

## Attachment E

### Stormwater Design Report

# Stormwater Management Report

## Phases II-III Accelerated Closure

### Southeast County Landfill

### Hillsborough County, Florida



**Hillsborough  
County Florida**

Hillsborough County  
Solid Waste Management Department (SWMD)  
332 N. Falkenburg Road  
Tampa, FL 33619

Florida Board of Professional Engineers  
Certificate No. 00004892

**SCS ENGINEERS**

09215600.13 | February 2022

3922 Coconut Palm Drive, Suite 102  
Tampa, FL 33619  
813-621-0080

## Table of Contents

Section	Page
Introduction .....	1
Existing Conditions.....	1
Post Development Conditions .....	2
ICPR Model Parameters.....	3
Results .....	5
Conclusion .....	9

## Tables

Table 1.	Approved Drainage Basins (2008 CERP) .....	2
Table 2.	Phase I-VI Closure Drainage Basins (2022) .....	4
Table 3.	Top Slope Berms Peak Flows and ICPR Results .....	5
Table 4.	Midslope Berms Peak Flows and ICPR Results .....	6
Table 5.	Downchutes and Access Road Swale Peak Flows .....	8
Table 6.	Comparison of 2008 Permitted Discharge and Phase I-VI Closure Model Design.....	9

## Attachments

Appendix A	Stormwater Feature Map
Appendix B	Approved Drainage Basin Plan (2008)
Appendix C	Post-Development Drainage Maps
Appendix D	Phase I-VI ICPR Model Schematic Figures, Inputs, Outputs, and References
Appendix E	Channel Analysis
Appendix F	Permitted 2008 ICPR Model Outputs

## Figures

Figure C.1-C.6	Drainage Area Maps
Figure D.1-D.5	ICPR Schematic Drawings
Figure E.1	Proposed Typical Stormwater Details

## INTRODUCTION

This Stormwater Management Report was prepared by SCS Engineers (SCS) for the Southeast County Landfill (SCLF) Phase I-VI Closure Design. The Phase I-VI Closure Design was developed as part of a Phases II-III Accelerated Closure permit application that will be incorporated into the active SCLF solid waste operations permit to satisfy conditions of Alternate Procedure SWAP19-1. In order to develop a more functional and cohesive closure design for the Phases II-III Accelerated Closure permit application, SCS has developed a closure design, plans, and model based on closure of the entirety of Phase I-VI.

Although a site-wide Conceptual Environmental Resource Permit (CERP) application for the SCLF was approved by the FDEP in 2008, the model was not used to size structures within the Phase I-VI landfill footprint. Therefore, SCS has subdivided the original five basins on Phase I-VI into over forty sub-basins. The overall post-development conditions of the Phase I-VI area will not deviate from the conditions approved as part of the 2008 CERP.

The purpose of this report is to provide a summary of the proposed stormwater design associated with the Phase I-VI final closure, which includes the implementation of downchutes, top slope berms, midslope berms, and an access road swale as part of the design stormwater system. SCS used Interconnected Channel and Pond Routing (ICPR) modeling software v.4.07.08 to model the drainage patterns of the stormwater management system to ensure its components provide adequate capacity to convey a 25-year/24-hour duration rain event, and rainfall depth of 8.40 inches.

This Phase I-VI Closure model was then compared to the results of the ICPR model associated with the 2008 site-wide CERP No. 29-0270881-004 to ensure the refined stormwater design does not exceed the currently permitted post-development peak flow values at Ponds B and D. A summary of this comparison can be found in the Results section of this report.

## EXISTING CONDITIONS

A site-wide CERP application was approved by the FDEP in 2008 for the SCLF. Under this permit, modifications to the existing stormwater ponds of Phases I-VI and the proposed stormwater ponds/conveyances may be authorized. This approved permit submittal included Stormwater Management Plans with the Phases I-VI final buildout divided into a total of five drainage basins. A terrace and downchute system was proposed to direct stormwater runoff off the Phase I-VI footprint.

Currently the stormwater management system at SCLF is comprised of the following drainage areas that include Sedimentation Ponds A-2, A-3, 2, 3, 4, 8, Ponds A-1, B, C, D, E, F, G, H and a series of perimeter conveyance ditches. Stormwater runoff flows through the stormwater system to Pond B and Pond D, the furthest downstream stormwater ponds that are existing, which subsequently convey flow to surface water features that are referred to as mine cuts. These mine cuts, which are located entirely on site, are remnants of site-wide phosphate mining activities conducted by the previous land owner (Agrico Chemical Company) from the 1940's through the early 1980's. **Appendix A** contains a figure of the current stormwater ponds and conveyance features at the SCLF.

The three mine cuts (Mine Cut 1, Mine Cut 2, and Mine Cut 3) convey water counterclockwise around the site and ultimately discharge at the northwest corner of the property through NPDES Outfall No. 001 into a tributary of Long Flat Creek. Long Flat Creek flows in a northerly direction before discharging into the Alafia River. See **Appendix B** for the Approved Drainage Basin Plan of SCLF.

For the purpose of this report, the ICPR model associated with the approved 2008 CERP will be used to compare the refined Phase I-VI stormwater design model. **Table 1** shows the stormwater basin areas used in the approved 2008 CERP.

Table 1. Approved Drainage Basins (2008 CERP)

<b>Basin Name</b>	<b>Area (acres)</b>	<b>Outlet</b>	<b>Location</b>
PH 1	40.4	Pond B	Phase I-VI
PH 2A	10.5	Pond B	Phase I-VI
PH 4	26.0	Pond B	Phase I-VI
A-1	5.0	Pond B	Perimeter
A-2	14.0	Pond B	Perimeter
A-3	9.1	Pond B	Perimeter
B	7.5	Pond B	Perimeter
F	1.3	Pond B	Perimeter
G	0.6	Pond B	Perimeter
PH 2	30.2	Pond D	Phase I-VI
PH 3	17.1	Pond D	Phase I-VI
PH 56	36.0	Pond D	Phase I-VI
Sec 12	8.6	Pond D	Landfill Expansion Area
Sec 13	24.3	Pond D	Landfill Expansion Area
Sed 2	16.4	Pond D	Perimeter
Sed 3	11.1	Pond D	Perimeter
Sed 4	17.9	Pond D	Perimeter
Sed 8	0.5	Pond D	Perimeter
D	31.5	Pond D	Perimeter
<b>Total Area:</b>	<b>308</b>		

## POST DEVELOPMENT CONDITIONS

The proposed post-development conditions reflect the final “build-out” upon completion of the 162.4 acre Phase I-VI Landfill final closure. The closure design structures within the Phase I-VI footprint have been designed to handle a 25-year/24-hour duration rain event. The design consists of top slope berms, midslope berms, downchutes and an access road swale to direct stormwater off Phases I-VI and into the existing site-wide stormwater system. No improvements are proposed outside the Phase I-VI footprint; therefore, the existing stormwater system as described in the previous section is not affected. Peak outflow from Pond B and Pond D have not increased, as shown in the Results section of this report. Further detail for each proposed stormwater conveyance structure is provided in the narrative below and within the Phase I-VI Closure Design Drawings. Information regarding the updated ICPR model can be found in the following section.

The final cover system at the top (crown) of the Phase I-VI closure area is designed to be at a 5% slope with side slopes no greater than 4(H):1(V). Stormwater runoff on the final cover system will travel downslope to a series of berms. These berms are designed with depth of two feet to provide adequate storage capacity. Stormwater will be conveyed at an approximate 2% slope along the

berms to downchutes. Additionally, a geocomposite drain system will be installed throughout the crown portion of the final cover system to direct stormwater that has infiltrated through the soil cover off of the closure liner and into the downchutes. Drain pipes in the geocomposite will be installed upslope of each proposed midslope berm to re-direct stormwater off the liner system and into its respective downchute. Although these geocomposite drains collect a minimal amount of infiltrated water (less than 0.3 inches of depth), they are critical to prevent saturation of the cover soil which could lead to veneer stability failure.

The proposed downchutes are designed to be open channel trapezoids with a top width of 19 feet, a bottom width of 7 feet, and side slopes of 3(H):1(V) providing adequate storage capacity. The downchutes will be lined with grout filled fabric revetment (GFFR), which consists of a fabric envelope in a mat configuration filled with a pumpable sand/cement grout to form a stable mat surface of suitable weight and configuration. A series of gabion walls and GFFR armoring will be installed at the toe of the downchutes to act as energy dissipators in order to prevent soil erosion. Additionally, the proposed access road swale will be three feet wide, two feet deep, with a 3:1 slope on both sides of the swale. Like the downchutes, the access road swale will be GFFR-lined and will direct stormwater runoff from the permanent access road off the closure area and into its respective downchute. The access road will traverse the Phase I and Phase II side slope in a counter-clockwise direction until reaching the top of the landfill, providing access to closed portions of the landfill.

Vegetative cover (sod) will be placed on the final cover slopes of the SCLF. This vegetative cover will minimize erosion and reduce soil loss from the final cover system. The final cover system will be regularly inspected in accordance with the Phase I-VI Long-Term Care Plan and erosion damage or vegetative stress will be repaired before significant erosion is developed. For additional design information, the Phase I-VI Closure Design Drawings have been included as Attachment A of the Phases II-III Accelerated Closure Permit Application dated February, 2022 (bound separately).

## ICPR MODEL PARAMETERS

The post-development hydraulic conditions for all contributing area to Ponds B and D, including the Phase I-VI closure design and conceptual Capacity Expansion Area were simulated using ICPR modeling software. Drainage basins (referred to as Basins and Sub-Basins in ICPR) were delineated for each existing and proposed conveyance structure. These drainage basins are listed below in **Table 2**. The model concludes at Ponds B and D as these two ponds are the two furthest downstream ponds to which the stormwater within Phases I-VI travels. Existing perimeter stormwater ditches, conveyance structures, and sedimentation/stormwater ponds were also incorporated into the Phase I-VI Closure model using a topographic survey provided by Pickett (surveyor) dated July 29, 2021, as-built information from the permitted 2008 conceptual site-wide design, and input data from the approved 2008 CERP model.

**Table 2** shows the areas of drainage basins used in the current stormwater model. Note, these basins, with the exception of Section 12 and 13, were delineated using the previously mentioned topographic survey and as-built information as well as the Phase I-VI Closure stormwater management plan associated with the Phase IVI Closure design. Section 12 and 13 drainage basins were delineated using the footprint and section boundaries of the Capacity Expansion Area, proposed final grades and the permitted 2008 Drainage Basin Plan. As can be seen, both **Table 1** and **Table 2** give a total area of approximately 308 acres, with a resulting difference of 0.6 acres (0.2%) between the two total areas. This minor difference is within an acceptable range and is to be expected when accounting for rounding error and drainage basin delineation computing differences between the 2008 Drainage Basin Plan and the updated drainage areas. Post-development drainage maps associated with the Phase I-VI Closure model can be found as **Figures C.1 through C.6** in **Appendix C**.

Table 2. Phase I-VI Closure Drainage Basins (2022)

<b>Basin Name</b>	<b>Area (acres)</b>	<b>Outlet</b>	<b>Location</b>
B7-A	1.3	Pond B	Downchute 7
Q - R	9.6	Pond B	Downchute 8
Z08 - O - P	12.2	Pond B	Downchute 9
Z07 - N - M	25.9	Pond B	Downchute 10
Z06 - Z09 - K - L	26.8	Pond B	Downchute 11
J	5.1	Pond B	Downchute 1
Z05 - H - I	4.0	Pond B	Perimeter
Sed A-2	13.8	Pond B	Perimeter
Sed A-3	8.7	Pond B	Perimeter
SE Ditch	7.6	Pond B	Perimeter
NE Ditch	2.3	Pond B	Perimeter
Pond F	1.6	Pond B	Perimeter
Pond G	1.1	Pond B	Perimeter
Pond B	7.0		Perimeter
NW Ditch	2.3	Pond D	Perimeter
SW Ditch	0.5	Pond D	Perimeter
Z05 - H - I	9.5	Pond D	Downchute 2
Z04 - F - G	15.1	Pond D	Downchute 3
Z03 - D - E	20.7	Pond D	Downchute 4
Z02 - B - C	16.0	Pond D	Downchute 5
Z01 - A - S	11.0	Pond D	Downchute 6
Sec 12	10.5	Pond D	CEA
Sec 13	22.4	Pond D	CEA
Sed 4	16.3	Pond D	Perimeter
Sed 3	10.1	Pond D	Perimeter
Sed 2	4.9	Pond D	Perimeter
Sed 8	10.8	Pond D	Perimeter
Pond D	31.5		Perimeter
<b>Total Area</b>	<b>308.6</b>		

Nodes and Channel Links were utilized to develop a “Link-Node network”, with Links modeling each downchute and berm and Nodes modeling the adjoining point of each downchute and berm. Furthermore, the model incorporated the same parameters as the approved 2008 CERP model including the Natural Resource Conservation Service (NRCS) Unit Hydrograph 484 for the drainage basins inside the Phase I-VI footprint, and Unit Hydrograph 256 for the drainage basins of the perimeter ditches and ponds. These hydrographs simulated the direct runoff generated over each drainage basin at a constant rate during the specified time interval using the Soil Conservation Service Curve Number Method (CN) and an 8.40-inch rainfall depth. Lastly, elevation warning stages were assigned for each node. These warning stages were set two feet (the design depth for each

structure) higher than the upstream and downstream elevation for each berm and downchute within the Phase I-VI footprint, ultimately showing if the 25-year/24-hour duration rain event would overtop the berms or downchutes. The following section contains a summary of the model outputs. **Appendix D** includes ICPR schematic drawings as **Figures D.1 through D.5**, inputs, outputs, and model references. The Phase I-VI Closure Stormwater design is portrayed in the Phase I-VI Closure Design Drawings, included as Attachment A of the Phases II-III Accelerated Closure Permit Application.

As previously mentioned, Section 12 and 13 drainage basins were delineated using the current footprint, proposed final landfill elevations, section boundaries of the Capacity Expansion Area, and the permitted 2008 Drainage Basin Plan. Downchutes in these basins were modeled using design information of the downchutes in the Phase I-VI Closure design and inputs from the 2008 CERP model where applicable (length, slope, and invert elevations). Other conveyance structures in this area generally followed the 2008 CERP model, though width and depth values had to be increased in the Phase I-VI closure model, to eliminate structure overflow.

## RESULTS

Stormwater runoff along the top of the closed landfill will flow to a series of berms along the edge of crown. These berms are sized to convey the peak runoff from a 25-year/24-hour duration rain event. A typical detail for the top slope berms is included in **Appendix E** as **Figure E.1**. To avoid erosion of the cover, the shear stress for vegetation and underlying substrates were calculated on the berm section with the largest peak flow. The shear stresses were analyzed using North American Green, Erosion Control Materials Design Software Version 7.0 with sod grass and no reinforcement. Results are included as **Appendix E** and show the channel to be stable with a factor of safety of 3.14. **Table 3** below shows the maximum flow and velocity along each of the top slope berms.

Table 3. Top Slope Berms Peak Flows and ICPR Results

Basin Name	Top Slope Berm	Erosion Control	Peak Flow (cfs)	Max Velocity (fps)	Warning Stage (ft)	Max Stage (ft)
Z01-A	L-0680C	Sod	14.62	3.17	226.26	223.71
Z01-B	L-0670C	Sod	14.24	1.44	237.64	236.65
Z01-B	L-1700C	Sod	12.99	3.13	226.26	223.71
Z02-A	L-1400C	Sod	23.51	3.01	225.75	224.72
Z02-B	L-1330C	Sod	24.88	3.30	225.75	224.72
Z03-A	L-0230C	Sod	38.37	3.89	225.75	224.30
Z03-B	L-2340C	Sod	42.51	3.94	225.75	224.30
Z04-A	L-1170C	Sod	23.52	2.98	225.00	224.00
Z04-B	L-1180C	Sod	27.18	3.32	225.00	224.00
Z05-A	L-0460C	Sod	7.73	2.86	225.00	223.45
Z05-B	L-0500C	Sod	5.21	2.62	225.00	223.45
Z06-A	L-0570C	Sod	35.12	3.56	225.75	224.87
Z06-B	L-0630C	Sod	30.67	3.13	225.75	224.87
Z07-A	L-1060C	Sod	38.23	3.29	225.75	224.98
Z07-B	L-1070C	Sod	35.13	3.06	225.75	224.98
Z08-A	L-0360C	Sod	14.02	1.25	229.34	228.47

Z08-A	L-1580C	Sod	11.90	2.94	225.58	224.21
Z08-B	L-0350C	Sod	12.34	1.09	226.24	225.33
Z08-B	L-1590C	Sod	11.16	2.93	225.58	224.21

Stormwater runoff along the side slopes of the closed landfill will flow to a series of berms that flow to the downchutes. These berms are sized to convey the peak runoff from a 25-year/24-hour duration rain event. A typical detail for the midslope berms is included in **Appendix E** as **Figure E**. To avoid erosion of the cover, the shear stress for vegetation and underlying substrates were calculated on the midslope berm section with the largest peak flow. The shear stresses were analyzed using North American Green, Erosion Control Materials Design Software Version 7.0 with sod grass and no reinforcement. Results are included as **Appendix E** and show the channel to be stable with a factor of safety of 2.29. **Table 4** below shows the maximum flow and velocity along each of the midslope berms.

Table 4. Midslope Berms Peak Flows and ICPR Results

Basin Name	Midslope Berm	Erosion Control	Peak Flow (cfs)	Max Velocity (fps)	Warning Stage (ft)	Max Stage (ft)
A01	L-0740C	Sod	9.05	2.91	138.2	137.42
A02	L-0710C	Sod	3.66	2.28	173.93	172.93
A03	L-0700C	Sod	7.96	3.58	194	192.81
B01	L-1360C	Sod	11.22	2.78	137.9	137.44
B02	L-1350C	Sod	7.82	2.55	179	178.33
B03	L-1340C	Sod	8.73	3.4	208.92	207.98
C01	L-1370C	Sod	15.33	3	137.9	137.44
C02	L-1380C	Sod	8.38	2.51	179	178.33
C03	L-1390C	Sod	12.87	3.67	203.92	203.11
D01	L-0300C	Sod	15.33	1.42	135.5	135.41
D02	L-0280C	Sod	13.45	2.62	168	167.66
D03	L-0260C	Sod	16.724	2.85	202	201.52
E01	L-0290C	Sod	7.99	1.41	135.5	135.41
E02	L-0270C	Sod	6.92	1.7	172	171.56
E03	L-0250C	Sod	9.45	2.34	202	201.52
F01	L-1240C	Sod	4.21	1.35	146.19	145.63
F02	L-1220C	Sod	7.21	2.13	163	162.41
F03	L-1200C	Sod	12.33	3.42	192	191.27
G01	L-1230C	Sod	7.64	1.87	140	139.5
G02	L-1210C	Sod	9.38	2.57	163	162.41
G03	L-1190C	Sod	15.99	3.92	192	191.27
H01	L-0490C	Sod	8.64	3	139	137.14
H02	L-0480C	Sod	7.32	3.28	169	167.94
H03	L-0470C	Sod	8.85	3.65	199	197.75

I01	L-0530C	Sod	9.69	3.24	139	137.14
I02	L-0520C	Sod	8.01	3.39	169	167.94
I03	L-0510C	Sod	9.09	3.68	199	197.75
J01	L-1300C	Sod	12.25	3.9	136	130.63
J02	L-1290C	Sod	10.63	3.81	164	162.5
J03	L-1280C	Sod	5.41	3.33	192.41	190.67
K01	L-0610C	Sod	11.76	2.55	160	159.7
K02	L-0620C	Sod	17.4	0.82	205.2	205.2
K03	L-1600C	Sod	32.83	4.3	194	193.55
L01	L-0600C	Sod	8.23	3.6	138	129.03
L02	L-0590C	Sod	11.85	2.77	164	163.55
L03	L-0580C	Sod	14.65	3.44	197.18	196.45
M01	L-1120C	Sod	11.14	2.2	136.92	136.65
M02	L-1110C	Sod	10.61	2.39	164	163.55
M03	L-1080C	Sod	19.64	4.14	194	193.4
N01	L-1130C	Sod	11.58	2.29	136.92	136.65
N02	L-1100C	Sod	11.6	2.36	162	161.63
N03	L-1090C	Sod	17.74	3.72	194	193.4
O01	L-0400C	Sod	8.14	1.37	137.7	137.12
O02	L-0390C	Sod	9.14	3.67	164.22	162.92
O03	L-0370C	Sod	15.03	4.07	194.04	192.88
P01	L-0420C	Sod	6.82	1.49	137.7	137.12
P02	L-0410C	Sod	6.86	3.48	164.22	162.92
P03	L-0380C	Sod	6.56	3.45	194.04	192.88
Q01	L-1530C	Sod	6.78	1.98	139.15	137.29
Q02	L-1510C	Sod	9.51	3.46	161.9	160.95
Q03	L-1500C	Sod	17.58	4.21	192.8	192.76
R01	L-1570C	Sod	3.38	3.02	139.15	137.29
R02	L-1520C	Sod	8.84	3.54	163.92	162.87
R03	L-1490C	Sod	19.78	1.47	192.8	192.76
S01	L-0730C	Sod	8.22	2.76	138.2	137.42
S02	L-1480C	Sod	4.63	3.19	171	163.06
S03	L-0690C	Sod	12.65	3.92	191.07	190.03
B7-A	L-0870C	Sod	8.15	3.59	154.03	151.96

For ICPR modeling purposes each section of the downchute was divided into segments, where it meets a berm outlet into the downchute. The downchute's maximum peak flows and velocities (for each section/node) are summarized below in **Table 5**. Downchutes were sized to manage peak runoff from a 25-year/24-hour duration rain event without overtopping. According to the ICPR model for the design storm, all warning stage elevations were met and no overflow will occur. For a more detailed breakdown of the results see **Appendix D**.

Table 5. Downchutes and Access Road Swale Peak Flows

Structure	Erosion Control	Peak Flow (cfs)	Max Velocity (fps)
Downchute 1	GFFR	23.51	12.46
Downchute 2	GFFR	61.61	20.83
Downchute 3	GFFR	100.90	15.59
Downchute 4	GFFR	139.44	16.72
Downchute 5	GFFR	105.59	15.93
Downchute 6	GFFR	69.83	14.05
Downchute 7	GFFR	8.14	3.08
Downchute 8	GFFR	63.06	13.43
Downchute 9	GFFR	60.03	11.20
Downchute 10	GFFR	130.98	16.32
Downchute 11	GFFR	126.61	16.98
Access Road Swale	GFFR	25.70	6.84

**Table 6** below provides the comparison of the max stage and warning stage elevations from the approved 2008 CERP model (which also represents current site conditions for this analysis) and the model associated with the Phase I-VI closure stormwater design. The 2008 CERP values below were taken from the permitted 2008 ICPR Model outputs provided as **Appendix F**. As can be seen, the proposed improvements do not increase the permitted max total outflow values of Pond B and Pond D. Additionally, Pond D's max stage elevation is not increased as a result of the proposed Phase I-VI Closure design improvements and Pond B's max stage elevation is increased a negligible amount (0.09ft) while remaining over four feet under the warning stage. The slight increase in Pond B's max stage elevation can be attributed to the fact that the downchute configuration of the Phase I-VI Closure stormwater design varies from the 2008 CERP design, and as such, Pond A-3 receives a significantly higher max inflow than what is shown in the 2008 CERP model results (177.49 cfs vs 18.14 cfs). This results in a 67% increase in Pond A-3 outflow; 26.29 cfs (Phase I-VI Closure model) vs. 15.66 cfs (2008 CERP model). It is also worth noting that the 2008 CERP model was created using ICPR v3, which is no longer supported by Streamline Technologies, Inc, whereas the Phase I-VI Closure model was created using ICPR v.4.07.08.

Table 6. Comparison of 2008 Permitted Discharge and Phase I-VI Closure Model Design

Name of Pond	2008 Permitted Post-Development			Phase I-VI Closure Post-Development		
	Max Total Outflow (cfs)	Max Stage (ft)	Warning Stage (ft)	Max Total Outflow (cfs)	Max Stage (ft)	Warning Stage (ft)
Sed Pond 2	120.62	123.18	125	72.13	123.12	125
Sed Pond 3	73.16	127.46	130	178.62	123.90	130
Sed Pond 4	115.71	130.90	132	116.02	129.04	132
Sed Pond 8	120.95	120.42	125	179.45	120.16	125
<b>Pond D</b>	<b>34.88</b>	<b>115.43</b>	<b>116</b>	<b>31.22</b>	<b>114.75</b>	<b>116</b>
Pond F	4.55	126.34	128	5.26	127.94	128
Pond G	5.37	125.76	127	1.75	126.64	127
Pond A-1	13.13	127.38	128	10.26	125.80	128
Sed Pond A-2	13.44	125.33	126	7.95	125.73	126
Sed Pond A-3	15.66	125.24	126	26.29	125.74	126
<b>Pond B</b>	<b>70.69</b>	<b>125.65</b>	<b>130</b>	<b>70.15</b>	<b>125.74</b>	<b>130</b>

## CONCLUSION

The ICPR model of the refined stormwater design for the SCLF Phase I-VI Closure Design will not increase the Pond B and Pond D max total outflow as shown in the previous section. Additionally, the proposed stormwater system successfully conveys and contains the design storm through the proposed structures on the landfill and existing conveyance features outside of the Phase I-VI footprint, as displayed in the Phase I-VI Closure ICPR model results. Therefore, the implementation of the post-development downchutes, berms, and access road swale on Phase I-VI will be sufficient to handle the design storm. These features will function to direct stormwater runoff, reducing infiltration into the landfill and mitigating erosion of the final landfill closure system.

## Appendix A

### Stormwater Feature Map

EXISTING STORMWATER PIPE DATA TABLE			
STRUCTURE NO	TYPE OF STRUCTURE	DIAMETER (IN)	LENGTH (FT)
S-2	ERCP	14x22	92.38
S-3	CMP	36.00	81.19
S-4	ERCP	14x22	47.87
S-5	ERCP	14x22	73.39
S-6	ERCP	14x22	50
S-8	ERCP	34x54	100.67
	ERCP	34x54	100.39
S-9	CMP	24.00	343.74
S-10	RCP	48.00	100.06
S-12A	RCP	30.00	169.40
S-12B	RCP	48.00	50.37
S-13	RCP	24.00	104.48
	RCP	24.00	104.56
S-14	RCP	24.00	104.90
	RCP	24.00	104.90
S-16	STEEL	24 (W)-21 (E)	22.04
	STEEL (E)-ECMP (W)	21 (E)-22x24 (W)	20.98
S-17	RCP	48.00	50.51
	RCP	48.00	50.71
S-18	CMP	18.00	19.89
S-19	RCP	48.00	161.35
S-20	CMP	48.00	90.98
	CMP	48.00	91.11
S-21	RCP	36.00	34.84
S-23	HDPE	8.00	41.00
	HDPE	8.00	41.00
S-24	ERCP	12x18	91.04
S-27	CMP	18.00	24.15
S-29	RCP	30.00	114.00
	RCP	30.00	114.00
S-30	RCP	36.00	119.00
	RCP	36.00	119.00
S-32	ERCP	24x38	355.00
	ERCP	24x38	355.00
S-33	RCP	36.00	81.00
S-44	HDPE	8.00	60.00
	HDPE	8.00	60.00
S-45	RCP	36x60	75.00
S-47	RCP	30.00	66.00
S-48	RCP	48.00	29.00
S-49	RCP	42.00	48.00
S-50	RCP	30.00	108.00
	RCP	30.00	108.00
S-51	RCP	36.00	50
S-52	RCP	36.00	50
S-53	RCP	3x6 BOX	27
S-54	HDPE	30.00	175
S-55	HDPE	30.00	175
S-57A	RCP	24.00	136
S-57B	RCP	24.00	136
S-58	CMP	12.00	40.34
	CMP	12.00	40.16
	CMP	12.00	40.27
TS-2	BOX CULVERT	48x96	74.73
TS-3	RCP	18.00	98.07
TS-6	METAL	20.00	29.65
	CMP	36.00	19.59

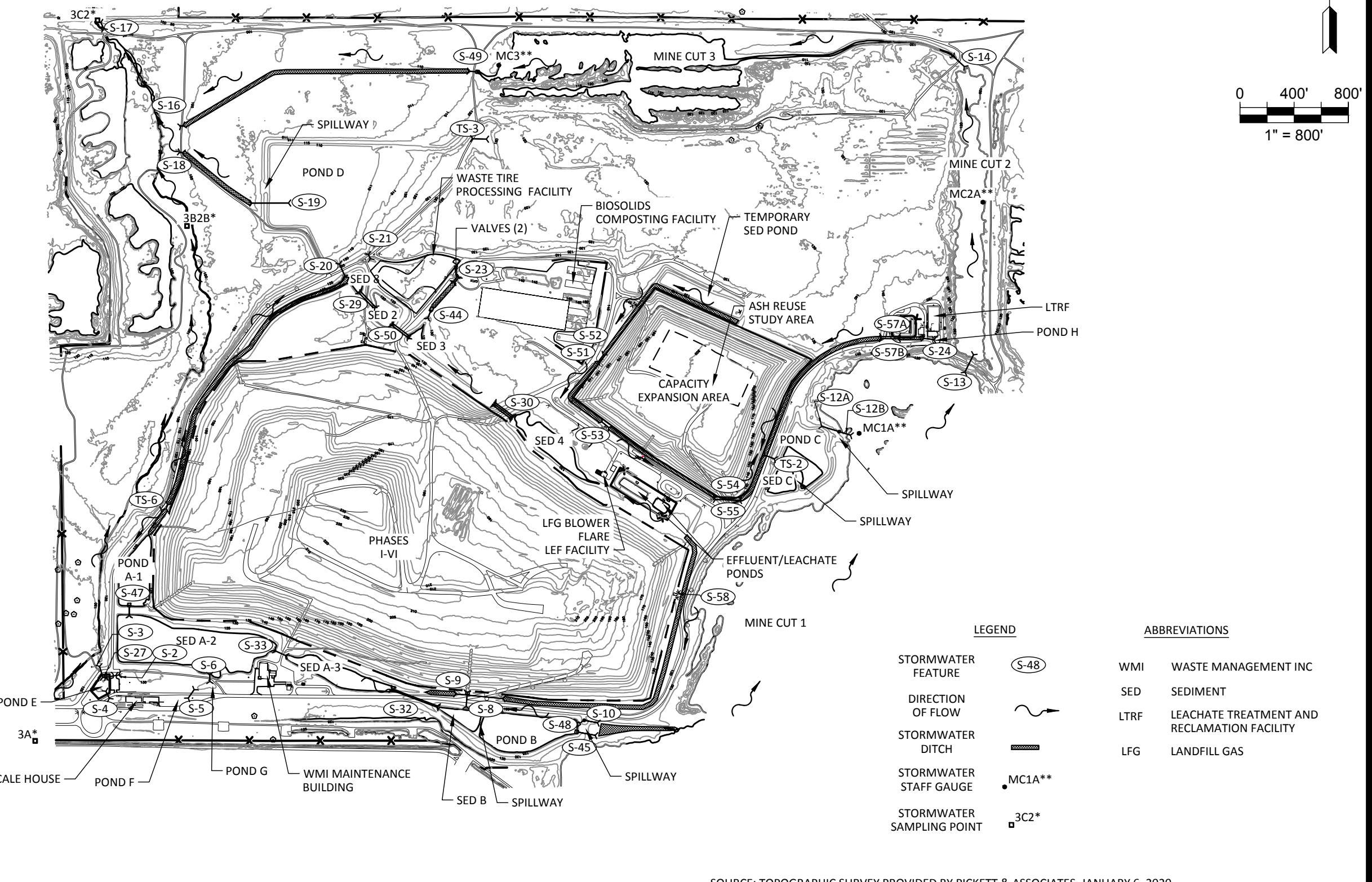
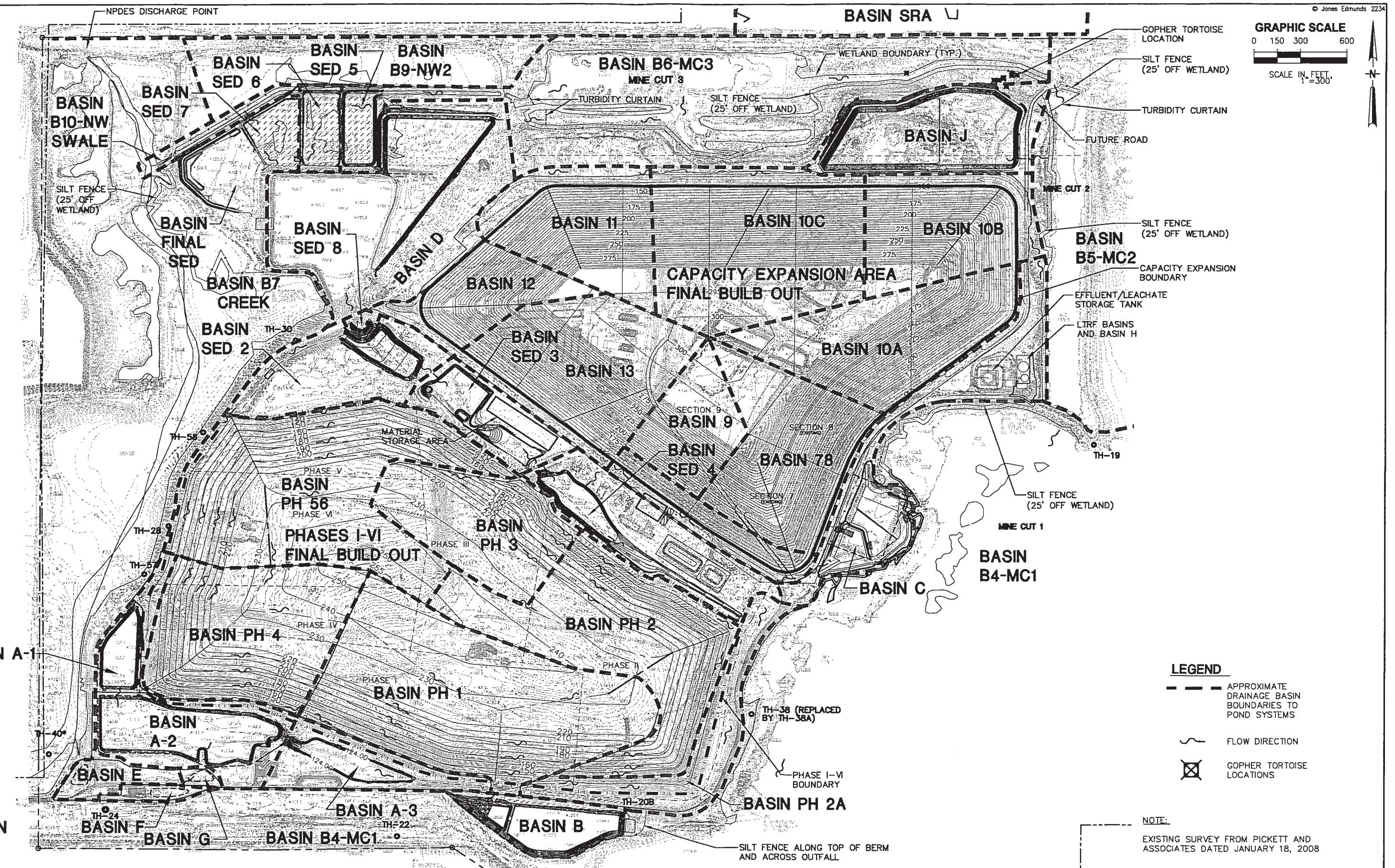


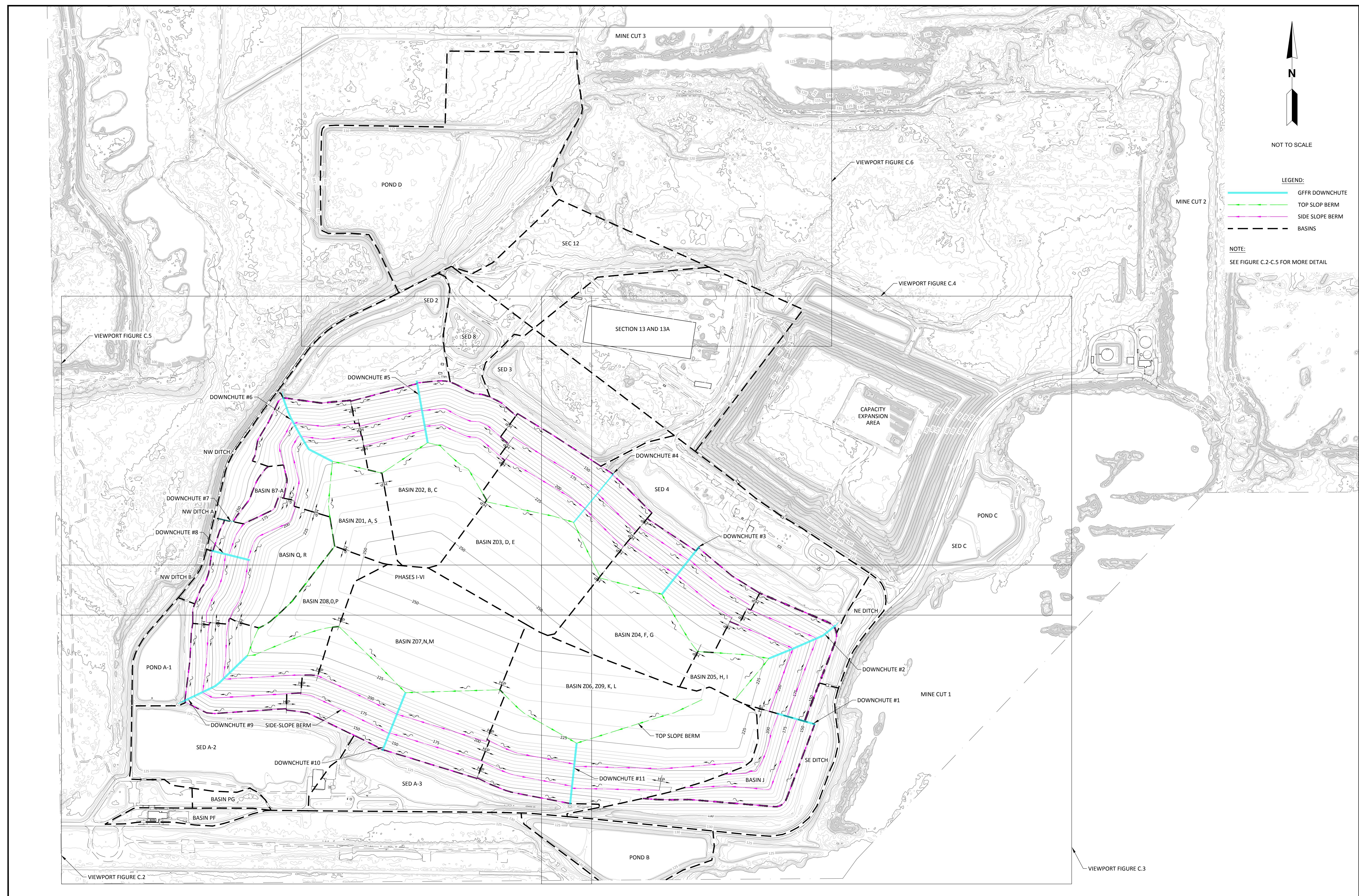
FIGURE 1. STORMWATER FEATURE MAP  
SOUTHEAST COUNTY LANDFILL - HILLSBOROUGH COUNTY, FLORIDA

**Appendix B**  
**Approved Drainage Basin Plan**  
**(2008 by Others)**

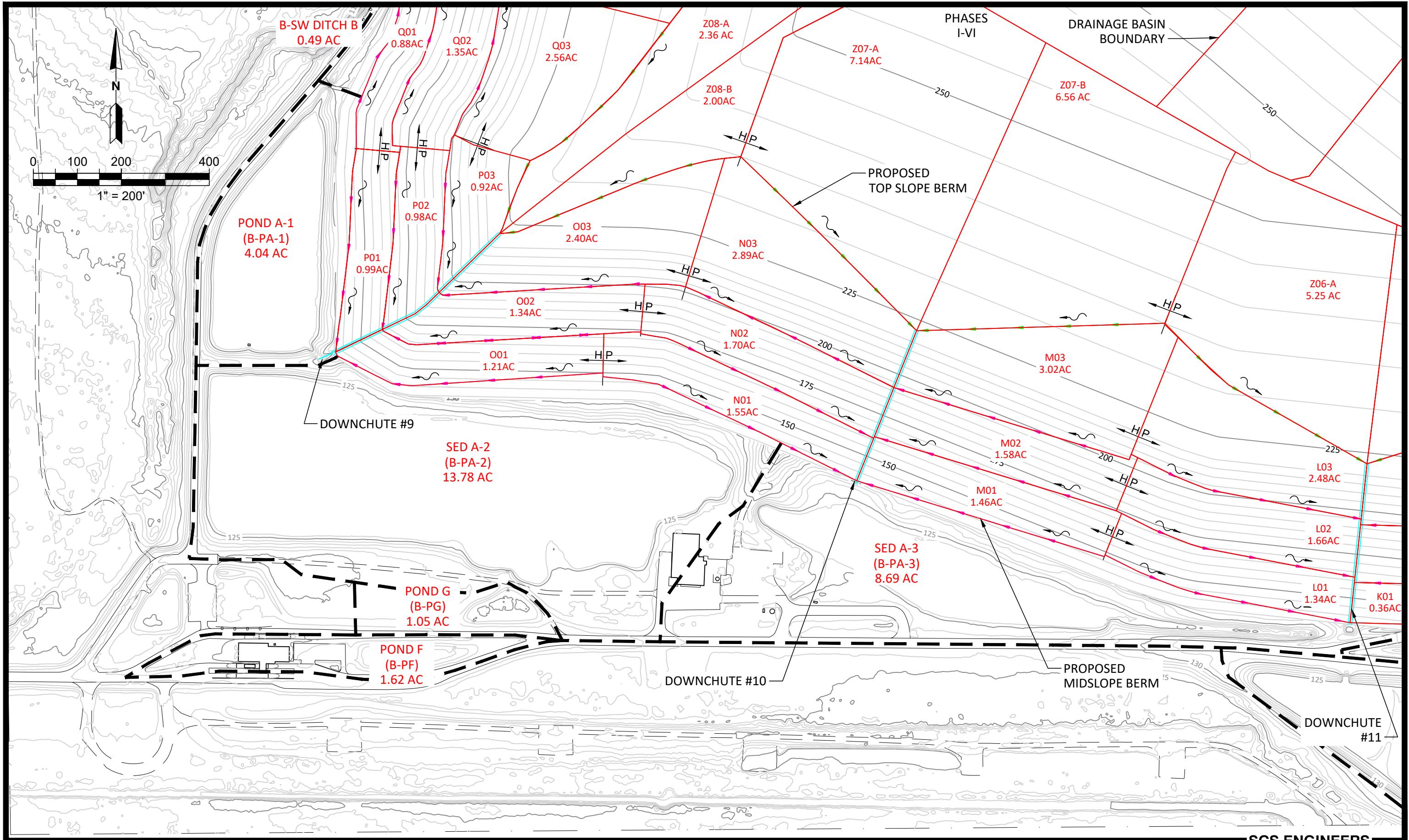


## Appendix C

### Post-Development Drainage Maps

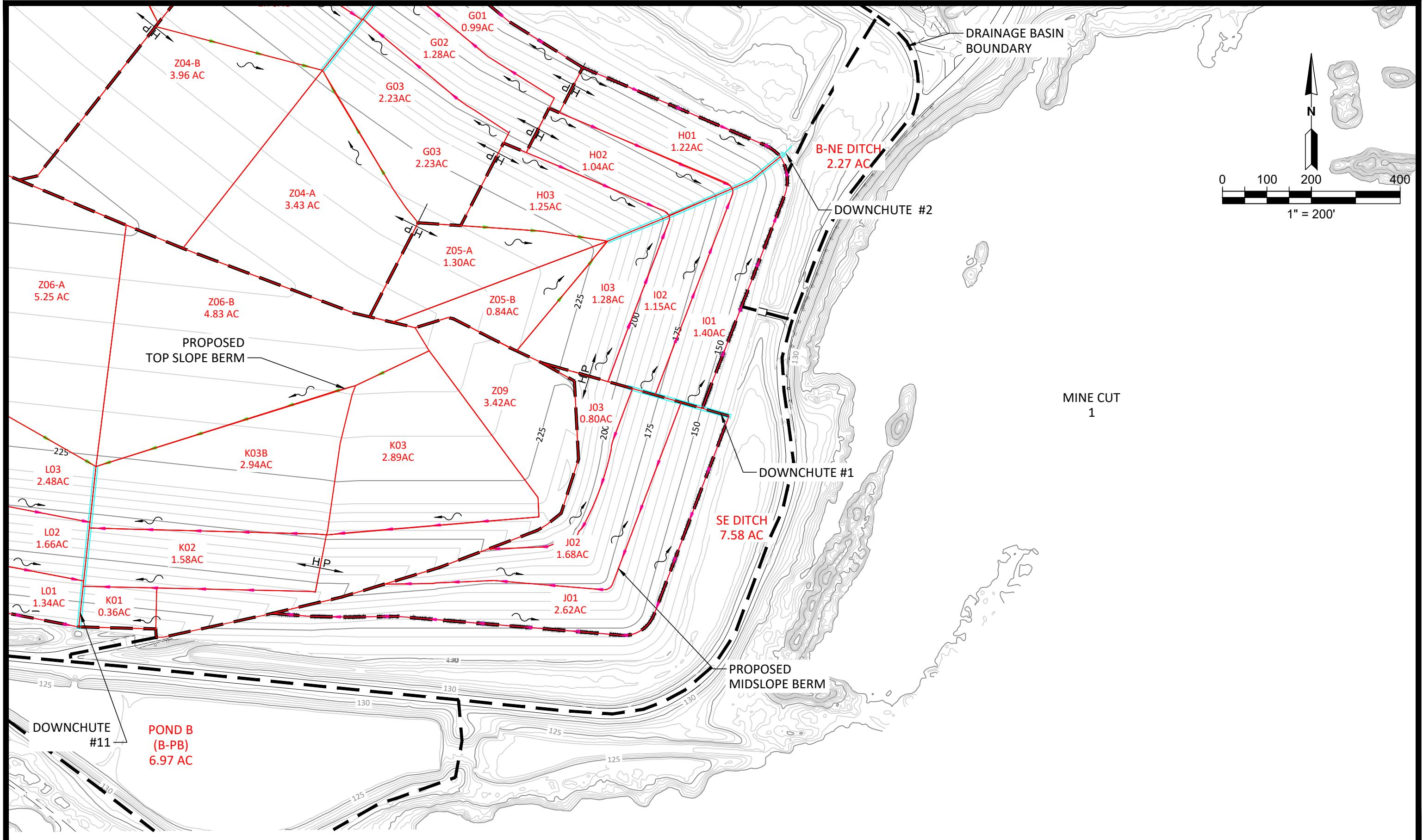


SOUTHEAST COUNTY LANDFILL - POST-DEVELOPMENT DRAINAGE MAP - FIGURE C.1



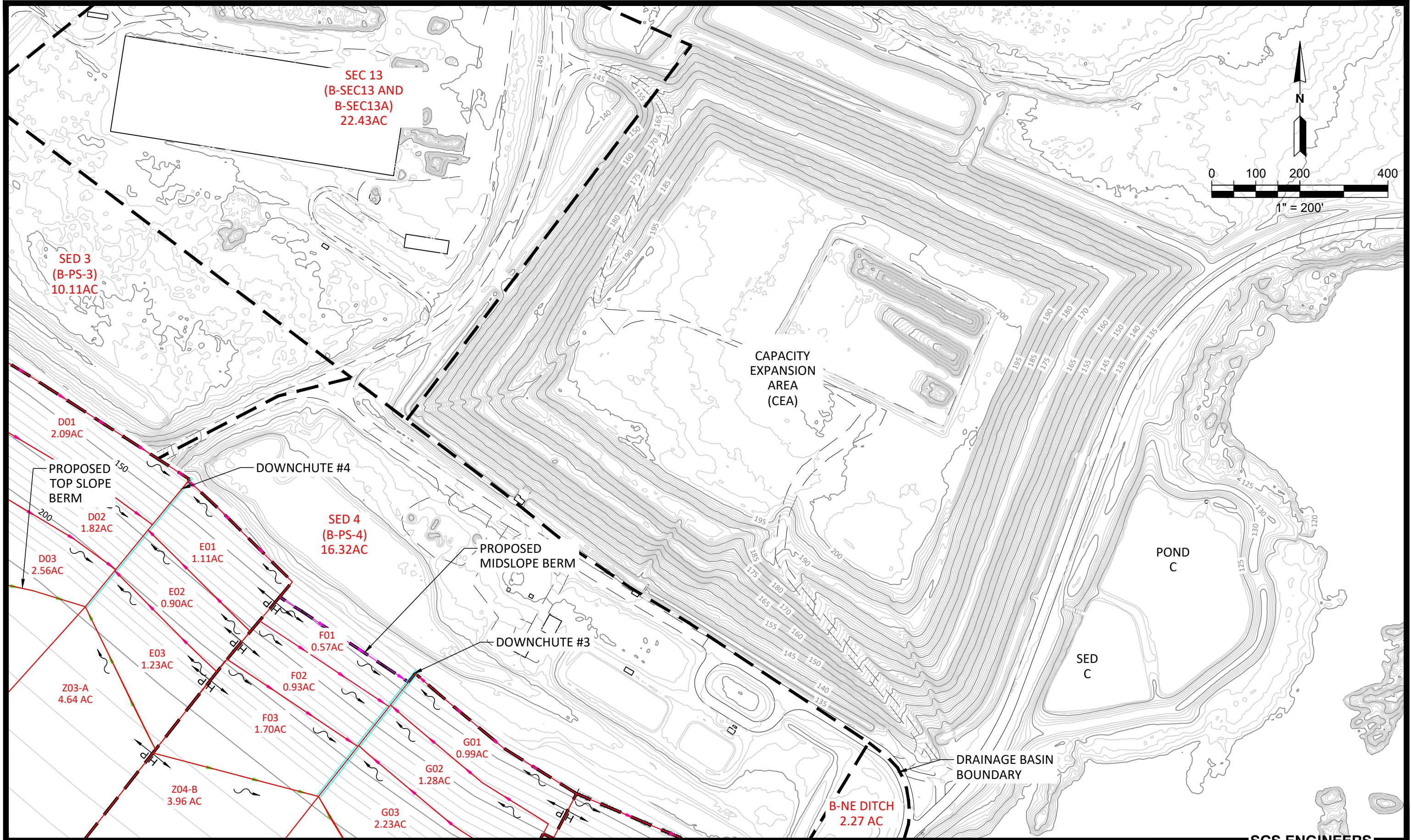
SOUTHEAST COUNTY LANDFILL - POST-DEVELOPMENT DRAINAGE MAPS - FIGURE C.2

SCS ENGINEERS



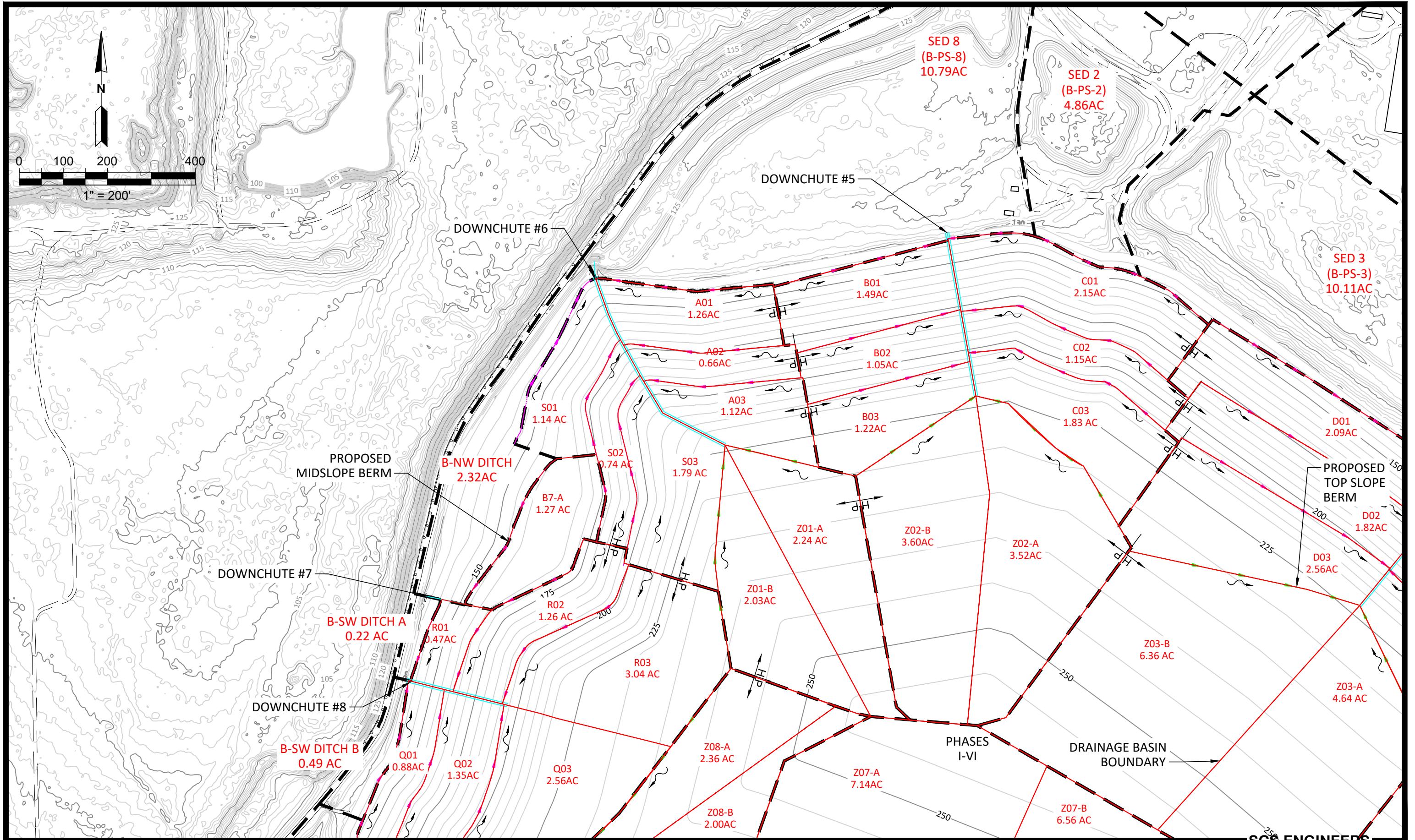
SOUTHEAST COUNTY LANDFILL - POST-DEVELOPMENT DRAINAGE MAPS - FIGURE C.3

SCS ENGINEERS



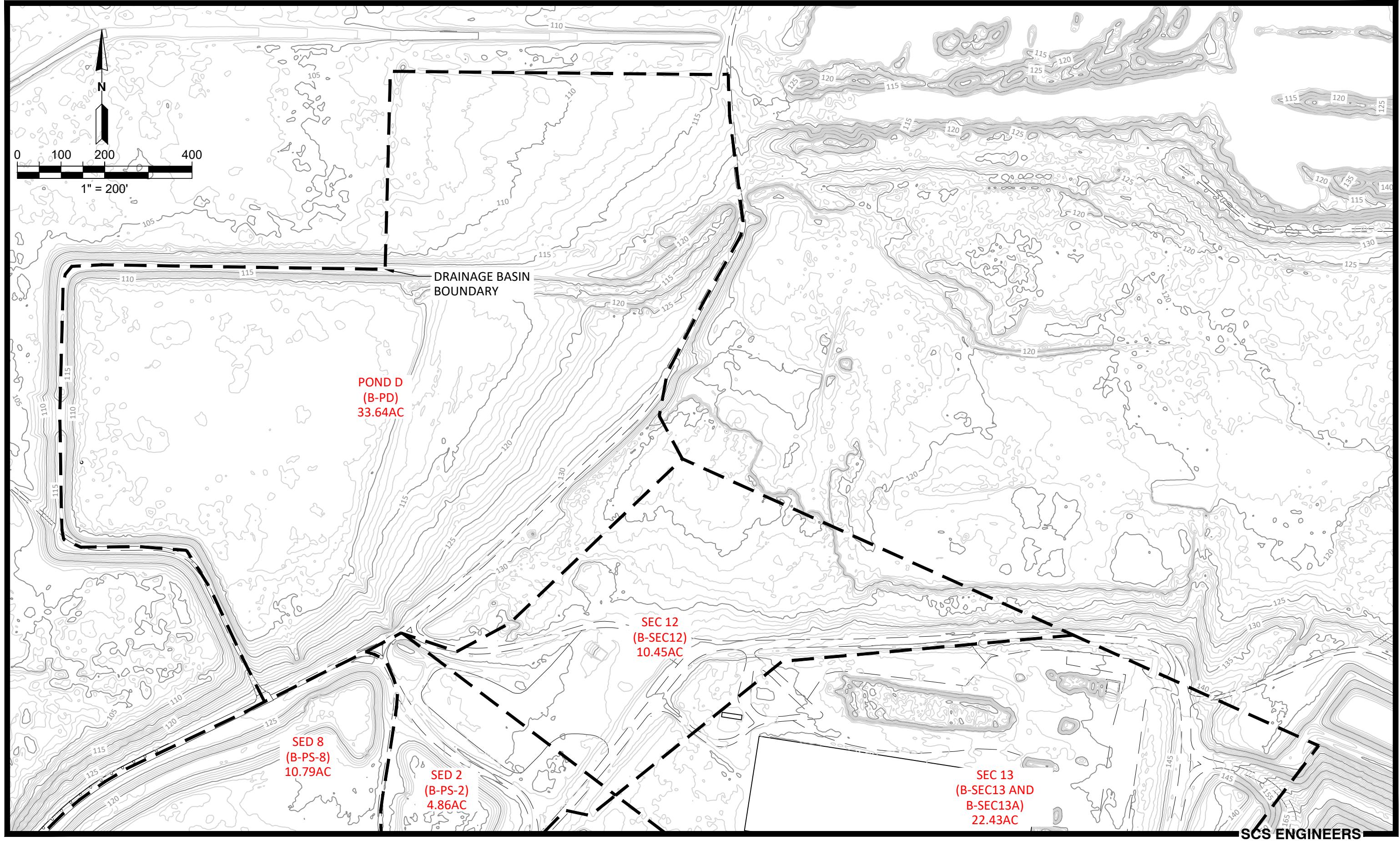
SOUTHEAST COUNTY LANDFILL - POST-DEVELOPMENT DRAINAGE MAPS - FIGURE C.4

SCS ENGINEERS



SOUTHEAST COUNTY LANDFILL - POST-DEVELOPMENT DRAINAGE MAPS - FIGURE C.5

SCS ENGINEERS



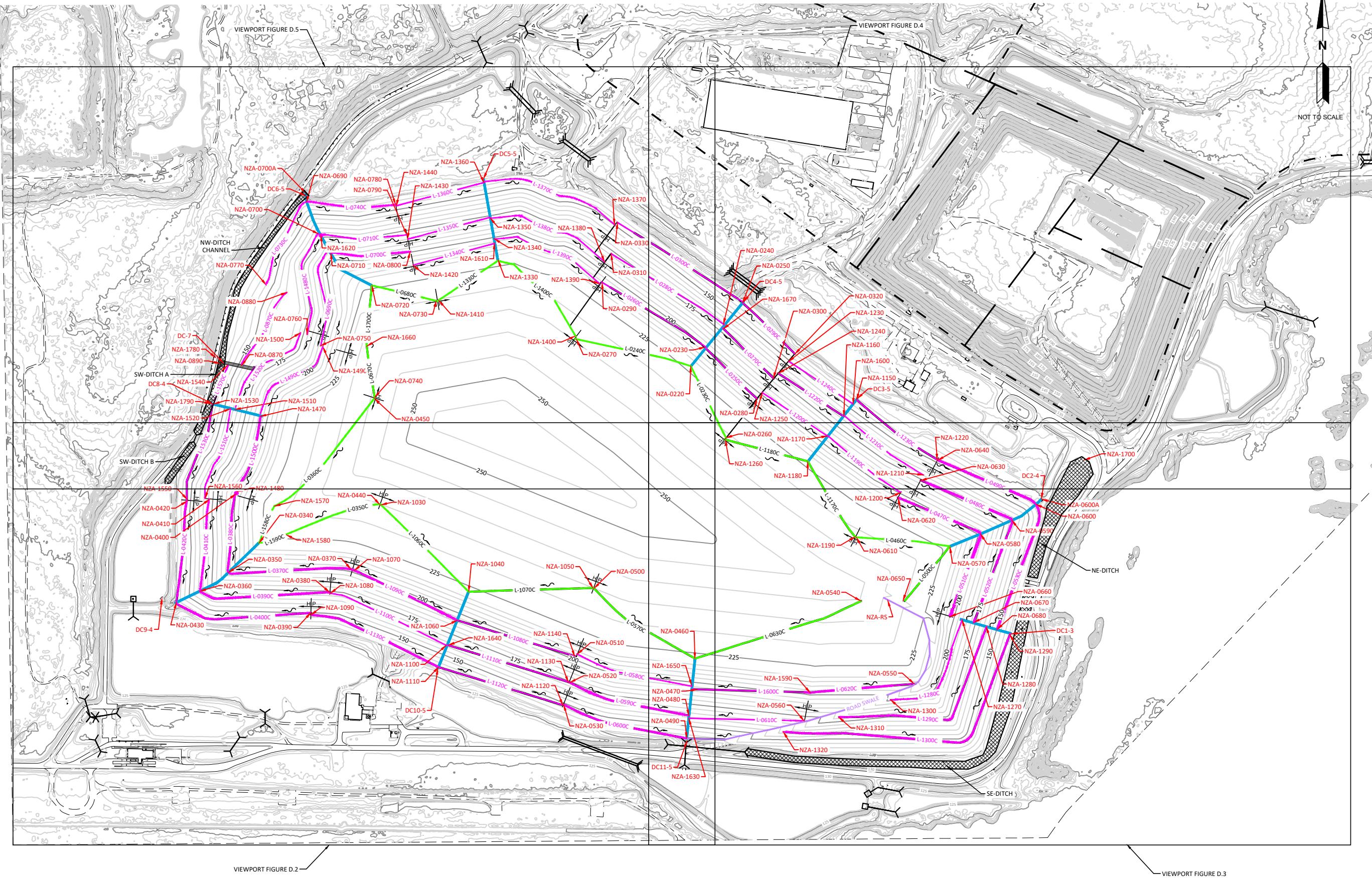
SOUTHEAST COUNTY LANDFILL - POST-DEVELOPMENT DRAINAGE MAPS - FIGURE C.6

SCS ENGINEERS

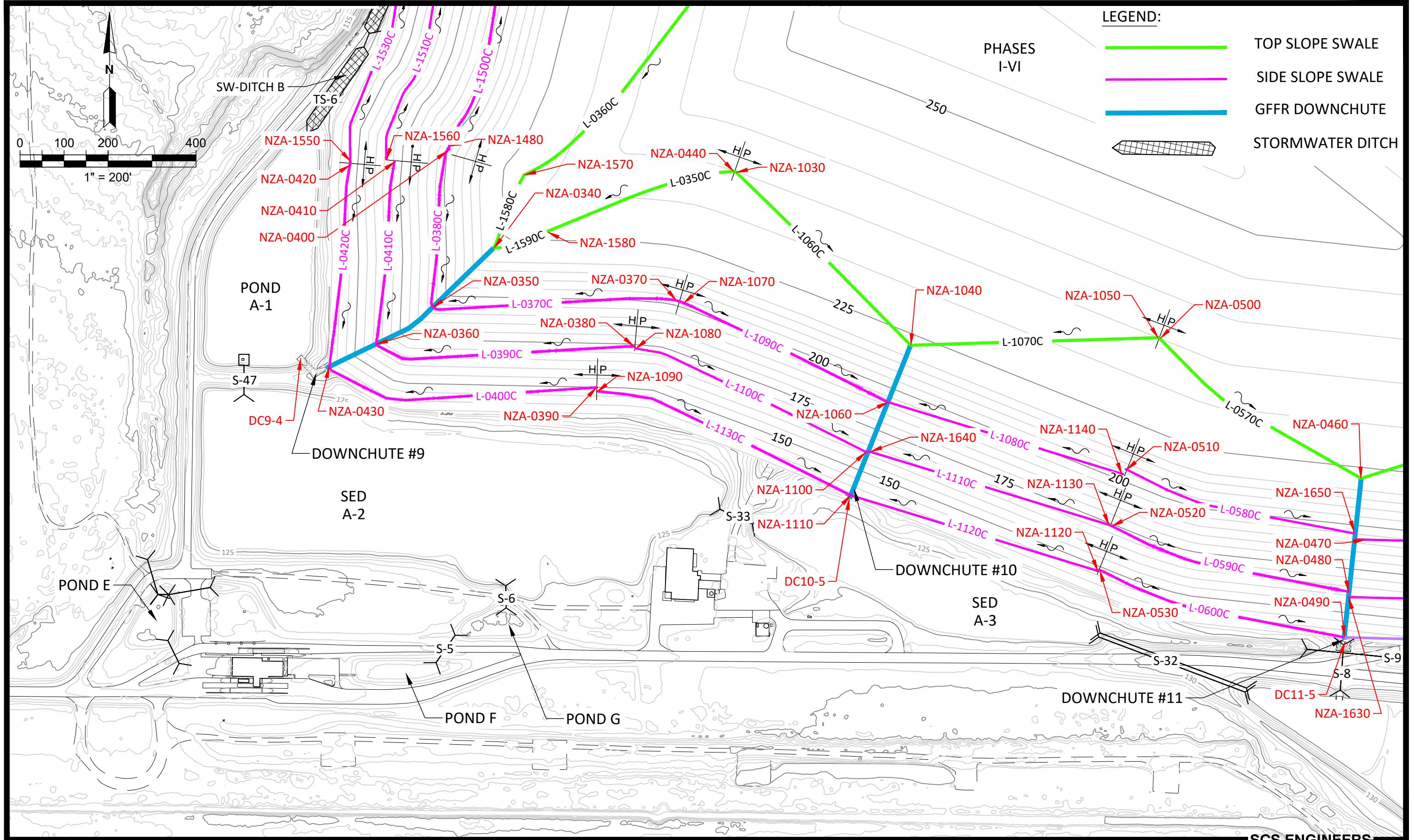
## Appendix D

### Phase I-VI Closure ICPR Model

## ICPR Schematic Figures

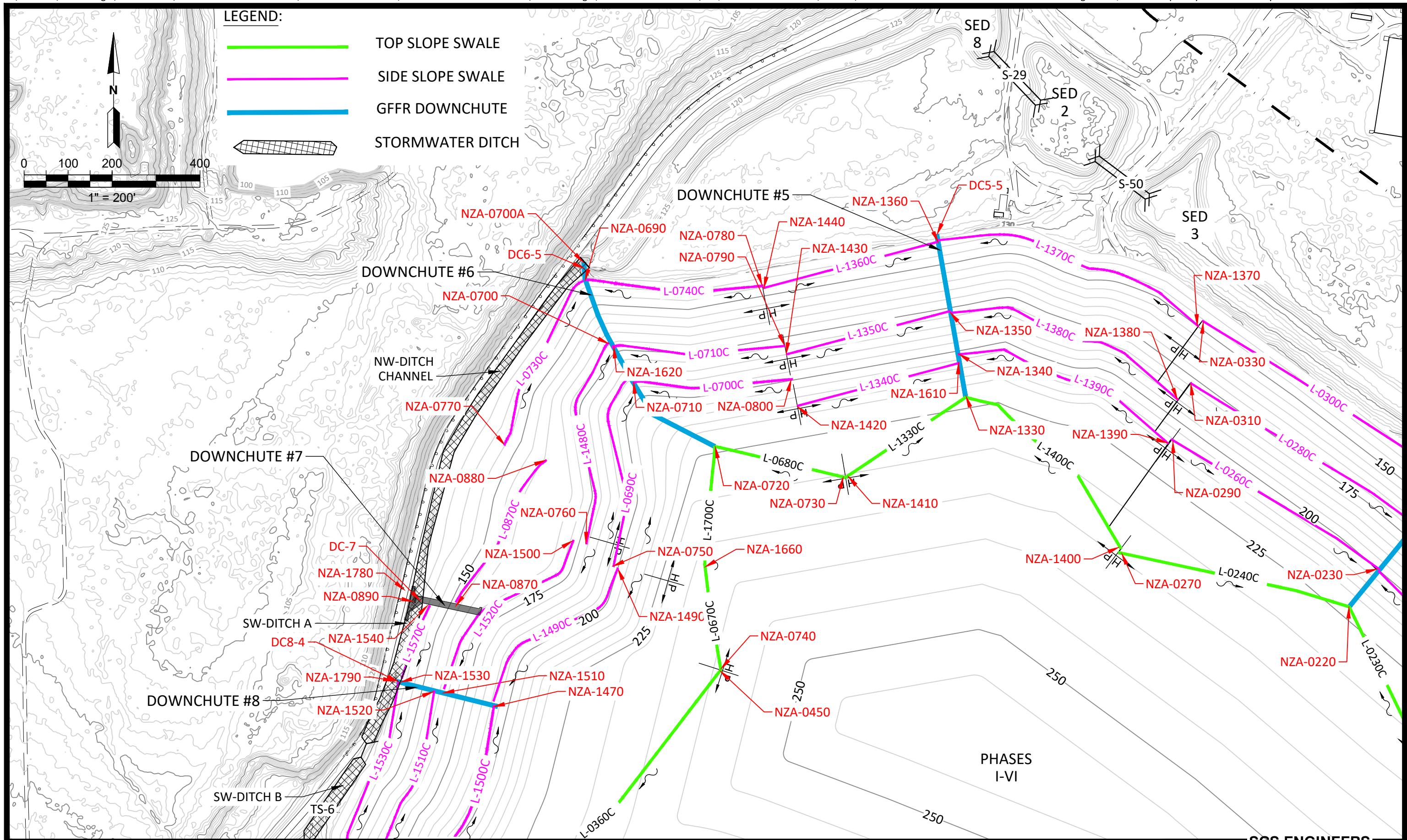


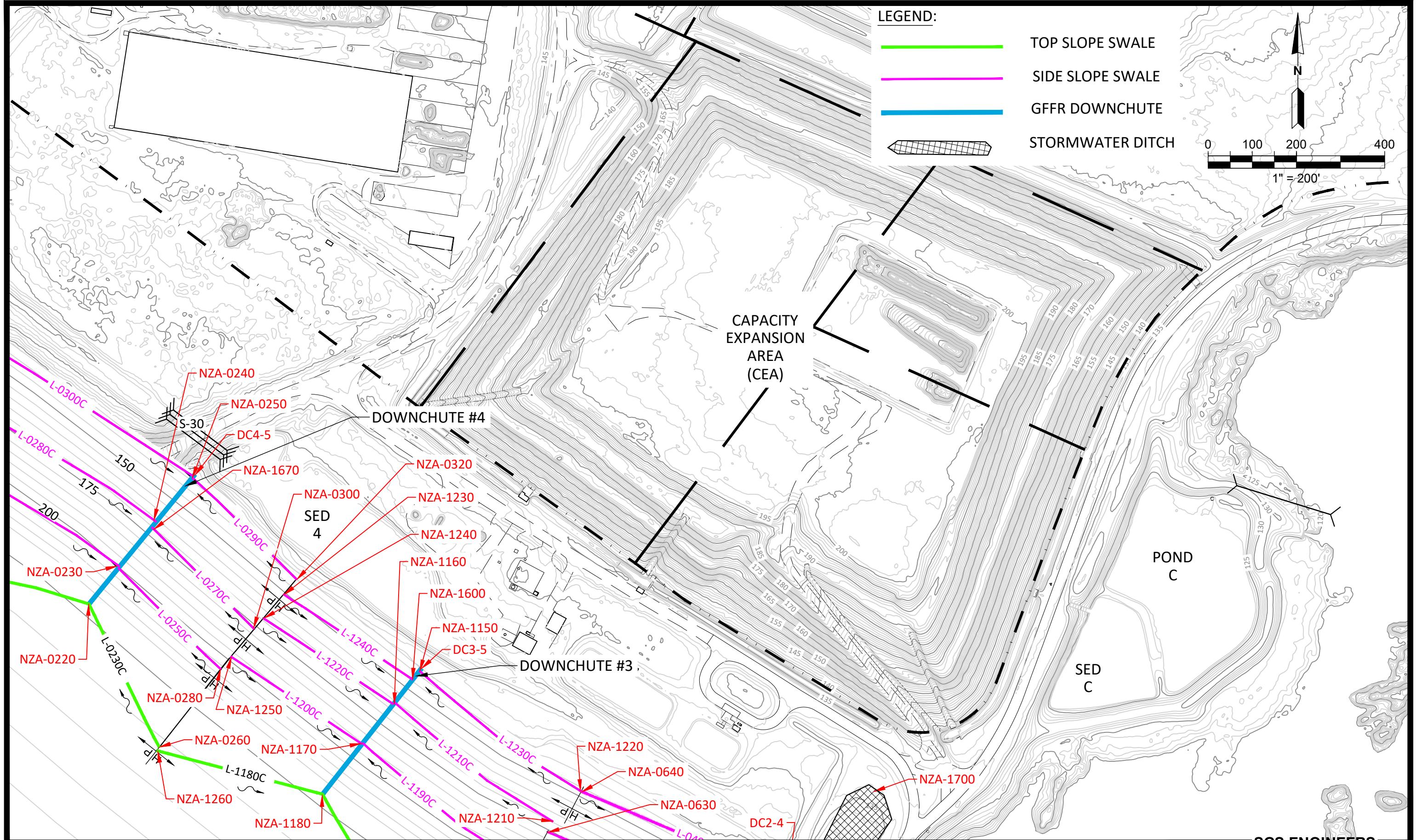
SOUTHEAST COUNTY LANDFILL STORMWATER FIGURE - ICPR SCHEMATIC FIGURE D.1

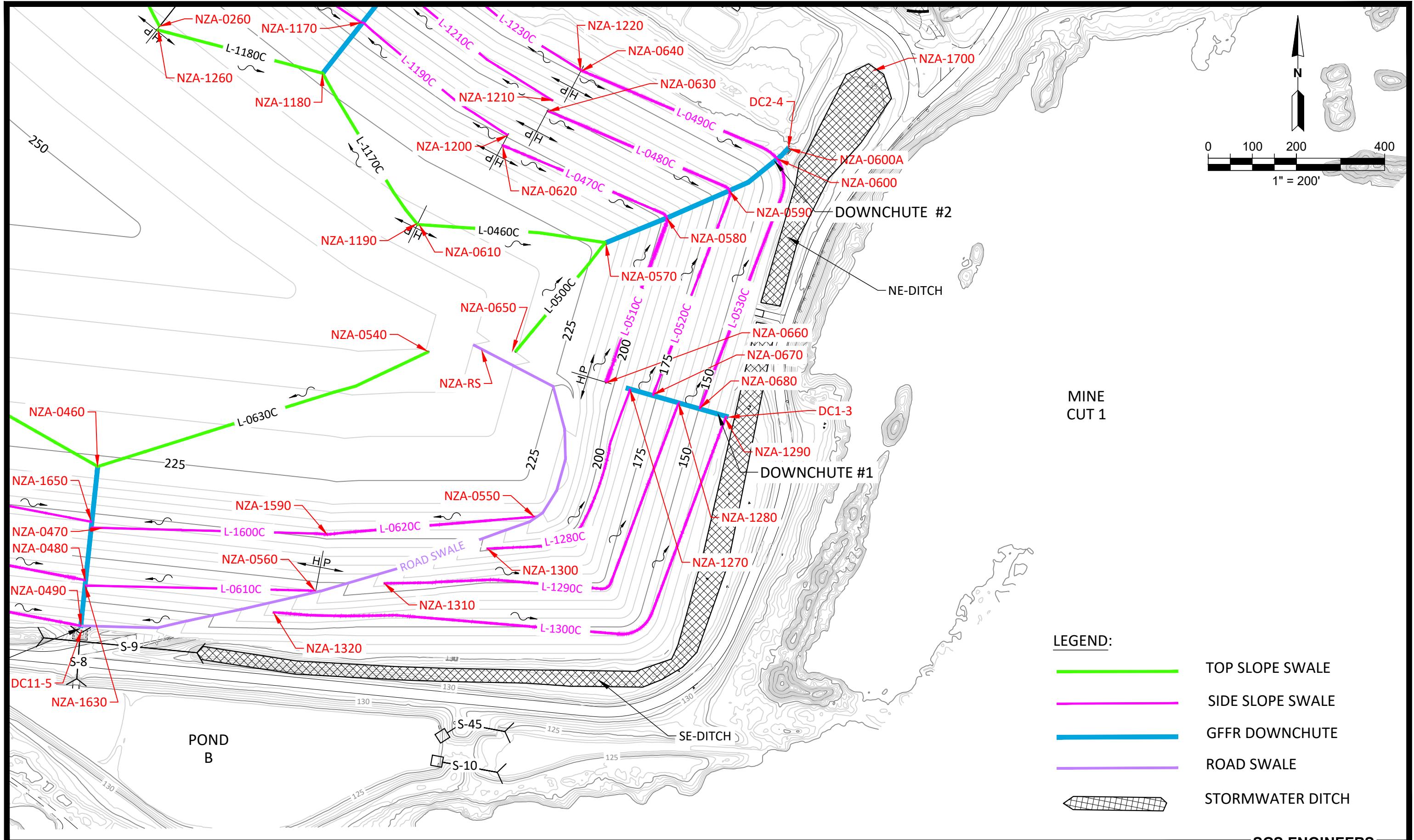


SOUTHEAST COUNTY LANDFILL STORMWATER FIGURE - ICPR SCHEMATIC FIGURE D.2

**SCS ENGINEERS**

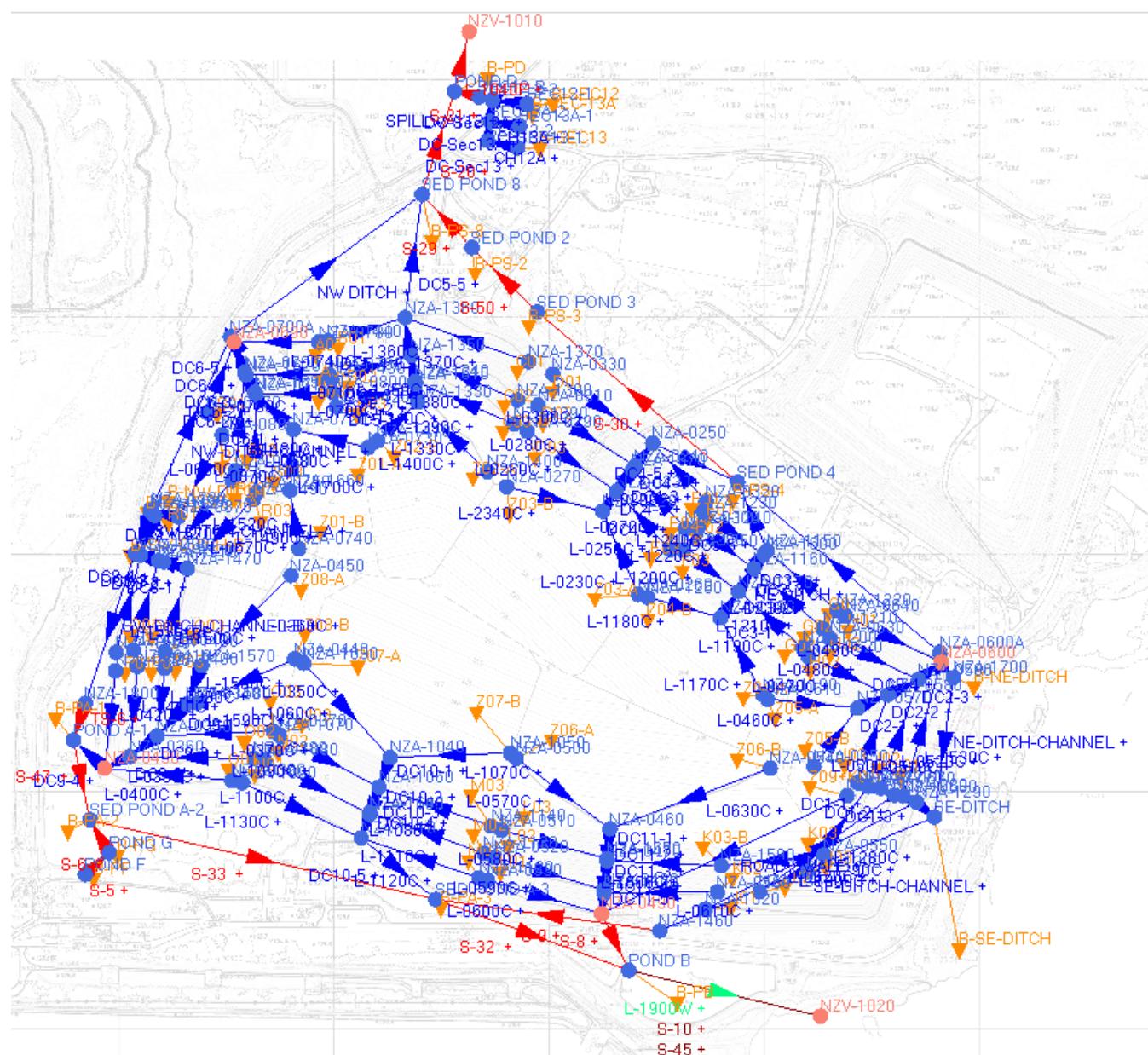




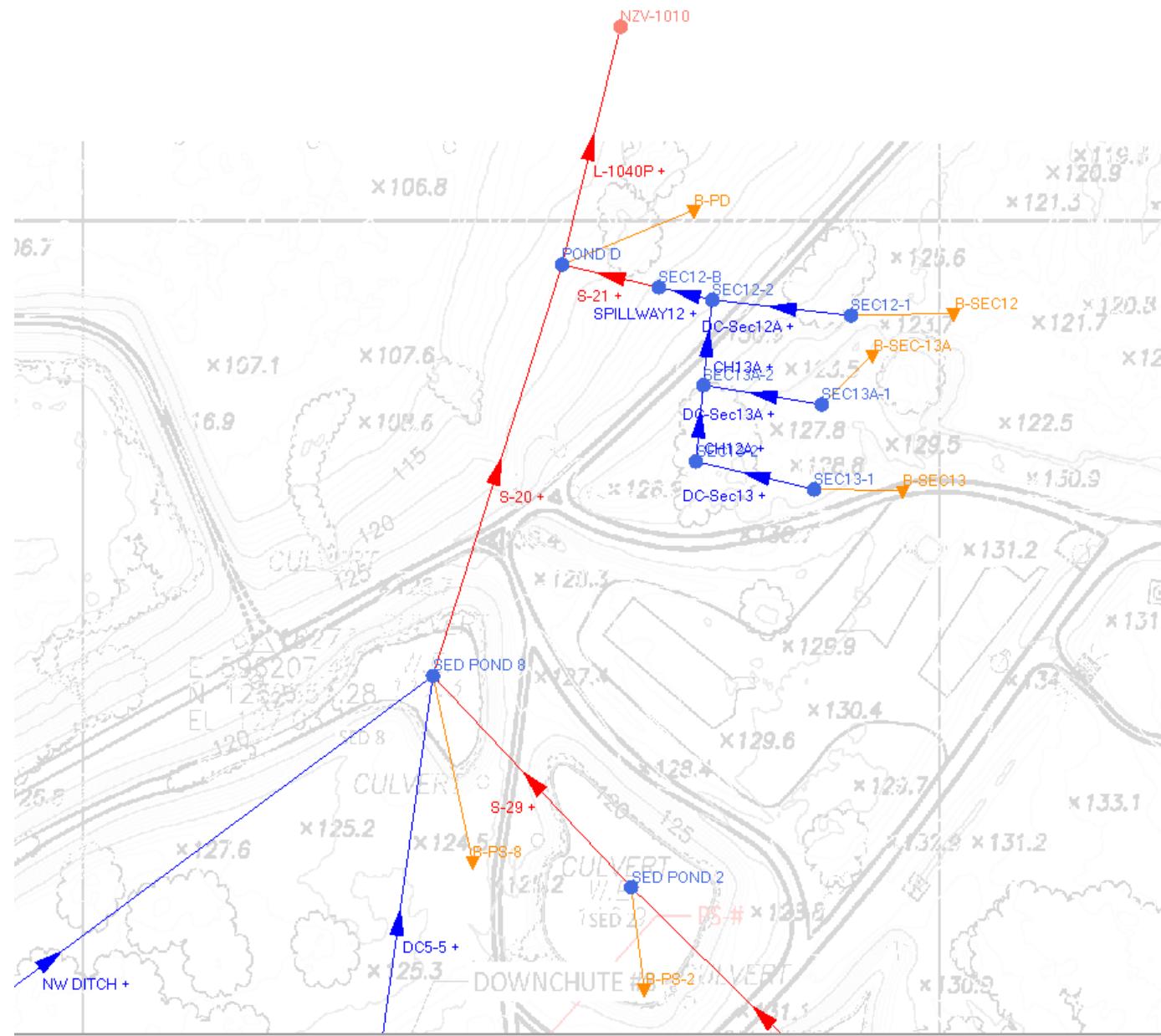


SOUTHEAST COUNTY LANDFILL STORMWATER FIGURE - ICPR SCHEMATIC FIGURE D.5

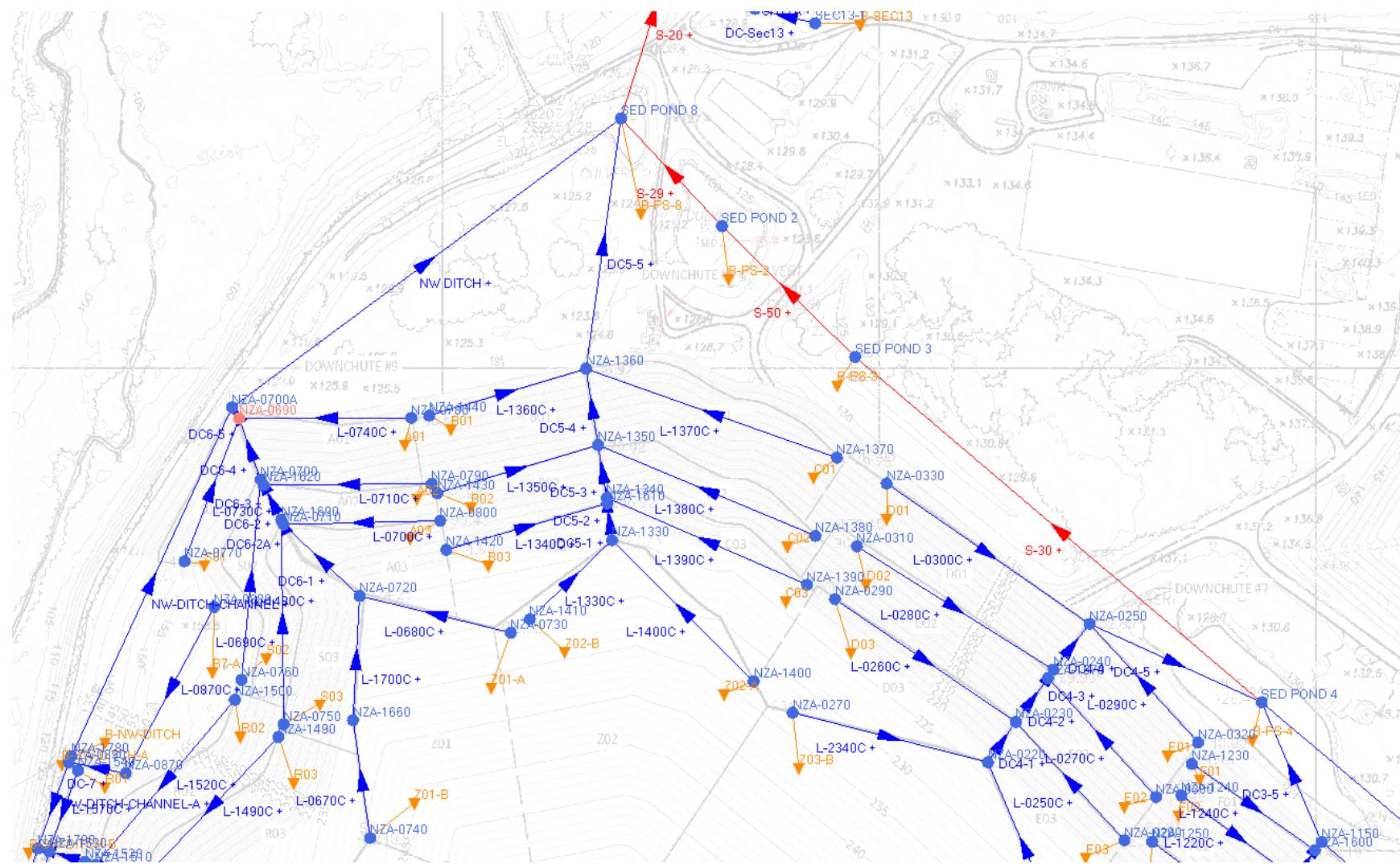
## OVERALL SCHEMATIC – ICPR



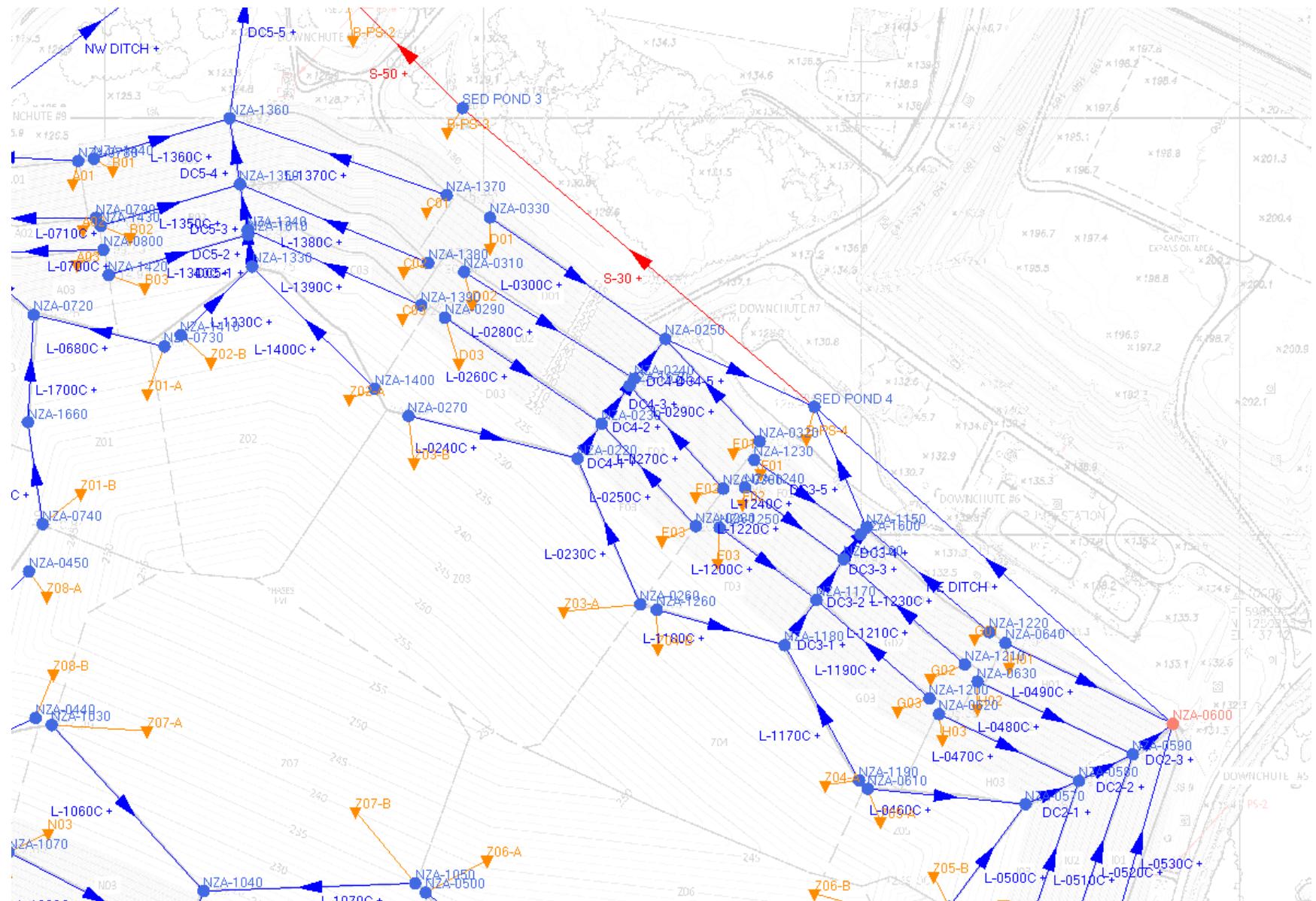
#### ZOOMED VIEWS – CLOCKWISE FROM NW CORNER



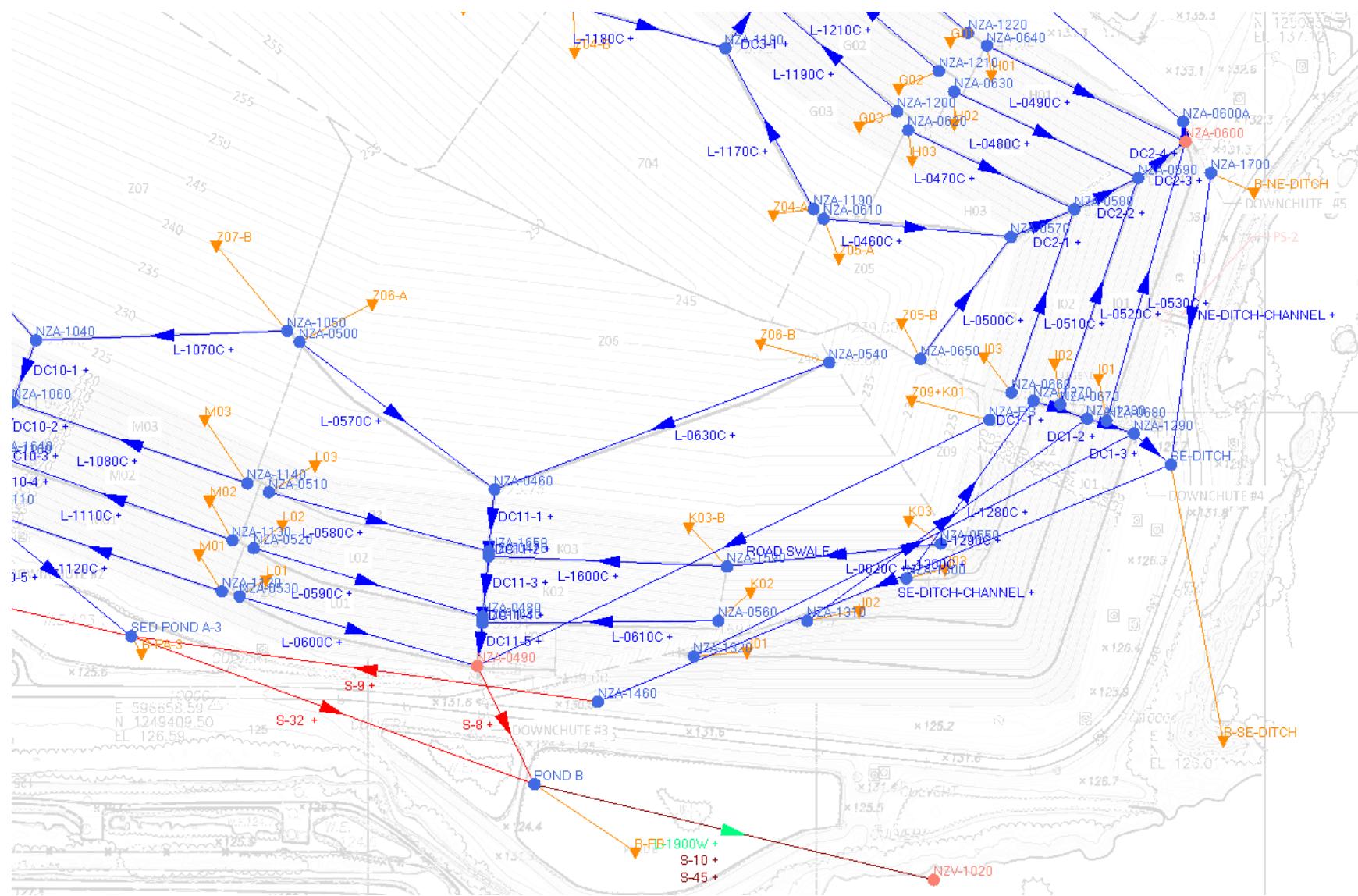
#### ZOOMED VIEWS – CLOCKWISE FROM NW CORNER



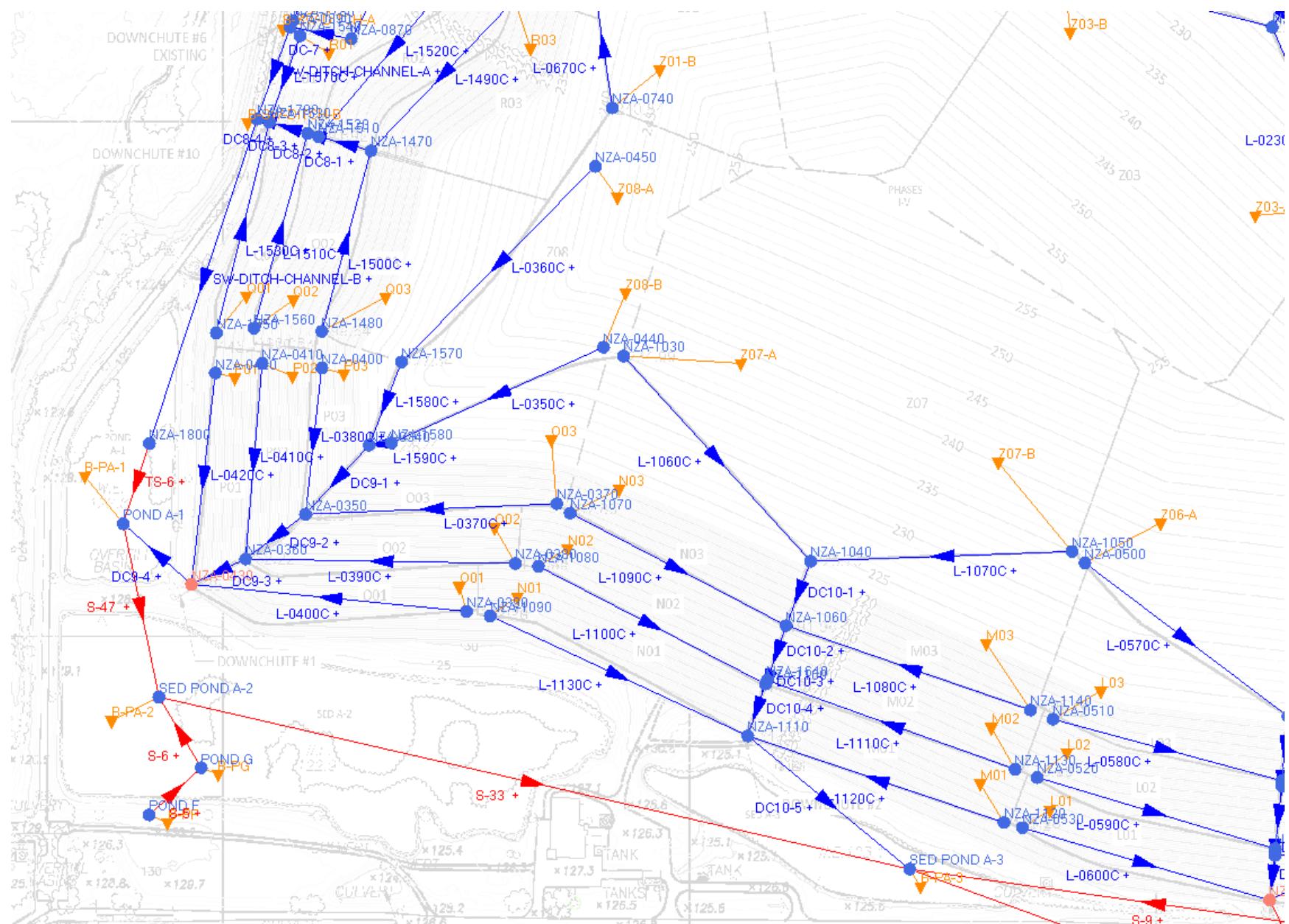
#### ZOOMED VIEWS – CLOCKWISE FROM NW CORNER



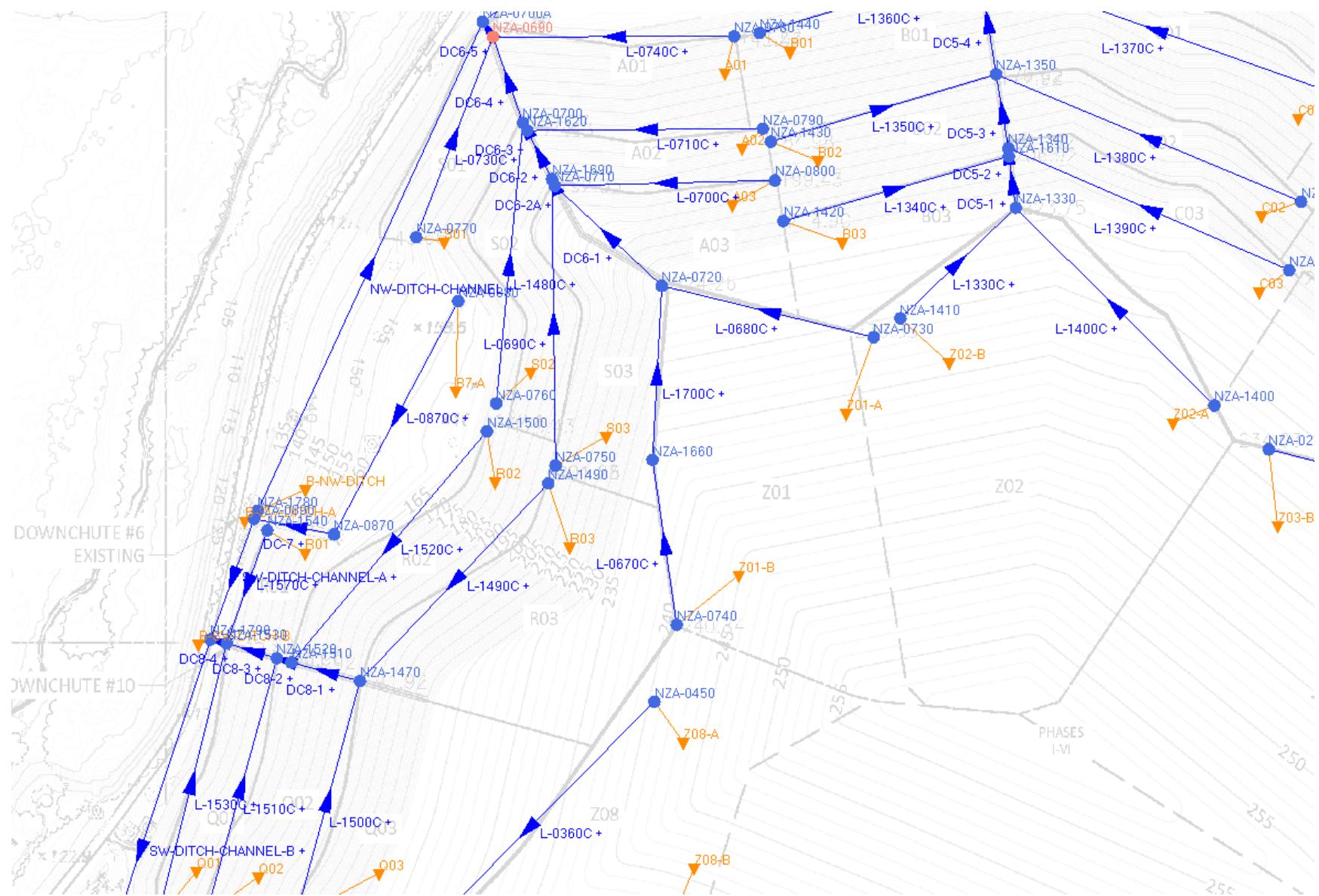
#### ZOOMED VIEWS – CLOCKWISE FROM NW CORNER



#### ZOOMED VIEWS – CLOCKWISE FROM NW CORNER



ZOOMED VIEWS – CLOCKWISE FROM NW CORNER



## ICPR Inputs

SCS ENGINEERS		
Page _____ 1 _____ OF _____ 1		
<b>CLIENT</b> Hillsborough Southeast County Landfill	<b>PROJECT</b> Southeast County Landfill - Phase I-VI Closure	<b>JOB NO.</b> 09215600.13
<b>SUBJECT</b>  Stormwater Analysis ICPR Model Inputs & Results		<b>BY</b> AV  <b>CHECKED</b> TAH
		<b>DATE</b> 12/15/2021
		<b>DATE</b> 1/31/2021
<p><b>Objective:</b>            To determine if the proposed Phase I-VI closure design improvements pass the 25-year, 24-hour storm. Additionally, Pond B and Pond D max outflow values were evaluated to ensure their post development flows did not exceed their pre-development values.         </p>		
<p><b>Methodology:</b>            Use ICPR to evaluate the stormwater system's capacity, peak flows, and max stage. This stormwater system includes the Phase I-VI limits and the existing system that discharges to Pond B and D, including the final buildup of the CEA.         </p>		
<p><b>Assumptions:</b></p> <ol style="list-style-type: none"> <li>1.) The design storm is the 25-year, 24-hour rainfall event.</li> <li>2.) The time of concentration (Tc) for each suba-basin within Phase I-VI is assumed to be 8 minutes. The TC for each pond basin was taken from the 2008 CERP model's inputs.</li> <li>3.) Use SCSII-24 Rainfall of 8.40 in. for the 25-year, 24-hour storm. The approved 2008 CERP model included with ERP permit # ERP No. 29-0270881-004 used this value.</li> <li>4.) CN = 74 for all sub-basins inside the Phase I-VI area (Good Condition Pasture - Gourp C Soil). - See attached</li> <li>5.) Existing stormwater pond and structures information obtained from as-built drawings provided by others dated September 2010, Pickett topographic survey dated July 29, 2021, and approved 2008 CERP model</li> <li>6.) Berms will be modeled with a constant slope of 2%. Each sub-basin will be modeled for runoff to enter the upstream portion of the channel.</li> <li>7.) Length of berms calculated using Civil 3D AutoCAD.</li> <li>8.) Berms channel manning n is 0.14 for grass ditches with flow &gt; 0.7 ft (FDOT Drainage Manual, Table 2.2)</li> <li>9.) Access Road swale manning n is 0.033 for GFFR roughened concrete (USGS Paper and FDOT Drainage Manual, Table 2.2)</li> </ol>		
<p><b>Calculation</b>            See Attachments for Basin map/ICPR schematic, ICPR input, ICPR output, and References.         </p>		
<p><b>Conclusion</b>            The stormwater system passes the 25yr/24 hour storm and Pond B and Pond D's post-development flows do not exceed than their pre-development flows.         </p>		

**Simple Basin: A01**

Scenario: Scenario 1  
Node: NZA-0780  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.2600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: A02**

Scenario: Scenario 1  
Node: NZA-0790  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.6600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: A03**

Scenario: Scenario 1  
Node: NZA-0800  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.1200 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

Simple Basin: B-NE-DITCH

Scenario: Scenario 1  
Node: NZA-1700  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 2.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 2.2700 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: Contributing area to Northeast Ditch

---

Simple Basin: B-NW-DITCH

Scenario: Scenario 1  
Node: NZA-1780  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 2.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 2.3200 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

---

% Direct: 0.00

Rainfall Name:

Comment:

---

Simple Basin: B-PA-1

Scenario: Scenario 1

Node: POND A-1

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 6.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH256

Peaking Factor: 256.0

Area: 4.0400 ac

Curve Number: 91.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment: Contributing area around pond A-1

---

Simple Basin: B-PA-2

Scenario: Scenario 1

Node: SED POND A-2

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 16.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH256

Peaking Factor: 256.0

Area: 13.7800 ac

Curve Number: 85.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment: Contributing area around pond A-2

---

**Simple Basin: B-PA-3**

Scenario: Scenario 1  
Node: SED POND A-3  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 22.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 8.6900 ac  
Curve Number: 85.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: Contributing area around pond A-3

---

**Simple Basin: B-PB**

Scenario: Scenario 1  
Node: POND B  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 6.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 6.9700 ac  
Curve Number: 93.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: Contributing area to Pond B

---

**Simple Basin: B-PD**

Scenario: Scenario 1  
Node: POND D  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 14.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 31.5000 ac  
Curve Number: 92.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: B-PF

Scenario: Scenario 1  
Node: POND F  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 6.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 1.6200 ac  
Curve Number: 90.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: B-PG

Scenario: Scenario 1  
Node: POND G  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 6.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 1.0500 ac  
Curve Number: 83.0  
% Impervious: 0.00  
% DCIA: 0.00

---

% Direct: 0.00

Rainfall Name:

Comment:

---

Simple Basin: B-PS-2

Scenario: Scenario 1

Node: SED POND 2

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 24.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH256

Peaking Factor: 256.0

Area: 4.8600 ac

Curve Number: 84.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment: Contributing area to Sedimentation Pond 2

---

Simple Basin: B-PS-3

Scenario: Scenario 1

Node: SED POND 3

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 19.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH256

Peaking Factor: 256.0

Area: 10.1100 ac

Curve Number: 82.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment: Contributing area to Sedimentation Pond 3

---

**Simple Basin: B-PS-4**

Scenario: Scenario 1  
Node: SED POND 4  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 32.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 16.3200 ac  
Curve Number: 82.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: Contributing area to Sedimentation Pond 4

---

**Simple Basin: B-PS-8**

Scenario: Scenario 1  
Node: SED POND 8  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 6.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 10.7900 ac  
Curve Number: 84.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: Contributing area to Sedimentation Pond 8

---

**Simple Basin: B-SE-DITCH**

Scenario: Scenario 1  
Node: SE-DITCH  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 2.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 7.5800 ac  
Curve Number: 83.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: Contributing area to Southeast Ditch

---

#### Simple Basin: B-SEC-13A

Scenario: Scenario 1  
Node: SEC13A-1  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 10.0000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

#### Simple Basin: B-SEC12

Scenario: Scenario 1  
Node: SEC12-1  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 10.3300 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

---

% Direct: 0.00

Rainfall Name:

Comment:

---

Simple Basin: B-SEC13

Scenario: Scenario 1

Node: SEC13-1

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 16.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 12.4300 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

---

Simple Basin: B-SW-DITCH-A

Scenario: Scenario 1

Node: NZA-0890

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 2.0000 min

Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH256

Peaking Factor: 256.0

Area: 0.2200 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

---

**Simple Basin: B-SW-DITCH-B**

Scenario: Scenario 1  
Node: NZA-1790  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 2.0000 min  
Max Allowable Q: 0.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH256  
Peaking Factor: 256.0  
Area: 0.4900 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: B01**

Scenario: Scenario 1  
Node: NZA-1440  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.4900 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: B02**

Scenario: Scenario 1  
Node: NZA-1430  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.0500 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: B03

Scenario: Scenario 1  
Node: NZA-1420  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.2200 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: B7-A

Scenario: Scenario 1  
Node: NZA-0880  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.2700 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: C01

Scenario: Scenario 1

Node: NZA-1370

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 2.1700 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: C02

Scenario: Scenario 1

Node: NZA-1380

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.1500 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: C03**

Scenario: Scenario 1  
Node: NZA-1390  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.8300 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

**Simple Basin: D01**

Scenario: Scenario 1  
Node: NZA-0330  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.0900 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

**Simple Basin: D02**

Scenario: Scenario 1  
Node: NZA-0310  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.8200 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

#### Simple Basin: D03

Scenario: Scenario 1  
Node: NZA-0290  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 11.7900 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.5600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

#### Simple Basin: E01

Scenario: Scenario 1  
Node: NZA-0320  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.1100 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: E02

Scenario: Scenario 1

Node: NZA-0300

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.9000 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: E03

Scenario: Scenario 1

Node: NZA-0280

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.2300 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: F01**

Scenario: Scenario 1  
Node: NZA-1230  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.5700 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

**Simple Basin: F02**

Scenario: Scenario 1  
Node: NZA-1240  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.9300 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

**Simple Basin: F03**

Scenario: Scenario 1  
Node: NZA-1250  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.7000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: G01

Scenario: Scenario 1  
Node: NZA-1220  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.9900 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: G02

Scenario: Scenario 1  
Node: NZA-1210  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.2800 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

#### Simple Basin: G03

Scenario: Scenario 1

Node: NZA-1200

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 2.2300 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

#### Simple Basin: H01

Scenario: Scenario 1

Node: NZA-0640

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.2200 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: H02**

Scenario: Scenario 1  
Node: NZA-0630  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.0400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: H03**

Scenario: Scenario 1  
Node: NZA-0620  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.2500 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: I01**

Scenario: Scenario 1  
Node: NZA-0680  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.4000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

Simple Basin: I02

Scenario: Scenario 1  
Node: NZA-0670  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.1500 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

Simple Basin: I03

Scenario: Scenario 1  
Node: NZA-0660  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.2800 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: J01

Scenario: Scenario 1

Node: NZA-1320

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 2.6200 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: J02

Scenario: Scenario 1

Node: NZA-1310

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.6800 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: J03**

Scenario: Scenario 1  
Node: NZA-1300  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.8000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: K02**

Scenario: Scenario 1  
Node: NZA-0560  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.5800 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: K03**

Scenario: Scenario 1  
Node: NZA-0550  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 15.6900 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.8900 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: SPLIT INTO K03 AREA MINUS K03B AREA

---

#### Simple Basin: K03-B

Scenario: Scenario 1  
Node: NZA-1590  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 15.6900 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.9400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

#### Simple Basin: L01

Scenario: Scenario 1  
Node: NZA-0530  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.3400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: L02

Scenario: Scenario 1

Node: NZA-0520

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.6600 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: L03

Scenario: Scenario 1

Node: NZA-0510

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 15.6600 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 2.4800 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: M01**

Scenario: Scenario 1  
Node: NZA-1120  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.4600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: M02**

Scenario: Scenario 1  
Node: NZA-1130  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 12.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.5800 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: M03**

Scenario: Scenario 1  
Node: NZA-1140  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 12.4700 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 3.0200 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: N01

Scenario: Scenario 1  
Node: NZA-1090  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.5500 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: N02

Scenario: Scenario 1  
Node: NZA-1080  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 12.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.7000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: N03

Scenario: Scenario 1

Node: NZA-1070

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 15.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 2.8900 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: O01

Scenario: Scenario 1

Node: NZA-0390

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.2100 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: O02**

Scenario: Scenario 1  
Node: NZA-0380  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.3400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: O03**

Scenario: Scenario 1  
Node: NZA-0370  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 12.7900 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.4000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: P01**

Scenario: Scenario 1  
Node: NZA-0420  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.9900 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: P02

Scenario: Scenario 1  
Node: NZA-0410  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.9800 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: P03

Scenario: Scenario 1  
Node: NZA-0400  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.9200 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

#### Simple Basin: Q01

Scenario: Scenario 1

Node: NZA-1550

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.8800 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

#### Simple Basin: Q02

Scenario: Scenario 1

Node: NZA-1560

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.3500 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: Q03**

Scenario: Scenario 1  
Node: NZA-1480  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.5900 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.5600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

**Simple Basin: R01**

Scenario: Scenario 1  
Node: NZA-1540  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.4700 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

---

**Simple Basin: R02**

Scenario: Scenario 1  
Node: NZA-1500  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.2600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: R03

Scenario: Scenario 1  
Node: NZA-1490  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 12.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 3.0400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: S01

Scenario: Scenario 1  
Node: NZA-0770  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 8.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.1400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: S02

Scenario: Scenario 1

Node: NZA-0760

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.7400 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: S03

Scenario: Scenario 1

Node: NZA-0750

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 8.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.7900 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: Z01-A**

Scenario: Scenario 1  
Node: NZA-0730  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.2400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: Z01-B**

Scenario: Scenario 1  
Node: NZA-0740  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.0300 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: Z02-A**

Scenario: Scenario 1  
Node: NZA-1400  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 3.5200 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: Z02-B

Scenario: Scenario 1  
Node: NZA-1410  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 3.6000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: Z03-A

Scenario: Scenario 1  
Node: NZA-0260  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 4.6400 ac  
Curve Number: 86.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: Z03-B

Scenario: Scenario 1

Node: NZA-0270

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 6.3600 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: Z04-A

Scenario: Scenario 1

Node: NZA-1190

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 3.4300 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: Z04-B**

Scenario: Scenario 1  
Node: NZA-1260  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 3.9600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: Z05-A**

Scenario: Scenario 1  
Node: NZA-0610  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 1.3000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: Z05-B**

Scenario: Scenario 1  
Node: NZA-0650  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 0.8400 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: Z06-A

Scenario: Scenario 1  
Node: NZA-0500  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 5.2500 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

Simple Basin: Z06-B

Scenario: Scenario 1  
Node: NZA-0540  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 4.8300 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: Z07-A

Scenario: Scenario 1

Node: NZA-1030

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 20.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 7.1400 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

Simple Basin: Z07-B

Scenario: Scenario 1

Node: NZA-1050

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 20.0000 min

Max Allowable Q: 9999.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 6.5600 ac

Curve Number: 74.0

% Impervious: 0.00

% DCIA: 0.00

% Direct: 0.00

Rainfall Name:

Comment:

**Simple Basin: Z08-A**

Scenario: Scenario 1  
Node: NZA-0450  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 15.7700 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.3600 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: Z08-B**

Scenario: Scenario 1  
Node: NZA-0440  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 15.7700 min  
Max Allowable Q: 9999.00 cfs  
Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 2.0000 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment:

**Simple Basin: Z09+K01**

Scenario: Scenario 1  
Node: NZA-RS  
Hydrograph Method: NRCS Unit Hydrograph  
Infiltration Method: Curve Number  
Time of Concentration: 10.0000 min  
Max Allowable Q: 9999.00 cfs

---

Time Shift: 0.0000 hr  
Unit Hydrograph: UH484  
Peaking Factor: 484.0  
Area: 3.7900 ac  
Curve Number: 74.0  
% Impervious: 0.00  
% DCIA: 0.00  
% Direct: 0.00  
Rainfall Name:

Comment: BASINS Z09+K01 AREA COMBINED FOR ROAD SWALE TO DISCHARGE AT DOWNCHUTE 11

---

Node: NZA-0220

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 225.75 ft

Comment:

---

Node: NZA-0230

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 202.00 ft

Comment:

---

Node: NZA-0240

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 168.00 ft

Comment:

**Node: NZA-0250**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 135.50 ft

Comment:

**Node: NZA-0260**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 233.04 ft

Comment:

**Node: NZA-0270**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 236.55 ft

Comment:

**Node: NZA-0280**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 209.00 ft

Comment:

**Node: NZA-0290**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 212.78 ft

Comment:

**Node: NZA-0300**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 179.96 ft

Comment:

**Node: NZA-0310**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 180.45 ft

Comment:

**Node: NZA-0320**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 142.00 ft

Comment:

**Node: NZA-0330**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 147.93 ft

Comment:

**Node: NZA-0340**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 225.58 ft

Comment:

**Node: NZA-0350**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 194.04 ft

Comment:

**Node: NZA-0360**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 164.22 ft

Comment:

**Node: NZA-0370**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 204.86 ft

Comment:

**Node: NZA-0380**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 175.93 ft

Comment:

**Node: NZA-0390**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 151.90 ft

Comment:

**Node: NZA-0400**

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 201.64 ft

Comment:

## Node: NZA-0410

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 172.73 ft

Comment:

---

## Node: NZA-0420

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 147.71 ft

Comment:

---

## Node: NZA-0430

Scenario: Scenario 1  
 Type: Stage/Volume  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 137.70 ft

Stage [ft]	Volume [ac-ft]	Volume [ft <sup>3</sup> ]
129.00	0.00	0
129.50	0.00	147
130.00	0.01	294
130.50	0.01	441
131.00	0.01	588
131.50	0.02	735
132.00	0.02	882

Comment:

---

## Node: NZA-0440

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs

---

Initial Stage: 0.00 ft  
Warning Stage: 237.00 ft

Comment:

---

Node: NZA-0450

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 242.84 ft

Comment:

---

Node: NZA-0460

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 225.75 ft

Comment:

---

Node: NZA-0470

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 194.00 ft

Comment:

---

Node: NZA-0480

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs

Initial Stage: 0.00 ft  
Warning Stage: 164.00 ft

Comment:

Node: NZA-0490

Scenario: Scenario 1  
Type: Stage/Volume  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 138.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
126.00	0.00	0
127.00	0.01	502
128.00	0.02	1004
129.00	0.03	1506
131.00	0.05	2008
131.50	0.06	2510
132.00	0.07	3012

Comment: 126.7

Node: NZA-0500

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 237.00 ft

Comment:

Node: NZA-0510

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 208.88 ft

Comment:

---

Node: NZA-0520

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 175.96 ft

Comment:

---

Node: NZA-0530

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 150.28 ft

Comment:

---

Node: NZA-0540

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 241.66 ft

Comment:

---

Node: NZA-0550

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 214.55 ft

---

---

---

Comment:

---

Node: NZA-0560

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 171.86 ft

Comment:

---

Node: NZA-0570

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 225.00 ft

Comment:

---

Node: NZA-0580

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 199.00 ft

Comment:

---

Node: NZA-0590

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 169.00 ft

---

---

Comment:

Node: NZA-0600

Scenario: Scenario 1  
Type: Stage/Volume  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 139.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft <sup>3</sup> ]
135.00	0.00	0
135.50	0.00	193
136.00	0.01	387
136.50	0.01	581
137.00	0.03	1161

Comment:

Node: NZA-0600A

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 137.12 ft

Comment:

Node: NZA-0610

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 242.00 ft

Comment:

Node: NZA-0620

Scenario: Scenario 1

---

Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 207.35 ft

Comment:

Node: NZA-0630

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 178.24 ft

Comment:

Node: NZA-0640

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 149.00 ft

Comment:

Node: NZA-0650

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 231.50 ft

Comment:

Node: NZA-0660

Scenario: Scenario 1

Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 206.73 ft

Comment:

---

Node: NZA-0670

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 179.00 ft

Comment:

---

Node: NZA-0680

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 151.00 ft

Comment:

---

Node: NZA-0690

Scenario: Scenario 1  
 Type: Stage/Volume  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 138.20 ft

Stage [ft]	Volume [ac-ft]	Volume [ft <sup>3</sup> ]
131.00	0.00	0
131.50	0.00	193
132.00	0.01	387
132.50	0.01	581
133.00	0.02	774
133.50	0.02	967

Stage [ft]	Volume [ac-ft]	Volume [ft <sup>3</sup> ]
134.00	0.03	1161

Comment:

Node: NZA-0700

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 171.00 ft

Comment:

Node: NZA-0700A

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 126.52 ft

Comment:

Node: NZA-0710

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 194.00 ft

Comment:

Node: NZA-0720

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 226.26 ft

Comment:

---

Node: NZA-0730

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 232.35 ft

Comment:

---

Node: NZA-0740

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 242.84 ft

Comment:

---

Node: NZA-0750

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 199.18 ft

Comment:

---

Node: NZA-0760

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 181.16 ft

Comment:

---

Node: NZA-0770

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 147.00 ft

Comment:

---

Node: NZA-0780

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 146.22 ft

Comment:

---

Node: NZA-0790

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 182.00 ft

Comment:

---

Node: NZA-0800

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 201.43 ft

Comment:

---

Node: NZA-0870

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 154.03 ft

Comment:

---

Node: NZA-0880

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 162.29 ft

Comment:

---

Node: NZA-0890

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 132.00 ft

Comment:

---

Node: NZA-1030

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 237.00 ft

Comment:

---

Node: NZA-1040

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 225.75 ft

Comment:

---

Node: NZA-1050

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 237.04 ft

Comment:

---

Node: NZA-1060

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 194.00 ft

Comment:

---

Node: NZA-1070

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 205.00 ft

Comment:

---

Node: NZA-1080

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 174.88 ft

Comment:

---

Node: NZA-1090

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 149.76 ft

Comment:

---

Node: NZA-1100

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 162.00 ft

Comment:

---

Node: NZA-1110

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 136.92 ft

Comment:

---

Node: NZA-1120

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 149.24 ft

Comment:

---

Node: NZA-1130

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 175.96 ft

Comment:

---

Node: NZA-1140

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 205.75 ft

Comment:

---

Node: NZA-1150

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 140.00 ft

Comment:

---

Node: NZA-1160

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 163.00 ft

Comment:

---

Node: NZA-1170

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 192.00 ft

Comment:

---

Node: NZA-1180

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 225.00 ft

Comment:

---

Node: NZA-1190

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 233.84 ft

Comment:

---

Node: NZA-1200

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 200.79 ft

Comment:

---

Node: NZA-1210

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 171.68 ft

Comment:

---

Node: NZA-1220

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 149.00 ft

Comment:

---

Node: NZA-1230

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 153.18 ft

Comment:

---

Node: NZA-1240

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 170.95 ft

Comment:

---

Node: NZA-1250

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 199.81 ft

Comment:

---

Node: NZA-1260

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 233.53 ft

Comment:

---

Node: NZA-1270

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 192.41 ft

Comment:

---

Node: NZA-1280

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 164.00 ft

Comment:

---

Node: NZA-1290

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 136.00 ft

Comment:

---

Node: NZA-1300

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 203.42 ft

Comment:

---

Node: NZA-1310

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 183.73 ft

Comment:

---

Node: NZA-1320

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 163.36 ft

Comment:

---

Node: NZA-1330

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 225.75 ft

Comment:

---

Node: NZA-1340

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 203.92 ft

Comment:

---

Node: NZA-1350

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 179.00 ft

Comment:

---

Node: NZA-1360

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 137.90 ft

Comment:

---

Node: NZA-1370

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 151.75 ft

Comment:

---

Node: NZA-1380

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 192.38 ft

Comment:

---

Node: NZA-1390

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 215.69 ft

Comment:

---

Node: NZA-1400

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 236.03 ft

Comment:

---

Node: NZA-1410

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 232.35 ft

Comment:

---

Node: NZA-1420

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 216.90 ft

Comment:

---

Node: NZA-1430

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 186.98 ft

Comment:

---

Node: NZA-1440

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 147.52 ft

Comment:

---

Node: NZA-1460

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 130.50 ft

Comment:

---

Node: NZA-1470

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 192.80 ft

Comment:

---

Node: NZA-1480

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 201.70 ft

Comment:

---

Node: NZA-1490

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 201.95 ft

Comment:

---

Node: NZA-1500

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 173.49 ft

Comment:

---

Node: NZA-1510

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 163.92 ft

Comment:

---

Node: NZA-1520

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 161.90 ft

Comment:

---

Node: NZA-1530

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 139.15 ft

Comment:

---

Node: NZA-1540

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 142.88 ft

Comment:

---

Node: NZA-1550

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 147.71 ft

Comment:

---

Node: NZA-1560

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 168.00 ft

Comment:

---

Node: NZA-1570

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 229.34 ft

Comment:

---

Node: NZA-1580

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 226.24 ft

Comment:

---

Node: NZA-1590

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 205.20 ft

Comment:

---

Node: NZA-1600

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 146.19 ft

Comment:

---

Node: NZA-1610

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 208.92 ft

Comment:

---

Node: NZA-1620

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 173.93 ft

Comment:

---

Node: NZA-1630

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 160.00 ft

Comment:

---

Node: NZA-1640

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 164.00 ft

Comment:

---

Node: NZA-1650

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 197.18 ft

Comment:

---

Node: NZA-1660

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 237.64 ft

Comment:

---

Node: NZA-1670

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 172.00 ft

Comment:

---

Node: NZA-1690

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 191.07 ft

Comment:

---

Node: NZA-1700

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 139.00 ft

Comment: Road elevation

---

Node: NZA-1780

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 140.00 ft

Comment:

---

Node: NZA-1790

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 132.00 ft

Comment:

---

Node: NZA-1800

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft

---

Warning Stage: 129.10 ft

Comment:

---

Node: NZA-RS

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 241.00 ft

Comment:

---

Node: NZV-1010

Scenario: Scenario 1  
 Type: Stage/Volume  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 125.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft <sup>3</sup> ]
104.00	0.05	2178
105.00	0.10	4356
106.00	0.15	6534

Comment:

---

Node: NZV-1020

Scenario: Scenario 1  
 Type: Stage/Volume  
 Base Flow: 0.00 cfs  
 Initial Stage: 0.00 ft  
 Warning Stage: 128.00 ft

Stage [ft]	Volume [ac-ft]	Volume [ft <sup>3</sup> ]
110.00	50.00	2178000
111.00	51.00	2221560
112.00	52.00	2265120
113.00	53.00	2308680

---

Comment:

---

#### Node: POND A-1

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 123.43 ft  
 Warning Stage: 128.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
120.00	1.9000	82764
123.70	2.3300	101495
125.00	2.4900	108464
128.00	2.9000	126324

Comment:

---

#### Node: POND B

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 123.34 ft  
 Warning Stage: 130.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
118.00	0.3100	13504
120.00	0.4300	18731
122.00	0.5600	24394
124.00	4.4300	192971
126.00	5.0200	218671
128.00	5.5400	241322
130.00	6.0000	261360

Comment:

---

#### Node: POND D

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 110.50 ft  
 Warning Stage: 116.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
110.50	18.5000	805860
111.00	18.8000	818928
115.00	21.1000	919116

Comment:

---

#### Node: POND F

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 125.00 ft  
 Warning Stage: 128.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
125.00	0.1000	4356
126.00	0.1100	4792
127.00	0.2200	9583
128.00	0.3200	13939

Comment:

---

#### Node: POND G

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 123.00 ft  
 Warning Stage: 127.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
123.00	0.0400	1742
124.00	0.0450	1960
124.50	0.0500	2178
125.00	0.0550	2396
125.50	0.8000	34848
126.00	0.1900	8276
127.00	0.2400	10454

Comment:

---

#### Node: SE-DITCH

Scenario: Scenario 1

---

Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 131.00 ft

Comment:

---

Node: SEC12-1

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 288.00 ft

Comment:

---

Node: SEC12-2

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 130.00 ft

Comment:

---

Node: SEC12-B

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 127.15 ft

Comment:

---

Node: SEC13-1

Scenario: Scenario 1

---

Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 288.00 ft

Comment:

---

Node: SEC13-2

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 133.00 ft

Comment:

---

Node: SEC13A-1

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 288.00 ft

Comment:

---

Node: SEC13A-2

Scenario: Scenario 1  
Type: Stage/Area  
Base Flow: 0.00 cfs  
Initial Stage: 0.00 ft  
Warning Stage: 131.00 ft

Comment:

---

Node: SED POND 2

Scenario: Scenario 1

Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 118.00 ft  
 Warning Stage: 125.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
118.00	1.8000	78408
120.00	2.6000	113256
122.00	3.2000	139392
124.00	4.0000	174240
125.00	4.9000	213444

Comment:

---

#### Node: SED POND 3

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 121.11 ft  
 Warning Stage: 130.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
121.11	0.0010	44
125.00	1.5000	65340
126.00	3.1000	135036
130.00	3.9000	169884

Comment:

---

#### Node: SED POND 4

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 126.50 ft  
 Warning Stage: 132.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
125.00	1.7000	74052
128.00	2.6000	113256
130.00	3.5000	152460
132.00	5.7000	248292

Comment:

**Node: SED POND 8**

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 115.50 ft  
 Warning Stage: 125.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
115.50	0.0010	44
117.00	0.2200	9583
118.00	0.3900	16988
119.00	0.6700	29185
120.00	0.9700	42253
121.00	1.3100	57064
122.00	1.6500	71874
123.00	1.9000	82764
124.00	2.2200	96703

Comment:

---

**Node: SED POND A-2**

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 123.34 ft  
 Warning Stage: 126.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
120.00	7.3000	317988
123.70	8.3100	361984
125.00	8.6700	377665
126.00	8.9000	387684

Comment:

---

**Node: SED POND A-3**

Scenario: Scenario 1  
 Type: Stage/Area  
 Base Flow: 0.00 cfs  
 Initial Stage: 123.34 ft  
 Warning Stage: 126.00 ft

Stage [ft]	Area [ac]	Area [ft <sup>2</sup> ]
120.00	1.6200	70567
123.70	2.2800	99317

Stage [ft]	Area [ac]	Area [ft2]
125.00	2.7500	119790
126.00	3.4400	149846

Comment:

---

Drop Structure Link: A-1 Riser	Upstream Pipe	Downstream Pipe
Scenario: Scenario 1	Invert: 120.94 ft	Invert: 120.01 ft
From Node: POND A-1	Manning's N: 0.0130	Manning's N: 0.0130
To Node: SED POND A-2	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 2.50 ft	Max Depth: 2.50 ft
Flow Direction: Both	Bottom Clip	
Solution: Combine	Default: 0.00 ft	Default: 0.00 ft
Increments: 0	Op Table:	Op Table:
Pipe Count: 1	Ref Node:	Ref Node:
Damping: 0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length: 66.00 ft	Top Clip	
FHWA Code: 0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef: 0.50	Op Table:	Op Table:
Exit Loss Coef: 1.00	Ref Node:	Ref Node:
Bend Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location: 0.00 dec		
Energy Switch: Energy		

Pipe Comment:

---

Weir Component	Bottom Clip	
Weir: 1	Default: 0.00 ft	
Weir Count: 1	Op Table:	
Weir Flow Direction: Both	Ref Node:	
Damping: 0.0000 ft	Top Clip	
Weir Type: Sharp Crested Vertical	Default: 0.00 ft	
Geometry Type: Circular	Op Table:	
Invert: 122.99 ft	Ref Node:	
Control Elevation: 122.99 ft	Discharge Coefficients	
Max Depth: 1.50 ft	Weir Default: 3.200	
	Weir Table:	
	Orifice Default: 0.600	
	Orifice Table:	

Weir Comment:

---

Weir Component	Bottom Clip	
Weir: 2	Default: 0.00 ft	
Weir Count: 1	Op Table:	
Weir Flow Direction: Both	Ref Node:	
Damping: 0.0000 ft	Top Clip	
Weir Type: Sharp Crested Vertical		

Geometry Type:	Rectangular	
Invert:	127.50 ft	Default: 0.00 ft
Control Elevation:	127.50 ft	Op Table:
Max Depth:	3.00 ft	Ref Node:
Max Width:	4.50 ft	Discharge Coefficients
Fillet:	0.00 ft	Weir Default: 3.200
		Weir Table:
		Orifice Default: 0.600
		Orifice Table:
Weir Comment:		
Drop Structure Comment:		

Channel Link: CH12A		Upstream	Downstream
Scenario:	Scenario 1	Invert: 130.00 ft	Invert: 128.00 ft
From Node:	SEC13-2	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	SEC13A-2	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count:	1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction:	Both	Extrapolation: Normal	Extrapolation: Normal
Damping:	0.0000 ft	Bottom Width: 7.00 ft	Bottom Width: 7.00 ft
Length:	1000.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)
Contraction Coef:	0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)
Expansion Coef:	0.00	Bottom Clip	
Entr Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef:	0.00	Op Table:	Op Table:
Bend Loss Coef:	0.00	Ref Node:	Ref Node:
Bend Location:	0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch:	Energy	Top Clip	
		Default: 0.00 ft	Default: 0.00 ft
		Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000
Comment:			

Channel Link: CH13A		Upstream	Downstream
Scenario:	Scenario 1	Invert: 128.00 ft	Invert: 127.00 ft
From Node:	SEC13A-2	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	SEC12-2	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count:	1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction:	Both	Extrapolation: Normal	Extrapolation: Normal
Damping:	0.0000 ft	Bottom Width: 7.00 ft	Bottom Width: 7.00 ft
Length:	600.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)
Contraction Coef:	0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)
Expansion Coef:	0.00	Bottom Clip	
Entr Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft

Exit Loss Coef: 0.00	Op Table:	Op Table:		
Bend Loss Coef: 0.00	Ref Node:	Ref Node:		
Bend Location: 0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000		
Energy Switch: Energy	Top Clip			
<hr/>				
Default: 0.00 ft				
Op Table:				
Ref Node:				
Manning's N: 0.0000				

Comment:

---

Channel Link: DC-7		Upstream	Downstream
Scenario: Scenario 1		Invert: 151.62 ft	Invert: 128.00 ft
From Node: NZA-0870		Manning's N: 0.0330	Manning's N: 0.0330
To Node: NZA-0890		Geometry: Irregular	Geometry: Irregular
Link Count: 1		Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both			
Damping: 0.0000 ft			
Length: 108.00 ft			
Contraction Coef: 0.00			
Expansion Coef: 0.00			
Entr Loss Coef: 0.00			
Exit Loss Coef: 1.00			
Bend Loss Coef: 0.00			
Bend Location: 0.00 dec			
Energy Switch: Energy			

Comment:

---

Channel Link: DC-Sec12A		Upstream	Downstream
Scenario: Scenario 1		Invert: 286.00 ft	Invert: 127.00 ft
From Node: SEC12-1		Manning's N: 0.0000	Manning's N: 0.0000
To Node: SEC12-2		Geometry: Irregular	Geometry: Irregular
Link Count: 1		Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both			
Damping: 0.0000 ft			
Length: 850.00 ft			
Contraction Coef: 0.00			
Expansion Coef: 0.00			
Entr Loss Coef: 0.00			
Exit Loss Coef: 0.00			
Bend Loss Coef: 0.00			
Bend Location: 0.00 dec			
Energy Switch: Energy			

Comment:

---

Channel Link: DC-Sec13	Upstream	Downstream
Scenario: Scenario 1	Invert: 286.00 ft	Invert: 130.00 ft
From Node: SEC13-1	Manning's N: 0.0330	Manning's N: 0.0330
To Node: SEC13-2	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count: 1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Flow Direction: Both	Extrapolation: Normal	Extrapolation: Normal
Damping: 0.0000 ft	Bottom Width: 7.00 ft	Bottom Width: 7.00 ft
Length: 700.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)
Contraction Coef: 0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)
Expansion Coef: 0.00	Bottom Clip	
Entr Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef: 0.00	Op Table:	Op Table:
Bend Loss Coef: 0.00	Ref Node:	Ref Node:
Bend Location: 0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch: Energy	Top Clip	
	Default: 0.00 ft	Default: 0.00 ft
	Op Table:	Op Table:
	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Channel Link: DC-Sec13A	Upstream	Downstream
Scenario: Scenario 1	Invert: 286.00 ft	Invert: 128.00 ft
From Node: SEC13A-1	Manning's N: 0.0330	Manning's N: 0.0330
To Node: SEC13A-2	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count: 1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Flow Direction: Both	Extrapolation: Normal	Extrapolation: Normal
Damping: 0.0000 ft	Bottom Width: 7.00 ft	Bottom Width: 7.00 ft
Length: 700.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)
Contraction Coef: 0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)
Expansion Coef: 0.00	Bottom Clip	
Entr Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef: 0.00	Op Table:	Op Table:
Bend Loss Coef: 0.00	Ref Node:	Ref Node:
Bend Location: 0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch: Energy	Top Clip	
	Default: 0.00 ft	Default: 0.00 ft
	Op Table:	Op Table:
	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Channel Link: DC1-1	Upstream	Downstream
Scenario: Scenario 1	Invert: 190.41 ft	Invert: 162.00 ft
From Node: NZA-1270	Manning's N: 0.0000	Manning's N: 0.0000

To Node:	NZA-1280	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section:	X-DOWNCHUTE 7'
Flow Direction:	Both		Cross Section: X-DOWNCHUTE 7'
Damping:	0.0000 ft		
Length:	113.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC1-2		Upstream	Downstream
Scenario:	Scenario 1	Invert:	162.00 ft
From Node:	NZA-1280	Manning's N:	0.0000
To Node:	NZA-1290	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section:	X-DOWNCHUTE 7'
Flow Direction:	Both		Cross Section: X-DOWNCHUTE 7'
Damping:	0.0000 ft		
Length:	111.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	1.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC1-3		Upstream	Downstream
Scenario:	Scenario 1	Invert:	130.00 ft
From Node:	NZA-1290	Manning's N:	0.1400
To Node:	SE-DITCH	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count:	1	Max Depth:	5.00 ft
Flow Direction:	Both	Extrapolation:	Normal
Damping:	0.0000 ft	Bottom Width:	70.00 ft
Length:	527.00 ft	Left Slope:	3.000 (h:v)
Contraction Coef:	0.00	Right Slope:	3.000 (h:v)
Expansion Coef:	0.00	Bottom Clip	
Entr Loss Coef:	0.00	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:	
Bend Loss Coef:	0.00	Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000
			Manning's N: 0.0000

Energy Switch: Energy	Top Clip	
	Default: 0.00 ft	Default: 0.00 ft
	Op Table:	Op Table:
	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Channel Link: DC10-1	Upstream	Downstream
Scenario: Scenario 1	Invert: 223.75 ft	Invert: 191.92 ft
From Node: NZA-1040	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1060	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 139.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: DC10-2	Upstream	Downstream
Scenario: Scenario 1	Invert: 191.92 ft	Invert: 161.92 ft
From Node: NZA-1060	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1640	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 120.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: DC10-3	Upstream	Downstream
----------------------	----------	------------

Scenario: Scenario 1	Invert: 162.00 ft	Invert: 160.00 ft
From Node: NZA-1640	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1100	Geometry: Irregular	
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 15.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: DC10-4		Upstream	Downstream
Scenario: Scenario 1		Invert: 160.00 ft	Invert: 134.92 ft
From Node: NZA-1100		Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1110	Geometry: Irregular		Geometry: Irregular
Link Count: 1	Cross Section: X-DOWNCHUTE 7'		Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both			
Damping: 0.0000 ft			
Length: 107.00 ft			
Contraction Coef: 0.00			
Expansion Coef: 0.00			
Entr Loss Coef: 0.00			
Exit Loss Coef: 1.00			
Bend Loss Coef: 0.00			
Bend Location: 0.00 dec			
Energy Switch: Energy			

Comment:

---

Channel Link: DC10-5		Upstream	Downstream
Scenario: Scenario 1		Invert: 134.92 ft	Invert: 124.00 ft
From Node: NZA-1110		Manning's N: 0.0000	Manning's N: 0.0000
To Node: SED POND A-3	Geometry: Irregular		Geometry: Irregular
Link Count: 1	Cross Section: X-DOWNCHUTE 7'		Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both			
Damping: 0.0000 ft			
Length: 66.00 ft			
Contraction Coef: 0.00			
Expansion Coef: 0.00			
Entr Loss Coef: 0.00			
Exit Loss Coef: 0.00			

Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: DC11-1		Upstream	Downstream
Scenario:	Scenario 1	Invert: 223.75 ft	Invert: 192.00 ft
From Node:	NZA-0460	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	NZA-1650	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	123.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: DC11-2		Upstream	Downstream
Scenario:	Scenario 1	Invert: 195.18 ft	Invert: 192.00 ft
From Node:	NZA-1650	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0470	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	20.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: DC11-3		Upstream	Downstream
Scenario:	Scenario 1	Invert: 192.00 ft	Invert: 162.00 ft
From Node:	NZA-0470	Manning's N: 0.0330	Manning's N: 0.0330

To Node:	NZA-0480	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section:	X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	119.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC11-4	Upstream	Downstream
Scenario:	Scenario 1	Invert: 161.92 ft
From Node:	NZA-0480	Manning's N: 0.0000
To Node:	NZA-1630	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both	Geometry: Irregular
Damping:	0.0000 ft	Cross Section: X-DOWNCHUTE 7'
Length:	15.00 ft	
Contraction Coef:	0.00	
Expansion Coef:	0.00	
Entr Loss Coef:	0.00	
Exit Loss Coef:	0.00	
Bend Loss Coef:	0.00	
Bend Location:	0.00 dec	
Energy Switch:	Energy	

Comment:

---

Channel Link: DC11-5	Upstream	Downstream
Scenario:	Scenario 1	Invert: 158.00 ft
From Node:	NZA-1630	Manning's N: 0.0000
To Node:	NZA-0490	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both	Geometry: Irregular
Damping:	0.0000 ft	Cross Section: X-DOWNCHUTE 7'
Length:	108.00 ft	
Contraction Coef:	0.00	
Expansion Coef:	0.00	
Entr Loss Coef:	0.00	
Exit Loss Coef:	1.00	
Bend Loss Coef:	0.00	
Bend Location:	0.00 dec	

Energy Switch: Energy

Comment:

**Channel Link: DC2-1**

	Upstream	Downstream
Scenario: Scenario 1	Invert: 223.00 ft	Invert: 197.00 ft
From Node: NZA-0570	Manning's N: 0.0330	Manning's N: 0.0330
To Node: NZA-0580	Geometry: Irregular	
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 134.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

**Channel Link: DC2-2**

	Upstream	Downstream
Scenario: Scenario 1	Invert: 197.00 ft	Invert: 167.00 ft
From Node: NZA-0580	Manning's N: 0.0330	Manning's N: 0.0330
To Node: NZA-0590	Geometry: Irregular	
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 155.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

**Channel Link: DC2-3**

	Upstream	Downstream
Scenario: Scenario 1	Invert: 167.00 ft	Invert: 136.00 ft
From Node: NZA-0590	Manning's N: 0.0330	Manning's N: 0.0330
To Node: NZA-0600	Geometry: Irregular	
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'

Flow Direction: Both  
 Damping: 0.0000 ft  
 Length: 45.00 ft  
 Contraction Coef: 0.00  
 Expansion Coef: 0.00  
 Entr Loss Coef: 0.00  
 Exit Loss Coef: 1.00  
 Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

---

Channel Link: DC2-4		Upstream	Downstream
Scenario:	Scenario 1	Invert: 136.00 ft	Invert: 135.00 ft
From Node:	NZA-0600	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0600A	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	45.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC3-1		Upstream	Downstream
Scenario:	Scenario 1	Invert: 223.00 ft	Invert: 190.00 ft
From Node:	NZA-1180	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1170	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	147.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC3-2		Upstream	Downstream
Scenario:	Scenario 1	Invert: 190.00 ft	Invert: 161.00 ft
From Node:	NZA-1170	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1160	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	114.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: DC3-3		Upstream	Downstream
Scenario:	Scenario 1	Invert: 161.00 ft	Invert: 144.19 ft
From Node:	NZA-1160	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1600	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	68.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: DC3-4		Upstream	Downstream
Scenario:	Scenario 1	Invert: 144.19 ft	Invert: 138.00 ft
From Node:	NZA-1600	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1150	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	25.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		

Exit Loss Coef: 1.00  
 Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: DC3-5		Upstream	Downstream
Scenario:	Scenario 1	Invert: 138.00 ft	Invert: 130.00 ft
From Node:	NZA-1150	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	SED POND 4	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	45.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: DC4-1		Upstream	Downstream
Scenario:	Scenario 1	Invert: 223.00 ft	Invert: 200.00 ft
From Node:	NZA-0220	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	NZA-0230	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	107.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: DC4-2		Upstream	Downstream
Scenario:	Scenario 1	Invert: 200.00 ft	Invert: 170.00 ft

From Node:	NZA-0230	Manning's N:	0.0330	Manning's N:	0.0330
To Node:	NZA-1670	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:		X-DOWNCHUTE 7'	
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	119.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: DC4-3		Upstream	Downstream
Scenario:	Scenario 1	Invert:	170.00 ft
From Node:	NZA-1670	Manning's N:	0.0000
To Node:	NZA-0240	Geometry: Irregular	
Link Count:	1	Cross Section:	X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	15.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC4-4		Upstream	Downstream
Scenario:	Scenario 1	Invert:	166.00 ft
From Node:	NZA-0240	Manning's N:	0.0330
To Node:	NZA-0250	Geometry: Irregular	
Link Count:	1	Cross Section:	X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	143.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	1.00		
Bend Loss Coef:	0.00		

Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: DC4-5		Upstream	Downstream
Scenario:	Scenario 1	Invert: 133.00 ft	Invert: 130.00 ft
From Node:	NZA-0250	Manning's N: 0.1400	Manning's N: 0.1400
To Node:	SED POND 4	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	45.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	1.00		
Exit Loss Coef:	1.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: DC5-1		Upstream	Downstream
Scenario:	Scenario 1	Invert: 223.75 ft	Invert: 206.92 ft
From Node:	NZA-1330	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1610	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	79.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: DC5-2		Upstream	Downstream
Scenario:	Scenario 1	Invert: 206.92 ft	Invert: 201.92 ft
From Node:	NZA-1610	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1340	Geometry: Irregular	Geometry: Irregular

Link Count:	1	Cross Section:	X-DOWNCHUTE 7'	Cross Section:	X-DOWNCHUTE 7'
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	20.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: DC5-3		Upstream	Downstream
Scenario:	Scenario 1	Invert: 201.92 ft	Invert: 177.00 ft
From Node:	NZA-1340	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1350	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	97.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC5-4		Upstream	Downstream
Scenario:	Scenario 1	Invert: 177.00 ft	Invert: 135.90 ft
From Node:	NZA-1350	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1360	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	167.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	1.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC5-5		Upstream	Downstream
Scenario:	Scenario 1	Invert: 135.90 ft	Invert: 124.00 ft
From Node:	NZA-1360	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	SED POND 8	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	50.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC6-1		Upstream	Downstream
Scenario:	Scenario 1	Invert: 223.00 ft	Invert: 192.00 ft
From Node:	NZA-0720	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	NZA-0710	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	227.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC6-2		Upstream	Downstream
Scenario:	Scenario 1	Invert: 189.07 ft	Invert: 171.93 ft
From Node:	NZA-1690	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	NZA-1620	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		

Damping: 0.0000 ft  
Length: 94.00 ft  
Contraction Coef: 0.00  
Expansion Coef: 0.00  
Entr Loss Coef: 0.00  
Exit Loss Coef: 0.00  
Bend Loss Coef: 0.00  
Bend Location: 0.00 dec  
Energy Switch: Energy

Comment:

---

#### Channel Link: DC6-2A

	Upstream	Downstream
Scenario: Scenario 1	Invert: 192.00 ft	Invert: 189.07 ft
From Node: NZA-0710	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1690	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 15.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

#### Channel Link: DC6-3

	Upstream	Downstream
Scenario: Scenario 1	Invert: 171.93 ft	Invert: 169.00 ft
From Node: NZA-1620	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0700	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 13.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: DC6-4		Upstream	Downstream
Scenario:	Scenario 1	Invert: 162.00 ft	Invert: 136.20 ft
From Node:	NZA-0700	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	NZA-0690	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	123.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	1.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: DC6-5		Upstream	Downstream
Scenario:	Scenario 1	Invert: 136.20 ft	Invert: 125.00 ft
From Node:	NZA-0690	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0700A	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	45.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: DC8-1		Upstream	Downstream
Scenario:	Scenario 1	Invert: 191.92 ft	Invert: 161.92 ft
From Node:	NZA-1470	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1510	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	120.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		

Exit Loss Coef: 0.00  
 Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

---

Channel Link: DC8-2		Upstream	Downstream
Scenario:	Scenario 1	Invert: 161.92 ft	Invert: 156.90 ft
From Node:	NZA-1510	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1520	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	20.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC8-3		Upstream	Downstream
Scenario:	Scenario 1	Invert: 159.90 ft	Invert: 135.92 ft
From Node:	NZA-1520	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1530	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	85.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	1.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC8-4		Upstream	Downstream
Scenario:	Scenario 1	Invert: 135.92 ft	Invert: 127.00 ft

From Node:	NZA-1530	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	NZA-1790	Geometry: Irregular		Geometry: Irregular	
Link Count:	1	Cross Section:		X-DOWNCHUTE 7'	
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	20.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.50				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: DC9-1		Upstream	Downstream
Scenario:	Scenario 1	Invert:	223.58 ft
From Node:	NZA-0340	Manning's N:	0.0330
To Node:	NZA-0350	Geometry: Irregular	
Link Count:	1	Cross Section:	
Flow Direction:	Both	X-DOWNCHUTE 7'	
Damping:	0.0000 ft		
Length:	191.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: DC9-2		Upstream	Downstream																														
Scenario:	Scenario 1	Invert:	192.04 ft																														
From Node:	NZA-0350	Manning's N:	0.0330																														
To Node:	NZA-0360	Geometry: Irregular																															
Link Count:	1	Flow Direction:	Both	Cross Section:		Damping:	0.0000 ft	X-DOWNCHUTE 7'		Length:	156.00 ft			Contraction Coef:	0.00			Expansion Coef:	0.00			Entr Loss Coef:	0.00			Exit Loss Coef:	0.00			Bend Loss Coef:	0.00		
Flow Direction:	Both	Cross Section:																															
Damping:	0.0000 ft	X-DOWNCHUTE 7'																															
Length:	156.00 ft																																
Contraction Coef:	0.00																																
Expansion Coef:	0.00																																
Entr Loss Coef:	0.00																																
Exit Loss Coef:	0.00																																
Bend Loss Coef:	0.00																																

Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: DC9-3		Upstream	Downstream
Scenario:	Scenario 1	Invert: 161.93 ft	Invert: 132.00 ft
From Node:	NZA-0360	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	NZA-0430	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	116.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	1.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: DC9-4		Upstream	Downstream
Scenario:	Scenario 1	Invert: 136.00 ft	Invert: 124.00 ft
From Node:	NZA-0430	Manning's N: 0.0330	Manning's N: 0.0330
To Node:	POND A-1	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-DOWNCHUTE 7'	Cross Section: X-DOWNCHUTE 7'
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	83.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-0230C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 231.00 ft	Invert: 223.75 ft
From Node:	NZA-0260	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0220	Geometry: Irregular	Geometry: Irregular

Link Count:	1	Cross Section:	X-Top Ditch	Cross Section:	X-Top Ditch
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	361.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-0250C	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 207.00 ft	Invert: 200.00 ft
From Node:	NZA-0280	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0230	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	326.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-0260C	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 210.73 ft	Invert: 200.00 ft
From Node:	NZA-0290	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0230	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	560.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-0270C	Upstream	Downstream
Scenario: Scenario 1	Invert: 176.96 ft	Invert: 170.00 ft
From Node: NZA-0300	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1670	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 327.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-0280C	Upstream	Downstream
Scenario: Scenario 1	Invert: 178.45 ft	Invert: 166.00 ft
From Node: NZA-0310	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0240	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 582.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-0290C	Upstream	Downstream
Scenario: Scenario 1	Invert: 140.00 ft	Invert: 133.00 ft
From Node: NZA-0320	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0250	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		

Damping: 0.0000 ft  
Length: 354.00 ft  
Contraction Coef: 0.00  
Expansion Coef: 0.00  
Entr Loss Coef: 0.00  
Exit Loss Coef: 0.00  
Bend Loss Coef: 0.00  
Bend Location: 0.00 dec  
Energy Switch: Energy

Comment:

---

Channel Link: L-0300C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 145.93 ft	Invert: 133.00 ft
From Node:	NZA-0330	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0250	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	650.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

---

Channel Link: L-0350C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 235.00 ft	Invert: 224.24 ft
From Node:	NZA-0440	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1580	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	536.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: L-0360C	Upstream	Downstream
Scenario: Scenario 1	Invert: 240.84 ft	Invert: 227.34 ft
From Node: NZA-0450	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1570	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 674.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		
Comment:		

Channel Link: L-0370C	Upstream	Downstream
Scenario: Scenario 1	Invert: 202.86 ft	Invert: 192.04 ft
From Node: NZA-0370	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0350	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 563.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		
Comment:		

Channel Link: L-0380C	Upstream	Downstream
Scenario: Scenario 1	Invert: 199.64 ft	Invert: 192.00 ft
From Node: NZA-0400	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0350	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 363.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		

Exit Loss Coef: 0.00  
 Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

---

Channel Link: L-0390C	Upstream	Downstream
Scenario: Scenario 1	Invert: 173.93 ft	Invert: 162.22 ft
From Node: NZA-0380	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0360	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 594.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-0400C	Upstream	Downstream
Scenario: Scenario 1	Invert: 149.90 ft	Invert: 132.00 ft
From Node: NZA-0390	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0430	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 630.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-0410C	Upstream	Downstream
Scenario: Scenario 1	Invert: 170.73 ft	Invert: 162.22 ft

From Node:	NZA-0410	Manning's N:	0.0000	Manning's N:	0.0000	
To Node:	NZA-0360	Geometry: Irregular		Geometry: Irregular		
Link Count:	1	Cross Section:		X-Side Slope Ditch	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both					
Damping:	0.0000 ft					
Length:	432.00 ft					
Contraction Coef:	0.00					
Expansion Coef:	0.00					
Entr Loss Coef:	0.00					
Exit Loss Coef:	0.00					
Bend Loss Coef:	0.00					
Bend Location:	0.00 dec					
Energy Switch:	Energy					

Comment:

---

Channel Link: L-0420C		Upstream	Downstream		
Scenario:	Scenario 1	Invert:	145.71 ft		
From Node:	NZA-0420	Manning's N:	0.0000		
To Node:	NZA-0430	Geometry: Irregular			
Link Count:	1	Cross Section:	X-Side Slope Ditch		
Flow Direction:	Both	Cross Section:		X-Side Slope Ditch	
Damping:	0.0000 ft				
Length:	465.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-0460C		Upstream	Downstream		
Scenario:	Scenario 1	Invert:	231.84 ft		
From Node:	NZA-0610	Manning's N:	0.0000		
To Node:	NZA-0570	Geometry: Irregular			
Link Count:	1	Cross Section:	X-Top Ditch		
Flow Direction:	Both	Cross Section:		X-Top Ditch	
Damping:	0.0000 ft				
Length:	429.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				

Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: L-0470C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 205.35 ft	Invert: 197.00 ft
From Node:	NZA-0620	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0580	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	409.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-0480C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 176.24 ft	Invert: 167.00 ft
From Node:	NZA-0630	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0590	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	451.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-0490C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 147.00 ft	Invert: 136.00 ft
From Node:	NZA-0640	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0600	Geometry: Irregular	Geometry: Irregular

Link Count:	1	Cross Section:	X-Side Slope Ditch	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	490.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-0500C	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 230.18 ft	Invert: 223.58 ft
From Node:	NZA-0650	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0570	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	321.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-0510C	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 204.73 ft	Invert: 197.00 ft
From Node:	NZA-0660	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0580	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	398.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-0520C	Upstream	Downstream
Scenario: Scenario 1	Invert: 177.00 ft	Invert: 167.00 ft
From Node: NZA-0670	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0590	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 497.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-0530C	Upstream	Downstream
Scenario: Scenario 1	Invert: 149.00 ft	Invert: 136.00 ft
From Node: NZA-0680	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0600	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 605.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-0570C	Upstream	Downstream
Scenario: Scenario 1	Invert: 235.00 ft	Invert: 223.75 ft
From Node: NZA-0500	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0460	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		

Damping: 0.0000 ft  
Length: 570.00 ft  
Contraction Coef: 0.00  
Expansion Coef: 0.00  
Entr Loss Coef: 0.00  
Exit Loss Coef: 0.00  
Bend Loss Coef: 0.00  
Bend Location: 0.00 dec  
Energy Switch: Energy

Comment:

---

Channel Link: L-0580C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 206.88 ft	Invert: 195.18 ft
From Node:	NZA-0510	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1650	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	546.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

---

Channel Link: L-0590C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 173.96 ft	Invert: 161.92 ft
From Node:	NZA-0520	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0480	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	566.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: L-0600C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 148.28 ft	Invert: 136.00 ft
From Node:	NZA-0530	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0490	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	581.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: L-0610C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 169.86 ft	Invert: 158.00 ft
From Node:	NZA-0560	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1630	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	522.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: L-0620C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 212.55 ft	Invert: 202.62 ft
From Node:	NZA-0550	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1590	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	479.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		

Exit Loss Coef: 0.00  
 Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: L-0630C	Upstream	Downstream
Scenario: Scenario 1	Invert: 239.66 ft	Invert: 223.75 ft
From Node: NZA-0540	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0460	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 795.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

Channel Link: L-0670C	Upstream	Downstream
Scenario: Scenario 1	Invert: 240.84 ft	Invert: 235.64 ft
From Node: NZA-0740	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1660	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 267.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

Channel Link: L-0680C	Upstream	Downstream
Scenario: Scenario 1	Invert: 230.35 ft	Invert: 224.26 ft

From Node:	NZA-0730	Manning's N:	0.0000	Manning's N:	0.0000
To Node:	NZA-0720	Geometry:	Irregular	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Top Ditch	Cross Section:	X-Top Ditch
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	305.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-0690C		Upstream	Downstream
Scenario:	Scenario 1	Invert:	197.18 ft
From Node:	NZA-0750	Manning's N:	0.0000
To Node:	NZA-1690	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both		Cross Section: X-Side Slope Ditch
Damping:	0.0000 ft		
Length:	445.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-0700C		Upstream	Downstream
Scenario:	Scenario 1	Invert:	199.43 ft
From Node:	NZA-0800	Manning's N:	0.0000
To Node:	NZA-0710	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both		Cross Section: X-Side Slope Ditch
Damping:	0.0000 ft		
Length:	364.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		

Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: L-0710C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 180.00 ft	Invert: 171.93 ft
From Node:	NZA-0790	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1620	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	916.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-0730C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 145.00 ft	Invert: 136.20 ft
From Node:	NZA-0770	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0690	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	418.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-0740C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 144.22 ft	Invert: 136.20 ft
From Node:	NZA-0780	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0690	Geometry: Irregular	Geometry: Irregular

Link Count:	1	Cross Section:	X-Side Slope Ditch	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	407.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-0870C	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 160.29 ft	Invert: 152.03 ft
From Node:	NZA-0880	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-0870	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	387.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Pipe Link: L-1040P	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 108.00 ft	Invert: 106.00 ft
From Node:	POND D	Manning's N: 0.0150	Manning's N: 0.0150
To Node:	NZV-1010	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length:	50.00 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef:	0.00	Top Clip	
Bend Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location:	0.00 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Channel Link: L-1060C	Upstream	Downstream
Scenario: Scenario 1	Invert: 235.00 ft	Invert: 223.75 ft
From Node: NZA-1030	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1040	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 562.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-1070C	Upstream	Downstream
Scenario: Scenario 1	Invert: 235.04 ft	Invert: 223.75 ft
From Node: NZA-1050	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1040	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 564.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-1080C	Upstream	Downstream
Scenario: Scenario 1	Invert: 203.60 ft	Invert: 191.96 ft
From Node: NZA-1140	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1060	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		

Damping: 0.0000 ft  
Length: 560.00 ft  
Contraction Coef: 0.00  
Expansion Coef: 0.00  
Entr Loss Coef: 0.00  
Exit Loss Coef: 0.00  
Bend Loss Coef: 0.00  
Bend Location: 0.00 dec  
Energy Switch: Energy

Comment:

---

Channel Link: L-1090C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 202.86 ft	Invert: 191.96 ft
From Node:	NZA-1070	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1060	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	526.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

---

Channel Link: L-1100C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 172.88 ft	Invert: 160.00 ft
From Node:	NZA-1080	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1100	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	585.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: L-1110C	Upstream	Downstream
Scenario: Scenario 1	Invert: 173.96 ft	Invert: 162.00 ft
From Node: NZA-1130	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1640	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 580.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		
Comment:		

Channel Link: L-1120C	Upstream	Downstream
Scenario: Scenario 1	Invert: 147.24 ft	Invert: 134.92 ft
From Node: NZA-1120	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1110	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 588.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		
Comment:		

Channel Link: L-1130C	Upstream	Downstream
Scenario: Scenario 1	Invert: 147.76 ft	Invert: 134.92 ft
From Node: NZA-1090	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1110	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 628.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		

Exit Loss Coef: 0.00  
 Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: L-1170C	Upstream	Downstream
Scenario: Scenario 1	Invert: 231.84 ft	Invert: 223.00 ft
From Node: NZA-1190	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1180	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 405.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

Channel Link: L-1180C	Upstream	Downstream
Scenario: Scenario 1	Invert: 231.53 ft	Invert: 223.00 ft
From Node: NZA-1260	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1180	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 388.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

Channel Link: L-1190C	Upstream	Downstream
Scenario: Scenario 1	Invert: 198.79 ft	Invert: 190.00 ft

From Node:	NZA-1200	Manning's N:	0.0000	Manning's N:	0.0000	
To Node:	NZA-1170	Geometry: Irregular		Geometry: Irregular		
Link Count:	1	Cross Section:		X-Side Slope Ditch	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both					
Damping:	0.0000 ft					
Length:	417.00 ft					
Contraction Coef:	0.00					
Expansion Coef:	0.00					
Entr Loss Coef:	0.00					
Exit Loss Coef:	0.00					
Bend Loss Coef:	0.00					
Bend Location:	0.00 dec					
Energy Switch:	Energy					

Comment:

---

Channel Link: L-1200C		Upstream	Downstream		
Scenario:	Scenario 1	Invert:	197.81 ft		
From Node:	NZA-1250	Manning's N:	0.0000		
To Node:	NZA-1170	Geometry: Irregular			
Link Count:	1	Cross Section:	X-Side Slope Ditch		
Flow Direction:	Both	Cross Section:		X-Side Slope Ditch	
Damping:	0.0000 ft				
Length:	357.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-1210C		Upstream	Downstream		
Scenario:	Scenario 1	Invert:	169.68 ft		
From Node:	NZA-1210	Manning's N:	0.0000		
To Node:	NZA-1160	Geometry: Irregular			
Link Count:	1	Cross Section:	X-Side Slope Ditch		
Flow Direction:	Both	Cross Section:		X-Side Slope Ditch	
Damping:	0.0000 ft				
Length:	450.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				

Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: L-1220C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 168.95 ft	Invert: 161.00 ft
From Node:	NZA-1240	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1160	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	353.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-1230C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 147.00 ft	Invert: 138.00 ft
From Node:	NZA-1220	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1150	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	457.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-1240C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 151.18 ft	Invert: 144.19 ft
From Node:	NZA-1230	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1600	Geometry: Irregular	Geometry: Irregular

Link Count:	1	Cross Section:	X-Side Slope Ditch	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	350.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-1280C	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 201.42 ft	Invert: 190.41 ft
From Node:	NZA-1300	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1270	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	565.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-1290C	Upstream	Downstream	
Scenario:	Scenario 1	Invert: 181.73 ft	Invert: 162.00 ft
From Node:	NZA-1310	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1280	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	958.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-1300C	Upstream	Downstream
Scenario: Scenario 1	Invert: 161.36 ft	Invert: 134.00 ft
From Node: NZA-1320	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1290	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 1358.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-1330C	Upstream	Downstream
Scenario: Scenario 1	Invert: 230.35 ft	Invert: 223.75 ft
From Node: NZA-1410	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1330	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 328.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-1340C	Upstream	Downstream
Scenario: Scenario 1	Invert: 214.90 ft	Invert: 206.92 ft
From Node: NZA-1420	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1610	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		

Damping: 0.0000 ft  
Length: 381.00 ft  
Contraction Coef: 0.00  
Expansion Coef: 0.00  
Entr Loss Coef: 0.00  
Exit Loss Coef: 0.00  
Bend Loss Coef: 0.00  
Bend Location: 0.00 dec  
Energy Switch: Energy

Comment:

---

Channel Link: L-1350C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 184.98 ft	Invert: 177.00 ft
From Node:	NZA-1430	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1350	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	385.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

---

Channel Link: L-1360C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 145.52 ft	Invert: 135.90 ft
From Node:	NZA-1440	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1360	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	410.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		
Comment:			

Channel Link: L-1370C	Upstream	Downstream
Scenario: Scenario 1	Invert: 149.75 ft	Invert: 135.90 ft
From Node: NZA-1370	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1360	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 649.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		
Comment:		

Channel Link: L-1380C	Upstream	Downstream
Scenario: Scenario 1	Invert: 190.38 ft	Invert: 177.00 ft
From Node: NZA-1380	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1350	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 580.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		
Comment:		

Channel Link: L-1390C	Upstream	Downstream
Scenario: Scenario 1	Invert: 213.69 ft	Invert: 201.92 ft
From Node: NZA-1390	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1340	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 544.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		

Exit Loss Coef: 0.00  
 Bend Loss Coef: 0.00  
 Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: L-1400C	Upstream	Downstream
Scenario: Scenario 1	Invert: 234.03 ft	Invert: 223.75 ft
From Node: NZA-1400	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-1330	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 513.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

Channel Link: L-1480C	Upstream	Downstream
Scenario: Scenario 1	Invert: 179.16 ft	Invert: 169.00 ft
From Node: NZA-0760	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0700	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 480.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

Channel Link: L-1490C	Upstream	Downstream
Scenario: Scenario 1	Invert: 199.95 ft	Invert: 190.80 ft

From Node:	NZA-1490	Manning's N:	0.0000	Manning's N:	0.0000	
To Node:	NZA-1470	Geometry: Irregular		Geometry: Irregular		
Link Count:	1	Cross Section:		X-Side Slope Ditch	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both					
Damping:	0.0000 ft					
Length:	443.00 ft					
Contraction Coef:	0.00					
Expansion Coef:	0.00					
Entr Loss Coef:	0.00					
Exit Loss Coef:	0.00					
Bend Loss Coef:	0.00					
Bend Location:	0.00 dec					
Energy Switch:	Energy					

Comment:

---

Channel Link: L-1500C	Upstream	Downstream
Scenario:	Scenario 1	Invert: 199.62 ft
From Node:	NZA-1480	Manning's N: 0.0000
To Node:	NZA-1470	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch
Flow Direction:	Both	Cross Section: X-Side Slope Ditch
Damping:	0.0000 ft	
Length:	370.00 ft	
Contraction Coef:	0.00	
Expansion Coef:	0.00	
Entr Loss Coef:	0.00	
Exit Loss Coef:	0.00	
Bend Loss Coef:	0.00	
Bend Location:	0.00 dec	
Energy Switch:	Energy	

Comment:

---

Channel Link: L-1510C	Upstream	Downstream
Scenario:	Scenario 1	Invert: 166.00 ft
From Node:	NZA-1560	Manning's N: 0.0000
To Node:	NZA-1520	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch
Flow Direction:	Both	Cross Section: X-Side Slope Ditch
Damping:	0.0000 ft	
Length:	430.00 ft	
Contraction Coef:	0.00	
Expansion Coef:	0.00	
Entr Loss Coef:	0.00	
Exit Loss Coef:	0.00	
Bend Loss Coef:	0.00	

Bend Location: 0.00 dec  
 Energy Switch: Energy

Comment:

Channel Link: L-1520C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 171.49 ft	Invert: 161.92 ft
From Node:	NZA-1500	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1510	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	477.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-1530C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 145.71 ft	Invert: 135.92 ft
From Node:	NZA-1550	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1530	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	458.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

Channel Link: L-1570C		Upstream	Downstream
Scenario:	Scenario 1	Invert: 140.88 ft	Invert: 137.15 ft
From Node:	NZA-1540	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	NZA-1530	Geometry: Irregular	Geometry: Irregular

Link Count:	1	Cross Section:	X-Side Slope Ditch	Cross Section:	X-Side Slope Ditch
Flow Direction:	Both				
Damping:	0.0000 ft				
Length:	178.00 ft				
Contraction Coef:	0.00				
Expansion Coef:	0.00				
Entr Loss Coef:	0.00				
Exit Loss Coef:	0.00				
Bend Loss Coef:	0.00				
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment:

---

Channel Link: L-1580C		Upstream	Downstream
Scenario:	Scenario 1	Invert:	227.34 ft
From Node:	NZA-1570	Manning's N:	0.0000
To Node:	NZA-0340	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Top Ditch
Flow Direction:	Both		Cross Section: X-Top Ditch
Damping:	0.0000 ft		
Length:	180.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-1590C		Upstream	Downstream
Scenario:	Scenario 1	Invert:	224.24 ft
From Node:	NZA-1580	Manning's N:	0.0000
To Node:	NZA-0340	Geometry:	Irregular
Link Count:	1	Cross Section:	X-Top Ditch
Flow Direction:	Both		Cross Section: X-Top Ditch
Damping:	0.0000 ft		
Length:	42.00 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Comment:

---

Channel Link: L-1600C	Upstream	Downstream
Scenario: Scenario 1	Invert: 202.62 ft	Invert: 192.00 ft
From Node: NZA-1590	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0470	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Side Slope Ditch	Cross Section: X-Side Slope Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 534.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-1700C	Upstream	Downstream
Scenario: Scenario 1	Invert: 235.64 ft	Invert: 224.26 ft
From Node: NZA-1660	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0720	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		
Damping: 0.0000 ft		
Length: 244.00 ft		
Contraction Coef: 0.00		
Expansion Coef: 0.00		
Entr Loss Coef: 0.00		
Exit Loss Coef: 0.00		
Bend Loss Coef: 0.00		
Bend Location: 0.00 dec		
Energy Switch: Energy		

Comment:

---

Channel Link: L-2340C	Upstream	Downstream
Scenario: Scenario 1	Invert: 234.55 ft	Invert: 223.75 ft
From Node: NZA-0270	Manning's N: 0.0000	Manning's N: 0.0000
To Node: NZA-0220	Geometry: Irregular	Geometry: Irregular
Link Count: 1	Cross Section: X-Top Ditch	Cross Section: X-Top Ditch
Flow Direction: Both		

Damping: 0.0000 ft  
Length: 540.00 ft  
Contraction Coef: 0.00  
Expansion Coef: 0.00  
Entr Loss Coef: 0.00  
Exit Loss Coef: 0.00  
Bend Loss Coef: 0.00  
Bend Location: 0.00 dec  
Energy Switch: Energy

Comment:

---

Channel Link: NE DITCH		Upstream	Downstream
Scenario:	Scenario 1	Invert: 135.00 ft	Invert: 132.00 ft
From Node:	NZA-0600A	Manning's N: 0.1400	Manning's N: 0.1400
To Node:	SED POND 4	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count:	1	Max Depth: 5.00 ft	Max Depth: 5.00 ft
Flow Direction:	Both	Extrapolation: Normal	Extrapolation: Normal
Damping:	0.0000 ft	Bottom Width: 20.00 ft	Bottom Width: 20.00 ft
Length:	500.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)
Contraction Coef:	0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)
Expansion Coef:	0.00	Bottom Clip	
Entr Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef:	0.00	Op Table:	Op Table:
Bend Loss Coef:	0.00	Ref Node:	Ref Node:
Bend Location:	0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch:	Energy	Top Clip	
		Default: 0.00 ft	Default: 0.00 ft
		Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Channel Link: NE-DITCH-CHANNEL		Upstream	Downstream
Scenario:	Scenario 1	Invert: 138.00 ft	Invert: 127.70 ft
From Node:	NZA-1700	Manning's N: 0.1400	Manning's N: 0.1400
To Node:	SE-DITCH	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count:	1	Max Depth: 4.00 ft	Max Depth: 4.00 ft
Flow Direction:	Both	Extrapolation: Normal	Extrapolation: Normal
Damping:	0.0000 ft	Bottom Width: 20.00 ft	Bottom Width: 20.00 ft
Length:	860.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)
Contraction Coef:	0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)
Expansion Coef:	0.00	Bottom Clip	
Entr Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef:	0.00	Op Table:	Op Table:
Bend Loss Coef:	0.00	Ref Node:	Ref Node:

Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy		Top Clip		
		Default:	0.00 ft	Default:	0.00 ft
		Op Table:		Op Table:	
		Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

---

Channel Link: NW DITCH		Upstream	Downstream
Scenario:	Scenario 1	Invert:	125.00 ft
From Node:	NZA-0700A	Manning's N:	0.1400
To Node:	SED POND 8	Geometry:	Trapezoidal
Link Count:	1	Max Depth:	3.00 ft
Flow Direction:	Both	Extrapolation:	Normal
Damping:	0.0000 ft	Bottom Width:	40.00 ft
Length:	50.00 ft	Left Slope:	3.000 (h:v)
Contraction Coef:	0.00	Right Slope:	3.000 (h:v)
Expansion Coef:	0.00		Bottom Clip
Entr Loss Coef:	0.00	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:	
Bend Loss Coef:	0.00	Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000
Energy Switch:	Energy		Top Clip
		Default:	0.00 ft
		Op Table:	
		Ref Node:	
		Manning's N:	0.0000

Comment:

---

Channel Link: NW-DITCH-CHANNEL		Upstream	Downstream
Scenario:	Scenario 1	Invert:	138.00 ft
From Node:	NZA-1780	Manning's N:	0.1400
To Node:	NZA-0700A	Geometry:	Trapezoidal
Link Count:	1	Max Depth:	2.00 ft
Flow Direction:	Both	Extrapolation:	Normal
Damping:	0.0000 ft	Bottom Width:	20.00 ft
Length:	870.00 ft	Left Slope:	3.000 (h:v)
Contraction Coef:	0.00	Right Slope:	3.000 (h:v)
Expansion Coef:	0.00		Bottom Clip
Entr Loss Coef:	0.00	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:	
Bend Loss Coef:	0.00	Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000
Energy Switch:	Energy		Top Clip
		Default:	0.00 ft

Op Table:	Op Table:
Ref Node:	Ref Node:
Manning's N: 0.0000	Manning's N: 0.0000
Comment:	

Weir Link: POND B WEIR	
Scenario: Scenario 1	Bottom Clip
From Node: POND B	Default: 0.00 ft
To Node: NZV-1020	Op Table:
Link Count: 1	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Sharp Crested Vertical	Op Table:
Geometry Type: Trapezoidal	Ref Node:
Invert: 125.70 ft	Discharge Coefficients
Control Elevation: 125.70 ft	Weir Default: 2.800
Max Depth: 1.75 ft	Weir Table:
Extrapolation Method: Normal Projection	Orifice Default: 0.600
Bottom Width: 25.00 ft	Orifice Table:
Left Slope: 5.000 (h:v)	
Right Slope: 5.000 (h:v)	
Comment:	

Channel Link: ROAD SWALE		Upstream	Downstream
Scenario: Scenario 1	Invert: 239.00 ft	Invert: 136.00 ft	
From Node: NZA-RS	Manning's N: 0.0330	Manning's N: 0.0330	
To Node: NZA-0490	Geometry: Trapezoidal	Geometry: Trapezoidal	
Link Count: 1	Max Depth: 2.00 ft	Max Depth: 2.00 ft	
Flow Direction: Both	Extrapolation: Normal	Extrapolation: Normal	
Damping: 0.0000 ft	Bottom Width: 3.00 ft	Bottom Width: 3.00 ft	
Length: 1750.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)	
Contraction Coef: 0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)	
Expansion Coef: 0.00	Bottom Clip		
Entr Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft	
Exit Loss Coef: 0.00	Op Table:	Op Table:	
Bend Loss Coef: 0.00	Ref Node:	Ref Node:	
Bend Location: 0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000	
Energy Switch: Energy	Top Clip		
	Default: 0.00 ft	Default: 0.00 ft	
	Op Table:	Op Table:	
	Ref Node:	Ref Node:	
	Manning's N: 0.0000	Manning's N: 0.0000	
Comment:			

Drop Structure Link: S-10	Upstream Pipe	Downstream Pipe
Scenario: Scenario 1	Invert: 121.69 ft	Invert: 121.00 ft
From Node: POND B	Manning's N: 0.0130	Manning's N: 0.0130
To Node: NZV-1020	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Bottom Clip	
Solution: Combine	Default: 0.00 ft	Default: 0.00 ft
Increments: 0	Op Table:	Op Table:
Pipe Count: 1	Ref Node:	Ref Node:
Damping: 0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length: 129.00 ft	Top Clip	
FHWA Code: 0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef: 0.50	Op Table:	Op Table:
Exit Loss Coef: 0.00	Ref Node:	Ref Node:
Bend Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location: 0.00 dec		
Energy Switch: Diff Wave		
Pipe Comment:		

Weir Component	Bottom Clip	
Weir: 1	Default: 0.00 ft	
Weir Count: 1	Op Table:	
Weir Flow Direction: Both	Ref Node:	
Damping: 0.0000 ft	Top Clip	
Weir Type: Sharp Crested Vertical	Default: 0.00 ft	
Geometry Type: Rectangular	Op Table:	
Invert: 123.00 ft	Ref Node:	
Control Elevation: 123.00 ft	Discharge Coefficients	
Max Depth: 0.60 ft	Weir Default: 3.200	
Max Width: 1.25 ft	Weir Table:	
Fillet: 0.00 ft	Orifice Default: 0.600	
	Orifice Table:	
Weir Comment:		

Weir Component	Bottom Clip	
Weir: 2	Default: 0.00 ft	
Weir Count: 1	Op Table:	
Weir Flow Direction: Both	Ref Node:	
Damping: 0.0000 ft	Top Clip	
Weir Type: Sharp Crested Vertical	Default: 0.00 ft	
Geometry Type: Rectangular	Op Table:	
Invert: 123.60 ft	Ref Node:	
Control Elevation: 123.60 ft	Discharge Coefficients	
Max Depth: 3.00 ft	Weir Default: 3.200	
Max Width: 7.00 ft	Weir Table:	
Fillet: 0.00 ft	Orifice Default: 0.600	
	Orifice Table:	
Weir Comment:		

Drop Structure Comment:

Drop Structure Link: S-10A		Upstream Pipe	Downstream Pipe
Scenario:	Scenario 1	Invert: 121.50 ft	Invert: 121.00 ft
From Node:	POND B	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	NZV-1020	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction:	Both	Bottom Clip	
Solution:	Combine	Default: 0.00 ft	Default: 0.00 ft
Increments:	0	Op Table:	Op Table:
Pipe Count:	1	Ref Node:	Ref Node:
Damping:	0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length:	100.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.50	Op Table:	Op Table:
Exit Loss Coef:	0.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 dec		
Energy Switch:	Energy		

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Rectangular
Invert:	123.60 ft
Control Elevation:	123.60 ft
Max Depth:	3.00 ft
Max Width:	7.00 ft
Fillet:	0.00 ft
Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Drop Structure Comment:

Pipe Link: S-20		Upstream	Downstream
Scenario:	Scenario 1	Invert: 115.32 ft	Invert: 114.60 ft
From Node:	SED POND 8	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	POND D	Geometry: Circular	Geometry: Circular
Link Count:	2	Max Depth: 4.00 ft	Max Depth: 4.00 ft

Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Length:	91.00 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.50	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip	
Bend Loss Coef:	0.00	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N:	0.0000

Comment:

---

Pipe Link: S-21		Upstream	Downstream
Scenario:	Scenario 1	Invert:	123.16 ft
From Node:	SEC12-B	Manning's N:	0.0130
To Node:	POND D	Geometry: Circular	
Link Count:	2	Max Depth:	5.00 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Length:	35.00 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.50	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip	
Bend Loss Coef:	0.00	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N:	0.0000

Comment:

---

Pipe Link: S-29		Upstream	Downstream
Scenario:	Scenario 1	Invert:	119.55 ft
From Node:	SED POND 2	Manning's N:	0.0130
To Node:	SED POND 8	Geometry: Circular	
Link Count:	2	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Length:	114.00 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.50	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip	
Bend Loss Coef:	0.00	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N:	0.0000

Comment:

---

Pipe Link: S-30	Upstream	Downstream
Scenario: Scenario 1	Invert: 125.02 ft	Invert: 124.96 ft
From Node: SED POND 4	Manning's N: 0.0130	Manning's N: 0.0130
To Node: SED POND 3	Geometry: Circular	Geometry: Circular
Link Count: 3	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 119.00 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 1.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0.00 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Pipe Link: S-32	Upstream	Downstream
Scenario: Scenario 1	Invert: 122.99 ft	Invert: 121.99 ft
From Node: SED POND A-3	Manning's N: 0.0130	Manning's N: 0.0130
To Node: POND B	Geometry: Circular	Geometry: Circular
Link Count: 2	Max Depth: 2.00 ft	Max Depth: 3.20 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 355.00 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 1.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0.00 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Pipe Link: S-33	Upstream	Downstream
Scenario: Scenario 1	Invert: 120.00 ft	Invert: 120.00 ft
From Node: SED POND A-2	Manning's N: 0.0130	Manning's N: 0.0130
To Node: SED POND A-3	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 81.00 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.50	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 1.00	Top Clip	

Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0.00 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Pipe Link: S-5		Upstream	Downstream
Scenario: Scenario 1		Invert: 127.00 ft	Invert: 126.00 ft
From Node: POND F		Manning's N: 0.0130	Manning's N: 0.0130
To Node: POND G		Geometry: Circular	Geometry: Circular
Link Count: 1		Max Depth: 1.17 ft	Max Depth: 1.84 ft
Flow Direction: Both		Bottom Clip	
Damping: 0.0000 ft		Default: 0.00 ft	Default: 0.00 ft
Length: 73.39 ft		Op Table:	Op Table:
FHWA Code: 0		Ref Node:	Ref Node:
Entr Loss Coef: 0.00		Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00		Top Clip	
Bend Loss Coef: 0.00		Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0.00 dec		Op Table:	Op Table:
Energy Switch: Energy		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Pipe Link: S-50		Upstream	Downstream
Scenario: Scenario 1		Invert: 122.10 ft	Invert: 120.07 ft
From Node: SED POND 3		Manning's N: 0.0130	Manning's N: 0.0130
To Node: SED POND 2		Geometry: Circular	Geometry: Circular
Link Count: 2		Max Depth: 24.00 ft	Max Depth: 24.00 ft
Flow Direction: Both		Bottom Clip	
Damping: 0.0000 ft		Default: 0.00 ft	Default: 0.00 ft
Length: 108.00 ft		Op Table:	Op Table:
FHWA Code: 0		Ref Node:	Ref Node:
Entr Loss Coef: 0.50		Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 1.00		Top Clip	
Bend Loss Coef: 0.00		Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0.00 dec		Op Table:	Op Table:
Energy Switch: Energy		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Pipe Link: S-6		Upstream	Downstream
Scenario: Scenario 1		Invert: 126.00 ft	Invert: 124.54 ft

From Node:	POND G	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	SED POND A-2	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	1.17 ft	Max Depth:	1.84 ft
Flow Direction:	Both		Bottom Clip		
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	50.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00		Top Clip		
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

---

Pipe Link: S-8		Upstream	Downstream
Scenario:	Scenario 1	Invert:	126.70 ft
From Node:	NZA-0490	Manning's N:	0.0130
To Node:	POND B	Geometry:	Horizontal Ellipse
Link Count:	2	Max Depth:	2.80 ft
Flow Direction:	Both		Bottom Clip
Damping:	0.0000 ft	Default:	0.00 ft
Length:	100.00 ft	Op Table:	
FHWA Code:	0	Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000
Exit Loss Coef:	0.00		Top Clip
Bend Loss Coef:	0.00	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:	
Energy Switch:	Energy	Ref Node:	
		Manning's N:	0.0000

Comment: ERCP - Elliptical Concrete Pipe x2

---

Pipe Link: S-9		Upstream	Downstream
Scenario:	Scenario 1	Invert:	125.30 ft
From Node:	NZA-1460	Manning's N:	0.0120
To Node:	SED POND A-3	Geometry:	Circular
Link Count:	1	Max Depth:	2.00 ft
Flow Direction:	Both		Bottom Clip
Damping:	0.0000 ft	Default:	0.00 ft
Length:	343.00 ft	Op Table:	
FHWA Code:	0	Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000
Exit Loss Coef:	0.00		Top Clip
Bend Loss Coef:	0.00	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:	

Energy Switch: Energy	Ref Node: Manning's N: 0.0000	Ref Node: Manning's N: 0.0000
Comment:		

Channel Link: SE-DITCH-CHANNEL	Upstream	Downstream
Scenario: Scenario 1	Invert: 127.70 ft	Invert: 125.00 ft
From Node: SE-DITCH	Manning's N: 0.1400	Manning's N: 0.1400
To Node: NZA-1460	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count: 1	Max Depth: 5.00 ft	Max Depth: 5.00 ft
Flow Direction: Both	Extrapolation: Normal	Extrapolation: Normal
Damping: 0.0000 ft	Bottom Width: 30.00 ft	Bottom Width: 30.00 ft
Length: 1060.00 ft	Left Slope: 3.000 (h:v)	Left Slope: 3.000 (h:v)
Contraction Coef: 0.00	Right Slope: 3.000 (h:v)	Right Slope: 3.000 (h:v)
Expansion Coef: 0.00	Bottom Clip	
Entr Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef: 0.00	Op Table:	Op Table:
Bend Loss Coef: 0.00	Ref Node:	Ref Node:
Bend Location: 0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch: Energy	Top Clip	
	Default: 0.00 ft	Default: 0.00 ft
	Op Table:	Op Table:
	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:
----------

Channel Link: SPILLWAY12	Upstream	Downstream
Scenario: Scenario 1	Invert: 127.00 ft	Invert: 123.15 ft
From Node: SEC12-2	Manning's N: 0.0120	Manning's N: 0.0120
To Node: SEC12-B	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count: 1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Extrapolation: Normal	Extrapolation: Normal
Damping: 0.0000 ft	Bottom Width: 20.00 ft	Bottom Width: 20.00 ft
Length: 200.00 ft	Left Slope: 4.000 (h:v)	Left Slope: 4.000 (h:v)
Contraction Coef: 0.00	Right Slope: 4.000 (h:v)	Right Slope: 4.000 (h:v)
Expansion Coef: 0.00	Bottom Clip	
Entr Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef: 0.00	Op Table:	Op Table:
Bend Loss Coef: 0.00	Ref Node:	Ref Node:
Bend Location: 0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch: Energy	Top Clip	
	Default: 0.00 ft	Default: 0.00 ft
	Op Table:	Op Table:
	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:
----------

Channel Link: SW-DITCH-CHANNEL-A		Upstream	Downstream
Scenario:	Scenario 1	Invert: 128.00 ft	Invert: 127.00 ft
From Node:	NZA-0890	Manning's N: 0.1400	Manning's N: 0.1400
To Node:	NZA-1790	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Flow Direction:	Both	Extrapolation: Normal	Extrapolation: Normal
Damping:	0.0000 ft	Bottom Width: 5.00 ft	Bottom Width: 5.00 ft
Length:	200.00 ft	Left Slope: 2.000 (h:v)	Left Slope: 2.000 (h:v)
Contraction Coef:	0.00	Right Slope: 2.000 (h:v)	Right Slope: 2.000 (h:v)
Expansion Coef:	0.00	Bottom Clip	
Entr Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef:	0.00	Op Table:	Op Table:
Bend Loss Coef:	0.00	Ref Node:	Ref Node:
Bend Location:	0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch:	Energy	Top Clip	
		Default: 0.00 ft	Default: 0.00 ft
		Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Channel Link: SW-DITCH-CHANNEL-B		Upstream	Downstream
Scenario:	Scenario 1	Invert: 127.00 ft	Invert: 125.68 ft
From Node:	NZA-1790	Manning's N: 0.1400	Manning's N: 0.1400
To Node:	NZA-1800	Geometry: Trapezoidal	Geometry: Trapezoidal
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Flow Direction:	Both	Extrapolation: Normal	Extrapolation: Normal
Damping:	0.0000 ft	Bottom Width: 5.00 ft	Bottom Width: 5.00 ft
Length:	140.00 ft	Left Slope: 2.000 (h:v)	Left Slope: 2.000 (h:v)
Contraction Coef:	0.00	Right Slope: 2.000 (h:v)	Right Slope: 2.000 (h:v)
Expansion Coef:	0.00	Bottom Clip	
Entr Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Exit Loss Coef:	0.00	Op Table:	Op Table:
Bend Loss Coef:	0.00	Ref Node:	Ref Node:
Bend Location:	0.00 dec	Manning's N: 0.0000	Manning's N: 0.0000
Energy Switch:	Energy	Top Clip	
		Default: 0.00 ft	Default: 0.00 ft
		Op Table:	Op Table:
		Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000

Comment:

---

Pipe Link: TS-6		Upstream	Downstream
Scenario:	Scenario 1	Invert: 125.68 ft	Invert: 125.55 ft
From Node:	NZA-1800	Manning's N: 0.0130	Manning's N: 0.0130

To Node:	POND A-1	Geometry: Circular	Geometry: Circular	
Link Count:	2	Max Depth:	3.00 ft	
Flow Direction:	Both	Bottom Clip		
Damping:	0.0000 ft	Default:	0.00 ft	
Length:	30.00 ft	Op Table:	Op Table:	
FHWA Code:	0	Ref Node:	Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	
Exit Loss Coef:	1.00	Top Clip		
Bend Loss Coef:	0.00	Default:	0.00 ft	
Bend Location:	0.00 dec	Op Table:	Op Table:	
Energy Switch:	Energy	Ref Node:	Ref Node:	
		Manning's N:	0.0000	

Comment:

---

Simulation: 25yr,24hr

Scenario: Scenario 1  
Run Date/Time: 1/31/2022 9:54:26 AM  
Program Version: ICPR4 4.07.08

#### General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000
Hydrology [sec]		Surface Hydraulics [sec]		Groundwater [sec]
Min Calculation Time:	60.0000	0.0500	900.0000	
Max Calculation Time:		10.0000		

#### Output Time Increments

##### Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

##### Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

##### Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

**Restart File**  
Save Restart: False

### Resources & Lookup Tables

**Resources**  
Rainfall Folder:  
Reference ET Folder:  
Unit Hydrograph  
Folder:

### Lookup Tables

Boundary Stage Set:  
Extern Hydrograph Set:  
Curve Number Set: 1  
Green-Ampt Set:  
Vertical Layers Set:  
Impervious Set: 1  
Roughness Set:  
Crop Coef Set:  
Fillable Porosity Set:  
Conductivity Set:  
Leakage Set:

### Tolerances & Options

Time Marching: SAOR  
Max Iterations: 6  
Over-Relax Weight: 0.5 dec  
Fact:  
dZ Tolerance: 0.0001 ft  
Max dZ: 1.0000 ft  
Link Optimizer Tol: 0.0000 ft  
Edge Length Option: Automatic  
Dflt Damping (2D): 0.0100 ft  
Min Node Srf Area (2D): 100 ft<sup>2</sup>  
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr  
ET for Manual Basins: False  
Smp/Man Basin Rain Opt:  
OF Region Rain Opt: Global  
Rainfall Name: ~SCSII-24  
Rainfall Amount: 8.40 in  
Storm Duration: 24.0000 hr  
Dflt Damping (1D): 0.0100 ft  
Min Node Srf Area (1D): 100 ft<sup>2</sup>  
Energy Switch (1D): Energy

Comment:

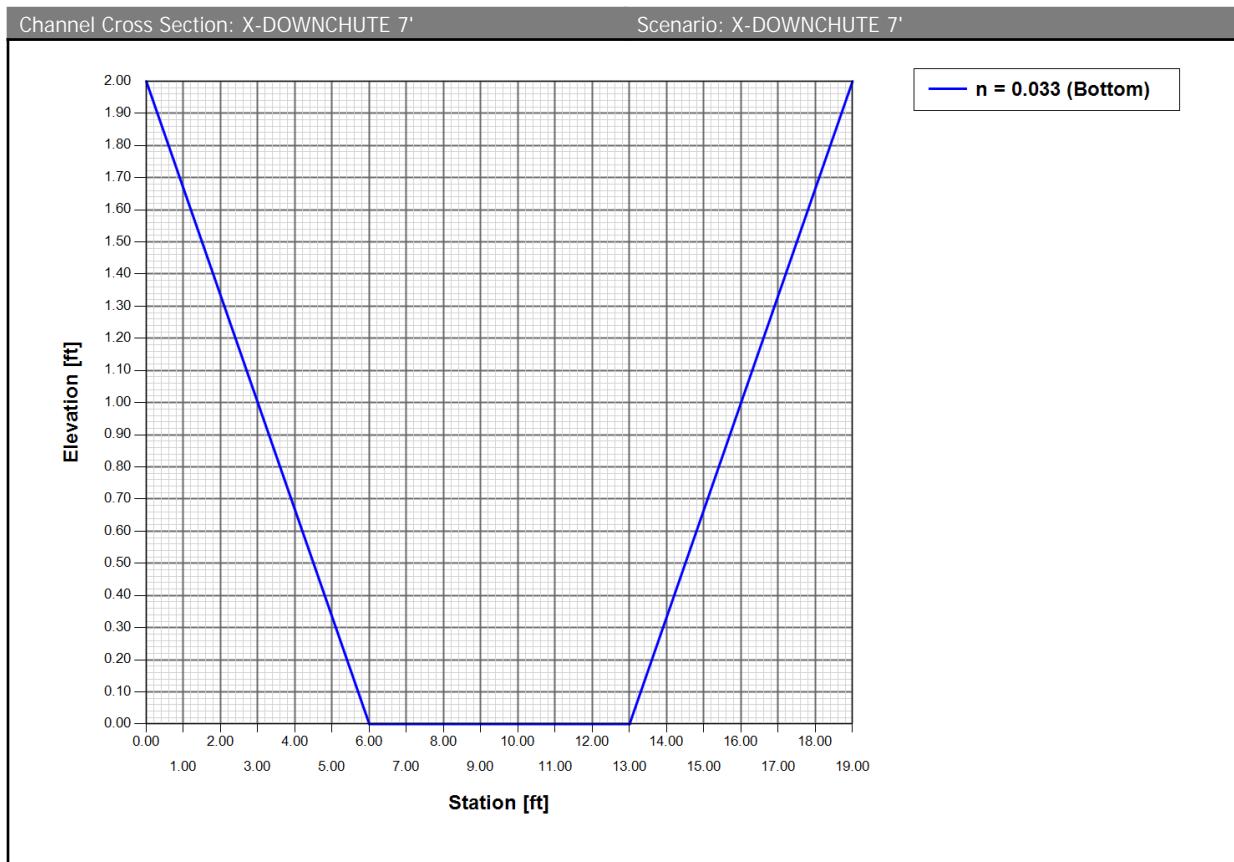
### Channel Cross Section: X-DOWNCHUTE 7'

Scenario: Scenario 1  
Lid: No  
Conveyance Method: ICPRv3

### Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0		0.00	2.00
1		6.00	0.00
2		13.00	0.00
3		19.00	2.00
			0.0330

Comment:



#### Channel Cross Section: X-Side Slope Ditch

Scenario: Scenario 1

Lid: No

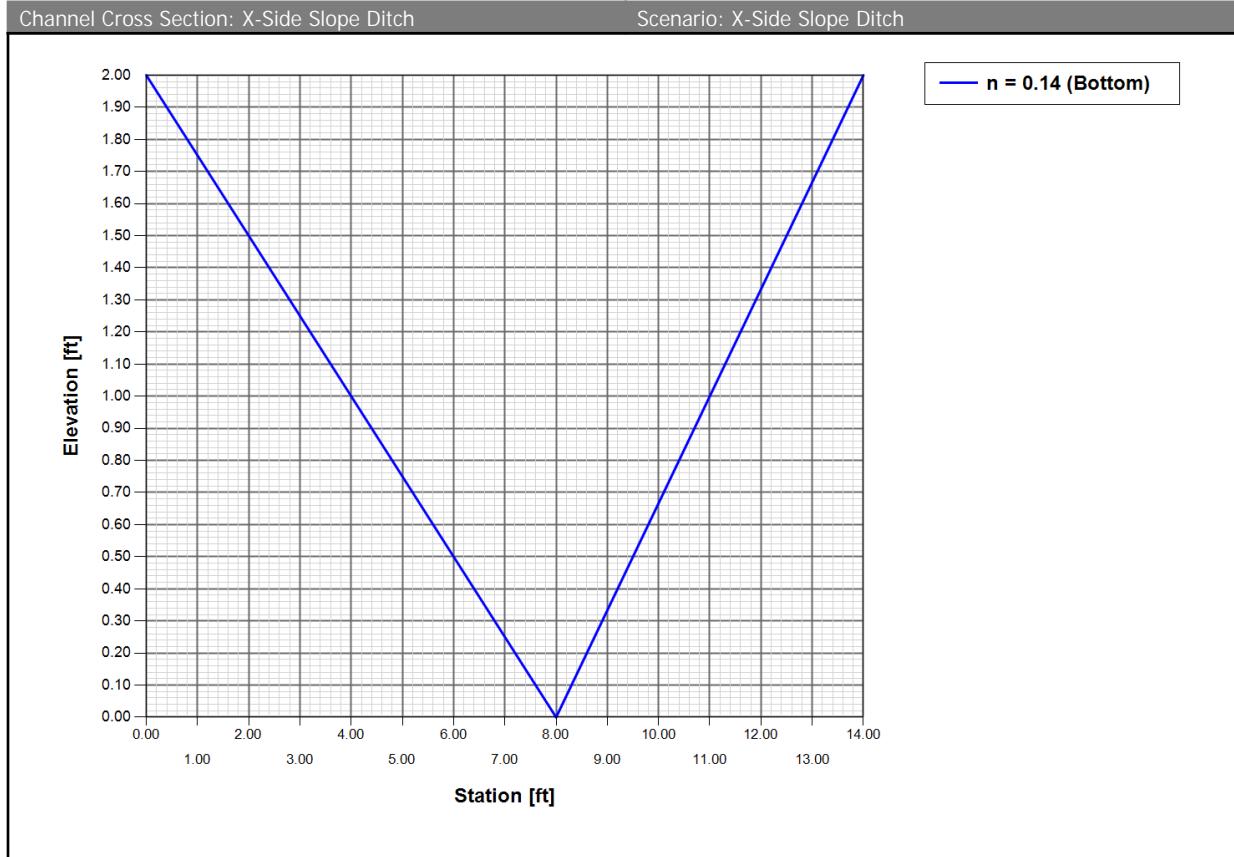
Conveyance Method: ICPRV3

#### Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0		0.00	2.00
1		8.00	0.00
			0.1400

Order	Station [ft]	Elevation [ft]	Manning's N
2	14.00	2.00	0.1400

Comment:



#### Channel Cross Section: X-Top Ditch

Scenario: Scenario 1

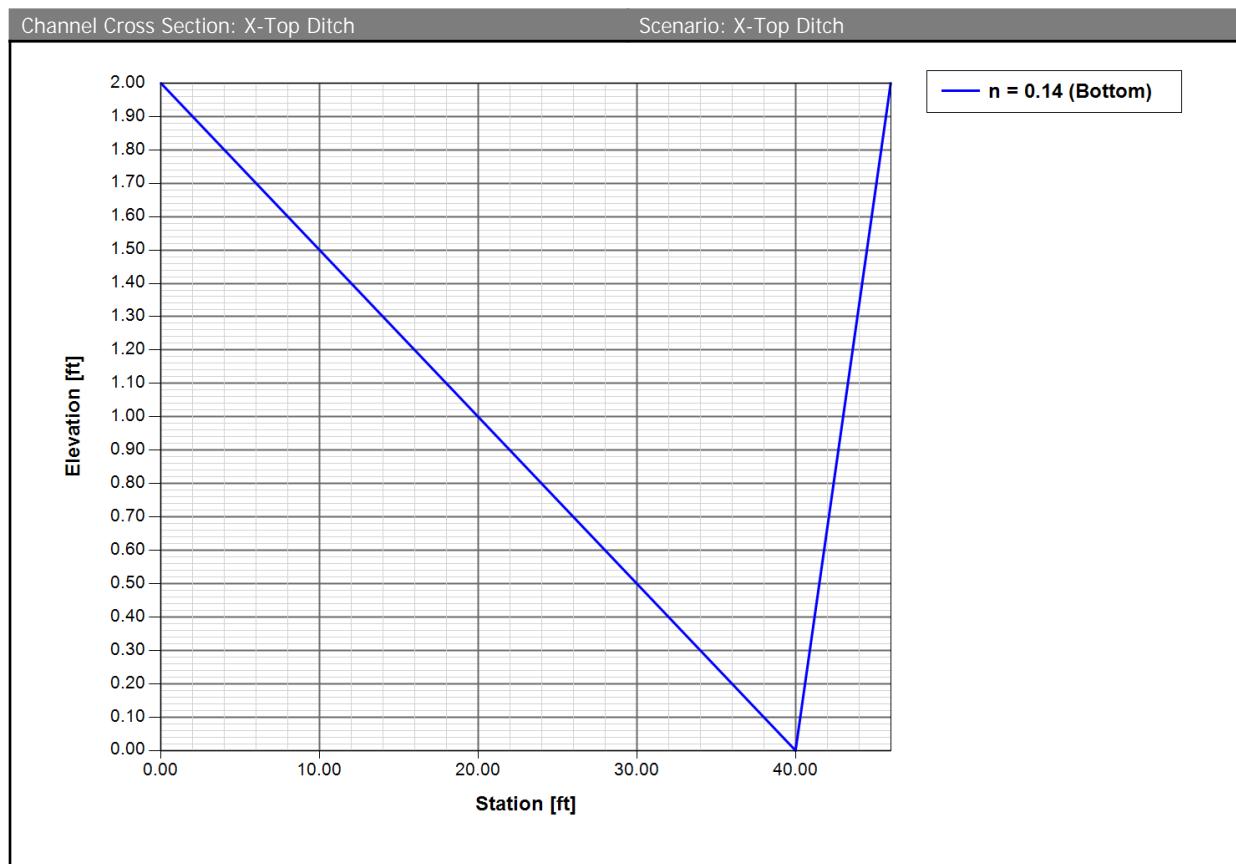
Lid: No

Conveyance Method: ICPRv3

#### Bottom Point Table

Order	Station [ft]	Elevation [ft]	Manning's N
0	0.00	2.00	0.1400
1	40.00	0.00	0.1400
2	46.00	2.00	0.1400

Comment:



## SCS ENGINEERS

Page 1 OF 1

CLIENT Hillsborough Southeast County Landfill	PROJECT Southeast County Landfill - Phase I-VI Closure	JOB NO. 09215600.13
SUBJECT Time of Concentration Calculation	BY AV CHECKED SPL	DATE 11/11/2021 DATE 12/16/2021

**Objective:**

Evaluate Time of Concentration of each sub-basin of the proposed design.

**Methodology:**

Time of concentration (Tc) is conservatively estimated for all basins assuming a Tc of 8 min for all sub-basins in the closure. This includes Phase I-VI sub-basins at 5% on the top of crown and 25% on the side slopes. A shorter Tc translates to higher peak stages in the perimeter ditch system and thus is a more conservative model and calculation.

A conservative Tc of 8 minutes was selected by evaluating a sampling of sub-basins using the TR-55 Method. For those sub-basins, the calculated Tc was utilized in the model:

## Sheet Flow

## Open Channel Flow

$$T_t = \frac{0.007(nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$$

$$V = \frac{1.49 r^{\frac{2}{3}} S^{\frac{1}{2}}}{n}$$

## Shallow Concentrated Flow

$$T_t = \frac{L}{3600V}$$

$$T_t = \frac{L}{3600V}$$

$$T_c = Tt_1 + Tt_2 + .Tt_m$$

Rainfall, P2 (25yr-24hr) 7.89 in obtained from NOAA station closest to the landfill

Manning's Roughness, n 0.15 for sheet flow short grassed ditch

Manning's Roughness, n 0.14 for open channel flow short grassed ditch

Crown: 5% (20:1) Slope 0.05 Average velocity V= 3.6

Side 25% (4:1) Slope 0.25 Average velocity V= 8.2

Subcatchments	Flow Type	Tt (hr)	V (ft/s)	n	L (ft)	P2 (in)	S (ft/ft)	r (ft)	a (ft^2)	Pw (ft)	Tc (hr)	Tc (min)
Z08	Sheet Flow	0.0997	-	0.15	150	7.89	0.05	-	-	-	0.26	15.77
	Shallow Concentrated Flow	0.0147	3.6	-	190	-	-	-	-	-		
	Open Channel Flow	0.1484	1.49710476	0.14	800	-	0.02	0.99194	46	46.374		
D03	Sheet Flow	0.0997	-	0.15	150	7.89	0.05	-	-	-	0.20	11.79
	Shallow Concentrated Flow	0.0063	3.6	-	81	-	-	-	-	-		
	Shallow Concentrated Flow	0.0014	8.2	-	42	-	-	-	-	-		
	Open Channel Flow	0.0891	1.46600155	0.14	470	-	0.02	0.96088	14	14.57		
K03	Sheet Flow	0.0997	-	0.15	150	7.89	0.05	-	-	-	0.26	15.69
	Shallow Concentrated Flow	0.0146	3.6	-	189	-	-	-	-	-		
	Shallow Concentrated Flow	0.0017	8.2	-	50	-	-	-	-	-		
	Open Channel Flow	0.1455	1.46600155	0.14	768	-	0.02	0.96088	14	14.57		
L03	Sheet Flow	0.0997	-	0.15	150	7.89	0.05	-	-	-	0.26	15.66
	Shallow Concentrated Flow	0.0063	3.6	-	81	-	-	-	-	-		
	Shallow Concentrated Flow	0.0018	8.2	-	54	-	-	-	-	-		
	Open Channel Flow	0.1533	1.46600155	0.14	809	-	0.02	0.96088	14	14.57		
O03	Sheet Flow	0.0997	-	0.15	150	7.89	0.05	-	-	-	0.21	12.79
	Shallow Concentrated Flow	0.0063	3.6	-	82	-	-	-	-	-		
	Shallow Concentrated Flow	0.0023	8.2	-	68	-	-	-	-	-		
	Open Channel Flow	0.1048	1.46600155	0.14	553	-	0.02	0.96088	14	14.57		
M03	Sheet Flow	0.0997	-	0.15	150	7.89	0.05	-	-	-	0.21	12.47
	Shallow Concentrated Flow	0.0079	3.6	-	102	-	-	-	-	-		
	Shallow Concentrated Flow	0.0023	8.2	-	68	-	-	-	-	-		
	Open Channel Flow	0.0980	1.46600155	0.14	517	-	0.02	0.96088	14	14.57		
Q03	Sheet Flow	0.0997	-	0.15	150	7.89	0.05	-	-	-	0.18	10.59
	Shallow Concentrated Flow	0.0094	3.6	-	122	-	-	-	-	-		
	Shallow Concentrated Flow	0.0037	8.2	-	109	-	-	-	-	-		
	Open Channel Flow	0.0637	1.46600155	0.14	336	-	0.02	0.96088	14	14.57		

treatment to prevent entry to facilities that present a hazard to children and, to a lesser extent, all persons. **Section 3.7** provides general criteria. Provide protective treatment for open channels in the form of fencing when a potential hazard exists.

## 2.6.2 Roadside Safety

The design and location of open channels will comply with roadside safety and clear zone requirements. See the **FDM** for clear zone requirements, including special clearance criteria for canals.

## 2.7 DOCUMENTATION

Design documentation for open channels will include hydrologic and hydraulic analyses, calculated freeboard and channel lining requirements. For roadside ditches, **Figure 2-1** provides the required standard format for documentation.

**Table 2.2: Manning's "n" Values for Artificial Channels with Bare Soil and Vegetative Linings**

<u>Channel Lining</u>	<u>Description</u>	<u>Design "n"</u>
Bare Earth, Fairly Uniform	Clean, recently completed	0.02
Bare Earth, Fairly Uniform	Short grass and some weeds	0.03
Dragline Excavated	No Vegetation	0.03
Dragline Excavated	Light Brush	0.04
Maintained Grass or Sodded Ditches	Good stand, well maintained 2 to 6 inches	0.06*
Channels not Maintained	Clear bottom, brush sides	0.08
Channels not Maintained	Dense weeds to flow depth	0.10
Maintained Grass or Sodded Ditches	Fair stand, length 12 to 24 inches	0.20*

\* Decrease 30 percent for flows > 0.7 ft depth (max flow depth 1.5 ft)

n = 0.14 for terraces, grassed channels

**Table 2.3: Manning's "n" Values for Artificial Channels with Rigid Linings**

<u>Channel Lining</u>	<u>Description</u>	<u>Design "n"</u>	<u>Concrete of GFFR</u>
Concrete Paved	Broomed*	0.016	
Concrete Paved	"Roughened" - Standard	0.020	
Concrete Paved	Gunite	0.020	
Concrete Paved	Over Rubble	0.023	
Rubble Riprap	Ditch Lining	0.035	

\* Broomed is not the standard finish and must be specified when used (see **Standard Specification 524-7**)

**Table 2.4: Maximum Shear Stress Values and Allowable Velocities for Different Soils**

<u>Soil Type</u>	<u>Shear Stress, (psf<sup>+</sup>)</u>	<u>*Allowable Velocity (fps<sup>#</sup>)</u>
Silt or Fine Sand	0.027	1.50
Sandy Loam	0.037	1.75
Silt Loam	0.048	2.00
Firm Loam	0.075	2.50
Stiff Clay	0.260	3.75
Hardpans	0.670	6.00

\* For a flow depth of approximately 3 ft

+ psf is pounds per square foot

# fps is feet per second

Reference: University of Florida (1972)

**Table 2.** Adjustment values for factors that affect the roughness of a channel  
[Modified from Aldridge and Garrett, 1973, table 2]

0.013 represents  
matting of GFFR

Channel conditions	n value adjustment <sup>1</sup>	Example
Degree of irregularity ( <i>n</i> <sub>1</sub> )	Smooth	0.000
	Minor	0.001–0.005
	Moderate	0.006–0.010
	Severe	0.011–0.020
Variation in channel cross section ( <i>n</i> <sub>2</sub> )	Gradual	0.000
	Alternating occasionally	0.001–0.005
	Alternating frequently	0.010–0.015
Effect of obstruction ( <i>n</i> <sub>3</sub> )	Negligible	0.000–0.004
	Minor	0.005–0.015
	Appreciable	0.020–0.030
	Severe	0.040–0.050
Amount of vegetation ( <i>n</i> <sub>4</sub> )	Small	0.002–0.010
	Medium	0.010–0.025
	Large	0.025–0.050
	Very large	0.050–0.100
Degree of meandering <sup>2</sup> ( <i>m</i> )	Minor	1.00
	Appreciable	1.15
	Severe	1.30

<sup>1</sup> Adjustments for degree of irregularity, variations in cross section, effect of obstructions, and vegetation are added to the base n value (table 1) before multiplying by the adjustment for meander.

<sup>2</sup> Adjustment values apply to flow confined in the channel and do not apply where downvalley flow crosses meanders.

**Table B-7: SCS Runoff Curve Numbers – Agricultural, Suburban, and Urban Land**

Land Use Description	Hydrologic Soil Group			
	A	B	C	D
Cultivated Land <sup>a</sup> :				
Without conservation treatment	72	81	88	91
With conservation treatment	62	71	78	81
Pasture or range land:				
Poor condition	68	79	86	89
Good condition	39	61	74	80
Meadow: good condition	30	58	71	78
Wood or Forest Land:				
Thin stand, poor cover, no mulch	45	66	77	83
Good cover <sup>b</sup>	25	55	70	77
Open Spaces, Lawns, Parks, Golf Courses, Cemeteries:				
Good condition: grass cover on 75% or more of the area	39	61	74	80
Fair condition: grass cover on 50% to 75% of the area	49	69	79	84
Poor condition: grass cover on 50% or less of the area	68	79	86	89
Commercial and Business Areas (85% impervious)	89	92	94	95
Industrial Districts (72% impervious)	81	88	91	93
Residential <sup>c</sup>				
Average lot size	Average % Impervious <sup>d</sup>			
1/8 acre or less	65	77	85	90
1/4 acre	38	61	75	83
1/3 acre	30	57	72	81
1/2 acre	25	54	70	80
1 acre	20	51	68	79
Paved Parking Lots, Roofs, Driveways <sup>e</sup> :	98	98	98	98
Streets and Roads:				
Paved with curbs and storm sewers <sup>e</sup>	98	98	98	98
Gravel	76	85	89	91
Dirt	72	82	87	89
Paved with open ditches	83	89	92	93
Newly graded area (no vegetation established) <sup>f</sup>	77	86	91	94

<sup>a</sup> For a more detailed description of agricultural land use curve numbers, refer to Table B-8.

<sup>b</sup> Good cover is protected from grazing and litter and brush cover soil.

<sup>c</sup> Curve numbers are computed assuming the runoff from the house and driveway is directed toward the street with a minimum of roof water directed to lawns where additional infiltration could occur, which depends on the depth and degree of the permeability of the underlying strata.

<sup>d</sup> The remaining pervious areas (lawn) are considered to be in good pasture condition for these curve numbers.

<sup>e</sup> In some warmer climates of the country, a curve number of 96 may be used.

<sup>f</sup> Use for temporary conditions during grading and construction.

Note: These values are for Antecedent Moisture Condition II, and  $I_a = 0.2S$ .

Reference: USDA, SCS, TR-55 (1984).

## ICPR Outputs

## Link Min/Max Conditions [Scenario 1]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
A-1 Riser - Pipe	25yr,24hr	10.26	0.00	0.53	0.00	0.00	0.00
A-1 Riser - Weir: 1	25yr,24hr	10.26	0.00	-0.01	5.81	5.81	5.81
A-1 Riser - Weir: 2	25yr,24hr	0.00	0.00	0.00	0.00	0.00	0.00
CH12A	25yr,24hr	69.47	0.00	0.00	2.52	1.60	2.06
CH13A	25yr,24hr	114.19	0.00	-0.06	2.63	6.04	4.32
DC-7	25yr,24hr	8.14	0.00	0.00	3.08	0.28	1.67
DC-Sec12A	25yr,24hr	75.46	0.00	-0.01	5.50	13.20	9.35
DC-Sec13	25yr,24hr	75.68	0.00	-0.01	5.50	13.55	9.53
DC-Sec13A	25yr,24hr	70.18	0.00	-0.01	5.40	2.20	3.70
DC1-1	25yr,24hr	5.35	0.00	0.00	2.72	11.84	7.28
DC1-2	25yr,24hr	15.63	0.00	0.00	3.69	12.46	8.08
DC1-3	25yr,24hr	23.51	0.00	0.00	0.52	0.18	0.35
DC10-1	25yr,24hr	70.30	0.00	0.00	5.40	13.73	9.57
DC10-2	25yr,24hr	98.89	0.00	-0.01	5.85	15.89	10.87
DC10-3	25yr,24hr	107.61	0.00	-0.01	5.97	12.93	9.45
DC10-4	25yr,24hr	117.23	0.00	-0.01	6.08	16.32	11.20
DC10-5	25yr,24hr	130.98	0.00	-0.01	6.24	14.69	10.47
DC11-1	25yr,24hr	60.34	0.00	0.00	5.21	0.83	3.02
DC11-2	25yr,24hr	74.75	0.00	0.00	5.48	12.46	8.97
DC11-3	25yr,24hr	107.27	0.00	-0.01	5.96	16.33	11.15
DC11-4	25yr,24hr	117.39	0.00	-0.01	6.09	16.98	11.53
DC11-5	25yr,24hr	126.61	0.00	-0.01	6.19	16.32	11.26
DC2-1	25yr,24hr	12.93	0.00	0.00	3.50	10.91	7.21
DC2-2	25yr,24hr	29.88	0.00	0.00	4.38	11.08	7.73
DC2-3	25yr,24hr	44.54	0.00	0.00	4.84	20.83	12.83
DC2-4	25yr,24hr	61.61	0.00	-0.02	5.24	2.88	3.92
DC3-1	25yr,24hr	48.94	0.00	-0.01	4.95	11.98	8.47
DC3-2	25yr,24hr	75.01	0.00	-0.01	5.49	14.54	10.01
DC3-3	25yr,24hr	90.32	0.00	-0.01	5.73	15.38	10.55
DC3-4	25yr,24hr	94.04	0.00	-0.01	5.78	15.59	10.69
DC3-5	25yr,24hr	100.90	0.00	-0.01	5.88	14.17	10.02
DC4-1	25yr,24hr	78.18	0.00	-0.03	5.54	13.98	9.76
DC4-2	25yr,24hr	102.80	0.00	-0.01	5.90	16.13	11.02
DC4-3	25yr,24hr	108.49	0.00	-0.01	5.98	16.72	11.35
DC4-4	25yr,24hr	120.90	0.00	-0.01	6.13	16.36	11.24
DC4-5	25yr,24hr	139.44	0.00	0.68	6.33	10.86	8.59
DC5-1	25yr,24hr	46.58	0.00	0.00	4.89	11.67	8.28
DC5-2	25yr,24hr	54.46	0.00	-0.01	5.08	12.67	8.88
DC5-3	25yr,24hr	66.42	0.00	-0.01	5.33	13.90	9.62
DC5-4	25yr,24hr	81.34	0.00	-0.01	5.59	14.81	10.20
DC5-5	25yr,24hr	105.59	0.00	-0.01	5.94	15.93	10.94
DC6-1	25yr,24hr	27.27	0.00	0.00	4.28	9.31	6.80
DC6-2	25yr,24hr	46.34	0.00	0.00	4.89	10.80	7.85

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
DC6-2A	25yr,24hr	34.49	0.00	0.00	4.54	11.14	7.84
DC6-3	25yr,24hr	49.69	0.00	0.00	4.97	12.00	8.49
DC6-4	25yr,24hr	54.19	0.00	0.00	5.08	12.04	8.56
DC6-5	25yr,24hr	69.83	0.00	-0.01	5.40	14.05	9.72
DC8-1	25yr,24hr	36.67	0.00	0.00	4.61	12.60	8.61
DC8-2	25yr,24hr	44.96	0.00	0.00	4.85	0.69	2.77
DC8-3	25yr,24hr	53.86	0.00	-0.01	5.07	13.43	9.25
DC8-4	25yr,24hr	63.06	0.00	0.55	5.27	1.30	3.28
DC9-1	25yr,24hr	22.70	0.00	0.00	4.08	10.20	7.14
DC9-2	25yr,24hr	36.74	0.00	0.00	4.61	11.09	7.85
DC9-3	25yr,24hr	48.40	0.00	0.00	4.94	0.57	2.75
DC9-4	25yr,24hr	60.03	0.00	0.00	5.21	11.20	8.20
L-0230C	25yr,24hr	38.37	0.00	-0.01	1.05	3.89	2.47
L-0250C	25yr,24hr	9.45	0.00	0.00	1.34	2.34	1.48
L-0260C	25yr,24hr	16.72	0.00	0.00	1.16	2.85	1.77
L-0270C	25yr,24hr	6.92	0.00	0.00	1.32	1.70	1.13
L-0280C	25yr,24hr	13.45	0.00	0.00	1.39	2.62	1.64
L-0290C	25yr,24hr	7.99	0.00	0.00	1.41	0.80	0.97
L-0300C	25yr,24hr	15.33	0.00	0.00	1.65	1.42	1.28
L-0350C	25yr,24hr	12.34	0.00	0.00	1.09	1.07	1.00
L-0360C	25yr,24hr	14.02	0.00	0.00	1.12	1.25	1.04
L-0370C	25yr,24hr	15.03	0.00	0.00	1.07	4.07	2.57
L-0380C	25yr,24hr	6.56	0.00	0.00	0.91	3.45	2.17
L-0390C	25yr,24hr	9.14	0.00	0.00	0.95	3.67	2.31
L-0400C	25yr,24hr	8.14	0.00	0.00	1.57	1.37	0.91
L-0410C	25yr,24hr	6.86	0.00	0.00	0.89	3.48	2.18
L-0420C	25yr,24hr	6.82	0.00	0.00	1.49	1.20	0.83
L-0460C	25yr,24hr	7.73	0.00	0.00	0.69	2.86	1.77
L-0470C	25yr,24hr	8.85	0.00	0.00	0.96	3.65	2.31
L-0480C	25yr,24hr	7.32	0.00	0.00	0.93	3.28	2.06
L-0490C	25yr,24hr	8.64	0.00	0.00	1.03	3.00	1.92
L-0500C	25yr,24hr	5.21	0.00	0.00	0.64	2.62	1.63
L-0510C	25yr,24hr	9.09	0.00	0.00	0.95	3.68	2.32
L-0520C	25yr,24hr	8.01	0.00	0.00	0.94	3.39	2.12
L-0530C	25yr,24hr	9.69	0.00	0.00	1.02	3.24	2.04
L-0570C	25yr,24hr	35.12	0.00	0.01	1.03	3.56	2.24
L-0580C	25yr,24hr	14.65	0.00	0.00	1.13	3.44	2.17
L-0590C	25yr,24hr	11.85	0.00	0.00	1.40	2.77	1.73
L-0600C	25yr,24hr	8.23	0.00	0.00	0.94	3.60	2.27
L-0610C	25yr,24hr	11.76	0.00	0.00	1.49	2.55	1.61
L-0620C	25yr,24hr	17.40	0.00	0.00	1.74	0.82	1.27
L-0630C	25yr,24hr	30.67	0.00	0.00	1.00	3.13	1.97
L-0670C	25yr,24hr	14.24	0.00	0.00	0.97	1.44	1.11
L-0680C	25yr,24hr	14.62	0.00	0.01	0.82	3.17	1.99
L-0690C	25yr,24hr	12.65	0.00	0.00	1.01	3.92	2.47
L-0700C	25yr,24hr	7.96	0.00	0.00	0.94	3.58	2.26
L-0710C	25yr,24hr	3.66	0.00	0.00	0.60	2.28	1.33

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
L-0730C	25yr,24hr	8.22	0.00	0.00	1.04	2.76	1.72
L-0740C	25yr,24hr	9.05	0.00	0.00	1.00	2.91	1.86
L-0870C	25yr,24hr	8.15	0.00	0.00	0.95	3.59	2.27
L-1040P	25yr,24hr	31.22	0.00	-2.68	10.19	13.95	12.03
L-1060C	25yr,24hr	38.23	0.00	0.01	1.07	3.29	2.07
L-1070C	25yr,24hr	35.13	0.00	0.00	1.05	3.06	1.92
L-1080C	25yr,24hr	19.64	0.00	0.01	1.24	4.14	2.63
L-1090C	25yr,24hr	17.74	0.00	0.00	1.20	3.72	2.35
L-1100C	25yr,24hr	11.60	0.00	0.00	1.43	2.36	1.52
L-1110C	25yr,24hr	10.61	0.00	0.00	1.34	2.39	1.52
L-1120C	25yr,24hr	11.14	0.00	0.00	1.44	2.20	1.43
L-1130C	25yr,24hr	11.58	0.00	0.00	1.43	2.29	1.47
L-1170C	25yr,24hr	23.52	0.00	0.00	0.98	2.98	1.87
L-1180C	25yr,24hr	27.18	0.00	0.01	1.01	3.32	2.10
L-1190C	25yr,24hr	15.99	0.00	0.00	1.14	3.92	2.49
L-1200C	25yr,24hr	12.33	0.00	0.00	1.12	3.42	2.17
L-1210C	25yr,24hr	9.38	0.00	0.00	1.14	2.57	1.58
L-1220C	25yr,24hr	7.21	0.00	0.00	1.31	2.13	1.35
L-1230C	25yr,24hr	7.64	0.00	0.00	1.27	1.87	1.21
L-1240C	25yr,24hr	4.21	0.00	0.00	1.21	1.35	0.95
L-1280C	25yr,24hr	5.41	0.00	0.00	0.83	3.33	2.08
L-1290C	25yr,24hr	10.63	0.00	0.00	1.00	3.81	2.40
L-1300C	25yr,24hr	12.25	0.00	0.00	1.02	3.90	2.46
L-1330C	25yr,24hr	24.88	0.00	0.01	0.96	3.30	2.08
L-1340C	25yr,24hr	8.73	0.00	0.00	0.99	3.40	2.15
L-1350C	25yr,24hr	7.82	0.00	0.00	1.18	2.55	1.58
L-1360C	25yr,24hr	11.22	0.00	0.00	1.41	2.78	1.75
L-1370C	25yr,24hr	15.33	0.00	0.00	1.21	3.00	1.88
L-1380C	25yr,24hr	8.38	0.00	0.00	1.22	2.51	1.56
L-1390C	25yr,24hr	12.87	0.00	0.00	1.09	3.67	2.32
L-1400C	25yr,24hr	23.51	0.00	0.00	0.94	3.01	1.88
L-1480C	25yr,24hr	4.63	0.00	0.00	0.82	3.19	2.01
L-1490C	25yr,24hr	19.78	0.00	0.00	1.48	1.47	1.47
L-1500C	25yr,24hr	17.58	0.00	-0.01	1.18	4.21	2.69
L-1510C	25yr,24hr	9.51	0.00	0.00	0.87	3.46	2.12
L-1520C	25yr,24hr	8.84	0.00	0.00	0.96	3.54	2.22
L-1530C	25yr,24hr	6.78	0.00	0.00	1.25	1.98	1.27
L-1570C	25yr,24hr	3.38	0.00	0.00	0.78	3.02	1.90
L-1580C	25yr,24hr	11.90	0.00	0.00	0.81	2.94	1.85
L-1590C	25yr,24hr	11.16	0.00	0.01	0.82	2.93	1.86
L-1600C	25yr,24hr	32.83	0.00	0.01	1.49	4.30	2.76
L-1700C	25yr,24hr	12.99	0.00	-0.01	1.11	3.13	2.12
L-2340C	25yr,24hr	42.51	0.00	-0.01	1.06	3.94	2.50
NE DITCH	25yr,24hr	51.95	0.00	0.01	0.96	4.16	2.56
NE-DITCH-CH ANNEL	25yr,24hr	15.59	0.00	0.00	1.08	0.43	0.75
NW DITCH	25yr,24hr	80.17	0.00	0.05	1.47	3.89	2.68

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
NW-DITCH-C HANNEL	25yr,24hr	16.55	0.00	0.00	1.18	0.69	0.91
POND B WEIR	25yr,24hr	0.16	0.00	0.00	0.00	0.00	0.00
ROAD SWALE	25yr,24hr	25.70	0.00	0.00	4.55	6.84	5.70
S-10 - Pipe	25yr,24hr	35.95	0.00	0.79	0.00	0.00	0.00
S-10 - Weir: 1	25yr,24hr	3.89	0.00	0.24	5.18	5.18	5.18
S-10 - Weir: 2	25yr,24hr	32.46	0.00	0.05	3.43	3.43	3.43
S-10A - Pipe	25yr,24hr	34.19	0.00	0.01	0.00	0.00	0.00
S-10A - Weir: 1	25yr,24hr	34.19	0.00	0.02	3.61	3.61	3.61
S-20	25yr,24hr	179.45	0.00	27.47	9.07	10.89	9.97
S-21	25yr,24hr	167.54	0.00	0.58	8.14	9.80	8.97
S-29	25yr,24hr	72.13	0.00	-8.43	7.73	12.98	10.16
S-30	25yr,24hr	116.02	0.00	0.39	5.47	7.62	6.54
S-32	25yr,24hr	26.29	-2.34	0.00	4.18	1.98	3.08
S-33	25yr,24hr	7.95	-43.84	0.01	-6.20	-6.20	-6.20
S-5	25yr,24hr	5.26	0.00	0.00	5.67	6.60	6.13
S-50	25yr,24hr	178.62	0.00	23.38	6.14	11.57	8.68
S-6	25yr,24hr	1.75	0.00	0.02	3.64	6.29	4.96
S-8	25yr,24hr	153.35	0.00	0.46	8.74	7.08	7.91
S-9	25yr,24hr	17.11	0.00	0.04	5.45	6.83	6.13
SE-DITCH-CH ANNEL	25yr,24hr	44.01	0.00	0.00	0.74	0.57	0.65
SPILLWAY12	25yr,24hr	168.26	0.00	-0.01	5.68	1.68	3.68
SW-DITCH-C HANNEL-A	25yr,24hr	9.01	0.00	0.00	0.47	0.28	0.38
SW-DITCH-C HANNEL-B	25yr,24hr	71.52	0.00	-0.01	1.95	2.79	2.12
TS-6	25yr,24hr	71.20	0.00	20.81	6.48	7.37	6.46

## Node Max Conditions [Scenario 1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
NZA-0220	25yr,24hr	225.75	224.30	-0.0005	80.74	78.18	12866
NZA-0230	25yr,24hr	202.00	201.52	-0.0001	103.56	102.80	6411
NZA-0240	25yr,24hr	168.00	167.66	-0.0001	121.29	120.90	4582
NZA-0250	25yr,24hr	135.50	135.41	-0.0001	141.35	139.44	8194
NZA-0260	25yr,24hr	233.04	232.78	0.0001	39.30	38.37	8135
NZA-0270	25yr,24hr	236.55	236.41	0.0001	44.99	42.51	11655
NZA-0280	25yr,24hr	209.00	208.51	0.0001	9.07	9.45	1687
NZA-0290	25yr,24hr	212.78	212.76	0.0001	17.34	16.72	3694
NZA-0300	25yr,24hr	179.96	178.22	0.0001	6.64	6.92	1478
NZA-0310	25yr,24hr	180.45	180.21	0.0001	13.42	13.45	3482
NZA-0320	25yr,24hr	142.00	141.27	0.0001	8.18	7.99	1896
NZA-0330	25yr,24hr	147.93	147.56	0.0001	15.41	15.33	4084
NZA-0340	25yr,24hr	225.58	224.21	0.0000	22.78	22.70	2902
NZA-0350	25yr,24hr	194.04	192.88	0.0000	36.92	36.74	5443
NZA-0360	25yr,24hr	164.22	162.92	0.0000	48.71	48.40	5259
NZA-0370	25yr,24hr	204.86	204.87	0.0001	15.92	15.03	3464
NZA-0380	25yr,24hr	175.93	175.59	0.0001	9.88	9.14	3026
NZA-0390	25yr,24hr	151.90	151.12	0.0001	8.92	8.14	3545
NZA-0400	25yr,24hr	201.64	201.08	-0.0001	6.78	6.56	1614
NZA-0410	25yr,24hr	172.73	172.21	0.0001	7.23	6.86	1967
NZA-0420	25yr,24hr	147.71	146.86	0.0000	7.30	6.82	2560
NZA-0430	25yr,24hr	137.70	137.12	0.0001	61.33	60.03	9620
NZA-0440	25yr,24hr	237.00	236.04	0.0000	12.29	12.34	6377
NZA-0450	25yr,24hr	242.84	241.97	0.0001	14.50	14.02	8558
NZA-0460	25yr,24hr	225.75	224.87	0.0000	65.69	60.34	20633
NZA-0470	25yr,24hr	194.00	193.55	0.0001	107.53	107.27	4332
NZA-0480	25yr,24hr	164.00	163.55	0.0001	117.63	117.39	4024
NZA-0490	25yr,24hr	138.00	129.03	0.0001	154.50	153.35	8909
NZA-0500	25yr,24hr	237.00	236.73	0.0001	37.14	35.12	10257
NZA-0510	25yr,24hr	208.88	208.80	-0.0001	15.28	14.65	3362
NZA-0520	25yr,24hr	175.96	175.64	-0.0001	11.74	11.85	3235
NZA-0530	25yr,24hr	150.28	149.86	0.0001	9.88	8.23	4853
NZA-0540	25yr,24hr	241.66	241.30	0.0001	34.17	30.67	13720
NZA-0550	25yr,24hr	214.55	214.24	-0.0001	17.80	17.40	3095
NZA-0560	25yr,24hr	171.86	171.47	-0.0001	11.18	11.76	2900
NZA-0570	25yr,24hr	225.00	223.45	0.0000	12.93	12.93	618
NZA-0580	25yr,24hr	199.00	197.75	0.0000	30.25	29.88	4319
NZA-0590	25yr,24hr	169.00	167.94	0.0000	44.94	44.54	4608
NZA-0600	25yr,24hr	139.00	137.14	0.0001	62.45	61.61	6872
NZA-0600A	25yr,24hr	137.12	137.06	0.0001	61.61	51.95	14359
NZA-0610	25yr,24hr	242.00	232.82	0.0000	9.20	7.73	7252
NZA-0620	25yr,24hr	207.35	206.97	0.0001	9.22	8.85	2042
NZA-0630	25yr,24hr	178.24	177.74	0.0001	7.67	7.32	2140
NZA-0640	25yr,24hr	149.00	148.55	0.0001	9.00	8.64	2472
NZA-0650	25yr,24hr	231.50	231.02	0.0000	5.94	5.21	4650
NZA-0660	25yr,24hr	206.73	206.38	0.0001	9.44	9.09	2019

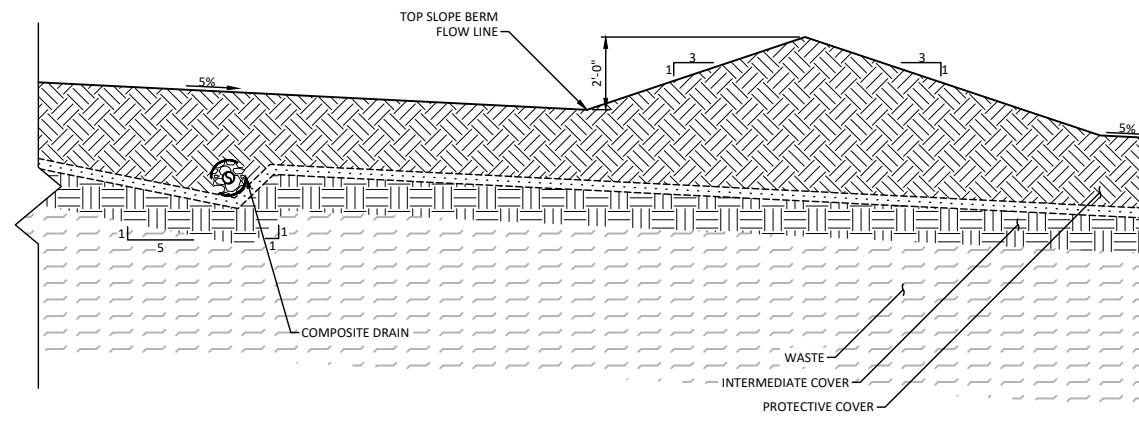
Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
NZA-0670	25yr,24hr	179.00	178.56	0.0001	8.48	8.01	2443
NZA-0680	25yr,24hr	151.00	150.65	0.0001	10.32	9.69	3203
NZA-0690	25yr,24hr	138.20	137.42	0.0001	70.30	69.83	5089
NZA-0700	25yr,24hr	171.00	163.06	0.0000	54.20	54.19	839
NZA-0700A	25yr,24hr	126.52	126.25	0.0000	82.37	80.17	13987
NZA-0710	25yr,24hr	194.00	192.81	0.0000	34.60	34.49	2440
NZA-0720	25yr,24hr	226.26	223.71	0.0000	27.29	27.27	1214
NZA-0730	25yr,24hr	232.35	231.60	0.0001	15.85	14.62	6592
NZA-0740	25yr,24hr	242.84	242.02	-0.0001	14.36	14.24	3476
NZA-0750	25yr,24hr	199.18	199.07	0.0001	13.20	12.65	2581
NZA-0760	25yr,24hr	181.16	180.43	0.0000	5.46	4.63	3211
NZA-0770	25yr,24hr	147.00	146.52	0.0001	8.41	8.22	2099
NZA-0780	25yr,24hr	146.22	145.83	0.0001	9.29	9.05	2142
NZA-0790	25yr,24hr	182.00	181.32	0.0000	4.87	3.66	3978
NZA-0800	25yr,24hr	201.43	200.99	0.0001	8.26	7.96	1744
NZA-0870	25yr,24hr	154.03	151.96	0.0000	8.15	8.14	642
NZA-0880	25yr,24hr	162.29	161.85	-0.0001	8.98	8.15	3207
NZA-0890	25yr,24hr	132.00	130.29	0.0001	8.88	9.01	2420
NZA-1030	25yr,24hr	237.00	236.77	0.0001	39.68	38.23	10501
NZA-1040	25yr,24hr	225.75	224.98	0.0000	73.35	70.30	18361
NZA-1050	25yr,24hr	237.04	236.75	0.0001	36.46	35.13	10247
NZA-1060	25yr,24hr	194.00	193.40	0.0000	99.30	98.89	7646
NZA-1070	25yr,24hr	205.00	204.92	0.0001	18.17	17.74	3428
NZA-1080	25yr,24hr	174.88	174.53	-0.0001	11.46	11.60	3287
NZA-1090	25yr,24hr	149.76	149.43	0.0001	11.43	11.58	3570
NZA-1100	25yr,24hr	162.00	161.63	0.0001	117.39	117.23	4172
NZA-1110	25yr,24hr	136.92	136.65	0.0001	131.63	130.98	8131
NZA-1120	25yr,24hr	149.24	148.86	0.0001	10.77	11.14	3262
NZA-1130	25yr,24hr	175.96	175.59	-0.0001	10.65	10.61	3205
NZA-1140	25yr,24hr	205.75	205.73	0.0001	20.16	19.64	3665
NZA-1150	25yr,24hr	140.00	139.50	-0.0001	101.04	100.90	2789
NZA-1160	25yr,24hr	163.00	162.41	-0.0001	90.78	90.32	5093
NZA-1170	25yr,24hr	192.00	191.27	-0.0001	75.52	75.01	5392
NZA-1180	25yr,24hr	225.00	224.00	0.0000	50.70	48.94	11056
NZA-1190	25yr,24hr	233.84	233.28	0.0001	24.26	23.52	6185
NZA-1200	25yr,24hr	200.79	200.79	-0.0001	16.44	15.99	2642
NZA-1210	25yr,24hr	171.68	171.26	0.0001	9.44	9.38	2406
NZA-1220	25yr,24hr	149.00	148.34	0.0001	7.30	7.64	2174
NZA-1230	25yr,24hr	153.18	152.18	-0.0001	4.20	4.21	1344
NZA-1240	25yr,24hr	170.95	170.25	0.0001	6.86	7.21	1610
NZA-1250	25yr,24hr	199.81	199.59	0.0001	12.53	12.33	2054
NZA-1260	25yr,24hr	233.53	233.06	0.0001	28.01	27.18	6223
NZA-1270	25yr,24hr	192.41	190.67	0.0000	5.41	5.35	2148
NZA-1280	25yr,24hr	164.00	162.50	0.0000	15.97	15.63	4667
NZA-1290	25yr,24hr	136.00	130.63	0.0000	27.86	23.51	36961
NZA-1300	25yr,24hr	203.42	202.78	0.0001	5.90	5.41	2356
NZA-1310	25yr,24hr	183.73	183.47	0.0001	12.39	10.63	5137

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
NZA-1320	25yr,24hr	163.36	163.21	0.0001	19.32	12.25	13301
NZA-1330	25yr,24hr	225.75	224.72	0.0000	48.33	46.58	11047
NZA-1340	25yr,24hr	203.92	203.11	-0.0001	66.61	66.42	3294
NZA-1350	25yr,24hr	179.00	178.33	-0.0001	82.00	81.34	6241
NZA-1360	25yr,24hr	137.90	137.44	-0.0001	106.50	105.59	7218
NZA-1370	25yr,24hr	151.75	151.67	0.0001	16.00	15.33	4114
NZA-1380	25yr,24hr	192.38	191.84	0.0001	8.48	8.38	2866
NZA-1390	25yr,24hr	215.69	215.52	0.0001	13.49	12.87	3170
NZA-1400	25yr,24hr	236.03	235.51	0.0001	24.90	23.51	7941
NZA-1410	25yr,24hr	232.35	231.85	0.0001	25.47	24.88	5147
NZA-1420	25yr,24hr	216.90	216.49	0.0001	9.00	8.73	1935
NZA-1430	25yr,24hr	186.98	186.43	0.0001	7.74	7.82	1890
NZA-1440	25yr,24hr	147.52	147.13	0.0001	10.99	11.22	2252
NZA-1460	25yr,24hr	130.50	128.81	-0.0001	44.01	17.11	26181
NZA-1470	25yr,24hr	192.80	192.76	0.0001	37.15	36.67	5441
NZA-1480	25yr,24hr	201.70	201.68	-0.0001	17.87	17.58	2318
NZA-1490	25yr,24hr	201.95	201.91	0.0001	20.49	19.78	3040
NZA-1500	25yr,24hr	173.49	173.12	0.0001	9.29	8.84	2423
NZA-1510	25yr,24hr	163.92	162.87	0.0000	45.07	44.96	2604
NZA-1520	25yr,24hr	161.90	160.95	0.0001	53.98	53.86	2557
NZA-1530	25yr,24hr	139.15	137.29	0.0001	63.33	63.06	3176
NZA-1540	25yr,24hr	142.88	141.99	-0.0001	3.47	3.38	1022
NZA-1550	25yr,24hr	147.71	147.00	-0.0001	6.49	6.78	2066
NZA-1560	25yr,24hr	168.00	167.76	0.0001	9.95	9.51	2376
NZA-1570	25yr,24hr	229.34	228.47	0.0000	14.02	11.90	10589
NZA-1580	25yr,24hr	226.24	225.33	-0.0001	12.34	11.16	6977
NZA-1590	25yr,24hr	205.20	205.20	0.0001	35.31	32.83	7091
NZA-1600	25yr,24hr	146.19	145.63	-0.0001	94.13	94.04	2208
NZA-1610	25yr,24hr	208.92	207.98	0.0000	54.54	54.46	2116
NZA-1620	25yr,24hr	173.93	172.93	0.0000	49.99	49.69	4054
NZA-1630	25yr,24hr	160.00	159.70	0.0001	126.83	126.61	3909
NZA-1640	25yr,24hr	164.00	163.55	0.0001	107.72	107.61	3955
NZA-1650	25yr,24hr	197.18	196.45	0.0001	74.99	74.75	4041
NZA-1660	25yr,24hr	237.64	236.65	0.0000	14.24	12.99	7705
NZA-1670	25yr,24hr	172.00	171.56	-0.0001	108.61	108.49	2515
NZA-1690	25yr,24hr	191.07	190.03	0.0000	46.46	46.34	2492
NZA-1700	25yr,24hr	139.00	138.65	0.0000	17.65	15.59	17201
NZA-1780	25yr,24hr	140.00	138.64	0.0000	18.04	16.55	17401
NZA-1790	25yr,24hr	132.00	130.21	0.0001	72.08	71.52	3143
NZA-1800	25yr,24hr	129.10	129.09	-0.0012	71.52	71.20	1373
NZA-RS	25yr,24hr	241.00	239.96	0.0000	26.81	25.70	7358
NZV-1010	25yr,24hr	125.00	114.75	0.0007	31.22	0.00	2228
NZV-1020	25yr,24hr	128.00	125.73	0.0001	70.15	0.00	43560
POND A-1	25yr,24hr	128.00	126.21	0.0001	152.70	10.26	116442
POND B	25yr,24hr	130.00	125.74	0.0001	197.96	70.15	215293
POND D	25yr,24hr	116.00	114.75	-0.0094	512.84	31.22	913315
POND F	25yr,24hr	128.00	127.94	0.0001	14.93	5.26	13728

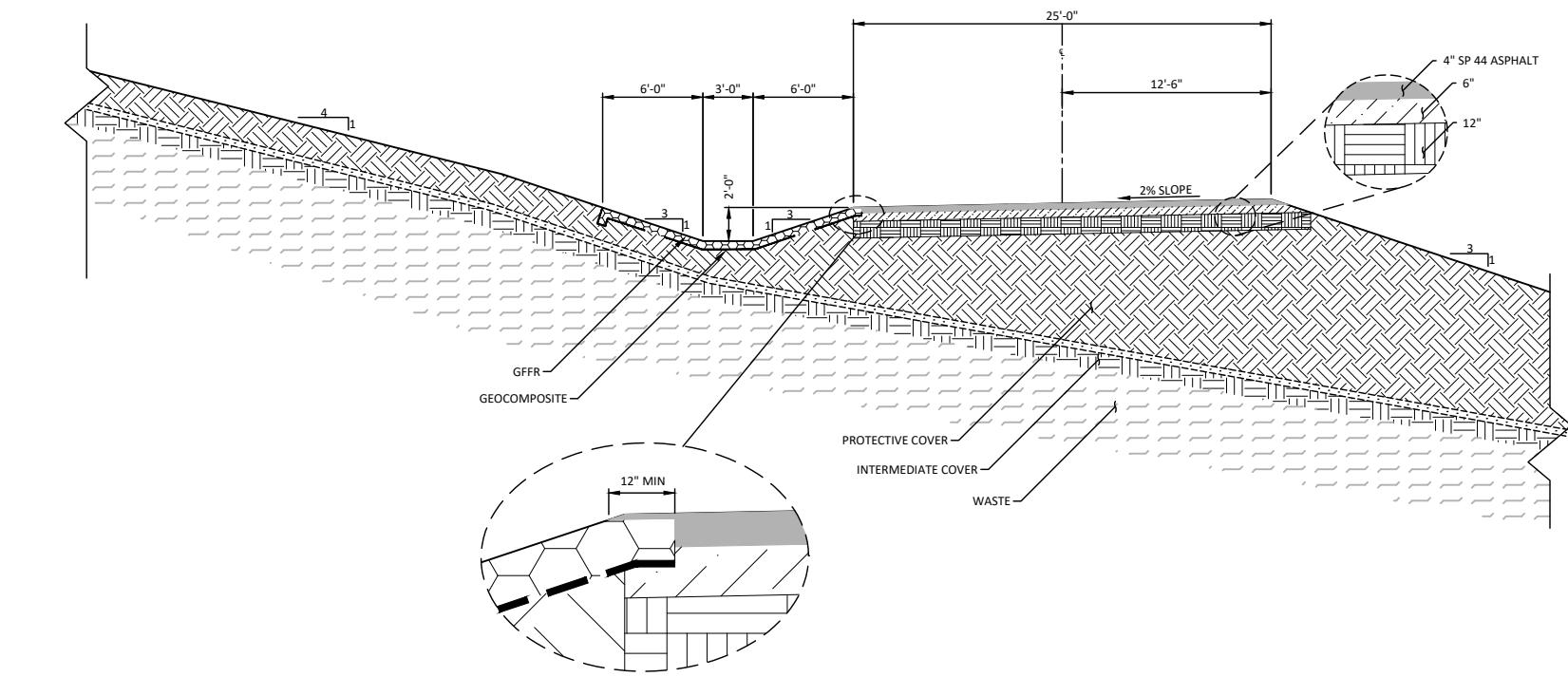
Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft <sup>2</sup> ]
POND G	25yr,24hr	127.00	126.64	0.0001	12.78	1.75	34905
SE-DITCH	25yr,24hr	131.00	129.40	0.0001	94.04	44.01	55171
SEC12-1	25yr,24hr	288.00	287.28	-0.0001	76.17	75.46	5813
SEC12-2	25yr,24hr	130.00	128.20	0.0000	169.80	168.26	13562
SEC12-B	25yr,24hr	127.15	126.26	0.0001	168.26	167.54	4282
SEC13-1	25yr,24hr	288.00	287.27	0.0000	75.98	75.68	5520
SEC13-2	25yr,24hr	133.00	132.08	0.0001	75.68	69.47	16666
SEC13A-1	25yr,24hr	288.00	287.22	-0.0001	70.74	70.18	5740
SEC13A-2	25yr,24hr	131.00	130.81	0.0001	128.85	114.19	25399
SED POND 2	25yr,24hr	125.00	123.13	-0.0001	188.34	72.13	160702
SED POND 3	25yr,24hr	130.00	123.90	0.0062	146.20	178.62	48039
SED POND 4	25yr,24hr	132.00	129.04	0.0001	328.33	116.02	134465
SED POND 8	25yr,24hr	125.00	120.16	-0.0002	246.31	179.45	45158
SED POND A-2	25yr,24hr	126.00	125.73	0.0001	107.66	7.95	385054
SED POND A-3	25yr,24hr	126.00	125.74	0.0001	177.49	68.72	142851

## Appendix E

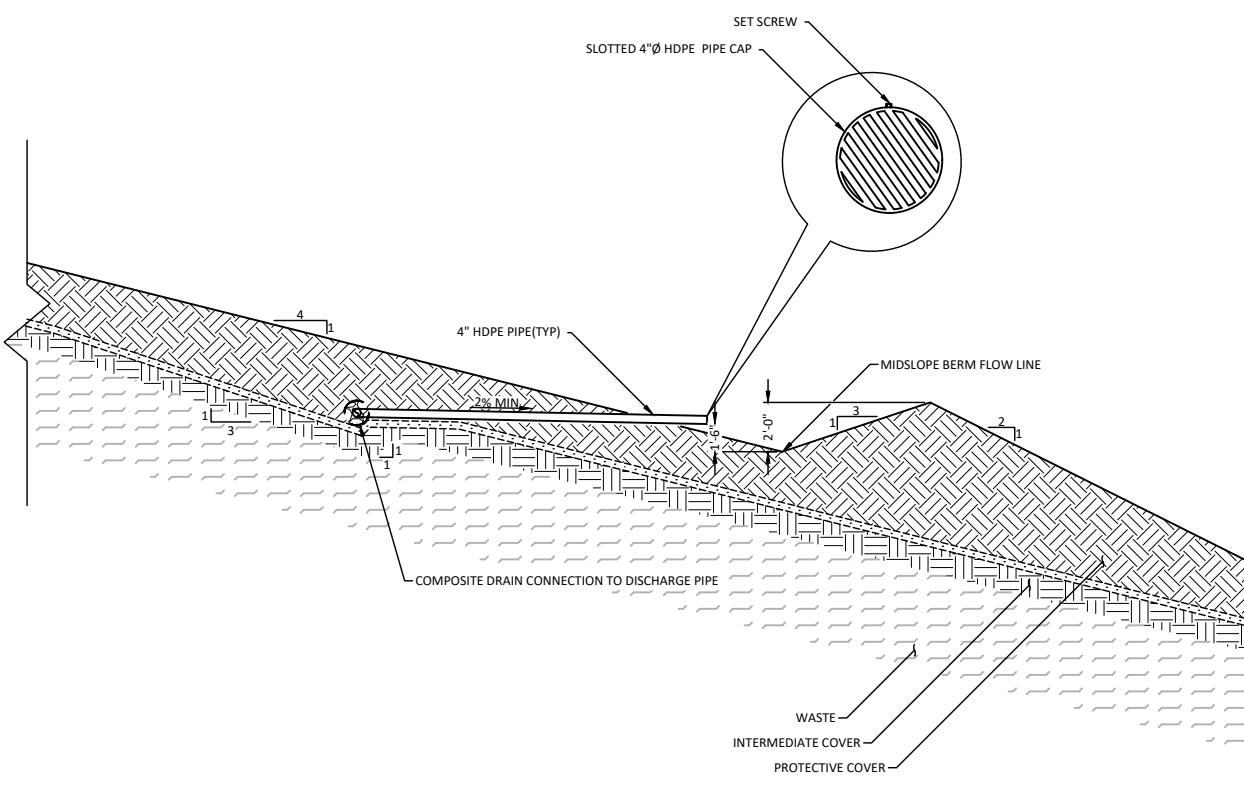
### Channel Analysis



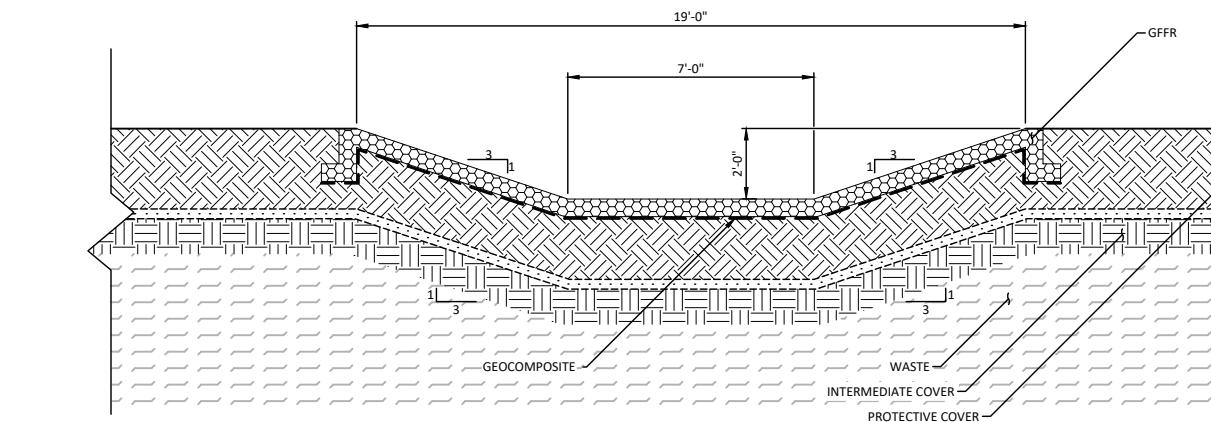
TOP SLOPE BERM DETAIL



MAIN HAUL ROAD SWALE DETAIL



MID SLOPE BERM DETAIL



DOWNCHUTE DETAIL



North American Green  
 5401 St. Wendel-Cynthiana Rd.  
 Poseyville, Indiana 47633  
 Tel. 800.772.2040  
 >Fax 812.867.0247  
[www.nagreen.com](http://www.nagreen.com)  
 ECMDS v7.0

## CHANNEL ANALYSIS

> > Max Flow Top-slope Berm

Name	Max Flow Top-slope Berm
Discharge	42.51
Channel Slope	0.02
Channel Bottom Width	0
Left Side Slope	20
Right Side Slope	3
Low Flow Liner	
Retardence Class	D 2-6 in
Vegetation Type	Sod Former
Vegetation Density	Very Good 80-95%
Soil Type	Sandy Loam (GM)

### Unreinforced Vegetation

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
Unreinforced Vegetation	Straight	42.51 cfs	3.55 ft/s	1.02 ft	0.038	4 lbs/ft <sup>2</sup>	1.27 lbs/ft <sup>2</sup>	3.14	STABLE	--
Underlying Substrate	Straight	42.51 cfs	3.55 ft/s	1.02 ft	0.038	4 lbs/ft <sup>2</sup>	0.63 lbs/ft <sup>2</sup>	6.33	STABLE	--



North American Green  
 5401 St. Wendel-Cynthiana Rd.  
 Poseyville, Indiana 47633  
 Tel. 800.772.2040  
 >Fax 812.867.0247  
[www.nagreen.com](http://www.nagreen.com)  
 ECMDS v7.0

## CHANNEL ANALYSIS

> > Max Flow Side-slope Berm

Name	Max Flow Side-slope Berm
Discharge	32.83
Channel Slope	0.02
Channel Bottom Width	0
Left Side Slope	3
Right Side Slope	4
Low Flow Liner	
Retardence Class	D 2-6 in
Vegetation Type	Sod Former
Vegetation Density	Very Good 80-95%
Soil Type	Sandy Loam (GM)

### Unreinforced Vegetation

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
Unreinforced Vegetation	Straight	32.83 cfs	4.8 ft/s	1.4 ft	0.034	4 lbs/ft <sup>2</sup>	1.75 lbs/ft <sup>2</sup>	2.29	STABLE	--
Underlying Substrate	Straight	32.83 cfs	4.8 ft/s	1.4 ft	0.034	4 lbs/ft <sup>2</sup>	0.84 lbs/ft <sup>2</sup>	4.77	STABLE	--

## Appendix F

### Permitted 2008 ICPR Model Outputs

**APPENDIX D.2.B**

**POST-DEVELOPMENT ICPR MODEL  
OUTPUT DATA**

PROPOSED CONDITION NO 2E Summary

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	M	irf rea ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
A1		BASE01.28.08_redesi	13.78	127.381	128.000	0.0011	120295	12.09	147.288	12.71	13.134	
A2		BASE01.28.08_redesi	19.31	125.331	126.000	0.0002	381027	12.08	71.796	22.89	13.448	
A3		BASE01.28.08_redesi	18.66	125.238	126.000	0.0003	111827	12.08	18.142	22.46	15.657	
B10-NW-swale		BASE01.28.08_redesi	22.73	98.110	103.000	0.0009	16266	26.97	69.310	26.23	69.371	
B4-MC1		BASE01.28.08_redesi	27.39	123.299	125.000	0.0001	4921760	12.78	523.659	27.35	18.992	
B5-MC2		BASE01.28.08_redesi	20.10	122.526	124.500	0.0003	471697	12.00	198.561	20.10	44.781	
B6-MC3		BASE01.28.08_redesi	25.08	112.441	120.000	0.0002	957868	12.08	254.389	25.08	69.463	
B7-Creek		BASE01.28.08_redesi	20.75	97.289	98.000	0.0008	1193235	13.87	339.642	20.75	243.419	
B7-Creek South		BASE01.28.08_redesi	17.67	121.838	125.000	-0.0003	108680	17.48	126.682	17.67	126.624	
BasinB		BASE01.28.08_redesi	12.54	125.646	130.000	0.0007	211799	12.10	217.559	12.54	70.699	
BasinC		BASE01.28.08_redesi	12.83	129.322	130.000	0.0013	190943	12.27	281.107	12.83	127.162	
BasinD		BASE01.28.08_redesi	20.40	115.433	116.000	0.0004	907828	12.19	375.102	19.65	34.885	
BasinE		BASE01.28.08_redesi	12.15	127.284	128.000	0.0013	11038	12.08	12.757	12.15	11.907	
BasinF		BASE01.28.08_redesi	12.20	126.345	128.000	0.0008	9266	12.00	7.175	12.19	4.546	
BasinG		BASE01.28.08_redesi	12.38	125.763	127.000	0.0014	7787	12.06	6.927	12.38	5.365	
BasinH		BASE01.28.08_redesi	24.50	139.822	149.750	0.0011	466	12.00	0.630	0.00	0.000	
BasinJ		BASE01.28.08_redesi	13.75	125.942	130.000	0.0007	514247	12.15	364.685	13.72	35.391	
Citrus		BASE01.28.08_redesi	17.49	126.851	128.000	-0.0025	293513	15.50	148.937	17.49	126.106	
FINAL-SED		BASE01.28.08_redesi	26.98	103.190	104.000	0.0009	142274	26.50	69.326	26.97	69.310	
LTF-1		BASE01.28.08_redesi	12.00	148.891	149.000	0.0022	168	12.00	4.086	12.00	4.047	
LTF-4		BASE01.28.08_redesi	24.50	142.138	145.750	0.0004	8186	12.00	3.154	7.28	0.000	
LTF-5		BASE01.28.08_redesi	12.04	145.767	148.500	-0.0003	1731	12.00	4.047	12.01	3.649	
LTF-6		BASE01.28.08_redesi	12.04	145.749	148.750	0.0013	2198	12.00	5.482	12.04	5.141	
LTF-7		BASE01.28.08_redesi	12.03	143.589	144.750	-0.0002	5744	12.00	31.098	12.03	30.745	
manhole-node		BASE01.28.08_redesi	12.83	124.896	126.000	-0.0025	210	12.83	47.618	12.83	47.618	
Manhole10		BASE01.28.08_redesi	12.54	124.736	129.000	-0.0200	287	12.54	32.607	12.54	32.606	
NPDES		BASE01.28.08_redesi	0.00	90.800	92.000	0.0000	59	20.75	243.453	0.00	0.000	
P-8		BASE01.28.08_redesi	12.13	132.300	138.000	0.0025	6629	12.09	200.666	12.13	195.051	
P1-node		BASE01.28.08_redesi	12.28	135.293	136.000	-0.0013	47261	12.12	313.886	12.28	259.600	
Ph1		BASE01.28.08_redesi	12.09	219.114	220.000	0.0025	5031	12.08	202.013	12.09	200.666	
Ph2		BASE01.28.08_redesi	12.09	219.568	220.000	-0.0023	4422	12.08	149.182	12.09	147.920	
Ph2A		BASE01.28.08_redesi	14.07	127.137	130.000	0.0015	87637	12.25	23.022	0.00	0.000	
Ph3		BASE01.28.08_redesi	12.11	219.493	220.000	-0.0016	9636	12.08	86.093	12.11	82.930	
Ph4		BASE01.28.08_redesi	12.10	219.579	220.000	0.0013	6807	12.08	126.898	12.10	124.798	
Ph56		BASE01.28.08_redesi	12.09	219.824	220.000	-0.0025	5067	12.08	181.249	12.09	179.823	
Sect10A		BASE01.28.08_redesi	12.11	292.924	298.000	-0.0017	5635	12.17	115.190	12.17	115.682	
Sect10AA		BASE01.28.08_redesi	12.20	142.016	145.000	-0.0005	37940	12.11	143.307	12.20	135.554	
Sect10B		BASE01.28.08_redesi	12.08	287.534	290.000	-0.0007	5058	12.08	74.937	12.08	74.833	
Sect10BB		BASE01.28.08_redesi	12.11	129.984	131.000	-1.0000	24402	12.08	74.833	12.13	73.677	
Sect10C		BASE01.28.08_redesi	12.09	289.396	290.000	-0.0021	6896	12.08	157.309	12.09	156.317	
Sect10CC		BASE01.28.08_redesi	12.14	127.424	130.000	-0.0010	28245	12.09	250.221	12.11	226.933	
Sect11		BASE01.28.08_redesi	12.08	287.670	290.000	-0.0008	4967	12.08	88.505	12.08	88.378	
Sect11A		BASE01.28.08_redesi	12.14	129.249	130.000	-0.0009	21717	12.08	88.378	12.14	96.341	
Sect12		BASE01.28.08_redesi	12.08	287.172	290.000	-0.0004	5182	12.08	44.754	12.08	44.650	
Sect12A		BASE01.28.08_redesi	12.20	129.711	131.000	-0.0030	19888	12.10	176.136	11.97	420.895	
Sect12B		BASE01.28.08_redesi	12.21	129.140	130.000	0.0168	4235	11.97	420.895	12.21	153.480	
Sect13		BASE01.28.08_redesi	12.09	287.974	290.000	-0.0009	6044	12.08	124.111	12.09	123.542	
Sect13A		BASE01.28.08_redesi	12.01	132.336	133.000	-0.0011	17266	12.09	123.542	12.11	132.077	
Sect789		BASE01.28.08_redesi	12.04	293.932	298.000	-0.0022	10194	12.00	178.922	12.04	174.737	
Sect789A		BASE01.28.08_redesi	12.17	137.122	138.000	-0.0018	28522	12.04	191.468	12.09	187.478	
SECT9		BASE01.28.08_redesi	12.07	137.252	138.000	-0.0005	13600	12.00	23.348	12.05	16.769	
Sed2		BASE01.28.08_redesi	12.90	123.181	125.000	-0.0011	162122	12.10	259.186	12.90	120.623	
Sed3		BASE01.28.08_redesi	14.20	127.463	130.000	-0.0016	148107	12.43	141.179	13.32	73.162	
Sed4		BASE01.28.08_redesi	12.61	130.901	132.000	0.0011	212322	12.15	277.385	12.61	115.716	
Sed4-Ch		BASE01.28.08_redesi	12.09	134.374	135.000	-0.0019	21506	12.09	147.920	12.16	154.679	
Sed5		BASE01.28.08_redesi	25.67	106.315	107.000	0.0001	136289	24.00	69.494	25.60	69.389	
Sed6		BASE01.28.08_redesi	26.13	105.264	106.000	0.0007	116712	25.60	69.389	26.02	69.348	
Sed7		BASE01.28.08_redesi	26.58	104.253	105.000	0.0002	105697	26.02	69.348	26.50	69.326	
Sed8		BASE01.28.08_redesi	12.90	120.424	125.000	-0.0004	6518	12.89	120.953	12.90	120.951	
Spway-J		BASE01.28.08_redesi	12.16	127.134	130.000	0.0021	21495	12.12	300.436	12.15	294.623	
SRA		BASE01.28.08_redesi	27.50	120.465	121.000	0.0006	455839	12.67	193.853	0.00	0.000	

PROPOSAL CONDITIONS / WAVE SUMMARY

Name	Group	Simulation	Max Flow hrs	Max Flow cfs	Max Delta Q cfs	Max US Stage hrs	Max U. Age ft	Max DS Stage hrs	Max DS Stage ft
A3OUTPIPE		BASE01.28.08_redesi	18.54	18.267	-0.816	18.66	125.238	12.54	125.646
Ch10BB		BASE01.28.08_redesi	12.13	73.677	-4.354	12.11	129.984	12.16	127.134
Ch10CC		BASE01.28.08_redesi	12.11	226.933	-0.311	12.14	127.424	12.16	127.134
Ch11A		BASE01.28.08_redesi	12.14	96.341	-38.500	12.14	129.249	12.14	127.424
Ch12A		BASE01.28.08_redesi	12.11	132.077	-0.084	12.01	132.336	12.20	129.711
Ch789		BASE01.28.08_redesi	12.09	187.478	-55.121	12.17	137.122	12.28	135.293
Creek-Channel	DC-1	BASE01.28.08_redesi	17.67	126.624	-0.072	17.67	121.838	17.67	98.723
	DC-2	BASE01.28.08_redesi	12.10	124.798	-15.946	12.10	219.579	13.78	127.381
	DC-3	BASE01.28.08_redesi	12.09	200.666	-64.666	12.09	219.114	12.13	132.300
	DC-4	BASE01.28.08_redesi	12.11	82.930	-0.063	12.11	219.493	12.11	141.617
	DC-5	BASE01.28.08_redesi	12.09	179.823	-0.158	12.09	219.824	12.09	132.372
	DC10A	BASE01.28.08_redesi	12.17	115.682	0.072	12.11	292.924	12.20	142.016
	DC10B	BASE01.28.08_redesi	12.08	74.833	-0.044	12.08	287.534	12.08	129.149
	DC10C	BASE01.28.08_redesi	12.09	156.317	-0.142	12.09	289.396	12.09	129.216
	DC11	BASE01.28.08_redesi	12.08	88.378	-0.052	12.08	287.670	12.08	129.280
	DC12	BASE01.28.08_redesi	12.08	44.650	-0.026	12.08	287.172	12.08	128.769
DS-Sed2A	DC13	BASE01.28.08_redesi	12.09	123.542	-0.071	12.09	287.974	12.09	132.707
	DC789	BASE01.28.08_redesi	12.04	174.737	-0.181	12.04	293.932	12.04	142.339
	DS-A1	BASE01.28.08_redesi	12.71	13.134	-1.021	13.78	127.381	19.31	125.331
	DS-B6-MC3	BASE01.28.08_redesi	25.08	69.463	0.044	25.08	112.441	25.67	106.315
	DS-D	BASE01.28.08_redesi	19.65	34.885	1.595	20.40	115.433	25.08	112.441
	DS-J	BASE01.28.08_redesi	13.72	35.391	0.621	13.75	125.942	20.10	122.526
	DS-Sed2A	BASE01.28.08_redesi	12.90	60.312	0.016	12.90	123.181	12.90	120.424
	DS-Sed2B	BASE01.28.08_redesi	12.90	60.312	0.016	12.90	123.181	12.90	120.424
	DS-Sed8	BASE01.28.08_redesi	12.90	120.951	0.031	12.90	120.424	20.40	115.433
	FinalSedOut	BASE01.28.08_redesi	13.48	7.593	2.805	26.98	103.190	22.73	98.110
Manhole10Out	Manhole10Out	BASE01.28.08_redesi	12.54	32.606	0.018	12.54	124.736	12.54	123.427
	northpipe-link	BASE01.28.08_redesi	12.00	4.047	-0.004	12.00	148.891	12.00	146.359
	NW Swale Berm	BASE01.28.08_redesi	22.73	33.400	0.009	22.73	98.110	20.75	97.289
	OS	BASE01.28.08_redesi	17.49	126.106	14.520	17.49	126.851	17.49	122.617
	P7Final	BASE01.28.08_redesi	12.16	4.471	2.364	26.58	104.253	26.98	103.190
	PIPE6-7	BASE01.28.08_redesi	13.13	4.206	0.001	26.13	105.264	26.58	104.253
	Pump	BASE01.28.08_redesi	7.28	0.000	0.000	24.50	142.138	12.04	145.767
	S-10	BASE01.28.08_redesi	12.54	32.607	0.793	12.54	125.646	12.54	124.736
	S-10A	BASE01.28.08_redesi	12.54	38.092	0.028	12.54	125.646	27.39	123.299
	S-11	BASE01.28.08_redesi	12.28	259.600	0.639	12.28	135.293	12.27	132.379
S-12A	S-12A	BASE01.28.08_redesi	12.83	47.618	0.245	12.83	129.322	12.83	124.896
	S-12B	BASE01.28.08_redesi	12.83	47.618	2.657	12.83	124.896	27.39	123.299
	S-13	BASE01.28.08_redesi	27.19	9.199	0.766	27.39	123.299	15.94	122.419
	S-13A	BASE01.28.08_redesi	27.35	9.793	0.919	27.39	123.299	15.86	122.415
	S-14	BASE01.28.08_redesi	20.10	21.841	-7.387	20.10	122.526	19.22	120.630
	S-14A	BASE01.28.08_redesi	20.10	22.939	7.899	20.10	122.526	19.59	120.515
	S-16	BASE01.28.08_redesi	27.32	17.293	-0.011	22.73	98.110	20.75	97.289
	S-16A	BASE01.28.08_redesi	26.50	16.458	-0.011	22.73	98.110	20.75	97.289
	S-17	BASE01.28.08_redesi	20.75	123.230	9.190	20.75	97.289	20.09	93.956
	S-17A	BASE01.28.08_redesi	20.75	120.189	8.221	20.75	97.289	20.75	94.063
S-18	S-18	BASE01.28.08_redesi	26.57	10.663	0.654	22.73	98.110	20.75	97.289
	S-21	BASE01.28.08_redesi	12.21	76.763	0.272	12.21	129.140	12.20	125.689
	S-21A	BASE01.28.08_redesi	12.21	76.718	0.270	12.21	129.140	12.19	125.638
	S-22	BASE01.28.08_redesi	13.32	73.162	45.749	14.20	127.463	13.32	123.620
	S-24	BASE01.28.08_redesi	0.00	0.000	0.000	24.50	139.822	12.04	145.767
	S-25	BASE01.28.08_redesi	12.61	68.646	0.839	12.61	130.901	12.58	128.544
	S-25A	BASE01.28.08_redesi	12.61	47.070	-12.261	12.61	130.901	12.57	128.735
	S-3	BASE01.28.08_redesi	12.15	11.907	0.007	12.15	127.264	17.67	121.838
	S-5	BASE01.28.08_redesi	12.19	4.546	-0.090	12.20	126.345	12.62	125.688
	S-6	BASE01.28.08_redesi	12.38	5.365	0.574	12.38	125.763	19.31	125.331
S-7	S-7	BASE01.28.08_redesi	22.89	13.448	0.207	19.31	125.331	18.66	125.238
	S-8	BASE01.28.08_redesi	12.13	195.051	-0.187	12.13	132.300	12.12	129.199
	S-9	BASE01.28.08_redesi	150.00	-0.000	-1.737	18.66	125.238	14.07	127.137
	Sed4-Ch	BASE01.28.08_redesi	12.16	154.679	-51.125	12.09	134.374	12.61	130.901
	Spway-J	BASE01.28.08_redesi	12.15	294.623	-23.146	12.16	127.134	13.75	125.942
	SPWAY12	BASE01.28.08_redesi	11.97	420.895	-337.802	12.20	129.711	12.21	129.140
	Spway5	BASE01.28.08_redesi	25.60	69.389	0.027	25.67	106.315	26.13	105.264
	Spway6	BASE01.28.08_redesi	26.03	65.433	0.025	26.13	105.264	26.58	104.253
	Spway7	BASE01.28.08_redesi	26.51	65.467	0.027	26.58	104.253	26.98	103.190
	SpwayC	BASE01.28.08_redesi	12.83	79.544	0.097	12.83	129.322	12.83	124.291

Name	Group	Simulation	Max Time Flow hrs	Max Flow cfs	Max Delta Q cfs	Max US Stage hrs	U. fax ft	Max DS Stage hrs	Max DS Stage ft
SpwayD		BASE01.28.08_redesi	0.00	0.000	0.000	20.40	115.433	20.75	97.289
SpwayFinal		BASE01.28.08_redesi	26.98	62.315	0.008	26.98	103.190	22.73	98.110
Swale1		BASE01.28.08_redesi	12.05	16.769	0.834	12.07	137.252	12.17	137.122
Swale3		BASE01.28.08_redesi	12.20	135.554	-0.048	12.20	142.016	12.28	135.293
swale5		BASE01.28.08_redesi	12.01	3.649	-0.028	12.04	145.767	12.04	145.749
swale6-link		BASE01.28.08_redesi	12.03	30.745	0.097	12.03	143.589	12.03	140.589
swpipe1-link		BASE01.28.08_redesi	12.04	2.570	0.003	12.04	145.749	12.04	143.393
SWpipe2-link		BASE01.28.08_redesi	12.04	2.570	0.003	12.04	145.749	12.04	143.393