

DRAINAGE NARRATIVE AND CALCULATIONS

Old Towne Commons
Phase 1

FEBRUARY 27, 2025



SUBMITTED BY
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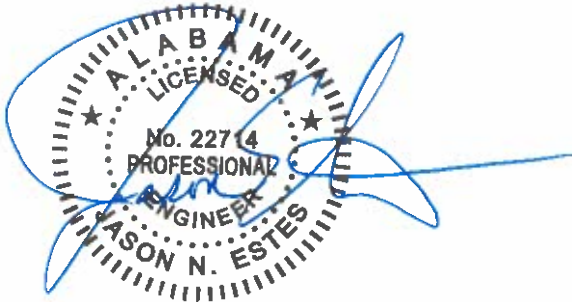


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GENERAL INFORMATION

Old Towne Commons is a 407-acre development to be located in Bay Minette, Alabama. The site is bounded to the north and east by wooded wetlands and by undeveloped wooded land to the south. US Highway 31 runs along the west side of the site. Phase 1 of Old Towne Commons will consist of approximately 102 acres, including 4.29 acres of wetland, and will be divided into three sub-phases (A,B,C) containing a total of 250 lots.

A vicinity map showing the location of the site can be found in Appendix A.

EXISTING DRAINAGE CONDITIONS

The site is a mixture of brush and trees and generally drains towards the wetland to the north and east. Soil information for the site was obtained using Web Soil Survey (USDA) and the soil report can be found in Appendix C. It was found that the soils on site have hydrologic ratings of A, B, C and D and were described as somewhat excessively drained to very poorly drained. The terrain of the site is divided into three (3) natural watersheds.

- Watershed A
 - Western portion of the site containing 35.06 acres.
 - Has elevations ranging from approximately 191 ft to 220 ft.
 - Stormwater flows east and west towards the center of the watershed and then north towards the wetland.

- Watershed B
 - Eastern portion of the site containing 39.67 acres.
 - Has elevations ranging from 176 ft to 220 ft.
 - Stormwater sheet flows west to the existing wetland.

- Watershed C
 - A small portion of Watershed C falls within Phase 1 but drains south towards the area of future development.
 - This portion will remain undeveloped with Phase 1 and will be evaluated with the design of Phase 2.

See the map titled “Pre-Developed Drainage Map” in Appendix B for the existing watershed conditions.

DESIGN CRITERIA

City of Bay Minette Subdivision Regulations

- All drainage structures shall be designed and sized to meet the runoff of the drainage area to be served and in accordance with the City of Bay Minette Drainage and Stormwater Standards.

- Post-development release rates may not exceed pre-development rates for a 2, 5, 10, 25, 50 and 100 year rain event.
- No subdivision may shed stormwater onto any adjacent land unless the runoff is contained within an existing drainage easement, swale, structure or right-of-way.
- No storm drain may be emptied into or become part of any sanitary sewer system and vice versa.
- Inlets should be provided so that surface water is not carried across any intersection or for a distance of more than 600 ft in the gutter and when calculations indicate curb capacities are exceeded, catch basins shall be used to intercept flow at that point.
- Culverts:
 - All roadway cross drain pipes shall be reinforced concrete and have a minimum size of 18 inches.
 - Culverts under arterial roadways shall normally accommodate a minimum of 25-year frequency design storms. Culverts under all other roadways shall normally accommodate a minimum of a 10-year storm.
- Open Channels and Ditches:
 - Open channels and ditches shall be designed as not to create a traffic hazard or create hazardous erosion.
 - The minimum flow line for paved ditches shall be 0.3% and shall be a maximum of 1% for unpaved ditches.
 - The recommended maximum flow velocities shall be in accordance with the ranges recommended in the latest edition of the ALDOT Hydraulics Manual.

HYDRAULIC ANALYSIS

GIS contours and field verified elevations were used to determine the size of each drainage basin. The drainage basin areas were then plotted onto the USDA Web Soil Survey, which gives soil types, locations, hydrologic groups, and other various characteristics. The soil properties provided by Web Soil Survey, the TR-55 procedure for estimating runoff and peak discharges, and precipitation intensity curves provided by NOAA for the 2, 5, 10, 25, 50, and 100-yr, 24 hour storms were utilized in hydraulic modeling software to determine peak runoff rates for the pre and post development conditions.

Bentley PondPack was utilized with the SCS method and the respective curve numbers to determine the peak runoff rates in the pre and post development conditions and for detention/retention calculations. Each pond was designed so the post development outflow rate is less than the pre-development runoff rate for the 2 through 100-year storms. The PondPack report in Appendix D shows pre and post development curve numbers and retention/detention calculations.

Bentley SewerGEMS 2023 and the Rational Runoff method were used to analyze the closed drainage system for the development. The proposed structures and pipes were designed to collect and convey runoff from the 25 year storm event. See Appendix E for calculations from SewerGEMS.

PROPOSED CONDITIONS

The proposed conditions divide the stormwater runoff into four (4) basins. Concrete valley gutters, concrete pipe, drainage structures and swales will be used to transport most of the stormwater runoff to one of the four proposed detention ponds. The detention ponds were designed to attenuate the stormwater runoff from the site and release it at rates less than the pre-development runoff rate.

Ponds 1 and 4, located at the northern end of the development, will attenuate runoff from approximately 19.41 acres combined. Ponds 2 and 3, located on the west and east sides, respectively, will attenuate runoff from a combined 31.87 acres. Each pond will dissipate energy in the water exiting the pond through use of a rip rap stilling basin before entering the existing wetland. Tables 1 through 2 below show the pre-development and post-development flow rates for each watershed and basin.

A portion of each watershed, along the outside perimeter, will directly release runoff into the adjacent wetland. The portions of direct runoff, combined with the flows exiting the pond will be less than the pre-development flow rates for each watershed. Best management practices should be used to protect the existing wetland and downstream infrastructure to ensure the development does not negatively affect the surroundings.

The map titled “Post-Developed Drainage Map,” found in Appendix B shows the post-developed conditions.

The following tables show the discharge rates (cfs), for each watershed in the pre-development and post-development conditions.

Table 1: Watershed A Pre vs Post

WATERSHED A						
	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year
TOTAL PRE (cfs) (35.01 ac)	49.79	78.57	107.84	155.69	199.53	248.14
BASIN 1 POST (POND 1 RELEASE) (cfs) (14.39 ac)	17.03	27.34	37.55	53.66	67.35	81.46
BASIN 2 POST (POND 2 RELEASE) (cfs) (17.86 ac)	3.05	5.53	8.23	12.38	14.98	18.85
DIRECT 1 (NORTH TO WETLAND) (cfs) (4.94 ac)	10.74	16.88	23.11	33.25	42.39	52.50
BASIN 4 POST (POND 4 RELEASE) (2.38 ac)	5.41	8.62	11.61	16.25	20.47	25.11
TOTAL POST (cfs)	36.23	58.37	80.50	115.54	145.19	177.92
Difference (cfs)	13.56	20.20	27.34	40.15	54.34	70.22
Pond 1 DHW (ft)	184.46	185.06	185.60	186.43	187.13	187.87
Pond 1 Freeboard (ft)	4.54	3.94	3.40	2.57	1.87	1.13
Pond 2 DHW (ft)	195.00	195.52	196.07	197.00	197.87	198.91
Pond 2 Freeboard (ft)	5.00	4.48	3.93	3.00	2.13	1.09
Pond 4 DHW (ft)	192.93	193.11	193.24	193.45	193.61	193.77
Pond 4 Freeboard (ft)	1.57	1.39	1.26	1.05	0.89	0.73

Table 2: Watershed B Pre vs Post

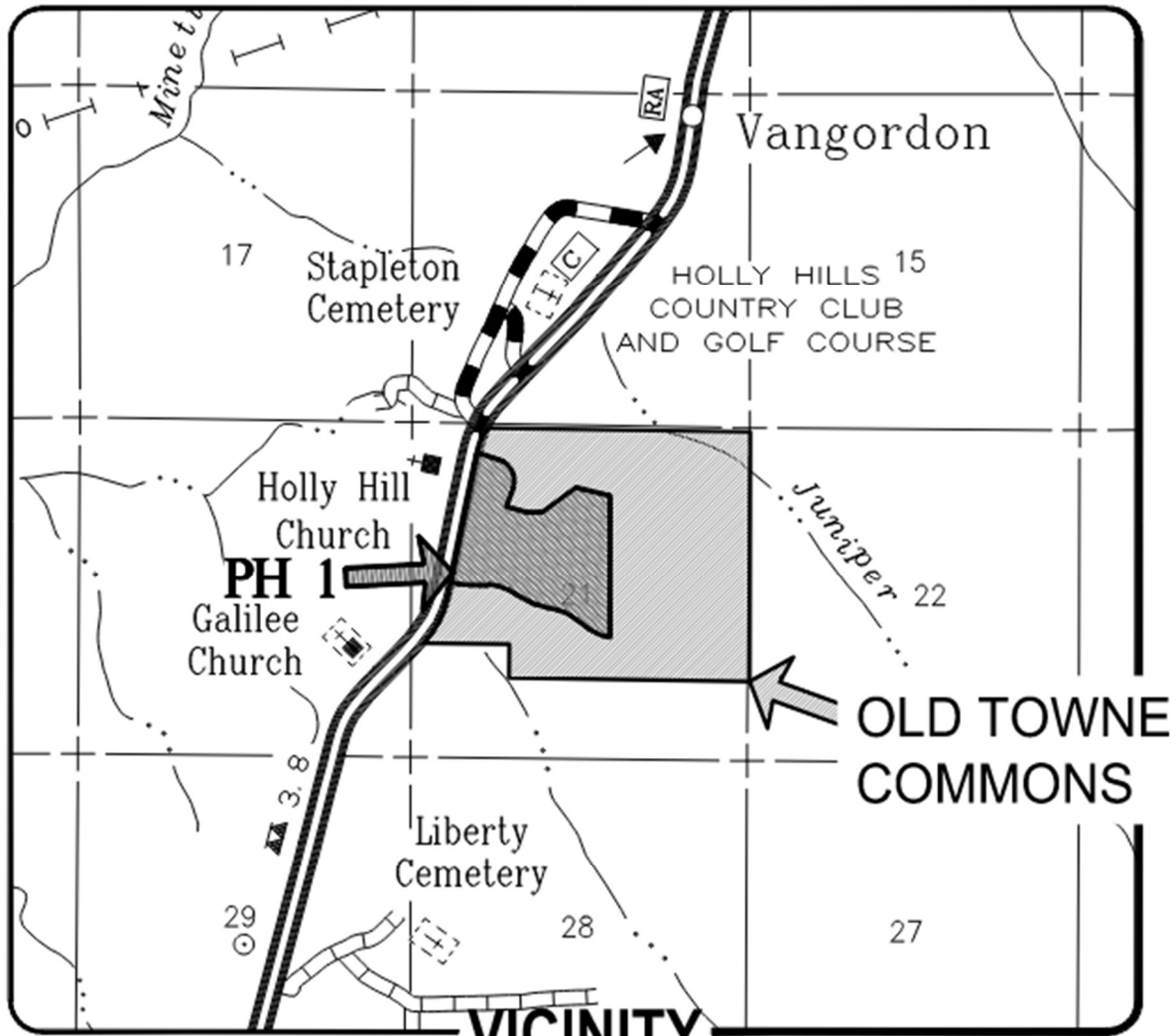
WATERSHED B						
	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year
TOTAL PRE (cfs) (38.43 ac)	19.43	40.83	65.38	108.43	150.51	199.06
BASIN 3 POST (POND 3 RELEASE) (cfs) (14.01 ac)	6.48	14.62	25.95	45.92	64.09	82.88
DIRECT 2 (WEST TO WETLAND) (cfs) (11.68 ac)	10.61	20.80	31.85	51.65	70.62	92.33
TOTAL POST (cfs)	17.09	35.42	57.80	97.57	134.71	175.21
Difference (cfs)	2.34	5.41	7.58	10.86	15.80	23.85
Pond 3 DHW (ft)	189.48	190.17	190.68	191.43	192.04	192.66
Pond 3 Freeboard (ft)	4.52	3.83	3.32	2.57	1.96	1.34

CONCLUSION

Improvements within Phase 1 of Old Towne Commons have been designed and analyzed to meet or exceed the requirements of the City of Bay Minette. The total on-site post development runoff rate for the proposed improvements is less than the total pre-development rate for each watershed on site. Stormwater management facilities will be utilized to attenuate stormwater runoff and have been designed to prevent negative impacts to downstream facilities.

APPENDIX A

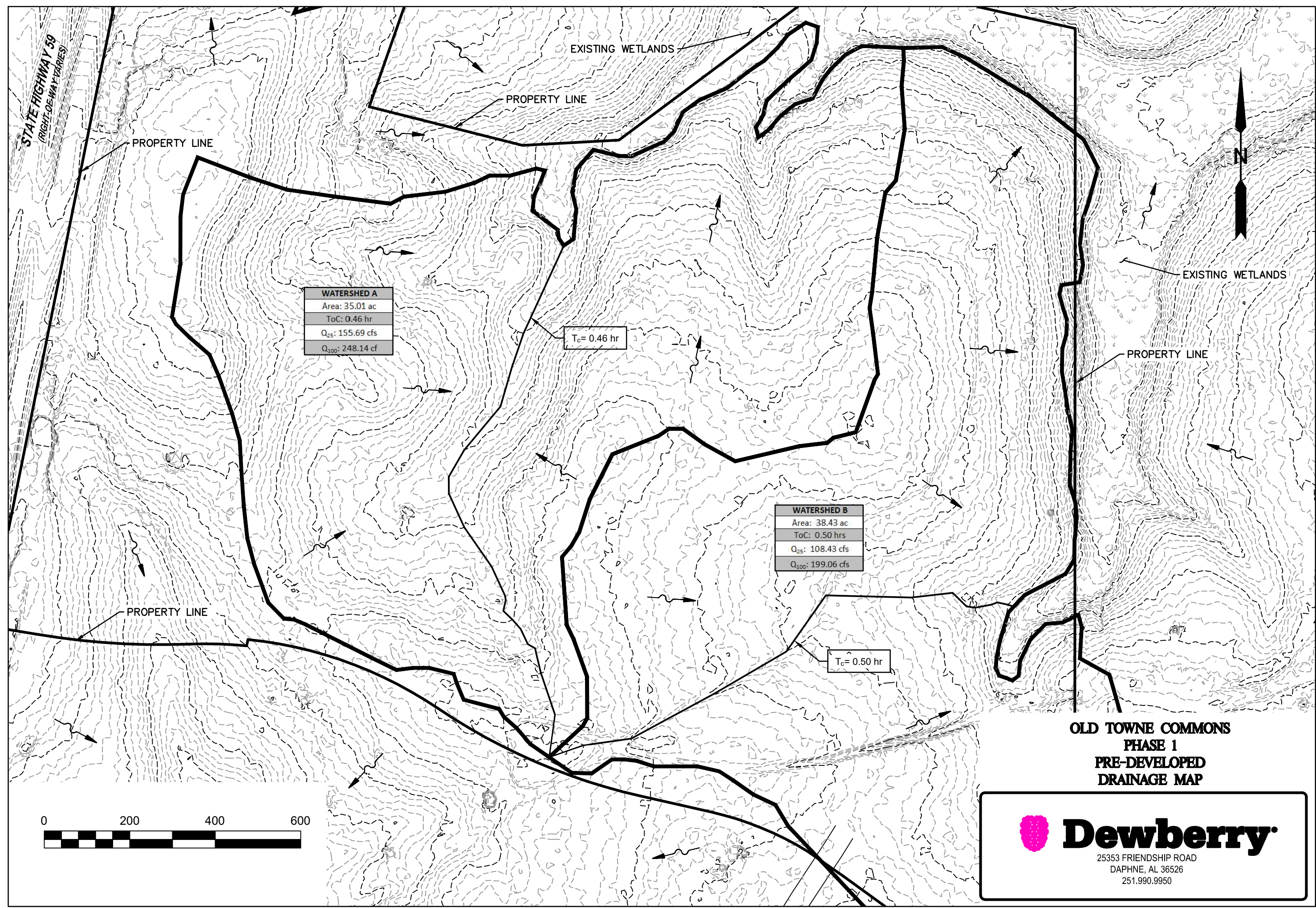
VICINITY MAP



**VICINITY
MAP**

APPENDIX B

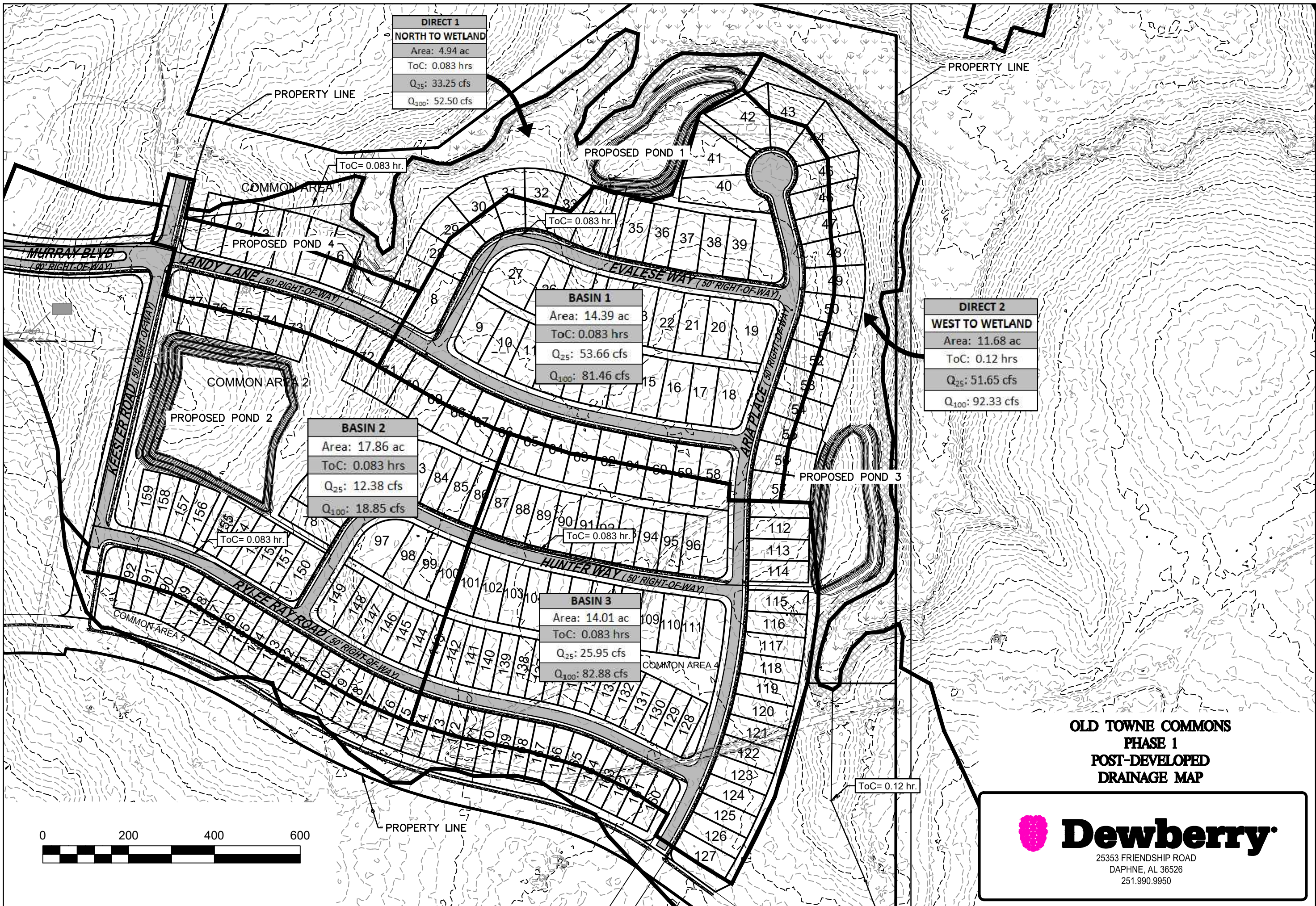
DRAINAGE BASIN MAPS



**OLD TOWNE COMMONS
PHASE 1
PRE-DEVELOPED
DRAINAGE MAP**

Dewberry
25353 FRIENDSHIP ROAD
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251.990.9950

w:\50180936 OLD TOWN COMMONS PH1\ENGINEERING_PLAN SHEETS\DRAINAGE MAPS\50180936_DRAINAGE MAPS.dwg
February 27, 2025



DIRECT 1
NORTH TO WETLAND
Area: 4.94 ac
ToC: 0.083 hrs
Q ₂₅ : 33.25 cfs
Q ₁₀₀ : 52.50 cfs


BASIN 1
Area: 14.39 ac
ToC: 0.083 hrs
Q ₂₅ : 53.66 cfs
Q ₁₀₀ : 81.46 cfs

BASIN 2
Area: 17.86 ac
ToC: 0.083 hrs
Q ₂₅ : 12.38 cfs
Q ₁₀₀ : 18.85 cfs

BASIN 3
Area: 14.01 ac
ToC: 0.083 hrs
Q ₂₅ : 25.95 cfs
Q ₁₀₀ : 82.88 cfs

DIRECT 2
WEST TO WETLAND
Area: 11.68 ac
ToC: 0.12 hrs
Q ₂₅ : 51.65 cfs
Q ₁₀₀ : 92.33 cfs

**OLD TOWNE COMMONS
PHASE 1
POST-DEVELOPED
DRAINAGE MAP**



Dewberry
25353 FRIENDSHIP ROAD
DAPHNE, AL 36526
251.990.9950



APPENDIX C

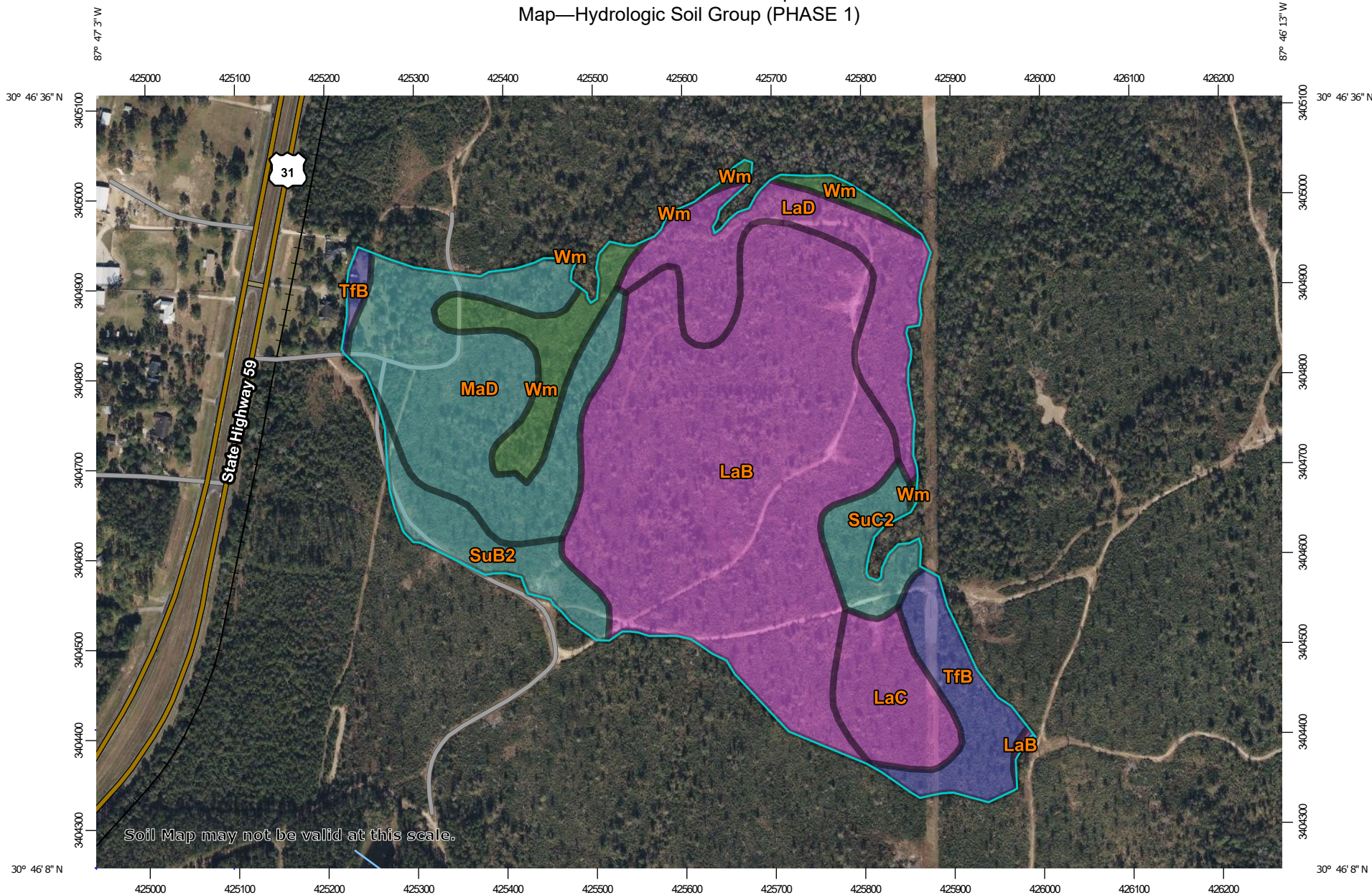
WEB SOILS SURVEY REPORT

Custom Soil Resource Report for **Baldwin County, Alabama**

PHASE 1



Custom Soil Resource Report
 Map—Hydrologic Soil Group (PHASE 1)



































Map Scale: 1:6,060 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  A
 -  A/D
 -  B
 -  B/D
 -  C
 -  C/D
 -  D
 -  Not rated or not available
 - Soil Rating Lines**
 -  A
 -  A/D
 -  B
 -  B/D
 -  C
 -  C/D
 -  D
 -  Not rated or not available
 - Soil Rating Points**
 -  A
 -  A/D
 -  B
 -  B/D
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads
- Background**
 -  Aerial Photography
- Soils (continued)**
 -  C
 -  C/D
 -  D
 -  Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Baldwin County, Alabama
 Survey Area Data: Version 17, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2021—Dec 22, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group (PHASE 1)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
LaB	Lakeland loamy fine sand, 0 to 5 percent slopes	A	33.0	44.2%
LaC	Lakeland loamy fine sand, 5 to 8 percent slopes	A	4.4	5.8%
LaD	Lakeland loamy fine sand, 8 to 12 percent slopes	A	8.1	10.8%
MaD	Malbis fine sandy loam, 5 to 12 percent slopes	C	13.4	18.0%
SuB2	Sunsweet fine sandy loam, 2 to 5 percent slopes, eroded	C	3.7	5.0%
SuC2	Sunsweet fine sandy loam, 5 to 8 percent slopes, eroded	C	2.7	3.6%
TfB	Tifton very fine sandy loam, 2 to 5 percent slopes	B	4.7	6.3%
Wm	Wet loamy alluvial land	A/D	4.7	6.2%
Totals for Area of Interest			74.8	100.0%

Rating Options—Hydrologic Soil Group (PHASE 1)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX D

PONDPACK REPORT

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Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
BASIN A	Pre-Development 2 YEAR	2	6.329	12.350	49.79
BASIN A	Pre-Development 5 YEAR	5	9.770	12.350	78.57
BASIN A	Pre-Development 10 YEAR	10	13.321	12.350	107.84
BASIN A	Pre-Development 25 YEAR	25	19.218	12.300	155.69
BASIN A	Pre-Development 50 YEAR	50	24.649	12.300	199.53
BASIN A	Pre-Development 100 YEAR	100	30.761	12.300	248.14
BASIN B	Pre-Development 2 YEAR	2	3.240	12.450	19.43
BASIN B	Pre-Development 5 YEAR	5	5.904	12.400	40.83
BASIN B	Pre-Development 10 YEAR	10	8.888	12.400	65.38
BASIN B	Pre-Development 25 YEAR	25	14.185	12.350	108.43
BASIN B	Pre-Development 50 YEAR	50	19.319	12.350	150.51
BASIN B	Pre-Development 100 YEAR	100	25.299	12.350	199.06
POST 1	Post-Development 2 YEAR	2	3.100	12.100	38.80
POST 1	Post-Development 5 YEAR	5	4.627	12.100	57.90
POST 1	Post-Development 10 YEAR	10	6.175	12.100	76.83
POST 1	Post-Development 25 YEAR	25	8.709	12.100	107.09
POST 1	Post-Development 50 YEAR	50	11.019	12.100	134.02
POST 1	Post-Development 100 YEAR	100	13.599	12.100	163.55
POST 2	Post-Development 2 YEAR	2	3.079	12.100	37.95
POST 2	Post-Development 5 YEAR	5	4.797	12.100	59.99
POST 2	Post-Development 10 YEAR	10	6.578	12.100	82.40
POST 2	Post-Development 25 YEAR	25	9.548	12.100	118.93
POST 2	Post-Development 50 YEAR	50	12.292	12.100	151.92
POST 2	Post-Development 100 YEAR	100	15.385	12.100	188.43

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
POST 3	Post-Development 2 YEAR	2	2.505	12.100	30.99
POST 3	Post-Development 5 YEAR	5	3.875	12.100	48.51
POST 3	Post-Development 10 YEAR	10	5.290	12.100	66.24
POST 3	Post-Development 25 YEAR	25	7.643	12.100	95.06
POST 3	Post-Development 50 YEAR	50	9.812	12.100	121.02
POST 3	Post-Development 100 YEAR	100	12.253	12.100	149.70
DIRECT 1	Post-Development 2 YEAR	2	0.869	12.100	10.74
DIRECT 1	Post-Development 5 YEAR	5	1.349	12.100	16.88
DIRECT 1	Post-Development 10 YEAR	10	1.845	12.100	23.11
DIRECT 1	Post-Development 25 YEAR	25	2.671	12.100	33.25
DIRECT 1	Post-Development 50 YEAR	50	3.433	12.100	42.39
DIRECT 1	Post-Development 100 YEAR	100	4.292	12.100	52.50
DIRECT 2	Post-Development 2 YEAR	2	1.068	12.150	10.61
DIRECT 2	Post-Development 5 YEAR	5	1.896	12.150	20.80
DIRECT 2	Post-Development 10 YEAR	10	2.814	12.150	31.85
DIRECT 2	Post-Development 25 YEAR	25	4.427	12.100	51.65
DIRECT 2	Post-Development 50 YEAR	50	5.979	12.100	70.62
DIRECT 2	Post-Development 100 YEAR	100	7.779	12.100	92.33
POST 4	Post-Development 2 YEAR	2	0.526	12.100	6.59
POST 4	Post-Development 5 YEAR	5	0.782	12.100	9.78
POST 4	Post-Development 10 YEAR	10	1.040	12.100	12.93
POST 4	Post-Development 25 YEAR	25	1.463	12.100	17.95
POST 4	Post-Development 50 YEAR	50	1.847	12.100	22.41
POST 4	Post-Development 100 YEAR	100	2.276	12.100	27.30

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
OUT-A	Pre-Development 2 YEAR	2	6.329	12.350	49.79
OUT-A	Pre-Development 5 YEAR	5	9.770	12.350	78.57
OUT-A	Pre-Development 10 YEAR	10	13.321	12.350	107.84
OUT-A	Pre-Development 25 YEAR	25	19.218	12.300	155.69
OUT-A	Pre-Development 50 YEAR	50	24.649	12.300	199.53
OUT-A	Pre-Development 100 YEAR	100	30.761	12.300	248.14
OUT-B	Pre-Development 2 YEAR	2	3.240	12.450	19.43
OUT-B	Pre-Development 5 YEAR	5	5.904	12.400	40.83
OUT-B	Pre-Development 10 YEAR	10	8.888	12.400	65.38
OUT-B	Pre-Development 25 YEAR	25	14.185	12.350	108.43
OUT-B	Pre-Development 50 YEAR	50	19.319	12.350	150.51
OUT-B	Pre-Development 100 YEAR	100	25.299	12.350	199.06
O-POND 1	Post-Development 2 YEAR	2	3.033	12.350	17.03
O-POND 1	Post-Development 5 YEAR	5	4.535	12.300	27.34
O-POND 1	Post-Development 10 YEAR	10	6.061	12.300	37.55
O-POND 1	Post-Development 25 YEAR	25	8.571	12.250	53.66
O-POND 1	Post-Development 50 YEAR	50	10.862	12.250	67.35
O-POND 1	Post-Development 100 YEAR	100	13.423	12.250	81.46
O-POND 2	Post-Development 2 YEAR	2	2.231	14.250	3.05
O-POND 2	Post-Development 5 YEAR	5	3.715	13.600	5.53
O-POND 2	Post-Development 10 YEAR	10	5.279	13.250	8.23
O-POND 2	Post-Development 25 YEAR	25	7.912	13.050	12.38
O-POND 2	Post-Development 50 YEAR	50	10.317	13.100	14.98
O-POND 2	Post-Development 100 YEAR	100	12.868	15.550	15.85

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
O-POND 3	Post-Development 2 YEAR	2	2.365	12.550	6.48
O-POND 3	Post-Development 5 YEAR	5	3.683	12.450	14.62
O-POND 3	Post-Development 10 YEAR	10	5.053	12.350	25.95
O-POND 3	Post-Development 25 YEAR	25	7.347	12.300	45.92
O-POND 3	Post-Development 50 YEAR	50	9.473	12.250	64.09
O-POND 3	Post-Development 100 YEAR	100	11.869	12.250	82.88
O-DIRECT 2	Post-Development 2 YEAR	2	1.068	12.150	10.61
O-DIRECT 2	Post-Development 5 YEAR	5	1.896	12.150	20.80
O-DIRECT 2	Post-Development 10 YEAR	10	2.814	12.150	31.85
O-DIRECT 2	Post-Development 25 YEAR	25	4.427	12.100	51.65
O-DIRECT 2	Post-Development 50 YEAR	50	5.979	12.100	70.62
O-DIRECT 2	Post-Development 100 YEAR	100	7.779	12.100	92.33
O-DIRECT 1	Post-Development 2 YEAR	2	0.869	12.100	10.74
O-DIRECT 1	Post-Development 5 YEAR	5	1.349	12.100	16.88
O-DIRECT 1	Post-Development 10 YEAR	10	1.845	12.100	23.11
O-DIRECT 1	Post-Development 25 YEAR	25	2.671	12.100	33.25
O-DIRECT 1	Post-Development 50 YEAR	50	3.433	12.100	42.39
O-DIRECT 1	Post-Development 100 YEAR	100	4.292	12.100	52.50
O-POND 4	Post-Development 2 YEAR	2	0.526	12.150	5.41
O-POND 4	Post-Development 5 YEAR	5	0.781	12.150	8.62
O-POND 4	Post-Development 10 YEAR	10	1.039	12.150	11.61
O-POND 4	Post-Development 25 YEAR	25	1.461	12.150	16.25
O-POND 4	Post-Development 50 YEAR	50	1.845	12.150	20.47
O-POND 4	Post-Development 100 YEAR	100	2.273	12.100	25.11

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
PO-1 (IN)	Post-Development 2 YEAR	2	3.100	12.100	38.80	(N/A)	(N/A)
PO-1 (OUT)	Post-Development 2 YEAR	2	3.033	12.350	17.03	184.46	0.826
PO-1 (IN)	Post-Development 5 YEAR	5	4.627	12.100	57.90	(N/A)	(N/A)
PO-1 (OUT)	Post-Development 5 YEAR	5	4.535	12.300	27.34	185.06	1.198
PO-1 (IN)	Post-Development 10 YEAR	10	6.175	12.100	76.83	(N/A)	(N/A)
PO-1 (OUT)	Post-Development 10 YEAR	10	6.061	12.300	37.55	185.60	1.559
PO-1 (IN)	Post-Development 25 YEAR	25	8.709	12.100	107.09	(N/A)	(N/A)
PO-1 (OUT)	Post-Development 25 YEAR	25	8.571	12.250	53.66	186.43	2.141
PO-1 (IN)	Post-Development 50 YEAR	50	11.019	12.100	134.02	(N/A)	(N/A)
PO-1 (OUT)	Post-Development 50 YEAR	50	10.862	12.250	67.35	187.13	2.665
PO-1 (IN)	Post-Development 100 YEAR	100	13.599	12.100	163.55	(N/A)	(N/A)
PO-1 (OUT)	Post-Development 100 YEAR	100	13.423	12.250	81.46	187.87	3.254
PO-2 (IN)	Post-Development 2 YEAR	2	3.079	12.100	37.95	(N/A)	(N/A)
PO-2 (OUT)	Post-Development 2 YEAR	2	2.231	14.250	3.05	195.00	1.552
PO-2 (IN)	Post-Development 5 YEAR	5	4.797	12.100	59.99	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
PO-2 (OUT)	Post-Development 5 YEAR	5	3.715	13.600	5.53	195.52	2.396
PO-2 (IN)	Post-Development 10 YEAR	10	6.578	12.100	82.40	(N/A)	(N/A)
PO-2 (OUT)	Post-Development 10 YEAR	10	5.279	13.250	8.23	196.07	3.302
PO-2 (IN)	Post-Development 25 YEAR	25	9.548	12.100	118.93	(N/A)	(N/A)
PO-2 (OUT)	Post-Development 25 YEAR	25	7.912	13.050	12.38	197.00	4.890
PO-2 (IN)	Post-Development 50 YEAR	50	12.292	12.100	151.92	(N/A)	(N/A)
PO-2 (OUT)	Post-Development 50 YEAR	50	10.317	13.100	14.98	197.87	6.439
PO-2 (IN)	Post-Development 100 YEAR	100	15.385	12.100	188.43	(N/A)	(N/A)
PO-2 (OUT)	Post-Development 100 YEAR	100	12.868	15.550	15.85	198.91	8.367
PO-3 (IN)	Post-Development 2 YEAR	2	2.505	12.100	30.99	(N/A)	(N/A)
PO-3 (OUT)	Post-Development 2 YEAR	2	2.365	12.550	6.48	189.48	0.921
PO-3 (IN)	Post-Development 5 YEAR	5	3.875	12.100	48.51	(N/A)	(N/A)
PO-3 (OUT)	Post-Development 5 YEAR	5	3.683	12.450	14.62	190.17	1.396
PO-3 (IN)	Post-Development 10 YEAR	10	5.290	12.100	66.24	(N/A)	(N/A)
PO-3 (OUT)	Post-Development 10 YEAR	10	5.053	12.350	25.95	190.68	1.766

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
PO-3 (IN)	Post-Development 25 YEAR	25	7.643	12.100	95.06	(N/A)	(N/A)
PO-3 (OUT)	Post-Development 25 YEAR	25	7.347	12.300	45.92	191.43	2.328
PO-3 (IN)	Post-Development 50 YEAR	50	9.812	12.100	121.02	(N/A)	(N/A)
PO-3 (OUT)	Post-Development 50 YEAR	50	9.473	12.250	64.09	192.04	2.817
PO-3 (IN)	Post-Development 100 YEAR	100	12.253	12.100	149.70	(N/A)	(N/A)
PO-3 (OUT)	Post-Development 100 YEAR	100	11.869	12.250	82.88	192.66	3.333
PO-4 (IN)	Post-Development 2 YEAR	2	0.526	12.100	6.59	(N/A)	(N/A)
PO-4 (OUT)	Post-Development 2 YEAR	2	0.526	12.150	5.41	192.93	0.047
PO-4 (IN)	Post-Development 5 YEAR	5	0.782	12.100	9.78	(N/A)	(N/A)
PO-4 (OUT)	Post-Development 5 YEAR	5	0.781	12.150	8.62	193.11	0.067
PO-4 (IN)	Post-Development 10 YEAR	10	1.040	12.100	12.93	(N/A)	(N/A)
PO-4 (OUT)	Post-Development 10 YEAR	10	1.039	12.150	11.61	193.24	0.083
PO-4 (IN)	Post-Development 25 YEAR	25	1.463	12.100	17.95	(N/A)	(N/A)
PO-4 (OUT)	Post-Development 25 YEAR	25	1.461	12.150	16.25	193.45	0.108
PO-4 (IN)	Post-Development 50 YEAR	50	1.847	12.100	22.41	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
PO-4 (OUT)	Post-Development 50 YEAR	50	1.845	12.150	20.47	193.61	0.129
PO-4 (IN)	Post-Development 100 YEAR	100	2.276	12.100	27.30	(N/A)	(N/A)
PO-4 (OUT)	Post-Development 100 YEAR	100	2.273	12.100	25.11	193.77	0.150

Subsection: Time-Depth Curve
 Label: Type III - Daphne 2021
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time-Depth Curve: 100 YEAR

Label	100 YEAR
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	100 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.1
0.500	0.1	0.1	0.1	0.1	0.1
1.000	0.2	0.2	0.2	0.2	0.2
1.500	0.2	0.3	0.3	0.3	0.3
2.000	0.3	0.3	0.3	0.4	0.4
2.500	0.4	0.4	0.4	0.4	0.5
3.000	0.5	0.5	0.5	0.5	0.6
3.500	0.6	0.6	0.6	0.6	0.7
4.000	0.7	0.7	0.7	0.7	0.8
4.500	0.8	0.8	0.8	0.9	0.9
5.000	0.9	0.9	0.9	1.0	1.0
5.500	1.0	1.0	1.1	1.1	1.1
6.000	1.1	1.2	1.2	1.2	1.2
6.500	1.3	1.3	1.3	1.4	1.4
7.000	1.4	1.5	1.5	1.5	1.6
7.500	1.6	1.6	1.7	1.7	1.8
8.000	1.8	1.8	1.9	1.9	2.0
8.500	2.0	2.1	2.1	2.2	2.2
9.000	2.3	2.4	2.4	2.5	2.6
9.500	2.6	2.7	2.8	2.8	2.9
10.000	3.0	3.1	3.1	3.2	3.3
10.500	3.4	3.5	3.6	3.7	3.8
11.000	3.9	4.1	4.2	4.4	4.5
11.500	4.7	5.0	5.4	5.9	6.6
12.000	7.9	9.2	9.9	10.4	10.8
12.500	11.1	11.3	11.4	11.6	11.7
13.000	11.9	12.0	12.1	12.2	12.3
13.500	12.4	12.5	12.6	12.7	12.7
14.000	12.8	12.9	13.0	13.0	13.1
14.500	13.2	13.2	13.3	13.4	13.4
15.000	13.5	13.6	13.6	13.7	13.7
15.500	13.8	13.8	13.9	13.9	14.0
16.000	14.0	14.0	14.1	14.1	14.2
16.500	14.2	14.2	14.3	14.3	14.3
17.000	14.4	14.4	14.4	14.5	14.5

Subsection: Time-Depth Curve
 Label: Type III - Daphne 2021
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.500	14.5	14.6	14.6	14.6	14.6
18.000	14.7	14.7	14.7	14.7	14.8
18.500	14.8	14.8	14.8	14.9	14.9
19.000	14.9	14.9	14.9	15.0	15.0
19.500	15.0	15.0	15.1	15.1	15.1
20.000	15.1	15.1	15.2	15.2	15.2
20.500	15.2	15.2	15.3	15.3	15.3
21.000	15.3	15.3	15.4	15.4	15.4
21.500	15.4	15.4	15.4	15.5	15.5
22.000	15.5	15.5	15.5	15.5	15.6
22.500	15.6	15.6	15.6	15.6	15.6
23.000	15.7	15.7	15.7	15.7	15.7
23.500	15.7	15.7	15.8	15.8	15.8
24.000	15.8	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
 Label: Type III - Daphne 2021
 Scenario: Pre-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time-Depth Curve: 100 YEAR	
Label	100 YEAR
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	100 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.1
0.500	0.1	0.1	0.1	0.1	0.1
1.000	0.2	0.2	0.2	0.2	0.2
1.500	0.2	0.3	0.3	0.3	0.3
2.000	0.3	0.3	0.3	0.4	0.4
2.500	0.4	0.4	0.4	0.4	0.5
3.000	0.5	0.5	0.5	0.5	0.6
3.500	0.6	0.6	0.6	0.6	0.7
4.000	0.7	0.7	0.7	0.7	0.8
4.500	0.8	0.8	0.8	0.9	0.9
5.000	0.9	0.9	0.9	1.0	1.0
5.500	1.0	1.0	1.1	1.1	1.1
6.000	1.1	1.2	1.2	1.2	1.2
6.500	1.3	1.3	1.3	1.4	1.4
7.000	1.4	1.5	1.5	1.5	1.6
7.500	1.6	1.6	1.7	1.7	1.8
8.000	1.8	1.8	1.9	1.9	2.0
8.500	2.0	2.1	2.1	2.2	2.2
9.000	2.3	2.4	2.4	2.5	2.6
9.500	2.6	2.7	2.8	2.8	2.9
10.000	3.0	3.1	3.1	3.2	3.3
10.500	3.4	3.5	3.6	3.7	3.8
11.000	3.9	4.1	4.2	4.4	4.5
11.500	4.7	5.0	5.4	5.9	6.6
12.000	7.9	9.2	9.9	10.4	10.8
12.500	11.1	11.3	11.4	11.6	11.7
13.000	11.9	12.0	12.1	12.2	12.3
13.500	12.4	12.5	12.6	12.7	12.7
14.000	12.8	12.9	13.0	13.0	13.1
14.500	13.2	13.2	13.3	13.4	13.4
15.000	13.5	13.6	13.6	13.7	13.7
15.500	13.8	13.8	13.9	13.9	14.0
16.000	14.0	14.0	14.1	14.1	14.2
16.500	14.2	14.2	14.3	14.3	14.3
17.000	14.4	14.4	14.4	14.5	14.5

Subsection: Time-Depth Curve
 Label: Type III - Daphne 2021
 Scenario: Pre-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.500	14.5	14.6	14.6	14.6	14.6
18.000	14.7	14.7	14.7	14.7	14.8
18.500	14.8	14.8	14.8	14.9	14.9
19.000	14.9	14.9	14.9	15.0	15.0
19.500	15.0	15.0	15.1	15.1	15.1
20.000	15.1	15.1	15.2	15.2	15.2
20.500	15.2	15.2	15.3	15.3	15.3
21.000	15.3	15.3	15.4	15.4	15.4
21.500	15.4	15.4	15.4	15.5	15.5
22.000	15.5	15.5	15.5	15.5	15.6
22.500	15.6	15.6	15.6	15.6	15.6
23.000	15.7	15.7	15.7	15.7	15.7
23.500	15.7	15.7	15.8	15.8	15.8
24.000	15.8	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time of Concentration Calculations
Label: BASIN A
Scenario: Pre-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.012 ft/ft
2 Year 24 Hour Depth	5.9 in
Average Velocity	0.09 ft/s
Segment Time of Concentration	0.323 hours

Segment #2: TR-55 Shallow Concentrated Flow

Hydraulic Length	1,240.00 ft
Is Paved?	False
Slope	0.023 ft/ft
Average Velocity	2.45 ft/s
Segment Time of Concentration	0.140 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.464 hours
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Subsection: Time of Concentration Calculations
Label: BASIN A
Scenario: Pre-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (Sf^{0.5})) / n$

Where: $(Lf / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc = Unpaved surface:
 $V = 16.1345 * (Sf^{0.5})$

Paved Surface:
 $V = 20.3282 * (Sf^{0.5})$

Where: $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Subsection: Time of Concentration Calculations
Label: BASIN B
Scenario: Pre-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.008 ft/ft
2 Year 24 Hour Depth	5.9 in
Average Velocity	0.07 ft/s
Segment Time of Concentration	0.380 hours

Segment #2: TR-55 Shallow Concentrated Flow

Hydraulic Length	1,128.00 ft
Is Paved?	False
Slope	0.027 ft/ft
Average Velocity	2.65 ft/s
Segment Time of Concentration	0.118 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.498 hours
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Subsection: Time of Concentration Calculations
Label: BASIN B
Scenario: Pre-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (Sf^{0.5})) / n$

Where: $(Lf / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc = Unpaved surface:
 $V = 16.1345 * (Sf^{0.5})$

Paved Surface:
 $V = 20.3282 * (Sf^{0.5})$

Where: $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Subsection: Time of Concentration Calculations
Label: DIRECT 1
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.050
Slope	0.017 ft/ft
2 Year 24 Hour Depth	5.9 in
Average Velocity	0.52 ft/s
Segment Time of Concentration	0.053 hours

Segment #2: TR-55 Shallow Concentrated Flow

Hydraulic Length	293.00 ft
Is Paved?	False
Slope	0.067 ft/ft
Average Velocity	4.18 ft/s
Segment Time of Concentration	0.019 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.083 hours
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Subsection: Time of Concentration Calculations
Label: DIRECT 1
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (Sf^{0.5})) / n$

Where: $(Lf / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc = Unpaved surface:
 $V = 16.1345 * (Sf^{0.5})$

Paved Surface:
 $V = 20.3282 * (Sf^{0.5})$

Where: $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Subsection: Time of Concentration Calculations
 Label: DIRECT 2
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.050
Slope	0.025 ft/ft
2 Year 24 Hour Depth	5.9 in
Average Velocity	0.61 ft/s
Segment Time of Concentration	0.046 hours

Segment #2: TR-55 Shallow Concentrated Flow

Hydraulic Length	626.00 ft
Is Paved?	False
Slope	0.020 ft/ft
Average Velocity	2.28 ft/s
Segment Time of Concentration	0.076 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.122 hours
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Subsection: Time of Concentration Calculations
Label: DIRECT 2
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (Sf^{0.5})) / n$

Where: $(Lf / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

Tc = Unpaved surface:
 $V = 16.1345 * (Sf^{0.5})$

Paved Surface:
 $V = 20.3282 * (Sf^{0.5})$

Where: $(Lf / V) / 3600$
V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= Flow length, feet

Subsection: Time of Concentration Calculations
 Label: POST 1
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.013
Slope	0.044 ft/ft
2 Year 24 Hour Depth	5.9 in
Average Velocity	2.24 ft/s
Segment Time of Concentration	0.012 hours

Segment #2: TR-55 Channel Flow

Flow Area	1.4 ft ²
Hydraulic Length	1,677.00 ft
Manning's n	0.013
Slope	0.019 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	9.10 ft/s
Segment Time of Concentration	0.051 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.083 hours
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Subsection: Time of Concentration Calculations
Label: POST 1
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (Sf^{-0.5})) / n$

Where: $(Lf / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

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

Where: Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Subsection: Time of Concentration Calculations
 Label: POST 2
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.013
Slope	0.061 ft/ft
2 Year 24 Hour Depth	5.9 in
Average Velocity	2.55 ft/s
Segment Time of Concentration	0.011 hours

Segment #2: TR-55 Channel Flow

Flow Area	1.4 ft ²
Hydraulic Length	808.00 ft
Manning's n	0.013
Slope	0.011 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	7.08 ft/s
Segment Time of Concentration	0.032 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.083 hours
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Subsection: Time of Concentration Calculations
Label: POST 2
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (Sf^{-0.5})) / n$

Where: $(Lf / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

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

Where: Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Subsection: Time of Concentration Calculations
Label: POST 3
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.013
Slope	0.021 ft/ft
2 Year 24 Hour Depth	5.9 in
Average Velocity	1.67 ft/s
Segment Time of Concentration	0.017 hours

Segment #2: TR-55 Channel Flow

Flow Area	1.4 ft ²
Hydraulic Length	756.00 ft
Manning's n	0.013
Slope	0.020 ft/ft
Wetted Perimeter	3.14 ft
Average Velocity	9.44 ft/s
Segment Time of Concentration	0.022 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.083 hours
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Subsection: Time of Concentration Calculations
Label: POST 3
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

==== SCS Channel Flow

Tc = $R = Qa / Wp$
 $V = (1.49 * (R^{2/3}) * (Sf^{-0.5})) / n$

Where: $(Lf / V) / 3600$
R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

==== SCS TR-55 Sheet Flow

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

Where: Tc= Time of concentration, hours
n= Manning's n
Lf= Flow length, feet
P= 2yr, 24hr Rain depth, inches
Sf= Slope, %

Subsection: Runoff CN-Area
 Label: DIRECT 1
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - grass combination - fair - Soil A	43.000	1.960	0.0	0.0	43.000
Woods - grass combination - fair - Soil C	76.000	2.980	0.0	0.0	76.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	4.940	(N/A)	(N/A)	62.907

Subsection: Runoff CN-Area
 Label: DIRECT 2
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
Woods - grass combination - fair - Soil A	43.000	8.406	0.0	0.0	43.000
Woods - grass combination - fair - Soil B	65.000	1.959	0.0	0.0	65.000
Woods - grass combination - fair - Soil C	76.000	1.318	0.0	0.0	76.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	11.683	(N/A)	(N/A)	50.412

Subsection: Time vs. Elevation
 Label: PO-1 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	183.00	183.00	183.00	183.00	183.00
0.250	183.00	183.00	183.00	183.00	183.00
0.500	183.00	183.00	183.00	183.00	183.00
0.750	183.00	183.00	183.00	183.00	183.00
1.000	183.00	183.00	183.00	183.00	183.00
1.250	183.00	183.00	183.00	183.00	183.00
1.500	183.00	183.00	183.00	183.00	183.00
1.750	183.00	183.00	183.00	183.00	183.00
2.000	183.00	183.00	183.00	183.00	183.00
2.250	183.00	183.00	183.00	183.00	183.00
2.500	183.00	183.00	183.00	183.00	183.00
2.750	183.00	183.00	183.00	183.00	183.00
3.000	183.00	183.00	183.00	183.00	183.00
3.250	183.00	183.00	183.00	183.00	183.00
3.500	183.00	183.00	183.00	183.00	183.00
3.750	183.00	183.00	183.00	183.00	183.00
4.000	183.00	183.00	183.00	183.00	183.00
4.250	183.00	183.00	183.00	183.00	183.00
4.500	183.00	183.00	183.00	183.00	183.00
4.750	183.00	183.00	183.00	183.00	183.00
5.000	183.00	183.00	183.00	183.00	183.00
5.250	183.00	183.00	183.00	183.00	183.00
5.500	183.00	183.00	183.00	183.01	183.01
5.750	183.01	183.01	183.01	183.01	183.01
6.000	183.01	183.02	183.02	183.02	183.02
6.250	183.02	183.03	183.03	183.03	183.03
6.500	183.04	183.04	183.04	183.05	183.05
6.750	183.05	183.06	183.06	183.06	183.07
7.000	183.07	183.07	183.08	183.08	183.09
7.250	183.09	183.10	183.10	183.10	183.11
7.500	183.11	183.12	183.12	183.13	183.14
7.750	183.14	183.15	183.15	183.16	183.16
8.000	183.17	183.18	183.18	183.19	183.20
8.250	183.21	183.21	183.22	183.23	183.24
8.500	183.25	183.26	183.26	183.27	183.28
8.750	183.29	183.30	183.31	183.32	183.33
9.000	183.34	183.35	183.36	183.37	183.38
9.250	183.39	183.40	183.41	183.42	183.43
9.500	183.44	183.45	183.46	183.47	183.48
9.750	183.49	183.51	183.52	183.53	183.54
10.000	183.55	183.56	183.57	183.58	183.60
10.250	183.61	183.62	183.64	183.65	183.67

Subsection: Time vs. Elevation
 Label: PO-1 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.500	183.68	183.70	183.71	183.73	183.74
10.750	183.76	183.78	183.80	183.81	183.83
11.000	183.85	183.87	183.89	183.91	183.93
11.250	183.96	183.99	184.03	184.06	184.10
11.500	184.14	184.19	184.26	184.35	184.49
11.750	184.65	184.85	185.07	185.32	185.66
12.000	186.15	186.71	187.23	187.63	187.82
12.250	187.87	187.85	187.79	187.68	187.55
12.500	187.38	187.18	186.98	186.77	186.57
12.750	186.38	186.21	186.05	185.89	185.75
13.000	185.62	185.49	185.38	185.27	185.17
13.250	185.08	185.00	184.92	184.85	184.79
13.500	184.73	184.68	184.63	184.58	184.54
13.750	184.50	184.46	184.43	184.39	184.36
14.000	184.33	184.30	184.28	184.25	184.23
14.250	184.21	184.19	184.17	184.15	184.13
14.500	184.11	184.10	184.08	184.07	184.06
14.750	184.04	184.03	184.02	184.01	184.00
15.000	183.98	183.97	183.96	183.95	183.94
15.250	183.93	183.92	183.91	183.90	183.89
15.500	183.88	183.87	183.86	183.85	183.84
15.750	183.83	183.82	183.81	183.80	183.79
16.000	183.79	183.78	183.77	183.76	183.75
16.250	183.74	183.73	183.73	183.72	183.71
16.500	183.71	183.70	183.69	183.69	183.68
16.750	183.67	183.67	183.66	183.66	183.65
17.000	183.65	183.64	183.63	183.63	183.62
17.250	183.62	183.61	183.61	183.60	183.60
17.500	183.59	183.59	183.58	183.58	183.57
17.750	183.57	183.56	183.56	183.56	183.55
18.000	183.55	183.54	183.54	183.53	183.53
18.250	183.52	183.52	183.52	183.51	183.51
18.500	183.51	183.50	183.50	183.50	183.50
18.750	183.49	183.49	183.49	183.49	183.48
19.000	183.48	183.48	183.48	183.48	183.47
19.250	183.47	183.47	183.47	183.46	183.46
19.500	183.46	183.46	183.46	183.45	183.45
19.750	183.45	183.45	183.45	183.45	183.44
20.000	183.44	183.44	183.44	183.44	183.43
20.250	183.43	183.43	183.43	183.43	183.43
20.500	183.42	183.42	183.42	183.42	183.42
20.750	183.42	183.42	183.41	183.41	183.41

Subsection: Time vs. Elevation
 Label: PO-1 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
21.000	183.41	183.41	183.41	183.40	183.40
21.250	183.40	183.40	183.40	183.40	183.40
21.500	183.40	183.39	183.39	183.39	183.39
21.750	183.39	183.39	183.39	183.38	183.38
22.000	183.38	183.38	183.38	183.38	183.38
22.250	183.38	183.37	183.37	183.37	183.37
22.500	183.37	183.37	183.37	183.36	183.36
22.750	183.36	183.36	183.36	183.36	183.36
23.000	183.36	183.35	183.35	183.35	183.35
23.250	183.35	183.35	183.35	183.34	183.34
23.500	183.34	183.34	183.34	183.34	183.34
23.750	183.34	183.33	183.33	183.33	183.33
24.000	183.33	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time vs. Elevation
 Label: PO-2 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	194.00	194.00	194.00	194.00	194.00
0.250	194.00	194.00	194.00	194.00	194.00
0.500	194.00	194.00	194.00	194.00	194.00
0.750	194.00	194.00	194.00	194.00	194.00
1.000	194.00	194.00	194.00	194.00	194.00
1.250	194.00	194.00	194.00	194.00	194.00
1.500	194.00	194.00	194.00	194.00	194.00
1.750	194.00	194.00	194.00	194.00	194.00
2.000	194.00	194.00	194.00	194.00	194.00
2.250	194.00	194.00	194.00	194.00	194.00
2.500	194.00	194.00	194.00	194.00	194.00
2.750	194.00	194.00	194.00	194.00	194.00
3.000	194.00	194.00	194.00	194.00	194.00
3.250	194.00	194.00	194.00	194.00	194.00
3.500	194.00	194.00	194.00	194.00	194.00
3.750	194.00	194.00	194.00	194.00	194.00
4.000	194.00	194.00	194.00	194.00	194.00
4.250	194.00	194.00	194.00	194.00	194.00
4.500	194.00	194.00	194.00	194.00	194.00
4.750	194.00	194.00	194.00	194.00	194.00
5.000	194.00	194.00	194.00	194.00	194.00
5.250	194.00	194.00	194.00	194.00	194.00
5.500	194.00	194.00	194.00	194.00	194.00
5.750	194.00	194.00	194.00	194.00	194.00
6.000	194.00	194.00	194.00	194.00	194.00
6.250	194.00	194.00	194.00	194.00	194.00
6.500	194.00	194.00	194.00	194.00	194.00
6.750	194.00	194.00	194.00	194.00	194.01
7.000	194.01	194.01	194.01	194.01	194.01
7.250	194.01	194.01	194.02	194.02	194.02
7.500	194.02	194.02	194.03	194.03	194.03
7.750	194.03	194.03	194.04	194.04	194.04
8.000	194.05	194.05	194.05	194.06	194.06
8.250	194.06	194.07	194.07	194.08	194.08
8.500	194.08	194.09	194.09	194.10	194.10
8.750	194.11	194.12	194.12	194.13	194.14
9.000	194.14	194.15	194.16	194.17	194.17
9.250	194.18	194.19	194.20	194.21	194.22
9.500	194.23	194.24	194.25	194.26	194.27
9.750	194.28	194.29	194.30	194.31	194.33
10.000	194.34	194.35	194.36	194.38	194.39
10.250	194.41	194.42	194.44	194.46	194.47

Subsection: Time vs. Elevation
 Label: PO-2 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.500	194.49	194.51	194.53	194.55	194.57
10.750	194.59	194.61	194.63	194.65	194.67
11.000	194.69	194.72	194.74	194.77	194.80
11.250	194.83	194.86	194.89	194.93	194.97
11.500	195.01	195.05	195.11	195.18	195.27
11.750	195.38	195.51	195.66	195.84	196.07
12.000	196.39	196.78	197.19	197.56	197.84
12.250	198.05	198.22	198.36	198.48	198.57
12.500	198.64	198.70	198.73	198.76	198.79
12.750	198.81	198.83	198.84	198.86	198.87
13.000	198.88	198.89	198.89	198.90	198.90
13.250	198.91	198.91	198.91	198.91	198.91
13.500	198.91	198.91	198.91	198.91	198.91
13.750	198.90	198.90	198.90	198.89	198.88
14.000	198.88	198.87	198.86	198.86	198.85
14.250	198.84	198.83	198.82	198.81	198.80
14.500	198.79	198.78	198.77	198.76	198.75
14.750	198.74	198.73	198.71	198.70	198.69
15.000	198.68	198.66	198.65	198.63	198.62
15.250	198.60	198.59	198.57	198.56	198.54
15.500	198.53	198.51	198.49	198.47	198.46
15.750	198.44	198.42	198.40	198.38	198.36
16.000	198.34	198.32	198.30	198.28	198.26
16.250	198.24	198.22	198.20	198.18	198.16
16.500	198.14	198.12	198.10	198.07	198.05
16.750	198.03	198.01	197.99	197.97	197.94
17.000	197.92	197.90	197.88	197.86	197.83
17.250	197.81	197.79	197.77	197.75	197.72
17.500	197.70	197.68	197.66	197.63	197.61
17.750	197.59	197.57	197.54	197.52	197.50
18.000	197.48	197.45	197.43	197.41	197.39
18.250	197.36	197.34	197.32	197.30	197.27
18.500	197.25	197.23	197.21	197.19	197.17
18.750	197.15	197.12	197.10	197.08	197.06
19.000	197.04	197.02	197.00	196.98	196.96
19.250	196.94	196.92	196.90	196.88	196.86
19.500	196.84	196.82	196.80	196.78	196.76
19.750	196.74	196.73	196.71	196.69	196.67
20.000	196.65	196.63	196.62	196.60	196.58
20.250	196.56	196.55	196.53	196.51	196.50
20.500	196.48	196.46	196.45	196.43	196.41
20.750	196.40	196.38	196.36	196.35	196.33

Subsection: Time vs. Elevation
 Label: PO-2 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
21.000	196.32	196.30	196.29	196.27	196.26
21.250	196.24	196.23	196.21	196.20	196.18
21.500	196.17	196.16	196.14	196.13	196.11
21.750	196.10	196.09	196.07	196.06	196.05
22.000	196.04	196.02	196.01	196.00	195.98
22.250	195.97	195.96	195.95	195.94	195.92
22.500	195.91	195.90	195.89	195.88	195.86
22.750	195.85	195.84	195.83	195.82	195.81
23.000	195.80	195.79	195.77	195.76	195.75
23.250	195.74	195.73	195.72	195.71	195.70
23.500	195.69	195.68	195.67	195.66	195.65
23.750	195.64	195.63	195.62	195.61	195.61
24.000	195.60	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time vs. Elevation
 Label: PO-3 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	188.00	188.00	188.00	188.00	188.00
0.250	188.00	188.00	188.00	188.00	188.00
0.500	188.00	188.00	188.00	188.00	188.00
0.750	188.00	188.00	188.00	188.00	188.00
1.000	188.00	188.00	188.00	188.00	188.00
1.250	188.00	188.00	188.00	188.00	188.00
1.500	188.00	188.00	188.00	188.00	188.00
1.750	188.00	188.00	188.00	188.00	188.00
2.000	188.00	188.00	188.00	188.00	188.00
2.250	188.00	188.00	188.00	188.00	188.00
2.500	188.00	188.00	188.00	188.00	188.00
2.750	188.00	188.00	188.00	188.00	188.00
3.000	188.00	188.00	188.00	188.00	188.00
3.250	188.00	188.00	188.00	188.00	188.00
3.500	188.00	188.00	188.00	188.00	188.00
3.750	188.00	188.00	188.00	188.00	188.00
4.000	188.00	188.00	188.00	188.00	188.00
4.250	188.00	188.00	188.00	188.00	188.00
4.500	188.00	188.00	188.00	188.00	188.00
4.750	188.00	188.00	188.00	188.00	188.00
5.000	188.00	188.00	188.00	188.00	188.00
5.250	188.00	188.00	188.00	188.00	188.00
5.500	188.00	188.00	188.00	188.00	188.00
5.750	188.00	188.00	188.00	188.00	188.00
6.000	188.00	188.00	188.00	188.00	188.00
6.250	188.00	188.00	188.00	188.00	188.00
6.500	188.00	188.00	188.01	188.01	188.01
6.750	188.01	188.01	188.01	188.01	188.02
7.000	188.02	188.02	188.02	188.03	188.03
7.250	188.03	188.03	188.04	188.04	188.05
7.500	188.05	188.05	188.06	188.06	188.07
7.750	188.07	188.07	188.08	188.08	188.09
8.000	188.09	188.10	188.11	188.11	188.12
8.250	188.12	188.13	188.14	188.15	188.15
8.500	188.16	188.17	188.18	188.19	188.20
8.750	188.21	188.22	188.23	188.24	188.25
9.000	188.26	188.27	188.28	188.29	188.31
9.250	188.32	188.33	188.35	188.36	188.38
9.500	188.39	188.41	188.42	188.44	188.46
9.750	188.47	188.49	188.51	188.53	188.54
10.000	188.56	188.58	188.60	188.62	188.64
10.250	188.66	188.68	188.70	188.72	188.74

Subsection: Time vs. Elevation
 Label: PO-3 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.500	188.77	188.79	188.81	188.84	188.86
10.750	188.89	188.92	188.95	188.97	189.00
11.000	189.03	189.06	189.09	189.12	189.16
11.250	189.20	189.24	189.29	189.34	189.39
11.500	189.44	189.51	189.59	189.70	189.83
11.750	190.00	190.19	190.40	190.62	190.92
12.000	191.33	191.79	192.21	192.53	192.66
12.250	192.66	192.61	192.53	192.41	192.28
12.500	192.13	191.96	191.79	191.63	191.48
12.750	191.34	191.22	191.11	191.02	190.92
13.000	190.84	190.76	190.69	190.63	190.57
13.250	190.52	190.48	190.44	190.40	190.36
13.500	190.33	190.30	190.27	190.24	190.22
13.750	190.19	190.17	190.15	190.13	190.11
14.000	190.09	190.08	190.06	190.04	190.03
14.250	190.02	190.00	189.99	189.98	189.97
14.500	189.96	189.95	189.94	189.93	189.91
14.750	189.90	189.89	189.88	189.87	189.86
15.000	189.85	189.84	189.83	189.82	189.81
15.250	189.80	189.80	189.79	189.78	189.77
15.500	189.76	189.75	189.74	189.73	189.72
15.750	189.71	189.70	189.68	189.67	189.66
16.000	189.65	189.64	189.62	189.61	189.60
16.250	189.59	189.57	189.56	189.55	189.54
16.500	189.53	189.51	189.50	189.49	189.48
16.750	189.47	189.45	189.44	189.43	189.42
17.000	189.41	189.40	189.39	189.37	189.36
17.250	189.35	189.34	189.33	189.32	189.31
17.500	189.30	189.29	189.28	189.27	189.26
17.750	189.24	189.23	189.22	189.21	189.20
18.000	189.19	189.18	189.17	189.16	189.15
18.250	189.14	189.13	189.12	189.12	189.11
18.500	189.10	189.09	189.08	189.07	189.07
18.750	189.06	189.05	189.04	189.04	189.03
19.000	189.02	189.02	189.01	189.00	189.00
19.250	188.99	188.99	188.98	188.97	188.97
19.500	188.96	188.96	188.95	188.94	188.94
19.750	188.93	188.93	188.92	188.92	188.91
20.000	188.91	188.90	188.90	188.89	188.89
20.250	188.88	188.88	188.87	188.87	188.86
20.500	188.86	188.85	188.85	188.85	188.84
20.750	188.84	188.83	188.83	188.83	188.82

Subsection: Time vs. Elevation
 Label: PO-3 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
21.000	188.82	188.81	188.81	188.81	188.80
21.250	188.80	188.80	188.79	188.79	188.79
21.500	188.78	188.78	188.78	188.77	188.77
21.750	188.77	188.76	188.76	188.76	188.75
22.000	188.75	188.75	188.74	188.74	188.74
22.250	188.73	188.73	188.73	188.72	188.72
22.500	188.72	188.72	188.71	188.71	188.71
22.750	188.70	188.70	188.70	188.70	188.69
23.000	188.69	188.69	188.69	188.68	188.68
23.250	188.68	188.67	188.67	188.67	188.67
23.500	188.66	188.66	188.66	188.66	188.65
23.750	188.65	188.65	188.65	188.64	188.64
24.000	188.64	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time vs. Elevation
 Label: PO-4 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	192.50	192.50	192.50	192.50	192.50
0.250	192.50	192.50	192.50	192.50	192.50
0.500	192.50	192.50	192.50	192.50	192.50
0.750	192.50	192.50	192.50	192.50	192.50
1.000	192.50	192.50	192.50	192.50	192.50
1.250	192.50	192.50	192.50	192.50	192.50
1.500	192.50	192.50	192.50	192.50	192.50
1.750	192.50	192.50	192.50	192.50	192.50
2.000	192.50	192.50	192.50	192.50	192.50
2.250	192.50	192.50	192.50	192.50	192.50
2.500	192.50	192.50	192.50	192.50	192.50
2.750	192.50	192.50	192.50	192.50	192.50
3.000	192.50	192.50	192.50	192.50	192.50
3.250	192.50	192.50	192.50	192.50	192.50
3.500	192.50	192.50	192.50	192.50	192.50
3.750	192.50	192.50	192.50	192.50	192.50
4.000	192.50	192.50	192.50	192.50	192.50
4.250	192.50	192.50	192.50	192.50	192.50
4.500	192.50	192.50	192.50	192.50	192.50
4.750	192.50	192.50	192.50	192.50	192.50
5.000	192.50	192.50	192.50	192.50	192.50
5.250	192.50	192.50	192.50	192.50	192.50
5.500	192.50	192.50	192.50	192.50	192.50
5.750	192.50	192.50	192.50	192.50	192.50
6.000	192.50	192.50	192.50	192.50	192.51
6.250	192.51	192.51	192.51	192.51	192.51
6.500	192.51	192.51	192.51	192.51	192.51
6.750	192.51	192.51	192.51	192.51	192.51
7.000	192.51	192.51	192.51	192.51	192.51
7.250	192.51	192.51	192.51	192.52	192.52
7.500	192.52	192.52	192.52	192.52	192.52
7.750	192.52	192.52	192.52	192.52	192.52
8.000	192.52	192.52	192.52	192.52	192.53
8.250	192.53	192.53	192.53	192.53	192.53
8.500	192.53	192.53	192.53	192.53	192.54
8.750	192.54	192.54	192.54	192.54	192.54
9.000	192.54	192.54	192.55	192.55	192.55
9.250	192.55	192.55	192.55	192.55	192.56
9.500	192.56	192.56	192.56	192.56	192.56
9.750	192.57	192.57	192.57	192.57	192.57
10.000	192.57	192.58	192.58	192.58	192.58
10.250	192.58	192.59	192.59	192.59	192.60

Subsection: Time vs. Elevation
 Label: PO-4 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.500	192.60	192.60	192.61	192.61	192.61
10.750	192.61	192.62	192.62	192.62	192.63
11.000	192.63	192.64	192.64	192.65	192.65
11.250	192.66	192.67	192.68	192.69	192.70
11.500	192.72	192.73	192.76	192.81	192.87
11.750	192.95	193.04	193.11	193.18	193.30
12.000	193.50	193.68	193.77	193.77	193.65
12.250	193.51	193.39	193.30	193.22	193.15
12.500	193.08	193.02	192.96	192.91	192.87
12.750	192.84	192.81	192.79	192.78	192.76
13.000	192.75	192.74	192.72	192.72	192.71
13.250	192.70	192.70	192.69	192.69	192.69
13.500	192.68	192.68	192.68	192.67	192.67
13.750	192.67	192.66	192.66	192.66	192.65
14.000	192.65	192.65	192.64	192.64	192.64
14.250	192.64	192.63	192.63	192.63	192.63
14.500	192.63	192.63	192.62	192.62	192.62
14.750	192.62	192.62	192.62	192.61	192.61
15.000	192.61	192.61	192.61	192.61	192.61
15.250	192.60	192.60	192.60	192.60	192.60
15.500	192.60	192.59	192.59	192.59	192.59
15.750	192.59	192.59	192.58	192.58	192.58
16.000	192.58	192.58	192.58	192.58	192.57
16.250	192.57	192.57	192.57	192.57	192.57
16.500	192.57	192.57	192.57	192.57	192.57
16.750	192.57	192.56	192.56	192.56	192.56
17.000	192.56	192.56	192.56	192.56	192.56
17.250	192.56	192.56	192.56	192.56	192.56
17.500	192.56	192.55	192.55	192.55	192.55
17.750	192.55	192.55	192.55	192.55	192.55
18.000	192.55	192.55	192.55	192.55	192.55
18.250	192.55	192.55	192.54	192.54	192.54
18.500	192.54	192.54	192.54	192.54	192.54
18.750	192.54	192.54	192.54	192.54	192.54
19.000	192.54	192.54	192.54	192.54	192.54
19.250	192.54	192.54	192.54	192.54	192.54
19.500	192.54	192.54	192.54	192.54	192.54
19.750	192.54	192.54	192.54	192.54	192.54
20.000	192.54	192.54	192.54	192.54	192.54
20.250	192.54	192.54	192.54	192.54	192.54
20.500	192.54	192.54	192.54	192.54	192.54
20.750	192.54	192.54	192.54	192.53	192.53

Subsection: Time vs. Elevation
 Label: PO-4 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
21.000	192.53	192.53	192.53	192.53	192.53
21.250	192.53	192.53	192.53	192.53	192.53
21.500	192.53	192.53	192.53	192.53	192.53
21.750	192.53	192.53	192.53	192.53	192.53
22.000	192.53	192.53	192.53	192.53	192.53
22.250	192.53	192.53	192.53	192.53	192.53
22.500	192.53	192.53	192.53	192.53	192.53
22.750	192.53	192.53	192.53	192.53	192.53
23.000	192.53	192.53	192.53	192.53	192.53
23.250	192.53	192.53	192.53	192.53	192.53
23.500	192.53	192.53	192.53	192.53	192.53
23.750	192.53	192.53	192.53	192.53	192.53
24.000	192.52	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Individual Outlet Curves
 Label: POND 1 OUTLET STRUCTURE
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
183.00	0.00	(N/A)	0.00
183.25	1.29	(N/A)	0.00
183.50	3.61	(N/A)	0.00
183.75	6.53	(N/A)	0.00
184.00	9.90	(N/A)	0.00
184.25	13.63	(N/A)	0.00
184.50	17.64	(N/A)	0.00
184.75	21.88	(N/A)	0.00
185.00	26.30	(N/A)	0.00
185.25	30.88	(N/A)	0.00
185.50	35.58	(N/A)	0.00
185.75	40.36	(N/A)	0.00
186.00	45.21	(N/A)	0.00
186.25	50.09	(N/A)	0.00
186.50	55.00	(N/A)	0.00
186.75	59.91	(N/A)	0.00
187.00	64.80	(N/A)	0.00
187.25	69.65	(N/A)	0.00
187.50	74.46	(N/A)	0.00
187.75	79.20	(N/A)	0.00
188.00	83.85	(N/A)	0.00
188.25	88.42	(N/A)	0.00
188.50	92.87	(N/A)	0.00
188.75	97.21	(N/A)	0.00
189.00	101.41	(N/A)	0.00

Computation Messages

H=.00; Htw=.00;
 Qfree=.00;
 H=.25; Htw=.00;
 Qfree=1.29;
 H=.50; Htw=.00;
 Qfree=3.61;
 H=.75; Htw=.00;
 Qfree=6.53;
 H=1.00; Htw=.00;
 Qfree=9.90;
 H=1.25; Htw=.00;
 Qfree=13.63;

Subsection: Individual Outlet Curves
Label: POND 1 OUTLET STRUCTURE
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages

H=1.50; Htw=.00; Qfree=17.64; H=1.75; Htw=.00; Qfree=21.88; H=2.00; Htw=.00; Qfree=26.30; H=2.25; Htw=.00; Qfree=30.88; H=2.50; Htw=.00; Qfree=35.58; H=2.75; Htw=.00; Qfree=40.36; H=3.00; Htw=.00; Qfree=45.21; H=3.25; Htw=.00; Qfree=50.09; H=3.50; Htw=.00; Qfree=55.00; H=3.75; Htw=.00; Qfree=59.91; H=4.00; Htw=.00; Qfree=64.80; H=4.25; Htw=.00; Qfree=69.65; H=4.50; Htw=.00; Qfree=74.46; H=4.75; Htw=.00; Qfree=79.20; H=5.00; Htw=.00; Qfree=83.85; H=5.25; Htw=.00; Qfree=88.42; H=5.50; Htw=.00; Qfree=92.87; H=5.75; Htw=.00; Qfree=97.21; H=6.00; Htw=.00; Qfree=101.41;

Subsection: Individual Outlet Curves
 Label: POND 1 OUTLET STRUCTURE
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 2 (Irregular Weir)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
183.00	0.00	(N/A)	0.00
183.25	0.00	(N/A)	0.00
183.50	0.00	(N/A)	0.00
183.75	0.00	(N/A)	0.00
184.00	0.00	(N/A)	0.00
184.25	0.00	(N/A)	0.00
184.50	0.00	(N/A)	0.00
184.75	0.00	(N/A)	0.00
185.00	0.00	(N/A)	0.00
185.25	0.00	(N/A)	0.00
185.50	0.00	(N/A)	0.00
185.75	0.00	(N/A)	0.00
186.00	0.00	(N/A)	0.00
186.25	0.00	(N/A)	0.00
186.50	0.00	(N/A)	0.00
186.75	0.00	(N/A)	0.00
187.00	0.00	(N/A)	0.00
187.25	0.00	(N/A)	0.00
187.50	0.00	(N/A)	0.00
187.75	0.00	(N/A)	0.00
188.00	0.00	(N/A)	0.00
188.25	2.38	(N/A)	0.00
188.50	7.11	(N/A)	0.00
188.75	13.76	(N/A)	0.00
189.00	22.24	(N/A)	0.00

Computation Messages

E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00
 E < Y min=188.00

Subsection: Individual Outlet Curves
Label: POND 1 OUTLET STRUCTURE
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Weir - 2 (Irregular Weir)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages

E < Y min=188.00
E < Y min=188.00
E < Y min=188.00
E < Y min=188.00
E < Y min=188.00
E < Y min=188.00
E < Y min=188.00
E < Y min=188.00
E < Y min=188.00
E = Y min=188.00
Max.H=.25;
Max.Htw=free out;; W(ft)
=7.00
Max.H=.50;
Max.Htw=free out;; W(ft)
=8.00
Max.H=.75;
Max.Htw=free out;; W(ft)
=9.00
Max.H=1.00;
Max.Htw=free out;; W(ft)
=10.00

Subsection: Composite Rating Curve
Label: POND 1 OUTLET STRUCTURE
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

Composite Outflow Summary

Contributing Structures
Weir - 1
Weir - 1
Weir - 1 + Weir - 2
Weir - 1 + Weir - 2
Weir - 1 + Weir - 2
Weir - 1 + Weir - 2
Weir - 1 + Weir - 2

Subsection: Individual Outlet Curves
 Label: POND 2 OUTLET WITH CULVERT
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
194.00	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
194.50	1.06	194.50	194.35	194.35	0.00	0.00	(N/A)	0.00
195.00	3.05	195.00	194.61	194.61	0.00	0.00	(N/A)	0.00
195.50	5.42	195.50	194.82	194.82	0.00	0.00	(N/A)	0.00
196.00	7.89	196.00	195.00	195.00	0.00	0.00	(N/A)	0.00
196.50	10.25	196.50	195.16	195.16	0.00	0.00	(N/A)	0.00
197.00	12.37	197.00	195.28	195.28	0.00	0.00	(N/A)	0.00
197.50	14.09	197.50	195.38	195.38	0.00	0.00	(N/A)	0.00
198.00	15.29	198.00	195.44	195.44	0.00	0.00	(N/A)	0.00
198.50	15.86	198.50	195.47	195.47	0.00	0.00	(N/A)	0.00
199.00	15.69	199.00	195.47	195.47	0.00	0.00	(N/A)	0.00
199.50	14.67	199.50	195.41	195.41	0.00	0.00	(N/A)	0.00
200.00	12.70	200.00	195.30	195.30	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.

H=.50; Htw=.35;
 Qfree=1.48;
 H=1.00; Htw=.61;
 Qfree=3.90;
 H=1.50; Htw=.82;
 Qfree=6.61;
 H=2.00; Htw=1.00;
 Qfree=9.33;
 H=2.50; Htw=1.16;
 Qfree=11.86;
 H=3.00; Htw=1.28;
 Qfree=14.03;
 H=3.50; Htw=1.38;
 Qfree=15.71;
 H=4.00; Htw=1.44;
 Qfree=16.80;
 H=4.50; Htw=1.47;
 Qfree=17.18;
 H=5.00; Htw=1.47;
 Qfree=16.77;
 H=5.50; Htw=1.41;
 Qfree=15.48;

Subsection: Individual Outlet Curves
Label: POND 2 OUTLET WITH CULVERT
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
Downstream ID = Culvert - 1 (Culvert-Circular)

Message
H=6.00; Htw=1.30; Qfree=13.23;

Subsection: Individual Outlet Curves
 Label: POND 2 OUTLET WITH CULVERT
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 24.97 ft³/s
 Upstream ID = Weir - 1 (Rectangular Weir)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
194.00	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
194.50	1.06	194.35	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
195.00	3.05	194.61	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
195.50	5.42	194.82	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
196.00	7.89	195.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
196.50	10.26	195.16	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
197.00	12.37	195.28	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00
197.50	14.08	195.38	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00
198.00	15.28	195.44	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00
198.50	15.85	195.47	Free Outfall	Free Outfall	0.00	0.02	(N/A)	0.00
199.00	15.68	195.47	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00
199.50	14.67	195.41	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
200.00	12.70	195.30	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .085ft Dcr= .249ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .150ft Dcr= .427ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .206ft Dcr= .573ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .255ft Dcr= .696ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .299ft Dcr= .798ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .335ft Dcr= .880ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .364ft Dcr= .942ft
 CRIT.DEPTH Hev= .00ft

Subsection: Individual Outlet Curves
Label: POND 2 OUTLET WITH CULVERT
Scenario: Post-Development 100 YEAR

Return Event: 100 years
Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 24.97 ft³/s
Upstream ID = Weir - 1 (Rectangular Weir)
Downstream ID = Tailwater (Pond Outfall)

Message
CRIT.DEPTH CONTROL Vh= .384ft Dcr= .983ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .394ft Dcr= 1.002ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .391ft Dcr= .996ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .374ft Dcr= .962ft CRIT.DEPTH Hev= .00ft
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE

Subsection: Composite Rating Curve
 Label: POND 2 OUTLET WITH CULVERT
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
194.00	0.00	(N/A)	0.00
194.50	1.06	(N/A)	0.00
195.00	3.05	(N/A)	0.00
195.50	5.42	(N/A)	0.00
196.00	7.89	(N/A)	0.00
196.50	10.25	(N/A)	0.00
197.00	12.37	(N/A)	0.00
197.50	14.08	(N/A)	0.00
198.00	15.28	(N/A)	0.00
198.50	15.85	(N/A)	0.00
199.00	15.68	(N/A)	0.00
199.50	14.67	(N/A)	0.00
200.00	12.70	(N/A)	0.00

Contributing Structures

(no Q: Weir - 1,Culvert - 1)
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1
 Weir - 1,Culvert - 1

Subsection: Individual Outlet Curves
 Label: POND 4 OUTLET STRUCTURE
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 2 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
192.50	0.00	(N/A)	0.00
193.00	6.26	(N/A)	0.00
193.50	17.40	(N/A)	0.00
194.00	31.41	(N/A)	0.00
194.50	47.52	(N/A)	0.00

Computation Messages
H=.00; Htw=.00; Qfree=.00;
H=.50; Htw=.00; Qfree=6.26;
H=1.00; Htw=.00; Qfree=17.40;
H=1.50; Htw=.00; Qfree=31.41;
H=2.00; Htw=.00; Qfree=47.52;

Subsection: Composite Rating Curve
 Label: POND 4 OUTLET STRUCTURE
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
192.50	0.00	(N/A)	0.00
193.00	6.26	(N/A)	0.00
193.50	17.40	(N/A)	0.00
194.00	31.41	(N/A)	0.00
194.50	47.52	(N/A)	0.00

Contributing Structures
Weir - 2
Weir - 2
Weir - 2
Weir - 2
Weir - 2

Subsection: Diverted Hydrograph
 Label: Outlet-1
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	81.46 ft ³ /s
Time to Peak	12.250 hours
Hydrograph Volume	13.423 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
5.250	0.00	0.00	0.00	0.01	0.01
5.500	0.01	0.02	0.02	0.03	0.03
5.750	0.04	0.05	0.05	0.06	0.07
6.000	0.08	0.09	0.10	0.11	0.12
6.250	0.13	0.14	0.15	0.16	0.18
6.500	0.19	0.20	0.22	0.23	0.25
6.750	0.27	0.29	0.30	0.32	0.34
7.000	0.36	0.38	0.40	0.42	0.45
7.250	0.47	0.49	0.52	0.54	0.57
7.500	0.59	0.62	0.65	0.67	0.70
7.750	0.73	0.76	0.79	0.82	0.85
8.000	0.89	0.92	0.95	0.99	1.02
8.250	1.06	1.10	1.14	1.18	1.23
8.500	1.27	1.34	1.42	1.51	1.59
8.750	1.67	1.76	1.84	1.93	2.02
9.000	2.11	2.19	2.28	2.38	2.47
9.250	2.56	2.65	2.75	2.85	2.94
9.500	3.04	3.14	3.24	3.35	3.45
9.750	3.56	3.67	3.80	3.93	4.06
10.000	4.19	4.32	4.46	4.60	4.74
10.250	4.89	5.04	5.20	5.37	5.54
10.500	5.72	5.90	6.08	6.27	6.47
10.750	6.68	6.91	7.14	7.37	7.60
11.000	7.84	8.08	8.35	8.65	8.99
11.250	9.38	9.80	10.29	10.82	11.39
11.500	11.99	12.73	13.78	15.31	17.43
11.750	20.22	23.63	27.66	32.25	38.60
12.000	48.08	59.03	69.27	76.92	80.59
12.250	81.46	81.09	79.88	77.94	75.34
12.500	72.06	68.32	64.32	60.26	56.37
12.750	52.72	49.32	46.14	43.17	40.41
13.000	37.83	35.44	33.24	31.23	29.41
13.250	27.76	26.27	24.93	23.71	22.60
13.500	21.58	20.66	19.82	19.04	18.31
13.750	17.64	17.03	16.46	15.92	15.41
14.000	14.93	14.48	14.05	13.65	13.30
14.250	12.97	12.66	12.37	12.10	11.84
14.500	11.59	11.36	11.14	10.93	10.73
14.750	10.54	10.35	10.17	10.00	9.84

Subsection: Diverted Hydrograph
 Label: Outlet-1
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
15.000	9.68	9.53	9.39	9.24	9.10
15.250	8.96	8.82	8.69	8.55	8.42
15.500	8.29	8.15	8.02	7.89	7.77
15.750	7.64	7.51	7.38	7.26	7.13
16.000	7.00	6.88	6.76	6.64	6.53
16.250	6.44	6.35	6.26	6.17	6.09
16.500	6.01	5.93	5.86	5.78	5.71
16.750	5.64	5.57	5.50	5.44	5.37
17.000	5.31	5.24	5.18	5.12	5.06
17.250	5.00	4.94	4.88	4.82	4.76
17.500	4.70	4.65	4.59	4.53	4.48
17.750	4.42	4.36	4.31	4.25	4.20
18.000	4.14	4.09	4.03	3.98	3.93
18.250	3.89	3.85	3.81	3.77	3.73
18.500	3.69	3.66	3.63	3.60	3.58
18.750	3.55	3.53	3.51	3.48	3.46
19.000	3.44	3.42	3.40	3.38	3.36
19.250	3.34	3.32	3.30	3.28	3.26
19.500	3.24	3.23	3.21	3.19	3.17
19.750	3.15	3.14	3.12	3.10	3.08
20.000	3.07	3.05	3.03	3.01	3.00
20.250	2.98	2.97	2.95	2.94	2.92
20.500	2.91	2.89	2.88	2.86	2.85
20.750	2.83	2.82	2.81	2.79	2.78
21.000	2.77	2.75	2.74	2.73	2.71
21.250	2.70	2.69	2.68	2.66	2.65
21.500	2.64	2.62	2.61	2.60	2.59
21.750	2.57	2.56	2.55	2.54	2.53
22.000	2.51	2.50	2.49	2.48	2.46
22.250	2.45	2.44	2.43	2.41	2.40
22.500	2.39	2.38	2.37	2.35	2.34
22.750	2.33	2.32	2.31	2.29	2.28
23.000	2.27	2.26	2.24	2.23	2.22
23.250	2.21	2.20	2.18	2.17	2.16
23.500	2.15	2.14	2.12	2.11	2.10
23.750	2.09	2.08	2.06	2.05	2.04
24.000	2.03	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Diverted Hydrograph
 Label: Outlet-2
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	15.85 ft ³ /s
Time to Peak	15.550 hours
Hydrograph Volume	12.868 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
6.450	0.00	0.00	0.00	0.00	0.00
6.700	0.00	0.01	0.01	0.01	0.01
6.950	0.01	0.01	0.02	0.02	0.02
7.200	0.02	0.03	0.03	0.03	0.04
7.450	0.04	0.04	0.05	0.05	0.06
7.700	0.06	0.07	0.07	0.08	0.08
7.950	0.09	0.10	0.10	0.11	0.12
8.200	0.12	0.13	0.14	0.15	0.16
8.450	0.17	0.18	0.19	0.20	0.21
8.700	0.22	0.23	0.25	0.26	0.27
8.950	0.29	0.30	0.32	0.33	0.35
9.200	0.37	0.38	0.40	0.42	0.44
9.450	0.46	0.48	0.50	0.52	0.54
9.700	0.56	0.59	0.61	0.64	0.66
9.950	0.69	0.71	0.74	0.77	0.80
10.200	0.83	0.86	0.89	0.93	0.96
10.450	1.00	1.04	1.09	1.17	1.24
10.700	1.32	1.40	1.48	1.57	1.65
10.950	1.74	1.83	1.93	2.03	2.13
11.200	2.24	2.36	2.49	2.63	2.77
11.450	2.93	3.10	3.31	3.57	3.90
11.700	4.31	4.83	5.46	6.21	7.08
11.950	8.21	9.75	11.46	13.03	14.24
12.200	14.90	15.34	15.53	15.69	15.82
12.450	15.82	15.80	15.78	15.77	15.76
12.700	15.75	15.75	15.74	15.73	15.73
12.950	15.72	15.72	15.72	15.72	15.72
13.200	15.71	15.71	15.71	15.71	15.71
13.450	15.71	15.71	15.71	15.71	15.71
13.700	15.71	15.71	15.72	15.72	15.72
13.950	15.72	15.72	15.72	15.73	15.73
14.200	15.73	15.74	15.74	15.74	15.74
14.450	15.75	15.75	15.75	15.76	15.76
14.700	15.77	15.77	15.77	15.78	15.78
14.950	15.79	15.79	15.79	15.80	15.80
15.200	15.81	15.81	15.82	15.82	15.83
15.450	15.83	15.84	15.85	15.84	15.82
15.700	15.80	15.78	15.76	15.74	15.71
15.950	15.69	15.67	15.65	15.62	15.60

Subsection: Diverted Hydrograph
 Label: Outlet-2
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
16.200	15.58	15.55	15.53	15.51	15.48
16.450	15.46	15.44	15.41	15.39	15.37
16.700	15.34	15.32	15.29	15.25	15.20
16.950	15.15	15.10	15.04	14.99	14.94
17.200	14.88	14.83	14.78	14.72	14.67
17.450	14.62	14.56	14.51	14.46	14.40
17.700	14.35	14.30	14.24	14.19	14.13
17.950	14.08	14.00	13.92	13.84	13.77
18.200	13.69	13.61	13.54	13.46	13.39
18.450	13.31	13.24	13.16	13.09	13.02
18.700	12.94	12.87	12.80	12.73	12.66
18.950	12.59	12.51	12.45	12.38	12.29
19.200	12.20	12.12	12.03	11.95	11.86
19.450	11.78	11.70	11.61	11.53	11.45
19.700	11.37	11.29	11.21	11.13	11.06
19.950	10.98	10.90	10.83	10.75	10.67
20.200	10.60	10.53	10.45	10.38	10.31
20.450	10.24	10.16	10.08	10.00	9.92
20.700	9.84	9.76	9.69	9.61	9.54
20.950	9.46	9.39	9.32	9.25	9.17
21.200	9.10	9.03	8.96	8.90	8.83
21.450	8.76	8.69	8.63	8.56	8.50
21.700	8.43	8.37	8.30	8.24	8.18
21.950	8.12	8.06	8.00	7.94	7.87
22.200	7.81	7.75	7.69	7.63	7.57
22.450	7.51	7.45	7.39	7.33	7.27
22.700	7.21	7.16	7.10	7.05	6.99
22.950	6.94	6.88	6.83	6.77	6.72
23.200	6.67	6.62	6.57	6.51	6.46
23.450	6.41	6.36	6.32	6.27	6.22
23.700	6.17	6.12	6.08	6.03	5.98
23.950	5.94	5.89	(N/A)	(N/A)	(N/A)

Subsection: Diverted Hydrograph
 Label: Outlet-3
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	82.88 ft ³ /s
Time to Peak	12.250 hours
Hydrograph Volume	11.869 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
6.200	0.00	0.00	0.00	0.00	0.01
6.450	0.01	0.01	0.01	0.02	0.02
6.700	0.02	0.03	0.03	0.04	0.04
6.950	0.05	0.06	0.06	0.07	0.08
7.200	0.09	0.09	0.10	0.11	0.12
7.450	0.13	0.14	0.16	0.17	0.18
7.700	0.19	0.21	0.22	0.23	0.25
7.950	0.26	0.28	0.30	0.31	0.33
8.200	0.35	0.37	0.39	0.41	0.43
8.450	0.45	0.48	0.50	0.53	0.55
8.700	0.58	0.61	0.64	0.67	0.70
8.950	0.73	0.77	0.80	0.84	0.88
9.200	0.91	0.95	0.99	1.03	1.08
9.450	1.12	1.17	1.21	1.26	1.31
9.700	1.36	1.41	1.46	1.53	1.61
9.950	1.70	1.78	1.87	1.96	2.05
10.200	2.14	2.24	2.34	2.44	2.55
10.450	2.66	2.77	2.88	3.00	3.12
10.700	3.25	3.37	3.51	3.64	3.78
10.950	3.92	4.07	4.23	4.40	4.58
11.200	4.77	4.99	5.22	5.47	5.73
11.450	6.01	6.31	6.67	7.11	7.69
11.700	9.04	11.18	14.99	19.24	24.43
11.950	31.80	43.09	56.51	69.32	78.87
12.200	82.80	82.88	81.35	78.83	75.45
12.450	71.36	66.68	61.67	56.58	51.74
12.700	47.40	43.58	40.18	37.13	34.39
12.950	32.04	29.90	27.95	26.18	24.59
13.200	23.16	21.90	20.86	20.00	19.21
13.450	18.48	17.81	17.19	16.61	16.07
13.700	15.57	15.10	14.65	14.23	13.83
13.950	13.44	13.08	12.73	12.40	12.09
14.200	11.80	11.53	11.28	11.10	10.94
14.450	10.80	10.65	10.51	10.37	10.23
14.700	10.09	9.96	9.83	9.70	9.57
14.950	9.44	9.31	9.19	9.06	8.94
15.200	8.81	8.69	8.57	8.45	8.33
15.450	8.21	8.09	7.98	7.93	7.87
15.700	7.81	7.75	7.69	7.63	7.57

Subsection: Diverted Hydrograph
 Label: Outlet-3
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
15.950	7.50	7.43	7.36	7.29	7.22
16.200	7.15	7.09	7.02	6.95	6.88
16.450	6.82	6.75	6.69	6.62	6.56
16.700	6.49	6.43	6.37	6.30	6.24
16.950	6.18	6.12	6.05	5.99	5.93
17.200	5.87	5.81	5.75	5.69	5.63
17.450	5.57	5.52	5.46	5.40	5.34
17.700	5.29	5.23	5.17	5.11	5.06
17.950	5.00	4.95	4.89	4.83	4.78
18.200	4.73	4.68	4.63	4.58	4.53
18.450	4.48	4.44	4.39	4.35	4.31
18.700	4.26	4.22	4.18	4.14	4.11
18.950	4.07	4.03	4.00	3.96	3.93
19.200	3.89	3.86	3.83	3.80	3.77
19.450	3.74	3.71	3.68	3.66	3.63
19.700	3.60	3.58	3.55	3.52	3.50
19.950	3.47	3.45	3.42	3.40	3.38
20.200	3.35	3.33	3.31	3.28	3.26
20.450	3.24	3.22	3.20	3.18	3.16
20.700	3.14	3.12	3.10	3.08	3.06
20.950	3.04	3.02	3.00	2.98	2.97
21.200	2.95	2.93	2.91	2.90	2.88
21.450	2.86	2.85	2.83	2.81	2.80
21.700	2.78	2.77	2.75	2.74	2.72
21.950	2.70	2.69	2.67	2.66	2.64
22.200	2.63	2.62	2.60	2.59	2.57
22.450	2.56	2.54	2.53	2.52	2.50
22.700	2.49	2.47	2.46	2.45	2.43
22.950	2.42	2.41	2.39	2.38	2.37
23.200	2.35	2.34	2.33	2.31	2.30
23.450	2.29	2.28	2.26	2.25	2.24
23.700	2.23	2.21	2.20	2.19	2.17
23.950	2.16	2.15	(N/A)	(N/A)	(N/A)

Subsection: Diverted Hydrograph
 Label: Outlet-4
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	25.11 ft ³ /s
Time to Peak	12.100 hours
Hydrograph Volume	2.273 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
5.100	0.00	0.00	0.00	0.01	0.01
5.350	0.01	0.01	0.02	0.02	0.02
5.600	0.03	0.03	0.03	0.03	0.04
5.850	0.04	0.04	0.05	0.05	0.05
6.100	0.06	0.06	0.06	0.07	0.07
6.350	0.08	0.08	0.08	0.09	0.09
6.600	0.10	0.10	0.11	0.11	0.12
6.850	0.12	0.13	0.14	0.14	0.15
7.100	0.15	0.16	0.17	0.17	0.18
7.350	0.18	0.19	0.20	0.20	0.21
7.600	0.22	0.23	0.23	0.24	0.25
7.850	0.25	0.26	0.27	0.28	0.29
8.100	0.29	0.30	0.32	0.33	0.34
8.350	0.35	0.36	0.38	0.39	0.40
8.600	0.42	0.43	0.45	0.46	0.48
8.850	0.49	0.51	0.53	0.54	0.56
9.100	0.58	0.59	0.61	0.63	0.65
9.350	0.67	0.68	0.70	0.72	0.74
9.600	0.76	0.78	0.80	0.82	0.84
9.850	0.86	0.88	0.90	0.92	0.95
10.100	0.97	1.00	1.03	1.06	1.09
10.350	1.13	1.16	1.20	1.24	1.28
10.600	1.32	1.35	1.39	1.44	1.48
10.850	1.52	1.56	1.60	1.64	1.69
11.100	1.76	1.83	1.93	2.04	2.16
11.350	2.29	2.42	2.56	2.70	2.92
11.600	3.29	3.86	4.67	5.68	7.08
11.850	8.77	10.34	12.95	17.43	22.31
12.100	25.11	25.03	21.63	17.59	14.96
12.350	12.92	11.18	9.59	8.06	6.68
12.600	5.78	5.12	4.61	4.23	3.94
12.850	3.69	3.48	3.29	3.11	2.95
13.100	2.81	2.69	2.60	2.53	2.47
13.350	2.42	2.37	2.32	2.28	2.24
13.600	2.19	2.15	2.11	2.07	2.03
13.850	1.99	1.95	1.91	1.86	1.82
14.100	1.79	1.75	1.73	1.70	1.68
14.350	1.66	1.63	1.61	1.59	1.57
14.600	1.55	1.53	1.51	1.49	1.47

Subsection: Diverted Hydrograph
 Label: Outlet-4
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
14.850	1.45	1.43	1.41	1.39	1.38
15.100	1.35	1.33	1.31	1.30	1.27
15.350	1.25	1.23	1.21	1.19	1.17
15.600	1.15	1.13	1.11	1.09	1.07
15.850	1.05	1.03	1.01	0.99	0.97
16.100	0.96	0.94	0.93	0.91	0.90
16.350	0.89	0.88	0.88	0.87	0.86
16.600	0.85	0.84	0.83	0.82	0.81
16.850	0.80	0.80	0.79	0.78	0.77
17.100	0.76	0.75	0.74	0.73	0.73
17.350	0.72	0.71	0.70	0.69	0.68
17.600	0.67	0.66	0.65	0.65	0.64
17.850	0.63	0.62	0.61	0.60	0.59
18.100	0.58	0.58	0.57	0.57	0.57
18.350	0.56	0.56	0.56	0.55	0.55
18.600	0.55	0.55	0.54	0.54	0.54
18.850	0.54	0.53	0.53	0.53	0.52
19.100	0.52	0.52	0.52	0.51	0.51
19.350	0.51	0.51	0.50	0.50	0.50
19.600	0.50	0.49	0.49	0.49	0.49
19.850	0.48	0.48	0.48	0.47	0.47
20.100	0.47	0.47	0.46	0.46	0.46
20.350	0.46	0.46	0.45	0.45	0.45
20.600	0.45	0.45	0.44	0.44	0.44
20.850	0.44	0.44	0.43	0.43	0.43
21.100	0.43	0.43	0.42	0.42	0.42
21.350	0.42	0.42	0.41	0.41	0.41
21.600	0.41	0.41	0.40	0.40	0.40
21.850	0.40	0.40	0.39	0.39	0.39
22.100	0.39	0.39	0.38	0.38	0.38
22.350	0.38	0.38	0.37	0.37	0.37
22.600	0.37	0.37	0.37	0.36	0.36
22.850	0.36	0.36	0.35	0.35	0.35
23.100	0.35	0.35	0.34	0.34	0.34
23.350	0.34	0.34	0.34	0.33	0.33
23.600	0.33	0.33	0.32	0.32	0.32
23.850	0.32	0.32	0.31	0.31	(N/A)

Subsection: Elevation-Volume-Flow Table (Pond)
 Label: PO-1
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	183.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
183.00	0.00	0.000	0.522	0.00	0.00	0.00
183.25	1.29	0.132	0.537	0.00	1.29	65.38
183.50	3.61	0.268	0.551	0.00	3.61	133.52
183.75	6.53	0.408	0.566	0.00	6.53	204.03
184.00	9.90	0.551	0.581	0.00	9.90	276.79
184.25	13.63	0.698	0.596	0.00	13.63	351.69
184.50	17.64	0.849	0.610	0.00	17.64	428.65
184.75	21.88	1.004	0.625	0.00	21.88	507.65
185.00	26.30	1.162	0.641	0.00	26.30	588.66
185.25	30.88	1.324	0.655	0.00	30.88	671.65
185.50	35.58	1.490	0.671	0.00	35.58	756.57
185.75	40.36	1.659	0.686	0.00	40.36	843.42
186.00	45.21	1.833	0.701	0.00	45.21	932.20
186.25	50.09	2.010	0.717	0.00	50.09	1,022.88
186.50	55.00	2.191	0.732	0.00	55.00	1,115.44
186.75	59.91	2.376	0.748	0.00	59.91	1,209.87
187.00	64.80	2.565	0.763	0.00	64.80	1,306.19
187.25	69.65	2.758	0.779	0.00	69.65	1,404.37
187.50	74.46	2.954	0.795	0.00	74.46	1,504.40
187.75	79.20	3.155	0.811	0.00	79.20	1,606.27
188.00	83.85	3.360	0.827	0.00	83.85	1,710.00
188.25	90.80	3.569	0.843	0.00	90.80	1,817.96
188.50	99.98	3.781	0.859	0.00	99.98	1,930.10
188.75	110.96	3.998	0.875	0.00	110.96	2,046.01
189.00	123.65	4.219	0.892	0.00	123.65	2,165.60

Subsection: Level Pool Pond Routing Summary
 Label: PO-1 (IN)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration

Infiltration Method (Computed)	No Infiltration
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Initial Conditions

Elevation (Water Surface, Initial)	183.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Inflow/Outflow Hydrograph Summary

Flow (Peak In)	163.55 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	81.46 ft ³ /s	Time to Peak (Flow, Outlet)	12.250 hours

Elevation (Water Surface, Peak)	187.87 ft
Volume (Peak)	3.254 ac-ft

Mass Balance (ac-ft)

Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	13.599 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	13.423 ac-ft
Volume (Retained)	0.167 ac-ft
Volume (Unrouted)	-0.008 ac-ft
Error (Mass Balance)	0.1 %

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-1 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	81.46 ft ³ /s
Time to Peak	12.250 hours
Hydrograph Volume	13.423 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
5.250	0.00	0.00	0.00	0.01	0.01
5.500	0.01	0.02	0.02	0.03	0.03
5.750	0.04	0.05	0.05	0.06	0.07
6.000	0.08	0.09	0.10	0.11	0.12
6.250	0.13	0.14	0.15	0.16	0.18
6.500	0.19	0.20	0.22	0.23	0.25
6.750	0.27	0.29	0.30	0.32	0.34
7.000	0.36	0.38	0.40	0.42	0.45
7.250	0.47	0.49	0.52	0.54	0.57
7.500	0.59	0.62	0.65	0.67	0.70
7.750	0.73	0.76	0.79	0.82	0.85
8.000	0.89	0.92	0.95	0.99	1.02
8.250	1.06	1.10	1.14	1.18	1.23
8.500	1.27	1.34	1.42	1.51	1.59
8.750	1.67	1.76	1.84	1.93	2.02
9.000	2.11	2.19	2.28	2.38	2.47
9.250	2.56	2.65	2.75	2.85	2.94
9.500	3.04	3.14	3.24	3.35	3.45
9.750	3.56	3.67	3.80	3.93	4.06
10.000	4.19	4.32	4.46	4.60	4.74
10.250	4.89	5.04	5.20	5.37	5.54
10.500	5.72	5.90	6.08	6.27	6.47
10.750	6.68	6.91	7.14	7.37	7.60
11.000	7.84	8.08	8.35	8.65	8.99
11.250	9.38	9.80	10.29	10.82	11.39
11.500	11.99	12.73	13.78	15.31	17.43
11.750	20.22	23.63	27.66	32.25	38.60
12.000	48.08	59.03	69.27	76.92	80.59
12.250	81.46	81.09	79.88	77.94	75.34
12.500	72.06	68.32	64.32	60.26	56.37
12.750	52.72	49.32	46.14	43.17	40.41
13.000	37.83	35.44	33.24	31.23	29.41
13.250	27.76	26.27	24.93	23.71	22.60
13.500	21.58	20.66	19.82	19.04	18.31
13.750	17.64	17.03	16.46	15.92	15.41
14.000	14.93	14.48	14.05	13.65	13.30
14.250	12.97	12.66	12.37	12.10	11.84
14.500	11.59	11.36	11.14	10.93	10.73
14.750	10.54	10.35	10.17	10.00	9.84

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-1 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
15.000	9.68	9.53	9.39	9.24	9.10
15.250	8.96	8.82	8.69	8.55	8.42
15.500	8.29	8.15	8.02	7.89	7.77
15.750	7.64	7.51	7.38	7.26	7.13
16.000	7.00	6.88	6.76	6.64	6.53
16.250	6.44	6.35	6.26	6.17	6.09
16.500	6.01	5.93	5.86	5.78	5.71
16.750	5.64	5.57	5.50	5.44	5.37
17.000	5.31	5.24	5.18	5.12	5.06
17.250	5.00	4.94	4.88	4.82	4.76
17.500	4.70	4.65	4.59	4.53	4.48
17.750	4.42	4.36	4.31	4.25	4.20
18.000	4.14	4.09	4.03	3.98	3.93
18.250	3.89	3.85	3.81	3.77	3.73
18.500	3.69	3.66	3.63	3.60	3.58
18.750	3.55	3.53	3.51	3.48	3.46
19.000	3.44	3.42	3.40	3.38	3.36
19.250	3.34	3.32	3.30	3.28	3.26
19.500	3.24	3.23	3.21	3.19	3.17
19.750	3.15	3.14	3.12	3.10	3.08
20.000	3.07	3.05	3.03	3.01	3.00
20.250	2.98	2.97	2.95	2.94	2.92
20.500	2.91	2.89	2.88	2.86	2.85
20.750	2.83	2.82	2.81	2.79	2.78
21.000	2.77	2.75	2.74	2.73	2.71
21.250	2.70	2.69	2.68	2.66	2.65
21.500	2.64	2.62	2.61	2.60	2.59
21.750	2.57	2.56	2.55	2.54	2.53
22.000	2.51	2.50	2.49	2.48	2.46
22.250	2.45	2.44	2.43	2.41	2.40
22.500	2.39	2.38	2.37	2.35	2.34
22.750	2.33	2.32	2.31	2.29	2.28
23.000	2.27	2.26	2.24	2.23	2.22
23.250	2.21	2.20	2.18	2.17	2.16
23.500	2.15	2.14	2.12	2.11	2.10
23.750	2.09	2.08	2.06	2.05	2.04
24.000	2.03	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation-Volume-Flow Table (Pond)
 Label: PO-2
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration

Infiltration Method (Computed) No Infiltration

Initial Conditions

Elevation (Water Surface, Initial) 194.00 ft
 Volume (Initial) 0.000 ac-ft
 Flow (Initial Outlet) 0.00 ft³/s
 Flow (Initial Infiltration) 0.00 ft³/s
 Flow (Initial, Total) 0.00 ft³/s
 Time Increment 0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
194.00	0.00	0.000	1.517	0.00	0.00	0.00
194.50	1.06	0.768	1.554	0.00	1.06	372.62
195.00	3.05	1.554	1.591	0.00	3.05	755.11
195.50	5.42	2.359	1.629	0.00	5.42	1,147.03
196.00	7.89	3.183	1.667	0.00	7.89	1,548.22
196.50	10.25	4.025	1.705	0.00	10.25	1,958.58
197.00	12.37	4.888	1.744	0.00	12.37	2,378.05
197.50	14.08	5.770	1.783	0.00	14.08	2,806.56
198.00	15.28	6.671	1.823	0.00	15.28	3,244.11
198.50	15.85	7.593	1.863	0.00	15.85	3,690.65
199.00	15.68	8.534	1.903	0.00	15.68	4,146.16
199.50	14.67	9.496	1.944	0.00	14.67	4,610.62
200.00	12.70	10.478	1.985	0.00	12.70	5,083.96

Subsection: Level Pool Pond Routing Summary
 Label: PO-2 (IN)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration

Infiltration Method (Computed)	No Infiltration
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Initial Conditions

Elevation (Water Surface, Initial)	194.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Inflow/Outflow Hydrograph Summary

Flow (Peak In)	188.43 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	15.85 ft ³ /s	Time to Peak (Flow, Outlet)	15.550 hours

Elevation (Water Surface, Peak)	198.91 ft
Volume (Peak)	8.367 ac-ft

Mass Balance (ac-ft)

Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	15.385 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	12.868 ac-ft
Volume (Retained)	2.491 ac-ft
Volume (Unrouted)	-0.025 ac-ft
Error (Mass Balance)	0.2 %

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-2 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	15.85 ft ³ /s
Time to Peak	15.550 hours
Hydrograph Volume	12.868 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
6.450	0.00	0.00	0.00	0.00	0.00
6.700	0.00	0.01	0.01	0.01	0.01
6.950	0.01	0.01	0.02	0.02	0.02
7.200	0.02	0.03	0.03	0.03	0.04
7.450	0.04	0.04	0.05	0.05	0.06
7.700	0.06	0.07	0.07	0.08	0.08
7.950	0.09	0.10	0.10	0.11	0.12
8.200	0.12	0.13	0.14	0.15	0.16
8.450	0.17	0.18	0.19	0.20	0.21
8.700	0.22	0.23	0.25	0.26	0.27
8.950	0.29	0.30	0.32	0.33	0.35
9.200	0.37	0.38	0.40	0.42	0.44
9.450	0.46	0.48	0.50	0.52	0.54
9.700	0.56	0.59	0.61	0.64	0.66
9.950	0.69	0.71	0.74	0.77	0.80
10.200	0.83	0.86	0.89	0.93	0.96
10.450	1.00	1.04	1.09	1.17	1.24
10.700	1.32	1.40	1.48	1.57	1.65
10.950	1.74	1.83	1.93	2.03	2.13
11.200	2.24	2.36	2.49	2.63	2.77
11.450	2.93	3.10	3.31	3.57	3.90
11.700	4.31	4.83	5.46	6.21	7.08
11.950	8.21	9.75	11.46	13.03	14.24
12.200	14.90	15.34	15.53	15.69	15.82
12.450	15.82	15.80	15.78	15.77	15.76
12.700	15.75	15.75	15.74	15.73	15.73
12.950	15.72	15.72	15.72	15.72	15.72
13.200	15.71	15.71	15.71	15.71	15.71
13.450	15.71	15.71	15.71	15.71	15.71
13.700	15.71	15.71	15.72	15.72	15.72
13.950	15.72	15.72	15.72	15.73	15.73
14.200	15.73	15.74	15.74	15.74	15.74
14.450	15.75	15.75	15.75	15.76	15.76
14.700	15.77	15.77	15.77	15.78	15.78
14.950	15.79	15.79	15.79	15.80	15.80
15.200	15.81	15.81	15.82	15.82	15.83
15.450	15.83	15.84	15.85	15.84	15.82
15.700	15.80	15.78	15.76	15.74	15.71
15.950	15.69	15.67	15.65	15.62	15.60

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-2 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
16.200	15.58	15.55	15.53	15.51	15.48
16.450	15.46	15.44	15.41	15.39	15.37
16.700	15.34	15.32	15.29	15.25	15.20
16.950	15.15	15.10	15.04	14.99	14.94
17.200	14.88	14.83	14.78	14.72	14.67
17.450	14.62	14.56	14.51	14.46	14.40
17.700	14.35	14.30	14.24	14.19	14.13
17.950	14.08	14.00	13.92	13.84	13.77
18.200	13.69	13.61	13.54	13.46	13.39
18.450	13.31	13.24	13.16	13.09	13.02
18.700	12.94	12.87	12.80	12.73	12.66
18.950	12.59	12.51	12.45	12.38	12.29
19.200	12.20	12.12	12.03	11.95	11.86
19.450	11.78	11.70	11.61	11.53	11.45
19.700	11.37	11.29	11.21	11.13	11.06
19.950	10.98	10.90	10.83	10.75	10.67
20.200	10.60	10.53	10.45	10.38	10.31
20.450	10.24	10.16	10.08	10.00	9.92
20.700	9.84	9.76	9.69	9.61	9.54
20.950	9.46	9.39	9.32	9.25	9.17
21.200	9.10	9.03	8.96	8.90	8.83
21.450	8.76	8.69	8.63	8.56	8.50
21.700	8.43	8.37	8.30	8.24	8.18
21.950	8.12	8.06	8.00	7.94	7.87
22.200	7.81	7.75	7.69	7.63	7.57
22.450	7.51	7.45	7.39	7.33	7.27
22.700	7.21	7.16	7.10	7.05	6.99
22.950	6.94	6.88	6.83	6.77	6.72
23.200	6.67	6.62	6.57	6.51	6.46
23.450	6.41	6.36	6.32	6.27	6.22
23.700	6.17	6.12	6.08	6.03	5.98
23.950	5.94	5.89	(N/A)	(N/A)	(N/A)

Subsection: Elevation-Volume-Flow Table (Pond)
 Label: PO-3
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration

Infiltration Method (Computed) No Infiltration

Initial Conditions

Elevation (Water Surface, Initial) 188.00 ft
 Volume (Initial) 0.000 ac-ft
 Flow (Initial Outlet) 0.00 ft³/s
 Flow (Initial Infiltration) 0.00 ft³/s
 Flow (Initial, Total) 0.00 ft³/s
 Time Increment 0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
188.00	0.00	0.000	0.583	0.00	0.00	0.00
188.50	1.48	0.299	0.611	0.00	1.48	145.98
189.00	3.90	0.611	0.639	0.00	3.90	299.56
189.50	6.61	0.937	0.667	0.00	6.61	460.21
189.75	7.99	1.106	0.681	0.00	7.99	543.11
190.00	11.19	1.278	0.695	0.00	11.19	629.56
190.50	21.31	1.632	0.724	0.00	21.31	811.40
191.00	33.94	2.002	0.753	0.00	33.94	1,002.78
191.50	48.01	2.386	0.783	0.00	48.01	1,202.69
192.00	62.87	2.785	0.813	0.00	62.87	1,410.58
192.50	78.06	3.198	0.843	0.00	78.06	1,626.06
193.00	93.23	3.627	0.873	0.00	93.23	1,848.86
193.50	119.16	4.072	0.904	0.00	119.16	2,089.83
194.00	155.80	4.531	0.935	0.00	155.80	2,349.03

Subsection: Level Pool Pond Routing Summary
 Label: PO-3 (IN)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration

Infiltration Method (Computed)	No Infiltration
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Initial Conditions

Elevation (Water Surface, Initial)	188.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Inflow/Outflow Hydrograph Summary

Flow (Peak In)	149.70 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	82.88 ft ³ /s	Time to Peak (Flow, Outlet)	12.250 hours

Elevation (Water Surface, Peak)	192.66 ft
Volume (Peak)	3.333 ac-ft

Mass Balance (ac-ft)

Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	12.253 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	11.869 ac-ft
Volume (Retained)	0.374 ac-ft
Volume (Unrouted)	-0.010 ac-ft
Error (Mass Balance)	0.1 %

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-3 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	82.88 ft ³ /s
Time to Peak	12.250 hours
Hydrograph Volume	11.869 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
6.200	0.00	0.00	0.00	0.00	0.01
6.450	0.01	0.01	0.01	0.02	0.02
6.700	0.02	0.03	0.03	0.04	0.04
6.950	0.05	0.06	0.06	0.07	0.08
7.200	0.09	0.09	0.10	0.11	0.12
7.450	0.13	0.14	0.16	0.17	0.18
7.700	0.19	0.21	0.22	0.23	0.25
7.950	0.26	0.28	0.30	0.31	0.33
8.200	0.35	0.37	0.39	0.41	0.43
8.450	0.45	0.48	0.50	0.53	0.55
8.700	0.58	0.61	0.64	0.67	0.70
8.950	0.73	0.77	0.80	0.84	0.88
9.200	0.91	0.95	0.99	1.03	1.08
9.450	1.12	1.17	1.21	1.26	1.31
9.700	1.36	1.41	1.46	1.53	1.61
9.950	1.70	1.78	1.87	1.96	2.05
10.200	2.14	2.24	2.34	2.44	2.55
10.450	2.66	2.77	2.88	3.00	3.12
10.700	3.25	3.37	3.51	3.64	3.78
10.950	3.92	4.07	4.23	4.40	4.58
11.200	4.77	4.99	5.22	5.47	5.73
11.450	6.01	6.31	6.67	7.11	7.69
11.700	9.04	11.18	14.99	19.24	24.43
11.950	31.80	43.09	56.51	69.32	78.87
12.200	82.80	82.88	81.35	78.83	75.45
12.450	71.36	66.68	61.67	56.58	51.74
12.700	47.40	43.58	40.18	37.13	34.39
12.950	32.04	29.90	27.95	26.18	24.59
13.200	23.16	21.90	20.86	20.00	19.21
13.450	18.48	17.81	17.19	16.61	16.07
13.700	15.57	15.10	14.65	14.23	13.83
13.950	13.44	13.08	12.73	12.40	12.09
14.200	11.80	11.53	11.28	11.10	10.94
14.450	10.80	10.65	10.51	10.37	10.23
14.700	10.09	9.96	9.83	9.70	9.57
14.950	9.44	9.31	9.19	9.06	8.94
15.200	8.81	8.69	8.57	8.45	8.33
15.450	8.21	8.09	7.98	7.93	7.87
15.700	7.81	7.75	7.69	7.63	7.57

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-3 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
15.950	7.50	7.43	7.36	7.29	7.22
16.200	7.15	7.09	7.02	6.95	6.88
16.450	6.82	6.75	6.69	6.62	6.56
16.700	6.49	6.43	6.37	6.30	6.24
16.950	6.18	6.12	6.05	5.99	5.93
17.200	5.87	5.81	5.75	5.69	5.63
17.450	5.57	5.52	5.46	5.40	5.34
17.700	5.29	5.23	5.17	5.11	5.06
17.950	5.00	4.95	4.89	4.83	4.78
18.200	4.73	4.68	4.63	4.58	4.53
18.450	4.48	4.44	4.39	4.35	4.31
18.700	4.26	4.22	4.18	4.14	4.11
18.950	4.07	4.03	4.00	3.96	3.93
19.200	3.89	3.86	3.83	3.80	3.77
19.450	3.74	3.71	3.68	3.66	3.63
19.700	3.60	3.58	3.55	3.52	3.50
19.950	3.47	3.45	3.42	3.40	3.38
20.200	3.35	3.33	3.31	3.28	3.26
20.450	3.24	3.22	3.20	3.18	3.16
20.700	3.14	3.12	3.10	3.08	3.06
20.950	3.04	3.02	3.00	2.98	2.97
21.200	2.95	2.93	2.91	2.90	2.88
21.450	2.86	2.85	2.83	2.81	2.80
21.700	2.78	2.77	2.75	2.74	2.72
21.950	2.70	2.69	2.67	2.66	2.64
22.200	2.63	2.62	2.60	2.59	2.57
22.450	2.56	2.54	2.53	2.52	2.50
22.700	2.49	2.47	2.46	2.45	2.43
22.950	2.42	2.41	2.39	2.38	2.37
23.200	2.35	2.34	2.33	2.31	2.30
23.450	2.29	2.28	2.26	2.25	2.24
23.700	2.23	2.21	2.20	2.19	2.17
23.950	2.16	2.15	(N/A)	(N/A)	(N/A)

Subsection: Elevation-Volume-Flow Table (Pond)
 Label: PO-4
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration

Infiltration Method (Computed) No Infiltration

Initial Conditions

Elevation (Water Surface, Initial) 192.50 ft
 Volume (Initial) 0.000 ac-ft
 Flow (Initial Outlet) 0.00 ft³/s
 Flow (Initial Infiltration) 0.00 ft³/s
 Flow (Initial, Total) 0.00 ft³/s
 Time Increment 0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ac-ft)	Area (acres)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
192.50	0.00	0.000	0.105	0.00	0.00	0.00
193.00	6.26	0.055	0.115	0.00	6.26	32.85
193.50	17.40	0.115	0.125	0.00	17.40	73.03
194.00	31.41	0.180	0.136	0.00	31.41	118.64
194.50	47.52	0.251	0.147	0.00	47.52	169.00

Subsection: Level Pool Pond Routing Summary
 Label: PO-4 (IN)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Infiltration

Infiltration Method (Computed)	No Infiltration
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Initial Conditions

Elevation (Water Surface, Initial)	192.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Inflow/Outflow Hydrograph Summary

Flow (Peak In)	27.30 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	25.11 ft ³ /s	Time to Peak (Flow, Outlet)	12.100 hours

Elevation (Water Surface, Peak)	193.77 ft
Volume (Peak)	0.150 ac-ft

Mass Balance (ac-ft)

Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	2.276 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	2.273 ac-ft
Volume (Retained)	0.002 ac-ft
Volume (Unrouted)	-0.001 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-4 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

Peak Discharge	25.11 ft ³ /s
Time to Peak	12.100 hours
Hydrograph Volume	2.273 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
5.100	0.00	0.00	0.00	0.01	0.01
5.350	0.01	0.01	0.02	0.02	0.02
5.600	0.03	0.03	0.03	0.03	0.04
5.850	0.04	0.04	0.05	0.05	0.05
6.100	0.06	0.06	0.06	0.07	0.07
6.350	0.08	0.08	0.08	0.09	0.09
6.600	0.10	0.10	0.11	0.11	0.12
6.850	0.12	0.13	0.14	0.14	0.15
7.100	0.15	0.16	0.17	0.17	0.18
7.350	0.18	0.19	0.20	0.20	0.21
7.600	0.22	0.23	0.23	0.24	0.25
7.850	0.25	0.26	0.27	0.28	0.29
8.100	0.29	0.30	0.32	0.33	0.34
8.350	0.35	0.36	0.38	0.39	0.40
8.600	0.42	0.43	0.45	0.46	0.48
8.850	0.49	0.51	0.53	0.54	0.56
9.100	0.58	0.59	0.61	0.63	0.65
9.350	0.67	0.68	0.70	0.72	0.74
9.600	0.76	0.78	0.80	0.82	0.84
9.850	0.86	0.88	0.90	0.92	0.95
10.100	0.97	1.00	1.03	1.06	1.09
10.350	1.13	1.16	1.20	1.24	1.28
10.600	1.32	1.35	1.39	1.44	1.48
10.850	1.52	1.56	1.60	1.64	1.69
11.100	1.76	1.83	1.93	2.04	2.16
11.350	2.29	2.42	2.56	2.70	2.92
11.600	3.29	3.86	4.67	5.68	7.08
11.850	8.77	10.34	12.95	17.43	22.31
12.100	25.11	25.03	21.63	17.59	14.96
12.350	12.92	11.18	9.59	8.06	6.68
12.600	5.78	5.12	4.61	4.23	3.94
12.850	3.69	3.48	3.29	3.11	2.95
13.100	2.81	2.69	2.60	2.53	2.47
13.350	2.42	2.37	2.32	2.28	2.24
13.600	2.19	2.15	2.11	2.07	2.03
13.850	1.99	1.95	1.91	1.86	1.82
14.100	1.79	1.75	1.73	1.70	1.68
14.350	1.66	1.63	1.61	1.59	1.57
14.600	1.55	1.53	1.51	1.49	1.47

Subsection: Pond Routed Hydrograph (total out)
 Label: PO-4 (OUT)
 Scenario: Post-Development 100 YEAR

Return Event: 100 years
 Storm Event: 100 YEAR

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
14.850	1.45	1.43	1.41	1.39	1.38
15.100	1.35	1.33	1.31	1.30	1.27
15.350	1.25	1.23	1.21	1.19	1.17
15.600	1.15	1.13	1.11	1.09	1.07
15.850	1.05	1.03	1.01	0.99	0.97
16.100	0.96	0.94	0.93	0.91	0.90
16.350	0.89	0.88	0.88	0.87	0.86
16.600	0.85	0.84	0.83	0.82	0.81
16.850	0.80	0.80	0.79	0.78	0.77
17.100	0.76	0.75	0.74	0.73	0.73
17.350	0.72	0.71	0.70	0.69	0.68
17.600	0.67	0.66	0.65	0.65	0.64
17.850	0.63	0.62	0.61	0.60	0.59
18.100	0.58	0.58	0.57	0.57	0.57
18.350	0.56	0.56	0.56	0.55	0.55
18.600	0.55	0.55	0.54	0.54	0.54
18.850	0.54	0.53	0.53	0.53	0.52
19.100	0.52	0.52	0.52	0.51	0.51
19.350	0.51	0.51	0.50	0.50	0.50
19.600	0.50	0.49	0.49	0.49	0.49
19.850	0.48	0.48	0.48	0.47	0.47
20.100	0.47	0.47	0.46	0.46	0.46
20.350	0.46	0.46	0.45	0.45	0.45
20.600	0.45	0.45	0.44	0.44	0.44
20.850	0.44	0.44	0.43	0.43	0.43
21.100	0.43	0.43	0.42	0.42	0.42
21.350	0.42	0.42	0.41	0.41	0.41
21.600	0.41	0.41	0.40	0.40	0.40
21.850	0.40	0.40	0.39	0.39	0.39
22.100	0.39	0.39	0.38	0.38	0.38
22.350	0.38	0.38	0.37	0.37	0.37
22.600	0.37	0.37	0.37	0.36	0.36
22.850	0.36	0.36	0.35	0.35	0.35
23.100	0.35	0.35	0.34	0.34	0.34
23.350	0.34	0.34	0.34	0.33	0.33
23.600	0.33	0.33	0.32	0.32	0.32
23.850	0.32	0.32	0.31	0.31	(N/A)

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APPENDIX E

SEWERGEMS REPORT

FlexTable: Catch Basin Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Captured) (cfs)	Inlet	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
A1	208.48	205.30	5.25	S1	208.48	208.48
A2	209.45	204.90	2.68	S1	208.41	208.41
A3	208.22	204.70	0.73	S1	208.22	208.22
A4	214.06	203.50	0.09	S1	207.87	207.87
A5	214.31	209.46	1.80	S1	209.96	209.96
A6	214.31	207.75	1.80	S1	208.52	208.52
A7	213.68	208.25	0.73	S1	208.61	208.61
B1	203.41	195.40	2.20	S1	195.97	195.97
B2	202.45	195.13	2.81	S1	195.99	195.99
B3	196.32	191.00	5.29	S1	192.39	192.39
B4	196.33	191.09	5.13	S1	192.58	192.58
C1	212.50	204.31	2.81	S1	205.92	205.92
C2	210.35	202.19	5.46	S2	205.80	205.80
C3	210.35	203.00	9.90	S2	206.05	206.05
C4	211.87	208.74	2.37	S1	209.32	209.32
C5	211.88	204.04	2.51	S1	206.12	206.12
C6	209.04	201.95	0.32	YI	204.77	204.77
C7	202.42	199.70	4.36	YI	202.42	202.42
C8	200.94	195.57	0.72	YI	198.43	198.43
C9	200.70	195.28	10.22	S2	197.94	197.94
C10	202.21	196.66	3.49	S1	197.37	197.37
C11	200.69	195.00	4.86	S2	197.17	197.17
C12	208.95	201.88	3.68	YI	203.51	203.51
C13	205.89	200.00	3.31	YI	203.23	203.23
D1	203.95	199.24	0.00	S1	199.51	199.51
D2	203.87	198.89	2.69	S1	199.51	199.51
D3	202.83	197.08	1.61	S1	198.56	198.56
D4	202.04	195.37	0.64	S1	196.88	196.88
D5	199.01	194.83	0.00	S1	196.17	196.17
D6	198.18	193.75	5.77	S1	195.07	195.07
D7	202.04	197.09	2.32	S1	197.67	197.67
E1	209.26	205.92	1.79	S1	206.87	206.87
E2	209.39	205.23	2.09	S1	205.98	205.98
E3	208.62	203.00	2.15	S1	203.95	203.95
E4	206.61	202.25	2.57	S1	203.38	203.38
E5	202.49	194.00	3.60	S1	198.85	198.85
E6	208.27	200.50	5.03	S1	206.48	206.48
E7	207.64	200.25	5.33	S1	206.39	206.39
E8	204.65	197.25	3.65	S1	204.49	204.49
E9	204.44	197.00	3.64	S1	204.44	204.44
E10	202.71	195.81	3.90	S1	199.47	199.47
E11	202.82	194.35	3.37	S1	199.42	199.42
E12	215.16	203.70	3.59	S1	211.01	211.01
E13	214.38	203.45	4.12	S1	210.94	210.94
E14	211.29	202.70	3.85	S1	209.88	209.88
E15	208.10	202.25	5.85	S1	208.03	208.03
E16	207.95	202.00	3.24	S1	207.95	207.95

FlexTable: Catch Basin Table

Label	Elevation (Rim) (ft)	Elevation (Invert) (ft)	Flow (Captured) (cfs)	Inlet	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)
E17	207.57	202.10	2.03	S1	207.13	207.13
E18	207.10	201.30	3.56	S1	207.10	207.10
E19	206.11	200.70	2.00	S1	205.75	205.75
E20	205.74	200.50	1.98	S1	205.74	205.74
E21	203.71	198.72	1.82	S1	203.53	203.53
E22	203.46	198.54	2.86	S1	203.46	203.46
E23	196.78	190.00	0.00	YI	192.60	192.60
E24	204.00	200.50	3.31	YI	203.60	203.60
E25	0.00	0.00	1.58	YI	0.00	0.00
F2	208.18	200.41	7.47	S2	205.27	205.27
F3	208.21	200.69	7.05	S2	205.24	205.24
F4	208.90	201.85	4.94	S1	205.50	205.50
F5	208.11	201.60	1.91	S1	205.39	205.39
F6	211.30	206.00	3.80	S1	206.75	206.75
F7	210.10	205.65	0.65	S1	206.50	206.50
F8	209.80	205.80	0.00	YI	205.80	205.80
F9	209.91	205.00	0.00	S2	205.80	205.80
F10	209.91	204.85	0.00	S2	205.64	205.64
F11	210.67	203.50	0.00	YI	204.30	204.30

FlexTable: Catchment Table

Label	Outflow Element	Area (User Defined) (acres)	Runoff Coefficient (Rational)	Time of Concentration (hours)	Flow (Total Out) (cfs)
CM-A1	A1	0.770	0.700	0.083	7.01
CM-A2	A2	0.300	0.700	0.083	2.73
CM-A3	A3	0.080	0.700	0.083	0.73
CM-A4	A4	0.010	0.700	0.083	0.09
CM-A5	A5	0.198	0.700	0.083	1.80
CM-A6	A6	0.198	0.700	0.083	1.80
CM-A7	A7	0.080	0.700	0.083	0.73
CM-B1	B1	0.242	0.700	0.083	2.20
CM-B2	B2	0.318	0.700	0.083	2.89
CM-B3	B3	0.780	0.700	0.083	7.10
CM-B4	B4	0.743	0.700	0.083	6.76
CM-C1	C1	0.318	0.700	0.083	2.89
CM-C2	C2	0.600	0.700	0.083	5.46
CM-C3	C3	1.240	0.700	0.083	11.29
CM-C4	C4	0.261	0.700	0.083	2.38
CM-C5	C5	0.279	0.700	0.083	2.54
CM-C6	C6	0.050	0.500	0.083	0.33
CM-C7	C7	0.730	0.500	0.083	4.75
CM-C8	C8	0.112	0.500	0.083	0.73
CM-C9	C9	1.300	0.700	0.083	11.83
CM-C10	C10	0.420	0.700	0.083	3.82
CM-C11	C11	0.534	0.700	0.083	4.86
CM-C12	C12	0.610	0.500	0.083	3.97
CM-C13	C13	0.545	0.500	0.083	3.54
CM-D1	D1	0.000	0.700	0.083	0.00
CM-D2	D2	0.302	0.700	0.083	2.75
CM-D3	D3	0.177	0.700	0.083	1.61
CM-D4	D4	0.070	0.700	0.083	0.64
CM-D5	D5	0.000	0.700	0.083	0.00
CM-D6	D6	0.900	0.700	0.083	8.19
CM-D7	D7	0.255	0.700	0.083	2.32
CM-E1	E1	0.197	0.700	0.083	1.79
CM-E2	E2	0.230	0.700	0.083	2.09
CM-E3	E3	0.236	0.700	0.083	2.15
CM-E4	E4	0.286	0.700	0.083	2.60
CM-E5	E5	0.438	0.700	0.083	3.99
CM-E6	E6	0.720	0.700	0.083	6.55
CM-E7	E7	0.789	0.700	0.083	7.18
CM-E8	E8	0.446	0.700	0.083	4.06
CM-E9	E9	0.445	0.700	0.083	4.05
CM-E10	E10	0.491	0.700	0.083	4.47
CM-E11	E11	0.401	0.700	0.083	3.65
CM-E12	E12	0.436	0.700	0.083	3.97
CM-E13	E13	0.530	0.700	0.083	4.82
CM-E14	E14	0.482	0.700	0.083	4.39
CM-E15	E15	0.920	0.700	0.083	8.37
CM-E16	E16	0.381	0.700	0.083	3.47
CM-E17	E17	0.223	0.700	0.083	2.03

FlexTable: Catchment Table

Label	Outflow Element	Area (User Defined) (acres)	Runoff Coefficient (Rational)	Time of Concentration (hours)	Flow (Total Out) (cfs)
CM-E18	E18	0.431	0.700	0.083	3.92
CM-E19	E19	0.220	0.700	0.083	2.00
CM-E20	E20	0.218	0.700	0.083	1.98
CM-E21	E21	0.200	0.700	0.083	1.82
CM-E22	E22	0.325	0.700	0.083	2.96
CM-E23	E23	0.000	0.500	0.083	0.00
CM-E24	E24	0.545	0.500	0.083	3.54
CM-E25	E25	0.251	0.500	0.083	1.63
CM-F2	F2	0.850	0.700	0.083	7.74
CM-F3	F3	0.792	0.700	0.083	7.21
CM-F4	F4	0.700	0.700	0.083	6.37
CM-F5	F5	0.210	0.700	0.083	1.91
CM-F6	F6	0.473	0.700	0.083	4.31
CM-F7	F7	0.071	0.700	0.083	0.65
CM-F8	F8	0.000	0.700	0.083	0.00
CM-F9	F9	0.000	0.700	0.083	0.00
CM-F10	F10	0.000	0.700	0.083	0.00
CM-F11	F11	0.000	0.500	0.083	0.00

FlexTable: Conduit Table

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Diameter (in)	Length (User Defined) (ft)	Flow (cfs)	Velocity (ft/s)	Size	Manning's n
49	E19	200.70	E20	200.50	18.0	36.4	2.00	1.13	18 inch	0.013
50	E20	200.76	E22	198.54	18.0	144.8	26.82	15.18	18 inch	0.013
51	E21	198.72	E22	198.54	18.0	32.2	4.97	2.81	18 inch	0.013
52	E22	198.54	E5	197.35	18.0	202.5	33.59	19.01	18 inch	0.013
53	E5	196.24	E23	190.00	36.0	265.1	66.88	15.43	36 inch	0.013
54	E23	190.00	HW-5	188.00	36.0	53.3	65.70	18.35	36 inch	0.013
54.1	E24	200.50	E21	199.85	18.0		3.31	1.88	18 inch	0.013
54.2	E25	205.50	E4	204.25	18.0		1.58	5.13	18 inch	0.013
56	F3	200.41	F2	200.69	24.0	28.0	7.47	2.38	24 inch	0.013
57	F3	200.69	HW-7	198.00	24.0	299.8	19.56	6.23	24 inch	0.013
58	F4	201.85	F5	201.60	18.0	50.0	4.94	2.80	18 inch	0.013
59	F5	201.60	F3	200.69	24.0	164.8	6.74	2.15	24 inch	0.013
60	F6	206.00	F7	205.65	18.0	32.5	3.80	5.61	18 inch	0.013
61	F7	205.65	F9	205.00	18.0	137.8	4.43	4.29	18 inch	0.013
62	F8	205.80	F9	205.00	18.0		0.00	0.00	18 inch	0.013
63	F9	205.00	F10	204.85	18.0	28.0	4.30	4.47	18 inch	0.013
64	F10	204.85	F11	203.50	18.0	166.6	4.27	5.22	18 inch	0.013
65	F11	203.50	HW-6	203.00	18.0	97.7	4.15	4.36	18 inch	0.013