Terrain type	NRCS Soil	Curve No.
Cell	Ash	N/A	86
Roads	Gravel	B	85
Perimeter ditch	Grass	B	61
Pond	Water/Grass Slopes	B	98

4.2 Stage-Storage Tables

Sediment Pond			
Depth	Elevation	Area (s.f.)	Volume (c.f.)
0	623	71,298	0
1	624	74,669	72,984
2	625	78,111	148,374
3	626	81,597	229,228
4	627	85,123	312,588
5	628	88,967	399,633
6	629	92,444	490,339
7	630	95,882	584,502
8	631	99,413	682,150
9	632	103,004	783,359
10	633	106,634	888,178

Clear Pool			
Depth	Elevation	Area (s.f.)	Volume (c.f.)
0	622	19,749	0
1	623	21,414	20,582
2	624	23,091	42,835
3	625	24,591	66,676
4	626	26,143	92,043
5	627	27,789	119,009
6	628	29,543	147,675
7	629	31,379	178,136
8	630	33,283	210,467
9	631	35,295	244,756
10	632	37,246	281,027
11	633	39,238	319,269

4.3 Time of Concentration

Time of concentration (Tc) for the sediment pond and clear pool is the minimum Tc of 6 minutes. The time of concentration for the cell area is shown below.

```
**************************************************
SCS TR-55 Time of Concentration Computations Report
**************************************************

Sheet Flow Equation
-------------------

        Tc = (0.007 * ((n * Lf)^0.8)) / ((P^0.5) * (Sf^0.4))

        Where:

        Tc = Time of Concentration (hrs)
        n  = Manning's Roughness
        Lf = Flow Length (ft)
        P  = 2 yr, 24 hr Rainfall (inches)
        Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation
----------------------------------

        V  = 16.1345 * (Sf^0.5) (unpaved surface)
        V  = 20.3282 * (Sf^0.5) (paved surface)
        V  = 15.0 * (Sf^0.5) (grassed waterway surface)
        V  = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
        V  = 9.0 * (Sf^0.5) (cultivated straight rows surface)
        V  = 7.0 * (Sf^0.5) (short grass pasture surface)
        V  = 5.0 * (Sf^0.5) (woodland surface)
        V  = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
        Tc = (Lf / V) / (3600 sec/hr)

        Where:

        Tc = Time of Concentration (hrs)
        Lf = Flow Length (ft)
        V  = Velocity (ft/sec)
        Sf = Slope (ft/ft)

Channel Flow Equation
---------------------

        V  = (1.49 * (R^(2/3)) * (Sf^0.5)) / n
        R  = Aq / Wp
        Tc = (Lf / V) / (3600 sec/hr)

        Where:

        Tc = Time of Concentration (hrs)
        Lf = Flow Length (ft)
        R  = Hydraulic Radius (ft)
        Aq = Flow Area (ft²)
        Wp = Wetted Perimeter (ft)
        V  = Velocity (ft/sec)
        Sf = Slope (ft/ft)
        n  = Manning's Roughness
```

Subbasin Cell E Basin

Sheet Flow Computations

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.15	0.00	0.00
Flow Length (ft):	200.00	0.00	0.00
Slope (%):	1.50	0.00	0.00
2 yr, 24 hr Rainfall (in):	3.80	3.80	3.80
Velocity (ft/sec):	0.19	0.00	0.00
Computed Flow Time (minutes):	17.56	0.00	0.00

Shallow Concentrated Flow Computations

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	307.00	0.00	0.00
Slope (%):	4.20	0.00	0.00
Surface Type:	Unpaved	Unpaved	Unpaved
Velocity (ft/sec):	3.31	0.00	0.00
Computed Flow Time (minutes):	1.55	0.00	0.00

Channel Flow Computations

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.03	0.00	0.00
Flow Length (ft):	1950.00	0.00	0.00
Channel Slope (%):	1.20	0.00	0.00
Cross Section Area (ft^2):	11.51	0.00	0.00
Wetted Perimeter (ft):	12.02	0.00	0.00
Velocity (ft/sec):	5.29	0.00	0.00
Computed Flow Time (minutes):	6.15	0.00	0.00

Total TOC (minutes):	25.26

4.4 Results

Runoff Summary

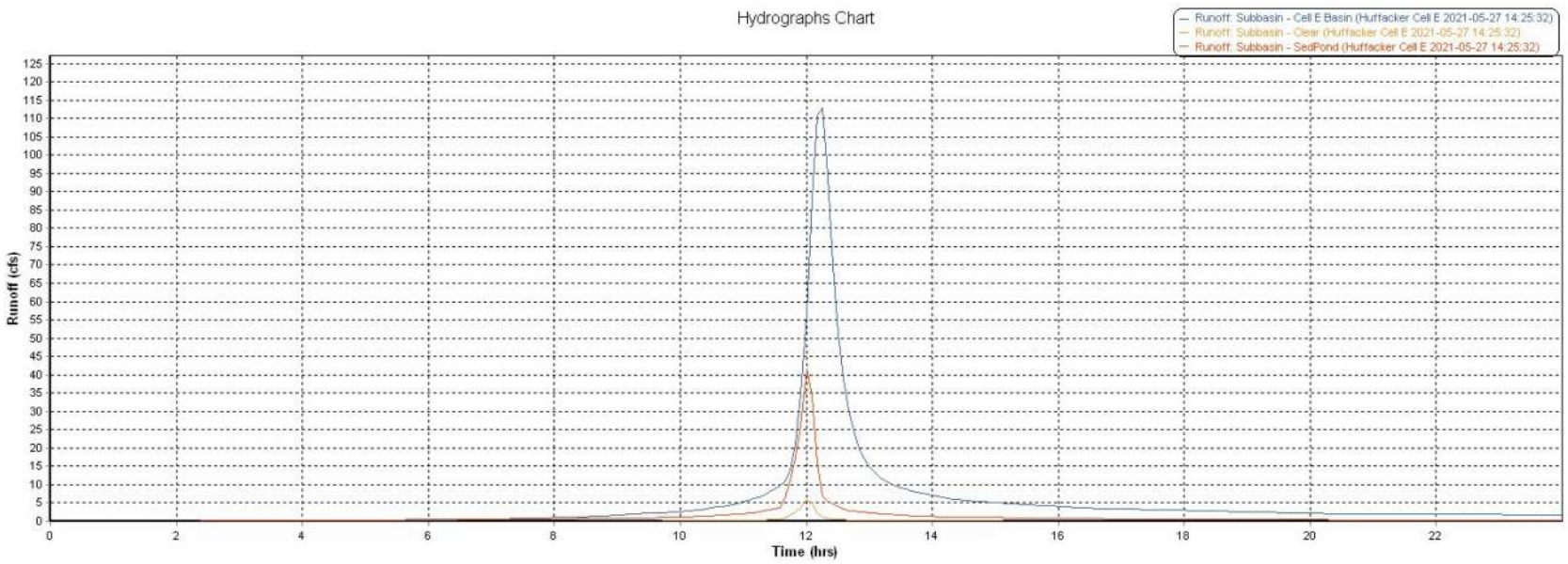
****
Subbasin Runoff Summary
****

Subbasin ID	Total Precip in	Total Runoff in	Peak Runoff cfs	Weighted Curve Number	Time of Concentration days	Time of Concentration hh:mm:ss
Cell E Basin	6.29	4.51	115.24	84.430	0	00:25:15
Clear	6.29	5.77	6.00	95.610	0	00:06:00
SedPond	6.29	5.88	41.81	96.550	0	00:06:00

Maximum WSEL's

****
Node Depth Summary
****

Node ID	Average Depth Attained ft	Maximum Depth Attained ft	Maximum HGL Attained ft	Time of Max Occurrence days	Time of Max Occurrence hh:mm	Total Flooded Volume acre-in	Total Time Flooded minutes	Retention Time hh:mm:ss
Jun-16	0.19	1.29	634.29	0	12:15	0	0	0:00:00
Jun-17	0.09	0.62	632.62	0	12:15	0	0	0:00:00
Riser1	1.77	5.57	629.16	0	22:02	0	0	0:00:00
Riser2	0.05	1.32	623.00	0	00:00	0	0	0:00:00
Out-04	0.05	0.77	619.11	0	00:00	0	0	0:00:00
Out-06	0.00	0.00	631.00	0	00:00	0	0	0:00:00
ClearPool	3.09	7.16	629.16	0	22:04	0	0	0:00:00
SedPond1	5.25	7.34	630.34	0	14:02	0	0	0:00:00



Runoff Summary Table

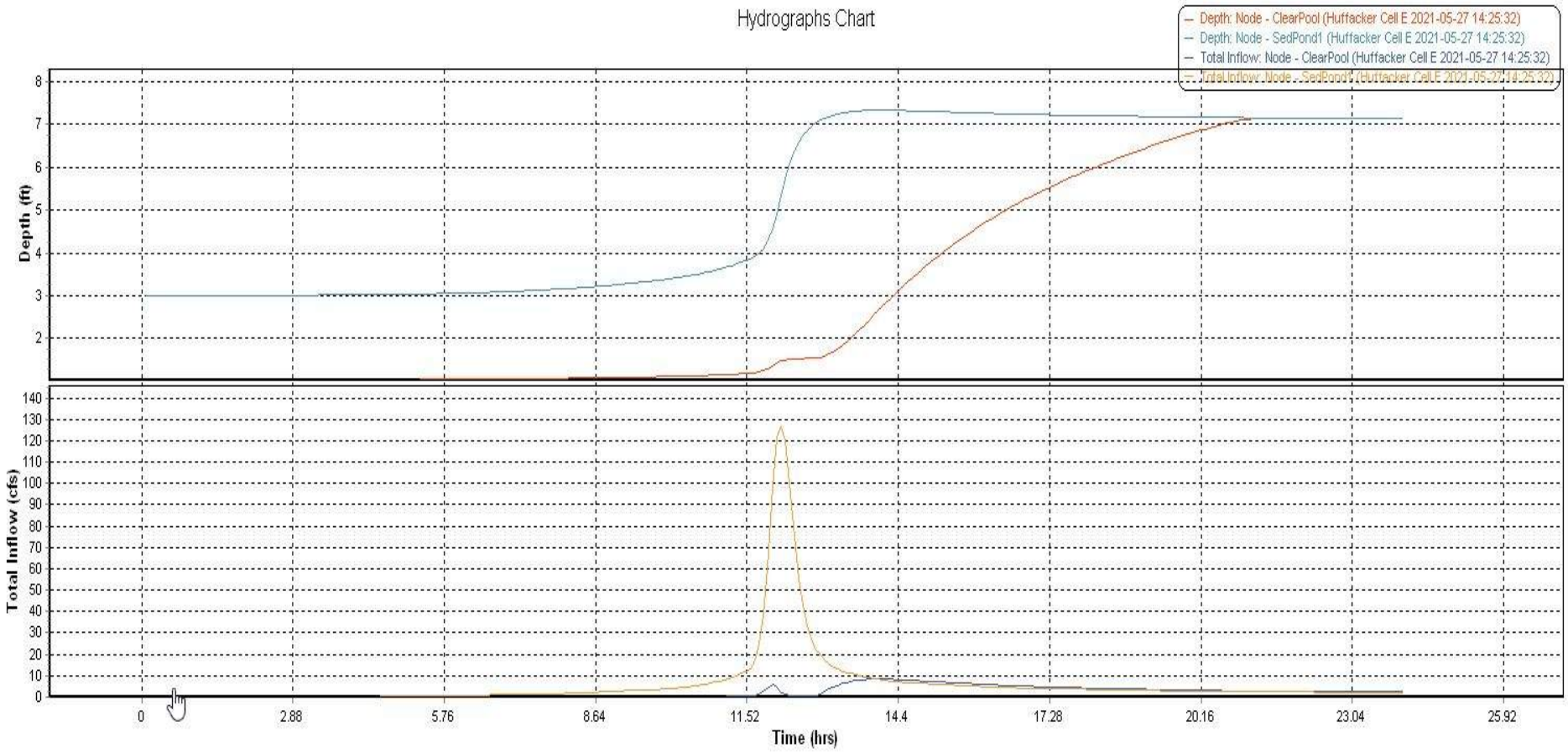
Time period
From: 07/06/2016, 12:00:00 AM
To: 07/07/2016, 12:00:00 AM

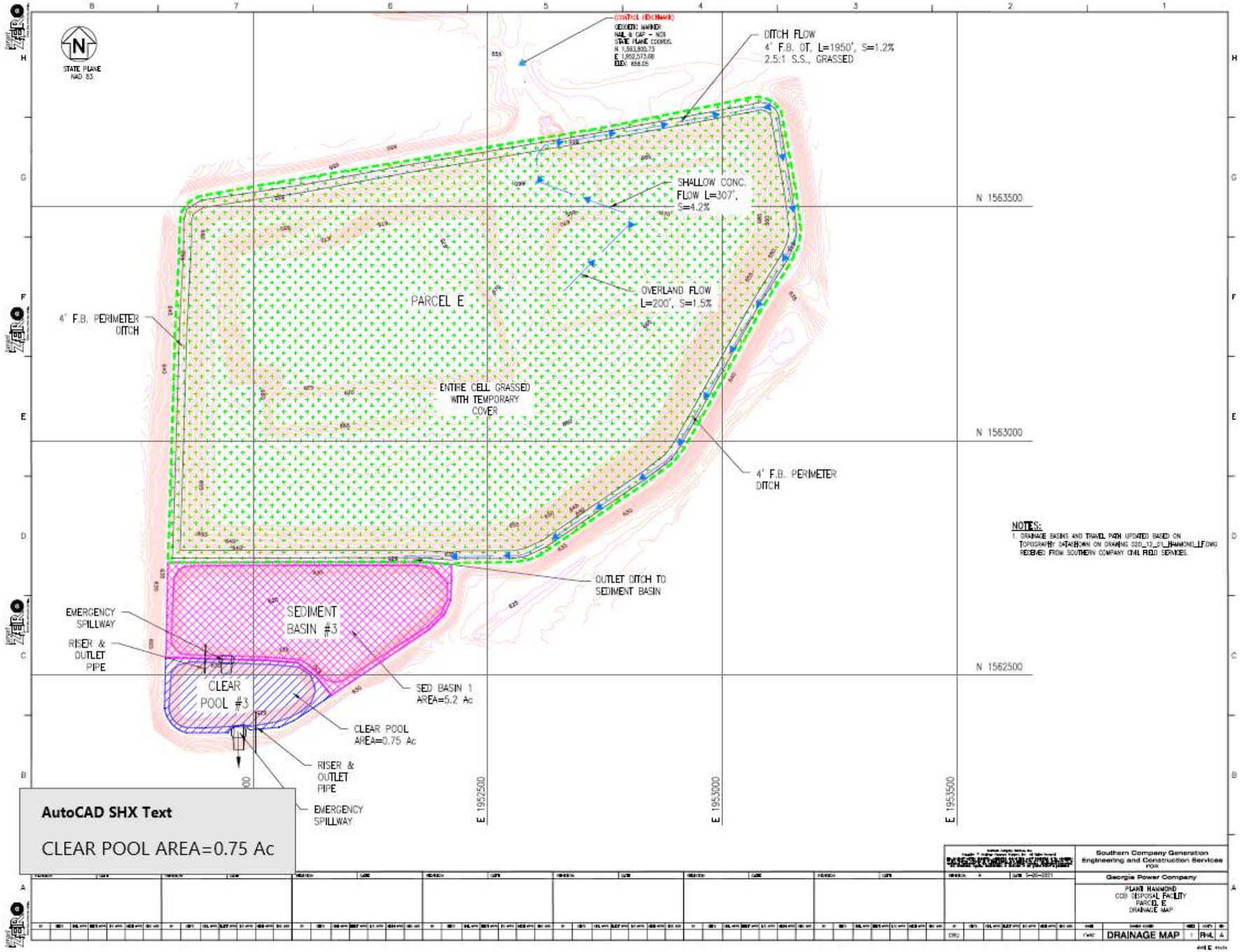
Thresholds
Exceedance: 0
Deficit: 0

Detention storage
Max flow: 0

Element ID	Cell E Basin	Clear	SedPond
Maximum Runoff (cfs)	113.00	5.96	41.64
Minimum Runoff (cfs)	0.00	0.00	0.00
Event Mean Runoff (cfs)	5.03	0.18	1.29
Duration of Exceedances (hrs)	N/A	N/A	N/A
Duration of Deficits (hrs)	N/A	N/A	N/A
Number of Exceedances	N/A	N/A	N/A
Number of Deficits	N/A	N/A	N/A
Volume of Exceedance (ft³)	N/A	N/A	N/A
Volume of Deficit (ft³)	N/A	N/A	N/A
Total Runoff (ft³)	432463.42	15765.95	111227.79
Detention Storage (ft³)	N/A	N/A	N/A

Pond Inflows/Depths




CONTROL (Benchmark)
GEODETIC MARKER
NAIL & CAP = NGS
STATE PLANE COORDS.
N 1,563,805.73
E 1,952,573.68
ELEV. 658.65
STATE PLANE
NAD 83
DITCH FLOW
4' F.B. DT, L=1950', S=1.2%
2.5:1 S.S., GRASSED
SHALLOW CONC.
FLOW L=307',
S=4.2%
OVERLAND FLOW
L=200', S=1.5%
PARCEL E
4' F.B. PERIMETER
DITCH
ENTIRE CELL GRASSED
WITH TEMPORARY
COVER
4' F.B. PERIMETER
DITCH
OUTLET DITCH TO
SEDIMENT BASIN
SEDIMENT
BASIN #3
EMERGENCY
SPILLWAY
RISER &
OUTLET
PIPE
CLEAR
POOL #3
SED BASIN 1
AREA=5.2 Ac
CLEAR POOL
AREA=0.75 Ac
RISER &
OUTLET
PIPE
EMERGENCY
SPILLWAY
N 1563500
N 1563000
N 1562500
E 1952500
E 1953000
E 1953500
NOTES:
1. DRAINAGE BASINS AND TRAVEL PATH UPDATED BASED ON
TOPOGRAPHY DATA SHOWN ON DRAWING C2D_12_01_HAMMOND_LF.DWG
RECEIVED FROM SOUTHERN COMPANY CIVIL FIELD SERVICES.
AutoCAD SHX Text
CLEAR POOL AREA=0.75 Ac
Southern Company Generation
Engineering and Construction Services
FOR
Georgia Power Company
PLANT HAMMOND
CCR DISPOSAL FACILITY
PARCEL E
DRAINAGE MAP
DRAINAGE MAP
REV
A

Run-on and Run-off Control System Plan for Landfills:
Calculation Summary

for

Plant Hammond Huffaker Road Parcel F

Prepared by:

Stantec Consulting Services Inc.

1. BACKGROUND AND DESIGN CRITERIA

Parcel F will contain coal combustion residual (CCR) material from nearby Plant Hammond. To manage stormwater, the proposed landfill will utilize two separate sediment basins as well as various stormwater drainage ditches, culverts, and flumes. This report documents the hydrologic and hydraulic analysis performed for proposed Sediment Basins 4 and 5, Clear Pools 4 and 5, stormwater culverts, perimeter drainage ditches, and landfill flumes. The locations of proposed stormwater structures are illustrated in Figure 1.

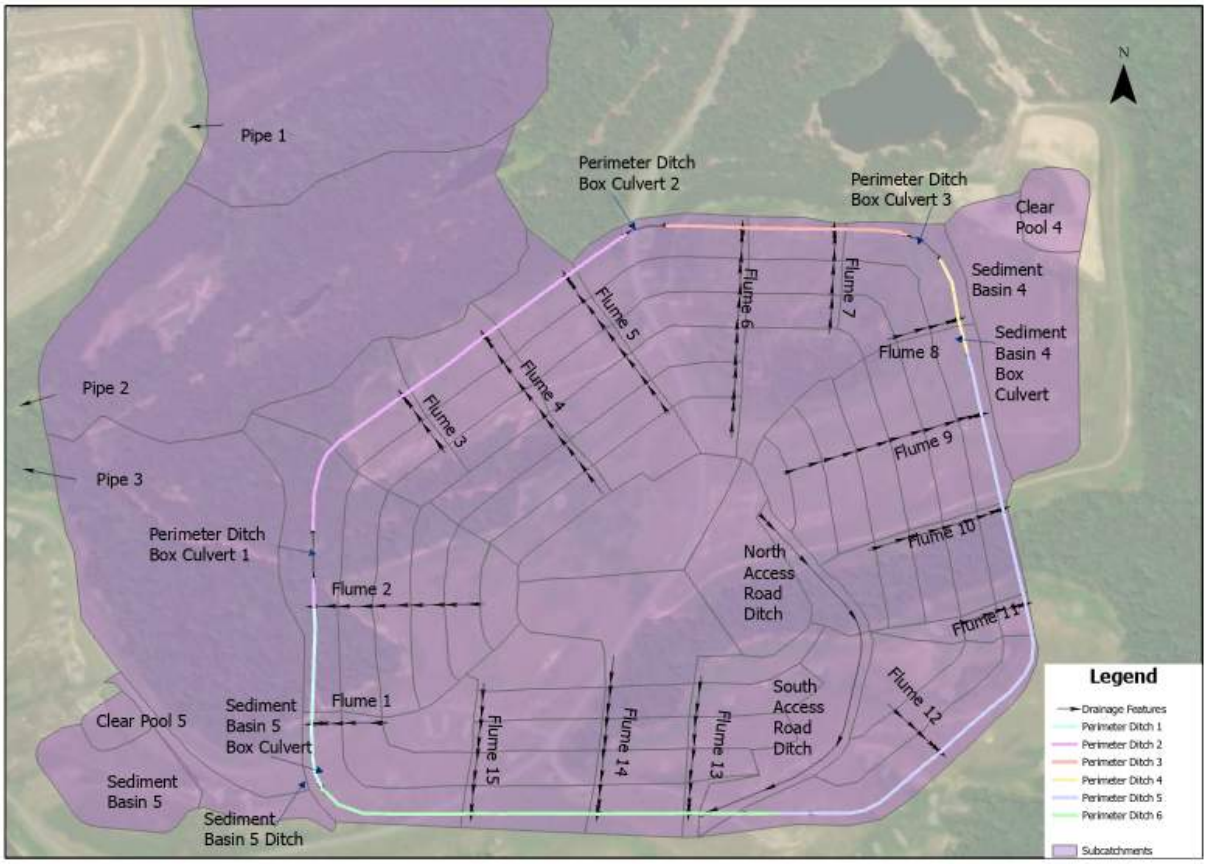


Figure 1 Huffaker Road Landfill – Parcel F Proposed Stormwater Structures

The following design criteria were used to evaluate proposed stormwater infrastructure:

1. Drainage ditches maintain ½-foot of freeboard during the 25-year, 24-hour storm event and contain the 100-year, 24-hour storm event without overtopping.

2. Sediment Basin 4, Clear Pool 4, Sediment Basin 5, and Clear Pool 5 route the 100-year, 24-hour storm event without overtopping and convey the 25-year, 24- hour storm without activating the emergency spillway.

3. Stormwater runoff flumes for the proposed landfill convey both the 25-year, 24-hour event and 100-year, 24-hour event.

4. Pipes under the access road from Parcel E to Parcel F maintain ½-foot of freeboard during the 25-year, 24-hour storm event and pass the 100-year, 24-hour storm event without overtopping the access road.

5. Box culverts at the sediment basins and along the perimeter ditch maintain ½-foot of freeboard during the 25-year, 24-hour storm event and pass the 100-year 24-hour storm event without overtopping.

2. METHODOLOGY

The United States Department of Agriculture (USDA) Soil Conservation Service (SCS) curve number method was used in creating a stormwater management model (with the Computational Hydraulics International PCSWMM design software) to compute the peak flows and the hydraulic capacity of the ditches and ponds at the site. Esri ArcGIS software was used to create multiple features and measurements used in the PCSWMM model. The following were applied for this analysis:

- Drainage areas were delineated using the design contours. The total area that drains to the ditches is approximately 140 acres.

- Perimeter drainage ditch channel geometry as illustrated on Plant Hammond - Georgia Power Huffaker Road Coal Combustion By-Products Disposal Facility (Parcel F) Construction Plans:
    - Trapezoidal channel
    - Four-foot bottom width
    - 3H:1V side slopes
    - 3.5-foot depth

- Sediment Basin 5 Box Culvert discharges to Sediment Basin 5 Ditch with the following geometry:
    - Concrete-lined trapezoidal channel
    - 20-foot bottom width
    - 3H:1V side slopes
    - 2-foot depth

- Sediment Basin 5 Ditch discharges to a Low Water Crossing at Sediment Basin 5 with the following geometry:
    - Concrete-lined trapezoidal channel
    - 20-foot bottom width
    - 10H:1V side slopes
    - 2-foot depth

- Flume geometry as illustrated in the Plant Hammond Georgia Power - Huffaker Road Coal Combustion By-Products Disposal Facility (Parcel F) Construction Plans:
    - Rip rap trapezoidal channel
    - Four-foot bottom width
    - 3H:1V side slopes
    - Two-foot depth

- Landfill access road ditch
    - Engineered turf trapezoidal channel
    - Two-foot bottom width
    - 3H:1V side slopes
    - 2.5-foot depth

- Geometry of the pipes under the access road from Parcel E to Parcel F.
    - Four-foot diameter single barrel HDPE pipe culverts
    - Entry loss coefficient 0.2
    - Exit loss coefficient 0.3

- NOAA Atlas 14 rainfall depths were used for all storm events evaluated.
    - 25-year, 24-hour: 6.29 inches
    - 100-year, 24-hour: 7.85 inches

- A SCS Type-II rainfall distribution was used along with the rainfall depths listed above.

- A composite curve number was calculated for each drainage sub-catchment based on future landfill closure conditions. A SCS hydrologic soil group composite classification of C (poorly drained) was assigned for the land covers provided below. The SCS hydrologic soil group classification of Type C was determined to be the most appropriate fit due to the low permeability of the cap system and existing soils:
    - Closure vegetated surface, vegetated open space, and vegetated ditches – 71
    - Rock-lined stormwater flumes and crushed stone roads – 89
    - Open water surface – 98
    - Closure turf – 95
    - Road – 89

- Manning's roughness coefficient "n" values were based on *Open Channel Hydraulics* (Chow, 1959), Manual for Erosion and Sediment Control in Georgia (current edition dated 2016) and WinTR-55. The values used were:
    - 0.015 – Concrete-lined channels
    - 0.012 – Concrete Box Culvert
    - 0.020 – Erosion control blanket lined channels
    - 0.030 – Vegetated ditch
    - 0.074 – Rip rap
    - 0.012 – HDPE Pipe

- Sediment Basin 4, Clear Pool 4, Sediment Basin 5, and Clear Pool 5 stage-area curves were developed based on design configurations. The elevation-area curves are included in Attachment B.

- Sediment Basin 4 and Clear Pool 4 primary spillway structure configuration was referenced from Plant Hammond - Georgia Power Huffaker Road Coal Combustion By-Products Disposal Facility (Parcel F) Construction Plans:
    - Sediment Basin 4, 48-inch diameter with a HDPE perforated riser with trash rack.
    - Clear Pool 4, 48-inch diameter with a 10-foot tall BCCMP riser with trash rack
    - 48-inch diameter BCCMP barrel
    - A rating curve calculation is included in Attachment C

- Sediment Basin 4 and Clear Pool 4 emergency spillway channel geometry was referenced from Plant Hammond Georgia Power - Huffaker Road Coal Combustion By-Products Disposal Facility (Parcel F) Construction Plans:
    - Concrete-lined trapezoidal channel
    - 20-foot bottom width
    - 4H:1V side slopes

- Sediment Basin 5 and Clear Pool 5 current primary spillway structure configuration was referenced from Plant Hammond Georgia Power Huffaker Road Coal Combustion By Products Disposal Facility (Parcel F) Construction Plans:
    - Sediment Basin 5, 48-inch diameter with a 10-foot tall BCCMP perforated riser with trash rack.
    - Clear Pool 5, 48-inch diameter with a BCCMP riser with trash rack
    - 48-inch diameter BCCMP barrel
    - A rating curve calculation is included in Attachment C

- Sediment Basin 5 and Clear Pool 5 emergency spillway channel were referenced from Plant Hammond Georgia Power Huffaker Road Coal Combustion By Products Disposal Facility (Parcel F) Construction Plans:
    - Concrete-lined trapezoidal channel
    - 10-foot bottom width
    - 4H:1V side slopes

- Box Culverts
    - Sediment Basin 4 Box Culvert
        - Triple concrete box culverts 3 feet tall and 6 feet wide
        - 36-foot length
        - Entry loss coefficient 0.4
        - Exit loss coefficient 0 (no energy loss due to discharge into Sediment Basin 4)
    - Sediment Basin 5 Box Culvert
        - Double Concrete box culverts 3 feet tall and 6 feet wide
        - 160-foot length
        - Entry loss coefficient 0.4
        - Exit loss coefficient 0.5
- Box Culverts along Perimeter Ditch
    - Single concrete-lined box culvert
    - Culvert 1: Single 3 feet tall and 4 feet wide
    - Culvert 2: Double 3 feet tall and 4 feet wide
    - Culvert 3: Double 3 feet tall and 5 feet wide
    - Entry loss coefficient 0.5
    - Exit loss coefficient 0.4

2.1 EVALUATION BETWEEN VEGETATIVE AND CLOSURE TURF COVER SYSTEMS

The use of a closure turf cover system was included in these analyses. For this cover system, changes to the model included:

- The site was evaluated for closure turf and a curve number of 95 was used from the Closure Turf Hydrology Parameters for high intensity (Watershed Geo, 2019).

A summary of hydraulic results for Sediment Basins 4 and 5, Clear Ponds 4 and 5, stormwater ditches, and runoff flumes are shown below in Tables 1-8. For each hydraulic element there is a table for natural vegetative cover and a table for Closure Turf. Tables 9-12 show the results of channel lining evaluations for the perimeter, access road, and southwest ditches as well as the stormwater flumes. Tables 13 and 14 show the results of the hydraulic analysis for the access road pipes and box culverts.

Stantec

Table 1 Perimeter Ditch Hydraulic Results (Vegetative Cover)

Segment[1]	Peak Water Surface Depth (ft) 25-Year Storm Event	Peak Water Surface Depth (ft) 100-Year Storm Event	Ditch Depth (ft)	Minimum Freeboard (ft)
Perimeter Ditch 1	2.0	2.5	3.5	1.0
Perimeter Ditch 2	1.8	2.3	3.5	1.2
Perimeter Ditch 3	2.0	2.6	3.5	0.9
Perimeter Ditch 4	1.9	2.5	3.5	1.0
Perimeter Ditch 5	1.9	2.5	3.5	1.0
Perimeter Ditch 6	2.0	2.5	3.5	1.0

[1] For each ditch listed, the segment with the largest resulting peak water surface depth is shown.

Table 2 Perimeter Ditch Hydraulic Results (Closure Turf Cover)

Segment[1]	Peak Water Surface Depth (ft) 25-Year Storm Event	Peak Water Surface Depth (ft) 100-Year Storm Event	Ditch Depth (ft)	Minimum Freeboard (ft)
Perimeter Ditch 1	2.7	3.3	3.5	0.2
Perimeter Ditch 2	2.5	3.0	3.5	0.5
Perimeter Ditch 3	2.9	3.5	3.5	0.0
Perimeter Ditch 4	2.7	3.3	3.5	0.2
Perimeter Ditch 5	2.7	3.3	3.5	0.2
Perimeter Ditch 6	2.7	3.3	3.5	0.2

[1] For each ditch listed, the segment with the largest resulting peak water surface depth is shown.

Table 3 Landfill Access Road & Southwest Ditch Hydraulic Results (Vegetative Cover)

Segment[1]	Peak Water Surface Depth (ft) 25-Year Storm Event	Peak Water Surface Depth (ft) 100-Year Storm Event	Ditch Depth (ft)	Minimum Freeboard (ft)
North Landfill Access Road Ditch	0.4	0.4	2.5	2.1
South Landfill Access Road Ditch	0.6	0.7	2.5	1.8
Ditch to Sediment Basin 5	0.6	0.7	2.0	1.3

[1] For each ditch listed, the segment with the largest resulting peak water surface depth is shown.

Table 4 Landfill Access Road & Southwest Ditch Hydraulic Results (Closure Turf Cover)

Segment[1]	Peak Water Surface Depth (ft) 25-Year Storm Event	Peak Water Surface Depth (ft) 100-Year Storm Event	Ditch Depth (ft)	Minimum Freeboard (ft)
North Landfill Access Road Ditch	0.5	0.5	2.5	2.0
South Landfill Access Road Ditch	0.7	0.8	2.5	1.7
Ditch to Sediment Basin 5	0.8	0.9	2.0	1.1

[1] For each ditch listed, the segment with the largest resulting peak water surface depth is shown.

Stantec

Table 5 Pond Hydraulic Results (Vegetative Cover)

Scenario	Starting Water Surface Elevation (WSE) (ft)	Peak WSE (ft)	Top of Berm Elevation (ft)	Freeboard (ft)	Emergency Spillway Elevation (ft)	Riser Rim Elevation (ft)	Emergency Spillway Flow (cfs)	Riser Peak Flow (cfs)
Sediment Basin 4 – 25-year storm event	660.5	666.1	672.5	6.4	670.5	666	0	3.4
Sediment Basin 4 – 100-year storm event	660.5	666.4	672.5	6.1	670.5	666	0	11.2
Clear Pool 4 – 25-year storm event	654.5	659.1	668.4	9.3	666	659	0	2.2
Clear Pool 4 – 100-year storm event	654.5	659.4	668.4	9.0	666	659	0	11.4
Sediment Basin 5 – 25-year storm event	661.5	669.3	674	4.7	672	669.0	0	7.6
Sediment Basin 5 – 100-year storm event	661.5	669.7	674	4.3	672	669.0	0	23.0
Clear Pool 5 – 25-year storm event	658	667.8	672.6	4.8	672	667.5	0	6.8
Clear Pool 5 – 100-year storm event	658	668.2	672.6	4.4	672	667.5	0	21.9

Stantec

Table 6 Pond Hydraulic Results (Closure Turf Cover)

Scenario	Starting Water Surface Elevation (WSE) (ft)	Peak WSE (ft)	Top of Berm Elevation (ft)	Freeboard (ft)	Emergency Spillway Elevation (ft)	Riser Rim Elevation (ft)	Emergency Spillway Flow (cfs)	Riser Peak Flow (cfs)
Sediment Basin 4 – 25-year storm event	660.5	666.5	672.5	6.0	670.5	666	0	15.8
Sediment Basin 4 – 100-year storm event	660.5	667.1	672.5	5.4	670.5	666	0	43.9
Clear Pool 4 – 25-year storm event	654.5	659.5	668.4	8.9	666	659	0	15.9
Clear Pool 4 – 100-year storm event	654.5	660.1	668.4	8.3	666	659	0	44.2
Sediment Basin 5 – 25-year storm event	661.5	669.9	674	4.1	672	669.0	0	32.1
Sediment Basin 5 – 100-year storm event	661.5	670.5	674	3.5	672	669.0	0	70.4
Clear Pool 5 – 25-year storm event	658	668.3	672.6	4.3	672	667.5	0	30.5
Clear Pool 5 – 100-year storm event	658	669.0	672.6	3.6	642	667.5	0	68.6

Stantec

Table 7 Flume Hydraulic Results (Vegetative Cover)

Flume[1]	Peak Water Surface Depth (ft) 25-year	Peak Water Surface Depth (ft) 100-year	Flume Depth (ft)	Minimum Freeboard (ft)
Flume 1	0.8	0.9	2.0	1.1
Flume 2	1.3	1.5	2.0	0.5
Flume 3	0.7	0.8	2.0	1.2
Flume 4	1.4	1.6	2.0	0.4
Flume 5	1.1	1.2	2.0	0.8
Flume 6	1.1	1.3	2.0	0.7
Flume 7	0.9	1.0	2.0	1.0
Flume 8	0.7	0.8	2.0	1.2
Flume 9	1.3	1.5	2.0	0.5
Flume 10	1.0	1.2	2.0	0.8
Flume 11	0.4	0.5	2.0	1.5
Flume 12	0.9	1.0	2.0	1.0
Flume 13	1.0	1.1	2.0	0.9
Flume 14	1.1	1.3	2.0	0.7
Flume 15	1.1	1.3	2.0	0.7

[1] For each flume listed, the segment with the largest resulting peak water surface depth is shown.

Table 8 Flume Hydraulic Results (Closure Turf Cover)

Flume[1]	Peak Water Surface Depth (ft) 25-year	Peak Water Surface Depth (ft) 100-year	Flume Depth (ft)	Minimum Freeboard (ft)
Flume 1	1.0	1.1	2.0	0.9
Flume 2	1.5	1.7	2.0	0.3
Flume 3	0.9	1.0	2.0	1.0
Flume 4	1.6	1.8	2.0	0.2
Flume 5	1.3	1.4	2.0	0.6
Flume 6	1.3	1.5	2.0	0.5
Flume 7	1.1	1.2	2.0	0.8
Flume 8	0.9	1.0	2.0	1.0
Flume 9	1.6	1.8	2.0	1.2
Flume 10	1.2	1.3	2.0	0.7
Flume 11	0.5	0.6	2.0	1.4
Flume 12	1.1	1.2	2.0	0.8
Flume 13	1.2	1.3	2.0	0.7
Flume 14	1.4	1.5	2.0	0.5
Flume 15	1.3	1.5	2.0	0.5

[1] For each flume listed, the segment with the largest resulting peak water surface depth is shown.

2.2 EVALUATION OF DITCH LININGS

The ditch linings were evaluated and chosen using the *Manual for Erosion and Sediment Control in Georgia*. The velocities from the closure turf model during the 100-year storm event were used as they are higher than the vegetative model.

Table 9 Perimeter Ditch Evaluation

Ditch[1]	Max Velocity (ft/s) 100-year storm event	Category	Recommended Lining	Manning's n
Perimeter Ditch 1	5.7	> 5ft/s, <10ft/s Category 2	Erosion Control Blanket	0.02
Perimeter Ditch 2	6.3	> 5ft/s, <10ft/s Category 2	Erosion Control Blanket	0.02
Perimeter Ditch 3	9.3	> 10 ft/s	Concrete	0.015
Perimeter Ditch 4[2]	9.6	> 10 ft/s	Concrete	0.015
Perimeter Ditch 5[2]	9.6	> 10 ft/s	Concrete	0.015
Perimeter Ditch 6	12.8	> 10 ft/s	Concrete	0.015

[1]For each ditch listed, the segment with the largest resulting velocity is shown.
[2]Since Perimeter Ditch 4 and 5 are downstream of a concrete-lined segment of the perimeter ditch, concrete was also chosen as the lining for these segments.

Table 10 Landfill Access Road Ditch Evaluation

Ditch	Maximum Velocity (ft/s) 100-year Storm Event	Category	Recommended Lining	Manning's n
North Landfill Access Road Ditch Segment	12.6	> 10 ft/s	Concrete	0.015
South Landfill Access Road Ditch Segment	21.2	> 10 ft/s	Concrete	0.015

Table 11 Southwest Ditch Evaluation

Ditch	Maximum Velocity (ft/s) 100-year Storm Event	Category	Recommended Lining	Manning's n
Southwest Ditch to Sediment Basin 5	15.9	> 10 ft/s	Concrete	0.015
Low Water Crossing	22.8	> 10 ft/s	Concrete	0.015

Table 12 Flume Evaluation

Flume[1]	Maximum Velocity (ft/s) 100-year storm event	Recommended Lining	Category	Permissible Velocity (ft/s)	Depth of Channel (ft)	Manning's n
Flume 1	4.3	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 2	6.6	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 3	5.5	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 4	7.1	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 5	5.1	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 6	5.3	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 7	4.4	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 8	4.0	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 9	7.2	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 10	5.9	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 11	2.4	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 12	8.3	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 13	5.5	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 14	6.6	Rip Rap	DOT Type 3	11.5	2.0	0.074
Flume 15	5.5	Rip Rap	DOT Type 3	11.5	2.0	0.074

[1]For each scenario listed, the segment with the largest resulting velocity is shown.

The velocities in the flumes shown in Table 12 were evaluated using the *Manual for Erosion and Sediment Control in Georgia*. Tables C-1 and C-3 (Attachment F) were used to select Type 3 Rip Rap for the ditch lining, which has a nominal size of nine inches. In the *Georgia Stormwater Management Manual* Table 5.4-4 (Attachment F), the Manning's n of a rip rap channel with a nominal size of nine inches is 0.074.

Figure 2 HydroCalc Flume Hydraulic Jump Calculations

TRAPEZOIDAL CHANNEL ANALYSIS
CRITICAL DEPTH COMPUTATION

February 11, 2026

PROGRAM INPUT DATA

DESCRIPTION	VALUE
Flow Rate (cfs)	64.6
Channel Bottom Slope (ft/ft)	0.35
Manning's Roughness Coefficient (n-value)	0.074
Channel Left Side Slope (horizontal/vertical)	3.0
Channel Right Side Slope (horizontal/vertical)	3.0
Channel Bottom Width (ft)	4.0

COMPUTATION RESULTS

DESCRIPTION	VALUE
Critical Depth (ft)	1.42
Critical Slope (ft/ft)	0.0855
Flow Velocity (fps)	5.49
Froude Number	1.0
Velocity Head (ft)	0.47
Energy Head (ft)	1.89
Cross-Sectional Area of Flow (sq ft)	11.76
Top Width of Flow (ft)	12.53

HYDROCALC Hydraulics for Windows, Version 2.0.1, Copyright(c) 1996-2010
Dodson & Associates, Inc., 5629 FM 1960 West, Suite 314, Houston, TX 77069
Email:software@dodson-hydro.com, All Rights Reserved.

The 35% slopes from the flume decrease to approximately 1% at the confluence with the perimeter ditch. Due to the steep slope of the flume confluence with the perimeter ditch, the hydraulic jump was modeled through the program HydroCalc to evaluate the depth of lining. The flowrate was taken as the peak flow from the Closure Turf model in the flumes. The calculation was performed using the highest flowrate at flume 4. Manning's n values for rip rap lined channels were determined based on the Georgia Stormwater Management Manual.

Table 13 Pipes Under Access Road

Scenario	Maximum Velocity (ft/s) 100-year Storm Event	Minimum Elevation of the Road (ft)	Pipe Diameter (ft)	Peak Elevation Upstream (ft)	Freeboard (ft)
Pipe 1	6.3	638	4.0	629.8	8.2
Pipe 2	7.8	632	4.0	622.5	9.5
Pipe 3	8.0	632	4.0	629.2	2.8

Table 14 Box Culverts

Scenario	Maximum Velocity (ft/s) 100-year Storm Event	Maximum Depth	Minimum Elevation of the Road (ft)	Peak Elevation Upstream (ft)	Freeboard (ft)
Sediment Basin 4 Culvert	11.3	3.3	676	673.7	2.3
Sediment Basin 5 Culvert	10.5	3.3	694	690.7	3.3
Culvert 1	3.4	0.8	697	694.7	2.3
Culvert 2	6.6	3.0	690	687.7	2.3
Culvert 3	7.1	3.5	680	679.3	0.7

3. CONCLUSION

3.1 VEGETATIVE AND CLOSURE TURF COVER SYSTEMS CONCLUSION

Based on the results in tables 1-8, both vegetative and closure turf cover are acceptable within the design criteria.

3.2 DITCH LINING EVALUATION CONCLUSION

Based on the peak velocities in the perimeter ditches, an Erosion Control Blanket channel lining is recommended for Perimeter Ditch 1 and 2, while Perimeter Ditches 3, 4, 5 and 6 have a recommended lining of concrete due to the higher maximum velocity.

The flumes were evaluated by computing the velocity and conservatively Type 3 Rip Rap sizing was recommended as summarized in Table 12.

The hydraulic jump was evaluated at the confluence of the flume and perimeter ditch the results shown above in Figure 2. The depth of the confluence was found to have acceptable amount of freeboard within the design parameters. The perimeter ditch at the confluence was conservatively recommended to be armored with rip rap.

The box culverts and pipes under the access road contain the 100-year storm event without overtopping the road.

3.3 RESULTS

Based on the PCSWMM-calculated results with the inputs described in Section 2, the following are concluded for the vegetative and closure turf cover systems:

1. The proposed drainage ditches contain the 25-year, 24-hour storm event with the minimum ½-foot of freeboard and contain the 100-year, 24-hour storm event without overtopping.

2. The designed Sediment Basins 4 and 5 and Clear Pool 4 and 5 configurations do not overtop for the 100-year, 24-hour event and do not activate the emergency spillway for the 25-year, 24-hour event.

3. The proposed flume configurations contain sufficient capacity for both the 25-year and 100-year, 24-hour storm events.

4. The pipes under the access road from Parcel E to Parcel F contain the 25-year, 24-hour storm event with the minimum 6 inches of freeboard and contain the 100-year, 24-hour storm event without overtopping.

5. Box culverts at the sediment basins and along the perimeter ditch maintain ½-foot of freeboard during the 25-year, 24-hour storm event and pass the 100-year 24-hour storm event without overtopping.

4. REFERENCES

Chow, Ven Te (1959). *Open Channel Hydraulics*. Caldwell, New Jersey: The Blackburn Press.

Computational Hydraulics International (CHI) (2019). *PCSWMM 2019 Professional 2D* software. Version 7.2.2785.

Esri Inc. (2017). *ArcGIS Desktop 10.5.1* software. Version 10.5.1.7333.

Georgia Power Company. (Febuary 2026). Plant Hammond Georgia Power Huffaker Road Coal Combustion By Products Disposal Facility (Parcel F) Construction Plans.

Georgia Power Company. (Febuary 2026). Plant Hammond Georgia Power Huffaker Road Coal Combustion By Products Disposal Facility (Parcel F) Construction Plans. Design Calculations.

Georgia Stormwater Management Manual: 2016 Edition: Volumes 1 and 2.

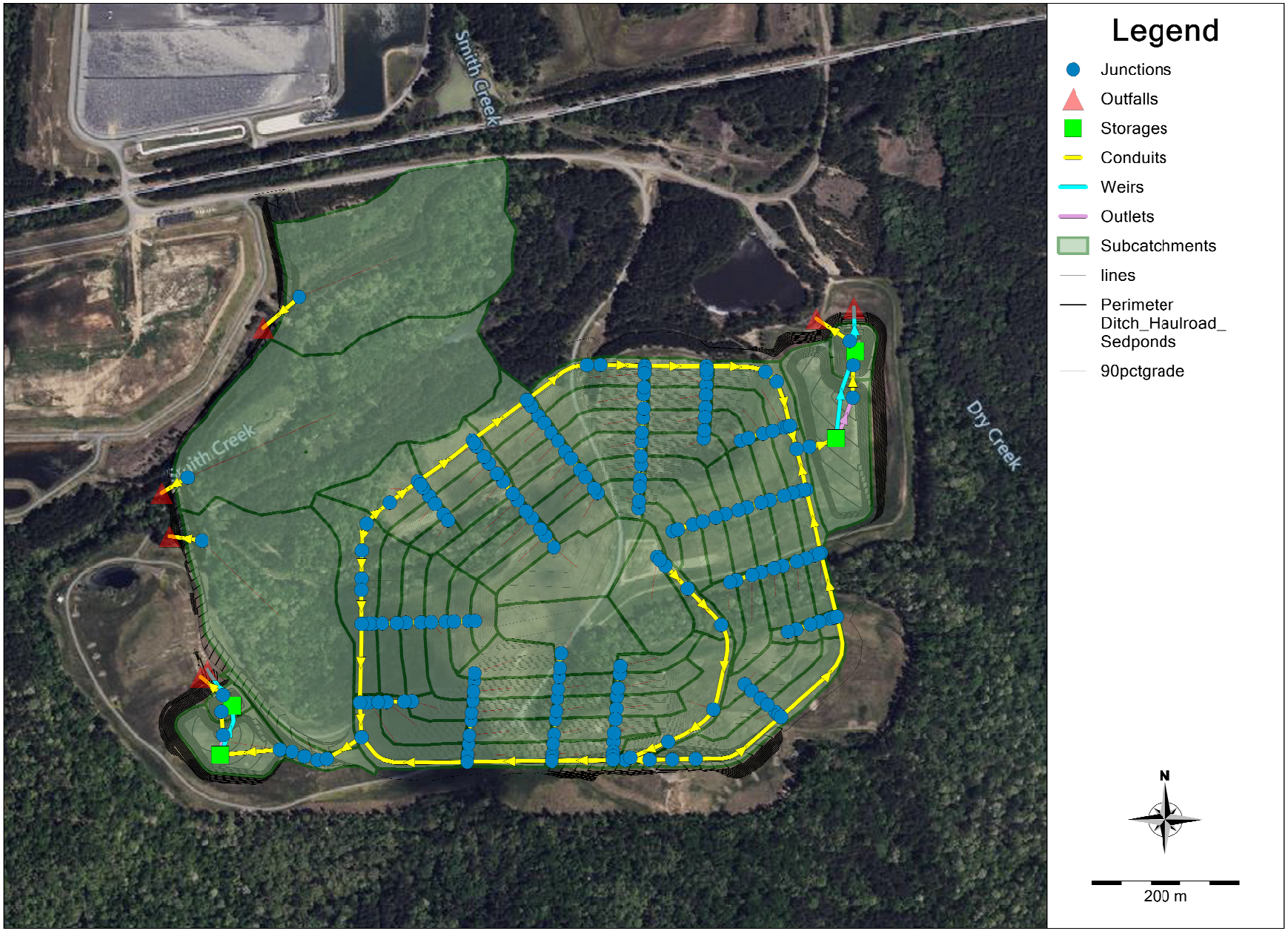
Manual for Erosion and Sediment Control in Georgia: 2016 Edition: Georgia Soil and Water Conservation Commission

Watershed Geo. *Closure Turf Design Guidelines Manual*: May 2019.

WinTR-55: Small Watershed Hydrology Version 1.00.10. United States Department of Agriculture: National Resources Conservation Service. 04/01/2011

Attachment A

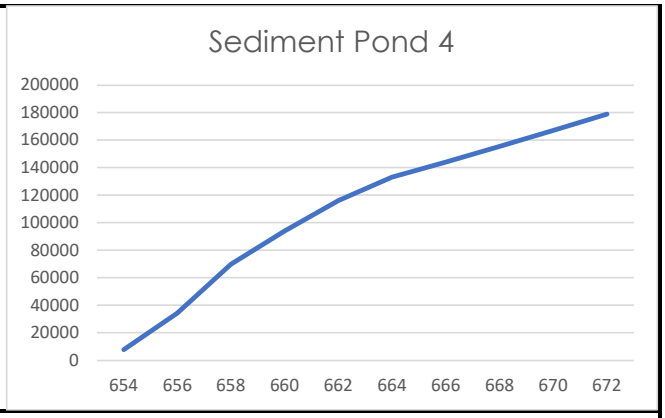
PCSWMM Model Overview


Smith Creek
Smith Creek
Dry Creek
Legend
Junctions
Outfalls
Storages
Conduits
Weirs
Outlets
Subcatchments
lines
Perimeter
Ditch_Haulroad_
Sedponds
90pctgrade
N
200 m

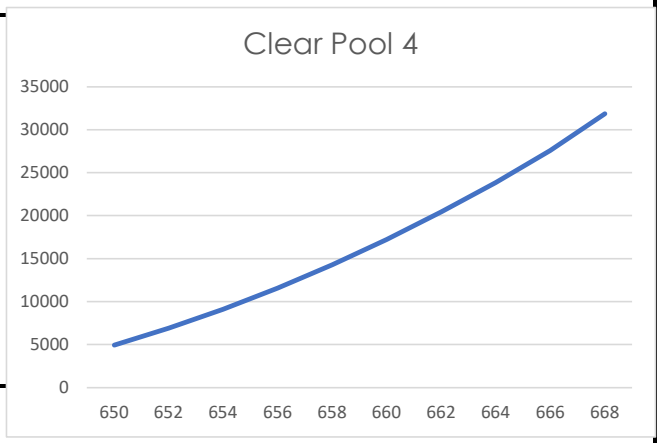
Attachment B

Pond Elevation-Area Curves

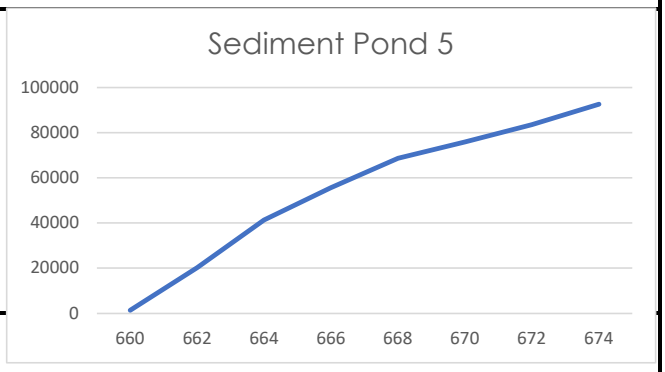
Pond	Elevation	Area
Sediment Pond 4	654	7762
Sediment Pond 4	656	34367
Sediment Pond 4	658	69952
Sediment Pond 4	660	94008
Sediment Pond 4	662	116039
Sediment Pond 4	664	132993
Sediment Pond 4	666	144085
Sediment Pond 4	668	155461
Sediment Pond 4	670	167078
Sediment Pond 4	672	179008
Sediment Pond 4	674	199230



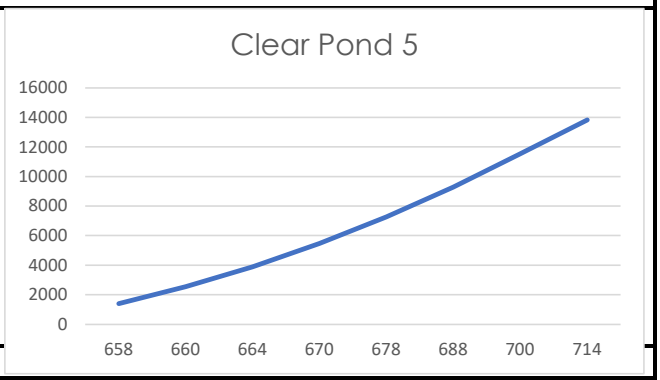
Pond	Elevation	Area
Clear Pool 4	650	4962
Clear Pool 4	652	6911
Clear Pool 4	654	9111
Clear Pool 4	656	11561
Clear Pool 4	658	14262
Clear Pool 4	660	17213
Clear Pool 4	662	20415
Clear Pool 4	664	23867
Clear Pool 4	666	27570
Clear Pool 4	668	31883



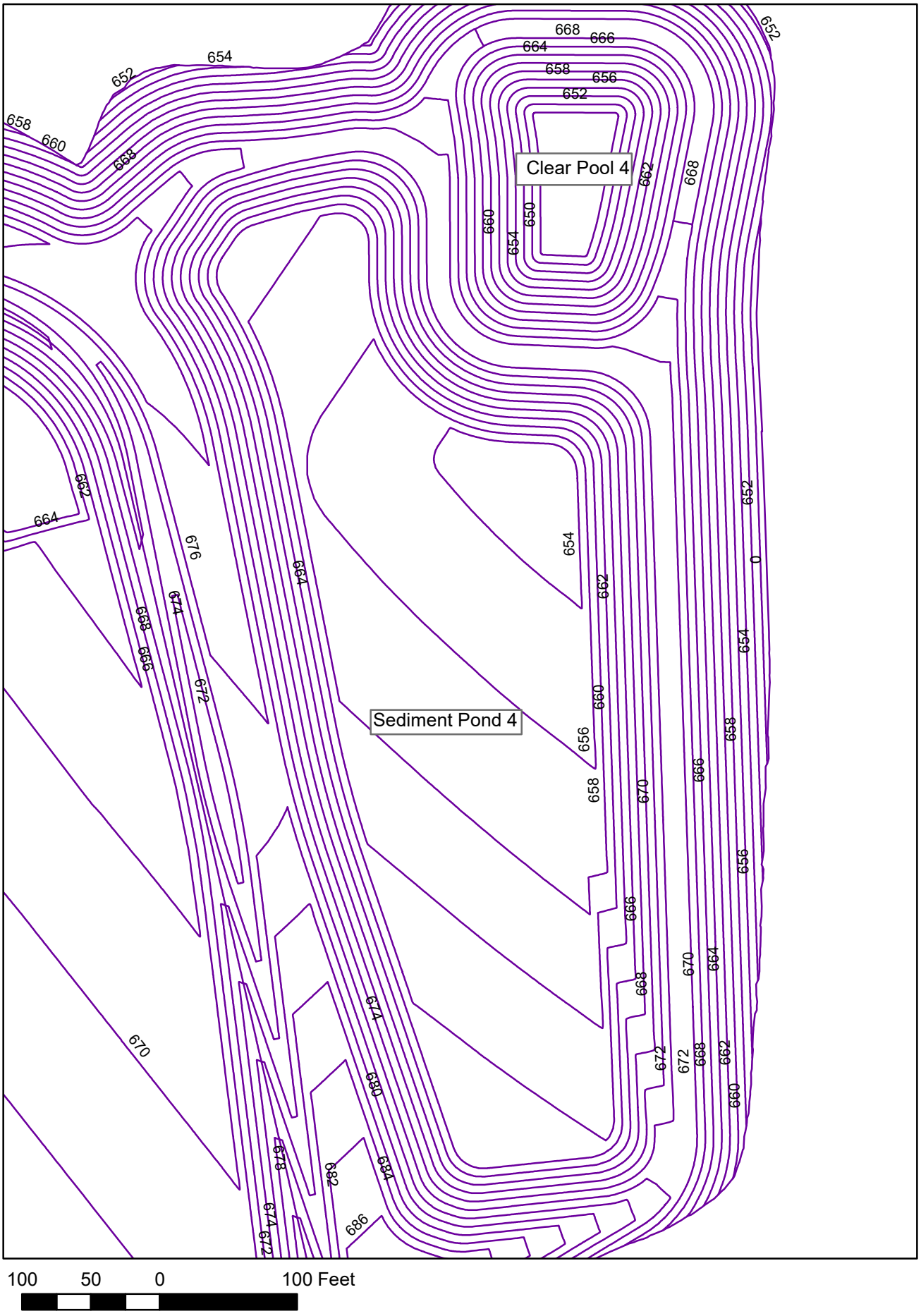
Pond	Elevation	Area
Sediment Pond 5	660	1380
Sediment Pond 5	662	20229
Sediment Pond 5	664	41251
Sediment Pond 5	666	55549
Sediment Pond 5	668	68600
Sediment Pond 5	670	75873
Sediment Pond 5	672	83536
Sediment Pond 5	674	92692



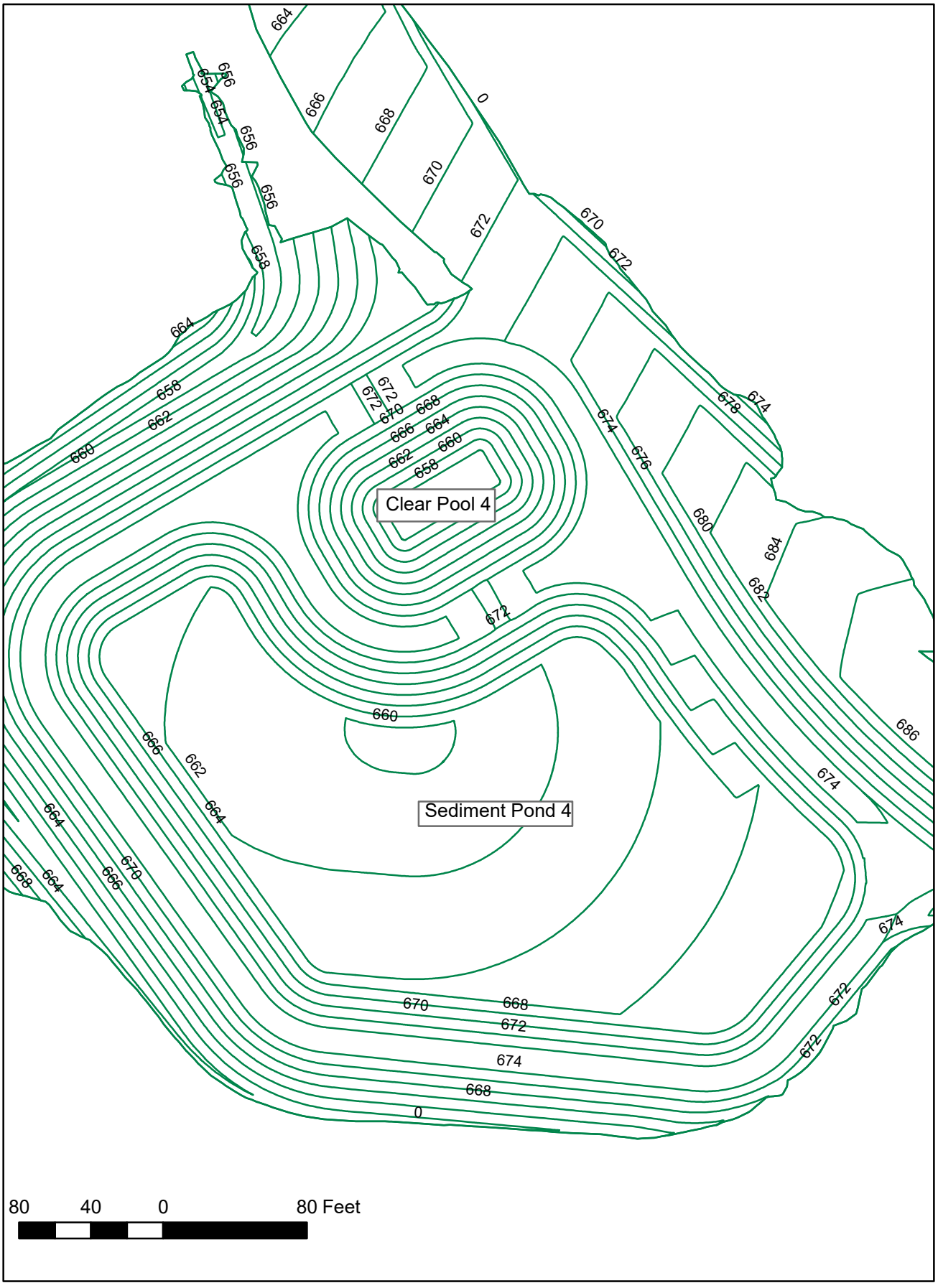
Pond	Elevation	Area
Clear Pool 5	658	1411
Clear Pool 5	660	2533
Clear Pool 5	664	3881
Clear Pool 5	670	5456
Clear Pool 5	678	7256
Clear Pool 5	688	9283
Clear Pool 5	700	11536
Clear Pool 5	714	13836
Clear Pool 5	730	16341



Storage Curve Contours



Storage Curve Contours



Attachment C

Perforated Riser Rating Curve Calculation

Stage-Discharge Calculation
Georgia Power Company Plant Hammond
Huffaker Road

Stantec

Sediment Basin 4

Basin Elevations		**Principal Spillway**	48" Dia. Riser & 48" Dia. Barrel
Top of Berm	672.5 Feet	Dia.	48 inches
Emergency Spillway Crest	670.5 Feet	Dia.	4 Feet
Riser Rim	666 Feet	Perim.	12.6 Feet
Bottom of Basin	654 Feet	Area	12.6 SF

	Principal Spillway			**Pipe Orifice Flow**		**Outlet[3]**	
Elevation (FT)	**Head (FT)**	**Orifice[1] (CFS)**	**Weir[2] (CFS)**	**Hc (ft)**	**Q=C0A(2gHc)0.5 (cfs)**	**Head (FT)**	**Discharge (CFS)**
654.0				**0**		**0.0**	**0.0**
654.5				**0.5**		**0.5**	**0.0**
655.0				**1.0**		**1.0**	**0.0**
655.5				**1.5**		**1.5**	**0.0**
656.0				**2.0**		**2.0**	**0.0**
656.5				**2.5**		**2.5**	**0.0**
657.0				**3.0**		**3.0**	**0.0**
657.5				**3.5**		**3.5**	**0.0**
658.0				**4.0**		**4.0**	**0.0**
658.5				**4.5**		**4.5**	**0.0**
659.0				**5.0**		**5.0**	**0.0**
659.5				**5.5**		**5.5**	**0.0**
660.0				**6.0**		**6.0**	**0.0**
660.5				**6.5**		**6.5**	**0.0**
661.0				**7.0**		**7.0**	**0.0**
661.5				**7.5**		**7.5**	**0.0**
662.0				**8.0**		**8.0**	**0.0**
662.5				**8.5**		**8.5**	**0.0**
663.0				**9.0**		**9.0**	**0.0**
663.5				**9.5**		**9.5**	**0.0**
664.0				**10.0**		**10.0**	**0.0**
664.5				**10.5**		**10.5**	**0.0**
665.0				**11.0**		**11.0**	**0.0**
665.5				**11.5**		**11.5**	**0.0**
666.0	0.0	0.0	0.0	**12.0**	0.0	**12.0**	**0.0**
666.5	0.5	42.8	13.7	**12.5**	213.8	**12.5**	**13.7**
667.0	1.0	60.5	38.8	**13.0**	218.1	**13.0**	**38.8**
667.5	1.5	74.1	71.3	**13.5**	222.2	**13.5**	**71.3**
668.0	2.0	85.6	109.7	**14.0**	226.3	**14.0**	**85.6**
668.5	2.5	95.7	153.3	**14.5**	230.3	**14.5**	**95.7**
669.0	3.0	104.8	201.6	**15.0**	234.2	**15.0**	**104.8**
669.5	3.5	113.2	254.0	**15.5**	238.1	**15.5**	**113.2**
670.0	4.0	121.0	310.3	**16.0**	241.9	**16.0**	**121.0**
670.5	4.5	128.4	370.3	**16.5**	245.7	**16.5**	**128.4**
671.0	5.0	135.3	433.7	**17.0**	249.4	**17.0**	**135.3**
671.5	5.5	141.9	500.4	**17.5**	253.0	**17.5**	**141.9**
672.0	6.0	148.2	570.1	**18.0**	256.6	**18.0**	**148.2**
672.5	6.5	154.3	642.9	**19**	263.6	**18.5**	**154.3**

(1) Discharge estimated with orifice equation:

$$Q = 0.6 \cdot A \cdot \sqrt{2gh}$$

(2) Discharge estimated with broad-crested weir equation

$$Q = 3.087 \cdot L \cdot H^{3/2}$$

(3) Discharge is the minimum of orifice and weir flow

Stage-Discharge Calculation
Georgia Power Company Plant Hammond
Huffaker Road

Clear Pool 4

Basin Elevations		**Principal Spillway**	48" Dia. Riser & 48" Dia. Barrel
Top of Berm	668.4 Feet	Dia.	48 Inches
Emergency Spillway Crest	666 Feet	Dia.	4 Feet
Riser Rim	659 Feet	Perim.	12.6 Feet
Bottom of Basin	650 Feet	Area	12.6 SF

	Principal Spillway			Pipe Orifice Flow		Outlet[3]	
Elevation (FT)	Head (FT)	Orifice[1] (CFS)	Weir[2] (CFS)	Hc (ft)	Q=C0A(2gHc)0.5 (cfs)	Head (FT)	Discharge (CFS)
650.0				**0**		**0**	**0.0**
650.5				**0.5**		**0.5**	**0.0**
651.0				**1.0**		**1.0**	**0.0**
651.5				**1.5**		**1.5**	**0.0**
652.0				**2.0**		**2.0**	**0.0**
652.5				**2.5**		**2.5**	**0.0**
653.0				**3.0**		**3.0**	**0.0**
653.5				**3.5**		**3.5**	**0.0**
654.0				**4.0**		**4.0**	**0.0**
654.5				**4.5**		**4.5**	**0.0**
655.0				**5.0**		**5.0**	**0.0**
655.5				**5.5**		**5.5**	**0.0**
656.0				**6.0**		**6.0**	**0.0**
656.5				**6.5**		**6.5**	**0.0**
657.0				**7.0**		**7.0**	**0.0**
657.5				**7.5**		**7.5**	**0.0**
658.0				**8.0**		**8.0**	**0.0**
658.5				**8.5**		**8.5**	**0.0**
659.0	0.0	0.0	0.0	**9.0**	0.0	**9.0**	**0.0**
659.5	0.5	42.8	13.7	**9.5**	186.4	**9.5**	**13.7**
660.0	1.0	60.5	38.8	**10.0**	191.3	**10.0**	**38.8**
660.5	1.5	74.1	71.3	**10.5**	196.0	**10.5**	**71.3**
661.0	2.0	85.6	109.7	**11.0**	200.6	**11.0**	**85.6**
661.5	2.5	95.7	153.3	**11.5**	205.1	**11.5**	**95.7**
662.0	3.0	104.8	201.6	**12.0**	209.5	**12.0**	**104.8**
662.5	3.5	113.2	254.0	**12.5**	213.8	**12.5**	**113.2**
663.0	4.0	121.0	310.3	**13.0**	218.1	**13.0**	**121.0**
663.5	4.5	128.4	370.3	**13.5**	222.2	**13.5**	**128.4**
664.0	5.0	135.3	433.7	**14.0**	226.3	**14.0**	**135.3**
664.5	5.5	141.9	500.4	**14.5**	230.3	**14.5**	**141.9**
665.0	6.0	148.2	570.1	**15.0**	234.2	**15.0**	**148.2**
665.5	6.5	154.3	642.9	**15.5**	238.1	**15.5**	**154.3**
666.0	7.0	160.1	718.4	**16.0**	241.9	**16.0**	**160.1**
666.5	7.5	165.7	796.8	**16.5**	245.7	**16.5**	**165.7**
667.0	8.0	171.1	877.8	**17.0**	249.4	**17.0**	**171.1**
667.5	8.5	176.4	961.3	**17.5**	253.0	**17.5**	**176.4**
668.0	9.0	181.5	1047.4	**18.0**	256.6	**18.0**	**181.5**
668.5	9.5	186.5	1135.9	**18.5**	260.1	**18.5**	**186.5**

(1) Discharge estimated with orifice equation:

$$Q = 0.6 \cdot A \cdot \sqrt{2gh}$$

(2) Discharge estimated with broad-crested weir equation

$$Q = 3.087 \cdot L \cdot H^{3/2}$$

(3) Discharge is the minimum of orifice and weir flow

Stage-Discharge Calculation
Georgia Power Company Plant Hammond
Huffaker Road

Sediment Basin 5

Basin Elevations			**Principal Spillway**	48" Dia. Riser & 48" Dia. Barrel
Top of Berm	674	Feet	Dia.	48 Inches
Emergency Spillway Crest	672	Feet	Dia.	4 Feet
Riser Rim	669	Feet	Perim.	12.6 Feet
Bottom of Basin	660	Feet	Area	12.6 SF

	Principal Spillway			**Pipe Orifice Flow**		**Outlet[3]**	
Elevation (FT)	**Head (FT)**	**Orifice[1] (CFS)**	**Weir[2] (CFS)**	**Hc (ft)**	**Q=C0A(2gHc)0.5 (cfs)**	**Head (FT)**	**Discharge (CFS)**
660.0				0		**0.0**	**0.0**
660.5				0.5		**0.5**	**0.0**
661.0				1		**1.0**	**0.0**
661.5				1.5		**1.5**	**0.0**
662.0				2		**2.0**	**0.0**
662.5				2.5		**2.5**	**0.0**
663.0				3		**3.0**	**0.0**
663.5				3.5		**3.5**	**0.0**
664.0				4		**4.0**	**0.0**
664.5				4.5		**4.5**	**0.0**
665.0				5		**5.0**	**0.0**
665.5				5.5		**5.5**	**0.0**
666.0				6		**6.0**	**0.0**
666.5				6.5		**6.5**	**0.0**
667.0				7		**7.0**	**0.0**
667.5				7.5		**7.5**	**0.0**
668.0				8		**8.0**	**0.0**
668.5				8.5		**8.5**	**0.0**
669.0	0.0	0.0	0.0	9	0.0	**9.0**	**0.0**
669.5	0.5	42.8	13.7	9.5	186.4	**9.5**	**13.7**
670.0	1.0	60.5	38.8	10	191.3	**10.0**	**38.8**
670.5	1.5	74.1	71.3	10.5	196.0	**10.5**	**71.3**
671.0	2.0	85.6	109.7	11	200.6	**11.0**	**85.6**
671.5	2.5	95.7	153.3	11.5	205.1	**11.5**	**95.7**
672.0	3.0	104.8	201.6	12	209.5	**12.0**	**104.8**

(1) Discharge estimated with orifice equation:

$$Q = 0.6 \cdot A \cdot \sqrt{2gh}$$

(2) Discharge estimated with broad-crested weir equation

$$Q = 3.087 \cdot L \cdot H^{3/2}$$

(3) Discharge is the minimum of orifice and weir flow

Stage-Discharge Calculation
Georgia Power Company Plant Hammond
Huffaker Road

Clear Pool 5

Basin Elevations			**Principal Spillway**	48" Dia. Riser & 48" Dia. Barrel	
Top of Berm	672.6	Feet	Dia.	48	Inches
Emergency Spillway Crest	672	Feet	Dia.	4	Feet
Riser Rim	667.5	Feet	Perim.	12.6	Feet
Bottom of Basin	658	Feet	Area	12.6	SF

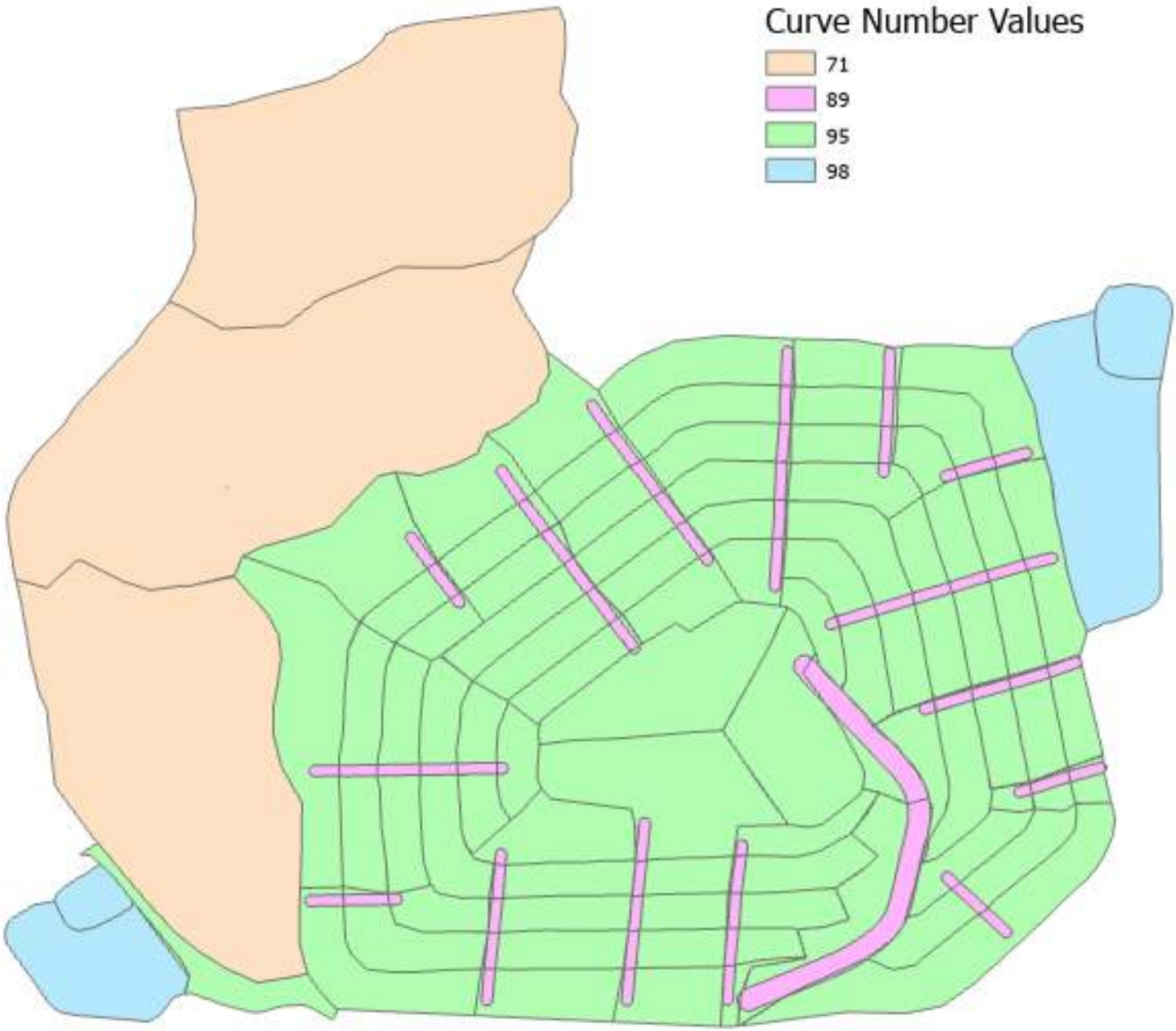
	Principal Spillway			**Pipe Orifice Flow**		**Outlet**[3]	
Elevation (FT)	**Head (FT)**	**Orifice**[1] **(CFS)**	**Weir**[2] **(CFS)**	**Hc (ft)**	**Q=C0A(2gHc)0.5 (cfs)**	**Head (FT)**	**Discharge (CFS)**
658.0				**0.0**		**0.0**	**0.0**
658.5				**0.5**		**0.5**	**0.0**
659.0				**1.0**		**1.0**	**0.0**
659.5				**1.5**		**1.5**	**0.0**
660.0				**2.0**		**2.0**	**0.0**
660.5				**2.5**		**2.5**	**0.0**
661.0				**3.0**		**3.0**	**0.0**
661.5				**3.5**		**3.5**	**0.0**
662.0				**4.0**		**4.0**	**0.0**
662.5				**4.5**		**4.5**	**0.0**
663.0				**5.0**		**5.0**	**0.0**
663.5				**5.5**		**5.5**	**0.0**
664.0				**6.0**		**6.0**	**0.0**
664.5				**6.5**		**6.5**	**0.0**
665.0				**7.0**		**7.0**	**0.0**
665.5				**7.5**		**7.5**	**0.0**
666.0				**8.0**		**8.0**	**0.0**
666.5				**8.5**		**8.5**	**0.0**
667.0				**9.0**		**9.0**	**0.0**
667.5	0.0	0.0	0.0	**9.5**	0.0	**9.5**	**0.0**
668.0	0.5	42.8	13.7	**10.0**	191.3	**10.0**	**13.7**
668.5	1.0	60.5	38.8	**10.5**	196.0	**10.5**	**38.8**
669.0	1.5	74.1	71.3	**11.0**	200.6	**11.0**	**71.3**
669.5	2.0	85.6	109.7	**11.5**	205.1	**11.5**	**85.6**
670.0	2.5	95.7	153.3	**12.0**	209.5	**12.0**	**95.7**
670.5	3.0	104.8	201.6	**12.5**	213.8	**12.5**	**104.8**
671.0	3.5	113.2	254.0	**13.0**	218.1	**13.0**	**113.2**
671.5	4.0	121.0	310.3	**13.5**	222.2	**13.5**	**121.0**
672.0	4.5	128.4	370.3	**14.0**	226.3	**14.0**	**128.4**
672.5	5.0	135.3	433.7	**14.5**	230.3	**14.5**	**135.3**

(1) Discharge estimated with orifice equation:
$Q = 0.6 \cdot A \cdot \sqrt{2gh}$
(2) Discharge estimated with broad-crested weir equation
$Q = 3.087 \cdot L \cdot H^{3/2}$
(3) Discharge is the minimum of orifice and weir flow

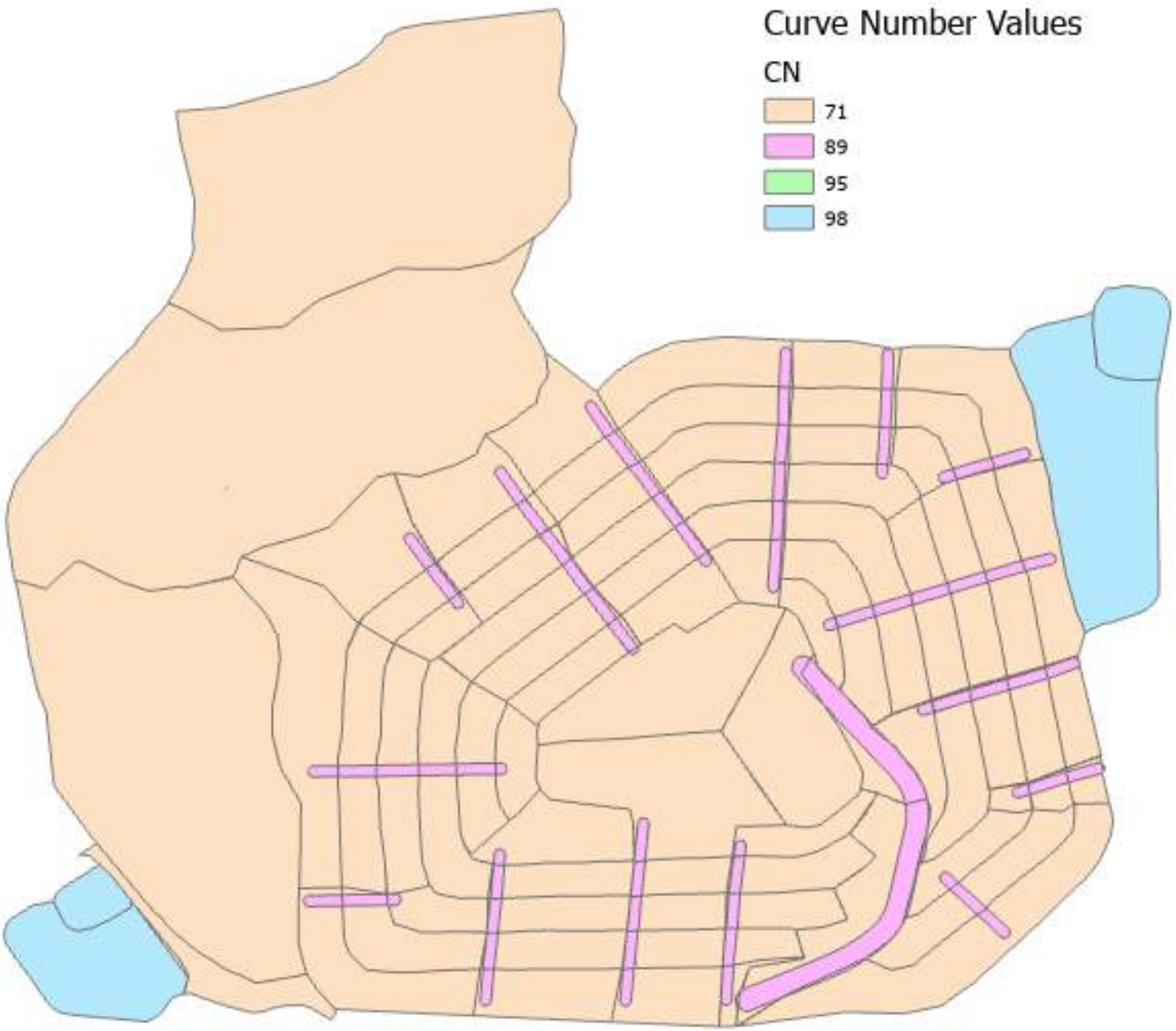
Attachment D

Land Cover Figures

Closure Turf Curve Number



Vegetative Cover Curve Number



Attachment E

PCSWMM Results

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.015)

Model Creator: Callie Olszak
Last Update:1/21/2026
Company: Stantec

WARNING 02: maximum depth increased for Node J87

****
Element Count
****
Number of rain gages 3
Number of subcatchments ... 82
Number of nodes 208
Number of links 207
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
SCS_Type_II_3.77in	SCS_Type_II_3.77in	INTENSITY	6 min.
SCS_Type_II_6.29in	SCS_Type_II_6.29in	INTENSITY	6 min.
SCS_Type_II_7.85in	SCS_Type_II_7.85in	INTENSITY	6 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
S1	1.78	278.30	0.00	1.0000	SCS_Type_II_7.85in	J77
S1_1	1.50	95.80	0.00	1.0000	SCS_Type_II_7.85in	J178
S1_2	0.80	89.50	0.00	1.0000	SCS_Type_II_7.85in	J101
S1_3	0.87	250.80	0.00	1.0000	SCS_Type_II_7.85in	J105
S1_4	0.84	241.00	0.00	1.0000	SCS_Type_II_7.85in	J98
S1_5	0.66	254.80	0.00	1.0000	SCS_Type_II_7.85in	J102
S1_6	0.65	253.90	0.00	1.0000	SCS_Type_II_7.85in	J104
S1_7	0.48	178.50	0.00	1.0000	SCS_Type_II_7.85in	J83
S10	0.57	173.00	0.00	1.0000	SCS_Type_II_7.85in	J149
S10_1	0.17	54.80	0.00	1.0000	SCS_Type_II_7.85in	J58

S10_2	0.26	86.90	0.00	1.0000	SCS_Type_II_7.85in
J188					
S10_4	0.24	81.40	0.00	1.0000	SCS_Type_II_7.85in
J56					
S11	1.07	250.00	0.00	1.0000	SCS_Type_II_7.85in
J63					
S11_2	0.61	261.60	0.00	1.0000	SCS_Type_II_7.85in
J18					
S11_4	0.71	262.00	0.00	1.0000	SCS_Type_II_7.85in
J60					
S11_5	0.69	263.50	0.00	1.0000	SCS_Type_II_7.85in
J62					
S12_2	1.31	274.70	0.00	1.0000	SCS_Type_II_7.85in
J73					
S12_3	1.25	272.20	0.00	1.0000	SCS_Type_II_7.85in
J75					
S12_6	1.33	275.80	0.00	1.0000	SCS_Type_II_7.85in
J71					
S12_8	1.44	273.90	0.00	1.0000	SCS_Type_II_7.85in
J16					
S13	5.01	442.00	0.00	1.0000	SCS_Type_II_7.85in
SU1					
S14	1.04	106.00	0.00	1.0000	SCS_Type_II_7.85in
SU2					
S16	13.35	1095.80	0.00	3.4000	SCS_Type_II_7.85in
J106					
S16_2	14.52	335.50	0.00	1.3000	SCS_Type_II_7.85in
J94					
S16_3	17.90	720.00	0.00	3.0000	SCS_Type_II_7.85in
J147					
S18_1	0.62	145.30	0.00	1.0000	SCS_Type_II_7.85in
J171					
S18_2	0.79	294.30	0.00	1.0000	SCS_Type_II_7.85in
J113					
S18_3	0.59	222.80	0.00	1.0000	SCS_Type_II_7.85in
J111					
S18_4	0.92	368.00	0.00	1.0000	SCS_Type_II_7.85in
J115					
S18_5	1.11	438.20	0.00	1.0000	SCS_Type_II_7.85in
J117					
S18_7	1.53	150.00	0.00	0.5000	SCS_Type_II_7.85in
J174					
S19_1	0.77	279.40	0.00	1.0000	SCS_Type_II_7.85in
J140					
S19_2	0.59	220.50	0.00	1.0000	SCS_Type_II_7.85in
J143					
S19_3	2.05	253.30	0.00	0.5000	SCS_Type_II_7.85in
J163					
S19_4	1.42	275.60	0.00	0.5000	SCS_Type_II_7.85in
J166					
S2	2.70	283.40	0.00	3.0000	SCS_Type_II_7.85in
J107					
S20_1	0.81	343.30	0.00	1.0000	SCS_Type_II_7.85in
J133					
S20_3	0.73	278.80	0.00	1.0000	SCS_Type_II_7.85in
J138					
S20_4	0.98	411.90	0.00	1.0000	SCS_Type_II_7.85in
J136					
S20_5	0.96	379.90	0.00	1.0000	SCS_Type_II_7.85in
J134					

S20_6	0.48	197.50	0.00	1.0000	SCS_Type_II_7.85in
J145					
S21_1	0.68	258.00	0.00	1.0000	SCS_Type_II_7.85in
J120					
S21_2	1.34	96.00	0.00	0.5000	SCS_Type_II_7.85in
J170					
S21_3	0.87	271.00	0.00	1.0000	SCS_Type_II_7.85in
J127					
S21_5	0.70	285.40	0.00	1.0000	SCS_Type_II_7.85in
J124					
S21_6	0.70	279.60	0.00	1.0000	SCS_Type_II_7.85in
J126					
S21_7	0.69	271.00	0.00	1.0000	SCS_Type_II_7.85in
J122					
S23_1	0.64	157.10	0.00	1.0000	SCS_Type_II_7.85in
J19					
S23_3	1.04	217.40	0.00	1.0000	SCS_Type_II_7.85in
J17					
S23_4	1.58	323.00	0.00	1.0000	SCS_Type_II_7.85in
J10					
S23_5	1.73	375.30	0.00	1.0000	SCS_Type_II_7.85in
J6					
S23_7	3.23	110.70	0.00	0.5000	SCS_Type_II_7.85in
J154					
S3	3.11	329.00	0.00	3.0000	SCS_Type_II_7.85in
J79					
S4	1.36	360.90	0.00	1.0000	SCS_Type_II_7.85in
J33					
S4_1	2.46	186.00	0.00	1.0000	SCS_Type_II_7.85in
J20					
S4_10	1.19	373.00	0.00	1.0000	SCS_Type_II_7.85in
J24					
S4_11	0.89	362.00	0.00	1.0000	SCS_Type_II_7.85in
J28					
S4_12	0.93	83.60	0.00	1.0000	SCS_Type_II_7.85in
J204					
S4_2	0.60	114.90	0.00	1.0000	SCS_Type_II_7.85in
J22					
S4_3	0.53	94.00	0.00	1.0000	SCS_Type_II_7.85in
J36					
S4_4	1.69	255.79	0.00	1.0000	SCS_Type_II_7.85in
J13					
S4_6	0.80	361.70	0.00	1.0000	SCS_Type_II_7.85in
J32					
S4_7	1.67	87.00	0.00	1.0000	SCS_Type_II_7.85in
J158					
S4_9	0.81	363.60	0.00	1.0000	SCS_Type_II_7.85in
J30					
S5	3.40	251.70	0.00	3.0000	SCS_Type_II_7.85in
J42					
S5_3	0.74	87.20	0.00	1.0000	SCS_Type_II_7.85in
J150					
S5_4	0.63	252.80	0.00	1.0000	SCS_Type_II_7.85in
J196					
S5_5	0.57	244.40	0.00	1.0000	SCS_Type_II_7.85in
J38					
S5_6	0.57	244.30	0.00	1.0000	SCS_Type_II_7.85in
J40					
S6	0.70	393.90	0.00	1.0000	SCS_Type_II_7.85in
J64					

S6_1	0.66	295.40	0.00	1.0000	SCS_Type_II_7.85in
J65					
S6_10	1.11	58.00	0.00	3.9000	SCS_Type_II_7.85in
J87					
S6_3	0.41	187.10	0.00	1.0000	SCS_Type_II_7.85in
J67					
S6_5	0.69	289.00	0.00	1.0000	SCS_Type_II_7.85in
J46					
S6_6	0.86	365.90	0.00	1.0000	SCS_Type_II_7.85in
J66					
S6_7	0.20	69.00	0.00	1.0000	SCS_Type_II_7.85in
J195					
S7_2	2.34	169.40	40.00	1.0000	SCS_Type_II_7.85in
J49					
S8	1.41	486.50	0.00	1.0000	SCS_Type_II_7.85in
J181					
S8_1	0.77	216.70	20.00	1.0000	SCS_Type_II_7.85in
J50					
S8_2	2.81	131.00	10.00	1.0000	SCS_Type_II_7.85in
J190					
S8_4	1.44	327.90	5.00	1.0000	SCS_Type_II_7.85in
J51					
S9	0.87	120.00	60.00	1.0000	SCS_Type_II_7.85in
J80					

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	707.22	2.00	0.0	
J10	JUNCTION	731.53	2.00	0.0	
J100	JUNCTION	677.70	3.50	0.0	
J101	JUNCTION	700.56	2.00	0.0	
J102	JUNCTION	701.29	2.00	0.0	
J103	JUNCTION	722.99	2.00	0.0	
J104	JUNCTION	723.73	2.00	0.0	
J105	JUNCTION	746.26	2.00	0.0	
J106	JUNCTION	626.84	4.00	0.0	
J107	JUNCTION	831.45	2.50	0.0	
J108	JUNCTION	827.93	2.50	0.0	
J109	JUNCTION	819.49	2.00	0.0	
J11	JUNCTION	680.55	3.50	0.0	
J110	JUNCTION	795.21	2.00	0.0	
J111	JUNCTION	773.18	2.00	0.0	
J112	JUNCTION	772.45	2.00	0.0	
J113	JUNCTION	749.82	2.00	0.0	
J114	JUNCTION	749.09	2.00	0.0	
J115	JUNCTION	727.14	2.00	0.0	
J116	JUNCTION	726.41	2.00	0.0	
J117	JUNCTION	704.49	2.00	0.0	
J118	JUNCTION	703.76	2.00	0.0	
J119	JUNCTION	709.47	2.00	0.0	
J12	JUNCTION	754.40	2.00	0.0	
J120	JUNCTION	710.21	2.00	0.0	
J121	JUNCTION	731.58	2.00	0.0	

J122	JUNCTION	732.31	2.00	0.0
J123	JUNCTION	753.86	2.00	0.0
J124	JUNCTION	754.60	2.00	0.0
J125	JUNCTION	776.15	2.00	0.0
J126	JUNCTION	776.89	2.00	0.0
J127	JUNCTION	800.07	2.00	0.0
J128	JUNCTION	728.17	3.50	0.0
J129	JUNCTION	692.97	3.50	0.0
J13	JUNCTION	755.14	2.00	0.0
J130	JUNCTION	689.86	3.50	0.0
J131	JUNCTION	817.05	2.50	0.0
J132	JUNCTION	732.01	3.50	0.0
J133	JUNCTION	803.90	2.00	0.0
J134	JUNCTION	780.73	2.00	0.0
J135	JUNCTION	779.99	2.00	0.0
J136	JUNCTION	758.78	2.00	0.0
J137	JUNCTION	758.04	2.00	0.0
J138	JUNCTION	736.04	2.00	0.0
J139	JUNCTION	735.30	2.00	0.0
J14	JUNCTION	733.75	3.50	0.0
J140	JUNCTION	713.70	2.00	0.0
J141	JUNCTION	712.96	2.00	0.0
J142	JUNCTION	716.45	2.00	0.0
J143	JUNCTION	717.19	2.00	0.0
J144	JUNCTION	739.43	2.00	0.0
J145	JUNCTION	740.03	2.00	0.0
J146	JUNCTION	824.69	2.00	0.0
J147	JUNCTION	620.32	4.00	0.0
J148	JUNCTION	651.61	16.79	0.0
J149	JUNCTION	812.47	2.00	0.0
J15	JUNCTION	778.03	2.00	0.0
J150	JUNCTION	723.37	2.00	0.0
J151	JUNCTION	732.09	3.50	0.0
J152	JUNCTION	658.86	13.74	0.0
J153	JUNCTION	694.84	3.50	0.0
J154	JUNCTION	696.21	3.50	0.0
J155	JUNCTION	698.13	2.00	0.0
J156	JUNCTION	683.24	3.50	0.0
J157	JUNCTION	698.36	2.00	0.0
J158	JUNCTION	694.99	2.00	0.0
J159	JUNCTION	675.83	3.50	0.0
J16	JUNCTION	675.49	3.50	0.0
J160	JUNCTION	673.04	3.50	0.0
J161	JUNCTION	694.75	2.00	0.0
J162	JUNCTION	802.13	2.00	0.0
J163	JUNCTION	698.70	2.00	0.0
J164	JUNCTION	698.47	2.00	0.0
J165	JUNCTION	803.17	2.00	0.0
J166	JUNCTION	695.59	2.00	0.0
J167	JUNCTION	695.35	2.00	0.0
J168	JUNCTION	799.47	2.00	0.0
J169	JUNCTION	692.23	2.00	0.0
J17	JUNCTION	778.76	2.00	0.0
J170	JUNCTION	692.47	2.00	0.0
J171	JUNCTION	818.89	2.00	0.0
J172	JUNCTION	795.94	2.00	0.0
J173	JUNCTION	686.06	2.00	0.0

J174	JUNCTION	686.30	2.00	0.0
J175	JUNCTION	745.66	2.00	0.0
J176	JUNCTION	683.44	2.00	0.0
J177	JUNCTION	683.20	2.00	0.0
J178	JUNCTION	677.46	2.00	0.0
J179	JUNCTION	677.24	2.00	0.0
J18	JUNCTION	685.60	3.50	0.0
J180	JUNCTION	811.87	2.00	0.0
J181	JUNCTION	788.16	2.00	0.0
J182	JUNCTION	681.29	2.00	0.0
J183	JUNCTION	681.03	2.00	0.0
J184	JUNCTION	777.89	2.00	0.0
J185	JUNCTION	753.64	2.00	0.0
J186	JUNCTION	691.40	2.00	0.0
J187	JUNCTION	691.14	2.00	0.0
J188	JUNCTION	701.21	2.00	0.0
J189	JUNCTION	700.95	2.00	0.0
J19	JUNCTION	802.73	2.00	0.0
J190	JUNCTION	721.73	2.00	0.0
J191	JUNCTION	721.45	2.00	0.0
J192	JUNCTION	814.09	2.00	0.0
J193	JUNCTION	792.34	2.00	0.0
J194	JUNCTION	748.84	2.00	0.0
J195	JUNCTION	732.36	2.00	0.0
J196	JUNCTION	739.90	2.00	0.0
J197	JUNCTION	723.08	2.00	0.0
J198	JUNCTION	786.78	2.00	0.0
J199	JUNCTION	710.40	2.00	0.0
J2	JUNCTION	715.88	3.50	0.0
J20	JUNCTION	662.78	2.00	0.0
J200	JUNCTION	694.28	3.50	0.0
J201	JUNCTION	696.41	3.50	0.0
J202	JUNCTION	696.17	3.50	0.0
J203	JUNCTION	684.62	3.50	0.0
J204	JUNCTION	710.69	2.00	0.0
J21	JUNCTION	689.25	3.50	0.0
J22	JUNCTION	739.40	2.00	0.0
J23	JUNCTION	738.80	2.00	0.0
J24	JUNCTION	711.52	2.00	0.0
J25	JUNCTION	710.78	2.00	0.0
J26	JUNCTION	704.85	3.50	0.0
J27	JUNCTION	725.46	2.00	0.0
J28	JUNCTION	726.19	2.00	0.0
J29	JUNCTION	748.69	2.00	0.0
J30	JUNCTION	749.42	2.00	0.0
J31	JUNCTION	767.69	2.00	0.0
J32	JUNCTION	768.42	2.00	0.0
J33	JUNCTION	787.37	3.50	0.0
J34	JUNCTION	670.77	2.00	0.0
J35	JUNCTION	739.16	2.00	0.0
J37	JUNCTION	762.12	2.00	0.0
J38	JUNCTION	762.85	2.00	0.0
J39	JUNCTION	782.18	2.00	0.0
J4	JUNCTION	687.43	4.00	0.0
J40	JUNCTION	782.91	2.00	0.0
J41	JUNCTION	802.41	2.00	0.0
J42	JUNCTION	803.14	2.00	0.0

J43	JUNCTION	671.75	2.00	0.0
J44	JUNCTION	737.94	2.50	0.0
J45	JUNCTION	659.31	9.99	0.0
J46	JUNCTION	772.31	2.00	0.0
J47	JUNCTION	830.60	2.50	0.0
J48	JUNCTION	750.92	2.50	0.0
J49	JUNCTION	770.27	2.50	0.0
J5	JUNCTION	692.62	3.50	0.0
J50	JUNCTION	758.99	2.00	0.0
J51	JUNCTION	758.40	2.00	0.0
J52	JUNCTION	738.49	2.00	0.0
J53	JUNCTION	737.76	2.00	0.0
J54	JUNCTION	695.41	3.50	0.0
J55	JUNCTION	718.04	2.00	0.0
J56	JUNCTION	718.77	2.00	0.0
J57	JUNCTION	743.69	2.00	0.0
J58	JUNCTION	744.29	2.00	0.0
J59	JUNCTION	705.38	2.00	0.0
J6	JUNCTION	707.96	2.00	0.0
J60	JUNCTION	706.12	2.00	0.0
J61	JUNCTION	730.09	2.00	0.0
J62	JUNCTION	730.82	2.00	0.0
J63	JUNCTION	754.37	2.00	0.0
J64	JUNCTION	778.48	2.00	0.0
J65	JUNCTION	814.69	2.00	0.0
J66	JUNCTION	793.07	2.00	0.0
J67	JUNCTION	749.58	2.00	0.0
J68	JUNCTION	732.07	2.00	0.0
J69	JUNCTION	726.51	3.50	0.0
J7	JUNCTION	717.52	3.50	0.0
J70	JUNCTION	692.70	2.00	0.0
J71	JUNCTION	693.44	2.00	0.0
J72	JUNCTION	716.48	2.00	0.0
J73	JUNCTION	717.22	2.00	0.0
J74	JUNCTION	740.05	2.00	0.0
J75	JUNCTION	740.78	2.00	0.0
J76	JUNCTION	763.73	2.00	0.0
J77	JUNCTION	764.47	2.00	0.0
J78	JUNCTION	787.42	2.00	0.0
J79	JUNCTION	824.68	2.00	0.0
J8	JUNCTION	730.79	2.00	0.0
J80	JUNCTION	800.16	2.50	0.0
J81	JUNCTION	771.58	2.00	0.0
J82	JUNCTION	671.75	3.50	0.0
J83	JUNCTION	721.11	2.00	0.0
J86	JUNCTION	657.51	9.99	0.0
J87	JUNCTION	686.60	3.00	0.0
J88	JUNCTION	670.18	3.00	0.0
J89	JUNCTION	664.57	2.00	0.0
J9	JUNCTION	686.74	3.50	0.0
J90	JUNCTION	652.25	13.75	0.0
J91	JUNCTION	649.00	9.99	0.0
J94	JUNCTION	628.56	4.00	0.0
J96	JUNCTION	720.51	2.00	0.0
J97	JUNCTION	670.36	4.00	0.0
J98	JUNCTION	696.82	2.00	0.0
J99	JUNCTION	696.09	2.00	0.0

J3	OUTFALL	648.36	0.00	0.0
J36	OUTFALL	656.94	0.00	0.0
J84	OUTFALL	648.36	3.00	0.0
J85	OUTFALL	656.94	4.00	0.0
J92	OUTFALL	619.86	4.00	0.0
J93	OUTFALL	626.31	4.00	0.0
J95	OUTFALL	627.85	4.00	0.0
SU1	STORAGE	654.00	18.50	0.0
SU2	STORAGE	650.00	18.40	0.0
SU3	STORAGE	660.00	14.00	0.0
SU4	STORAGE	658.00	14.60	0.0

****
Link Summary
****

Name	From Node	To Node	Type	Length	% Slope	Roughness
C1	J87	J43	CONDUIT	40.6	39.3476	0.0150
C1_1	J34	J89	CONDUIT	60.7	10.2759	0.0150
C1_2	J89	J20	CONDUIT	56.9	3.1480	0.0150
C1_4	J43	J34	CONDUIT	60.2	1.6286	0.0150
C10	J199	J26	CONDUIT	16.6	35.4993	0.0740
C10_1	J11	J100	CONDUIT	273.8	1.0408	0.0150
C10_2	J65	J192	CONDUIT	29.9	2.0037	0.0740
C10_3	J192	J66	CONDUIT	63.3	35.1859	0.0740
C100	J126	J125	CONDUIT	36.8	2.0113	0.0740
C101	J125	J124	CONDUIT	65.5	34.8703	0.0740
C102	J124	J123	CONDUIT	36.7	2.0157	0.0740
C103	J122	J121	CONDUIT	36.8	1.9825	0.0740
C104	J123	J122	CONDUIT	64.8	35.2694	0.0740
C105	J121	J120	CONDUIT	65.0	34.8061	0.0740
C106	J120	J119	CONDUIT	36.8	2.0107	0.0740
C107_2	J169	J9	CONDUIT	16.5	35.2590	0.0740
C107_3	J119	J170	CONDUIT	51.6	34.8560	0.0740
C107_4	J170	J169	CONDUIT	11.9	2.0189	0.0740
C109_1	J133	J165	CONDUIT	36.8	1.9857	0.0740
C109_2	J165	J134	CONDUIT	67.7	35.1148	0.0740

C11	J83	J96	CONDUIT	29.9	2.0044	0.0740
C11_3	J16	J97	CONDUIT	184.2	2.7861	0.0150
C11_4	J82	J97	CONDUIT	50.0	2.7811	0.0150
C110	J134	J135	CONDUIT	36.7	2.0146	0.0740
C111	J135	J136	CONDUIT	63.8	35.2432	0.0740
C112	J136	J137	CONDUIT	36.7	2.0151	0.0740
C113	J137	J138	CONDUIT	66.2	35.2592	0.0740
C114	J138	J139	CONDUIT	36.8	2.0107	0.0740
C115	J139	J140	CONDUIT	65.7	34.8178	0.0740
C116	J140	J141	CONDUIT	36.8	2.0118	0.0740
C117_1	J141	J166	CONDUIT	52.6	34.9705	0.0740
C117_3	J166	J167	CONDUIT	11.8	2.0257	0.0740
C117_4	J167	J130	CONDUIT	16.5	35.2830	0.0740
C119	J144	J143	CONDUIT	67.6	34.8388	0.0740
C12	J69	J7	CONDUIT	267.4	3.3639	0.0150
C12_1	J18	J16	CONDUIT	293.7	3.4444	0.0150
C120	J143	J142	CONDUIT	36.8	2.0129	0.0740
C121_1	J142	J163	CONDUIT	53.6	35.0959	0.0740
C121_3	J163	J164	CONDUIT	11.8	1.9479	0.0740
C121_4	J164	J129	CONDUIT	16.5	35.3553	0.0740
C123	J147	J92	CONDUIT	91.6	0.5020	0.0120
C13	J58	J57	CONDUIT	29.8	2.0159	0.0740
C13_2	J54	J18	CONDUIT	285.3	3.4410	0.0150
C13_4	J2	J54	CONDUIT	561.8	3.6460	0.0150
C14	J106	J93	CONDUIT	107.3	0.4941	0.0120
C14_1	J7	J26	CONDUIT	377.1	3.3619	0.0150
C14_10	J161	J21	CONDUIT	16.5	35.3553	0.0740
C14_2	J26	J4	CONDUIT	515.1	3.3838	0.0150
C14_4	J24	J25	CONDUIT	36.7	2.0173	0.0740
C14_5	J23	J24	CONDUIT	81.8	35.3553	0.0740

C14_6	J25	J158	CONDUIT	47.3	
35.3974	0.0740				
C14_7	J158	J161	CONDUIT	11.7	
2.0482	0.0740				
C15	J44	J128	CONDUIT	24.1	
44.3843	0.0150				
C15_1	J14	J151	CONDUIT	104.2	
1.5930	0.0150				
C15_3	J128	J69	CONDUIT	55.3	
3.0001	0.0150				
C15_4	J14	J132	CONDUIT	99.8	
1.7442	0.0150				
C15_5	J132	J128	CONDUIT	108.2	
3.5540	0.0150				
C15_6	J151	J2	CONDUIT	441.7	
3.6722	0.0150				
C16	J9	J203	CONDUIT	203.6	
1.0413	0.0200				
C16_1	J5	J21	CONDUIT	354.9	
0.9497	0.0200				
C16_2	J154	J153	CONDUIT	123.0	
1.1135	0.0200				
C16_6	J153	J200	CONDUIT	175.4	
0.3193	0.0120				
C16_7	J200	J5	CONDUIT	149.3	
1.1118	0.0200				
C17	J22	J23	CONDUIT	29.8	
2.0111	0.0740				
C17_3	J129	J130	CONDUIT	302.4	
1.0284	0.0200				
C17_4	J130	J9	CONDUIT	300.0	
1.0399	0.0200				
C18	J107	J47	CONDUIT	17.8	
4.7746	0.0150				
C18_2	J160	J82	CONDUIT	200.0	
0.6450	0.0150				
C18_3	J203	J156	CONDUIT	112.8	
1.2232	0.0120				
C18_5	J100	J159	CONDUIT	250.0	
0.7480	0.0150				
C18_8	J156	J11	CONDUIT	258.0	
1.0427	0.0150				
C19	J10	J8	CONDUIT	36.8	
2.0113	0.0740				
C2	J94	J95	CONDUIT	140.8	
0.5042	0.0120				
C2_13	J4	J87	CONDUIT	164.4	
0.5049	0.0120				
C2_3	J90	J148	CONDUIT	129.0	
0.4961	0.0120				
C2_4	J148	SU2	CONDUIT	61.3	
2.6293	0.0220				
C20	J8	J6	CONDUIT	68.5	
35.3670	0.0740				
C21	J6	J1	CONDUIT	36.7	
2.0173	0.0740				
C22	J201	J154	CONDUIT	122.9	
0.1628	0.0200				
C23	J145	J144	CONDUIT	30.1	
1.9964	0.0740				

C24		J201	J202	CONDUIT	141.2
0.1699	0.0200				
C24_1		J33	J198	CONDUIT	29.8
1.9803	0.0740				
C24_2		J198	J32	CONDUIT	55.2
35.2977	0.0740				
C25		J46	J81	CONDUIT	36.5
1.9999	0.0740				
C26		J81	J67	CONDUIT	65.5
35.6287	0.0740				
C27		J32	J31	CONDUIT	36.5
1.9993	0.0740				
C28		J31	J30	CONDUIT	55.1
35.1749	0.0740				
C29		J30	J29	CONDUIT	36.5
1.9988	0.0740				
C3		J20	SU3	CONDUIT	263.8
1.0540	0.0010				
C3_7		J97	J88	CONDUIT	36.0
0.5004	0.0120				
C30		J29	J28	CONDUIT	67.6
35.3024	0.0740				
C31		J28	J27	CONDUIT	36.6
1.9922	0.0740				
C32		J202	J129	CONDUIT	155.9
2.0532	0.0200				
C32_2		J27	J204	CONDUIT	45.0
34.7819	0.0740				
C32_3		J204	J199	CONDUIT	12.1
2.4053	0.0740				
C33_1		J67	J194	CONDUIT	37.0
1.9993	0.0740				
C33_3		J194	J195	CONDUIT	52.1
33.3435	0.0740				
C33_4		J195	J68	CONDUIT	12.6
2.3095	0.0740				
C34		J42	J41	CONDUIT	36.7
1.9884	0.0740				
C35		J41	J40	CONDUIT	58.7
35.2064	0.0740				
C36		J40	J39	CONDUIT	36.5
1.9993	0.0740				
C37		J39	J38	CONDUIT	58.3
35.1508	0.0740				
C38		J38	J37	CONDUIT	36.5
2.0009	0.0740				
C39		J159	J160	CONDUIT	227.8
1.2249	0.0120				
C39_1		J37	J196	CONDUIT	66.5
35.4751	0.0740				
C39_2		J196	J35	CONDUIT	36.9
2.0080	0.0740				
C39_3		J21	J4	CONDUIT	152.8
1.1916	0.0200				
C4		J88	SU1	CONDUIT	126.8
12.8701	0.0010				
C40		J68	J69	CONDUIT	16.6
35.5955	0.0740				
C41_1		J35	J150	CONDUIT	49.2
33.9014	0.0740				

C41_3	J150	J197	CONDUIT	12.4	2.3450	0.0740
C41_4	J197	J7	CONDUIT	16.6	35.5713	0.0740
C42_1	J66	J193	CONDUIT	36.6	1.9944	0.0740
C42_2	J193	J46	CONDUIT	60.4	35.1710	0.0740
C43_1	J48	J44	CONDUIT	182.6	7.1269	0.0150
C43_3	J108	J131	CONDUIT	141.0	7.7349	0.0150
C43_4	J49	J48	CONDUIT	251.0	7.7349	0.0150
C43_5	J80	J49	CONDUIT	387.5	7.7354	0.0150
C43_6	J131	J80	CONDUIT	219.1	7.7351	0.0150
C45	J79	J133	CONDUIT	62.5	35.2726	0.0740
C45_4	J47	J108	CONDUIT	35.2	7.5995	0.0150
C46	J146	J42	CONDUIT	64.2	35.6220	0.0740
C47_1	J149	J180	CONDUIT	30.2	1.9878	0.0740
C47_3	J180	J181	CONDUIT	70.0	35.9704	0.0740
C47_4	J181	J78	CONDUIT	36.8	2.0096	0.0740
C48	J50	J51	CONDUIT	29.8	1.9829	0.0740
C49	J51	J52	CONDUIT	60.0	35.2095	0.0740
C5_1	J19	J162	CONDUIT	30.2	1.9878	0.0740
C5_2	J162	J17	CONDUIT	69.8	35.5321	0.0740
C5_4	J155	J5	CONDUIT	16.5	35.4035	0.0740
C5_5	J1	J157	CONDUIT	26.4	35.6573	0.0740
C5_6	J157	J155	CONDUIT	11.6	1.9763	0.0740
C50	J52	J53	CONDUIT	36.5	2.0031	0.0740
C51_1	J53	J190	CONDUIT	48.3	35.1662	0.0740
C51_3	J190	J191	CONDUIT	11.9	2.3457	0.0740
C51_4	J191	J2	CONDUIT	16.6	35.5951	0.0740
C52	J57	J56	CONDUIT	74.9	35.2704	0.0740
C53	J56	J55	CONDUIT	36.3	2.0092	0.0740
C54_1	J55	J188	CONDUIT	50.1	35.6494	0.0740
C54_3	J188	J189	CONDUIT	11.7	2.2190	0.0740

C54_4	J189	J54	CONDUIT	16.5	35.5479	0.0740
C55_1	J45	J152	CONDUIT	90.0	0.5000	0.0120
C55_2	J152	SU4	CONDUIT	54.5	1.5777	0.0220
C56	J86	J85	CONDUIT	114.0	0.5000	0.0120
C6	J17	J15	CONDUIT	36.8	1.9846	0.0740
C60_1	J64	J184	CONDUIT	29.6	1.9970	0.0740
C60_2	J184	J63	CONDUIT	71.2	35.0260	0.0740
C61_1	J63	J185	CONDUIT	36.4	2.0048	0.0740
C61_2	J185	J62	CONDUIT	68.5	35.3031	0.0740
C62	J62	J61	CONDUIT	36.4	2.0076	0.0740
C63	J61	J60	CONDUIT	71.5	35.6117	0.0740
C64_1	J59	J186	CONDUIT	41.7	35.6230	0.0740
C64_3	J186	J187	CONDUIT	11.7	2.2190	0.0740
C64_4	J187	J18	CONDUIT	16.5	35.5479	0.0740
C65	J60	J59	CONDUIT	36.6	2.0223	0.0740
C69	J78	J77	CONDUIT	68.5	35.5763	0.0740
C7	J15	J13	CONDUIT	68.3	35.5534	0.0740
C70	J77	J76	CONDUIT	36.8	2.0124	0.0740
C71	J76	J75	CONDUIT	68.5	35.5763	0.0740
C72	J75	J74	CONDUIT	36.6	1.9922	0.0740
C73	J74	J73	CONDUIT	68.6	35.2685	0.0740
C74	J73	J72	CONDUIT	36.7	2.0157	0.0740
C75	J72	J71	CONDUIT	68.5	35.6983	0.0740
C76	J71	J70	CONDUIT	36.7	2.0173	0.0740
C77_1	J70	J182	CONDUIT	34.1	35.4602	0.0740
C77_3	J182	J183	CONDUIT	11.8	2.2077	0.0740
C77_4	J183	J16	CONDUIT	16.5	35.5479	0.0740
C78	J96	J98	CONDUIT	70.6	35.6148	0.0740
C79	J98	J99	CONDUIT	36.8	1.9819	0.0740
C8	J13	J12	CONDUIT	36.8	2.0113	0.0740

C80_1		J99	J178	CONDUIT	55.9
35.3411	0.0740				
C80_3		J178	J179	CONDUIT	11.7
1.8791	0.0740				
C80_4		J179	J82	CONDUIT	16.5
35.2111	0.0740				
C81_1		J105	J175	CONDUIT	29.9
2.0064	0.0740				
C81_2		J175	J104	CONDUIT	66.4
34.9728	0.0740				
C82		J104	J103	CONDUIT	36.7
2.0173	0.0740				
C83		J103	J102	CONDUIT	65.2
35.3065	0.0740				
C84		J102	J101	CONDUIT	36.8
1.9862	0.0740				
C85_1		J101	J176	CONDUIT	51.9
34.9499	0.0740				
C85_3		J176	J177	CONDUIT	11.9
2.0223	0.0740				
C85_4		J177	J100	CONDUIT	16.5
35.3313	0.0740				
C88_1		J109	J171	CONDUIT	30.0
2.0031	0.0740				
C88_3		J171	J172	CONDUIT	69.7
34.8602	0.0740				
C88_4		J172	J110	CONDUIT	36.7
1.9890	0.0740				
C89		J110	J111	CONDUIT	66.8
34.9393	0.0740				
C9		J12	J10	CONDUIT	68.5
35.4367	0.0740				
C90		J111	J112	CONDUIT	36.6
1.9928	0.0740				
C91		J112	J113	CONDUIT	67.7
35.4552	0.0740				
C92		J113	J114	CONDUIT	36.6
1.9922	0.0740				
C93		J114	J115	CONDUIT	65.6
35.4888	0.0740				
C94		J115	J116	CONDUIT	36.7
1.9873	0.0740				
C95		J116	J117	CONDUIT	66.3
35.0437	0.0740				
C96		J117	J118	CONDUIT	36.7
1.9879	0.0740				
C97_2		J173	J11	CONDUIT	16.5
35.4035	0.0740				
C97_3		J118	J174	CONDUIT	52.8
35.0394	0.0740				
C97_4		J174	J173	CONDUIT	11.8
2.0326	0.0740				
C99_1		J127	J168	CONDUIT	30.0
1.9991	0.0740				
C99_2		J168	J126	CONDUIT	68.5
34.9150	0.0740				
OL1_2		J91	J84	CONDUIT	128.0
0.5039	0.0120				
C33		SU2	J3	WEIR	
W1		SU1	SU2	WEIR	

W2	SU3	SU4	WEIR
W4	SU4	J36	WEIR
C2_1	SU1	J90	OUTLET
C41	SU3	J45	OUTLET
OL1	SU4	J86	OUTLET
OL1_1	SU2	J91	OUTLET

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	TRAPEZOIDAL	2.00	52.00	1.59	32.00	1	4407.02
C1_1	TRAPEZOIDAL	2.00	52.00	1.59	32.00	1	2252.14
C1_2	TRAPEZOIDAL	2.00	80.00	1.33	60.00	1	1699.69
C1_4	TRAPEZOIDAL	2.00	52.00	1.59	32.00	1	896.60
C10	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	270.41
C10_1	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1	798.34
C10_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	64.24
C10_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	269.21
C100	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	64.36
C101	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	268.00
C102	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	64.43
C103	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	63.90
C104	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	269.53
C105	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	267.75
C106	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	64.36
C107_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	269.49
C107_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	267.95
C107_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	64.49
C109_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	63.95
C109_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	268.94
C11	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1	64.25

C11_3	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1306.16						
C11_4	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1304.97						
C110	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.42						
C111	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.43						
C112	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.43						
C113	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.49						
C114	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.36						
C115	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
267.80						
C116	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.37						
C117_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.39						
C117_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.60						
C117_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.58						
C119	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
267.88						
C12	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1435.22						
C12_1	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1452.30						
C120	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.39						
C121_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.87						
C121_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.34						
C121_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.86						
C123	CIRCULAR	4.00	12.57	1.00	4.00	1
110.25						
C13	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.44						
C13_2	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1451.57						
C13_4	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1494.18						
C14	CIRCULAR	4.00	12.57	1.00	4.00	1
109.39						
C14_1	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1434.79						
C14_10	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.86						
C14_2	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1439.45						
C14_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.46						
C14_5	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.86						
C14_6	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.02						

C14_7	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.95						
C15	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
1898.96						
C15_1	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
987.64						
C15_3	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1355.38						
C15_4	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1033.47						
C15_5	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1475.21						
C15_6	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
1499.55						
C16	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
598.89						
C16_1	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
571.94						
C16_2	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
619.30						
C16_6	RECT_CLOSED	3.00	12.00	0.86	4.00	1
75.76						
C16_7	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
618.82						
C17	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.36						
C17_3	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
595.16						
C17_4	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
598.50						
C18	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
622.83						
C18_2	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
628.46						
C18_3	RECT_CLOSED	3.00	12.00	0.86	4.00	2
148.30						
C18_5	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
676.79						
C18_8	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
799.05						
C19	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.36						
C2	CIRCULAR	4.00	12.57	1.00	4.00	1
110.50						
C2_13	RECT_CLOSED	3.00	18.00	1.00	6.00	2
158.39						
C2_3	CIRCULAR	4.00	12.57	1.00	4.00	1
109.61						
C2_4	DUMMY	0.00	0.00	0.00	0.00	1
0.00						
C20	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.90						
C21	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.46						
C22	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
236.78						
C23	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.13						
C24	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
241.94						

C24_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.87						
C24_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.64						
C25	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.18						
C26	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.90						
C27	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.17						
C28	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.17						
C29	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.16						
C3	DUMMY	0.00	0.00	0.00	0.00	1
0.00						
C3_7	RECT_CLOSED	3.00	18.00	1.00	6.00	3
157.68						
C30	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.66						
C31	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.06						
C32	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
840.95						
C32_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
267.66						
C32_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
70.39						
C33_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.17						
C33_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
262.07						
C33_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
68.97						
C34	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.00						
C35	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.29						
C36	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.17						
C37	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.08						
C38	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.20						
C39	RECT_CLOSED	3.00	15.00	0.94	5.00	2
196.92						
C39_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.32						
C39_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.31						
C39_3	TRAPEZOIDAL	3.50	50.75	1.94	25.00	1
640.64						
C4	DUMMY	0.00	0.00	0.00	0.00	1
0.00						
C40	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.77						
C41_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
264.25						
C41_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
69.50						

C41_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.68						
C42_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.09						
C42_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.15						
C43_1	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
760.94						
C43_3	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
792.74						
C43_4	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
792.74						
C43_5	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
792.76						
C43_6	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
792.75						
C45	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.54						
C45_4	TRAPEZOIDAL	2.50	23.75	1.33	17.00	1
785.77						
C46	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.87						
C47_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.99						
C47_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
272.20						
C47_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.34						
C48	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.91						
C49	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.30						
C5_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.99						
C5_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.53						
C5_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.04						
C5_5	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
271.01						
C5_6	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.80						
C50	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.23						
C51_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.14						
C51_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
69.51						
C51_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.77						
C52	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.53						
C53	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.33						
C54_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.98						
C54_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
67.61						
C54_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.59						

C55_1	CIRCULAR	4.00	12.57	1.00	4.00	1
110.04						
C55_2	DUMMY	0.00	0.00	0.00	0.00	1
0.00						
C56	CIRCULAR	4.00	12.57	1.00	4.00	1
110.04						
C6	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.94						
C60_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.14						
C60_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.60						
C61_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.26						
C61_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.66						
C62	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.30						
C63	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.84						
C64_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.88						
C64_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
67.61						
C64_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.59						
C65	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.54						
C69	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.70						
C7	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.61						
C70	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.38						
C71	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.70						
C72	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.06						
C73	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.53						
C74	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.43						
C75	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
271.17						
C76	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.46						
C77_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.26						
C77_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
67.43						
C77_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.59						
C78	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.85						
C79	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.89						
C8	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.36						
C80_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.80						

C80_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
62.21						
C80_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.31						
C81_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.29						
C81_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.40						
C82	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.46						
C83	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.67						
C84	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.96						
C85_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.31						
C85_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.54						
C85_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
269.77						
C88_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.23						
C88_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
267.96						
C88_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.01						
C89	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.27						
C9	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.17						
C90	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.07						
C91	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.24						
C92	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.06						
C93	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.37						
C94	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.98						
C95	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.67						
C96	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
63.99						
C97_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
270.04						
C97_3	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.65						
C97_4	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.70						
C99_1	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
64.17						
C99_2	TRAPEZOIDAL	2.00	20.00	1.20	16.00	1
268.17						
OL1_2	CIRCULAR	3.00	7.07	0.75	3.00	1
51.29						

****

NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
  Rainfall/Runoff ..... YES
  RDII ..... NO
  Snowmelt ..... NO
  Groundwater ..... NO
  Flow Routing ..... YES
  Ponding Allowed ..... NO
  Water Quality ..... NO
Infiltration Method ..... CURVE_NUMBER
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 10/18/2022 00:00:00
Ending Date 10/19/2022 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00
Wet Time Step 00:05:00
Dry Time Step 00:05:00
Routing Time Step ..... 5.00 sec
Variable Time Step ..... YES
Maximum Trials 8
Number of Threads 8
Head Tolerance ..... 0.005000 ft

**********	Volume	Depth
Runoff Quantity Continuity	acre-feet	inches
**********	---------	-------
Total Precipitation	88.641	7.850
Evaporation Loss	0.000	0.000
Infiltration Loss	13.807	1.223
Surface Runoff	72.181	6.392
Final Storage	2.768	0.245
Continuity Error (%)	-0.130	

**********	Volume	Volume
Flow Routing Continuity	acre-feet	10^6 gal
**********	---------	---------
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	72.184	23.522
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	44.674	14.558
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	9.276	3.023

Final Stored Volume 36.793 11.989
Continuity Error (%) ..... -0.009

****
Time-Step Critical Elements
****
Link C15 (97.94%)

****
Highest Flow Instability Indexes
****
Link C55_1 (1)

****
Routing Time Step Summary
****
Minimum Time Step : 0.74 sec
Average Time Step : 2.22 sec
Maximum Time Step : 5.00 sec
Percent in Steady State : 0.00
Average Iterations per Step : 2.00
Percent Not Converging : 0.00
Time Step Frequencies :
5.000 - 3.155 sec : 9.65 %
3.155 - 1.991 sec : 51.39 %
1.991 - 1.256 sec : 27.58 %
1.256 - 0.792 sec : 9.03 %
0.792 - 0.500 sec : 2.36 %

****
Subcatchment Runoff Summary
****

Subcatchment	Precip in	Runon in	Evap in	Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
S1	7.85	0.00	0.00	0.49	0.00	7.18	7.18	0.35	12.05	0.915
S1_1	7.85	0.00	0.00	0.49	0.00	7.07	7.07	0.29	7.30	0.901
S1_2	7.85	0.00	0.00	0.49	0.00	7.15	7.15	0.15	4.88	0.910
S1_3	7.85	0.00	0.00	0.49	0.00	7.23	7.23	0.17	6.75	0.921
S1_4	7.85	0.00	0.00	0.59	0.00	7.13	7.13	0.16	6.43	0.908
S1_5	7.85	0.00	0.00	0.59	0.00	7.15	7.15	0.13	5.50	0.911

S1_6			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.13	5.47	0.911			
S1_7			7.85	0.00	0.00	0.49	0.00
7.24	7.24	0.09	3.99	0.923			
S10			7.85	0.00	0.00	0.49	0.00
7.23	7.23	0.11	4.47	0.921			
S10_1			7.85	0.00	0.00	0.59	0.00
7.14	7.14	0.03	1.36	0.909			
S10_2			7.85	0.00	0.00	0.69	0.00
7.04	7.04	0.05	2.05	0.897			
S10_4			7.85	0.00	0.00	0.69	0.00
7.04	7.04	0.05	1.90	0.897			
S11			7.85	0.00	0.00	0.49	0.00
7.21	7.21	0.21	7.85	0.919			
S11_2			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.12	5.25	0.911			
S11_4			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.14	5.85	0.910			
S11_5			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.13	5.74	0.911			
S12_2			7.85	0.00	0.00	0.49	0.00
7.20	7.20	0.26	9.47	0.918			
S12_3			7.85	0.00	0.00	0.49	0.00
7.21	7.21	0.25	9.10	0.918			
S12_6			7.85	0.00	0.00	0.49	0.00
7.20	7.20	0.26	9.55	0.918			
S12_8			7.85	0.00	0.00	0.49	0.00
7.20	7.20	0.28	10.19	0.917			
S13			7.85	0.00	0.00	0.20	0.00
7.46	7.46	1.02	32.83	0.950			
S14			7.85	0.00	0.00	0.20	0.00
7.47	7.47	0.21	7.10	0.952			
S16			7.85	0.00	0.00	2.69	0.00
4.96	4.96	1.80	55.84	0.632			
S16_2			7.85	0.00	0.00	2.69	0.00
4.62	4.62	1.82	20.31	0.588			
S16_3			7.85	0.00	0.00	2.69	0.00
4.86	4.86	2.36	49.71	0.619			
S18_1			7.85	0.00	0.00	0.59	0.00
7.12	7.12	0.12	4.54	0.906			
S18_2			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.15	6.56	0.910			
S18_3			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.11	4.90	0.910			
S18_4			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.18	7.82	0.923			
S18_5			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.22	9.41	0.923			
S18_7			7.85	0.00	0.00	0.49	0.00
7.09	7.09	0.29	7.72	0.903			
S19_1			7.85	0.00	0.00	0.59	0.00
7.14	7.14	0.15	6.33	0.910			
S19_2			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.11	4.89	0.910			
S19_3			7.85	0.00	0.00	0.49	0.00
7.12	7.12	0.40	11.41	0.907			
S19_4			7.85	0.00	0.00	0.49	0.00
7.17	7.17	0.28	9.25	0.913			
S2			7.85	0.00	0.00	0.49	0.00
7.19	7.19	0.53	18.91	0.916			

S20_1			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.16	6.98	0.924			
S20_3			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.14	6.07	0.911			
S20_4			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.19	8.44	0.924			
S20_5			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.19	8.16	0.923			
S20_6			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.09	4.11	0.923			
S21_1			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.13	5.64	0.910			
S21_2			7.85	0.00	0.00	0.49	0.00
7.03	7.03	0.26	5.81	0.896			
S21_3			7.85	0.00	0.00	0.49	0.00
7.23	7.23	0.17	6.91	0.921			
S21_5			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.14	5.93	0.911			
S21_6			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.14	5.90	0.911			
S21_7			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.13	5.77	0.911			
S23_1			7.85	0.00	0.00	0.49	0.00
7.22	7.22	0.12	4.71	0.919			
S23_3			7.85	0.00	0.00	0.49	0.00
7.20	7.20	0.20	7.48	0.918			
S23_4			7.85	0.00	0.00	0.49	0.00
7.20	7.20	0.31	11.35	0.918			
S23_5			7.85	0.00	0.00	0.49	0.00
7.21	7.21	0.34	12.58	0.918			
S23_7			7.85	0.00	0.00	0.49	0.00
6.85	6.85	0.60	9.15	0.873			
S3			7.85	0.00	0.00	0.49	0.00
7.19	7.19	0.61	21.84	0.916			
S4			7.85	0.00	0.00	0.49	0.00
7.22	7.22	0.27	10.29	0.920			
S4_1			7.85	0.00	0.00	0.20	0.00
7.44	7.44	0.50	15.36	0.948			
S4_10			7.85	0.00	0.00	0.49	0.00
7.23	7.23	0.23	9.48	0.921			
S4_11			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.18	7.62	0.923			
S4_12			7.85	0.00	0.00	0.49	0.00
7.12	7.12	0.18	5.23	0.907			
S4_2			7.85	0.00	0.00	0.49	0.00
7.20	7.20	0.12	4.24	0.917			
S4_3			7.85	0.00	0.00	0.20	0.00
7.52	7.52	0.11	4.06	0.958			
S4_4			7.85	0.00	0.00	0.49	0.00
7.18	7.18	0.33	11.31	0.914			
S4_6			7.85	0.00	0.00	0.59	0.00
7.16	7.16	0.15	6.93	0.912			
S4_7			7.85	0.00	0.00	0.49	0.00
7.04	7.04	0.32	7.36	0.897			
S4_9			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.16	7.07	0.924			
S5			7.85	0.00	0.00	0.49	0.00
7.16	7.16	0.66	21.69	0.912			
S5_3			7.85	0.00	0.00	0.49	0.00
7.15	7.15	0.14	4.62	0.911			

S5_4			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.12	5.29	0.911			
S5_5			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.11	4.89	0.911			
S5_6			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.11	4.89	0.911			
S6			7.85	0.00	0.00	0.49	0.00
7.26	7.26	0.14	6.42	0.925			
S6_1			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.13	5.78	0.924			
S6_10			7.85	0.00	0.00	0.49	0.00
7.14	7.14	0.21	6.58	0.909			
S6_3			7.85	0.00	0.00	0.59	0.00
7.16	7.16	0.08	3.56	0.912			
S6_5			7.85	0.00	0.00	0.59	0.00
7.15	7.15	0.13	5.89	0.911			
S6_6			7.85	0.00	0.00	0.49	0.00
7.25	7.25	0.17	7.43	0.924			
S6_7			7.85	0.00	0.00	0.69	0.00
7.05	7.05	0.04	1.60	0.897			
S7_2			7.85	0.00	0.00	0.47	3.12
4.12	7.24	0.46	17.35	0.923			
S8			7.85	0.00	0.00	0.49	0.00
7.24	7.24	0.28	11.53	0.922			
S8_1			7.85	0.00	0.00	0.39	1.56
5.79	7.35	0.15	6.74	0.937			
S8_2			7.85	0.00	0.00	0.44	0.78
6.33	7.11	0.54	13.23	0.906			
S8_4			7.85	0.00	0.00	0.47	0.39
6.85	7.24	0.28	10.73	0.923			
S9			7.85	0.00	0.00	0.35	4.69
2.74	7.43	0.18	8.32	0.946			

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	0.16	0.85	708.07	0 12:00	0.85
J10	JUNCTION	0.38	1.49	733.02	0 12:00	1.49
J100	JUNCTION	0.41	1.93	679.63	0 12:00	1.92
J101	JUNCTION	0.10	0.57	701.13	0 11:55	0.57
J102	JUNCTION	0.25	1.19	702.48	0 11:54	1.19
J103	JUNCTION	0.07	0.41	723.40	0 11:54	0.41
J104	JUNCTION	0.21	1.02	724.75	0 11:54	1.02
J105	JUNCTION	0.16	0.78	747.04	0 11:54	0.78
J106	JUNCTION	0.47	2.33	629.17	0 12:00	2.33
J107	JUNCTION	0.10	0.51	831.96	0 12:00	0.51
J108	JUNCTION	0.08	0.45	828.38	0 12:00	0.45
J109	JUNCTION	0.00	0.00	819.49	0 00:00	0.00
J11	JUNCTION	0.33	1.68	682.23	0 12:00	1.68
J110	JUNCTION	0.04	0.24	795.45	0 12:00	0.24
J111	JUNCTION	0.19	0.92	774.10	0 11:55	0.92

J112	JUNCTION	0.06	0.35	772.80	0	11:55	0.35
J113	JUNCTION	0.24	1.12	750.94	0	11:55	1.12
J114	JUNCTION	0.08	0.47	749.56	0	11:55	0.47
J115	JUNCTION	0.30	1.30	728.44	0	11:55	1.30
J116	JUNCTION	0.10	0.59	727.00	0	11:55	0.59
J117	JUNCTION	0.35	1.46	705.95	0	11:55	1.46
J118	JUNCTION	0.12	0.70	704.46	0	11:55	0.70
J119	JUNCTION	0.11	0.67	710.14	0	11:55	0.67
J12	JUNCTION	0.11	0.59	754.99	0	12:00	0.59
J120	JUNCTION	0.33	1.42	711.63	0	11:55	1.42
J121	JUNCTION	0.10	0.60	732.18	0	11:55	0.60
J122	JUNCTION	0.30	1.32	733.63	0	11:55	1.32
J123	JUNCTION	0.08	0.52	754.38	0	11:55	0.52
J124	JUNCTION	0.26	1.19	755.79	0	11:54	1.19
J125	JUNCTION	0.07	0.42	776.57	0	11:54	0.42
J126	JUNCTION	0.22	1.04	777.93	0	11:54	1.04
J127	JUNCTION	0.16	0.79	800.86	0	11:54	0.79
J128	JUNCTION	0.12	0.67	728.84	0	11:55	0.67
J129	JUNCTION	0.13	0.69	693.66	0	12:00	0.69
J13	JUNCTION	0.32	1.30	756.44	0	12:00	1.30
J130	JUNCTION	0.28	1.43	691.29	0	12:00	1.43
J131	JUNCTION	0.08	0.45	817.50	0	12:00	0.45
J132	JUNCTION	0.00	0.00	732.01	0	00:00	0.00
J133	JUNCTION	0.35	1.39	805.29	0	12:00	1.39
J134	JUNCTION	0.38	1.51	782.24	0	12:00	1.51
J135	JUNCTION	0.13	0.74	780.73	0	12:00	0.74
J136	JUNCTION	0.42	1.62	760.40	0	11:55	1.62
J137	JUNCTION	0.14	0.82	758.86	0	11:55	0.82
J138	JUNCTION	0.44	1.69	737.73	0	11:55	1.69
J139	JUNCTION	0.16	0.88	736.18	0	11:55	0.88
J14	JUNCTION	0.00	0.00	733.75	0	00:00	0.00
J140	JUNCTION	0.46	1.76	715.46	0	11:55	1.76
J141	JUNCTION	0.16	0.93	713.89	0	11:55	0.93
J142	JUNCTION	0.05	0.35	716.80	0	11:54	0.35
J143	JUNCTION	0.18	0.91	718.10	0	11:54	0.91
J144	JUNCTION	0.03	0.22	739.65	0	11:54	0.22
J145	JUNCTION	0.11	0.65	740.68	0	11:54	0.65
J146	JUNCTION	0.00	0.00	824.69	0	00:00	0.00
J147	JUNCTION	0.53	2.18	622.50	0	12:00	2.18
J148	JUNCTION	0.00	0.05	651.66	0	12:58	0.05
J149	JUNCTION	0.13	0.67	813.14	0	11:54	0.67
J15	JUNCTION	0.07	0.41	778.44	0	12:00	0.41
J150	JUNCTION	0.35	1.30	724.67	0	12:00	1.30
J151	JUNCTION	0.00	0.00	732.09	0	00:00	0.00
J152	JUNCTION	0.01	0.11	658.97	0	12:26	0.11
J153	JUNCTION	0.24	0.92	695.76	0	12:02	0.92
J154	JUNCTION	0.13	0.43	696.64	0	12:00	0.42
J155	JUNCTION	0.16	0.85	698.98	0	12:00	0.85
J156	JUNCTION	0.29	1.46	684.70	0	12:00	1.46
J157	JUNCTION	0.38	1.40	699.76	0	12:00	1.40
J158	JUNCTION	0.28	0.97	695.96	0	12:00	0.97
J159	JUNCTION	0.22	1.80	677.63	0	12:00	1.80
J16	JUNCTION	0.23	1.20	676.69	0	11:57	1.20
J160	JUNCTION	0.42	1.99	675.03	0	12:00	1.99
J161	JUNCTION	0.11	0.55	695.30	0	12:00	0.55
J162	JUNCTION	0.04	0.24	802.37	0	12:00	0.24
J163	JUNCTION	0.27	0.96	699.66	0	12:00	0.96

J164	JUNCTION	0.10	0.54	699.01	0	12:00	0.54
J165	JUNCTION	0.12	0.65	803.82	0	12:00	0.65
J166	JUNCTION	0.42	1.60	697.19	0	11:55	1.60
J167	JUNCTION	0.18	1.00	696.35	0	11:55	1.00
J168	JUNCTION	0.05	0.30	799.77	0	11:54	0.30
J169	JUNCTION	0.13	0.73	692.96	0	11:55	0.73
J17	JUNCTION	0.23	1.03	779.79	0	12:00	1.03
J170	JUNCTION	0.33	1.23	693.70	0	11:55	1.23
J171	JUNCTION	0.04	0.24	819.13	0	12:00	0.24
J172	JUNCTION	0.13	0.70	796.64	0	12:00	0.70
J173	JUNCTION	0.14	0.77	686.83	0	11:56	0.77
J174	JUNCTION	0.35	1.30	687.60	0	11:56	1.30
J175	JUNCTION	0.05	0.30	745.96	0	11:54	0.30
J176	JUNCTION	0.26	1.00	684.44	0	11:55	1.00
J177	JUNCTION	0.10	0.57	683.77	0	11:55	0.57
J178	JUNCTION	0.26	0.92	678.38	0	12:00	0.92
J179	JUNCTION	0.09	0.50	677.74	0	12:00	0.50
J18	JUNCTION	0.15	0.80	686.40	0	11:56	0.80
J180	JUNCTION	0.04	0.23	812.10	0	11:54	0.23
J181	JUNCTION	0.24	1.13	789.29	0	11:54	1.13
J182	JUNCTION	0.39	1.49	682.78	0	12:00	1.49
J183	JUNCTION	0.17	0.92	681.95	0	12:00	0.92
J184	JUNCTION	0.04	0.29	778.18	0	11:54	0.29
J185	JUNCTION	0.07	0.45	754.09	0	11:54	0.45
J186	JUNCTION	0.26	1.06	692.46	0	11:55	1.06
J187	JUNCTION	0.10	0.62	691.76	0	11:55	0.61
J188	JUNCTION	0.12	0.57	701.78	0	11:55	0.57
J189	JUNCTION	0.04	0.25	701.20	0	11:55	0.25
J19	JUNCTION	0.13	0.69	803.42	0	12:00	0.69
J190	JUNCTION	0.33	1.14	722.87	0	12:00	1.14
J191	JUNCTION	0.14	0.71	722.16	0	12:00	0.71
J192	JUNCTION	0.04	0.27	814.36	0	11:54	0.27
J193	JUNCTION	0.07	0.43	792.77	0	11:54	0.43
J194	JUNCTION	0.09	0.58	749.42	0	11:55	0.58
J195	JUNCTION	0.25	1.04	733.40	0	11:55	1.04
J196	JUNCTION	0.39	1.51	741.41	0	12:00	1.51
J197	JUNCTION	0.14	0.78	723.86	0	12:00	0.78
J198	JUNCTION	0.06	0.37	787.15	0	11:54	0.37
J199	JUNCTION	0.13	0.74	711.14	0	11:55	0.74
J2	JUNCTION	0.10	0.52	716.40	0	12:00	0.52
J20	JUNCTION	0.00	0.01	662.79	0	12:01	0.01
J200	JUNCTION	0.12	0.42	694.70	0	12:02	0.42
J201	JUNCTION	0.02	0.20	696.61	0	12:01	0.20
J202	JUNCTION	0.01	0.07	696.24	0	12:03	0.07
J203	JUNCTION	0.49	3.49	688.11	0	12:00	3.49
J204	JUNCTION	0.31	1.24	711.93	0	11:55	1.24
J21	JUNCTION	0.28	1.31	690.56	0	12:00	1.31
J22	JUNCTION	0.13	0.65	740.05	0	12:00	0.65
J23	JUNCTION	0.04	0.23	739.03	0	12:00	0.23
J24	JUNCTION	0.23	1.06	712.58	0	11:55	1.06
J25	JUNCTION	0.07	0.43	711.21	0	11:55	0.43
J26	JUNCTION	0.22	1.20	706.05	0	11:56	1.20
J27	JUNCTION	0.11	0.69	726.15	0	11:55	0.69
J28	JUNCTION	0.34	1.45	727.64	0	11:54	1.45
J29	JUNCTION	0.10	0.60	749.29	0	11:54	0.60
J30	JUNCTION	0.30	1.31	750.73	0	11:54	1.31
J31	JUNCTION	0.08	0.50	768.19	0	11:54	0.50

J32	JUNCTION	0.25	1.16	769.58	0	11:54	1.16
J33	JUNCTION	0.20	0.92	788.29	0	11:54	0.92
J34	JUNCTION	0.09	0.52	671.29	0	12:01	0.52
J35	JUNCTION	0.14	0.74	739.90	0	12:00	0.74
J37	JUNCTION	0.12	0.68	762.80	0	12:00	0.68
J38	JUNCTION	0.37	1.42	764.27	0	12:00	1.42
J39	JUNCTION	0.12	0.62	782.80	0	12:00	0.62
J4	JUNCTION	0.49	3.30	690.73	0	12:01	3.30
J40	JUNCTION	0.35	1.35	784.26	0	12:00	1.35
J41	JUNCTION	0.11	0.56	802.97	0	12:00	0.56
J42	JUNCTION	0.32	1.27	804.41	0	12:00	1.27
J43	JUNCTION	0.17	0.89	672.64	0	12:01	0.89
J44	JUNCTION	0.08	0.44	738.38	0	11:55	0.44
J45	JUNCTION	0.54	2.33	661.64	0	12:26	2.33
J46	JUNCTION	0.26	1.20	773.51	0	11:54	1.20
J47	JUNCTION	0.08	0.45	831.05	0	12:00	0.45
J48	JUNCTION	0.14	0.75	751.67	0	11:55	0.75
J49	JUNCTION	0.13	0.68	770.95	0	11:54	0.68
J5	JUNCTION	0.26	1.19	693.81	0	12:00	1.19
J50	JUNCTION	0.12	0.72	759.71	0	11:54	0.72
J51	JUNCTION	0.08	0.50	758.90	0	11:54	0.50
J52	JUNCTION	0.26	1.17	739.66	0	11:54	1.16
J53	JUNCTION	0.08	0.50	738.26	0	11:54	0.50
J54	JUNCTION	0.11	0.58	695.99	0	12:00	0.58
J55	JUNCTION	0.03	0.19	718.23	0	11:55	0.19
J56	JUNCTION	0.10	0.60	719.37	0	11:55	0.60
J57	JUNCTION	0.02	0.12	743.81	0	11:54	0.12
J58	JUNCTION	0.06	0.38	744.67	0	11:54	0.37
J59	JUNCTION	0.10	0.62	706.00	0	11:55	0.61
J6	JUNCTION	0.44	1.66	709.62	0	12:00	1.66
J60	JUNCTION	0.31	1.34	707.46	0	11:55	1.34
J61	JUNCTION	0.09	0.54	730.63	0	11:55	0.54
J62	JUNCTION	0.27	1.22	732.04	0	11:54	1.22
J63	JUNCTION	0.23	1.08	755.45	0	11:54	1.08
J64	JUNCTION	0.14	0.77	779.25	0	11:54	0.77
J65	JUNCTION	0.14	0.74	815.43	0	11:54	0.74
J66	JUNCTION	0.21	1.05	794.12	0	11:54	1.05
J67	JUNCTION	0.28	1.29	750.87	0	11:54	1.29
J68	JUNCTION	0.09	0.60	732.67	0	11:55	0.59
J69	JUNCTION	0.14	0.82	727.33	0	11:55	0.82
J7	JUNCTION	0.19	1.04	718.56	0	11:56	1.04
J70	JUNCTION	0.17	0.92	693.62	0	12:00	0.92
J71	JUNCTION	0.47	1.75	695.19	0	12:00	1.75
J72	JUNCTION	0.15	0.84	717.32	0	12:00	0.84
J73	JUNCTION	0.43	1.64	718.86	0	12:00	1.64
J74	JUNCTION	0.13	0.74	740.79	0	12:00	0.74
J75	JUNCTION	0.39	1.52	742.30	0	12:00	1.52
J76	JUNCTION	0.11	0.64	764.37	0	12:00	0.64
J77	JUNCTION	0.34	1.37	765.84	0	12:00	1.37
J78	JUNCTION	0.08	0.48	787.90	0	11:54	0.48
J79	JUNCTION	0.10	0.57	825.25	0	12:00	0.57
J8	JUNCTION	0.13	0.73	731.52	0	12:00	0.73
J80	JUNCTION	0.10	0.53	800.68	0	11:54	0.53
J81	JUNCTION	0.08	0.52	772.10	0	11:54	0.52
J82	JUNCTION	0.30	1.84	673.59	0	12:00	1.84
J83	JUNCTION	0.11	0.64	721.75	0	11:54	0.64
J86	JUNCTION	0.49	2.29	659.80	0	12:32	2.29

J87	JUNCTION	0.06	0.36	686.96	0	12:00	0.36
J88	JUNCTION	0.02	0.18	670.36	0	12:00	0.18
J89	JUNCTION	0.15	0.78	665.35	0	12:01	0.78
J9	JUNCTION	0.34	1.68	688.42	0	11:58	1.68
J90	JUNCTION	0.56	1.76	654.01	0	12:58	1.76
J91	JUNCTION	0.57	2.15	651.16	0	13:06	2.15
J94	JUNCTION	0.44	1.28	629.84	0	12:00	1.28
J96	JUNCTION	0.03	0.22	720.73	0	11:54	0.22
J97	JUNCTION	0.47	3.35	673.71	0	12:00	3.34
J98	JUNCTION	0.20	0.97	697.79	0	11:54	0.97
J99	JUNCTION	0.06	0.38	696.47	0	11:54	0.38
J3	OUTFALL	0.00	0.00	648.36	0	00:00	0.00
J36	OUTFALL	0.00	0.00	656.94	0	00:00	0.00
J84	OUTFALL	0.57	2.15	650.51	0	13:06	2.15
J85	OUTFALL	0.49	2.29	659.23	0	12:32	2.29
J92	OUTFALL	0.48	1.88	621.74	0	12:00	1.88
J93	OUTFALL	0.43	2.02	628.33	0	12:00	2.02
J95	OUTFALL	0.41	1.16	629.01	0	12:00	1.16
SU1	STORAGE	10.23	13.08	667.08	0	12:58	13.08
SU2	STORAGE	7.22	10.08	660.08	0	13:06	10.08
SU3	STORAGE	6.87	10.49	670.49	0	12:26	10.49
SU4	STORAGE	5.32	10.96	668.96	0	12:32	10.96

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min		Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	0.00	47.29	0	12:00	0	1.3	0.006
J10	JUNCTION	11.35	34.79	0	12:00	0.309	0.965	0.038
J100	JUNCTION	0.00	178.41	0	12:00	0	4.95	0.037
J101	JUNCTION	4.88	21.93	0	11:55	0.155	0.58	0.012
J102	JUNCTION	5.50	17.60	0	11:54	0.128	0.425	0.046
J103	JUNCTION	0.00	12.16	0	11:54	0	0.298	0.016
J104	JUNCTION	5.47	12.18	0	11:54	0.127	0.298	0.057
J105	JUNCTION	6.75	6.75	0	11:54	0.171	0.171	0.020
J106	JUNCTION	55.84	55.84	0	12:00	1.8	1.8	0.008

J107		JUNCTION	18.91	18.91	0	12:00	0.527	
0.527	0.001							
J108		JUNCTION	0.00	18.90	0	12:00	0	
0.527	0.011							
J109		JUNCTION	0.00	0.00	0	00:00	0	
0	0.000 gal							
J11		JUNCTION	0.00	156.82	0	12:00	0	
4.37	0.035							
J110		JUNCTION	0.00	4.54	0	12:00	0	
0.12	0.026							
J111		JUNCTION	4.90	9.28	0	11:55	0.115	
0.234	0.063							
J112		JUNCTION	0.00	9.27	0	11:55	0	
0.234	0.019							
J113		JUNCTION	6.56	15.71	0	11:55	0.154	
0.388	0.053							
J114		JUNCTION	0.00	15.71	0	11:55	0	
0.388	0.015							
J115		JUNCTION	7.82	23.36	0	11:55	0.181	
0.569	0.044							
J116		JUNCTION	0.00	23.36	0	11:55	0	
0.569	0.013							
J117		JUNCTION	9.41	32.57	0	11:55	0.219	
0.788	0.040							
J118		JUNCTION	0.00	32.57	0	11:55	0	
0.787	0.009							
J119		JUNCTION	0.00	29.79	0	11:55	0	
0.706	0.009							
J12		JUNCTION	0.00	23.46	0	12:00	0	
0.656	0.013							
J120		JUNCTION	5.64	29.81	0	11:55	0.131	
0.707	0.041							
J121		JUNCTION	0.00	24.26	0	11:55	0	
0.575	0.013							
J122		JUNCTION	5.77	24.27	0	11:54	0.133	
0.576	0.044							
J123		JUNCTION	0.00	18.58	0	11:54	0	
0.442	0.014							
J124		JUNCTION	5.93	18.60	0	11:54	0.136	
0.443	0.049							
J125		JUNCTION	0.00	12.74	0	11:54	0	
0.307	0.016							
J126		JUNCTION	5.90	12.77	0	11:54	0.136	
0.307	0.058							
J127		JUNCTION	6.91	6.91	0	11:54	0.171	
0.171	0.020							
J128		JUNCTION	0.00	42.92	0	11:55	0	
1.16	0.013							
J129		JUNCTION	0.00	20.21	0	12:00	0	
0.616	0.080							
J13		JUNCTION	11.31	23.49	0	12:00	0.329	
0.656	0.045							
J130		JUNCTION	0.00	84.20	0	12:00	0	
2.33	0.054							
J131		JUNCTION	0.00	18.90	0	12:00	0	
0.527	0.021							
J132		JUNCTION	0.00	0.00	0	00:00	0	
0	0.000 gal							
J133		JUNCTION	6.98	28.15	0	12:00	0.159	
0.767	0.039							

J134		JUNCTION	8.16	35.63	0	12:00	0.19	
0.957	0.037							
J135		JUNCTION	0.00	35.62	0	12:00	0	
0.956	0.011							
J136		JUNCTION	8.44	43.89	0	11:54	0.193	
1.15	0.033							
J137		JUNCTION	0.00	43.88	0	11:55	0	
1.15	0.010							
J138		JUNCTION	6.07	49.86	0	11:55	0.141	
1.29	0.033							
J139		JUNCTION	0.00	49.85	0	11:55	0	
1.29	0.009							
J14		JUNCTION	0.00	0.00	0	00:00	0	
0	0.000 gal							
J140		JUNCTION	6.33	56.08	0	11:55	0.149	
1.44	0.032							
J141		JUNCTION	0.00	56.07	0	11:55	0	
1.44	0.008							
J142		JUNCTION	0.00	8.94	0	11:54	0	
0.209	0.012							
J143		JUNCTION	4.89	8.97	0	11:54	0.115	
0.209	0.067							
J144		JUNCTION	0.00	4.10	0	11:54	0	
0.0945	0.022							
J145		JUNCTION	4.11	4.11	0	11:54	0.0945	
0.0945	0.025							
J146		JUNCTION	0.00	0.00	0	00:00	0	
0	0.000 gal							
J147		JUNCTION	49.71	49.71	0	12:00	2.36	
2.36	0.007							
J148		JUNCTION	0.00	44.00	0	12:58	0	
4.77	-0.001							
J149		JUNCTION	4.47	4.47	0	11:54	0.111	
0.111	0.024							
J15		JUNCTION	0.00	12.18	0	12:00	0	
0.327	0.015							
J150		JUNCTION	4.62	39.74	0	12:00	0.145	
1.15	0.018							
J151		JUNCTION	0.00	0.00	0	00:00	0	
0	0.000 gal							
J152		JUNCTION	0.00	70.53	0	12:26	0	
4.28	-0.011							
J153		JUNCTION	0.00	8.49	0	12:00	0	
0.589	0.086							
J154		JUNCTION	9.15	9.15	0	12:00	0.6	
0.6	0.041							
J155		JUNCTION	0.00	47.28	0	12:00	0	
1.3	0.002							
J156		JUNCTION	0.00	118.05	0	12:00	0	
3.29	0.034							
J157		JUNCTION	0.00	47.29	0	12:00	0	
1.3	0.011							
J158		JUNCTION	7.36	20.72	0	12:00	0.32	
0.671	0.024							
J159		JUNCTION	0.00	178.34	0	12:00	0	
4.94	0.023							
J16		JUNCTION	10.19	129.47	0	11:57	0.281	
3.62	0.016							
J160		JUNCTION	0.00	178.32	0	12:00	0	
4.94	0.053							

J161		JUNCTION	0.00	20.70	0	12:00	0
0.671	0.003						
J162		JUNCTION	0.00	4.71	0	12:00	0
0.124	0.020						
J163		JUNCTION	11.41	19.75	0	12:00	0.395
0.604	0.028						
J164		JUNCTION	0.00	19.74	0	12:00	0
0.604	0.003						
J165		JUNCTION	0.00	28.14	0	12:00	0
0.767	0.012						
J166		JUNCTION	9.25	64.62	0	11:55	0.276
1.72	0.017						
J167		JUNCTION	0.00	64.62	0	11:55	0
1.71	0.002						
J168		JUNCTION	0.00	6.90	0	11:54	0
0.171	0.019						
J169		JUNCTION	0.00	34.72	0	11:55	0
0.962	0.002						
J17		JUNCTION	7.48	12.19	0	12:00	0.203
0.327	0.059						
J170		JUNCTION	5.81	34.72	0	11:55	0.256
0.962	0.022						
J171		JUNCTION	4.54	4.54	0	12:00	0.12
0.12	0.020						
J172		JUNCTION	0.00	4.54	0	12:00	0
0.12	0.087						
J173		JUNCTION	0.00	39.31	0	11:56	0
1.08	0.002						
J174		JUNCTION	7.72	39.31	0	11:56	0.294
1.08	0.021						
J175		JUNCTION	0.00	6.75	0	11:54	0
0.171	0.019						
J176		JUNCTION	0.00	21.93	0	11:55	0
0.58	0.026						
J177		JUNCTION	0.00	21.93	0	11:55	0
0.58	0.002						
J178		JUNCTION	7.30	17.33	0	12:00	0.288
0.544	0.031						
J179		JUNCTION	0.00	17.32	0	12:00	0
0.544	0.003						
J18		JUNCTION	5.25	64.93	0	11:56	0.119
1.84	0.033						
J180		JUNCTION	0.00	4.47	0	11:54	0
0.111	0.024						
J181		JUNCTION	11.53	15.95	0	11:54	0.277
0.389	0.053						
J182		JUNCTION	0.00	55.32	0	12:00	0
1.5	0.012						
J183		JUNCTION	0.00	55.32	0	12:00	0
1.5	0.002						
J184		JUNCTION	0.00	6.41	0	11:54	0
0.138	0.016						
J185		JUNCTION	0.00	14.09	0	11:54	0
0.347	0.016						
J186		JUNCTION	0.00	25.52	0	11:55	0
0.617	0.021						
J187		JUNCTION	0.00	25.51	0	11:55	0
0.617	0.003						
J188		JUNCTION	2.05	5.24	0	11:55	0.0489
0.127	0.046						

J189		JUNCTION	0.00	5.24	0	11:55	0
0.127	0.005						
J19		JUNCTION	4.71	4.71	0	12:00	0.124
0.124	0.023						
J190		JUNCTION	13.23	29.79	0	12:00	0.544
0.98	0.020						
J191		JUNCTION	0.00	29.77	0	12:00	0
0.98	0.003						
J192		JUNCTION	0.00	5.77	0	11:54	0
0.13	0.019						
J193		JUNCTION	0.00	13.13	0	11:54	0
0.3	0.015						
J194		JUNCTION	0.00	22.42	0	11:54	0
0.513	0.012						
J195		JUNCTION	1.60	24.00	0	11:55	0.0382
0.551	0.026						
J196		JUNCTION	5.29	35.17	0	12:00	0.122
1	0.036						
J197		JUNCTION	0.00	39.73	0	12:00	0
1.15	0.003						
J198		JUNCTION	0.00	10.29	0	11:54	0
0.268	0.015						
J199		JUNCTION	0.00	36.17	0	11:55	0
0.936	0.003						
J2		JUNCTION	0.00	29.77	0	12:00	0
0.98	0.074						
J20		JUNCTION	15.36	233.54	0	12:00	0.498
7.06	0.000						
J200		JUNCTION	0.00	8.41	0	12:02	0
0.588	0.072						
J201		JUNCTION	0.00	0.61	0	12:00	0
0.0113	0.007						
J202		JUNCTION	0.00	0.56	0	12:02	0
0.0113	0.204						
J203		JUNCTION	0.00	118.26	0	11:58	0
3.29	0.046						
J204		JUNCTION	5.23	36.17	0	11:55	0.179
0.936	0.019						
J21		JUNCTION	0.00	75.69	0	12:00	0
2.56	0.049						
J22		JUNCTION	4.24	4.24	0	12:00	0.117
0.117	0.024						
J23		JUNCTION	0.00	4.24	0	12:00	0
0.117	0.029						
J24		JUNCTION	9.48	13.47	0	11:54	0.235
0.351	0.061						
J25		JUNCTION	0.00	13.46	0	11:55	0
0.351	0.010						
J26		JUNCTION	0.00	141.19	0	11:55	0
3.79	0.015						
J27		JUNCTION	0.00	31.62	0	11:54	0
0.757	0.008						
J28		JUNCTION	7.62	31.64	0	11:54	0.176
0.757	0.041						
J29		JUNCTION	0.00	24.11	0	11:54	0
0.581	0.013						
J30		JUNCTION	7.07	24.13	0	11:54	0.159
0.582	0.039						
J31		JUNCTION	0.00	17.15	0	11:54	0
0.422	0.013						

J32	JUNCTION	6.93	17.17	0	11:54	0.155	0.423
0.044							
J33	JUNCTION	10.29	10.29	0	11:54	0.268	0.268
0.017							
J34	JUNCTION	0.00	218.77	0	12:01	0	6.56
0.005							
J35	JUNCTION	0.00	35.15	0	12:00	0	1
0.009							
J37	JUNCTION	0.00	30.37	0	12:00	0	0.881
0.011							
J38	JUNCTION	4.89	30.39	0	12:00	0.111	0.881
0.035							
J39	JUNCTION	0.00	26.01	0	12:00	0	0.771
0.011							
J4	JUNCTION	0.00	213.63	0	12:00	0	6.35
0.071							
J40	JUNCTION	4.89	26.03	0	12:00	0.111	0.771
0.037							
J41	JUNCTION	0.00	21.64	0	12:00	0	0.66
0.012							
J42	JUNCTION	21.69	21.69	0	12:00	0.66	0.66
0.043							
J43	JUNCTION	0.00	218.77	0	12:00	0	6.56
0.009							
J44	JUNCTION	0.00	42.92	0	11:55	0	1.16
0.005							
J45	JUNCTION	0.00	70.53	0	12:26	0	4.28
0.011							
J46	JUNCTION	5.89	18.96	0	11:54	0.134	0.434
0.047							
J47	JUNCTION	0.00	18.90	0	12:00	0	0.527
0.004							
J48	JUNCTION	0.00	42.92	0	11:54	0	1.16
0.021							
J49	JUNCTION	17.35	42.98	0	11:54	0.459	1.16
0.026							
J5	JUNCTION	0.00	55.29	0	12:00	0	1.89
0.052							
J50	JUNCTION	6.74	6.74	0	11:54	0.154	0.154
0.013							
J51	JUNCTION	10.73	17.46	0	11:54	0.282	0.436
0.012							
J52	JUNCTION	0.00	17.45	0	11:54	0	0.436
0.047							
J53	JUNCTION	0.00	17.42	0	11:54	0	0.436
0.009							
J54	JUNCTION	0.00	34.73	0	12:00	0	1.11
0.066							
J55	JUNCTION	0.00	3.22	0	11:55	0	0.0784
0.023							
J56	JUNCTION	1.90	3.24	0	11:54	0.0452	0.0784
0.106							
J57	JUNCTION	0.00	1.36	0	11:54	0	0.0333
0.037							
J58	JUNCTION	1.36	1.36	0	11:54	0.0333	0.0333
0.039							
J59	JUNCTION	0.00	25.52	0	11:55	0	0.617
0.009							
J6	JUNCTION	12.58	47.31	0	12:00	0.339	1.3
0.034							

J60	JUNCTION	5.85	25.53	0	11:54	0.137	0.618
0.046							
J61	JUNCTION	0.00	19.75	0	11:54	0	0.48
0.014							
J62	JUNCTION	5.74	19.77	0	11:54	0.134	0.481
0.049							
J63	JUNCTION	7.85	14.12	0	11:54	0.209	0.347
0.059							
J64	JUNCTION	6.42	6.42	0	11:54	0.138	0.138
0.021							
J65	JUNCTION	5.78	5.78	0	11:54	0.13	0.13
0.022							
J66	JUNCTION	7.43	13.16	0	11:54	0.17	0.3
0.056							
J67	JUNCTION	3.56	22.44	0	11:54	0.0794	0.513
0.047							
J68	JUNCTION	0.00	24.00	0	11:55	0	0.551
0.003							
J69	JUNCTION	0.00	66.91	0	11:55	0	1.71
0.018							
J7	JUNCTION	0.00	105.24	0	11:55	0	2.86
0.034							
J70	JUNCTION	0.00	55.32	0	12:00	0	1.5
0.006							
J71	JUNCTION	9.55	55.34	0	12:00	0.26	1.5
0.032							
J72	JUNCTION	0.00	45.79	0	12:00	0	1.24
0.010							
J73	JUNCTION	9.47	45.81	0	12:00	0.257	1.24
0.035							
J74	JUNCTION	0.00	36.35	0	12:00	0	0.981
0.011							
J75	JUNCTION	9.10	36.36	0	12:00	0.245	0.981
0.038							
J76	JUNCTION	0.00	27.27	0	12:00	0	0.736
0.012							
J77	JUNCTION	12.05	27.27	0	12:00	0.348	0.736
0.043							
J78	JUNCTION	0.00	15.92	0	11:54	0	0.388
0.013							
J79	JUNCTION	21.84	21.84	0	12:00	0.608	0.608
0.008							
J8	JUNCTION	0.00	34.77	0	12:00	0	0.965
0.011							
J80	JUNCTION	8.32	25.93	0	11:54	0.175	0.702
0.030							
J81	JUNCTION	0.00	18.94	0	11:54	0	0.434
0.014							
J82	JUNCTION	0.00	195.36	0	12:00	0	5.48
0.010							
J83	JUNCTION	3.99	3.99	0	11:54	0.0939	0.0939
0.025							
J86	JUNCTION	0.00	68.70	0	12:32	0	3.94
0.010							
J87	JUNCTION	6.58	218.77	0	12:00	0.215	6.56
0.004							
J88	JUNCTION	0.00	324.16	0	12:00	0	9.1
-0.000							
J89	JUNCTION	0.00	218.77	0	12:01	0	6.56
0.009							

J9		JUNCTION	0.00	118.28	0	11:57	0	
3.29	0.036							
J90		JUNCTION	0.00	44.00	0	12:58	0	
4.77	0.011							
J91		JUNCTION	0.00	44.30	0	13:06	0	
4.53	0.013							
J94		JUNCTION	20.31	20.31	0	12:00	1.82	
1.82	0.013							
J96		JUNCTION	0.00	3.98	0	11:54	0	
0.0939	0.022							
J97		JUNCTION	0.00	324.39	0	12:00	0	
9.1	0.016							
J98		JUNCTION	6.43	10.40	0	11:54	0.162	
0.256	0.065							
J99		JUNCTION	0.00	10.38	0	11:54	0	
0.256	0.012							
J3		OUTFALL	0.00	0.00	0	00:00	0	
0	0.000 gal							
J36		OUTFALL	4.06	4.06	0	11:54	0.108	
0.108	0.000							
J84		OUTFALL	0.00	44.30	0	13:06	0	
4.53	0.000							
J85		OUTFALL	0.00	68.70	0	12:32	0	
3.94	0.000							
J92		OUTFALL	0.00	49.76	0	12:00	0	
2.36	0.000							
J93		OUTFALL	0.00	55.83	0	12:00	0	
1.8	0.000							
J95		OUTFALL	0.00	20.39	0	12:00	0	
1.82	0.000							
SU1		STORAGE	32.83	356.46	0	12:00	1.02	
12.8	0.000							
SU2		STORAGE	7.10	44.88	0	12:58	0.211	
5.22	0.000							
SU3		STORAGE	0.00	233.54	0	12:00	0	
7.15	0.001							
SU4		STORAGE	0.00	70.53	0	12:26	0	
4.28	-0.002							

****
Node Surcharge Summary
****

No nodes were surcharged.

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

	Average	Avg	Evap	Exfil	Maximum	Max	Time of Max	Maximum
	Volume	Pcnt	Pcnt	Pcnt	Volume	Pcnt	Occurrence	Outflow
Storage Unit	1000 ft3	Full	Loss	Loss	1000 ft3	Full	days hr:min	CFS
SU1	824.942	39	0	0	1205.501	57	0 12:58	44.00
SU2	67.420	22	0	0	107.326	34	0 13:06	44.30
SU3	264.026	34	0	0	486.007	62	0 12:26	70.53
SU4	25.777	25	0	0	58.377	56	0 12:32	68.70

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
J3	0.00	0.00	0.00	0.000
J36	96.77	0.32	4.06	0.108
J84	49.36	16.95	44.30	4.528
J85	52.09	15.96	68.70	3.941
J92	88.41	6.99	49.76	2.363
J93	88.52	5.70	55.83	1.799
J95	88.02	4.80	20.39	1.818
System	66.17	50.71	139.72	14.557

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	218.77	0 12:00	15.94	0.05	0.31
C1_1	CONDUIT	218.77	0 12:01	15.28	0.10	0.33
C1_2	CONDUIT	218.78	0 12:01	22.82	0.13	0.20
C1_4	CONDUIT	218.77	0 12:01	14.00	0.24	0.35
C10	CONDUIT	36.17	0 11:55	5.51	0.13	0.48
C10_1	CONDUIT	156.76	0 12:00	9.26	0.20	0.51
C10_2	CONDUIT	5.77	0 11:54	2.08	0.09	0.25
C10_3	CONDUIT	5.76	0 11:54	1.46	0.02	0.33
C100	CONDUIT	12.74	0 11:54	2.81	0.20	0.37
C101	CONDUIT	12.73	0 11:54	2.45	0.05	0.40
C102	CONDUIT	18.58	0 11:54	3.30	0.29	0.43

C103	CONDUIT	24.26	0	11:55	3.66	0.38	0.48
C104	CONDUIT	18.58	0	11:55	2.99	0.07	0.46
C105	CONDUIT	24.25	0	11:55	3.42	0.09	0.50
C106	CONDUIT	29.79	0	11:55	4.00	0.46	0.52
C107_2	CONDUIT	34.72	0	11:55	3.89	0.13	0.60
C107_3	CONDUIT	29.79	0	11:55	4.58	0.11	0.48
C107_4	CONDUIT	34.72	0	11:55	5.12	0.54	0.49
C109_1	CONDUIT	28.14	0	12:00	3.90	0.44	0.51
C109_2	CONDUIT	28.13	0	12:00	3.61	0.10	0.54
C11	CONDUIT	3.98	0	11:54	1.76	0.06	0.21
C11_3	CONDUIT	129.46	0	11:57	6.21	0.10	0.65
C11_4	CONDUIT	195.34	0	12:00	7.05	0.15	0.74
C110	CONDUIT	35.62	0	12:00	4.31	0.55	0.56
C111	CONDUIT	35.62	0	12:00	4.04	0.13	0.59
C112	CONDUIT	43.88	0	11:55	4.70	0.68	0.61
C113	CONDUIT	43.88	0	11:55	4.49	0.16	0.63
C114	CONDUIT	49.85	0	11:55	4.93	0.77	0.64
C115	CONDUIT	49.85	0	11:55	4.74	0.19	0.66
C116	CONDUIT	56.07	0	11:55	5.17	0.87	0.67
C117_1	CONDUIT	56.07	0	11:55	5.66	0.21	0.63
C117_3	CONDUIT	64.62	0	11:55	6.27	1.00	0.65
C117_4	CONDUIT	64.62	0	11:55	7.06	0.24	0.61
C119	CONDUIT	4.09	0	11:54	1.27	0.02	0.28
C12	CONDUIT	66.87	0	11:55	10.65	0.05	0.27
C12_1	CONDUIT	64.89	0	11:56	9.23	0.04	0.29
C120	CONDUIT	8.94	0	11:54	2.42	0.14	0.31
C121_1	CONDUIT	8.94	0	11:54	2.35	0.03	0.32
C121_3	CONDUIT	19.74	0	12:00	4.23	0.31	0.37
C121_4	CONDUIT	19.73	0	12:00	5.50	0.07	0.31
C123	CONDUIT	49.76	0	12:00	7.78	0.45	0.51
C13	CONDUIT	1.36	0	11:54	1.17	0.02	0.12
C13_2	CONDUIT	34.70	0	12:00	8.36	0.02	0.20
C13_4	CONDUIT	29.67	0	12:00	9.57	0.02	0.16
C14	CONDUIT	55.83	0	12:00	8.01	0.51	0.54
C14_1	CONDUIT	105.14	0	11:56	12.84	0.07	0.32
C14_10	CONDUIT	20.70	0	12:00	3.35	0.08	0.47
C14_2	CONDUIT	140.95	0	11:56	6.75	0.10	0.64
C14_4	CONDUIT	13.46	0	11:55	2.89	0.21	0.37
C14_5	CONDUIT	4.23	0	12:00	1.12	0.02	0.32
C14_6	CONDUIT	13.46	0	11:55	3.20	0.05	0.35
C14_7	CONDUIT	20.70	0	12:00	4.32	0.32	0.38
C15	CONDUIT	42.92	0	11:55	21.21	0.02	0.22
C15_1	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
C15_3	CONDUIT	42.91	0	11:55	9.23	0.03	0.21
C15_4	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
C15_5	CONDUIT	0.00	0	00:00	0.00	0.00	0.10
C15_6	CONDUIT	0.00	0	00:00	0.00	0.00	0.07
C16	CONDUIT	118.26	0	11:58	4.31	0.20	0.74
C16_1	CONDUIT	55.10	0	12:00	5.69	0.10	0.36
C16_2	CONDUIT	8.49	0	12:00	2.14	0.01	0.19
C16_6	CONDUIT	8.41	0	12:02	3.13	0.11	0.22
C16_7	CONDUIT	8.40	0	12:02	2.29	0.01	0.23
C17	CONDUIT	4.24	0	12:00	1.81	0.07	0.22
C17_3	CONDUIT	20.11	0	12:00	2.64	0.03	0.30
C17_4	CONDUIT	84.14	0	12:00	6.25	0.14	0.44
C18	CONDUIT	18.90	0	12:00	11.46	0.03	0.19
C18_2	CONDUIT	178.29	0	12:00	9.56	0.28	0.55

C18_3	CONDUIT	118.05	0	12:00	6.61	0.40	0.74
C18_5	CONDUIT	178.34	0	12:00	10.01	0.26	0.53
C18_8	CONDUIT	118.04	0	12:00	8.66	0.15	0.45
C19	CONDUIT	34.77	0	12:00	4.27	0.54	0.56
C2	CONDUIT	20.39	0	12:00	6.29	0.18	0.31
C2_13	CONDUIT	212.49	0	12:01	10.54	0.67	0.56
C2_3	CONDUIT	44.00	0	12:58	20.57	0.40	0.23
C2_4	DUMMY	44.00	0	12:58			
C20	CONDUIT	34.76	0	12:00	3.85	0.13	0.60
C21	CONDUIT	47.29	0	12:00	4.86	0.73	0.63
C22	CONDUIT	0.61	0	12:00	0.40	0.00	0.09
C23	CONDUIT	4.10	0	11:54	1.78	0.06	0.22
C24	CONDUIT	0.56	0	12:02	0.92	0.00	0.04
C24_1	CONDUIT	10.29	0	11:54	2.67	0.16	0.32
C24_2	CONDUIT	10.28	0	11:54	2.15	0.04	0.38
C25	CONDUIT	18.94	0	11:54	3.33	0.30	0.43
C26	CONDUIT	18.93	0	11:54	3.12	0.07	0.45
C27	CONDUIT	17.15	0	11:54	3.19	0.27	0.41
C28	CONDUIT	17.14	0	11:54	2.82	0.06	0.45
C29	CONDUIT	24.11	0	11:54	3.68	0.38	0.48
C3	DUMMY	233.54	0	12:00			
C3_7	CONDUIT	324.16	0	12:00	11.33	0.69	0.53
C30	CONDUIT	24.11	0	11:54	3.33	0.09	0.51
C31	CONDUIT	31.62	0	11:54	4.09	0.49	0.54
C32	CONDUIT	0.55	0	12:03	0.36	0.00	0.11
C32_2	CONDUIT	31.62	0	11:55	4.74	0.12	0.48
C32_3	CONDUIT	36.17	0	11:55	5.24	0.51	0.50
C33_1	CONDUIT	22.42	0	11:54	3.52	0.35	0.47
C33_3	CONDUIT	22.41	0	11:55	4.29	0.09	0.41
C33_4	CONDUIT	24.00	0	11:55	4.54	0.35	0.41
C34	CONDUIT	21.64	0	12:00	3.51	0.34	0.46
C35	CONDUIT	21.63	0	12:00	3.29	0.08	0.48
C36	CONDUIT	26.01	0	12:00	3.79	0.41	0.49
C37	CONDUIT	26.00	0	12:00	3.59	0.10	0.51
C38	CONDUIT	30.37	0	12:00	4.05	0.47	0.52
C39	CONDUIT	178.32	0	12:00	9.39	0.45	0.63
C39_1	CONDUIT	30.36	0	12:00	3.83	0.11	0.55
C39_2	CONDUIT	35.15	0	12:00	4.25	0.55	0.56
C39_3	CONDUIT	75.50	0	12:00	3.28	0.12	0.66
C4	DUMMY	324.16	0	12:00			
C40	CONDUIT	24.00	0	11:55	5.54	0.09	0.35
C41_1	CONDUIT	35.15	0	12:00	4.89	0.13	0.51
C41_3	CONDUIT	39.73	0	12:00	5.38	0.57	0.52
C41_4	CONDUIT	39.73	0	12:00	6.57	0.15	0.45
C42_1	CONDUIT	13.13	0	11:54	2.85	0.20	0.37
C42_2	CONDUIT	13.12	0	11:54	2.50	0.05	0.41
C43_1	CONDUIT	42.92	0	11:55	19.26	0.06	0.24
C43_3	CONDUIT	18.90	0	12:00	12.62	0.02	0.18
C43_4	CONDUIT	42.92	0	11:54	14.62	0.05	0.28
C43_5	CONDUIT	25.88	0	11:54	11.40	0.03	0.24
C43_6	CONDUIT	18.88	0	12:00	11.29	0.02	0.19
C45	CONDUIT	21.83	0	12:00	3.21	0.08	0.49
C45_4	CONDUIT	18.90	0	12:00	12.56	0.02	0.18
C46	CONDUIT	0.00	0	00:00	0.00	0.00	0.32
C47_1	CONDUIT	4.47	0	11:54	1.85	0.07	0.23
C47_3	CONDUIT	4.46	0	11:54	1.09	0.02	0.34
C47_4	CONDUIT	15.92	0	11:54	3.10	0.25	0.40

C48	CONDUIT	6.73	0	11:54	1.89	0.11	0.31
C49	CONDUIT	17.45	0	11:54	3.22	0.06	0.42
C5_1	CONDUIT	4.71	0	12:00	1.89	0.07	0.23
C5_2	CONDUIT	4.71	0	12:00	1.27	0.02	0.32
C5_4	CONDUIT	47.28	0	12:00	6.63	0.18	0.51
C5_5	CONDUIT	47.29	0	12:00	5.68	0.17	0.56
C5_6	CONDUIT	47.28	0	12:00	5.68	0.74	0.56
C50	CONDUIT	17.42	0	11:54	3.21	0.27	0.42
C51_1	CONDUIT	17.41	0	11:54	3.29	0.06	0.41
C51_3	CONDUIT	29.77	0	12:00	4.75	0.43	0.46
C51_4	CONDUIT	29.77	0	12:00	8.31	0.11	0.31
C52	CONDUIT	1.36	0	11:54	0.75	0.01	0.18
C53	CONDUIT	3.22	0	11:55	1.57	0.05	0.20
C54_1	CONDUIT	3.22	0	11:55	1.64	0.01	0.19
C54_3	CONDUIT	5.24	0	11:55	2.42	0.08	0.21
C54_4	CONDUIT	5.24	0	11:55	2.44	0.02	0.21
C55_1	CONDUIT	70.53	0	12:26	22.95	0.64	0.31
C55_2	DUMMY	70.53	0	12:26			
C56	CONDUIT	68.70	0	12:32	9.23	0.62	0.57
C6	CONDUIT	12.18	0	12:00	2.76	0.19	0.36
C60_1	CONDUIT	6.41	0	11:54	2.18	0.10	0.26
C60_2	CONDUIT	6.40	0	11:54	1.55	0.02	0.34
C61_1	CONDUIT	14.09	0	11:54	2.94	0.22	0.38
C61_2	CONDUIT	14.08	0	11:54	2.61	0.05	0.42
C62	CONDUIT	19.75	0	11:54	3.40	0.31	0.44
C63	CONDUIT	19.75	0	11:55	3.10	0.07	0.47
C64_1	CONDUIT	25.52	0	11:55	4.66	0.09	0.42
C64_3	CONDUIT	25.51	0	11:55	4.66	0.38	0.42
C64_4	CONDUIT	25.51	0	11:55	5.92	0.09	0.35
C65	CONDUIT	25.52	0	11:55	3.78	0.40	0.49
C69	CONDUIT	15.91	0	11:54	2.56	0.06	0.46
C7	CONDUIT	12.18	0	12:00	2.17	0.04	0.43
C70	CONDUIT	27.27	0	12:00	3.87	0.42	0.50
C71	CONDUIT	27.26	0	12:00	3.49	0.10	0.54
C72	CONDUIT	36.35	0	12:00	4.34	0.57	0.57
C73	CONDUIT	36.35	0	12:00	4.03	0.13	0.60
C74	CONDUIT	45.79	0	12:00	4.79	0.71	0.62
C75	CONDUIT	45.79	0	12:00	4.50	0.17	0.65
C76	CONDUIT	55.32	0	12:00	5.17	0.86	0.67
C77_1	CONDUIT	55.32	0	12:00	6.00	0.20	0.60
C77_3	CONDUIT	55.32	0	12:00	6.00	0.82	0.60
C77_4	CONDUIT	55.32	0	12:00	7.24	0.20	0.53
C78	CONDUIT	3.97	0	11:54	1.16	0.01	0.30
C79	CONDUIT	10.38	0	11:54	2.57	0.16	0.34
C8	CONDUIT	23.46	0	12:00	3.64	0.36	0.47
C80_1	CONDUIT	10.37	0	11:54	2.75	0.04	0.32
C80_3	CONDUIT	17.32	0	12:00	3.99	0.28	0.35
C80_4	CONDUIT	17.32	0	12:00	2.23	0.06	0.58
C81_1	CONDUIT	6.75	0	11:54	2.22	0.11	0.27
C81_2	CONDUIT	6.74	0	11:54	1.72	0.03	0.33
C82	CONDUIT	12.16	0	11:54	2.77	0.19	0.36
C83	CONDUIT	12.15	0	11:54	2.37	0.05	0.40
C84	CONDUIT	17.58	0	11:54	3.01	0.27	0.44
C85_1	CONDUIT	21.93	0	11:55	4.39	0.08	0.39
C85_3	CONDUIT	21.93	0	11:55	4.39	0.34	0.39
C85_4	CONDUIT	21.93	0	11:55	2.46	0.08	0.62
C88_1	CONDUIT	0.00	0	00:00	0.00	0.00	0.06

C88_3	CONDUIT	4.54	0	12:00	1.79	0.02	0.23
C88_4	CONDUIT	4.54	0	12:00	1.79	0.07	0.23
C89	CONDUIT	4.54	0	12:00	1.38	0.02	0.29
C9	CONDUIT	23.45	0	12:00	3.16	0.09	0.52
C90	CONDUIT	9.27	0	11:55	2.46	0.14	0.32
C91	CONDUIT	9.27	0	11:55	2.02	0.03	0.37
C92	CONDUIT	15.71	0	11:55	3.07	0.25	0.40
C93	CONDUIT	15.70	0	11:55	2.66	0.06	0.44
C94	CONDUIT	23.36	0	11:55	3.61	0.37	0.47
C95	CONDUIT	23.35	0	11:55	3.21	0.09	0.51
C96	CONDUIT	32.57	0	11:55	4.14	0.51	0.54
C97_2	CONDUIT	39.31	0	11:56	4.45	0.15	0.61
C97_3	CONDUIT	32.56	0	11:55	4.66	0.12	0.50
C97_4	CONDUIT	39.31	0	11:56	5.34	0.61	0.52
C99_1	CONDUIT	6.90	0	11:54	2.24	0.11	0.27
C99_2	CONDUIT	6.89	0	11:54	1.72	0.03	0.33
OL1_2	CONDUIT	44.30	0	13:06	8.16	0.86	0.72
C33	WEIR	0.00	0	00:00			0.00
W1	WEIR	0.00	0	00:00			0.00
W2	WEIR	0.00	0	00:00			0.00
W4	WEIR	0.00	0	00:00			0.00
C2_1	DUMMY	44.00	0	12:58			
C41	DUMMY	70.53	0	12:26			
OL1	DUMMY	68.70	0	12:32			
OL1_1	DUMMY	44.30	0	13:06			

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.01	0.00	0.00	0.00	0.98	0.00	0.00	0.96	0.00
C1_1	1.00	0.02	0.00	0.00	0.00	0.98	0.00	0.00	0.96	0.00
C1_2	1.00	0.02	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.00
C1_4	1.00	0.02	0.00	0.00	0.00	0.98	0.00	0.00	0.01	0.00
C10	1.00	0.01	0.03	0.00	0.89	0.07	0.00	0.00	0.91	0.00
C10_1	1.00	0.04	0.00	0.00	0.08	0.88	0.00	0.00	0.87	0.00
C10_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00
C10_3	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91	0.00
C100	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00

C101	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C102	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C103	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C104	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C105	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C106	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C107_2	1.00	0.04	0.00	0.00	0.95	0.01	0.00	0.00	0.88
0.00									
C107_3	1.00	0.04	0.01	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C107_4	1.00	0.04	0.00	0.00	0.92	0.04	0.00	0.00	0.00
0.00									
C109_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C109_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.90
0.00									
C11	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C11_3	1.00	0.01	0.00	0.00	0.06	0.93	0.00	0.00	0.86
0.00									
C11_4	1.00	0.01	0.03	0.00	0.05	0.91	0.00	0.00	0.87
0.00									
C110	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C111	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C112	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C113	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C114	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C115	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C116	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C117_1	1.00	0.04	0.00	0.00	0.92	0.03	0.00	0.00	0.90
0.00									
C117_3	1.00	0.04	0.00	0.00	0.89	0.07	0.00	0.00	0.00
0.00									
C117_4	1.00	0.04	0.00	0.00	0.51	0.45	0.00	0.00	0.88
0.00									
C119	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C12	1.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.89
0.00									
C12_1	1.00	0.00	0.00	0.00	0.01	0.99	0.00	0.00	0.95
0.00									
C120	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C121_1	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C121_3	1.00	0.04	0.00	0.00	0.95	0.01	0.00	0.00	0.00
0.00									

C121_4	1.00	0.04	0.00	0.00	0.10	0.85	0.00	0.00	0.87
0.00									
C123	1.00	0.11	0.00	0.00	0.01	0.88	0.00	0.00	0.00
0.00									
C13	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C13_2	1.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.89
0.00									
C13_4	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.92
0.00									
C14	1.00	0.11	0.00	0.00	0.01	0.88	0.00	0.00	0.00
0.00									
C14_1	1.00	0.00	0.00	0.00	0.01	0.99	0.00	0.00	0.89
0.00									
C14_10	1.00	0.04	0.00	0.00	0.95	0.01	0.00	0.00	0.88
0.00									
C14_2	1.00	0.01	0.00	0.00	0.05	0.94	0.00	0.00	0.94
0.00									
C14_4	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C14_5	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C14_6	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.90
0.00									
C14_7	1.00	0.04	0.00	0.00	0.94	0.02	0.00	0.00	0.00
0.00									
C15	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.99
0.00									
C15_1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C15_3	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.88
0.00									
C15_4	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C15_5	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C15_6	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C16	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.85
0.00									
C16_1	1.00	0.04	0.00	0.00	0.87	0.09	0.00	0.00	0.88
0.00									
C16_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.87
0.00									
C16_6	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.86									
C16_7	1.00	0.04	0.01	0.00	0.94	0.00	0.00	0.00	0.88
0.00									
C17	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C17_3	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C17_4	1.00	0.04	0.00	0.00	0.88	0.08	0.00	0.00	0.87
0.00									
C18	1.00	0.04	0.00	0.00	0.00	0.96	0.00	0.00	0.00
0.00									
C18_2	1.00	0.04	0.01	0.00	0.01	0.93	0.00	0.00	0.04
0.00									
C18_3	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.88									

C18_5	1.00	0.04	0.00	0.00	0.01	0.94	0.00	0.00	0.01
0.00									
C18_8	1.00	0.04	0.02	0.00	0.03	0.92	0.00	0.00	0.87
0.00									
C19	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C2	1.00	0.11	0.00	0.00	0.02	0.87	0.00	0.00	0.00
0.00									
C2_13	1.00	0.01	0.00	0.00	0.00	0.98	0.00	0.00	0.00
0.96									
C2_3	1.00	0.47	0.00	0.00	0.00	0.53	0.00	0.00	0.11
0.00									
C20	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C21	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C22	1.00	0.04	0.57	0.00	0.39	0.00	0.00	0.00	0.42
0.00									
C23	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C24	1.00	0.61	0.00	0.00	0.39	0.00	0.00	0.00	0.00
0.00									
C24_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C24_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C25	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C26	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C27	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C28	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C29	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C3_7	1.00	0.01	0.00	0.00	0.01	0.98	0.00	0.00	0.00
0.89									
C30	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C31	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C32	1.00	0.04	0.58	0.00	0.37	0.00	0.00	0.00	0.51
0.00									
C32_2	1.00	0.04	0.00	0.00	0.95	0.01	0.00	0.00	0.91
0.00									
C32_3	1.00	0.04	0.00	0.00	0.92	0.04	0.00	0.00	0.00
0.00									
C33_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C33_3	1.00	0.04	0.01	0.00	0.95	0.00	0.00	0.00	0.89
0.00									
C33_4	1.00	0.04	0.00	0.00	0.93	0.02	0.00	0.00	0.00
0.00									
C34	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C35	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.90
0.00									
C36	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									

C37	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C38	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C39	1.00	0.05	0.00	0.00	0.82	0.13	0.00	0.00	0.83
0.00									
C39_1	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C39_2	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C39_3	1.00	0.01	0.03	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C40	1.00	0.00	0.04	0.00	0.80	0.15	0.00	0.00	0.90
0.00									
C41_1	1.00	0.04	0.01	0.00	0.93	0.02	0.00	0.00	0.90
0.00									
C41_3	1.00	0.04	0.00	0.00	0.91	0.05	0.00	0.00	0.00
0.00									
C41_4	1.00	0.00	0.04	0.00	0.10	0.86	0.00	0.00	0.91
0.00									
C42_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C42_2	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C43_1	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
0.00									
C43_3	1.00	0.04	0.00	0.00	0.00	0.96	0.00	0.00	0.03
0.00									
C43_4	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.98
0.00									
C43_5	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
0.00									
C43_6	1.00	0.00	0.04	0.00	0.01	0.95	0.00	0.00	0.90
0.00									
C45	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C45_4	1.00	0.04	0.00	0.00	0.00	0.96	0.00	0.00	0.01
0.00									
C46	1.00	0.04	0.96	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C47_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C47_3	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C47_4	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C48	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00									
C49	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99
0.00									
C5_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C5_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C5_4	1.00	0.04	0.00	0.00	0.77	0.19	0.00	0.00	0.88
0.00									
C5_5	1.00	0.04	0.00	0.00	0.90	0.05	0.00	0.00	0.90
0.00									
C5_6	1.00	0.04	0.00	0.00	0.90	0.05	0.00	0.00	0.00
0.00									

C50	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00									
C51_1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99
0.00									
C51_3	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00
0.00									
C51_4	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
0.00									
C52	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C53	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C54_1	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C54_3	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C54_4	1.00	0.00	0.04	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C55_1	1.00	0.45	0.00	0.00	0.00	0.55	0.00	0.00	0.14
0.00									
C56	1.00	0.48	0.00	0.00	0.00	0.52	0.00	0.00	0.13
0.00									
C6	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C60_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C60_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C61_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C61_2	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C62	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C63	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C64_1	1.00	0.05	0.00	0.00	0.92	0.03	0.00	0.00	0.89
0.00									
C64_3	1.00	0.05	0.00	0.00	0.93	0.03	0.00	0.00	0.00
0.00									
C64_4	1.00	0.00	0.05	0.00	0.72	0.23	0.00	0.00	0.90
0.00									
C65	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C69	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C7	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C70	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C71	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C72	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C73	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C74	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C75	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									

C76	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C77_1	1.00	0.04	0.00	0.00	0.89	0.06	0.00	0.00	0.90
0.00									
C77_3	1.00	0.04	0.00	0.00	0.89	0.06	0.00	0.00	0.00
0.00									
C77_4	1.00	0.01	0.03	0.00	0.05	0.90	0.00	0.00	0.91
0.00									
C78	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C79	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C8	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C80_1	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C80_3	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C80_4	1.00	0.04	0.00	0.00	0.94	0.01	0.00	0.00	0.87
0.00									
C81_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C81_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C82	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C83	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C84	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.01
0.00									
C85_1	1.00	0.04	0.00	0.00	0.94	0.02	0.00	0.00	0.91
0.00									
C85_3	1.00	0.04	0.00	0.00	0.94	0.02	0.00	0.00	0.00
0.00									
C85_4	1.00	0.04	0.00	0.00	0.95	0.01	0.00	0.00	0.88
0.00									
C88_1	1.00	0.05	0.95	0.00	0.00	0.00	0.00	0.00	0.00
0.00									
C88_3	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C88_4	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C89	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C9	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C90	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C91	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C92	1.00	0.05	0.00	0.00	0.95	0.00	0.00	0.00	0.00
0.00									
C93	1.00	0.04	0.01	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C94	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C95	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
C96	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									

C97_2	1.00	0.04	0.00	0.00	0.94	0.01	0.00	0.00	0.87
0.00									
C97_3	1.00	0.04	0.00	0.00	0.95	0.00	0.00	0.00	0.90
0.00									
C97_4	1.00	0.04	0.00	0.00	0.91	0.04	0.00	0.00	0.00
0.00									
C99_1	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.00
0.00									
C99_2	1.00	0.04	0.00	0.00	0.96	0.00	0.00	0.00	0.91
0.00									
OL1_2	1.00	0.51	0.00	0.00	0.00	0.49	0.00	0.00	0.30
0.00									

****
Conduit Surcharge Summary
****

	Hours Full			Hours Above Full	Hours Capacity
Conduit	Both Ends	Upstream	Dnstream	Normal Flow	Limited
C117_3	0.01	0.01	0.01	0.01	0.01
C18_3	0.01	0.18	0.01	0.01	0.01
C2_13	0.01	0.15	0.01	0.01	0.01
C3_7	0.01	0.15	0.01	0.01	0.01

Analysis begun on: Tue Feb 17 14:56:30 2026
Analysis ended on: Tue Feb 17 14:56:42 2026
Total elapsed time: 00:00:12

Attachment F

Ditch Lining Evaluation Reference Tables

Table C-1 Graded Rip-Rap Stone

Flow Velocity (ft./sec.)	N.S.A. No.[1]	Size Inches (Sq. Opening) Max.	Avg.[2]	Min.	Filter Stone N.S.A. No.[1]
2.5	R-1	1 1/2	3/4	No. 8	FS-1
4.5	R-2	3	1 1/2	1	FS-1
6.5	R-3	6	3	2	FS-2
9.0	R-4	12	6	3	FS-2
11.5	R-5	18	9	5	FS-2
13.0	R-6	24	12	7	FS-3
14.5	R-7	30	15	12	FS-3

[1] National Stone Association

[2] At least 50% of the individual stone particles must be equal or larger than this listed size

Table C-3. Graded Rip-Rap Stone

D.O.T. No.[1]	Size inches (Sq. opening) Max.	Avg.	Min.	Common Uses
Type 3	12	9	5	Creek Banks Pipe Outlets
Type 1	24	12	7	Lakes & Shorelines Rivers
[1]Georgia Department of Transportation				

Table 5.4-4 Manning's Roughness Coefficients (n) for Artificial Channels

Category	Lining Type	Depth Ranges 0-0.5 ft	0.5-2.0 ft	>2.0 ft
Rigid	Concrete	0.015	0.013	0.013
	Grouted Riprap	0.040	0.030	0.028
	Stone Masonry	0.042	0.032	0.030
	Soil Cement	0.025	0.022	0.020
	Asphalt	0.018	0.016	0.016
Unlined	Bare Soil	0.023	0.020	0.020
	Rock Cut	0.045	0.035	0.025
Temporary*	Woven Paper Net	0.016	0.015	0.015
	Jute Net	0.028	0.022	0.019
	Fiberglass Roving	0.028	0.022	0.019
	Straw with Net	0.065	0.033	0.025
	Curled Wood Mat	0.066	0.035	0.028
	Synthetic Mat	0.036	0.025	0.021
Gravel Riprap	1-inch D_{50}	0.044	0.033	0.030
	2-inch D_{50}	0.066	0.041	0.034
Rock Riprap	6-inch D_{50}	0.104	0.069	0.035
	12-inch D_{50}	-	0.078	0.040

Note: Values listed are representative values for the respective depth ranges. Manning's roughness coefficients, n, vary with the flow depth.

*Some "temporary" linings become permanent when buried.

Source: HEC-15, 2005.