HOWARD STEIN HUDSON

Engineers + Planners

SUPPLEMENTAL DATA REPORT

Proposed Multi-family Development

51-53-55 Summer Street

Walpole, Massachusetts

6/20/23

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June 2023

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Existing Conditions

The subject site consists of three parcels totaling 54.73 acres in the Limited Manufacturing – LM zone. The addresses of record for the parcels are 51-53-55 Summer Street. Summer Street has a 50-foot-wide right-of-way along the frontage of the existing lots. There are no existing buildings or improvements on site. The site extends to the east side of the railroad tracks. On the north side there is a Park, School, Recreation & Conservation (PSRC) zoned area encompassing a large wetland area. On the west and south sides there is Residence B (RB) zoned properties.

There is a railroad yard located on the abutting property on the east side of our project site in the LM zone, across from the railroad right-of-way. The PSRC zone does not contain any existing buildings. An RB zone exists to the west and south of the parcel and contain residential dwellings with associated improvements (such as stand-alone garages, pools, sheds, driveways, etc).

The site contains a mix of woodlands, isolated vegetated wetlands, bordering vegetated wetlands, vernal pools, and open grassed areas. All three vernal pools are denoted as potential vernal pools at this time. This property is located within the Area 3 – Primary Recharge Area Water Resource Protection Overlay District and partially within the Large-Scale Ground-Mounted Solar Photovoltaic Overlay District (SPOD). The terrain ranges on site from elevation 186’ to 228’ Mean Sea Level, with the lower areas generally being wetlands and the higher elevations being upland areas. The site topography decreases from south to north starting at Summer Street and ending at Cedar Swamp Brook at the rear of the site. The site currently accepts direct runoff from abutters on the south and west sides. This runoff flows into a wetland on the northern side of the property. Existing flow patterns are generally from the south and west towards north, with localized flow in other directions due to the site terrain.

The site hydrology consists of upland areas flowing to both isolated and bordering vegetated wetlands existing across the entirety of the site. The entire site drains to four analysis points. The first (AP1) is a small portion of the entrance to the site that drains back onto Summer Street and into the drainage system located within Summer Street. This takes up a very small portion of the site drainage. The second analysis point (AP2) for the site is an isolated wetland which is located adjacent to the existing train tracks on the eastern side of the property. This depression has an outlet which flows under the railroad tracks, but it is currently completely blocked; water collects here and slowly infiltrates into the soil. The third analysis point is another wetland area (AP3). This isolated pocket is located adjacent to the eastern train tracks and the other depressed wetland pocket, AP2, and collects and infiltrates water. The final analysis point (AP4) is Cedar Swamp Brook which runs along the entirety of the northern part of the property.

The only drainage infrastructure located onsite is the blocked outlet pipe which runs under the existing railroad tracks. There is an existing storm drain system in Summer Street with a catch basin located along the site's frontage.

Soil conditions on site are mainly Fine Sandy Loam (Canton, Ridgebury, Whitman, Scituate, and Merrimac) with a smaller area of Hollis-Rock Outcrop-Charlton Complex. The hydrologic soil group for these soils area A, B, C & D with a majority belonging to groups B, C & D.

Both town and private sewer, water, electricity, gas, and communications are currently located within the Summer Street right-of-way, which is the preferred source of utilities to service the project.

Proposed Conditions

This project proposed to construct a multifamily housing development consisting of apartment buildings and townhouses for rent. This project is to be serviced by municipal utilities. An easement was purchased from the abutter located at 87 Summer Street to facilitate a second means of emergency access and looped water service for the development.

The existing site is proposed to be improved with the addition of stormwater best management practices which are designed to treat, detain, and infiltrate the proposed impervious areas on the developed site, directing stormwater to the same four (4) analysis points.

There are eight (8) main stormwater treatment trains proposed within the new development. The first main treatment train drains to Pond P204 which is the proposed Stormtech infiltration system located to the east of the proposed multi-family building #2000. This treatment train takes the clean roof runoff from multi-family building #2000, the adjacent townhouse unit and some of the pavement runoff to the north of multi-family building #2000. This treatment train outlets to the adjacent wetland and flows to Analysis Point #4.

Treatment train #2 drains to Pond P205 which is located adjacent to the emergency access to Summer Street. This infiltration basin accepts runoff from the emergency access road. This treatment train outlets to the adjacent wetland and flows to Analysis Point #4.

Treatment train #3 drains to Pond P206, the second Stormtech chamber system onsite, which is located behind multi-family building #1000. This Stormtech system accepts all the clean roof runoff from multi-family building #1000 as well as the associated pretreated street drainage on the northern side of the building. This drainage is piped into the system, treated, and infiltrated onsite prior to out-letting to the adjacent wetland system and flowing to Analysis Point #4

Treatment train #4 drains to Pond P207 which is located on the western side of multi-family building #1000 and accepts most of the street and open-space drainage located adjacent to multi-family buildings #1000 and #2000. This treatment train outlets to the adjacent wetland and flows to Analysis Point #4.

Treatment train #5 drains to Pond P210 which is located north of Driveway A, on the eastern side of the property adjacent to the railroad tracks. This Pocket Wetland accepts all the associated street drainage from the beginning section of Driveway A until the mail kiosk. This treatment train outlets to the adjacent wetland and flows to Analysis Point #2.

Treatment train #6 drains to Pond P212 which is located between Driveway C, Driveway D, and wetland system C, in the center of the development. This Infiltration Pond takes all the street drainage from the high points of both crossings to more than halfway down Driveway C and D. The three townhouses adjacent to the open space in the center of the development are directed to this infiltration pond and treated. This treatment train outlets to the adjacent wetland and flows to Analysis Point #4.

Treatment train #7 drains to Pond P213, the third Stormtech chamber system onsite, which is located in the south parking area adjacent to multi-family building #13000. This Stormtech system accepts the southern half of Driveway D and all roof runoff from multi-family building #13000. This drainage is piped into the system, treated, and infiltrated prior to discharging to Pond P212, and later to the adjacent wetland system, Analysis Point #4.

Treatment train #8 drains to Pond P214, the fourth Stormtech chamber system onsite, which is located in the north parking area adjacent to multi-family building #13000. This Stormtech system accepts the parking area to the north of multi-family building #13000. This drainage is piped into the system, treated, and infiltrated prior to discharging to Analysis Point #4.

The remainder of the clean roof runoff from the townhouse units are handled with individual drip edge systems which outlet to either Analysis Point #2 or 4 via overland flow.

As of February 28, 2023, tree clearing has occurred as depicted on previously approved plans dated January 10, 2020, revised through April 13, 2021. Tree clearing which has occurred outside of the newly proposed limit of disturbance will grow back to its natural state.

The remainder of the land, which was untouched will flow, as it currently does, to the existing analysis points.

Stormwater Management Standards

Standard 1: No new untreated discharges

The Massachusetts Stormwater Handbook requires that the project demonstrates that no new stormwater conveyances (e.g. outfalls) discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

The proposed project will not discharge stormwater directly to, or cause erosion in, wetlands or water of the Commonwealth and will treat stormwater prior to discharge or infiltration.

BMP's have been proposed to treat stormwater collected from the newly paved areas. Each treatment chain consists of a deep sump hooded catch basin, grassed channel and a sediment forebay which is sized to accommodate the water quality volume per the Massachusetts Stormwater Handbook.

The new discharges have been designed to outlet to flared end sections with riprap to minimize any erosion to the isolated vegetated wetland. The table below shows the average flow rate for the 2-year storm event in feet per second (fps).

Storm Event	2-year
Flared End Section (Pond 204) (fps)	2.71
Flared End Section (Pond 205) (fps)	0.00
Flared End Section (Pond 206) (fps)	0.00
Flared End Section (Pond 207) (fps)	1.10
Flared End Section (Pond 210) (fps)	3.62
Flared End Section (Pond 212) (fps)	0.00
Flared End Section (Pond 213) (fps)	0.00
Flared End Section (Pond 214) (fps)	0.00

Standard 2: Post-development peak discharge rates not to exceed pre-development peak discharge rates.

Post-development peak discharge rates do not exceed the pre-development peak discharge rates and total runoff volumes for all storm events except for a runoff volume increase to Analysis Point #4 during the 100-year storm event (Cedar Brook). The proposed condition reduces rates by collecting and controlling the stormwater runoff within the stormwater management system.

Storm Event	2-year	10-year	25-year	100-year
Pre-Development Rates (cfs) AP1	0.74	1.28	1.71	2.59
Volume (cf) (Summer St)	2,360	4,159	5,619	8,714
Post-Development Rates (cfs) AP1	0.67	1.05	1.35	1.96
Volume (cf) (Summer St)	2,247	3,627	4,720	7,004
Rate Reductions (cfs)	**-0.07**	**-0.23**	**-0.36**	**-0.63**
Volume Reductions (cf)	**- 113**	**- 532**	**- 899**	**-1,710**
Pre-Development Rates (cfs) AP2	12.30	27.75	41.12	70.33
Volume (cf) (Wetland at track)	85,349	184,006	270,829	464,971
Post-Development Rates (cfs) AP2	7.31	18.24	28.46	52.47
Volume (cf) (Wetland at track)	75,144	157,893	229,211	394,820
Rate Reductions (cfs)	**-4.99**	**-9.51**	**-12.66**	**-17.86**
Volume Reductions (cf)	**-10,205**	**-26,113**	**-41,618**	**-70,151**
Pre-Development Rates (cfs) AP3	2.52	5.96	8.96	15.56
Volume (cf) (Wetland at track)	8,514	18,960	28,279	49,317
Post-Development Rates (cfs) AP3	1.15	2.89	4.43	7.86
Volume (cf) (Wetland at track)	4,009	9,258	14,013	24,862
Rate Reductions (cfs)	**-1.37**	**-3.07**	**-4.53**	**-7.70**
Volume Reductions (cf)	**-4,505**	**-9,702**	**-14,266**	**-24,455**
Pre-Development Rates (cfs) AP4	10.77	33.90	56.04	107.72
Volume (cf) (Cedar Brook)	73,247	192,708	306,701	576,512
Post-Development Rates (cfs) AP4	7.79	25.19	43.69	98.54
Volume (cf) (Cedar Brook)	65,174	178,860	300,250	593,282

Rate Reductions (cfs)	**-2.98**	**-8.71**	**-12.35**	**-9.18**
Volume Reductions (cf)	**-8,073**	**-13,848**	**-6,451**	**16,770**

Standard 3: Minimize or eliminate loss of annual recharge to groundwater.

Groundwater recharge will be accomplished using the surface infiltration and subsurface practices. As shown in the table summary for Standard 2, the project decreases the total volume of runoff for all storm events except for a runoff volume increase to Analysis Point #4 (Cedar Brook) during the 100-year storm event. This reduction in volume is generated by collecting and infiltrating a significant portion of the impervious surfaces created on site.

Recharge Volume Requirement:

Rv = F x impervious area

Rv = Required Recharge Volume, expressed in Ft^3, cubic yards, or acre-feet

F= Target Depth Factor associated with each Hydrologic Soil Group

Impervious Area = pavement and rooftop area on site

Recharge volume for the entire site:

Soil A:

Rv=0.60 in * 55,549 sf * 1 ft / 12 in **= 2,778 cf recharge**

Soil B:

Rv=0.35 in * 71,802 sf * 1 ft / 12 in **= 2,095 cf recharge**

Soil C:

Rv=0.25 in * 285,304 sf * 1 ft / 12 in **= 5,944 cf recharge**

Soil D:

Rv=0.1 in * 45,142 sf * 1 ft / 12 in **= 377 cf recharge**

Total Recharge Required:

Rv= (2,778 cf) + (2,095 cf) + (5,944 cf) + (377 cf) = **11,194 cf total recharge required**

Total recharge provided:

*Townhouse Drip Edges (4 Unit – Type I) = 96 cf below outlet = (96 cf) * (5 buildings) = 480 cf*

*Townhouse Drip Edges (4 Unit – Type II) = 82 cf below outlet = (82 cf) * (2 buildings) = 164 cf*

*Townhouse Drip Edges (6 Unit) = 136 cf below outlet = (136 cf) * (4 buildings) = 544 cf*

Club house drip edge = 130 cf below outlet

Pond P204 = 2,117 cf below outlet (Stormtech System)

Pond P205 = 7,623 cf below outlet

Pond P206 = 4,970 cf below outlet (Stormtech System)

Pond P207 = 6,345 cf below outlet

Pond P210 = 0 cf below outlet
Pond P212 = 22,538 cf below outlet
Pond P213 = 5,440 cf below outlet (Stormtech System)
Pond P214 = 5,178 cf below outlet (Stormtech System)
Total site recharge provided = 55,529 cf recharge volume > 11,194 cf required
Recharge per Pond

Pond P204

Soil A:
Rv=0.60 in * 8,041 sf * 1 ft / 12 in **= 403 cf recharge**
Soil C:
Rv=0.25 in * 41,586 sf * 1 ft / 12 in **= 867 cf recharge**
Soil D:
Rv=0.1 in * 3 sf * 1 ft / 12 in = **1 cf recharge**
Total Weighted Average Recharge:
Rv = (403 cf) + (867 cf) + (1 cf) = **1,271 cf recharge required**

Recharge provided (including drip edges) = 2,383 cf > 1,270 cf required

Pond P205:

Soil B:
Rv=0.35 in * 16,376 sf * 1 ft / 12 in **= 478 cf recharge**

Recharge provided = 7,623 cf > 478 cf required

Pond P206:

Soil A:
Rv=0.60 in * 131 sf * 1 ft / 12 in **= 7 cf recharge**
Soil C:
Rv=0.25 in * 27,225 sf * 1 ft / 12 in **= 568 cf recharge**
Soil D:
Rv=0.1 in * 20,862 sf * 1 ft / 12 in **= 174 cf recharge**
Total Weighted Average Recharge:
Rv= (7 cf) + (568 cf) + (174 cf) = **749 cf total recharge required**

Recharge provided = 4,970 cf > 749 cf required

Pond P207

Soil A:
Rv=0.60 in * 35,976 sf * 1 ft / 12 in **= 1,799 cf recharge**
Soil C:
Rv=0.25 in * 25,566 sf * 1 ft / 12 in **= 533 cf recharge**
Soil D:
Rv=0.1 in * 20,350 sf * 1 ft / 12 in **= 170 cf recharge**
Total Weighted Average Recharge:
Rv= (1,799 cf) + (533 cf) +(170 cf) = **2,502 cf recharge required**

Recharge provided = 6,345 cf > 2,502 cf required

Pond P210

Soil B:
Rv=0.35 in * 30,443 sf * 1 ft / 12 in **= 888 cf recharge**
Soil C:
Rv=0.25 in * 911 sf * 1 ft / 12 in **= 19 cf recharge**
Soil D:
Rv=0.1 in * 1,186 sf * 1 ft / 12 in **= 10 cf recharge**
Total Weighted Average Recharge:
Rv= (888 cf) + (19 cf) +(10 cf) = **917 cf recharge required**

Recharge provided = 0 cf ≠ 917 cf required
(Overall recharge provided on site still greater than overall recharge required)

Pond P212

Soil B:
Rv=0.35 in * 772 sf * 1 ft / 12 in **= 23 cf recharge**
Soil C:
Rv=0.25 in * 109,962 sf * 1 ft / 12 in **= 2,291 cf recharge**
Soil D:
Rv=0.1 in * 1,920 sf * 1 ft / 12 in **= 16 cf recharge**
Total Weighted Average Recharge:
Rv= (23 cf) + (2,291 cf) + (16 cf) = **2,330 cf recharge required**

Recharge provided (including drip edges) = 22,906 cf > 2,330 cf required

Pond P213

Soil C:

Rv=0.25 in * 29,819 sf * 1 ft / 12 in = **622 cf recharge**

Recharge provided = 5,440 cf > 622 cf required

Pond P214

Soil A:

Rv=0.6 in * 8,071 sf * 1 ft / 12 in = **404 cf recharge**

Soil C:

Rv=0.25 in * 22,900 sf * 1 ft / 12 in = **478 cf recharge**

Total Weighted Average Recharge:

Rv= (404 cf) + (478 cf) = **882 cf recharge required**

Recharge provided = 5,178 cf > 882 cf required

Drawdown Within 72 Hours

Townhouse Drip Edge (4 unit – Type I): 96 cf / [(0.17 in/hr)(1 ft/12 in)(470 sf)] = **14.4 hours < 72 hours, OK**

Townhouse Drip Edge (4 unit – Type II): 82 cf / [(0.17 in/hr)(1 ft/12 in)(404 sf)] = **14.3 hours < 72 hours, OK**

Townhouse Drip Edge (6 unit): 136 cf / [)0.17 in/hr)(1 ft/12 in)(665 sf)] = **14.4 hours < 72 hours, OK**

Pond P204: 2,117 cf / [(0.66 in/hr)(1 ft/12 in)(5,670 sf)] = **6.8 hours < 72 hours, OK**

Pond P205: 7,623 cf / [(2.41 in/hr)(1 ft/12 in)(3,939 sf)] = **9.7 hours < 72 hours, OK**

Pond P206: 4,970 cf / [(3.5 in/hr)(1 ft/12 in)(6,072 sf)] = **2.8 hours < 72 hours, OK**

Pond P207: 6,345 cf / [(3.69 in/hr)(1 ft/12 in)(10,100 sf)] = **2.1 hours < 72 hours, OK**

Pond P212: 22,358 cf / [(5.13 in/hr)(1 ft/12 in)(4,354 sf)] = **12.0 hours < 72 hours, OK**

Pond P213: 5,440 cf / [(5.13 in/hr)(1 ft/12 in)(3,317 sf)] = **3.9 hours < 72 hours, OK**

Pond P214: 5,178 cf / [(8.28 in/hr)(1 ft/12 in)(3,201 sf)] = **2.4 hours < 72 hours, OK**

Water Quality Volume

Calculated as V*wq* = (Dwq/12 inches/foot) * (A*imp* * 43,560 square feet/acre), where:

V*wq* = required water quality volume (in cubic feet)

D*wq* = water quality depth: one-inch for discharges within a Zone II or Interim Wellhead Protection Area, to or near another critical area, runoff from a LUHPPL, or exfiltration to soils with infiltration rate greater than 2.4 inches/hour or greater; ½ inch for discharges near or to other areas.

Aimp = impervious area (in acres)

Aimp = Impervious Area of Subcatchments onsite = 457,797 SF

Dwq = 1 inch

*Vwq = (1 inch / 12 inches / foot) * (308,995 S.F.) = 25,750 C.F.*

*Vwq = (½ inch / 12 inches / foot) * (148,802 S.F.) = 12,401 C.F.*

Total Water Quality Volumes from proposed BMP's = 55,529 cf > 38,151 cf OK

Pretreatment sizing for flow based devices

Calculated as V*wq* = (Dwq/12 inches/foot) * (A*imp* * 43,560 square feet/acre), where:

V*wq* = required water quality volume (in cubic feet)

D*wq* = water quality depth: one-inch for discharges within a Zone II or Interim Wellhead Protection Area, to or near another critical area, runoff from a LUHPPL, or exfiltration to soils with infiltration rate greater than 2.4 inches/hour or greater; ½ inch for discharges near or to other areas.

A*imp* = impervious area

Pond P204:

Stormtech Infiltration Chambers = (½ inch / 12 inches / foot) * (49,630 S.F.) = 2,068 C.F.

Designed Infiltration Chambers = 2,117 C.F. below outlet

2,117 CF > 2,068 CF OK

Stormtech Isolator Row:

Q(½)=(752 csm/in)(1.14 AC)(0.0015625 mi2/AC)(½ in)
Q(½)=0.67 cfs
For the SC 740 each chamber is rated for 0.14 cfs:
Design calls for 9 SC 740 Isolator Units = 9 units x 0.14 cfs = 1.26 cfs
1.26 cfs > 0.67 cfs OK
Volume Provided = 1.26 cfs

1.26 cfs > 0.67 cfs O.K.

<u>Pond P205:</u>

Infiltration pond = (1 inch / 12 inches / foot) * (16,376 S.F.) = 1,365 C.F.

Designed Infiltration Pond = 7,623 C.F. below outlet

7,623 CF > 1,365 CF OK

Sediment forebay = 0.1 * 1,365 C.F = 137 C.F

Designed sediment forebays = 144 CF

144 CF > 137 CF OK

<u>Pond P206:</u>

Stormtech Infiltration Chambers = (1 inch / 12 inches / foot) * (48,218 S.F.) = 4,019 C.F.

Designed Infiltration Chambers = 4,970 C.F. below outlet

4,970 CF > 4,019 CF OK

Stormtech Isolator Row:
Q(1)=(774 csm/in)(1.11 AC)(0.0015625 mi2/AC)(1 in)
Q(1)=1.35 cfs
For the SC 740 each chamber is rated for 0.14 cfs:
Design calls for 16 SC 740 Isolator Units = 16 units x 0.14 cfs = 2.24 cfs
2.24 cfs > 1.35 cfs OK
Volume Provided = 2.24 cfs

2.24 cfs > 1.35 cfs O.K.

Pond P207:

Infiltration pond = (1 inch / 12 inches / foot) * (64,794 S.F.) = 5,400 C.F.

Designed Infiltration Pond = 6,345 C.F. below outlet

6,345 CF > 5,400 CF OK

Sediment forebay = 0.1 * 5,400 C.F = 540 C.F

Designed sediment forebays = 1,257 CF

1,257 CF > 540 CF OK

Pond P210:

Pocket Wetland #1 = (½ inch / 12 inches / foot) * (32,540 S.F.) = 1,356 C.F.

Micropool and Low / High Marsh Volume = 2,619 C.F. (See attached design criteria)

2,619 CF ≥ 1,356 CF OK

Sediment forebay = 0.1 * 1,356 C.F = 136 C.F

Designed sediment forebays = 267 CF

267 CF > 136 CF OK

Pond P212:

Infiltration pond = (1 inch / 12 inches / foot) * (112,654 S.F.) = 9,388 C.F.

Designed Infiltration Pond = 22,538 C.F. below outlet

22,538 CF > 9,388 CF OK

Sediment forebay = 0.1 * 9,388 C.F = 939 C.F

Designed sediment forebays = 2,406 CF

2,406 **CF > 939 CF OK**

Pond P213:

Stormtech Infiltration Chambers = (1 inch / 12 inches / foot) * (29,819 S.F.) = 2,485 C.F.

Designed Infiltration Chambers = 5,440 C.F. below outlet

5,440 CF > 2,485 CF OK

Stormtech Isolator Row:
Q(1)=(774 csm/in)(0.69 AC)(0.0015625 mi2/AC)(1 in)
Q(1)=0.84 cfs
For the SC 740 each chamber is rated for 0.14 cfs:
Design calls for 9 SC 740 Isolator Units = 9 units x 0.14 cfs = 1.26 cfs
1.26 cfs > 0.84 cfs OK
Volume Provided = 1.26 cfs

1.26 cfs > 0.84 cfs O.K.

Pond P214:

Stormtech Infiltration Chambers = (1 inch / 12 inches / foot) * (30,971 S.F.) = 2,581 C.F.

Designed Infiltration Chambers = 5,178 C.F. below outlet

5,178 CF > 2,581 CF

Stormtech Isolator Row:
Q(1)=(774 csm/in)(0.72 AC)(0.0015625 mi2/AC)(1 in)
Q(1)=0.87 cfs
For the SC 740 each chamber is rated for 0.14 cfs:
Design calls for 9 SC 740 Isolator Units = 9 units x 0.14 cfs = 1.26 cfs
Volume Provided = 1.26 cfs

1.26 cfs > 0.87 cfs O.K.

Contech Stormceptor STC-900 Water Quality Unit

Q(1) = (774 csm/in)(0.39 AC)(0.0015625 mi2/AC)(1 in)
Q = 0.48 cfs
STC-900 Water Quality Unit is rated for 0.89 cfs
Volume Provided = 0.89 cfs

0.89 cfs > 0.48 cfs O.K.

Standard 4: Stormwater management system to remove 80% of the average annual load of Total Suspended Solids (TSS)

The stormwater management system is designed to remove >80% annual total suspended solids (TSS) from the proposed roadway, driveways, and sidewalks.

The stormwater management system is designed to remove 80% of the average annual total suspended solids (TSS) from the proposed development.

<u>TSS Removal Calculation</u>

<u>Pretreatment Train #1 to Pond P204</u>

- Deep Sump Hooded Catch Basin:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Isolator Row:

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

<u>Treatment Train #1 to Pond P204</u>

- Stormtech Isolator Row:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Infiltration Chambers

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%
Site impervious percentage = 7%

Pretreatment Train #2 to Pond P205

- Deep Sump Hooded Catch Basins:

  100% * 25% = **25%**
  100% - 25% = 75%

- Sediment Forebay:

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

Treatment Train #2 to Pond P205

- Sediment Forebay:

  100% * 25% = **25%**
  100% - 25% = 75%

- Infiltration Pond

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%
Site impervious percentage = 5%

Pretreatment Train #3 to Pond P206

- Deep Sump Hooded Catch Basin:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Isolator Row:

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

Treatment Train #3 to Pond P206

- Stormtech Isolator Row:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Infiltration Chambers

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%
Site impervious percentage = 8%

Pretreatment Train #4 to Pond P207

- Deep Sump Hooded Catch Basins:

  100% * 25% = **25%**
  100% - 25% = 75%

- Sediment Forebay / CDS Water Quality Unit *(Calculation based on minimum treatment from Deep Sump Hooded Catch Basin only. CDS Water Quality unit will see a higher TSS treatment removal rate.):*

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

Treatment Train #4 to Pond P207

- Sediment Forebay / CDS Water Quality Unit *(Calculations based on minimum treatment from Deep Sump Hooded Catch Basin only. CDS Water Quality Unit will see a higher TSS treatment removal rate.):*

  100% * 25% = **25%**
  100% - 25% = 75%

- Infiltration Pond:

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%
Site impervious percentage = 25%

<u>Pretreatment Train #5 to Pond P210</u>

- Deep Sump Hooded Catch Basins:

  100% * 25% = **25%**
  100% - 25% = 75%

- Sediment Forebay:

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

<u>Treatment Train #5 to Pond P210</u>

- Sediment Forebay:

  100% * 25% = **25%**
  100% - 25% = 75%

- Pocket Wetland

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%
Site impervious percentage = 10%

<u>Pretreatment Train #6 to Pond P212</u>

- Deep Sump Hooded Catch Basin

  100% * 25% = **25%**
  100% - 25% = 75%

- Sediment Forebay:

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

<u>Treatment Train #6 to Pond P212</u>

- Sediment Forebay:

  100% * 25% = **25%**
  100% - 25% = 75%

- Infiltration Pond:

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%
Site impervious percentage = 28%

<u>Pretreatment Train #7 to Pond P213</u>

- Deep Sump Hooded Catch Basin:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Isolator Row:

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

<u>Treatment Train #7 to Pond P213</u>

- Stormtech Isolator Row:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Infiltration Chambers:

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%

Site impervious percentage = 8%

<u>Pretreatment Train #8 to Pond P214</u>

- Deep Sump Hooded Catch Basin:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Isolator Row:

  75% * 25% = **19%**
  75% - 19% = 56%

Pretreatment TSS Removal = 25% + 19% = 44%

<u>Treatment Train #8 to Pond P214</u>

- Stormtech Isolator Row:

  100% * 25% = **25%**
  100% - 25% = 75%

- Stormtech Infiltration Chambers:

  75% * 80% = **60%**
  75% - 60% = 15%

TSS Removal of the proposed drainage = 25% + 60% = 85%

Site impervious percentage = 3%

<u>Treatment Train #9 to Existing Summer Street CB</u>

- Deep Sump Hooded Catch Basins:

  100% * 25% = **25%**
  100% - 25% = 75%

TSS Removal of the proposed drainage = 25%
Site impervious percentage = 3%

<u>Treatment Train #10 Overland flow from rooftops and pavement</u>

TSS Removal of the proposed drainage = 0%
Site impervious percentage = 3%

Total weighted TSS Removal rate = [(7% * 85%) + (5% * 85%) + (8% * 85%) + (25% * 85%) + (10% * 85%) + (28% * 85%) + (8% * 85%) + (3% * 85%) + (3% * 25%) + (3% * 0%)

= 5.9 + 4.3 + 6.8 + 21.3 + 8.5 + 23.8 + 6.8 + 2.6 + 0.8 + 0 = <u>80.8% > 80%, OK</u>

Standard 5: Land uses with higher potential pollutant loads.

The development is not considered a land use that generally produces higher potential pollutant loads.

Standard 6: Stormwater discharges to critical areas

There are three potential vernal pools located on the property. Potential vernal pool #1 is located on the eastern side of the property just north of Pocket Wetland #1 and adjacent to the railroad. Potential vernal pool #2 is isolated and located just to the north of PVP#1, also adjacent to the railroad. Potential vernal pool #3 is located on the southern side of the parcel to the south of both wetland crossings. A pocket wetland is proposed to outlet more than 180' upslope from potential vernal pool #1. All treatment trains that discharge to critical areas have been designed to meet the pretreatment requirement of 44% TSS removal prior to entering the treatment system such as an Infiltration Pond or Pocket Wetland.

Standard 7: Redevelopment projects

The project is not considered a redevelopment project.

Standard 8: Control construction-related impacts

The project will install erosion and sediment controls prior to any earthwork activity. Erosion control barriers will be placed down slope from the proposed construction to prevent erosion and sedimentation into the surrounding areas. The barriers will be maintained and inspected periodically during construction; sediment buildup will be removed, and any damaged barrier will be replaced as needed. See site plan and SWPPP.

Standard 9: Long-term operation and maintenance plan

See Appendix A for the operation and maintenance requirements of the stormwater management system.

Standard 10: No illicit discharges

An illicit discharge compliance statement has been provided by the property owner under separate cover.

Appendix A: Test Pit Information and Falling Head Permeability Test Results

MASTER LOG - TEST PIT INFORMATION

55 SUMMER ST, WALPOLE MA

Test Pits Performed on 12/4/2019, 12/5/2019, 12/6/2019, 01/09/2020, 10/20/2020, 10/21/2020

Test Pits Performed By Kasey Ferreira, E.I.T.

Test Pits Witnessed By Chris Johnson, Town of Walpole

TP-1 (Drainage)			
0”-13”	A_p	Loam/Organics	
13”-23”	B_w	Sandy Loam	
23”-120”	C	Loamy Sand	
Mottles at 24”			
HSG C			

TP-2 (Drainage)			
0”-10”	A_p	Loam/Organics	
10”-118”	C	Loamy Sand	
Weeping at 71”, Mottles at 33”			
HSG B			

TP-3 (Drainage)			
0”-12”	A_p	Loam	
12”-20”	B_w	Sandy Loam	
20”-98”	C	Loamy Sand	
Standing at 94”, Mottles at 31”			
HSG C			

TP-4 (Drainage)			
0"-11"	A_p	Loam/Organics	
11"-96"	C	Loamy Sand	
Standing at 97", Mottles at 49"			
HSG A			

TP-5 (Drainage)			
0"-12"	A_p	Loam/Organics	
12"-109"	C	Loamy Sand	
Standing at 85", Mottles at 41"			
HSG A			

TP-6 (Drainage)			
0"-11"	A_p	Loam/Organics	
11"-20"	B_w	Sandy Loam	
20"-99"	C	Loamy Sand	
Standing at 60", Mottles at 26"			
HSG C			

TP-7 (Drainage)			
0"-7"	A_p	Loam	
7"-122"	C	Loamy Sand	
Weeping at 103", Mottles at 40"			
HSG B			

TP-8 (Drainage)			
0”-7”	A_p	Loam	
7”-18”	B_w	Sandy Loam	
18”-139”	C	Loamy Sand	
Standing at 130”, Weeping at 125”, Mottles at 44”			
HSG B			

TP-9 (Drainage)			
0”-40”	Fill		
40”-117”	C	Medium Sand	
Weeping at 34”, Mottles at 40”			
HSG A			

TP-10 (Drainage)			
0”-9”	A_p	Loam	
9”-23”	B_w	Sandy Loam	
23”-96”	C	Coarse Sand	
Standing at 96”, Mottles at 34”			
HSG C			

TP-11 (Drainage)			
0”-8”	A_p	Loam	
8”-17”	B_w	Loamy Sand	
17”-122”	C	Medium Sand	
Standing at 115”, Weeping at 46”, Mottles at 30”			
HSG B			

TP-12 (Drainage)			
0"-9"	A_p	Loam	
9"-18"	B_w	Loamy Sand	
18"-120"	C	Medium Sand	
Weeping at 24", Mottles at 29"			
HSG B			

TP-13 (Drainage)			
0"-13"	A_p	Loam	
13"-28"	B_w	Sandy Loam	
28"-135"	C	Loamy Sand	
Weeping at 115", Mottles at 43"			
HSG B			

TP-14 (Drainage)			
0"-7"	A_p	Loam	
7"-13"	B_w	Loamy Fine Sand	
13"-95"	C_1	Coarse Sand	
95"-120"	C_2	Gravel	
Standing at 104", Mottles at 95"			
HSG A			

TP-15 (Drainage)			
0”-5”	A_p	Loam	
5”-22”	B_w	Sandy Loam	
22”-120”	C	Loamy Sand	
Weeping at 30”			
HSG C			

TP-16 (Drainage)			
0”-5”	A_p	Loam	
5”-20”	B_w	Sandy Loam	
20”-120”	C	Loamy Sand	
Standing at 96”, Mottles at 36”			
HSG C			

TP-17 (Drainage)			
0”-9”	A_p	Loam/Organics	
9”-108”	C	Loamy Sand	
Weeping at 18”			
HSG A/D (D)			

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TP-18 (Drainage)			
0”-8”	A_p	Loam	
8”-17”	B_w	Sandy Loam	
17”-120”	C	Loamy Sand	
Weeping at 29”, Mottles at 26”			
HSG C			

TP-19 (Building)			
0”-8”	A_p	Loam	
8”-20”	B_w	Loamy Sand	
20”-120”	C	Sand	
Mottles at 50”			
HSG A			

TP-20 (Building)			
0”-7”	A_p	Loam	
7”-24”	B_w	Sandy Loam	
24”-103”	C	Loamy Sand	
Mottles at 48”			
HSG B			

TP-21 (Exploratory)			
0”-9”	A_p	Loam	
9”-24”	B_w	Loamy Sand	
24”-102”	C	Sand	
Mottles at 43”			
HSG A			

TP-22 (Exploratory)			
0”-6”	A_p	Loam	
6”-23”	B_w	Sandy Loam	
23”-66”	C	Loamy Sand	
Mottles at 32”			
HSG C			

TP-23 (Building)			
0”-12”	A_p	Loam	
12”-24”	B_w	Loamy Sand	
24”-118”	C	Sand	
Standing at 96”, Mottles at 36”			
HSG B			

TP-24 (Building)			
0”-11”	A_p	Loam	
11”-24”	B_w	Loamy Sand	
24”-102”	C	Sand	
Weeping at 100”, Mottles at 39”, Refusal at 102”			
HSG B			

TP-25 (Building)			
0”-10”	A_p	Loam	
10”-20”	B_w	Loamy Sand	
20”-69”	C	Sand	
Mottles at 41”, Refusal at 69”			
HSG A			

TP-25A (Exploratory)			
0”-8”	A_p	Loam	
8”-15”	B_w	Sandy Loam	
15”-108”	C	Loamy Sand	
Mottles at 32”			
HSG C			

TP-26 (Building)			
0”-10”	A_p	Loam	
10”-18”	B_w	Sandy Loam	
18”-75”	C	Loamy Sand	
Mottles at 49”, Refusal at 75”			
HSG B			

TP-27 (Building)			
0”-8”	A_p	Loam	
8”-25”	B_w	Sandy Loam	
25”-48”	C_1	Loamy Sand	
48”-110	C_2	Loamy Sand	
Standing at 100”, Weeping at 54”, Mottles at 30”			
HSG C			

TP-28 (Building)			
0”-6”	A_p	Loam	
6”-24”	B_w	Sandy Loam	
24”-99”	C	Loamy Sand	
Standing at 90”, Weeping at 65”, Mottles at 32”			
HSG C			

TP-29 (Exploratory)			
0”-13”	A_p	Loam	
13”-18”	B_w	Sandy Loam	
18”-132”	C	Loamy Sand	
Mottles at 43”			
HSG B			

TP-30 (Exploratory)			
0”-12”	A_p	Loam/Organics	
12”-30”	B_w	Loam	
30”-128”	C	Loamy Sand	
Weeping at 102”, Mottles at 36”			
HSG C			

TP-31 (Exploratory)			
0”-32”	Fill		
32”-96”	C	Gravelly Loamy sand	
Mottles at 42”			
HSG A			

TP-32 (Drainage)			
0”-14”	A	Sandy Loam	
14”-20”	B	Sandy Loam	
20”-88”	C	Sandy Loam	
Mottles at 30”, No Standing			
HSG C			

TP-33 (Drainage)			
0”-12”	A	Sandy Loam	
12”-30”	B	Sandy Loam	
30”-87”	C	Loamy Sand	
Mottles at 30”			
HSG C			

TP-34 (Drainage)			
0”-10”	A	Sandy Loam	
10”-24”	Bw	Sandy Loam	
24”-72”	C	Loamy Sand	
Mottles at 37”			
HSG C			

TP-36 (Drainage)			
0”-10”	A	Sandy Loam	
10”-22”	Bw	Sandy Loam	
22”-62”	C	Sandy Loam	
Mottles at 21”			
HSG C			

TP-37 (Drainage)			
0”-11”	A	Sandy Loam	
11”-28”	Bw	Sandy Loam	
28”-52”	C	Sandy Loam	
Seasonal high at 28”			
HSG C			

TP-38 (Drainage)			
0"-12"	A	Sandy Loam	
12"-28"	B	Sandy Loam	
28"-72"	C	Sand	
Mottles at 42"			
HSG B			

TP-39 (Drainage)			
0"-14"	A	Sandy Loam	
14"-37"	B	Sandy Loam	
37"-66"	C	Loamy Sand	
Mottles at 36"			
HSG C			

TP-40 (Drainage)			
0"-14"	A	Sandy Loam	
14"-30"	Bw	Sandy Loam	
30"-59"	C1	Sand	
59"-98"	C2	Loamy Sand	
Seasonal high at 28"			
HSG C			

TP-40A (Drainage)			
0”-14”	A	Sandy Loam	
14”-23”	Bw	Sandy Loam	
23”-80”	C	Sand	
Seasonal high at 40”			
HSG C			

TP-41 (Drainage)			
0”-9”	A	Sandy Loam	
9”-20”	B	Sandy Loam	
20”-88”	C	Sand	
Seasonal high at 45”			
HSG B			

TP-42 (Drainage)			
0”-10”	A	Sandy Loam	
10”-28”	Bw	Sandy Loam	
28”-86”	C	Sand	
Seasonal high at 48”, presence of color change			
HSG B			

TP-43 (Drainage)			
0”-10”	A	Sandy Loam	
10”-26”	Bw	Sandy Loam	
26”-64”	C1	Sandy Loam	
64”-100”	C2	Loamy Sand	
Mottles at 26”			
HSG C			

TP-43A (Drainage)			
0”-10”	A	Sandy Loam	
10”-19”	Bw	Sandy Loam	
19”-89”	C	Sandy Loam	
Mottles at 16”			
HSG B/D (B)			

TP-44 (Drainage)			
0”-10”	A	Sandy Loam	
10”-35”	Bw	Sandy Loam	
35”-52”	C1	Sandy Loam	
52”-76”	C2	Loamy Sand	
Seasonal high at 35”			
HSG C			

TP-45 (Drainage)			
0”-12”	A	Sandy Loam	
12”-27”	Bw	Sandy Loam	
27”-56”	C1	Sandy Loam	
56”-91”	C2	Loamy Sand	
TBD			

TP-46 (Drainage)			
0”-12”	A	Sandy Loam	
12”-27”	Bw	Sandy Loam	
27”-52”	C1	Sandy Loam	
52”-100”	C2	Loamy Sand	
Seasonal high at 18”			
HSG B/D (B)			

TP-47 (Drainage)			
0”-12”	A	Sandy Loam	
12”-34”	Bw	Sandy Loam	
34”-48”	C1	Sandy Loam	
48”-102”	C2	Loamy Sand	
Seasonal high at 30”			
HSG C			

TP-48 (Drainage)			
0”-12”	A	Sandy Loam	
12”-29”	Bw	Sandy Loam	
29”-80”	C	Loamy Sand	
Seasonal high at 36”			
HSG C			

TP-49 (Drainage)			
0”-10”	A	Sandy Loam	
10”-24”	Bw	Sandy Loam	
24”-60”	C	Loamy Sand	
Refusal at 60”. No seasonal high present.			
HSG B			

TP-50 (Drainage)			
0”-12”	A	Sandy Loam	
12”-25”	Bw	Sandy Loam	
25”-67”	C	Loamy Sand	
No seasonal high.			
HSG B			

TP-51 (Drainage)			
0”-12”	A	Sandy Loam	
12”-34”	B	Sandy Loam	
34”-65”	C	Loamy Sand	
Seasonal high at 21”			
HSG B/D			

TP-52 (Drainage)			
0”-10”	A	Sandy Loam	
10”-28”	Bw	Sandy Loam	
28”-72”	C	Loamy Sand	
Seasonal high at 53”			
HSG B			

TP-53 (Drainage)			
0”-10”	A	Sandy Loam	
10”-32”	B	Sandy Loam	
32”-78”	C	Sandy Loam	
Seasonal high at 32”			
HSG C			

TP-2A (Drainage)			
0”-14”	A	Sandy Loam	
14”-28”	Bw	Sandy Loam	
28”-72”	C	Sandy Loam	
Mottles at 25”			
HSG C			

HSG-1 (Drainage)			
0”-10”	A	Sandy Loam	
10”-28”	Bw	Sandy Loam	
28”-32”	C	Loamy Sand	
Refusal at 32”. No seasonal high.			
HSG C			

HSG-2 (Drainage)			
0”-10”	A	Sandy Loam	
10”-30”	Bw	Sandy Loam	
30”-42”	C	Loamy Sand	
Seasonal high at 32”			
HSG C			

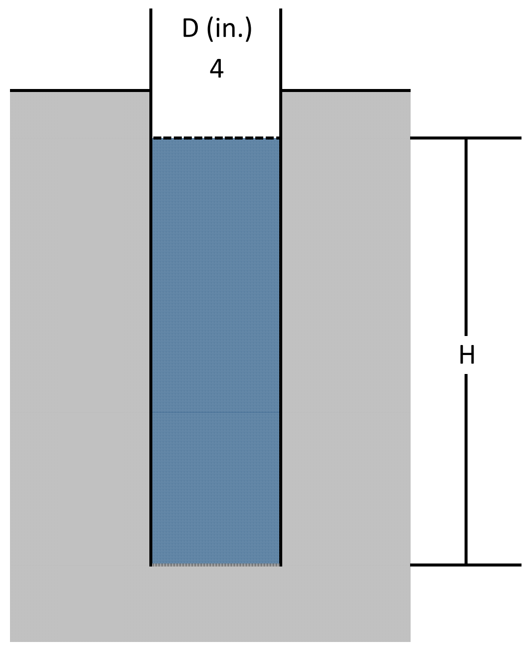
HSG-3 (Drainage)			
0”-10”	A	Sandy Loam	
10”-22”	Bw	Sandy Loam	
22”-41”	C	Sandy Loam	
Seasonal high at 34”			
HSG C			

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 1
Test Date: 28-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 8" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

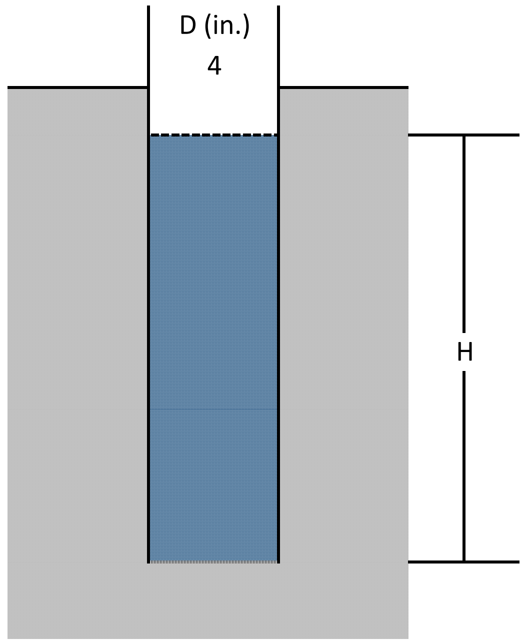
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	600	1.04	600	0.043	0.3
22	1320	1.05	720	0.044	0.3
21	2340	1.05	1020	0.047	0.2
20	3360	1.05	1020	0.049	0.2
19	4440	1.05	1080	0.051	0.2
18	5460	1.06	1020	0.054	0.2

Average	0.22	in/hr
Safety Factor	2	
Design K	***0.11***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 2A
Test Date: 28-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 8" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

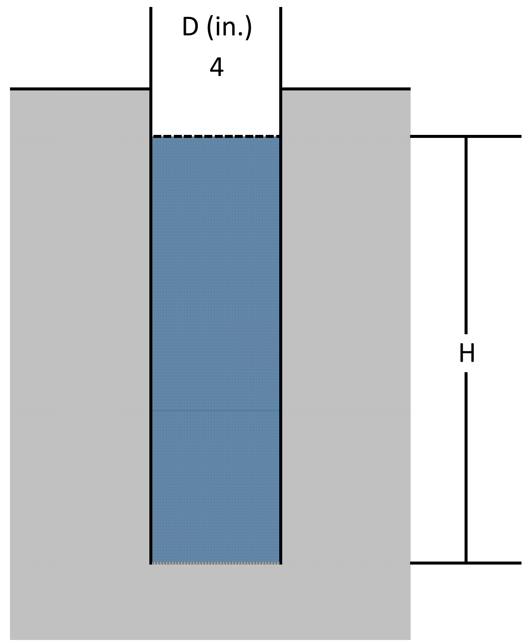
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	300	1.04	300	0.043	0.6
22	660	1.05	360	0.044	0.5
21	1140	1.05	480	0.047	0.4
20	1740	1.05	600	0.049	0.3
19	2340	1.05	600	0.051	0.4
18	3060	1.06	720	0.054	0.3

Average	0.41	in/hr
Safety Factor	2	
Design K	***0.21***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 32
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 32" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

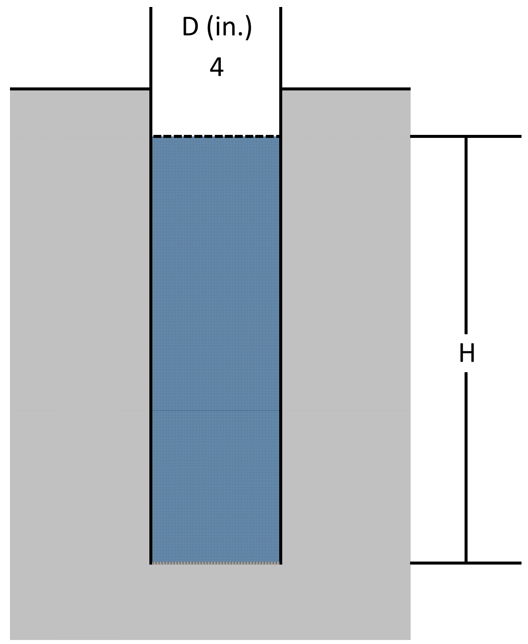
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	90	1.04	90	0.043	1.9
22	180	1.05	90	0.044	2.0
21	285	1.05	105	0.047	1.8
20	390	1.05	105	0.049	1.9
19	570	1.05	180	0.051	1.2
18	690	1.06	120	0.054	1.9

Average	1.79	in/hr
Safety Factor	2	
Design K	***0.89***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 33
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E./Kasey Ferreira

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 37" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	600	1.04	600	0.043	0.3
22	1740	1.05	1140	0.044	0.2
21	2820	1.05	1080	0.047	0.2
20	4140	1.05	1320	0.049	0.2
19	5580	1.05	1440	0.051	0.1
18	7140	1.06	1560	0.054	0.1

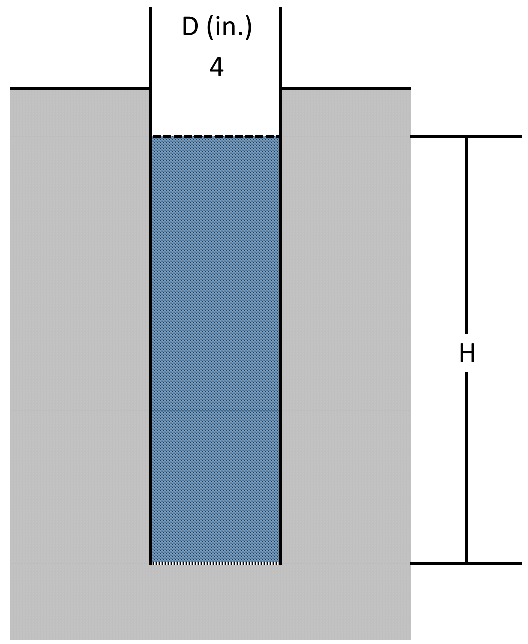
Average	0.18	in/hr
Safety Factor	2	
Design K	***0.09***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 34
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 32" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	300	1.04	300	0.043	0.6
22	600	1.05	300	0.044	0.6
21	900	1.05	300	0.047	0.6
20	1260	1.05	360	0.049	0.6
19	1620	1.05	360	0.051	0.6
18	1980	1.06	360	0.054	0.6

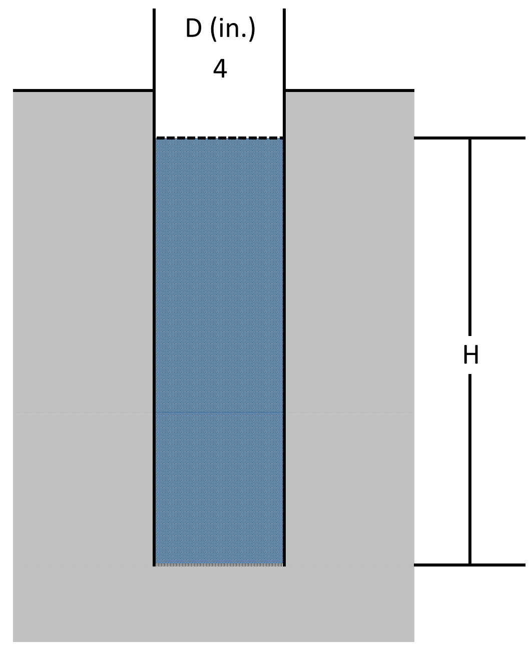
Average	0.60	in/hr
Safety Factor	2	
Design K	***0.30***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 16
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 32" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	300	1.04	300	0.043	0.6
22	660	1.05	360	0.044	0.5
21	1140	1.05	480	0.047	0.4
20	1680	1.05	540	0.049	0.4
19	2160	1.05	480	0.051	0.4
18	2700	1.06	540	0.054	0.4

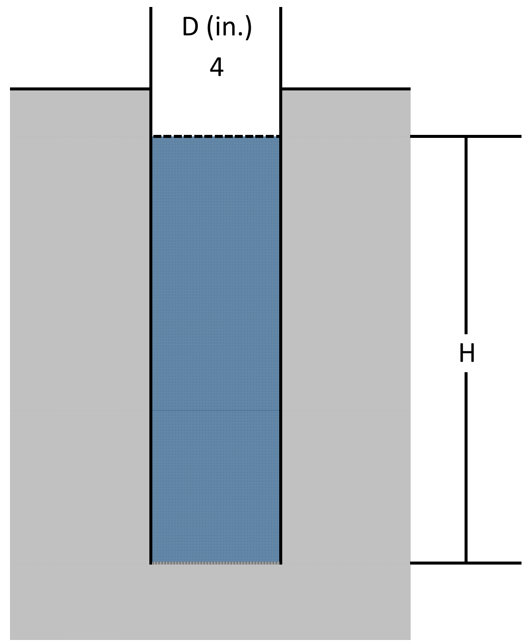
Average	0.45	in/hr
Safety Factor	2	
Design K	***0.23***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 38
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 38" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
22	18	1.09	18	0.087	19.9
20	36	1.10	18	0.095	21.8
18	56	1.11	20	0.105	21.7
16	81	1.13	25	0.118	19.4
14	107	1.14	26	0.134	21.1
12	137	1.17	30	0.154	21.1

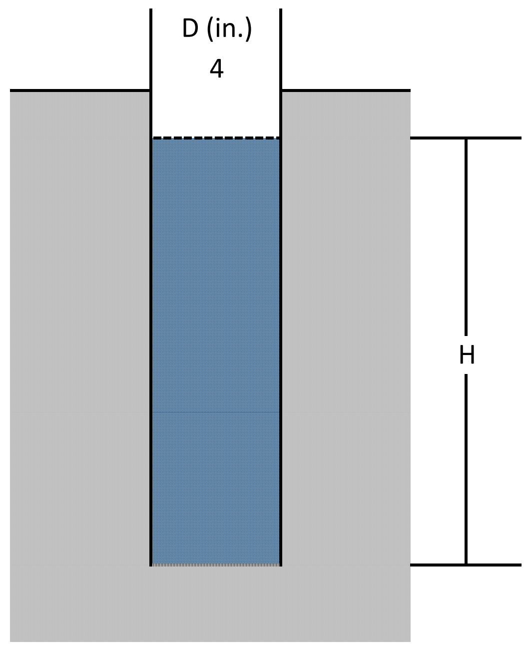
Average	20.8	in/hr
Safety Factor	2	
Design K	***10.41***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 40
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 32" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

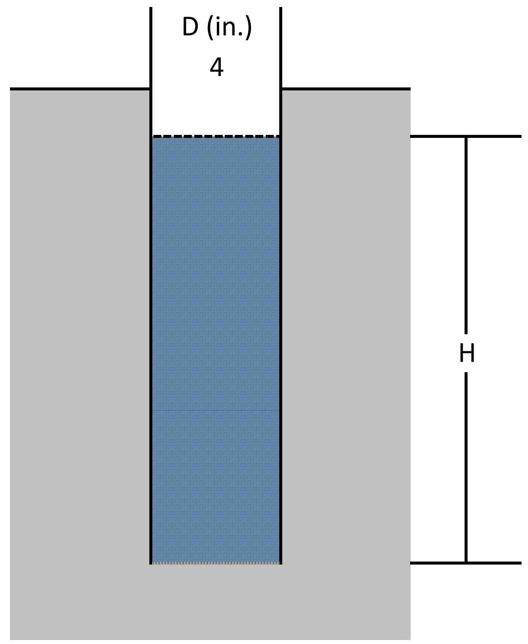
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
22	33	1.09	33	0.087	10.8
20	75	1.10	42	0.095	9.3
18	118	1.11	43	0.105	10.1
16	166	1.13	48	0.118	10.1
14	219	1.14	53	0.134	10.4
12	277	1.17	58	0.154	10.9

Average	10.3	in/hr
Safety Factor	2	
Design K	***5.13***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 40A
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 42" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

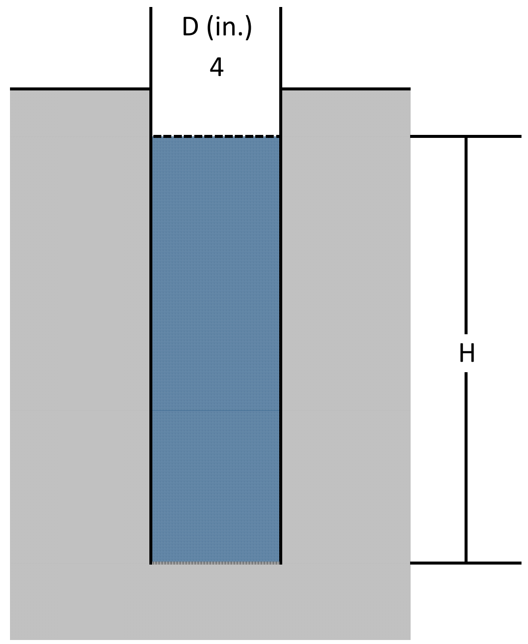
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
22	34	1.09	34	0.087	10.5
20	60	1.10	26	0.095	15.1
18	93	1.11	33	0.105	13.1
16	129	1.13	36	0.118	13.4
14	171	1.14	42	0.134	13.1
12	217	1.17	46	0.154	13.8

Average	13.2	in/hr
Safety Factor	2	
Design K	***6.58***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 41
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 42" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
22	15	1.09	15	0.087	23.8
20	37	1.10	22	0.095	17.8
18	63	1.11	26	0.105	16.7
16	102	1.13	39	0.118	12.4
14	145	1.14	43	0.134	12.8
12	185	1.17	40	0.154	15.8

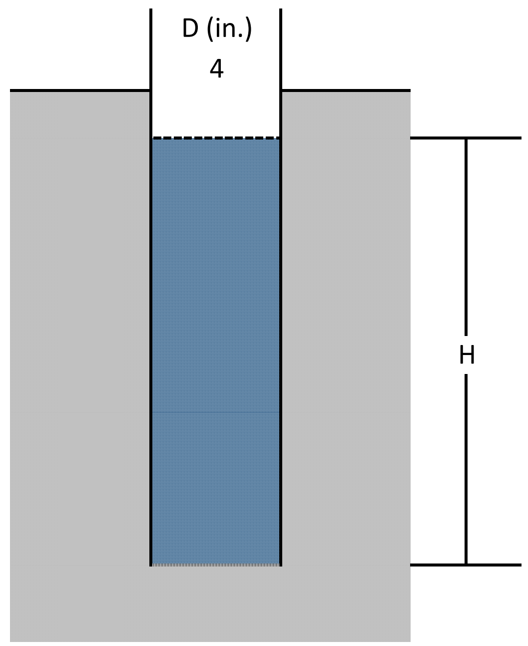
Average	16.6	in/hr
Safety Factor	2	
Design K	***8.28***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 42 (in C1)
Test Date: 20-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 38" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

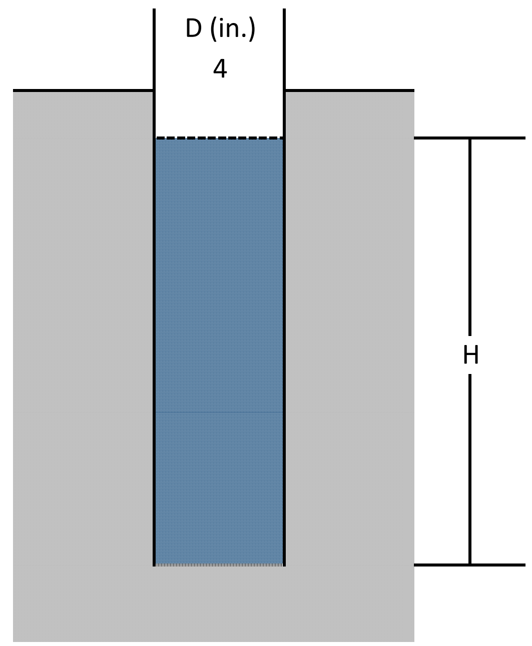
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
22	56	1.09	56	0.087	6.4
20	114	1.10	58	0.095	6.8
18	175	1.11	61	0.105	7.1
16	251	1.13	76	0.118	6.4
14	352	1.14	101	0.134	5.4
12	440	1.17	88	0.154	7.2

Average	6.5	in/hr
Safety Factor	2	
Design K	***3.27***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 42 (in C2) (remove C1)
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 52" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
22	20	1.09	20	0.087	17.9
20	38	1.10	18	0.095	21.8
18	61	1.11	23	0.105	18.8
16	88	1.13	27	0.118	17.9
14	110	1.14	22	0.134	24.9
12	133	1.17	23	0.154	27.5

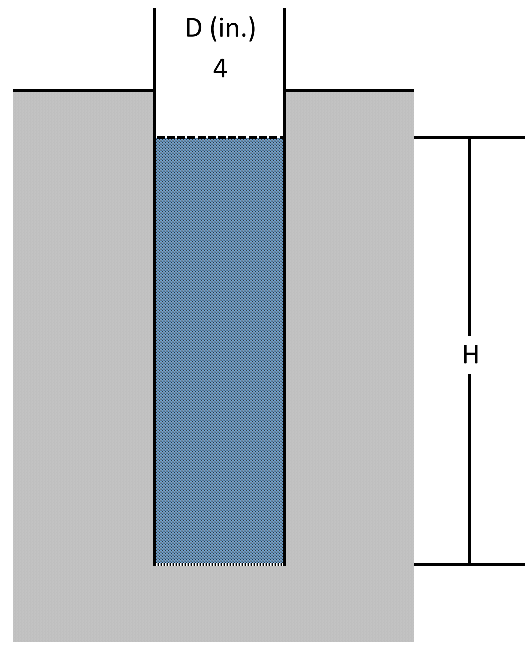
Average	21.5	in/hr
Safety Factor	2	
Design K	***10.74***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 43 (in C2) (remove C1)
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 74" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	75	1.04	75	0.043	2.3
22	164	1.05	89	0.044	2.1
21	390	1.05	226	0.047	0.8
20	600	1.05	210	0.049	1.0
19	870	1.05	270	0.051	0.8
18	1110	1.06	240	0.054	0.9

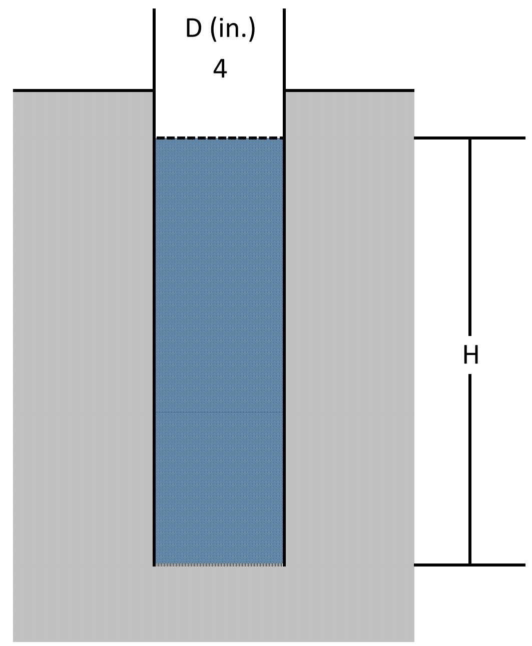
Average	1.3	in/hr
Safety Factor	2	
Design K	***0.66***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 44 (in C2) (remove C1)
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 56" below existing grade



$$k = \frac{\pi D}{11(t_2-t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
22	23	1.09	23	0.087	15.6
20	48	1.10	25	0.095	15.7
18	75	1.11	27	0.105	16.0
16	98	1.13	23	0.118	21.1
14	120	1.14	22	0.134	24.9
12	165	1.17	45	0.154	14.1

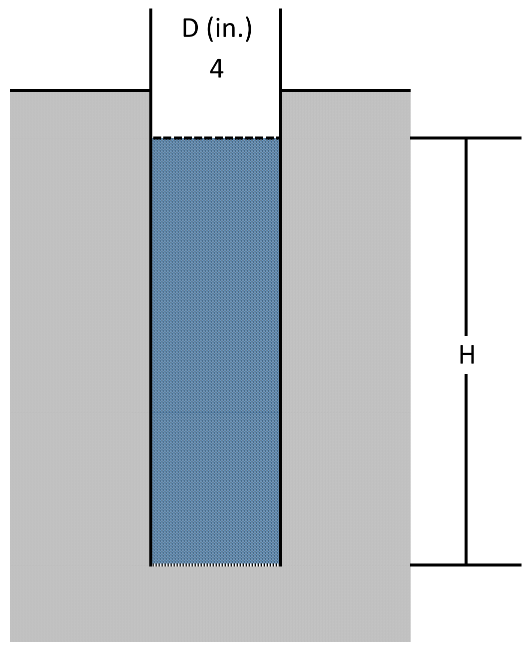
Average 17.9 in/hr
Safety Factor 2
Design K ***8.95 in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 45 (in C2) (remove C1)
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 62" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

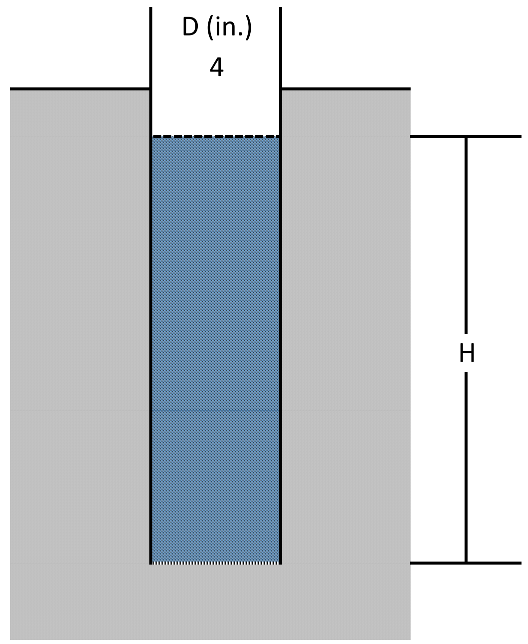
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
20	0	n/a	n/a		
19	390	1.05	390	0.051	0.5
18	690	1.06	300	0.054	0.7
17	1050	1.06	360	0.057	0.7
16	1410	1.06	360	0.061	0.7
15	1770	1.07	360	0.065	0.7
14	2130	1.07	360	0.069	0.8

Average	0.7	in/hr
Safety Factor	2	
Design K	***0.35***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 46 (in C2) (remove C1)
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 64" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

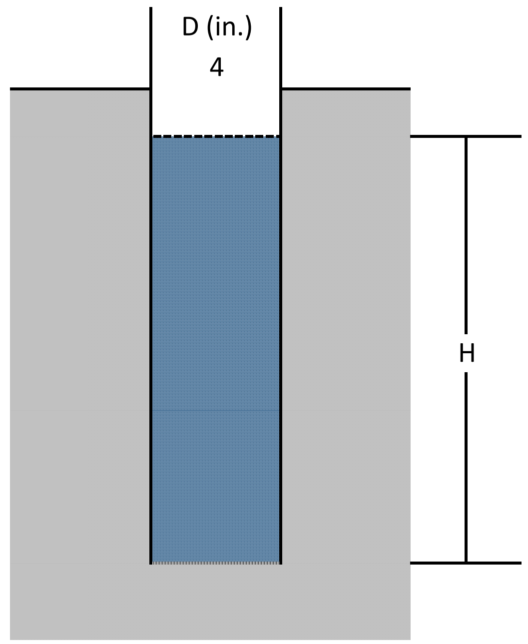
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	120	1.04	120	0.043	1.5
22	300	1.05	180	0.044	1.0
21	480	1.05	180	0.047	1.1
20	660	1.05	180	0.049	1.1
19	840	1.05	180	0.051	1.2
18	1020	1.06	180	0.054	1.2

Average	1.2	in/hr
Safety Factor	2	
Design K	***0.59***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 47 (in C2) (remove C1)
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 72" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	20	1.04	20	0.043	8.7
22	40	1.05	20	0.044	9.1
21	60	1.05	20	0.047	9.6
20	90	1.05	30	0.049	6.7
19	130	1.05	40	0.051	5.3
18	175	1.06	45	0.054	4.9

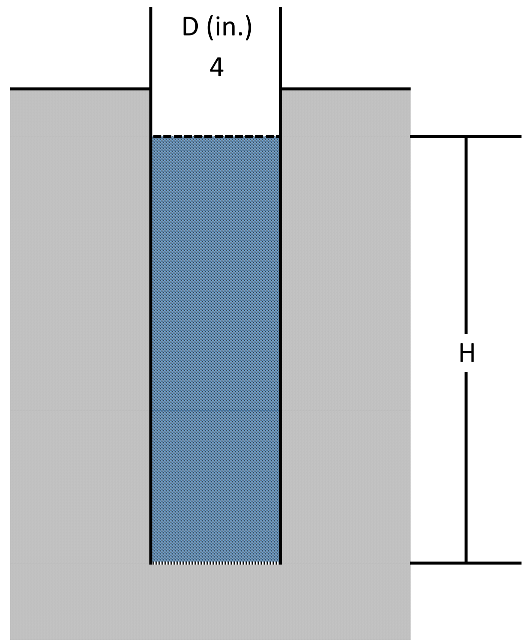
Average	7.4	in/hr
Safety Factor	2	
Design K	***3.69***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 48
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 48" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	7	1.04	7	0.043	25.0
22	15	1.05	8	0.044	22.8
21	35	1.05	20	0.047	9.6
20	59	1.05	24	0.049	8.4
19	105	1.05	46	0.051	4.6
18	145	1.06	40	0.054	5.6

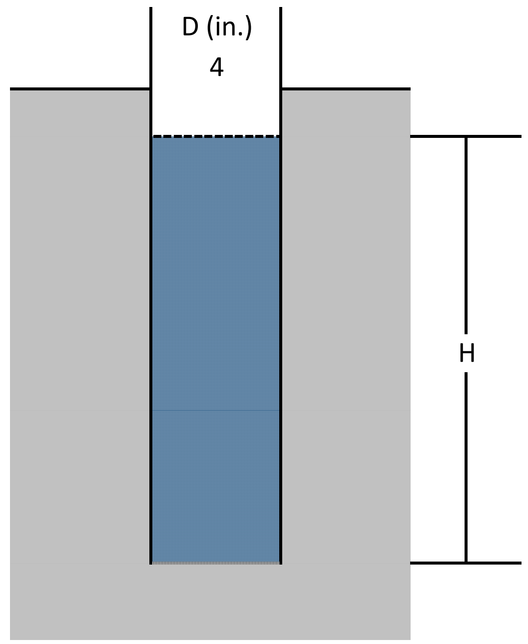
Average	12.6	in/hr
Safety Factor	2	
Design K	***6.32***	***in/hr***

PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 49
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 32" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	35	1.04	35	0.043	5.0
22	65	1.05	30	0.044	6.1
21	100	1.05	35	0.047	5.5
20	135	1.05	35	0.049	5.7
19	165	1.05	30	0.051	7.0
18	205	1.06	40	0.054	5.6

Average 5.8 in/hr
Safety Factor 2
Design K ***2.91 in/hr***

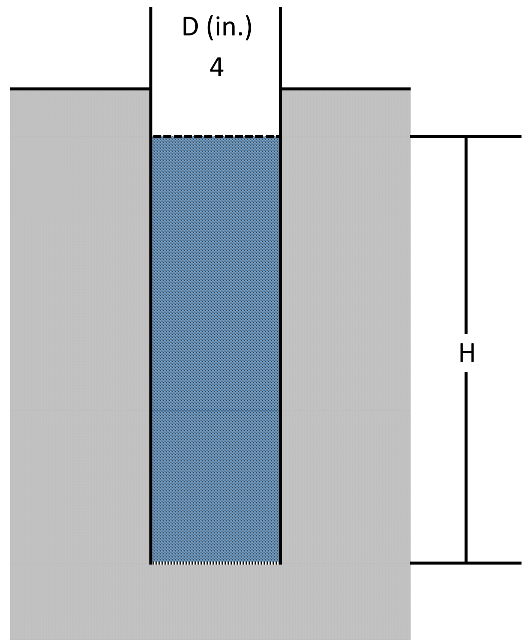
PERMEABILITY TESTING RESULTS

Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 50
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus

24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 42" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

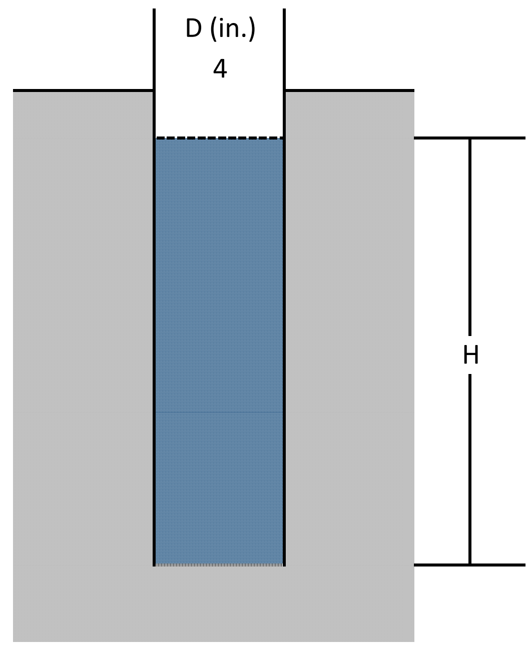
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	120	1.04	120	0.043	1.5
22	285	1.05	165	0.044	1.1
21	450	1.05	165	0.047	1.2
20	630	1.05	180	0.049	1.1
19	820	1.05	190	0.051	1.1
18	1010	1.06	190	0.054	1.2

Average	1.2	in/hr
Safety Factor	2	
Design K	***0.59***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 51 (in C2) (remove C1)
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 58" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

4" Sch. 40 PVC Test Pipe

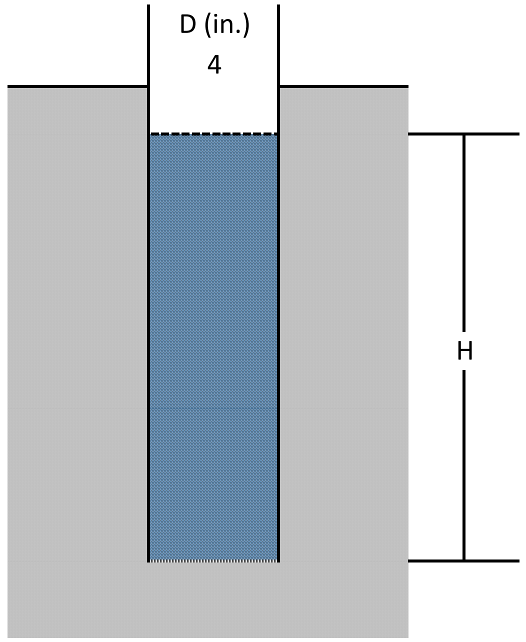
H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	45	1.04	45	0.043	3.9
22	85	1.05	40	0.044	4.6
21	150	1.05	65	0.047	2.9
20	240	1.05	90	0.049	2.2
19	375	1.05	135	0.051	1.6
18	510	1.06	135	0.054	1.6

Average	2.8	in/hr
Safety Factor	2	
Design K	***1.40***	***in/hr***

PERMEABILITY TESTING RESULTS
Falling Head Permeability Test

Project: Summer Street, Walpole
Location: OTH 52
Test Date: 21-Oct-20
By: Daniel J. Merrikin, P.E.

Test apparatus
24" long x 4" diameter schedule 40 pvc pipe
Bottom of pipe set 42" below existing grade



$$k = \frac{\pi D}{11(t_2 - t_1)} \ln(H_1/H_2)$$

Ref: Fig. 19.3
Lambe and Whitman,
Soil Mechanics,1969
Falling Head

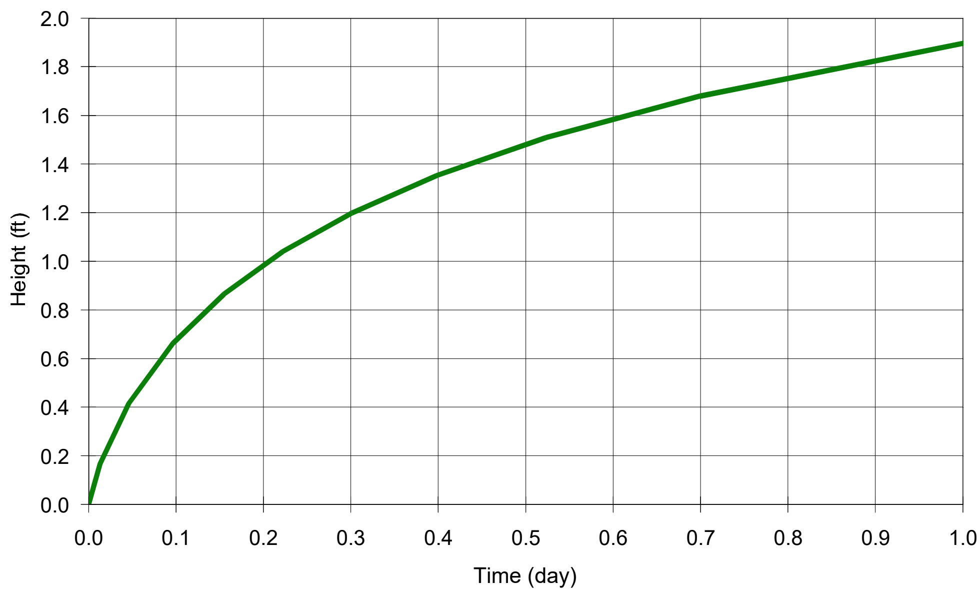
4" Sch. 40 PVC Test Pipe

H (inches)	T (seconds)	H_1/H_2 (inches)	t_2-t_1 (seconds)	$\ln(H_1/H_2)$	k (in/hr)
24	0	n/a	n/a		
23	30	1.04	30	0.043	5.8
22	55	1.05	25	0.044	7.3
21	85	1.05	30	0.047	6.4
20	110	1.05	25	0.049	8.0
19	140	1.05	30	0.051	7.0
18	170	1.06	30	0.054	7.4

Average	7.0	in/hr
Safety Factor	2	
Design K	***3.50***	***in/hr***

Appendix B: Mounding Analysis

Groundwater Mounding Analysis (Hantush's Method using Glover's Solution)



COMPANY: Howard Stein Hudson

PROJECT: Infiltration Pond #1

ANALYST: Matthew Baker

DATE: 6/12/2023 TIME: 1:06:46 PM

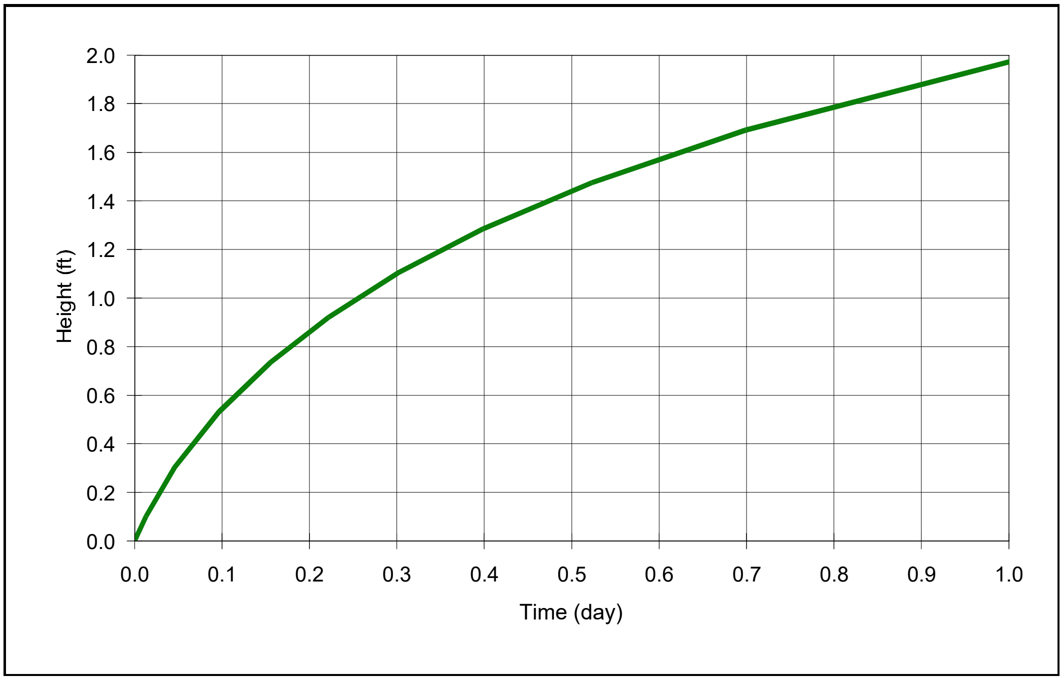
INPUT PARAMETERS

Application rate: 5.92 c.ft/day/sq. ft
Duration of application: 1 day
Total simulation time: 1 day
Fillable porosity: 0.4
Hydraulic conductivity: 90 ft/day
Initial saturated thickness: 35 ft
Length of application area: 150 ft
Width of application area: 29 ft
No constant head boundary used
Groundwater mounding @
X coordinate: 0 ft
Y coordinate: 0 ft
Total volume applied: 25752 cft

MODEL RESULTS

Time (day)	Mound Height (ft)
0	0
0	0.17
0	0.41
0.1	0.66
0.2	0.86
0.2	1.04
0.3	1.2
0.4	1.35
0.5	1.51
0.7	1.68
1	1.9

Groundwater Mounding Analysis (Hantush's Method using Glover's Solution)



COMPANY: Howard Stein Hudson

PROJECT: Infiltration Pond #2

ANALYST: Matthew Baker

DATE: 6/12/2023 TIME: 1:04:22 PM

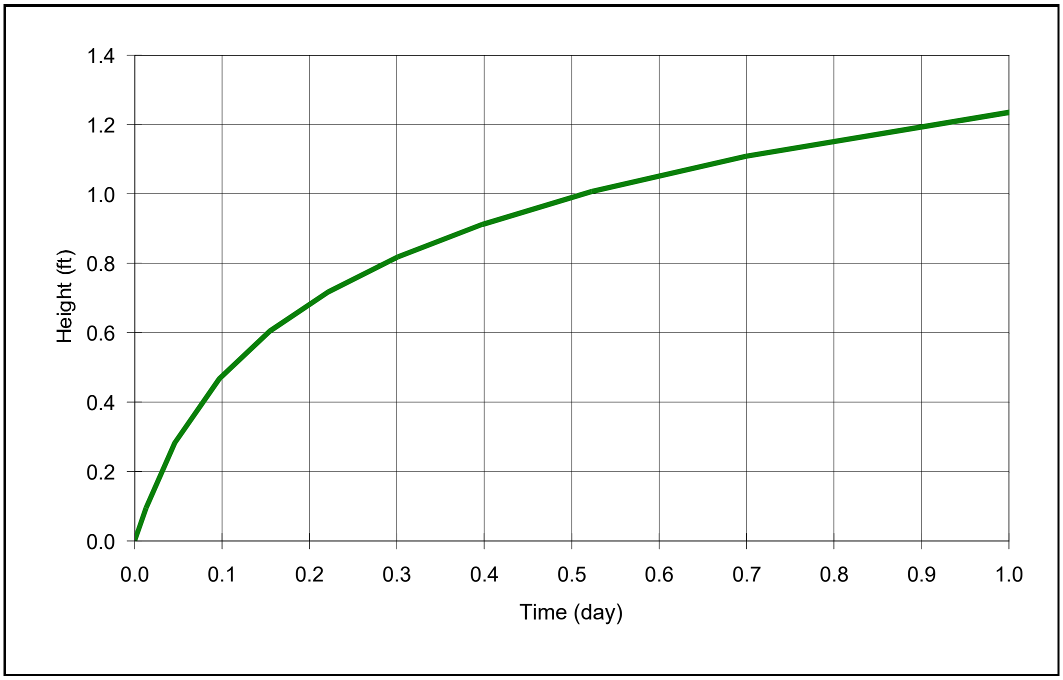
INPUT PARAMETERS

Application rate: 3.13 c.ft/day/sq. ft
Duration of application: 1 day
Total simulation time: 1 day
Fillable porosity: 0.4
Hydraulic conductivity: 90 ft/day
Initial saturated thickness: 20 ft
Length of application area: 165 ft
Width of application area: 40 ft
No constant head boundary used
Groundwater mounding @
X coordinate: 0 ft
Y coordinate: 0 ft
Total volume applied: 20658 cft

MODEL RESULTS

Time (day)	Mound Height (ft)
0	0
0	0.1
0	0.3
0.1	0.53
0.2	0.73
0.2	0.92
0.3	1.1
0.4	1.28
0.5	1.48
0.7	1.69
1	1.97

Groundwater Mounding Analysis (Hantush's Method using Glover's Solution)



COMPANY: Howard Stein Hudson

PROJECT: Infiltration Pond #3

ANALYST: Matthew Baker

DATE: 6/7/2023 TIME: 12:08:37 PM

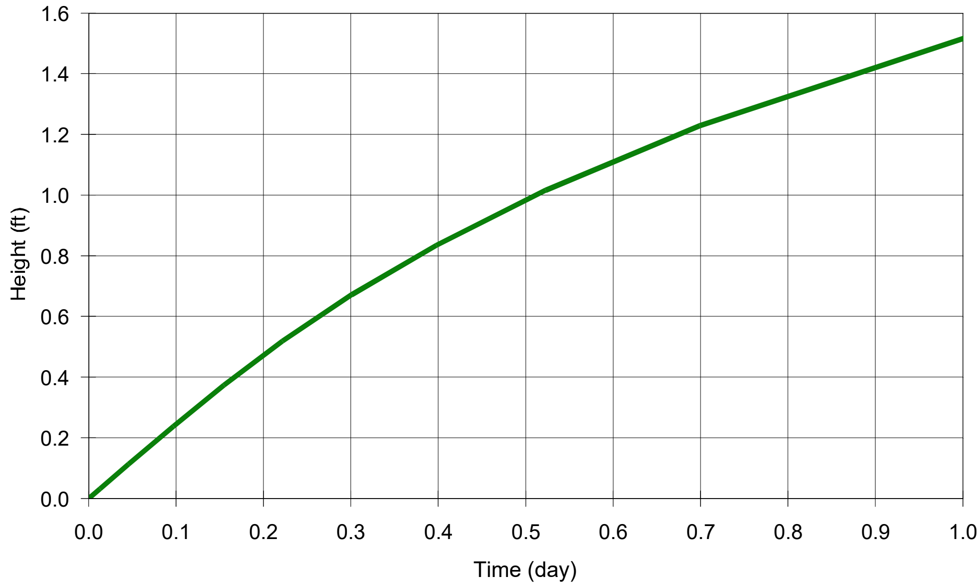
INPUT PARAMETERS

Application rate: 2.93 c.ft/day/sq. ft
Duration of application: 1 day
Total simulation time: 1 day
Fillable porosity: 0.4
Hydraulic conductivity: 70 ft/day
Initial saturated thickness: 35 ft
Length of application area: 77 ft
Width of application area: 50 ft
No constant head boundary used
Groundwater mounding @
X coordinate: 0 ft
Y coordinate: 0 ft
Total volume applied: 11280.5 cft

MODEL RESULTS

Time (day)	Mound Height (ft)
0	0
0	0.1
0	0.28
0.1	0.47
0.2	0.6
0.2	0.72
0.3	0.82
0.4	0.91
0.5	1.01
0.7	1.11
1	1.24

Groundwater Mounding Analysis (Hantush's Method using Glover's Solution)



COMPANY: Howard Stein Hudson

PROJECT: Stormtech #1

ANALYST: Matthew Baker

DATE: 6/7/2023 TIME: 12:17:27 PM

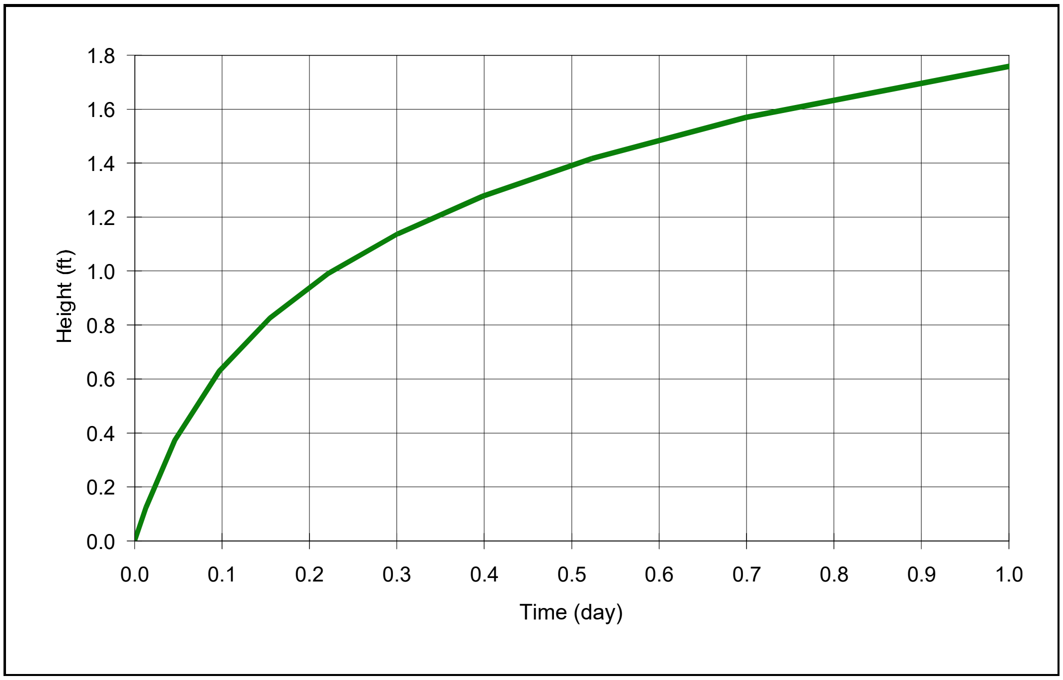
INPUT PARAMETERS

Application rate: 0.99 c.ft/day/sq. ft
Duration of application: 1 day
Total simulation time: 1 day
Fillable porosity: 0.4
Hydraulic conductivity: 12 ft/day
Initial saturated thickness: 35 ft
Length of application area: 82 ft
Width of application area: 67 ft
No constant head boundary used
Groundwater mounding @
X coordinate: 0 ft
Y coordinate: 0 ft
Total volume applied: 5439.06 cft

MODEL RESULTS

Time (day)	Mound Height (ft)
0	0
0	0.03
0	0.11
0.1	0.24
0.2	0.37
0.2	0.52
0.3	0.67
0.4	0.84
0.5	1.02
0.7	1.23
1	1.52

Groundwater Mounding Analysis (Hantush's Method using Glover's Solution)



COMPANY: Howard Stein Hudson

PROJECT: Stormtech #2

ANALYST: Matthew Baker

DATE: 6/7/2023 TIME: 12:16:03 PM

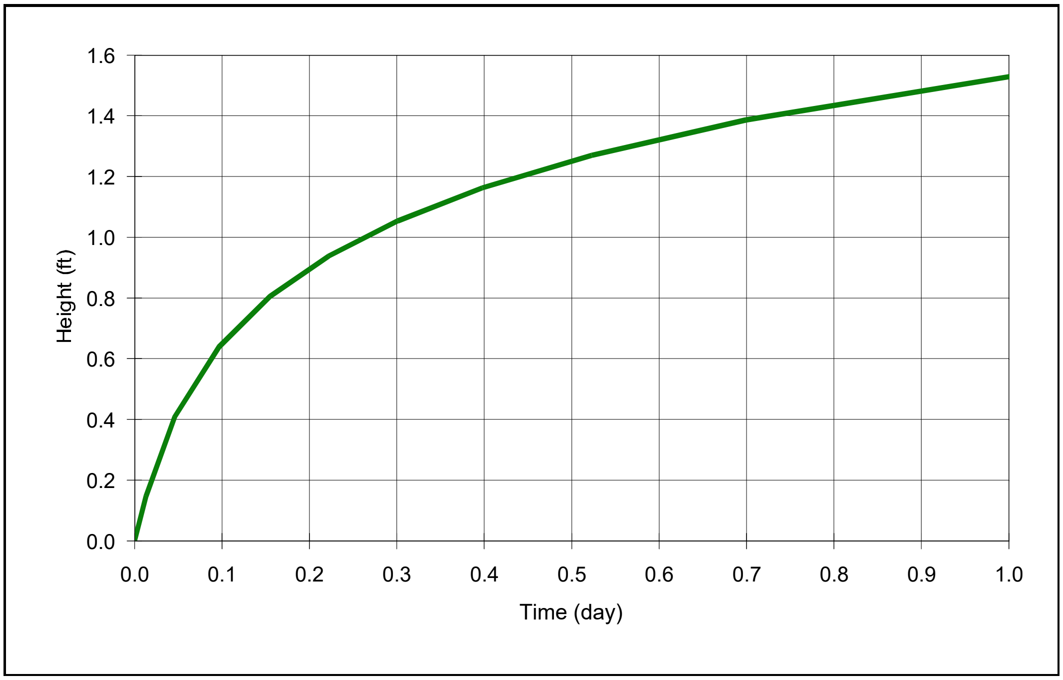
INPUT PARAMETERS

Application rate: 3.86 c.ft/day/sq. ft
Duration of application: 1 day
Total simulation time: 1 day
Fillable porosity: 0.4
Hydraulic conductivity: 70 ft/day
Initial saturated thickness: 35 ft
Length of application area: 92 ft
Width of application area: 48 ft
No constant head boundary used
Groundwater mounding @
X coordinate: 0 ft
Y coordinate: 0 ft
Total volume applied: 17045.76 cft

MODEL RESULTS

Time (day)	Mound Height (ft)
0	0
0	0.12
0	0.37
0.1	0.63
0.2	0.83
0.2	0.99
0.3	1.14
0.4	1.28
0.5	1.42
0.7	1.57
1	1.76

Groundwater Mounding Analysis (Hantush's Method using Glover's Solution)



COMPANY: Howard Stein Hudson

PROJECT: Stormtech #3

ANALYST: Matthew Baker

DATE: 6/7/2023 TIME: 12:21:05 PM

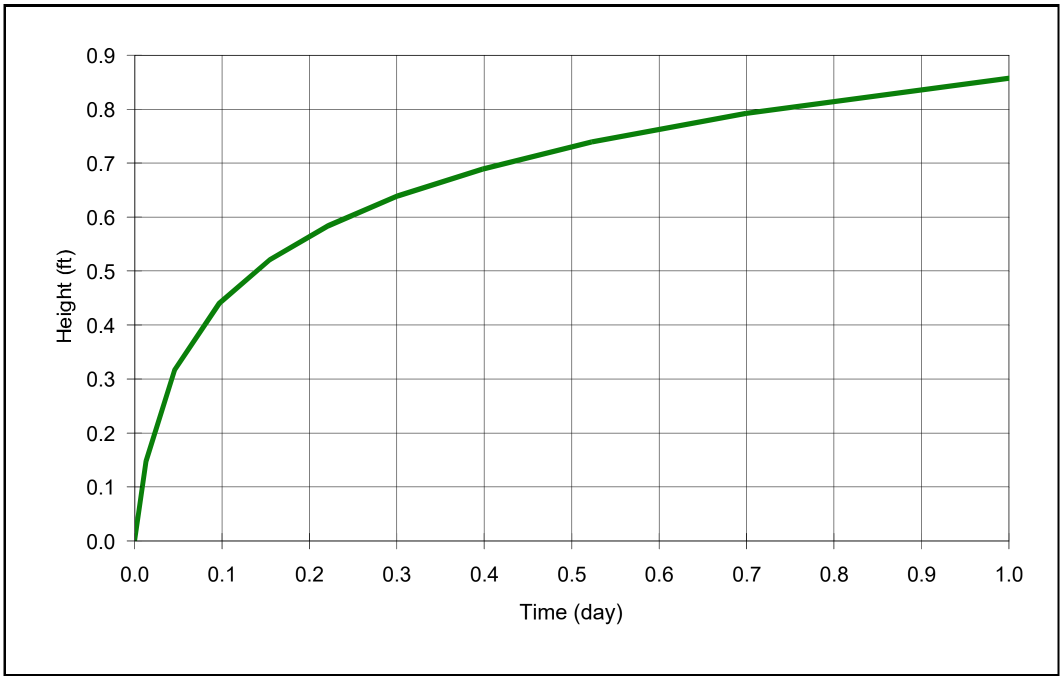
INPUT PARAMETERS

Application rate: 4.61 c.ft/day/sq. ft
Duration of application: 1 day
Total simulation time: 1 day
Fillable porosity: 0.4
Hydraulic conductivity: 85 ft/day
Initial saturated thickness: 35 ft
Length of application area: 68 ft
Width of application area: 49 ft
No constant head boundary used
Groundwater mounding @
X coordinate: 0 ft
Y coordinate: 0 ft
Total volume applied: 15360.52 cft

MODEL RESULTS

Time (day)	Mound Height (ft)
0	0
0	0.15
0	0.41
0.1	0.64
0.2	0.8
0.2	0.94
0.3	1.05
0.4	1.16
0.5	1.27
0.7	1.39
1	1.53

Groundwater Mounding Analysis (Hantush's Method using Glover's Solution)



COMPANY: Howard Stein Hudson

PROJECT: Stormtech #4

ANALYST: Matthew Baker

DATE: 6/7/2023 TIME: 12:23:42 PM

INPUT PARAMETERS

Application rate: 5.42 c.ft/day/sq. ft
Duration of application: 1 day
Total simulation time: 1 day
Fillable porosity: 0.4
Hydraulic conductivity: 200 ft/day
Initial saturated thickness: 35 ft
Length of application area: 68 ft
Width of application area: 44 ft
No constant head boundary used
Groundwater mounding @
X coordinate: 0 ft
Y coordinate: 0 ft
Total volume applied: 16216.64 cft

MODEL RESULTS

Time (day)	Mound Height (ft)
0	0
0	0.15
0	0.32
0.1	0.44
0.2	0.52
0.2	0.58
0.3	0.64
0.4	0.69
0.5	0.74
0.7	0.79
1	0.86

Appendix C: Operation and Maintenance Plan

HOWARD STEIN HUDSON

Engineers + Planners

Operation and Maintenance Plan and Long-Term Pollution Prevention Plan

51-53-55 Summer Street

Walpole, Massachusetts

Prepared by:

Howard Stein Hudson

114 Turnpike Road, Suite 2C

Chelmsford, MA 01824

June 2023

Contents

Operation and Maintenance Plan

Deep Sump Hooded Catch Basins

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $10,200.00 - $15,300.00
(Per DEP Stormwater Structural BMP's Vol 2)

Inspect or clean deep sump basins at least four times per year and at the end of the foliage and snow removal seasons. Sediments must also be removed four times per year or whenever the depth of deposits is greater than or equal to one half the depth from the bottom of the invert of the lowest pipe in the basin. If handling runoff from land uses with higher potential pollutant loads or discharging runoff near or to a critical area, more frequent cleaning may be necessary. Clamshell buckets are typically used to remove sediment in Massachusetts. However, vacuum trucks are preferable because they remove more trapped sediment and supernatant than clamshells. Vacuuming is also a speedier process and is less likely to snap the cast iron hood within the deep sump catch basin.

Date	Inspector	Condition	Maintenance Performed*

***Evidence of maintenance (i.e. receipts) must be provided.**

Contech Water Quality Unit – STC 450i

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $200.00 - $300.00
(Per Stormceptor Inspection and Maintenance Guide)

Inspect or clean pos-construction prior to being put in service. The unit is to be cleaned by a vacuum truck. The unit should be cleaned once the sediment depth reaches 15% of the storage capacity, or when about 8 inches of sediment has been accumulated. Additional information regarding the maintenance of the unit can be found within the attached product Maintenance Manual.

Date	Inspector	Condition	Maintenance Performed*

***Evidence of maintenance (i.e. receipts) must be provided.**

Subsurface Infiltration System

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $200.00 - $300.00
(Per DEP Stormwater Structural BMP's Vol 2)

For the first 3 months after construction, the subsurface infiltration system should be inspected after every storm greater than 1" for standing water for periods more than 72 hours. Therein after, the subsurface infiltration system should be inspected biannually. If standing water is observed for longer than 72 hours, a pump should be placed in the basin and discharged through the outlet pipe. After the system is dewatered, it should be observed by a Professional Engineer. A Professional Engineer should provide an opinion as to why the infiltration system is not draining and provide recommendations to restore infiltration capacity to the system.

Date	Inspector	Condition	Maintenance Performed*

*Evidence of maintenance (i.e. receipts) must be provided.

Isolator Row

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $600.00 - $900.00
(Per DEP Stormwater Structural BMP's Vol 2)

In the first year of operation, the Isolator Row should be inspected every 6 months for depth of sediment. Therein after, the Isolator Row should be inspected annually. If sediment is present, a stadia rod should be inserted into the inspection port to determine depth of sediment. If/when the depth exceeds 3 inches throughout the length of the Isolator Row, clean out should be performed. Please see the Isolator Row Maintenance Manual for cleanout procedures.

Date	Inspector	Condition	Maintenance Performed*

*Evidence of maintenance (ie. receipts) must be provided.

Sediment Forebay

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $1,200.00
(Per DEP Stormwater Structural BMP's Vol 2)

In many cases, a landscaping contractor working elsewhere on the site can complete maintenance tasks. Stabilize the floor and sidewalls of the sediment forebay before making it operational, otherwise the practice will discharge excess amounts of suspended sediments.

Inspect and clean out the sediment forebay to assure that sediments and associated pollutants are cleaned out. Frequently removing accumulated sediments will make it less likely that sediments will be resuspended. At a minimum, inspect the sediment forebays monthly and clean them out at least four times a year.

Mow the grass areas and keep the grass height no greater than 6 inches. Check for signs of rilling and gullying and repair as needed. After removing the sediment, replace any vegetation damaged during the clean-out by either reseeding or resodding. When reseeding, incorporate practices such as hydroseeding with a tackifier, blanket, or similar practice to ensure that no scour occurs in the forebay, while the seeds germinate and develop roots.

*Paying careful attention to the pretreatment and operation and maintenance can extend the life of the soil media.

Date	Inspector	Condition	Maintenance Performed*

***Evidence of maintenance (ie. receipts) must be provided.**

Infiltration Ponds

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $580.00
(Per DEP Stormwater Structural BMP's Vol 2)

In many cases, a landscaping contractor working elsewhere on the site can complete maintenance tasks. Inspect the basin and outlet structure to ensure no structural damage has occurred and that they are functioning properly and up to design standards.

Inspection and preventive maintenance are required at least twice per year, and after each major storm event. Note how long water remains standing in the basin after a storm. If water remains standing after 48 to 72 hours after a storm, the infiltration basin may be clogged.

At least twice per year, mow the buffer area, side slopes, and basin bottom. Remove grass clippings, accumulated organic matter, trash and debris at this time.

Remove sediment from the basin as necessary when the basin is dry. Use light equipment when removing the top layer, as to not compact the underlying soil. Use deep tilling to break and remove any clogged surfaces and revegetate immediately.

Important items to check during inspections include:

- Signs of differential settlement
- Cracking
- Erosion
- Leakage in the embankments
- Tree growth on the embankments
- Condition of rip rap
- Sediment accumulation
- Health of vegetation, turf

*Paying careful attention to the pretreatment and operation and maintenance can extend the life of the soil media.

Date	Inspector	Condition	Maintenance Performed*

***Evidence of maintenance (ie. receipts) must be provided.**

Pocket Wetland

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $580.00
(Per DEP Stormwater Structural BMP's Vol 2)

The constructed stormwater wetland must be observed over time. In the first 3 years after construction, inspect the constructed stormwater wetland twice a year during both the growing and non-growing seasons. Following the maturation of the plant community within the treatment wetland(s), in addition to annual forebay inspection and clean-outs, the plant communities will be assessed to verify that the desired species composition is retained, and that woody or pernicious species do not become substantially established. In the event that undesirable plant specimens become established these will be removed either by hand pulling, puller-bear extraction, or by targeted herbicide application by a Licensed Applicator. A brief, annual photolog (1-2 photos per community type from consistent view positions) will provide documentation under the O&M plan. During these inspections, record and map the following information:

- The types and distribution of the dominant wetland plants in the marsh;
- The presence and distribution of planted wetland species;
- The presence and distribution of invasive wetland species (invasive species must be removed);
- Indications that other species are replacing the planted wetland species;
- Percentages of standing water that is unvegetated (excluding the deep-water cells which are not suitable for emerging plant growth);
- The maximum elevation and the vegetative condition in this zone if the design elevation of the normal pool is being maintained for wetlands with extended zones;
- Stability of the original depth zones and the micro-topographic features; and
- Accumulation of sediment in the forebay and micro pool; and survival rate of plants (cells with dead plants must be replanted).

Date	Inspector	Condition	Maintenance Performed*

***Evidence of maintenance (ie. receipts) must be provided.**

Outfalls and Riprap

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $750.00 - $1,000.00
(Per DEP Stormwater Structural BMP's Vol 2)

Inspections should be performed annually and after major storm events. If riprap has been damaged, repairs should be made promptly to prevent a progressive failure. Channel obstructions, such as trees and sediment bars, can change flow patterns and cause erosive forces which may damage riprap and the integrity of the outfall.

Date	Inspector	Condition	Maintenance Performed*

***Evidence of maintenance (ie. receipts) must be provided.**

Drip-edge System

System Owner: Fairfield Residential (until ownership is transferred)
Robert Hewitt
rhewitt@ffres.com
Estimated Annual Maintenance: $2,500.00 - $3,000.00
(Per DEP Stormwater Structural BMP's Vol 2)

Inspect the infiltration trench after the first several rainfall events, after all major storms, and on regularly scheduled dates every six months. Inspect the trench 24 hours or several days after a rain event, to look for ponded water. If there is ponded water at the surface of the trench, it is likely that the trench surface is clogged. To address surface clogging, remove and replace the topsoil or first layer of stone aggregate and the filter fabric. If water is ponded inside the trench, it may indicate that the bottom of the trench has failed. To rehabilitate a failed trench, all accumulated sediment must be stripped from the bottom, the bottom of the trench must be scarified and tilled to induce infiltration, and all of the stone aggregate and filter fabric or media must be removed and replaced.

Date	Inspector	Condition	Maintenance Performed*

***Evidence of maintenance (ie. receipts) must be provided.**

Erosion and Sediment Control Notes

A. Erosion and sediment control measures must be installed prior to the start of construction and maintained and upgraded as necessary during construction by the contractor. It is the contractor's responsibility to inspect and install additional control measures as needed during construction.

B. All catch basins receiving drainage from the project site must be provided with a catch basin filter.

C. Stabilization of all re-graded and soil stockpile areas must be maintained during all phases of construction.

D. Sediment removed from erosion and sediment control devices must be properly removed and disposed. All damaged controls must be removed and replaced.

E. The contractor is responsible for implementing the erosion and sediment control plan which will be submitted as part of the SWPPP. This includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plant, and notifying the proper city agency of any transfer of this responsibility.

F. The contractor shall be responsible for controlling wide erosion and dust throughout the life of his contract. Dust control may include, but is not limited to, sprinkling of water on exposed soils and street sweeping adjacent roadways.

G. If final grading is to be delayed for more than 21 days after land disturbance activates cease, temporary vegetation or mulch shall be used to stabilize soils within 14 days of the last disturbance.

H. If a disturbed area will be exposed for greater than one year, permanent grasses or other approved cover must be installed.

I. The contractor must keep on-site at all times additional silt fence and straw wattle for the installation at the direction of the engineer or the city to mitigate any emergency condition.

J. The constriction fencing and erosion and sediment controls as shown may not be practical during all stages of construction. Earthwork activity on-site must be done in a manner such that runoff is directed to a sediment control device or infiltrated to the ground.

K. Demolition and construction debris must be properly contained and disposed of.

L. Disposal of all demolished materials is the responsibility of the contractor and must be hauled off-site in accordance with all federal, state, and local requirements.

General Construction Sequence

- Construction sequence to comply with the submitted and approved SWPPP.

Construction

A seven-step process to prepare a wetland bed prior to planting (Shueler 1992):

1. Prepare final pond-scaping and grading plans for the constructed stormwater wetland. At the same time, order wetland plant stocks from aquatic nurseries.
2. Once the constructed stormwater wetland volume has been excavated, grade the wetland to create the major internal features (pool, aquatic bench, deep water channels, etc.).
3. Because deep subsoils often lack the nutrients and organic matter needed to support vigorous plant growth, add topsoil and/or wetland mulch to the wetland excavation. If available, wetland mulch is preferable to topsoil.
4. After the mulch or topsoil has been added, grade the constructed stormwater wetland to its final elevations. Temporarily stabilize all wetland features above the normal pool. After final grading, close the pool drain to allow the pool to fill. MassDEP recommends evaluating the wetland elevations during a standing period of approximately six months to assess how the constructed stormwater wetland responds to storm flows and inundation, where the pond-scaping zones are located, and whether the final grade and micro-topography will persist over time.
5. Before planting, measure the constructed stormwater wetland depths to the nearest inch to confirm planting depth. If necessary, modify the pond-scape plan at this time to reflect altered depths or availability of plant stock.
6. Aggressively apply erosion controls during the standing and planting periods. Stabilize the vegetation in all areas above the normal pool elevation during the standing period (typically by hydroseeding).
7. Dewater the constructed stormwater wetland at least three days before planting, because a dry wetland is easier to plant than a wet one.

Invasive Vegetation Control

A. Wetland Replication Areas

1. Undesirable exotic vegetation, including all species from the Massachusetts Department of Agriculture, "Massachusetts Prohibited Plant List" (MA DAR, 2017) will be removed from areas where compensatory wetland replication will occur, including the adjacent upland work areas if applicable. Throughout the anticipated two (2) growing season monitoring period, undesirable plants will be removed by hand-pulling or mechanical means if necessary. Non-invasive wetland plants that are not desirable to the replication plan may also be controlled manually during the two seasons of maturation for the replication areas.

B. Upland Project Area Buffer Zone Invasive Species Control Plan

1. The most pernicious invasions of exotic vegetation currently occur within areas of former pasture within uplands that lie within the project area. These materials will be removed during site preparation and either chipped and composted and disposed of offsite or taken off site to a processing facility.

2. Undesirable exotic vegetation will be removed from areas of upland Buffer Zone within the project development areas (buildings, roads and drainage, landscaped areas). In general lawns and public areas with landscaping will be kept free of undesirable vegetation during normal landscape maintenance. Particular attention will be paid to areas not associated with private dwellings to assure that seed sources do not develop within areas beyond exclusive use zones. No management of exotic vegetation will be conducted within areas left in their natural state.

C. Invasive Plant Species Maintenance Plan

1. Throughout the areas improved beyond exclusive use and public use areas (lawns, gardens, planting islands, sidewalks) annual mowing will be performed, after August 1, for the purpose of controlling invasive plant species, both woody and herbaceous.

2. Areas beyond typical public view or visitation are particularly susceptible to overgrowth by undesirable species; examples of these can be found at: http://www.massnrc.org/MIPAG/invasive.htm. These species can generally be controlled or eliminated by regular mowing and destruction of propagules prior to ripening. The areas of greatest concern are low/no activity areas such as detention basin berms, and

areas cleared and graded for project construction, but not part of normal habitation and use activities. Example areas include:

2.1 East of Basin #1
2.2 East of Building #1 and parking
2.3 North and East of Basin
2.4 North of Maintenance Facilities

3. Regular, annual mowing of these areas will discourage establishment and propagation of undesirable plant species. In the event that species on the MIPAG list (or other current recognized lists) become established despite mowing, conventional measures will be employed to eradicate these from herbaceous communities functioning to stabilize areas disturbed in the course of project construction. Hand, or mechanical pulling, or licensed herbicide application, as appropriate will be used to minimize advancement of undesirable plant species in “back areas” not typically used for recreation or enjoyment by the residents.

Long-Term Pollution Prevention Plan

This Long-Term Pollution Prevention Plan is prepared to comply with the provisions set forth in the Massachusetts Department of Environmental Protection (DEP) Stormwater Management Standards. Structural Best Management Practices (BMP's) require periodic maintenance to ensure proper function and efficiency in pollutant removal from stormwater discharges that would otherwise reach wetland resource areas untreated.

Maintenance schedules found below are as recommended in Department of Environmental Protection's Massachusetts Stormwater Handbook and as recommended in manufacturer's specifications.

- Transfer of Ownership

After the project is completed the site ownership and maintenance responsibilities will be transferred to a from Fairfield Residential. The new owner will be responsible for the operation, maintenance, and inspection of all components of the onsite stormwater management system.

Trash and Litter Cleanup

The owner (or maintainer) shall perform trash and litter cleanup once per month in and around the site. Trash and litter shall be disposed of in the on-site dumpsters during construction, and after construction shall be collected and properly disposed of.

Paved Roadway

Impervious surfaces (pavement and sidewalks) shall be swept on an annual basis between April 1 and May 31. Raised sidewalks shall be swept by hand prior to any mechanical (rotary brush) sweeping. Sand and sediment deposits shall be collected from the site and disposed of by a licensed contractor, who must dispose of the material off-site in a manner consistent with all local, state, and federal regulations.

Deep Sump Hooded Catch Basins

Catch Basins shall be inspected on a bi-annual basis. Any sediment accumulations in excess of half the unit's sump depth shall be removed. Material shall be removed by a licensed contractor, who shall be responsible for disposing of the material off-site in a manner consistent with all local, state, and federal regulations.

Contech Water Quality Unit – STC 450i

Inspect or clean pos-construction prior to being put in service. The unit is to be cleaned by a vacuum truck. The unit should be cleaned once the sediment depth reaches 15% of the storage capacity, or when about 8 inches of sediment has been accumulated. Additional information regarding the maintenance of the unit can be found within the attached product Maintenance Manual.

Landscape Maintenance of Maintained Landscape Areas

Landscaped surfaces in and around the proposed development in maintained areas shall be kept healthy and maintained. All lawn areas, as shown in maintained upland areas, shall be kept cut and watered to maintain groundcover. Clippings shall be contained and disposed of at an offsite location. Care should be taken as to not dump or dispose of any clippings and or plant material into the replication area and/or the Town of Walpole Conservation Areas. All landscaping on the site shall be installed so as to not require ongoing use of fertilizers and pesticides. Fertilizers containing phosphorus shall not be used on the property. All landscape waste accumulated in the course of grounds maintenance, including grass clippings and leaves, shall be disposed of at a proper upland composting or disposal area, and shall not be disposed of in any wetland area or buffer zone without the approval of the conservation commission. Non-organic fertilizers and pesticides and landscape care chemicals within 100 feet of the wetlands are prohibited. Signs must be posted as referenced in condition #49 of the Decision and dog curbing rules must be implemented (pick up and proper disposal) to further reduce nutrient loading within wetland resource areas.

Shrubs and trees shall be maintained and shall be replaced immediately if the plant has died.

Snow Plowing and Disposal

All snow shall be plowed and stored within the areas designated on the O&M and LTPPP Plan. Once these areas can no longer accept additional snow, all excess snow shall be removed from the site. Absolutely no deposition of snow shall enter directly into the wetlands or placed over any stormwater management facility. This shall be maintained in perpetuity.

Subsurface Infiltration Systems

For the first 3 months after construction, the subsurface infiltration system should be inspected after every storm greater than 1” for standing water for periods more than 72 hours. Therein after, the subsurface infiltration system should be inspected biannually. If standing water is observed for longer than 72 hours, a pump should be placed in the basin and discharged through the outlet pipe. After the system is dewatered, it should be observed by a Professional Engineer. A Professional

Engineer should provide an opinion as to why the infiltration system is not draining and provide recommendations to restore infiltration capacity to the system.

Isolator Row

In the first year of operation, the Isolator Row should be inspected every 6 months for depth of sediment. Therein after, the Isolator Row should be inspected annually. If sediment is present, a stadia rod should be inserted into the inspection port to determine depth of sediment. If/when the depth exceeds 3 inches throughout the length of the Isolator Row, clean out should be performed. Please see the Isolator Row Maintenance Manual for cleanout procedures.

Sediment Forebays

In many cases, a landscaping contractor working elsewhere on the site can complete maintenance tasks. Stabilize the floor and sidewalls of the sediment forebay before making it operational, otherwise the practice will discharge excess amounts of suspended sediments.

Inspect and clean out the sediment forebay to assure that sediments and associated pollutants are cleaned out. Frequently removing accumulated sediments will make it less likely that sediments will be resuspended. At a minimum, inspect the sediment forebays monthly and clean them out at least four times a year.

Mow the grass areas and keep the grass height no greater than 6 inches. Check for signs of rilling and gullying and repair as needed. After removing the sediment, replace any vegetation damaged during the clean-out by either reseeding or resodding. When reseeding, incorporate practices such as hydroseeding with a tackifier, blanket, or similar practice to ensure that no scour occurs in the forebay while the seeds germinate and develop roots.

Infiltration Pond

In many cases, a landscaping contractor working elsewhere on the site can complete maintenance tasks. Inspect the basin and outlet structure to ensure no damage has occurred and that they are functioning properly and up to design standards.

Inspection and preventive maintenance is required at least twice per year, and after each major storm event. Note how long water remains standing in the basin after a storm. If water remains standing after 48 to 72 hours after a storm, the infiltration basin may be clogged.

At least twice per year, mow the buffer area, side slopes, and basin bottom. Remove grass clippings, accumulated organic matter, trash and debris at this time.

Remove sediment from the basin as necessary when the basin is dry. Use light equipment when removing the top layer, as not to compact the underlying soil. Use deep tilling to break and remove any clogged surfaces and revegetate immediately.

Important items to check during inspections include:

- Signs of differential settlement
- Cracking
- Erosion
- Leakage in the embankments
- Condition of rip rap
- Sediment accumulation
- Health of vegetation, turf

Pocket Wetlands

Unlike conventional wet basin systems that require large-scale sediment removal at infrequent intervals, constructed stormwater wetlands require small-scale maintenance at regular intervals to evaluate the health and composition of the plant species.

Proponents must carefully observe the constructed stormwater wetland system over time. In the first three years after construction, inspect the constructed stormwater wetlands twice a year during both the growing and non-growing seasons. The sediment forebays should be inspected and cleaned once a year. This requirement must be included in the Operations and Maintenance plan. During these inspections, record and map the following information:

- The types and distribution of the dominant wetland plants in the marsh
- The presence and distribution of planted wetland species
- The presence and distribution of invasive wetland species (invasives must be removed)
- Indications that other species are replacing the planted wetland species
- Percentage of standing water that is unvegetated (excluding the deep water cells which are not suitable for emergent plant growth)
- The maximum elevation and the vegetative condition in this zone, if the design elevation of the normal pool is being maintained for wetlands with extended zones
- Stability of the original depth zones and the micro-topographical features
- Accumulation of sediment in the forebay and micropool; and survival rate of plants (cells with dead plants must be replanted)

Outfalls and Riprap

Inspections should be performed annually and after major storm events. If riprap has been damaged, repairs should be made promptly to prevent a progressive failure. Channel obstructions, such as trees and sediment bars, can change flow patterns and cause erosive forces which may damage riprap and the integrity of the outfall.

Drip-edge System

Inspect the infiltration trench after the first several rainfall events, after all major storms, and on regularly scheduled dates every six months. Inspect the trench 24 hours or several days after a rain event, to look for ponded water. If there is ponded water at the surface of the trench, it is likely that the trench surface is clogged. To address surface clogging, remove and replace the topsoil or first layer of stone aggregate and the filter fabric. If water is ponded inside the trench, it may indicate that the bottom of the trench has failed. To rehabilitate a failed trench, all accumulated sediment must be stripped from the bottom, the bottom of the trench must be scarified and tilled to induce infiltration, and all of the stone aggregate and filter fabric or media must be removed and replaced.

DEP Standard 4: Water Quality

The Long-Term Pollution Prevention Plan Includes the following:

Good housekeeping practices:
Prevent or reduce pollutant runoff from reaching the wetland resource areas through street sweeping, stabilizing all disturbed areas with vegetative cover and catch basin cleaning.

Provisions for storing materials and waste products inside or under cover:
All materials on site are to be stored in a neat and orderly fashion in their appropriate containers and, if possible, under a roof or other secure enclosure. All waste products are to be placed in secure receptacles until they are emptied by a solid waste management company licensed in the commonwealth of Massachusetts.

Vehicle washing controls:
Vehicle washing will occur on-site as part of standard operations. All contaminants / hazardous waste shall be disposed of in a manner specified by local or state regulations or by the manufacturer. provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash waters. Ensure there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water; and for storage of soaps, detergents, or solvents, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these detergents to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas. The homeowners shall be instructed in these practices.

Requirements for routine inspections and maintenance of Stormwater BMP's:
Follow the procedures outlined within the Operations and Maintenance Section of this report.

Spill prevention and response plan:
Spill Prevention: As mentioned previously, all materials on site are to be stored in a neat and orderly fashion in their appropriate containers and, if possible, under a roof or other secure enclosure. Products shall be kept in their original containers with the original manufacturer's label. Product should not be mixed unless recommended by the manufacturer. The manufacturer's recommendations for proper use, storage and disposal shall be followed at all times and, if possible, all of the product should be used up before proper disposal.

The manufacturer's recommended methods for cleanup must be followed and spills cleaned up immediately after discovery. Spills shall be kept well ventilated and personnel must wear appropriate protective gear to prevent injury from contact with hazardous substances. Spills of toxic or hazardous materials must be reported to the appropriate local and/ or state agency in accordance with the local and/ or Commonwealth of Massachusetts regulations.

Requirements for storage and use of fertilizers, herbicides and pesticides:
Consult the town of Chelmsford, MA Conservation Commission for any questions regarding these materials.

Fertilizers:
Fertilizers are to be applied at the minimum amounts recommended by the manufacturer and once applied shall be worked into the soil to limit the possibility of entering the storm drains. Storage procedures are to be followed as previously stated and the contents of any partially used bags should be transferred to a sealable container, either bag or bin to avoid spilling.
Herbicides and Pesticides: Storage of these materials are to be as outlined previously and especially out of the reach of pets and children, away from damp areas where their containers may succumb to moisture or rust and should not be stored near food. These materials must not be placed in the trash or washed down the drain. Handle using rubber gloves and use an appropriate mask when using these products for extensive periods of time.

Provisions for maintenance of lawns, gardens, and other landscaped areas:
lawns gardens and other landscape areas are to be maintained in a manner that the ground remains stabilized. All dead plants shall be replaced in a timely manner as to prevent erosion and sedimentation control within the resource areas buffer zones.

Provisions for solid waste management:
All waste products are to be placed in secure receptacles until they are emptied by a solid waste management company licensed in the Commonwealth of Massachusetts.

Snow disposal and plowing plans relative to Wetland Resource Areas:
Snow disposal/removal shall refer to the locations as depicted on the O&M and LTPPP Plan attached to this document.

Winter Road Salt and/or Sand Use and Storage restrictions:
Road Salt use must be in compliance with the Guidelines on Deicing Chemical (Road Salt) Storage effective date December 19, 1997, Guideline No. DWSG97-1 found in the BRP's Drinking Water Program. Sand Use: Encourage the use of environmentally friendly alternatives such as calcium chloride and/or sand instead of road salt for melting ice whenever possible. Use of de-icing agents should be tightly restricted to those absolutely necessary for public safety in consideration of associated vegetated wetlands. Environmentally friendly salt alternatives shall be used for de-icing operations.

Provisions for prevention of illicit discharges to the stormwater management systems:
According to Standard 10 in the Massachusetts Stormwater Handbook, Illicit discharges to the stormwater management system are discharges that are not entirely comprised of stormwater. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities: firefighting, water line flushing, landscape irrigation, uncontaminated groundwater, potable water sources, foundation drains, air conditioning condensation, footing drains, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated water from swimming pools, water used for street washing and water used to clean residential buildings without detergents.

Training for staff or personnel involved with implementing LTPPP:
This responsibility lies with the owner(s) unless a legally-binding agreement is made with another party to perform such duties for the owner(s).

List of Emergency contacts for implementing Long-Term Pollution Prevention Plan:
This responsibility lies with the owner(s) unless a legally-binding agreement is made with another party to perform such duties for the owner(s).

Appendix A: Stormtech Construction Guide

SiteASSIST™ by StormTech

FOR STORMTECH INSTRUCTIONS, DOWNLOAD THE INSTALLATION APP

StormTech® An ADS company

SC-310/SC-740/DC-780

StormTech Construction Guide

REQUIRED MATERIALS AND EQUIPMENT LIST

- Acceptable fill materials per Table 1
- ADS Plus and non-woven geotextile fabrics
- StormTech solid end caps and pre-cored end caps
- StormTech chambers
- StormTech manifolds and fittings

IMPORTANT NOTES:

A. This installation guide provides the minimum requirements for proper installation of chambers. Non-adherence to this guide may result in damage to chambers during installation. Replacement of damaged chambers during or after backfilling is costly and very time consuming. It is recommended that all installers are familiar with this guide, and that the contractor inspects the chambers for distortion, damage and joint integrity as work progresses.

B. Use of a dozer to push embedment stone between the rows of chambers may cause damage to chambers and is not an acceptable backfill method. Any chambers damaged by using the “dump and push” method are not covered under the StormTech standard warranty.

C. Care should be taken in the handling of chambers and end caps. Avoid dropping, prying or excessive force on chambers during removal from pallet and initial placement.

Requirements for System Installation

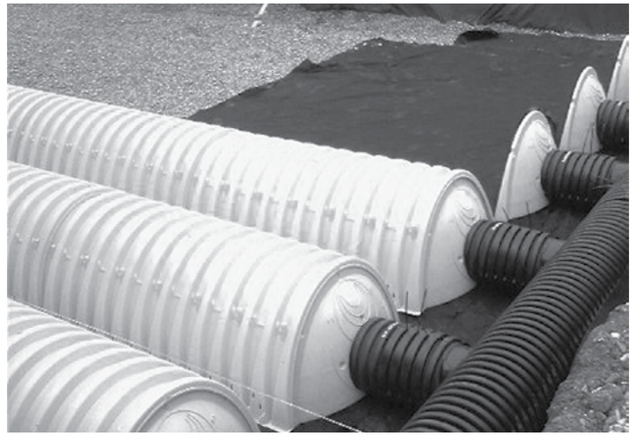
Excavate bed and prepare subgrade per engineer’s plans.

Place non-woven geotextile over prepared soils and up excavation walls. Install underdrains if required.

Place clean, crushed, angular stone foundation 6” (150 mm) min. Compact to achieve a flat surface.

Manifold, Scour Fabric and Chamber Assembly

Install manifolds and lay out ADS PLUS fabric at inlet rows [min. 12.5 ft (3.8 m)] at each inlet end cap. Place a continuous piece along entire length of Isolator® PLUS Row(s).



Align the first chamber and end cap of each row with inlet pipes. Contractor may choose to postpone stone placement around end chambers and leave ends of rows open for easy inspection of chambers during the backfill process.

Continue installing chambers by overlapping chamber end corrugations. Chamber joints are labeled "Lower Joint – Overlap Here" and "Build this direction – Upper Joint" Be sure that the chamber placement does not exceed the reach of the construction equipment used to place the stone. Maintain minimum 6" (150 mm) spacing between rows.

Attaching the End Caps

Lift the end of the chamber a few inches off the ground. With the curved face of the end cap facing outward, place the end cap into the chamber's end corrugation.

Prefabricated End Caps

24" (600 mm) inlets are the maximum size that can fit into a SC-740/DC-780 end cap and must be prefabricated with a 24" (600 mm) pipe stub. SC-310 chambers with a 12" (300 mm) inlet pipe must use a prefabricated end cap with a 12" (300 mm) pipe stub. When used on an Isolator Row PLUS, these end caps will contain a welded FLAMP (flared end ramp) that will lay on top of the ADS PLUS fabric (shown above)

Isolator Row PLUS

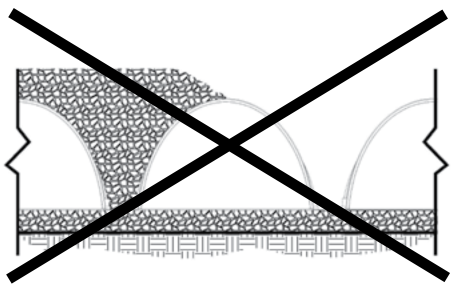
Place a continuous layer of ADS PLUS fabric between the foundation stone and the Isolator Row PLUS chambers, making sure the fabric lays flat and extends the entire width of the chamber feet. Drape a strip of ADS non-woven geotextile over the row of chambers (not required over DC-780). This is the same type of non-woven geotextile used as a separation layer around the angular stone of the StormTech system.

Initial Anchoring of Chambers – Embedment Stone

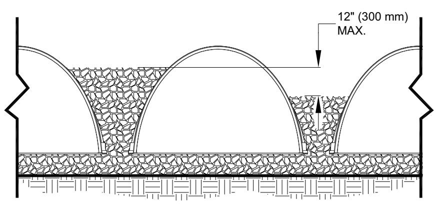

Initial embedment shall be spotted along the centerline of the chamber evenly anchoring the lower portion of the chamber. This is best accomplished with a stone conveyor or excavator reaching along the row.

No equipment shall be operated on the bed at this stage of the installation. Excavators must be located off the bed. Dump trucks shall not dump stone directly on to the bed. Dozers or loaders are not allowed on the bed at this time.

Backfill of Chambers – Embedment Stone

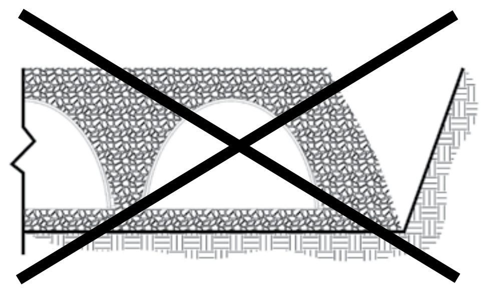


UNEVEN BACKFILL

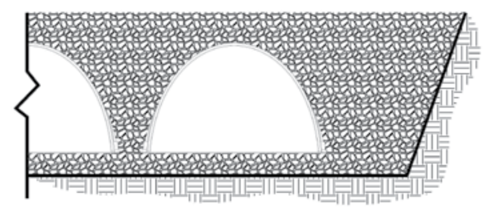


EVEN BACKFILL

Backfill chambers evenly. Stone column height should never differ by more than 12” (300 mm) between adjacent chamber rows or between chamber rows and perimeter.



PERIMETER NOT BACKFILLED



PERIMETER FULLY BACKFILLED

Perimeter stone must be brought up evenly with chamber rows. Perimeter must be fully backfilled, with stone extended horizontally to the excavation wall.

Backfill - Embedment Stone & Cover Stone

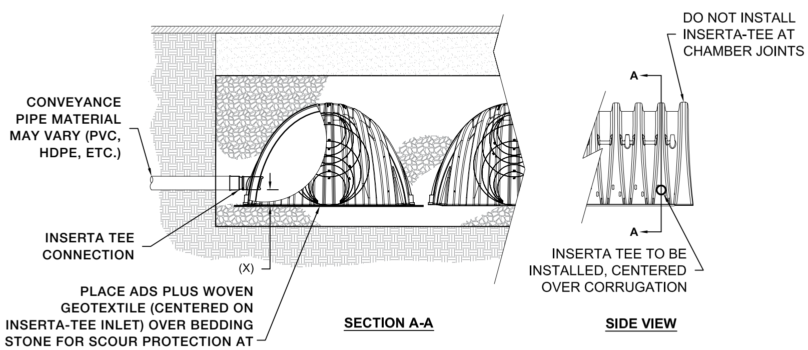
Continue evenly backfilling between rows and around perimeter until embedment stone reaches tops of chambers. Perimeter stone must extend horizontally to the excavation wall for both straight or sloped sidewalls. **Only after chambers have been backfilled to top of chamber and with a minimum 6" (150 mm) of cover stone on top of chambers can small dozers be used over the chambers for backfilling remaining cover stone.**

Small dozers and skid loaders may be used to finish grading stone backfill in accordance with ground pressure limits in Table 2. They must push material parallel to rows only. Never push perpendicular to rows. StormTech recommends that the contractor inspect chambers before placing final backfill. Any chambers damaged by construction shall be removed and replaced.

Final Backfill of Chambers – Fill Material

Install non-woven geotextile over stone. Geotextile must overlap 24" (600 mm) min. where edges meet. Compact each lift of backfill as specified in the site design engineer's drawings. Roller travel parallel with rows.

Inserta Tee Detail



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 36, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON.		

NOTE:
PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.

StormTech Isolator Row PLUS Detail

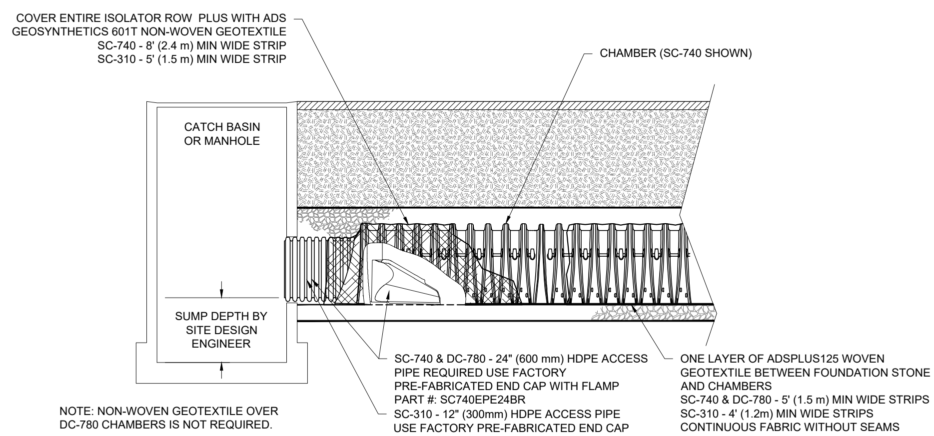


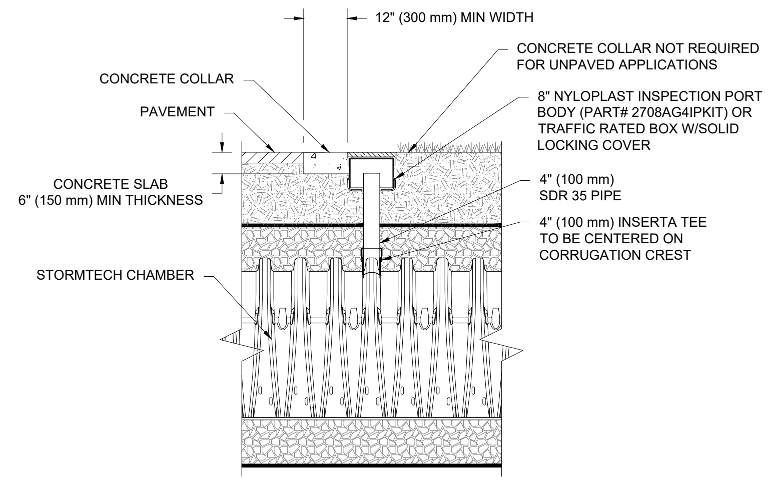
Table 1- Acceptable Fill Materials

Material Location	Description	AASHTO M43 Designation[1]	Compaction/Density Requirement
Ⓓ **Final Fill:** Fill Material for layer 'D' starts from the top of the 'C' layer to the bottom of flexible pavement or unpaved finished grade above. Note that the pavement subbase may be part of the 'D' layer.	Any soil/rock materials, native soils or per engineer's plans. Check plans for pavement subgrade requirements.	N/A	Prepare per site design engineer's plans. Paved installations may have stringent material and preparation requirements.
Ⓒ **Initial Fill:** Fill Material for layer 'C' starts from the top of the embedment stone ('B' layer) to 18" (450 mm) above the top of the chamber. Note that pavement subbase may be part of the 'C' layer.	Granular well-graded soil/aggregate mixtures, <35% fines or processed aggregate. Most pavement subbase materials can be used in lieu of this layer.	AASHTO M45 A-1, A-2-4, A-3 or AASHTO M431 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	Begin compaction after min. 12" (300 mm) of material over the chambers is reached. Compact additional layers in 6" (150 mm) max. lifts to a min. 95% Proctor density for well-graded material and 95% relative density for processed aggregate materials. Roller gross vehicle weight not to exceed 12,000 lbs (53 kN). Dynamic force not to exceed 20,000 lbs (89 kN).
Ⓑ **Embedment Stone:** Embedment Stone surrounding chambers from the foundation stone to the 'C' layer above.	Clean, crushed, angular stone	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	No compaction required.
Ⓐ **Foundation Stone:** Foundation Stone below the chambers from the subgrade up to the foot (bottom) of the chamber.	Clean, crushed, angular stone,	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	Place and compact in 6" (150 mm) lifts using two full coverages with a vibratory compactor.[2, 3]

PLEASE NOTE:

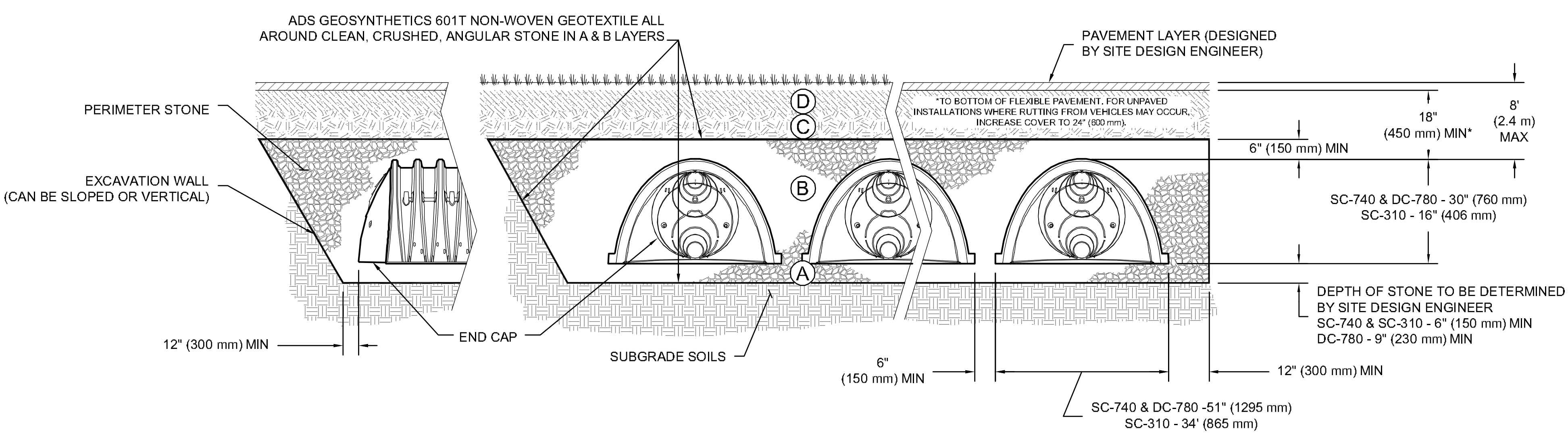
1. *The listed AASHTO designations are for gradations only. The stone must also be clean, crushed, angular. For example, a specification for #4 stone would state: "clean, crushed, angular no. 4 (AASHTO M43) stone".*
2. *StormTech compaction requirements are met for 'A' location materials when placed and compacted in 6" (150 mm) (max) lifts using two full coverages with a vibratory compactor.*
3. *Where infiltration surfaces may be comprised by compaction, for standard installations and standard design load conditions, a flat surface may be achieved by raking or dragging without compaction equipment. For special load designs, contact StormTech for compaction requirements.*

Figure 1- Inspection Port Detail



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

Figure 2 - Fill Material Locations



NOTES:

1. ***36" (900 mm) of stabilized cover materials over the chambers is required for full dump truck travel and dumping.***
2. ***During paving operations, dump truck axle loads on 18" (450 mm) of cover may be necessary. Precautions should be taken to avoid rutting of the road base layer, to ensure that compaction requirements have been met, and that a minimum of 18" (450 mm) of cover exists over the chambers. Contact StormTech for additional guidance on allowable axle loads during paving.***
3. ***Ground pressure for track dozers is the vehicle operating weight divided by total ground contact area for both tracks. Excavators will exert higher ground pressures based on loaded bucket weight and boom extension.***
4. ***Mini-excavators (< 8,000lbs/3,628 kg) can be used with at least 12" (300 mm) of stone over the chambers and are limited by the maximum ground pressures in Table 2 based on a full bucket at maximum boom extension.***
5. ***Storage of materials such as construction materials, equipment, spoils, etc. should not be located over the StormTech system. The use of equipment over the StormTech system not covered in Table 2 (ex. soil mixing equipment, cranes, etc) is limited. Please contact StormTech for more information.***
6. ***Allowable track loads based on vehicle travel only. Excavators shall not operate on chamber beds until the total backfill reaches 3 feet (900 mm) over the entire bed.***

Table 2 - Maximum Allowable Construction Vehicle Loads[5]

Material Location	Fill Depth over Chambers in. [mm]	Maximum Allowable Wheel Loads		Maximum Allowable Track Loads[6]		Maximum Allowable Roller Loads
		Max Axle Load for Trucks lbs [kN]	Max Wheel Load for Loaders lbs [kN]	Track Width in. [mm]	Max Ground Pressure psf [kPa]	Max Drum Weight or Dynamic Force lbs [kN]
Ⓓ **Final Fill Material**	36" [900] Compacted	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	3420 [164] 2350 [113] 1850 [89] 1510 [72] 1310 [63]	38,000 [169]
Ⓒ **Initial Fill Material**	24" [600] Compacted	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	2480 [119] 1770 [85] 1430 [68] 1210 [58] 1070 [51]	20,000 [89]
	24" [600] Loose/Dumped	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	2245 [107] 1625 [78] 1325 [63] 1135 [54] 1010 [48]	20,000 [89] Roller gross vehicle weight not to exceed 12,000 lbs. [53 kN]
	18" [450]	32,000 [142]	16,000 [71]	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	2010 [96] 1480 [71] 1220 [58] 1060 [51] 950 [45]	20,000 [89] Roller gross vehicle weight not to exceed 12,000 lbs. [53 kN]
Ⓑ **Embedment Stone**	12" [300]	16,000 [71]	NOT ALLOWED	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	1540 [74] 1190 [57] 1010 [48] 910 [43] 840 [40]	20,000 [89] Roller gross vehicle weight not to exceed 12,000 lbs. [53 kN]
	6" [150]	8,000 [35]	NOT ALLOWED	12" [305] 18" [457] 24" [610] 30" [762] 36" [914]	1070 [51] 900 [43] 800 [38] 760 [36] 720 [34]	NOT ALLOWED

Table 3 - Placement Methods and Descriptions

Material Location	Placement Methods/ Restrictions	Wheel Load Restrictions	Track Load Restrictions	Roller Load Restrictions
		See Table 2 for Maximum Construction Loads		
Ⓓ **Final Fill Material**	A variety of placement methods may be used. All construction loads must not exceed the maximum limits in Table 2.	36" (900 mm) minimum cover required for dump trucks to dump over chambers.	Dozers to push parallel to rows until 36" (900mm) compacted cover is reached.[4]	Roller travel parallel to rows only until 36" (900 mm) compacted cover is reached.
Ⓒ **Initial Fill Material**	Excavator positioned off bed recommended. Small excavator allowed over chambers. Small dozer allowed.	Asphalt can be dumped into paver when compacted pavement subbase reaches 18" (450 mm) above top of chambers.	Small LGP track dozers & skid loaders allowed to grade cover stone with at least 6" (150 mm) stone under tracks at all times. Equipment must push parallel to rows at all times.	Use dynamic force of roller only after compacted fill depth reaches 12" (300 mm) over chambers. Roller travel parallel to chamber rows only.
Ⓑ **Embedment Stone**	No equipment allowed on bare chambers. Use excavator or stone conveyor positioned off bed or on foundation stone to evenly fill around all chambers to at least the top of chambers.	No wheel loads allowed. Material must be placed outside the limits of the chamber bed.	No tracked equipment is allowed on chambers until a min. 6" (150 mm) cover stone is in place.	No rollers allowed.
Ⓐ **Foundation Stone**	No StormTech restrictions. Contractor responsible for any conditions or requirements by others relative to subgrade bearing capacity, dewatering or protection of subgrade.			

Appendix B: Stormtech Isolator Row Operation and Maintenance Manual

StormTech®
Detention • Retention • Water Quality
An ADS company

Isolator® Row O&M Manual


SC-740


MC-3500


MC-4500

THE MOST **ADVANCED** NAME IN WATER MANAGEMENT SOLUTIONS™

THE ISOLATOR® ROW

INTRODUCTION

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row is a technique to inexpensively enhance Total Suspended Solids (TSS) removal and provide easy access for inspection and maintenance.

THE ISOLATOR ROW

The Isolator Row is a row of StormTech chambers, either SC-160LP, SC-310, SC-310-3, SC-740, DC-780, MC-3500 or MC-4500 models, that is surrounded with filter fabric and connected to a closely located manhole for easy access. The fabric-wrapped chambers provide for settling and filtration of sediment as storm water rises in the Isolator Row and ultimately passes through the filter fabric. The open bottom chambers and perforated sidewalls (SC-310, SC- 310-3 and SC-740 models) allow storm water to flow both vertically and horizontally out of the chambers. Sediments are captured in the Isolator Row protecting the storage areas of the adjacent stone and chambers from sediment accumulation.

Two different fabrics are used for the Isolator Row. A woven geotextile fabric is placed between the stone and the Isolator Row chambers. The tough geotextile provides a media for storm water filtration and provides a durable surface for maintenance operations. It is also designed to prevent scour of the underlying stone and remain intact during high pressure jetting. A non-woven fabric is placed over the chambers to provide a filter media for flows passing through the perforations in the sidewall of the chamber. The non-woven fabric is not required over the SC-160LP, DC-780, MC-3500 or MC-4500 models as these chambers do not have perforated side walls.

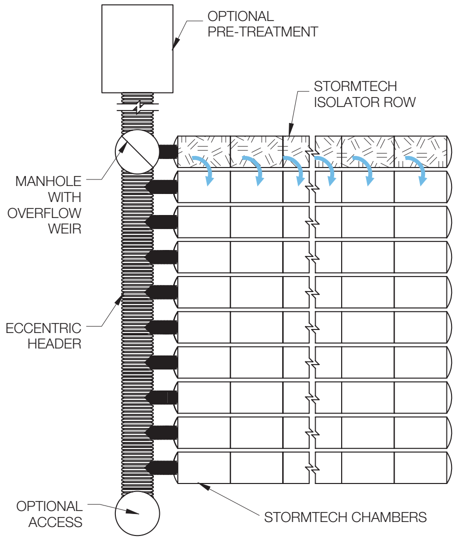
The Isolator Row is typically designed to capture the "first flush" and offers the versatility to be sized on a volume basis or flow rate basis. An upstream manhole not only provides access to the Isolator Row but typically includes a high flow weir such that storm water flowrates or volumes that exceed the capacity of the Isolator Row overtop the over flow weir and discharge through a manifold to the other chambers.

The Isolator Row may also be part of a treatment train. By treating storm water prior to entry into the chamber system, the service life can be extended and pollutants such as hydrocarbons can be captured. Pre-treatment best management practices can be as simple as deep sump catch basins, oil-water separators or can be innovative storm water treatment devices. The design of the treatment train and selection of pretreatment devices by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, the Isolator Row is recommended by StormTech as an effective means to minimize maintenance requirements and maintenance costs.

Note: See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row.

Looking down the Isolator Row from the manhole opening, woven geotextile is shown between the chamber and stone base.

StormTech Isolator Row with Overflow Spillway (not to scale)



ISOLATOR ROW INSPECTION/MAINTENANCE

INSPECTION

The frequency of inspection and maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

The Isolator Row incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3 inches throughout the length of the Isolator Row, clean-out should be performed.

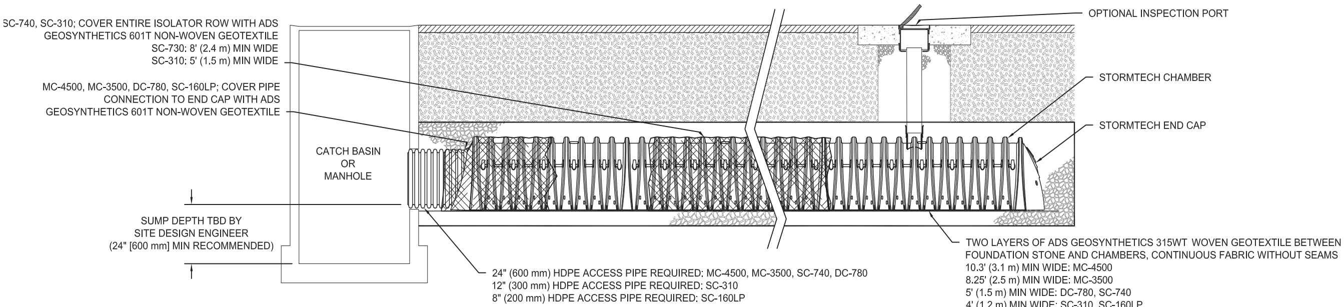
MAINTENANCE

The Isolator Row was designed to reduce the cost of periodic maintenance. By "isolating" sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entries.

Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" are best. Most JetVac reels have 400 feet of hose allowing maintenance of an Isolator Row up to 50 chambers long. **The JetVac process shall only be performed on StormTech Isolator Rows that have AASHTO class 1 woven geotextile (as specified by StormTech) over their angular base stone.**

StormTech Isolator Row (not to scale)

Note: Non-woven fabric is only required over the inlet pipe connection into the end cap for SC-160LP, DC-780, MC-3500 and MC-4500 chamber models and is not required over the entire Isolator Row.



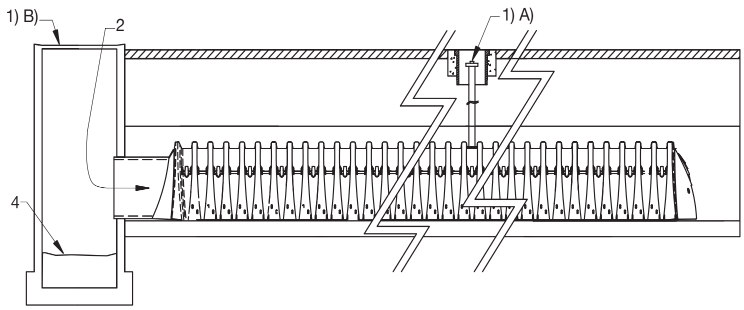
ISOLATOR ROW STEP BY STEP MAINTENANCE PROCEDURES

STEP 1
Inspect Isolator Row for sediment.
A) Inspection ports (if present)
  i. Remove lid from floor box frame
  ii. Remove cap from inspection riser
  iii. Using a flashlight and stadia rod,measure depth of sediment and record results on maintenance log.
  iv. If sediment is at or above 3 inch depth, proceed to Step 2. If not, proceed to Step 3.
B) All Isolator Rows
  i. Remove cover from manhole at upstream end of Isolator Row
  ii. Using a flashlight, inspect down Isolator Row through outlet pipe
    1. Mirrors on poles or cameras may be used to avoid a confined space entry
    2. Follow OSHA regulations for confined space entry if entering manhole
  iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches), proceed to Step 2. If not, proceed to Step 3.

STEP 2
Clean out Isolator Row using the JetVac process.
A) A fixed floor cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable
B) Apply multiple passes of JetVac until backflush water is clean
C) Vacuum manhole sump as required

STEP 3
Replace all caps, lids and covers, record observations and actions.

STEP 4
Inspect & clean catch basins and manholes upstream of the StormTech system.



SAMPLE MAINTENANCE LOG

Date	Stadia Rod Readings: Fixed point to chamber bottom (1)	Stadia Rod Readings: Fixed point to top of sediment (2)	Sediment Depth (1)–(2)	Observations/Actions	Inspector
3/15/11	6.3 ft	none		New installation. Fixed point is CI frame at grade	DJM
9/24/11		6.2	0.1 ft	Some grit felt	SM
6/20/13		5.8	0.5 ft	Mucky feel, debris visible in manhole and in Isolator Row, maintenance due	NV
7/7/13	6.3 ft		0	System jetted and vacuumed	DJM

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A division of ADS

Advanced Drainage Systems, Inc.
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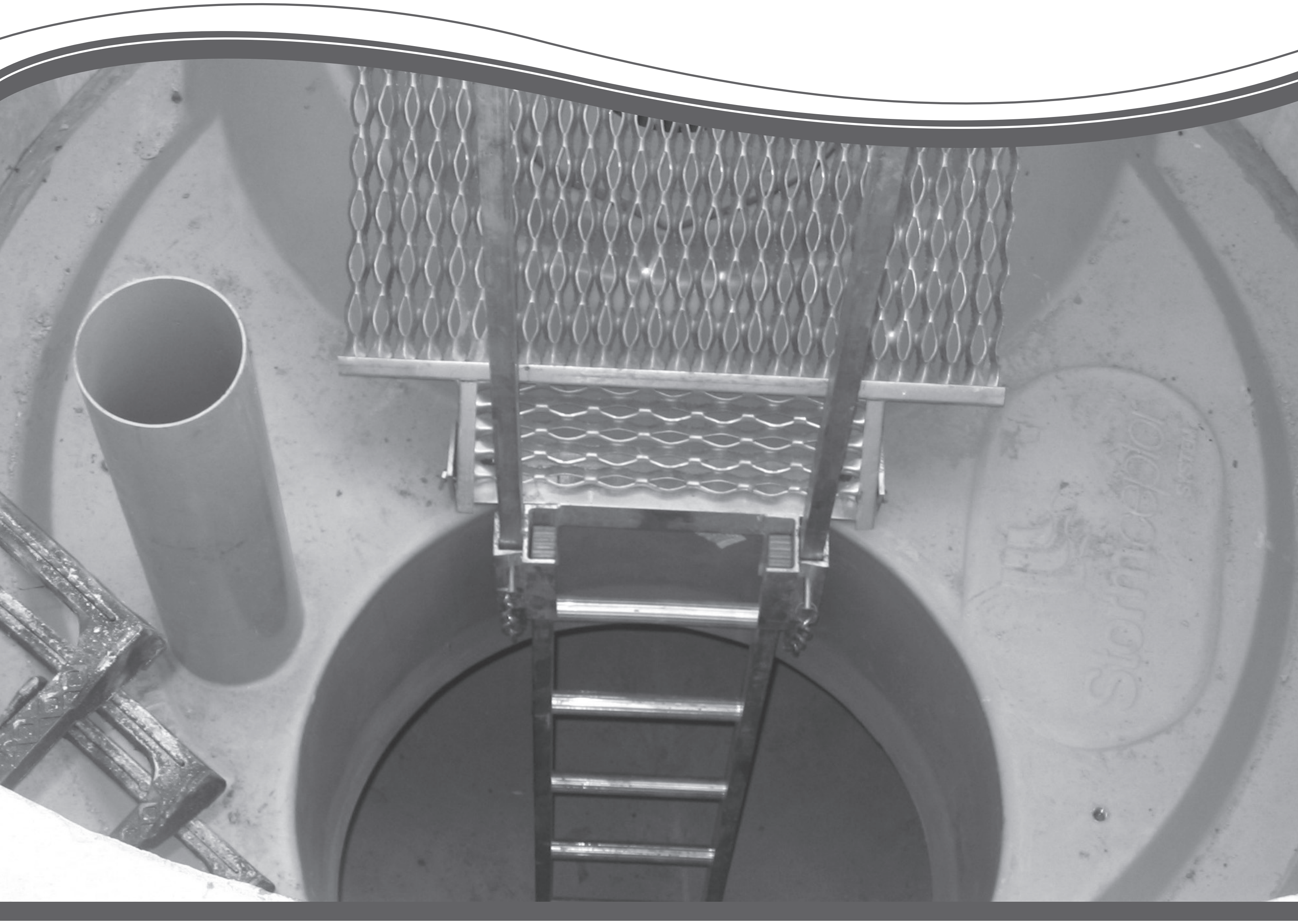
1-800-821-6710 www.ads-pipe.com

Appendix C: Stormceptor STC Operation and Maintenance Guide

CONTECH®
ENGINEERED SOLUTIONS

Stormceptor® STC
Operation and Maintenance Guide



Stormceptor® STC

Stormceptor Design Notes

- Only the STC 450i is adaptable to function with a catch basin inlet and/or inline pipes.
- Only the Stormceptor models STC 450i to STC 7200 may accommodate multiple inlet pipes.

Inlet and outlet invert elevation differences are as follows:

Inlet and Outlet Pipe Invert Elevations Differences			
Inlet Pipe Configuration	STC 450i	STC 900 to STC 7200	STC 11000 to STC 16000
Single inlet pipe	3 in. (75 mm)	1 in. (25 mm)	3 in. (75 mm)
Multiple inlet pipes	3 in. (75 mm)	3 in. (75 mm)	Only one inlet pipe.

Maximum inlet and outlet pipe diameters:

Inlet/Outlet Configuration	Inlet Unit STC 450i	In-Line Unit STC 900 to STC 7200	Series* STC 11000 to STC 16000
Straight Through	24 inch (600 mm)	42 inch (1050 mm)	60 inch (1500 mm)
Bend (90 degrees)	18 inch (450 mm)	33 inch (825 mm)	33 inch (825 mm)

- The inlet and in-line Stormceptor units can accommodate turns to a maximum of 90 degrees.
- Minimum distance from top of grade to crown is 2 feet (0.6 m)
- Submerged conditions. A unit is submerged when the standing water elevation at the proposed location of the Stormceptor unit is greater than the outlet invert elevation during zero flow conditions. In these cases, please contact your local Stormceptor representative and provide the following information:
- Top of grade elevation
- Stormceptor inlet and outlet pipe diameters and invert elevations
- Standing water elevation
- Stormceptor head loss, K = 1.3 (for submerged condition, K = 4)

Stormceptor® STC

OPERATION AND MAINTENANCE GUIDE
Table of Content

1. About Stormceptor

The Stormceptor® STC (Standard Treatment Cell) was developed by Imbrium™ Systems to address the growing need to remove and isolate pollution from the storm drain system before it enters the environment. The Stormceptor STC targets hydrocarbons and total suspended solids (TSS) in stormwater runoff. It improves water quality by removing contaminants through the gravitational settling of fine sediments and floatation of hydrocarbons while preventing the re-suspension or scour of previously captured pollutants.

The development of the Stormceptor STC revolutionized stormwater treatment, and created an entirely new category of environmental technology. Protecting thousands of waterways around the world, the Stormceptor System has set the standard for effective stormwater treatment.

1.1. Patent Information

The Stormceptor technology is protected by the following patents:

- Australia Patent No. 693,164 • 693,164 • 707,133 • 729,096 • 779401
- Austrian Patent No. 289647
- Canadian Patent No 2,009,208 •2,137,942 • 2,175,277 • 2,180,305 • 2,180,383 • 2,206,338 • 2,327,768 (Pending)
- China Patent No 1168439
- Denmark DK 711879
- German DE 69534021
- Indonesian Patent No 16688
- Japan Patent No 9-11476 (Pending)
- Korea 10-2000-0026101 (Pending)
- Malaysia Patent No PI9701737 (Pending)
- New Zealand Patent No 314646
- United States Patent No 4,985,148 • 5,498,331 • 5,725,760 • 5,753,115 • 5,849,181 • 6,068,765 • 6,371,690
- Stormceptor OSR Patent Pending • Stormceptor LCS Patent Pending

2. Stormceptor Design Overview

2.1. Design Philosophy

The patented Stormceptor System has been designed to focus on the environmental objective of providing long-term pollution control. The unique and innovative Stormceptor design allows for continuous positive treatment of runoff during all rainfall events, while ensuring that all captured pollutants are retained within the system, even during intense storm events.

An integral part of the Stormceptor design is PCSWMM for Stormceptor - sizing software developed in conjunction with Computational Hydraulics Inc. (CHI) and internationally acclaimed expert, Dr. Bill James. Using local historical rainfall data and continuous simulation modeling, this software allows a Stormceptor unit to be designed for each individual site and the corresponding water quality objectives.

By using PCSWMM for Stormceptor, the Stormceptor System can be designed to remove a wide range of particles (typically from 20 to 2,000 microns), and can also be customized to remove a specific particle size distribution (PSD). The specified PSD should accurately reflect what is in the stormwater runoff to ensure the device is achieving the desired water quality objective. Since stormwater runoff contains small particles (less than 75 microns), it is important to design a treatment system to remove smaller particles in addition to coarse particles.

2.2. Benefits

The Stormceptor System removes free oil and suspended solids from stormwater, preventing spills and non-point source pollution from entering downstream lakes and rivers. The key benefits, capabilities and applications of the Stormceptor System are as follows:

- Provides continuous positive treatment during all rainfall events
- Can be designed to remove over 80% of the annual sediment load
- Removes a wide range of particles
- Can be designed to remove a specific particle size distribution (PSD)
- Captures free oil from stormwater
- Prevents scouring or re-suspension of trapped pollutants
- Pre-treatment to reduce maintenance costs for downstream treatment measures (ponds, swales, detention basins, filters)
- Groundwater recharge protection
- Spills capture and mitigation
- Simple to design and specify
- Designed to your local watershed conditions
- Small footprint to allow for easy retrofit installations
- Easy to maintain (vacuum truck)
- Multiple inlets can connect to a single unit
- Suitable as a bend structure
- Pre-engineered for traffic loading (minimum AASHTO HS-20)
- Minimal elevation drop between inlet and outlet pipes
- Small head loss
- Additional protection provided by an 18” (457 mm) fiberglass skirt below the top of the insert, for the containment of hydrocarbons in the event of a spill.

2.3. Environmental Benefit

Freshwater resources are vital to the health and welfare of their surrounding communities. There is increasing public awareness, government regulations and corporate commitment to reducing the pollution entering our waterways. A major source of this pollution originates from stormwater runoff from urban areas. Rainfall runoff carries oils, sediment and other contaminants from roads and parking lots discharging directly into our streams, lakes and coastal waterways.

The Stormceptor System is designed to isolate contaminants from getting into the natural environment. The Stormceptor technology provides protection for the environment from spills that occur at service stations and vehicle accident sites, while also removing contaminated sediment in runoff that washes from roads and parking lots.

3. Key Operation Features

3.1. Scour Prevention

A key feature of the Stormceptor System is its patented scour prevention technology. This innovation ensures pollutants are captured and retained during all rainfall events, even extreme storms. The Stormceptor System provides continuous positive treatment for all rainfall events, including intense storms. Stormceptor slows incoming runoff, controlling and reducing velocities in the lower chamber to create a non-turbulent environment that promotes free oils and floatable debris to rise and sediment to settle.

The patented scour prevention technology, the fiberglass insert, regulates flows into the lower chamber through a combination of a weir and orifice while diverting high energy flows away through the upper chamber to prevent scouring. Laboratory testing demonstrated no scouring when tested up to 125% of the unit's operating rate, with the unit loaded to 100% sediment capacity (NJDEP, 2005). Second, the depth of the lower chamber ensures the sediment storage zone is adequately separated from the path of flow in the lower chamber to prevent scouring.

3.2. Operational Hydraulic Loading Rate

Designers and regulators need to evaluate the treatment capacity and performance of manufactured stormwater treatment systems. A commonly used parameter is the "operational hydraulic loading rate" which originated as a design methodology for wastewater treatment devices.

Operational hydraulic loading rate may be calculated by dividing the flow rate into a device by its settling area. This represents the critical settling velocity that is the prime determinant to quantify the influent particle size and density captured by the device. PCSWMM for Stormceptor uses a similar parameter that is calculated by dividing the hydraulic detention time in the device by the fall distance of the sediment.

$$v_{SC} = \frac{H}{6_H} = \frac{Q}{A_S}$$

Where:

v_{SC} = critical settling velocity, ft/s (m/s)

H = tank depth, ft (m)

$\varnothing_H$ = hydraulic detention time, ft/s (m/s)

Q = volumetric flow rate, ft3/s (m3/s)

A_S = surface area, ft^2 (m^2)

(Tchobanoglous, G. and Schroeder, E.D. 1987. Water Quality. Addison Wesley.)

Unlike designing typical wastewater devices, stormwater systems are designed for highly variable flow rates including intense peak flows. PCSWMM for Stormceptor incorporates all of the flows into its calculations, ensuring that the operational hydraulic loading rate is considered not only for one flow rate, but for all flows including extreme events.

3.3. Double Wall Containment

The Stormceptor System was conceived as a pollution identifier to assist with identifying illicit discharges. The fiberglass insert has a continuous skirt that lines the concrete barrel wall for a depth of 18 inches (457 mm) that provides double wall containment for hydrocarbons storage. This protective barrier ensures that toxic floatables do not migrate through the concrete wall into the surrounding soils.

4. Stormceptor Product Line

4.1. Stormceptor Models

A summary of Stormceptor models and capacities are listed in Table 1.

Table 1. Stormceptor Models

Stormceptor Model	Total Storage Volume U.S. Gal (L)	Hydrocarbon Storage Capacity U.S. Gal (L)	Maximum Sediment Capacity ft^3 (L)
STC 450i	470 (1,780)	86 (330)	46 (1,302)
STC 900	952 (3,600)	251 (950)	89 (2,520)
STC 1200	1,234 (4,670)	251 (950)	127 (3,596)
STC 1800	1,833 (6,940)	251 (950)	207 (5,861)
STC 2400	2,462 (9,320)	840 (3,180)	205 (5,805)
STC 3600	3,715 (1,406)	840 (3,180)	373 (10,562)
STC 4800	5,059 (1,950)	909 (3,440)	543 (15,376)
STC 6000	6,136 (23,230)	909 (3,440)	687 (19,453)
STC 7200	7,420 (28,090)	1,059 (4,010)	839 (23,757)
STC 11000	11,194 (42,370)	2,797 (10, 590)	1,086 (30,752)
STC 13000	13,348 (50,530)	2,797 (10, 590)	1,374 (38,907)
STC 16000	15,918 (60,260)	3,055 (11, 560)	1,677 (47,487)

NOTE: Storage volumes may vary slightly from region to region. For detailed information, contact your local Stormceptor representative.

4.2. Inline Stormceptor

The Inline Stormceptor, Figure 1, is the standard design for most stormwater treatment applications. The patented Stormceptor design allows the Inline unit to maintain continuous positive treatment of total suspended solids (TSS) year-round, regardless of flow rate. The Inline Stormceptor is composed of a precast concrete tank with a fiberglass insert situated at the invert of the storm sewer pipe, creating an upper chamber above the insert and a lower chamber below the insert.

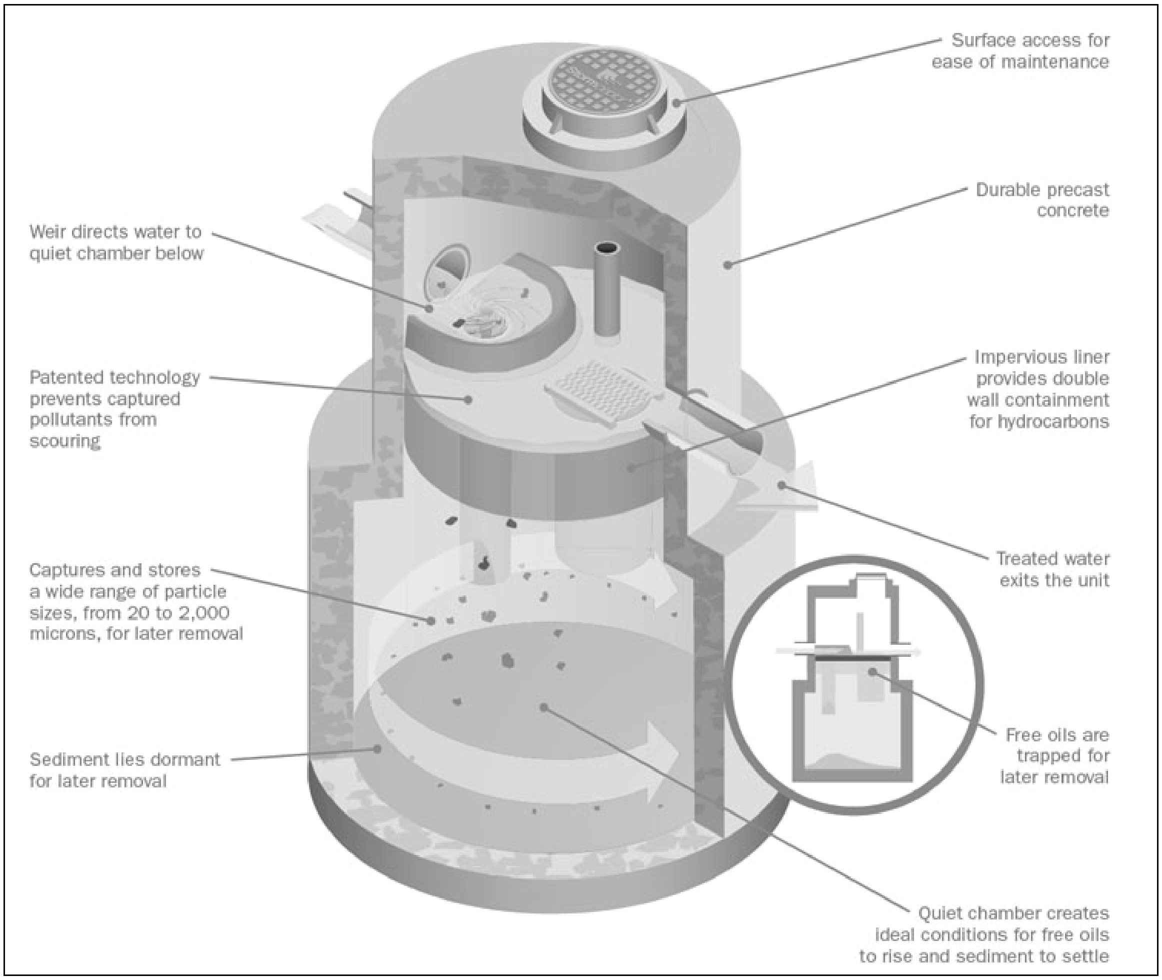


Figure 1. Inline Stormceptor

Operation

As water flows into the Stormceptor unit, it is slowed and directed to the lower chamber by a weir and drop tee. The stormwater enters the lower chamber, a non-turbulent environment, allowing free oils to rise and sediment to settle. The oil is captured underneath the fiberglass insert and shielded from exposure to the concrete walls by a fiberglass skirt. After the pollutants separate, treated water continues up a riser pipe, and exits the lower chamber on the downstream side of the weir before leaving the unit. During high flow events, the Stormceptor System's patented scour prevention technology ensures continuous pollutant removal and prevents re-suspension of previously captured pollutants.

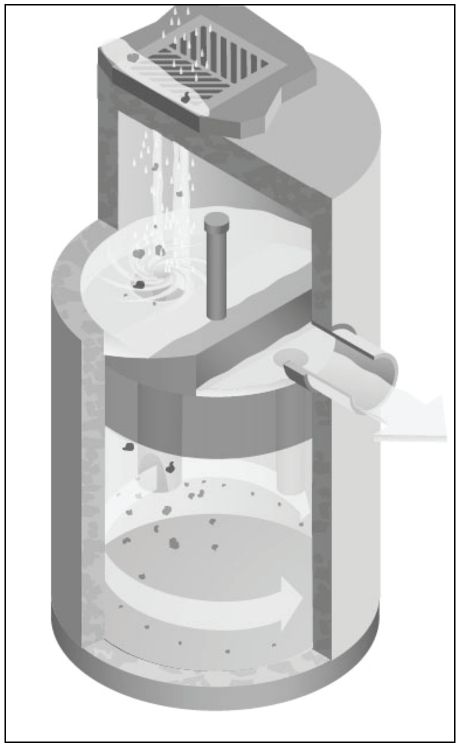


Figure 2. Inlet Stormceptor

4.3. Inlet Stormceptor

The Inlet Stormceptor System, Figure 2, was designed to provide protection for parking lots, loading bays, gas stations and other spill-prone areas. The Inlet Stormceptor is designed to remove sediment from stormwater introduced through a grated inlet, a storm sewer pipe, or both.

The Inlet Stormceptor design operates in the same manner as the Inline unit, providing continuous positive treatment, and ensuring that captured material is not re-suspended.

4.4. Series Stormceptor

Designed to treat larger drainage areas, the Series Stormceptor System, Figure 3, consists of two adjacent Stormceptor models that function in parallel. This design eliminates the need for additional structures and piping to reduce installation costs.

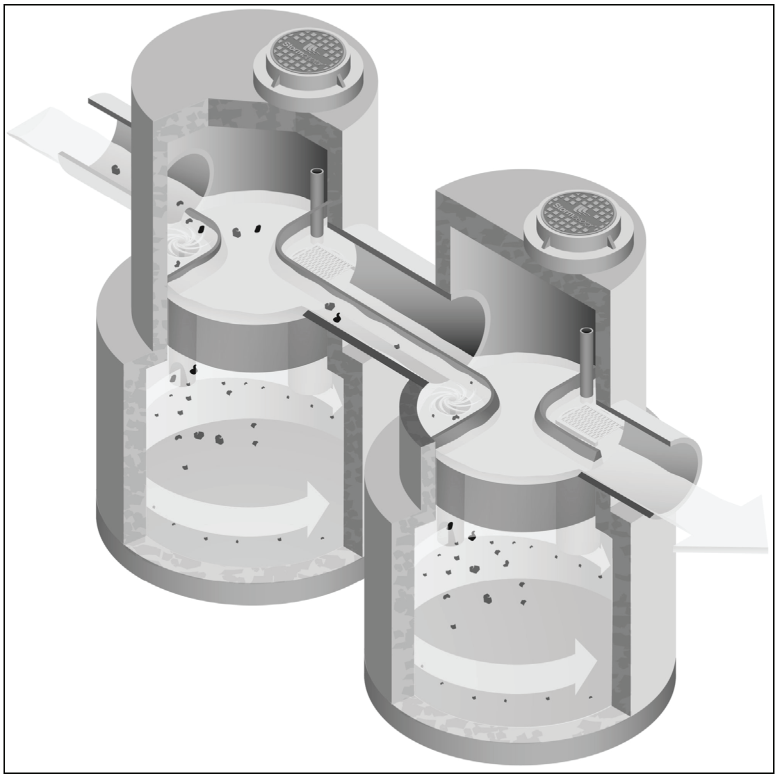


Figure 3. Series System

The Series Stormceptor design operates in the same manner as the Inline unit, providing continuous positive treatment, and ensuring that captured material is not re-suspended.

5. Sizing the Stormceptor System

The Stormceptor System is a versatile product that can be used for many different aspects of water quality improvement. While addressing these needs, there are conditions that the designer needs to be aware of in order to size the Stormceptor model to meet the demands of each individual site in an efficient and cost-effective manner.

PCSWMM for Stormceptor is the support tool used for identifying the appropriate Stormceptor model. In order to size a unit, it is recommended the user follow the seven design steps in the program. The steps are as follows:

STEP 1 – Project Details

The first step prior to sizing the Stormceptor System is to clearly identify the water quality objective for the development. It is recommended that a level of annual sediment (TSS) removal be identified and defined by a particle size distribution.

STEP 2 – Site Details

Identify the site development by the drainage area and the level of imperviousness. It is recommended that imperviousness be calculated based on the actual area of imperviousness based on paved surfaces, sidewalks and rooftops.

STEP 3 – Upstream Attenuation

The Stormceptor System is designed as a water quality device and is sometimes used in conjunction with onsite water quantity control devices such as ponds or underground detention systems. When possible, a greater benefit is typically achieved when installing a Stormceptor unit upstream of a detention facility. By placing the Stormceptor unit upstream of a detention structure, a benefit of less maintenance of the detention facility is realized.

STEP 4 – Particle Size Distribution

It is critical that the PSD be defined as part of the water quality objective. PSD is critical for the design of treatment system for a unit process of gravity settling and governs the size of a treatment system. A range of particle sizes has been provided and it is recommended that clays and silt-sized particles be considered in addition to sand and gravel-sized particles. Options and sample PSDs are provided in PCSWMM for Stormceptor. The default particle size distribution is the Fine Distribution, Table 2, option.

Table 2. Fine Distribution

Particle Size	Distribution	Specific Gravity
20	20%	1.3
60	20%	1.8
150	20%	2.2
400	20%	2.65
2000	20%	2.65

If the objective is the long-term removal of 80% of the total suspended solids on a given site, the PSD should be representative of the expected sediment on the site. For example, a system designed to remove 80% of coarse particles (greater than 75 microns) would provide relatively poor removal efficiency of finer particles that may be naturally prevalent in runoff from the site.

Since the small particle fraction contributes a disproportionately large amount of the total available particle surface area for pollutant adsorption, a system designed primarily for coarse particle capture will compromise water quality objectives.

STEP 5 – Rainfall Records

Local historical rainfall has been acquired from the U.S. National Oceanic and Atmospheric Administration, Environment Canada and regulatory agencies across North America. The rainfall data provided with PCSMM for Stormceptor provides an accurate estimation of small storm hydrology by modeling actual historical storm events including duration, intensities and peaks.

STEP 6 – Summary

At this point, the program may be executed to predict the level of TSS removal from the site. Once the simulation has completed, a table shall be generated identifying the TSS removal of each Stormceptor unit.

STEP 7 – Sizing Summary

Performance estimates of all Stormceptor units for the given site parameters will be displayed in a tabular format. The unit that meets the water quality objective, identified in Step 1, will be highlighted.

5.1. PCSWMM for Stormceptor

The Stormceptor System has been developed in conjunction with PCSWMM for Stormceptor as a technological solution to achieve water quality goals. Together, these two innovations model, simulate, predict and calculate the water quality objectives desired by a design engineer for TSS removal.

PCSWMM for Stormceptor is a proprietary sizing program which uses site specific inputs to a computer model to simulate sediment accumulation, hydrology and long-term total suspended solids removal. The model has been calibrated to field monitoring results from Stormceptor units that have been monitored in North America. The sizing methodology can be described by three processes:

1. Determination of real time hydrology
2. Buildup and wash off of TSS from impervious land areas
3. TSS transport through the Stormceptor (settling and discharge). The use of a calibrated model is the preferred method for sizing stormwater quality structures for the following reasons:
   - The hydrology of the local area is properly and accurately incorporated in the sizing (distribution of flows, flow rate ranges and peaks, back-to-back storms, inter-event times)
   - The distribution of TSS with the hydrology is properly and accurately considered in the sizing
   - Particle size distribution is properly considered in the sizing
   - The sizing can be optimized for TSS removal
   - The cost benefit of alternate TSS removal criteria can be easily assessed
   - The program assesses the performance of all Stormceptor models. Sizing may be selected based on a specific water quality outcome or based on the Maximum Extent Practicable

For more information regarding PCSWMM for Stormceptor, contact your local Stormceptor representative, or visit www.imbriumsystems.com to download a free copy of the program.

5.2. Sediment Loading Characteristics

The way in which sediment is transferred to stormwater can have a considerable effect on which type of system is implemented. On typical impervious surfaces (e.g. parking lots) sediment will build over time and wash off with the next rainfall. When rainfall patterns are examined, a short intense storm will have a higher concentration of sediment than a long slow drizzle. Together with rainfall data representing the site's typical rainfall patterns, sediment loading characteristics play a part in the correct sizing of a stormwater quality device.

Typical Sites

For standard site design of the Stormceptor System, PCSWMM for Stormceptor is utilized to accurately assess the unit's performance. As an integral part of the product's design, the program can be used to meet local requirements for total suspended solid removal. Typical installations of manufactured stormwater treatment devices would occur on areas such as paved parking lots or paved roads. These are considered "stable" surfaces which have non – erodible surfaces.

Unstable Sites

While standard sites consist of stable concrete or asphalt surfaces, sites such as gravel parking lots, or maintenance yards with stockpiles of sediment would be classified as "unstable". These types of sites do not exhibit first flush characteristics, are highly erodible and exhibit atypical sediment loading characteristics and must therefore be sized more carefully. Contact your local Stormceptor representative for assistance in selecting a proper unit sized for such unstable sites.

6. Spill Controls

When considering the removal of total petroleum hydrocarbons (TPH) from a storm sewer system there are two functions of the system: oil removal, and spill capture.

'Oil Removal' describes the capture of the minute volumes of free oil mobilized from impervious surfaces. In this instance relatively low concentrations, volumes and flow rates are considered. While the Stormceptor unit will still provide an appreciable oil removal function during higher flow events and/or with higher TPH concentrations, desired effluent limits may be exceeded under these conditions.

'Spill Capture' describes a manner of TPH removal more appropriate to recovery of a relatively high volume of a single phase deleterious liquid that is introduced to the storm sewer system over a relatively short duration. The two design criteria involved when considering this manner of introduction are overall volume and the specific gravity of the material. A standard Stormceptor unit will be able to capture and retain a maximum spill volume and a minimum specific gravity.

For spill characteristics that fall outside these limits, unit modifications are required. Contact your local Stormceptor Representative for more information.

One of the key features of the Stormceptor technology is its ability to capture and retain spills. While the standard Stormceptor System provides excellent protection for spill control, there are additional options to enhance spill protection if desired.

6.1. Oil Level Alarm

The oil level alarm is an electronic monitoring system designed to trigger a visual and audible alarm when a pre-set level of oil is reached within the lower chamber. As a standard, the oil

level alarm is designed to trigger at approximately 85% of the unit's available depth level for oil capture. The feature acts as a safeguard against spills caused by exceeding the oil storage capacity of the separator and eliminates the need for manual oil level inspection.

The oil level alarm installed on the Stormceptor insert is illustrated in Figure 4.

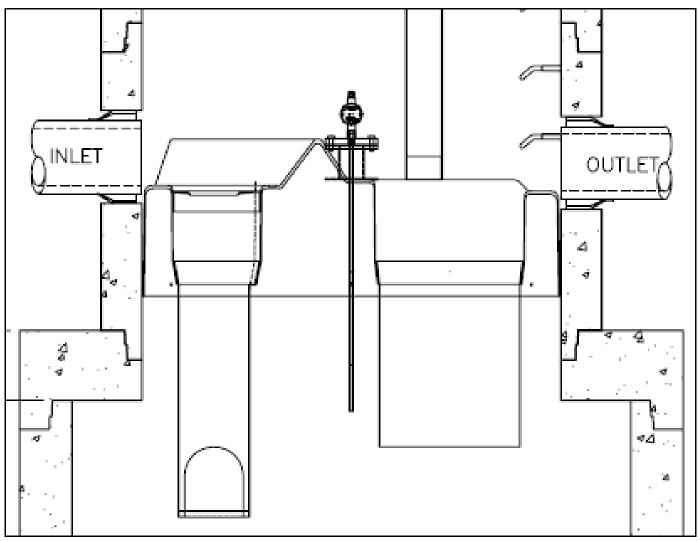


Figure 4. Oil level alarm

6.2. Increased Volume Storage Capacity

The Stormceptor unit may be modified to store a greater spill volume than is typically available. Under such a scenario, instead of installing a larger than required unit, modifications can be made to the recommended Stormceptor model to accommodate larger volumes. Contact your local Stormceptor representative for additional information and assistance for modifications.

7. Stormceptor Options

The Stormceptor System allows flexibility to incorporate to existing and new storm drainage infrastructure. The following section identifies considerations that should be reviewed when installing the system into a drainage network. For conditions that fall outside of the recommendations in this section, please contact your local Stormceptor representative for further guidance.

7.1. Installation Depth Minimum Cover

The minimum distance from the top of grade to the crown of the inlet pipe is 24 inches (600 mm). For situations that have a lower minimum distance, contact your local Stormceptor representative.

7.2. Maximum Inlet and Outlet Pipe Diameters

Maximum inlet and outlet pipe diameters are illustrated in Figure 5. Contact your local Stormceptor representative for larger pipe diameters

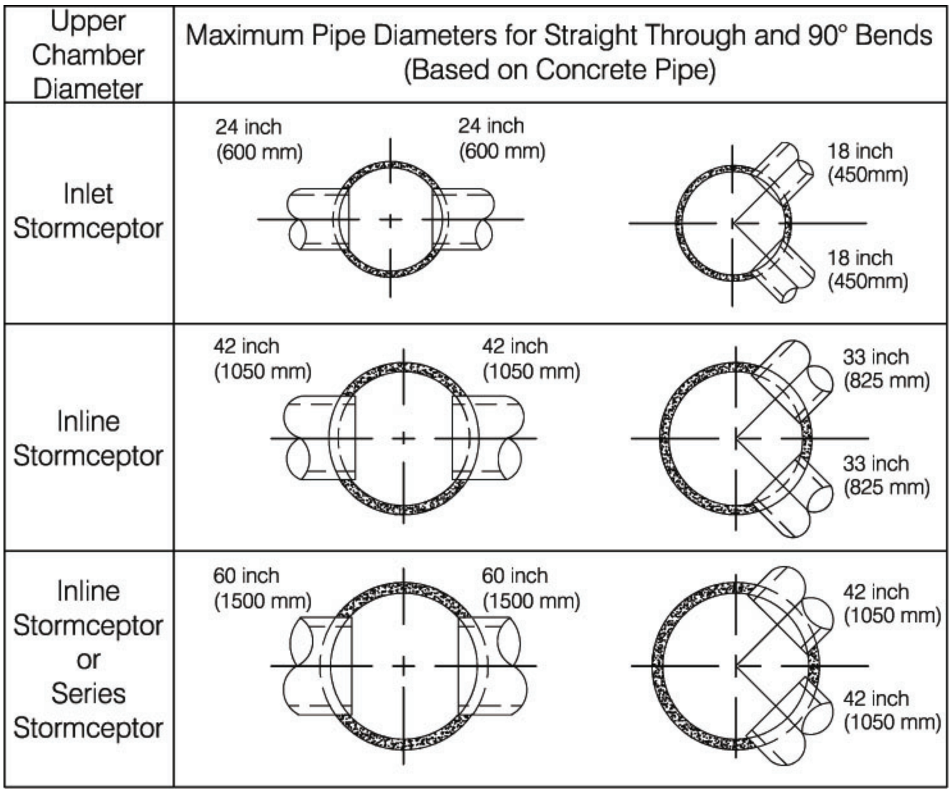


Figure 5. Maximum pipe diameters for straight through and bend applications

*The bend should only be incorporated into the second structure (downstream structure) of the Series Stormceptor System

7.3. Bends

The Stormceptor System can be used to change horizontal alignment in the storm drain network up to a maximum of 90 degrees. Figure 6 illustrates the typical bend situations of the Stormceptor System. Bends should only be applied to the second structure (downstream structure) of the Series Stormceptor System.

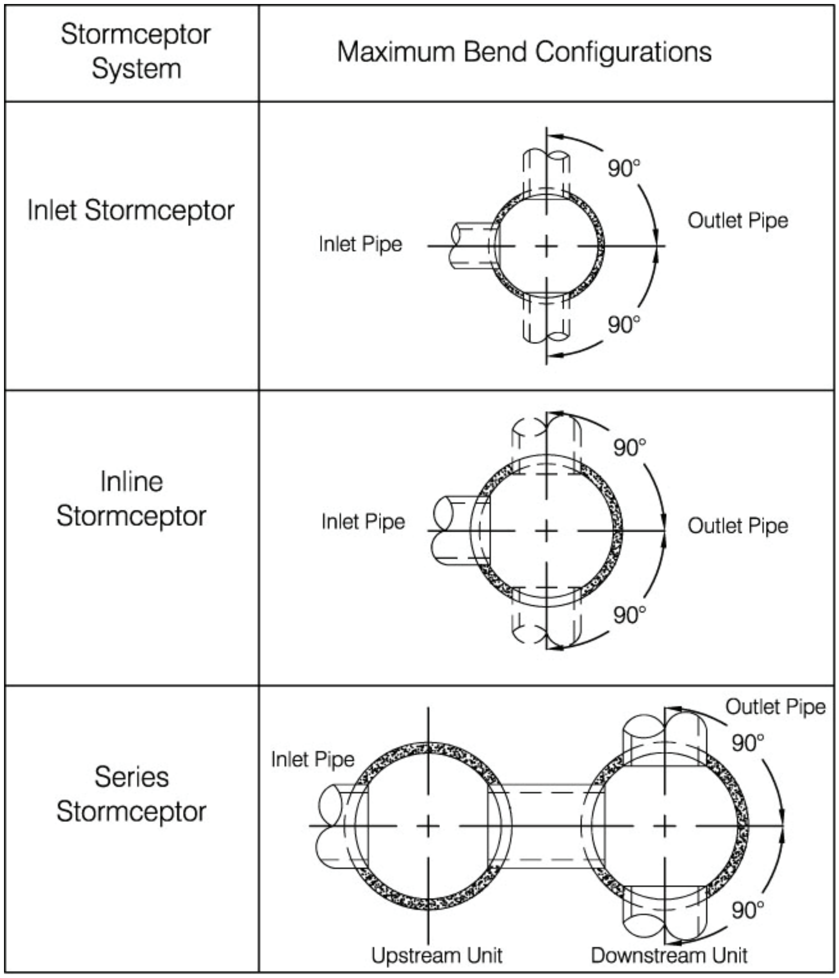


Figure 6. Maximum bend angles

7.4. Multiple Inlet Pipes

The Inlet and Inline Stormceptor System can accommodate two or more inlet pipes. The maximum number of inlet pipes that can be accommodated into a Stormceptor unit is a function of the number, alignment and diameter of the pipes and its effects on the structural integrity of the precast concrete. When multiple inlet pipes are used for new developments, each inlet pipe shall have an invert elevation 3 inches (75 mm) higher than the outlet pipe invert elevation.

7.5. Inlet/Outlet Pipe Invert Elevations

Recommended inlet and outlet pipe invert differences are listed in Table 3.

Table 3. Recommended Drops Between Inlet and Outlet Pipe Inverts

Number of Inlet Pipes	Inlet System	In-Line System	Series System
1	3 inches (75 mm)	1 inch (25 mm)	3 inches (75 mm)
>1	3 inches (75 mm)	3 inches (75 mm)	Not Applicable

7.6. Shallow Stormceptor

In cases where there may be restrictions to the depth of burial of storm sewer systems. In this situation, for selected Stormceptor models, the lower chamber components may be increased in diameter to reduce the overall depth of excavation required.

7.7. Customized Live Load

The Stormceptor system is typically designed for local highway truck loading (AASHTO HS- 20). When the project requires live loads greater than HS-20, the Stormceptor System may be customized structurally for a pre-specified live load. Contact your local Stormceptor representative for customized loading conditions.

7.8. Pre-treatment

The Stormceptor System may be sized to remove sediment and for spills control in conjunction with other stormwater BMPs to meet the water quality objective. For pretreatment applications, the Stormceptor System should be the first unit in a treatment train. The benefits of pre-treatment include the extension of the operational life (extension of maintenance frequency) of large stormwater management facilities, prevention of spills and lower total life- cycle maintenance cost.

7.9. Head loss

The head loss through the Stormceptor System is similar to a 60 degree bend at a manhole. The K value for calculating minor losses is approximately 1.3 (minor loss = k*1.3v2/2g).

However, when a Submerged modification is applied to a Stormceptor unit, the corresponding K value is 4.

7.10. Submerged

The Submerged modification, Figure 7, allows the Stormceptor System to operate in submerged or partially submerged storm sewers. This configuration can be installed on all models of the Stormceptor System by modifying the fiberglass insert. A customized weir height and a secondary drop tee are added.

Submerged instances are defined as standing water in the storm drain system during zero flow conditions. In these instances, the following information is necessary for the proper design and application of submerged modifications:

- Stormceptor top of grade elevation
- Stormceptor outlet pipe invert elevation
- Standing water elevation

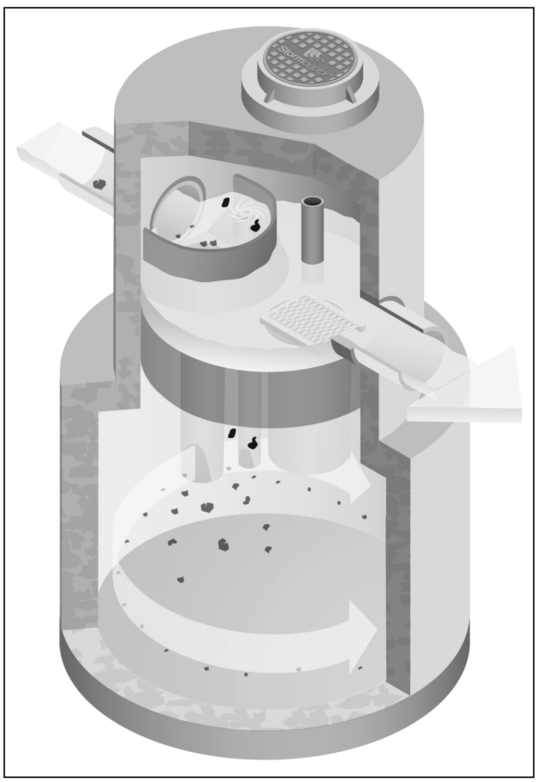


Figure 7. Submerged Stormceptor

8. Comparing Technologies

Designers have many choices available to achieve water quality goals in the treatment of stormwater runoff. Since many alternatives are available for use in stormwater quality treatment it is important to consider how to make an appropriate comparison between "approved alternatives". The following is a guide to assist with the accurate comparison of differing technologies and performance claims.

8.1. Particle Size Distribution (PSD)

The most sensitive parameter to the design of a stormwater quality device is the selection of the design particle size. While it is recommended that the actual particle size distribution (PSD) for sites be measured prior to sizing, alternative values for particle size should be selected to represent what is likely to occur naturally on the site. A reasonable estimate of a particle size distribution likely to be found on parking lots or other impervious surfaces should consist of a wide range of particles such as 20 microns to 2,000 microns (Ontario MOE, 1994).

There is no absolute right particle size distribution or specific gravity and the user is cautioned to review the site location, characteristics, material handling practices and regulatory requirements when selecting a particle size distribution. When comparing technologies, designs using different PSDs will result in incomparable TSS removal efficiencies. The PSD of the TSS removed needs to be standard between two products to allow for an accurate comparison.

8.2. Scour Prevention

In order to accurately predict the performance of a manufactured treatment device, there must be confidence that it will perform under all conditions. Since rainfall patterns cannot be predicted, stormwater quality devices placed in storm sewer systems must be able to withstand extreme events, and ensure that all pollutants previously captured are retained in the system.

In order to have confidence in a system's performance under extreme conditions, independent validation of scour prevention is essential when examining different technologies. Lack of independent verification of scour prevention should make a designer wary of accepting any product's performance claims.

8.3. Hydraulics

Full scale laboratory testing has been used to confirm the hydraulics of the Stormceptor System. Results of lab testing have been used to physically design the Stormceptor System and the sewer pipes entering and leaving the unit. Key benefits of Stormceptor are:

- Low head loss (typical k value of 1.3)
- Minimal inlet/outlet invert elevation drop across the structure
- Use as a bend structure
- Accommodates multiple inlets

The adaptability of the treatment device to the storm sewer design infrastructure can affect the overall performance and cost of the site.

8.4. Hydrology

Stormwater quality treatment technologies need to perform under varying climatic conditions. These can vary from long low intensity rainfall to short duration, high intensity storms. Since a treatment device is expected to perform under all these conditions, it makes sense that any system's design should accommodate those conditions as well.

Long-term continuous simulation evaluates the performance of a technology under the varying conditions expected in the climate of the subject site. Single, peak event design does not provide this information and is not equivalent to long-term simulation. Designers should request long-term simulation performance to ensure the technology can meet the long-term water quality objective.

9. Testing

The Stormceptor System has been the most widely monitored stormwater treatment technology in the world. Performance verification and monitoring programs are completed to the strictest standards and integrity. Since its introduction in 1990, numerous independent field tests and studies detailing the effectiveness of the Stormceptor System have been completed.

- Coventry University, UK – 97% removal of oil, 83% removal of sand and 73% removal of peat
- National Water Research Institute, Canada, - scaled testing for the development of the Stormceptor System identifying both TSS removal and scour prevention.
- New Jersey TARP Program – full scale testing of an STC 900 demonstrating 75% TSS removal of particles from 1 to 1000 microns. Scour testing completed demonstrated that the system does not scour. The New Jersey Department of Environmental Protection was followed.
- City of Indianapolis – full scale testing of an STC 900 demonstrating over 80% TSS removal of particles from 50 microns to 300 microns at 130% of the unit's operating rate. Scour testing completed demonstrated that the system does not scour.
- Westwood Massachusetts (1997), demonstrated >80% TSS removal
- Como Park (1997), demonstrated 76% TSS removal
- Ontario MOE SWAMP Program – 57% removal of 1 to 25 micron particles
- Laval Quebec – 50% removal of 1 to 25 micron particles

10. Installation

The installation of the concrete Stormceptor should conform in general to state highway, or local specifications for the installation of manholes. Selected sections of a general specification that are applicable are summarized in the following sections.

10.1. Excavation

Excavation for the installation of the Stormceptor should conform to state highway, or local specifications. Topsoil removed during the excavation for the Stormceptor should be stockpiled in designated areas and should not be mixed with subsoil or other materials.

Topsoil stockpiles and the general site preparation for the installation of the Stormceptor should conform to state highway or local specifications.

The Stormceptor should not be installed on frozen ground. Excavation should extend a minimum of 12 inches (300 mm) from the precast concrete surfaces plus an allowance for shoring and bracing where required. If the bottom of the excavation provides an unsuitable foundation additional excavation may be required.

In areas with a high water table, continuous dewatering may be required to ensure that the excavation is stable and free of water.

10.2. Backfilling

Backfill material should conform to state highway or local specifications. Backfill material should be placed in uniform layers not exceeding 12 inches (300mm) in depth and compacted to state highway or local specifications.

11. Stormceptor Construction Sequence

The concrete Stormceptor is installed in sections in the following sequence:

1. Aggregate base
2. Base slab
3. Lower chamber sections
4. Upper chamber section with fiberglass insert
5. Connect inlet and outlet pipes
6. Assembly of fiberglass insert components (drop tee, riser pipe, oil cleanout port and orifice plate
7. Remainder of upper chamber
8. Frame and access cover

The precast base should be placed level at the specified grade. The entire base should be in contact with the underlying compacted granular material. Subsequent sections, complete with joint seals, should be installed in accordance with the precast concrete manufacturer's recommendations.

Adjustment of the Stormceptor can be performed by lifting the upper sections free of the excavated area, re-leveling the base and re-installing the sections. Damaged sections and gaskets should be repaired or replaced as necessary. Once the Stormceptor has been constructed, any lift holes must be plugged with mortar.

12. Maintenance

12.1. Health and Safety

The Stormceptor System has been designed considering safety first. It is recommended that confined space entry protocols be followed if entry to the unit is required. In addition, the fiberglass insert has the following health and safety features:

- Designed to withstand the weight of personnel
- A safety grate is located over the 24 inch (600 mm) riser pipe opening
- Ladder rungs can be provided for entry into the unit, if required

12.2. Maintenance Procedures

Maintenance of the Stormceptor system is performed using vacuum trucks. No entry into the unit is required for maintenance (in most cases). The vacuum service industry is a well- established sector of the service industry that cleans underground tanks, sewers and catch basins. Costs to clean a Stormceptor will vary based on the size of unit and transportation distances.

The need for maintenance can be determined easily by inspecting the unit from the surface. The depth of oil in the unit can be determined by inserting a dipstick in the oil inspection/cleanout port.

Similarly, the depth of sediment can be measured from the surface without entry into the Stormceptor via a dipstick tube equipped with a ball valve. This tube would be inserted through the riser pipe. Maintenance should be performed once the sediment depth exceeds the guideline values provided in the Table 4.

Table 4. Sediment Depths Indicating Required Servicing*

Particle Size	Specific Gravity
Model	Sediment Depth inches (mm)
450i	8 (200)
900	8 (200)
1200	10 (250)
1800	15 (381)
2400	12 (300)
3600	17 (430)
4800	15 (380)
6000	18 (460)
7200	15 (381)
11000	17 (380)
13000	20 (500)
16000	17 (380)
* based on 15% of the Stormceptor unit’s total storage	

Although annual servicing is recommended, the frequency of maintenance may need to be increased or reduced based on local conditions (i.e. if the unit is filling up with sediment more quickly than projected, maintenance may be required semi-annually; conversely once the site has stabilized maintenance may only be required every two or three years).

Oil is removed through the oil inspection/cleanout port and sediment is removed through the riser pipe. Alternatively oil could be removed from the 24 inches (600 mm) opening if water is removed from the lower chamber to lower the oil level below the drop pipes.

The following procedures should be taken when cleaning out Stormceptor:

1. Check for oil through the oil cleanout port
2. Remove any oil separately using a small portable pump
3. Decant the water from the unit to the sanitary sewer, if permitted by the local regulating authority, or into a separate containment tank
4. Remove the sludge from the bottom of the unit using the vacuum truck
5. Re-fill Stormceptor with water where required by the local jurisdiction

12.3. Submerged Stormceptor

Careful attention should be paid to maintenance of the Submerged Stormceptor System. In cases where the storm drain system is submerged, there is a requirement to plug both the inlet and outlet pipes to economically clean out the unit.

12.4. Hydrocarbon Spills

The Stormceptor is often installed in areas where the potential for spills is great. The Stormceptor System should be cleaned immediately after a spill occurs by a licensed liquid waste hauler.

12.5. Disposal

Requirements for the disposal of material from the Stormceptor System are similar to that of any other stormwater Best Management Practice (BMP) where permitted. Disposal options for the sediment may range from disposal in a sanitary trunk sewer upstream of a sewage treatment plant, to disposal in a sanitary landfill site. Petroleum waste products collected in the Stormceptor (free oil/chemical/fuel spills) should be removed by a licensed waste management company.

12.6. Oil Sheens

With a steady influx of water with high concentrations of oil, a sheen may be noticeable at the Stormceptor outlet. This may occur because a rainbow or sheen can be seen at very small oil concentrations ($<$10 mg/L). Stormceptor will remove over 98% of all free oil spills from storm sewer systems for dry weather or frequently occurring runoff events.

The appearance of a sheen at the outlet with high influent oil concentrations does not mean the unit is not working to this level of removal. In addition, if the influent oil is emulsified the Stormceptor will not be able to remove it. The Stormceptor is designed for free oil removal and not emulsified conditions.

SUPPORT

Drawings and specifications are available at www.ContechES.com.

Site-specific design support is available from our engineers.

CONTECH® ENGINEERED SOLUTIONS
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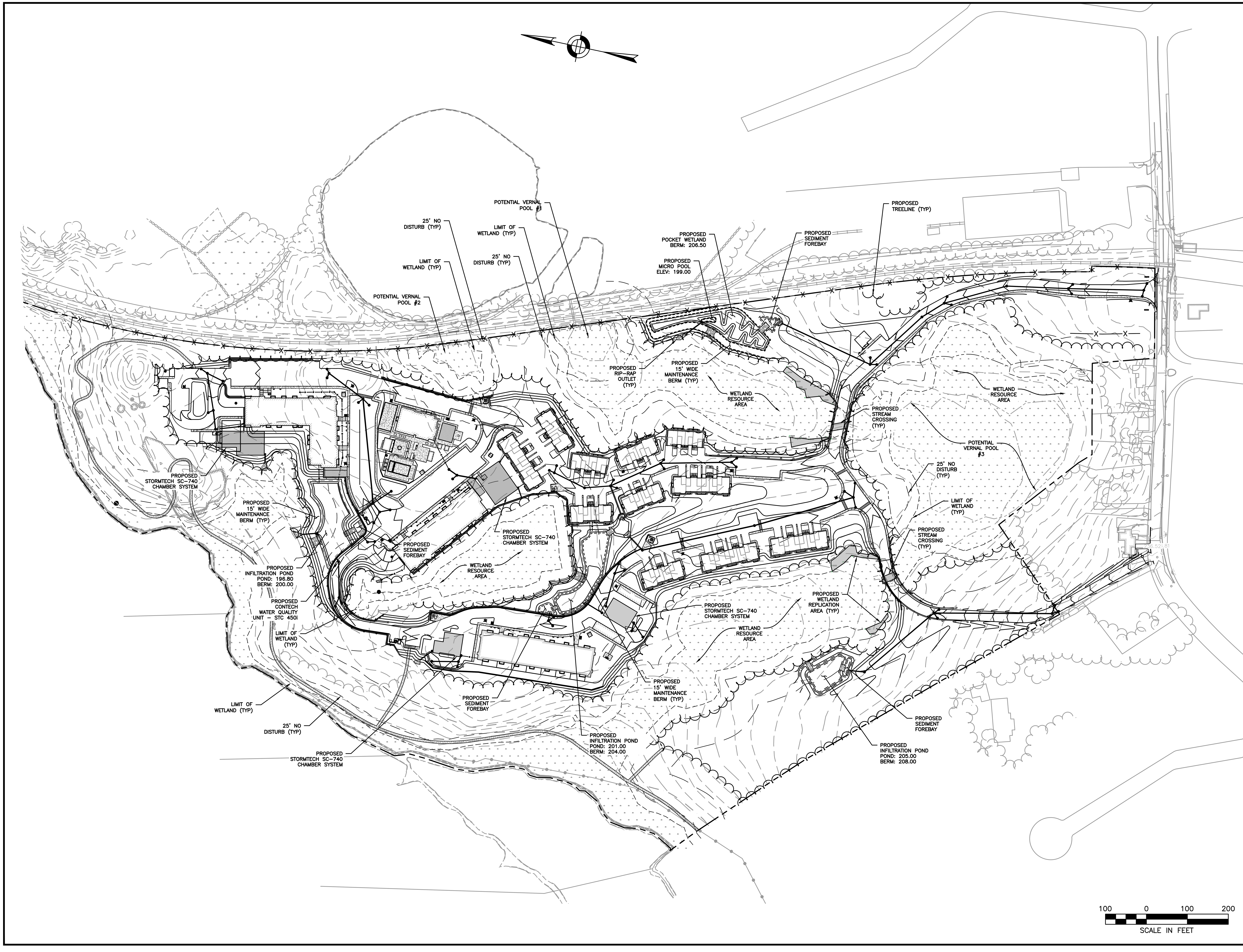
www.ContechES.com

Appendix D: O&M and LTPPP Plan



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Chelmsford, MA 01824
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PREPARED FOR:

FRH REALTY LLC
c/o FAIRFIELD RESIDENTIAL
5 BURLINGTON WOODS, SUITE 203
BURLINGTON, MA 01803

PROPOSED MULTIFAMILY DEVELOPMENT

SUMMER STREET
WALPOLE, MA

REVISIONS:

NO	BY	DATE	DESCRIPTION

SITE PLAN

OPERATIONS AND MAINTENANCE PLAN

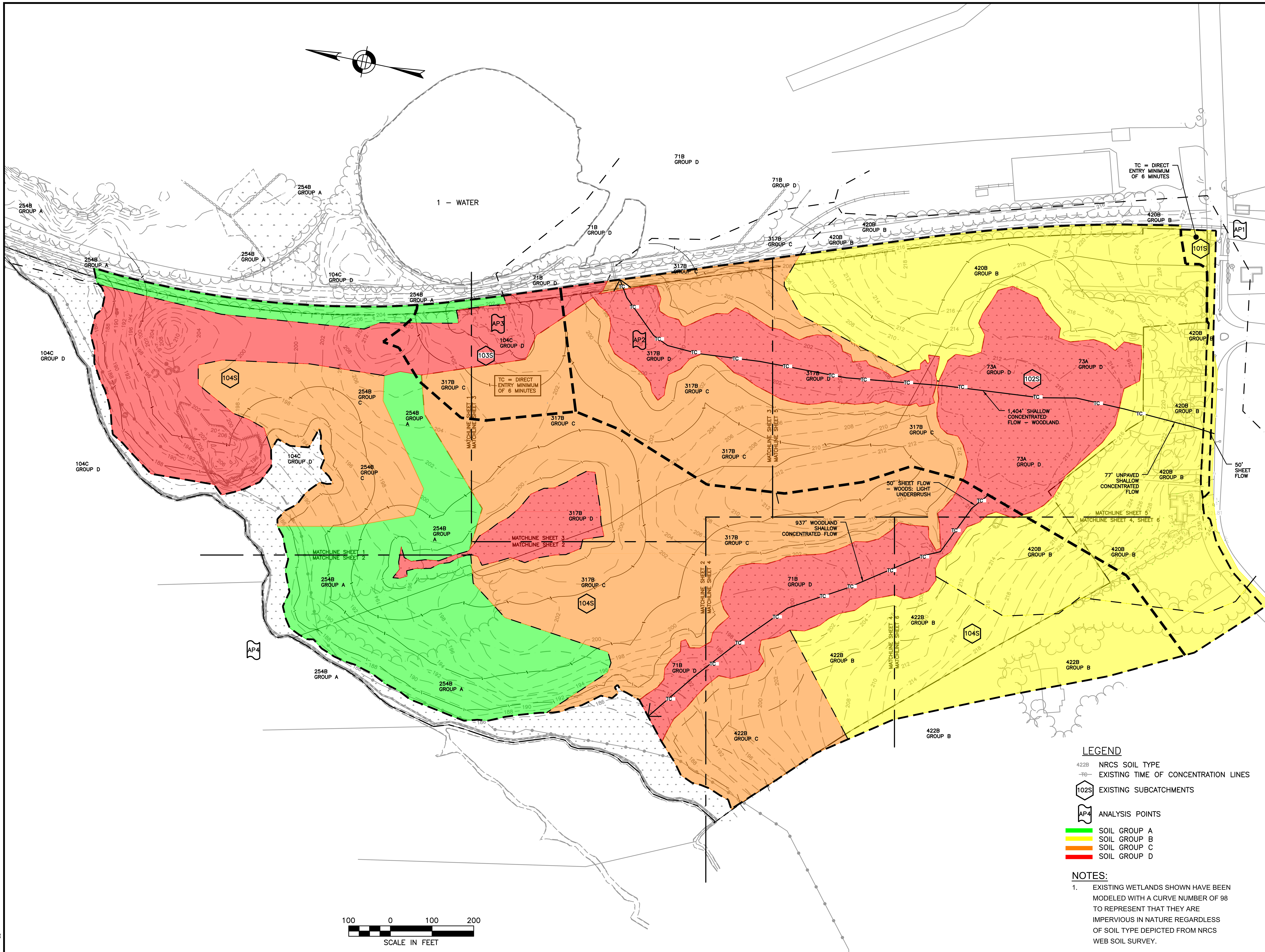
DATE:	JUNE 20, 2023
PROJECT NUMBER:	19097
DESIGNED BY:	PB/KE/KF
DRAWN BY:	PB/MB/KF/KL
CHECKED BY:	KE

C.1

SHEET 1 OF 1

6/14/2023 L:\19097\19097.04 - Lot 2\CURRENT\19097 - Operations and Maintenance Plan.dwg
Matthew Baker

Appendix D: Pre and Post Drainage Maps



NOTES:

1. EXISTING WETLANDS SHOWN HAVE BEEN MODELED WITH A CURVE NUMBER OF 98 TO REPRESENT THAT THEY ARE IMPERVIOUS IN NATURE REGARDLESS OF SOIL TYPE DEPICTED FROM NRCS WEB SOIL SURVEY.

6/19/2023 L:\19097\19097.04 - Lot 2\CURRENT\19097 - Drainage and SWM.dwg
Nathan Clegg

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BURLINGTON, MA 01803

PROPOSED MULTIFAMILY DEVELOPMENT

SUMMER STREET
WALPOLE, MA

REVISIONS:

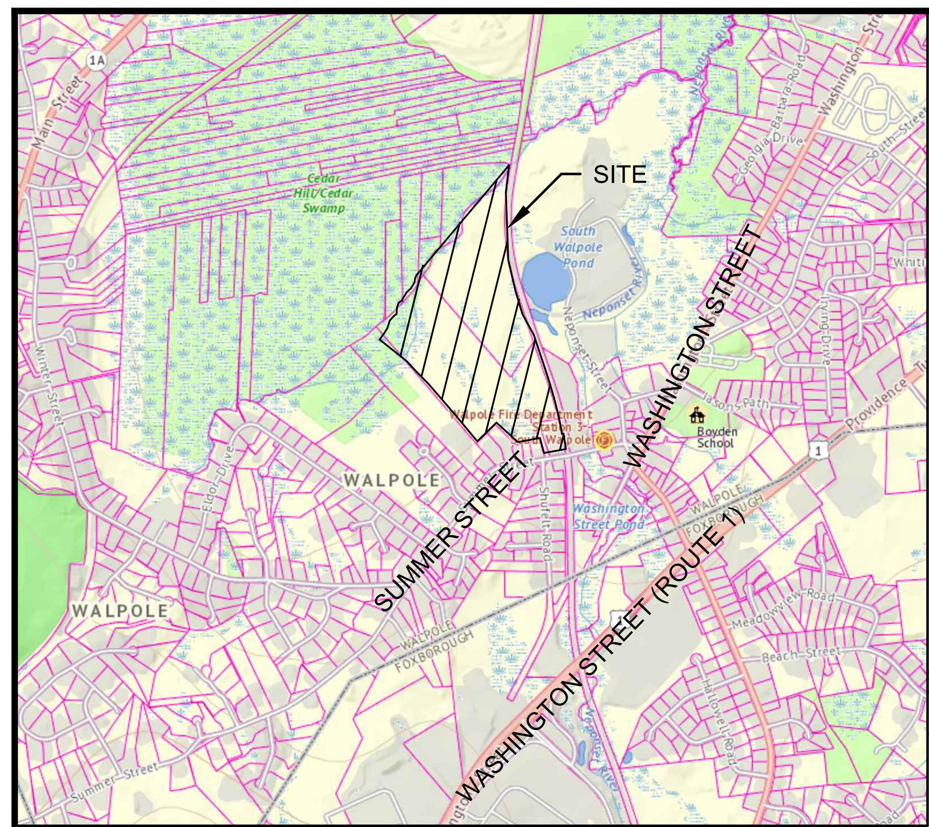
NO	BY	DATE	DESCRIPTION

SITE PLAN

EXISTING WATERSHED PLAN

DATE:	JUNE 20, 2023
PROJECT NUMBER:	19097
DESIGNED BY:	PB/KE/KF
DRAWN BY:	PB/MB/KF/KL
CHECKED BY:	KE

1



LOCUS MAP
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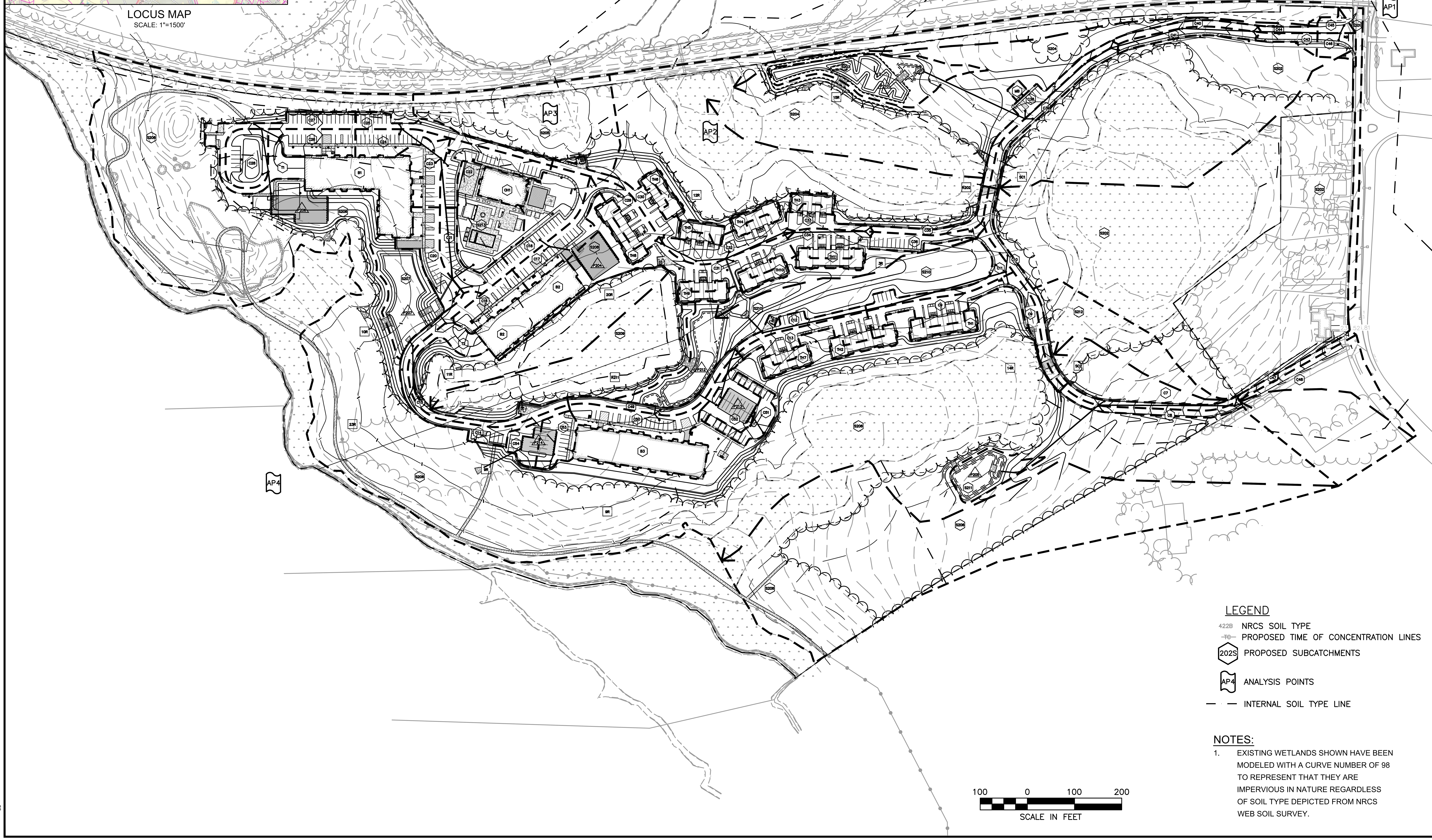

LEGEND

- 422B NRCS SOIL TYPE
- TC PROPOSED TIME OF CONCENTRATION LINES
- 202S PROPOSED SUBCATCHMENTS
- AP4 ANALYSIS POINTS
- INTERNAL SOIL TYPE LINE

NOTES:

1. EXISTING WETLANDS SHOWN HAVE BEEN MODELED WITH A CURVE NUMBER OF 98 TO REPRESENT THAT THEY ARE IMPERVIOUS IN NATURE REGARDLESS OF SOIL TYPE DEPICTED FROM NRCS WEB SOIL SURVEY.

100 0 100 200
SCALE IN FEET

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55 SS LLC
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PROPOSED MULTIFAMILY DEVELOPMENT
SUMMER STREET
WALPOLE, MA

REVISIONS:

NO	BY	DATE	DESCRIPTION

SITE PLAN

PROPOSED WATERSHED OVERVIEW PLAN

DATE:	SEPTEMBER 29, 2022
PROJECT NUMBER:	19097.03
DESIGNED BY:	PB/KE/KF
DRAWN BY:	PB/MB/KF/KL
CHECKED BY:	KE

2

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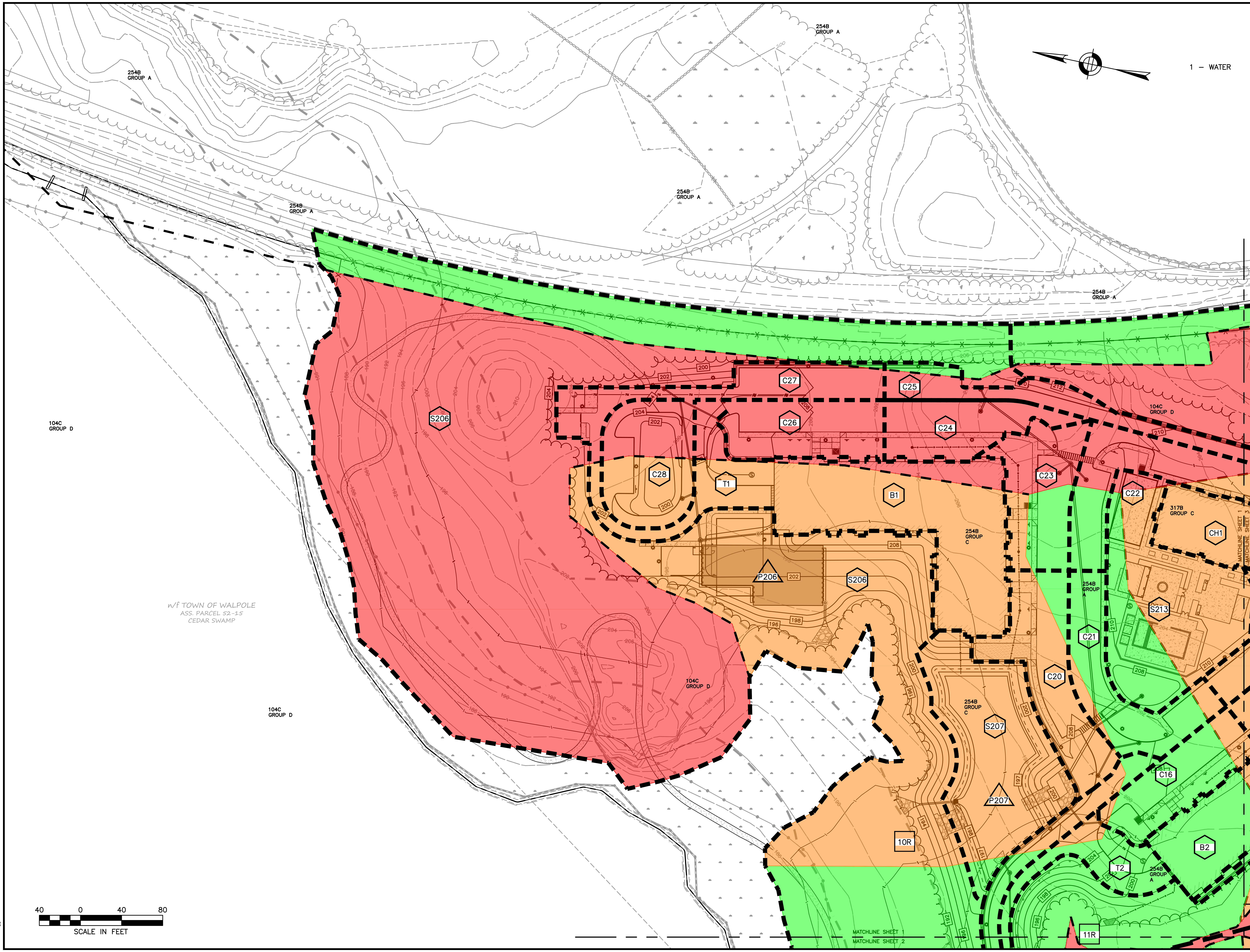

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PROPOSED MULTIFAMILY DEVELOPMENT

SUMMER STREET
WALPOLE, MA

REVISIONS:

NO	BY	DATE	DESCRIPTION

SITE PLAN

POST DEVELOPMENT DRAINAGE MAP 1 OF 6

DATE:	JUNE 20, 2023
PROJECT NUMBER:	19097
DESIGNED BY:	PB/KE/KF
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C.3

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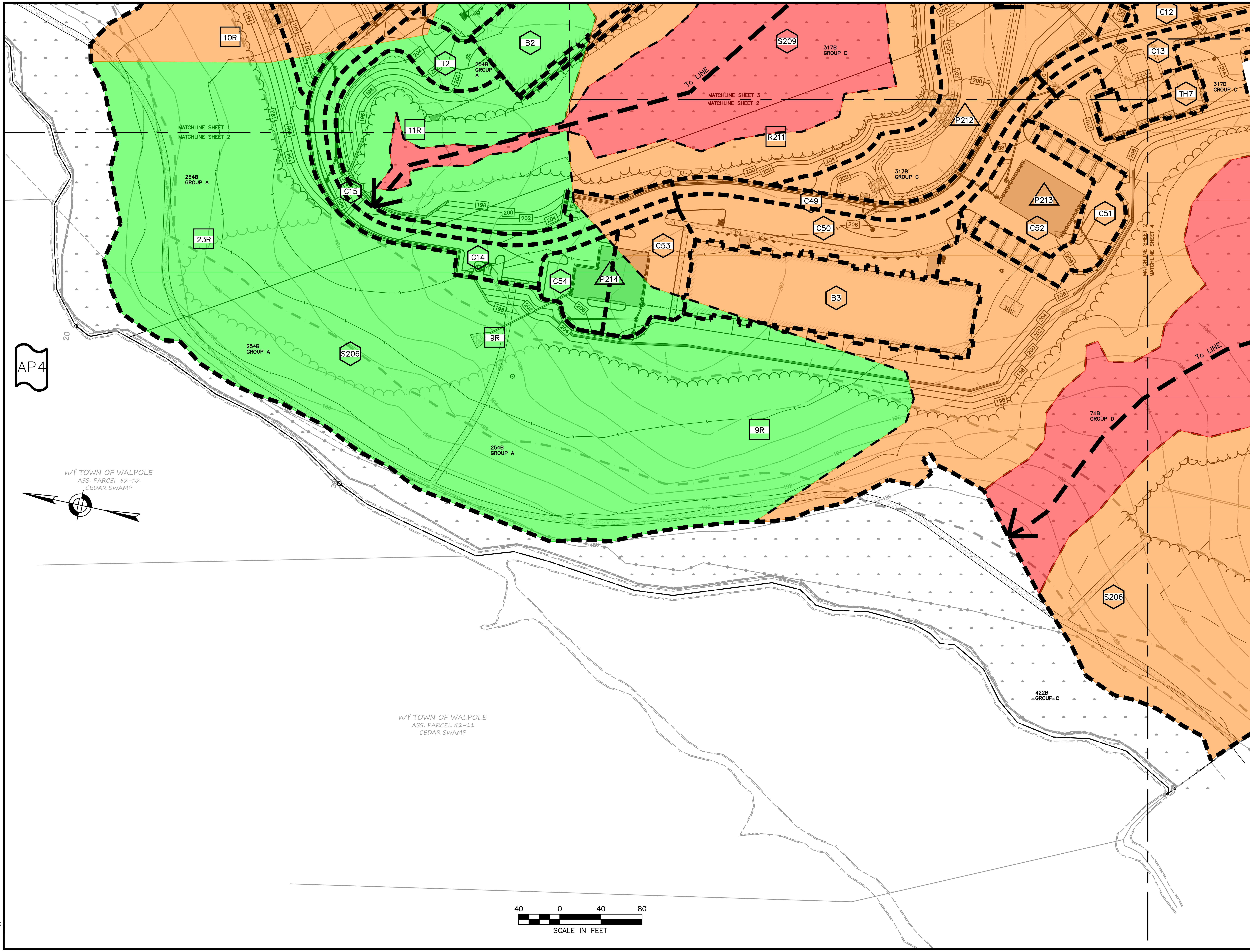

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PROPOSED MULTIFAMILY DEVELOPMENT

SUMMER STREET
WALPOLE, MA

REVISIONS:

NO	BY	DATE	DESCRIPTION

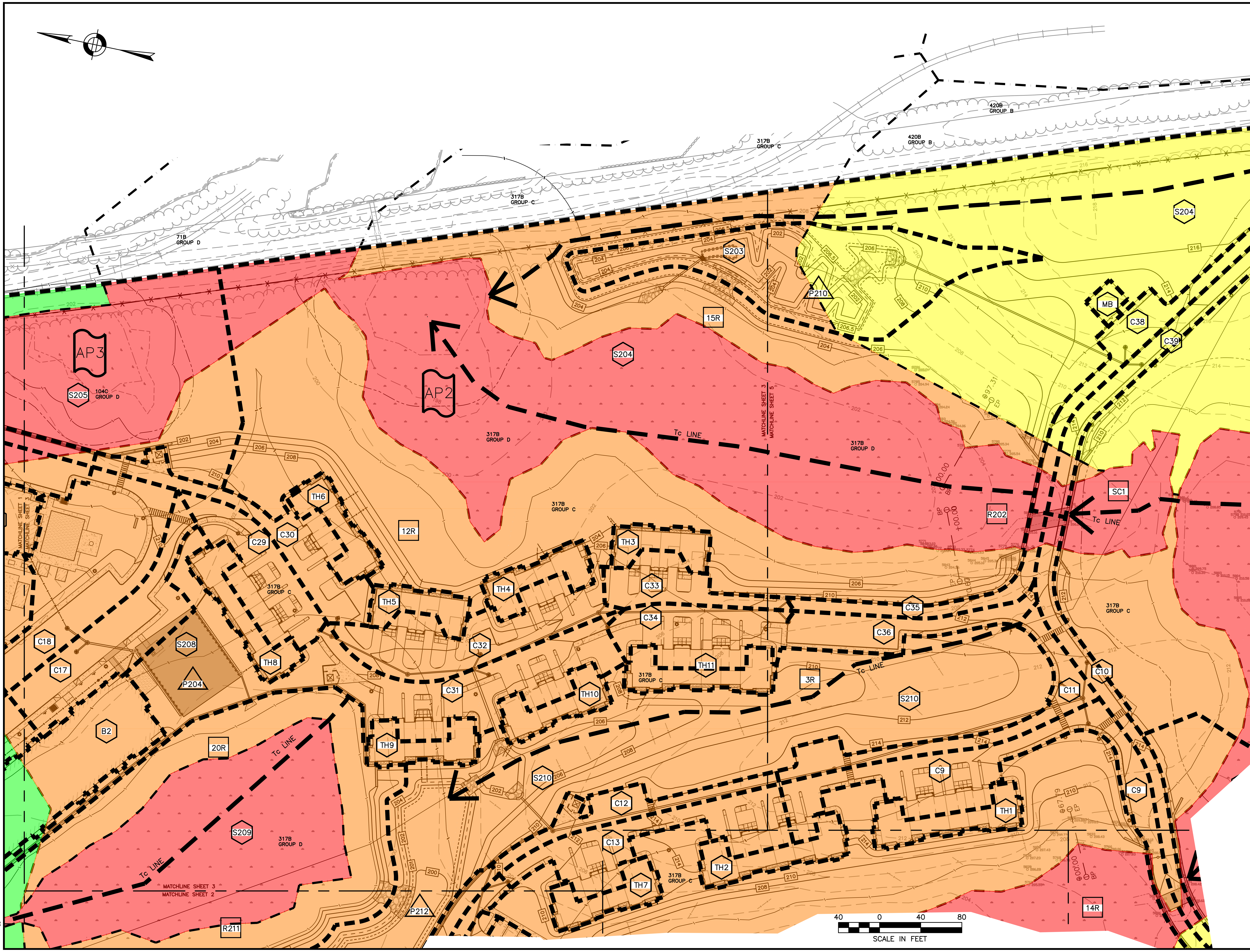
SITE PLAN

POST DEVELOPMENT DRAINAGE MAP
2 OF 6

DATE:	JUNE 20, 2023
PROJECT NUMBER:	19097
DESIGNED BY:	PB/KE/KF
DRAWN BY:	PB/MB/KF/KL
CHECKED BY:	KE

C.4

SHEET 4 OF 8



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PROPOSED MULTIFAMILY DEVELOPMENT

SUMMER STREET
WALPOLE, MA

REVISIONS:

NO	BY	DATE	DESCRIPTION

SITE PLAN

POST DEVELOPMENT DRAINAGE MAP 3 OF 6

DATE:	JUNE 20, 2023
PROJECT NUMBER:	19097
DESIGNED BY:	PB/KE/KF
DRAWN BY:	PB/MB/KF/KL
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C.5

SHEET 5 OF 8

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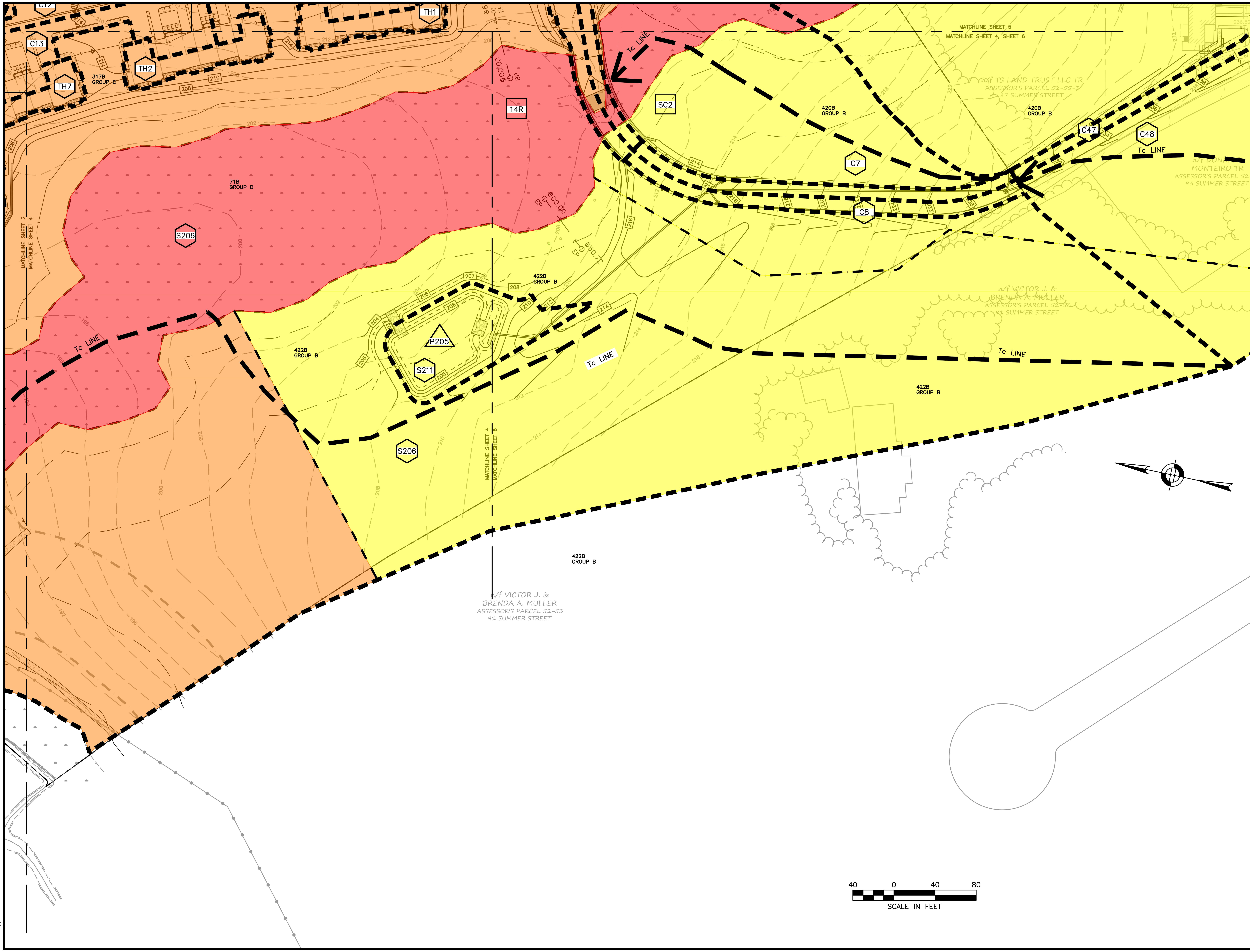
Nathan Clegg



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PROPOSED MULTIFAMILY DEVELOPMENT
SUMMER STREET
WALPOLE, MA

REVISIONS:

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POST DEVELOPMENT DRAINAGE MAP 4 OF 6

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PROJECT NUMBER:	19097
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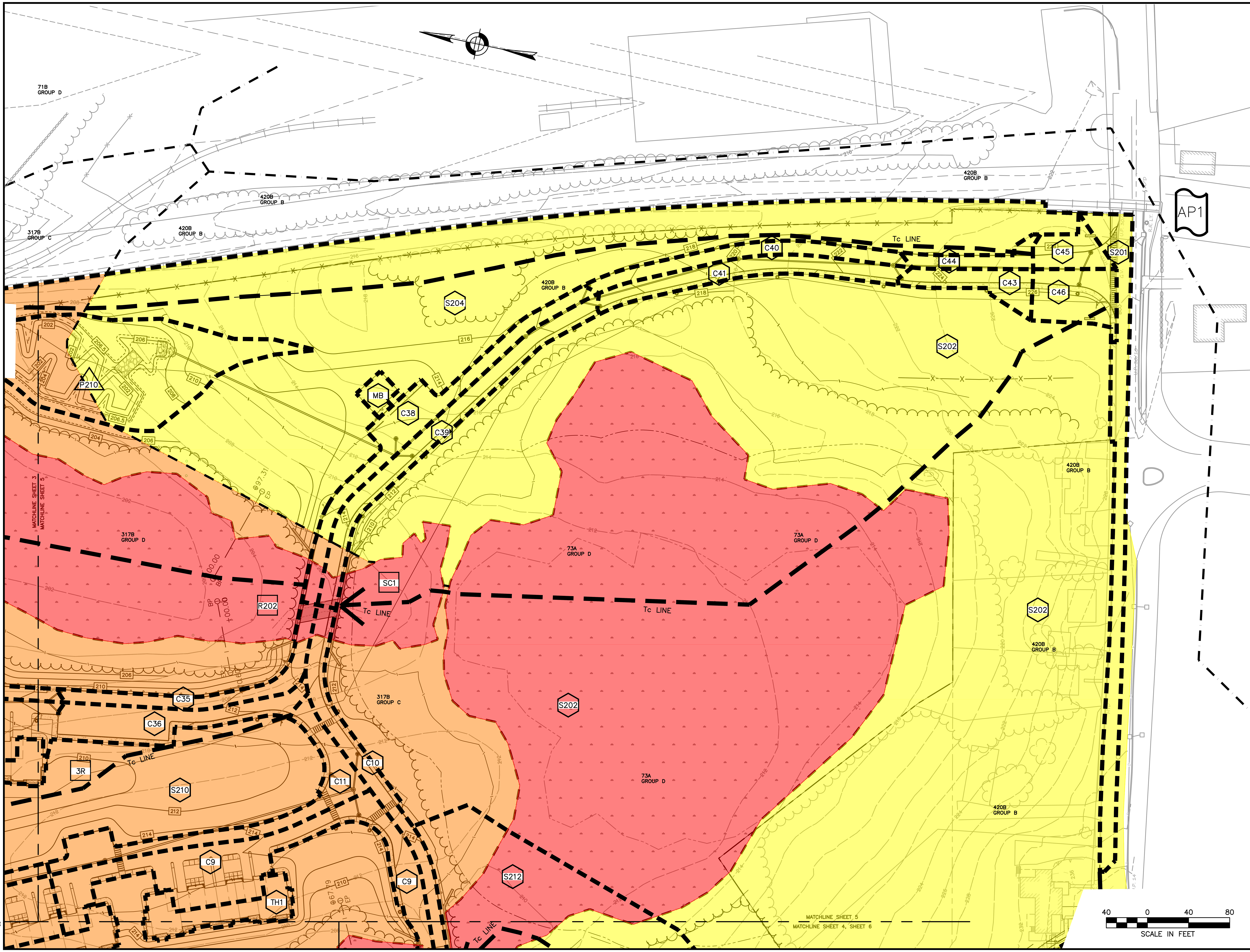
C.6

SHEET 6 OF 8



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PROPOSED MULTIFAMILY DEVELOPMENT
SUMMER STREET
WALPOLE, MA

REVISIONS:

NO	BY	DATE	DESCRIPTION

SITE PLAN

POST DEVELOPMENT DRAINAGE MAP 5 OF 6

DATE:	JUNE 20, 2023
PROJECT NUMBER:	19097
DESIGNED BY:	PB/KE/KF
DRAWN BY:	PB/MB/KF/KL
CHECKED BY:	KE

C.7

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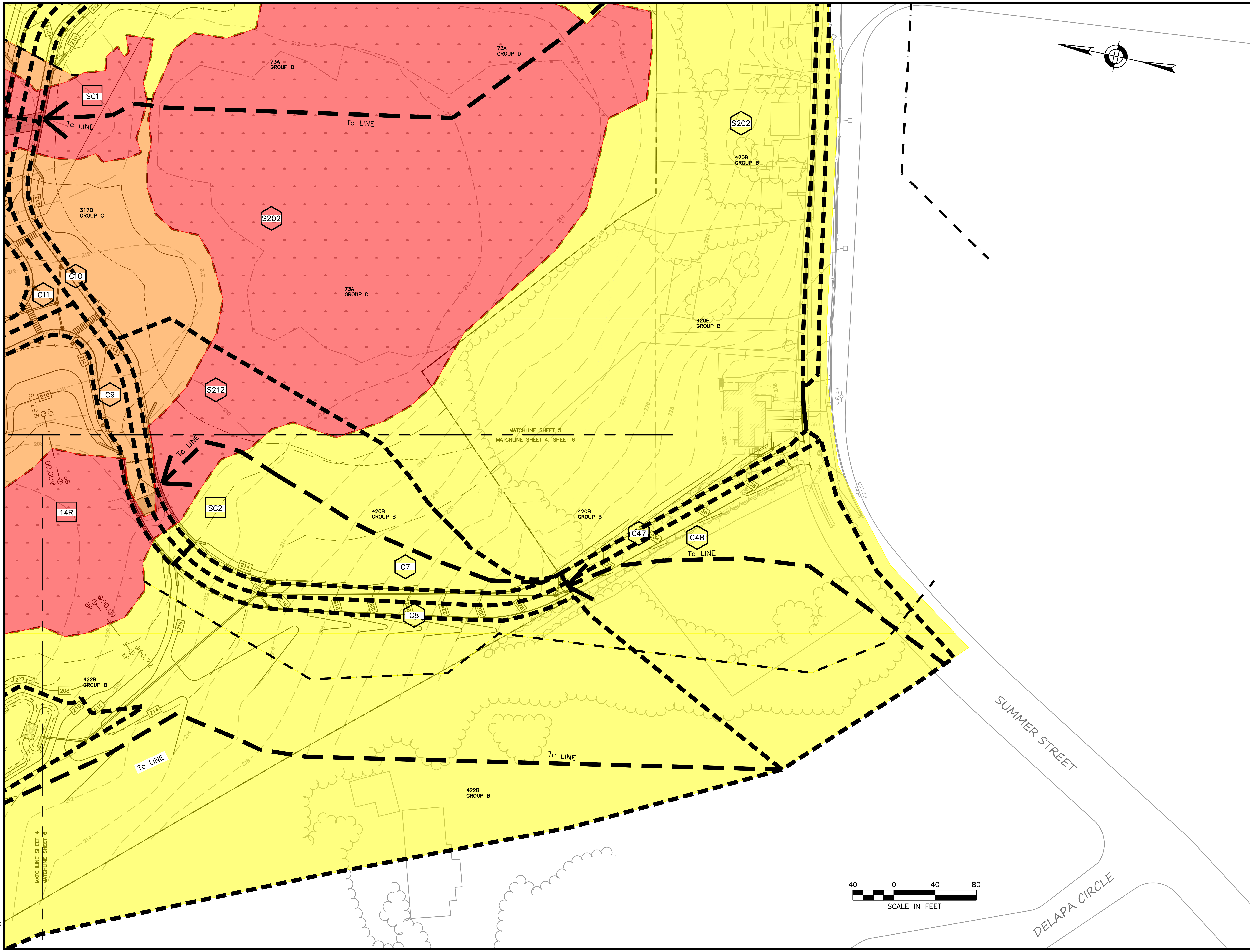

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PROPOSED MULTIFAMILY DEVELOPMENT

SUMMER STREET
WALPOLE, MA

REVISIONS:

NO	BY	DATE	DESCRIPTION

SITE PLAN

POST DEVELOPMENT DRAINAGE MAP 6 OF 6

DATE:	JUNE 20, 2023
PROJECT NUMBER:	19097
DESIGNED BY:	PB/KE/KF
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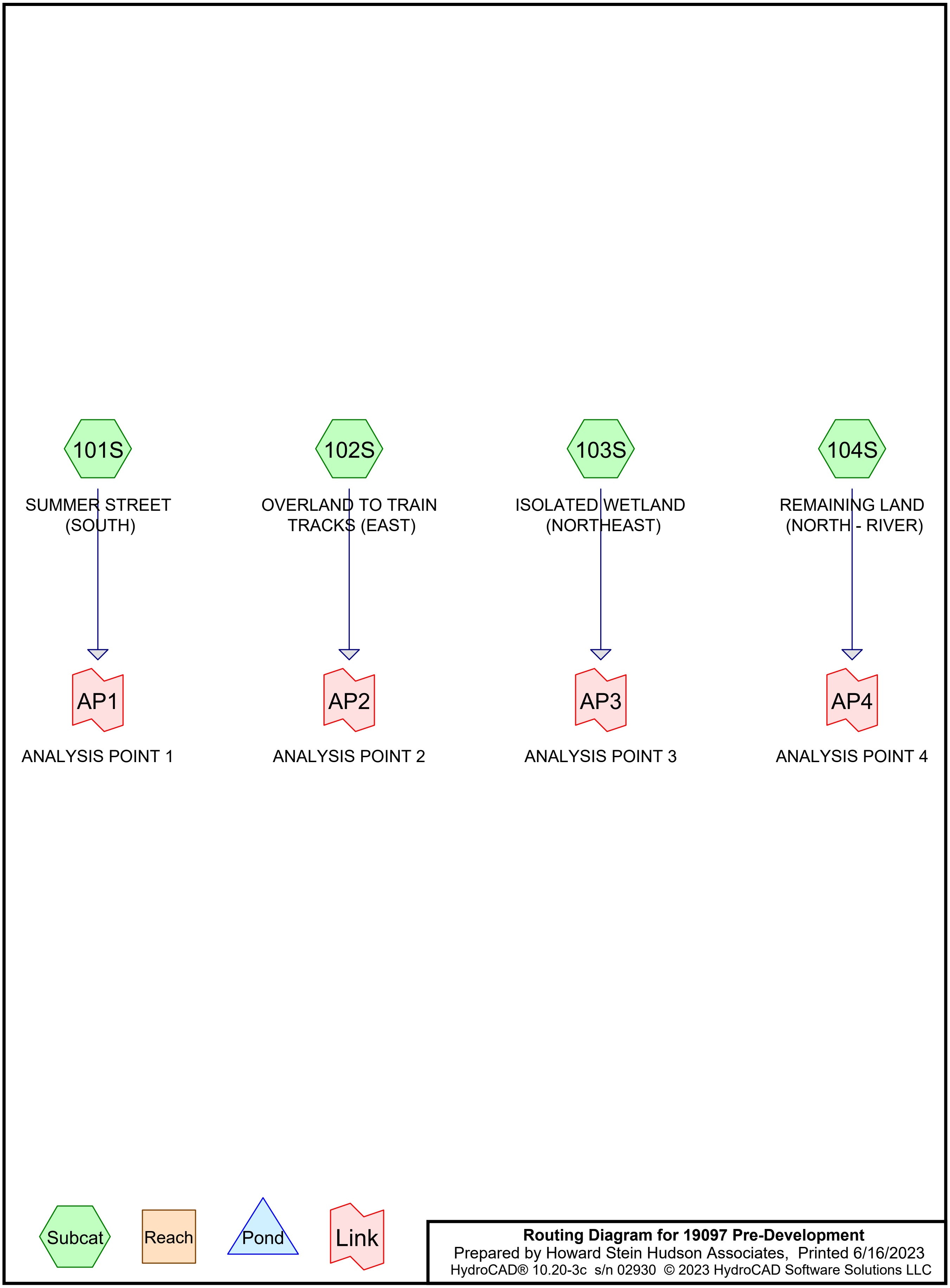
Nathan Clegg

Appendix E: HydroCAD, Stage Storage, and Pocket Wetland Calculations


101S
SUMMER STREET (SOUTH)
102S
OVERLAND TO TRAIN TRACKS (EAST)
103S
ISOLATED WETLAND (NORTHEAST)
104S
REMAINING LAND (NORTH - RIVER)
AP1
ANALYSIS POINT 1
AP2
ANALYSIS POINT 2
AP3
ANALYSIS POINT 3
AP4
ANALYSIS POINT 4
Subcat
Reach
Pond
Link
Routing Diagram for 19097 Pre-Development
Prepared by Howard Stein Hudson Associates, Printed 6/16/2023
HydroCAD® 10.20-3c s/n 02930 © 2023 HydroCAD Software Solutions LLC

Project Notes

Rainfall events imported from "19097 Post-Development.hcp"

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2YR	Type III 24-hr		Default	24.00	1	3.27	2
2	10YR	Type III 24-hr		Default	24.00	1	4.96	2
3	25YR	Type III 24-hr		Default	24.00	1	6.29	2
4	100YR	Type III 24-hr		Default	24.00	1	9.06	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
143,648	68	1 acre lots, 20% imp, HSG B (102S, 104S)
549	79	1 acre lots, 20% imp, HSG C (104S)
179,555	61	>75% Grass cover, Good, HSG B (101S, 102S)
15,945	74	>75% Grass cover, Good, HSG C (102S)
3,192	80	>75% Grass cover, Good, HSG D (102S)
89,402	30	Brush, Good, HSG A (103S, 104S)
2,920	65	Brush, Good, HSG C (104S)
4,643	73	Brush, Good, HSG D (103S)
1,262	96	Gravel surface, HSG B (101S)
33,283	98	Paved parking, HSG B (101S, 102S)
448,007	98	Water Surface, 0% imp, HSG D (102S, 103S, 104S)
212,938	30	Woods, Good, HSG A (103S, 104S)
358,427	55	Woods, Good, HSG B (102S, 104S)
866,259	70	Woods, Good, HSG C (102S, 103S, 104S)
213,890	77	Woods, Good, HSG D (102S, 103S, 104S)
2,573,920	**68**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
302,340	HSG A	103S, 104S
716,175	HSG B	101S, 102S, 104S
885,673	HSG C	102S, 103S, 104S
669,732	HSG D	102S, 103S, 104S
0	Other	
2,573,920		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
0	143,648	549	0	0	144,197	1 acre lots, 20% imp	
0	179,555	15,945	3,192	0	198,692	>75% Grass cover, Good	
89,402	0	2,920	4,643	0	96,965	Brush, Good	
0	1,262	0	0	0	1,262	Gravel surface	
0	33,283	0	0	0	33,283	Paved parking	
0	0	0	448,007	0	448,007	Water Surface, 0% imp	
212,938	358,427	866,259	213,890	0	1,651,514	Woods, Good	
302,340	**716,175**	**885,673**	**669,732**	**0**	**2,573,920**	**TOTAL AREA**	

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment101S: SUMMER STREET Runoff Area=13,756 sf 64.57% Impervious Runoff Depth>2.06"
Tc=6.0 min CN=88 Runoff=0.74 cfs 2,360 cf

Subcatchment102S: OVERLANDTO Runoff Area=956,300 sf 3.58% Impervious Runoff Depth>1.07"
Flow Length=1,531' Tc=44.5 min CN=74 Runoff=12.30 cfs 85,349 cf

Subcatchment103S: ISOLATED Runoff Area=105,094 sf 0.00% Impervious Runoff Depth>0.97"
Tc=6.0 min CN=72 Runoff=2.52 cfs 8,514 cf

Subcatchment104S: REMAININGLAND Runoff Area=1,498,770 sf 1.27% Impervious Runoff Depth>0.59"
Flow Length=987' Tc=28.6 min CN=64 Runoff=10.77 cfs 73,247 cf

Link AP1: ANALYSISPOINT 1 Inflow=0.74 cfs 2,360 cf
Primary=0.74 cfs 2,360 cf

Link AP2: ANALYSISPOINT 2 Inflow=12.30 cfs 85,349 cf
Primary=12.30 cfs 85,349 cf

Link AP3: ANALYSISPOINT 3 Inflow=2.52 cfs 8,514 cf
Primary=2.52 cfs 8,514 cf

Link AP4: ANALYSISPOINT 4 Inflow=10.77 cfs 73,247 cf
Primary=10.77 cfs 73,247 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 169,469 cf Average Runoff Depth = 0.79"
97.59% Pervious = 2,511,798 sf 2.41% Impervious = 62,122 sf

Summary for Subcatchment 101S: SUMMER STREET (SOUTH)

Runoff = 0.74 cfs @ 12.09 hrs, Volume= 2,360 cf, Depth> 2.06"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,612	61	>75% Grass cover, Good, HSG B
8,882	98	Paved parking, HSG B
1,262	96	Gravel surface, HSG B
13,756	88	Weighted Average
4,874		35.43% Pervious Area
8,882		64.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 102S: OVERLAND TO TRAIN TRACKS (EAST)

Runoff = 12.30 cfs @ 12.66 hrs, Volume= 85,349 cf, Depth> 1.07"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
175,943	61	>75% Grass cover, Good, HSG B
184,742	55	Woods, Good, HSG B
24,401	98	Paved parking, HSG B
49,311	68	1 acre lots, 20% imp, HSG B
15,945	74	>75% Grass cover, Good, HSG C
235,274	70	Woods, Good, HSG C
3,192	80	>75% Grass cover, Good, HSG D
1,550	77	Woods, Good, HSG D
265,942	98	Water Surface, 0% imp, HSG D
956,300	74	Weighted Average
922,037		96.42% Pervious Area
34,263		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0800	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
0.3	77	0.0780	4.50		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
41.0	1,404	0.0130	0.57		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
44.5	1,531	Total			

Summary for Subcatchment 103S: ISOLATED WETLAND (NORTHEAST)

Runoff = 2.52 cfs @ 12.10 hrs, Volume= 8,514 cf, Depth> 0.97"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,813	30	Brush, Good, HSG A
1,646	30	Woods, Good, HSG A
48,198	70	Woods, Good, HSG C
4,643	73	Brush, Good, HSG D
35,989	77	Woods, Good, HSG D
8,805	98	Water Surface, 0% imp, HSG D
105,094	72	Weighted Average
105,094		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 104S: REMAINING LAND (NORTH - RIVER)

Runoff = 10.77 cfs @ 12.50 hrs, Volume= 73,247 cf, Depth> 0.59"
Routed to Link AP4 : ANALYSIS POINT 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
83,589	30	Brush, Good, HSG A
211,292	30	Woods, Good, HSG A
173,685	55	Woods, Good, HSG B
94,337	68	1 acre lots, 20% imp, HSG B
549	79	1 acre lots, 20% imp, HSG C
2,920	65	Brush, Good, HSG C
582,787	70	Woods, Good, HSG C
173,260	98	Water Surface, 0% imp, HSG D
176,351	77	Woods, Good, HSG D
1,498,770	64	Weighted Average
1,479,793		98.73% Pervious Area
18,977		1.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	50	0.0400	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
19.4	937	0.0260	0.81		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.6	987	Total			

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 13,756 sf, 64.57% Impervious, Inflow Depth > 2.06" for 2YR event
Inflow = 0.74 cfs @ 12.09 hrs, Volume= 2,360 cf
Primary = 0.74 cfs @ 12.09 hrs, Volume= 2,360 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 956,300 sf, 3.58% Impervious, Inflow Depth > 1.07" for 2YR event
Inflow = 12.30 cfs @ 12.66 hrs, Volume= 85,349 cf
Primary = 12.30 cfs @ 12.66 hrs, Volume= 85,349 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

Inflow Area = 105,094 sf, 0.00% Impervious, Inflow Depth > 0.97" for 2YR event
Inflow = 2.52 cfs @ 12.10 hrs, Volume= 8,514 cf
Primary = 2.52 cfs @ 12.10 hrs, Volume= 8,514 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT 4

Inflow Area = 1,498,770 sf, 1.27% Impervious, Inflow Depth > 0.59" for 2YR event
Inflow = 10.77 cfs @ 12.50 hrs, Volume= 73,247 cf
Primary = 10.77 cfs @ 12.50 hrs, Volume= 73,247 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment101S: SUMMER STREET Runoff Area=13,756 sf 64.57% Impervious Runoff Depth>3.63"
Tc=6.0 min CN=88 Runoff=1.28 cfs 4,159 cf

Subcatchment102S: OVERLANDTO Runoff Area=956,300 sf 3.58% Impervious Runoff Depth>2.31"
Flow Length=1,531' Tc=44.5 min CN=74 Runoff=27.75 cfs 184,006 cf

Subcatchment103S: ISOLATED Runoff Area=105,094 sf 0.00% Impervious Runoff Depth>2.16"
Tc=6.0 min CN=72 Runoff=5.96 cfs 18,960 cf

Subcatchment104S: REMAININGLAND Runoff Area=1,498,770 sf 1.27% Impervious Runoff Depth>1.54"
Flow Length=987' Tc=28.6 min CN=64 Runoff=33.90 cfs 192,708 cf

Link AP1: ANALYSISPOINT 1 Inflow=1.28 cfs 4,159 cf
Primary=1.28 cfs 4,159 cf

Link AP2: ANALYSISPOINT 2 Inflow=27.75 cfs 184,006 cf
Primary=27.75 cfs 184,006 cf

Link AP3: ANALYSISPOINT 3 Inflow=5.96 cfs 18,960 cf
Primary=5.96 cfs 18,960 cf

Link AP4: ANALYSISPOINT 4 Inflow=33.90 cfs 192,708 cf
Primary=33.90 cfs 192,708 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 399,833 cf Average Runoff Depth = 1.86"
97.59% Pervious = 2,511,798 sf 2.41% Impervious = 62,122 sf

Summary for Subcatchment 101S: SUMMER STREET (SOUTH)

Runoff = 1.28 cfs @ 12.09 hrs, Volume= 4,159 cf, Depth> 3.63"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,612	61	>75% Grass cover, Good, HSG B
8,882	98	Paved parking, HSG B
1,262	96	Gravel surface, HSG B
13,756	88	Weighted Average
4,874		35.43% Pervious Area
8,882		64.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 102S: OVERLAND TO TRAIN TRACKS (EAST)

Runoff = 27.75 cfs @ 12.62 hrs, Volume= 184,006 cf, Depth> 2.31"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
175,943	61	>75% Grass cover, Good, HSG B
184,742	55	Woods, Good, HSG B
24,401	98	Paved parking, HSG B
49,311	68	1 acre lots, 20% imp, HSG B
15,945	74	>75% Grass cover, Good, HSG C
235,274	70	Woods, Good, HSG C
3,192	80	>75% Grass cover, Good, HSG D
1,550	77	Woods, Good, HSG D
265,942	98	Water Surface, 0% imp, HSG D
956,300	74	Weighted Average
922,037		96.42% Pervious Area
34,263		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0800	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
0.3	77	0.0780	4.50		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
41.0	1,404	0.0130	0.57		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
44.5	1,531	Total			

Summary for Subcatchment 103S: ISOLATED WETLAND (NORTHEAST)

Runoff = 5.96 cfs @ 12.10 hrs, Volume= 18,960 cf, Depth> 2.16"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,813	30	Brush, Good, HSG A
1,646	30	Woods, Good, HSG A
48,198	70	Woods, Good, HSG C
4,643	73	Brush, Good, HSG D
35,989	77	Woods, Good, HSG D
8,805	98	Water Surface, 0% imp, HSG D
105,094	72	Weighted Average
105,094		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 104S: REMAINING LAND (NORTH - RIVER)

Runoff = 33.90 cfs @ 12.44 hrs, Volume= 192,708 cf, Depth> 1.54"
Routed to Link AP4 : ANALYSIS POINT 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
83,589	30	Brush, Good, HSG A
211,292	30	Woods, Good, HSG A
173,685	55	Woods, Good, HSG B
94,337	68	1 acre lots, 20% imp, HSG B
549	79	1 acre lots, 20% imp, HSG C
2,920	65	Brush, Good, HSG C
582,787	70	Woods, Good, HSG C
173,260	98	Water Surface, 0% imp, HSG D
176,351	77	Woods, Good, HSG D
1,498,770	64	Weighted Average
1,479,793		98.73% Pervious Area
18,977		1.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	50	0.0400	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
19.4	937	0.0260	0.81		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.6	987	Total			

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 13,756 sf, 64.57% Impervious, Inflow Depth > 3.63" for 10YR event
Inflow = 1.28 cfs @ 12.09 hrs, Volume= 4,159 cf
Primary = 1.28 cfs @ 12.09 hrs, Volume= 4,159 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 956,300 sf, 3.58% Impervious, Inflow Depth > 2.31" for 10YR event
Inflow = 27.75 cfs @ 12.62 hrs, Volume= 184,006 cf
Primary = 27.75 cfs @ 12.62 hrs, Volume= 184,006 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

Inflow Area = 105,094 sf, 0.00% Impervious, Inflow Depth > 2.16" for 10YR event
Inflow = 5.96 cfs @ 12.10 hrs, Volume= 18,960 cf
Primary = 5.96 cfs @ 12.10 hrs, Volume= 18,960 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT 4

Inflow Area = 1,498,770 sf, 1.27% Impervious, Inflow Depth > 1.54" for 10YR event
Inflow = 33.90 cfs @ 12.44 hrs, Volume= 192,708 cf
Primary = 33.90 cfs @ 12.44 hrs, Volume= 192,708 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment101S: SUMMER STREET Runoff Area=13,756 sf 64.57% Impervious Runoff Depth>4.90"
Tc=6.0 min CN=88 Runoff=1.71 cfs 5,619 cf

Subcatchment102S: OVERLANDTO Runoff Area=956,300 sf 3.58% Impervious Runoff Depth>3.40"
Flow Length=1,531' Tc=44.5 min CN=74 Runoff=41.12 cfs 270,829 cf

Subcatchment103S: ISOLATED Runoff Area=105,094 sf 0.00% Impervious Runoff Depth>3.23"
Tc=6.0 min CN=72 Runoff=8.96 cfs 28,279 cf

Subcatchment104S: REMAININGLAND Runoff Area=1,498,770 sf 1.27% Impervious Runoff Depth>2.46"
Flow Length=987' Tc=28.6 min CN=64 Runoff=56.04 cfs 306,701 cf

Link AP1: ANALYSISPOINT 1 Inflow=1.71 cfs 5,619 cf
Primary=1.71 cfs 5,619 cf

Link AP2: ANALYSISPOINT 2 Inflow=41.12 cfs 270,829 cf
Primary=41.12 cfs 270,829 cf

Link AP3: ANALYSISPOINT 3 Inflow=8.96 cfs 28,279 cf
Primary=8.96 cfs 28,279 cf

Link AP4: ANALYSISPOINT 4 Inflow=56.04 cfs 306,701 cf
Primary=56.04 cfs 306,701 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 611,428 cf Average Runoff Depth = 2.85"
97.59% Pervious = 2,511,798 sf 2.41% Impervious = 62,122 sf

Summary for Subcatchment 101S: SUMMER STREET (SOUTH)

Runoff = 1.71 cfs @ 12.09 hrs, Volume= 5,619 cf, Depth> 4.90"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,612	61	>75% Grass cover, Good, HSG B
8,882	98	Paved parking, HSG B
1,262	96	Gravel surface, HSG B
13,756	88	Weighted Average
4,874		35.43% Pervious Area
8,882		64.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 102S: OVERLAND TO TRAIN TRACKS (EAST)

Runoff = 41.12 cfs @ 12.61 hrs, Volume= 270,829 cf, Depth> 3.40"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
175,943	61	>75% Grass cover, Good, HSG B
184,742	55	Woods, Good, HSG B
24,401	98	Paved parking, HSG B
49,311	68	1 acre lots, 20% imp, HSG B
15,945	74	>75% Grass cover, Good, HSG C
235,274	70	Woods, Good, HSG C
3,192	80	>75% Grass cover, Good, HSG D
1,550	77	Woods, Good, HSG D
265,942	98	Water Surface, 0% imp, HSG D
956,300	74	Weighted Average
922,037		96.42% Pervious Area
34,263		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0800	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
0.3	77	0.0780	4.50		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
41.0	1,404	0.0130	0.57		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
44.5	1,531	Total			

Summary for Subcatchment 103S: ISOLATED WETLAND (NORTHEAST)

Runoff = 8.96 cfs @ 12.09 hrs, Volume= 28,279 cf, Depth> 3.23"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,813	30	Brush, Good, HSG A
1,646	30	Woods, Good, HSG A
48,198	70	Woods, Good, HSG C
4,643	73	Brush, Good, HSG D
35,989	77	Woods, Good, HSG D
8,805	98	Water Surface, 0% imp, HSG D
105,094	72	Weighted Average
105,094		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 104S: REMAINING LAND (NORTH - RIVER)

Runoff = 56.04 cfs @ 12.42 hrs, Volume= 306,701 cf, Depth> 2.46"
Routed to Link AP4 : ANALYSIS POINT 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
83,589	30	Brush, Good, HSG A
211,292	30	Woods, Good, HSG A
173,685	55	Woods, Good, HSG B
94,337	68	1 acre lots, 20% imp, HSG B
549	79	1 acre lots, 20% imp, HSG C
2,920	65	Brush, Good, HSG C
582,787	70	Woods, Good, HSG C
173,260	98	Water Surface, 0% imp, HSG D
176,351	77	Woods, Good, HSG D
1,498,770	64	Weighted Average
1,479,793		98.73% Pervious Area
18,977		1.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	50	0.0400	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
19.4	937	0.0260	0.81		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.6	987	Total			

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 13,756 sf, 64.57% Impervious, Inflow Depth > 4.90" for 25YR event
Inflow = 1.71 cfs @ 12.09 hrs, Volume= 5,619 cf
Primary = 1.71 cfs @ 12.09 hrs, Volume= 5,619 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 956,300 sf, 3.58% Impervious, Inflow Depth > 3.40" for 25YR event
Inflow = 41.12 cfs @ 12.61 hrs, Volume= 270,829 cf
Primary = 41.12 cfs @ 12.61 hrs, Volume= 270,829 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

Inflow Area = 105,094 sf, 0.00% Impervious, Inflow Depth > 3.23" for 25YR event
Inflow = 8.96 cfs @ 12.09 hrs, Volume= 28,279 cf
Primary = 8.96 cfs @ 12.09 hrs, Volume= 28,279 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT 4

Inflow Area =	1,498,770 sf,	1.27% Impervious,	Inflow Depth > 2.46"	for 25YR event	
Inflow =	56.04 cfs @	12.42 hrs,	Volume=	306,701 cf	
Primary =	56.04 cfs @	12.42 hrs,	Volume=	306,701 cf,	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment101S: SUMMER STREET Runoff Area=13,756 sf 64.57% Impervious Runoff Depth>7.60"
Tc=6.0 min CN=88 Runoff=2.59 cfs 8,714 cf

Subcatchment102S: OVERLANDTO Runoff Area=956,300 sf 3.58% Impervious Runoff Depth>5.83"
Flow Length=1,531' Tc=44.5 min CN=74 Runoff=70.33 cfs 464,971 cf

Subcatchment103S: ISOLATED Runoff Area=105,094 sf 0.00% Impervious Runoff Depth>5.63"
Tc=6.0 min CN=72 Runoff=15.56 cfs 49,317 cf

Subcatchment104S: REMAININGLAND Runoff Area=1,498,770 sf 1.27% Impervious Runoff Depth>4.62"
Flow Length=987' Tc=28.6 min CN=64 Runoff=107.72 cfs 576,512 cf

Link AP1: ANALYSISPOINT 1 Inflow=2.59 cfs 8,714 cf
Primary=2.59 cfs 8,714 cf

Link AP2: ANALYSISPOINT 2 Inflow=70.33 cfs 464,971 cf
Primary=70.33 cfs 464,971 cf

Link AP3: ANALYSISPOINT 3 Inflow=15.56 cfs 49,317 cf
Primary=15.56 cfs 49,317 cf

Link AP4: ANALYSISPOINT 4 Inflow=107.72 cfs 576,512 cf
Primary=107.72 cfs 576,512 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 1,099,514 cf Average Runoff Depth = 5.13"
97.59% Pervious = 2,511,798 sf 2.41% Impervious = 62,122 sf

Summary for Subcatchment 101S: SUMMER STREET (SOUTH)

Runoff = 2.59 cfs @ 12.09 hrs, Volume= 8,714 cf, Depth> 7.60"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,612	61	>75% Grass cover, Good, HSG B
8,882	98	Paved parking, HSG B
1,262	96	Gravel surface, HSG B
13,756	88	Weighted Average
4,874		35.43% Pervious Area
8,882		64.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 102S: OVERLAND TO TRAIN TRACKS (EAST)

Runoff = 70.33 cfs @ 12.60 hrs, Volume= 464,971 cf, Depth> 5.83"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
175,943	61	>75% Grass cover, Good, HSG B
184,742	55	Woods, Good, HSG B
24,401	98	Paved parking, HSG B
49,311	68	1 acre lots, 20% imp, HSG B
15,945	74	>75% Grass cover, Good, HSG C
235,274	70	Woods, Good, HSG C
3,192	80	>75% Grass cover, Good, HSG D
1,550	77	Woods, Good, HSG D
265,942	98	Water Surface, 0% imp, HSG D
956,300	74	Weighted Average
922,037		96.42% Pervious Area
34,263		3.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0800	0.26		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
0.3	77	0.0780	4.50		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
41.0	1,404	0.0130	0.57		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
44.5	1,531	Total			

Summary for Subcatchment 103S: ISOLATED WETLAND (NORTHEAST)

Runoff = 15.56 cfs @ 12.09 hrs, Volume= 49,317 cf, Depth> 5.63"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,813	30	Brush, Good, HSG A
1,646	30	Woods, Good, HSG A
48,198	70	Woods, Good, HSG C
4,643	73	Brush, Good, HSG D
35,989	77	Woods, Good, HSG D
8,805	98	Water Surface, 0% imp, HSG D
105,094	72	Weighted Average
105,094		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 104S: REMAINING LAND (NORTH - RIVER)

Runoff = 107.72 cfs @ 12.40 hrs, Volume= 576,512 cf, Depth> 4.62"
Routed to Link AP4 : ANALYSIS POINT 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
83,589	30	Brush, Good, HSG A
211,292	30	Woods, Good, HSG A
173,685	55	Woods, Good, HSG B
94,337	68	1 acre lots, 20% imp, HSG B
549	79	1 acre lots, 20% imp, HSG C
2,920	65	Brush, Good, HSG C
582,787	70	Woods, Good, HSG C
173,260	98	Water Surface, 0% imp, HSG D
176,351	77	Woods, Good, HSG D
1,498,770	64	Weighted Average
1,479,793		98.73% Pervious Area
18,977		1.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	50	0.0400	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
19.4	937	0.0260	0.81		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.6	987	Total			

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 13,756 sf, 64.57% Impervious, Inflow Depth > 7.60" for 100YR event
Inflow = 2.59 cfs @ 12.09 hrs, Volume= 8,714 cf
Primary = 2.59 cfs @ 12.09 hrs, Volume= 8,714 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 956,300 sf, 3.58% Impervious, Inflow Depth > 5.83" for 100YR event
Inflow = 70.33 cfs @ 12.60 hrs, Volume= 464,971 cf
Primary = 70.33 cfs @ 12.60 hrs, Volume= 464,971 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

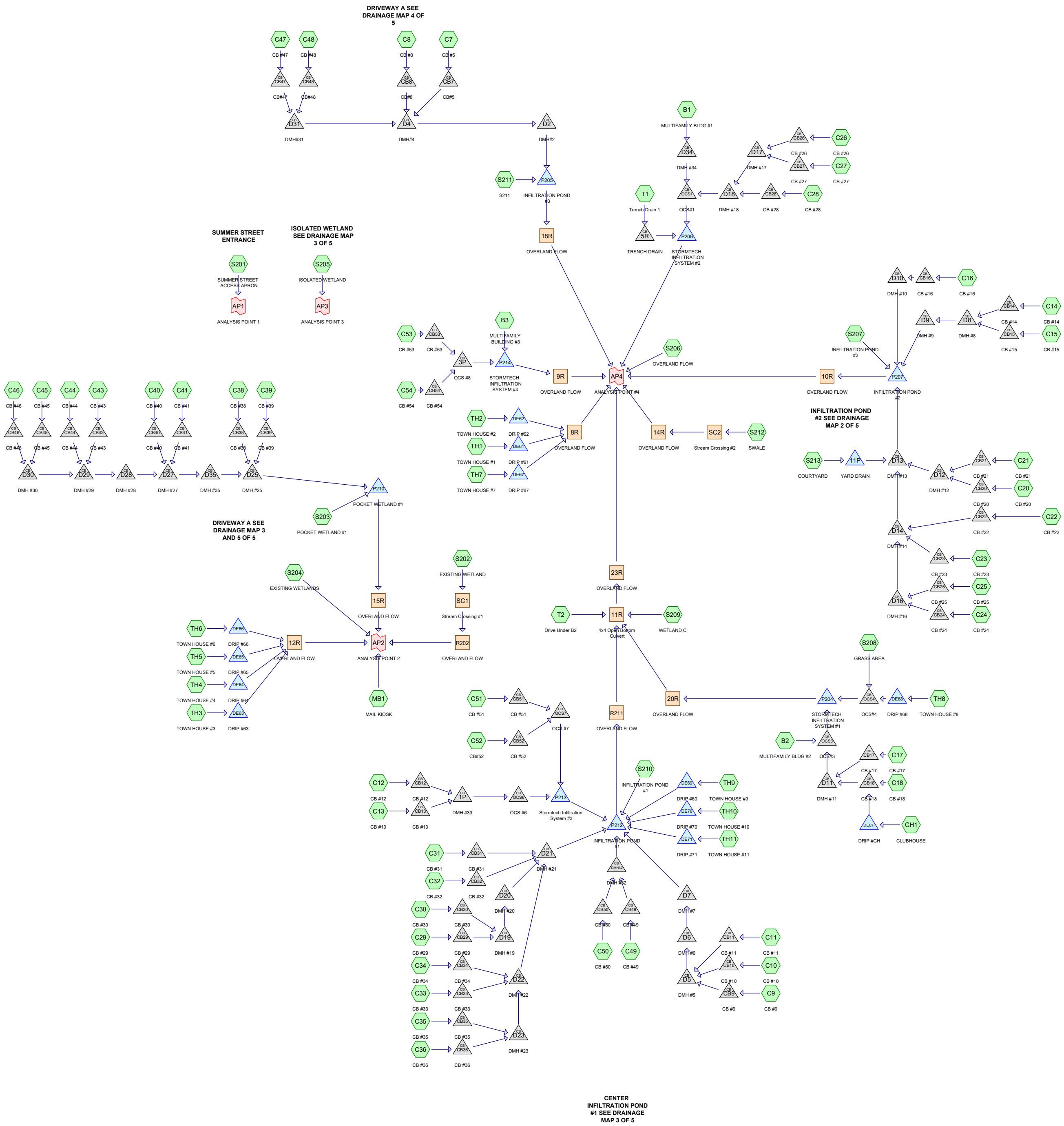
Inflow Area = 105,094 sf, 0.00% Impervious, Inflow Depth > 5.63" for 100YR event
Inflow = 15.56 cfs @ 12.09 hrs, Volume= 49,317 cf
Primary = 15.56 cfs @ 12.09 hrs, Volume= 49,317 cf, Atten= 0%, Lag= 0.0 min

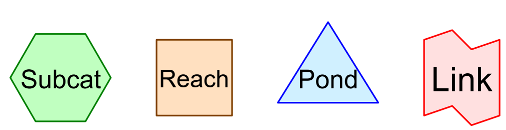
Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT 4

Inflow Area =	1,498,770 sf,	1.27% Impervious,	Inflow Depth > 4.62"	for 100YR event
Inflow =	107.72 cfs @	12.40 hrs, Volume=	576,512 cf	
Primary =	107.72 cfs @	12.40 hrs, Volume=	576,512 cf,	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs





Routing Diagram for 19097 Post-Development

Prepared by Howard Stein Hudson Associates, Printed 6/19/2023

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Project Notes

Rainfall events imported from "19097 PreDevelopment.hcp"
Rainfall events imported from "19097 PostDevelopment-prelim.hcp"

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2YR	Type III 24-hr		Default	24.00	1	3.27	2
2	10YR	Type III 24-hr		Default	24.00	1	4.96	2
3	25YR	Type III 24-hr		Default	24.00	1	6.29	2
4	100YR	Type III 24-hr		Default	24.00	1	9.06	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
17,568	51	1 acre lots, 20% imp, HSG A (S206)
147,453	68	1 acre lots, 20% imp, HSG B (C48, S206)
40,742	39	>75% Grass cover, Good, HSG A (C14, C16, C21, C23, C25, C27, C53, C54, S206, S208, S209, S213, T2)
258,351	61	>75% Grass cover, Good, HSG B (C43, C44, C45, C46, C8, C9, S201, S202, S203, S204, S206, S211, S212)
271,812	74	>75% Grass cover, Good, HSG C (C13, C14, C16, C17, C18, C20, C22, C23, C25, C28, C29, C30, C31, C32, C33, C34, C49, C50, C52, C53, C54, C9, CH1, S202, S203, S204, S205, S206, S207, S208, S209, S210, S212, S213, T1, T2, TH1, TH10, TH11, TH2, TH3, TH4, TH5, TH6, TH7, TH8, TH9)
22,374	80	>75% Grass cover, Good, HSG D (C22, C23, C24, C25, C26, C27, C28, C35, C9, CH1, S202, S205, S206, S212, S213, T1)
41,148	30	Brush, Good, HSG A (S206)
107,179	48	Brush, Good, HSG B (S202, S204, S206, S212)
66,752	65	Brush, Good, HSG C (S202, S204, S205, S206, S210, S212)
6,281	73	Brush, Good, HSG D (S204, S205)
46,900	98	Paved parking, HSG A (C14, C15, C16, C20, C21, C22, C23, C25, C27, C53, C54, S206, S208, S209, S213, T2)
39,770	98	Paved parking, HSG B (C38, C39, C40, C41, C43, C44, C45, C46, S201, S202, S212)
141,055	98	Paved parking, HSG C (C13, C14, C15, C16, C17, C18, C20, C21, C22, C23, C25, C28, C29, C30, C31, C32, C33, C34, C35, C36, C38, C39, C51, C52, C53, C54, C9, S202, S204, S205, S206, S208, S209, S212, S213, T1, T2)
41,121	98	Paved parking, HSG D (C22, C23, C24, C25, C26, C27, C28, C35, C38, C39, C9, S202, S204, S205, S212, S213, T1)
17,148	98	Paved roads w/curbs & sewers, HSG B (C10, C47, C48, C7, C8, C9)
34,156	98	Paved roads w/curbs & sewers, HSG C (C10, C11, C12, C49, C50)
919	98	Paved roads w/curbs & sewers, HSG D (C10)
8,649	98	Roofs, HSG A (B2, B3, S213)
14,884	98	Roofs, HSG B (MB1, S202)
110,093	98	Roofs, HSG C (B1, B2, B3, C13, C29, C30, C31, C32, C33, C34, C51, C9, CH1, S213, TH1, TH10, TH11, TH2, TH3, TH4, TH5, TH6, TH7, TH8, TH9)
3,102	98	Roofs, HSG D (B1, CH1)
1,371	98	Water Surface, 0% imp, HSG A (S207, S213)
1,060	98	Water Surface, 0% imp, HSG B (S203)
29,784	98	Water Surface, 0% imp, HSG C (S203, S207, S210, S213)
171,979	98	Water Surface, 0% imp, HSG D (S206, S209, S212)
7,328	98	Water Surface, HSG B (S211)
271,794	98	Water Surface, HSG D (S202, S204, S205)
145,962	30	Woods, Good, HSG A (S205, S206, S209)
123,002	55	Woods, Good, HSG B (S202, S204, S206, S212)

Area Listing (all nodes) (continued)

Area (sq-ft)	CN	Description (subcatchment-numbers)
232,021	70	Woods, Good, HSG C (S202, S204, S205, S206, S209, S212)
152,162	77	Woods, Good, HSG D (S204, S205, S206)
2,573,920	**75**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
302,340	HSG A	B2, B3, C14, C15, C16, C20, C21, C22, C23, C25, C27, C53, C54, S205, S206, S207, S208, S209, S213, T2
716,175	HSG B	C10, C38, C39, C40, C41, C43, C44, C45, C46, C47, C48, C7, C8, C9, MB1, S201, S202, S203, S204, S206, S211, S212
885,673	HSG C	B1, B2, B3, C10, C11, C12, C13, C14, C15, C16, C17, C18, C20, C21, C22, C23, C25, C28, C29, C30, C31, C32, C33, C34, C35, C36, C38, C39, C49, C50, C51, C52, C53, C54, C9, CH1, S202, S203, S204, S205, S206, S207, S208, S209, S210, S212, S213, T1, T2, TH1, TH10, TH11, TH2, TH3, TH4, TH5, TH6, TH7, TH8, TH9
669,732	HSG D	B1, C10, C22, C23, C24, C25, C26, C27, C28, C35, C38, C39, C9, CH1, S202, S204, S205, S206, S209, S212, S213, T1
0	Other	
2,573,920		**TOTAL AREA**

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	11R	194.00	193.55	30.0	0.0150	0.069	48.0	48.0	0.0	
2	SC1	206.37	205.51	43.1	0.0200	0.030	192.0	60.0	0.0	
3	SC2	208.52	207.64	36.5	0.0241	0.030	192.0	60.0	0.0	
4	1P	205.50	204.33	46.7	0.0251	0.013	0.0	12.0	0.0	
5	5R	197.22	196.50	36.0	0.0200	0.012	0.0	8.0	0.0	
6	11P	203.25	202.94	61.0	0.0051	0.012	0.0	12.0	0.0	
7	CB10	209.76	209.59	33.8	0.0050	0.013	0.0	12.0	0.0	
8	CB11	209.94	209.67	26.3	0.0103	0.013	0.0	12.0	0.0	
9	CB12	206.68	205.65	41.3	0.0249	0.013	0.0	12.0	0.0	
10	CB13	206.70	205.61	43.7	0.0249	0.013	0.0	12.0	0.0	
11	CB14	200.79	200.67	23.2	0.0052	0.013	0.0	12.0	0.0	
12	CB15	200.79	200.71	15.6	0.0051	0.013	0.0	12.0	0.0	
13	CB16	203.47	203.33	20.9	0.0067	0.013	0.0	12.0	0.0	
14	CB17	204.99	204.86	13.8	0.0094	0.013	0.0	12.0	0.0	
15	CB18	204.72	204.59	25.1	0.0052	0.013	0.0	15.0	0.0	
16	CB20	203.97	203.81	30.3	0.0053	0.013	0.0	12.0	0.0	
17	CB21	204.32	204.19	26.0	0.0050	0.013	0.0	12.0	0.0	
18	CB22	205.33	205.25	16.1	0.0050	0.012	0.0	12.0	0.0	
19	CB23	205.41	205.32	16.3	0.0055	0.012	0.0	12.0	0.0	
20	CB24	205.21	205.15	12.1	0.0050	0.012	0.0	12.0	0.0	
21	CB25	205.22	205.16	11.4	0.0053	0.012	0.0	15.0	0.0	
22	CB26	201.77	201.55	42.5	0.0052	0.013	0.0	12.0	0.0	
23	CB27	201.00	200.90	18.0	0.0056	0.013	0.0	12.0	0.0	
24	CB28	197.75	197.69	13.7	0.0044	0.013	0.0	12.0	0.0	
25	CB29	205.38	205.31	13.5	0.0052	0.013	0.0	12.0	0.0	
26	CB30	205.38	205.29	17.5	0.0051	0.013	0.0	12.0	0.0	
27	CB31	204.19	204.11	16.4	0.0049	0.013	0.0	12.0	0.0	
28	CB32	204.19	204.11	16.3	0.0049	0.013	0.0	12.0	0.0	
29	CB33	205.28	205.22	11.7	0.0051	0.013	0.0	12.0	0.0	
30	CB34	205.21	205.13	16.5	0.0048	0.013	0.0	12.0	0.0	
31	CB35	207.04	206.96	15.2	0.0053	0.013	0.0	12.0	0.0	
32	CB36	207.04	206.96	16.1	0.0050	0.013	0.0	12.0	0.0	
33	CB38	209.69	209.61	16.7	0.0048	0.012	0.0	12.0	0.0	
34	CB39	209.69	209.61	16.4	0.0049	0.013	0.0	12.0	0.0	
35	CB40	213.68	213.55	17.8	0.0073	0.013	0.0	12.0	0.0	
36	CB41	213.89	213.80	18.4	0.0049	0.013	0.0	12.0	0.0	
37	CB43	220.00	219.93	14.9	0.0047	0.013	0.0	12.0	0.0	
38	CB44	220.00	219.93	14.9	0.0047	0.013	0.0	12.0	0.0	
39	CB45	221.29	221.20	18.2	0.0049	0.013	0.0	12.0	0.0	
40	CB46	221.53	221.45	15.3	0.0052	0.013	0.0	12.0	0.0	
41	CB47	225.05	224.95	20.9	0.0048	0.012	0.0	12.0	0.0	

Pipe Listing (all nodes) (continued)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
42	CB48	224.82	224.74	16.9	0.0047	0.012	0.0	15.0	0.0	
43	CB49	202.76	202.68	15.5	0.0052	0.013	0.0	12.0	0.0	
44	CB50	202.78	202.70	15.3	0.0052	0.013	0.0	12.0	0.0	
45	CB51	202.35	202.19	31.4	0.0051	0.013	0.0	12.0	0.0	
46	CB52	202.68	202.55	25.5	0.0051	0.013	0.0	12.0	0.0	
47	CB53	202.78	202.62	32.0	0.0050	0.013	0.0	12.0	0.0	
48	CB54	202.66	202.48	36.7	0.0049	0.013	0.0	12.0	0.0	
49	CB7	212.60	212.45	15.1	0.0099	0.012	0.0	12.0	0.0	
50	CB8	213.79	213.64	15.1	0.0099	0.013	0.0	12.0	0.0	
51	CB9	210.10	209.71	19.9	0.0196	0.013	0.0	12.0	0.0	
52	D10	203.33	203.25	15.6	0.0051	0.013	0.0	12.0	0.0	
53	D11	204.25	204.03	44.6	0.0049	0.013	0.0	18.0	0.0	
54	D12	203.21	203.00	41.9	0.0050	0.013	0.0	12.0	0.0	
55	D13	201.95	201.65	60.1	0.0050	0.013	0.0	24.0	0.0	
56	D14	204.13	202.85	256.3	0.0050	0.012	0.0	18.0	0.0	
57	D16	204.90	204.38	103.5	0.0050	0.012	0.0	15.0	0.0	
58	D17	200.55	197.69	91.6	0.0312	0.013	0.0	12.0	0.0	
59	D18	197.44	196.98	46.3	0.0099	0.013	0.0	15.0	0.0	
60	D19	205.19	204.43	82.5	0.0092	0.013	0.0	12.0	0.0	
61	D2	206.90	206.52	38.2	0.0099	0.013	0.0	15.0	0.0	
62	D20	204.19	203.87	63.5	0.0050	0.013	0.0	15.0	0.0	
63	D21	203.02	202.66	72.4	0.0050	0.013	0.0	24.0	0.0	
64	D22	204.87	203.92	134.2	0.0071	0.013	0.0	15.0	0.0	
65	D23	206.70	204.97	173.3	0.0100	0.013	0.0	15.0	0.0	
66	D25	209.36	208.17	237.6	0.0050	0.012	0.0	15.0	0.0	
67	D27	213.34	212.38	63.9	0.0150	0.012	0.0	15.0	0.0	
68	D28	217.46	214.29	158.3	0.0200	0.013	0.0	12.0	0.0	
69	D29	219.83	217.55	150.9	0.0151	0.013	0.0	12.0	0.0	
70	D30	220.92	220.00	184.2	0.0050	0.013	0.0	12.0	0.0	
71	D31	224.63	213.09	288.5	0.0400	0.012	0.0	15.0	0.0	
72	D34	198.07	197.03	52.0	0.0200	0.012	0.0	12.0	0.0	
73	D35	212.28	209.71	171.5	0.0150	0.012	0.0	15.0	0.0	
74	D4	210.34	207.01	222.3	0.0150	0.012	0.0	15.0	0.0	
75	D5	209.09	208.17	183.0	0.0050	0.013	0.0	18.0	0.0	
76	D6	208.07	206.57	299.7	0.0050	0.013	0.0	18.0	0.0	
77	D7	206.47	204.04	44.2	0.0550	0.013	0.0	18.0	0.0	
78	D8	200.57	200.13	87.7	0.0050	0.013	0.0	12.0	0.0	
79	D9	200.03	199.97	11.9	0.0050	0.013	0.0	12.0	0.0	
80	DE61	212.70	212.65	10.0	0.0050	0.013	0.0	6.0	0.0	
81	DE62	212.70	212.65	10.0	0.0050	0.013	0.0	6.0	0.0	
82	DE63	207.50	207.45	10.0	0.0050	0.013	0.0	6.0	0.0	

Pipe Listing (all nodes) (continued)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
83	DE64	205.50	205.45	10.0	0.0050	0.013	0.0	6.0	0.0	
84	DE65	206.50	206.45	10.0	0.0050	0.013	0.0	6.0	0.0	
85	DE66	208.30	208.25	10.0	0.0050	0.013	0.0	6.0	0.0	
86	DE67	208.50	208.45	10.0	0.0050	0.013	0.0	6.0	0.0	
87	DE68	207.50	206.00	20.0	0.0750	0.013	0.0	6.0	0.0	
88	DE69	206.00	205.95	10.0	0.0050	0.013	0.0	6.0	0.0	
89	DE70	206.40	206.35	10.0	0.0050	0.013	0.0	6.0	0.0	
90	DE71	207.00	206.95	10.0	0.0050	0.013	0.0	6.0	0.0	
91	DECH	208.50	205.10	80.0	0.0425	0.013	0.0	4.0	0.0	
92	DMH32	202.59	201.57	19.2	0.0531	0.013	0.0	12.0	0.0	
93	P204	202.75	201.00	35.0	0.0500	0.012	0.0	15.0	0.0	
94	P206	194.65	194.50	30.0	0.0050	0.013	0.0	18.0	0.0	
95	P207	194.75	194.55	40.0	0.0050	0.012	0.0	15.0	0.0	
96	P210	202.25	202.03	44.0	0.0050	0.013	0.0	12.0	0.0	
97	P213	202.30	202.00	60.0	0.0050	0.013	0.0	12.0	0.0	
98	P214	201.00	200.88	25.0	0.0048	0.013	0.0	12.0	0.0	

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentB1: MULTIFAMILYBLDG Runoff Area=23,255 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=1.66 cfs 5,882 cf

SubcatchmentB2: MULTIFAMILYBLDG Runoff Area=17,561 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=1.25 cfs 4,442 cf

SubcatchmentB3: MULTIFAMILY Runoff Area=19,981 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=1.42 cfs 5,054 cf

SubcatchmentC10: CB #10 Runoff Area=6,961 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.50 cfs 1,761 cf

SubcatchmentC11: CB #11 Runoff Area=7,173 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.51 cfs 1,814 cf

SubcatchmentC12: CB #12 Runoff Area=5,238 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.37 cfs 1,325 cf

SubcatchmentC13: CB #13 Runoff Area=10,873 sf 90.78% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.75 cfs 2,552 cf

SubcatchmentC14: CB #14 Runoff Area=12,099 sf 86.22% Impervious Runoff Depth>2.32"
Tc=6.0 min CN=91 Runoff=0.73 cfs 2,341 cf

SubcatchmentC15: CB #15 Runoff Area=6,666 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.47 cfs 1,686 cf

SubcatchmentC16: CB #16 Runoff Area=8,516 sf 64.88% Impervious Runoff Depth>1.39"
Tc=6.0 min CN=79 Runoff=0.31 cfs 985 cf

SubcatchmentC17: CB #17 Runoff Area=11,836 sf 73.87% Impervious Runoff Depth>2.42"
Tc=6.0 min CN=92 Runoff=0.73 cfs 2,382 cf

SubcatchmentC18: CB #18 Runoff Area=18,591 sf 66.35% Impervious Runoff Depth>2.23"
Tc=6.0 min CN=90 Runoff=1.08 cfs 3,458 cf

SubcatchmentC20: CB #20 Runoff Area=11,939 sf 88.95% Impervious Runoff Depth>2.71"
Tc=6.0 min CN=95 Runoff=0.80 cfs 2,698 cf

SubcatchmentC21: CB #21 Runoff Area=10,174 sf 87.04% Impervious Runoff Depth>2.23"
Tc=6.0 min CN=90 Runoff=0.59 cfs 1,892 cf

SubcatchmentC22: CB #22 Runoff Area=12,001 sf 91.62% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.83 cfs 2,817 cf

SubcatchmentC23: CB #23 Runoff Area=9,694 sf 61.00% Impervious Runoff Depth>2.14"
Tc=6.0 min CN=89 Runoff=0.54 cfs 1,732 cf

SubcatchmentC24: CB #24 Runoff Area=7,930 sf 72.16% Impervious Runoff Depth>2.51"
Tc=6.0 min CN=93 Runoff=0.51 cfs 1,660 cf

SubcatchmentC25: CB #25 Runoff Area=8,487 sf 80.92% Impervious Runoff Depth>2.61"
Tc=6.0 min CN=94 Runoff=0.56 cfs 1,846 cf

SubcatchmentC26: CB #26 Runoff Area=8,835 sf 63.75% Impervious Runoff Depth>2.32"
Tc=6.0 min CN=91 Runoff=0.53 cfs 1,710 cf

SubcatchmentC27: CB #27 Runoff Area=6,111 sf 91.90% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.42 cfs 1,434 cf

SubcatchmentC28: CB #28 Runoff Area=10,372 sf 51.33% Impervious Runoff Depth>2.06"
Tc=6.0 min CN=88 Runoff=0.56 cfs 1,779 cf

SubcatchmentC29: CB #29 Runoff Area=8,495 sf 84.21% Impervious Runoff Depth>2.61"
Tc=6.0 min CN=94 Runoff=0.56 cfs 1,848 cf

SubcatchmentC30: CB #30 Runoff Area=8,933 sf 82.40% Impervious Runoff Depth>2.61"
Tc=6.0 min CN=94 Runoff=0.59 cfs 1,943 cf

SubcatchmentC31: CB #31 Runoff Area=16,365 sf 68.64% Impervious Runoff Depth>2.23"
Tc=6.0 min CN=90 Runoff=0.95 cfs 3,044 cf

SubcatchmentC32: CB #32 Runoff Area=12,710 sf 70.47% Impervious Runoff Depth>2.32"
Tc=6.0 min CN=91 Runoff=0.76 cfs 2,460 cf

SubcatchmentC33: CB #33 Runoff Area=5,421 sf 83.90% Impervious Runoff Depth>2.61"
Tc=6.0 min CN=94 Runoff=0.36 cfs 1,179 cf

SubcatchmentC34: CB #34 Runoff Area=8,622 sf 80.51% Impervious Runoff Depth>2.51"
Tc=6.0 min CN=93 Runoff=0.55 cfs 1,804 cf

SubcatchmentC35: CB #35 Runoff Area=4,149 sf 98.10% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.30 cfs 1,049 cf

SubcatchmentC36: CB #36 Runoff Area=6,622 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.47 cfs 1,675 cf

SubcatchmentC38: CB #38 Runoff Area=7,637 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.54 cfs 1,932 cf

SubcatchmentC39: CB #39 Runoff Area=7,612 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.54 cfs 1,925 cf

SubcatchmentC40: CB #40 Runoff Area=4,211 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.30 cfs 1,065 cf

SubcatchmentC41: CB #41 Runoff Area=5,586 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.40 cfs 1,413 cf

SubcatchmentC43: CB #43 Runoff Area=3,109 sf 75.36% Impervious Runoff Depth>2.14"
Tc=6.0 min CN=89 Runoff=0.17 cfs 555 cf

SubcatchmentC44: CB #44 Runoff Area=1,978 sf 84.43% Impervious Runoff Depth>2.42"
Tc=6.0 min CN=92 Runoff=0.12 cfs 398 cf

SubcatchmentC45: CB #45 Runoff Area=2,465 sf 50.30% Impervious Runoff Depth>1.45"
Tc=6.0 min CN=80 Runoff=0.09 cfs 299 cf

SubcatchmentC46: CB #46 Runoff Area=4,397 sf 50.97% Impervious Runoff Depth>1.45"
Tc=6.0 min CN=80 Runoff=0.17 cfs 533 cf

SubcatchmentC47: CB #47 Runoff Area=3,012 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.21 cfs 762 cf

SubcatchmentC48: CB #48 Runoff Area=60,128 sf 25.16% Impervious Runoff Depth>0.87"
Flow Length=400' Tc=11.8 min CN=70 Runoff=1.03 cfs 4,342 cf

SubcatchmentC49: CB #49 Runoff Area=5,238 sf 84.59% Impervious Runoff Depth>2.61"
Tc=6.0 min CN=94 Runoff=0.34 cfs 1,139 cf

SubcatchmentC50: CB #50 Runoff Area=15,040 sf 77.20% Impervious Runoff Depth>2.51"
Tc=6.0 min CN=93 Runoff=0.96 cfs 3,147 cf

SubcatchmentC51: CB #51 Runoff Area=6,823 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.49 cfs 1,726 cf

SubcatchmentC52: CB#52 Runoff Area=9,052 sf 87.14% Impervious Runoff Depth>2.71"
Tc=6.0 min CN=95 Runoff=0.61 cfs 2,045 cf

SubcatchmentC53: CB #53 Runoff Area=7,863 sf 86.52% Impervious Runoff Depth>2.51"
Tc=6.0 min CN=93 Runoff=0.50 cfs 1,646 cf

SubcatchmentC54: CB #54 Runoff Area=4,821 sf 86.85% Impervious Runoff Depth>2.32"
Tc=6.0 min CN=91 Runoff=0.29 cfs 933 cf

SubcatchmentC7: CB #5 Runoff Area=4,650 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.33 cfs 1,176 cf

SubcatchmentC8: CB #8 Runoff Area=5,450 sf 88.75% Impervious Runoff Depth>2.61"
Tc=6.0 min CN=94 Runoff=0.36 cfs 1,185 cf

SubcatchmentC9: CB #9 Runoff Area=16,307 sf 93.95% Impervious Runoff Depth>2.92"
Tc=6.0 min CN=97 Runoff=1.14 cfs 3,974 cf

SubcatchmentCH1: CLUBHOUSE Runoff Area=6,262 sf 92.70% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.43 cfs 1,470 cf

SubcatchmentMB1: MAIL KIOSK Runoff Area=938 sf 100.00% Impervious Runoff Depth>3.04"
Tc=6.0 min CN=98 Runoff=0.07 cfs 237 cf

SubcatchmentS201: SUMMER STREET Runoff Area=9,943 sf 92.79% Impervious Runoff Depth>2.71"
Tc=6.0 min CN=95 Runoff=0.67 cfs 2,247 cf

SubcatchmentS202: EXISTING WETLAND Runoff Area=432,269 sf 42.08% Impervious Runoff Depth>1.19"
Flow Length=856' Tc=23.2 min CN=76 Runoff=8.51 cfs 43,021 cf

SubcatchmentS203: POCKET WETLAND #1 Runoff Area=25,587 sf 0.00% Impervious Runoff Depth>0.97"
Tc=6.0 min CN=72 Runoff=0.61 cfs 2,073 cf

SubcatchmentS204: EXISTING Runoff Area=308,203 sf 31.07% Impervious Runoff Depth>1.14"
Flow Length=632' Tc=22.6 min CN=75 Runoff=5.78 cfs 29,158 cf

SubcatchmentS205: ISOLATED WETLAND Runoff Area=55,420 sf 16.57% Impervious Runoff Depth>0.87"
Tc=6.0 min CN=70 Runoff=1.15 cfs 4,009 cf

SubcatchmentS206: OVERLAND FLOW Runoff Area=891,295 sf 2.91% Impervious Runoff Depth>0.63"
Flow Length=1,467' Tc=34.5 min CN=65 Runoff=6.52 cfs 46,602 cf

SubcatchmentS207: INFILTRATION POND Runoff Area=20,803 sf 0.00% Impervious Runoff Depth>2.06"
Tc=6.0 min CN=88 Runoff=1.12 cfs 3,568 cf

SubcatchmentS208: GRASS AREA Runoff Area=13,760 sf 9.33% Impervious Runoff Depth>1.14"
Tc=6.0 min CN=75 Runoff=0.40 cfs 1,308 cf

SubcatchmentS209: WETLAND C Runoff Area=107,073 sf 0.38% Impervious Runoff Depth>1.02"
Flow Length=607' Slope=0.0150 '/' Tc=28.9 min CN=73 Runoff=1.60 cfs 9,101 cf

SubcatchmentS210: INFILTRATION POND Runoff Area=75,890 sf 0.00% Impervious Runoff Depth>1.32"
Flow Length=580' Slope=0.0150 '/' Tc=16.5 min CN=78 Runoff=1.92 cfs 8,348 cf

SubcatchmentS211: S211 Runoff Area=15,436 sf 47.47% Impervious Runoff Depth>1.39"
Tc=6.0 min CN=79 Runoff=0.56 cfs 1,786 cf

SubcatchmentS212: SWALE Runoff Area=52,768 sf 0.60% Impervious Runoff Depth>0.63"
Flow Length=418' Tc=23.1 min CN=65 Runoff=0.46 cfs 2,770 cf

SubcatchmentS213: COURTYARD Runoff Area=21,407 sf 48.10% Impervious Runoff Depth>1.39"
Tc=6.0 min CN=79 Runoff=0.78 cfs 2,476 cf

SubcatchmentT1: Trench Drain 1 Runoff Area=11,173 sf 75.10% Impervious Runoff Depth>2.51"
Tc=6.0 min CN=93 Runoff=0.71 cfs 2,338 cf

SubcatchmentT2: Drive Under B2 Runoff Area=4,445 sf 64.30% Impervious Runoff Depth>1.32"
Tc=6.0 min CN=78 Runoff=0.15 cfs 490 cf

SubcatchmentTH1: TOWN HOUSE #1 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.29 cfs 997 cf

SubcatchmentTH10: TOWN HOUSE #10 Runoff Area=3,476 sf 91.60% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.24 cfs 816 cf

SubcatchmentTH11: TOWN HOUSE #11 Runoff Area=4,210 sf 92.61% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.29 cfs 988 cf

SubcatchmentTH2: TOWN HOUSE #2 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.29 cfs 997 cf

SubcatchmentTH3: TOWN HOUSE #3 Runoff Area=3,013 sf 88.68% Impervious Runoff Depth>2.71"
Tc=6.0 min CN=95 Runoff=0.20 cfs 681 cf

SubcatchmentTH4: TOWN HOUSE #4 Runoff Area=3,470 sf 91.59% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.24 cfs 814 cf

SubcatchmentTH5: TOWN HOUSE #5 Runoff Area=3,016 sf 88.69% Impervious Runoff Depth>2.71"
Tc=6.0 min CN=95 Runoff=0.20 cfs 682 cf

SubcatchmentTH6: TOWN HOUSE #6 Runoff Area=3,407 sf 91.46% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.23 cfs 800 cf

SubcatchmentTH7: TOWN HOUSE #7 Runoff Area=3,481 sf 91.61% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.24 cfs 817 cf

SubcatchmentTH8: TOWN HOUSE #8 Runoff Area=4,212 sf 92.62% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.29 cfs 989 cf

SubcatchmentTH9: TOWN HOUSE #9 Runoff Area=3,480 sf 91.61% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=96 Runoff=0.24 cfs 817 cf

Reach 8R: OVERLAND FLOW Avg. Flow Depth=0.04' Max Vel=0.06 fps Inflow=0.69 cfs 1,940 cf
n=0.400 L=563.0' S=0.0213 '/' Capacity=28.09 cfs Outflow=0.11 cfs 1,734 cf

Reach 9R: OVERLAND FLOW Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=211.0' S=0.0652 '/' Capacity=23.45 cfs Outflow=0.00 cfs 0 cf

Reach 10R: OVERLAND FLOW Avg. Flow Depth=0.02' Max Vel=0.05 fps Inflow=0.04 cfs 101 cf
n=0.400 L=164.0' S=0.0366 '/' Capacity=17.57 cfs Outflow=0.02 cfs 101 cf

Reach 11R: 4x4 Open Bottom Culvert Avg. Flow Depth=0.36' Max Vel=1.19 fps Inflow=1.70 cfs 14,965 cf
48.0" x 48.0" Box Pipe n=0.069 L=30.0' S=0.0150 '/' Capacity=42.20 cfs Outflow=1.70 cfs 14,959 cf

Reach 12R: OVERLAND FLOW Avg. Flow Depth=0.06' Max Vel=0.09 fps Inflow=0.77 cfs 2,134 cf
n=0.400 L=250.0' S=0.0240 '/' Capacity=29.80 cfs Outflow=0.30 cfs 2,085 cf

Reach 14R: OVERLAND FLOW Avg. Flow Depth=0.03' Max Vel=0.05 fps Inflow=0.46 cfs 2,770 cf
n=0.400 L=852.0' S=0.0246 '/' Capacity=31.55 cfs Outflow=0.07 cfs 2,124 cf

Reach 15R: OVERLAND FLOW Avg. Flow Depth=0.04' Max Vel=0.06 fps Inflow=0.12 cfs 4,736 cf
n=0.400 L=300.0' S=0.0200 '/' Capacity=27.21 cfs Outflow=0.12 cfs 4,228 cf

Reach 18R: OVERLAND FLOW Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=609.0' S=0.0279 '/' Capacity=38.42 cfs Outflow=0.00 cfs 0 cf

Reach 20R: OVERLAND FLOW Avg. Flow Depth=0.09' Max Vel=0.07 fps Inflow=0.93 cfs 5,781 cf
n=0.400 L=560.0' S=0.0093 '/' Capacity=18.54 cfs Outflow=0.34 cfs 5,373 cf

Reach 23R: OVERLAND FLOW Avg. Flow Depth=0.16' Max Vel=0.15 fps Inflow=1.70 cfs 14,959 cf
n=0.400 L=237.0' S=0.0211 '/' Capacity=31.93 cfs Outflow=1.24 cfs 14,613 cf

Reach R202: OVERLAND FLOW Avg. Flow Depth=0.21' Max Vel=0.13 fps Inflow=8.50 cfs 43,012 cf
n=0.400 L=700.0' S=0.0107 '/' Capacity=42.56 cfs Outflow=2.85 cfs 39,436 cf

Reach R211: OVERLAND FLOW Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=600.0' S=0.0087 '/' Capacity=14.51 cfs Outflow=0.00 cfs 0 cf

Reach SC1: Stream Crossing #1 Avg. Flow Depth=0.21' Max Vel=2.48 fps Inflow=8.51 cfs 43,021 cf
192.0" x 60.0", R=207.0" Arch Pipe n=0.030 L=43.1' S=0.0200 '/' Capacity=722.91 cfs Outflow=8.50 cfs 43,012 cf

Reach SC2: Stream Crossing #2 Avg. Flow Depth=0.03' Max Vel=1.04 fps Inflow=0.46 cfs 2,770 cf
192.0" x 60.0", R=180.0" Arch Pipe n=0.030 L=36.5' S=0.0241 '/' Capacity=768.96 cfs Outflow=0.46 cfs 2,770 cf

Pond 1P: DMH #33 Peak Elev=206.05' Inflow=1.12 cfs 3,877 cf
12.0" Round Culvert n=0.013 L=46.7' S=0.0251 '/' Outflow=1.12 cfs 3,877 cf

Pond 3P: OCS #8 Peak Elev=201.07' Inflow=0.79 cfs 2,578 cf
Outflow=0.79 cfs 2,578 cf

Pond 5R: TRENCH DRAIN Peak Elev=197.74' Inflow=0.71 cfs 2,338 cf
8.0" Round Culvert n=0.012 L=36.0' S=0.0200 '/' Outflow=0.71 cfs 2,338 cf

Pond 11P: YARD DRAIN Peak Elev=207.32' Storage=383 cf Inflow=0.78 cfs 2,476 cf
Outflow=0.51 cfs 2,448 cf

Pond CB10: CB #10 Peak Elev=210.18' Inflow=0.50 cfs 1,761 cf
12.0" Round Culvert n=0.013 L=33.8' S=0.0050 '/' Outflow=0.50 cfs 1,761 cf

Pond CB11: CB #11 Peak Elev=210.32' Inflow=0.51 cfs 1,814 cf
12.0" Round Culvert n=0.013 L=26.3' S=0.0103 '/' Outflow=0.51 cfs 1,814 cf

Pond CB12: CB #12 Peak Elev=206.98' Inflow=0.37 cfs 1,325 cf
12.0" Round Culvert n=0.013 L=41.3' S=0.0249 '/' Outflow=0.37 cfs 1,325 cf

Pond CB13: CB #13 Peak Elev=207.14' Inflow=0.75 cfs 2,552 cf
12.0" Round Culvert n=0.013 L=43.7' S=0.0249 '/' Outflow=0.75 cfs 2,552 cf

Pond CB14: CB #14 Peak Elev=201.41' Inflow=0.73 cfs 2,341 cf
12.0" Round Culvert n=0.013 L=23.2' S=0.0052 '/' Outflow=0.73 cfs 2,341 cf

Pond CB15: CB #15 Peak Elev=201.34' Inflow=0.47 cfs 1,686 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=0.47 cfs 1,686 cf

Pond CB16: CB #16 Peak Elev=203.82' Inflow=0.31 cfs 985 cf
12.0" Round Culvert n=0.013 L=20.9' S=0.0067 '/' Outflow=0.31 cfs 985 cf

Pond CB17: CB #17 Peak Elev=205.48' Inflow=0.73 cfs 2,382 cf
12.0" Round Culvert n=0.013 L=13.8' S=0.0094 '/' Outflow=0.73 cfs 2,382 cf

Pond CB18: CB #18 Peak Elev=205.37' Inflow=1.28 cfs 3,873 cf
15.0" Round Culvert n=0.013 L=25.1' S=0.0052 '/' Outflow=1.28 cfs 3,873 cf

Pond CB20: CB #20 Peak Elev=204.51' Inflow=0.80 cfs 2,698 cf
12.0" Round Culvert n=0.013 L=30.3' S=0.0053 '/' Outflow=0.80 cfs 2,698 cf

Pond CB21: CB #21 Peak Elev=204.78' Inflow=0.59 cfs 1,892 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0050 '/' Outflow=0.59 cfs 1,892 cf

Pond CB22: CB #22 Peak Elev=205.89' Inflow=0.83 cfs 2,817 cf
12.0" Round Culvert n=0.012 L=16.1' S=0.0050 '/' Outflow=0.83 cfs 2,817 cf

Pond CB23: CB #23 Peak Elev=205.85' Inflow=0.54 cfs 1,732 cf
12.0" Round Culvert n=0.012 L=16.3' S=0.0055 '/' Outflow=0.54 cfs 1,732 cf

Pond CB24: CB #24 Peak Elev=205.64' Inflow=0.51 cfs 1,660 cf
12.0" Round Culvert n=0.012 L=12.1' S=0.0050 '/' Outflow=0.51 cfs 1,660 cf

Pond CB25: CB #25 Peak Elev=205.64' Inflow=0.56 cfs 1,846 cf
15.0" Round Culvert n=0.012 L=11.4' S=0.0053 '/' Outflow=0.56 cfs 1,846 cf

Pond CB26: CB #26 Peak Elev=202.20' Inflow=0.53 cfs 1,710 cf
12.0" Round Culvert n=0.013 L=42.5' S=0.0052 '/' Outflow=0.53 cfs 1,710 cf

Pond CB27: CB #27 Peak Elev=201.38' Inflow=0.42 cfs 1,434 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0056 '/' Outflow=0.42 cfs 1,434 cf

Pond CB28: CB #28 Peak Elev=198.22' Inflow=0.56 cfs 1,779 cf
12.0" Round Culvert n=0.013 L=13.7' S=0.0044 '/' Outflow=0.56 cfs 1,779 cf

Pond CB29: CB #29 Peak Elev=205.89' Inflow=0.56 cfs 1,848 cf
12.0" Round Culvert n=0.013 L=13.5' S=0.0052 '/' Outflow=0.56 cfs 1,848 cf

Pond CB30: CB #30 Peak Elev=205.90' Inflow=0.59 cfs 1,943 cf
12.0" Round Culvert n=0.013 L=17.5' S=0.0051 '/' Outflow=0.59 cfs 1,943 cf

Pond CB31: CB #31 Peak Elev=204.80' Inflow=0.95 cfs 3,044 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=0.95 cfs 3,044 cf

Pond CB32: CB #32 Peak Elev=204.73' Inflow=0.76 cfs 2,460 cf
12.0" Round Culvert n=0.013 L=16.3' S=0.0049 '/' Outflow=0.76 cfs 2,460 cf

Pond CB33: CB #33 Peak Elev=205.66' Inflow=0.36 cfs 1,179 cf
12.0" Round Culvert n=0.013 L=11.7' S=0.0051 '/' Outflow=0.36 cfs 1,179 cf

Pond CB34: CB #34 Peak Elev=205.69' Inflow=0.55 cfs 1,804 cf
12.0" Round Culvert n=0.013 L=16.5' S=0.0048 '/' Outflow=0.55 cfs 1,804 cf

Pond CB35: CB #35 Peak Elev=207.36' Inflow=0.30 cfs 1,049 cf
12.0" Round Culvert n=0.013 L=15.2' S=0.0053 '/' Outflow=0.30 cfs 1,049 cf

Pond CB36: CB #36 Peak Elev=207.45' Inflow=0.47 cfs 1,675 cf
12.0" Round Culvert n=0.013 L=16.1' S=0.0050 '/' Outflow=0.47 cfs 1,675 cf

Pond CB38: CB #38 Peak Elev=210.28' Inflow=0.54 cfs 1,932 cf
12.0" Round Culvert n=0.012 L=16.7' S=0.0048 '/' Outflow=0.54 cfs 1,932 cf

Pond CB39: CB #39 Peak Elev=210.28' Inflow=0.54 cfs 1,925 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=0.54 cfs 1,925 cf

Pond CB40: CB #40 Peak Elev=214.02' Inflow=0.30 cfs 1,065 cf
12.0" Round Culvert n=0.013 L=17.8' S=0.0073 '/' Outflow=0.30 cfs 1,065 cf

Pond CB41: CB #41 Peak Elev=214.27' Inflow=0.40 cfs 1,413 cf
12.0" Round Culvert n=0.013 L=18.4' S=0.0049 '/' Outflow=0.40 cfs 1,413 cf

Pond CB43: CB #43 Peak Elev=220.29' Inflow=0.17 cfs 555 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.17 cfs 555 cf

Pond CB44: CB #44 Peak Elev=220.26' Inflow=0.12 cfs 398 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.12 cfs 398 cf

Pond CB45: CB #45 Peak Elev=221.47' Inflow=0.09 cfs 299 cf
12.0" Round Culvert n=0.013 L=18.2' S=0.0049 '/' Outflow=0.09 cfs 299 cf

Pond CB46: CB #46 Peak Elev=221.77' Inflow=0.17 cfs 533 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=0.17 cfs 533 cf

Pond CB47: CB#47 Peak Elev=225.32' Inflow=0.21 cfs 762 cf
12.0" Round Culvert n=0.012 L=20.9' S=0.0048 '/' Outflow=0.21 cfs 762 cf

Pond CB48: CB#48 Peak Elev=225.40' Inflow=1.03 cfs 4,342 cf
15.0" Round Culvert n=0.012 L=16.9' S=0.0047 '/' Outflow=1.03 cfs 4,342 cf

Pond CB49: CB #49 Peak Elev=203.25' Inflow=0.34 cfs 1,139 cf
12.0" Round Culvert n=0.013 L=15.5' S=0.0052 '/' Outflow=0.34 cfs 1,139 cf

Pond CB50: CB #50 Peak Elev=203.41' Inflow=0.96 cfs 3,147 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=0.96 cfs 3,147 cf

Pond CB51: CB #51 Peak Elev=202.76' Inflow=0.49 cfs 1,726 cf
12.0" Round Culvert n=0.013 L=31.4' S=0.0051 '/' Outflow=0.49 cfs 1,726 cf

Pond CB52: CB #52 Peak Elev=203.15' Inflow=0.61 cfs 2,045 cf
12.0" Round Culvert n=0.013 L=25.5' S=0.0051 '/' Outflow=0.61 cfs 2,045 cf

Pond CB53: CB #53 Peak Elev=203.20' Inflow=0.50 cfs 1,646 cf
12.0" Round Culvert n=0.013 L=32.0' S=0.0050 '/' Outflow=0.50 cfs 1,646 cf

Pond CB54: CB #54 Peak Elev=202.98' Inflow=0.29 cfs 933 cf
12.0" Round Culvert n=0.013 L=36.7' S=0.0049 '/' Outflow=0.29 cfs 933 cf

Pond CB7: CB#5 Peak Elev=212.90' Inflow=0.33 cfs 1,176 cf
12.0" Round Culvert n=0.012 L=15.1' S=0.0099 '/' Outflow=0.33 cfs 1,176 cf

Pond CB8: CB#8 Peak Elev=214.11' Inflow=0.36 cfs 1,185 cf
12.0" Round Culvert n=0.013 L=15.1' S=0.0099 '/' Outflow=0.36 cfs 1,185 cf

Pond CB9: CB #9 Peak Elev=210.66' Inflow=1.14 cfs 3,974 cf
12.0" Round Culvert n=0.013 L=19.9' S=0.0196 '/' Outflow=1.14 cfs 3,974 cf

Pond D10: DMH #10 Peak Elev=203.66' Inflow=0.31 cfs 985 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=0.31 cfs 985 cf

Pond D11: DMH #11 Peak Elev=205.02' Inflow=2.02 cfs 6,256 cf
18.0" Round Culvert n=0.013 L=44.6' S=0.0049 '/' Outflow=2.02 cfs 6,256 cf

Pond D12: DMH #12 Peak Elev=203.96' Inflow=1.40 cfs 4,590 cf
12.0" Round Culvert n=0.013 L=41.9' S=0.0050 '/' Outflow=1.40 cfs 4,590 cf

Pond D13: DMH #13 Peak Elev=202.97' Inflow=4.21 cfs 15,091 cf
24.0" Round Culvert n=0.013 L=60.1' S=0.0050 '/' Outflow=4.21 cfs 15,091 cf

Pond D14: DMH #14 Peak Elev=204.91' Inflow=2.43 cfs 8,054 cf
18.0" Round Culvert n=0.012 L=256.3' S=0.0050 '/' Outflow=2.43 cfs 8,054 cf

Pond D16: DMH #16 Peak Elev=205.47' Inflow=1.06 cfs 3,505 cf
15.0" Round Culvert n=0.012 L=103.5' S=0.0050 '/' Outflow=1.06 cfs 3,505 cf

Pond D17: DMH #17 Peak Elev=201.05' Inflow=0.95 cfs 3,144 cf
12.0" Round Culvert n=0.013 L=91.6' S=0.0312 '/' Outflow=0.95 cfs 3,144 cf

Pond D18: DMH #18 Peak Elev=198.06' Inflow=1.51 cfs 4,923 cf
15.0" Round Culvert n=0.013 L=46.3' S=0.0099 '/' Outflow=1.51 cfs 4,923 cf

Pond D19: DMH #19 Peak Elev=205.76' Inflow=1.15 cfs 3,791 cf
12.0" Round Culvert n=0.013 L=82.5' S=0.0092 '/' Outflow=1.15 cfs 3,791 cf

Pond D2: DMH#2 Peak Elev=207.57' Inflow=1.72 cfs 7,465 cf
15.0" Round Culvert n=0.013 L=38.2' S=0.0099 '/' Outflow=1.72 cfs 7,465 cf

Pond D20: DMH #20 Peak Elev=204.78' Inflow=1.15 cfs 3,791 cf
15.0" Round Culvert n=0.013 L=63.5' S=0.0050 '/' Outflow=1.15 cfs 3,791 cf

Pond D21: DMH #21 Peak Elev=204.08' Inflow=4.53 cfs 15,002 cf
24.0" Round Culvert n=0.013 L=72.4' S=0.0050 '/' Outflow=4.53 cfs 15,002 cf

Pond D22: DMH #22 Peak Elev=205.54' Inflow=1.67 cfs 5,708 cf
15.0" Round Culvert n=0.013 L=134.2' S=0.0071 '/' Outflow=1.67 cfs 5,708 cf

Pond D23: DMH #23 Peak Elev=207.11' Inflow=0.77 cfs 2,724 cf
15.0" Round Culvert n=0.013 L=173.3' S=0.0100 '/' Outflow=0.77 cfs 2,724 cf

Pond D25: DMH #25 Peak Elev=210.19' Inflow=2.34 cfs 8,121 cf
15.0" Round Culvert n=0.012 L=237.6' S=0.0050 '/' Outflow=2.34 cfs 8,121 cf

Pond D27: DMH #27 Peak Elev=213.88' Inflow=1.26 cfs 4,263 cf
15.0" Round Culvert n=0.012 L=63.9' S=0.0150 '/' Outflow=1.26 cfs 4,263 cf

Pond D28: DMH #28 Peak Elev=217.83' Inflow=0.56 cfs 1,785 cf
12.0" Round Culvert n=0.013 L=158.3' S=0.0200 '/' Outflow=0.56 cfs 1,785 cf

Pond D29: DMH #29 Peak Elev=220.20' Inflow=0.56 cfs 1,785 cf
12.0" Round Culvert n=0.013 L=150.9' S=0.0151 '/' Outflow=0.56 cfs 1,785 cf

Pond D30: DMH #30 Peak Elev=221.21' Inflow=0.26 cfs 832 cf
12.0" Round Culvert n=0.013 L=184.2' S=0.0050 '/' Outflow=0.26 cfs 832 cf

Pond D31: DMH#31 Peak Elev=225.15' Inflow=1.18 cfs 5,104 cf
15.0" Round Culvert n=0.012 L=288.5' S=0.0400 '/' Outflow=1.18 cfs 5,104 cf

Pond D34: DMH #34 Peak Elev=198.77' Inflow=1.66 cfs 5,882 cf
12.0" Round Culvert n=0.012 L=52.0' S=0.0200 '/' Outflow=1.66 cfs 5,882 cf

Pond D35: DMH #35 Peak Elev=212.82' Inflow=1.26 cfs 4,263 cf
15.0" Round Culvert n=0.012 L=171.5' S=0.0150 '/' Outflow=1.26 cfs 4,263 cf

Pond D4: DMH#4 Peak Elev=210.98' Inflow=1.72 cfs 7,465 cf
15.0" Round Culvert n=0.012 L=222.3' S=0.0150 '/' Outflow=1.72 cfs 7,465 cf

Pond D5: DMH #5 Peak Elev=209.86' Inflow=2.15 cfs 7,549 cf
18.0" Round Culvert n=0.013 L=183.0' S=0.0050 '/' Outflow=2.15 cfs 7,549 cf

Pond D6: DMH #6 Peak Elev=208.82' Inflow=2.15 cfs 7,549 cf
18.0" Round Culvert n=0.013 L=299.7' S=0.0050 '/' Outflow=2.15 cfs 7,549 cf

Pond D7: DMH #7 Peak Elev=207.14' Inflow=2.15 cfs 7,549 cf
18.0" Round Culvert n=0.013 L=44.2' S=0.0550 '/' Outflow=2.15 cfs 7,549 cf

Pond D8: DMH #8 Peak Elev=201.27' Inflow=1.20 cfs 4,028 cf
12.0" Round Culvert n=0.013 L=87.7' S=0.0050 '/' Outflow=1.20 cfs 4,028 cf

Pond D9: DMH #9 Peak Elev=200.73' Inflow=1.20 cfs 4,028 cf
12.0" Round Culvert n=0.013 L=11.9' S=0.0050 '/' Outflow=1.20 cfs 4,028 cf

Pond DE61: DRIP #61 Peak Elev=213.08' Storage=238 cf Inflow=0.29 cfs 997 cf
Discarded=0.00 cfs 181 cf Primary=0.24 cfs 676 cf Outflow=0.24 cfs 857 cf

Pond DE62: DRIP #62 Peak Elev=213.08' Storage=238 cf Inflow=0.29 cfs 997 cf
Discarded=0.00 cfs 181 cf Primary=0.24 cfs 676 cf Outflow=0.24 cfs 857 cf

Pond DE63: DRIP #63 Peak Elev=207.82' Storage=135 cf Inflow=0.20 cfs 681 cf
Discarded=0.00 cfs 107 cf Primary=0.18 cfs 488 cf Outflow=0.18 cfs 596 cf

Pond DE64: DRIP #64 Peak Elev=205.85' Storage=162 cf Inflow=0.24 cfs 814 cf
Discarded=0.00 cfs 129 cf Primary=0.21 cfs 586 cf Outflow=0.21 cfs 715 cf

Pond DE65: DRIP #65 Peak Elev=206.82' Storage=135 cf Inflow=0.20 cfs 682 cf
Discarded=0.00 cfs 107 cf Primary=0.18 cfs 489 cf Outflow=0.18 cfs 596 cf

Pond DE66: DRIP #66 Peak Elev=208.65' Storage=161 cf Inflow=0.23 cfs 800 cf
Discarded=0.00 cfs 129 cf Primary=0.20 cfs 571 cf Outflow=0.21 cfs 700 cf

Pond DE67: DRIP #67 Peak Elev=208.85' Storage=162 cf Inflow=0.24 cfs 817 cf
Discarded=0.00 cfs 129 cf Primary=0.21 cfs 588 cf Outflow=0.21 cfs 718 cf

Pond DE68: DRIP #68 Peak Elev=207.82' Storage=220 cf Inflow=0.29 cfs 989 cf
Discarded=0.00 cfs 181 cf Primary=0.25 cfs 669 cf Outflow=0.25 cfs 850 cf

Pond DE69: DRIP #69 Peak Elev=206.35' Storage=162 cf Inflow=0.24 cfs 817 cf
Discarded=0.00 cfs 129 cf Primary=0.21 cfs 588 cf Outflow=0.21 cfs 717 cf

Pond DE70: DRIP #70 Peak Elev=206.75' Storage=162 cf Inflow=0.24 cfs 816 cf
Discarded=0.00 cfs 129 cf Primary=0.21 cfs 587 cf Outflow=0.21 cfs 716 cf

Pond DE71: DRIP #71 Peak Elev=207.38' Storage=237 cf Inflow=0.29 cfs 988 cf
Discarded=0.00 cfs 181 cf Primary=0.24 cfs 667 cf Outflow=0.24 cfs 848 cf

Pond DECH: DRIP #CH Peak Elev=209.01' Storage=260 cf Inflow=0.43 cfs 1,470 cf
Discarded=0.04 cfs 1,053 cf Primary=0.25 cfs 416 cf Outflow=0.28 cfs 1,469 cf

Pond DMH32: DMH #32 Peak Elev=203.19' Inflow=1.31 cfs 4,287 cf
12.0" Round Culvert n=0.013 L=19.2' S=0.0531 '/' Outflow=1.31 cfs 4,287 cf

Pond OCS1: OCS#1 Peak Elev=195.75' Inflow=3.17 cfs 10,805 cf
Outflow=3.17 cfs 10,805 cf

Pond OCS3: OCS#3 Peak Elev=203.95' Inflow=3.26 cfs 10,698 cf
Outflow=3.26 cfs 10,698 cf

Pond OCS4: OCS#4 Peak Elev=203.89' Inflow=0.64 cfs 1,977 cf
Outflow=0.64 cfs 1,977 cf

Pond OCS6: OCS #6 Peak Elev=201.93' Inflow=1.12 cfs 3,877 cf
Outflow=1.12 cfs 3,877 cf

Pond OCS7: OCS #7 Peak Elev=202.32' Inflow=1.10 cfs 3,771 cf
Outflow=1.10 cfs 3,771 cf

Pond P204: STORMTECH INFILTRATION Peak Elev=203.89' Storage=5,017 cf Inflow=3.90 cfs 12,675 cf
Discarded=0.09 cfs 5,215 cf Primary=0.93 cfs 5,781 cf Outflow=1.02 cfs 10,996 cf

Pond P205: INFILTRATIONPOND #3 Peak Elev=205.79' Storage=3,362 cf Inflow=2.27 cfs 9,251 cf
Discarded=0.26 cfs 9,244 cf Primary=0.00 cfs 0 cf Outflow=0.26 cfs 9,244 cf

Pond P206: STORMTECHINFILTRATION Peak Elev=195.67' Storage=4,118 cf Inflow=3.88 cfs 13,143 cf
Discarded=0.49 cfs 13,142 cf Primary=0.00 cfs 0 cf Outflow=0.49 cfs 13,142 cf

Pond P207: INFILTRATIONPOND #2 Peak Elev=197.50' Storage=7,511 cf Inflow=6.85 cfs 23,672 cf
Discarded=0.96 cfs 23,563 cf Primary=0.04 cfs 101 cf Outflow=1.00 cfs 23,663 cf

Pond P210: POCKET WETLAND #1 Peak Elev=202.97' Storage=7,606 cf Inflow=2.95 cfs 10,193 cf
Outflow=0.12 cfs 4,736 cf

Pond P212: INFILTRATIONPOND #1 Peak Elev=201.74' Storage=14,075 cf Inflow=9.79 cfs 37,028 cf
Discarded=1.25 cfs 37,018 cf Primary=0.00 cfs 0 cf Outflow=1.25 cfs 37,018 cf

Pond P213: Stormtech Infiltration System #3 Peak Elev=201.93' Storage=1,973 cf Inflow=2.22 cfs 7,648 cf
Discarded=0.39 cfs 7,647 cf Primary=0.00 cfs 0 cf Outflow=0.39 cfs 7,647 cf

Pond P214: STORMTECHINFILTRATION Peak Elev=200.78' Storage=1,357 cf Inflow=2.21 cfs 7,633 cf
Discarded=0.61 cfs 7,642 cf Primary=0.00 cfs 0 cf Outflow=0.61 cfs 7,642 cf

Link AP1: ANALYSISPOINT 1 Inflow=0.67 cfs 2,247 cf
Primary=0.67 cfs 2,247 cf

Link AP2: ANALYSISPOINT 2 Inflow=7.31 cfs 75,144 cf
Primary=7.31 cfs 75,144 cf

Link AP3: ANALYSISPOINT 3 Inflow=1.15 cfs 4,009 cf
Primary=1.15 cfs 4,009 cf

Link AP4: ANALYSISPOINT #4 Inflow=7.79 cfs 65,174 cf
Primary=7.79 cfs 65,174 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 266,846 cf Average Runoff Depth = 1.24"
70.09% Pervious = 1,803,997 sf 29.91% Impervious = 769,923 sf

Summary for Subcatchment B1: MULTIFAMILY BLDG #1

Runoff = 1.66 cfs @ 12.09 hrs, Volume= 5,882 cf, Depth> 3.04"
Routed to Pond D34 : DMH #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
20,156	98	Roofs, HSG C
3,099	98	Roofs, HSG D
23,255	98	Weighted Average
23,255		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B2: MULTIFAMILY BLDG #2

Runoff = 1.25 cfs @ 12.09 hrs, Volume= 4,442 cf, Depth> 3.04"
Routed to Pond OCS3 : OCS#3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
7,873	98	Roofs, HSG A
9,688	98	Roofs, HSG C
17,561	98	Weighted Average
17,561		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B3: MULTIFAMILY BUILDING #3

Runoff = 1.42 cfs @ 12.09 hrs, Volume= 5,054 cf, Depth> 3.04"
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
608	98	Roofs, HSG A
19,373	98	Roofs, HSG C
19,981	98	Weighted Average
19,981		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C10: CB #10

Runoff = 0.50 cfs @ 12.09 hrs, Volume= 1,761 cf, Depth> 3.04"
Routed to Pond CB10 : CB #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
339	98	Paved roads w/curbs & sewers, HSG B
5,703	98	Paved roads w/curbs & sewers, HSG C
919	98	Paved roads w/curbs & sewers, HSG D
6,961	98	Weighted Average
6,961		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C11: CB #11

Runoff = 0.51 cfs @ 12.09 hrs, Volume= 1,814 cf, Depth> 3.04"
Routed to Pond CB11 : CB #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
7,173	98	Paved roads w/curbs & sewers, HSG C
7,173		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C12: CB #12

Runoff = 0.37 cfs @ 12.09 hrs, Volume= 1,325 cf, Depth> 3.04"
Routed to Pond CB12 : CB #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,238	98	Paved roads w/curbs & sewers, HSG C
5,238		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C13: CB #13

Runoff = 0.75 cfs @ 12.09 hrs, Volume= 2,552 cf, Depth> 2.82"
Routed to Pond CB13 : CB #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,003	74	>75% Grass cover, Good, HSG C
7,547	98	Paved parking, HSG C
2,323	98	Roofs, HSG C
10,873	96	Weighted Average
1,003		9.22% Pervious Area
9,870		90.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C14: CB #14

Runoff = 0.73 cfs @ 12.09 hrs, Volume= 2,341 cf, Depth> 2.32"
Routed to Pond CB14 : CB #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,195	39	>75% Grass cover, Good, HSG A
7,649	98	Paved parking, HSG A
472	74	>75% Grass cover, Good, HSG C
2,783	98	Paved parking, HSG C
12,099	91	Weighted Average
1,667		13.78% Pervious Area
10,432		86.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C15: CB #15

Runoff = 0.47 cfs @ 12.09 hrs, Volume= 1,686 cf, Depth> 3.04"
Routed to Pond CB15 : CB #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,000	98	Paved parking, HSG A
1,666	98	Paved parking, HSG C
6,666	98	Weighted Average
6,666		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C16: CB #16

Runoff = 0.31 cfs @ 12.10 hrs, Volume= 985 cf, Depth> 1.39"
Routed to Pond CB16 : CB #16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
2,467	39	>75% Grass cover, Good, HSG A
4,380	98	Paved parking, HSG A
524	74	>75% Grass cover, Good, HSG C
1,145	98	Paved parking, HSG C
8,516	79	Weighted Average
2,991		35.12% Pervious Area
5,525		64.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C17: CB #17

Runoff = 0.73 cfs @ 12.09 hrs, Volume= 2,382 cf, Depth> 2.42"
Routed to Pond CB17 : CB #17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,093	74	>75% Grass cover, Good, HSG C
8,743	98	Paved parking, HSG C
11,836	92	Weighted Average
3,093		26.13% Pervious Area
8,743		73.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C18: CB #18

Runoff = 1.08 cfs @ 12.09 hrs, Volume= 3,458 cf, Depth> 2.23"
Routed to Pond CB18 : CB #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
6,255	74	>75% Grass cover, Good, HSG C
12,336	98	Paved parking, HSG C
18,591	90	Weighted Average
6,255		33.65% Pervious Area
12,336		66.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C20: CB #20

Runoff = 0.80 cfs @ 12.09 hrs, Volume= 2,698 cf, Depth> 2.71"
Routed to Pond CB20 : CB #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,319	98	Paved parking, HSG A
1,319	74	>75% Grass cover, Good, HSG C
7,301	98	Paved parking, HSG C
11,939	95	Weighted Average
1,319		11.05% Pervious Area
10,620		88.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C21: CB #21

Runoff = 0.59 cfs @ 12.09 hrs, Volume= 1,892 cf, Depth> 2.23"
Routed to Pond CB21 : CB #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,319	39	>75% Grass cover, Good, HSG A
7,301	98	Paved parking, HSG A
1,554	98	Paved parking, HSG C
10,174	90	Weighted Average
1,319		12.96% Pervious Area
8,855		87.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C22: CB #22

Runoff = 0.83 cfs @ 12.09 hrs, Volume= 2,817 cf, Depth> 2.82"
Routed to Pond CB22 : CB #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
2,946	98	Paved parking, HSG A
177	74	>75% Grass cover, Good, HSG C
2,641	98	Paved parking, HSG C
829	80	>75% Grass cover, Good, HSG D
5,408	98	Paved parking, HSG D
12,001	96	Weighted Average
1,006		8.38% Pervious Area
10,995		91.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C23: CB #23

Runoff = 0.54 cfs @ 12.09 hrs, Volume= 1,732 cf, Depth> 2.14"
Routed to Pond CB23 : CB #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
242	39	>75% Grass cover, Good, HSG A
3,016	98	Paved parking, HSG A
1,267	74	>75% Grass cover, Good, HSG C
218	98	Paved parking, HSG C
2,272	80	>75% Grass cover, Good, HSG D
2,679	98	Paved parking, HSG D
9,694	89	Weighted Average
3,781		39.00% Pervious Area
5,913		61.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C24: CB #24

Runoff = 0.51 cfs @ 12.09 hrs, Volume= 1,660 cf, Depth> 2.51"
Routed to Pond CB24 : CB #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,722	98	Paved parking, HSG D
2,208	80	>75% Grass cover, Good, HSG D
7,930	93	Weighted Average
2,208		27.84% Pervious Area
5,722		72.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C25: CB #25

Runoff = 0.56 cfs @ 12.09 hrs, Volume= 1,846 cf, Depth> 2.61"
Routed to Pond CB25 : CB #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
211	39	>75% Grass cover, Good, HSG A
519	98	Paved parking, HSG A
15	74	>75% Grass cover, Good, HSG C
300	98	Paved parking, HSG C
1,393	80	>75% Grass cover, Good, HSG D
6,049	98	Paved parking, HSG D
8,487	94	Weighted Average
1,619		19.08% Pervious Area
6,868		80.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C26: CB #26

Runoff = 0.53 cfs @ 12.09 hrs, Volume= 1,710 cf, Depth> 2.32"
Routed to Pond CB26 : CB #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,203	80	>75% Grass cover, Good, HSG D
5,632	98	Paved parking, HSG D
8,835	91	Weighted Average
3,203		36.25% Pervious Area
5,632		63.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C27: CB #27

Runoff = 0.42 cfs @ 12.09 hrs, Volume= 1,434 cf, Depth> 2.82"
Routed to Pond CB27 : CB #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
98	39	>75% Grass cover, Good, HSG A
131	98	Paved parking, HSG A
397	80	>75% Grass cover, Good, HSG D
5,485	98	Paved parking, HSG D
6,111	96	Weighted Average
495		8.10% Pervious Area
5,616		91.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C28: CB #28

Runoff = 0.56 cfs @ 12.09 hrs, Volume= 1,779 cf, Depth> 2.06"
Routed to Pond CB28 : CB #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
2,751	74	>75% Grass cover, Good, HSG C
2,841	98	Paved parking, HSG C
2,297	80	>75% Grass cover, Good, HSG D
2,483	98	Paved parking, HSG D
10,372	88	Weighted Average
5,048		48.67% Pervious Area
5,324		51.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C29: CB #29

Runoff = 0.56 cfs @ 12.09 hrs, Volume= 1,848 cf, Depth> 2.61"
Routed to Pond CB29 : CB #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,341	74	>75% Grass cover, Good, HSG C
5,330	98	Paved parking, HSG C
1,824	98	Roofs, HSG C
8,495	94	Weighted Average
1,341		15.79% Pervious Area
7,154		84.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C30: CB #30

Runoff = 0.59 cfs @ 12.09 hrs, Volume= 1,943 cf, Depth> 2.61"
Routed to Pond CB30 : CB #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,572	74	>75% Grass cover, Good, HSG C
6,310	98	Paved parking, HSG C
1,051	98	Roofs, HSG C
8,933	94	Weighted Average
1,572		17.60% Pervious Area
7,361		82.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C31: CB #31

Runoff = 0.95 cfs @ 12.09 hrs, Volume= 3,044 cf, Depth> 2.23"
Routed to Pond CB31 : CB #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,132	74	>75% Grass cover, Good, HSG C
9,132	98	Paved parking, HSG C
2,101	98	Roofs, HSG C
16,365	90	Weighted Average
5,132		31.36% Pervious Area
11,233		68.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C32: CB #32

Runoff = 0.76 cfs @ 12.09 hrs, Volume= 2,460 cf, Depth> 2.32"
Routed to Pond CB32 : CB #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,753	74	>75% Grass cover, Good, HSG C
7,068	98	Paved parking, HSG C
1,889	98	Roofs, HSG C
12,710	91	Weighted Average
3,753		29.53% Pervious Area
8,957		70.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C33: CB #33

Runoff = 0.36 cfs @ 12.09 hrs, Volume= 1,179 cf, Depth> 2.61"
Routed to Pond CB33 : CB #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
873	74	>75% Grass cover, Good, HSG C
3,693	98	Paved parking, HSG C
855	98	Roofs, HSG C
5,421	94	Weighted Average
873		16.10% Pervious Area
4,548		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C34: CB #34

Runoff = 0.55 cfs @ 12.09 hrs, Volume= 1,804 cf, Depth> 2.51"
Routed to Pond CB34 : CB #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,680	74	>75% Grass cover, Good, HSG C
5,115	98	Paved parking, HSG C
1,827	98	Roofs, HSG C
8,622	93	Weighted Average
1,680		19.49% Pervious Area
6,942		80.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C35: CB #35

Runoff = 0.30 cfs @ 12.09 hrs, Volume= 1,049 cf, Depth> 3.04"
Routed to Pond CB35 : CB #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,578	98	Paved parking, HSG C
79	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
4,149	98	Weighted Average
79		1.90% Pervious Area
4,070		98.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C36: CB #36

Runoff = 0.47 cfs @ 12.09 hrs, Volume= 1,675 cf, Depth> 3.04"
Routed to Pond CB36 : CB #36

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
6,622	98	Paved parking, HSG C
6,622		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C38: CB #38

Runoff = 0.54 cfs @ 12.09 hrs, Volume= 1,932 cf, Depth> 3.04"
Routed to Pond CB38 : CB #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
6,647	98	Paved parking, HSG B
392	98	Paved parking, HSG C
598	98	Paved parking, HSG D
7,637	98	Weighted Average
7,637		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C39: CB #39

Runoff = 0.54 cfs @ 12.09 hrs, Volume= 1,925 cf, Depth> 3.04"
Routed to Pond CB39 : CB #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
6,505	98	Paved parking, HSG B
519	98	Paved parking, HSG C
588	98	Paved parking, HSG D
7,612	98	Weighted Average
7,612		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C40: CB #40

Runoff = 0.30 cfs @ 12.09 hrs, Volume= 1,065 cf, Depth> 3.04"
Routed to Pond CB40 : CB #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
4,211	98	Paved parking, HSG B
4,211		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C41: CB #41

Runoff = 0.40 cfs @ 12.09 hrs, Volume= 1,413 cf, Depth> 3.04"
Routed to Pond CB41 : CB #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,586	98	Paved parking, HSG B
5,586		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C43: CB #43

Runoff = 0.17 cfs @ 12.09 hrs, Volume= 555 cf, Depth> 2.14"
Routed to Pond CB43 : CB #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
2,343	98	Paved parking, HSG B
766	61	>75% Grass cover, Good, HSG B
3,109	89	Weighted Average
766		24.64% Pervious Area
2,343		75.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C44: CB #44

Runoff = 0.12 cfs @ 12.09 hrs, Volume= 398 cf, Depth> 2.42"
Routed to Pond CB44 : CB #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,670	98	Paved parking, HSG B
308	61	>75% Grass cover, Good, HSG B
1,978	92	Weighted Average
308		15.57% Pervious Area
1,670		84.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C45: CB #45

Runoff = 0.09 cfs @ 12.10 hrs, Volume= 299 cf, Depth> 1.45"
Routed to Pond CB45 : CB #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,240	98	Paved parking, HSG B
1,225	61	>75% Grass cover, Good, HSG B
2,465	80	Weighted Average
1,225		49.70% Pervious Area
1,240		50.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C46: CB #46

Runoff = 0.17 cfs @ 12.10 hrs, Volume= 533 cf, Depth> 1.45"
Routed to Pond CB46 : CB #46

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
2,241	98	Paved parking, HSG B
2,156	61	>75% Grass cover, Good, HSG B
4,397	80	Weighted Average
2,156		49.03% Pervious Area
2,241		50.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C47: CB #47

Runoff = 0.21 cfs @ 12.09 hrs, Volume= 762 cf, Depth> 3.04"
Routed to Pond CB47 : CB#47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,012	98	Paved roads w/curbs & sewers, HSG B
3,012		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C48: CB #48

Runoff = 1.03 cfs @ 12.19 hrs, Volume= 4,342 cf, Depth> 0.87"
Routed to Pond CB48 : CB#48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,877	98	Paved roads w/curbs & sewers, HSG B
56,251	68	1 acre lots, 20% imp, HSG B
60,128	70	Weighted Average
45,001		74.84% Pervious Area
15,127		25.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	50	0.0800	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
4.8	350	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.8	400	Total			

Summary for Subcatchment C49: CB #49

Runoff = 0.34 cfs @ 12.09 hrs, Volume= 1,139 cf, Depth> 2.61"
Routed to Pond CB49 : CB #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
4,431	98	Paved roads w/curbs & sewers, HSG C
807	74	>75% Grass cover, Good, HSG C
5,238	94	Weighted Average
807		15.41% Pervious Area
4,431		84.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C50: CB #50

Runoff = 0.96 cfs @ 12.09 hrs, Volume= 3,147 cf, Depth> 2.51"
Routed to Pond CB50 : CB #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,429	74	>75% Grass cover, Good, HSG C
11,611	98	Paved roads w/curbs & sewers, HSG C
15,040	93	Weighted Average
3,429		22.80% Pervious Area
11,611		77.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C51: CB #51

Runoff = 0.49 cfs @ 12.09 hrs, Volume= 1,726 cf, Depth> 3.04"
Routed to Pond CB51 : CB #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,147	98	Roofs, HSG C
3,676	98	Paved parking, HSG C
6,823	98	Weighted Average
6,823		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C52: CB#52

Runoff = 0.61 cfs @ 12.09 hrs, Volume= 2,045 cf, Depth> 2.71"
Routed to Pond CB52 : CB #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,164	74	>75% Grass cover, Good, HSG C
7,888	98	Paved parking, HSG C
9,052	95	Weighted Average
1,164		12.86% Pervious Area
7,888		87.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C53: CB #53

Runoff = 0.50 cfs @ 12.09 hrs, Volume= 1,646 cf, Depth> 2.51"
Routed to Pond CB53 : CB #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
287	39	>75% Grass cover, Good, HSG A
3,287	98	Paved parking, HSG A
773	74	>75% Grass cover, Good, HSG C
3,516	98	Paved parking, HSG C
7,863	93	Weighted Average
1,060		13.48% Pervious Area
6,803		86.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C54: CB #54

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 933 cf, Depth> 2.32"
Routed to Pond CB54 : CB #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
550	39	>75% Grass cover, Good, HSG A
4,176	98	Paved parking, HSG A
84	74	>75% Grass cover, Good, HSG C
11	98	Paved parking, HSG C
4,821	91	Weighted Average
634		13.15% Pervious Area
4,187		86.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C7: CB #5

Runoff = 0.33 cfs @ 12.09 hrs, Volume= 1,176 cf, Depth> 3.04"
Routed to Pond CB7 : CB#5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
4,650	98	Paved roads w/curbs & sewers, HSG B
4,650		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C8: CB #8

Runoff = 0.36 cfs @ 12.09 hrs, Volume= 1,185 cf, Depth> 2.61"
Routed to Pond CB8 : CB#8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
4,837	98	Paved roads w/curbs & sewers, HSG B
613	61	>75% Grass cover, Good, HSG B
5,450	94	Weighted Average
613		11.25% Pervious Area
4,837		88.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C9: CB #9

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 3,974 cf, Depth> 2.92"
Routed to Pond CB9 : CB #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
31	61	>75% Grass cover, Good, HSG B
433	98	Paved roads w/curbs & sewers, HSG B
904	74	>75% Grass cover, Good, HSG C
12,073	98	Paved parking, HSG C
2,305	98	Roofs, HSG C
52	80	>75% Grass cover, Good, HSG D
509	98	Paved parking, HSG D
16,307	97	Weighted Average
987		6.05% Pervious Area
15,320		93.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment CH1: CLUBHOUSE

Runoff = 0.43 cfs @ 12.09 hrs, Volume= 1,470 cf, Depth> 2.82"
Routed to Pond DECH : DRIP #CH

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,802	98	Roofs, HSG C
3	98	Roofs, HSG D
435	74	>75% Grass cover, Good, HSG C
22	80	>75% Grass cover, Good, HSG D
6,262	96	Weighted Average
457		7.30% Pervious Area
5,805		92.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment MB1: MAIL KIOSK

Runoff = 0.07 cfs @ 12.09 hrs, Volume= 237 cf, Depth> 3.04"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
938	98	Roofs, HSG B
938		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S201: SUMMER STREET ACCESS APRON

Runoff = 0.67 cfs @ 12.09 hrs, Volume= 2,247 cf, Depth> 2.71"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
717	61	>75% Grass cover, Good, HSG B
9,226	98	Paved parking, HSG B
9,943	95	Weighted Average
717		7.21% Pervious Area
9,226		92.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S202: EXISTING WETLAND

Runoff = 8.51 cfs @ 12.34 hrs, Volume= 43,021 cf, Depth> 1.19"
Routed to Reach SC1 : Stream Crossing #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
136,496	61	>75% Grass cover, Good, HSG B
83,935	55	Woods, Good, HSG B
29	98	Paved parking, HSG B
13,946	98	Roofs, HSG B
9,038	48	Brush, Good, HSG B
2,573	74	>75% Grass cover, Good, HSG C
17,121	70	Woods, Good, HSG C
98	98	Paved parking, HSG C
1,097	65	Brush, Good, HSG C
126	80	>75% Grass cover, Good, HSG D
132	98	Paved parking, HSG D
167,678	98	Water Surface, HSG D
432,269	76	Weighted Average
250,386		57.92% Pervious Area
181,883		42.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
1.4	118	0.0400	1.40		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.2	688	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.2	856	Total			

Summary for Subcatchment S203: POCKET WETLAND #1

Runoff = 0.61 cfs @ 12.10 hrs, Volume= 2,073 cf, Depth> 0.97"
Routed to Pond p210 : POCKET WETLAND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
12,682	61	>75% Grass cover, Good, HSG B
1,060	98	Water Surface, 0% imp, HSG B
7,785	74	>75% Grass cover, Good, HSG C
4,060	98	Water Surface, 0% imp, HSG C
25,587	72	Weighted Average
25,587		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S204: EXISTING WETLANDS

Runoff = 5.78 cfs @ 12.34 hrs, Volume= 29,158 cf, Depth> 1.14"
Routed to Link ap2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
53,739	61	>75% Grass cover, Good, HSG B
17,975	55	Woods, Good, HSG B
20,940	48	Brush, Good, HSG B
41,421	74	>75% Grass cover, Good, HSG C
68,342	70	Woods, Good, HSG C
116	98	Paved parking, HSG C
1,904	65	Brush, Good, HSG C
1,528	65	Brush, Good, HSG C
2,508	77	Woods, Good, HSG D
161	98	Paved parking, HSG D
4,073	73	Brush, Good, HSG D
95,496	98	Water Surface, HSG D
308,203	75	Weighted Average
212,430		68.93% Pervious Area
95,773		31.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.2000	0.26		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.27"
19.4	582	0.0100	0.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
22.6	632	Total			

Summary for Subcatchment S205: ISOLATED WETLAND

Runoff = 1.15 cfs @ 12.10 hrs, Volume= 4,009 cf, Depth> 0.87"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
10,910	30	Woods, Good, HSG A
3,684	74	>75% Grass cover, Good, HSG C
2,275	70	Woods, Good, HSG C
171	98	Paved parking, HSG C
1,706	65	Brush, Good, HSG C
1,940	80	>75% Grass cover, Good, HSG D
23,513	77	Woods, Good, HSG D
393	98	Paved parking, HSG D
2,208	73	Brush, Good, HSG D
8,620	98	Water Surface, HSG D
55,420	70	Weighted Average
46,236		83.43% Pervious Area
9,184		16.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S206: OVERLAND FLOW

Runoff = 6.52 cfs @ 12.58 hrs, Volume= 46,602 cf, Depth> 0.63"
Routed to Link AP4 : ANALYSIS POINT #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
16,514	39	>75% Grass cover, Good, HSG A
118,226	30	Woods, Good, HSG A
713	98	Paved parking, HSG A
41,148	30	Brush, Good, HSG A
17,568	51	1 acre lots, 20% imp, HSG A
37,410	61	>75% Grass cover, Good, HSG B
13,900	55	Woods, Good, HSG B
54,538	48	Brush, Good, HSG B
91,202	68	1 acre lots, 20% imp, HSG B
77,444	74	>75% Grass cover, Good, HSG C
114,763	70	Woods, Good, HSG C
3,493	98	Paved parking, HSG C
57,740	65	Brush, Good, HSG C
5,763	80	>75% Grass cover, Good, HSG D
126,141	77	Woods, Good, HSG D
114,732	98	Water Surface, 0% imp, HSG D
891,295	65	Weighted Average
865,335		97.09% Pervious Area
25,960		2.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0500	0.10		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
5.0	334	0.0250	1.11		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.9	91	0.0250	0.79		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
10.2	491	0.0400	0.80		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
8.9	501	0.0350	0.94		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
34.5	1,467	Total			

Summary for Subcatchment S207: INFILTRATION POND #2

Runoff = 1.12 cfs @ 12.09 hrs, Volume= 3,568 cf, Depth> 2.06"
Routed to Pond P207 : INFILTRATION POND #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
839	98	Water Surface, 0% imp, HSG A
8,802	74	>75% Grass cover, Good, HSG C
11,162	98	Water Surface, 0% imp, HSG C
20,803	88	Weighted Average
20,803		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S208: GRASS AREA

Runoff = 0.40 cfs @ 12.10 hrs, Volume= 1,308 cf, Depth> 1.14"
Routed to Pond OCS4 : OCS#4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
476	39	>75% Grass cover, Good, HSG A
12,000	74	>75% Grass cover, Good, HSG C
168	98	Paved parking, HSG A
1,116	98	Paved parking, HSG C
13,760	75	Weighted Average
12,476		90.67% Pervious Area
1,284		9.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S209: WETLAND C

Runoff = 1.60 cfs @ 12.44 hrs, Volume= 9,101 cf, Depth> 1.02"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
10,826	39	>75% Grass cover, Good, HSG A
16,826	30	Woods, Good, HSG A
8,863	74	>75% Grass cover, Good, HSG C
26,084	70	Woods, Good, HSG C
44,067	98	Water Surface, 0% imp, HSG D
304	98	Paved parking, HSG A
103	98	Paved parking, HSG C
107,073	73	Weighted Average
106,666		99.62% Pervious Area
407		0.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	50	0.0150	0.06		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
15.2	557	0.0150	0.61		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.9	607	Total			

Summary for Subcatchment S210: INFILTRATION POND #1

Runoff = 1.92 cfs @ 12.24 hrs, Volume= 8,348 cf, Depth> 1.32"
Routed to Pond P212 : INFILTRATION POND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
13,844	98	Water Surface, 0% imp, HSG C
59,814	74	>75% Grass cover, Good, HSG C
2,232	65	Brush, Good, HSG C
75,890	78	Weighted Average
75,890		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	50	0.0150	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
10.3	530	0.0150	0.86		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.5	580	Total			

Summary for Subcatchment S211: S211

Runoff = 0.56 cfs @ 12.10 hrs, Volume= 1,786 cf, Depth> 1.39"
Routed to Pond P205 : INFILTRATION POND #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
8,108	61	>75% Grass cover, Good, HSG B
7,328	98	Water Surface, HSG B
15,436	79	Weighted Average
8,108		52.53% Pervious Area
7,328		47.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S212: SWALE

Runoff = 0.46 cfs @ 12.40 hrs, Volume= 2,770 cf, Depth> 0.63"
Routed to Reach SC2 : Stream Crossing #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
4,100	61	>75% Grass cover, Good, HSG B
7,192	55	Woods, Good, HSG B
1,180	74	>75% Grass cover, Good, HSG C
3,436	70	Woods, Good, HSG C
13,180	98	Water Surface, 0% imp, HSG D
72	98	Paved parking, HSG B
22,663	48	Brush, Good, HSG B
545	65	Brush, Good, HSG C
107	98	Paved parking, HSG C
135	98	Paved parking, HSG D
158	80	>75% Grass cover, Good, HSG D
52,768	65	Weighted Average
52,454		99.40% Pervious Area
314		0.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.1	50	0.0400	0.05		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.27"
3.9	232	0.0600	0.98		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
3.1	136	0.0220	0.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.1	418	Total			

Summary for Subcatchment S213: COURTYARD

Runoff = 0.78 cfs @ 12.10 hrs, Volume= 2,476 cf, Depth> 1.39"
Routed to Pond 11P : YARD DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
5,047	39	>75% Grass cover, Good, HSG A
1,678	98	Paved parking, HSG A
168	98	Roofs, HSG A
532	98	Water Surface, 0% imp, HSG A
4,518	74	>75% Grass cover, Good, HSG C
7,080	98	Paved parking, HSG C
878	98	Roofs, HSG C
718	98	Water Surface, 0% imp, HSG C
296	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
21,407	79	Weighted Average
11,111		51.90% Pervious Area
10,296		48.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T1: Trench Drain 1

Runoff = 0.71 cfs @ 12.09 hrs, Volume= 2,338 cf, Depth> 2.51"
Routed to Pond 5R : TRENCH DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,443	74	>75% Grass cover, Good, HSG C
4,228	98	Paved parking, HSG C
1,339	80	>75% Grass cover, Good, HSG D
4,163	98	Paved parking, HSG D
11,173	93	Weighted Average
2,782		24.90% Pervious Area
8,391		75.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T2: Drive Under B2

Runoff = 0.15 cfs @ 12.10 hrs, Volume= 490 cf, Depth> 1.32"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
1,510	39	>75% Grass cover, Good, HSG A
2,313	98	Paved parking, HSG A
77	74	>75% Grass cover, Good, HSG C
545	98	Paved parking, HSG C
4,445	78	Weighted Average
1,587		35.70% Pervious Area
2,858		64.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH1: TOWN HOUSE #1

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 997 cf, Depth> 2.82"
Routed to Pond DE61 : DRIP #61

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH10: TOWN HOUSE #10

Runoff = 0.24 cfs @ 12.09 hrs, Volume= 816 cf, Depth> 2.82"
Routed to Pond DE70 : DRIP #70

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,184	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,476	96	Weighted Average
292		8.40% Pervious Area
3,184		91.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH11: TOWN HOUSE #11

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 988 cf, Depth> 2.82"
Routed to Pond DE71 : DRIP #71

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,899	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,210	96	Weighted Average
311		7.39% Pervious Area
3,899		92.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH2: TOWN HOUSE #2

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 997 cf, Depth> 2.82"
Routed to Pond DE62 : DRIP #62

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH3: TOWN HOUSE #3

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 681 cf, Depth> 2.71"
Routed to Pond DE63 : DRIP #63

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
2,672	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,013	95	Weighted Average
341		11.32% Pervious Area
2,672		88.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH4: TOWN HOUSE #4

Runoff = 0.24 cfs @ 12.09 hrs, Volume= 814 cf, Depth> 2.82"
Routed to Pond DE64 : DRIP #64

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,178	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,470	96	Weighted Average
292		8.41% Pervious Area
3,178		91.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH5: TOWN HOUSE #5

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 682 cf, Depth> 2.71"
Routed to Pond DE65 : DRIP #65

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
2,675	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,016	95	Weighted Average
341		11.31% Pervious Area
2,675		88.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH6: TOWN HOUSE #6

Runoff = 0.23 cfs @ 12.09 hrs, Volume= 800 cf, Depth> 2.82"
Routed to Pond DE66 : DRIP #66

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,116	98	Roofs, HSG C
291	74	>75% Grass cover, Good, HSG C
3,407	96	Weighted Average
291		8.54% Pervious Area
3,116		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH7: TOWN HOUSE #7

Runoff = 0.24 cfs @ 12.09 hrs, Volume= 817 cf, Depth> 2.82"
Routed to Pond DE67 : DRIP #67

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,189	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,481	96	Weighted Average
292		8.39% Pervious Area
3,189		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH8: TOWN HOUSE #8

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 989 cf, Depth> 2.82"
Routed to Pond DE68 : DRIP #68

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,901	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,212	96	Weighted Average
311		7.38% Pervious Area
3,901		92.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH9: TOWN HOUSE #9

Runoff = 0.24 cfs @ 12.09 hrs, Volume= 817 cf, Depth> 2.82"
Routed to Pond DE69 : DRIP #69

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2YR Rainfall=3.27"

Area (sf)	CN	Description
3,188	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,480	96	Weighted Average
292		8.39% Pervious Area
3,188		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Reach 8R: OVERLAND FLOW

Inflow Area = 11,975 sf, 92.37% Impervious, Inflow Depth > 1.94" for 2YR event
Inflow = 0.69 cfs @ 12.14 hrs, Volume= 1,940 cf
Outflow = 0.11 cfs @ 12.77 hrs, Volume= 1,734 cf, Atten= 84%, Lag= 37.7 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.06 fps, Min. Travel Time= 156.1 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 252.3 min

Peak Storage= 1,031 cf @ 12.77 hrs
Average Depth at Peak Storage= 0.04' , Surface Width= 50.37'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 28.09 cfs

50.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 563.0' Slope= 0.0213 '/'
Inlet Invert= 208.00', Outlet Invert= 196.00'

Summary for Reach 9R: OVERLAND FLOW

Inflow Area = 32,665 sf, 94.81% Impervious, Inflow Depth = 0.00" for 2YR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 23.45 cfs

20.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 211.0' Slope= 0.0652 '/'
Inlet Invert= 201.75', Outlet Invert= 188.00'

Summary for Reach 10R: OVERLAND FLOW

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth = 0.01" for 2YR event
Inflow = 0.04 cfs @ 12.71 hrs, Volume= 101 cf
Outflow = 0.02 cfs @ 13.19 hrs, Volume= 101 cf, Atten= 53%, Lag= 29.2 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.05 fps, Min. Travel Time= 54.7 min
Avg. Velocity = 0.03 fps, Avg. Travel Time= 80.0 min

Peak Storage= 60 cf @ 13.19 hrs
Average Depth at Peak Storage= 0.02' , Surface Width= 20.36'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 17.57 cfs

20.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 164.0' Slope= 0.0366 '/'
Inlet Invert= 192.00', Outlet Invert= 186.00'

‡

Summary for Reach 11R: 4x4 Open Bottom Culvert

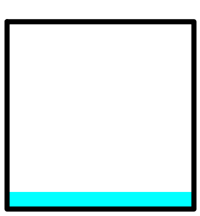
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 0.42" for 2YR event
Inflow = 1.70 cfs @ 12.45 hrs, Volume= 14,965 cf
Outflow = 1.70 cfs @ 12.45 hrs, Volume= 14,959 cf, Atten= 0%, Lag= 0.3 min
Routed to Reach 23R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 1.19 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 0.55 fps, Avg. Travel Time= 0.9 min

Peak Storage= 43 cf @ 12.45 hrs
Average Depth at Peak Storage= 0.36' , Surface Width= 4.00'
Bank-Full Depth= 4.00' Flow Area= 16.0 sf, Capacity= 42.20 cfs

48.0" W x 48.0" H Box Pipe
n= 0.069 Riprap, 6-inch
Length= 30.0' Slope= 0.0150 '/'
Inlet Invert= 194.00', Outlet Invert= 193.55'



Summary for Reach 12R: OVERLAND FLOW

Inflow Area = 12,906 sf, 90.20% Impervious, Inflow Depth > 1.98" for 2YR event
Inflow = 0.77 cfs @ 12.13 hrs, Volume= 2,134 cf
Outflow = 0.30 cfs @ 12.43 hrs, Volume= 2,085 cf, Atten= 61%, Lag= 18.0 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.09 fps, Min. Travel Time= 45.1 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 107.5 min

Peak Storage= 811 cf @ 12.43 hrs
Average Depth at Peak Storage= 0.06' , Surface Width= 50.64'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 29.80 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 250.0' Slope= 0.0240 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

Summary for Reach 14R: OVERLAND FLOW

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 0.63" for 2YR event
Inflow = 0.46 cfs @ 12.41 hrs, Volume= 2,770 cf
Outflow = 0.07 cfs @ 14.79 hrs, Volume= 2,124 cf, Atten= 84%, Lag= 142.6 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.05 fps, Min. Travel Time= 266.3 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 316.0 min

Peak Storage= 1,163 cf @ 14.79 hrs
Average Depth at Peak Storage= 0.03' , Surface Width= 50.54'
Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 31.55 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 70.00'
Length= 852.0' Slope= 0.0246 '/'
Inlet Invert= 207.00', Outlet Invert= 186.00'

Summary for Reach 15R: OVERLAND FLOW

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 0.91" for 2YR event
Inflow = 0.12 cfs @ 15.47 hrs, Volume= 4,736 cf
Outflow = 0.12 cfs @ 17.02 hrs, Volume= 4,228 cf, Atten= 2%, Lag= 92.9 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.06 fps, Min. Travel Time= 82.1 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 90.4 min

Peak Storage= 595 cf @ 17.02 hrs
Average Depth at Peak Storage= 0.04' , Surface Width= 50.40'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 27.21 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 300.0' Slope= 0.0200 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

Summary for Reach 18R: OVERLAND FLOW

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth = 0.00" for 2YR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.00' Flow Area= 75.0 sf, Capacity= 38.42 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 100.00'
Length= 609.0' Slope= 0.0279 '/'
Inlet Invert= 203.00', Outlet Invert= 186.00'

Summary for Reach 20R: OVERLAND FLOW

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth = 0.96" for 2YR event
Inflow = 0.93 cfs @ 12.49 hrs, Volume= 5,781 cf
Outflow = 0.34 cfs @ 13.75 hrs, Volume= 5,373 cf, Atten= 64%, Lag= 75.2 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.07 fps, Min. Travel Time= 128.2 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 210.1 min

Peak Storage= 2,612 cf @ 13.75 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 50.92'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 18.54 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 560.0' Slope= 0.0093 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

Summary for Reach 23R: OVERLAND FLOW

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 0.42" for 2YR event
Inflow = 1.70 cfs @ 12.45 hrs, Volume= 14,959 cf
Outflow = 1.24 cfs @ 12.76 hrs, Volume= 14,613 cf, Atten= 27%, Lag= 18.2 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.15 fps, Min. Travel Time= 26.3 min
Avg. Velocity = 0.08 fps, Avg. Travel Time= 52.5 min

Peak Storage= 1,960 cf @ 12.76 hrs
Average Depth at Peak Storage= 0.16' , Surface Width= 56.23'
Bank-Full Depth= 1.00' Flow Area= 70.0 sf, Capacity= 31.93 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 20.0 '/' Top Width= 90.00'
Length= 237.0' Slope= 0.0211 '/'
Inlet Invert= 193.00', Outlet Invert= 188.00'

‡

Summary for Reach R202: OVERLAND FLOW

[62] Hint: Exceeded Reach SC1 OUTLET depth by 0.11' @ 13.30 hrs

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 1.19" for 2YR event
Inflow = 8.50 cfs @ 12.35 hrs, Volume= 43,012 cf
Outflow = 2.85 cfs @ 12.90 hrs, Volume= 39,436 cf, Atten= 66%, Lag= 33.4 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.13 fps, Min. Travel Time= 89.4 min
Avg. Velocity = 0.07 fps, Avg. Travel Time= 163.7 min

Peak Storage= 15,282 cf @ 12.90 hrs
Average Depth at Peak Storage= 0.21' , Surface Width= 110.38'
Bank-Full Depth= 1.00' Flow Area= 125.0 sf, Capacity= 42.56 cfs

100.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 150.00'
Length= 700.0' Slope= 0.0107 '/'
Inlet Invert= 205.50', Outlet Invert= 198.00'

‡

Summary for Reach R211: OVERLAND FLOW

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth = 0.00" for 2YR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.00' Flow Area= 50.0 sf, Capacity= 14.51 cfs

35.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 15.0 '/' Top Width= 65.00'
Length= 600.0' Slope= 0.0087 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

‡ 

Summary for Reach SC1: Stream Crossing #1

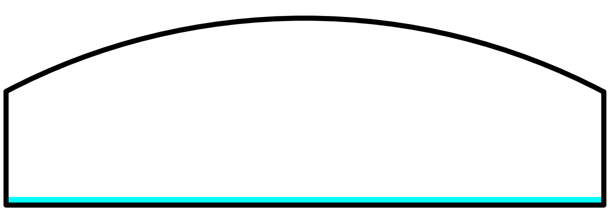
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 1.19" for 2YR event
Inflow = 8.51 cfs @ 12.34 hrs, Volume= 43,021 cf
Outflow = 8.50 cfs @ 12.35 hrs, Volume= 43,012 cf, Atten= 0%, Lag= 0.1 min
Routed to Reach R202 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 2.48 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 1.06 fps, Avg. Travel Time= 0.7 min

Peak Storage= 148 cf @ 12.35 hrs
Average Depth at Peak Storage= 0.21' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 69.8 sf, Capacity= 722.91 cfs

192.0" W x 60.0" H, R=207.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 43.1' Slope= 0.0200 '/'
Inlet Invert= 206.37', Outlet Invert= 205.51'



Summary for Reach SC2: Stream Crossing #2

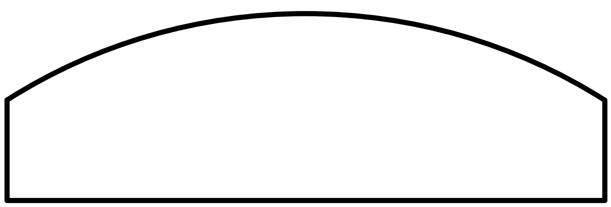
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 0.63" for 2YR event
Inflow = 0.46 cfs @ 12.40 hrs, Volume= 2,770 cf
Outflow = 0.46 cfs @ 12.41 hrs, Volume= 2,770 cf, Atten= 0%, Lag= 0.6 min
Routed to Reach 14R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 1.04 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.04 fps, Avg. Travel Time= 0.6 min

Peak Storage= 16 cf @ 12.41 hrs
Average Depth at Peak Storage= 0.03' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 68.1 sf, Capacity= 768.96 cfs

192.0" W x 60.0" H, R=180.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 36.5' Slope= 0.0241 '/'
Inlet Invert= 208.52', Outlet Invert= 207.64'



Summary for Pond 1P: DMH #33

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 2.89" for 2YR event
Inflow = 1.12 cfs @ 12.09 hrs, Volume= 3,877 cf
Outflow = 1.12 cfs @ 12.09 hrs, Volume= 3,877 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.12 cfs @ 12.09 hrs, Volume= 3,877 cf
Routed to Pond OCS6 : OCS #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.05' @ 12.09 hrs
Flood Elev= 209.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.50'	**12.0" Round Culvert** L= 46.7' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 204.33' S= 0.0251 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.09 cfs @ 12.09 hrs HW=206.04' TW=201.78' (Dynamic Tailwater)
1=Culvert (Inlet Controls 1.09 cfs @ 2.51 fps)

Summary for Pond 3P: OCS #8

Inflow Area = 12,684 sf, 86.64% Impervious, Inflow Depth > 2.44" for 2YR event
Inflow = 0.79 cfs @ 12.09 hrs, Volume= 2,578 cf
Outflow = 0.79 cfs @ 12.09 hrs, Volume= 2,578 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.79 cfs @ 12.09 hrs, Volume= 2,578 cf
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.07' @ 12.09 hrs
Flood Elev= 206.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.62'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.77 cfs @ 12.09 hrs HW=201.07' TW=200.49' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.77 cfs @ 2.28 fps)

Summary for Pond 5R: TRENCH DRAIN

Inflow Area = 11,173 sf, 75.10% Impervious, Inflow Depth > 2.51" for 2YR event
Inflow = 0.71 cfs @ 12.09 hrs, Volume= 2,338 cf
Outflow = 0.71 cfs @ 12.09 hrs, Volume= 2,338 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.71 cfs @ 12.09 hrs, Volume= 2,338 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 197.74' @ 12.09 hrs
Flood Elev= 199.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.22'	**8.0" Round Culvert** L= 36.0' Ke= 0.500 Inlet / Outlet Invert= 197.22' / 196.50' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.70 cfs @ 12.09 hrs HW=197.73' TW=195.23' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.70 cfs @ 2.43 fps)

Summary for Pond 11P: YARD DRAIN

Inflow Area = 21,407 sf, 48.10% Impervious, Inflow Depth > 1.39" for 2YR event
Inflow = 0.78 cfs @ 12.10 hrs, Volume= 2,476 cf
Outflow = 0.51 cfs @ 12.20 hrs, Volume= 2,448 cf, Atten= 34%, Lag= 6.4 min
Primary = 0.51 cfs @ 12.20 hrs, Volume= 2,448 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.32' @ 12.20 hrs Surf.Area= 5,486 sf Storage= 383 cf

Plug-Flow detention time= 22.4 min calculated for 2,448 cf (99% of inflow)
Center-of-Mass det. time= 15.7 min (859.9 - 844.2)

Volume	Invert	Avail.Storage	Storage Description
#1	207.25'	5,475 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.25	5,050	0	0
208.00	9,550	5,475	5,475

Device	Routing	Invert	Outlet Devices
#1	Primary	203.25'	**12.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 203.25' / 202.94' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	207.25'	**4.0" x 4.0" Horiz. Orifice/Grate X 4.00 columns** X 4 rows C= 0.600 in 24.0" x 24.0" Grate (44% open area) Limited to weir flow at low heads

Primary OutFlow Max=0.51 cfs @ 12.20 hrs HW=207.32' TW=202.75' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.51 cfs of 6.55 cfs potential flow)
  └─**2=Orifice/Grate** (Weir Controls 0.51 cfs @ 0.88 fps)

Summary for Pond CB10: CB #10

Inflow Area = 6,961 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.50 cfs @ 12.09 hrs, Volume= 1,761 cf
Outflow = 0.50 cfs @ 12.09 hrs, Volume= 1,761 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.50 cfs @ 12.09 hrs, Volume= 1,761 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.18' @ 12.09 hrs
Flood Elev= 212.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.76'	**12.0" Round Culvert** L= 33.8' Ke= 0.500 Inlet / Outlet Invert= 209.76' / 209.59' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.48 cfs @ 12.09 hrs HW=210.17' TW=209.85' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.48 cfs @ 2.34 fps)

Summary for Pond CB11: CB #11

Inflow Area = 7,173 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.51 cfs @ 12.09 hrs, Volume= 1,814 cf
Outflow = 0.51 cfs @ 12.09 hrs, Volume= 1,814 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.51 cfs @ 12.09 hrs, Volume= 1,814 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 210.32' @ 12.09 hrs
Flood Elev= 213.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.94'	**12.0" Round Culvert** L= 26.3' Ke= 0.500 Inlet / Outlet Invert= 209.94' / 209.67' S= 0.0103 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.50 cfs @ 12.09 hrs HW=210.31' TW=209.85' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.50 cfs @ 2.79 fps)

Summary for Pond CB12: CB #12

Inflow Area = 5,238 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.37 cfs @ 12.09 hrs, Volume= 1,325 cf
Outflow = 0.37 cfs @ 12.09 hrs, Volume= 1,325 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.37 cfs @ 12.09 hrs, Volume= 1,325 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.98' @ 12.09 hrs
Flood Elev= 209.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.68'	**12.0" Round Culvert** L= 41.3' Ke= 0.500 Inlet / Outlet Invert= 206.68' / 205.65' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.36 cfs @ 12.09 hrs HW=206.98' TW=206.04' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.36 cfs @ 1.86 fps)

Summary for Pond CB13: CB #13

Inflow Area = 10,873 sf, 90.78% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.75 cfs @ 12.09 hrs, Volume= 2,552 cf
Outflow = 0.75 cfs @ 12.09 hrs, Volume= 2,552 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.75 cfs @ 12.09 hrs, Volume= 2,552 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.14' @ 12.09 hrs
Flood Elev= 209.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**12.0" Round Culvert** L= 43.7' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 205.61' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.73 cfs @ 12.09 hrs HW=207.13' TW=206.04' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.73 cfs @ 2.24 fps)

Summary for Pond CB14: CB #14

Inflow Area = 12,099 sf, 86.22% Impervious, Inflow Depth > 2.32" for 2YR event
Inflow = 0.73 cfs @ 12.09 hrs, Volume= 2,341 cf
Outflow = 0.73 cfs @ 12.09 hrs, Volume= 2,341 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.73 cfs @ 12.09 hrs, Volume= 2,341 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.41' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 23.2' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.67' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.71 cfs @ 12.09 hrs HW=201.40' TW=201.26' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.71 cfs @ 2.02 fps)

Summary for Pond CB15: CB #15

Inflow Area = 6,666 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.47 cfs @ 12.09 hrs, Volume= 1,686 cf
Outflow = 0.47 cfs @ 12.09 hrs, Volume= 1,686 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.47 cfs @ 12.09 hrs, Volume= 1,686 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.34' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.71' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.46 cfs @ 12.09 hrs HW=201.33' TW=201.26' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.46 cfs @ 1.54 fps)

Summary for Pond CB16: CB #16

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 1.39" for 2YR event
Inflow = 0.31 cfs @ 12.10 hrs, Volume= 985 cf
Outflow = 0.31 cfs @ 12.10 hrs, Volume= 985 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.31 cfs @ 12.10 hrs, Volume= 985 cf
Routed to Pond D10 : DMH #10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.82' @ 12.10 hrs
Flood Elev= 206.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.47'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 203.47' / 203.33' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.31 cfs @ 12.10 hrs HW=203.81' TW=203.66' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.31 cfs @ 1.90 fps)

Summary for Pond CB17: CB #17

Inflow Area = 11,836 sf, 73.87% Impervious, Inflow Depth > 2.42" for 2YR event
Inflow = 0.73 cfs @ 12.09 hrs, Volume= 2,382 cf
Outflow = 0.73 cfs @ 12.09 hrs, Volume= 2,382 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.73 cfs @ 12.09 hrs, Volume= 2,382 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.48' @ 12.09 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.99'	**12.0" Round Culvert** L= 13.8' Ke= 0.500 Inlet / Outlet Invert= 204.99' / 204.86' S= 0.0094 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.72 cfs @ 12.09 hrs HW=205.47' TW=205.01' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.72 cfs @ 2.78 fps)

Summary for Pond CB18: CB #18

Inflow Area = 24,853 sf, 72.99% Impervious, Inflow Depth > 1.87" for 2YR event
Inflow = 1.28 cfs @ 12.10 hrs, Volume= 3,873 cf
Outflow = 1.28 cfs @ 12.10 hrs, Volume= 3,873 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.28 cfs @ 12.10 hrs, Volume= 3,873 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.37' @ 12.10 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.72'	**15.0" Round Culvert** L= 25.1' Ke= 0.500 Inlet / Outlet Invert= 204.72' / 204.59' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.28 cfs @ 12.10 hrs HW=205.37' TW=205.02' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.28 cfs @ 2.90 fps)

Summary for Pond CB20: CB #20

Inflow Area = 11,939 sf, 88.95% Impervious, Inflow Depth > 2.71" for 2YR event
Inflow = 0.80 cfs @ 12.09 hrs, Volume= 2,698 cf
Outflow = 0.80 cfs @ 12.09 hrs, Volume= 2,698 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.80 cfs @ 12.09 hrs, Volume= 2,698 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.51' @ 12.09 hrs
Flood Elev= 207.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.97'	**12.0" Round Culvert** L= 30.3' Ke= 0.500 Inlet / Outlet Invert= 203.97' / 203.81' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.78 cfs @ 12.09 hrs HW=204.50' TW=203.95' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.78 cfs @ 2.66 fps)

Summary for Pond CB21: CB #21

Inflow Area = 10,174 sf, 87.04% Impervious, Inflow Depth > 2.23" for 2YR event
Inflow = 0.59 cfs @ 12.09 hrs, Volume= 1,892 cf
Outflow = 0.59 cfs @ 12.09 hrs, Volume= 1,892 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.59 cfs @ 12.09 hrs, Volume= 1,892 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.78' @ 12.09 hrs
Flood Elev= 208.02'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.32'	**12.0" Round Culvert** L= 26.0' Ke= 0.500 Inlet / Outlet Invert= 204.32' / 204.19' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.58 cfs @ 12.09 hrs HW=204.78' TW=203.95' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.58 cfs @ 2.43 fps)

Summary for Pond CB22: CB #22

Inflow Area = 12,001 sf, 91.62% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.83 cfs @ 12.09 hrs, Volume= 2,817 cf
Outflow = 0.83 cfs @ 12.09 hrs, Volume= 2,817 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.83 cfs @ 12.09 hrs, Volume= 2,817 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 205.89' @ 12.09 hrs
Flood Elev= 208.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.33'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 205.33' / 205.25' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.80 cfs @ 12.09 hrs HW=205.88' TW=204.90' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.80 cfs @ 2.64 fps)

Summary for Pond CB23: CB #23

Inflow Area = 9,694 sf, 61.00% Impervious, Inflow Depth > 2.14" for 2YR event
Inflow = 0.54 cfs @ 12.09 hrs, Volume= 1,732 cf
Outflow = 0.54 cfs @ 12.09 hrs, Volume= 1,732 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.54 cfs @ 12.09 hrs, Volume= 1,732 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.85' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.41'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 205.41' / 205.32' S= 0.0055 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.53 cfs @ 12.09 hrs HW=205.84' TW=204.90' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.53 cfs @ 2.42 fps)

Summary for Pond CB24: CB #24

Inflow Area = 7,930 sf, 72.16% Impervious, Inflow Depth > 2.51" for 2YR event
Inflow = 0.51 cfs @ 12.09 hrs, Volume= 1,660 cf
Outflow = 0.51 cfs @ 12.09 hrs, Volume= 1,660 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.51 cfs @ 12.09 hrs, Volume= 1,660 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.64' @ 12.09 hrs
Flood Elev= 209.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 12.1' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.15' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.49 cfs @ 12.09 hrs HW=205.63' TW=205.46' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.49 cfs @ 2.31 fps)

Summary for Pond CB25: CB #25

Inflow Area = 8,487 sf, 80.92% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 0.56 cfs @ 12.09 hrs, Volume= 1,846 cf
Outflow = 0.56 cfs @ 12.09 hrs, Volume= 1,846 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.56 cfs @ 12.09 hrs, Volume= 1,846 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.64' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.22'	**15.0" Round Culvert** L= 11.4' Ke= 0.500 Inlet / Outlet Invert= 205.22' / 205.16' S= 0.0053 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.54 cfs @ 12.09 hrs HW=205.63' TW=205.46' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.54 cfs @ 2.31 fps)

Summary for Pond CB26: CB #26

Inflow Area = 8,835 sf, 63.75% Impervious, Inflow Depth > 2.32" for 2YR event
Inflow = 0.53 cfs @ 12.09 hrs, Volume= 1,710 cf
Outflow = 0.53 cfs @ 12.09 hrs, Volume= 1,710 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.53 cfs @ 12.09 hrs, Volume= 1,710 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.20' @ 12.09 hrs
Flood Elev= 204.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.77'	**12.0" Round Culvert** L= 42.5' Ke= 0.500 Inlet / Outlet Invert= 201.77' / 201.55' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.52 cfs @ 12.09 hrs HW=202.19' TW=201.05' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.52 cfs @ 2.42 fps)

Summary for Pond CB27: CB #27

Inflow Area = 6,111 sf, 91.90% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.42 cfs @ 12.09 hrs, Volume= 1,434 cf
Outflow = 0.42 cfs @ 12.09 hrs, Volume= 1,434 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.42 cfs @ 12.09 hrs, Volume= 1,434 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.38' @ 12.09 hrs
Flood Elev= 204.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 18.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.90' S= 0.0056 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.41 cfs @ 12.09 hrs HW=201.38' TW=201.04' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.41 cfs @ 2.24 fps)

Summary for Pond CB28: CB #28

Inflow Area = 10,372 sf, 51.33% Impervious, Inflow Depth > 2.06" for 2YR event
Inflow = 0.56 cfs @ 12.09 hrs, Volume= 1,779 cf
Outflow = 0.56 cfs @ 12.09 hrs, Volume= 1,779 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.56 cfs @ 12.09 hrs, Volume= 1,779 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.22' @ 12.09 hrs
Flood Elev= 200.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.75'	**12.0" Round Culvert** L= 13.7' Ke= 0.500 Inlet / Outlet Invert= 197.75' / 197.69' S= 0.0044 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=198.21' TW=198.05' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.55 cfs @ 2.25 fps)

Summary for Pond CB29: CB #29

Inflow Area = 8,495 sf, 84.21% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 0.56 cfs @ 12.09 hrs, Volume= 1,848 cf
Outflow = 0.56 cfs @ 12.09 hrs, Volume= 1,848 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.56 cfs @ 12.09 hrs, Volume= 1,848 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.89' @ 12.09 hrs
Flood Elev= 208.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 13.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.31' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.54 cfs @ 12.09 hrs HW=205.88' TW=205.75' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.54 cfs @ 2.02 fps)

Summary for Pond CB30: CB #30

Inflow Area = 8,933 sf, 82.40% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 0.59 cfs @ 12.09 hrs, Volume= 1,943 cf
Outflow = 0.59 cfs @ 12.09 hrs, Volume= 1,943 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.59 cfs @ 12.09 hrs, Volume= 1,943 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.90' @ 12.09 hrs
Flood Elev= 208.54'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 17.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.29' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.57 cfs @ 12.09 hrs HW=205.89' TW=205.75' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.57 cfs @ 2.05 fps)

Summary for Pond CB31: CB #31

Inflow Area = 16,365 sf, 68.64% Impervious, Inflow Depth > 2.23" for 2YR event
Inflow = 0.95 cfs @ 12.09 hrs, Volume= 3,044 cf
Outflow = 0.95 cfs @ 12.09 hrs, Volume= 3,044 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.95 cfs @ 12.09 hrs, Volume= 3,044 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.80' @ 12.09 hrs
Flood Elev= 207.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.93 cfs @ 12.09 hrs HW=204.79' TW=204.06' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.93 cfs @ 2.69 fps)

Summary for Pond CB32: CB #32

Inflow Area = 12,710 sf, 70.47% Impervious, Inflow Depth > 2.32" for 2YR event
Inflow = 0.76 cfs @ 12.09 hrs, Volume= 2,460 cf
Outflow = 0.76 cfs @ 12.09 hrs, Volume= 2,460 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.76 cfs @ 12.09 hrs, Volume= 2,460 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.73' @ 12.09 hrs
Flood Elev= 207.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.75 cfs @ 12.09 hrs HW=204.72' TW=204.06' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.75 cfs @ 2.54 fps)

Summary for Pond CB33: CB #33

Inflow Area = 5,421 sf, 83.90% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 0.36 cfs @ 12.09 hrs, Volume= 1,179 cf
Outflow = 0.36 cfs @ 12.09 hrs, Volume= 1,179 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.36 cfs @ 12.09 hrs, Volume= 1,179 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.66' @ 12.09 hrs
Flood Elev= 208.45'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.28'	**12.0" Round Culvert** L= 11.7' Ke= 0.500 Inlet / Outlet Invert= 205.28' / 205.22' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.35 cfs @ 12.09 hrs HW=205.65' TW=205.53' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.35 cfs @ 1.94 fps)

Summary for Pond CB34: CB #34

Inflow Area = 8,622 sf, 80.51% Impervious, Inflow Depth > 2.51" for 2YR event
Inflow = 0.55 cfs @ 12.09 hrs, Volume= 1,804 cf
Outflow = 0.55 cfs @ 12.09 hrs, Volume= 1,804 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.55 cfs @ 12.09 hrs, Volume= 1,804 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.69' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 16.5' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.13' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.54 cfs @ 12.09 hrs HW=205.68' TW=205.53' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.54 cfs @ 2.15 fps)

Summary for Pond CB35: CB #35

Inflow Area = 4,149 sf, 98.10% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.30 cfs @ 12.09 hrs, Volume= 1,049 cf
Outflow = 0.30 cfs @ 12.09 hrs, Volume= 1,049 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.30 cfs @ 12.09 hrs, Volume= 1,049 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.36' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 15.2' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=207.36' TW=207.11' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.29 cfs @ 2.01 fps)

Summary for Pond CB36: CB #36

Inflow Area = 6,622 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.47 cfs @ 12.09 hrs, Volume= 1,675 cf
Outflow = 0.47 cfs @ 12.09 hrs, Volume= 1,675 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.47 cfs @ 12.09 hrs, Volume= 1,675 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.45' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.46 cfs @ 12.09 hrs HW=207.45' TW=207.11' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.46 cfs @ 2.25 fps)

Summary for Pond CB38: CB #38

Inflow Area = 7,637 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.54 cfs @ 12.09 hrs, Volume= 1,932 cf
Outflow = 0.54 cfs @ 12.09 hrs, Volume= 1,932 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.54 cfs @ 12.09 hrs, Volume= 1,932 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 210.28' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.7' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.53 cfs @ 12.09 hrs HW=210.26' TW=210.18' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.53 cfs @ 1.63 fps)

Summary for Pond CB39: CB #39

Inflow Area = 7,612 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.54 cfs @ 12.09 hrs, Volume= 1,925 cf
Outflow = 0.54 cfs @ 12.09 hrs, Volume= 1,925 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.54 cfs @ 12.09 hrs, Volume= 1,925 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.28' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.53 cfs @ 12.09 hrs HW=210.27' TW=210.18' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.53 cfs @ 1.62 fps)

Summary for Pond CB40: CB #40

Inflow Area = 4,211 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.30 cfs @ 12.09 hrs, Volume= 1,065 cf
Outflow = 0.30 cfs @ 12.09 hrs, Volume= 1,065 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.30 cfs @ 12.09 hrs, Volume= 1,065 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.02' @ 12.09 hrs
Flood Elev= 217.04'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.68'	**12.0" Round Culvert** L= 17.8' Ke= 0.500 Inlet / Outlet Invert= 213.68' / 213.55' S= 0.0073 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=214.01' TW=213.87' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.29 cfs @ 1.89 fps)

Summary for Pond CB41: CB #41

Inflow Area = 5,586 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.40 cfs @ 12.09 hrs, Volume= 1,413 cf
Outflow = 0.40 cfs @ 12.09 hrs, Volume= 1,413 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.40 cfs @ 12.09 hrs, Volume= 1,413 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.27' @ 12.09 hrs
Flood Elev= 217.06'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.89'	**12.0" Round Culvert** L= 18.4' Ke= 0.500 Inlet / Outlet Invert= 213.89' / 213.80' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.39 cfs @ 12.09 hrs HW=214.26' TW=213.87' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.39 cfs @ 2.16 fps)

Summary for Pond CB43: CB #43

Inflow Area = 3,109 sf, 75.36% Impervious, Inflow Depth > 2.14" for 2YR event
Inflow = 0.17 cfs @ 12.09 hrs, Volume= 555 cf
Outflow = 0.17 cfs @ 12.09 hrs, Volume= 555 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.17 cfs @ 12.09 hrs, Volume= 555 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.29' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.17 cfs @ 12.09 hrs HW=220.28' TW=220.20' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.17 cfs @ 1.41 fps)

Summary for Pond CB44: CB #44

Inflow Area = 1,978 sf, 84.43% Impervious, Inflow Depth > 2.42" for 2YR event
Inflow = 0.12 cfs @ 12.09 hrs, Volume= 398 cf
Outflow = 0.12 cfs @ 12.09 hrs, Volume= 398 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.12 cfs @ 12.09 hrs, Volume= 398 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 220.26' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.12 cfs @ 12.09 hrs HW=220.26' TW=220.20' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.12 cfs @ 1.14 fps)

Summary for Pond CB45: CB #45

Inflow Area = 2,465 sf, 50.30% Impervious, Inflow Depth > 1.45" for 2YR event
Inflow = 0.09 cfs @ 12.10 hrs, Volume= 299 cf
Outflow = 0.09 cfs @ 12.10 hrs, Volume= 299 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.09 cfs @ 12.10 hrs, Volume= 299 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.47' @ 12.10 hrs
Flood Elev= 224.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.29'	**12.0" Round Culvert** L= 18.2' Ke= 0.500 Inlet / Outlet Invert= 221.29' / 221.20' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.09 cfs @ 12.10 hrs HW=221.47' TW=221.21' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.09 cfs @ 1.48 fps)

Summary for Pond CB46: CB #46

Inflow Area = 4,397 sf, 50.97% Impervious, Inflow Depth > 1.45" for 2YR event
Inflow = 0.17 cfs @ 12.10 hrs, Volume= 533 cf
Outflow = 0.17 cfs @ 12.10 hrs, Volume= 533 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.17 cfs @ 12.10 hrs, Volume= 533 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.77' @ 12.10 hrs
Flood Elev= 224.69'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.53'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 221.53' / 221.45' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.17 cfs @ 12.10 hrs HW=221.77' TW=221.21' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.17 cfs @ 1.74 fps)

Summary for Pond CB47: CB#47

Inflow Area = 3,012 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.21 cfs @ 12.09 hrs, Volume= 762 cf
Outflow = 0.21 cfs @ 12.09 hrs, Volume= 762 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.21 cfs @ 12.09 hrs, Volume= 762 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.32' @ 12.09 hrs
Flood Elev= 230.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	225.05'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 225.05' / 224.95' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.09 hrs HW=225.31' TW=225.08' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.21 cfs @ 1.89 fps)

Summary for Pond CB48: CB#48

Inflow Area = 60,128 sf, 25.16% Impervious, Inflow Depth > 0.87" for 2YR event
Inflow = 1.03 cfs @ 12.19 hrs, Volume= 4,342 cf
Outflow = 1.03 cfs @ 12.19 hrs, Volume= 4,342 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.03 cfs @ 12.19 hrs, Volume= 4,342 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.40' @ 12.19 hrs
Flood Elev= 230.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.82'	**15.0" Round Culvert** L= 16.9' Ke= 0.500 Inlet / Outlet Invert= 224.82' / 224.74' S= 0.0047 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.01 cfs @ 12.19 hrs HW=225.40' TW=225.14' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.01 cfs @ 2.70 fps)

Summary for Pond CB49: CB #49

Inflow Area = 5,238 sf, 84.59% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 0.34 cfs @ 12.09 hrs, Volume= 1,139 cf
Outflow = 0.34 cfs @ 12.09 hrs, Volume= 1,139 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.34 cfs @ 12.09 hrs, Volume= 1,139 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.25' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.76'	**12.0" Round Culvert** L= 15.5' Ke= 0.500 Inlet / Outlet Invert= 202.76' / 202.68' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.34 cfs @ 12.09 hrs HW=203.24' TW=203.18' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.34 cfs @ 1.31 fps)

Summary for Pond CB50: CB #50

Inflow Area = 15,040 sf, 77.20% Impervious, Inflow Depth > 2.51" for 2YR event
Inflow = 0.96 cfs @ 12.09 hrs, Volume= 3,147 cf
Outflow = 0.96 cfs @ 12.09 hrs, Volume= 3,147 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.96 cfs @ 12.09 hrs, Volume= 3,147 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.41' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.70' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.94 cfs @ 12.09 hrs HW=203.40' TW=203.18' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.94 cfs @ 2.63 fps)

Summary for Pond CB51: CB #51

Inflow Area = 6,823 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.49 cfs @ 12.09 hrs, Volume= 1,726 cf
Outflow = 0.49 cfs @ 12.09 hrs, Volume= 1,726 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.49 cfs @ 12.09 hrs, Volume= 1,726 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.76' @ 12.09 hrs
Flood Elev= 212.77'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.35'	**12.0" Round Culvert** L= 31.4' Ke= 0.500 Inlet / Outlet Invert= 202.35' / 202.19' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.47 cfs @ 12.09 hrs HW=202.76' TW=202.32' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.47 cfs @ 2.33 fps)

Summary for Pond CB52: CB #52

Inflow Area = 9,052 sf, 87.14% Impervious, Inflow Depth > 2.71" for 2YR event
Inflow = 0.61 cfs @ 12.09 hrs, Volume= 2,045 cf
Outflow = 0.61 cfs @ 12.09 hrs, Volume= 2,045 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.61 cfs @ 12.09 hrs, Volume= 2,045 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.15' @ 12.09 hrs
Flood Elev= 205.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.68'	**12.0" Round Culvert** L= 25.5' Ke= 0.500 Inlet / Outlet Invert= 202.68' / 202.55' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.59 cfs @ 12.09 hrs HW=203.14' TW=202.32' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 0.59 cfs @ 2.45 fps)

Summary for Pond CB53: CB #53

Inflow Area = 7,863 sf, 86.52% Impervious, Inflow Depth > 2.51" for 2YR event
Inflow = 0.50 cfs @ 12.09 hrs, Volume= 1,646 cf
Outflow = 0.50 cfs @ 12.09 hrs, Volume= 1,646 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.50 cfs @ 12.09 hrs, Volume= 1,646 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.20' @ 12.09 hrs
Flood Elev= 205.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 32.0' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.62' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.49 cfs @ 12.09 hrs HW=203.20' TW=201.07' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 0.49 cfs @ 2.34 fps)

Summary for Pond CB54: CB #54

Inflow Area = 4,821 sf, 86.85% Impervious, Inflow Depth > 2.32" for 2YR event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 933 cf
Outflow = 0.29 cfs @ 12.09 hrs, Volume= 933 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.29 cfs @ 12.09 hrs, Volume= 933 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 202.98' @ 12.09 hrs
Flood Elev= 205.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.66'	**12.0" Round Culvert** L= 36.7' Ke= 0.500 Inlet / Outlet Invert= 202.66' / 202.48' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 12.09 hrs HW=202.97' TW=201.07' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.28 cfs @ 2.03 fps)

Summary for Pond CB7: CB#5

Inflow Area = 4,650 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.33 cfs @ 12.09 hrs, Volume= 1,176 cf
Outflow = 0.33 cfs @ 12.09 hrs, Volume= 1,176 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.33 cfs @ 12.09 hrs, Volume= 1,176 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 212.90' @ 12.09 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.60'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 212.60' / 212.45' S= 0.0099 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.32 cfs @ 12.09 hrs HW=212.90' TW=210.95' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.32 cfs @ 2.44 fps)

Summary for Pond CB8: CB#8

Inflow Area = 5,450 sf, 88.75% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 0.36 cfs @ 12.09 hrs, Volume= 1,185 cf
Outflow = 0.36 cfs @ 12.09 hrs, Volume= 1,185 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.36 cfs @ 12.09 hrs, Volume= 1,185 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.11' @ 12.09 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.79'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 213.79' / 213.64' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.35 cfs @ 12.09 hrs HW=214.11' TW=210.95' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.35 cfs @ 2.42 fps)

Summary for Pond CB9: CB #9

Inflow Area = 16,307 sf, 93.95% Impervious, Inflow Depth > 2.92" for 2YR event
Inflow = 1.14 cfs @ 12.09 hrs, Volume= 3,974 cf
Outflow = 1.14 cfs @ 12.09 hrs, Volume= 3,974 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.14 cfs @ 12.09 hrs, Volume= 3,974 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.66' @ 12.09 hrs
Flood Elev= 213.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.10'	**12.0" Round Culvert** L= 19.9' Ke= 0.500 Inlet / Outlet Invert= 210.10' / 209.71' S= 0.0196 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.11 cfs @ 12.09 hrs HW=210.65' TW=209.85' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.11 cfs @ 2.52 fps)

Summary for Pond D10: DMH #10

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 1.39" for 2YR event
Inflow = 0.31 cfs @ 12.10 hrs, Volume= 985 cf
Outflow = 0.31 cfs @ 12.10 hrs, Volume= 985 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.31 cfs @ 12.10 hrs, Volume= 985 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.66' @ 12.10 hrs
Flood Elev= 206.49'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.33'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 203.33' / 203.25' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.31 cfs @ 12.10 hrs HW=203.66' TW=197.13' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.31 cfs @ 2.04 fps)

Summary for Pond D11: DMH #11

Inflow Area = 36,689 sf, 73.28% Impervious, Inflow Depth > 2.05" for 2YR event
Inflow = 2.02 cfs @ 12.10 hrs, Volume= 6,256 cf
Outflow = 2.02 cfs @ 12.10 hrs, Volume= 6,256 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.02 cfs @ 12.10 hrs, Volume= 6,256 cf
Routed to Pond OCS3 : OCS#3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 205.02' @ 12.10 hrs
Flood Elev= 208.33'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.25'	**18.0" Round Culvert** L= 44.6' Ke= 0.500 Inlet / Outlet Invert= 204.25' / 204.03' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.99 cfs @ 12.10 hrs HW=205.01' TW=203.95' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.99 cfs @ 3.22 fps)

Summary for Pond D12: DMH #12

Inflow Area = 22,113 sf, 88.07% Impervious, Inflow Depth > 2.49" for 2YR event
Inflow = 1.40 cfs @ 12.09 hrs, Volume= 4,590 cf
Outflow = 1.40 cfs @ 12.09 hrs, Volume= 4,590 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.40 cfs @ 12.09 hrs, Volume= 4,590 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.96' @ 12.09 hrs
Flood Elev= 207.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.21'	**12.0" Round Culvert** L= 41.9' Ke= 0.500 Inlet / Outlet Invert= 203.21' / 203.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.36 cfs @ 12.09 hrs HW=203.95' TW=202.96' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.36 cfs @ 3.06 fps)

Summary for Pond D13: DMH #13

Inflow Area = 81,632 sf, 72.61% Impervious, Inflow Depth > 2.22" for 2YR event
Inflow = 4.21 cfs @ 12.09 hrs, Volume= 15,091 cf
Outflow = 4.21 cfs @ 12.09 hrs, Volume= 15,091 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.21 cfs @ 12.09 hrs, Volume= 15,091 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.97' @ 12.09 hrs
Flood Elev= 208.12'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.95'	**24.0" Round Culvert** L= 60.1' Ke= 0.500 Inlet / Outlet Invert= 201.95' / 201.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=4.15 cfs @ 12.09 hrs HW=202.96' TW=197.13' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 4.15 cfs @ 3.80 fps)

Summary for Pond D14: DMH #14

Inflow Area = 38,112 sf, 77.40% Impervious, Inflow Depth > 2.54" for 2YR event
Inflow = 2.43 cfs @ 12.09 hrs, Volume= 8,054 cf
Outflow = 2.43 cfs @ 12.09 hrs, Volume= 8,054 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.43 cfs @ 12.09 hrs, Volume= 8,054 cf
Routed to Pond d13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.91' @ 12.09 hrs
Flood Elev= 208.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.13'	**18.0" Round Culvert** L= 256.3' Ke= 0.500 Inlet / Outlet Invert= 204.13' / 202.85' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.37 cfs @ 12.09 hrs HW=204.90' TW=202.96' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.37 cfs @ 3.79 fps)

Summary for Pond D16: DMH #16

Inflow Area = 16,417 sf, 76.69% Impervious, Inflow Depth > 2.56" for 2YR event
Inflow = 1.06 cfs @ 12.09 hrs, Volume= 3,505 cf
Outflow = 1.06 cfs @ 12.09 hrs, Volume= 3,505 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.06 cfs @ 12.09 hrs, Volume= 3,505 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.47' @ 12.09 hrs
Flood Elev= 208.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.90'	**15.0" Round Culvert** L= 103.5' Ke= 0.500 Inlet / Outlet Invert= 204.90' / 204.38' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.04 cfs @ 12.09 hrs HW=205.46' TW=204.90' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.04 cfs @ 2.84 fps)

Summary for Pond D17: DMH #17

Inflow Area = 14,946 sf, 75.26% Impervious, Inflow Depth > 2.52" for 2YR event
Inflow = 0.95 cfs @ 12.09 hrs, Volume= 3,144 cf
Outflow = 0.95 cfs @ 12.09 hrs, Volume= 3,144 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.95 cfs @ 12.09 hrs, Volume= 3,144 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.05' @ 12.09 hrs
Flood Elev= 204.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.55'	**12.0" Round Culvert** L= 91.6' Ke= 0.500 Inlet / Outlet Invert= 200.55' / 197.69' S= 0.0312 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.93 cfs @ 12.09 hrs HW=201.04' TW=198.05' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.93 cfs @ 2.40 fps)

Summary for Pond D18: DMH #18

Inflow Area = 25,318 sf, 65.46% Impervious, Inflow Depth > 2.33" for 2YR event
Inflow = 1.51 cfs @ 12.09 hrs, Volume= 4,923 cf
Outflow = 1.51 cfs @ 12.09 hrs, Volume= 4,923 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.51 cfs @ 12.09 hrs, Volume= 4,923 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.06' @ 12.09 hrs
Flood Elev= 201.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.44'	**15.0" Round Culvert** L= 46.3' Ke= 0.500 Inlet / Outlet Invert= 197.44' / 196.98' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.48 cfs @ 12.09 hrs HW=198.05' TW=195.74' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.48 cfs @ 3.65 fps)

Summary for Pond D19: DMH #19

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 1.15 cfs @ 12.09 hrs, Volume= 3,791 cf
Outflow = 1.15 cfs @ 12.09 hrs, Volume= 3,791 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.15 cfs @ 12.09 hrs, Volume= 3,791 cf
Routed to Pond d20 : DMH #20

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.76' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.19'	**12.0" Round Culvert** L= 82.5' Ke= 0.500 Inlet / Outlet Invert= 205.19' / 204.43' S= 0.0092 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.12 cfs @ 12.09 hrs HW=205.75' TW=204.78' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.12 cfs @ 3.57 fps)

Summary for Pond D2: DMH#2

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 1.22" for 2YR event
Inflow = 1.72 cfs @ 12.13 hrs, Volume= 7,465 cf
Outflow = 1.72 cfs @ 12.13 hrs, Volume= 7,465 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.72 cfs @ 12.13 hrs, Volume= 7,465 cf
Routed to Pond P205 : INFILTRATION POND #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.57' @ 12.13 hrs
Flood Elev= 212.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**15.0" Round Culvert** L= 38.2' Ke= 0.500 Inlet / Outlet Invert= 206.90' / 206.52' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.69 cfs @ 12.13 hrs HW=207.57' TW=205.31' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.69 cfs @ 3.69 fps)

Summary for Pond D20: DMH #20

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 2.61" for 2YR event
Inflow = 1.15 cfs @ 12.09 hrs, Volume= 3,791 cf
Outflow = 1.15 cfs @ 12.09 hrs, Volume= 3,791 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.15 cfs @ 12.09 hrs, Volume= 3,791 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.78' @ 12.09 hrs
Flood Elev= 207.68'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**15.0" Round Culvert** L= 63.5' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 203.87' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.12 cfs @ 12.09 hrs HW=204.78' TW=204.06' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.12 cfs @ 2.90 fps)

Summary for Pond D21: DMH #21

Inflow Area = 71,317 sf, 79.77% Impervious, Inflow Depth > 2.52" for 2YR event
Inflow = 4.53 cfs @ 12.09 hrs, Volume= 15,002 cf
Outflow = 4.53 cfs @ 12.09 hrs, Volume= 15,002 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.53 cfs @ 12.09 hrs, Volume= 15,002 cf
Routed to Pond p212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.08' @ 12.09 hrs
Flood Elev= 207.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.02'	**24.0" Round Culvert** L= 72.4' Ke= 0.500 Inlet / Outlet Invert= 203.02' / 202.66' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=4.42 cfs @ 12.09 hrs HW=204.06' TW=200.94' (Dynamic Tailwater)
└**1=Culvert** (Barrel Controls 4.42 cfs @ 3.89 fps)

Summary for Pond D22: DMH #22

Inflow Area = 24,814 sf, 89.39% Impervious, Inflow Depth > 2.76" for 2YR event
Inflow = 1.67 cfs @ 12.09 hrs, Volume= 5,708 cf
Outflow = 1.67 cfs @ 12.09 hrs, Volume= 5,708 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.67 cfs @ 12.09 hrs, Volume= 5,708 cf
Routed to Pond d21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.54' @ 12.09 hrs
Flood Elev= 208.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.87'	**15.0" Round Culvert** L= 134.2' Ke= 0.500 Inlet / Outlet Invert= 204.87' / 203.92' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=205.53' TW=204.06' (Dynamic Tailwater)
└**1=Culvert** (Barrel Controls 1.63 cfs @ 3.64 fps)

Summary for Pond D23: DMH #23

Inflow Area = 10,771 sf, 99.27% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 0.77 cfs @ 12.09 hrs, Volume= 2,724 cf
Outflow = 0.77 cfs @ 12.09 hrs, Volume= 2,724 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.77 cfs @ 12.09 hrs, Volume= 2,724 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.11' @ 12.09 hrs
Flood Elev= 210.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**15.0" Round Culvert** L= 173.3' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 204.97' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.75 cfs @ 12.09 hrs HW=207.11' TW=205.52' (Dynamic Tailwater)
└**1=Culvert** (Outlet Controls 0.75 cfs @ 3.20 fps)

Summary for Pond D25: DMH #25

Inflow Area = 36,995 sf, 87.96% Impervious, Inflow Depth > 2.63" for 2YR event
Inflow = 2.34 cfs @ 12.09 hrs, Volume= 8,121 cf
Outflow = 2.34 cfs @ 12.09 hrs, Volume= 8,121 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.34 cfs @ 12.09 hrs, Volume= 8,121 cf
Routed to Pond P210 : POCKET WETLAND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.19' @ 12.09 hrs
Flood Elev= 213.11'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.36'	**15.0" Round Culvert** L= 237.6' Ke= 0.500 Inlet / Outlet Invert= 209.36' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.28 cfs @ 12.09 hrs HW=210.18' TW=202.37' (Dynamic Tailwater)
1=Culvert (Barrel Controls 2.28 cfs @ 3.78 fps)

Summary for Pond D27: DMH #27

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 2.35" for 2YR event
Inflow = 1.26 cfs @ 12.09 hrs, Volume= 4,263 cf
Outflow = 1.26 cfs @ 12.09 hrs, Volume= 4,263 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.26 cfs @ 12.09 hrs, Volume= 4,263 cf
Routed to Pond D35 : DMH #35

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.88' @ 12.09 hrs
Flood Elev= 217.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.34'	**15.0" Round Culvert** L= 63.9' Ke= 0.500 Inlet / Outlet Invert= 213.34' / 212.38' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.23 cfs @ 12.09 hrs HW=213.87' TW=212.81' (Dynamic Tailwater)
1=Culvert (Inlet Controls 1.23 cfs @ 2.48 fps)

Summary for Pond D28: DMH #28

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 1.79" for 2YR event
Inflow = 0.56 cfs @ 12.09 hrs, Volume= 1,785 cf
Outflow = 0.56 cfs @ 12.09 hrs, Volume= 1,785 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.56 cfs @ 12.09 hrs, Volume= 1,785 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 217.83' @ 12.09 hrs
Flood Elev= 220.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	217.46'	**12.0" Round Culvert** L= 158.3' Ke= 0.500 Inlet / Outlet Invert= 217.46' / 214.29' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=217.83' TW=213.87' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.55 cfs @ 2.07 fps)

Summary for Pond D29: DMH #29

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 1.79" for 2YR event
Inflow = 0.56 cfs @ 12.09 hrs, Volume= 1,785 cf
Outflow = 0.56 cfs @ 12.09 hrs, Volume= 1,785 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.56 cfs @ 12.09 hrs, Volume= 1,785 cf
Routed to Pond D28 : DMH #28

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.20' @ 12.09 hrs
Flood Elev= 223.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	219.83'	**12.0" Round Culvert** L= 150.9' Ke= 0.500 Inlet / Outlet Invert= 219.83' / 217.55' S= 0.0151 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=220.20' TW=217.83' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.55 cfs @ 2.07 fps)

Summary for Pond D30: DMH #30

Inflow Area = 6,862 sf, 50.73% Impervious, Inflow Depth > 1.45" for 2YR event
Inflow = 0.26 cfs @ 12.10 hrs, Volume= 832 cf
Outflow = 0.26 cfs @ 12.10 hrs, Volume= 832 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.26 cfs @ 12.10 hrs, Volume= 832 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.21' @ 12.10 hrs
Flood Elev= 224.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.92'	**12.0" Round Culvert** L= 184.2' Ke= 0.500 Inlet / Outlet Invert= 220.92' / 220.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.26 cfs @ 12.10 hrs HW=221.21' TW=220.20' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.26 cfs @ 2.04 fps)

Summary for Pond D31: DMH#31

Inflow Area = 63,140 sf, 28.73% Impervious, Inflow Depth > 0.97" for 2YR event
Inflow = 1.18 cfs @ 12.17 hrs, Volume= 5,104 cf
Outflow = 1.18 cfs @ 12.17 hrs, Volume= 5,104 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.18 cfs @ 12.17 hrs, Volume= 5,104 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.15' @ 12.17 hrs
Flood Elev= 229.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.63'	**15.0" Round Culvert** L= 288.5' Ke= 0.500 Inlet / Outlet Invert= 224.63' / 213.09' S= 0.0400 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.15 cfs @ 12.17 hrs HW=225.14' TW=210.96' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.15 cfs @ 2.44 fps)

Summary for Pond D34: DMH #34

Inflow Area = 23,255 sf,100.00% Impervious, Inflow Depth > 3.04" for 2YR event
Inflow = 1.66 cfs @ 12.09 hrs, Volume= 5,882 cf
Outflow = 1.66 cfs @ 12.09 hrs, Volume= 5,882 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.66 cfs @ 12.09 hrs, Volume= 5,882 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.77' @ 12.09 hrs
Flood Elev= 202.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	198.07'	**12.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 198.07' / 197.03' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.61 cfs @ 12.09 hrs HW=198.75' TW=195.74' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.61 cfs @ 2.82 fps)

Summary for Pond D35: DMH #35

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 2.35" for 2YR event
Inflow = 1.26 cfs @ 12.09 hrs, Volume= 4,263 cf
Outflow = 1.26 cfs @ 12.09 hrs, Volume= 4,263 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.26 cfs @ 12.09 hrs, Volume= 4,263 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 212.82' @ 12.09 hrs
Flood Elev= 215.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.28'	**15.0" Round Culvert** L= 171.5' Ke= 0.500 Inlet / Outlet Invert= 212.28' / 209.71' S= 0.0150 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.23 cfs @ 12.09 hrs HW=212.81' TW=210.18' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.23 cfs @ 2.48 fps)

Summary for Pond D4: DMH#4

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 1.22" for 2YR event
Inflow = 1.72 cfs @ 12.13 hrs, Volume= 7,465 cf
Outflow = 1.72 cfs @ 12.13 hrs, Volume= 7,465 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.72 cfs @ 12.13 hrs, Volume= 7,465 cf
Routed to Pond D2 : DMH#2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.98' @ 12.13 hrs
Flood Elev= 217.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.34'	**15.0" Round Culvert** L= 222.3' Ke= 0.500 Inlet / Outlet Invert= 210.34' / 207.01' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.69 cfs @ 12.13 hrs HW=210.97' TW=207.57' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.69 cfs @ 2.71 fps)

Summary for Pond D5: DMH #5

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 2.98" for 2YR event
Inflow = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf
Outflow = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf
Routed to Pond D6 : DMH #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 209.86' @ 12.09 hrs
Flood Elev= 212.97'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.09'	**18.0" Round Culvert** L= 183.0' Ke= 0.500 Inlet / Outlet Invert= 209.09' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.09 cfs @ 12.09 hrs HW=209.85' TW=208.81' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 2.09 cfs @ 3.39 fps)

Summary for Pond D6: DMH #6

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 2.98" for 2YR event
Inflow = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf
Outflow = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf
Routed to Pond D7 : DMH #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.82' @ 12.09 hrs
Flood Elev= 214.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	208.07'	**18.0" Round Culvert** L= 299.7' Ke= 0.500 Inlet / Outlet Invert= 208.07' / 206.57' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.09 cfs @ 12.09 hrs HW=208.81' TW=207.13' (Dynamic Tailwater)
1=Culvert (Outlet Controls 2.09 cfs @ 3.51 fps)

Summary for Pond D7: DMH #7

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 2.98" for 2YR event
Inflow = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf
Outflow = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.15 cfs @ 12.09 hrs, Volume= 7,549 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.14' @ 12.09 hrs
Flood Elev= 213.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 44.2' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 204.04' S= 0.0550 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.09 cfs @ 12.09 hrs HW=207.13' TW=200.93' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.09 cfs @ 2.77 fps)

Summary for Pond D8: DMH #8

Inflow Area = 18,765 sf, 91.12% Impervious, Inflow Depth > 2.58" for 2YR event
Inflow = 1.20 cfs @ 12.09 hrs, Volume= 4,028 cf
Outflow = 1.20 cfs @ 12.09 hrs, Volume= 4,028 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.20 cfs @ 12.09 hrs, Volume= 4,028 cf
Routed to Pond D9 : DMH #9

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.27' @ 12.09 hrs
Flood Elev= 204.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.57'	**12.0" Round Culvert** L= 87.7' Ke= 0.500 Inlet / Outlet Invert= 200.57' / 200.13' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.17 cfs @ 12.09 hrs HW=201.26' TW=200.72' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.17 cfs @ 2.87 fps)

Summary for Pond D9: DMH #9

Inflow Area =	18,765 sf, 91.12% Impervious,	Inflow Depth > 2.58"	for 2YR event
Inflow =	1.20 cfs @ 12.09 hrs, Volume=	4,028 cf	
Outflow =	1.20 cfs @ 12.09 hrs, Volume=	4,028 cf,	Atten= 0%, Lag= 0.0 min
Primary =	1.20 cfs @ 12.09 hrs, Volume=	4,028 cf	

Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 200.73' @ 12.09 hrs
Flood Elev= 204.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.03'	**12.0" Round Culvert** L= 11.9' Ke= 0.500 Inlet / Outlet Invert= 200.03' / 199.97' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.17 cfs @ 12.09 hrs HW=200.72' TW=197.12' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.17 cfs @ 2.84 fps)

Summary for Pond DE61: DRIP #61

Inflow Area =	4,247 sf, 92.68% Impervious,	Inflow Depth > 2.82"	for 2YR event
Inflow =	0.29 cfs @ 12.09 hrs, Volume=	997 cf	
Outflow =	0.24 cfs @ 12.15 hrs, Volume=	857 cf,	Atten= 16%, Lag= 3.5 min
Discarded =	0.00 cfs @ 7.35 hrs, Volume=	181 cf	
Primary =	0.24 cfs @ 12.15 hrs, Volume=	676 cf	

Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.08' @ 12.15 hrs Surf.Area= 665 sf Storage= 238 cf

Plug-Flow detention time= 100.3 min calculated for 857 cf (86% of inflow)
Center-of-Mass det. time= 39.1 min (812.1 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.35 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.24 cfs @ 12.15 hrs HW=213.08' TW=208.02' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.24 cfs @ 2.06 fps)

Summary for Pond DE62: DRIP #62

Inflow Area = 4,247 sf, 92.68% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 997 cf
Outflow = 0.24 cfs @ 12.15 hrs, Volume= 857 cf, Atten= 16%, Lag= 3.5 min
Discarded = 0.00 cfs @ 7.35 hrs, Volume= 181 cf
Primary = 0.24 cfs @ 12.15 hrs, Volume= 676 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.08' @ 12.15 hrs Surf.Area= 665 sf Storage= 238 cf

Plug-Flow detention time= 100.3 min calculated for 857 cf (86% of inflow)
Center-of-Mass det. time= 39.1 min (812.1 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.35 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.24 cfs @ 12.15 hrs HW=213.08' TW=208.02' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.24 cfs @ 2.06 fps)

Summary for Pond DE63: DRIP #63

Inflow Area = 3,013 sf, 88.68% Impervious, Inflow Depth > 2.71" for 2YR event
Inflow = 0.20 cfs @ 12.09 hrs, Volume= 681 cf
Outflow = 0.18 cfs @ 12.13 hrs, Volume= 596 cf, Atten= 11%, Lag= 2.6 min
Discarded = 0.00 cfs @ 7.45 hrs, Volume= 107 cf
Primary = 0.18 cfs @ 12.13 hrs, Volume= 488 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.82' @ 12.13 hrs Surf.Area= 404 sf Storage= 135 cf

Plug-Flow detention time= 90.3 min calculated for 596 cf (87% of inflow)
Center-of-Mass det. time= 33.7 min (813.5 - 779.9)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	404	0.0	0	0
207.00	404	40.0	2	2
208.99	404	40.0	322	323
209.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 207.50' / 207.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.45 hrs HW=207.01' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.18 cfs @ 12.13 hrs HW=207.82' TW=202.04' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Barrel Controls 0.18 cfs @ 1.90 fps)

Summary for Pond DE64: DRIP #64

Inflow Area = 3,470 sf, 91.59% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.24 cfs @ 12.09 hrs, Volume= 814 cf
Outflow = 0.21 cfs @ 12.13 hrs, Volume= 715 cf, Atten= 12%, Lag= 2.8 min
Discarded = 0.00 cfs @ 7.05 hrs, Volume= 129 cf
Primary = 0.21 cfs @ 12.13 hrs, Volume= 586 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.85' @ 12.13 hrs Surf.Area= 470 sf Storage= 162 cf

Plug-Flow detention time= 90.8 min calculated for 715 cf (88% of inflow)
Center-of-Mass det. time= 35.0 min (808.0 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	204.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.99	470	0.0	0	0
205.00	470	40.0	2	2
206.99	470	40.0	374	376
207.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	205.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 205.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	204.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.05 hrs HW=205.01' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.20 cfs @ 12.13 hrs HW=205.85' TW=202.04' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Barrel Controls 0.20 cfs @ 1.97 fps)

Summary for Pond DE65: DRIP #65

Inflow Area = 3,016 sf, 88.69% Impervious, Inflow Depth > 2.71" for 2YR event
Inflow = 0.20 cfs @ 12.09 hrs, Volume= 682 cf
Outflow = 0.18 cfs @ 12.13 hrs, Volume= 596 cf, Atten= 11%, Lag= 2.6 min
Discarded = 0.00 cfs @ 7.45 hrs, Volume= 107 cf
Primary = 0.18 cfs @ 12.13 hrs, Volume= 489 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.82' @ 12.13 hrs Surf.Area= 404 sf Storage= 135 cf

Plug-Flow detention time= 89.4 min calculated for 595 cf (87% of inflow)
Center-of-Mass det. time= 33.6 min (813.5 - 779.9)

Volume	Invert	Avail.Storage	Storage Description
#1	205.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.99	404	0.0	0	0
206.00	404	40.0	2	2
207.99	404	40.0	322	323
208.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	207.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.50' / 206.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.45 hrs HW=206.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.18 cfs @ 12.13 hrs HW=206.82' TW=202.04' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.18 cfs @ 1.90 fps)

Summary for Pond DE66: DRIP #66

Inflow Area = 3,407 sf, 91.46% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.23 cfs @ 12.09 hrs, Volume= 800 cf
Outflow = 0.21 cfs @ 12.13 hrs, Volume= 700 cf, Atten= 12%, Lag= 2.8 min
Discarded = 0.00 cfs @ 6.25 hrs, Volume= 129 cf
Primary = 0.20 cfs @ 12.13 hrs, Volume= 571 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 208.65' @ 12.13 hrs Surf.Area= 470 sf Storage= 161 cf

Plug-Flow detention time= 91.7 min calculated for 700 cf (88% of inflow)
Center-of-Mass det. time= 35.3 min (808.3 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	207.79'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.79	470	0.0	0	0
207.80	470	40.0	2	2
209.79	470	40.0	374	376
209.80	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.70'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.30'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.30' / 208.25' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.79'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 6.25 hrs HW=207.80' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.20 cfs @ 12.13 hrs HW=208.64' TW=202.04' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Barrel Controls 0.20 cfs @ 1.96 fps)

Summary for Pond DE67: DRIP #67

Inflow Area = 3,481 sf, 91.61% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.24 cfs @ 12.09 hrs, Volume= 817 cf
Outflow = 0.21 cfs @ 12.13 hrs, Volume= 718 cf, Atten= 12%, Lag= 2.8 min
Discarded = 0.00 cfs @ 7.00 hrs, Volume= 129 cf
Primary = 0.21 cfs @ 12.13 hrs, Volume= 588 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.85' @ 12.13 hrs Surf.Area= 470 sf Storage= 162 cf

Plug-Flow detention time= 89.9 min calculated for 716 cf (88% of inflow)
Center-of-Mass det. time= 35.0 min (807.9 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	470	0.0	0	0
208.00	470	40.0	2	2
209.99	470	40.0	374	376
210.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 208.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.00 hrs HW=208.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.21 cfs @ 12.13 hrs HW=208.85' TW=208.02' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.21 cfs @ 1.98 fps)

Summary for Pond DE68: DRIP #68

Inflow Area = 4,212 sf, 92.62% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 989 cf
Outflow = 0.25 cfs @ 12.14 hrs, Volume= 850 cf, Atten= 13%, Lag= 3.0 min
Discarded = 0.00 cfs @ 7.35 hrs, Volume= 181 cf
Primary = 0.25 cfs @ 12.14 hrs, Volume= 669 cf
Routed to Pond OCS4 : OCS#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.82' @ 12.14 hrs Surf.Area= 665 sf Storage= 220 cf

Plug-Flow detention time= 97.1 min calculated for 848 cf (86% of inflow)
Center-of-Mass det. time= 37.0 min (810.0 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	665	0.0	0	0
207.00	665	40.0	3	3
208.99	665	40.0	529	532
209.00	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 207.50' / 206.00' S= 0.0750 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.35 hrs HW=207.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.25 cfs @ 12.14 hrs HW=207.81' TW=203.64' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Inlet Controls 0.25 cfs @ 1.90 fps)

Summary for Pond DE69: DRIP #69

Inflow Area = 3,480 sf, 91.61% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.24 cfs @ 12.09 hrs, Volume= 817 cf
Outflow = 0.21 cfs @ 12.13 hrs, Volume= 717 cf, Atten= 12%, Lag= 2.8 min
Discarded = 0.00 cfs @ 7.00 hrs, Volume= 129 cf
Primary = 0.21 cfs @ 12.13 hrs, Volume= 588 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.35' @ 12.13 hrs Surf.Area= 470 sf Storage= 162 cf

Plug-Flow detention time= 89.9 min calculated for 716 cf (88% of inflow)
Center-of-Mass det. time= 35.0 min (807.9 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	205.49'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.49	470	0.0	0	0
205.50	470	40.0	2	2
207.49	470	40.0	374	376
207.50	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.00' / 205.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.00 hrs HW=205.51' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.21 cfs @ 12.13 hrs HW=206.35' TW=201.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.21 cfs @ 1.98 fps)

Summary for Pond DE70: DRIP #70

Inflow Area = 3,476 sf, 91.60% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.24 cfs @ 12.09 hrs, Volume= 816 cf
Outflow = 0.21 cfs @ 12.13 hrs, Volume= 716 cf, Atten= 12%, Lag= 2.8 min
Discarded = 0.00 cfs @ 6.20 hrs, Volume= 129 cf
Primary = 0.21 cfs @ 12.13 hrs, Volume= 587 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.75' @ 12.13 hrs Surf.Area= 470 sf Storage= 162 cf

Plug-Flow detention time= 90.7 min calculated for 716 cf (88% of inflow)
Center-of-Mass det. time= 35.0 min (808.0 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	205.89'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.89	470	0.0	0	0
205.90	470	40.0	2	2
207.89	470	40.0	374	376
207.90	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.80'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.40'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.40' / 206.35' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.89'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 6.20 hrs HW=205.90' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.21 cfs @ 12.13 hrs HW=206.75' TW=201.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.21 cfs @ 1.98 fps)

Summary for Pond DE71: DRIP #71

Inflow Area = 4,210 sf, 92.61% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 988 cf
Outflow = 0.24 cfs @ 12.15 hrs, Volume= 848 cf, Atten= 16%, Lag= 3.5 min
Discarded = 0.00 cfs @ 7.75 hrs, Volume= 181 cf
Primary = 0.24 cfs @ 12.15 hrs, Volume= 667 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.38' @ 12.15 hrs Surf.Area= 665 sf Storage= 237 cf

Plug-Flow detention time= 100.7 min calculated for 848 cf (86% of inflow)
Center-of-Mass det. time= 39.3 min (812.3 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	206.49'	805 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.49	665	0.0	0	0
206.50	665	40.0	3	3
209.49	665	40.0	795	798
209.50	665	100.0	7	805

Device	Routing	Invert	Outlet Devices
#1	Primary	209.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 207.00' / 206.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 7.75 hrs HW=206.52' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.24 cfs @ 12.15 hrs HW=207.38' TW=201.12' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.24 cfs @ 2.06 fps)

Summary for Pond DECH: DRIP #CH

Inflow Area = 6,262 sf, 92.70% Impervious, Inflow Depth > 2.82" for 2YR event
Inflow = 0.43 cfs @ 12.09 hrs, Volume= 1,470 cf
Outflow = 0.28 cfs @ 12.19 hrs, Volume= 1,469 cf, Atten= 35%, Lag= 5.9 min
Discarded = 0.04 cfs @ 11.50 hrs, Volume= 1,053 cf
Primary = 0.25 cfs @ 12.19 hrs, Volume= 416 cf
Routed to Pond CB18 : CB #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 209.01' @ 12.19 hrs Surf.Area= 636 sf Storage= 260 cf

Plug-Flow detention time= 19.9 min calculated for 1,469 cf (100% of inflow)
Center-of-Mass det. time= 19.7 min (792.7 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	770 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	636	0.0	0	0
208.00	636	40.0	3	3
210.99	636	40.0	761	763
211.00	636	100.0	6	770

Device	Routing	Invert	Outlet Devices
#1	Primary	210.90'	**160.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**4.0" Round Culvert** L= 80.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 205.10' S= 0.0425 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#3	Discarded	207.99'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.04 cfs @ 11.50 hrs HW=208.02' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.25 cfs @ 12.19 hrs HW=209.01' TW=205.27' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Inlet Controls 0.25 cfs @ 2.81 fps)

Summary for Pond DMH32: DMH #32

Inflow Area = 20,278 sf, 79.11% Impervious, Inflow Depth > 2.54" for 2YR event
Inflow = 1.31 cfs @ 12.09 hrs, Volume= 4,287 cf
Outflow = 1.31 cfs @ 12.09 hrs, Volume= 4,287 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.31 cfs @ 12.09 hrs, Volume= 4,287 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.19' @ 12.09 hrs
Flood Elev= 206.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.59'	**12.0" Round Culvert** L= 19.2' Ke= 0.500 Inlet / Outlet Invert= 202.59' / 201.57' S= 0.0531 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.27 cfs @ 12.09 hrs HW=203.18' TW=200.94' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.27 cfs @ 2.62 fps)

Summary for Pond OCS1: OCS#1

Inflow Area = 48,573 sf, 81.99% Impervious, Inflow Depth > 2.67" for 2YR event
Inflow = 3.17 cfs @ 12.09 hrs, Volume= 10,805 cf
Outflow = 3.17 cfs @ 12.09 hrs, Volume= 10,805 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.17 cfs @ 12.09 hrs, Volume= 10,805 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 195.75' @ 12.09 hrs
Flood Elev= 201.48'

Device	Routing	Invert	Outlet Devices
#1	Primary	195.00'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.09 cfs @ 12.09 hrs HW=195.74' TW=195.23' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 3.09 cfs @ 2.93 fps)

Summary for Pond OCS3: OCS#3

Inflow Area = 54,250 sf, 81.93% Impervious, Inflow Depth > 2.37" for 2YR event
Inflow = 3.26 cfs @ 12.09 hrs, Volume= 10,698 cf
Outflow = 3.26 cfs @ 12.09 hrs, Volume= 10,698 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.26 cfs @ 12.09 hrs, Volume= 10,698 cf
Routed to Pond p204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.95' @ 12.11 hrs
Flood Elev= 209.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.20 cfs @ 12.09 hrs HW=203.94' TW=203.47' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 3.20 cfs @ 3.13 fps)

Summary for Pond OCS4: OCS#4

Inflow Area = 17,972 sf, 28.85% Impervious, Inflow Depth > 1.32" for 2YR event
Inflow = 0.64 cfs @ 12.11 hrs, Volume= 1,977 cf
Outflow = 0.64 cfs @ 12.11 hrs, Volume= 1,977 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.64 cfs @ 12.11 hrs, Volume= 1,977 cf
Routed to Pond P204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.89' @ 12.49 hrs
Flood Elev= 208.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.64 cfs @ 12.11 hrs HW=203.59' TW=203.52' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.64 cfs @ 1.29 fps)

Summary for Pond OCS6: OCS #6

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 2.89" for 2YR event
Inflow = 1.12 cfs @ 12.09 hrs, Volume= 3,877 cf
Outflow = 1.12 cfs @ 12.09 hrs, Volume= 3,877 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.12 cfs @ 12.09 hrs, Volume= 3,877 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.93' @ 12.52 hrs
Flood Elev= 206.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.20'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.10 cfs @ 12.09 hrs HW=201.78' TW=201.55' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.10 cfs @ 2.30 fps)

Summary for Pond OCS7: OCS #7

Inflow Area = 15,875 sf, 92.67% Impervious, Inflow Depth > 2.85" for 2YR event
Inflow = 1.10 cfs @ 12.09 hrs, Volume= 3,771 cf
Outflow = 1.10 cfs @ 12.09 hrs, Volume= 3,771 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.10 cfs @ 12.09 hrs, Volume= 3,771 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.32' @ 12.09 hrs
Flood Elev= 206.47'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.78'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.07 cfs @ 12.09 hrs HW=202.32' TW=201.55' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.07 cfs @ 2.49 fps)

Summary for Pond P204: STORMTECH INFILTRATION SYSTEM #1

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth > 2.11" for 2YR event
Inflow = 3.90 cfs @ 12.09 hrs, Volume= 12,675 cf
Outflow = 1.02 cfs @ 12.49 hrs, Volume= 10,996 cf, Atten= 74%, Lag= 23.8 min
Discarded = 0.09 cfs @ 10.60 hrs, Volume= 5,215 cf
Primary = 0.93 cfs @ 12.49 hrs, Volume= 5,781 cf
Routed to Reach 20r : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.89' @ 12.49 hrs Surf.Area= 5,670 sf Storage= 5,017 cf
Flood Elev= 208.75' Surf.Area= 5,670 sf Storage= 13,379 cf

Plug-Flow detention time= 142.3 min calculated for 10,973 cf (87% of inflow)
Center-of-Mass det. time= 84.7 min (873.6 - 788.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	202.50'	5,923 cf	**77.50'W x 67.70'L x 4.08'H STORMTECH SC-740** 21,423 cf Overall - 6,615 cf Embedded = 14,808 cf x 40.0% Voids
#2A	203.08'	6,615 cf	**ADS_StormTech SC-740 +Cap** x 144 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 144 Chambers in 16 Rows
#3B	202.50'	427 cf	**6.25'W x 67.70'L x 3.50'H ISOLATOR ROW** 1,481 cf Overall - 413 cf Embedded = 1,067 cf x 40.0% Voids
#4B	203.00'	413 cf	**ADS_StormTech SC-740 +Cap** x 9 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		13,379 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.75'	**15.0" Round Culvert** L= 35.0' Ke= 0.500 Inlet / Outlet Invert= 202.75' / 201.00' S= 0.0500 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	204.75'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#3	Device 1	203.25'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Discarded	202.50'	**0.660 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.09 cfs @ 10.60 hrs HW=202.57' (Free Discharge)
└─**4=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=0.93 cfs @ 12.49 hrs HW=203.88' TW=200.04' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.93 cfs of 4.24 cfs potential flow)
  ├─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
  └─**3=Orifice/Grate** (Orifice Controls 0.93 cfs @ 2.71 fps)

Summary for Pond P205: INFILTRATION POND #3

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth > 1.25" for 2YR event
Inflow = 2.27 cfs @ 12.12 hrs, Volume= 9,251 cf
Outflow = 0.26 cfs @ 13.49 hrs, Volume= 9,244 cf, Atten= 89%, Lag= 82.2 min
Discarded = 0.26 cfs @ 13.49 hrs, Volume= 9,244 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach 18R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 205.79' @ 13.49 hrs Surf.Area= 4,584 sf Storage= 3,362 cf

Plug-Flow detention time= 120.6 min calculated for 9,244 cf (100% of inflow)
Center-of-Mass det. time= 120.1 min (954.0 - 833.9)

Volume	Invert	Avail.Storage	Storage Description
#1	205.00'	15,630 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.00	3,939	0	0
206.00	4,756	4,348	4,348
207.00	5,627	5,192	9,539
208.00	6,555	6,091	15,630

Device	Routing	Invert	Outlet Devices
#1	Primary	206.65'	**15.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	205.00'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.26 cfs @ 13.49 hrs HW=205.79' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.26 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=205.00' TW=203.00' (Dynamic Tailwater)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond P206: STORMTECH INFILTRATION SYSTEM #2

Inflow Area = 59,746 sf, 80.70% Impervious, Inflow Depth > 2.64" for 2YR event
Inflow = 3.88 cfs @ 12.09 hrs, Volume= 13,143 cf
Outflow = 0.49 cfs @ 11.75 hrs, Volume= 13,142 cf, Atten= 87%, Lag= 0.0 min
Discarded = 0.49 cfs @ 11.75 hrs, Volume= 13,142 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 195.67' @ 12.66 hrs Surf.Area= 6,072 sf Storage= 4,118 cf

Plug-Flow detention time= 54.5 min calculated for 13,142 cf (100% of inflow)
Center-of-Mass det. time= 54.4 min (832.0 - 777.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	194.67'	1,786 cf	**39.50'W x 53.46'L x 3.33'H FIELD A** 7,038 cf Overall - 2,573 cf Embedded = 4,466 cf x 40.0% Voids
#2A	195.00'	2,573 cf	**ADS_StormTech SC-740 +Cap** x 56 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 56 Chambers in 8 Rows
#3B	194.67'	3,296 cf	**58.50'W x 67.70'L x 3.33'H FIELD B** 13,201 cf Overall - 4,962 cf Embedded = 8,239 cf x 40.0% Voids
#4B	195.00'	4,962 cf	**ADS_StormTech SC-740 +Cap** x 108 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 108 Chambers in 12 Rows
		12,616 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 30.0' Ke= 0.200 Inlet / Outlet Invert= 194.65' / 194.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	195.85'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Discarded	194.67'	**3.500 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.49 cfs @ 11.75 hrs HW=194.73' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.49 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=194.67' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.00 cfs of 0.00 cfs potential flow)
  └─**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond P207: INFILTRATION POND #2

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth > 2.19" for 2YR event
Inflow = 6.85 cfs @ 12.09 hrs, Volume= 23,672 cf
Outflow = 1.00 cfs @ 12.71 hrs, Volume= 23,663 cf, Atten= 85%, Lag= 36.9 min
Discarded = 0.96 cfs @ 12.71 hrs, Volume= 23,563 cf
Primary = 0.04 cfs @ 12.71 hrs, Volume= 101 cf
Routed to Reach 10R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 197.50' @ 12.71 hrs Surf.Area= 11,216 sf Storage= 7,511 cf

Plug-Flow detention time= 55.8 min calculated for 23,663 cf (100% of inflow)
Center-of-Mass det. time= 55.6 min (856.6 - 801.0)

Volume	Invert	Avail.Storage	Storage Description
#1	196.80'	40,260 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.80	10,100	0	0
198.00	12,000	13,260	13,260
200.00	15,000	27,000	40,260

Device	Routing	Invert	Outlet Devices
#1	Primary	198.80'	**20.0' long x 21.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	194.75'	**15.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 194.75' / 194.55' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#3	Device 2	198.80'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads
#4	Device 2	197.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Discarded	196.80'	**3.690 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.96 cfs @ 12.71 hrs HW=197.50' (Free Discharge)
└─**5=Exfiltration** (Exfiltration Controls 0.96 cfs)

Primary OutFlow Max=0.04 cfs @ 12.71 hrs HW=197.50' TW=192.01' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Passes 0.04 cfs of 8.49 cfs potential flow)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 0.04 cfs @ 1.10 fps)

Summary for Pond P210: POCKET WETLAND #1

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 1.95" for 2YR event
Inflow = 2.95 cfs @ 12.09 hrs, Volume= 10,193 cf
Outflow = 0.12 cfs @ 15.47 hrs, Volume= 4,736 cf, Atten= 96%, Lag= 203.0 min
Primary = 0.12 cfs @ 15.47 hrs, Volume= 4,736 cf
Routed to Reach 15R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Starting Elev= 201.00' Surf.Area= 376 sf Storage= 591 cf
Peak Elev= 202.97' @ 15.47 hrs Surf.Area= 5,971 sf Storage= 7,606 cf (7,015 cf above start)

Plug-Flow detention time= 467.1 min calculated for 4,136 cf (41% of inflow)
Center-of-Mass det. time= 282.9 min (1,072.6 - 789.6)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	43,190 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	218	0	0
200.00	294	256	256
201.00	376	335	591
202.00	3,991	2,184	2,775
204.00	8,073	12,064	14,839
206.00	13,272	21,345	36,184
206.50	14,753	7,006	43,190

Device	Routing	Invert	Outlet Devices
#1	Primary	205.10'	**20.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	202.25'	**12.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 202.25' / 202.03' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	202.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 2	204.50'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads

Primary OutFlow Max=0.12 cfs @ 15.47 hrs HW=202.97' TW=202.04' (Dynamic Tailwater)
—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
—**2=Culvert** (Passes 0.12 cfs of 1.31 cfs potential flow)
—**3=Orifice/Grate** (Orifice Controls 0.12 cfs @ 3.62 fps)
—**4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond P212: INFILTRATION POND #1

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth > 1.84" for 2YR event
Inflow = 9.79 cfs @ 12.10 hrs, Volume= 37,028 cf
Outflow = 1.25 cfs @ 12.92 hrs, Volume= 37,018 cf, Atten= 87%, Lag= 49.6 min
Discarded = 1.25 cfs @ 12.92 hrs, Volume= 37,018 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach R211 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.74' @ 12.92 hrs Surf.Area= 10,558 sf Storage= 14,075 cf

Plug-Flow detention time= 97.9 min calculated for 36,941 cf (100% of inflow)
Center-of-Mass det. time= 97.5 min (895.7 - 798.2)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	41,774 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	4,354	0	0	4,354
201.00	9,360	6,699	6,699	9,368
202.00	10,993	10,166	16,865	11,040
204.00	13,976	24,909	41,774	14,126

Device	Routing	Invert	Outlet Devices
#1	Primary	202.50'	**25.0' long x 20.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	200.00'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=1.25 cfs @ 12.92 hrs HW=201.74' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 1.25 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' TW=200.00' (Dynamic Tailwater)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond P213: Stormtech Infiltration System #3

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=1)

Inflow Area = 31,986 sf, 93.23% Impervious, Inflow Depth > 2.87" for 2YR event
Inflow = 2.22 cfs @ 12.09 hrs, Volume= 7,648 cf
Outflow = 0.39 cfs @ 11.80 hrs, Volume= 7,647 cf, Atten= 82%, Lag= 0.0 min
Discarded = 0.39 cfs @ 11.80 hrs, Volume= 7,647 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.93' @ 12.54 hrs Surf.Area= 3,317 sf Storage= 1,973 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 27.1 min (795.0 - 767.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.95'	2,990 cf	**49.00'W x 67.70'L x 3.50'H Field A** 11,610 cf Overall - 4,135 cf Embedded = 7,475 cf x 40.0% Voids
#2A	201.45'	4,135 cf	**ADS_StormTech SC-740 +Cap** x 90 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 90 Chambers in 10 Rows
		7,125 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.30'	**12.0" Round Culvert** L= 60.0' Ke= 0.500 Inlet / Outlet Invert= 202.30' / 202.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.95'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#3	Device 1	204.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	203.35'	**6.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.39 cfs @ 11.80 hrs HW=201.02' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.39 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.95' TW=200.00' (Dynamic Tailwater)
└─**1=Culvert** (Controls 0.00 cfs)
  ├─**3=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond P214: STORMTECH INFILTRATION SYSTEM #4

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=2)

Inflow Area =	32,665 sf, 94.81% Impervious,	Inflow Depth > 2.80" for 2YR event		
Inflow =	2.21 cfs @	12.09 hrs, Volume=	7,633 cf	
Outflow =	0.61 cfs @	11.90 hrs, Volume=	7,642 cf,	Atten= 72%, Lag= 0.0 min
Discarded =	0.61 cfs @	11.90 hrs, Volume=	7,642 cf	
Primary =	0.00 cfs @	0.00 hrs, Volume=	0 cf	

Routed to Reach 9R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 200.78' @ 12.43 hrs Surf.Area= 3,201 sf Storage= 1,357 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 10.0 min (778.8 - 768.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.00'	1,851 cf	**30.00'W x 67.70'L x 3.50'H Field A** 7,108 cf Overall - 2,481 cf Embedded = 4,627 cf x 40.0% Voids
#2A	200.50'	2,481 cf	**ADS_StormTech SC-740 +Cap** x 54 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 54 Chambers in 6 Rows
#3B	200.00'	1,087 cf	**25.25'W x 46.34'L x 3.50'H Field B** 4,095 cf Overall - 1,378 cf Embedded = 2,717 cf x 40.0% Voids
#4B	200.50'	1,378 cf	**ADS_StormTech SC-740 +Cap** x 30 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 30 Chambers in 5 Rows
		6,797 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.88' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.00'	**8.280 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#3	Device 1	203.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	202.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.61 cfs @ 11.90 hrs HW=200.06' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.61 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' TW=201.75' (Dynamic Tailwater)
└─**1=Culvert** (Controls 0.00 cfs)
  ├─**3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 9,943 sf, 92.79% Impervious, Inflow Depth > 2.71" for 2YR event
Inflow = 0.67 cfs @ 12.09 hrs, Volume= 2,247 cf
Primary = 0.67 cfs @ 12.09 hrs, Volume= 2,247 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 816,898 sf, 39.51% Impervious, Inflow Depth > 1.10" for 2YR event
Inflow = 7.31 cfs @ 12.40 hrs, Volume= 75,144 cf
Primary = 7.31 cfs @ 12.40 hrs, Volume= 75,144 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

Inflow Area = 55,420 sf, 16.57% Impervious, Inflow Depth > 0.87" for 2YR event
Inflow = 1.15 cfs @ 12.10 hrs, Volume= 4,009 cf
Primary = 1.15 cfs @ 12.10 hrs, Volume= 4,009 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT #4

Inflow Area = 1,691,659 sf, 25.34% Impervious, Inflow Depth > 0.46" for 2YR event
Inflow = 7.79 cfs @ 12.60 hrs, Volume= 65,174 cf
Primary = 7.79 cfs @ 12.60 hrs, Volume= 65,174 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentB1: MULTIFAMILYBLDG Runoff Area=23,255 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=2.53 cfs 9,148 cf

SubcatchmentB2: MULTIFAMILYBLDG Runoff Area=17,561 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=1.91 cfs 6,908 cf

SubcatchmentB3: MULTIFAMILY Runoff Area=19,981 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=2.17 cfs 7,860 cf

SubcatchmentC10: CB #10 Runoff Area=6,961 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.76 cfs 2,738 cf

SubcatchmentC11: CB #11 Runoff Area=7,173 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.78 cfs 2,822 cf

SubcatchmentC12: CB #12 Runoff Area=5,238 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.57 cfs 2,060 cf

SubcatchmentC13: CB #13 Runoff Area=10,873 sf 90.78% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=1.16 cfs 4,068 cf

SubcatchmentC14: CB #14 Runoff Area=12,099 sf 86.22% Impervious Runoff Depth>3.94"
Tc=6.0 min CN=91 Runoff=1.20 cfs 3,973 cf

SubcatchmentC15: CB #15 Runoff Area=6,666 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.73 cfs 2,622 cf

SubcatchmentC16: CB #16 Runoff Area=8,516 sf 64.88% Impervious Runoff Depth>2.76"
Tc=6.0 min CN=79 Runoff=0.62 cfs 1,962 cf

SubcatchmentC17: CB #17 Runoff Area=11,836 sf 73.87% Impervious Runoff Depth>4.05"
Tc=6.0 min CN=92 Runoff=1.20 cfs 3,992 cf

SubcatchmentC18: CB #18 Runoff Area=18,591 sf 66.35% Impervious Runoff Depth>3.83"
Tc=6.0 min CN=90 Runoff=1.81 cfs 5,941 cf

SubcatchmentC20: CB #20 Runoff Area=11,939 sf 88.95% Impervious Runoff Depth>4.38"
Tc=6.0 min CN=95 Runoff=1.26 cfs 4,355 cf

SubcatchmentC21: CB #21 Runoff Area=10,174 sf 87.04% Impervious Runoff Depth>3.83"
Tc=6.0 min CN=90 Runoff=0.99 cfs 3,251 cf

SubcatchmentC22: CB #22 Runoff Area=12,001 sf 91.62% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=1.28 cfs 4,490 cf

SubcatchmentC23: CB #23 Runoff Area=9,694 sf 61.00% Impervious Runoff Depth>3.73"
Tc=6.0 min CN=89 Runoff=0.93 cfs 3,014 cf

SubcatchmentC24: CB #24	Runoff Area=7,930 sf 72.16% Impervious Runoff Depth>4.16" Tc=6.0 min CN=93 Runoff=0.82 cfs 2,746 cf
SubcatchmentC25: CB #25	Runoff Area=8,487 sf 80.92% Impervious Runoff Depth>4.27" Tc=6.0 min CN=94 Runoff=0.89 cfs 3,017 cf
SubcatchmentC26: CB #26	Runoff Area=8,835 sf 63.75% Impervious Runoff Depth>3.94" Tc=6.0 min CN=91 Runoff=0.88 cfs 2,901 cf
SubcatchmentC27: CB #27	Runoff Area=6,111 sf 91.90% Impervious Runoff Depth>4.49" Tc=6.0 min CN=96 Runoff=0.65 cfs 2,287 cf
SubcatchmentC28: CB #28	Runoff Area=10,372 sf 51.33% Impervious Runoff Depth>3.63" Tc=6.0 min CN=88 Runoff=0.97 cfs 3,136 cf
SubcatchmentC29: CB #29	Runoff Area=8,495 sf 84.21% Impervious Runoff Depth>4.27" Tc=6.0 min CN=94 Runoff=0.89 cfs 3,020 cf
SubcatchmentC30: CB #30	Runoff Area=8,933 sf 82.40% Impervious Runoff Depth>4.27" Tc=6.0 min CN=94 Runoff=0.93 cfs 3,175 cf
SubcatchmentC31: CB #31	Runoff Area=16,365 sf 68.64% Impervious Runoff Depth>3.83" Tc=6.0 min CN=90 Runoff=1.59 cfs 5,230 cf
SubcatchmentC32: CB #32	Runoff Area=12,710 sf 70.47% Impervious Runoff Depth>3.94" Tc=6.0 min CN=91 Runoff=1.26 cfs 4,174 cf
SubcatchmentC33: CB #33	Runoff Area=5,421 sf 83.90% Impervious Runoff Depth>4.27" Tc=6.0 min CN=94 Runoff=0.57 cfs 1,927 cf
SubcatchmentC34: CB #34	Runoff Area=8,622 sf 80.51% Impervious Runoff Depth>4.16" Tc=6.0 min CN=93 Runoff=0.89 cfs 2,986 cf
SubcatchmentC35: CB #35	Runoff Area=4,149 sf 98.10% Impervious Runoff Depth>4.72" Tc=6.0 min CN=98 Runoff=0.45 cfs 1,632 cf
SubcatchmentC36: CB #36	Runoff Area=6,622 sf 100.00% Impervious Runoff Depth>4.72" Tc=6.0 min CN=98 Runoff=0.72 cfs 2,605 cf
SubcatchmentC38: CB #38	Runoff Area=7,637 sf 100.00% Impervious Runoff Depth>4.72" Tc=6.0 min CN=98 Runoff=0.83 cfs 3,004 cf
SubcatchmentC39: CB #39	Runoff Area=7,612 sf 100.00% Impervious Runoff Depth>4.72" Tc=6.0 min CN=98 Runoff=0.83 cfs 2,994 cf
SubcatchmentC40: CB #40	Runoff Area=4,211 sf 100.00% Impervious Runoff Depth>4.72" Tc=6.0 min CN=98 Runoff=0.46 cfs 1,656 cf
SubcatchmentC41: CB #41	Runoff Area=5,586 sf 100.00% Impervious Runoff Depth>4.72" Tc=6.0 min CN=98 Runoff=0.61 cfs 2,197 cf

SubcatchmentC43: CB #43 Runoff Area=3,109 sf 75.36% Impervious Runoff Depth>3.73"
Tc=6.0 min CN=89 Runoff=0.30 cfs 967 cf

SubcatchmentC44: CB #44 Runoff Area=1,978 sf 84.43% Impervious Runoff Depth>4.05"
Tc=6.0 min CN=92 Runoff=0.20 cfs 667 cf

SubcatchmentC45: CB #45 Runoff Area=2,465 sf 50.30% Impervious Runoff Depth>2.86"
Tc=6.0 min CN=80 Runoff=0.19 cfs 587 cf

SubcatchmentC46: CB #46 Runoff Area=4,397 sf 50.97% Impervious Runoff Depth>2.86"
Tc=6.0 min CN=80 Runoff=0.33 cfs 1,046 cf

SubcatchmentC47: CB #47 Runoff Area=3,012 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.33 cfs 1,185 cf

SubcatchmentC48: CB #48 Runoff Area=60,128 sf 25.16% Impervious Runoff Depth>2.00"
Flow Length=400' Tc=11.8 min CN=70 Runoff=2.61 cfs 10,030 cf

SubcatchmentC49: CB #49 Runoff Area=5,238 sf 84.59% Impervious Runoff Depth>4.27"
Tc=6.0 min CN=94 Runoff=0.55 cfs 1,862 cf

SubcatchmentC50: CB #50 Runoff Area=15,040 sf 77.20% Impervious Runoff Depth>4.16"
Tc=6.0 min CN=93 Runoff=1.55 cfs 5,209 cf

SubcatchmentC51: CB #51 Runoff Area=6,823 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.74 cfs 2,684 cf

SubcatchmentC52: CB#52 Runoff Area=9,052 sf 87.14% Impervious Runoff Depth>4.38"
Tc=6.0 min CN=95 Runoff=0.96 cfs 3,302 cf

SubcatchmentC53: CB #53 Runoff Area=7,863 sf 86.52% Impervious Runoff Depth>4.16"
Tc=6.0 min CN=93 Runoff=0.81 cfs 2,723 cf

SubcatchmentC54: CB #54 Runoff Area=4,821 sf 86.85% Impervious Runoff Depth>3.94"
Tc=6.0 min CN=91 Runoff=0.48 cfs 1,583 cf

SubcatchmentC7: CB #5 Runoff Area=4,650 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.51 cfs 1,829 cf

SubcatchmentC8: CB #8 Runoff Area=5,450 sf 88.75% Impervious Runoff Depth>4.27"
Tc=6.0 min CN=94 Runoff=0.57 cfs 1,937 cf

SubcatchmentC9: CB #9 Runoff Area=16,307 sf 93.95% Impervious Runoff Depth>4.60"
Tc=6.0 min CN=97 Runoff=1.76 cfs 6,257 cf

SubcatchmentCH1: CLUBHOUSE Runoff Area=6,262 sf 92.70% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.67 cfs 2,343 cf

SubcatchmentMB1: MAIL KIOSK Runoff Area=938 sf 100.00% Impervious Runoff Depth>4.72"
Tc=6.0 min CN=98 Runoff=0.10 cfs 369 cf

SubcatchmentS201: SUMMER STREET Runoff Area=9,943 sf 92.79% Impervious Runoff Depth>4.38"
Tc=6.0 min CN=95 Runoff=1.05 cfs 3,627 cf

SubcatchmentS202: EXISTING WETLAND Runoff Area=432,269 sf 42.08% Impervious Runoff Depth>2.49"
Flow Length=856' Tc=23.2 min CN=76 Runoff=18.32 cfs 89,722 cf

SubcatchmentS203: POCKET WETLAND #1 Runoff Area=25,587 sf 0.00% Impervious Runoff Depth>2.16"
Tc=6.0 min CN=72 Runoff=1.45 cfs 4,616 cf

SubcatchmentS204: EXISTING Runoff Area=308,203 sf 31.07% Impervious Runoff Depth>2.41"
Flow Length=632' Tc=22.6 min CN=75 Runoff=12.75 cfs 61,782 cf

SubcatchmentS205: ISOLATED WETLAND Runoff Area=55,420 sf 16.57% Impervious Runoff Depth>2.00"
Tc=6.0 min CN=70 Runoff=2.89 cfs 9,258 cf

SubcatchmentS206: OVERLAND FLOW Runoff Area=891,295 sf 2.91% Impervious Runoff Depth>1.61"
Flow Length=1,467' Tc=34.5 min CN=65 Runoff=19.55 cfs 119,746 cf

SubcatchmentS207: INFILTRATION POND Runoff Area=20,803 sf 0.00% Impervious Runoff Depth>3.63"
Tc=6.0 min CN=88 Runoff=1.94 cfs 6,290 cf

SubcatchmentS208: GRASS AREA Runoff Area=13,760 sf 9.33% Impervious Runoff Depth>2.41"
Tc=6.0 min CN=75 Runoff=0.88 cfs 2,769 cf

SubcatchmentS209: WETLAND C Runoff Area=107,073 sf 0.38% Impervious Runoff Depth>2.23"
Flow Length=607' Slope=0.0150 '/' Tc=28.9 min CN=73 Runoff=3.68 cfs 19,940 cf

SubcatchmentS210: INFILTRATION POND Runoff Area=75,890 sf 0.00% Impervious Runoff Depth>2.67"
Flow Length=580' Slope=0.0150 '/' Tc=16.5 min CN=78 Runoff=3.96 cfs 16,882 cf

SubcatchmentS211: S211 Runoff Area=15,436 sf 47.47% Impervious Runoff Depth>2.76"
Tc=6.0 min CN=79 Runoff=1.13 cfs 3,556 cf

SubcatchmentS212: SWALE Runoff Area=52,768 sf 0.60% Impervious Runoff Depth>1.62"
Flow Length=418' Tc=23.1 min CN=65 Runoff=1.38 cfs 7,112 cf

SubcatchmentS213: COURTYARD Runoff Area=21,407 sf 48.10% Impervious Runoff Depth>2.76"
Tc=6.0 min CN=79 Runoff=1.56 cfs 4,932 cf

SubcatchmentT1: Trench Drain 1 Runoff Area=11,173 sf 75.10% Impervious Runoff Depth>4.16"
Tc=6.0 min CN=93 Runoff=1.15 cfs 3,869 cf

SubcatchmentT2: Drive Under B2 Runoff Area=4,445 sf 64.30% Impervious Runoff Depth>2.68"
Tc=6.0 min CN=78 Runoff=0.31 cfs 991 cf

SubcatchmentTH1: TOWN HOUSE #1 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.45 cfs 1,589 cf

SubcatchmentTH10: TOWN HOUSE #10 Runoff Area=3,476 sf 91.60% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.37 cfs 1,301 cf

SubcatchmentTH11: TOWN HOUSE #11 Runoff Area=4,210 sf 92.61% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.45 cfs 1,575 cf

SubcatchmentTH2: TOWN HOUSE #2 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.45 cfs 1,589 cf

SubcatchmentTH3: TOWN HOUSE #3 Runoff Area=3,013 sf 88.68% Impervious Runoff Depth>4.38"
Tc=6.0 min CN=95 Runoff=0.32 cfs 1,099 cf

SubcatchmentTH4: TOWN HOUSE #4 Runoff Area=3,470 sf 91.59% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.37 cfs 1,298 cf

SubcatchmentTH5: TOWN HOUSE #5 Runoff Area=3,016 sf 88.69% Impervious Runoff Depth>4.38"
Tc=6.0 min CN=95 Runoff=0.32 cfs 1,100 cf

SubcatchmentTH6: TOWN HOUSE #6 Runoff Area=3,407 sf 91.46% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.36 cfs 1,275 cf

SubcatchmentTH7: TOWN HOUSE #7 Runoff Area=3,481 sf 91.61% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.37 cfs 1,302 cf

SubcatchmentTH8: TOWN HOUSE #8 Runoff Area=4,212 sf 92.62% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.45 cfs 1,576 cf

SubcatchmentTH9: TOWN HOUSE #9 Runoff Area=3,480 sf 91.61% Impervious Runoff Depth>4.49"
Tc=6.0 min CN=96 Runoff=0.37 cfs 1,302 cf

Reach 8R: OVERLAND FLOW Avg. Flow Depth=0.06' Max Vel=0.08 fps Inflow=1.10 cfs 3,558 cf
n=0.400 L=563.0' S=0.0213 '/' Capacity=28.09 cfs Outflow=0.26 cfs 3,276 cf

Reach 9R: OVERLAND FLOW Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=211.0' S=0.0652 '/' Capacity=23.45 cfs Outflow=0.00 cfs 0 cf

Reach 10R: OVERLAND FLOW Avg. Flow Depth=0.19' Max Vel=0.22 fps Inflow=0.96 cfs 5,876 cf
n=0.400 L=164.0' S=0.0366 '/' Capacity=17.57 cfs Outflow=0.92 cfs 5,876 cf

Reach 11R: 4x4 Open Bottom Culvert Avg. Flow Depth=0.63' Max Vel=1.62 fps Inflow=4.11 cfs 40,067 cf
48.0" x 48.0" Box Pipe n=0.069 L=30.0' S=0.0150 '/' Capacity=42.20 cfs Outflow=4.11 cfs 40,059 cf

Reach 12R: OVERLAND FLOW Avg. Flow Depth=0.10' Max Vel=0.12 fps Inflow=1.23 cfs 3,881 cf
n=0.400 L=250.0' S=0.0240 '/' Capacity=29.80 cfs Outflow=0.61 cfs 3,787 cf

Reach 14R: OVERLAND FLOW Avg. Flow Depth=0.07' Max Vel=0.09 fps Inflow=1.38 cfs 7,111 cf
n=0.400 L=852.0' S=0.0246 '/' Capacity=31.55 cfs Outflow=0.31 cfs 6,155 cf

Reach 15R: OVERLAND FLOW Avg. Flow Depth=0.05' Max Vel=0.07 fps Inflow=0.19 cfs 7,883 cf
n=0.400 L=300.0' S=0.0200 '/' Capacity=27.21 cfs Outflow=0.19 cfs 7,158 cf

Reach 18R: OVERLAND FLOW Avg. Flow Depth=0.03' Max Vel=0.06 fps Inflow=0.40 cfs 1,449 cf
n=0.400 L=609.0' S=0.0279 '/' Capacity=38.42 cfs Outflow=0.09 cfs 1,312 cf

Reach 20R: OVERLAND FLOW Avg. Flow Depth=0.18' Max Vel=0.11 fps Inflow=1.79 cfs 13,822 cf
n=0.400 L=560.0' S=0.0093 '/' Capacity=18.54 cfs Outflow=1.03 cfs 13,230 cf

Reach 23R: OVERLAND FLOW Avg. Flow Depth=0.29' Max Vel=0.22 fps Inflow=4.11 cfs 40,059 cf
n=0.400 L=237.0' S=0.0211 '/' Capacity=31.93 cfs Outflow=3.63 cfs 39,543 cf

Reach R202: OVERLAND FLOW Avg. Flow Depth=0.39' Max Vel=0.19 fps Inflow=18.32 cfs 89,705 cf
n=0.400 L=700.0' S=0.0107 '/' Capacity=42.56 cfs Outflow=8.31 cfs 84,798 cf

Reach R211: OVERLAND FLOW Avg. Flow Depth=0.19' Max Vel=0.11 fps Inflow=3.94 cfs 6,192 cf
n=0.400 L=600.0' S=0.0087 '/' Capacity=14.51 cfs Outflow=0.78 cfs 5,906 cf

Reach SC1: Stream Crossing #1 Avg. Flow Depth=0.34' Max Vel=3.33 fps Inflow=18.32 cfs 89,722 cf
192.0" x 60.0", R=207.0" Arch Pipe n=0.030 L=43.1' S=0.0200 '/' Capacity=722.91 cfs Outflow=18.32 cfs 89,705 cf

Reach SC2: Stream Crossing #2 Avg. Flow Depth=0.07' Max Vel=1.32 fps Inflow=1.38 cfs 7,112 cf
192.0" x 60.0", R=180.0" Arch Pipe n=0.030 L=36.5' S=0.0241 '/' Capacity=768.96 cfs Outflow=1.38 cfs 7,111 cf

Pond 1P: DMH #33 Peak Elev=206.22' Inflow=1.73 cfs 6,129 cf
12.0" Round Culvert n=0.013 L=46.7' S=0.0251 '/' Outflow=1.73 cfs 6,129 cf

Pond 3P: OCS #8 Peak Elev=201.47' Inflow=1.29 cfs 4,306 cf
Outflow=1.29 cfs 4,306 cf

Pond 5R: TRENCH DRAIN Peak Elev=198.02' Inflow=1.15 cfs 3,869 cf
8.0" Round Culvert n=0.012 L=36.0' S=0.0200 '/' Outflow=1.15 cfs 3,869 cf

Pond 11P: YARD DRAIN Peak Elev=207.37' Storage=671 cf Inflow=1.56 cfs 4,932 cf
Outflow=1.14 cfs 4,891 cf

Pond CB10: CB #10 Peak Elev=210.33' Inflow=0.76 cfs 2,738 cf
12.0" Round Culvert n=0.013 L=33.8' S=0.0050 '/' Outflow=0.76 cfs 2,738 cf

Pond CB11: CB #11 Peak Elev=210.43' Inflow=0.78 cfs 2,822 cf
12.0" Round Culvert n=0.013 L=26.3' S=0.0103 '/' Outflow=0.78 cfs 2,822 cf

Pond CB12: CB #12 Peak Elev=207.06' Inflow=0.57 cfs 2,060 cf
12.0" Round Culvert n=0.013 L=41.3' S=0.0249 '/' Outflow=0.57 cfs 2,060 cf

Pond CB13: CB #13 Peak Elev=207.26' Inflow=1.16 cfs 4,068 cf
12.0" Round Culvert n=0.013 L=43.7' S=0.0249 '/' Outflow=1.16 cfs 4,068 cf

Pond CB14: CB #14 Peak Elev=201.69' Inflow=1.20 cfs 3,973 cf
12.0" Round Culvert n=0.013 L=23.2' S=0.0052 '/' Outflow=1.20 cfs 3,973 cf

Pond CB15: CB #15 Peak Elev=201.60' Inflow=0.73 cfs 2,622 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=0.73 cfs 2,622 cf

Pond CB16: CB #16 Peak Elev=203.99' Inflow=0.62 cfs 1,962 cf
12.0" Round Culvert n=0.013 L=20.9' S=0.0067 '/' Outflow=0.62 cfs 1,962 cf

Pond CB17: CB #17 Peak Elev=205.64' Inflow=1.20 cfs 3,992 cf
12.0" Round Culvert n=0.013 L=13.8' S=0.0094 '/' Outflow=1.20 cfs 3,992 cf

Pond CB18: CB #18 Peak Elev=205.61' Inflow=2.14 cfs 6,857 cf
15.0" Round Culvert n=0.013 L=25.1' S=0.0052 '/' Outflow=2.14 cfs 6,857 cf

Pond CB20: CB #20 Peak Elev=204.67' Inflow=1.26 cfs 4,355 cf
12.0" Round Culvert n=0.013 L=30.3' S=0.0053 '/' Outflow=1.26 cfs 4,355 cf

Pond CB21: CB #21 Peak Elev=204.94' Inflow=0.99 cfs 3,251 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0050 '/' Outflow=0.99 cfs 3,251 cf

Pond CB22: CB #22 Peak Elev=206.05' Inflow=1.28 cfs 4,490 cf
12.0" Round Culvert n=0.012 L=16.1' S=0.0050 '/' Outflow=1.28 cfs 4,490 cf

Pond CB23: CB #23 Peak Elev=206.00' Inflow=0.93 cfs 3,014 cf
12.0" Round Culvert n=0.012 L=16.3' S=0.0055 '/' Outflow=0.93 cfs 3,014 cf

Pond CB24: CB #24 Peak Elev=205.83' Inflow=0.82 cfs 2,746 cf
12.0" Round Culvert n=0.012 L=12.1' S=0.0050 '/' Outflow=0.82 cfs 2,746 cf

Pond CB25: CB #25 Peak Elev=205.82' Inflow=0.89 cfs 3,017 cf
15.0" Round Culvert n=0.012 L=11.4' S=0.0053 '/' Outflow=0.89 cfs 3,017 cf

Pond CB26: CB #26 Peak Elev=202.34' Inflow=0.88 cfs 2,901 cf
12.0" Round Culvert n=0.013 L=42.5' S=0.0052 '/' Outflow=0.88 cfs 2,901 cf

Pond CB27: CB #27 Peak Elev=201.49' Inflow=0.65 cfs 2,287 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0056 '/' Outflow=0.65 cfs 2,287 cf

Pond CB28: CB #28 Peak Elev=198.44' Inflow=0.97 cfs 3,136 cf
12.0" Round Culvert n=0.013 L=13.7' S=0.0044 '/' Outflow=0.97 cfs 3,136 cf

Pond CB29: CB #29 Peak Elev=206.08' Inflow=0.89 cfs 3,020 cf
12.0" Round Culvert n=0.013 L=13.5' S=0.0052 '/' Outflow=0.89 cfs 3,020 cf

Pond CB30: CB #30 Peak Elev=206.09' Inflow=0.93 cfs 3,175 cf
12.0" Round Culvert n=0.013 L=17.5' S=0.0051 '/' Outflow=0.93 cfs 3,175 cf

Pond CB31: CB #31 Peak Elev=205.02' Inflow=1.59 cfs 5,230 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=1.59 cfs 5,230 cf

Pond CB32: CB #32 Peak Elev=204.91' Inflow=1.26 cfs 4,174 cf
12.0" Round Culvert n=0.013 L=16.3' S=0.0049 '/' Outflow=1.26 cfs 4,174 cf

Pond CB33: CB #33 Peak Elev=205.84' Inflow=0.57 cfs 1,927 cf
12.0" Round Culvert n=0.013 L=11.7' S=0.0051 '/' Outflow=0.57 cfs 1,927 cf

Pond CB34: CB #34 Peak Elev=205.89' Inflow=0.89 cfs 2,986 cf
12.0" Round Culvert n=0.013 L=16.5' S=0.0048 '/' Outflow=0.89 cfs 2,986 cf

Pond CB35: CB #35 Peak Elev=207.44' Inflow=0.45 cfs 1,632 cf
12.0" Round Culvert n=0.013 L=15.2' S=0.0053 '/' Outflow=0.45 cfs 1,632 cf

Pond CB36: CB #36 Peak Elev=207.56' Inflow=0.72 cfs 2,605 cf
12.0" Round Culvert n=0.013 L=16.1' S=0.0050 '/' Outflow=0.72 cfs 2,605 cf

Pond CB38: CB #38 Peak Elev=210.56' Inflow=0.83 cfs 3,004 cf
12.0" Round Culvert n=0.012 L=16.7' S=0.0048 '/' Outflow=0.83 cfs 3,004 cf

Pond CB39: CB #39 Peak Elev=210.56' Inflow=0.83 cfs 2,994 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=0.83 cfs 2,994 cf

Pond CB40: CB #40 Peak Elev=214.16' Inflow=0.46 cfs 1,656 cf
12.0" Round Culvert n=0.013 L=17.8' S=0.0073 '/' Outflow=0.46 cfs 1,656 cf

Pond CB41: CB #41 Peak Elev=214.37' Inflow=0.61 cfs 2,197 cf
12.0" Round Culvert n=0.013 L=18.4' S=0.0049 '/' Outflow=0.61 cfs 2,197 cf

Pond CB43: CB #43 Peak Elev=220.42' Inflow=0.30 cfs 967 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.30 cfs 967 cf

Pond CB44: CB #44 Peak Elev=220.39' Inflow=0.20 cfs 667 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.20 cfs 667 cf

Pond CB45: CB #45 Peak Elev=221.54' Inflow=0.19 cfs 587 cf
12.0" Round Culvert n=0.013 L=18.2' S=0.0049 '/' Outflow=0.19 cfs 587 cf

Pond CB46: CB #46 Peak Elev=221.87' Inflow=0.33 cfs 1,046 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=0.33 cfs 1,046 cf

Pond CB47: CB#47 Peak Elev=225.52' Inflow=0.33 cfs 1,185 cf
12.0" Round Culvert n=0.012 L=20.9' S=0.0048 '/' Outflow=0.33 cfs 1,185 cf

Pond CB48: CB#48 Peak Elev=225.81' Inflow=2.61 cfs 10,030 cf
15.0" Round Culvert n=0.012 L=16.9' S=0.0047 '/' Outflow=2.61 cfs 10,030 cf

Pond CB49: CB #49 Peak Elev=203.45' Inflow=0.55 cfs 1,862 cf
12.0" Round Culvert n=0.013 L=15.5' S=0.0052 '/' Outflow=0.55 cfs 1,862 cf

Pond CB50: CB #50 Peak Elev=203.64' Inflow=1.55 cfs 5,209 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=1.55 cfs 5,209 cf

Pond CB51: CB #51 Peak Elev=202.87' Inflow=0.74 cfs 2,684 cf
12.0" Round Culvert n=0.013 L=31.4' S=0.0051 '/' Outflow=0.74 cfs 2,684 cf

Pond CB52: CB #52 Peak Elev=203.29' Inflow=0.96 cfs 3,302 cf
12.0" Round Culvert n=0.013 L=25.5' S=0.0051 '/' Outflow=0.96 cfs 3,302 cf

Pond CB53: CB #53 Peak Elev=203.33' Inflow=0.81 cfs 2,723 cf
12.0" Round Culvert n=0.013 L=32.0' S=0.0050 '/' Outflow=0.81 cfs 2,723 cf

Pond CB54: CB #54 Peak Elev=203.07' Inflow=0.48 cfs 1,583 cf
12.0" Round Culvert n=0.013 L=36.7' S=0.0049 '/' Outflow=0.48 cfs 1,583 cf

Pond CB7: CB#5 Peak Elev=212.99' Inflow=0.51 cfs 1,829 cf
12.0" Round Culvert n=0.012 L=15.1' S=0.0099 '/' Outflow=0.51 cfs 1,829 cf

Pond CB8: CB#8 Peak Elev=214.21' Inflow=0.57 cfs 1,937 cf
12.0" Round Culvert n=0.013 L=15.1' S=0.0099 '/' Outflow=0.57 cfs 1,937 cf

Pond CB9: CB #9 Peak Elev=210.82' Inflow=1.76 cfs 6,257 cf
12.0" Round Culvert n=0.013 L=19.9' S=0.0196 '/' Outflow=1.76 cfs 6,257 cf

Pond D10: DMH #10 Peak Elev=203.81' Inflow=0.62 cfs 1,962 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=0.62 cfs 1,962 cf

Pond D11: DMH #11 Peak Elev=205.28' Inflow=3.34 cfs 10,849 cf
18.0" Round Culvert n=0.013 L=44.6' S=0.0049 '/' Outflow=3.34 cfs 10,849 cf

Pond D12: DMH #12 Peak Elev=204.24' Inflow=2.25 cfs 7,606 cf
12.0" Round Culvert n=0.013 L=41.9' S=0.0050 '/' Outflow=2.25 cfs 7,606 cf

Pond D13: DMH #13 Peak Elev=203.33' Inflow=7.09 cfs 25,765 cf
24.0" Round Culvert n=0.013 L=60.1' S=0.0050 '/' Outflow=7.09 cfs 25,765 cf

Pond D14: DMH #14 Peak Elev=205.16' Inflow=3.91 cfs 13,267 cf
18.0" Round Culvert n=0.012 L=256.3' S=0.0050 '/' Outflow=3.91 cfs 13,267 cf

Pond D16: DMH #16 Peak Elev=205.68' Inflow=1.70 cfs 5,763 cf
15.0" Round Culvert n=0.012 L=103.5' S=0.0050 '/' Outflow=1.70 cfs 5,763 cf

Pond D17: DMH #17 Peak Elev=201.21' Inflow=1.53 cfs 5,188 cf
12.0" Round Culvert n=0.013 L=91.6' S=0.0312 '/' Outflow=1.53 cfs 5,188 cf

Pond D18: DMH #18 Peak Elev=198.27' Inflow=2.50 cfs 8,324 cf
15.0" Round Culvert n=0.013 L=46.3' S=0.0099 '/' Outflow=2.50 cfs 8,324 cf

Pond D19: DMH #19 Peak Elev=205.94' Inflow=1.82 cfs 6,195 cf
12.0" Round Culvert n=0.013 L=82.5' S=0.0092 '/' Outflow=1.82 cfs 6,195 cf

Pond D2: DMH#2 Peak Elev=207.99' Inflow=3.67 cfs 14,981 cf
15.0" Round Culvert n=0.013 L=38.2' S=0.0099 '/' Outflow=3.67 cfs 14,981 cf

Pond D20: DMH #20 Peak Elev=204.96' Inflow=1.82 cfs 6,195 cf
15.0" Round Culvert n=0.013 L=63.5' S=0.0050 '/' Outflow=1.82 cfs 6,195 cf

Pond D21: DMH #21 Peak Elev=204.42' Inflow=7.30 cfs 24,749 cf
24.0" Round Culvert n=0.013 L=72.4' S=0.0050 '/' Outflow=7.30 cfs 24,749 cf

Pond D22: DMH #22 Peak Elev=205.74' Inflow=2.62 cfs 9,150 cf
15.0" Round Culvert n=0.013 L=134.2' S=0.0071 '/' Outflow=2.62 cfs 9,150 cf

Pond D23: DMH #23 Peak Elev=207.23' Inflow=1.17 cfs 4,237 cf
15.0" Round Culvert n=0.013 L=173.3' S=0.0100 '/' Outflow=1.17 cfs 4,237 cf

Pond D25: DMH #25 Peak Elev=210.49' Inflow=3.74 cfs 13,119 cf
15.0" Round Culvert n=0.012 L=237.6' S=0.0050 '/' Outflow=3.74 cfs 13,119 cf

Pond D27: DMH #27 Peak Elev=214.05' Inflow=2.08 cfs 7,120 cf
15.0" Round Culvert n=0.012 L=63.9' S=0.0150 '/' Outflow=2.08 cfs 7,120 cf

Pond D28: DMH #28 Peak Elev=217.98' Inflow=1.01 cfs 3,267 cf
12.0" Round Culvert n=0.013 L=158.3' S=0.0200 '/' Outflow=1.01 cfs 3,267 cf

Pond D29: DMH #29 Peak Elev=220.35' Inflow=1.01 cfs 3,267 cf
12.0" Round Culvert n=0.013 L=150.9' S=0.0151 '/' Outflow=1.01 cfs 3,267 cf

Pond D30: DMH #30 Peak Elev=221.34' Inflow=0.52 cfs 1,633 cf
12.0" Round Culvert n=0.013 L=184.2' S=0.0050 '/' Outflow=0.52 cfs 1,633 cf

Pond D31: DMH#31 Peak Elev=225.49' Inflow=2.84 cfs 11,215 cf
15.0" Round Culvert n=0.012 L=288.5' S=0.0400 '/' Outflow=2.84 cfs 11,215 cf

Pond D34: DMH #34 Peak Elev=199.01' Inflow=2.53 cfs 9,148 cf
12.0" Round Culvert n=0.012 L=52.0' S=0.0200 '/' Outflow=2.53 cfs 9,148 cf

Pond D35: DMH #35 Peak Elev=212.99' Inflow=2.08 cfs 7,120 cf
15.0" Round Culvert n=0.012 L=171.5' S=0.0150 '/' Outflow=2.08 cfs 7,120 cf

Pond D4: DMH#4 Peak Elev=211.36' Inflow=3.67 cfs 14,981 cf
15.0" Round Culvert n=0.012 L=222.3' S=0.0150 '/' Outflow=3.67 cfs 14,981 cf

Pond D5: DMH #5 Peak Elev=210.09' Inflow=3.30 cfs 11,817 cf
18.0" Round Culvert n=0.013 L=183.0' S=0.0050 '/' Outflow=3.30 cfs 11,817 cf

Pond D6: DMH #6 Peak Elev=209.03' Inflow=3.30 cfs 11,817 cf
18.0" Round Culvert n=0.013 L=299.7' S=0.0050 '/' Outflow=3.30 cfs 11,817 cf

Pond D7: DMH #7 Peak Elev=207.33' Inflow=3.30 cfs 11,817 cf
18.0" Round Culvert n=0.013 L=44.2' S=0.0550 '/' Outflow=3.30 cfs 11,817 cf

Pond D8: DMH #8 Peak Elev=201.54' Inflow=1.93 cfs 6,595 cf
12.0" Round Culvert n=0.013 L=87.7' S=0.0050 '/' Outflow=1.93 cfs 6,595 cf

Pond D9: DMH #9 Peak Elev=200.97' Inflow=1.93 cfs 6,595 cf
12.0" Round Culvert n=0.013 L=11.9' S=0.0050 '/' Outflow=1.93 cfs 6,595 cf

Pond DE61: DRIP #61 Peak Elev=213.22' Storage=273 cf Inflow=0.45 cfs 1,589 cf
Discarded=0.00 cfs 196 cf Primary=0.38 cfs 1,249 cf Outflow=0.39 cfs 1,445 cf

Pond DE62: DRIP #62 Peak Elev=213.22' Storage=273 cf Inflow=0.45 cfs 1,589 cf
Discarded=0.00 cfs 196 cf Primary=0.38 cfs 1,249 cf Outflow=0.39 cfs 1,445 cf

Pond DE63: DRIP #63 Peak Elev=207.93' Storage=152 cf Inflow=0.32 cfs 1,099 cf
Discarded=0.00 cfs 117 cf Primary=0.29 cfs 895 cf Outflow=0.29 cfs 1,012 cf

Pond DE64: DRIP #64 Peak Elev=205.97' Storage=184 cf Inflow=0.37 cfs 1,298 cf
Discarded=0.00 cfs 140 cf Primary=0.33 cfs 1,057 cf Outflow=0.33 cfs 1,197 cf

Pond DE65: DRIP #65 Peak Elev=206.93' Storage=152 cf Inflow=0.32 cfs 1,100 cf
Discarded=0.00 cfs 117 cf Primary=0.29 cfs 896 cf Outflow=0.29 cfs 1,013 cf

Pond DE66: DRIP #66 Peak Elev=208.76' Storage=183 cf Inflow=0.36 cfs 1,275 cf
Discarded=0.00 cfs 140 cf Primary=0.32 cfs 1,033 cf Outflow=0.33 cfs 1,173 cf

Pond DE67: DRIP #67 Peak Elev=208.97' Storage=184 cf Inflow=0.37 cfs 1,302 cf
Discarded=0.00 cfs 140 cf Primary=0.33 cfs 1,061 cf Outflow=0.33 cfs 1,201 cf

Pond DE68: DRIP #68 Peak Elev=207.92' Storage=248 cf Inflow=0.45 cfs 1,576 cf
Discarded=0.00 cfs 196 cf Primary=0.39 cfs 1,238 cf Outflow=0.40 cfs 1,434 cf

Pond DE69: DRIP #69 Peak Elev=206.47' Storage=184 cf Inflow=0.37 cfs 1,302 cf
Discarded=0.00 cfs 140 cf Primary=0.33 cfs 1,061 cf Outflow=0.33 cfs 1,200 cf

Pond DE70: DRIP #70 Peak Elev=206.87' Storage=184 cf Inflow=0.37 cfs 1,301 cf
Discarded=0.00 cfs 140 cf Primary=0.33 cfs 1,059 cf Outflow=0.33 cfs 1,199 cf

Pond DE71: DRIP #71 Peak Elev=207.51' Storage=273 cf Inflow=0.45 cfs 1,575 cf
Discarded=0.00 cfs 196 cf Primary=0.38 cfs 1,235 cf Outflow=0.38 cfs 1,431 cf

Pond DECH: DRIP #CH Peak Elev=209.49' Storage=382 cf Inflow=0.67 cfs 2,343 cf
Discarded=0.04 cfs 1,427 cf Primary=0.38 cfs 916 cf Outflow=0.42 cfs 2,343 cf

Pond DMH32: DMH #32 Peak Elev=203.40' Inflow=2.09 cfs 7,071 cf
12.0" Round Culvert n=0.013 L=19.2' S=0.0531 '/' Outflow=2.09 cfs 7,071 cf

Pond OCS1: OCS#1 Peak Elev=196.14' Inflow=5.03 cfs 17,471 cf
Outflow=5.03 cfs 17,471 cf

Pond OCS3: OCS#3 Peak Elev=204.75' Inflow=5.25 cfs 17,757 cf
Outflow=5.25 cfs 17,757 cf

Pond OCS4: OCS#4 Peak Elev=204.72' Inflow=1.25 cfs 4,007 cf
Outflow=1.25 cfs 4,007 cf

Pond OCS6: OCS #6 Peak Elev=202.65' Inflow=1.73 cfs 6,129 cf
Outflow=1.73 cfs 6,129 cf

Pond OCS7: OCS #7 Peak Elev=202.65' Inflow=1.70 cfs 5,986 cf
Outflow=1.70 cfs 5,986 cf

Pond P204: STORMTECH INFILTRATION Peak Elev=204.72' Storage=8,487 cf Inflow=6.49 cfs 21,764 cf
Discarded=0.09 cfs 5,743 cf Primary=1.79 cfs 13,822 cf Outflow=1.88 cfs 19,565 cf

Pond P205: INFILTRATIONPOND #3 Peak Elev=206.70' Storage=7,871 cf Inflow=4.73 cfs 18,538 cf
Discarded=0.30 cfs 14,188 cf Primary=0.40 cfs 1,449 cf Outflow=0.70 cfs 15,637 cf

Pond P206: STORMTECHINFILTRATION Peak Elev=196.10' Storage=6,143 cf Inflow=6.18 cfs 21,341 cf
Discarded=0.49 cfs 18,384 cf Primary=1.63 cfs 2,954 cf Outflow=2.12 cfs 21,338 cf

Pond P207: INFILTRATIONPOND #2 Peak Elev=198.06' Storage=13,926 cf Inflow=11.58 cfs 40,612 cf
Discarded=1.03 cfs 34,722 cf Primary=0.96 cfs 5,876 cf Outflow=1.99 cfs 40,597 cf

Pond P210: POCKET WETLAND#1 Peak Elev=203.77' Storage=13,036 cf Inflow=5.18 cfs 17,735 cf
Outflow=0.19 cfs 7,883 cf

Pond P212: INFILTRATIONPOND #1 Peak Elev=202.65' Storage=24,325 cf Inflow=16.29 cfs 63,872 cf
Discarded=1.42 cfs 57,664 cf Primary=3.94 cfs 6,192 cf Outflow=5.35 cfs 63,856 cf

Pond P213: Stormtech Infiltration System Peak Elev=202.65' Storage=3,828 cf Inflow=3.43 cfs 12,114 cf
Discarded=0.39 cfs 12,113 cf Primary=0.00 cfs 0 cf Outflow=0.39 cfs 12,113 cf

Pond P214: STORMTECHINFILTRATION Peak Elev=201.46' Storage=3,080 cf Inflow=3.46 cfs 12,166 cf
Discarded=0.61 cfs 12,168 cf Primary=0.00 cfs 0 cf Outflow=0.61 cfs 12,168 cf

Link AP1: ANALYSISPOINT 1 Inflow=1.05 cfs 3,627 cf
Primary=1.05 cfs 3,627 cf

Link AP2: ANALYSISPOINT 2 Inflow=18.24 cfs 157,893 cf
Primary=18.24 cfs 157,893 cf

Link AP3: ANALYSISPOINT 3 Inflow=2.89 cfs 9,258 cf
Primary=2.89 cfs 9,258 cf

Link AP4: ANALYSISPOINT #4 Inflow=25.19 cfs 178,860 cf
Primary=25.19 cfs 178,860 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 532,571 cf Average Runoff Depth = 2.48"
70.09% Pervious = 1,803,997 sf 29.91% Impervious = 769,923 sf

Summary for Subcatchment B1: MULTIFAMILY BLDG #1

Runoff = 2.53 cfs @ 12.09 hrs, Volume= 9,148 cf, Depth> 4.72"
Routed to Pond D34 : DMH #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
20,156	98	Roofs, HSG C
3,099	98	Roofs, HSG D
23,255	98	Weighted Average
23,255		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B2: MULTIFAMILY BLDG #2

Runoff = 1.91 cfs @ 12.09 hrs, Volume= 6,908 cf, Depth> 4.72"
Routed to Pond OCS3 : OCS#3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
7,873	98	Roofs, HSG A
9,688	98	Roofs, HSG C
17,561	98	Weighted Average
17,561		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B3: MULTIFAMILY BUILDING #3

Runoff = 2.17 cfs @ 12.09 hrs, Volume= 7,860 cf, Depth> 4.72"
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
608	98	Roofs, HSG A
19,373	98	Roofs, HSG C
19,981	98	Weighted Average
19,981		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C10: CB #10

Runoff = 0.76 cfs @ 12.09 hrs, Volume= 2,738 cf, Depth> 4.72"
Routed to Pond CB10 : CB #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
339	98	Paved roads w/curbs & sewers, HSG B
5,703	98	Paved roads w/curbs & sewers, HSG C
919	98	Paved roads w/curbs & sewers, HSG D
6,961	98	Weighted Average
6,961		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C11: CB #11

Runoff = 0.78 cfs @ 12.09 hrs, Volume= 2,822 cf, Depth> 4.72"
Routed to Pond CB11 : CB #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
7,173	98	Paved roads w/curbs & sewers, HSG C
7,173		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C12: CB #12

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 2,060 cf, Depth> 4.72"
Routed to Pond CB12 : CB #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,238	98	Paved roads w/curbs & sewers, HSG C
5,238		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C13: CB #13

Runoff = 1.16 cfs @ 12.09 hrs, Volume= 4,068 cf, Depth> 4.49"
Routed to Pond CB13 : CB #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,003	74	>75% Grass cover, Good, HSG C
7,547	98	Paved parking, HSG C
2,323	98	Roofs, HSG C
10,873	96	Weighted Average
1,003		9.22% Pervious Area
9,870		90.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C14: CB #14

Runoff = 1.20 cfs @ 12.09 hrs, Volume= 3,973 cf, Depth> 3.94"
Routed to Pond CB14 : CB #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,195	39	>75% Grass cover, Good, HSG A
7,649	98	Paved parking, HSG A
472	74	>75% Grass cover, Good, HSG C
2,783	98	Paved parking, HSG C
12,099	91	Weighted Average
1,667		13.78% Pervious Area
10,432		86.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C15: CB #15

Runoff = 0.73 cfs @ 12.09 hrs, Volume= 2,622 cf, Depth> 4.72"
Routed to Pond CB15 : CB #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,000	98	Paved parking, HSG A
1,666	98	Paved parking, HSG C
6,666	98	Weighted Average
6,666		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C16: CB #16

Runoff = 0.62 cfs @ 12.09 hrs, Volume= 1,962 cf, Depth> 2.76"
Routed to Pond CB16 : CB #16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
2,467	39	>75% Grass cover, Good, HSG A
4,380	98	Paved parking, HSG A
524	74	>75% Grass cover, Good, HSG C
1,145	98	Paved parking, HSG C
8,516	79	Weighted Average
2,991		35.12% Pervious Area
5,525		64.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C17: CB #17

Runoff = 1.20 cfs @ 12.09 hrs, Volume= 3,992 cf, Depth> 4.05"
Routed to Pond CB17 : CB #17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,093	74	>75% Grass cover, Good, HSG C
8,743	98	Paved parking, HSG C
11,836	92	Weighted Average
3,093		26.13% Pervious Area
8,743		73.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C18: CB #18

Runoff = 1.81 cfs @ 12.09 hrs, Volume= 5,941 cf, Depth> 3.83"
Routed to Pond CB18 : CB #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
6,255	74	>75% Grass cover, Good, HSG C
12,336	98	Paved parking, HSG C
18,591	90	Weighted Average
6,255		33.65% Pervious Area
12,336		66.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C20: CB #20

Runoff = 1.26 cfs @ 12.09 hrs, Volume= 4,355 cf, Depth> 4.38"
Routed to Pond CB20 : CB #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,319	98	Paved parking, HSG A
1,319	74	>75% Grass cover, Good, HSG C
7,301	98	Paved parking, HSG C
11,939	95	Weighted Average
1,319		11.05% Pervious Area
10,620		88.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C21: CB #21

Runoff = 0.99 cfs @ 12.09 hrs, Volume= 3,251 cf, Depth> 3.83"
Routed to Pond CB21 : CB #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,319	39	>75% Grass cover, Good, HSG A
7,301	98	Paved parking, HSG A
1,554	98	Paved parking, HSG C
10,174	90	Weighted Average
1,319		12.96% Pervious Area
8,855		87.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C22: CB #22

Runoff = 1.28 cfs @ 12.09 hrs, Volume= 4,490 cf, Depth> 4.49"
Routed to Pond CB22 : CB #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
2,946	98	Paved parking, HSG A
177	74	>75% Grass cover, Good, HSG C
2,641	98	Paved parking, HSG C
829	80	>75% Grass cover, Good, HSG D
5,408	98	Paved parking, HSG D
12,001	96	Weighted Average
1,006		8.38% Pervious Area
10,995		91.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C23: CB #23

Runoff = 0.93 cfs @ 12.09 hrs, Volume= 3,014 cf, Depth> 3.73"
Routed to Pond CB23 : CB #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
242	39	>75% Grass cover, Good, HSG A
3,016	98	Paved parking, HSG A
1,267	74	>75% Grass cover, Good, HSG C
218	98	Paved parking, HSG C
2,272	80	>75% Grass cover, Good, HSG D
2,679	98	Paved parking, HSG D
9,694	89	Weighted Average
3,781		39.00% Pervious Area
5,913		61.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C24: CB #24

Runoff = 0.82 cfs @ 12.09 hrs, Volume= 2,746 cf, Depth> 4.16"
Routed to Pond CB24 : CB #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,722	98	Paved parking, HSG D
2,208	80	>75% Grass cover, Good, HSG D
7,930	93	Weighted Average
2,208		27.84% Pervious Area
5,722		72.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C25: CB #25

Runoff = 0.89 cfs @ 12.09 hrs, Volume= 3,017 cf, Depth> 4.27"
Routed to Pond CB25 : CB #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
211	39	>75% Grass cover, Good, HSG A
519	98	Paved parking, HSG A
15	74	>75% Grass cover, Good, HSG C
300	98	Paved parking, HSG C
1,393	80	>75% Grass cover, Good, HSG D
6,049	98	Paved parking, HSG D
8,487	94	Weighted Average
1,619		19.08% Pervious Area
6,868		80.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C26: CB #26

Runoff = 0.88 cfs @ 12.09 hrs, Volume= 2,901 cf, Depth> 3.94"
Routed to Pond CB26 : CB #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,203	80	>75% Grass cover, Good, HSG D
5,632	98	Paved parking, HSG D
8,835	91	Weighted Average
3,203		36.25% Pervious Area
5,632		63.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C27: CB #27

Runoff = 0.65 cfs @ 12.09 hrs, Volume= 2,287 cf, Depth> 4.49"
Routed to Pond CB27 : CB #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
98	39	>75% Grass cover, Good, HSG A
131	98	Paved parking, HSG A
397	80	>75% Grass cover, Good, HSG D
5,485	98	Paved parking, HSG D
6,111	96	Weighted Average
495		8.10% Pervious Area
5,616		91.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C28: CB #28

Runoff = 0.97 cfs @ 12.09 hrs, Volume= 3,136 cf, Depth> 3.63"
Routed to Pond CB28 : CB #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
2,751	74	>75% Grass cover, Good, HSG C
2,841	98	Paved parking, HSG C
2,297	80	>75% Grass cover, Good, HSG D
2,483	98	Paved parking, HSG D
10,372	88	Weighted Average
5,048		48.67% Pervious Area
5,324		51.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C29: CB #29

Runoff = 0.89 cfs @ 12.09 hrs, Volume= 3,020 cf, Depth> 4.27"
Routed to Pond CB29 : CB #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,341	74	>75% Grass cover, Good, HSG C
5,330	98	Paved parking, HSG C
1,824	98	Roofs, HSG C
8,495	94	Weighted Average
1,341		15.79% Pervious Area
7,154		84.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C30: CB #30

Runoff = 0.93 cfs @ 12.09 hrs, Volume= 3,175 cf, Depth> 4.27"
Routed to Pond CB30 : CB #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,572	74	>75% Grass cover, Good, HSG C
6,310	98	Paved parking, HSG C
1,051	98	Roofs, HSG C
8,933	94	Weighted Average
1,572		17.60% Pervious Area
7,361		82.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C31: CB #31

Runoff = 1.59 cfs @ 12.09 hrs, Volume= 5,230 cf, Depth> 3.83"
Routed to Pond CB31 : CB #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,132	74	>75% Grass cover, Good, HSG C
9,132	98	Paved parking, HSG C
2,101	98	Roofs, HSG C
16,365	90	Weighted Average
5,132		31.36% Pervious Area
11,233		68.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C32: CB #32

Runoff = 1.26 cfs @ 12.09 hrs, Volume= 4,174 cf, Depth> 3.94"
Routed to Pond CB32 : CB #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,753	74	>75% Grass cover, Good, HSG C
7,068	98	Paved parking, HSG C
1,889	98	Roofs, HSG C
12,710	91	Weighted Average
3,753		29.53% Pervious Area
8,957		70.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C33: CB #33

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 1,927 cf, Depth> 4.27"
Routed to Pond CB33 : CB #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
873	74	>75% Grass cover, Good, HSG C
3,693	98	Paved parking, HSG C
855	98	Roofs, HSG C
5,421	94	Weighted Average
873		16.10% Pervious Area
4,548		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C34: CB #34

Runoff = 0.89 cfs @ 12.09 hrs, Volume= 2,986 cf, Depth> 4.16"
Routed to Pond CB34 : CB #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,680	74	>75% Grass cover, Good, HSG C
5,115	98	Paved parking, HSG C
1,827	98	Roofs, HSG C
8,622	93	Weighted Average
1,680		19.49% Pervious Area
6,942		80.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C35: CB #35

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 1,632 cf, Depth> 4.72"
Routed to Pond CB35 : CB #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,578	98	Paved parking, HSG C
79	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
4,149	98	Weighted Average
79		1.90% Pervious Area
4,070		98.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C36: CB #36

Runoff = 0.72 cfs @ 12.09 hrs, Volume= 2,605 cf, Depth> 4.72"
Routed to Pond CB36 : CB #36

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
6,622	98	Paved parking, HSG C
6,622		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C38: CB #38

Runoff = 0.83 cfs @ 12.09 hrs, Volume= 3,004 cf, Depth> 4.72"
Routed to Pond CB38 : CB #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
6,647	98	Paved parking, HSG B
392	98	Paved parking, HSG C
598	98	Paved parking, HSG D
7,637	98	Weighted Average
7,637		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C39: CB #39

Runoff = 0.83 cfs @ 12.09 hrs, Volume= 2,994 cf, Depth> 4.72"
Routed to Pond CB39 : CB #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
6,505	98	Paved parking, HSG B
519	98	Paved parking, HSG C
588	98	Paved parking, HSG D
7,612	98	Weighted Average
7,612		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C40: CB #40

Runoff = 0.46 cfs @ 12.09 hrs, Volume= 1,656 cf, Depth> 4.72"
Routed to Pond CB40 : CB #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
4,211	98	Paved parking, HSG B
4,211		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C41: CB #41

Runoff = 0.61 cfs @ 12.09 hrs, Volume= 2,197 cf, Depth> 4.72"
Routed to Pond CB41 : CB #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,586	98	Paved parking, HSG B
5,586		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C43: CB #43

Runoff = 0.30 cfs @ 12.09 hrs, Volume= 967 cf, Depth> 3.73"
Routed to Pond CB43 : CB #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
2,343	98	Paved parking, HSG B
766	61	>75% Grass cover, Good, HSG B
3,109	89	Weighted Average
766		24.64% Pervious Area
2,343		75.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C44: CB #44

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 667 cf, Depth> 4.05"
Routed to Pond CB44 : CB #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,670	98	Paved parking, HSG B
308	61	>75% Grass cover, Good, HSG B
1,978	92	Weighted Average
308		15.57% Pervious Area
1,670		84.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C45: CB #45

Runoff = 0.19 cfs @ 12.09 hrs, Volume= 587 cf, Depth> 2.86"
Routed to Pond CB45 : CB #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,240	98	Paved parking, HSG B
1,225	61	>75% Grass cover, Good, HSG B
2,465	80	Weighted Average
1,225		49.70% Pervious Area
1,240		50.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C46: CB #46

Runoff = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf, Depth> 2.86"
Routed to Pond CB46 : CB #46

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
2,241	98	Paved parking, HSG B
2,156	61	>75% Grass cover, Good, HSG B
4,397	80	Weighted Average
2,156		49.03% Pervious Area
2,241		50.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C47: CB #47

Runoff = 0.33 cfs @ 12.09 hrs, Volume= 1,185 cf, Depth> 4.72"
Routed to Pond CB47 : CB#47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,012	98	Paved roads w/curbs & sewers, HSG B
3,012		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C48: CB #48

Runoff = 2.61 cfs @ 12.17 hrs, Volume= 10,030 cf, Depth> 2.00"
Routed to Pond CB48 : CB#48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,877	98	Paved roads w/curbs & sewers, HSG B
56,251	68	1 acre lots, 20% imp, HSG B
60,128	70	Weighted Average
45,001		74.84% Pervious Area
15,127		25.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	50	0.0800	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
4.8	350	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.8	400	Total			

Summary for Subcatchment C49: CB #49

Runoff = 0.55 cfs @ 12.09 hrs, Volume= 1,862 cf, Depth> 4.27"
Routed to Pond CB49 : CB #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
4,431	98	Paved roads w/curbs & sewers, HSG C
807	74	>75% Grass cover, Good, HSG C
5,238	94	Weighted Average
807		15.41% Pervious Area
4,431		84.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C50: CB #50

Runoff = 1.55 cfs @ 12.09 hrs, Volume= 5,209 cf, Depth> 4.16"
Routed to Pond CB50 : CB #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,429	74	>75% Grass cover, Good, HSG C
11,611	98	Paved roads w/curbs & sewers, HSG C
15,040	93	Weighted Average
3,429		22.80% Pervious Area
11,611		77.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C51: CB #51

Runoff = 0.74 cfs @ 12.09 hrs, Volume= 2,684 cf, Depth> 4.72"
Routed to Pond CB51 : CB #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,147	98	Roofs, HSG C
3,676	98	Paved parking, HSG C
6,823	98	Weighted Average
6,823		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C52: CB#52

Runoff = 0.96 cfs @ 12.09 hrs, Volume= 3,302 cf, Depth> 4.38"
Routed to Pond CB52 : CB #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,164	74	>75% Grass cover, Good, HSG C
7,888	98	Paved parking, HSG C
9,052	95	Weighted Average
1,164		12.86% Pervious Area
7,888		87.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C53: CB #53

Runoff = 0.81 cfs @ 12.09 hrs, Volume= 2,723 cf, Depth> 4.16"
Routed to Pond CB53 : CB #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
287	39	>75% Grass cover, Good, HSG A
3,287	98	Paved parking, HSG A
773	74	>75% Grass cover, Good, HSG C
3,516	98	Paved parking, HSG C
7,863	93	Weighted Average
1,060		13.48% Pervious Area
6,803		86.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C54: CB #54

Runoff = 0.48 cfs @ 12.09 hrs, Volume= 1,583 cf, Depth> 3.94"
Routed to Pond CB54 : CB #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
550	39	>75% Grass cover, Good, HSG A
4,176	98	Paved parking, HSG A
84	74	>75% Grass cover, Good, HSG C
11	98	Paved parking, HSG C
4,821	91	Weighted Average
634		13.15% Pervious Area
4,187		86.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C7: CB #5

Runoff = 0.51 cfs @ 12.09 hrs, Volume= 1,829 cf, Depth> 4.72"
Routed to Pond CB7 : CB#5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
4,650	98	Paved roads w/curbs & sewers, HSG B
4,650		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C8: CB #8

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 1,937 cf, Depth> 4.27"
Routed to Pond CB8 : CB#8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
4,837	98	Paved roads w/curbs & sewers, HSG B
613	61	>75% Grass cover, Good, HSG B
5,450	94	Weighted Average
613		11.25% Pervious Area
4,837		88.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C9: CB #9

Runoff = 1.76 cfs @ 12.09 hrs, Volume= 6,257 cf, Depth> 4.60"
Routed to Pond CB9 : CB #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
31	61	>75% Grass cover, Good, HSG B
433	98	Paved roads w/curbs & sewers, HSG B
904	74	>75% Grass cover, Good, HSG C
12,073	98	Paved parking, HSG C
2,305	98	Roofs, HSG C
52	80	>75% Grass cover, Good, HSG D
509	98	Paved parking, HSG D
16,307	97	Weighted Average
987		6.05% Pervious Area
15,320		93.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment CH1: CLUBHOUSE

Runoff = 0.67 cfs @ 12.09 hrs, Volume= 2,343 cf, Depth> 4.49"
Routed to Pond DECH : DRIP #CH

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,802	98	Roofs, HSG C
3	98	Roofs, HSG D
435	74	>75% Grass cover, Good, HSG C
22	80	>75% Grass cover, Good, HSG D
6,262	96	Weighted Average
457		7.30% Pervious Area
5,805		92.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment MB1: MAIL KIOSK

Runoff = 0.10 cfs @ 12.09 hrs, Volume= 369 cf, Depth> 4.72"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
938	98	Roofs, HSG B
938		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S201: SUMMER STREET ACCESS APRON

Runoff = 1.05 cfs @ 12.09 hrs, Volume= 3,627 cf, Depth> 4.38"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
717	61	>75% Grass cover, Good, HSG B
9,226	98	Paved parking, HSG B
9,943	95	Weighted Average
717		7.21% Pervious Area
9,226		92.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S202: EXISTING WETLAND

Runoff = 18.32 cfs @ 12.33 hrs, Volume= 89,722 cf, Depth> 2.49"
Routed to Reach SC1 : Stream Crossing #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
136,496	61	>75% Grass cover, Good, HSG B
83,935	55	Woods, Good, HSG B
29	98	Paved parking, HSG B
13,946	98	Roofs, HSG B
9,038	48	Brush, Good, HSG B
2,573	74	>75% Grass cover, Good, HSG C
17,121	70	Woods, Good, HSG C
98	98	Paved parking, HSG C
1,097	65	Brush, Good, HSG C
126	80	>75% Grass cover, Good, HSG D
132	98	Paved parking, HSG D
167,678	98	Water Surface, HSG D
432,269	76	Weighted Average
250,386		57.92% Pervious Area
181,883		42.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
1.4	118	0.0400	1.40		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.2	688	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.2	856	Total			

Summary for Subcatchment S203: POCKET WETLAND #1

Runoff = 1.45 cfs @ 12.10 hrs, Volume= 4,616 cf, Depth> 2.16"
Routed to Pond p210 : POCKET WETLAND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
12,682	61	>75% Grass cover, Good, HSG B
1,060	98	Water Surface, 0% imp, HSG B
7,785	74	>75% Grass cover, Good, HSG C
4,060	98	Water Surface, 0% imp, HSG C
25,587	72	Weighted Average
25,587		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S204: EXISTING WETLANDS

Runoff = 12.75 cfs @ 12.32 hrs, Volume= 61,782 cf, Depth> 2.41"
Routed to Link ap2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
53,739	61	>75% Grass cover, Good, HSG B
17,975	55	Woods, Good, HSG B
20,940	48	Brush, Good, HSG B
41,421	74	>75% Grass cover, Good, HSG C
68,342	70	Woods, Good, HSG C
116	98	Paved parking, HSG C
1,904	65	Brush, Good, HSG C
1,528	65	Brush, Good, HSG C
2,508	77	Woods, Good, HSG D
161	98	Paved parking, HSG D
4,073	73	Brush, Good, HSG D
95,496	98	Water Surface, HSG D
308,203	75	Weighted Average
212,430		68.93% Pervious Area
95,773		31.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.2000	0.26		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.27"
19.4	582	0.0100	0.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
22.6	632	Total			

Summary for Subcatchment S205: ISOLATED WETLAND

Runoff = 2.89 cfs @ 12.10 hrs, Volume= 9,258 cf, Depth> 2.00"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
10,910	30	Woods, Good, HSG A
3,684	74	>75% Grass cover, Good, HSG C
2,275	70	Woods, Good, HSG C
171	98	Paved parking, HSG C
1,706	65	Brush, Good, HSG C
1,940	80	>75% Grass cover, Good, HSG D
23,513	77	Woods, Good, HSG D
393	98	Paved parking, HSG D
2,208	73	Brush, Good, HSG D
8,620	98	Water Surface, HSG D
55,420	70	Weighted Average
46,236		83.43% Pervious Area
9,184		16.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S206: OVERLAND FLOW

Runoff = 19.55 cfs @ 12.52 hrs, Volume= 119,746 cf, Depth> 1.61"
Routed to Link AP4 : ANALYSIS POINT #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
16,514	39	>75% Grass cover, Good, HSG A
118,226	30	Woods, Good, HSG A
713	98	Paved parking, HSG A
41,148	30	Brush, Good, HSG A
17,568	51	1 acre lots, 20% imp, HSG A
37,410	61	>75% Grass cover, Good, HSG B
13,900	55	Woods, Good, HSG B
54,538	48	Brush, Good, HSG B
91,202	68	1 acre lots, 20% imp, HSG B
77,444	74	>75% Grass cover, Good, HSG C
114,763	70	Woods, Good, HSG C
3,493	98	Paved parking, HSG C
57,740	65	Brush, Good, HSG C
5,763	80	>75% Grass cover, Good, HSG D
126,141	77	Woods, Good, HSG D
114,732	98	Water Surface, 0% imp, HSG D
891,295	65	Weighted Average
865,335		97.09% Pervious Area
25,960		2.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0500	0.10		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
5.0	334	0.0250	1.11		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.9	91	0.0250	0.79		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
10.2	491	0.0400	0.80		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
8.9	501	0.0350	0.94		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
34.5	1,467	Total			

Summary for Subcatchment S207: INFILTRATION POND #2

Runoff = 1.94 cfs @ 12.09 hrs, Volume= 6,290 cf, Depth> 3.63"
Routed to Pond P207 : INFILTRATION POND #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
839	98	Water Surface, 0% imp, HSG A
8,802	74	>75% Grass cover, Good, HSG C
11,162	98	Water Surface, 0% imp, HSG C
20,803	88	Weighted Average
20,803		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S208: GRASS AREA

Runoff = 0.88 cfs @ 12.09 hrs, Volume= 2,769 cf, Depth> 2.41"
Routed to Pond OCS4 : OCS#4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
476	39	>75% Grass cover, Good, HSG A
12,000	74	>75% Grass cover, Good, HSG C
168	98	Paved parking, HSG A
1,116	98	Paved parking, HSG C
13,760	75	Weighted Average
12,476		90.67% Pervious Area
1,284		9.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S209: WETLAND C

Runoff = 3.68 cfs @ 12.42 hrs, Volume= 19,940 cf, Depth> 2.23"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
10,826	39	>75% Grass cover, Good, HSG A
16,826	30	Woods, Good, HSG A
8,863	74	>75% Grass cover, Good, HSG C
26,084	70	Woods, Good, HSG C
44,067	98	Water Surface, 0% imp, HSG D
304	98	Paved parking, HSG A
103	98	Paved parking, HSG C
107,073	73	Weighted Average
106,666		99.62% Pervious Area
407		0.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	50	0.0150	0.06		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
15.2	557	0.0150	0.61		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.9	607	Total			

Summary for Subcatchment S210: INFILTRATION POND #1

Runoff = 3.96 cfs @ 12.23 hrs, Volume= 16,882 cf, Depth> 2.67"
Routed to Pond P212 : INFILTRATION POND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
13,844	98	Water Surface, 0% imp, HSG C
59,814	74	>75% Grass cover, Good, HSG C
2,232	65	Brush, Good, HSG C
75,890	78	Weighted Average
75,890		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	50	0.0150	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
10.3	530	0.0150	0.86		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.5	580	Total			

Summary for Subcatchment S211: S211

Runoff = 1.13 cfs @ 12.09 hrs, Volume= 3,556 cf, Depth> 2.76"
Routed to Pond P205 : INFILTRATION POND #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
8,108	61	>75% Grass cover, Good, HSG B
7,328	98	Water Surface, HSG B
15,436	79	Weighted Average
8,108		52.53% Pervious Area
7,328		47.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S212: SWALE

Runoff = 1.38 cfs @ 12.35 hrs, Volume= 7,112 cf, Depth> 1.62"
Routed to Reach SC2 : Stream Crossing #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
4,100	61	>75% Grass cover, Good, HSG B
7,192	55	Woods, Good, HSG B
1,180	74	>75% Grass cover, Good, HSG C
3,436	70	Woods, Good, HSG C
13,180	98	Water Surface, 0% imp, HSG D
72	98	Paved parking, HSG B
22,663	48	Brush, Good, HSG B
545	65	Brush, Good, HSG C
107	98	Paved parking, HSG C
135	98	Paved parking, HSG D
158	80	>75% Grass cover, Good, HSG D
52,768	65	Weighted Average
52,454		99.40% Pervious Area
314		0.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.1	50	0.0400	0.05		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.27"
3.9	232	0.0600	0.98		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
3.1	136	0.0220	0.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.1	418	Total			

Summary for Subcatchment S213: COURTYARD

Runoff = 1.56 cfs @ 12.09 hrs, Volume= 4,932 cf, Depth> 2.76"
Routed to Pond 11P : YARD DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
5,047	39	>75% Grass cover, Good, HSG A
1,678	98	Paved parking, HSG A
168	98	Roofs, HSG A
532	98	Water Surface, 0% imp, HSG A
4,518	74	>75% Grass cover, Good, HSG C
7,080	98	Paved parking, HSG C
878	98	Roofs, HSG C
718	98	Water Surface, 0% imp, HSG C
296	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
21,407	79	Weighted Average
11,111		51.90% Pervious Area
10,296		48.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T1: Trench Drain 1

Runoff = 1.15 cfs @ 12.09 hrs, Volume= 3,869 cf, Depth> 4.16"
Routed to Pond 5R : TRENCH DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,443	74	>75% Grass cover, Good, HSG C
4,228	98	Paved parking, HSG C
1,339	80	>75% Grass cover, Good, HSG D
4,163	98	Paved parking, HSG D
11,173	93	Weighted Average
2,782		24.90% Pervious Area
8,391		75.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T2: Drive Under B2

Runoff = 0.31 cfs @ 12.09 hrs, Volume= 991 cf, Depth> 2.68"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
1,510	39	>75% Grass cover, Good, HSG A
2,313	98	Paved parking, HSG A
77	74	>75% Grass cover, Good, HSG C
545	98	Paved parking, HSG C
4,445	78	Weighted Average
1,587		35.70% Pervious Area
2,858		64.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH1: TOWN HOUSE #1

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 1,589 cf, Depth> 4.49"
Routed to Pond DE61 : DRIP #61

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH10: TOWN HOUSE #10

Runoff = 0.37 cfs @ 12.09 hrs, Volume= 1,301 cf, Depth> 4.49"
Routed to Pond DE70 : DRIP #70

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,184	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,476	96	Weighted Average
292		8.40% Pervious Area
3,184		91.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH11: TOWN HOUSE #11

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 1,575 cf, Depth> 4.49"
Routed to Pond DE71 : DRIP #71

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,899	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,210	96	Weighted Average
311		7.39% Pervious Area
3,899		92.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH2: TOWN HOUSE #2

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 1,589 cf, Depth> 4.49"
Routed to Pond DE62 : DRIP #62

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH3: TOWN HOUSE #3

Runoff = 0.32 cfs @ 12.09 hrs, Volume= 1,099 cf, Depth> 4.38"
Routed to Pond DE63 : DRIP #63

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
2,672	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,013	95	Weighted Average
341		11.32% Pervious Area
2,672		88.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH4: TOWN HOUSE #4

Runoff = 0.37 cfs @ 12.09 hrs, Volume= 1,298 cf, Depth> 4.49"
Routed to Pond DE64 : DRIP #64

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,178	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,470	96	Weighted Average
292		8.41% Pervious Area
3,178		91.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH5: TOWN HOUSE #5

Runoff = 0.32 cfs @ 12.09 hrs, Volume= 1,100 cf, Depth> 4.38"
Routed to Pond DE65 : DRIP #65

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
2,675	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,016	95	Weighted Average
341		11.31% Pervious Area
2,675		88.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH6: TOWN HOUSE #6

Runoff = 0.36 cfs @ 12.09 hrs, Volume= 1,275 cf, Depth> 4.49"
Routed to Pond DE66 : DRIP #66

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,116	98	Roofs, HSG C
291	74	>75% Grass cover, Good, HSG C
3,407	96	Weighted Average
291		8.54% Pervious Area
3,116		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH7: TOWN HOUSE #7

Runoff = 0.37 cfs @ 12.09 hrs, Volume= 1,302 cf, Depth> 4.49"
Routed to Pond DE67 : DRIP #67

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,189	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,481	96	Weighted Average
292		8.39% Pervious Area
3,189		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH8: TOWN HOUSE #8

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 1,576 cf, Depth> 4.49"
Routed to Pond DE68 : DRIP #68

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,901	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,212	96	Weighted Average
311		7.38% Pervious Area
3,901		92.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH9: TOWN HOUSE #9

Runoff = 0.37 cfs @ 12.09 hrs, Volume= 1,302 cf, Depth> 4.49"
Routed to Pond DE69 : DRIP #69

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10YR Rainfall=4.96"

Area (sf)	CN	Description
3,188	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,480	96	Weighted Average
292		8.39% Pervious Area
3,188		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Reach 8R: OVERLAND FLOW

Inflow Area = 11,975 sf, 92.37% Impervious, Inflow Depth > 3.57" for 10YR event
Inflow = 1.10 cfs @ 12.14 hrs, Volume= 3,558 cf
Outflow = 0.26 cfs @ 12.59 hrs, Volume= 3,276 cf, Atten= 76%, Lag= 27.1 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.08 fps, Min. Travel Time= 110.7 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 214.4 min

Peak Storage= 1,755 cf @ 12.59 hrs
Average Depth at Peak Storage= 0.06' , Surface Width= 50.62'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 28.09 cfs

50.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 563.0' Slope= 0.0213 '/'
Inlet Invert= 208.00', Outlet Invert= 196.00'

‡

Summary for Reach 9R: OVERLAND FLOW

Inflow Area = 32,665 sf, 94.81% Impervious, Inflow Depth = 0.00" for 10YR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 23.45 cfs

20.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 211.0' Slope= 0.0652 '/'
Inlet Invert= 201.75', Outlet Invert= 188.00'

‡

Summary for Reach 10R: OVERLAND FLOW

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth = 0.54" for 10YR event
Inflow = 0.96 cfs @ 12.60 hrs, Volume= 5,876 cf
Outflow = 0.92 cfs @ 12.86 hrs, Volume= 5,876 cf, Atten= 4%, Lag= 15.2 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.22 fps, Min. Travel Time= 12.3 min
Avg. Velocity = 0.07 fps, Avg. Travel Time= 38.0 min

Peak Storage= 680 cf @ 12.86 hrs
Average Depth at Peak Storage= 0.19' , Surface Width= 23.79'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 17.57 cfs

20.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 164.0' Slope= 0.0366 '/'
Inlet Invert= 192.00', Outlet Invert= 186.00'

‡

Summary for Reach 11R: 4x4 Open Bottom Culvert

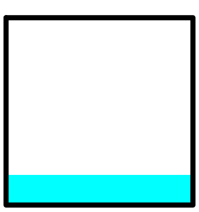
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 1.13" for 10YR event
Inflow = 4.11 cfs @ 12.47 hrs, Volume= 40,067 cf
Outflow = 4.11 cfs @ 12.47 hrs, Volume= 40,059 cf, Atten= 0%, Lag= 0.2 min
Routed to Reach 23R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 1.62 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 0.72 fps, Avg. Travel Time= 0.7 min

Peak Storage= 76 cf @ 12.47 hrs
Average Depth at Peak Storage= 0.63' , Surface Width= 4.00'
Bank-Full Depth= 4.00' Flow Area= 16.0 sf, Capacity= 42.20 cfs

48.0" W x 48.0" H Box Pipe
n= 0.069 Riprap, 6-inch
Length= 30.0' Slope= 0.0150 '/'
Inlet Invert= 194.00', Outlet Invert= 193.55'



Summary for Reach 12R: OVERLAND FLOW

Inflow Area = 12,906 sf, 90.20% Impervious, Inflow Depth > 3.61" for 10YR event
Inflow = 1.23 cfs @ 12.13 hrs, Volume= 3,881 cf
Outflow = 0.61 cfs @ 12.33 hrs, Volume= 3,787 cf, Atten= 51%, Lag= 12.2 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.12 fps, Min. Travel Time= 34.1 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 93.2 min

Peak Storage= 1,246 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.10' , Surface Width= 50.99'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 29.80 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 250.0' Slope= 0.0240 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

Summary for Reach 14R: OVERLAND FLOW

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 1.62" for 10YR event
Inflow = 1.38 cfs @ 12.35 hrs, Volume= 7,111 cf
Outflow = 0.31 cfs @ 13.19 hrs, Volume= 6,155 cf, Atten= 77%, Lag= 49.9 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.09 fps, Min. Travel Time= 150.5 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 226.9 min

Peak Storage= 2,832 cf @ 13.19 hrs
Average Depth at Peak Storage= 0.07' , Surface Width= 51.31'
Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 31.55 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 70.00'
Length= 852.0' Slope= 0.0246 '/'
Inlet Invert= 207.00', Outlet Invert= 186.00'

Summary for Reach 15R: OVERLAND FLOW

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 1.51" for 10YR event
Inflow = 0.19 cfs @ 15.68 hrs, Volume= 7,883 cf
Outflow = 0.19 cfs @ 16.81 hrs, Volume= 7,158 cf, Atten= 1%, Lag= 67.8 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.07 fps, Min. Travel Time= 68.4 min
Avg. Velocity = 0.07 fps, Avg. Travel Time= 74.8 min

Peak Storage= 783 cf @ 16.81 hrs
Average Depth at Peak Storage= 0.05' , Surface Width= 50.52'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 27.21 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 300.0' Slope= 0.0200 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

Summary for Reach 18R: OVERLAND FLOW

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth = 0.20" for 10YR event
Inflow = 0.40 cfs @ 12.90 hrs, Volume= 1,449 cf
Outflow = 0.09 cfs @ 14.19 hrs, Volume= 1,312 cf, Atten= 76%, Lag= 77.7 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.06 fps, Min. Travel Time= 167.4 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 265.5 min

Peak Storage= 953 cf @ 14.19 hrs
Average Depth at Peak Storage= 0.03' , Surface Width= 51.54'
Bank-Full Depth= 1.00' Flow Area= 75.0 sf, Capacity= 38.42 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 100.00'
Length= 609.0' Slope= 0.0279 '/'
Inlet Invert= 203.00', Outlet Invert= 186.00'

Summary for Reach 20R: OVERLAND FLOW

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth > 2.30" for 10YR event
Inflow = 1.79 cfs @ 12.47 hrs, Volume= 13,822 cf
Outflow = 1.03 cfs @ 13.55 hrs, Volume= 13,230 cf, Atten= 43%, Lag= 65.2 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.11 fps, Min. Travel Time= 83.0 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 155.3 min

Peak Storage= 5,110 cf @ 13.55 hrs
Average Depth at Peak Storage= 0.18' , Surface Width= 51.79'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 18.54 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 560.0' Slope= 0.0093 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

Summary for Reach 23R: OVERLAND FLOW

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 1.13" for 10YR event
Inflow = 4.11 cfs @ 12.47 hrs, Volume= 40,059 cf
Outflow = 3.63 cfs @ 12.73 hrs, Volume= 39,543 cf, Atten= 12%, Lag= 15.7 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.22 fps, Min. Travel Time= 17.8 min
Avg. Velocity = 0.10 fps, Avg. Travel Time= 40.2 min

Peak Storage= 3,866 cf @ 12.73 hrs
Average Depth at Peak Storage= 0.29' , Surface Width= 61.69'
Bank-Full Depth= 1.00' Flow Area= 70.0 sf, Capacity= 31.93 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 20.0 '/' Top Width= 90.00'
Length= 237.0' Slope= 0.0211 '/'
Inlet Invert= 193.00', Outlet Invert= 188.00'

‡

Summary for Reach R202: OVERLAND FLOW

[62] Hint: Exceeded Reach SC1 OUTLET depth by 0.21' @ 13.05 hrs

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 2.49" for 10YR event
Inflow = 18.32 cfs @ 12.33 hrs, Volume= 89,705 cf
Outflow = 8.31 cfs @ 12.74 hrs, Volume= 84,798 cf, Atten= 55%, Lag= 24.8 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.19 fps, Min. Travel Time= 60.1 min
Avg. Velocity = 0.09 fps, Avg. Travel Time= 135.3 min

Peak Storage= 29,976 cf @ 12.74 hrs
Average Depth at Peak Storage= 0.39' , Surface Width= 119.51'
Bank-Full Depth= 1.00' Flow Area= 125.0 sf, Capacity= 42.56 cfs

100.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 150.00'
Length= 700.0' Slope= 0.0107 '/'
Inlet Invert= 205.50', Outlet Invert= 198.00'

‡

Summary for Reach R211: OVERLAND FLOW

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth = 0.31" for 10YR event
Inflow = 3.94 cfs @ 12.51 hrs, Volume= 6,192 cf
Outflow = 0.78 cfs @ 13.04 hrs, Volume= 5,906 cf, Atten= 80%, Lag= 31.9 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.11 fps, Min. Travel Time= 92.1 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 217.1 min

Peak Storage= 4,295 cf @ 13.04 hrs
Average Depth at Peak Storage= 0.19' , Surface Width= 40.68'
Bank-Full Depth= 1.00' Flow Area= 50.0 sf, Capacity= 14.51 cfs

35.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 15.0 '/' Top Width= 65.00'
Length= 600.0' Slope= 0.0087 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

‡

Summary for Reach SC1: Stream Crossing #1

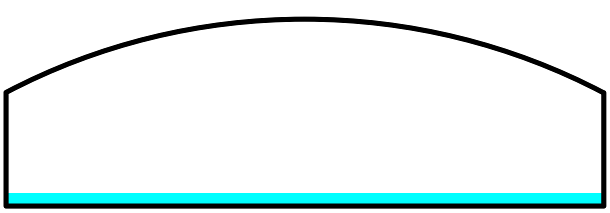
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 2.49" for 10YR event
Inflow = 18.32 cfs @ 12.33 hrs, Volume= 89,722 cf
Outflow = 18.32 cfs @ 12.33 hrs, Volume= 89,705 cf, Atten= 0%, Lag= 0.2 min
Routed to Reach R202 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 3.33 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.19 fps, Avg. Travel Time= 0.6 min

Peak Storage= 237 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.34' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 69.8 sf, Capacity= 722.91 cfs

192.0" W x 60.0" H, R=207.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 43.1' Slope= 0.0200 '/'
Inlet Invert= 206.37', Outlet Invert= 205.51'



Summary for Reach SC2: Stream Crossing #2

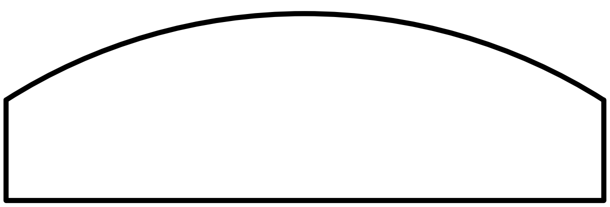
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 1.62" for 10YR event
Inflow = 1.38 cfs @ 12.35 hrs, Volume= 7,112 cf
Outflow = 1.38 cfs @ 12.35 hrs, Volume= 7,111 cf, Atten= 0%, Lag= 0.3 min
Routed to Reach 14R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 1.32 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.05 fps, Avg. Travel Time= 0.6 min

Peak Storage= 38 cf @ 12.35 hrs
Average Depth at Peak Storage= 0.07' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 68.1 sf, Capacity= 768.96 cfs

192.0" W x 60.0" H, R=180.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 36.5' Slope= 0.0241 '/'
Inlet Invert= 208.52', Outlet Invert= 207.64'



Summary for Pond 1P: DMH #33

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 4.56" for 10YR event
Inflow = 1.73 cfs @ 12.09 hrs, Volume= 6,129 cf
Outflow = 1.73 cfs @ 12.09 hrs, Volume= 6,129 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.73 cfs @ 12.09 hrs, Volume= 6,129 cf
Routed to Pond OCS6 : OCS #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.22' @ 12.09 hrs
Flood Elev= 209.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.50'	**12.0" Round Culvert** L= 46.7' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 204.33' S= 0.0251 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.69 cfs @ 12.09 hrs HW=206.20' TW=202.11' (Dynamic Tailwater)
1=Culvert (Inlet Controls 1.69 cfs @ 2.86 fps)

Summary for Pond 3P: OCS #8

Inflow Area = 12,684 sf, 86.64% Impervious, Inflow Depth > 4.07" for 10YR event
Inflow = 1.29 cfs @ 12.09 hrs, Volume= 4,306 cf
Outflow = 1.29 cfs @ 12.09 hrs, Volume= 4,306 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.29 cfs @ 12.09 hrs, Volume= 4,306 cf
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.47' @ 12.53 hrs
Flood Elev= 206.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.62'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.25 cfs @ 12.09 hrs HW=201.21' TW=200.83' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.25 cfs @ 2.61 fps)

Summary for Pond 5R: TRENCH DRAIN

Inflow Area = 11,173 sf, 75.10% Impervious, Inflow Depth > 4.16" for 10YR event
Inflow = 1.15 cfs @ 12.09 hrs, Volume= 3,869 cf
Outflow = 1.15 cfs @ 12.09 hrs, Volume= 3,869 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.15 cfs @ 12.09 hrs, Volume= 3,869 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.02' @ 12.09 hrs
Flood Elev= 199.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.22'	**8.0" Round Culvert** L= 36.0' Ke= 0.500 Inlet / Outlet Invert= 197.22' / 196.50' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=1.12 cfs @ 12.09 hrs HW=198.00' TW=195.61' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.12 cfs @ 3.21 fps)

Summary for Pond 11P: YARD DRAIN

Inflow Area = 21,407 sf, 48.10% Impervious, Inflow Depth > 2.76" for 10YR event
Inflow = 1.56 cfs @ 12.09 hrs, Volume= 4,932 cf
Outflow = 1.14 cfs @ 12.17 hrs, Volume= 4,891 cf, Atten= 27%, Lag= 4.9 min
Primary = 1.14 cfs @ 12.17 hrs, Volume= 4,891 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.37' @ 12.17 hrs Surf.Area= 5,792 sf Storage= 671 cf

Plug-Flow detention time= 18.2 min calculated for 4,881 cf (99% of inflow)
Center-of-Mass det. time= 13.3 min (837.5 - 824.3)

Volume	Invert	Avail.Storage	Storage Description
#1	207.25'	5,475 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.25	5,050	0	0
208.00	9,550	5,475	5,475

Device	Routing	Invert	Outlet Devices
#1	Primary	203.25'	**12.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 203.25' / 202.94' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	207.25'	**4.0" x 4.0" Horiz. Orifice/Grate X 4.00 columns** X 4 rows C= 0.600 in 24.0" x 24.0" Grate (44% open area) Limited to weir flow at low heads

Primary OutFlow Max=1.12 cfs @ 12.17 hrs HW=207.37' TW=203.12' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.12 cfs of 6.60 cfs potential flow)
  └─**2=Orifice/Grate** (Weir Controls 1.12 cfs @ 1.14 fps)

Summary for Pond CB10: CB #10

Inflow Area = 6,961 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.76 cfs @ 12.09 hrs, Volume= 2,738 cf
Outflow = 0.76 cfs @ 12.09 hrs, Volume= 2,738 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.76 cfs @ 12.09 hrs, Volume= 2,738 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.33' @ 12.09 hrs
Flood Elev= 212.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.76'	**12.0" Round Culvert** L= 33.8' Ke= 0.500 Inlet / Outlet Invert= 209.76' / 209.59' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.74 cfs @ 12.09 hrs HW=210.31' TW=210.07' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.74 cfs @ 2.38 fps)

Summary for Pond CB11: CB #11

Inflow Area = 7,173 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.78 cfs @ 12.09 hrs, Volume= 2,822 cf
Outflow = 0.78 cfs @ 12.09 hrs, Volume= 2,822 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.78 cfs @ 12.09 hrs, Volume= 2,822 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 210.43' @ 12.09 hrs
Flood Elev= 213.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.94'	**12.0" Round Culvert** L= 26.3' Ke= 0.500 Inlet / Outlet Invert= 209.94' / 209.67' S= 0.0103 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.76 cfs @ 12.09 hrs HW=210.42' TW=210.07' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.76 cfs @ 2.95 fps)

Summary for Pond CB12: CB #12

Inflow Area = 5,238 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.57 cfs @ 12.09 hrs, Volume= 2,060 cf
Outflow = 0.57 cfs @ 12.09 hrs, Volume= 2,060 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.57 cfs @ 12.09 hrs, Volume= 2,060 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.06' @ 12.09 hrs
Flood Elev= 209.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.68'	**12.0" Round Culvert** L= 41.3' Ke= 0.500 Inlet / Outlet Invert= 206.68' / 205.65' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=207.05' TW=206.20' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.55 cfs @ 2.08 fps)

Summary for Pond CB13: CB #13

Inflow Area = 10,873 sf, 90.78% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 1.16 cfs @ 12.09 hrs, Volume= 4,068 cf
Outflow = 1.16 cfs @ 12.09 hrs, Volume= 4,068 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.16 cfs @ 12.09 hrs, Volume= 4,068 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.26' @ 12.09 hrs
Flood Elev= 209.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**12.0" Round Culvert** L= 43.7' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 205.61' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.13 cfs @ 12.09 hrs HW=207.25' TW=206.20' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.13 cfs @ 2.53 fps)

Summary for Pond CB14: CB #14

Inflow Area = 12,099 sf, 86.22% Impervious, Inflow Depth > 3.94" for 10YR event
Inflow = 1.20 cfs @ 12.09 hrs, Volume= 3,973 cf
Outflow = 1.20 cfs @ 12.09 hrs, Volume= 3,973 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.20 cfs @ 12.09 hrs, Volume= 3,973 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.69' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 23.2' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.67' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.17 cfs @ 12.09 hrs HW=201.67' TW=201.52' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.17 cfs @ 2.14 fps)

Summary for Pond CB15: CB #15

Inflow Area = 6,666 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.73 cfs @ 12.09 hrs, Volume= 2,622 cf
Outflow = 0.73 cfs @ 12.09 hrs, Volume= 2,622 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.73 cfs @ 12.09 hrs, Volume= 2,622 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.60' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.71' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.71 cfs @ 12.09 hrs HW=201.58' TW=201.52' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.71 cfs @ 1.45 fps)

Summary for Pond CB16: CB #16

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 2.76" for 10YR event
Inflow = 0.62 cfs @ 12.09 hrs, Volume= 1,962 cf
Outflow = 0.62 cfs @ 12.09 hrs, Volume= 1,962 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.62 cfs @ 12.09 hrs, Volume= 1,962 cf
Routed to Pond D10 : DMH #10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.99' @ 12.09 hrs
Flood Elev= 206.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.47'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 203.47' / 203.33' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.61 cfs @ 12.09 hrs HW=203.98' TW=203.81' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.61 cfs @ 2.20 fps)

Summary for Pond CB17: CB #17

Inflow Area = 11,836 sf, 73.87% Impervious, Inflow Depth > 4.05" for 10YR event
Inflow = 1.20 cfs @ 12.09 hrs, Volume= 3,992 cf
Outflow = 1.20 cfs @ 12.09 hrs, Volume= 3,992 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.20 cfs @ 12.09 hrs, Volume= 3,992 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.64' @ 12.09 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.99'	**12.0" Round Culvert** L= 13.8' Ke= 0.500 Inlet / Outlet Invert= 204.99' / 204.86' S= 0.0094 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.17 cfs @ 12.09 hrs HW=205.63' TW=205.26' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.17 cfs @ 3.10 fps)

Summary for Pond CB18: CB #18

Inflow Area = 24,853 sf, 72.99% Impervious, Inflow Depth > 3.31" for 10YR event
Inflow = 2.14 cfs @ 12.09 hrs, Volume= 6,857 cf
Outflow = 2.14 cfs @ 12.09 hrs, Volume= 6,857 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.14 cfs @ 12.09 hrs, Volume= 6,857 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.61' @ 12.09 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.72'	**15.0" Round Culvert** L= 25.1' Ke= 0.500 Inlet / Outlet Invert= 204.72' / 204.59' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.11 cfs @ 12.09 hrs HW=205.60' TW=205.27' (Dynamic Tailwater)
1=Culvert (Outlet Controls 2.11 cfs @ 3.22 fps)

Summary for Pond CB20: CB #20

Inflow Area = 11,939 sf, 88.95% Impervious, Inflow Depth > 4.38" for 10YR event
Inflow = 1.26 cfs @ 12.09 hrs, Volume= 4,355 cf
Outflow = 1.26 cfs @ 12.09 hrs, Volume= 4,355 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.26 cfs @ 12.09 hrs, Volume= 4,355 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.67' @ 12.09 hrs
Flood Elev= 207.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.97'	**12.0" Round Culvert** L= 30.3' Ke= 0.500 Inlet / Outlet Invert= 203.97' / 203.81' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.23 cfs @ 12.09 hrs HW=204.66' TW=204.22' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.23 cfs @ 2.98 fps)

Summary for Pond CB21: CB #21

Inflow Area = 10,174 sf, 87.04% Impervious, Inflow Depth > 3.83" for 10YR event
Inflow = 0.99 cfs @ 12.09 hrs, Volume= 3,251 cf
Outflow = 0.99 cfs @ 12.09 hrs, Volume= 3,251 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.99 cfs @ 12.09 hrs, Volume= 3,251 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.94' @ 12.09 hrs
Flood Elev= 208.02'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.32'	**12.0" Round Culvert** L= 26.0' Ke= 0.500 Inlet / Outlet Invert= 204.32' / 204.19' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.97 cfs @ 12.09 hrs HW=204.93' TW=204.22' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.97 cfs @ 2.76 fps)

Summary for Pond CB22: CB #22

Inflow Area = 12,001 sf, 91.62% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 1.28 cfs @ 12.09 hrs, Volume= 4,490 cf
Outflow = 1.28 cfs @ 12.09 hrs, Volume= 4,490 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.28 cfs @ 12.09 hrs, Volume= 4,490 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.05' @ 12.09 hrs
Flood Elev= 208.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.33'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 205.33' / 205.25' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.25 cfs @ 12.09 hrs HW=206.04' TW=205.14' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.25 cfs @ 2.95 fps)

Summary for Pond CB23: CB #23

Inflow Area = 9,694 sf, 61.00% Impervious, Inflow Depth > 3.73" for 10YR event
Inflow = 0.93 cfs @ 12.09 hrs, Volume= 3,014 cf
Outflow = 0.93 cfs @ 12.09 hrs, Volume= 3,014 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.93 cfs @ 12.09 hrs, Volume= 3,014 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.00' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.41'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 205.41' / 205.32' S= 0.0055 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.90 cfs @ 12.09 hrs HW=205.99' TW=205.14' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.90 cfs @ 2.75 fps)

Summary for Pond CB24: CB #24

Inflow Area = 7,930 sf, 72.16% Impervious, Inflow Depth > 4.16" for 10YR event
Inflow = 0.82 cfs @ 12.09 hrs, Volume= 2,746 cf
Outflow = 0.82 cfs @ 12.09 hrs, Volume= 2,746 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.82 cfs @ 12.09 hrs, Volume= 2,746 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.83' @ 12.09 hrs
Flood Elev= 209.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 12.1' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.15' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.79 cfs @ 12.09 hrs HW=205.82' TW=205.67' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.79 cfs @ 2.29 fps)

Summary for Pond CB25: CB #25

Inflow Area = 8,487 sf, 80.92% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 0.89 cfs @ 12.09 hrs, Volume= 3,017 cf
Outflow = 0.89 cfs @ 12.09 hrs, Volume= 3,017 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.89 cfs @ 12.09 hrs, Volume= 3,017 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.82' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.22'	**15.0" Round Culvert** L= 11.4' Ke= 0.500 Inlet / Outlet Invert= 205.22' / 205.16' S= 0.0053 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.86 cfs @ 12.09 hrs HW=205.81' TW=205.67' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.86 cfs @ 2.24 fps)

Summary for Pond CB26: CB #26

Inflow Area = 8,835 sf, 63.75% Impervious, Inflow Depth > 3.94" for 10YR event
Inflow = 0.88 cfs @ 12.09 hrs, Volume= 2,901 cf
Outflow = 0.88 cfs @ 12.09 hrs, Volume= 2,901 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.88 cfs @ 12.09 hrs, Volume= 2,901 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.34' @ 12.09 hrs
Flood Elev= 204.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.77'	**12.0" Round Culvert** L= 42.5' Ke= 0.500 Inlet / Outlet Invert= 201.77' / 201.55' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.86 cfs @ 12.09 hrs HW=202.33' TW=201.20' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.86 cfs @ 2.75 fps)

Summary for Pond CB27: CB #27

Inflow Area = 6,111 sf, 91.90% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.65 cfs @ 12.09 hrs, Volume= 2,287 cf
Outflow = 0.65 cfs @ 12.09 hrs, Volume= 2,287 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.65 cfs @ 12.09 hrs, Volume= 2,287 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.49' @ 12.09 hrs
Flood Elev= 204.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 18.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.90' S= 0.0056 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.64 cfs @ 12.09 hrs HW=201.48' TW=201.20' (Dynamic Tailwater)
└—**1=Culvert** (Barrel Controls 0.64 cfs @ 2.50 fps)

Summary for Pond CB28: CB #28

Inflow Area = 10,372 sf, 51.33% Impervious, Inflow Depth > 3.63" for 10YR event
Inflow = 0.97 cfs @ 12.09 hrs, Volume= 3,136 cf
Outflow = 0.97 cfs @ 12.09 hrs, Volume= 3,136 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.97 cfs @ 12.09 hrs, Volume= 3,136 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.44' @ 12.09 hrs
Flood Elev= 200.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.75'	**12.0" Round Culvert** L= 13.7' Ke= 0.500 Inlet / Outlet Invert= 197.75' / 197.69' S= 0.0044 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.95 cfs @ 12.09 hrs HW=198.43' TW=198.26' (Dynamic Tailwater)
└—**1=Culvert** (Outlet Controls 0.95 cfs @ 2.36 fps)

Summary for Pond CB29: CB #29

Inflow Area = 8,495 sf, 84.21% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 0.89 cfs @ 12.09 hrs, Volume= 3,020 cf
Outflow = 0.89 cfs @ 12.09 hrs, Volume= 3,020 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.89 cfs @ 12.09 hrs, Volume= 3,020 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.08' @ 12.09 hrs
Flood Elev= 208.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 13.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.31' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.86 cfs @ 12.09 hrs HW=206.06' TW=205.93' (Dynamic Tailwater)
└—**1=Culvert** (Outlet Controls 0.86 cfs @ 2.13 fps)

Summary for Pond CB30: CB #30

Inflow Area = 8,933 sf, 82.40% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 0.93 cfs @ 12.09 hrs, Volume= 3,175 cf
Outflow = 0.93 cfs @ 12.09 hrs, Volume= 3,175 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.93 cfs @ 12.09 hrs, Volume= 3,175 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.09' @ 12.09 hrs
Flood Elev= 208.54'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 17.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.29' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.91 cfs @ 12.09 hrs HW=206.08' TW=205.93' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.91 cfs @ 2.18 fps)

Summary for Pond CB31: CB #31

Inflow Area = 16,365 sf, 68.64% Impervious, Inflow Depth > 3.83" for 10YR event
Inflow = 1.59 cfs @ 12.09 hrs, Volume= 5,230 cf
Outflow = 1.59 cfs @ 12.09 hrs, Volume= 5,230 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.59 cfs @ 12.09 hrs, Volume= 5,230 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.02' @ 12.09 hrs
Flood Elev= 207.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.56 cfs @ 12.09 hrs HW=205.01' TW=204.39' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.56 cfs @ 3.07 fps)

Summary for Pond CB32: CB #32

Inflow Area = 12,710 sf, 70.47% Impervious, Inflow Depth > 3.94" for 10YR event
Inflow = 1.26 cfs @ 12.09 hrs, Volume= 4,174 cf
Outflow = 1.26 cfs @ 12.09 hrs, Volume= 4,174 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.26 cfs @ 12.09 hrs, Volume= 4,174 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.91' @ 12.09 hrs
Flood Elev= 207.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.23 cfs @ 12.09 hrs HW=204.90' TW=204.39' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.23 cfs @ 2.89 fps)

Summary for Pond CB33: CB #33

Inflow Area = 5,421 sf, 83.90% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 0.57 cfs @ 12.09 hrs, Volume= 1,927 cf
Outflow = 0.57 cfs @ 12.09 hrs, Volume= 1,927 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.57 cfs @ 12.09 hrs, Volume= 1,927 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.84' @ 12.09 hrs
Flood Elev= 208.45'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.28'	**12.0" Round Culvert** L= 11.7' Ke= 0.500 Inlet / Outlet Invert= 205.28' / 205.22' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=205.82' TW=205.72' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.55 cfs @ 1.83 fps)

Summary for Pond CB34: CB #34

Inflow Area = 8,622 sf, 80.51% Impervious, Inflow Depth > 4.16" for 10YR event
Inflow = 0.89 cfs @ 12.09 hrs, Volume= 2,986 cf
Outflow = 0.89 cfs @ 12.09 hrs, Volume= 2,986 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.89 cfs @ 12.09 hrs, Volume= 2,986 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.89' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 16.5' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.13' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.86 cfs @ 12.09 hrs HW=205.88' TW=205.72' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.86 cfs @ 2.21 fps)

Summary for Pond CB35: CB #35

Inflow Area = 4,149 sf, 98.10% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.45 cfs @ 12.09 hrs, Volume= 1,632 cf
Outflow = 0.45 cfs @ 12.09 hrs, Volume= 1,632 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.45 cfs @ 12.09 hrs, Volume= 1,632 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.44' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 15.2' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.09 hrs HW=207.44' TW=207.22' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 0.44 cfs @ 2.24 fps)

Summary for Pond CB36: CB #36

Inflow Area = 6,622 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.72 cfs @ 12.09 hrs, Volume= 2,605 cf
Outflow = 0.72 cfs @ 12.09 hrs, Volume= 2,605 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.72 cfs @ 12.09 hrs, Volume= 2,605 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.56' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.70 cfs @ 12.09 hrs HW=207.55' TW=207.22' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 0.70 cfs @ 2.50 fps)

Summary for Pond CB38: CB #38

Inflow Area = 7,637 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.83 cfs @ 12.09 hrs, Volume= 3,004 cf
Outflow = 0.83 cfs @ 12.09 hrs, Volume= 3,004 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.83 cfs @ 12.09 hrs, Volume= 3,004 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 210.56' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.7' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.81 cfs @ 12.09 hrs HW=210.54' TW=210.47' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.81 cfs @ 1.54 fps)

Summary for Pond CB39: CB #39

Inflow Area = 7,612 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.83 cfs @ 12.09 hrs, Volume= 2,994 cf
Outflow = 0.83 cfs @ 12.09 hrs, Volume= 2,994 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.83 cfs @ 12.09 hrs, Volume= 2,994 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.56' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.81 cfs @ 12.09 hrs HW=210.54' TW=210.47' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.81 cfs @ 1.53 fps)

Summary for Pond CB40: CB #40

Inflow Area = 4,211 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.46 cfs @ 12.09 hrs, Volume= 1,656 cf
Outflow = 0.46 cfs @ 12.09 hrs, Volume= 1,656 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.46 cfs @ 12.09 hrs, Volume= 1,656 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.16' @ 12.09 hrs
Flood Elev= 217.04'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.68'	**12.0" Round Culvert** L= 17.8' Ke= 0.500 Inlet / Outlet Invert= 213.68' / 213.55' S= 0.0073 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.45 cfs @ 12.09 hrs HW=214.15' TW=214.04' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.45 cfs @ 1.78 fps)

Summary for Pond CB41: CB #41

Inflow Area = 5,586 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.61 cfs @ 12.09 hrs, Volume= 2,197 cf
Outflow = 0.61 cfs @ 12.09 hrs, Volume= 2,197 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.61 cfs @ 12.09 hrs, Volume= 2,197 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.37' @ 12.09 hrs
Flood Elev= 217.06'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.89'	**12.0" Round Culvert** L= 18.4' Ke= 0.500 Inlet / Outlet Invert= 213.89' / 213.80' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.59 cfs @ 12.09 hrs HW=214.36' TW=214.04' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.59 cfs @ 2.40 fps)

Summary for Pond CB43: CB #43

Inflow Area = 3,109 sf, 75.36% Impervious, Inflow Depth > 3.73" for 10YR event
Inflow = 0.30 cfs @ 12.09 hrs, Volume= 967 cf
Outflow = 0.30 cfs @ 12.09 hrs, Volume= 967 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.30 cfs @ 12.09 hrs, Volume= 967 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.42' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=220.41' TW=220.34' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.29 cfs @ 1.40 fps)

Summary for Pond CB44: CB #44

Inflow Area = 1,978 sf, 84.43% Impervious, Inflow Depth > 4.05" for 10YR event
Inflow = 0.20 cfs @ 12.09 hrs, Volume= 667 cf
Outflow = 0.20 cfs @ 12.09 hrs, Volume= 667 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.20 cfs @ 12.09 hrs, Volume= 667 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 220.39' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.20 cfs @ 12.09 hrs HW=220.38' TW=220.34' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.20 cfs @ 1.05 fps)

Summary for Pond CB45: CB #45

Inflow Area = 2,465 sf, 50.30% Impervious, Inflow Depth > 2.86" for 10YR event
Inflow = 0.19 cfs @ 12.09 hrs, Volume= 587 cf
Outflow = 0.19 cfs @ 12.09 hrs, Volume= 587 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.19 cfs @ 12.09 hrs, Volume= 587 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.54' @ 12.09 hrs
Flood Elev= 224.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.29'	**12.0" Round Culvert** L= 18.2' Ke= 0.500 Inlet / Outlet Invert= 221.29' / 221.20' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.18 cfs @ 12.09 hrs HW=221.54' TW=221.33' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.18 cfs @ 1.78 fps)

Summary for Pond CB46: CB #46

Inflow Area = 4,397 sf, 50.97% Impervious, Inflow Depth > 2.86" for 10YR event
Inflow = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf
Outflow = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.87' @ 12.09 hrs
Flood Elev= 224.69'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.53'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 221.53' / 221.45' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.33 cfs @ 12.09 hrs HW=221.87' TW=221.33' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.33 cfs @ 2.07 fps)

Summary for Pond CB47: CB#47

Inflow Area = 3,012 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.33 cfs @ 12.09 hrs, Volume= 1,185 cf
Outflow = 0.33 cfs @ 12.09 hrs, Volume= 1,185 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.33 cfs @ 12.09 hrs, Volume= 1,185 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.52' @ 12.15 hrs
Flood Elev= 230.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	225.05'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 225.05' / 224.95' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.33 cfs @ 12.09 hrs HW=225.47' TW=225.38' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.33 cfs @ 1.53 fps)

Summary for Pond CB48: CB#48

Inflow Area = 60,128 sf, 25.16% Impervious, Inflow Depth > 2.00" for 10YR event
Inflow = 2.61 cfs @ 12.17 hrs, Volume= 10,030 cf
Outflow = 2.61 cfs @ 12.17 hrs, Volume= 10,030 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.61 cfs @ 12.17 hrs, Volume= 10,030 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.81' @ 12.17 hrs
Flood Elev= 230.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.82'	**15.0" Round Culvert** L= 16.9' Ke= 0.500 Inlet / Outlet Invert= 224.82' / 224.74' S= 0.0047 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.56 cfs @ 12.17 hrs HW=225.80' TW=225.48' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 2.56 cfs @ 3.40 fps)

Summary for Pond CB49: CB #49

Inflow Area = 5,238 sf, 84.59% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 0.55 cfs @ 12.09 hrs, Volume= 1,862 cf
Outflow = 0.55 cfs @ 12.09 hrs, Volume= 1,862 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.55 cfs @ 12.09 hrs, Volume= 1,862 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.45' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.76'	**12.0" Round Culvert** L= 15.5' Ke= 0.500 Inlet / Outlet Invert= 202.76' / 202.68' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.53 cfs @ 12.09 hrs HW=203.44' TW=203.39' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 0.53 cfs @ 1.32 fps)

Summary for Pond CB50: CB #50

Inflow Area = 15,040 sf, 77.20% Impervious, Inflow Depth > 4.16" for 10YR event
Inflow = 1.55 cfs @ 12.09 hrs, Volume= 5,209 cf
Outflow = 1.55 cfs @ 12.09 hrs, Volume= 5,209 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.55 cfs @ 12.09 hrs, Volume= 5,209 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.64' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.70' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.51 cfs @ 12.09 hrs HW=203.63' TW=203.39' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 1.51 cfs @ 2.86 fps)

Summary for Pond CB51: CB #51

Inflow Area = 6,823 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.74 cfs @ 12.09 hrs, Volume= 2,684 cf
Outflow = 0.74 cfs @ 12.09 hrs, Volume= 2,684 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.74 cfs @ 12.09 hrs, Volume= 2,684 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.87' @ 12.09 hrs
Flood Elev= 212.77'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.35'	**12.0" Round Culvert** L= 31.4' Ke= 0.500 Inlet / Outlet Invert= 202.35' / 202.19' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.72 cfs @ 12.09 hrs HW=202.86' TW=202.47' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 0.72 cfs @ 2.59 fps)

Summary for Pond CB52: CB #52

Inflow Area = 9,052 sf, 87.14% Impervious, Inflow Depth > 4.38" for 10YR event
Inflow = 0.96 cfs @ 12.09 hrs, Volume= 3,302 cf
Outflow = 0.96 cfs @ 12.09 hrs, Volume= 3,302 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.96 cfs @ 12.09 hrs, Volume= 3,302 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.29' @ 12.09 hrs
Flood Elev= 205.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.68'	**12.0" Round Culvert** L= 25.5' Ke= 0.500 Inlet / Outlet Invert= 202.68' / 202.55' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.93 cfs @ 12.09 hrs HW=203.28' TW=202.48' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.93 cfs @ 2.74 fps)

Summary for Pond CB53: CB #53

Inflow Area = 7,863 sf, 86.52% Impervious, Inflow Depth > 4.16" for 10YR event
Inflow = 0.81 cfs @ 12.09 hrs, Volume= 2,723 cf
Outflow = 0.81 cfs @ 12.09 hrs, Volume= 2,723 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.81 cfs @ 12.09 hrs, Volume= 2,723 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.33' @ 12.09 hrs
Flood Elev= 205.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 32.0' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.62' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.79 cfs @ 12.09 hrs HW=203.32' TW=201.21' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.79 cfs @ 2.64 fps)

Summary for Pond CB54: CB #54

Inflow Area = 4,821 sf, 86.85% Impervious, Inflow Depth > 3.94" for 10YR event
Inflow = 0.48 cfs @ 12.09 hrs, Volume= 1,583 cf
Outflow = 0.48 cfs @ 12.09 hrs, Volume= 1,583 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.48 cfs @ 12.09 hrs, Volume= 1,583 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.07' @ 12.09 hrs
Flood Elev= 205.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.66'	**12.0" Round Culvert** L= 36.7' Ke= 0.500 Inlet / Outlet Invert= 202.66' / 202.48' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.47 cfs @ 12.09 hrs HW=203.07' TW=201.21' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.47 cfs @ 2.31 fps)

Summary for Pond CB7: CB#5

Inflow Area = 4,650 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 0.51 cfs @ 12.09 hrs, Volume= 1,829 cf
Outflow = 0.51 cfs @ 12.09 hrs, Volume= 1,829 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.51 cfs @ 12.09 hrs, Volume= 1,829 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 212.99' @ 12.09 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.60'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 212.60' / 212.45' S= 0.0099 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.49 cfs @ 12.09 hrs HW=212.98' TW=211.29' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.49 cfs @ 2.67 fps)

Summary for Pond CB8: CB#8

Inflow Area = 5,450 sf, 88.75% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 0.57 cfs @ 12.09 hrs, Volume= 1,937 cf
Outflow = 0.57 cfs @ 12.09 hrs, Volume= 1,937 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.57 cfs @ 12.09 hrs, Volume= 1,937 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.21' @ 12.09 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.79'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 213.79' / 213.64' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=214.20' TW=211.30' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.55 cfs @ 2.68 fps)

Summary for Pond CB9: CB #9

Inflow Area = 16,307 sf, 93.95% Impervious, Inflow Depth > 4.60" for 10YR event
Inflow = 1.76 cfs @ 12.09 hrs, Volume= 6,257 cf
Outflow = 1.76 cfs @ 12.09 hrs, Volume= 6,257 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.76 cfs @ 12.09 hrs, Volume= 6,257 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.82' @ 12.09 hrs
Flood Elev= 213.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.10'	**12.0" Round Culvert** L= 19.9' Ke= 0.500 Inlet / Outlet Invert= 210.10' / 209.71' S= 0.0196 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.71 cfs @ 12.09 hrs HW=210.81' TW=210.07' (Dynamic Tailwater)
1=Culvert (Inlet Controls 1.71 cfs @ 2.87 fps)

Summary for Pond D10: DMH #10

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 2.76" for 10YR event
Inflow = 0.62 cfs @ 12.09 hrs, Volume= 1,962 cf
Outflow = 0.62 cfs @ 12.09 hrs, Volume= 1,962 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.62 cfs @ 12.09 hrs, Volume= 1,962 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.81' @ 12.09 hrs
Flood Elev= 206.49'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.33'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 203.33' / 203.25' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.61 cfs @ 12.09 hrs HW=203.81' TW=197.48' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.61 cfs @ 2.43 fps)

Summary for Pond D11: DMH #11

Inflow Area = 36,689 sf, 73.28% Impervious, Inflow Depth > 3.55" for 10YR event
Inflow = 3.34 cfs @ 12.09 hrs, Volume= 10,849 cf
Outflow = 3.34 cfs @ 12.09 hrs, Volume= 10,849 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.34 cfs @ 12.09 hrs, Volume= 10,849 cf
Routed to Pond OCS3 : OCS#3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 205.28' @ 12.09 hrs
Flood Elev= 208.33'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.25'	**18.0" Round Culvert** L= 44.6' Ke= 0.500 Inlet / Outlet Invert= 204.25' / 204.03' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.28 cfs @ 12.09 hrs HW=205.27' TW=204.50' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 3.28 cfs @ 3.64 fps)

Summary for Pond D12: DMH #12

Inflow Area = 22,113 sf, 88.07% Impervious, Inflow Depth > 4.13" for 10YR event
Inflow = 2.25 cfs @ 12.09 hrs, Volume= 7,606 cf
Outflow = 2.25 cfs @ 12.09 hrs, Volume= 7,606 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.25 cfs @ 12.09 hrs, Volume= 7,606 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.24' @ 12.09 hrs
Flood Elev= 207.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.21'	**12.0" Round Culvert** L= 41.9' Ke= 0.500 Inlet / Outlet Invert= 203.21' / 203.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.20 cfs @ 12.09 hrs HW=204.22' TW=203.31' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.20 cfs @ 3.44 fps)

Summary for Pond D13: DMH #13

Inflow Area = 81,632 sf, 72.61% Impervious, Inflow Depth > 3.79" for 10YR event
Inflow = 7.09 cfs @ 12.09 hrs, Volume= 25,765 cf
Outflow = 7.09 cfs @ 12.09 hrs, Volume= 25,765 cf, Atten= 0%, Lag= 0.0 min
Primary = 7.09 cfs @ 12.09 hrs, Volume= 25,765 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.33' @ 12.09 hrs
Flood Elev= 208.12'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.95'	**24.0" Round Culvert** L= 60.1' Ke= 0.500 Inlet / Outlet Invert= 201.95' / 201.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=6.99 cfs @ 12.09 hrs HW=203.32' TW=197.48' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 6.99 cfs @ 4.30 fps)

Summary for Pond D14: DMH #14

Inflow Area = 38,112 sf, 77.40% Impervious, Inflow Depth > 4.18" for 10YR event
Inflow = 3.91 cfs @ 12.09 hrs, Volume= 13,267 cf
Outflow = 3.91 cfs @ 12.09 hrs, Volume= 13,267 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.91 cfs @ 12.09 hrs, Volume= 13,267 cf
Routed to Pond d13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.16' @ 12.09 hrs
Flood Elev= 208.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.13'	**18.0" Round Culvert** L= 256.3' Ke= 0.500 Inlet / Outlet Invert= 204.13' / 202.85' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.81 cfs @ 12.09 hrs HW=205.14' TW=203.31' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 3.81 cfs @ 4.25 fps)

Summary for Pond D16: DMH #16

Inflow Area = 16,417 sf, 76.69% Impervious, Inflow Depth > 4.21" for 10YR event
Inflow = 1.70 cfs @ 12.09 hrs, Volume= 5,763 cf
Outflow = 1.70 cfs @ 12.09 hrs, Volume= 5,763 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.70 cfs @ 12.09 hrs, Volume= 5,763 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.68' @ 12.09 hrs
Flood Elev= 208.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.90'	**15.0" Round Culvert** L= 103.5' Ke= 0.500 Inlet / Outlet Invert= 204.90' / 204.38' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.66 cfs @ 12.09 hrs HW=205.67' TW=205.14' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.66 cfs @ 3.01 fps)

Summary for Pond D17: DMH #17

Inflow Area = 14,946 sf, 75.26% Impervious, Inflow Depth > 4.17" for 10YR event
Inflow = 1.53 cfs @ 12.09 hrs, Volume= 5,188 cf
Outflow = 1.53 cfs @ 12.09 hrs, Volume= 5,188 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.53 cfs @ 12.09 hrs, Volume= 5,188 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.21' @ 12.09 hrs
Flood Elev= 204.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.55'	**12.0" Round Culvert** L= 91.6' Ke= 0.500 Inlet / Outlet Invert= 200.55' / 197.69' S= 0.0312 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.49 cfs @ 12.09 hrs HW=201.20' TW=198.26' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.49 cfs @ 2.75 fps)

Summary for Pond D18: DMH #18

Inflow Area = 25,318 sf, 65.46% Impervious, Inflow Depth > 3.95" for 10YR event
Inflow = 2.50 cfs @ 12.09 hrs, Volume= 8,324 cf
Outflow = 2.50 cfs @ 12.09 hrs, Volume= 8,324 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.50 cfs @ 12.09 hrs, Volume= 8,324 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.27' @ 12.09 hrs
Flood Elev= 201.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.44'	**15.0" Round Culvert** L= 46.3' Ke= 0.500 Inlet / Outlet Invert= 197.44' / 196.98' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.44 cfs @ 12.09 hrs HW=198.26' TW=196.02' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.44 cfs @ 4.06 fps)

Summary for Pond D19: DMH #19

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 1.82 cfs @ 12.09 hrs, Volume= 6,195 cf
Outflow = 1.82 cfs @ 12.09 hrs, Volume= 6,195 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.82 cfs @ 12.09 hrs, Volume= 6,195 cf
Routed to Pond d20 : DMH #20

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.94' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.19'	**12.0" Round Culvert** L= 82.5' Ke= 0.500 Inlet / Outlet Invert= 205.19' / 204.43' S= 0.0092 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.77 cfs @ 12.09 hrs HW=205.93' TW=204.95' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.77 cfs @ 3.96 fps)

Summary for Pond D2: DMH#2

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 2.45" for 10YR event
Inflow = 3.67 cfs @ 12.14 hrs, Volume= 14,981 cf
Outflow = 3.67 cfs @ 12.14 hrs, Volume= 14,981 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.67 cfs @ 12.14 hrs, Volume= 14,981 cf
Routed to Pond P205 : INFILTRATION POND #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.99' @ 12.14 hrs
Flood Elev= 212.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**15.0" Round Culvert** L= 38.2' Ke= 0.500 Inlet / Outlet Invert= 206.90' / 206.52' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.63 cfs @ 12.14 hrs HW=207.98' TW=205.83' (Dynamic Tailwater)
1=Culvert (Barrel Controls 3.63 cfs @ 4.32 fps)

Summary for Pond D20: DMH #20

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 4.27" for 10YR event
Inflow = 1.82 cfs @ 12.09 hrs, Volume= 6,195 cf
Outflow = 1.82 cfs @ 12.09 hrs, Volume= 6,195 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.82 cfs @ 12.09 hrs, Volume= 6,195 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.96' @ 12.09 hrs
Flood Elev= 207.68'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**15.0" Round Culvert** L= 63.5' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 203.87' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.77 cfs @ 12.09 hrs HW=204.95' TW=204.39' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.77 cfs @ 3.25 fps)

Summary for Pond D21: DMH #21

Inflow Area = 71,317 sf, 79.77% Impervious, Inflow Depth > 4.16" for 10YR event
Inflow = 7.30 cfs @ 12.09 hrs, Volume= 24,749 cf
Outflow = 7.30 cfs @ 12.09 hrs, Volume= 24,749 cf, Atten= 0%, Lag= 0.0 min
Primary = 7.30 cfs @ 12.09 hrs, Volume= 24,749 cf
Routed to Pond p212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.42' @ 12.09 hrs
Flood Elev= 207.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.02'	**24.0" Round Culvert** L= 72.4' Ke= 0.500 Inlet / Outlet Invert= 203.02' / 202.66' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=7.11 cfs @ 12.09 hrs HW=204.39' TW=201.62' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 7.11 cfs @ 4.36 fps)

Summary for Pond D22: DMH #22

Inflow Area = 24,814 sf, 89.39% Impervious, Inflow Depth > 4.42" for 10YR event
Inflow = 2.62 cfs @ 12.09 hrs, Volume= 9,150 cf
Outflow = 2.62 cfs @ 12.09 hrs, Volume= 9,150 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.62 cfs @ 12.09 hrs, Volume= 9,150 cf
Routed to Pond d21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.74' @ 12.09 hrs
Flood Elev= 208.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.87'	**15.0" Round Culvert** L= 134.2' Ke= 0.500 Inlet / Outlet Invert= 204.87' / 203.92' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.55 cfs @ 12.09 hrs HW=205.72' TW=204.39' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.55 cfs @ 4.05 fps)

Summary for Pond D23: DMH #23

Inflow Area = 10,771 sf, 99.27% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 1.17 cfs @ 12.09 hrs, Volume= 4,237 cf
Outflow = 1.17 cfs @ 12.09 hrs, Volume= 4,237 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.17 cfs @ 12.09 hrs, Volume= 4,237 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.23' @ 12.09 hrs
Flood Elev= 210.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**15.0" Round Culvert** L= 173.3' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 204.97' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.14 cfs @ 12.09 hrs HW=207.22' TW=205.72' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.14 cfs @ 3.49 fps)

Summary for Pond D25: DMH #25

Inflow Area = 36,995 sf, 87.96% Impervious, Inflow Depth > 4.26" for 10YR event
Inflow = 3.74 cfs @ 12.09 hrs, Volume= 13,119 cf
Outflow = 3.74 cfs @ 12.09 hrs, Volume= 13,119 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.74 cfs @ 12.09 hrs, Volume= 13,119 cf
Routed to Pond P210 : POCKET WETLAND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.49' @ 12.09 hrs
Flood Elev= 213.11'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.36'	**15.0" Round Culvert** L= 237.6' Ke= 0.500 Inlet / Outlet Invert= 209.36' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.64 cfs @ 12.09 hrs HW=210.47' TW=202.94' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 3.64 cfs @ 4.20 fps)

Summary for Pond D27: DMH #27

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 3.93" for 10YR event
Inflow = 2.08 cfs @ 12.09 hrs, Volume= 7,120 cf
Outflow = 2.08 cfs @ 12.09 hrs, Volume= 7,120 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.08 cfs @ 12.09 hrs, Volume= 7,120 cf
Routed to Pond D35 : DMH #35

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.05' @ 12.09 hrs
Flood Elev= 217.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.34'	**15.0" Round Culvert** L= 63.9' Ke= 0.500 Inlet / Outlet Invert= 213.34' / 212.38' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.03 cfs @ 12.09 hrs HW=214.04' TW=212.98' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.03 cfs @ 2.85 fps)

Summary for Pond D28: DMH #28

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 3.28" for 10YR event
Inflow = 1.01 cfs @ 12.09 hrs, Volume= 3,267 cf
Outflow = 1.01 cfs @ 12.09 hrs, Volume= 3,267 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.01 cfs @ 12.09 hrs, Volume= 3,267 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 217.98' @ 12.09 hrs
Flood Elev= 220.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	217.46'	**12.0" Round Culvert** L= 158.3' Ke= 0.500 Inlet / Outlet Invert= 217.46' / 214.29' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.99 cfs @ 12.09 hrs HW=217.97' TW=214.04' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.99 cfs @ 2.44 fps)

Summary for Pond D29: DMH #29

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 3.28" for 10YR event
Inflow = 1.01 cfs @ 12.09 hrs, Volume= 3,267 cf
Outflow = 1.01 cfs @ 12.09 hrs, Volume= 3,267 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.01 cfs @ 12.09 hrs, Volume= 3,267 cf
Routed to Pond D28 : DMH #28

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.35' @ 12.09 hrs
Flood Elev= 223.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	219.83'	**12.0" Round Culvert** L= 150.9' Ke= 0.500 Inlet / Outlet Invert= 219.83' / 217.55' S= 0.0151 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.99 cfs @ 12.09 hrs HW=220.34' TW=217.97' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.99 cfs @ 2.44 fps)

Summary for Pond D30: DMH #30

Inflow Area = 6,862 sf, 50.73% Impervious, Inflow Depth > 2.86" for 10YR event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 1,633 cf
Outflow = 0.52 cfs @ 12.09 hrs, Volume= 1,633 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.52 cfs @ 12.09 hrs, Volume= 1,633 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.34' @ 12.09 hrs
Flood Elev= 224.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.92'	**12.0" Round Culvert** L= 184.2' Ke= 0.500 Inlet / Outlet Invert= 220.92' / 220.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.51 cfs @ 12.09 hrs HW=221.33' TW=220.34' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.51 cfs @ 2.44 fps)

Summary for Pond D31: DMH#31

Inflow Area = 63,140 sf, 28.73% Impervious, Inflow Depth > 2.13" for 10YR event
Inflow = 2.84 cfs @ 12.16 hrs, Volume= 11,215 cf
Outflow = 2.84 cfs @ 12.16 hrs, Volume= 11,215 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.84 cfs @ 12.16 hrs, Volume= 11,215 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.49' @ 12.16 hrs
Flood Elev= 229.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.63'	**15.0" Round Culvert** L= 288.5' Ke= 0.500 Inlet / Outlet Invert= 224.63' / 213.09' S= 0.0400 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.79 cfs @ 12.16 hrs HW=225.48' TW=211.34' (Dynamic Tailwater)
└—**1=Culvert** (Inlet Controls 2.79 cfs @ 3.14 fps)

Summary for Pond D34: DMH #34

Inflow Area = 23,255 sf,100.00% Impervious, Inflow Depth > 4.72" for 10YR event
Inflow = 2.53 cfs @ 12.09 hrs, Volume= 9,148 cf
Outflow = 2.53 cfs @ 12.09 hrs, Volume= 9,148 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.53 cfs @ 12.09 hrs, Volume= 9,148 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 199.01' @ 12.09 hrs
Flood Elev= 202.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	198.07'	**12.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 198.07' / 197.03' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.46 cfs @ 12.09 hrs HW=198.99' TW=196.02' (Dynamic Tailwater)
└—**1=Culvert** (Inlet Controls 2.46 cfs @ 3.26 fps)

Summary for Pond D35: DMH #35

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 3.93" for 10YR event
Inflow = 2.08 cfs @ 12.09 hrs, Volume= 7,120 cf
Outflow = 2.08 cfs @ 12.09 hrs, Volume= 7,120 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.08 cfs @ 12.09 hrs, Volume= 7,120 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 212.99' @ 12.09 hrs
Flood Elev= 215.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.28'	**15.0" Round Culvert** L= 171.5' Ke= 0.500 Inlet / Outlet Invert= 212.28' / 209.71' S= 0.0150 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=2.03 cfs @ 12.09 hrs HW=212.98' TW=210.47' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.03 cfs @ 2.85 fps)

Summary for Pond D4: DMH#4

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 2.45" for 10YR event
Inflow = 3.67 cfs @ 12.14 hrs, Volume= 14,981 cf
Outflow = 3.67 cfs @ 12.14 hrs, Volume= 14,981 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.67 cfs @ 12.14 hrs, Volume= 14,981 cf
Routed to Pond D2 : DMH#2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 211.36' @ 12.14 hrs
Flood Elev= 217.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.34'	**15.0" Round Culvert** L= 222.3' Ke= 0.500 Inlet / Outlet Invert= 210.34' / 207.01' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.63 cfs @ 12.14 hrs HW=211.35' TW=207.98' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 3.63 cfs @ 3.42 fps)

Summary for Pond D5: DMH #5

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 4.66" for 10YR event
Inflow = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf
Outflow = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf
Routed to Pond D6 : DMH #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.09' @ 12.09 hrs
Flood Elev= 212.97'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.09'	**18.0" Round Culvert** L= 183.0' Ke= 0.500 Inlet / Outlet Invert= 209.09' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.21 cfs @ 12.09 hrs HW=210.07' TW=209.02' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 3.21 cfs @ 3.72 fps)

Summary for Pond D6: DMH #6

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 4.66" for 10YR event
Inflow = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf
Outflow = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf
Routed to Pond D7 : DMH #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 209.03' @ 12.09 hrs
Flood Elev= 214.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	208.07'	**18.0" Round Culvert** L= 299.7' Ke= 0.500 Inlet / Outlet Invert= 208.07' / 206.57' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.21 cfs @ 12.09 hrs HW=209.02' TW=207.31' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 3.21 cfs @ 3.89 fps)

Summary for Pond D7: DMH #7

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 4.66" for 10YR event
Inflow = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf
Outflow = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.30 cfs @ 12.09 hrs, Volume= 11,817 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.33' @ 12.09 hrs
Flood Elev= 213.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 44.2' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 204.04' S= 0.0550 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.21 cfs @ 12.09 hrs HW=207.31' TW=201.62' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 3.21 cfs @ 3.13 fps)

Summary for Pond D8: DMH #8

Inflow Area = 18,765 sf, 91.12% Impervious, Inflow Depth > 4.22" for 10YR event
Inflow = 1.93 cfs @ 12.09 hrs, Volume= 6,595 cf
Outflow = 1.93 cfs @ 12.09 hrs, Volume= 6,595 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.93 cfs @ 12.09 hrs, Volume= 6,595 cf
Routed to Pond D9 : DMH #9

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.54' @ 12.09 hrs
Flood Elev= 204.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.57'	**12.0" Round Culvert** L= 87.7' Ke= 0.500 Inlet / Outlet Invert= 200.57' / 200.13' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.88 cfs @ 12.09 hrs HW=201.52' TW=200.95' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.88 cfs @ 3.14 fps)

Summary for Pond D9: DMH #9

Inflow Area = 18,765 sf, 91.12% Impervious, Inflow Depth > 4.22" for 10YR event
Inflow = 1.93 cfs @ 12.09 hrs, Volume= 6,595 cf
Outflow = 1.93 cfs @ 12.09 hrs, Volume= 6,595 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.93 cfs @ 12.09 hrs, Volume= 6,595 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 200.97' @ 12.09 hrs
Flood Elev= 204.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.03'	**12.0" Round Culvert** L= 11.9' Ke= 0.500 Inlet / Outlet Invert= 200.03' / 199.97' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.88 cfs @ 12.09 hrs HW=200.95' TW=197.46' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.88 cfs @ 3.23 fps)

Summary for Pond DE61: DRIP #61

Inflow Area = 4,247 sf, 92.68% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.45 cfs @ 12.09 hrs, Volume= 1,589 cf
Outflow = 0.39 cfs @ 12.14 hrs, Volume= 1,445 cf, Atten= 15%, Lag= 3.3 min
Discarded = 0.00 cfs @ 5.25 hrs, Volume= 196 cf
Primary = 0.38 cfs @ 12.14 hrs, Volume= 1,249 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.22' @ 12.14 hrs Surf.Area= 665 sf Storage= 273 cf

Plug-Flow detention time= 80.1 min calculated for 1,445 cf (91% of inflow)
Center-of-Mass det. time= 34.3 min (796.4 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 5.25 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.38 cfs @ 12.14 hrs HW=213.21' TW=208.04' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.38 cfs @ 2.33 fps)

Summary for Pond DE62: DRIP #62

Inflow Area = 4,247 sf, 92.68% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.45 cfs @ 12.09 hrs, Volume= 1,589 cf
Outflow = 0.39 cfs @ 12.14 hrs, Volume= 1,445 cf, Atten= 15%, Lag= 3.3 min
Discarded = 0.00 cfs @ 5.25 hrs, Volume= 196 cf
Primary = 0.38 cfs @ 12.14 hrs, Volume= 1,249 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.22' @ 12.14 hrs Surf.Area= 665 sf Storage= 273 cf

Plug-Flow detention time= 80.1 min calculated for 1,445 cf (91% of inflow)
Center-of-Mass det. time= 34.3 min (796.4 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 5.25 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.38 cfs @ 12.14 hrs HW=213.21' TW=208.04' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.38 cfs @ 2.33 fps)

Summary for Pond DE63: DRIP #63

Inflow Area = 3,013 sf, 88.68% Impervious, Inflow Depth > 4.38" for 10YR event
Inflow = 0.32 cfs @ 12.09 hrs, Volume= 1,099 cf
Outflow = 0.29 cfs @ 12.12 hrs, Volume= 1,012 cf, Atten= 9%, Lag= 2.2 min
Discarded = 0.00 cfs @ 5.45 hrs, Volume= 117 cf
Primary = 0.29 cfs @ 12.12 hrs, Volume= 895 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.93' @ 12.12 hrs Surf.Area= 404 sf Storage= 152 cf

Plug-Flow detention time= 70.3 min calculated for 1,012 cf (92% of inflow)
Center-of-Mass det. time= 29.0 min (797.0 - 768.0)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	404	0.0	0	0
207.00	404	40.0	2	2
208.99	404	40.0	322	323
209.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 207.50' / 207.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 5.45 hrs HW=207.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.28 cfs @ 12.12 hrs HW=207.92' TW=202.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.28 cfs @ 2.15 fps)

Summary for Pond DE64: DRIP #64

Inflow Area = 3,470 sf, 91.59% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.37 cfs @ 12.09 hrs, Volume= 1,298 cf
Outflow = 0.33 cfs @ 12.13 hrs, Volume= 1,197 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 4.85 hrs, Volume= 140 cf
Primary = 0.33 cfs @ 12.13 hrs, Volume= 1,057 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.97' @ 12.13 hrs Surf.Area= 470 sf Storage= 184 cf

Plug-Flow detention time= 71.7 min calculated for 1,197 cf (92% of inflow)
Center-of-Mass det. time= 30.6 min (792.8 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	204.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.99	470	0.0	0	0
205.00	470	40.0	2	2
206.99	470	40.0	374	376
207.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	205.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 205.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	204.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.85 hrs HW=205.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.32 cfs @ 12.13 hrs HW=205.96' TW=202.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.32 cfs @ 2.23 fps)

Summary for Pond DE65: DRIP #65

Inflow Area = 3,016 sf, 88.69% Impervious, Inflow Depth > 4.38" for 10YR event
Inflow = 0.32 cfs @ 12.09 hrs, Volume= 1,100 cf
Outflow = 0.29 cfs @ 12.12 hrs, Volume= 1,013 cf, Atten= 9%, Lag= 2.2 min
Discarded = 0.00 cfs @ 5.45 hrs, Volume= 117 cf
Primary = 0.29 cfs @ 12.12 hrs, Volume= 896 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.93' @ 12.12 hrs Surf.Area= 404 sf Storage= 152 cf

Plug-Flow detention time= 69.6 min calculated for 1,011 cf (92% of inflow)
Center-of-Mass det. time= 29.0 min (797.0 - 768.0)

Volume	Invert	Avail.Storage	Storage Description
#1	205.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.99	404	0.0	0	0
206.00	404	40.0	2	2
207.99	404	40.0	322	323
208.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	207.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.50' / 206.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 5.45 hrs HW=206.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.28 cfs @ 12.12 hrs HW=206.92' TW=202.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.28 cfs @ 2.15 fps)

Summary for Pond DE66: DRIP #66

Inflow Area = 3,407 sf, 91.46% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.36 cfs @ 12.09 hrs, Volume= 1,275 cf
Outflow = 0.33 cfs @ 12.13 hrs, Volume= 1,173 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 4.10 hrs, Volume= 140 cf
Primary = 0.32 cfs @ 12.13 hrs, Volume= 1,033 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 208.76' @ 12.13 hrs Surf.Area= 470 sf Storage= 183 cf

Plug-Flow detention time= 71.9 min calculated for 1,171 cf (92% of inflow)
Center-of-Mass det. time= 30.9 min (793.0 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	207.79'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.79	470	0.0	0	0
207.80	470	40.0	2	2
209.79	470	40.0	374	376
209.80	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.70'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.30'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.30' / 208.25' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.79'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.10 hrs HW=207.80' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.32 cfs @ 12.13 hrs HW=208.76' TW=202.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.32 cfs @ 2.22 fps)

Summary for Pond DE67: DRIP #67

Inflow Area = 3,481 sf, 91.61% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.37 cfs @ 12.09 hrs, Volume= 1,302 cf
Outflow = 0.33 cfs @ 12.13 hrs, Volume= 1,201 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 4.85 hrs, Volume= 140 cf
Primary = 0.33 cfs @ 12.13 hrs, Volume= 1,061 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.97' @ 12.13 hrs Surf.Area= 470 sf Storage= 184 cf

Plug-Flow detention time= 71.6 min calculated for 1,201 cf (92% of inflow)
Center-of-Mass det. time= 30.6 min (792.7 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	470	0.0	0	0
208.00	470	40.0	2	2
209.99	470	40.0	374	376
210.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 208.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.85 hrs HW=208.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.32 cfs @ 12.13 hrs HW=208.96' TW=208.04' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.32 cfs @ 2.23 fps)

Summary for Pond DE68: DRIP #68

Inflow Area = 4,212 sf, 92.62% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.45 cfs @ 12.09 hrs, Volume= 1,576 cf
Outflow = 0.40 cfs @ 12.13 hrs, Volume= 1,434 cf, Atten= 12%, Lag= 2.8 min
Discarded = 0.00 cfs @ 5.25 hrs, Volume= 196 cf
Primary = 0.39 cfs @ 12.13 hrs, Volume= 1,238 cf
Routed to Pond OCS4 : OCS#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.92' @ 12.13 hrs Surf.Area= 665 sf Storage= 248 cf

Plug-Flow detention time= 77.4 min calculated for 1,431 cf (91% of inflow)
Center-of-Mass det. time= 32.5 min (794.6 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	665	0.0	0	0
207.00	665	40.0	3	3
208.99	665	40.0	529	532
209.00	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 207.50' / 206.00' S= 0.0750 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 5.25 hrs HW=207.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.39 cfs @ 12.13 hrs HW=207.92' TW=204.29' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Inlet Controls 0.39 cfs @ 2.20 fps)

Summary for Pond DE69: DRIP #69

Inflow Area =	3,480 sf, 91.61% Impervious,	Inflow Depth > 4.49"	for 10YR event
Inflow =	0.37 cfs @ 12.09 hrs, Volume=	1,302 cf	
Outflow =	0.33 cfs @ 12.13 hrs, Volume=	1,200 cf,	Atten= 11%, Lag= 2.5 min
Discarded =	0.00 cfs @ 4.85 hrs, Volume=	140 cf	
Primary =	0.33 cfs @ 12.13 hrs, Volume=	1,061 cf	

Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.47' @ 12.13 hrs Surf.Area= 470 sf Storage= 184 cf

Plug-Flow detention time= 71.0 min calculated for 1,198 cf (92% of inflow)
Center-of-Mass det. time= 30.6 min (792.7 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	205.49'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.49	470	0.0	0	0
205.50	470	40.0	2	2
207.49	470	40.0	374	376
207.50	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.00' / 205.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.85 hrs HW=205.51' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.32 cfs @ 12.13 hrs HW=206.46' TW=201.82' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.32 cfs @ 2.23 fps)

Summary for Pond DE70: DRIP #70

Inflow Area = 3,476 sf, 91.60% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.37 cfs @ 12.09 hrs, Volume= 1,301 cf
Outflow = 0.33 cfs @ 12.13 hrs, Volume= 1,199 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 4.05 hrs, Volume= 140 cf
Primary = 0.33 cfs @ 12.13 hrs, Volume= 1,059 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.87' @ 12.13 hrs Surf.Area= 470 sf Storage= 184 cf

Plug-Flow detention time= 71.7 min calculated for 1,199 cf (92% of inflow)
Center-of-Mass det. time= 30.6 min (792.7 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	205.89'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.89	470	0.0	0	0
205.90	470	40.0	2	2
207.89	470	40.0	374	376
207.90	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.80'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.40'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.40' / 206.35' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.89'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.05 hrs HW=205.90' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.32 cfs @ 12.13 hrs HW=206.86' TW=201.82' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.32 cfs @ 2.23 fps)

Summary for Pond DE71: DRIP #71

Inflow Area = 4,210 sf, 92.61% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.45 cfs @ 12.09 hrs, Volume= 1,575 cf
Outflow = 0.38 cfs @ 12.14 hrs, Volume= 1,431 cf, Atten= 15%, Lag= 3.3 min
Discarded = 0.00 cfs @ 5.75 hrs, Volume= 196 cf
Primary = 0.38 cfs @ 12.14 hrs, Volume= 1,235 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.51' @ 12.14 hrs Surf.Area= 665 sf Storage= 273 cf

Plug-Flow detention time= 79.8 min calculated for 1,428 cf (91% of inflow)
Center-of-Mass det. time= 34.4 min (796.5 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	206.49'	805 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.49	665	0.0	0	0
206.50	665	40.0	3	3
209.49	665	40.0	795	798
209.50	665	100.0	7	805

Device	Routing	Invert	Outlet Devices
#1	Primary	209.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 207.00' / 206.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 5.75 hrs HW=206.52' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.38 cfs @ 12.14 hrs HW=207.51' TW=201.88' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.38 cfs @ 2.33 fps)

Summary for Pond DECH: DRIP #CH

Inflow Area = 6,262 sf, 92.70% Impervious, Inflow Depth > 4.49" for 10YR event
Inflow = 0.67 cfs @ 12.09 hrs, Volume= 2,343 cf
Outflow = 0.42 cfs @ 12.19 hrs, Volume= 2,343 cf, Atten= 38%, Lag= 6.5 min
Discarded = 0.04 cfs @ 10.75 hrs, Volume= 1,427 cf
Primary = 0.38 cfs @ 12.19 hrs, Volume= 916 cf
Routed to Pond CB18 : CB #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 209.49' @ 12.19 hrs Surf.Area= 636 sf Storage= 382 cf

Plug-Flow detention time= 20.3 min calculated for 2,343 cf (100% of inflow)
Center-of-Mass det. time= 20.2 min (782.3 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	770 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	636	0.0	0	0
208.00	636	40.0	3	3
210.99	636	40.0	761	763
211.00	636	100.0	6	770

Device	Routing	Invert	Outlet Devices
#1	Primary	210.90'	**160.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**4.0" Round Culvert** L= 80.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 205.10' S= 0.0425 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#3	Discarded	207.99'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.04 cfs @ 10.75 hrs HW=208.02' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.38 cfs @ 12.19 hrs HW=209.49' TW=205.42' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Inlet Controls 0.38 cfs @ 4.37 fps)

Summary for Pond DMH32: DMH #32

Inflow Area = 20,278 sf, 79.11% Impervious, Inflow Depth > 4.18" for 10YR event
Inflow = 2.09 cfs @ 12.09 hrs, Volume= 7,071 cf
Outflow = 2.09 cfs @ 12.09 hrs, Volume= 7,071 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.09 cfs @ 12.09 hrs, Volume= 7,071 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.40' @ 12.09 hrs
Flood Elev= 206.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.59'	**12.0" Round Culvert** L= 19.2' Ke= 0.500 Inlet / Outlet Invert= 202.59' / 201.57' S= 0.0531 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.04 cfs @ 12.09 hrs HW=203.39' TW=201.62' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.04 cfs @ 3.04 fps)

Summary for Pond OCS1: OCS#1

Inflow Area = 48,573 sf, 81.99% Impervious, Inflow Depth > 4.32" for 10YR event
Inflow = 5.03 cfs @ 12.09 hrs, Volume= 17,471 cf
Outflow = 5.03 cfs @ 12.09 hrs, Volume= 17,471 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.03 cfs @ 12.09 hrs, Volume= 17,471 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 196.14' @ 12.32 hrs
Flood Elev= 201.48'

Device	Routing	Invert	Outlet Devices
#1	Primary	195.00'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=4.92 cfs @ 12.09 hrs HW=196.02' TW=195.61' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 4.92 cfs @ 3.06 fps)

Summary for Pond OCS3: OCS#3

Inflow Area = 54,250 sf, 81.93% Impervious, Inflow Depth > 3.93" for 10YR event
Inflow = 5.25 cfs @ 12.09 hrs, Volume= 17,757 cf
Outflow = 5.25 cfs @ 12.09 hrs, Volume= 17,757 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.25 cfs @ 12.09 hrs, Volume= 17,757 cf
Routed to Pond p204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.75' @ 12.43 hrs
Flood Elev= 209.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=5.16 cfs @ 12.09 hrs HW=204.49' TW=204.10' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 5.16 cfs @ 3.02 fps)

Summary for Pond OCS4: OCS#4

Inflow Area = 17,972 sf, 28.85% Impervious, Inflow Depth > 2.68" for 10YR event
Inflow = 1.25 cfs @ 12.10 hrs, Volume= 4,007 cf
Outflow = 1.25 cfs @ 12.10 hrs, Volume= 4,007 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.25 cfs @ 12.10 hrs, Volume= 4,007 cf
Routed to Pond P204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.72' @ 12.46 hrs
Flood Elev= 208.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.25 cfs @ 12.10 hrs HW=204.19' TW=204.15' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.25 cfs @ 0.91 fps)

Summary for Pond OCS6: OCS #6

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 4.56" for 10YR event
Inflow = 1.73 cfs @ 12.09 hrs, Volume= 6,129 cf
Outflow = 1.73 cfs @ 12.09 hrs, Volume= 6,129 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.73 cfs @ 12.09 hrs, Volume= 6,129 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.65' @ 12.71 hrs
Flood Elev= 206.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.20'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.71 cfs @ 12.09 hrs HW=202.11' TW=201.89' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.71 cfs @ 2.27 fps)

Summary for Pond OCS7: OCS #7

Inflow Area = 15,875 sf, 92.67% Impervious, Inflow Depth > 4.52" for 10YR event
Inflow = 1.70 cfs @ 12.09 hrs, Volume= 5,986 cf
Outflow = 1.70 cfs @ 12.09 hrs, Volume= 5,986 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.70 cfs @ 12.09 hrs, Volume= 5,986 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.65' @ 12.71 hrs
Flood Elev= 206.47'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.78'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.65 cfs @ 12.09 hrs HW=202.48' TW=201.89' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.65 cfs @ 2.84 fps)

Summary for Pond P204: STORMTECH INFILTRATION SYSTEM #1

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth > 3.62" for 10YR event
Inflow = 6.49 cfs @ 12.09 hrs, Volume= 21,764 cf
Outflow = 1.88 cfs @ 12.47 hrs, Volume= 19,565 cf, Atten= 71%, Lag= 22.4 min
Discarded = 0.09 cfs @ 9.15 hrs, Volume= 5,743 cf
Primary = 1.79 cfs @ 12.47 hrs, Volume= 13,822 cf
Routed to Reach 20r : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.72' @ 12.47 hrs Surf.Area= 5,670 sf Storage= 8,487 cf
Flood Elev= 208.75' Surf.Area= 5,670 sf Storage= 13,379 cf

Plug-Flow detention time= 110.9 min calculated for 19,565 cf (90% of inflow)
Center-of-Mass det. time= 62.5 min (841.6 - 779.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	202.50'	5,923 cf	**77.50'W x 67.70'L x 4.08'H STORMTECH SC-740** 21,423 cf Overall - 6,615 cf Embedded = 14,808 cf x 40.0% Voids
#2A	203.08'	6,615 cf	**ADS_StormTech SC-740 +Cap** x 144 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 144 Chambers in 16 Rows
#3B	202.50'	427 cf	**6.25'W x 67.70'L x 3.50'H ISOLATOR ROW** 1,481 cf Overall - 413 cf Embedded = 1,067 cf x 40.0% Voids
#4B	203.00'	413 cf	**ADS_StormTech SC-740 +Cap** x 9 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		13,379 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.75'	**15.0" Round Culvert** L= 35.0' Ke= 0.500 Inlet / Outlet Invert= 202.75' / 201.00' S= 0.0500 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	204.75'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#3	Device 1	203.25'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Discarded	202.50'	**0.660 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.09 cfs @ 9.15 hrs HW=202.56' (Free Discharge)
└─**4=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=1.79 cfs @ 12.47 hrs HW=204.71' TW=200.09' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.79 cfs of 6.84 cfs potential flow)
  ├─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
  └─**3=Orifice/Grate** (Orifice Controls 1.79 cfs @ 5.12 fps)

Summary for Pond P205: INFILTRATION POND #3

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth > 2.51" for 10YR event
Inflow = 4.73 cfs @ 12.12 hrs, Volume= 18,538 cf
Outflow = 0.70 cfs @ 12.90 hrs, Volume= 15,637 cf, Atten= 85%, Lag= 46.7 min
Discarded = 0.30 cfs @ 12.90 hrs, Volume= 14,188 cf
Primary = 0.40 cfs @ 12.90 hrs, Volume= 1,449 cf
Routed to Reach 18R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.70' @ 12.90 hrs Surf.Area= 5,363 sf Storage= 7,871 cf

Plug-Flow detention time= 232.2 min calculated for 15,605 cf (84% of inflow)
Center-of-Mass det. time= 164.8 min (986.3 - 821.5)

Volume	Invert	Avail.Storage	Storage Description
#1	205.00'	15,630 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.00	3,939	0	0
206.00	4,756	4,348	4,348
207.00	5,627	5,192	9,539
208.00	6,555	6,091	15,630

Device	Routing	Invert	Outlet Devices
#1	Primary	206.65'	**15.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	205.00'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.30 cfs @ 12.90 hrs HW=206.70' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.30 cfs)

Primary OutFlow Max=0.40 cfs @ 12.90 hrs HW=206.70' TW=203.01' (Dynamic Tailwater)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 0.40 cfs @ 0.58 fps)

Summary for Pond P206: STORMTECH INFILTRATION SYSTEM #2

Inflow Area = 59,746 sf, 80.70% Impervious, Inflow Depth > 4.29" for 10YR event
Inflow = 6.18 cfs @ 12.09 hrs, Volume= 21,341 cf
Outflow = 2.12 cfs @ 12.37 hrs, Volume= 21,338 cf, Atten= 66%, Lag= 16.9 min
Discarded = 0.49 cfs @ 11.45 hrs, Volume= 18,384 cf
Primary = 1.63 cfs @ 12.37 hrs, Volume= 2,954 cf
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 196.10' @ 12.37 hrs Surf.Area= 6,072 sf Storage= 6,143 cf

Plug-Flow detention time= 65.3 min calculated for 21,338 cf (100% of inflow)
Center-of-Mass det. time= 65.2 min (832.6 - 767.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	194.67'	1,786 cf	**39.50'W x 53.46'L x 3.33'H FIELD A** 7,038 cf Overall - 2,573 cf Embedded = 4,466 cf x 40.0% Voids
#2A	195.00'	2,573 cf	**ADS_StormTech SC-740 +Cap** x 56 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 56 Chambers in 8 Rows
#3B	194.67'	3,296 cf	**58.50'W x 67.70'L x 3.33'H FIELD B** 13,201 cf Overall - 4,962 cf Embedded = 8,239 cf x 40.0% Voids
#4B	195.00'	4,962 cf	**ADS_StormTech SC-740 +Cap** x 108 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 108 Chambers in 12 Rows
		12,616 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 30.0' Ke= 0.200 Inlet / Outlet Invert= 194.65' / 194.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	195.85'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Discarded	194.67'	**3.500 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.49 cfs @ 11.45 hrs HW=194.71' (Free Discharge)
3=Exfiltration (Exfiltration Controls 0.49 cfs)

Primary OutFlow Max=1.62 cfs @ 12.37 hrs HW=196.10' TW=0.00' (Dynamic Tailwater)
1=Culvert (Passes 1.62 cfs of 6.17 cfs potential flow)
2=Sharp-Crested Rectangular Weir (Weir Controls 1.62 cfs @ 1.64 fps)

Summary for Pond P207: INFILTRATION POND #2

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth > 3.76" for 10YR event
Inflow = 11.58 cfs @ 12.09 hrs, Volume= 40,612 cf
Outflow = 1.99 cfs @ 12.60 hrs, Volume= 40,597 cf, Atten= 83%, Lag= 30.7 min
Discarded = 1.03 cfs @ 12.60 hrs, Volume= 34,722 cf
Primary = 0.96 cfs @ 12.60 hrs, Volume= 5,876 cf
Routed to Reach 10R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.06' @ 12.60 hrs Surf.Area= 12,083 sf Storage= 13,926 cf

Plug-Flow detention time= 75.9 min calculated for 40,513 cf (100% of inflow)
Center-of-Mass det. time= 75.5 min (863.9 - 788.4)

Volume	Invert	Avail.Storage	Storage Description
#1	196.80'	40,260 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.80	10,100	0	0
198.00	12,000	13,260	13,260
200.00	15,000	27,000	40,260

Device	Routing	Invert	Outlet Devices
#1	Primary	198.80'	**20.0' long x 21.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	194.75'	**15.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 194.75' / 194.55' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#3	Device 2	198.80'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads
#4	Device 2	197.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Discarded	196.80'	**3.690 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=1.03 cfs @ 12.60 hrs HW=198.06' (Free Discharge)
└─**5=Exfiltration** (Exfiltration Controls 1.03 cfs)

Primary OutFlow Max=0.96 cfs @ 12.60 hrs HW=198.06' TW=192.18' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Passes 0.96 cfs of 9.67 cfs potential flow)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 0.96 cfs @ 2.76 fps)

Summary for Pond P210: POCKET WETLAND #1

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 3.40" for 10YR event
Inflow = 5.18 cfs @ 12.09 hrs, Volume= 17,735 cf
Outflow = 0.19 cfs @ 15.68 hrs, Volume= 7,883 cf, Atten= 96%, Lag= 215.2 min
Primary = 0.19 cfs @ 15.68 hrs, Volume= 7,883 cf
Routed to Reach 15R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Starting Elev= 201.00' Surf.Area= 376 sf Storage= 591 cf
Peak Elev= 203.77' @ 15.68 hrs Surf.Area= 7,604 sf Storage= 13,036 cf (12,445 cf above start)

Plug-Flow detention time= 459.2 min calculated for 7,277 cf (41% of inflow)
Center-of-Mass det. time= 292.2 min (1,075.2 - 783.0)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	43,190 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	218	0	0
200.00	294	256	256
201.00	376	335	591
202.00	3,991	2,184	2,775
204.00	8,073	12,064	14,839
206.00	13,272	21,345	36,184
206.50	14,753	7,006	43,190

Device	Routing	Invert	Outlet Devices
#1	Primary	205.10'	**20.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	202.25'	**12.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 202.25' / 202.03' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	202.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 2	204.50'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads

Primary OutFlow Max=0.19 cfs @ 15.68 hrs HW=203.77' TW=202.05' (Dynamic Tailwater)
- **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Culvert** (Passes 0.19 cfs of 3.19 cfs potential flow)
  - **3=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.63 fps)
  - **4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond P212: INFILTRATION POND #1

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth > 3.18" for 10YR event
Inflow = 16.29 cfs @ 12.10 hrs, Volume= 63,872 cf
Outflow = 5.35 cfs @ 12.51 hrs, Volume= 63,856 cf, Atten= 67%, Lag= 24.4 min
Discarded = 1.42 cfs @ 12.51 hrs, Volume= 57,664 cf
Primary = 3.94 cfs @ 12.51 hrs, Volume= 6,192 cf
Routed to Reach R211 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.65' @ 12.51 hrs Surf.Area= 11,925 sf Storage= 24,325 cf

Plug-Flow detention time= 142.3 min calculated for 63,856 cf (100% of inflow)
Center-of-Mass det. time= 142.2 min (930.0 - 787.9)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	41,774 cf	**Custom Stage Data (Conic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	4,354	0	0	4,354
201.00	9,360	6,699	6,699	9,368
202.00	10,993	10,166	16,865	11,040
204.00	13,976	24,909	41,774	14,126

Device	Routing	Invert	Outlet Devices
#1	Primary	202.50'	**25.0' long x 20.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	200.00'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=1.42 cfs @ 12.51 hrs HW=202.65' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 1.42 cfs)

Primary OutFlow Max=3.91 cfs @ 12.51 hrs HW=202.65' TW=200.07' (Dynamic Tailwater)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 3.91 cfs @ 1.04 fps)

Summary for Pond P213: Stormtech Infiltration System #3

Inflow Area = 31,986 sf, 93.23% Impervious, Inflow Depth > 4.54" for 10YR event
Inflow = 3.43 cfs @ 12.09 hrs, Volume= 12,114 cf
Outflow = 0.39 cfs @ 11.65 hrs, Volume= 12,113 cf, Atten= 89%, Lag= 0.0 min
Discarded = 0.39 cfs @ 11.65 hrs, Volume= 12,113 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.65' @ 12.72 hrs Surf.Area= 3,317 sf Storage= 3,828 cf

Plug-Flow detention time= 62.1 min calculated for 12,113 cf (100% of inflow)
Center-of-Mass det. time= 62.0 min (820.1 - 758.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.95'	2,990 cf	**49.00'W x 67.70'L x 3.50'H Field A** 11,610 cf Overall - 4,135 cf Embedded = 7,475 cf x 40.0% Voids
#2A	201.45'	4,135 cf	**ADS_StormTech SC-740 +Cap** x 90 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 90 Chambers in 10 Rows
		7,125 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.30'	**12.0" Round Culvert** L= 60.0' Ke= 0.500 Inlet / Outlet Invert= 202.30' / 202.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.95'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#3	Device 1	204.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

#4	Device 1	203.35'	**6.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.39 cfs @ 11.65 hrs HW=200.99' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.39 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.95' TW=200.00' (Dynamic Tailwater)
└─**1=Culvert** (Controls 0.00 cfs)
  ├─**3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond P214: STORMTECH INFILTRATION SYSTEM #4

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=3)

Inflow Area = 32,665 sf, 94.81% Impervious, Inflow Depth > 4.47" for 10YR event
Inflow = 3.46 cfs @ 12.09 hrs, Volume= 12,166 cf
Outflow = 0.61 cfs @ 11.75 hrs, Volume= 12,168 cf, Atten= 82%, Lag= 0.0 min
Discarded = 0.61 cfs @ 11.75 hrs, Volume= 12,168 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
  Routed to Reach 9R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.46' @ 12.54 hrs Surf.Area= 3,201 sf Storage= 3,080 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 26.6 min (786.2 - 759.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.00'	1,851 cf	**30.00'W x 67.70'L x 3.50'H Field A** 7,108 cf Overall - 2,481 cf Embedded = 4,627 cf x 40.0% Voids
#2A	200.50'	2,481 cf	**ADS_StormTech SC-740 +Cap** x 54 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 54 Chambers in 6 Rows
#3B	200.00'	1,087 cf	**25.25'W x 46.34'L x 3.50'H Field B** 4,095 cf Overall - 1,378 cf Embedded = 2,717 cf x 40.0% Voids
#4B	200.50'	1,378 cf	**ADS_StormTech SC-740 +Cap** x 30 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 30 Chambers in 5 Rows
		6,797 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.88' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.00'	**8.280 in/hr Exfiltration over Surface area** Phase-In= 0.01'

#3	Device 1	203.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	202.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.61 cfs @ 11.75 hrs HW=200.05' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.61 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' TW=201.75' (Dynamic Tailwater)
└─**1=Culvert** (Controls 0.00 cfs)
  ├─**3=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 9,943 sf, 92.79% Impervious, Inflow Depth > 4.38" for 10YR event
Inflow = 1.05 cfs @ 12.09 hrs, Volume= 3,627 cf
Primary = 1.05 cfs @ 12.09 hrs, Volume= 3,627 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 816,898 sf, 39.51% Impervious, Inflow Depth > 2.32" for 10YR event
Inflow = 18.24 cfs @ 12.40 hrs, Volume= 157,893 cf
Primary = 18.24 cfs @ 12.40 hrs, Volume= 157,893 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

Inflow Area = 55,420 sf, 16.57% Impervious, Inflow Depth > 2.00" for 10YR event
Inflow = 2.89 cfs @ 12.10 hrs, Volume= 9,258 cf
Primary = 2.89 cfs @ 12.10 hrs, Volume= 9,258 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT #4

Inflow Area = 1,691,659 sf, 25.34% Impervious, Inflow Depth > 1.27" for 10YR event
Inflow = 25.19 cfs @ 12.53 hrs, Volume= 178,860 cf
Primary = 25.19 cfs @ 12.53 hrs, Volume= 178,860 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentB1: MULTIFAMILYBLDG Runoff Area=23,255 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=3.21 cfs 11,720 cf

SubcatchmentB2: MULTIFAMILYBLDG Runoff Area=17,561 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=2.43 cfs 8,851 cf

SubcatchmentB3: MULTIFAMILY Runoff Area=19,981 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=2.76 cfs 10,070 cf

SubcatchmentC10: CB #10 Runoff Area=6,961 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.96 cfs 3,508 cf

SubcatchmentC11: CB #11 Runoff Area=7,173 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.99 cfs 3,615 cf

SubcatchmentC12: CB #12 Runoff Area=5,238 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.72 cfs 2,640 cf

SubcatchmentC13: CB #13 Runoff Area=10,873 sf 90.78% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=1.49 cfs 5,267 cf

SubcatchmentC14: CB #14 Runoff Area=12,099 sf 86.22% Impervious Runoff Depth>5.24"
Tc=6.0 min CN=91 Runoff=1.57 cfs 5,281 cf

SubcatchmentC15: CB #15 Runoff Area=6,666 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.92 cfs 3,360 cf

SubcatchmentC16: CB #16 Runoff Area=8,516 sf 64.88% Impervious Runoff Depth>3.94"
Tc=6.0 min CN=79 Runoff=0.88 cfs 2,794 cf

SubcatchmentC17: CB #17 Runoff Area=11,836 sf 73.87% Impervious Runoff Depth>5.35"
Tc=6.0 min CN=92 Runoff=1.56 cfs 5,278 cf

SubcatchmentC18: CB #18 Runoff Area=18,591 sf 66.35% Impervious Runoff Depth>5.13"
Tc=6.0 min CN=90 Runoff=2.38 cfs 7,940 cf

SubcatchmentC20: CB #20 Runoff Area=11,939 sf 88.95% Impervious Runoff Depth>5.70"
Tc=6.0 min CN=95 Runoff=1.62 cfs 5,667 cf

SubcatchmentC21: CB #21 Runoff Area=10,174 sf 87.04% Impervious Runoff Depth>5.13"
Tc=6.0 min CN=90 Runoff=1.30 cfs 4,345 cf

SubcatchmentC22: CB #22 Runoff Area=12,001 sf 91.62% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=1.64 cfs 5,813 cf

SubcatchmentC23: CB #23 Runoff Area=9,694 sf 61.00% Impervious Runoff Depth>5.01"
Tc=6.0 min CN=89 Runoff=1.22 cfs 4,050 cf

SubcatchmentC24: CB #24 Runoff Area=7,930 sf 72.16% Impervious Runoff Depth>5.47"
Tc=6.0 min CN=93 Runoff=1.06 cfs 3,612 cf

SubcatchmentC25: CB #25 Runoff Area=8,487 sf 80.92% Impervious Runoff Depth>5.58"
Tc=6.0 min CN=94 Runoff=1.14 cfs 3,947 cf

SubcatchmentC26: CB #26 Runoff Area=8,835 sf 63.75% Impervious Runoff Depth>5.24"
Tc=6.0 min CN=91 Runoff=1.15 cfs 3,856 cf

SubcatchmentC27: CB #27 Runoff Area=6,111 sf 91.90% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.84 cfs 2,960 cf

SubcatchmentC28: CB #28 Runoff Area=10,372 sf 51.33% Impervious Runoff Depth>4.90"
Tc=6.0 min CN=88 Runoff=1.29 cfs 4,237 cf

SubcatchmentC29: CB #29 Runoff Area=8,495 sf 84.21% Impervious Runoff Depth>5.58"
Tc=6.0 min CN=94 Runoff=1.14 cfs 3,950 cf

SubcatchmentC30: CB #30 Runoff Area=8,933 sf 82.40% Impervious Runoff Depth>5.58"
Tc=6.0 min CN=94 Runoff=1.20 cfs 4,154 cf

SubcatchmentC31: CB #31 Runoff Area=16,365 sf 68.64% Impervious Runoff Depth>5.13"
Tc=6.0 min CN=90 Runoff=2.10 cfs 6,989 cf

SubcatchmentC32: CB #32 Runoff Area=12,710 sf 70.47% Impervious Runoff Depth>5.24"
Tc=6.0 min CN=91 Runoff=1.65 cfs 5,548 cf

SubcatchmentC33: CB #33 Runoff Area=5,421 sf 83.90% Impervious Runoff Depth>5.58"
Tc=6.0 min CN=94 Runoff=0.73 cfs 2,521 cf

SubcatchmentC34: CB #34 Runoff Area=8,622 sf 80.51% Impervious Runoff Depth>5.47"
Tc=6.0 min CN=93 Runoff=1.15 cfs 3,927 cf

SubcatchmentC35: CB #35 Runoff Area=4,149 sf 98.10% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.57 cfs 2,091 cf

SubcatchmentC36: CB #36 Runoff Area=6,622 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.92 cfs 3,337 cf

SubcatchmentC38: CB #38 Runoff Area=7,637 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=1.06 cfs 3,849 cf

SubcatchmentC39: CB #39 Runoff Area=7,612 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=1.05 cfs 3,836 cf

SubcatchmentC40: CB #40 Runoff Area=4,211 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.58 cfs 2,122 cf

SubcatchmentC41: CB #41 Runoff Area=5,586 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.77 cfs 2,815 cf

SubcatchmentC43: CB #43 Runoff Area=3,109 sf 75.36% Impervious Runoff Depth>5.01"
Tc=6.0 min CN=89 Runoff=0.39 cfs 1,299 cf

SubcatchmentC44: CB #44 Runoff Area=1,978 sf 84.43% Impervious Runoff Depth>5.35"
Tc=6.0 min CN=92 Runoff=0.26 cfs 882 cf

SubcatchmentC45: CB #45 Runoff Area=2,465 sf 50.30% Impervious Runoff Depth>4.04"
Tc=6.0 min CN=80 Runoff=0.26 cfs 830 cf

SubcatchmentC46: CB #46 Runoff Area=4,397 sf 50.97% Impervious Runoff Depth>4.04"
Tc=6.0 min CN=80 Runoff=0.47 cfs 1,481 cf

SubcatchmentC47: CB #47 Runoff Area=3,012 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.42 cfs 1,518 cf

SubcatchmentC48: CB #48 Runoff Area=60,128 sf 25.16% Impervious Runoff Depth>3.03"
Flow Length=400' Tc=11.8 min CN=70 Runoff=4.02 cfs 15,183 cf

SubcatchmentC49: CB #49 Runoff Area=5,238 sf 84.59% Impervious Runoff Depth>5.58"
Tc=6.0 min CN=94 Runoff=0.70 cfs 2,436 cf

SubcatchmentC50: CB #50 Runoff Area=15,040 sf 77.20% Impervious Runoff Depth>5.47"
Tc=6.0 min CN=93 Runoff=2.00 cfs 6,850 cf

SubcatchmentC51: CB #51 Runoff Area=6,823 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.94 cfs 3,439 cf

SubcatchmentC52: CB#52 Runoff Area=9,052 sf 87.14% Impervious Runoff Depth>5.70"
Tc=6.0 min CN=95 Runoff=1.23 cfs 4,297 cf

SubcatchmentC53: CB #53 Runoff Area=7,863 sf 86.52% Impervious Runoff Depth>5.47"
Tc=6.0 min CN=93 Runoff=1.05 cfs 3,581 cf

SubcatchmentC54: CB #54 Runoff Area=4,821 sf 86.85% Impervious Runoff Depth>5.24"
Tc=6.0 min CN=91 Runoff=0.63 cfs 2,104 cf

SubcatchmentC7: CB #5 Runoff Area=4,650 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.64 cfs 2,344 cf

SubcatchmentC8: CB #8 Runoff Area=5,450 sf 88.75% Impervious Runoff Depth>5.58"
Tc=6.0 min CN=94 Runoff=0.73 cfs 2,534 cf

SubcatchmentC9: CB #9 Runoff Area=16,307 sf 93.95% Impervious Runoff Depth>5.93"
Tc=6.0 min CN=97 Runoff=2.24 cfs 8,058 cf

SubcatchmentCH1: CLUBHOUSE Runoff Area=6,262 sf 92.70% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.86 cfs 3,033 cf

SubcatchmentMB1: MAIL KIOSK Runoff Area=938 sf 100.00% Impervious Runoff Depth>6.05"
Tc=6.0 min CN=98 Runoff=0.13 cfs 473 cf

SubcatchmentS201: SUMMER STREET Runoff Area=9,943 sf 92.79% Impervious Runoff Depth>5.70"
Tc=6.0 min CN=95 Runoff=1.35 cfs 4,720 cf

SubcatchmentS202: EXISTING WETLAND Runoff Area=432,269 sf 42.08% Impervious Runoff Depth>3.62"
Flow Length=856' Tc=23.2 min CN=76 Runoff=26.72 cfs 130,245 cf

SubcatchmentS203: POCKET WETLAND #1 Runoff Area=25,587 sf 0.00% Impervious Runoff Depth>3.23"
Tc=6.0 min CN=72 Runoff=2.18 cfs 6,885 cf

SubcatchmentS204: EXISTING Runoff Area=308,203 sf 31.07% Impervious Runoff Depth>3.52"
Flow Length=632' Tc=22.6 min CN=75 Runoff=18.73 cfs 90,283 cf

SubcatchmentS205: ISOLATED WETLAND Runoff Area=55,420 sf 16.57% Impervious Runoff Depth>3.03"
Tc=6.0 min CN=70 Runoff=4.43 cfs 14,013 cf

SubcatchmentS206: OVERLAND FLOW Runoff Area=891,295 sf 2.91% Impervious Runoff Depth>2.54"
Flow Length=1,467' Tc=34.5 min CN=65 Runoff=31.85 cfs 188,907 cf

SubcatchmentS207: INFILTRATION POND Runoff Area=20,803 sf 0.00% Impervious Runoff Depth>4.90"
Tc=6.0 min CN=88 Runoff=2.59 cfs 8,498 cf

SubcatchmentS208: GRASS AREA Runoff Area=13,760 sf 9.33% Impervious Runoff Depth>3.53"
Tc=6.0 min CN=75 Runoff=1.28 cfs 4,045 cf

SubcatchmentS209: WETLAND C Runoff Area=107,073 sf 0.38% Impervious Runoff Depth>3.31"
Flow Length=607' Slope=0.0150 '/' Tc=28.9 min CN=73 Runoff=5.50 cfs 29,544 cf

SubcatchmentS210: INFILTRATION POND Runoff Area=75,890 sf 0.00% Impervious Runoff Depth>3.83"
Flow Length=580' Slope=0.0150 '/' Tc=16.5 min CN=78 Runoff=5.67 cfs 24,190 cf

SubcatchmentS211: S211 Runoff Area=15,436 sf 47.47% Impervious Runoff Depth>3.94"
Tc=6.0 min CN=79 Runoff=1.60 cfs 5,064 cf

SubcatchmentS212: SWALE Runoff Area=52,768 sf 0.60% Impervious Runoff Depth>2.55"
Flow Length=418' Tc=23.1 min CN=65 Runoff=2.25 cfs 11,217 cf

SubcatchmentS213: COURTYARD Runoff Area=21,407 sf 48.10% Impervious Runoff Depth>3.94"
Tc=6.0 min CN=79 Runoff=2.21 cfs 7,022 cf

SubcatchmentT1: Trench Drain 1 Runoff Area=11,173 sf 75.10% Impervious Runoff Depth>5.47"
Tc=6.0 min CN=93 Runoff=1.49 cfs 5,089 cf

SubcatchmentT2: Drive Under B2 Runoff Area=4,445 sf 64.30% Impervious Runoff Depth>3.83"
Tc=6.0 min CN=78 Runoff=0.45 cfs 1,420 cf

SubcatchmentTH1: TOWN HOUSE #1 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.58 cfs 2,057 cf

SubcatchmentTH10: TOWN HOUSE #10 Runoff Area=3,476 sf 91.60% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.48 cfs 1,684 cf

SubcatchmentTH11: TOWN HOUSE #11 Runoff Area=4,210 sf 92.61% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.58 cfs 2,039 cf

SubcatchmentTH2: TOWN HOUSE #2 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.58 cfs 2,057 cf

SubcatchmentTH3: TOWN HOUSE #3 Runoff Area=3,013 sf 88.68% Impervious Runoff Depth>5.70"
Tc=6.0 min CN=95 Runoff=0.41 cfs 1,430 cf

SubcatchmentTH4: TOWN HOUSE #4 Runoff Area=3,470 sf 91.59% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.47 cfs 1,681 cf

SubcatchmentTH5: TOWN HOUSE #5 Runoff Area=3,016 sf 88.69% Impervious Runoff Depth>5.70"
Tc=6.0 min CN=95 Runoff=0.41 cfs 1,432 cf

SubcatchmentTH6: TOWN HOUSE #6 Runoff Area=3,407 sf 91.46% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.47 cfs 1,650 cf

SubcatchmentTH7: TOWN HOUSE #7 Runoff Area=3,481 sf 91.61% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.48 cfs 1,686 cf

SubcatchmentTH8: TOWN HOUSE #8 Runoff Area=4,212 sf 92.62% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.58 cfs 2,040 cf

SubcatchmentTH9: TOWN HOUSE #9 Runoff Area=3,480 sf 91.61% Impervious Runoff Depth>5.81"
Tc=6.0 min CN=96 Runoff=0.48 cfs 1,686 cf

Reach 8R: OVERLAND FLOW Avg. Flow Depth=0.08' Max Vel=0.10 fps Inflow=1.38 cfs 4,854 cf
n=0.400 L=563.0' S=0.0213 '/' Capacity=28.09 cfs Outflow=0.40 cfs 4,526 cf

Reach 9R: OVERLAND FLOW Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=211.0' S=0.0652 '/' Capacity=23.45 cfs Outflow=0.00 cfs 0 cf

Reach 10R: OVERLAND FLOW Avg. Flow Depth=0.25' Max Vel=0.26 fps Inflow=1.47 cfs 12,790 cf
n=0.400 L=164.0' S=0.0366 '/' Capacity=17.57 cfs Outflow=1.45 cfs 12,790 cf

Reach 11R: 4x4 Open Bottom Culvert Avg. Flow Depth=1.12' Max Vel=2.11 fps Inflow=9.42 cfs 70,760 cf
48.0" x 48.0" Box Pipe n=0.069 L=30.0' S=0.0150 '/' Capacity=42.20 cfs Outflow=9.42 cfs 70,749 cf

Reach 12R: OVERLAND FLOW Avg. Flow Depth=0.12' Max Vel=0.14 fps Inflow=1.58 cfs 5,279 cf
n=0.400 L=250.0' S=0.0240 '/' Capacity=29.80 cfs Outflow=0.85 cfs 5,158 cf

Reach 14R: OVERLAND FLOW Avg. Flow Depth=0.10' Max Vel=0.13 fps Inflow=2.25 cfs 11,215 cf
n=0.400 L=852.0' S=0.0246 '/' Capacity=31.55 cfs Outflow=0.65 cfs 10,062 cf

Reach 15R: OVERLAND FLOW Avg. Flow Depth=0.06' Max Vel=0.08 fps Inflow=0.23 cfs 9,701 cf
n=0.400 L=300.0' S=0.0200 '/' Capacity=27.21 cfs Outflow=0.23 cfs 8,871 cf

Reach 18R: OVERLAND FLOW Avg. Flow Depth=0.11' Max Vel=0.14 fps Inflow=3.39 cfs 7,468 cf
n=0.400 L=609.0' S=0.0279 '/' Capacity=38.42 cfs Outflow=0.80 cfs 7,269 cf

Reach 20R: OVERLAND FLOW Avg. Flow Depth=0.23' Max Vel=0.13 fps Inflow=4.31 cfs 20,716 cf
n=0.400 L=560.0' S=0.0093 '/' Capacity=18.54 cfs Outflow=1.57 cfs 19,942 cf

Reach 23R: OVERLAND FLOW Avg. Flow Depth=0.48' Max Vel=0.30 fps Inflow=9.42 cfs 70,749 cf
n=0.400 L=237.0' S=0.0211 '/' Capacity=31.93 cfs Outflow=8.56 cfs 70,122 cf

Reach R202: OVERLAND FLOW Avg. Flow Depth=0.52' Max Vel=0.23 fps Inflow=26.73 cfs 130,223 cf
n=0.400 L=700.0' S=0.0107 '/' Capacity=42.56 cfs Outflow=13.59 cfs 124,425 cf

Reach R211: OVERLAND FLOW Avg. Flow Depth=0.45' Max Vel=0.18 fps Inflow=11.59 cfs 20,184 cf
n=0.400 L=600.0' S=0.0087 '/' Capacity=14.51 cfs Outflow=3.47 cfs 19,854 cf

Reach SC1: Stream Crossing #1 Avg. Flow Depth=0.43' Max Vel=3.86 fps Inflow=26.72 cfs 130,245 cf
192.0" x 60.0", R=207.0" Arch Pipe n=0.030 L=43.1' S=0.0200 '/' Capacity=722.91 cfs Outflow=26.73 cfs 130,223 cf

Reach SC2: Stream Crossing #2 Avg. Flow Depth=0.09' Max Vel=1.57 fps Inflow=2.25 cfs 11,217 cf
192.0" x 60.0", R=180.0" Arch Pipe n=0.030 L=36.5' S=0.0241 '/' Capacity=768.96 cfs Outflow=2.25 cfs 11,215 cf

Pond 1P: DMH #33 Peak Elev=206.34' Inflow=2.21 cfs 7,907 cf
12.0" Round Culvert n=0.013 L=46.7' S=0.0251 '/' Outflow=2.21 cfs 7,907 cf

Pond 3P: OCS #8 Peak Elev=202.09' Inflow=1.67 cfs 5,685 cf
Outflow=1.67 cfs 5,685 cf

Pond 5R: TRENCH DRAIN Peak Elev=198.33' Inflow=1.49 cfs 5,089 cf
8.0" Round Culvert n=0.012 L=36.0' S=0.0200 '/' Outflow=1.49 cfs 5,089 cf

Pond 11P: YARD DRAIN Peak Elev=207.41' Storage=883 cf Inflow=2.21 cfs 7,022 cf
Outflow=1.67 cfs 6,973 cf

Pond CB10: CB #10 Peak Elev=210.46' Inflow=0.96 cfs 3,508 cf
12.0" Round Culvert n=0.013 L=33.8' S=0.0050 '/' Outflow=0.96 cfs 3,508 cf

Pond CB11: CB #11 Peak Elev=210.55' Inflow=0.99 cfs 3,615 cf
12.0" Round Culvert n=0.013 L=26.3' S=0.0103 '/' Outflow=0.99 cfs 3,615 cf

Pond CB12: CB #12 Peak Elev=207.11' Inflow=0.72 cfs 2,640 cf
12.0" Round Culvert n=0.013 L=41.3' S=0.0249 '/' Outflow=0.72 cfs 2,640 cf

Pond CB13: CB #13 Peak Elev=207.35' Inflow=1.49 cfs 5,267 cf
12.0" Round Culvert n=0.013 L=43.7' S=0.0249 '/' Outflow=1.49 cfs 5,267 cf

Pond CB14: CB #14 Peak Elev=201.95' Inflow=1.57 cfs 5,281 cf
12.0" Round Culvert n=0.013 L=23.2' S=0.0052 '/' Outflow=1.57 cfs 5,281 cf

Pond CB15: CB #15 Peak Elev=201.84' Inflow=0.92 cfs 3,360 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=0.92 cfs 3,360 cf

Pond CB16: CB #16 Peak Elev=204.11' Inflow=0.88 cfs 2,794 cf
12.0" Round Culvert n=0.013 L=20.9' S=0.0067 '/' Outflow=0.88 cfs 2,794 cf

Pond CB17: CB #17 Peak Elev=205.78' Inflow=1.56 cfs 5,278 cf
12.0" Round Culvert n=0.013 L=13.8' S=0.0094 '/' Outflow=1.56 cfs 5,278 cf

Pond CB18: CB #18 Peak Elev=205.80' Inflow=2.77 cfs 9,314 cf
15.0" Round Culvert n=0.013 L=25.1' S=0.0052 '/' Outflow=2.77 cfs 9,314 cf

Pond CB20: CB #20 Peak Elev=204.88' Inflow=1.62 cfs 5,667 cf
12.0" Round Culvert n=0.013 L=30.3' S=0.0053 '/' Outflow=1.62 cfs 5,667 cf

Pond CB21: CB #21 Peak Elev=205.05' Inflow=1.30 cfs 4,345 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0050 '/' Outflow=1.30 cfs 4,345 cf

Pond CB22: CB #22 Peak Elev=206.17' Inflow=1.64 cfs 5,813 cf
12.0" Round Culvert n=0.012 L=16.1' S=0.0050 '/' Outflow=1.64 cfs 5,813 cf

Pond CB23: CB #23 Peak Elev=206.10' Inflow=1.22 cfs 4,050 cf
12.0" Round Culvert n=0.012 L=16.3' S=0.0055 '/' Outflow=1.22 cfs 4,050 cf

Pond CB24: CB #24 Peak Elev=205.98' Inflow=1.06 cfs 3,612 cf
12.0" Round Culvert n=0.012 L=12.1' S=0.0050 '/' Outflow=1.06 cfs 3,612 cf

Pond CB25: CB #25 Peak Elev=205.96' Inflow=1.14 cfs 3,947 cf
15.0" Round Culvert n=0.012 L=11.4' S=0.0053 '/' Outflow=1.14 cfs 3,947 cf

Pond CB26: CB #26 Peak Elev=202.43' Inflow=1.15 cfs 3,856 cf
12.0" Round Culvert n=0.013 L=42.5' S=0.0052 '/' Outflow=1.15 cfs 3,856 cf

Pond CB27: CB #27 Peak Elev=201.56' Inflow=0.84 cfs 2,960 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0056 '/' Outflow=0.84 cfs 2,960 cf

Pond CB28: CB #28 Peak Elev=198.60' Inflow=1.29 cfs 4,237 cf
12.0" Round Culvert n=0.013 L=13.7' S=0.0044 '/' Outflow=1.29 cfs 4,237 cf

Pond CB29: CB #29 Peak Elev=206.22' Inflow=1.14 cfs 3,950 cf
12.0" Round Culvert n=0.013 L=13.5' S=0.0052 '/' Outflow=1.14 cfs 3,950 cf

Pond CB30: CB #30 Peak Elev=206.24' Inflow=1.20 cfs 4,154 cf
12.0" Round Culvert n=0.013 L=17.5' S=0.0051 '/' Outflow=1.20 cfs 4,154 cf

Pond CB31: CB #31 Peak Elev=205.18' Inflow=2.10 cfs 6,989 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=2.10 cfs 6,989 cf

Pond CB32: CB #32 Peak Elev=205.04' Inflow=1.65 cfs 5,548 cf
12.0" Round Culvert n=0.013 L=16.3' S=0.0049 '/' Outflow=1.65 cfs 5,548 cf

Pond CB33: CB #33 Peak Elev=205.97' Inflow=0.73 cfs 2,521 cf
12.0" Round Culvert n=0.013 L=11.7' S=0.0051 '/' Outflow=0.73 cfs 2,521 cf

Pond CB34: CB #34 Peak Elev=206.04' Inflow=1.15 cfs 3,927 cf
12.0" Round Culvert n=0.013 L=16.5' S=0.0048 '/' Outflow=1.15 cfs 3,927 cf

Pond CB35: CB #35 Peak Elev=207.50' Inflow=0.57 cfs 2,091 cf
12.0" Round Culvert n=0.013 L=15.2' S=0.0053 '/' Outflow=0.57 cfs 2,091 cf

Pond CB36: CB #36 Peak Elev=207.64' Inflow=0.92 cfs 3,337 cf
12.0" Round Culvert n=0.013 L=16.1' S=0.0050 '/' Outflow=0.92 cfs 3,337 cf

Pond CB38: CB #38 Peak Elev=210.83' Inflow=1.06 cfs 3,849 cf
12.0" Round Culvert n=0.012 L=16.7' S=0.0048 '/' Outflow=1.06 cfs 3,849 cf

Pond CB39: CB #39 Peak Elev=210.83' Inflow=1.05 cfs 3,836 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=1.05 cfs 3,836 cf

Pond CB40: CB #40 Peak Elev=214.28' Inflow=0.58 cfs 2,122 cf
12.0" Round Culvert n=0.013 L=17.8' S=0.0073 '/' Outflow=0.58 cfs 2,122 cf

Pond CB41: CB #41 Peak Elev=214.43' Inflow=0.77 cfs 2,815 cf
12.0" Round Culvert n=0.013 L=18.4' S=0.0049 '/' Outflow=0.77 cfs 2,815 cf

Pond CB43: CB #43 Peak Elev=220.52' Inflow=0.39 cfs 1,299 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.39 cfs 1,299 cf

Pond CB44: CB #44 Peak Elev=220.49' Inflow=0.26 cfs 882 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.26 cfs 882 cf

Pond CB45: CB #45 Peak Elev=221.59' Inflow=0.26 cfs 830 cf
12.0" Round Culvert n=0.013 L=18.2' S=0.0049 '/' Outflow=0.26 cfs 830 cf

Pond CB46: CB #46 Peak Elev=221.94' Inflow=0.47 cfs 1,481 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=0.47 cfs 1,481 cf

Pond CB47: CB#47 Peak Elev=225.79' Inflow=0.42 cfs 1,518 cf
12.0" Round Culvert n=0.012 L=20.9' S=0.0048 '/' Outflow=0.42 cfs 1,518 cf

Pond CB48: CB#48 Peak Elev=226.24' Inflow=4.02 cfs 15,183 cf
15.0" Round Culvert n=0.012 L=16.9' S=0.0047 '/' Outflow=4.02 cfs 15,183 cf

Pond CB49: CB #49 Peak Elev=203.65' Inflow=0.70 cfs 2,436 cf
12.0" Round Culvert n=0.013 L=15.5' S=0.0052 '/' Outflow=0.70 cfs 2,436 cf

Pond CB50: CB #50 Peak Elev=203.87' Inflow=2.00 cfs 6,850 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=2.00 cfs 6,850 cf

Pond CB51: CB #51 Peak Elev=203.36' Inflow=0.94 cfs 3,439 cf
12.0" Round Culvert n=0.013 L=31.4' S=0.0051 '/' Outflow=0.94 cfs 3,439 cf

Pond CB52: CB #52 Peak Elev=203.38' Inflow=1.23 cfs 4,297 cf
12.0" Round Culvert n=0.013 L=25.5' S=0.0051 '/' Outflow=1.23 cfs 4,297 cf

Pond CB53: CB #53 Peak Elev=203.42' Inflow=1.05 cfs 3,581 cf
12.0" Round Culvert n=0.013 L=32.0' S=0.0050 '/' Outflow=1.05 cfs 3,581 cf

Pond CB54: CB #54 Peak Elev=203.14' Inflow=0.63 cfs 2,104 cf
12.0" Round Culvert n=0.013 L=36.7' S=0.0049 '/' Outflow=0.63 cfs 2,104 cf

Pond CB7: CB#5 Peak Elev=213.04' Inflow=0.64 cfs 2,344 cf
12.0" Round Culvert n=0.012 L=15.1' S=0.0099 '/' Outflow=0.64 cfs 2,344 cf

Pond CB8: CB#8 Peak Elev=214.27' Inflow=0.73 cfs 2,534 cf
12.0" Round Culvert n=0.013 L=15.1' S=0.0099 '/' Outflow=0.73 cfs 2,534 cf

Pond CB9: CB #9 Peak Elev=210.95' Inflow=2.24 cfs 8,058 cf
12.0" Round Culvert n=0.013 L=19.9' S=0.0196 '/' Outflow=2.24 cfs 8,058 cf

Pond D10: DMH #10 Peak Elev=203.91' Inflow=0.88 cfs 2,794 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=0.88 cfs 2,794 cf

Pond D11: DMH #11 Peak Elev=205.64' Inflow=4.32 cfs 14,592 cf
18.0" Round Culvert n=0.013 L=44.6' S=0.0049 '/' Outflow=4.32 cfs 14,592 cf

Pond D12: DMH #12 Peak Elev=204.60' Inflow=2.92 cfs 10,012 cf
12.0" Round Culvert n=0.013 L=41.9' S=0.0050 '/' Outflow=2.92 cfs 10,012 cf

Pond D13: DMH #13 Peak Elev=203.59' Inflow=9.39 cfs 34,406 cf
24.0" Round Culvert n=0.013 L=60.1' S=0.0050 '/' Outflow=9.39 cfs 34,406 cf

Pond D14: DMH #14 Peak Elev=205.34' Inflow=5.06 cfs 17,421 cf
18.0" Round Culvert n=0.012 L=256.3' S=0.0050 '/' Outflow=5.06 cfs 17,421 cf

Pond D16: DMH #16 Peak Elev=205.84' Inflow=2.20 cfs 7,558 cf
15.0" Round Culvert n=0.012 L=103.5' S=0.0050 '/' Outflow=2.20 cfs 7,558 cf

Pond D17: DMH #17 Peak Elev=201.33' Inflow=1.98 cfs 6,816 cf
12.0" Round Culvert n=0.013 L=91.6' S=0.0312 '/' Outflow=1.98 cfs 6,816 cf

Pond D18: DMH #18 Peak Elev=198.43' Inflow=3.27 cfs 11,053 cf
15.0" Round Culvert n=0.013 L=46.3' S=0.0099 '/' Outflow=3.27 cfs 11,053 cf

Pond D19: DMH #19 Peak Elev=206.09' Inflow=2.34 cfs 8,105 cf
12.0" Round Culvert n=0.013 L=82.5' S=0.0092 '/' Outflow=2.34 cfs 8,105 cf

Pond D2: DMH#2 Peak Elev=208.37' Inflow=5.38 cfs 21,579 cf
15.0" Round Culvert n=0.013 L=38.2' S=0.0099 '/' Outflow=5.38 cfs 21,579 cf

Pond D20: DMH #20 Peak Elev=205.13' Inflow=2.34 cfs 8,105 cf
15.0" Round Culvert n=0.013 L=63.5' S=0.0050 '/' Outflow=2.34 cfs 8,105 cf

Pond D21: DMH #21 Peak Elev=204.66' Inflow=9.46 cfs 32,518 cf
24.0" Round Culvert n=0.013 L=72.4' S=0.0050 '/' Outflow=9.46 cfs 32,518 cf

Pond D22: DMH #22 Peak Elev=205.89' Inflow=3.37 cfs 11,876 cf
15.0" Round Culvert n=0.013 L=134.2' S=0.0071 '/' Outflow=3.37 cfs 11,876 cf

Pond D23: DMH #23 Peak Elev=207.31' Inflow=1.49 cfs 5,429 cf
15.0" Round Culvert n=0.013 L=173.3' S=0.0100 '/' Outflow=1.49 cfs 5,429 cf

Pond D25: DMH #25 Peak Elev=210.76' Inflow=4.84 cfs 17,114 cf
15.0" Round Culvert n=0.012 L=237.6' S=0.0050 '/' Outflow=4.84 cfs 17,114 cf

Pond D27: DMH #27 Peak Elev=214.18' Inflow=2.73 cfs 9,429 cf
15.0" Round Culvert n=0.012 L=63.9' S=0.0150 '/' Outflow=2.73 cfs 9,429 cf

Pond D28: DMH #28 Peak Elev=218.08' Inflow=1.38 cfs 4,491 cf
12.0" Round Culvert n=0.013 L=158.3' S=0.0200 '/' Outflow=1.38 cfs 4,491 cf

Pond D29: DMH #29 Peak Elev=220.45' Inflow=1.38 cfs 4,491 cf
12.0" Round Culvert n=0.013 L=150.9' S=0.0151 '/' Outflow=1.38 cfs 4,491 cf

Pond D30: DMH #30 Peak Elev=221.43' Inflow=0.73 cfs 2,311 cf
12.0" Round Culvert n=0.013 L=184.2' S=0.0050 '/' Outflow=0.73 cfs 2,311 cf

Pond D31: DMH#31 Peak Elev=225.78' Inflow=4.31 cfs 16,701 cf
15.0" Round Culvert n=0.012 L=288.5' S=0.0400 '/' Outflow=4.31 cfs 16,701 cf

Pond D34: DMH #34 Peak Elev=199.29' Inflow=3.21 cfs 11,720 cf
12.0" Round Culvert n=0.012 L=52.0' S=0.0200 '/' Outflow=3.21 cfs 11,720 cf

Pond D35: DMH #35 Peak Elev=213.12' Inflow=2.73 cfs 9,429 cf
15.0" Round Culvert n=0.012 L=171.5' S=0.0150 '/' Outflow=2.73 cfs 9,429 cf

Pond D4: DMH#4 Peak Elev=211.79' Inflow=5.38 cfs 21,579 cf
15.0" Round Culvert n=0.012 L=222.3' S=0.0150 '/' Outflow=5.38 cfs 21,579 cf

Pond D5: DMH #5 Peak Elev=210.26' Inflow=4.20 cfs 15,182 cf
18.0" Round Culvert n=0.013 L=183.0' S=0.0050 '/' Outflow=4.20 cfs 15,182 cf

Pond D6: DMH #6 Peak Elev=209.19' Inflow=4.20 cfs 15,182 cf
18.0" Round Culvert n=0.013 L=299.7' S=0.0050 '/' Outflow=4.20 cfs 15,182 cf

Pond D7: DMH #7 Peak Elev=207.46' Inflow=4.20 cfs 15,182 cf
18.0" Round Culvert n=0.013 L=44.2' S=0.0550 '/' Outflow=4.20 cfs 15,182 cf

Pond D8: DMH #8 Peak Elev=201.79' Inflow=2.49 cfs 8,641 cf
12.0" Round Culvert n=0.013 L=87.7' S=0.0050 '/' Outflow=2.49 cfs 8,641 cf

Pond D9: DMH #9 Peak Elev=201.16' Inflow=2.49 cfs 8,641 cf
12.0" Round Culvert n=0.013 L=11.9' S=0.0050 '/' Outflow=2.49 cfs 8,641 cf

Pond DE61: DRIP #61 Peak Elev=213.33' Storage=303 cf Inflow=0.58 cfs 2,057 cf
Discarded=0.00 cfs 203 cf Primary=0.48 cfs 1,708 cf Outflow=0.48 cfs 1,911 cf

Pond DE62: DRIP #62 Peak Elev=213.33' Storage=303 cf Inflow=0.58 cfs 2,057 cf
Discarded=0.00 cfs 203 cf Primary=0.48 cfs 1,708 cf Outflow=0.48 cfs 1,911 cf

Pond DE63: DRIP #63 Peak Elev=208.01' Storage=164 cf Inflow=0.41 cfs 1,430 cf
Discarded=0.00 cfs 121 cf Primary=0.37 cfs 1,221 cf Outflow=0.37 cfs 1,342 cf

Pond DE64: DRIP #64 Peak Elev=206.06' Storage=201 cf Inflow=0.47 cfs 1,681 cf
Discarded=0.00 cfs 144 cf Primary=0.42 cfs 1,433 cf Outflow=0.42 cfs 1,578 cf

Pond DE65: DRIP #65 Peak Elev=207.01' Storage=165 cf Inflow=0.41 cfs 1,432 cf
Discarded=0.00 cfs 121 cf Primary=0.37 cfs 1,222 cf Outflow=0.37 cfs 1,343 cf

Pond DE66: DRIP #66 Peak Elev=208.85' Storage=199 cf Inflow=0.47 cfs 1,650 cf
Discarded=0.00 cfs 144 cf Primary=0.41 cfs 1,403 cf Outflow=0.42 cfs 1,547 cf

Pond DE67: DRIP #67 Peak Elev=209.06' Storage=201 cf Inflow=0.48 cfs 1,686 cf
Discarded=0.00 cfs 144 cf Primary=0.42 cfs 1,439 cf Outflow=0.42 cfs 1,583 cf

Pond DE68: DRIP #68 Peak Elev=208.02' Storage=274 cf Inflow=0.58 cfs 2,040 cf
Discarded=0.00 cfs 203 cf Primary=0.49 cfs 1,694 cf Outflow=0.49 cfs 1,897 cf

Pond DE69: DRIP #69 Peak Elev=206.56' Storage=201 cf Inflow=0.48 cfs 1,686 cf
Discarded=0.00 cfs 144 cf Primary=0.42 cfs 1,438 cf Outflow=0.42 cfs 1,582 cf

Pond DE70: DRIP #70 Peak Elev=206.96' Storage=201 cf Inflow=0.48 cfs 1,684 cf
Discarded=0.00 cfs 144 cf Primary=0.42 cfs 1,436 cf Outflow=0.42 cfs 1,581 cf

Pond DE71: DRIP #71 Peak Elev=207.62' Storage=302 cf Inflow=0.58 cfs 2,039 cf
Discarded=0.00 cfs 203 cf Primary=0.48 cfs 1,690 cf Outflow=0.48 cfs 1,893 cf

Pond DECH: DRIP #CH Peak Elev=209.99' Storage=508 cf Inflow=0.86 cfs 3,033 cf
Discarded=0.04 cfs 1,659 cf Primary=0.42 cfs 1,373 cf Outflow=0.45 cfs 3,033 cf

Pond DMH32: DMH #32 Peak Elev=203.60' Inflow=2.71 cfs 9,286 cf
12.0" Round Culvert n=0.013 L=19.2' S=0.0531 '/' Outflow=2.71 cfs 9,286 cf

Pond OCS1: OCS#1 Peak Elev=196.41' Inflow=6.49 cfs 22,774 cf
Outflow=6.49 cfs 22,774 cf

Pond OCS3: OCS#3 Peak Elev=205.31' Inflow=6.75 cfs 23,442 cf
Outflow=6.75 cfs 23,442 cf

Pond OCS4: OCS#4 Peak Elev=205.10' Inflow=1.75 cfs 5,738 cf
Outflow=1.75 cfs 5,738 cf

Pond OCS6: OCS #6 Peak Elev=203.36' Inflow=2.21 cfs 7,907 cf
Outflow=2.21 cfs 7,907 cf

Pond OCS7: OCS #7 Peak Elev=203.36' Inflow=2.17 cfs 7,735 cf
Outflow=2.17 cfs 7,735 cf

Pond P204: STORMTECH INFILTRATION Peak Elev=205.09' Storage=9,827 cf Inflow=8.49 cfs 29,181 cf
Discarded=0.09 cfs 6,064 cf Primary=4.31 cfs 20,716 cf Outflow=4.39 cfs 26,780 cf

Pond P205: INFILTRATIONPOND #3 Peak Elev=206.84' Storage=8,662 cf Inflow=6.85 cfs 26,643 cf
Discarded=0.31 cfs 15,146 cf Primary=3.39 cfs 7,468 cf Outflow=3.69 cfs 22,614 cf

Pond P206: STORMTECHINFILTRATION Peak Elev=196.29' Storage=6,969 cf Inflow=7.97 cfs 27,862 cf
Discarded=0.49 cfs 21,285 cf Primary=3.67 cfs 6,574 cf Outflow=4.16 cfs 27,859 cf

Pond P207: INFILTRATIONPOND #2 Peak Elev=198.50' Storage=19,452 cf Inflow=15.34 cfs 54,338 cf
Discarded=1.09 cfs 41,530 cf Primary=1.47 cfs 12,790 cf Outflow=2.56 cfs 54,320 cf

Pond P210: POCKET WETLAND#1 Peak Elev=204.35' Storage=17,796 cf Inflow=7.02 cfs 23,999 cf
Outflow=0.23 cfs 9,701 cf

Pond P212: INFILTRATIONPOND #1 Peak Elev=202.81' Storage=26,231 cf Inflow=21.45 cfs 85,741 cf
Discarded=1.44 cfs 64,639 cf Primary=11.59 cfs 20,184 cf Outflow=13.03 cfs 84,823 cf

Pond P213: Stormtech Infiltration System Peak Elev=203.36' Storage=5,458 cf Inflow=4.38 cfs 15,642 cf
Discarded=0.39 cfs 15,640 cf Primary=0.00 cfs 1 cf Outflow=0.40 cfs 15,641 cf

Pond P214: STORMTECHINFILTRATION Peak Elev=202.09' Storage=4,534 cf Inflow=4.44 cfs 15,756 cf
Discarded=0.61 cfs 15,774 cf Primary=0.00 cfs 0 cf Outflow=0.61 cfs 15,774 cf

Link AP1: ANALYSISPOINT 1 Inflow=1.35 cfs 4,720 cf
Primary=1.35 cfs 4,720 cf

Link AP2: ANALYSISPOINT 2 Inflow=28.46 cfs 229,211 cf
Primary=28.46 cfs 229,211 cf

Link AP3: ANALYSISPOINT 3 Inflow=4.43 cfs 14,013 cf
Primary=4.43 cfs 14,013 cf

Link AP4: ANALYSISPOINT #4 Inflow=43.69 cfs 300,250 cf
Primary=43.69 cfs 300,250 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 764,876 cf Average Runoff Depth = 3.57"
70.09% Pervious = 1,803,997 sf 29.91% Impervious = 769,923 sf

Summary for Subcatchment B1: MULTIFAMILY BLDG #1

Runoff = 3.21 cfs @ 12.09 hrs, Volume= 11,720 cf, Depth> 6.05"
Routed to Pond D34 : DMH #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
20,156	98	Roofs, HSG C
3,099	98	Roofs, HSG D
23,255	98	Weighted Average
23,255		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B2: MULTIFAMILY BLDG #2

Runoff = 2.43 cfs @ 12.09 hrs, Volume= 8,851 cf, Depth> 6.05"
Routed to Pond OCS3 : OCS#3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
7,873	98	Roofs, HSG A
9,688	98	Roofs, HSG C
17,561	98	Weighted Average
17,561		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B3: MULTIFAMILY BUILDING #3

Runoff = 2.76 cfs @ 12.09 hrs, Volume= 10,070 cf, Depth> 6.05"
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
608	98	Roofs, HSG A
19,373	98	Roofs, HSG C
19,981	98	Weighted Average
19,981		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C10: CB #10

Runoff = 0.96 cfs @ 12.09 hrs, Volume= 3,508 cf, Depth> 6.05"
Routed to Pond CB10 : CB #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
339	98	Paved roads w/curbs & sewers, HSG B
5,703	98	Paved roads w/curbs & sewers, HSG C
919	98	Paved roads w/curbs & sewers, HSG D
6,961	98	Weighted Average
6,961		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C11: CB #11

Runoff = 0.99 cfs @ 12.09 hrs, Volume= 3,615 cf, Depth> 6.05"
Routed to Pond CB11 : CB #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
7,173	98	Paved roads w/curbs & sewers, HSG C
7,173		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C12: CB #12

Runoff = 0.72 cfs @ 12.09 hrs, Volume= 2,640 cf, Depth> 6.05"
Routed to Pond CB12 : CB #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,238	98	Paved roads w/curbs & sewers, HSG C
5,238		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C13: CB #13

Runoff = 1.49 cfs @ 12.09 hrs, Volume= 5,267 cf, Depth> 5.81"
Routed to Pond CB13 : CB #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,003	74	>75% Grass cover, Good, HSG C
7,547	98	Paved parking, HSG C
2,323	98	Roofs, HSG C
10,873	96	Weighted Average
1,003		9.22% Pervious Area
9,870		90.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C14: CB #14

Runoff = 1.57 cfs @ 12.09 hrs, Volume= 5,281 cf, Depth> 5.24"
Routed to Pond CB14 : CB #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,195	39	>75% Grass cover, Good, HSG A
7,649	98	Paved parking, HSG A
472	74	>75% Grass cover, Good, HSG C
2,783	98	Paved parking, HSG C
12,099	91	Weighted Average
1,667		13.78% Pervious Area
10,432		86.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C15: CB #15

Runoff = 0.92 cfs @ 12.09 hrs, Volume= 3,360 cf, Depth> 6.05"
Routed to Pond CB15 : CB #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,000	98	Paved parking, HSG A
1,666	98	Paved parking, HSG C
6,666	98	Weighted Average
6,666		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C16: CB #16

Runoff = 0.88 cfs @ 12.09 hrs, Volume= 2,794 cf, Depth> 3.94"
Routed to Pond CB16 : CB #16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
2,467	39	>75% Grass cover, Good, HSG A
4,380	98	Paved parking, HSG A
524	74	>75% Grass cover, Good, HSG C
1,145	98	Paved parking, HSG C
8,516	79	Weighted Average
2,991		35.12% Pervious Area
5,525		64.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C17: CB #17

Runoff = 1.56 cfs @ 12.09 hrs, Volume= 5,278 cf, Depth> 5.35"
Routed to Pond CB17 : CB #17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,093	74	>75% Grass cover, Good, HSG C
8,743	98	Paved parking, HSG C
11,836	92	Weighted Average
3,093		26.13% Pervious Area
8,743		73.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C18: CB #18

Runoff = 2.38 cfs @ 12.09 hrs, Volume= 7,940 cf, Depth> 5.13"
Routed to Pond CB18 : CB #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
6,255	74	>75% Grass cover, Good, HSG C
12,336	98	Paved parking, HSG C
18,591	90	Weighted Average
6,255		33.65% Pervious Area
12,336		66.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C20: CB #20

Runoff = 1.62 cfs @ 12.09 hrs, Volume= 5,667 cf, Depth> 5.70"
Routed to Pond CB20 : CB #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,319	98	Paved parking, HSG A
1,319	74	>75% Grass cover, Good, HSG C
7,301	98	Paved parking, HSG C
11,939	95	Weighted Average
1,319		11.05% Pervious Area
10,620		88.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C21: CB #21

Runoff = 1.30 cfs @ 12.09 hrs, Volume= 4,345 cf, Depth> 5.13"
Routed to Pond CB21 : CB #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,319	39	>75% Grass cover, Good, HSG A
7,301	98	Paved parking, HSG A
1,554	98	Paved parking, HSG C
10,174	90	Weighted Average
1,319		12.96% Pervious Area
8,855		87.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C22: CB #22

Runoff = 1.64 cfs @ 12.09 hrs, Volume= 5,813 cf, Depth> 5.81"
Routed to Pond CB22 : CB #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
2,946	98	Paved parking, HSG A
177	74	>75% Grass cover, Good, HSG C
2,641	98	Paved parking, HSG C
829	80	>75% Grass cover, Good, HSG D
5,408	98	Paved parking, HSG D
12,001	96	Weighted Average
1,006		8.38% Pervious Area
10,995		91.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C23: CB #23

Runoff = 1.22 cfs @ 12.09 hrs, Volume= 4,050 cf, Depth> 5.01"
Routed to Pond CB23 : CB #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
242	39	>75% Grass cover, Good, HSG A
3,016	98	Paved parking, HSG A
1,267	74	>75% Grass cover, Good, HSG C
218	98	Paved parking, HSG C
2,272	80	>75% Grass cover, Good, HSG D
2,679	98	Paved parking, HSG D
9,694	89	Weighted Average
3,781		39.00% Pervious Area
5,913		61.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C24: CB #24

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 3,612 cf, Depth> 5.47"
Routed to Pond CB24 : CB #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,722	98	Paved parking, HSG D
2,208	80	>75% Grass cover, Good, HSG D
7,930	93	Weighted Average
2,208		27.84% Pervious Area
5,722		72.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C25: CB #25

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 3,947 cf, Depth> 5.58"
Routed to Pond CB25 : CB #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
211	39	>75% Grass cover, Good, HSG A
519	98	Paved parking, HSG A
15	74	>75% Grass cover, Good, HSG C
300	98	Paved parking, HSG C
1,393	80	>75% Grass cover, Good, HSG D
6,049	98	Paved parking, HSG D
8,487	94	Weighted Average
1,619		19.08% Pervious Area
6,868		80.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C26: CB #26

Runoff = 1.15 cfs @ 12.09 hrs, Volume= 3,856 cf, Depth> 5.24"
Routed to Pond CB26 : CB #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,203	80	>75% Grass cover, Good, HSG D
5,632	98	Paved parking, HSG D
8,835	91	Weighted Average
3,203		36.25% Pervious Area
5,632		63.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C27: CB #27

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 2,960 cf, Depth> 5.81"
Routed to Pond CB27 : CB #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
98	39	>75% Grass cover, Good, HSG A
131	98	Paved parking, HSG A
397	80	>75% Grass cover, Good, HSG D
5,485	98	Paved parking, HSG D
6,111	96	Weighted Average
495		8.10% Pervious Area
5,616		91.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C28: CB #28

Runoff = 1.29 cfs @ 12.09 hrs, Volume= 4,237 cf, Depth> 4.90"
Routed to Pond CB28 : CB #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
2,751	74	>75% Grass cover, Good, HSG C
2,841	98	Paved parking, HSG C
2,297	80	>75% Grass cover, Good, HSG D
2,483	98	Paved parking, HSG D
10,372	88	Weighted Average
5,048		48.67% Pervious Area
5,324		51.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C29: CB #29

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 3,950 cf, Depth> 5.58"
Routed to Pond CB29 : CB #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,341	74	>75% Grass cover, Good, HSG C
5,330	98	Paved parking, HSG C
1,824	98	Roofs, HSG C
8,495	94	Weighted Average
1,341		15.79% Pervious Area
7,154		84.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C30: CB #30

Runoff = 1.20 cfs @ 12.09 hrs, Volume= 4,154 cf, Depth> 5.58"
Routed to Pond CB30 : CB #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,572	74	>75% Grass cover, Good, HSG C
6,310	98	Paved parking, HSG C
1,051	98	Roofs, HSG C
8,933	94	Weighted Average
1,572		17.60% Pervious Area
7,361		82.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C31: CB #31

Runoff = 2.10 cfs @ 12.09 hrs, Volume= 6,989 cf, Depth> 5.13"
Routed to Pond CB31 : CB #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,132	74	>75% Grass cover, Good, HSG C
9,132	98	Paved parking, HSG C
2,101	98	Roofs, HSG C
16,365	90	Weighted Average
5,132		31.36% Pervious Area
11,233		68.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C32: CB #32

Runoff = 1.65 cfs @ 12.09 hrs, Volume= 5,548 cf, Depth> 5.24"
Routed to Pond CB32 : CB #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,753	74	>75% Grass cover, Good, HSG C
7,068	98	Paved parking, HSG C
1,889	98	Roofs, HSG C
12,710	91	Weighted Average
3,753		29.53% Pervious Area
8,957		70.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C33: CB #33

Runoff = 0.73 cfs @ 12.09 hrs, Volume= 2,521 cf, Depth> 5.58"
Routed to Pond CB33 : CB #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
873	74	>75% Grass cover, Good, HSG C
3,693	98	Paved parking, HSG C
855	98	Roofs, HSG C
5,421	94	Weighted Average
873		16.10% Pervious Area
4,548		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C34: CB #34

Runoff = 1.15 cfs @ 12.09 hrs, Volume= 3,927 cf, Depth> 5.47"
Routed to Pond CB34 : CB #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,680	74	>75% Grass cover, Good, HSG C
5,115	98	Paved parking, HSG C
1,827	98	Roofs, HSG C
8,622	93	Weighted Average
1,680		19.49% Pervious Area
6,942		80.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C35: CB #35

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 2,091 cf, Depth> 6.05"
Routed to Pond CB35 : CB #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,578	98	Paved parking, HSG C
79	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
4,149	98	Weighted Average
79		1.90% Pervious Area
4,070		98.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C36: CB #36

Runoff = 0.92 cfs @ 12.09 hrs, Volume= 3,337 cf, Depth> 6.05"
Routed to Pond CB36 : CB #36

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
6,622	98	Paved parking, HSG C
6,622		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C38: CB #38

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 3,849 cf, Depth> 6.05"
Routed to Pond CB38 : CB #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
6,647	98	Paved parking, HSG B
392	98	Paved parking, HSG C
598	98	Paved parking, HSG D
7,637	98	Weighted Average
7,637		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C39: CB #39

Runoff = 1.05 cfs @ 12.09 hrs, Volume= 3,836 cf, Depth> 6.05"
Routed to Pond CB39 : CB #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
6,505	98	Paved parking, HSG B
519	98	Paved parking, HSG C
588	98	Paved parking, HSG D
7,612	98	Weighted Average
7,612		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C40: CB #40

Runoff = 0.58 cfs @ 12.09 hrs, Volume= 2,122 cf, Depth> 6.05"
Routed to Pond CB40 : CB #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
4,211	98	Paved parking, HSG B
4,211		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C41: CB #41

Runoff = 0.77 cfs @ 12.09 hrs, Volume= 2,815 cf, Depth> 6.05"
Routed to Pond CB41 : CB #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,586	98	Paved parking, HSG B
5,586		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C43: CB #43

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 1,299 cf, Depth> 5.01"
Routed to Pond CB43 : CB #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
2,343	98	Paved parking, HSG B
766	61	>75% Grass cover, Good, HSG B
3,109	89	Weighted Average
766		24.64% Pervious Area
2,343		75.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C44: CB #44

Runoff = 0.26 cfs @ 12.09 hrs, Volume= 882 cf, Depth> 5.35"
Routed to Pond CB44 : CB #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,670	98	Paved parking, HSG B
308	61	>75% Grass cover, Good, HSG B
1,978	92	Weighted Average
308		15.57% Pervious Area
1,670		84.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C45: CB #45

Runoff = 0.26 cfs @ 12.09 hrs, Volume= 830 cf, Depth> 4.04"
Routed to Pond CB45 : CB #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,240	98	Paved parking, HSG B
1,225	61	>75% Grass cover, Good, HSG B
2,465	80	Weighted Average
1,225		49.70% Pervious Area
1,240		50.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C46: CB #46

Runoff = 0.47 cfs @ 12.09 hrs, Volume= 1,481 cf, Depth> 4.04"
Routed to Pond CB46 : CB #46

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
2,241	98	Paved parking, HSG B
2,156	61	>75% Grass cover, Good, HSG B
4,397	80	Weighted Average
2,156		49.03% Pervious Area
2,241		50.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C47: CB #47

Runoff = 0.42 cfs @ 12.09 hrs, Volume= 1,518 cf, Depth> 6.05"
Routed to Pond CB47 : CB#47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,012	98	Paved roads w/curbs & sewers, HSG B
3,012		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C48: CB #48

Runoff = 4.02 cfs @ 12.17 hrs, Volume= 15,183 cf, Depth> 3.03"
Routed to Pond CB48 : CB#48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,877	98	Paved roads w/curbs & sewers, HSG B
56,251	68	1 acre lots, 20% imp, HSG B
60,128	70	Weighted Average
45,001		74.84% Pervious Area
15,127		25.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	50	0.0800	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
4.8	350	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.8	400	Total			

Summary for Subcatchment C49: CB #49

Runoff = 0.70 cfs @ 12.09 hrs, Volume= 2,436 cf, Depth> 5.58"
Routed to Pond CB49 : CB #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
4,431	98	Paved roads w/curbs & sewers, HSG C
807	74	>75% Grass cover, Good, HSG C
5,238	94	Weighted Average
807		15.41% Pervious Area
4,431		84.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C50: CB #50

Runoff = 2.00 cfs @ 12.09 hrs, Volume= 6,850 cf, Depth> 5.47"
Routed to Pond CB50 : CB #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,429	74	>75% Grass cover, Good, HSG C
11,611	98	Paved roads w/curbs & sewers, HSG C
15,040	93	Weighted Average
3,429		22.80% Pervious Area
11,611		77.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C51: CB #51

Runoff = 0.94 cfs @ 12.09 hrs, Volume= 3,439 cf, Depth> 6.05"
Routed to Pond CB51 : CB #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,147	98	Roofs, HSG C
3,676	98	Paved parking, HSG C
6,823	98	Weighted Average
6,823		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C52: CB#52

Runoff = 1.23 cfs @ 12.09 hrs, Volume= 4,297 cf, Depth> 5.70"
Routed to Pond CB52 : CB #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,164	74	>75% Grass cover, Good, HSG C
7,888	98	Paved parking, HSG C
9,052	95	Weighted Average
1,164		12.86% Pervious Area
7,888		87.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C53: CB #53

Runoff = 1.05 cfs @ 12.09 hrs, Volume= 3,581 cf, Depth> 5.47"
Routed to Pond CB53 : CB #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
287	39	>75% Grass cover, Good, HSG A
3,287	98	Paved parking, HSG A
773	74	>75% Grass cover, Good, HSG C
3,516	98	Paved parking, HSG C
7,863	93	Weighted Average
1,060		13.48% Pervious Area
6,803		86.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C54: CB #54

Runoff = 0.63 cfs @ 12.09 hrs, Volume= 2,104 cf, Depth> 5.24"
Routed to Pond CB54 : CB #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
550	39	>75% Grass cover, Good, HSG A
4,176	98	Paved parking, HSG A
84	74	>75% Grass cover, Good, HSG C
11	98	Paved parking, HSG C
4,821	91	Weighted Average
634		13.15% Pervious Area
4,187		86.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C7: CB #5

Runoff = 0.64 cfs @ 12.09 hrs, Volume= 2,344 cf, Depth> 6.05"
Routed to Pond CB7 : CB#5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
4,650	98	Paved roads w/curbs & sewers, HSG B
4,650		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C8: CB #8

Runoff = 0.73 cfs @ 12.09 hrs, Volume= 2,534 cf, Depth> 5.58"
Routed to Pond CB8 : CB#8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
4,837	98	Paved roads w/curbs & sewers, HSG B
613	61	>75% Grass cover, Good, HSG B
5,450	94	Weighted Average
613		11.25% Pervious Area
4,837		88.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C9: CB #9

Runoff = 2.24 cfs @ 12.09 hrs, Volume= 8,058 cf, Depth> 5.93"
Routed to Pond CB9 : CB #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
31	61	>75% Grass cover, Good, HSG B
433	98	Paved roads w/curbs & sewers, HSG B
904	74	>75% Grass cover, Good, HSG C
12,073	98	Paved parking, HSG C
2,305	98	Roofs, HSG C
52	80	>75% Grass cover, Good, HSG D
509	98	Paved parking, HSG D
16,307	97	Weighted Average
987		6.05% Pervious Area
15,320		93.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment CH1: CLUBHOUSE

Runoff = 0.86 cfs @ 12.09 hrs, Volume= 3,033 cf, Depth> 5.81"
Routed to Pond DECH : DRIP #CH

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,802	98	Roofs, HSG C
3	98	Roofs, HSG D
435	74	>75% Grass cover, Good, HSG C
22	80	>75% Grass cover, Good, HSG D
6,262	96	Weighted Average
457		7.30% Pervious Area
5,805		92.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment MB1: MAIL KIOSK

Runoff = 0.13 cfs @ 12.09 hrs, Volume= 473 cf, Depth> 6.05"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
938	98	Roofs, HSG B
938		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S201: SUMMER STREET ACCESS APRON

Runoff = 1.35 cfs @ 12.09 hrs, Volume= 4,720 cf, Depth> 5.70"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
717	61	>75% Grass cover, Good, HSG B
9,226	98	Paved parking, HSG B
9,943	95	Weighted Average
717		7.21% Pervious Area
9,226		92.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S202: EXISTING WETLAND

Runoff = 26.72 cfs @ 12.32 hrs, Volume= 130,245 cf, Depth> 3.62"
Routed to Reach SC1 : Stream Crossing #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
136,496	61	>75% Grass cover, Good, HSG B
83,935	55	Woods, Good, HSG B
29	98	Paved parking, HSG B
13,946	98	Roofs, HSG B
9,038	48	Brush, Good, HSG B
2,573	74	>75% Grass cover, Good, HSG C
17,121	70	Woods, Good, HSG C
98	98	Paved parking, HSG C
1,097	65	Brush, Good, HSG C
126	80	>75% Grass cover, Good, HSG D
132	98	Paved parking, HSG D
167,678	98	Water Surface, HSG D
432,269	76	Weighted Average
250,386		57.92% Pervious Area
181,883		42.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
1.4	118	0.0400	1.40		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.2	688	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.2	856	Total			

Summary for Subcatchment S203: POCKET WETLAND #1

Runoff = 2.18 cfs @ 12.09 hrs, Volume= 6,885 cf, Depth> 3.23"
Routed to Pond p210 : POCKET WETLAND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
12,682	61	>75% Grass cover, Good, HSG B
1,060	98	Water Surface, 0% imp, HSG B
7,785	74	>75% Grass cover, Good, HSG C
4,060	98	Water Surface, 0% imp, HSG C
25,587	72	Weighted Average
25,587		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S204: EXISTING WETLANDS

Runoff = 18.73 cfs @ 12.31 hrs, Volume= 90,283 cf, Depth> 3.52"
Routed to Link ap2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
53,739	61	>75% Grass cover, Good, HSG B
17,975	55	Woods, Good, HSG B
20,940	48	Brush, Good, HSG B
41,421	74	>75% Grass cover, Good, HSG C
68,342	70	Woods, Good, HSG C
116	98	Paved parking, HSG C
1,904	65	Brush, Good, HSG C
1,528	65	Brush, Good, HSG C
2,508	77	Woods, Good, HSG D
161	98	Paved parking, HSG D
4,073	73	Brush, Good, HSG D
95,496	98	Water Surface, HSG D
308,203	75	Weighted Average
212,430		68.93% Pervious Area
95,773		31.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.2000	0.26		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.27"
19.4	582	0.0100	0.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
22.6	632	Total			

Summary for Subcatchment S205: ISOLATED WETLAND

Runoff = 4.43 cfs @ 12.09 hrs, Volume= 14,013 cf, Depth> 3.03"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
10,910	30	Woods, Good, HSG A
3,684	74	>75% Grass cover, Good, HSG C
2,275	70	Woods, Good, HSG C
171	98	Paved parking, HSG C
1,706	65	Brush, Good, HSG C
1,940	80	>75% Grass cover, Good, HSG D
23,513	77	Woods, Good, HSG D
393	98	Paved parking, HSG D
2,208	73	Brush, Good, HSG D
8,620	98	Water Surface, HSG D
55,420	70	Weighted Average
46,236		83.43% Pervious Area
9,184		16.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S206: OVERLAND FLOW

Runoff = 31.85 cfs @ 12.50 hrs, Volume= 188,907 cf, Depth> 2.54"
Routed to Link AP4 : ANALYSIS POINT #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
16,514	39	>75% Grass cover, Good, HSG A
118,226	30	Woods, Good, HSG A
713	98	Paved parking, HSG A
41,148	30	Brush, Good, HSG A
17,568	51	1 acre lots, 20% imp, HSG A
37,410	61	>75% Grass cover, Good, HSG B
13,900	55	Woods, Good, HSG B
54,538	48	Brush, Good, HSG B
91,202	68	1 acre lots, 20% imp, HSG B
77,444	74	>75% Grass cover, Good, HSG C
114,763	70	Woods, Good, HSG C
3,493	98	Paved parking, HSG C
57,740	65	Brush, Good, HSG C
5,763	80	>75% Grass cover, Good, HSG D
126,141	77	Woods, Good, HSG D
114,732	98	Water Surface, 0% imp, HSG D
891,295	65	Weighted Average
865,335		97.09% Pervious Area
25,960		2.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0500	0.10		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
5.0	334	0.0250	1.11		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.9	91	0.0250	0.79		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
10.2	491	0.0400	0.80		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
8.9	501	0.0350	0.94		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
34.5	1,467	Total			

Summary for Subcatchment S207: INFILTRATION POND #2

Runoff = 2.59 cfs @ 12.09 hrs, Volume= 8,498 cf, Depth> 4.90"
Routed to Pond P207 : INFILTRATION POND #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
839	98	Water Surface, 0% imp, HSG A
8,802	74	>75% Grass cover, Good, HSG C
11,162	98	Water Surface, 0% imp, HSG C
20,803	88	Weighted Average
20,803		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S208: GRASS AREA

Runoff = 1.28 cfs @ 12.09 hrs, Volume= 4,045 cf, Depth> 3.53"
Routed to Pond OCS4 : OCS#4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
476	39	>75% Grass cover, Good, HSG A
12,000	74	>75% Grass cover, Good, HSG C
168	98	Paved parking, HSG A
1,116	98	Paved parking, HSG C
13,760	75	Weighted Average
12,476		90.67% Pervious Area
1,284		9.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S209: WETLAND C

Runoff = 5.50 cfs @ 12.41 hrs, Volume= 29,544 cf, Depth> 3.31"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
10,826	39	>75% Grass cover, Good, HSG A
16,826	30	Woods, Good, HSG A
8,863	74	>75% Grass cover, Good, HSG C
26,084	70	Woods, Good, HSG C
44,067	98	Water Surface, 0% imp, HSG D
304	98	Paved parking, HSG A
103	98	Paved parking, HSG C
107,073	73	Weighted Average
106,666		99.62% Pervious Area
407		0.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	50	0.0150	0.06		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
15.2	557	0.0150	0.61		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.9	607	Total			

Summary for Subcatchment S210: INFILTRATION POND #1

Runoff = 5.67 cfs @ 12.23 hrs, Volume= 24,190 cf, Depth> 3.83"
Routed to Pond P212 : INFILTRATION POND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
13,844	98	Water Surface, 0% imp, HSG C
59,814	74	>75% Grass cover, Good, HSG C
2,232	65	Brush, Good, HSG C
75,890	78	Weighted Average
75,890		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	50	0.0150	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
10.3	530	0.0150	0.86		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.5	580	Total			

Summary for Subcatchment S211: S211

Runoff = 1.60 cfs @ 12.09 hrs, Volume= 5,064 cf, Depth> 3.94"
Routed to Pond P205 : INFILTRATION POND #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
8,108	61	>75% Grass cover, Good, HSG B
7,328	98	Water Surface, HSG B
15,436	79	Weighted Average
8,108		52.53% Pervious Area
7,328		47.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S212: SWALE

Runoff = 2.25 cfs @ 12.34 hrs, Volume= 11,217 cf, Depth> 2.55"
Routed to Reach SC2 : Stream Crossing #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
4,100	61	>75% Grass cover, Good, HSG B
7,192	55	Woods, Good, HSG B
1,180	74	>75% Grass cover, Good, HSG C
3,436	70	Woods, Good, HSG C
13,180	98	Water Surface, 0% imp, HSG D
72	98	Paved parking, HSG B
22,663	48	Brush, Good, HSG B
545	65	Brush, Good, HSG C
107	98	Paved parking, HSG C
135	98	Paved parking, HSG D
158	80	>75% Grass cover, Good, HSG D
52,768	65	Weighted Average
52,454		99.40% Pervious Area
314		0.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.1	50	0.0400	0.05		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.27"
3.9	232	0.0600	0.98		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
3.1	136	0.0220	0.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.1	418	Total			

Summary for Subcatchment S213: COURTYARD

Runoff = 2.21 cfs @ 12.09 hrs, Volume= 7,022 cf, Depth> 3.94"
Routed to Pond 11P : YARD DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
5,047	39	>75% Grass cover, Good, HSG A
1,678	98	Paved parking, HSG A
168	98	Roofs, HSG A
532	98	Water Surface, 0% imp, HSG A
4,518	74	>75% Grass cover, Good, HSG C
7,080	98	Paved parking, HSG C
878	98	Roofs, HSG C
718	98	Water Surface, 0% imp, HSG C
296	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
21,407	79	Weighted Average
11,111		51.90% Pervious Area
10,296		48.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T1: Trench Drain 1

Runoff = 1.49 cfs @ 12.09 hrs, Volume= 5,089 cf, Depth> 5.47"
Routed to Pond 5R : TRENCH DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,443	74	>75% Grass cover, Good, HSG C
4,228	98	Paved parking, HSG C
1,339	80	>75% Grass cover, Good, HSG D
4,163	98	Paved parking, HSG D
11,173	93	Weighted Average
2,782		24.90% Pervious Area
8,391		75.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T2: Drive Under B2

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 1,420 cf, Depth> 3.83"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
1,510	39	>75% Grass cover, Good, HSG A
2,313	98	Paved parking, HSG A
77	74	>75% Grass cover, Good, HSG C
545	98	Paved parking, HSG C
4,445	78	Weighted Average
1,587		35.70% Pervious Area
2,858		64.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH1: TOWN HOUSE #1

Runoff = 0.58 cfs @ 12.09 hrs, Volume= 2,057 cf, Depth> 5.81"
Routed to Pond DE61 : DRIP #61

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH10: TOWN HOUSE #10

Runoff = 0.48 cfs @ 12.09 hrs, Volume= 1,684 cf, Depth> 5.81"
Routed to Pond DE70 : DRIP #70

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,184	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,476	96	Weighted Average
292		8.40% Pervious Area
3,184		91.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH11: TOWN HOUSE #11

Runoff = 0.58 cfs @ 12.09 hrs, Volume= 2,039 cf, Depth> 5.81"
Routed to Pond DE71 : DRIP #71

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,899	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,210	96	Weighted Average
311		7.39% Pervious Area
3,899		92.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH2: TOWN HOUSE #2

Runoff = 0.58 cfs @ 12.09 hrs, Volume= 2,057 cf, Depth> 5.81"
Routed to Pond DE62 : DRIP #62

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH3: TOWN HOUSE #3

Runoff = 0.41 cfs @ 12.09 hrs, Volume= 1,430 cf, Depth> 5.70"
Routed to Pond DE63 : DRIP #63

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
2,672	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,013	95	Weighted Average
341		11.32% Pervious Area
2,672		88.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH4: TOWN HOUSE #4

Runoff = 0.47 cfs @ 12.09 hrs, Volume= 1,681 cf, Depth> 5.81"
Routed to Pond DE64 : DRIP #64

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,178	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,470	96	Weighted Average
292		8.41% Pervious Area
3,178		91.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH5: TOWN HOUSE #5

Runoff = 0.41 cfs @ 12.09 hrs, Volume= 1,432 cf, Depth> 5.70"
Routed to Pond DE65 : DRIP #65

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
2,675	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,016	95	Weighted Average
341		11.31% Pervious Area
2,675		88.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH6: TOWN HOUSE #6

Runoff = 0.47 cfs @ 12.09 hrs, Volume= 1,650 cf, Depth> 5.81"
Routed to Pond DE66 : DRIP #66

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,116	98	Roofs, HSG C
291	74	>75% Grass cover, Good, HSG C
3,407	96	Weighted Average
291		8.54% Pervious Area
3,116		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH7: TOWN HOUSE #7

Runoff = 0.48 cfs @ 12.09 hrs, Volume= 1,686 cf, Depth> 5.81"
Routed to Pond DE67 : DRIP #67

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,189	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,481	96	Weighted Average
292		8.39% Pervious Area
3,189		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH8: TOWN HOUSE #8

Runoff = 0.58 cfs @ 12.09 hrs, Volume= 2,040 cf, Depth> 5.81"
Routed to Pond DE68 : DRIP #68

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,901	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,212	96	Weighted Average
311		7.38% Pervious Area
3,901		92.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH9: TOWN HOUSE #9

Runoff = 0.48 cfs @ 12.09 hrs, Volume= 1,686 cf, Depth> 5.81"
Routed to Pond DE69 : DRIP #69

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25YR Rainfall=6.29"

Area (sf)	CN	Description
3,188	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,480	96	Weighted Average
292		8.39% Pervious Area
3,188		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Reach 8R: OVERLAND FLOW

Inflow Area = 11,975 sf, 92.37% Impervious, Inflow Depth > 4.86" for 25YR event
Inflow = 1.38 cfs @ 12.14 hrs, Volume= 4,854 cf
Outflow = 0.40 cfs @ 12.54 hrs, Volume= 4,526 cf, Atten= 71%, Lag= 23.9 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.10 fps, Min. Travel Time= 94.0 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 197.1 min

Peak Storage= 2,258 cf @ 12.54 hrs
Average Depth at Peak Storage= 0.08' , Surface Width= 50.80'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 28.09 cfs

50.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 563.0' Slope= 0.0213 '/'
Inlet Invert= 208.00', Outlet Invert= 196.00'

Summary for Reach 9R: OVERLAND FLOW

Inflow Area = 32,665 sf, 94.81% Impervious, Inflow Depth = 0.00" for 25YR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 23.45 cfs

20.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 211.0' Slope= 0.0652 '/'
Inlet Invert= 201.75', Outlet Invert= 188.00'

Summary for Reach 10R: OVERLAND FLOW

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth = 1.18" for 25YR event
Inflow = 1.47 cfs @ 12.61 hrs, Volume= 12,790 cf
Outflow = 1.45 cfs @ 12.81 hrs, Volume= 12,790 cf, Atten= 2%, Lag= 12.4 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.26 fps, Min. Travel Time= 10.5 min
Avg. Velocity = 0.10 fps, Avg. Travel Time= 28.4 min

Peak Storage= 910 cf @ 12.81 hrs
Average Depth at Peak Storage= 0.25' , Surface Width= 24.94'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 17.57 cfs

20.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 164.0' Slope= 0.0366 '/'
Inlet Invert= 192.00', Outlet Invert= 186.00'

‡

Summary for Reach 11R: 4x4 Open Bottom Culvert

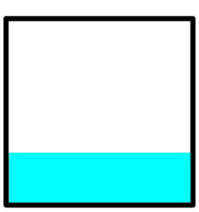
[52] Hint: Inlet/Outlet conditions not evaluated
[62] Hint: Exceeded Reach 20R OUTLET depth by 0.11' @ 12.50 hrs
[61] Hint: Exceeded Reach R211 outlet invert by 0.31' @ 12.55 hrs

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 2.00" for 25YR event
Inflow = 9.42 cfs @ 12.53 hrs, Volume= 70,760 cf
Outflow = 9.42 cfs @ 12.53 hrs, Volume= 70,749 cf, Atten= 0%, Lag= 0.2 min
Routed to Reach 23R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 2.11 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 0.82 fps, Avg. Travel Time= 0.6 min

Peak Storage= 134 cf @ 12.53 hrs
Average Depth at Peak Storage= 1.12' , Surface Width= 4.00'
Bank-Full Depth= 4.00' Flow Area= 16.0 sf, Capacity= 42.20 cfs

48.0" W x 48.0" H Box Pipe
n= 0.069 Riprap, 6-inch
Length= 30.0' Slope= 0.0150 '/'
Inlet Invert= 194.00', Outlet Invert= 193.55'



Summary for Reach 12R: OVERLAND FLOW

Inflow Area = 12,906 sf, 90.20% Impervious, Inflow Depth > 4.91" for 25YR event
Inflow = 1.58 cfs @ 12.13 hrs, Volume= 5,279 cf
Outflow = 0.85 cfs @ 12.30 hrs, Volume= 5,158 cf, Atten= 46%, Lag= 10.7 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.14 fps, Min. Travel Time= 29.9 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 85.1 min

Peak Storage= 1,523 cf @ 12.30 hrs
Average Depth at Peak Storage= 0.12' , Surface Width= 51.20'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 29.80 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 250.0' Slope= 0.0240 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

Summary for Reach 14R: OVERLAND FLOW

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 2.55" for 25YR event
Inflow = 2.25 cfs @ 12.34 hrs, Volume= 11,215 cf
Outflow = 0.65 cfs @ 12.97 hrs, Volume= 10,062 cf, Atten= 71%, Lag= 37.7 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.13 fps, Min. Travel Time= 113.6 min
Avg. Velocity = 0.07 fps, Avg. Travel Time= 199.3 min

Peak Storage= 4,397 cf @ 12.97 hrs
Average Depth at Peak Storage= 0.10' , Surface Width= 52.02'
Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 31.55 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 70.00'
Length= 852.0' Slope= 0.0246 '/'
Inlet Invert= 207.00', Outlet Invert= 186.00'

Summary for Reach 15R: OVERLAND FLOW

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 1.86" for 25YR event
Inflow = 0.23 cfs @ 15.93 hrs, Volume= 9,701 cf
Outflow = 0.23 cfs @ 16.99 hrs, Volume= 8,871 cf, Atten= 0%, Lag= 63.2 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.08 fps, Min. Travel Time= 63.7 min
Avg. Velocity = 0.07 fps, Avg. Travel Time= 70.7 min

Peak Storage= 872 cf @ 16.99 hrs
Average Depth at Peak Storage= 0.06' , Surface Width= 50.58'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 27.21 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 300.0' Slope= 0.0200 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

Summary for Reach 18R: OVERLAND FLOW

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth = 1.01" for 25YR event
Inflow = 3.39 cfs @ 12.37 hrs, Volume= 7,468 cf
Outflow = 0.80 cfs @ 12.90 hrs, Volume= 7,269 cf, Atten= 76%, Lag= 31.8 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.14 fps, Min. Travel Time= 73.6 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 163.7 min

Peak Storage= 3,543 cf @ 12.90 hrs
Average Depth at Peak Storage= 0.11' , Surface Width= 55.51'
Bank-Full Depth= 1.00' Flow Area= 75.0 sf, Capacity= 38.42 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 100.00'
Length= 609.0' Slope= 0.0279 '/'
Inlet Invert= 203.00', Outlet Invert= 186.00'

Summary for Reach 20R: OVERLAND FLOW

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth > 3.44" for 25YR event
Inflow = 4.31 cfs @ 12.27 hrs, Volume= 20,716 cf
Outflow = 1.57 cfs @ 13.10 hrs, Volume= 19,942 cf, Atten= 63%, Lag= 49.8 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.13 fps, Min. Travel Time= 70.3 min
Avg. Velocity = 0.07 fps, Avg. Travel Time= 138.3 min

Peak Storage= 6,626 cf @ 13.10 hrs
Average Depth at Peak Storage= 0.23' , Surface Width= 52.31'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 18.54 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 560.0' Slope= 0.0093 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

Summary for Reach 23R: OVERLAND FLOW

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 2.00" for 25YR event
Inflow = 9.42 cfs @ 12.53 hrs, Volume= 70,749 cf
Outflow = 8.56 cfs @ 12.72 hrs, Volume= 70,122 cf, Atten= 9%, Lag= 11.0 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.30 fps, Min. Travel Time= 13.2 min
Avg. Velocity = 0.11 fps, Avg. Travel Time= 35.1 min

Peak Storage= 6,778 cf @ 12.72 hrs
Average Depth at Peak Storage= 0.48' , Surface Width= 69.20'
Bank-Full Depth= 1.00' Flow Area= 70.0 sf, Capacity= 31.93 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 20.0 '/' Top Width= 90.00'
Length= 237.0' Slope= 0.0211 '/'
Inlet Invert= 193.00', Outlet Invert= 188.00'

Summary for Reach R202: OVERLAND FLOW

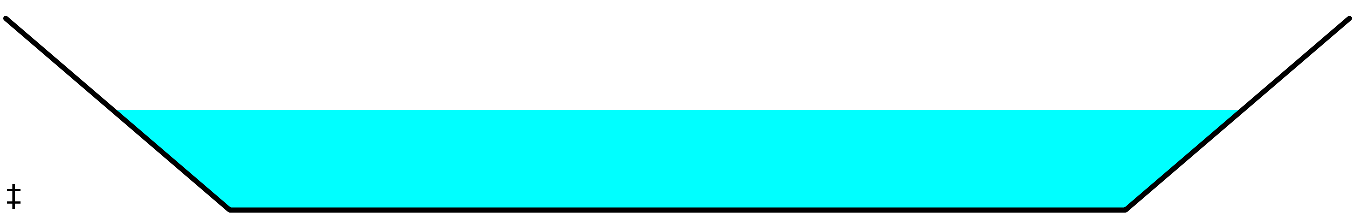
[62] Hint: Exceeded Reach SC1 OUTLET depth by 0.28' @ 12.95 hrs

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 3.62" for 25YR event
Inflow = 26.73 cfs @ 12.32 hrs, Volume= 130,223 cf
Outflow = 13.59 cfs @ 12.69 hrs, Volume= 124,425 cf, Atten= 49%, Lag= 21.9 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.23 fps, Min. Travel Time= 50.5 min
Avg. Velocity = 0.10 fps, Avg. Travel Time= 122.8 min

Peak Storage= 41,142 cf @ 12.69 hrs
Average Depth at Peak Storage= 0.52' , Surface Width= 126.01'
Bank-Full Depth= 1.00' Flow Area= 125.0 sf, Capacity= 42.56 cfs

100.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 150.00'
Length= 700.0' Slope= 0.0107 '/'
Inlet Invert= 205.50', Outlet Invert= 198.00'



Summary for Reach R211: OVERLAND FLOW

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth = 1.00" for 25YR event
Inflow = 11.59 cfs @ 12.30 hrs, Volume= 20,184 cf
Outflow = 3.47 cfs @ 12.70 hrs, Volume= 19,854 cf, Atten= 70%, Lag= 24.3 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.18 fps, Min. Travel Time= 54.3 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 157.4 min

Peak Storage= 11,311 cf @ 12.70 hrs
Average Depth at Peak Storage= 0.45' , Surface Width= 48.54'
Bank-Full Depth= 1.00' Flow Area= 50.0 sf, Capacity= 14.51 cfs

35.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 15.0 '/' Top Width= 65.00'
Length= 600.0' Slope= 0.0087 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

‡

Summary for Reach SC1: Stream Crossing #1

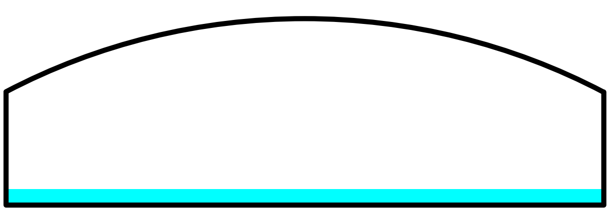
[52] Hint: Inlet/Outlet conditions not evaluated
[90] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 3.62" for 25YR event
Inflow = 26.72 cfs @ 12.32 hrs, Volume= 130,245 cf
Outflow = 26.73 cfs @ 12.32 hrs, Volume= 130,223 cf, Atten= 0%, Lag= 0.1 min
Routed to Reach R202 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 3.86 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.28 fps, Avg. Travel Time= 0.6 min

Peak Storage= 298 cf @ 12.32 hrs
Average Depth at Peak Storage= 0.43' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 69.8 sf, Capacity= 722.91 cfs

192.0" W x 60.0" H, R=207.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 43.1' Slope= 0.0200 '/'
Inlet Invert= 206.37', Outlet Invert= 205.51'



Summary for Reach SC2: Stream Crossing #2

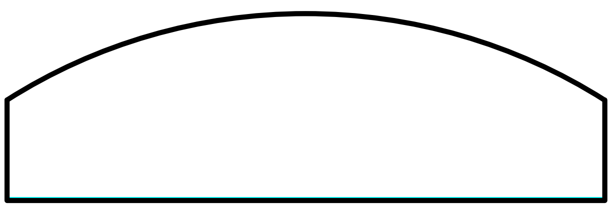
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 2.55" for 25YR event
Inflow = 2.25 cfs @ 12.34 hrs, Volume= 11,217 cf
Outflow = 2.25 cfs @ 12.34 hrs, Volume= 11,215 cf, Atten= 0%, Lag= 0.3 min
Routed to Reach 14R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 1.57 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 1.06 fps, Avg. Travel Time= 0.6 min

Peak Storage= 52 cf @ 12.34 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 68.1 sf, Capacity= 768.96 cfs

192.0" W x 60.0" H, R=180.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 36.5' Slope= 0.0241 '/'
Inlet Invert= 208.52', Outlet Invert= 207.64'



Summary for Pond 1P: DMH #33

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 5.89" for 25YR event
Inflow = 2.21 cfs @ 12.09 hrs, Volume= 7,907 cf
Outflow = 2.21 cfs @ 12.09 hrs, Volume= 7,907 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.21 cfs @ 12.09 hrs, Volume= 7,907 cf
Routed to Pond OCS6 : OCS #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.34' @ 12.09 hrs
Flood Elev= 209.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.50'	**12.0" Round Culvert** L= 46.7' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 204.33' S= 0.0251 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.15 cfs @ 12.09 hrs HW=206.33' TW=202.51' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.15 cfs @ 3.10 fps)

Summary for Pond 3P: OCS #8

Inflow Area = 12,684 sf, 86.64% Impervious, Inflow Depth > 5.38" for 25YR event
Inflow = 1.67 cfs @ 12.09 hrs, Volume= 5,685 cf
Outflow = 1.67 cfs @ 12.09 hrs, Volume= 5,685 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.67 cfs @ 12.09 hrs, Volume= 5,685 cf
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.09' @ 12.60 hrs
Flood Elev= 206.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.62'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.67 cfs @ 12.09 hrs HW=201.39' TW=201.11' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.67 cfs @ 2.57 fps)

Summary for Pond 5R: TRENCH DRAIN

Inflow Area = 11,173 sf, 75.10% Impervious, Inflow Depth > 5.47" for 25YR event
Inflow = 1.49 cfs @ 12.09 hrs, Volume= 5,089 cf
Outflow = 1.49 cfs @ 12.09 hrs, Volume= 5,089 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.49 cfs @ 12.09 hrs, Volume= 5,089 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.33' @ 12.09 hrs
Flood Elev= 199.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.22'	**8.0" Round Culvert** L= 36.0' Ke= 0.500 Inlet / Outlet Invert= 197.22' / 196.50' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=1.45 cfs @ 12.09 hrs HW=198.30' TW=195.96' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.45 cfs @ 4.15 fps)

Summary for Pond 11P: YARD DRAIN

Inflow Area = 21,407 sf, 48.10% Impervious, Inflow Depth > 3.94" for 25YR event
Inflow = 2.21 cfs @ 12.09 hrs, Volume= 7,022 cf
Outflow = 1.67 cfs @ 12.17 hrs, Volume= 6,973 cf, Atten= 25%, Lag= 4.5 min
Primary = 1.67 cfs @ 12.17 hrs, Volume= 6,973 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.41' @ 12.17 hrs Surf.Area= 6,009 sf Storage= 883 cf

Plug-Flow detention time= 16.5 min calculated for 6,973 cf (99% of inflow)
Center-of-Mass det. time= 12.2 min (826.4 - 814.2)

Volume	Invert	Avail.Storage	Storage Description
#1	207.25'	5,475 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.25	5,050	0	0
208.00	9,550	5,475	5,475

Device	Routing	Invert	Outlet Devices
#1	Primary	203.25'	**12.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 203.25' / 202.94' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	207.25'	**4.0" x 4.0" Horiz. Orifice/Grate X 4.00 columns** X 4 rows C= 0.600 in 24.0" x 24.0" Grate (44% open area) Limited to weir flow at low heads

Primary OutFlow Max=1.64 cfs @ 12.17 hrs HW=207.41' TW=203.36' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.64 cfs of 6.63 cfs potential flow)
  └─**2=Orifice/Grate** (Weir Controls 1.64 cfs @ 1.30 fps)

Summary for Pond CB10: CB #10

Inflow Area = 6,961 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.96 cfs @ 12.09 hrs, Volume= 3,508 cf
Outflow = 0.96 cfs @ 12.09 hrs, Volume= 3,508 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.96 cfs @ 12.09 hrs, Volume= 3,508 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.46' @ 12.09 hrs
Flood Elev= 212.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.76'	**12.0" Round Culvert** L= 33.8' Ke= 0.500 Inlet / Outlet Invert= 209.76' / 209.59' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.93 cfs @ 12.09 hrs HW=210.44' TW=210.24' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.93 cfs @ 2.30 fps)

Summary for Pond CB11: CB #11

Inflow Area = 7,173 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.99 cfs @ 12.09 hrs, Volume= 3,615 cf
Outflow = 0.99 cfs @ 12.09 hrs, Volume= 3,615 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.99 cfs @ 12.09 hrs, Volume= 3,615 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 210.55' @ 12.09 hrs
Flood Elev= 213.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.94'	**12.0" Round Culvert** L= 26.3' Ke= 0.500 Inlet / Outlet Invert= 209.94' / 209.67' S= 0.0103 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.96 cfs @ 12.09 hrs HW=210.54' TW=210.24' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.96 cfs @ 2.83 fps)

Summary for Pond CB12: CB #12

Inflow Area = 5,238 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.72 cfs @ 12.09 hrs, Volume= 2,640 cf
Outflow = 0.72 cfs @ 12.09 hrs, Volume= 2,640 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.72 cfs @ 12.09 hrs, Volume= 2,640 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.11' @ 12.09 hrs
Flood Elev= 209.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.68'	**12.0" Round Culvert** L= 41.3' Ke= 0.500 Inlet / Outlet Invert= 206.68' / 205.65' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.70 cfs @ 12.09 hrs HW=207.10' TW=206.33' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.70 cfs @ 2.22 fps)

Summary for Pond CB13: CB #13

Inflow Area = 10,873 sf, 90.78% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 1.49 cfs @ 12.09 hrs, Volume= 5,267 cf
Outflow = 1.49 cfs @ 12.09 hrs, Volume= 5,267 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.49 cfs @ 12.09 hrs, Volume= 5,267 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.35' @ 12.09 hrs
Flood Elev= 209.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**12.0" Round Culvert** L= 43.7' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 205.61' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.45 cfs @ 12.09 hrs HW=207.34' TW=206.33' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.45 cfs @ 2.72 fps)

Summary for Pond CB14: CB #14

Inflow Area = 12,099 sf, 86.22% Impervious, Inflow Depth > 5.24" for 25YR event
Inflow = 1.57 cfs @ 12.09 hrs, Volume= 5,281 cf
Outflow = 1.57 cfs @ 12.09 hrs, Volume= 5,281 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.57 cfs @ 12.09 hrs, Volume= 5,281 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.95' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 23.2' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.67' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.54 cfs @ 12.09 hrs HW=201.92' TW=201.76' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.54 cfs @ 1.96 fps)

Summary for Pond CB15: CB #15

Inflow Area = 6,666 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.92 cfs @ 12.09 hrs, Volume= 3,360 cf
Outflow = 0.92 cfs @ 12.09 hrs, Volume= 3,360 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.92 cfs @ 12.09 hrs, Volume= 3,360 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.84' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.71' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.91 cfs @ 12.09 hrs HW=201.81' TW=201.75' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.91 cfs @ 1.16 fps)

Summary for Pond CB16: CB #16

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 3.94" for 25YR event
Inflow = 0.88 cfs @ 12.09 hrs, Volume= 2,794 cf
Outflow = 0.88 cfs @ 12.09 hrs, Volume= 2,794 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.88 cfs @ 12.09 hrs, Volume= 2,794 cf
Routed to Pond D10 : DMH #10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.11' @ 12.09 hrs
Flood Elev= 206.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.47'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 203.47' / 203.33' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.86 cfs @ 12.09 hrs HW=204.10' TW=203.91' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.86 cfs @ 2.37 fps)

Summary for Pond CB17: CB #17

Inflow Area = 11,836 sf, 73.87% Impervious, Inflow Depth > 5.35" for 25YR event
Inflow = 1.56 cfs @ 12.09 hrs, Volume= 5,278 cf
Outflow = 1.56 cfs @ 12.09 hrs, Volume= 5,278 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.56 cfs @ 12.09 hrs, Volume= 5,278 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.78' @ 12.09 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.99'	**12.0" Round Culvert** L= 13.8' Ke= 0.500 Inlet / Outlet Invert= 204.99' / 204.86' S= 0.0094 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.20 cfs @ 12.09 hrs HW=205.76' TW=205.57' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.20 cfs @ 2.54 fps)

Summary for Pond CB18: CB #18

Inflow Area = 24,853 sf, 72.99% Impervious, Inflow Depth > 4.50" for 25YR event
Inflow = 2.77 cfs @ 12.09 hrs, Volume= 9,314 cf
Outflow = 2.77 cfs @ 12.09 hrs, Volume= 9,314 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.77 cfs @ 12.09 hrs, Volume= 9,314 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.80' @ 12.10 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.72'	**15.0" Round Culvert** L= 25.1' Ke= 0.500 Inlet / Outlet Invert= 204.72' / 204.59' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.12 cfs @ 12.09 hrs HW=205.79' TW=205.59' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 2.12 cfs @ 2.55 fps)

Summary for Pond CB20: CB #20

Inflow Area = 11,939 sf, 88.95% Impervious, Inflow Depth > 5.70" for 25YR event
Inflow = 1.62 cfs @ 12.09 hrs, Volume= 5,667 cf
Outflow = 1.62 cfs @ 12.09 hrs, Volume= 5,667 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.62 cfs @ 12.09 hrs, Volume= 5,667 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.88' @ 12.09 hrs
Flood Elev= 207.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.97'	**12.0" Round Culvert** L= 30.3' Ke= 0.500 Inlet / Outlet Invert= 203.97' / 203.81' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.59 cfs @ 12.09 hrs HW=204.85' TW=204.55' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.59 cfs @ 2.90 fps)

Summary for Pond CB21: CB #21

Inflow Area = 10,174 sf, 87.04% Impervious, Inflow Depth > 5.13" for 25YR event
Inflow = 1.30 cfs @ 12.09 hrs, Volume= 4,345 cf
Outflow = 1.30 cfs @ 12.09 hrs, Volume= 4,345 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.30 cfs @ 12.09 hrs, Volume= 4,345 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.05' @ 12.09 hrs
Flood Elev= 208.02'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.32'	**12.0" Round Culvert** L= 26.0' Ke= 0.500 Inlet / Outlet Invert= 204.32' / 204.19' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.27 cfs @ 12.09 hrs HW=205.04' TW=204.55' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.27 cfs @ 2.96 fps)

Summary for Pond CB22: CB #22

Inflow Area = 12,001 sf, 91.62% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 1.64 cfs @ 12.09 hrs, Volume= 5,813 cf
Outflow = 1.64 cfs @ 12.09 hrs, Volume= 5,813 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.64 cfs @ 12.09 hrs, Volume= 5,813 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.17' @ 12.09 hrs
Flood Elev= 208.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.33'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 205.33' / 205.25' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.60 cfs @ 12.09 hrs HW=206.15' TW=205.32' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.60 cfs @ 3.14 fps)

Summary for Pond CB23: CB #23

Inflow Area = 9,694 sf, 61.00% Impervious, Inflow Depth > 5.01" for 25YR event
Inflow = 1.22 cfs @ 12.09 hrs, Volume= 4,050 cf
Outflow = 1.22 cfs @ 12.09 hrs, Volume= 4,050 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.22 cfs @ 12.09 hrs, Volume= 4,050 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.10' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.41'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 205.41' / 205.32' S= 0.0055 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.19 cfs @ 12.09 hrs HW=206.09' TW=205.32' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.19 cfs @ 2.95 fps)

Summary for Pond CB24: CB #24

Inflow Area = 7,930 sf, 72.16% Impervious, Inflow Depth > 5.47" for 25YR event
Inflow = 1.06 cfs @ 12.09 hrs, Volume= 3,612 cf
Outflow = 1.06 cfs @ 12.09 hrs, Volume= 3,612 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.06 cfs @ 12.09 hrs, Volume= 3,612 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.98' @ 12.09 hrs
Flood Elev= 209.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 12.1' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.15' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.03 cfs @ 12.09 hrs HW=205.96' TW=205.82' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.03 cfs @ 2.26 fps)

Summary for Pond CB25: CB #25

Inflow Area = 8,487 sf, 80.92% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 1.14 cfs @ 12.09 hrs, Volume= 3,947 cf
Outflow = 1.14 cfs @ 12.09 hrs, Volume= 3,947 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.14 cfs @ 12.09 hrs, Volume= 3,947 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.96' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.22'	**15.0" Round Culvert** L= 11.4' Ke= 0.500 Inlet / Outlet Invert= 205.22' / 205.16' S= 0.0053 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.11 cfs @ 12.09 hrs HW=205.95' TW=205.82' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.11 cfs @ 2.16 fps)

Summary for Pond CB26: CB #26

Inflow Area = 8,835 sf, 63.75% Impervious, Inflow Depth > 5.24" for 25YR event
Inflow = 1.15 cfs @ 12.09 hrs, Volume= 3,856 cf
Outflow = 1.15 cfs @ 12.09 hrs, Volume= 3,856 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.15 cfs @ 12.09 hrs, Volume= 3,856 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.43' @ 12.09 hrs
Flood Elev= 204.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.77'	**12.0" Round Culvert** L= 42.5' Ke= 0.500 Inlet / Outlet Invert= 201.77' / 201.55' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.12 cfs @ 12.09 hrs HW=202.42' TW=201.32' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.12 cfs @ 2.93 fps)

Summary for Pond CB27: CB #27

Inflow Area = 6,111 sf, 91.90% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.84 cfs @ 12.09 hrs, Volume= 2,960 cf
Outflow = 0.84 cfs @ 12.09 hrs, Volume= 2,960 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.84 cfs @ 12.09 hrs, Volume= 2,960 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.56' @ 12.09 hrs
Flood Elev= 204.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 18.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.90' S= 0.0056 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.82 cfs @ 12.09 hrs HW=201.55' TW=201.32' (Dynamic Tailwater)
└—**1=Culvert** (Outlet Controls 0.82 cfs @ 2.65 fps)

Summary for Pond CB28: CB #28

Inflow Area = 10,372 sf, 51.33% Impervious, Inflow Depth > 4.90" for 25YR event
Inflow = 1.29 cfs @ 12.09 hrs, Volume= 4,237 cf
Outflow = 1.29 cfs @ 12.09 hrs, Volume= 4,237 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.29 cfs @ 12.09 hrs, Volume= 4,237 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.60' @ 12.09 hrs
Flood Elev= 200.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.75'	**12.0" Round Culvert** L= 13.7' Ke= 0.500 Inlet / Outlet Invert= 197.75' / 197.69' S= 0.0044 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.26 cfs @ 12.09 hrs HW=198.58' TW=198.41' (Dynamic Tailwater)
└—**1=Culvert** (Outlet Controls 1.26 cfs @ 2.43 fps)

Summary for Pond CB29: CB #29

Inflow Area = 8,495 sf, 84.21% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 1.14 cfs @ 12.09 hrs, Volume= 3,950 cf
Outflow = 1.14 cfs @ 12.09 hrs, Volume= 3,950 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.14 cfs @ 12.09 hrs, Volume= 3,950 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.22' @ 12.09 hrs
Flood Elev= 208.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 13.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.31' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.09 cfs @ 12.09 hrs HW=206.20' TW=206.07' (Dynamic Tailwater)
└—**1=Culvert** (Outlet Controls 1.09 cfs @ 2.13 fps)

Summary for Pond CB30: CB #30

Inflow Area = 8,933 sf, 82.40% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 1.20 cfs @ 12.09 hrs, Volume= 4,154 cf
Outflow = 1.20 cfs @ 12.09 hrs, Volume= 4,154 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.20 cfs @ 12.09 hrs, Volume= 4,154 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.24' @ 12.09 hrs
Flood Elev= 208.54'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 17.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.29' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.15 cfs @ 12.09 hrs HW=206.22' TW=206.07' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.15 cfs @ 2.20 fps)

Summary for Pond CB31: CB #31

Inflow Area = 16,365 sf, 68.64% Impervious, Inflow Depth > 5.13" for 25YR event
Inflow = 2.10 cfs @ 12.09 hrs, Volume= 6,989 cf
Outflow = 2.10 cfs @ 12.09 hrs, Volume= 6,989 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.10 cfs @ 12.09 hrs, Volume= 6,989 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.18' @ 12.09 hrs
Flood Elev= 207.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.04 cfs @ 12.09 hrs HW=205.17' TW=204.63' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.04 cfs @ 3.31 fps)

Summary for Pond CB32: CB #32

Inflow Area = 12,710 sf, 70.47% Impervious, Inflow Depth > 5.24" for 25YR event
Inflow = 1.65 cfs @ 12.09 hrs, Volume= 5,548 cf
Outflow = 1.65 cfs @ 12.09 hrs, Volume= 5,548 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.65 cfs @ 12.09 hrs, Volume= 5,548 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 205.04' @ 12.09 hrs
Flood Elev= 207.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.61 cfs @ 12.09 hrs HW=205.03' TW=204.63' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.61 cfs @ 3.10 fps)

Summary for Pond CB33: CB #33

Inflow Area = 5,421 sf, 83.90% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 0.73 cfs @ 12.09 hrs, Volume= 2,521 cf
Outflow = 0.73 cfs @ 12.09 hrs, Volume= 2,521 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.73 cfs @ 12.09 hrs, Volume= 2,521 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.97' @ 12.09 hrs
Flood Elev= 208.45'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.28'	**12.0" Round Culvert** L= 11.7' Ke= 0.500 Inlet / Outlet Invert= 205.28' / 205.22' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.71 cfs @ 12.09 hrs HW=205.96' TW=205.87' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.71 cfs @ 1.77 fps)

Summary for Pond CB34: CB #34

Inflow Area = 8,622 sf, 80.51% Impervious, Inflow Depth > 5.47" for 25YR event
Inflow = 1.15 cfs @ 12.09 hrs, Volume= 3,927 cf
Outflow = 1.15 cfs @ 12.09 hrs, Volume= 3,927 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.15 cfs @ 12.09 hrs, Volume= 3,927 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.04' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 16.5' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.13' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.12 cfs @ 12.09 hrs HW=206.02' TW=205.87' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.12 cfs @ 2.24 fps)

Summary for Pond CB35: CB #35

Inflow Area = 4,149 sf, 98.10% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.57 cfs @ 12.09 hrs, Volume= 2,091 cf
Outflow = 0.57 cfs @ 12.09 hrs, Volume= 2,091 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.57 cfs @ 12.09 hrs, Volume= 2,091 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.50' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 15.2' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.56 cfs @ 12.09 hrs HW=207.49' TW=207.30' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.56 cfs @ 2.38 fps)

Summary for Pond CB36: CB #36

Inflow Area = 6,622 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.92 cfs @ 12.09 hrs, Volume= 3,337 cf
Outflow = 0.92 cfs @ 12.09 hrs, Volume= 3,337 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.92 cfs @ 12.09 hrs, Volume= 3,337 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.64' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.89 cfs @ 12.09 hrs HW=207.63' TW=207.30' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.89 cfs @ 2.66 fps)

Summary for Pond CB38: CB #38

Inflow Area = 7,637 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 1.06 cfs @ 12.09 hrs, Volume= 3,849 cf
Outflow = 1.06 cfs @ 12.09 hrs, Volume= 3,849 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.06 cfs @ 12.09 hrs, Volume= 3,849 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 210.83' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.7' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.03 cfs @ 12.09 hrs HW=210.80' TW=210.72' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.03 cfs @ 1.31 fps)

Summary for Pond CB39: CB #39

Inflow Area = 7,612 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 1.05 cfs @ 12.09 hrs, Volume= 3,836 cf
Outflow = 1.05 cfs @ 12.09 hrs, Volume= 3,836 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.05 cfs @ 12.09 hrs, Volume= 3,836 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.83' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.02 cfs @ 12.09 hrs HW=210.80' TW=210.72' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.02 cfs @ 1.30 fps)

Summary for Pond CB40: CB #40

Inflow Area = 4,211 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.58 cfs @ 12.09 hrs, Volume= 2,122 cf
Outflow = 0.58 cfs @ 12.09 hrs, Volume= 2,122 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.58 cfs @ 12.09 hrs, Volume= 2,122 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.28' @ 12.09 hrs
Flood Elev= 217.04'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.68'	**12.0" Round Culvert** L= 17.8' Ke= 0.500 Inlet / Outlet Invert= 213.68' / 213.55' S= 0.0073 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.57 cfs @ 12.09 hrs HW=214.26' TW=214.17' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.57 cfs @ 1.72 fps)

Summary for Pond CB41: CB #41

Inflow Area = 5,586 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.77 cfs @ 12.09 hrs, Volume= 2,815 cf
Outflow = 0.77 cfs @ 12.09 hrs, Volume= 2,815 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.77 cfs @ 12.09 hrs, Volume= 2,815 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.43' @ 12.09 hrs
Flood Elev= 217.06'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.89'	**12.0" Round Culvert** L= 18.4' Ke= 0.500 Inlet / Outlet Invert= 213.89' / 213.80' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.75 cfs @ 12.09 hrs HW=214.42' TW=214.17' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.75 cfs @ 2.55 fps)

Summary for Pond CB43: CB #43

Inflow Area = 3,109 sf, 75.36% Impervious, Inflow Depth > 5.01" for 25YR event
Inflow = 0.39 cfs @ 12.09 hrs, Volume= 1,299 cf
Outflow = 0.39 cfs @ 12.09 hrs, Volume= 1,299 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.39 cfs @ 12.09 hrs, Volume= 1,299 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.52' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.38 cfs @ 12.09 hrs HW=220.51' TW=220.44' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.38 cfs @ 1.40 fps)

Summary for Pond CB44: CB #44

Inflow Area = 1,978 sf, 84.43% Impervious, Inflow Depth > 5.35" for 25YR event
Inflow = 0.26 cfs @ 12.09 hrs, Volume= 882 cf
Outflow = 0.26 cfs @ 12.09 hrs, Volume= 882 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.26 cfs @ 12.09 hrs, Volume= 882 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 220.49' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.25 cfs @ 12.09 hrs HW=220.48' TW=220.44' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.25 cfs @ 1.01 fps)

Summary for Pond CB45: CB #45

Inflow Area = 2,465 sf, 50.30% Impervious, Inflow Depth > 4.04" for 25YR event
Inflow = 0.26 cfs @ 12.09 hrs, Volume= 830 cf
Outflow = 0.26 cfs @ 12.09 hrs, Volume= 830 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.26 cfs @ 12.09 hrs, Volume= 830 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.59' @ 12.09 hrs
Flood Elev= 224.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.29'	**12.0" Round Culvert** L= 18.2' Ke= 0.500 Inlet / Outlet Invert= 221.29' / 221.20' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.26 cfs @ 12.09 hrs HW=221.59' TW=221.42' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.26 cfs @ 1.94 fps)

Summary for Pond CB46: CB #46

Inflow Area = 4,397 sf, 50.97% Impervious, Inflow Depth > 4.04" for 25YR event
Inflow = 0.47 cfs @ 12.09 hrs, Volume= 1,481 cf
Outflow = 0.47 cfs @ 12.09 hrs, Volume= 1,481 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.47 cfs @ 12.09 hrs, Volume= 1,481 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.94' @ 12.09 hrs
Flood Elev= 224.69'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.53'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 221.53' / 221.45' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.46 cfs @ 12.09 hrs HW=221.94' TW=221.42' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.46 cfs @ 2.26 fps)

Summary for Pond CB47: CB#47

Inflow Area = 3,012 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.42 cfs @ 12.09 hrs, Volume= 1,518 cf
Outflow = 0.42 cfs @ 12.09 hrs, Volume= 1,518 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.42 cfs @ 12.09 hrs, Volume= 1,518 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.79' @ 12.16 hrs
Flood Elev= 230.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	225.05'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 225.05' / 224.95' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.42 cfs @ 12.09 hrs HW=225.66' TW=225.62' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.42 cfs @ 1.18 fps)

Summary for Pond CB48: CB#48

Inflow Area = 60,128 sf, 25.16% Impervious, Inflow Depth > 3.03" for 25YR event
Inflow = 4.02 cfs @ 12.17 hrs, Volume= 15,183 cf
Outflow = 4.02 cfs @ 12.17 hrs, Volume= 15,183 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.02 cfs @ 12.17 hrs, Volume= 15,183 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 226.24' @ 12.16 hrs
Flood Elev= 230.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.82'	**15.0" Round Culvert** L= 16.9' Ke= 0.500 Inlet / Outlet Invert= 224.82' / 224.74' S= 0.0047 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.94 cfs @ 12.17 hrs HW=226.21' TW=225.76' (Dynamic Tailwater)
1=Culvert (Inlet Controls 3.94 cfs @ 3.21 fps)

Summary for Pond CB49: CB #49

Inflow Area = 5,238 sf, 84.59% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 0.70 cfs @ 12.09 hrs, Volume= 2,436 cf
Outflow = 0.70 cfs @ 12.09 hrs, Volume= 2,436 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.70 cfs @ 12.09 hrs, Volume= 2,436 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.65' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.76'	**12.0" Round Culvert** L= 15.5' Ke= 0.500 Inlet / Outlet Invert= 202.76' / 202.68' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.69 cfs @ 12.09 hrs HW=203.62' TW=203.57' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.69 cfs @ 1.28 fps)

Summary for Pond CB50: CB #50

Inflow Area = 15,040 sf, 77.20% Impervious, Inflow Depth > 5.47" for 25YR event
Inflow = 2.00 cfs @ 12.09 hrs, Volume= 6,850 cf
Outflow = 2.00 cfs @ 12.09 hrs, Volume= 6,850 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.00 cfs @ 12.09 hrs, Volume= 6,850 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.87' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.70' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.96 cfs @ 12.09 hrs HW=203.84' TW=203.57' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.96 cfs @ 2.50 fps)

Summary for Pond CB51: CB #51

Inflow Area = 6,823 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.94 cfs @ 12.09 hrs, Volume= 3,439 cf
Outflow = 0.94 cfs @ 12.09 hrs, Volume= 3,439 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.94 cfs @ 12.09 hrs, Volume= 3,439 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.36' @ 12.95 hrs
Flood Elev= 212.77'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.35'	**12.0" Round Culvert** L= 31.4' Ke= 0.500 Inlet / Outlet Invert= 202.35' / 202.19' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.92 cfs @ 12.09 hrs HW=202.94' TW=202.62' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.92 cfs @ 2.76 fps)

Summary for Pond CB52: CB #52

Inflow Area = 9,052 sf, 87.14% Impervious, Inflow Depth > 5.70" for 25YR event
Inflow = 1.23 cfs @ 12.09 hrs, Volume= 4,297 cf
Outflow = 1.23 cfs @ 12.09 hrs, Volume= 4,297 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.23 cfs @ 12.09 hrs, Volume= 4,297 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.38' @ 12.09 hrs
Flood Elev= 205.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.68'	**12.0" Round Culvert** L= 25.5' Ke= 0.500 Inlet / Outlet Invert= 202.68' / 202.55' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.20 cfs @ 12.09 hrs HW=203.37' TW=202.62' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.20 cfs @ 2.92 fps)

Summary for Pond CB53: CB #53

Inflow Area = 7,863 sf, 86.52% Impervious, Inflow Depth > 5.47" for 25YR event
Inflow = 1.05 cfs @ 12.09 hrs, Volume= 3,581 cf
Outflow = 1.05 cfs @ 12.09 hrs, Volume= 3,581 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.05 cfs @ 12.09 hrs, Volume= 3,581 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.42' @ 12.09 hrs
Flood Elev= 205.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 32.0' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.62' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.02 cfs @ 12.09 hrs HW=203.41' TW=201.39' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.02 cfs @ 2.82 fps)

Summary for Pond CB54: CB #54

Inflow Area = 4,821 sf, 86.85% Impervious, Inflow Depth > 5.24" for 25YR event
Inflow = 0.63 cfs @ 12.09 hrs, Volume= 2,104 cf
Outflow = 0.63 cfs @ 12.09 hrs, Volume= 2,104 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.63 cfs @ 12.09 hrs, Volume= 2,104 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 203.14' @ 12.09 hrs
Flood Elev= 205.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.66'	**12.0" Round Culvert** L= 36.7' Ke= 0.500 Inlet / Outlet Invert= 202.66' / 202.48' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.61 cfs @ 12.09 hrs HW=203.13' TW=201.39' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.61 cfs @ 2.48 fps)

Summary for Pond CB7: CB#5

Inflow Area = 4,650 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 0.64 cfs @ 12.09 hrs, Volume= 2,344 cf
Outflow = 0.64 cfs @ 12.09 hrs, Volume= 2,344 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.64 cfs @ 12.09 hrs, Volume= 2,344 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.04' @ 12.09 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.60'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 212.60' / 212.45' S= 0.0099 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.63 cfs @ 12.09 hrs HW=213.04' TW=211.65' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.63 cfs @ 2.81 fps)

Summary for Pond CB8: CB#8

Inflow Area = 5,450 sf, 88.75% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 0.73 cfs @ 12.09 hrs, Volume= 2,534 cf
Outflow = 0.73 cfs @ 12.09 hrs, Volume= 2,534 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.73 cfs @ 12.09 hrs, Volume= 2,534 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.27' @ 12.09 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.79'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 213.79' / 213.64' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.71 cfs @ 12.09 hrs HW=214.27' TW=211.65' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.71 cfs @ 2.84 fps)

Summary for Pond CB9: CB #9

Inflow Area = 16,307 sf, 93.95% Impervious, Inflow Depth > 5.93" for 25YR event
Inflow = 2.24 cfs @ 12.09 hrs, Volume= 8,058 cf
Outflow = 2.24 cfs @ 12.09 hrs, Volume= 8,058 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.24 cfs @ 12.09 hrs, Volume= 8,058 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.95' @ 12.09 hrs
Flood Elev= 213.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.10'	**12.0" Round Culvert** L= 19.9' Ke= 0.500 Inlet / Outlet Invert= 210.10' / 209.71' S= 0.0196 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.18 cfs @ 12.09 hrs HW=210.94' TW=210.24' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.18 cfs @ 3.11 fps)

Summary for Pond D10: DMH #10

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 3.94" for 25YR event
Inflow = 0.88 cfs @ 12.09 hrs, Volume= 2,794 cf
Outflow = 0.88 cfs @ 12.09 hrs, Volume= 2,794 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.88 cfs @ 12.09 hrs, Volume= 2,794 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.91' @ 12.09 hrs
Flood Elev= 206.49'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.33'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 203.33' / 203.25' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.86 cfs @ 12.09 hrs HW=203.91' TW=197.78' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.86 cfs @ 2.65 fps)

Summary for Pond D11: DMH #11

Inflow Area = 36,689 sf, 73.28% Impervious, Inflow Depth > 4.77" for 25YR event
Inflow = 4.32 cfs @ 12.09 hrs, Volume= 14,592 cf
Outflow = 4.32 cfs @ 12.09 hrs, Volume= 14,592 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.32 cfs @ 12.09 hrs, Volume= 14,592 cf
Routed to Pond OCS3 : OCS#3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 205.64' @ 12.12 hrs
Flood Elev= 208.33'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.25'	**18.0" Round Culvert** L= 44.6' Ke= 0.500 Inlet / Outlet Invert= 204.25' / 204.03' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.27 cfs @ 12.09 hrs HW=205.58' TW=205.19' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 4.27 cfs @ 3.42 fps)

Summary for Pond D12: DMH #12

Inflow Area = 22,113 sf, 88.07% Impervious, Inflow Depth > 5.43" for 25YR event
Inflow = 2.92 cfs @ 12.09 hrs, Volume= 10,012 cf
Outflow = 2.92 cfs @ 12.09 hrs, Volume= 10,012 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.92 cfs @ 12.09 hrs, Volume= 10,012 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.60' @ 12.09 hrs
Flood Elev= 207.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.21'	**12.0" Round Culvert** L= 41.9' Ke= 0.500 Inlet / Outlet Invert= 203.21' / 203.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.79 cfs @ 12.09 hrs HW=204.55' TW=203.56' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.79 cfs @ 3.55 fps)

Summary for Pond D13: DMH #13

Inflow Area = 81,632 sf, 72.61% Impervious, Inflow Depth > 5.06" for 25YR event
Inflow = 9.39 cfs @ 12.09 hrs, Volume= 34,406 cf
Outflow = 9.39 cfs @ 12.09 hrs, Volume= 34,406 cf, Atten= 0%, Lag= 0.0 min
Primary = 9.39 cfs @ 12.09 hrs, Volume= 34,406 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.59' @ 12.09 hrs
Flood Elev= 208.12'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.95'	**24.0" Round Culvert** L= 60.1' Ke= 0.500 Inlet / Outlet Invert= 201.95' / 201.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=9.26 cfs @ 12.09 hrs HW=203.58' TW=197.80' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 9.26 cfs @ 4.61 fps)

Summary for Pond D14: DMH #14

Inflow Area = 38,112 sf, 77.40% Impervious, Inflow Depth > 5.49" for 25YR event
Inflow = 5.06 cfs @ 12.09 hrs, Volume= 17,421 cf
Outflow = 5.06 cfs @ 12.09 hrs, Volume= 17,421 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.06 cfs @ 12.09 hrs, Volume= 17,421 cf
Routed to Pond d13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.34' @ 12.09 hrs
Flood Elev= 208.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.13'	**18.0" Round Culvert** L= 256.3' Ke= 0.500 Inlet / Outlet Invert= 204.13' / 202.85' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.93 cfs @ 12.09 hrs HW=205.32' TW=203.56' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 4.93 cfs @ 4.51 fps)

Summary for Pond D16: DMH #16

Inflow Area = 16,417 sf, 76.69% Impervious, Inflow Depth > 5.52" for 25YR event
Inflow = 2.20 cfs @ 12.09 hrs, Volume= 7,558 cf
Outflow = 2.20 cfs @ 12.09 hrs, Volume= 7,558 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.20 cfs @ 12.09 hrs, Volume= 7,558 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.84' @ 12.09 hrs
Flood Elev= 208.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.90'	**15.0" Round Culvert** L= 103.5' Ke= 0.500 Inlet / Outlet Invert= 204.90' / 204.38' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.14 cfs @ 12.09 hrs HW=205.82' TW=205.32' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 2.14 cfs @ 3.08 fps)

Summary for Pond D17: DMH #17

Inflow Area = 14,946 sf, 75.26% Impervious, Inflow Depth > 5.47" for 25YR event
Inflow = 1.98 cfs @ 12.09 hrs, Volume= 6,816 cf
Outflow = 1.98 cfs @ 12.09 hrs, Volume= 6,816 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.98 cfs @ 12.09 hrs, Volume= 6,816 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.33' @ 12.09 hrs
Flood Elev= 204.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.55'	**12.0" Round Culvert** L= 91.6' Ke= 0.500 Inlet / Outlet Invert= 200.55' / 197.69' S= 0.0312 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.93 cfs @ 12.09 hrs HW=201.32' TW=198.41' (Dynamic Tailwater)
└—**1=Culvert** (Inlet Controls 1.93 cfs @ 2.98 fps)

Summary for Pond D18: DMH #18

Inflow Area = 25,318 sf, 65.46% Impervious, Inflow Depth > 5.24" for 25YR event
Inflow = 3.27 cfs @ 12.09 hrs, Volume= 11,053 cf
Outflow = 3.27 cfs @ 12.09 hrs, Volume= 11,053 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.27 cfs @ 12.09 hrs, Volume= 11,053 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.43' @ 12.09 hrs
Flood Elev= 201.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.44'	**15.0" Round Culvert** L= 46.3' Ke= 0.500 Inlet / Outlet Invert= 197.44' / 196.98' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.19 cfs @ 12.09 hrs HW=198.41' TW=196.32' (Dynamic Tailwater)
└—**1=Culvert** (Barrel Controls 3.19 cfs @ 4.29 fps)

Summary for Pond D19: DMH #19

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 2.34 cfs @ 12.09 hrs, Volume= 8,105 cf
Outflow = 2.34 cfs @ 12.09 hrs, Volume= 8,105 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.34 cfs @ 12.09 hrs, Volume= 8,105 cf
Routed to Pond d20 : DMH #20

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.09' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.19'	**12.0" Round Culvert** L= 82.5' Ke= 0.500 Inlet / Outlet Invert= 205.19' / 204.43' S= 0.0092 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.28 cfs @ 12.09 hrs HW=206.07' TW=205.11' (Dynamic Tailwater)
└—**1=Culvert** (Outlet Controls 2.28 cfs @ 4.14 fps)

Summary for Pond D2: DMH#2

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 3.54" for 25YR event
Inflow = 5.38 cfs @ 12.14 hrs, Volume= 21,579 cf
Outflow = 5.38 cfs @ 12.14 hrs, Volume= 21,579 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.38 cfs @ 12.14 hrs, Volume= 21,579 cf
Routed to Pond P205 : INFILTRATION POND #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.37' @ 12.14 hrs
Flood Elev= 212.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**15.0" Round Culvert** L= 38.2' Ke= 0.500 Inlet / Outlet Invert= 206.90' / 206.52' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.33 cfs @ 12.14 hrs HW=208.36' TW=206.33' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 5.33 cfs @ 4.68 fps)

Summary for Pond D20: DMH #20

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 5.58" for 25YR event
Inflow = 2.34 cfs @ 12.09 hrs, Volume= 8,105 cf
Outflow = 2.34 cfs @ 12.09 hrs, Volume= 8,105 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.34 cfs @ 12.09 hrs, Volume= 8,105 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.13' @ 12.09 hrs
Flood Elev= 207.68'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**15.0" Round Culvert** L= 63.5' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 203.87' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.28 cfs @ 12.09 hrs HW=205.11' TW=204.63' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 2.28 cfs @ 3.28 fps)

Summary for Pond D21: DMH #21

Inflow Area = 71,317 sf, 79.77% Impervious, Inflow Depth > 5.47" for 25YR event
Inflow = 9.46 cfs @ 12.09 hrs, Volume= 32,518 cf
Outflow = 9.46 cfs @ 12.09 hrs, Volume= 32,518 cf, Atten= 0%, Lag= 0.0 min
Primary = 9.46 cfs @ 12.09 hrs, Volume= 32,518 cf
Routed to Pond p212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.66' @ 12.09 hrs
Flood Elev= 207.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.02'	**24.0" Round Culvert** L= 72.4' Ke= 0.500 Inlet / Outlet Invert= 203.02' / 202.66' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=9.21 cfs @ 12.09 hrs HW=204.63' TW=202.18' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 9.21 cfs @ 4.64 fps)

Summary for Pond D22: DMH #22

Inflow Area = 24,814 sf, 89.39% Impervious, Inflow Depth > 5.74" for 25YR event
Inflow = 3.37 cfs @ 12.09 hrs, Volume= 11,876 cf
Outflow = 3.37 cfs @ 12.09 hrs, Volume= 11,876 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.37 cfs @ 12.09 hrs, Volume= 11,876 cf
Routed to Pond d21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.89' @ 12.09 hrs
Flood Elev= 208.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.87'	**15.0" Round Culvert** L= 134.2' Ke= 0.500 Inlet / Outlet Invert= 204.87' / 203.92' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.28 cfs @ 12.09 hrs HW=205.87' TW=204.63' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 3.28 cfs @ 4.28 fps)

Summary for Pond D23: DMH #23

Inflow Area = 10,771 sf, 99.27% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 1.49 cfs @ 12.09 hrs, Volume= 5,429 cf
Outflow = 1.49 cfs @ 12.09 hrs, Volume= 5,429 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.49 cfs @ 12.09 hrs, Volume= 5,429 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.31' @ 12.09 hrs
Flood Elev= 210.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**15.0" Round Culvert** L= 173.3' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 204.97' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.45 cfs @ 12.09 hrs HW=207.30' TW=205.87' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.45 cfs @ 3.63 fps)

Summary for Pond D25: DMH #25

Inflow Area = 36,995 sf, 87.96% Impervious, Inflow Depth > 5.55" for 25YR event
Inflow = 4.84 cfs @ 12.09 hrs, Volume= 17,114 cf
Outflow = 4.84 cfs @ 12.09 hrs, Volume= 17,114 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.84 cfs @ 12.09 hrs, Volume= 17,114 cf
Routed to Pond P210 : POCKET WETLAND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.76' @ 12.09 hrs
Flood Elev= 213.11'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.36'	**15.0" Round Culvert** L= 237.6' Ke= 0.500 Inlet / Outlet Invert= 209.36' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.72 cfs @ 12.09 hrs HW=210.73' TW=203.34' (Dynamic Tailwater)
1=Culvert (Barrel Controls 4.72 cfs @ 4.38 fps)

Summary for Pond D27: DMH #27

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 5.20" for 25YR event
Inflow = 2.73 cfs @ 12.09 hrs, Volume= 9,429 cf
Outflow = 2.73 cfs @ 12.09 hrs, Volume= 9,429 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.73 cfs @ 12.09 hrs, Volume= 9,429 cf
Routed to Pond D35 : DMH #35

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.18' @ 12.09 hrs
Flood Elev= 217.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.34'	**15.0" Round Culvert** L= 63.9' Ke= 0.500 Inlet / Outlet Invert= 213.34' / 212.38' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.66 cfs @ 12.09 hrs HW=214.17' TW=213.11' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.66 cfs @ 3.09 fps)

Summary for Pond D28: DMH #28

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 4.51" for 25YR event
Inflow = 1.38 cfs @ 12.09 hrs, Volume= 4,491 cf
Outflow = 1.38 cfs @ 12.09 hrs, Volume= 4,491 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.38 cfs @ 12.09 hrs, Volume= 4,491 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 218.08' @ 12.09 hrs
Flood Elev= 220.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	217.46'	**12.0" Round Culvert** L= 158.3' Ke= 0.500 Inlet / Outlet Invert= 217.46' / 214.29' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.35 cfs @ 12.09 hrs HW=218.07' TW=214.17' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.35 cfs @ 2.67 fps)

Summary for Pond D29: DMH #29

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 4.51" for 25YR event
Inflow = 1.38 cfs @ 12.09 hrs, Volume= 4,491 cf
Outflow = 1.38 cfs @ 12.09 hrs, Volume= 4,491 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.38 cfs @ 12.09 hrs, Volume= 4,491 cf
Routed to Pond D28 : DMH #28

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.45' @ 12.09 hrs
Flood Elev= 223.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	219.83'	**12.0" Round Culvert** L= 150.9' Ke= 0.500 Inlet / Outlet Invert= 219.83' / 217.55' S= 0.0151 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.35 cfs @ 12.09 hrs HW=220.44' TW=218.07' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.35 cfs @ 2.67 fps)

Summary for Pond D30: DMH #30

Inflow Area = 6,862 sf, 50.73% Impervious, Inflow Depth > 4.04" for 25YR event
Inflow = 0.73 cfs @ 12.09 hrs, Volume= 2,311 cf
Outflow = 0.73 cfs @ 12.09 hrs, Volume= 2,311 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.73 cfs @ 12.09 hrs, Volume= 2,311 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.43' @ 12.09 hrs
Flood Elev= 224.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.92'	**12.0" Round Culvert** L= 184.2' Ke= 0.500 Inlet / Outlet Invert= 220.92' / 220.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.71 cfs @ 12.09 hrs HW=221.42' TW=220.44' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.71 cfs @ 2.64 fps)

Summary for Pond D31: DMH#31

Inflow Area = 63,140 sf, 28.73% Impervious, Inflow Depth > 3.17" for 25YR event
Inflow = 4.31 cfs @ 12.16 hrs, Volume= 16,701 cf
Outflow = 4.31 cfs @ 12.16 hrs, Volume= 16,701 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.31 cfs @ 12.16 hrs, Volume= 16,701 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 225.78' @ 12.16 hrs
Flood Elev= 229.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.63'	**15.0" Round Culvert** L= 288.5' Ke= 0.500 Inlet / Outlet Invert= 224.63' / 213.09' S= 0.0400 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.25 cfs @ 12.16 hrs HW=225.77' TW=211.76' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 4.25 cfs @ 3.63 fps)

Summary for Pond D34: DMH #34

Inflow Area = 23,255 sf,100.00% Impervious, Inflow Depth > 6.05" for 25YR event
Inflow = 3.21 cfs @ 12.09 hrs, Volume= 11,720 cf
Outflow = 3.21 cfs @ 12.09 hrs, Volume= 11,720 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.21 cfs @ 12.09 hrs, Volume= 11,720 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 199.29' @ 12.09 hrs
Flood Elev= 202.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	198.07'	**12.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 198.07' / 197.03' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.13 cfs @ 12.09 hrs HW=199.25' TW=196.32' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 3.13 cfs @ 3.98 fps)

Summary for Pond D35: DMH #35

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 5.20" for 25YR event
Inflow = 2.73 cfs @ 12.09 hrs, Volume= 9,429 cf
Outflow = 2.73 cfs @ 12.09 hrs, Volume= 9,429 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.73 cfs @ 12.09 hrs, Volume= 9,429 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 213.12' @ 12.09 hrs
Flood Elev= 215.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.28'	**15.0" Round Culvert** L= 171.5' Ke= 0.500 Inlet / Outlet Invert= 212.28' / 209.71' S= 0.0150 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=2.66 cfs @ 12.09 hrs HW=213.11' TW=210.73' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.66 cfs @ 3.09 fps)

Summary for Pond D4: DMH#4

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 3.54" for 25YR event
Inflow = 5.38 cfs @ 12.14 hrs, Volume= 21,579 cf
Outflow = 5.38 cfs @ 12.14 hrs, Volume= 21,579 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.38 cfs @ 12.14 hrs, Volume= 21,579 cf
Routed to Pond D2 : DMH#2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 211.79' @ 12.14 hrs
Flood Elev= 217.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.34'	**15.0" Round Culvert** L= 222.3' Ke= 0.500 Inlet / Outlet Invert= 210.34' / 207.01' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.33 cfs @ 12.14 hrs HW=211.78' TW=208.36' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 5.33 cfs @ 4.34 fps)

Summary for Pond D5: DMH #5

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 5.98" for 25YR event
Inflow = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf
Outflow = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf
Routed to Pond D6 : DMH #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.26' @ 12.09 hrs
Flood Elev= 212.97'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.09'	**18.0" Round Culvert** L= 183.0' Ke= 0.500 Inlet / Outlet Invert= 209.09' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.08 cfs @ 12.09 hrs HW=210.24' TW=209.17' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 4.08 cfs @ 3.90 fps)

Summary for Pond D6: DMH #6

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 5.98" for 25YR event
Inflow = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf
Outflow = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf
Routed to Pond D7 : DMH #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 209.19' @ 12.09 hrs
Flood Elev= 214.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	208.07'	**18.0" Round Culvert** L= 299.7' Ke= 0.500 Inlet / Outlet Invert= 208.07' / 206.57' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.08 cfs @ 12.09 hrs HW=209.17' TW=207.44' (Dynamic Tailwater)
1=Culvert (Outlet Controls 4.08 cfs @ 4.11 fps)

Summary for Pond D7: DMH #7

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 5.98" for 25YR event
Inflow = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf
Outflow = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.20 cfs @ 12.09 hrs, Volume= 15,182 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.46' @ 12.09 hrs
Flood Elev= 213.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 44.2' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 204.04' S= 0.0550 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.08 cfs @ 12.09 hrs HW=207.44' TW=202.18' (Dynamic Tailwater)
1=Culvert (Inlet Controls 4.08 cfs @ 3.36 fps)

Summary for Pond D8: DMH #8

Inflow Area = 18,765 sf, 91.12% Impervious, Inflow Depth > 5.53" for 25YR event
Inflow = 2.49 cfs @ 12.09 hrs, Volume= 8,641 cf
Outflow = 2.49 cfs @ 12.09 hrs, Volume= 8,641 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.49 cfs @ 12.09 hrs, Volume= 8,641 cf
Routed to Pond D9 : DMH #9

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 201.79' @ 12.09 hrs
Flood Elev= 204.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.57'	**12.0" Round Culvert** L= 87.7' Ke= 0.500 Inlet / Outlet Invert= 200.57' / 200.13' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.43 cfs @ 12.09 hrs HW=201.76' TW=201.14' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 2.43 cfs @ 3.30 fps)

Summary for Pond D9: DMH #9

Inflow Area = 18,765 sf, 91.12% Impervious, Inflow Depth > 5.53" for 25YR event
Inflow = 2.49 cfs @ 12.09 hrs, Volume= 8,641 cf
Outflow = 2.49 cfs @ 12.09 hrs, Volume= 8,641 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.49 cfs @ 12.09 hrs, Volume= 8,641 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.16' @ 12.09 hrs
Flood Elev= 204.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.03'	**12.0" Round Culvert** L= 11.9' Ke= 0.500 Inlet / Outlet Invert= 200.03' / 199.97' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.43 cfs @ 12.09 hrs HW=201.14' TW=197.77' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.43 cfs @ 3.48 fps)

Summary for Pond DE61: DRIP #61

Inflow Area = 4,247 sf, 92.68% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.58 cfs @ 12.09 hrs, Volume= 2,057 cf
Outflow = 0.48 cfs @ 12.14 hrs, Volume= 1,911 cf, Atten= 17%, Lag= 3.4 min
Discarded = 0.00 cfs @ 4.10 hrs, Volume= 203 cf
Primary = 0.48 cfs @ 12.14 hrs, Volume= 1,708 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.33' @ 12.14 hrs Surf.Area= 665 sf Storage= 303 cf

Plug-Flow detention time= 69.7 min calculated for 1,907 cf (93% of inflow)
Center-of-Mass det. time= 31.8 min (788.6 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.10 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.48 cfs @ 12.14 hrs HW=213.33' TW=208.06' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.48 cfs @ 2.49 fps)

Summary for Pond DE62: DRIP #62

Inflow Area = 4,247 sf, 92.68% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.58 cfs @ 12.09 hrs, Volume= 2,057 cf
Outflow = 0.48 cfs @ 12.14 hrs, Volume= 1,911 cf, Atten= 17%, Lag= 3.4 min
Discarded = 0.00 cfs @ 4.10 hrs, Volume= 203 cf
Primary = 0.48 cfs @ 12.14 hrs, Volume= 1,708 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.33' @ 12.14 hrs Surf.Area= 665 sf Storage= 303 cf

Plug-Flow detention time= 69.7 min calculated for 1,907 cf (93% of inflow)
Center-of-Mass det. time= 31.8 min (788.6 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00
			Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500
			Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.10 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.48 cfs @ 12.14 hrs HW=213.33' TW=208.06' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.48 cfs @ 2.49 fps)

Summary for Pond DE63: DRIP #63

Inflow Area = 3,013 sf, 88.68% Impervious, Inflow Depth > 5.70" for 25YR event
Inflow = 0.41 cfs @ 12.09 hrs, Volume= 1,430 cf
Outflow = 0.37 cfs @ 12.12 hrs, Volume= 1,342 cf, Atten= 8%, Lag= 2.2 min
Discarded = 0.00 cfs @ 4.30 hrs, Volume= 121 cf
Primary = 0.37 cfs @ 12.12 hrs, Volume= 1,221 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.01' @ 12.12 hrs Surf.Area= 404 sf Storage= 164 cf

Plug-Flow detention time= 60.7 min calculated for 1,342 cf (94% of inflow)
Center-of-Mass det. time= 26.6 min (788.7 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	404	0.0	0	0
207.00	404	40.0	2	2
208.99	404	40.0	322	323
209.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00
			Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500
			Inlet / Outlet Invert= 207.50' / 207.45' S= 0.0050 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.30 hrs HW=207.01' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.36 cfs @ 12.12 hrs HW=208.00' TW=202.10' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Barrel Controls 0.36 cfs @ 2.31 fps)

Summary for Pond DE64: DRIP #64

Inflow Area = 3,470 sf, 91.59% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.47 cfs @ 12.09 hrs, Volume= 1,681 cf
Outflow = 0.42 cfs @ 12.13 hrs, Volume= 1,578 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 3.80 hrs, Volume= 144 cf
Primary = 0.42 cfs @ 12.13 hrs, Volume= 1,433 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.06' @ 12.13 hrs Surf.Area= 470 sf Storage= 201 cf

Plug-Flow detention time= 62.4 min calculated for 1,578 cf (94% of inflow)
Center-of-Mass det. time= 28.2 min (785.0 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	204.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.99	470	0.0	0	0
205.00	470	40.0	2	2
206.99	470	40.0	374	376
207.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	205.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 205.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	204.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 3.80 hrs HW=205.01' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.41 cfs @ 12.13 hrs HW=206.05' TW=202.10' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Barrel Controls 0.41 cfs @ 2.39 fps)

Summary for Pond DE65: DRIP #65

Inflow Area = 3,016 sf, 88.69% Impervious, Inflow Depth > 5.70" for 25YR event
Inflow = 0.41 cfs @ 12.09 hrs, Volume= 1,432 cf
Outflow = 0.37 cfs @ 12.12 hrs, Volume= 1,343 cf, Atten= 8%, Lag= 2.2 min
Discarded = 0.00 cfs @ 4.30 hrs, Volume= 121 cf
Primary = 0.37 cfs @ 12.12 hrs, Volume= 1,222 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.01' @ 12.12 hrs Surf.Area= 404 sf Storage= 165 cf

Plug-Flow detention time= 60.7 min calculated for 1,343 cf (94% of inflow)
Center-of-Mass det. time= 26.6 min (788.7 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1	205.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.99	404	0.0	0	0
206.00	404	40.0	2	2
207.99	404	40.0	322	323
208.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	207.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.50' / 206.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.30 hrs HW=206.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.36 cfs @ 12.12 hrs HW=207.00' TW=202.10' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.36 cfs @ 2.31 fps)

Summary for Pond DE66: DRIP #66

Inflow Area = 3,407 sf, 91.46% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.47 cfs @ 12.09 hrs, Volume= 1,650 cf
Outflow = 0.42 cfs @ 12.13 hrs, Volume= 1,547 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 3.15 hrs, Volume= 144 cf
Primary = 0.41 cfs @ 12.13 hrs, Volume= 1,403 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 208.85' @ 12.13 hrs Surf.Area= 470 sf Storage= 199 cf

Plug-Flow detention time= 62.6 min calculated for 1,544 cf (94% of inflow)
Center-of-Mass det. time= 28.5 min (785.2 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	207.79'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.79	470	0.0	0	0
207.80	470	40.0	2	2
209.79	470	40.0	374	376
209.80	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.70'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.30'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.30' / 208.25' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.79'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 3.15 hrs HW=207.80' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.41 cfs @ 12.13 hrs HW=208.84' TW=202.10' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.41 cfs @ 2.38 fps)

Summary for Pond DE67: DRIP #67

Inflow Area = 3,481 sf, 91.61% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.48 cfs @ 12.09 hrs, Volume= 1,686 cf
Outflow = 0.42 cfs @ 12.13 hrs, Volume= 1,583 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 3.80 hrs, Volume= 144 cf
Primary = 0.42 cfs @ 12.13 hrs, Volume= 1,439 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 209.06' @ 12.13 hrs Surf.Area= 470 sf Storage= 201 cf

Plug-Flow detention time= 61.7 min calculated for 1,580 cf (94% of inflow)
Center-of-Mass det. time= 28.2 min (784.9 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	470	0.0	0	0
208.00	470	40.0	2	2
209.99	470	40.0	374	376
210.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 208.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 3.80 hrs HW=208.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.41 cfs @ 12.13 hrs HW=209.05' TW=208.05' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.41 cfs @ 2.39 fps)

Summary for Pond DE68: DRIP #68

Inflow Area = 4,212 sf, 92.62% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.58 cfs @ 12.09 hrs, Volume= 2,040 cf
Outflow = 0.49 cfs @ 12.14 hrs, Volume= 1,897 cf, Atten= 14%, Lag= 3.1 min
Discarded = 0.00 cfs @ 4.15 hrs, Volume= 203 cf
Primary = 0.49 cfs @ 12.14 hrs, Volume= 1,694 cf
Routed to Pond OCS4 : OCS#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.02' @ 12.14 hrs Surf.Area= 665 sf Storage= 274 cf

Plug-Flow detention time= 68.3 min calculated for 1,897 cf (93% of inflow)
Center-of-Mass det. time= 30.2 min (787.0 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	665	0.0	0	0
207.00	665	40.0	3	3
208.99	665	40.0	529	532
209.00	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 207.50' / 206.00' S= 0.0750 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.15 hrs HW=207.01' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.49 cfs @ 12.14 hrs HW=208.01' TW=204.88' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Inlet Controls 0.49 cfs @ 2.47 fps)

Summary for Pond DE69: DRIP #69

Inflow Area = 3,480 sf, 91.61% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.48 cfs @ 12.09 hrs, Volume= 1,686 cf
Outflow = 0.42 cfs @ 12.13 hrs, Volume= 1,582 cf, Atten= 11%, Lag= 2.5 min
Discarded = 0.00 cfs @ 3.80 hrs, Volume= 144 cf
Primary = 0.42 cfs @ 12.13 hrs, Volume= 1,438 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.56' @ 12.13 hrs Surf.Area= 470 sf Storage= 201 cf

Plug-Flow detention time= 62.2 min calculated for 1,582 cf (94% of inflow)
Center-of-Mass det. time= 28.2 min (784.9 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	205.49'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.49	470	0.0	0	0
205.50	470	40.0	2	2
207.49	470	40.0	374	376
207.50	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.00' / 205.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 3.80 hrs HW=205.51' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.41 cfs @ 12.13 hrs HW=206.55' TW=202.43' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.41 cfs @ 2.39 fps)

Summary for Pond DE70: DRIP #70

Inflow Area =	3,476 sf, 91.60% Impervious,	Inflow Depth > 5.81" for 25YR event		
Inflow =	0.48 cfs @	12.09 hrs, Volume=	1,684 cf	
Outflow =	0.42 cfs @	12.13 hrs, Volume=	1,581 cf,	Atten= 11%, Lag= 2.5 min
Discarded =	0.00 cfs @	3.15 hrs, Volume=	144 cf	
Primary =	0.42 cfs @	12.13 hrs, Volume=	1,436 cf	

Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.96' @ 12.13 hrs Surf.Area= 470 sf Storage= 201 cf

Plug-Flow detention time= 61.8 min calculated for 1,577 cf (94% of inflow)
Center-of-Mass det. time= 28.2 min (785.0 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	205.89'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.89	470	0.0	0	0
205.90	470	40.0	2	2
207.89	470	40.0	374	376
207.90	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.80'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.40'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.40' / 206.35' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.89'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 3.15 hrs HW=205.90' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.41 cfs @ 12.13 hrs HW=206.95' TW=202.43' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.41 cfs @ 2.39 fps)

Summary for Pond DE71: DRIP #71

Inflow Area = 4,210 sf, 92.61% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.58 cfs @ 12.09 hrs, Volume= 2,039 cf
Outflow = 0.48 cfs @ 12.14 hrs, Volume= 1,893 cf, Atten= 17%, Lag= 3.4 min
Discarded = 0.00 cfs @ 4.50 hrs, Volume= 203 cf
Primary = 0.48 cfs @ 12.14 hrs, Volume= 1,690 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.62' @ 12.14 hrs Surf.Area= 665 sf Storage= 302 cf

Plug-Flow detention time= 70.6 min calculated for 1,893 cf (93% of inflow)
Center-of-Mass det. time= 32.0 min (788.7 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	206.49'	805 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.49	665	0.0	0	0
206.50	665	40.0	3	3
209.49	665	40.0	795	798
209.50	665	100.0	7	805

Device	Routing	Invert	Outlet Devices
#1	Primary	209.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 207.00' / 206.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 4.50 hrs HW=206.52' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.47 cfs @ 12.14 hrs HW=207.62' TW=202.51' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.47 cfs @ 2.48 fps)

Summary for Pond DECH: DRIP #CH

Inflow Area = 6,262 sf, 92.70% Impervious, Inflow Depth > 5.81" for 25YR event
Inflow = 0.86 cfs @ 12.09 hrs, Volume= 3,033 cf
Outflow = 0.45 cfs @ 12.27 hrs, Volume= 3,033 cf, Atten= 47%, Lag= 11.3 min
Discarded = 0.04 cfs @ 10.10 hrs, Volume= 1,659 cf
Primary = 0.42 cfs @ 12.27 hrs, Volume= 1,373 cf
Routed to Pond CB18 : CB #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 209.99' @ 12.22 hrs Surf.Area= 636 sf Storage= 508 cf

Plug-Flow detention time= 21.3 min calculated for 3,026 cf (100% of inflow)
Center-of-Mass det. time= 21.1 min (777.9 - 756.8)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	770 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	636	0.0	0	0
208.00	636	40.0	3	3
210.99	636	40.0	761	763
211.00	636	100.0	6	770

Device	Routing	Invert	Outlet Devices
#1	Primary	210.90'	**160.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**4.0" Round Culvert** L= 80.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 205.10' S= 0.0425 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#3	Discarded	207.99'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.04 cfs @ 10.10 hrs HW=208.02' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.42 cfs @ 12.27 hrs HW=209.95' TW=205.55' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Outlet Controls 0.42 cfs @ 4.78 fps)

Summary for Pond DMH32: DMH #32

Inflow Area = 20,278 sf, 79.11% Impervious, Inflow Depth > 5.50" for 25YR event
Inflow = 2.71 cfs @ 12.09 hrs, Volume= 9,286 cf
Outflow = 2.71 cfs @ 12.09 hrs, Volume= 9,286 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.71 cfs @ 12.09 hrs, Volume= 9,286 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.60' @ 12.09 hrs
Flood Elev= 206.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.59'	**12.0" Round Culvert** L= 19.2' Ke= 0.500 Inlet / Outlet Invert= 202.59' / 201.57' S= 0.0531 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.64 cfs @ 12.09 hrs HW=203.57' TW=202.18' (Dynamic Tailwater)
└—**1=Culvert** (Inlet Controls 2.64 cfs @ 3.38 fps)

Summary for Pond OCS1: OCS#1

Inflow Area = 48,573 sf, 81.99% Impervious, Inflow Depth > 5.63" for 25YR event
Inflow = 6.49 cfs @ 12.09 hrs, Volume= 22,774 cf
Outflow = 6.49 cfs @ 12.09 hrs, Volume= 22,774 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.49 cfs @ 12.09 hrs, Volume= 22,774 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 196.41' @ 12.16 hrs
Flood Elev= 201.48'

Device	Routing	Invert	Outlet Devices
#1	Primary	195.00'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=6.35 cfs @ 12.09 hrs HW=196.32' TW=195.96' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 6.35 cfs @ 2.89 fps)

Summary for Pond OCS3: OCS#3

Inflow Area = 54,250 sf, 81.93% Impervious, Inflow Depth > 5.19" for 25YR event
Inflow = 6.75 cfs @ 12.09 hrs, Volume= 23,442 cf
Outflow = 6.75 cfs @ 12.09 hrs, Volume= 23,442 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.75 cfs @ 12.09 hrs, Volume= 23,442 cf
Routed to Pond p204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.31' @ 12.15 hrs
Flood Elev= 209.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=6.59 cfs @ 12.09 hrs HW=205.18' TW=204.58' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 6.59 cfs @ 3.73 fps)

Summary for Pond OCS4: OCS#4

Inflow Area = 17,972 sf, 28.85% Impervious, Inflow Depth > 3.83" for 25YR event
Inflow = 1.75 cfs @ 12.10 hrs, Volume= 5,738 cf
Outflow = 1.75 cfs @ 12.10 hrs, Volume= 5,738 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.75 cfs @ 12.10 hrs, Volume= 5,738 cf
Routed to Pond P204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.10' @ 12.26 hrs
Flood Elev= 208.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.75 cfs @ 12.10 hrs HW=204.69' TW=204.64' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.75 cfs @ 0.99 fps)

Summary for Pond OCS6: OCS #6

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 5.89" for 25YR event
Inflow = 2.21 cfs @ 12.09 hrs, Volume= 7,907 cf
Outflow = 2.21 cfs @ 12.09 hrs, Volume= 7,907 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.21 cfs @ 12.09 hrs, Volume= 7,907 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.36' @ 12.95 hrs
Flood Elev= 206.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.20'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.15 cfs @ 12.09 hrs HW=202.51' TW=202.19' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 2.15 cfs @ 2.74 fps)

Summary for Pond OCS7: OCS #7

Inflow Area = 15,875 sf, 92.67% Impervious, Inflow Depth > 5.85" for 25YR event
Inflow = 2.17 cfs @ 12.09 hrs, Volume= 7,735 cf
Outflow = 2.17 cfs @ 12.09 hrs, Volume= 7,735 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.17 cfs @ 12.09 hrs, Volume= 7,735 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.36' @ 12.95 hrs
Flood Elev= 206.47'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.78'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.21 cfs @ 12.09 hrs HW=202.62' TW=202.19' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 2.21 cfs @ 3.13 fps)

Summary for Pond P204: STORMTECH INFILTRATION SYSTEM #1

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth > 4.85" for 25YR event
Inflow = 8.49 cfs @ 12.09 hrs, Volume= 29,181 cf
Outflow = 4.39 cfs @ 12.27 hrs, Volume= 26,780 cf, Atten= 48%, Lag= 10.5 min
Discarded = 0.09 cfs @ 8.30 hrs, Volume= 6,064 cf
Primary = 4.31 cfs @ 12.27 hrs, Volume= 20,716 cf
Routed to Reach 20r : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 205.09' @ 12.27 hrs Surf.Area= 5,670 sf Storage= 9,827 cf
Flood Elev= 208.75' Surf.Area= 5,670 sf Storage= 13,379 cf

Plug-Flow detention time= 96.7 min calculated for 26,780 cf (92% of inflow)
Center-of-Mass det. time= 55.0 min (828.7 - 773.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	202.50'	5,923 cf	**77.50'W x 67.70'L x 4.08'H STORMTECH SC-740** 21,423 cf Overall - 6,615 cf Embedded = 14,808 cf x 40.0% Voids
#2A	203.08'	6,615 cf	**ADS_StormTech SC-740 +Cap** x 144 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 144 Chambers in 16 Rows
#3B	202.50'	427 cf	**6.25'W x 67.70'L x 3.50'H ISOLATOR ROW** 1,481 cf Overall - 413 cf Embedded = 1,067 cf x 40.0% Voids
#4B	203.00'	413 cf	**ADS_StormTech SC-740 +Cap** x 9 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		13,379 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.75'	**15.0" Round Culvert** L= 35.0' Ke= 0.500 Inlet / Outlet Invert= 202.75' / 201.00' S= 0.0500 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	204.75'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#3	Device 1	203.25'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Discarded	202.50'	**0.660 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.09 cfs @ 8.30 hrs HW=202.56' (Free Discharge)
└─**4=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=4.25 cfs @ 12.27 hrs HW=205.08' TW=200.12' (Dynamic Tailwater)
└─**1=Culvert** (Passes 4.25 cfs of 7.72 cfs potential flow)
  ├─**2=Broad-Crested Rectangular Weir** (Weir Controls 2.20 cfs @ 1.66 fps)
  └─**3=Orifice/Grate** (Orifice Controls 2.06 cfs @ 5.89 fps)

Summary for Pond P205: INFILTRATION POND #3

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth > 3.61" for 25YR event
Inflow = 6.85 cfs @ 12.12 hrs, Volume= 26,643 cf
Outflow = 3.69 cfs @ 12.37 hrs, Volume= 22,614 cf, Atten= 46%, Lag= 14.9 min
Discarded = 0.31 cfs @ 12.37 hrs, Volume= 15,146 cf
Primary = 3.39 cfs @ 12.37 hrs, Volume= 7,468 cf
Routed to Reach 18R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.84' @ 12.37 hrs Surf.Area= 5,490 sf Storage= 8,662 cf

Plug-Flow detention time= 169.0 min calculated for 22,567 cf (85% of inflow)
Center-of-Mass det. time= 104.0 min (918.2 - 814.2)

Volume	Invert	Avail.Storage	Storage Description
#1	205.00'	15,630 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.00	3,939	0	0
206.00	4,756	4,348	4,348
207.00	5,627	5,192	9,539
208.00	6,555	6,091	15,630

Device	Routing	Invert	Outlet Devices
#1	Primary	206.65'	**15.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	205.00'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.31 cfs @ 12.37 hrs HW=206.84' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.31 cfs)

Primary OutFlow Max=3.31 cfs @ 12.37 hrs HW=206.84' TW=203.04' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 3.31 cfs @ 1.17 fps)

Summary for Pond P206: STORMTECH INFILTRATION SYSTEM #2

Inflow Area = 59,746 sf, 80.70% Impervious, Inflow Depth > 5.60" for 25YR event
Inflow = 7.97 cfs @ 12.09 hrs, Volume= 27,862 cf
Outflow = 4.16 cfs @ 12.23 hrs, Volume= 27,859 cf, Atten= 48%, Lag= 8.5 min
Discarded = 0.49 cfs @ 11.15 hrs, Volume= 21,285 cf
Primary = 3.67 cfs @ 12.23 hrs, Volume= 6,574 cf
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 196.29' @ 12.23 hrs Surf.Area= 6,072 sf Storage= 6,969 cf

Plug-Flow detention time= 60.4 min calculated for 27,801 cf (100% of inflow)
Center-of-Mass det. time= 60.2 min (822.3 - 762.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	194.67'	1,786 cf	**39.50'W x 53.46'L x 3.33'H FIELD A** 7,038 cf Overall - 2,573 cf Embedded = 4,466 cf x 40.0% Voids
#2A	195.00'	2,573 cf	**ADS_StormTech SC-740 +Cap** x 56 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 56 Chambers in 8 Rows
#3B	194.67'	3,296 cf	**58.50'W x 67.70'L x 3.33'H FIELD B** 13,201 cf Overall - 4,962 cf Embedded = 8,239 cf x 40.0% Voids
#4B	195.00'	4,962 cf	**ADS_StormTech SC-740 +Cap** x 108 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 108 Chambers in 12 Rows
		12,616 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 30.0' Ke= 0.200 Inlet / Outlet Invert= 194.65' / 194.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	195.85'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Discarded	194.67'	**3.500 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.49 cfs @ 11.15 hrs HW=194.71' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.49 cfs)

Primary OutFlow Max=3.64 cfs @ 12.23 hrs HW=196.28' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 3.64 cfs of 7.27 cfs potential flow)
  └─**2=Sharp-Crested Rectangular Weir** (Weir Controls 3.64 cfs @ 2.15 fps)

Summary for Pond P207: INFILTRATION POND #2

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth > 5.03" for 25YR event
Inflow = 15.34 cfs @ 12.09 hrs, Volume= 54,338 cf
Outflow = 2.56 cfs @ 12.61 hrs, Volume= 54,320 cf, Atten= 83%, Lag= 30.9 min
Discarded = 1.09 cfs @ 12.61 hrs, Volume= 41,530 cf
Primary = 1.47 cfs @ 12.61 hrs, Volume= 12,790 cf
Routed to Reach 10R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.50' @ 12.61 hrs Surf.Area= 12,751 sf Storage= 19,452 cf

Plug-Flow detention time= 83.2 min calculated for 54,320 cf (100% of inflow)
Center-of-Mass det. time= 83.0 min (864.6 - 781.7)

Volume	Invert	Avail.Storage	Storage Description
#1	196.80'	40,260 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.80	10,100	0	0
198.00	12,000	13,260	13,260
200.00	15,000	27,000	40,260

Device	Routing	Invert	Outlet Devices
#1	Primary	198.80'	**20.0' long x 21.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	194.75'	**15.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 194.75' / 194.55' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#3	Device 2	198.80'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads
#4	Device 2	197.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Discarded	196.80'	**3.690 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=1.09 cfs @ 12.61 hrs HW=198.50' (Free Discharge)
└─**5=Exfiltration** (Exfiltration Controls 1.09 cfs)

Primary OutFlow Max=1.47 cfs @ 12.61 hrs HW=198.50' TW=192.24' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Passes 1.47 cfs of 10.45 cfs potential flow)
  ├─**3=Orifice/Grate** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 1.47 cfs @ 4.22 fps)

Summary for Pond P210: POCKET WETLAND #1

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 4.60" for 25YR event
Inflow = 7.02 cfs @ 12.09 hrs, Volume= 23,999 cf
Outflow = 0.23 cfs @ 15.93 hrs, Volume= 9,701 cf, Atten= 97%, Lag= 230.7 min
Primary = 0.23 cfs @ 15.93 hrs, Volume= 9,701 cf
Routed to Reach 15R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Starting Elev= 201.00' Surf.Area= 376 sf Storage= 591 cf
Peak Elev= 204.35' @ 15.93 hrs Surf.Area= 8,975 sf Storage= 17,796 cf (17,205 cf above start)

Plug-Flow detention time= 463.9 min calculated for 9,091 cf (38% of inflow)
Center-of-Mass det. time= 293.9 min (1,072.7 - 778.8)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	43,190 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	218	0	0
200.00	294	256	256
201.00	376	335	591
202.00	3,991	2,184	2,775
204.00	8,073	12,064	14,839
206.00	13,272	21,345	36,184
206.50	14,753	7,006	43,190

Device	Routing	Invert	Outlet Devices
#1	Primary	205.10'	**20.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	202.25'	**12.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 202.25' / 202.03' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	202.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 2	204.50'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads

Primary OutFlow Max=0.23 cfs @ 15.93 hrs HW=204.35' TW=202.06' (Dynamic Tailwater)
—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
—**2=Culvert** (Passes 0.23 cfs of 4.26 cfs potential flow)
 —**3=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.71 fps)
 —**4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond P212: INFILTRATION POND #1

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth > 4.27" for 25YR event
Inflow = 21.45 cfs @ 12.10 hrs, Volume= 85,741 cf
Outflow = 13.03 cfs @ 12.30 hrs, Volume= 84,823 cf, Atten= 39%, Lag= 11.9 min
Discarded = 1.44 cfs @ 12.30 hrs, Volume= 64,639 cf
Primary = 11.59 cfs @ 12.30 hrs, Volume= 20,184 cf
Routed to Reach R211 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.81' @ 12.30 hrs Surf.Area= 12,157 sf Storage= 26,231 cf

Plug-Flow detention time= 127.2 min calculated for 84,823 cf (99% of inflow)
Center-of-Mass det. time= 120.4 min (902.4 - 782.1)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	41,774 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	4,354	0	0	4,354
201.00	9,360	6,699	6,699	9,368
202.00	10,993	10,166	16,865	11,040
204.00	13,976	24,909	41,774	14,126

Device	Routing	Invert	Outlet Devices
#1	Primary	202.50'	**25.0' long x 20.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	200.00'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=1.44 cfs @ 12.30 hrs HW=202.81' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 1.44 cfs)

Primary OutFlow Max=11.56 cfs @ 12.30 hrs HW=202.81' TW=200.19' (Dynamic Tailwater)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 11.56 cfs @ 1.50 fps)

Summary for Pond P213: Stormtech Infiltration System #3

Inflow Area = 31,986 sf, 93.23% Impervious, Inflow Depth > 5.87" for 25YR event
Inflow = 4.38 cfs @ 12.09 hrs, Volume= 15,642 cf
Outflow = 0.40 cfs @ 12.96 hrs, Volume= 15,641 cf, Atten= 91%, Lag= 52.3 min
Discarded = 0.39 cfs @ 11.50 hrs, Volume= 15,640 cf
Primary = 0.00 cfs @ 12.96 hrs, Volume= 1 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.36' @ 12.96 hrs Surf.Area= 3,317 sf Storage= 5,458 cf

Plug-Flow detention time= 95.9 min calculated for 15,641 cf (100% of inflow)
Center-of-Mass det. time= 95.8 min (849.1 - 753.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.95'	2,990 cf	**49.00'W x 67.70'L x 3.50'H Field A** 11,610 cf Overall - 4,135 cf Embedded = 7,475 cf x 40.0% Voids
#2A	201.45'	4,135 cf	**ADS_StormTech SC-740 +Cap** x 90 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 90 Chambers in 10 Rows
		7,125 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.30'	**12.0" Round Culvert** L= 60.0' Ke= 0.500 Inlet / Outlet Invert= 202.30' / 202.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.95'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#3	Device 1	204.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

#4	Device 1	203.35'	**6.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.39 cfs @ 11.50 hrs HW=200.99' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.39 cfs)

Primary OutFlow Max=0.00 cfs @ 12.96 hrs HW=203.36' TW=202.58' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.00 cfs of 2.35 cfs potential flow)
  ├─**3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.30 fps)

Summary for Pond P214: STORMTECH INFILTRATION SYSTEM #4

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=3)

Inflow Area = 32,665 sf, 94.81% Impervious, Inflow Depth > 5.79" for 25YR event
Inflow = 4.44 cfs @ 12.09 hrs, Volume= 15,756 cf
Outflow = 0.61 cfs @ 11.70 hrs, Volume= 15,774 cf, Atten= 86%, Lag= 0.0 min
Discarded = 0.61 cfs @ 11.70 hrs, Volume= 15,774 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach 9R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.09' @ 12.61 hrs Surf.Area= 3,201 sf Storage= 4,534 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 43.4 min (798.3 - 754.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.00'	1,851 cf	**30.00'W x 67.70'L x 3.50'H Field A** 7,108 cf Overall - 2,481 cf Embedded = 4,627 cf x 40.0% Voids
#2A	200.50'	2,481 cf	**ADS_StormTech SC-740 +Cap** x 54 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 54 Chambers in 6 Rows
#3B	200.00'	1,087 cf	**25.25'W x 46.34'L x 3.50'H Field B** 4,095 cf Overall - 1,378 cf Embedded = 2,717 cf x 40.0% Voids
#4B	200.50'	1,378 cf	**ADS_StormTech SC-740 +Cap** x 30 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 30 Chambers in 5 Rows
		6,797 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.88' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.00'	**8.280 in/hr Exfiltration over Surface area** Phase-In= 0.01'

#3	Device 1	203.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	202.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.61 cfs @ 11.70 hrs HW=200.06' (Free Discharge)
2=Exfiltration (Exfiltration Controls 0.61 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' TW=201.75' (Dynamic Tailwater)
1=Culvert (Controls 0.00 cfs)
3=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
4=Orifice/Grate (Controls 0.00 cfs)

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 9,943 sf, 92.79% Impervious, Inflow Depth > 5.70" for 25YR event
Inflow = 1.35 cfs @ 12.09 hrs, Volume= 4,720 cf
Primary = 1.35 cfs @ 12.09 hrs, Volume= 4,720 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 816,898 sf, 39.51% Impervious, Inflow Depth > 3.37" for 25YR event
Inflow = 28.46 cfs @ 12.40 hrs, Volume= 229,211 cf
Primary = 28.46 cfs @ 12.40 hrs, Volume= 229,211 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

Inflow Area = 55,420 sf, 16.57% Impervious, Inflow Depth > 3.03" for 25YR event
Inflow = 4.43 cfs @ 12.09 hrs, Volume= 14,013 cf
Primary = 4.43 cfs @ 12.09 hrs, Volume= 14,013 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT #4

Inflow Area = 1,691,659 sf, 25.34% Impervious, Inflow Depth > 2.13" for 25YR event
Inflow = 43.69 cfs @ 12.54 hrs, Volume= 300,250 cf
Primary = 43.69 cfs @ 12.54 hrs, Volume= 300,250 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentB1: MULTIFAMILYBLDG Runoff Area=23,255 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=4.64 cfs 17,082 cf

SubcatchmentB2: MULTIFAMILYBLDG Runoff Area=17,561 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=3.50 cfs 12,899 cf

SubcatchmentB3: MULTIFAMILY Runoff Area=19,981 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=3.99 cfs 14,677 cf

SubcatchmentC10: CB #10 Runoff Area=6,961 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.39 cfs 5,113 cf

SubcatchmentC11: CB #11 Runoff Area=7,173 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.43 cfs 5,269 cf

SubcatchmentC12: CB #12 Runoff Area=5,238 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.04 cfs 3,847 cf

SubcatchmentC13: CB #13 Runoff Area=10,873 sf 90.78% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=2.16 cfs 7,768 cf

SubcatchmentC14: CB #14 Runoff Area=12,099 sf 86.22% Impervious Runoff Depth>7.97"
Tc=6.0 min CN=91 Runoff=2.33 cfs 8,033 cf

SubcatchmentC15: CB #15 Runoff Area=6,666 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.33 cfs 4,896 cf

SubcatchmentC16: CB #16 Runoff Area=8,516 sf 64.88% Impervious Runoff Depth>6.50"
Tc=6.0 min CN=79 Runoff=1.43 cfs 4,611 cf

SubcatchmentC17: CB #17 Runoff Area=11,836 sf 73.87% Impervious Runoff Depth>8.09"
Tc=6.0 min CN=92 Runoff=2.30 cfs 7,978 cf

SubcatchmentC18: CB #18 Runoff Area=18,591 sf 66.35% Impervious Runoff Depth>7.85"
Tc=6.0 min CN=90 Runoff=3.56 cfs 12,155 cf

SubcatchmentC20: CB #20 Runoff Area=11,939 sf 88.95% Impervious Runoff Depth>8.45"
Tc=6.0 min CN=95 Runoff=2.36 cfs 8,409 cf

SubcatchmentC21: CB #21 Runoff Area=10,174 sf 87.04% Impervious Runoff Depth>7.85"
Tc=6.0 min CN=90 Runoff=1.95 cfs 6,652 cf

SubcatchmentC22: CB #22 Runoff Area=12,001 sf 91.62% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=2.38 cfs 8,574 cf

SubcatchmentC23: CB #23 Runoff Area=9,694 sf 61.00% Impervious Runoff Depth>7.72"
Tc=6.0 min CN=89 Runoff=1.84 cfs 6,239 cf

SubcatchmentC24: CB #24 Runoff Area=7,930 sf 72.16% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=93 Runoff=1.55 cfs 5,426 cf

SubcatchmentC25: CB #25 Runoff Area=8,487 sf 80.92% Impervious Runoff Depth>8.33"
Tc=6.0 min CN=94 Runoff=1.67 cfs 5,892 cf

SubcatchmentC26: CB #26 Runoff Area=8,835 sf 63.75% Impervious Runoff Depth>7.97"
Tc=6.0 min CN=91 Runoff=1.70 cfs 5,866 cf

SubcatchmentC27: CB #27 Runoff Area=6,111 sf 91.90% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=1.21 cfs 4,366 cf

SubcatchmentC28: CB #28 Runoff Area=10,372 sf 51.33% Impervious Runoff Depth>7.60"
Tc=6.0 min CN=88 Runoff=1.95 cfs 6,570 cf

SubcatchmentC29: CB #29 Runoff Area=8,495 sf 84.21% Impervious Runoff Depth>8.33"
Tc=6.0 min CN=94 Runoff=1.67 cfs 5,898 cf

SubcatchmentC30: CB #30 Runoff Area=8,933 sf 82.40% Impervious Runoff Depth>8.33"
Tc=6.0 min CN=94 Runoff=1.76 cfs 6,202 cf

SubcatchmentC31: CB #31 Runoff Area=16,365 sf 68.64% Impervious Runoff Depth>7.85"
Tc=6.0 min CN=90 Runoff=3.13 cfs 10,699 cf

SubcatchmentC32: CB #32 Runoff Area=12,710 sf 70.47% Impervious Runoff Depth>7.97"
Tc=6.0 min CN=91 Runoff=2.45 cfs 8,439 cf

SubcatchmentC33: CB #33 Runoff Area=5,421 sf 83.90% Impervious Runoff Depth>8.33"
Tc=6.0 min CN=94 Runoff=1.07 cfs 3,764 cf

SubcatchmentC34: CB #34 Runoff Area=8,622 sf 80.51% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=93 Runoff=1.69 cfs 5,899 cf

SubcatchmentC35: CB #35 Runoff Area=4,149 sf 98.10% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=0.83 cfs 3,048 cf

SubcatchmentC36: CB #36 Runoff Area=6,622 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.32 cfs 4,864 cf

SubcatchmentC38: CB #38 Runoff Area=7,637 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.52 cfs 5,610 cf

SubcatchmentC39: CB #39 Runoff Area=7,612 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.52 cfs 5,591 cf

SubcatchmentC40: CB #40 Runoff Area=4,211 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=0.84 cfs 3,093 cf

SubcatchmentC41: CB #41 Runoff Area=5,586 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.11 cfs 4,103 cf

SubcatchmentC43: CB #43 Runoff Area=3,109 sf 75.36% Impervious Runoff Depth>7.72"
Tc=6.0 min CN=89 Runoff=0.59 cfs 2,001 cf

SubcatchmentC44: CB #44 Runoff Area=1,978 sf 84.43% Impervious Runoff Depth>8.09"
Tc=6.0 min CN=92 Runoff=0.38 cfs 1,333 cf

SubcatchmentC45: CB #45 Runoff Area=2,465 sf 50.30% Impervious Runoff Depth>6.62"
Tc=6.0 min CN=80 Runoff=0.42 cfs 1,360 cf

SubcatchmentC46: CB #46 Runoff Area=4,397 sf 50.97% Impervious Runoff Depth>6.62"
Tc=6.0 min CN=80 Runoff=0.75 cfs 2,426 cf

SubcatchmentC47: CB #47 Runoff Area=3,012 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=0.60 cfs 2,212 cf

SubcatchmentC48: CB #48 Runoff Area=60,128 sf 25.16% Impervious Runoff Depth>5.38"
Flow Length=400' Tc=11.8 min CN=70 Runoff=7.16 cfs 26,943 cf

SubcatchmentC49: CB #49 Runoff Area=5,238 sf 84.59% Impervious Runoff Depth>8.33"
Tc=6.0 min CN=94 Runoff=1.03 cfs 3,637 cf

SubcatchmentC50: CB #50 Runoff Area=15,040 sf 77.20% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=93 Runoff=2.94 cfs 10,290 cf

SubcatchmentC51: CB #51 Runoff Area=6,823 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=1.36 cfs 5,012 cf

SubcatchmentC52: CB#52 Runoff Area=9,052 sf 87.14% Impervious Runoff Depth>8.45"
Tc=6.0 min CN=95 Runoff=1.79 cfs 6,376 cf

SubcatchmentC53: CB #53 Runoff Area=7,863 sf 86.52% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=93 Runoff=1.54 cfs 5,380 cf

SubcatchmentC54: CB #54 Runoff Area=4,821 sf 86.85% Impervious Runoff Depth>7.97"
Tc=6.0 min CN=91 Runoff=0.93 cfs 3,201 cf

SubcatchmentC7: CB #5 Runoff Area=4,650 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=0.93 cfs 3,416 cf

SubcatchmentC8: CB #8 Runoff Area=5,450 sf 88.75% Impervious Runoff Depth>8.33"
Tc=6.0 min CN=94 Runoff=1.07 cfs 3,784 cf

SubcatchmentC9: CB #9 Runoff Area=16,307 sf 93.95% Impervious Runoff Depth>8.69"
Tc=6.0 min CN=97 Runoff=3.25 cfs 11,814 cf

SubcatchmentCH1: CLUBHOUSE Runoff Area=6,262 sf 92.70% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=1.24 cfs 4,474 cf

SubcatchmentMB1: MAIL KIOSK Runoff Area=938 sf 100.00% Impervious Runoff Depth>8.81"
Tc=6.0 min CN=98 Runoff=0.19 cfs 689 cf

SubcatchmentS201: SUMMER STREET Runoff Area=9,943 sf 92.79% Impervious Runoff Depth>8.45"
Tc=6.0 min CN=95 Runoff=1.96 cfs 7,004 cf

SubcatchmentS202: EXISTING WETLAND Runoff Area=432,269 sf 42.08% Impervious Runoff Depth>6.11"
Flow Length=856' Tc=23.2 min CN=76 Runoff=44.78 cfs 219,981 cf

SubcatchmentS203: POCKET WETLAND #1 Runoff Area=25,587 sf 0.00% Impervious Runoff Depth>5.63"
Tc=6.0 min CN=72 Runoff=3.79 cfs 12,007 cf

SubcatchmentS204: EXISTING Runoff Area=308,203 sf 31.07% Impervious Runoff Depth>5.98"
Flow Length=632' Tc=22.6 min CN=75 Runoff=31.68 cfs 153,689 cf

SubcatchmentS205: ISOLATED WETLAND Runoff Area=55,420 sf 16.57% Impervious Runoff Depth>5.38"
Tc=6.0 min CN=70 Runoff=7.86 cfs 24,862 cf

SubcatchmentS206: OVERLAND FLOW Runoff Area=891,295 sf 2.91% Impervious Runoff Depth>4.73"
Flow Length=1,467' Tc=34.5 min CN=65 Runoff=60.37 cfs 351,563 cf

SubcatchmentS207: INFILTRATION POND Runoff Area=20,803 sf 0.00% Impervious Runoff Depth>7.60"
Tc=6.0 min CN=88 Runoff=3.91 cfs 13,178 cf

SubcatchmentS208: GRASS AREA Runoff Area=13,760 sf 9.33% Impervious Runoff Depth>6.00"
Tc=6.0 min CN=75 Runoff=2.16 cfs 6,883 cf

SubcatchmentS209: WETLAND C Runoff Area=107,073 sf 0.38% Impervious Runoff Depth>5.73"
Flow Length=607' Slope=0.0150 '/' Tc=28.9 min CN=73 Runoff=9.50 cfs 51,122 cf

SubcatchmentS210: INFILTRATION POND Runoff Area=75,890 sf 0.00% Impervious Runoff Depth>6.36"
Flow Length=580' Slope=0.0150 '/' Tc=16.5 min CN=78 Runoff=9.35 cfs 40,231 cf

SubcatchmentS211: S211 Runoff Area=15,436 sf 47.47% Impervious Runoff Depth>6.50"
Tc=6.0 min CN=79 Runoff=2.59 cfs 8,357 cf

SubcatchmentS212: SWALE Runoff Area=52,768 sf 0.60% Impervious Runoff Depth>4.75"
Flow Length=418' Tc=23.1 min CN=65 Runoff=4.28 cfs 20,867 cf

SubcatchmentS213: COURTYARD Runoff Area=21,407 sf 48.10% Impervious Runoff Depth>6.50"
Tc=6.0 min CN=79 Runoff=3.59 cfs 11,590 cf

SubcatchmentT1: Trench Drain 1 Runoff Area=11,173 sf 75.10% Impervious Runoff Depth>8.21"
Tc=6.0 min CN=93 Runoff=2.18 cfs 7,644 cf

SubcatchmentT2: Drive Under B2 Runoff Area=4,445 sf 64.30% Impervious Runoff Depth>6.37"
Tc=6.0 min CN=78 Runoff=0.73 cfs 2,361 cf

SubcatchmentTH1: TOWN HOUSE #1 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.84 cfs 3,034 cf

SubcatchmentTH10: TOWN HOUSE #10 Runoff Area=3,476 sf 91.60% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.69 cfs 2,483 cf

SubcatchmentTH11: TOWN HOUSE #11 Runoff Area=4,210 sf 92.61% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.84 cfs 3,008 cf

SubcatchmentTH2: TOWN HOUSE #2 Runoff Area=4,247 sf 92.68% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.84 cfs 3,034 cf

SubcatchmentTH3: TOWN HOUSE #3 Runoff Area=3,013 sf 88.68% Impervious Runoff Depth>8.45"
Tc=6.0 min CN=95 Runoff=0.60 cfs 2,122 cf

SubcatchmentTH4: TOWN HOUSE #4 Runoff Area=3,470 sf 91.59% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.69 cfs 2,479 cf

SubcatchmentTH5: TOWN HOUSE #5 Runoff Area=3,016 sf 88.69% Impervious Runoff Depth>8.45"
Tc=6.0 min CN=95 Runoff=0.60 cfs 2,124 cf

SubcatchmentTH6: TOWN HOUSE #6 Runoff Area=3,407 sf 91.46% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.68 cfs 2,434 cf

SubcatchmentTH7: TOWN HOUSE #7 Runoff Area=3,481 sf 91.61% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.69 cfs 2,487 cf

SubcatchmentTH8: TOWN HOUSE #8 Runoff Area=4,212 sf 92.62% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.84 cfs 3,009 cf

SubcatchmentTH9: TOWN HOUSE #9 Runoff Area=3,480 sf 91.61% Impervious Runoff Depth>8.57"
Tc=6.0 min CN=96 Runoff=0.69 cfs 2,486 cf

Reach 8R: OVERLAND FLOW Avg. Flow Depth=0.11' Max Vel=0.12 fps Inflow=1.97 cfs 7,579 cf
n=0.400 L=563.0' S=0.0213 '/' Capacity=28.09 cfs Outflow=0.70 cfs 7,164 cf

Reach 9R: OVERLAND FLOW Avg. Flow Depth=0.16' Max Vel=0.27 fps Inflow=1.22 cfs 2,322 cf
n=0.400 L=211.0' S=0.0652 '/' Capacity=23.45 cfs Outflow=0.97 cfs 2,322 cf

Reach 10R: OVERLAND FLOW Avg. Flow Depth=0.69' Max Vel=0.47 fps Inflow=10.24 cfs 31,579 cf
n=0.400 L=164.0' S=0.0366 '/' Capacity=17.57 cfs Outflow=8.88 cfs 31,578 cf

Reach 11R: 4x4 Open Bottom Culvert Avg. Flow Depth=2.22' Max Vel=2.73 fps Inflow=24.22 cfs 144,775 cf
48.0" x 48.0" Box Pipe n=0.069 L=30.0' S=0.0150 '/' Capacity=42.20 cfs Outflow=24.22 cfs 144,761 cf

Reach 12R: OVERLAND FLOW Avg. Flow Depth=0.16' Max Vel=0.17 fps Inflow=2.22 cfs 8,218 cf
n=0.400 L=250.0' S=0.0240 '/' Capacity=29.80 cfs Outflow=1.36 cfs 8,061 cf

Reach 14R: OVERLAND FLOW Avg. Flow Depth=0.18' Max Vel=0.18 fps Inflow=4.27 cfs 20,864 cf
n=0.400 L=852.0' S=0.0246 '/' Capacity=31.55 cfs Outflow=1.64 cfs 19,373 cf

Reach 15R: OVERLAND FLOW Avg. Flow Depth=0.21' Max Vel=0.18 fps Inflow=3.51 cfs 20,698 cf
n=0.400 L=300.0' S=0.0200 '/' Capacity=27.21 cfs Outflow=1.89 cfs 19,826 cf

Reach 18R: OVERLAND FLOW Avg. Flow Depth=0.26' Max Vel=0.24 fps Inflow=10.22 cfs 22,242 cf
n=0.400 L=609.0' S=0.0279 '/' Capacity=38.42 cfs Outflow=3.56 cfs 21,983 cf

Reach 20R: OVERLAND FLOW Avg. Flow Depth=0.39' Max Vel=0.19 fps Inflow=8.98 cfs 35,788 cf
n=0.400 L=560.0' S=0.0093 '/' Capacity=18.54 cfs Outflow=3.75 cfs 34,661 cf

Reach 23R: OVERLAND FLOW Avg. Flow Depth=0.83' Max Vel=0.41 fps Inflow=24.22 cfs 144,761 cf
n=0.400 L=237.0' S=0.0211 '/' Capacity=31.93 cfs Outflow=22.58 cfs 143,931 cf

Reach R202: OVERLAND FLOW Avg. Flow Depth=0.75' Max Vel=0.29 fps Inflow=44.78 cfs 219,947 cf
n=0.400 L=700.0' S=0.0107 '/' Capacity=42.56 cfs Outflow=25.82 cfs 212,555 cf

Reach R211: OVERLAND FLOW Avg. Flow Depth=0.88' Max Vel=0.27 fps Inflow=27.69 cfs 57,014 cf
n=0.400 L=600.0' S=0.0087 '/' Capacity=14.51 cfs Outflow=11.38 cfs 56,631 cf

Reach SC1: Stream Crossing #1 Avg. Flow Depth=0.59' Max Vel=4.71 fps Inflow=44.78 cfs 219,981 cf
192.0" x 60.0", R=207.0" Arch Pipe n=0.030 L=43.1' S=0.0200 '/' Capacity=722.91 cfs Outflow=44.78 cfs 219,947 cf

Reach SC2: Stream Crossing #2 Avg. Flow Depth=0.13' Max Vel=2.01 fps Inflow=4.28 cfs 20,867 cf
192.0" x 60.0", R=180.0" Arch Pipe n=0.030 L=36.5' S=0.0241 '/' Capacity=768.96 cfs Outflow=4.27 cfs 20,864 cf

Pond 1P: DMH #33 Peak Elev=206.71' Inflow=3.20 cfs 11,616 cf
12.0" Round Culvert n=0.013 L=46.7' S=0.0251 '/' Outflow=3.20 cfs 11,616 cf

Pond 3P: OCS #8 Peak Elev=203.30' Inflow=2.47 cfs 8,581 cf
Outflow=2.47 cfs 8,581 cf

Pond 5R: TRENCH DRAIN Peak Elev=199.24' Inflow=2.18 cfs 7,644 cf
8.0" Round Culvert n=0.012 L=36.0' S=0.0200 '/' Outflow=2.18 cfs 7,644 cf

Pond 11P: YARD DRAIN Peak Elev=207.48' Storage=1,296 cf Inflow=3.59 cfs 11,590 cf
Outflow=2.82 cfs 11,525 cf

Pond CB10: CB #10 Peak Elev=210.78' Inflow=1.39 cfs 5,113 cf
12.0" Round Culvert n=0.013 L=33.8' S=0.0050 '/' Outflow=1.39 cfs 5,113 cf

Pond CB11: CB #11 Peak Elev=210.83' Inflow=1.43 cfs 5,269 cf
12.0" Round Culvert n=0.013 L=26.3' S=0.0103 '/' Outflow=1.43 cfs 5,269 cf

Pond CB12: CB #12 Peak Elev=207.24' Inflow=1.04 cfs 3,847 cf
12.0" Round Culvert n=0.013 L=41.3' S=0.0249 '/' Outflow=1.04 cfs 3,847 cf

Pond CB13: CB #13 Peak Elev=207.53' Inflow=2.16 cfs 7,768 cf
12.0" Round Culvert n=0.013 L=43.7' S=0.0249 '/' Outflow=2.16 cfs 7,768 cf

Pond CB14: CB #14 Peak Elev=203.42' Inflow=2.33 cfs 8,033 cf
12.0" Round Culvert n=0.013 L=23.2' S=0.0052 '/' Outflow=2.33 cfs 8,033 cf

Pond CB15: CB #15 Peak Elev=203.16' Inflow=1.33 cfs 4,896 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=1.33 cfs 4,896 cf

Pond CB16: CB #16 Peak Elev=204.33' Inflow=1.43 cfs 4,611 cf
12.0" Round Culvert n=0.013 L=20.9' S=0.0067 '/' Outflow=1.43 cfs 4,611 cf

Pond CB17: CB #17 Peak Elev=207.31' Inflow=2.30 cfs 7,978 cf
12.0" Round Culvert n=0.013 L=13.8' S=0.0094 '/' Outflow=2.30 cfs 7,978 cf

Pond CB18: CB #18 Peak Elev=207.38' Inflow=3.90 cfs 14,596 cf
15.0" Round Culvert n=0.013 L=25.1' S=0.0052 '/' Outflow=3.90 cfs 14,596 cf

Pond CB20: CB #20 Peak Elev=205.83' Inflow=2.36 cfs 8,409 cf
12.0" Round Culvert n=0.013 L=30.3' S=0.0053 '/' Outflow=2.36 cfs 8,409 cf

Pond CB21: CB #21 Peak Elev=205.70' Inflow=1.95 cfs 6,652 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0050 '/' Outflow=1.95 cfs 6,652 cf

Pond CB22: CB #22 Peak Elev=206.41' Inflow=2.38 cfs 8,574 cf
12.0" Round Culvert n=0.012 L=16.1' S=0.0050 '/' Outflow=2.38 cfs 8,574 cf

Pond CB23: CB #23 Peak Elev=206.30' Inflow=1.84 cfs 6,239 cf
12.0" Round Culvert n=0.012 L=16.3' S=0.0055 '/' Outflow=1.84 cfs 6,239 cf

Pond CB24: CB #24 Peak Elev=206.37' Inflow=1.55 cfs 5,426 cf
12.0" Round Culvert n=0.012 L=12.1' S=0.0050 '/' Outflow=1.55 cfs 5,426 cf

Pond CB25: CB #25 Peak Elev=206.30' Inflow=1.67 cfs 5,892 cf
15.0" Round Culvert n=0.012 L=11.4' S=0.0053 '/' Outflow=1.67 cfs 5,892 cf

Pond CB26: CB #26 Peak Elev=202.61' Inflow=1.70 cfs 5,866 cf
12.0" Round Culvert n=0.013 L=42.5' S=0.0052 '/' Outflow=1.70 cfs 5,866 cf

Pond CB27: CB #27 Peak Elev=201.82' Inflow=1.21 cfs 4,366 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0056 '/' Outflow=1.21 cfs 4,366 cf

Pond CB28: CB #28 Peak Elev=199.02' Inflow=1.95 cfs 6,570 cf
12.0" Round Culvert n=0.013 L=13.7' S=0.0044 '/' Outflow=1.95 cfs 6,570 cf

Pond CB29: CB #29 Peak Elev=206.87' Inflow=1.67 cfs 5,898 cf
12.0" Round Culvert n=0.013 L=13.5' S=0.0052 '/' Outflow=1.67 cfs 5,898 cf

Pond CB30: CB #30 Peak Elev=206.89' Inflow=1.76 cfs 6,202 cf
12.0" Round Culvert n=0.013 L=17.5' S=0.0051 '/' Outflow=1.76 cfs 6,202 cf

Pond CB31: CB #31 Peak Elev=205.84' Inflow=3.13 cfs 10,699 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=3.13 cfs 10,699 cf

Pond CB32: CB #32 Peak Elev=205.58' Inflow=2.45 cfs 8,439 cf
12.0" Round Culvert n=0.013 L=16.3' S=0.0049 '/' Outflow=2.45 cfs 8,439 cf

Pond CB33: CB #33 Peak Elev=206.39' Inflow=1.07 cfs 3,764 cf
12.0" Round Culvert n=0.013 L=11.7' S=0.0051 '/' Outflow=1.07 cfs 3,764 cf

Pond CB34: CB #34 Peak Elev=206.50' Inflow=1.69 cfs 5,899 cf
12.0" Round Culvert n=0.013 L=16.5' S=0.0048 '/' Outflow=1.69 cfs 5,899 cf

Pond CB35: CB #35 Peak Elev=207.66' Inflow=0.83 cfs 3,048 cf
12.0" Round Culvert n=0.013 L=15.2' S=0.0053 '/' Outflow=0.83 cfs 3,048 cf

Pond CB36: CB #36 Peak Elev=207.78' Inflow=1.32 cfs 4,864 cf
12.0" Round Culvert n=0.013 L=16.1' S=0.0050 '/' Outflow=1.32 cfs 4,864 cf

Pond CB38: CB #38 Peak Elev=212.84' Inflow=1.52 cfs 5,610 cf
12.0" Round Culvert n=0.012 L=16.7' S=0.0048 '/' Outflow=1.52 cfs 5,610 cf

Pond CB39: CB #39 Peak Elev=212.84' Inflow=1.52 cfs 5,591 cf
12.0" Round Culvert n=0.013 L=16.4' S=0.0049 '/' Outflow=1.52 cfs 5,591 cf

Pond CB40: CB #40 Peak Elev=214.52' Inflow=0.84 cfs 3,093 cf
12.0" Round Culvert n=0.013 L=17.8' S=0.0073 '/' Outflow=0.84 cfs 3,093 cf

Pond CB41: CB #41 Peak Elev=214.63' Inflow=1.11 cfs 4,103 cf
12.0" Round Culvert n=0.013 L=18.4' S=0.0049 '/' Outflow=1.11 cfs 4,103 cf

Pond CB43: CB #43 Peak Elev=220.71' Inflow=0.59 cfs 2,001 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.59 cfs 2,001 cf

Pond CB44: CB #44 Peak Elev=220.68' Inflow=0.38 cfs 1,333 cf
12.0" Round Culvert n=0.013 L=14.9' S=0.0047 '/' Outflow=0.38 cfs 1,333 cf

Pond CB45: CB #45 Peak Elev=221.73' Inflow=0.42 cfs 1,360 cf
12.0" Round Culvert n=0.013 L=18.2' S=0.0049 '/' Outflow=0.42 cfs 1,360 cf

Pond CB46: CB #46 Peak Elev=222.06' Inflow=0.75 cfs 2,426 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=0.75 cfs 2,426 cf

Pond CB47: CB#47 Peak Elev=226.92' Inflow=0.60 cfs 2,212 cf
12.0" Round Culvert n=0.012 L=20.9' S=0.0048 '/' Outflow=0.60 cfs 2,212 cf

Pond CB48: CB#48 Peak Elev=228.37' Inflow=7.16 cfs 26,943 cf
15.0" Round Culvert n=0.012 L=16.9' S=0.0047 '/' Outflow=7.16 cfs 26,943 cf

Pond CB49: CB #49 Peak Elev=204.26' Inflow=1.03 cfs 3,637 cf
12.0" Round Culvert n=0.013 L=15.5' S=0.0052 '/' Outflow=1.03 cfs 3,637 cf

Pond CB50: CB #50 Peak Elev=204.79' Inflow=2.94 cfs 10,290 cf
12.0" Round Culvert n=0.013 L=15.3' S=0.0052 '/' Outflow=2.94 cfs 10,290 cf

Pond CB51: CB #51 Peak Elev=204.55' Inflow=1.36 cfs 5,012 cf
12.0" Round Culvert n=0.013 L=31.4' S=0.0051 '/' Outflow=1.36 cfs 5,012 cf

Pond CB52: CB #52 Peak Elev=204.56' Inflow=1.79 cfs 6,376 cf
12.0" Round Culvert n=0.013 L=25.5' S=0.0051 '/' Outflow=1.79 cfs 6,376 cf

Pond CB53: CB #53 Peak Elev=203.58' Inflow=1.54 cfs 5,380 cf
12.0" Round Culvert n=0.013 L=32.0' S=0.0050 '/' Outflow=1.54 cfs 5,380 cf

Pond CB54: CB #54 Peak Elev=203.32' Inflow=0.93 cfs 3,201 cf
12.0" Round Culvert n=0.013 L=36.7' S=0.0049 '/' Outflow=0.93 cfs 3,201 cf

Pond CB7: CB#5 Peak Elev=215.06' Inflow=0.93 cfs 3,416 cf
12.0" Round Culvert n=0.012 L=15.1' S=0.0099 '/' Outflow=0.93 cfs 3,416 cf

Pond CB8: CB#8 Peak Elev=215.06' Inflow=1.07 cfs 3,784 cf
12.0" Round Culvert n=0.013 L=15.1' S=0.0099 '/' Outflow=1.07 cfs 3,784 cf

Pond CB9: CB #9 Peak Elev=211.34' Inflow=3.25 cfs 11,814 cf
12.0" Round Culvert n=0.013 L=19.9' S=0.0196 '/' Outflow=3.25 cfs 11,814 cf

Pond D10: DMH #10 Peak Elev=204.11' Inflow=1.43 cfs 4,611 cf
12.0" Round Culvert n=0.013 L=15.6' S=0.0051 '/' Outflow=1.43 cfs 4,611 cf

Pond D11: DMH #11 Peak Elev=207.27' Inflow=6.20 cfs 22,574 cf
18.0" Round Culvert n=0.013 L=44.6' S=0.0049 '/' Outflow=6.20 cfs 22,574 cf

Pond D12: DMH #12 Peak Elev=205.44' Inflow=4.31 cfs 15,061 cf
12.0" Round Culvert n=0.013 L=41.9' S=0.0050 '/' Outflow=4.31 cfs 15,061 cf

Pond D13: DMH #13 Peak Elev=204.14' Inflow=14.18 cfs 52,717 cf
24.0" Round Culvert n=0.013 L=60.1' S=0.0050 '/' Outflow=14.18 cfs 52,717 cf

Pond D14: DMH #14 Peak Elev=205.77' Inflow=7.44 cfs 26,131 cf
18.0" Round Culvert n=0.012 L=256.3' S=0.0050 '/' Outflow=7.44 cfs 26,131 cf

Pond D16: DMH #16 Peak Elev=206.22' Inflow=3.22 cfs 11,318 cf
15.0" Round Culvert n=0.012 L=103.5' S=0.0050 '/' Outflow=3.22 cfs 11,318 cf

Pond D17: DMH #17 Peak Elev=201.64' Inflow=2.92 cfs 10,232 cf
12.0" Round Culvert n=0.013 L=91.6' S=0.0312 '/' Outflow=2.92 cfs 10,232 cf

Pond D18: DMH #18 Peak Elev=198.76' Inflow=4.87 cfs 16,802 cf
15.0" Round Culvert n=0.013 L=46.3' S=0.0099 '/' Outflow=4.87 cfs 16,802 cf

Pond D19: DMH #19 Peak Elev=206.75' Inflow=3.43 cfs 12,100 cf
12.0" Round Culvert n=0.013 L=82.5' S=0.0092 '/' Outflow=3.43 cfs 12,100 cf

Pond D2: DMH#2 Peak Elev=209.92' Inflow=9.15 cfs 36,354 cf
15.0" Round Culvert n=0.013 L=38.2' S=0.0099 '/' Outflow=9.15 cfs 36,354 cf

Pond D20: DMH #20 Peak Elev=205.57' Inflow=3.43 cfs 12,100 cf
15.0" Round Culvert n=0.013 L=63.5' S=0.0050 '/' Outflow=3.43 cfs 12,100 cf

Pond D21: DMH #21 Peak Elev=205.17' Inflow=13.91 cfs 48,812 cf
24.0" Round Culvert n=0.013 L=72.4' S=0.0050 '/' Outflow=13.91 cfs 48,812 cf

Pond D22: DMH #22 Peak Elev=206.31' Inflow=4.90 cfs 17,574 cf
15.0" Round Culvert n=0.013 L=134.2' S=0.0071 '/' Outflow=4.90 cfs 17,574 cf

Pond D23: DMH #23 Peak Elev=207.50' Inflow=2.15 cfs 7,912 cf
15.0" Round Culvert n=0.013 L=173.3' S=0.0100 '/' Outflow=2.15 cfs 7,912 cf

Pond D25: DMH #25 Peak Elev=212.68' Inflow=7.14 cfs 25,517 cf
15.0" Round Culvert n=0.012 L=237.6' S=0.0050 '/' Outflow=7.14 cfs 25,517 cf

Pond D27: DMH #27 Peak Elev=214.46' Inflow=4.10 cfs 14,316 cf
15.0" Round Culvert n=0.012 L=63.9' S=0.0150 '/' Outflow=4.10 cfs 14,316 cf

Pond D28: DMH #28 Peak Elev=218.28' Inflow=2.14 cfs 7,120 cf
12.0" Round Culvert n=0.013 L=158.3' S=0.0200 '/' Outflow=2.14 cfs 7,120 cf

Pond D29: DMH #29 Peak Elev=220.65' Inflow=2.14 cfs 7,120 cf
12.0" Round Culvert n=0.013 L=150.9' S=0.0151 '/' Outflow=2.14 cfs 7,120 cf

Pond D30: DMH #30 Peak Elev=221.60' Inflow=1.17 cfs 3,786 cf
12.0" Round Culvert n=0.013 L=184.2' S=0.0050 '/' Outflow=1.17 cfs 3,786 cf

Pond D31: DMH#31 Peak Elev=226.91' Inflow=7.60 cfs 29,155 cf
15.0" Round Culvert n=0.012 L=288.5' S=0.0400 '/' Outflow=7.60 cfs 29,155 cf

Pond D34: DMH #34 Peak Elev=200.07' Inflow=4.64 cfs 17,082 cf
12.0" Round Culvert n=0.012 L=52.0' S=0.0200 '/' Outflow=4.64 cfs 17,082 cf

Pond D35: DMH #35 Peak Elev=213.61' Inflow=4.10 cfs 14,316 cf
15.0" Round Culvert n=0.012 L=171.5' S=0.0150 '/' Outflow=4.10 cfs 14,316 cf

Pond D4: DMH#4 Peak Elev=215.03' Inflow=9.15 cfs 36,354 cf
15.0" Round Culvert n=0.012 L=222.3' S=0.0150 '/' Outflow=9.15 cfs 36,354 cf

Pond D5: DMH #5 Peak Elev=210.62' Inflow=6.07 cfs 22,196 cf
18.0" Round Culvert n=0.013 L=183.0' S=0.0050 '/' Outflow=6.07 cfs 22,196 cf

Pond D6: DMH #6 Peak Elev=209.51' Inflow=6.07 cfs 22,196 cf
18.0" Round Culvert n=0.013 L=299.7' S=0.0050 '/' Outflow=6.07 cfs 22,196 cf

Pond D7: DMH #7 Peak Elev=207.73' Inflow=6.07 cfs 22,196 cf
18.0" Round Culvert n=0.013 L=44.2' S=0.0550 '/' Outflow=6.07 cfs 22,196 cf

Pond D8: DMH #8 Peak Elev=203.04' Inflow=3.66 cfs 12,929 cf
12.0" Round Culvert n=0.013 L=87.7' S=0.0050 '/' Outflow=3.66 cfs 12,929 cf

Pond D9: DMH #9 Peak Elev=201.60' Inflow=3.66 cfs 12,929 cf
12.0" Round Culvert n=0.013 L=11.9' S=0.0050 '/' Outflow=3.66 cfs 12,929 cf

Pond DE61: DRIP #61 Peak Elev=213.59' Storage=372 cf Inflow=0.84 cfs 3,034 cf
Discarded=0.00 cfs 211 cf Primary=0.69 cfs 2,673 cf Outflow=0.69 cfs 2,884 cf

Pond DE62: DRIP #62 Peak Elev=213.59' Storage=372 cf Inflow=0.84 cfs 3,034 cf
Discarded=0.00 cfs 211 cf Primary=0.69 cfs 2,673 cf Outflow=0.69 cfs 2,884 cf

Pond DE63: DRIP #63 Peak Elev=208.20' Storage=196 cf Inflow=0.60 cfs 2,122 cf
Discarded=0.00 cfs 127 cf Primary=0.52 cfs 1,906 cf Outflow=0.52 cfs 2,032 cf

Pond DE64: DRIP #64 Peak Elev=206.28' Storage=242 cf Inflow=0.69 cfs 2,479 cf
Discarded=0.00 cfs 149 cf Primary=0.60 cfs 2,224 cf Outflow=0.60 cfs 2,374 cf

Pond DE65: DRIP #65 Peak Elev=207.21' Storage=196 cf Inflow=0.60 cfs 2,124 cf
Discarded=0.00 cfs 127 cf Primary=0.52 cfs 1,908 cf Outflow=0.52 cfs 2,034 cf

Pond DE66: DRIP #66 Peak Elev=209.07' Storage=240 cf Inflow=0.68 cfs 2,434 cf
Discarded=0.00 cfs 149 cf Primary=0.58 cfs 2,180 cf Outflow=0.59 cfs 2,329 cf

Pond DE67: DRIP #67 Peak Elev=209.28' Storage=242 cf Inflow=0.69 cfs 2,487 cf
Discarded=0.00 cfs 149 cf Primary=0.60 cfs 2,232 cf Outflow=0.60 cfs 2,382 cf

Pond DE68: DRIP #68 Peak Elev=208.26' Storage=338 cf Inflow=0.84 cfs 3,009 cf
Discarded=0.00 cfs 211 cf Primary=0.68 cfs 2,652 cf Outflow=0.68 cfs 2,863 cf

Pond DE69: DRIP #69 Peak Elev=206.78' Storage=242 cf Inflow=0.69 cfs 2,486 cf
Discarded=0.00 cfs 149 cf Primary=0.60 cfs 2,232 cf Outflow=0.60 cfs 2,381 cf

Pond DE70: DRIP #70 Peak Elev=207.18' Storage=242 cf Inflow=0.69 cfs 2,483 cf
Discarded=0.00 cfs 149 cf Primary=0.60 cfs 2,229 cf Outflow=0.60 cfs 2,378 cf

Pond DE71: DRIP #71 Peak Elev=207.88' Storage=370 cf Inflow=0.84 cfs 3,008 cf
Discarded=0.00 cfs 211 cf Primary=0.68 cfs 2,647 cf Outflow=0.69 cfs 2,858 cf

Pond DECH: DRIP #CH Peak Elev=210.92' Storage=746 cf Inflow=1.24 cfs 4,474 cf
Discarded=0.04 cfs 2,032 cf Primary=1.05 cfs 2,441 cf Outflow=1.08 cfs 4,473 cf

Pond DMH32: DMH #32 Peak Elev=204.19' Inflow=3.97 cfs 13,927 cf
12.0" Round Culvert n=0.013 L=19.2' S=0.0531 '/' Outflow=3.97 cfs 13,927 cf

Pond OCS1: OCS#1 Peak Elev=196.96' Inflow=9.51 cfs 33,884 cf
Outflow=9.51 cfs 33,884 cf

Pond OCS3: OCS#3 Peak Elev=206.75' Inflow=9.71 cfs 35,473 cf
Outflow=9.71 cfs 35,473 cf

Pond OCS4: OCS#4 Peak Elev=205.75' Inflow=2.79 cfs 9,535 cf
Outflow=2.79 cfs 9,535 cf

Pond OCS6: OCS #6 Peak Elev=204.53' Inflow=3.20 cfs 11,616 cf
Outflow=3.20 cfs 11,616 cf

Pond OCS7: OCS #7 Peak Elev=204.53' Inflow=3.15 cfs 11,388 cf
Outflow=3.15 cfs 11,388 cf

Pond P204: STORMTECH INFILTRATION Peak Elev=205.68' Storage=11,436 cf Inflow=12.49 cfs 45,008 cf
Discarded=0.09 cfs 6,554 cf Primary=8.98 cfs 35,788 cf Outflow=9.06 cfs 42,342 cf

Pond P205: INFILTRATIONPOND #3 Peak Elev=207.05' Storage=9,818 cf Inflow=11.50 cfs 44,711 cf
Discarded=0.32 cfs 16,679 cf Primary=10.22 cfs 22,242 cf Outflow=10.54 cfs 38,922 cf

Pond P206: STORMTECHINFILTRATION Peak Elev=196.64' Storage=8,490 cf Inflow=11.69 cfs 41,528 cf
Discarded=0.49 cfs 26,156 cf Primary=8.72 cfs 15,367 cf Outflow=9.22 cfs 41,523 cf

Pond P207: INFILTRATIONPOND #2 Peak Elev=198.98' Storage=25,795 cf Inflow=23.17 cfs 83,435 cf
Discarded=1.15 cfs 51,829 cf Primary=10.24 cfs 31,579 cf Outflow=11.39 cfs 83,408 cf

Pond P210: POCKET WETLAND#1 Peak Elev=204.66' Storage=20,706 cf Inflow=10.93 cfs 37,524 cf
Outflow=3.51 cfs 20,698 cf

Pond P212: INFILTRATIONPOND #1 Peak Elev=203.05' Storage=29,225 cf Inflow=32.18 cfs 135,950 cf
Discarded=1.49 cfs 74,502 cf Primary=27.69 cfs 57,014 cf Outflow=29.18 cfs 131,516 cf

Pond P213: Stormtech Infiltration System Peak Elev=204.44' Storage=7,117 cf Inflow=6.35 cfs 23,003 cf
Discarded=0.39 cfs 19,325 cf Primary=1.88 cfs 3,677 cf Outflow=2.27 cfs 23,001 cf

Pond P214: STORMTECHINFILTRATION Peak Elev=203.26' Storage=6,493 cf Inflow=6.45 cfs 23,257 cf
Discarded=0.61 cfs 20,934 cf Primary=1.22 cfs 2,322 cf Outflow=1.84 cfs 23,256 cf

Link AP1: ANALYSISPOINT 1 Inflow=1.96 cfs 7,004 cf
Primary=1.96 cfs 7,004 cf

Link AP2: ANALYSISPOINT 2 Inflow=52.47 cfs 394,820 cf
Primary=52.47 cfs 394,820 cf

Link AP3: ANALYSISPOINT 3 Inflow=7.86 cfs 24,862 cf
Primary=7.86 cfs 24,862 cf

Link AP4: ANALYSISPOINT #4 Inflow=98.54 cfs 593,282 cf
Primary=98.54 cfs 593,282 cf

Total Runoff Area = 2,573,920 sf Runoff Volume = 1,283,918 cf Average Runoff Depth = 5.99"
70.09% Pervious = 1,803,997 sf 29.91% Impervious = 769,923 sf

Summary for Subcatchment B1: MULTIFAMILY BLDG #1

Runoff = 4.64 cfs @ 12.09 hrs, Volume= 17,082 cf, Depth> 8.81"
Routed to Pond D34 : DMH #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
20,156	98	Roofs, HSG C
3,099	98	Roofs, HSG D
23,255	98	Weighted Average
23,255		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B2: MULTIFAMILY BLDG #2

Runoff = 3.50 cfs @ 12.09 hrs, Volume= 12,899 cf, Depth> 8.81"
Routed to Pond OCS3 : OCS#3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
7,873	98	Roofs, HSG A
9,688	98	Roofs, HSG C
17,561	98	Weighted Average
17,561		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B3: MULTIFAMILY BUILDING #3

Runoff = 3.99 cfs @ 12.09 hrs, Volume= 14,677 cf, Depth> 8.81"
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
608	98	Roofs, HSG A
19,373	98	Roofs, HSG C
19,981	98	Weighted Average
19,981		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C10: CB #10

Runoff = 1.39 cfs @ 12.09 hrs, Volume= 5,113 cf, Depth> 8.81"
Routed to Pond CB10 : CB #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
339	98	Paved roads w/curbs & sewers, HSG B
5,703	98	Paved roads w/curbs & sewers, HSG C
919	98	Paved roads w/curbs & sewers, HSG D
6,961	98	Weighted Average
6,961		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C11: CB #11

Runoff = 1.43 cfs @ 12.09 hrs, Volume= 5,269 cf, Depth> 8.81"
Routed to Pond CB11 : CB #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
7,173	98	Paved roads w/curbs & sewers, HSG C
7,173		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C12: CB #12

Runoff = 1.04 cfs @ 12.09 hrs, Volume= 3,847 cf, Depth> 8.81"
Routed to Pond CB12 : CB #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,238	98	Paved roads w/curbs & sewers, HSG C
5,238		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C13: CB #13

Runoff = 2.16 cfs @ 12.09 hrs, Volume= 7,768 cf, Depth> 8.57"
Routed to Pond CB13 : CB #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,003	74	>75% Grass cover, Good, HSG C
7,547	98	Paved parking, HSG C
2,323	98	Roofs, HSG C
10,873	96	Weighted Average
1,003		9.22% Pervious Area
9,870		90.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C14: CB #14

Runoff = 2.33 cfs @ 12.09 hrs, Volume= 8,033 cf, Depth> 7.97"
Routed to Pond CB14 : CB #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,195	39	>75% Grass cover, Good, HSG A
7,649	98	Paved parking, HSG A
472	74	>75% Grass cover, Good, HSG C
2,783	98	Paved parking, HSG C
12,099	91	Weighted Average
1,667		13.78% Pervious Area
10,432		86.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C15: CB #15

Runoff = 1.33 cfs @ 12.09 hrs, Volume= 4,896 cf, Depth> 8.81"
Routed to Pond CB15 : CB #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,000	98	Paved parking, HSG A
1,666	98	Paved parking, HSG C
6,666	98	Weighted Average
6,666		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C16: CB #16

Runoff = 1.43 cfs @ 12.09 hrs, Volume= 4,611 cf, Depth> 6.50"
Routed to Pond CB16 : CB #16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
2,467	39	>75% Grass cover, Good, HSG A
4,380	98	Paved parking, HSG A
524	74	>75% Grass cover, Good, HSG C
1,145	98	Paved parking, HSG C
8,516	79	Weighted Average
2,991		35.12% Pervious Area
5,525		64.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C17: CB #17

Runoff = 2.30 cfs @ 12.09 hrs, Volume= 7,978 cf, Depth> 8.09"
Routed to Pond CB17 : CB #17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,093	74	>75% Grass cover, Good, HSG C
8,743	98	Paved parking, HSG C
11,836	92	Weighted Average
3,093		26.13% Pervious Area
8,743		73.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C18: CB #18

Runoff = 3.56 cfs @ 12.09 hrs, Volume= 12,155 cf, Depth> 7.85"
Routed to Pond CB18 : CB #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
6,255	74	>75% Grass cover, Good, HSG C
12,336	98	Paved parking, HSG C
18,591	90	Weighted Average
6,255		33.65% Pervious Area
12,336		66.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C20: CB #20

Runoff = 2.36 cfs @ 12.09 hrs, Volume= 8,409 cf, Depth> 8.45"
Routed to Pond CB20 : CB #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,319	98	Paved parking, HSG A
1,319	74	>75% Grass cover, Good, HSG C
7,301	98	Paved parking, HSG C
11,939	95	Weighted Average
1,319		11.05% Pervious Area
10,620		88.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C21: CB #21

Runoff = 1.95 cfs @ 12.09 hrs, Volume= 6,652 cf, Depth> 7.85"
Routed to Pond CB21 : CB #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,319	39	>75% Grass cover, Good, HSG A
7,301	98	Paved parking, HSG A
1,554	98	Paved parking, HSG C
10,174	90	Weighted Average
1,319		12.96% Pervious Area
8,855		87.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C22: CB #22

Runoff = 2.38 cfs @ 12.09 hrs, Volume= 8,574 cf, Depth> 8.57"
Routed to Pond CB22 : CB #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
2,946	98	Paved parking, HSG A
177	74	>75% Grass cover, Good, HSG C
2,641	98	Paved parking, HSG C
829	80	>75% Grass cover, Good, HSG D
5,408	98	Paved parking, HSG D
12,001	96	Weighted Average
1,006		8.38% Pervious Area
10,995		91.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C23: CB #23

Runoff = 1.84 cfs @ 12.09 hrs, Volume= 6,239 cf, Depth> 7.72"
Routed to Pond CB23 : CB #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
242	39	>75% Grass cover, Good, HSG A
3,016	98	Paved parking, HSG A
1,267	74	>75% Grass cover, Good, HSG C
218	98	Paved parking, HSG C
2,272	80	>75% Grass cover, Good, HSG D
2,679	98	Paved parking, HSG D
9,694	89	Weighted Average
3,781		39.00% Pervious Area
5,913		61.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C24: CB #24

Runoff = 1.55 cfs @ 12.09 hrs, Volume= 5,426 cf, Depth> 8.21"
Routed to Pond CB24 : CB #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,722	98	Paved parking, HSG D
2,208	80	>75% Grass cover, Good, HSG D
7,930	93	Weighted Average
2,208		27.84% Pervious Area
5,722		72.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C25: CB #25

Runoff = 1.67 cfs @ 12.09 hrs, Volume= 5,892 cf, Depth> 8.33"
Routed to Pond CB25 : CB #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
211	39	>75% Grass cover, Good, HSG A
519	98	Paved parking, HSG A
15	74	>75% Grass cover, Good, HSG C
300	98	Paved parking, HSG C
1,393	80	>75% Grass cover, Good, HSG D
6,049	98	Paved parking, HSG D
8,487	94	Weighted Average
1,619		19.08% Pervious Area
6,868		80.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C26: CB #26

Runoff = 1.70 cfs @ 12.09 hrs, Volume= 5,866 cf, Depth> 7.97"
Routed to Pond CB26 : CB #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,203	80	>75% Grass cover, Good, HSG D
5,632	98	Paved parking, HSG D
8,835	91	Weighted Average
3,203		36.25% Pervious Area
5,632		63.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C27: CB #27

Runoff = 1.21 cfs @ 12.09 hrs, Volume= 4,366 cf, Depth> 8.57"
Routed to Pond CB27 : CB #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
98	39	>75% Grass cover, Good, HSG A
131	98	Paved parking, HSG A
397	80	>75% Grass cover, Good, HSG D
5,485	98	Paved parking, HSG D
6,111	96	Weighted Average
495		8.10% Pervious Area
5,616		91.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C28: CB #28

Runoff = 1.95 cfs @ 12.09 hrs, Volume= 6,570 cf, Depth> 7.60"
Routed to Pond CB28 : CB #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
2,751	74	>75% Grass cover, Good, HSG C
2,841	98	Paved parking, HSG C
2,297	80	>75% Grass cover, Good, HSG D
2,483	98	Paved parking, HSG D
10,372	88	Weighted Average
5,048		48.67% Pervious Area
5,324		51.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C29: CB #29

Runoff = 1.67 cfs @ 12.09 hrs, Volume= 5,898 cf, Depth> 8.33"
Routed to Pond CB29 : CB #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,341	74	>75% Grass cover, Good, HSG C
5,330	98	Paved parking, HSG C
1,824	98	Roofs, HSG C
8,495	94	Weighted Average
1,341		15.79% Pervious Area
7,154		84.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C30: CB #30

Runoff = 1.76 cfs @ 12.09 hrs, Volume= 6,202 cf, Depth> 8.33"
Routed to Pond CB30 : CB #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,572	74	>75% Grass cover, Good, HSG C
6,310	98	Paved parking, HSG C
1,051	98	Roofs, HSG C
8,933	94	Weighted Average
1,572		17.60% Pervious Area
7,361		82.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C31: CB #31

Runoff = 3.13 cfs @ 12.09 hrs, Volume= 10,699 cf, Depth> 7.85"
Routed to Pond CB31 : CB #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,132	74	>75% Grass cover, Good, HSG C
9,132	98	Paved parking, HSG C
2,101	98	Roofs, HSG C
16,365	90	Weighted Average
5,132		31.36% Pervious Area
11,233		68.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C32: CB #32

Runoff = 2.45 cfs @ 12.09 hrs, Volume= 8,439 cf, Depth> 7.97"
Routed to Pond CB32 : CB #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,753	74	>75% Grass cover, Good, HSG C
7,068	98	Paved parking, HSG C
1,889	98	Roofs, HSG C
12,710	91	Weighted Average
3,753		29.53% Pervious Area
8,957		70.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C33: CB #33

Runoff = 1.07 cfs @ 12.09 hrs, Volume= 3,764 cf, Depth> 8.33"
Routed to Pond CB33 : CB #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
873	74	>75% Grass cover, Good, HSG C
3,693	98	Paved parking, HSG C
855	98	Roofs, HSG C
5,421	94	Weighted Average
873		16.10% Pervious Area
4,548		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C34: CB #34

Runoff = 1.69 cfs @ 12.09 hrs, Volume= 5,899 cf, Depth> 8.21"
Routed to Pond CB34 : CB #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,680	74	>75% Grass cover, Good, HSG C
5,115	98	Paved parking, HSG C
1,827	98	Roofs, HSG C
8,622	93	Weighted Average
1,680		19.49% Pervious Area
6,942		80.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C35: CB #35

Runoff = 0.83 cfs @ 12.09 hrs, Volume= 3,048 cf, Depth> 8.81"
Routed to Pond CB35 : CB #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,578	98	Paved parking, HSG C
79	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
4,149	98	Weighted Average
79		1.90% Pervious Area
4,070		98.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C36: CB #36

Runoff = 1.32 cfs @ 12.09 hrs, Volume= 4,864 cf, Depth> 8.81"
Routed to Pond CB36 : CB #36

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
6,622	98	Paved parking, HSG C
6,622		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C38: CB #38

Runoff = 1.52 cfs @ 12.09 hrs, Volume= 5,610 cf, Depth> 8.81"
Routed to Pond CB38 : CB #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
6,647	98	Paved parking, HSG B
392	98	Paved parking, HSG C
598	98	Paved parking, HSG D
7,637	98	Weighted Average
7,637		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C39: CB #39

Runoff = 1.52 cfs @ 12.09 hrs, Volume= 5,591 cf, Depth> 8.81"
Routed to Pond CB39 : CB #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
6,505	98	Paved parking, HSG B
519	98	Paved parking, HSG C
588	98	Paved parking, HSG D
7,612	98	Weighted Average
7,612		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C40: CB #40

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 3,093 cf, Depth> 8.81"
Routed to Pond CB40 : CB #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
4,211	98	Paved parking, HSG B
4,211		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C41: CB #41

Runoff = 1.11 cfs @ 12.09 hrs, Volume= 4,103 cf, Depth> 8.81"
Routed to Pond CB41 : CB #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,586	98	Paved parking, HSG B
5,586		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C43: CB #43

Runoff = 0.59 cfs @ 12.09 hrs, Volume= 2,001 cf, Depth> 7.72"
Routed to Pond CB43 : CB #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
2,343	98	Paved parking, HSG B
766	61	>75% Grass cover, Good, HSG B
3,109	89	Weighted Average
766		24.64% Pervious Area
2,343		75.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C44: CB #44

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 1,333 cf, Depth> 8.09"
Routed to Pond CB44 : CB #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,670	98	Paved parking, HSG B
308	61	>75% Grass cover, Good, HSG B
1,978	92	Weighted Average
308		15.57% Pervious Area
1,670		84.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C45: CB #45

Runoff = 0.42 cfs @ 12.09 hrs, Volume= 1,360 cf, Depth> 6.62"
Routed to Pond CB45 : CB #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,240	98	Paved parking, HSG B
1,225	61	>75% Grass cover, Good, HSG B
2,465	80	Weighted Average
1,225		49.70% Pervious Area
1,240		50.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C46: CB #46

Runoff = 0.75 cfs @ 12.09 hrs, Volume= 2,426 cf, Depth> 6.62"
Routed to Pond CB46 : CB #46

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
2,241	98	Paved parking, HSG B
2,156	61	>75% Grass cover, Good, HSG B
4,397	80	Weighted Average
2,156		49.03% Pervious Area
2,241		50.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C47: CB #47

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 2,212 cf, Depth> 8.81"
Routed to Pond CB47 : CB#47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,012	98	Paved roads w/curbs & sewers, HSG B
3,012		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C48: CB #48

Runoff = 7.16 cfs @ 12.16 hrs, Volume= 26,943 cf, Depth> 5.38"
Routed to Pond CB48 : CB#48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,877	98	Paved roads w/curbs & sewers, HSG B
56,251	68	1 acre lots, 20% imp, HSG B
60,128	70	Weighted Average
45,001		74.84% Pervious Area
15,127		25.16% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	50	0.0800	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
4.8	350	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.8	400	Total			

Summary for Subcatchment C49: CB #49

Runoff = 1.03 cfs @ 12.09 hrs, Volume= 3,637 cf, Depth> 8.33"
Routed to Pond CB49 : CB #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
4,431	98	Paved roads w/curbs & sewers, HSG C
807	74	>75% Grass cover, Good, HSG C
5,238	94	Weighted Average
807		15.41% Pervious Area
4,431		84.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C50: CB #50

Runoff = 2.94 cfs @ 12.09 hrs, Volume= 10,290 cf, Depth> 8.21"
Routed to Pond CB50 : CB #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,429	74	>75% Grass cover, Good, HSG C
11,611	98	Paved roads w/curbs & sewers, HSG C
15,040	93	Weighted Average
3,429		22.80% Pervious Area
11,611		77.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C51: CB #51

Runoff = 1.36 cfs @ 12.09 hrs, Volume= 5,012 cf, Depth> 8.81"
Routed to Pond CB51 : CB #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,147	98	Roofs, HSG C
3,676	98	Paved parking, HSG C
6,823	98	Weighted Average
6,823		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C52: CB#52

Runoff = 1.79 cfs @ 12.09 hrs, Volume= 6,376 cf, Depth> 8.45"
Routed to Pond CB52 : CB #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,164	74	>75% Grass cover, Good, HSG C
7,888	98	Paved parking, HSG C
9,052	95	Weighted Average
1,164		12.86% Pervious Area
7,888		87.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C53: CB #53

Runoff = 1.54 cfs @ 12.09 hrs, Volume= 5,380 cf, Depth> 8.21"
Routed to Pond CB53 : CB #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
287	39	>75% Grass cover, Good, HSG A
3,287	98	Paved parking, HSG A
773	74	>75% Grass cover, Good, HSG C
3,516	98	Paved parking, HSG C
7,863	93	Weighted Average
1,060		13.48% Pervious Area
6,803		86.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C54: CB #54

Runoff = 0.93 cfs @ 12.09 hrs, Volume= 3,201 cf, Depth> 7.97"
Routed to Pond CB54 : CB #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
550	39	>75% Grass cover, Good, HSG A
4,176	98	Paved parking, HSG A
84	74	>75% Grass cover, Good, HSG C
11	98	Paved parking, HSG C
4,821	91	Weighted Average
634		13.15% Pervious Area
4,187		86.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C7: CB #5

Runoff = 0.93 cfs @ 12.09 hrs, Volume= 3,416 cf, Depth> 8.81"
Routed to Pond CB7 : CB#5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
4,650	98	Paved roads w/curbs & sewers, HSG B
4,650		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C8: CB #8

Runoff = 1.07 cfs @ 12.09 hrs, Volume= 3,784 cf, Depth> 8.33"
Routed to Pond CB8 : CB#8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
4,837	98	Paved roads w/curbs & sewers, HSG B
613	61	>75% Grass cover, Good, HSG B
5,450	94	Weighted Average
613		11.25% Pervious Area
4,837		88.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment C9: CB #9

Runoff = 3.25 cfs @ 12.09 hrs, Volume= 11,814 cf, Depth> 8.69"
Routed to Pond CB9 : CB #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
31	61	>75% Grass cover, Good, HSG B
433	98	Paved roads w/curbs & sewers, HSG B
904	74	>75% Grass cover, Good, HSG C
12,073	98	Paved parking, HSG C
2,305	98	Roofs, HSG C
52	80	>75% Grass cover, Good, HSG D
509	98	Paved parking, HSG D
16,307	97	Weighted Average
987		6.05% Pervious Area
15,320		93.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment CH1: CLUBHOUSE

Runoff = 1.24 cfs @ 12.09 hrs, Volume= 4,474 cf, Depth> 8.57"
Routed to Pond DECH : DRIP #CH

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,802	98	Roofs, HSG C
3	98	Roofs, HSG D
435	74	>75% Grass cover, Good, HSG C
22	80	>75% Grass cover, Good, HSG D
6,262	96	Weighted Average
457		7.30% Pervious Area
5,805		92.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment MB1: MAIL KIOSK

Runoff = 0.19 cfs @ 12.09 hrs, Volume= 689 cf, Depth> 8.81"
Routed to Link AP2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
938	98	Roofs, HSG B
938		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S201: SUMMER STREET ACCESS APRON

Runoff = 1.96 cfs @ 12.09 hrs, Volume= 7,004 cf, Depth> 8.45"
Routed to Link AP1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
717	61	>75% Grass cover, Good, HSG B
9,226	98	Paved parking, HSG B
9,943	95	Weighted Average
717		7.21% Pervious Area
9,226		92.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S202: EXISTING WETLAND

Runoff = 44.78 cfs @ 12.31 hrs, Volume= 219,981 cf, Depth> 6.11"
Routed to Reach SC1 : Stream Crossing #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
136,496	61	>75% Grass cover, Good, HSG B
83,935	55	Woods, Good, HSG B
29	98	Paved parking, HSG B
13,946	98	Roofs, HSG B
9,038	48	Brush, Good, HSG B
2,573	74	>75% Grass cover, Good, HSG C
17,121	70	Woods, Good, HSG C
98	98	Paved parking, HSG C
1,097	65	Brush, Good, HSG C
126	80	>75% Grass cover, Good, HSG D
132	98	Paved parking, HSG D
167,678	98	Water Surface, HSG D
432,269	76	Weighted Average
250,386		57.92% Pervious Area
181,883		42.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.6	50	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
1.4	118	0.0400	1.40		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.2	688	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.2	856	Total			

Summary for Subcatchment S203: POCKET WETLAND #1

Runoff = 3.79 cfs @ 12.09 hrs, Volume= 12,007 cf, Depth> 5.63"
Routed to Pond p210 : POCKET WETLAND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
12,682	61	>75% Grass cover, Good, HSG B
1,060	98	Water Surface, 0% imp, HSG B
7,785	74	>75% Grass cover, Good, HSG C
4,060	98	Water Surface, 0% imp, HSG C
25,587	72	Weighted Average
25,587		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S204: EXISTING WETLANDS

Runoff = 31.68 cfs @ 12.31 hrs, Volume= 153,689 cf, Depth> 5.98"
Routed to Link ap2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
53,739	61	>75% Grass cover, Good, HSG B
17,975	55	Woods, Good, HSG B
20,940	48	Brush, Good, HSG B
41,421	74	>75% Grass cover, Good, HSG C
68,342	70	Woods, Good, HSG C
116	98	Paved parking, HSG C
1,904	65	Brush, Good, HSG C
1,528	65	Brush, Good, HSG C
2,508	77	Woods, Good, HSG D
161	98	Paved parking, HSG D
4,073	73	Brush, Good, HSG D
95,496	98	Water Surface, HSG D
308,203	75	Weighted Average
212,430		68.93% Pervious Area
95,773		31.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.2000	0.26		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.27"
19.4	582	0.0100	0.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
22.6	632	Total			

Summary for Subcatchment S205: ISOLATED WETLAND

Runoff = 7.86 cfs @ 12.09 hrs, Volume= 24,862 cf, Depth> 5.38"
Routed to Link AP3 : ANALYSIS POINT 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
10,910	30	Woods, Good, HSG A
3,684	74	>75% Grass cover, Good, HSG C
2,275	70	Woods, Good, HSG C
171	98	Paved parking, HSG C
1,706	65	Brush, Good, HSG C
1,940	80	>75% Grass cover, Good, HSG D
23,513	77	Woods, Good, HSG D
393	98	Paved parking, HSG D
2,208	73	Brush, Good, HSG D
8,620	98	Water Surface, HSG D
55,420	70	Weighted Average
46,236		83.43% Pervious Area
9,184		16.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S206: OVERLAND FLOW

Runoff = 60.37 cfs @ 12.48 hrs, Volume= 351,563 cf, Depth> 4.73"
Routed to Link AP4 : ANALYSIS POINT #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
16,514	39	>75% Grass cover, Good, HSG A
118,226	30	Woods, Good, HSG A
713	98	Paved parking, HSG A
41,148	30	Brush, Good, HSG A
17,568	51	1 acre lots, 20% imp, HSG A
37,410	61	>75% Grass cover, Good, HSG B
13,900	55	Woods, Good, HSG B
54,538	48	Brush, Good, HSG B
91,202	68	1 acre lots, 20% imp, HSG B
77,444	74	>75% Grass cover, Good, HSG C
114,763	70	Woods, Good, HSG C
3,493	98	Paved parking, HSG C
57,740	65	Brush, Good, HSG C
5,763	80	>75% Grass cover, Good, HSG D
126,141	77	Woods, Good, HSG D
114,732	98	Water Surface, 0% imp, HSG D
891,295	65	Weighted Average
865,335		97.09% Pervious Area
25,960		2.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0500	0.10		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
5.0	334	0.0250	1.11		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.9	91	0.0250	0.79		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
10.2	491	0.0400	0.80		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
8.9	501	0.0350	0.94		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
34.5	1,467	Total			

Summary for Subcatchment S207: INFILTRATION POND #2

Runoff = 3.91 cfs @ 12.09 hrs, Volume= 13,178 cf, Depth> 7.60"
Routed to Pond P207 : INFILTRATION POND #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
839	98	Water Surface, 0% imp, HSG A
8,802	74	>75% Grass cover, Good, HSG C
11,162	98	Water Surface, 0% imp, HSG C
20,803	88	Weighted Average
20,803		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S208: GRASS AREA

Runoff = 2.16 cfs @ 12.09 hrs, Volume= 6,883 cf, Depth> 6.00"
Routed to Pond OCS4 : OCS#4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
476	39	>75% Grass cover, Good, HSG A
12,000	74	>75% Grass cover, Good, HSG C
168	98	Paved parking, HSG A
1,116	98	Paved parking, HSG C
13,760	75	Weighted Average
12,476		90.67% Pervious Area
1,284		9.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S209: WETLAND C

Runoff = 9.50 cfs @ 12.40 hrs, Volume= 51,122 cf, Depth> 5.73"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
10,826	39	>75% Grass cover, Good, HSG A
16,826	30	Woods, Good, HSG A
8,863	74	>75% Grass cover, Good, HSG C
26,084	70	Woods, Good, HSG C
44,067	98	Water Surface, 0% imp, HSG D
304	98	Paved parking, HSG A
103	98	Paved parking, HSG C
107,073	73	Weighted Average
106,666		99.62% Pervious Area
407		0.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	50	0.0150	0.06		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 3.27"
15.2	557	0.0150	0.61		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.9	607	Total			

Summary for Subcatchment S210: INFILTRATION POND #1

Runoff = 9.35 cfs @ 12.22 hrs, Volume= 40,231 cf, Depth> 6.36"
Routed to Pond P212 : INFILTRATION POND #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
13,844	98	Water Surface, 0% imp, HSG C
59,814	74	>75% Grass cover, Good, HSG C
2,232	65	Brush, Good, HSG C
75,890	78	Weighted Average
75,890		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	50	0.0150	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.27"
10.3	530	0.0150	0.86		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
16.5	580	Total			

Summary for Subcatchment S211: S211

Runoff = 2.59 cfs @ 12.09 hrs, Volume= 8,357 cf, Depth> 6.50"
Routed to Pond P205 : INFILTRATION POND #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
8,108	61	>75% Grass cover, Good, HSG B
7,328	98	Water Surface, HSG B
15,436	79	Weighted Average
8,108		52.53% Pervious Area
7,328		47.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment S212: SWALE

Runoff = 4.28 cfs @ 12.32 hrs, Volume= 20,867 cf, Depth> 4.75"
Routed to Reach SC2 : Stream Crossing #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
4,100	61	>75% Grass cover, Good, HSG B
7,192	55	Woods, Good, HSG B
1,180	74	>75% Grass cover, Good, HSG C
3,436	70	Woods, Good, HSG C
13,180	98	Water Surface, 0% imp, HSG D
72	98	Paved parking, HSG B
22,663	48	Brush, Good, HSG B
545	65	Brush, Good, HSG C
107	98	Paved parking, HSG C
135	98	Paved parking, HSG D
158	80	>75% Grass cover, Good, HSG D
52,768	65	Weighted Average
52,454		99.40% Pervious Area
314		0.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.1	50	0.0400	0.05		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.27"
3.9	232	0.0600	0.98		**Shallow Concentrated Flow, BRUSH** Kv= 4.0 fps
3.1	136	0.0220	0.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
23.1	418	Total			

Summary for Subcatchment S213: COURTYARD

Runoff = 3.59 cfs @ 12.09 hrs, Volume= 11,590 cf, Depth> 6.50"
Routed to Pond 11P : YARD DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
5,047	39	>75% Grass cover, Good, HSG A
1,678	98	Paved parking, HSG A
168	98	Roofs, HSG A
532	98	Water Surface, 0% imp, HSG A
4,518	74	>75% Grass cover, Good, HSG C
7,080	98	Paved parking, HSG C
878	98	Roofs, HSG C
718	98	Water Surface, 0% imp, HSG C
296	80	>75% Grass cover, Good, HSG D
492	98	Paved parking, HSG D
21,407	79	Weighted Average
11,111		51.90% Pervious Area
10,296		48.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T1: Trench Drain 1

Runoff = 2.18 cfs @ 12.09 hrs, Volume= 7,644 cf, Depth> 8.21"
Routed to Pond 5R : TRENCH DRAIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,443	74	>75% Grass cover, Good, HSG C
4,228	98	Paved parking, HSG C
1,339	80	>75% Grass cover, Good, HSG D
4,163	98	Paved parking, HSG D
11,173	93	Weighted Average
2,782		24.90% Pervious Area
8,391		75.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment T2: Drive Under B2

Runoff = 0.73 cfs @ 12.09 hrs, Volume= 2,361 cf, Depth> 6.37"
Routed to Reach 11R : 4x4 Open Bottom Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
1,510	39	>75% Grass cover, Good, HSG A
2,313	98	Paved parking, HSG A
77	74	>75% Grass cover, Good, HSG C
545	98	Paved parking, HSG C
4,445	78	Weighted Average
1,587		35.70% Pervious Area
2,858		64.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH1: TOWN HOUSE #1

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 3,034 cf, Depth> 8.57"
Routed to Pond DE61 : DRIP #61

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH10: TOWN HOUSE #10

Runoff = 0.69 cfs @ 12.09 hrs, Volume= 2,483 cf, Depth> 8.57"
Routed to Pond DE70 : DRIP #70

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,184	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,476	96	Weighted Average
292		8.40% Pervious Area
3,184		91.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH11: TOWN HOUSE #11

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 3,008 cf, Depth> 8.57"
Routed to Pond DE71 : DRIP #71

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,899	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,210	96	Weighted Average
311		7.39% Pervious Area
3,899		92.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH2: TOWN HOUSE #2

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 3,034 cf, Depth> 8.57"
Routed to Pond DE62 : DRIP #62

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,936	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,247	96	Weighted Average
311		7.32% Pervious Area
3,936		92.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH3: TOWN HOUSE #3

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 2,122 cf, Depth> 8.45"
Routed to Pond DE63 : DRIP #63

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
2,672	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,013	95	Weighted Average
341		11.32% Pervious Area
2,672		88.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH4: TOWN HOUSE #4

Runoff = 0.69 cfs @ 12.09 hrs, Volume= 2,479 cf, Depth> 8.57"
Routed to Pond DE64 : DRIP #64

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,178	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,470	96	Weighted Average
292		8.41% Pervious Area
3,178		91.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH5: TOWN HOUSE #5

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 2,124 cf, Depth> 8.45"
Routed to Pond DE65 : DRIP #65

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
2,675	98	Roofs, HSG C
341	74	>75% Grass cover, Good, HSG C
3,016	95	Weighted Average
341		11.31% Pervious Area
2,675		88.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH6: TOWN HOUSE #6

Runoff = 0.68 cfs @ 12.09 hrs, Volume= 2,434 cf, Depth> 8.57"
Routed to Pond DE66 : DRIP #66

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,116	98	Roofs, HSG C
291	74	>75% Grass cover, Good, HSG C
3,407	96	Weighted Average
291		8.54% Pervious Area
3,116		91.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH7: TOWN HOUSE #7

Runoff = 0.69 cfs @ 12.09 hrs, Volume= 2,487 cf, Depth> 8.57"
Routed to Pond DE67 : DRIP #67

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,189	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,481	96	Weighted Average
292		8.39% Pervious Area
3,189		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH8: TOWN HOUSE #8

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 3,009 cf, Depth> 8.57"
Routed to Pond DE68 : DRIP #68

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,901	98	Roofs, HSG C
311	74	>75% Grass cover, Good, HSG C
4,212	96	Weighted Average
311		7.38% Pervious Area
3,901		92.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment TH9: TOWN HOUSE #9

Runoff = 0.69 cfs @ 12.09 hrs, Volume= 2,486 cf, Depth> 8.57"
Routed to Pond DE69 : DRIP #69

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 100YR Rainfall=9.06"

Area (sf)	CN	Description
3,188	98	Roofs, HSG C
292	74	>75% Grass cover, Good, HSG C
3,480	96	Weighted Average
292		8.39% Pervious Area
3,188		91.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Reach 8R: OVERLAND FLOW

Inflow Area = 11,975 sf, 92.37% Impervious, Inflow Depth > 7.60" for 100YR event
Inflow = 1.97 cfs @ 12.14 hrs, Volume= 7,579 cf
Outflow = 0.70 cfs @ 12.48 hrs, Volume= 7,164 cf, Atten= 64%, Lag= 20.2 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.12 fps, Min. Travel Time= 75.2 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 175.9 min

Peak Storage= 3,174 cf @ 12.48 hrs
Average Depth at Peak Storage= 0.11' , Surface Width= 51.12'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 28.09 cfs

50.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 563.0' Slope= 0.0213 '/'
Inlet Invert= 208.00', Outlet Invert= 196.00'

Summary for Reach 9R: OVERLAND FLOW

Inflow Area = 32,665 sf, 94.81% Impervious, Inflow Depth = 0.85" for 100YR event
Inflow = 1.22 cfs @ 12.42 hrs, Volume= 2,322 cf
Outflow = 0.97 cfs @ 12.60 hrs, Volume= 2,322 cf, Atten= 21%, Lag= 10.5 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.27 fps, Min. Travel Time= 13.0 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 56.1 min

Peak Storage= 752 cf @ 12.60 hrs
Average Depth at Peak Storage= 0.16' , Surface Width= 23.29'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 23.45 cfs

20.00' x 1.00' deep channel, n= 0.400
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 211.0' Slope= 0.0652 '/'
Inlet Invert= 201.75', Outlet Invert= 188.00'

Summary for Reach 10R: OVERLAND FLOW

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth = 2.92" for 100YR event
Inflow = 10.24 cfs @ 12.28 hrs, Volume= 31,579 cf
Outflow = 8.88 cfs @ 12.37 hrs, Volume= 31,578 cf, Atten= 13%, Lag= 5.7 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.47 fps, Min. Travel Time= 5.8 min
Avg. Velocity = 0.13 fps, Avg. Travel Time= 20.8 min

Peak Storage= 3,056 cf @ 12.37 hrs
Average Depth at Peak Storage= 0.69' , Surface Width= 33.85'
Bank-Full Depth= 1.00' Flow Area= 30.0 sf, Capacity= 17.57 cfs

20.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 40.00'
Length= 164.0' Slope= 0.0366 '/'
Inlet Invert= 192.00', Outlet Invert= 186.00'

‡

Summary for Reach 11R: 4x4 Open Bottom Culvert

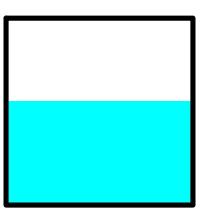
[52] Hint: Inlet/Outlet conditions not evaluated
[62] Hint: Exceeded Reach 20R OUTLET depth by 1.03' @ 12.45 hrs
[64] Warning: Exceeded Reach 20R outlet bank by 0.42' @ 12.47 hrs
[62] Hint: Exceeded Reach R211 OUTLET depth by 0.56' @ 12.45 hrs
[64] Warning: Exceeded Reach R211 outlet bank by 0.42' @ 12.47 hrs

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 4.09" for 100YR event
Inflow = 24.22 cfs @ 12.47 hrs, Volume= 144,775 cf
Outflow = 24.22 cfs @ 12.47 hrs, Volume= 144,761 cf, Atten= 0%, Lag= 0.1 min
Routed to Reach 23R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 2.73 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 0.95 fps, Avg. Travel Time= 0.5 min

Peak Storage= 266 cf @ 12.47 hrs
Average Depth at Peak Storage= 2.22' , Surface Width= 4.00'
Bank-Full Depth= 4.00' Flow Area= 16.0 sf, Capacity= 42.20 cfs

48.0" W x 48.0" H Box Pipe
n= 0.069 Riprap, 6-inch
Length= 30.0' Slope= 0.0150 '/'
Inlet Invert= 194.00', Outlet Invert= 193.55'



Summary for Reach 12R: OVERLAND FLOW

Inflow Area = 12,906 sf, 90.20% Impervious, Inflow Depth > 7.64" for 100YR event
Inflow = 2.22 cfs @ 12.14 hrs, Volume= 8,218 cf
Outflow = 1.36 cfs @ 12.29 hrs, Volume= 8,061 cf, Atten= 39%, Lag= 9.1 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.17 fps, Min. Travel Time= 24.9 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 74.2 min

Peak Storage= 2,026 cf @ 12.29 hrs
Average Depth at Peak Storage= 0.16' , Surface Width= 51.60'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 29.80 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 250.0' Slope= 0.0240 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

‡

Summary for Reach 14R: OVERLAND FLOW

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 4.74" for 100YR event
Inflow = 4.27 cfs @ 12.33 hrs, Volume= 20,864 cf
Outflow = 1.64 cfs @ 12.80 hrs, Volume= 19,373 cf, Atten= 62%, Lag= 28.4 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.18 fps, Min. Travel Time= 79.0 min
Avg. Velocity = 0.08 fps, Avg. Travel Time= 169.1 min

Peak Storage= 7,796 cf @ 12.80 hrs
Average Depth at Peak Storage= 0.18' , Surface Width= 53.54'
Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 31.55 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 70.00'
Length= 852.0' Slope= 0.0246 '/'
Inlet Invert= 207.00', Outlet Invert= 186.00'

Summary for Reach 15R: OVERLAND FLOW

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 3.97" for 100YR event
Inflow = 3.51 cfs @ 12.40 hrs, Volume= 20,698 cf
Outflow = 1.89 cfs @ 12.67 hrs, Volume= 19,826 cf, Atten= 46%, Lag= 16.2 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.18 fps, Min. Travel Time= 27.8 min
Avg. Velocity = 0.09 fps, Avg. Travel Time= 57.7 min

Peak Storage= 3,139 cf @ 12.67 hrs
Average Depth at Peak Storage= 0.21' , Surface Width= 52.05'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 27.21 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 300.0' Slope= 0.0200 '/'
Inlet Invert= 202.00', Outlet Invert= 196.00'

Summary for Reach 18R: OVERLAND FLOW

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth = 3.01" for 100YR event
Inflow = 10.22 cfs @ 12.18 hrs, Volume= 22,242 cf
Outflow = 3.56 cfs @ 12.56 hrs, Volume= 21,983 cf, Atten= 65%, Lag= 22.9 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.24 fps, Min. Travel Time= 42.7 min
Avg. Velocity = 0.09 fps, Avg. Travel Time= 116.4 min

Peak Storage= 9,121 cf @ 12.56 hrs
Average Depth at Peak Storage= 0.26' , Surface Width= 63.23'
Bank-Full Depth= 1.00' Flow Area= 75.0 sf, Capacity= 38.42 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 100.00'
Length= 609.0' Slope= 0.0279 '/'
Inlet Invert= 203.00', Outlet Invert= 186.00'

Summary for Reach 20R: OVERLAND FLOW

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth > 5.95" for 100YR event
Inflow = 8.98 cfs @ 12.18 hrs, Volume= 35,788 cf
Outflow = 3.75 cfs @ 12.53 hrs, Volume= 34,661 cf, Atten= 58%, Lag= 20.8 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.19 fps, Min. Travel Time= 50.3 min
Avg. Velocity = 0.08 fps, Avg. Travel Time= 118.6 min

Peak Storage= 11,298 cf @ 12.53 hrs
Average Depth at Peak Storage= 0.39' , Surface Width= 53.88'
Bank-Full Depth= 1.00' Flow Area= 55.0 sf, Capacity= 18.54 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 5.0 '/' Top Width= 60.00'
Length= 560.0' Slope= 0.0093 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

Summary for Reach 23R: OVERLAND FLOW

[61] Hint: Exceeded Reach 11R outlet invert by 0.28' @ 12.60 hrs

Inflow Area = 424,818 sf, 45.99% Impervious, Inflow Depth > 4.09" for 100YR event
Inflow = 24.22 cfs @ 12.47 hrs, Volume= 144,761 cf
Outflow = 22.58 cfs @ 12.60 hrs, Volume= 143,931 cf, Atten= 7%, Lag= 8.0 min
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.41 fps, Min. Travel Time= 9.6 min
Avg. Velocity = 0.13 fps, Avg. Travel Time= 29.8 min

Peak Storage= 13,052 cf @ 12.60 hrs
Average Depth at Peak Storage= 0.83' , Surface Width= 83.10'
Bank-Full Depth= 1.00' Flow Area= 70.0 sf, Capacity= 31.93 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 20.0 '/' Top Width= 90.00'
Length= 237.0' Slope= 0.0211 '/'
Inlet Invert= 193.00', Outlet Invert= 188.00'

Summary for Reach R202: OVERLAND FLOW

[55] Hint: Peak inflow is 105% of Manning's capacity
[62] Hint: Exceeded Reach SC1 OUTLET depth by 0.41' @ 12.90 hrs

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 6.11" for 100YR event
Inflow = 44.78 cfs @ 12.32 hrs, Volume= 219,947 cf
Outflow = 25.82 cfs @ 12.63 hrs, Volume= 212,555 cf, Atten= 42%, Lag= 18.6 min
Routed to Link AP2 : ANALYSIS POINT 2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.29 fps, Min. Travel Time= 40.5 min
Avg. Velocity = 0.11 fps, Avg. Travel Time= 106.8 min

Peak Storage= 62,638 cf @ 12.63 hrs
Average Depth at Peak Storage= 0.75' , Surface Width= 137.65'
Bank-Full Depth= 1.00' Flow Area= 125.0 sf, Capacity= 42.56 cfs

100.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 '/' Top Width= 150.00'
Length= 700.0' Slope= 0.0107 '/'
Inlet Invert= 205.50', Outlet Invert= 198.00'

Summary for Reach R211: OVERLAND FLOW

[55] Hint: Peak inflow is 191% of Manning's capacity

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth = 2.84" for 100YR event
Inflow = 27.69 cfs @ 12.16 hrs, Volume= 57,014 cf
Outflow = 11.38 cfs @ 12.54 hrs, Volume= 56,631 cf, Atten= 59%, Lag= 22.7 min
Routed to Reach 11R : 4x4 Open Bottom Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 0.27 fps, Min. Travel Time= 37.1 min
Avg. Velocity = 0.09 fps, Avg. Travel Time= 117.0 min

Peak Storage= 25,331 cf @ 12.54 hrs
Average Depth at Peak Storage= 0.88' , Surface Width= 61.30'
Bank-Full Depth= 1.00' Flow Area= 50.0 sf, Capacity= 14.51 cfs

35.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 15.0 '/' Top Width= 65.00'
Length= 600.0' Slope= 0.0087 '/'
Inlet Invert= 200.00', Outlet Invert= 194.80'

‡

Summary for Reach SC1: Stream Crossing #1

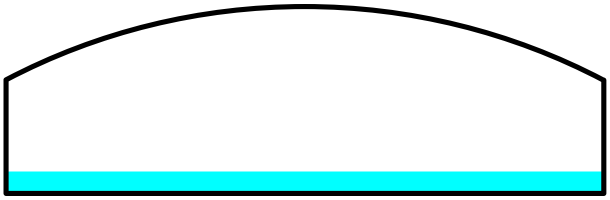
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 432,269 sf, 42.08% Impervious, Inflow Depth > 6.11" for 100YR event
Inflow = 44.78 cfs @ 12.31 hrs, Volume= 219,981 cf
Outflow = 44.78 cfs @ 12.32 hrs, Volume= 219,947 cf, Atten= 0%, Lag= 0.1 min
Routed to Reach R202 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 4.71 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.47 fps, Avg. Travel Time= 0.5 min

Peak Storage= 409 cf @ 12.32 hrs
Average Depth at Peak Storage= 0.59' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 69.8 sf, Capacity= 722.91 cfs

192.0" W x 60.0" H, R=207.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 43.1' Slope= 0.0200 '/'
Inlet Invert= 206.37', Outlet Invert= 205.51'



Summary for Reach SC2: Stream Crossing #2

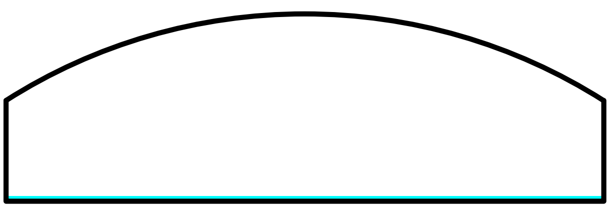
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 52,768 sf, 0.60% Impervious, Inflow Depth > 4.75" for 100YR event
Inflow = 4.28 cfs @ 12.32 hrs, Volume= 20,867 cf
Outflow = 4.27 cfs @ 12.33 hrs, Volume= 20,864 cf, Atten= 0%, Lag= 0.1 min
Routed to Reach 14R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Max. Velocity= 2.01 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 1.08 fps, Avg. Travel Time= 0.6 min

Peak Storage= 77 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.13' , Surface Width= 16.00'
Bank-Full Depth= 5.00' Flow Area= 68.1 sf, Capacity= 768.96 cfs

192.0" W x 60.0" H, R=180.0" Arch Pipe
n= 0.030 Stream, clean & straight
Length= 36.5' Slope= 0.0241 '/'
Inlet Invert= 208.52', Outlet Invert= 207.64'



Summary for Pond 1P: DMH #33

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 8.65" for 100YR event
Inflow = 3.20 cfs @ 12.09 hrs, Volume= 11,616 cf
Outflow = 3.20 cfs @ 12.09 hrs, Volume= 11,616 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.20 cfs @ 12.09 hrs, Volume= 11,616 cf
Routed to Pond OCS6 : OCS #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.71' @ 12.09 hrs
Flood Elev= 209.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.50'	**12.0" Round Culvert** L= 46.7' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 204.33' S= 0.0251 '/' Cc= 0.900

n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.12 cfs @ 12.09 hrs HW=206.68' TW=203.63' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 3.12 cfs @ 3.97 fps)

Summary for Pond 3P: OCS #8

Inflow Area = 12,684 sf, 86.64% Impervious, Inflow Depth > 8.12" for 100YR event
Inflow = 2.47 cfs @ 12.09 hrs, Volume= 8,581 cf
Outflow = 2.47 cfs @ 12.09 hrs, Volume= 8,581 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.47 cfs @ 12.09 hrs, Volume= 8,581 cf
Routed to Pond P214 : STORMTECH INFILTRATION SYSTEM #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.30' @ 12.41 hrs
Flood Elev= 206.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.62'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.40 cfs @ 12.09 hrs HW=202.18' TW=201.77' (Dynamic Tailwater)
↑—**1=Orifice/Grate** (Orifice Controls 2.40 cfs @ 3.06 fps)

Summary for Pond 5R: TRENCH DRAIN

Inflow Area = 11,173 sf, 75.10% Impervious, Inflow Depth > 8.21" for 100YR event
Inflow = 2.18 cfs @ 12.09 hrs, Volume= 7,644 cf
Outflow = 2.18 cfs @ 12.09 hrs, Volume= 7,644 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.18 cfs @ 12.09 hrs, Volume= 7,644 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 199.24' @ 12.09 hrs
Flood Elev= 199.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.22'	**8.0" Round Culvert** L= 36.0' Ke= 0.500 Inlet / Outlet Invert= 197.22' / 196.50' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=2.13 cfs @ 12.09 hrs HW=199.16' TW=196.52' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 2.13 cfs @ 6.09 fps)

Summary for Pond 11P: YARD DRAIN

Inflow Area = 21,407 sf, 48.10% Impervious, Inflow Depth > 6.50" for 100YR event
Inflow = 3.59 cfs @ 12.09 hrs, Volume= 11,590 cf
Outflow = 2.82 cfs @ 12.16 hrs, Volume= 11,525 cf, Atten= 22%, Lag= 4.2 min
Primary = 2.82 cfs @ 12.16 hrs, Volume= 11,525 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.48' @ 12.16 hrs Surf.Area= 6,408 sf Storage= 1,296 cf

Plug-Flow detention time= 14.4 min calculated for 11,501 cf (99% of inflow)
Center-of-Mass det. time= 10.9 min (811.0 - 800.1)

Volume	Invert	Avail.Storage	Storage Description
#1	207.25'	5,475 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.25	5,050	0	0
208.00	9,550	5,475	5,475

Device	Routing	Invert	Outlet Devices
#1	Primary	203.25'	**12.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 203.25' / 202.94' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	207.25'	**4.0" x 4.0" Horiz. Orifice/Grate X 4.00 columns** X 4 rows C= 0.600 in 24.0" x 24.0" Grate (44% open area) Limited to weir flow at low heads

Primary OutFlow Max=2.78 cfs @ 12.16 hrs HW=207.47' TW=203.83' (Dynamic Tailwater)
↑—**1=Culvert** (Passes 2.78 cfs of 6.70 cfs potential flow)
  ↑—**2=Orifice/Grate** (Weir Controls 2.78 cfs @ 1.55 fps)

Summary for Pond CB10: CB #10

Inflow Area = 6,961 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.39 cfs @ 12.09 hrs, Volume= 5,113 cf
Outflow = 1.39 cfs @ 12.09 hrs, Volume= 5,113 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.39 cfs @ 12.09 hrs, Volume= 5,113 cf
  Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.78' @ 12.09 hrs
Flood Elev= 212.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.76'	**12.0" Round Culvert** L= 33.8' Ke= 0.500 Inlet / Outlet Invert= 209.76' / 209.59' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.33 cfs @ 12.09 hrs HW=210.75' TW=210.59' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 1.33 cfs @ 2.13 fps)

Summary for Pond CB11: CB #11

Inflow Area = 7,173 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.43 cfs @ 12.09 hrs, Volume= 5,269 cf
Outflow = 1.43 cfs @ 12.09 hrs, Volume= 5,269 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.43 cfs @ 12.09 hrs, Volume= 5,269 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.83' @ 12.09 hrs
Flood Elev= 213.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.94'	**12.0" Round Culvert** L= 26.3' Ke= 0.500 Inlet / Outlet Invert= 209.94' / 209.67' S= 0.0103 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.38 cfs @ 12.09 hrs HW=210.81' TW=210.59' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.38 cfs @ 2.55 fps)

Summary for Pond CB12: CB #12

Inflow Area = 5,238 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.04 cfs @ 12.09 hrs, Volume= 3,847 cf
Outflow = 1.04 cfs @ 12.09 hrs, Volume= 3,847 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.04 cfs @ 12.09 hrs, Volume= 3,847 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.24' @ 12.09 hrs
Flood Elev= 209.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.68'	**12.0" Round Culvert** L= 41.3' Ke= 0.500 Inlet / Outlet Invert= 206.68' / 205.65' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.02 cfs @ 12.09 hrs HW=207.22' TW=206.68' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.02 cfs @ 3.38 fps)

Summary for Pond CB13: CB #13

Inflow Area = 10,873 sf, 90.78% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 2.16 cfs @ 12.09 hrs, Volume= 7,768 cf
Outflow = 2.16 cfs @ 12.09 hrs, Volume= 7,768 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.16 cfs @ 12.09 hrs, Volume= 7,768 cf
Routed to Pond 1P : DMH #33

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 207.53' @ 12.09 hrs
Flood Elev= 209.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**12.0" Round Culvert** L= 43.7' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 205.61' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.10 cfs @ 12.09 hrs HW=207.51' TW=206.68' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.10 cfs @ 3.07 fps)

Summary for Pond CB14: CB #14

Inflow Area = 12,099 sf, 86.22% Impervious, Inflow Depth > 7.97" for 100YR event
Inflow = 2.33 cfs @ 12.09 hrs, Volume= 8,033 cf
Outflow = 2.33 cfs @ 12.09 hrs, Volume= 8,033 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.33 cfs @ 12.09 hrs, Volume= 8,033 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.42' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 23.2' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.67' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.27 cfs @ 12.09 hrs HW=203.30' TW=202.93' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.27 cfs @ 2.89 fps)

Summary for Pond CB15: CB #15

Inflow Area = 6,666 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.33 cfs @ 12.09 hrs, Volume= 4,896 cf
Outflow = 1.33 cfs @ 12.09 hrs, Volume= 4,896 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.33 cfs @ 12.09 hrs, Volume= 4,896 cf
Routed to Pond D8 : DMH #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.16' @ 12.09 hrs
Flood Elev= 203.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.79'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 200.79' / 200.71' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.29 cfs @ 12.09 hrs HW=203.05' TW=202.93' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.29 cfs @ 1.65 fps)

Summary for Pond CB16: CB #16

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 6.50" for 100YR event
Inflow = 1.43 cfs @ 12.09 hrs, Volume= 4,611 cf
Outflow = 1.43 cfs @ 12.09 hrs, Volume= 4,611 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.43 cfs @ 12.09 hrs, Volume= 4,611 cf
Routed to Pond D10 : DMH #10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.33' @ 12.09 hrs
Flood Elev= 206.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.47'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 203.47' / 203.33' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.40 cfs @ 12.09 hrs HW=204.32' TW=204.09' (Dynamic Tailwater)
1=Culvert (Outlet Controls 1.40 cfs @ 2.65 fps)

Summary for Pond CB17: CB #17

Inflow Area = 11,836 sf, 73.87% Impervious, Inflow Depth > 8.09" for 100YR event
Inflow = 2.30 cfs @ 12.09 hrs, Volume= 7,978 cf
Outflow = 2.30 cfs @ 12.09 hrs, Volume= 7,978 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.30 cfs @ 12.09 hrs, Volume= 7,978 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.31' @ 12.10 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.99'	**12.0" Round Culvert** L= 13.8' Ke= 0.500 Inlet / Outlet Invert= 204.99' / 204.86' S= 0.0094 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.64 cfs @ 12.09 hrs HW=207.15' TW=207.12' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.64 cfs @ 0.82 fps)

Summary for Pond CB18: CB #18

Inflow Area = 24,853 sf, 72.99% Impervious, Inflow Depth > 7.05" for 100YR event
Inflow = 3.90 cfs @ 12.09 hrs, Volume= 14,596 cf
Outflow = 3.90 cfs @ 12.09 hrs, Volume= 14,596 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.90 cfs @ 12.09 hrs, Volume= 14,596 cf
Routed to Pond D11 : DMH #11

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 207.38' @ 12.11 hrs
Flood Elev= 208.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.72'	**15.0" Round Culvert** L= 25.1' Ke= 0.500 Inlet / Outlet Invert= 204.72' / 204.59' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.87 cfs @ 12.09 hrs HW=207.25' TW=207.15' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.87 cfs @ 1.52 fps)

Summary for Pond CB20: CB #20

Inflow Area = 11,939 sf, 88.95% Impervious, Inflow Depth > 8.45" for 100YR event
Inflow = 2.36 cfs @ 12.09 hrs, Volume= 8,409 cf
Outflow = 2.36 cfs @ 12.09 hrs, Volume= 8,409 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.36 cfs @ 12.09 hrs, Volume= 8,409 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.83' @ 12.09 hrs
Flood Elev= 207.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.97'	**12.0" Round Culvert** L= 30.3' Ke= 0.500 Inlet / Outlet Invert= 203.97' / 203.81' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.30 cfs @ 12.09 hrs HW=205.72' TW=205.35' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.30 cfs @ 2.92 fps)

Summary for Pond CB21: CB #21

Inflow Area = 10,174 sf, 87.04% Impervious, Inflow Depth > 7.85" for 100YR event
Inflow = 1.95 cfs @ 12.09 hrs, Volume= 6,652 cf
Outflow = 1.95 cfs @ 12.09 hrs, Volume= 6,652 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.95 cfs @ 12.09 hrs, Volume= 6,652 cf
Routed to Pond D12 : DMH #12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.70' @ 12.09 hrs
Flood Elev= 208.02'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.32'	**12.0" Round Culvert** L= 26.0' Ke= 0.500 Inlet / Outlet Invert= 204.32' / 204.19' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.91 cfs @ 12.09 hrs HW=205.61' TW=205.35' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.91 cfs @ 2.44 fps)

Summary for Pond CB22: CB #22

Inflow Area = 12,001 sf, 91.62% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 2.38 cfs @ 12.09 hrs, Volume= 8,574 cf
Outflow = 2.38 cfs @ 12.09 hrs, Volume= 8,574 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.38 cfs @ 12.09 hrs, Volume= 8,574 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.41' @ 12.09 hrs
Flood Elev= 208.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.33'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 205.33' / 205.25' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.32 cfs @ 12.09 hrs HW=206.39' TW=205.73' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 2.32 cfs @ 3.48 fps)

Summary for Pond CB23: CB #23

Inflow Area = 9,694 sf, 61.00% Impervious, Inflow Depth > 7.72" for 100YR event
Inflow = 1.84 cfs @ 12.09 hrs, Volume= 6,239 cf
Outflow = 1.84 cfs @ 12.09 hrs, Volume= 6,239 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.84 cfs @ 12.09 hrs, Volume= 6,239 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.30' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.41'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 205.41' / 205.32' S= 0.0055 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.79 cfs @ 12.09 hrs HW=206.29' TW=205.73' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.79 cfs @ 3.27 fps)

Summary for Pond CB24: CB #24

Inflow Area = 7,930 sf, 72.16% Impervious, Inflow Depth > 8.21" for 100YR event
Inflow = 1.55 cfs @ 12.09 hrs, Volume= 5,426 cf
Outflow = 1.55 cfs @ 12.09 hrs, Volume= 5,426 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.55 cfs @ 12.09 hrs, Volume= 5,426 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.37' @ 12.09 hrs
Flood Elev= 209.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 12.1' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.15' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.45 cfs @ 12.09 hrs HW=206.33' TW=206.19' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.45 cfs @ 1.84 fps)

Summary for Pond CB25: CB #25

Inflow Area = 8,487 sf, 80.92% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 1.67 cfs @ 12.09 hrs, Volume= 5,892 cf
Outflow = 1.67 cfs @ 12.09 hrs, Volume= 5,892 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.67 cfs @ 12.09 hrs, Volume= 5,892 cf
Routed to Pond D16 : DMH #16

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.30' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.22'	**15.0" Round Culvert** L= 11.4' Ke= 0.500 Inlet / Outlet Invert= 205.22' / 205.16' S= 0.0053 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.52 cfs @ 12.09 hrs HW=206.28' TW=206.19' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.52 cfs @ 1.85 fps)

Summary for Pond CB26: CB #26

Inflow Area = 8,835 sf, 63.75% Impervious, Inflow Depth > 7.97" for 100YR event
Inflow = 1.70 cfs @ 12.09 hrs, Volume= 5,866 cf
Outflow = 1.70 cfs @ 12.09 hrs, Volume= 5,866 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.70 cfs @ 12.09 hrs, Volume= 5,866 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 202.61' @ 12.09 hrs
Flood Elev= 204.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.77'	**12.0" Round Culvert** L= 42.5' Ke= 0.500 Inlet / Outlet Invert= 201.77' / 201.55' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.66 cfs @ 12.09 hrs HW=202.60' TW=201.61' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.66 cfs @ 3.23 fps)

Summary for Pond CB27: CB #27

Inflow Area = 6,111 sf, 91.90% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 1.21 cfs @ 12.09 hrs, Volume= 4,366 cf
Outflow = 1.21 cfs @ 12.09 hrs, Volume= 4,366 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.21 cfs @ 12.09 hrs, Volume= 4,366 cf
Routed to Pond D17 : DMH #17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.82' @ 12.09 hrs
Flood Elev= 204.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 18.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.90' S= 0.0056 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.18 cfs @ 12.09 hrs HW=201.79' TW=201.61' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.18 cfs @ 2.42 fps)

Summary for Pond CB28: CB #28

Inflow Area = 10,372 sf, 51.33% Impervious, Inflow Depth > 7.60" for 100YR event
Inflow = 1.95 cfs @ 12.09 hrs, Volume= 6,570 cf
Outflow = 1.95 cfs @ 12.09 hrs, Volume= 6,570 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.95 cfs @ 12.09 hrs, Volume= 6,570 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 199.02' @ 12.09 hrs
Flood Elev= 200.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.75'	**12.0" Round Culvert** L= 13.7' Ke= 0.500 Inlet / Outlet Invert= 197.75' / 197.69' S= 0.0044 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.90 cfs @ 12.09 hrs HW=198.98' TW=198.73' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.90 cfs @ 2.42 fps)

Summary for Pond CB29: CB #29

Inflow Area = 8,495 sf, 84.21% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 1.67 cfs @ 12.09 hrs, Volume= 5,898 cf
Outflow = 1.67 cfs @ 12.09 hrs, Volume= 5,898 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.67 cfs @ 12.09 hrs, Volume= 5,898 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.87' @ 12.09 hrs
Flood Elev= 208.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 13.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.31' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.35 cfs @ 12.09 hrs HW=206.79' TW=206.66' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.35 cfs @ 1.71 fps)

Summary for Pond CB30: CB #30

Inflow Area = 8,933 sf, 82.40% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 1.76 cfs @ 12.09 hrs, Volume= 6,202 cf
Outflow = 1.76 cfs @ 12.09 hrs, Volume= 6,202 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.76 cfs @ 12.09 hrs, Volume= 6,202 cf
Routed to Pond D19 : DMH #19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.89' @ 12.09 hrs
Flood Elev= 208.54'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.38'	**12.0" Round Culvert** L= 17.5' Ke= 0.500 Inlet / Outlet Invert= 205.38' / 205.29' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.45 cfs @ 12.09 hrs HW=206.81' TW=206.66' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.45 cfs @ 1.84 fps)

Summary for Pond CB31: CB #31

Inflow Area = 16,365 sf, 68.64% Impervious, Inflow Depth > 7.85" for 100YR event
Inflow = 3.13 cfs @ 12.09 hrs, Volume= 10,699 cf
Outflow = 3.13 cfs @ 12.09 hrs, Volume= 10,699 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.13 cfs @ 12.09 hrs, Volume= 10,699 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.84' @ 12.09 hrs
Flood Elev= 207.36'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.05 cfs @ 12.09 hrs HW=205.77' TW=205.12' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 3.05 cfs @ 3.89 fps)

Summary for Pond CB32: CB #32

Inflow Area = 12,710 sf, 70.47% Impervious, Inflow Depth > 7.97" for 100YR event
Inflow = 2.45 cfs @ 12.09 hrs, Volume= 8,439 cf
Outflow = 2.45 cfs @ 12.09 hrs, Volume= 8,439 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.45 cfs @ 12.09 hrs, Volume= 8,439 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.58' @ 12.09 hrs
Flood Elev= 207.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**12.0" Round Culvert** L= 16.3' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 204.11' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.39 cfs @ 12.09 hrs HW=205.52' TW=205.12' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.39 cfs @ 3.04 fps)

Summary for Pond CB33: CB #33

Inflow Area = 5,421 sf, 83.90% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 1.07 cfs @ 12.09 hrs, Volume= 3,764 cf
Outflow = 1.07 cfs @ 12.09 hrs, Volume= 3,764 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.07 cfs @ 12.09 hrs, Volume= 3,764 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.39' @ 12.09 hrs
Flood Elev= 208.45'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.28'	**12.0" Round Culvert** L= 11.7' Ke= 0.500 Inlet / Outlet Invert= 205.28' / 205.22' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.04 cfs @ 12.09 hrs HW=206.35' TW=206.27' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.04 cfs @ 1.33 fps)

Summary for Pond CB34: CB #34

Inflow Area = 8,622 sf, 80.51% Impervious, Inflow Depth > 8.21" for 100YR event
Inflow = 1.69 cfs @ 12.09 hrs, Volume= 5,899 cf
Outflow = 1.69 cfs @ 12.09 hrs, Volume= 5,899 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.69 cfs @ 12.09 hrs, Volume= 5,899 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.50' @ 12.09 hrs
Flood Elev= 208.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	**12.0" Round Culvert** L= 16.5' Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.13' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.64 cfs @ 12.09 hrs HW=206.46' TW=206.27' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.64 cfs @ 2.09 fps)

Summary for Pond CB35: CB #35

Inflow Area = 4,149 sf, 98.10% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 0.83 cfs @ 12.09 hrs, Volume= 3,048 cf
Outflow = 0.83 cfs @ 12.09 hrs, Volume= 3,048 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.83 cfs @ 12.09 hrs, Volume= 3,048 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.66' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 15.2' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.79 cfs @ 12.09 hrs HW=207.65' TW=207.48' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.79 cfs @ 2.27 fps)

Summary for Pond CB36: CB #36

Inflow Area = 6,622 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.32 cfs @ 12.09 hrs, Volume= 4,864 cf
Outflow = 1.32 cfs @ 12.09 hrs, Volume= 4,864 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.32 cfs @ 12.09 hrs, Volume= 4,864 cf
Routed to Pond D23 : DMH #23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.78' @ 12.09 hrs
Flood Elev= 210.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	207.04'	**12.0" Round Culvert** L= 16.1' Ke= 0.500 Inlet / Outlet Invert= 207.04' / 206.96' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.29 cfs @ 12.09 hrs HW=207.77' TW=207.48' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.29 cfs @ 2.93 fps)

Summary for Pond CB38: CB #38

Inflow Area = 7,637 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.52 cfs @ 12.09 hrs, Volume= 5,610 cf
Outflow = 1.52 cfs @ 12.09 hrs, Volume= 5,610 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.52 cfs @ 12.09 hrs, Volume= 5,610 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 212.84' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.7' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.48 cfs @ 12.09 hrs HW=212.67' TW=212.52' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.48 cfs @ 1.89 fps)

Summary for Pond CB39: CB #39

Inflow Area = 7,612 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.52 cfs @ 12.09 hrs, Volume= 5,591 cf
Outflow = 1.52 cfs @ 12.09 hrs, Volume= 5,591 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.52 cfs @ 12.09 hrs, Volume= 5,591 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 212.84' @ 12.09 hrs
Flood Elev= 212.86'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.69'	**12.0" Round Culvert** L= 16.4' Ke= 0.500 Inlet / Outlet Invert= 209.69' / 209.61' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.48 cfs @ 12.09 hrs HW=212.67' TW=212.52' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.48 cfs @ 1.88 fps)

Summary for Pond CB40: CB #40

Inflow Area = 4,211 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 0.84 cfs @ 12.09 hrs, Volume= 3,093 cf
Outflow = 0.84 cfs @ 12.09 hrs, Volume= 3,093 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.84 cfs @ 12.09 hrs, Volume= 3,093 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 214.52' @ 12.09 hrs
Flood Elev= 217.04'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.68'	**12.0" Round Culvert** L= 17.8' Ke= 0.500 Inlet / Outlet Invert= 213.68' / 213.55' S= 0.0073 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.74 cfs @ 12.09 hrs HW=214.50' TW=214.43' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.74 cfs @ 1.47 fps)

Summary for Pond CB41: CB #41

Inflow Area = 5,586 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.11 cfs @ 12.09 hrs, Volume= 4,103 cf
Outflow = 1.11 cfs @ 12.09 hrs, Volume= 4,103 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.11 cfs @ 12.09 hrs, Volume= 4,103 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.63' @ 12.09 hrs
Flood Elev= 217.06'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.89'	**12.0" Round Culvert** L= 18.4' Ke= 0.500 Inlet / Outlet Invert= 213.89' / 213.80' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.05 cfs @ 12.09 hrs HW=214.62' TW=214.43' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.05 cfs @ 2.39 fps)

Summary for Pond CB43: CB #43

Inflow Area = 3,109 sf, 75.36% Impervious, Inflow Depth > 7.72" for 100YR event
Inflow = 0.59 cfs @ 12.09 hrs, Volume= 2,001 cf
Outflow = 0.59 cfs @ 12.09 hrs, Volume= 2,001 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.59 cfs @ 12.09 hrs, Volume= 2,001 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.71' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.57 cfs @ 12.09 hrs HW=220.70' TW=220.64' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.57 cfs @ 1.38 fps)

Summary for Pond CB44: CB #44

Inflow Area = 1,978 sf, 84.43% Impervious, Inflow Depth > 8.09" for 100YR event
Inflow = 0.38 cfs @ 12.09 hrs, Volume= 1,333 cf
Outflow = 0.38 cfs @ 12.09 hrs, Volume= 1,333 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.38 cfs @ 12.09 hrs, Volume= 1,333 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.68' @ 12.09 hrs
Flood Elev= 223.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.00'	**12.0" Round Culvert** L= 14.9' Ke= 0.500 Inlet / Outlet Invert= 220.00' / 219.93' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.37 cfs @ 12.09 hrs HW=220.67' TW=220.64' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.37 cfs @ 0.95 fps)

Summary for Pond CB45: CB #45

Inflow Area = 2,465 sf, 50.30% Impervious, Inflow Depth > 6.62" for 100YR event
Inflow = 0.42 cfs @ 12.09 hrs, Volume= 1,360 cf
Outflow = 0.42 cfs @ 12.09 hrs, Volume= 1,360 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.42 cfs @ 12.09 hrs, Volume= 1,360 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 221.73' @ 12.09 hrs
Flood Elev= 224.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.29'	**12.0" Round Culvert** L= 18.2' Ke= 0.500 Inlet / Outlet Invert= 221.29' / 221.20' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.41 cfs @ 12.09 hrs HW=221.72' TW=221.59' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 0.41 cfs @ 1.88 fps)

Summary for Pond CB46: CB #46

Inflow Area = 4,397 sf, 50.97% Impervious, Inflow Depth > 6.62" for 100YR event
Inflow = 0.75 cfs @ 12.09 hrs, Volume= 2,426 cf
Outflow = 0.75 cfs @ 12.09 hrs, Volume= 2,426 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.75 cfs @ 12.09 hrs, Volume= 2,426 cf
Routed to Pond D30 : DMH #30

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 222.06' @ 12.09 hrs
Flood Elev= 224.69'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.53'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 221.53' / 221.45' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.73 cfs @ 12.09 hrs HW=222.06' TW=221.59' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 0.73 cfs @ 2.55 fps)

Summary for Pond CB47: CB#47

Inflow Area = 3,012 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 0.60 cfs @ 12.09 hrs, Volume= 2,212 cf
Outflow = 0.60 cfs @ 12.09 hrs, Volume= 2,212 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.60 cfs @ 12.09 hrs, Volume= 2,212 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 226.92' @ 12.16 hrs
Flood Elev= 230.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	225.05'	**12.0" Round Culvert** L= 20.9' Ke= 0.500 Inlet / Outlet Invert= 225.05' / 224.95' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.60 cfs @ 12.09 hrs HW=226.42' TW=226.40' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 0.60 cfs @ 0.76 fps)

Summary for Pond CB48: CB#48

Inflow Area = 60,128 sf, 25.16% Impervious, Inflow Depth > 5.38" for 100YR event
Inflow = 7.16 cfs @ 12.16 hrs, Volume= 26,943 cf
Outflow = 7.16 cfs @ 12.16 hrs, Volume= 26,943 cf, Atten= 0%, Lag= 0.0 min
Primary = 7.16 cfs @ 12.16 hrs, Volume= 26,943 cf
Routed to Pond D31 : DMH#31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 228.37' @ 12.16 hrs
Flood Elev= 230.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.82'	**15.0" Round Culvert** L= 16.9' Ke= 0.500 Inlet / Outlet Invert= 224.82' / 224.74' S= 0.0047 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=7.03 cfs @ 12.16 hrs HW=228.27' TW=226.85' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 7.03 cfs @ 5.73 fps)

Summary for Pond CB49: CB #49

Inflow Area = 5,238 sf, 84.59% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 1.03 cfs @ 12.09 hrs, Volume= 3,637 cf
Outflow = 1.03 cfs @ 12.09 hrs, Volume= 3,637 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.03 cfs @ 12.09 hrs, Volume= 3,637 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.26' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.76'	**12.0" Round Culvert** L= 15.5' Ke= 0.500 Inlet / Outlet Invert= 202.76' / 202.68' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.00 cfs @ 12.09 hrs HW=204.21' TW=204.14' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.00 cfs @ 1.28 fps)

Summary for Pond CB50: CB #50

Inflow Area = 15,040 sf, 77.20% Impervious, Inflow Depth > 8.21" for 100YR event
Inflow = 2.94 cfs @ 12.09 hrs, Volume= 10,290 cf
Outflow = 2.94 cfs @ 12.09 hrs, Volume= 10,290 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.94 cfs @ 12.09 hrs, Volume= 10,290 cf
Routed to Pond DMH32 : DMH #32

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.79' @ 12.09 hrs
Flood Elev= 205.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 15.3' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.70' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.86 cfs @ 12.09 hrs HW=204.71' TW=204.14' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.86 cfs @ 3.65 fps)

Summary for Pond CB51: CB #51

Inflow Area = 6,823 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 1.36 cfs @ 12.09 hrs, Volume= 5,012 cf
Outflow = 1.36 cfs @ 12.09 hrs, Volume= 5,012 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.36 cfs @ 12.09 hrs, Volume= 5,012 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.55' @ 12.34 hrs
Flood Elev= 212.77'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.35'	**12.0" Round Culvert** L= 31.4' Ke= 0.500 Inlet / Outlet Invert= 202.35' / 202.19' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.36 cfs @ 12.09 hrs HW=203.74' TW=203.61' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.36 cfs @ 1.73 fps)

Summary for Pond CB52: CB #52

Inflow Area = 9,052 sf, 87.14% Impervious, Inflow Depth > 8.45" for 100YR event
Inflow = 1.79 cfs @ 12.09 hrs, Volume= 6,376 cf
Outflow = 1.79 cfs @ 12.09 hrs, Volume= 6,376 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.79 cfs @ 12.09 hrs, Volume= 6,376 cf
Routed to Pond OCS7 : OCS #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.56' @ 12.33 hrs
Flood Elev= 205.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.68'	**12.0" Round Culvert** L= 25.5' Ke= 0.500 Inlet / Outlet Invert= 202.68' / 202.55' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.87 cfs @ 12.09 hrs HW=203.85' TW=203.61' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 1.87 cfs @ 2.38 fps)

Summary for Pond CB53: CB #53

Inflow Area = 7,863 sf, 86.52% Impervious, Inflow Depth > 8.21" for 100YR event
Inflow = 1.54 cfs @ 12.09 hrs, Volume= 5,380 cf
Outflow = 1.54 cfs @ 12.09 hrs, Volume= 5,380 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.54 cfs @ 12.09 hrs, Volume= 5,380 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.58' @ 12.09 hrs
Flood Elev= 205.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.78'	**12.0" Round Culvert** L= 32.0' Ke= 0.500 Inlet / Outlet Invert= 202.78' / 202.62' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.50 cfs @ 12.09 hrs HW=203.57' TW=202.18' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.50 cfs @ 3.10 fps)

Summary for Pond CB54: CB #54

Inflow Area = 4,821 sf, 86.85% Impervious, Inflow Depth > 7.97" for 100YR event
Inflow = 0.93 cfs @ 12.09 hrs, Volume= 3,201 cf
Outflow = 0.93 cfs @ 12.09 hrs, Volume= 3,201 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.93 cfs @ 12.09 hrs, Volume= 3,201 cf
Routed to Pond 3P : OCS #8

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.32' @ 12.40 hrs
Flood Elev= 205.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.66'	**12.0" Round Culvert** L= 36.7' Ke= 0.500 Inlet / Outlet Invert= 202.66' / 202.48' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.91 cfs @ 12.09 hrs HW=203.24' TW=202.18' (Dynamic Tailwater)
└**1=Culvert** (Barrel Controls 0.91 cfs @ 2.74 fps)

Summary for Pond CB7: CB#5

Inflow Area = 4,650 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 0.93 cfs @ 12.09 hrs, Volume= 3,416 cf
Outflow = 0.93 cfs @ 12.09 hrs, Volume= 3,416 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.93 cfs @ 12.09 hrs, Volume= 3,416 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 215.06' @ 12.14 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.60'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 212.60' / 212.45' S= 0.0099 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.92 cfs @ 12.09 hrs HW=214.04' TW=213.78' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 1.92 cfs @ 2.44 fps)

Summary for Pond CB8: CB#8

Inflow Area = 5,450 sf, 88.75% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 1.07 cfs @ 12.09 hrs, Volume= 3,784 cf
Outflow = 1.07 cfs @ 12.09 hrs, Volume= 3,784 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.07 cfs @ 12.09 hrs, Volume= 3,784 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 215.06' @ 12.14 hrs
Flood Elev= 215.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.79'	**12.0" Round Culvert** L= 15.1' Ke= 0.500 Inlet / Outlet Invert= 213.79' / 213.64' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.30 cfs @ 12.09 hrs HW=214.47' TW=213.79' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.30 cfs @ 3.24 fps)

Summary for Pond CB9: CB #9

Inflow Area = 16,307 sf, 93.95% Impervious, Inflow Depth > 8.69" for 100YR event
Inflow = 3.25 cfs @ 12.09 hrs, Volume= 11,814 cf
Outflow = 3.25 cfs @ 12.09 hrs, Volume= 11,814 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.25 cfs @ 12.09 hrs, Volume= 11,814 cf
Routed to Pond D5 : DMH #5

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 211.34' @ 12.09 hrs
Flood Elev= 213.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.10'	**12.0" Round Culvert** L= 19.9' Ke= 0.500 Inlet / Outlet Invert= 210.10' / 209.71' S= 0.0196 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.16 cfs @ 12.09 hrs HW=211.30' TW=210.59' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 3.16 cfs @ 4.03 fps)

Summary for Pond D10: DMH #10

Inflow Area = 8,516 sf, 64.88% Impervious, Inflow Depth > 6.50" for 100YR event
Inflow = 1.43 cfs @ 12.09 hrs, Volume= 4,611 cf
Outflow = 1.43 cfs @ 12.09 hrs, Volume= 4,611 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.43 cfs @ 12.09 hrs, Volume= 4,611 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.11' @ 12.09 hrs
Flood Elev= 206.49'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.33'	**12.0" Round Culvert** L= 15.6' Ke= 0.500 Inlet / Outlet Invert= 203.33' / 203.25' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.40 cfs @ 12.09 hrs HW=204.09' TW=198.46' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 1.40 cfs @ 3.00 fps)

Summary for Pond D11: DMH #11

Inflow Area = 36,689 sf, 73.28% Impervious, Inflow Depth > 7.38" for 100YR event
Inflow = 6.20 cfs @ 12.09 hrs, Volume= 22,574 cf
Outflow = 6.20 cfs @ 12.09 hrs, Volume= 22,574 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.20 cfs @ 12.09 hrs, Volume= 22,574 cf
Routed to Pond OCS3 : OCS#3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.27' @ 12.10 hrs
Flood Elev= 208.33'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.25'	**18.0" Round Culvert** L= 44.6' Ke= 0.500 Inlet / Outlet Invert= 204.25' / 204.03' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.09 cfs @ 12.09 hrs HW=207.14' TW=206.62' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 6.09 cfs @ 3.44 fps)

Summary for Pond D12: DMH #12

Inflow Area = 22,113 sf, 88.07% Impervious, Inflow Depth > 8.17" for 100YR event
Inflow = 4.31 cfs @ 12.09 hrs, Volume= 15,061 cf
Outflow = 4.31 cfs @ 12.09 hrs, Volume= 15,061 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.31 cfs @ 12.09 hrs, Volume= 15,061 cf
Routed to Pond D13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.44' @ 12.09 hrs
Flood Elev= 207.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.21'	**12.0" Round Culvert** L= 41.9' Ke= 0.500 Inlet / Outlet Invert= 203.21' / 203.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.20 cfs @ 12.09 hrs HW=205.35' TW=204.10' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 4.20 cfs @ 5.35 fps)

Summary for Pond D13: DMH #13

Inflow Area = 81,632 sf, 72.61% Impervious, Inflow Depth > 7.75" for 100YR event
Inflow = 14.18 cfs @ 12.09 hrs, Volume= 52,717 cf
Outflow = 14.18 cfs @ 12.09 hrs, Volume= 52,717 cf, Atten= 0%, Lag= 0.0 min
Primary = 14.18 cfs @ 12.09 hrs, Volume= 52,717 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.14' @ 12.09 hrs
Flood Elev= 208.12'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.95'	**24.0" Round Culvert** L= 60.1' Ke= 0.500 Inlet / Outlet Invert= 201.95' / 201.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=14.01 cfs @ 12.09 hrs HW=204.12' TW=198.49' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 14.01 cfs @ 5.11 fps)

Summary for Pond D14: DMH #14

Inflow Area = 38,112 sf, 77.40% Impervious, Inflow Depth > 8.23" for 100YR event
Inflow = 7.44 cfs @ 12.09 hrs, Volume= 26,131 cf
Outflow = 7.44 cfs @ 12.09 hrs, Volume= 26,131 cf, Atten= 0%, Lag= 0.0 min
Primary = 7.44 cfs @ 12.09 hrs, Volume= 26,131 cf
Routed to Pond d13 : DMH #13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.77' @ 12.09 hrs
Flood Elev= 208.78'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.13'	**18.0" Round Culvert** L= 256.3' Ke= 0.500 Inlet / Outlet Invert= 204.13' / 202.85' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=7.26 cfs @ 12.09 hrs HW=205.73' TW=204.10' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 7.26 cfs @ 4.79 fps)

Summary for Pond D16: DMH #16

Inflow Area = 16,417 sf, 76.69% Impervious, Inflow Depth > 8.27" for 100YR event
Inflow = 3.22 cfs @ 12.09 hrs, Volume= 11,318 cf
Outflow = 3.22 cfs @ 12.09 hrs, Volume= 11,318 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.22 cfs @ 12.09 hrs, Volume= 11,318 cf
Routed to Pond D14 : DMH #14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.22' @ 12.09 hrs
Flood Elev= 208.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.90'	**15.0" Round Culvert** L= 103.5' Ke= 0.500 Inlet / Outlet Invert= 204.90' / 204.38' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.14 cfs @ 12.09 hrs HW=206.19' TW=205.73' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 3.14 cfs @ 3.09 fps)

Summary for Pond D17: DMH #17

Inflow Area = 14,946 sf, 75.26% Impervious, Inflow Depth > 8.22" for 100YR event
Inflow = 2.92 cfs @ 12.09 hrs, Volume= 10,232 cf
Outflow = 2.92 cfs @ 12.09 hrs, Volume= 10,232 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.92 cfs @ 12.09 hrs, Volume= 10,232 cf
Routed to Pond D18 : DMH #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.64' @ 12.09 hrs
Flood Elev= 204.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.55'	**12.0" Round Culvert** L= 91.6' Ke= 0.500 Inlet / Outlet Invert= 200.55' / 197.69' S= 0.0312 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.84 cfs @ 12.09 hrs HW=201.61' TW=198.73' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.84 cfs @ 3.62 fps)

Summary for Pond D18: DMH #18

Inflow Area = 25,318 sf, 65.46% Impervious, Inflow Depth > 7.96" for 100YR event
Inflow = 4.87 cfs @ 12.09 hrs, Volume= 16,802 cf
Outflow = 4.87 cfs @ 12.09 hrs, Volume= 16,802 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.87 cfs @ 12.09 hrs, Volume= 16,802 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.76' @ 12.09 hrs
Flood Elev= 201.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	197.44'	**15.0" Round Culvert** L= 46.3' Ke= 0.500 Inlet / Outlet Invert= 197.44' / 196.98' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.74 cfs @ 12.09 hrs HW=198.73' TW=196.91' (Dynamic Tailwater)
1=Culvert (Barrel Controls 4.74 cfs @ 4.65 fps)

Summary for Pond D19: DMH #19

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 3.43 cfs @ 12.09 hrs, Volume= 12,100 cf
Outflow = 3.43 cfs @ 12.09 hrs, Volume= 12,100 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.43 cfs @ 12.09 hrs, Volume= 12,100 cf
Routed to Pond d20 : DMH #20

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 206.75' @ 12.09 hrs
Flood Elev= 208.57'

Device	Routing	Invert	Outlet Devices
#1	Primary	205.19'	**12.0" Round Culvert** L= 82.5' Ke= 0.500 Inlet / Outlet Invert= 205.19' / 204.43' S= 0.0092 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.31 cfs @ 12.09 hrs HW=206.66' TW=205.53' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 3.31 cfs @ 4.22 fps)

Summary for Pond D2: DMH#2

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 5.96" for 100YR event
Inflow = 9.15 cfs @ 12.14 hrs, Volume= 36,354 cf
Outflow = 9.15 cfs @ 12.14 hrs, Volume= 36,354 cf, Atten= 0%, Lag= 0.0 min
Primary = 9.15 cfs @ 12.14 hrs, Volume= 36,354 cf
Routed to Pond P205 : INFILTRATION POND #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 209.92' @ 12.14 hrs
Flood Elev= 212.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**15.0" Round Culvert** L= 38.2' Ke= 0.500 Inlet / Outlet Invert= 206.90' / 206.52' S= 0.0099 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=9.07 cfs @ 12.14 hrs HW=209.88' TW=207.03' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 9.07 cfs @ 7.39 fps)

Summary for Pond D20: DMH #20

Inflow Area = 17,428 sf, 83.29% Impervious, Inflow Depth > 8.33" for 100YR event
Inflow = 3.43 cfs @ 12.09 hrs, Volume= 12,100 cf
Outflow = 3.43 cfs @ 12.09 hrs, Volume= 12,100 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.43 cfs @ 12.09 hrs, Volume= 12,100 cf
Routed to Pond D21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.57' @ 12.09 hrs
Flood Elev= 207.68'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.19'	**15.0" Round Culvert** L= 63.5' Ke= 0.500 Inlet / Outlet Invert= 204.19' / 203.87' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.34 cfs @ 12.09 hrs HW=205.53' TW=205.12' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 3.34 cfs @ 3.16 fps)

Summary for Pond D21: DMH #21

Inflow Area = 71,317 sf, 79.77% Impervious, Inflow Depth > 8.21" for 100YR event
Inflow = 13.91 cfs @ 12.09 hrs, Volume= 48,812 cf
Outflow = 13.91 cfs @ 12.09 hrs, Volume= 48,812 cf, Atten= 0%, Lag= 0.0 min
Primary = 13.91 cfs @ 12.09 hrs, Volume= 48,812 cf
Routed to Pond p212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.17' @ 12.09 hrs
Flood Elev= 207.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.02'	**24.0" Round Culvert** L= 72.4' Ke= 0.500 Inlet / Outlet Invert= 203.02' / 202.66' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=13.55 cfs @ 12.09 hrs HW=205.12' TW=202.97' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 13.55 cfs @ 5.10 fps)

Summary for Pond D22: DMH #22

Inflow Area = 24,814 sf, 89.39% Impervious, Inflow Depth > 8.50" for 100YR event
Inflow = 4.90 cfs @ 12.09 hrs, Volume= 17,574 cf
Outflow = 4.90 cfs @ 12.09 hrs, Volume= 17,574 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.90 cfs @ 12.09 hrs, Volume= 17,574 cf
Routed to Pond d21 : DMH #21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.31' @ 12.09 hrs
Flood Elev= 208.46'

Device	Routing	Invert	Outlet Devices
#1	Primary	204.87'	**15.0" Round Culvert** L= 134.2' Ke= 0.500 Inlet / Outlet Invert= 204.87' / 203.92' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.78 cfs @ 12.09 hrs HW=206.27' TW=205.12' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 4.78 cfs @ 4.34 fps)

Summary for Pond D23: DMH #23

Inflow Area = 10,771 sf, 99.27% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 2.15 cfs @ 12.09 hrs, Volume= 7,912 cf
Outflow = 2.15 cfs @ 12.09 hrs, Volume= 7,912 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.15 cfs @ 12.09 hrs, Volume= 7,912 cf
Routed to Pond D22 : DMH #22

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 207.50' @ 12.09 hrs
Flood Elev= 210.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.70'	**15.0" Round Culvert** L= 173.3' Ke= 0.500 Inlet / Outlet Invert= 206.70' / 204.97' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.09 cfs @ 12.09 hrs HW=207.48' TW=206.27' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 2.09 cfs @ 3.69 fps)

Summary for Pond D25: DMH #25

Inflow Area = 36,995 sf, 87.96% Impervious, Inflow Depth > 8.28" for 100YR event
Inflow = 7.14 cfs @ 12.09 hrs, Volume= 25,517 cf
Outflow = 7.14 cfs @ 12.09 hrs, Volume= 25,517 cf, Atten= 0%, Lag= 0.0 min
Primary = 7.14 cfs @ 12.09 hrs, Volume= 25,517 cf
Routed to Pond P210 : POCKET WETLAND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 212.68' @ 12.09 hrs
Flood Elev= 213.11'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.36'	**15.0" Round Culvert** L= 237.6' Ke= 0.500 Inlet / Outlet Invert= 209.36' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.95 cfs @ 12.09 hrs HW=212.52' TW=204.08' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 6.95 cfs @ 5.67 fps)

Summary for Pond D27: DMH #27

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 7.90" for 100YR event
Inflow = 4.10 cfs @ 12.09 hrs, Volume= 14,316 cf
Outflow = 4.10 cfs @ 12.09 hrs, Volume= 14,316 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.10 cfs @ 12.09 hrs, Volume= 14,316 cf
Routed to Pond D35 : DMH #35

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 214.46' @ 12.09 hrs
Flood Elev= 217.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	213.34'	**15.0" Round Culvert** L= 63.9' Ke= 0.500 Inlet / Outlet Invert= 213.34' / 212.38' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.04 cfs @ 12.09 hrs HW=214.44' TW=213.55' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 4.04 cfs @ 4.72 fps)

Summary for Pond D28: DMH #28

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 7.15" for 100YR event
Inflow = 2.14 cfs @ 12.09 hrs, Volume= 7,120 cf
Outflow = 2.14 cfs @ 12.09 hrs, Volume= 7,120 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.14 cfs @ 12.09 hrs, Volume= 7,120 cf
Routed to Pond D27 : DMH #27

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 218.28' @ 12.09 hrs
Flood Elev= 220.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	217.46'	**12.0" Round Culvert** L= 158.3' Ke= 0.500 Inlet / Outlet Invert= 217.46' / 214.29' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.09 cfs @ 12.09 hrs HW=218.27' TW=214.44' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.09 cfs @ 3.07 fps)

Summary for Pond D29: DMH #29

Inflow Area = 11,949 sf, 62.72% Impervious, Inflow Depth > 7.15" for 100YR event
Inflow = 2.14 cfs @ 12.09 hrs, Volume= 7,120 cf
Outflow = 2.14 cfs @ 12.09 hrs, Volume= 7,120 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.14 cfs @ 12.09 hrs, Volume= 7,120 cf
Routed to Pond D28 : DMH #28

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 220.65' @ 12.09 hrs
Flood Elev= 223.21'

Device	Routing	Invert	Outlet Devices
#1	Primary	219.83'	**12.0" Round Culvert** L= 150.9' Ke= 0.500 Inlet / Outlet Invert= 219.83' / 217.55' S= 0.0151 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.09 cfs @ 12.09 hrs HW=220.64' TW=218.27' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 2.09 cfs @ 3.07 fps)

Summary for Pond D30: DMH #30

Inflow Area = 6,862 sf, 50.73% Impervious, Inflow Depth > 6.62" for 100YR event
Inflow = 1.17 cfs @ 12.09 hrs, Volume= 3,786 cf
Outflow = 1.17 cfs @ 12.09 hrs, Volume= 3,786 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.17 cfs @ 12.09 hrs, Volume= 3,786 cf
Routed to Pond D29 : DMH #29

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 221.60' @ 12.09 hrs
Flood Elev= 224.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	220.92'	**12.0" Round Culvert** L= 184.2' Ke= 0.500 Inlet / Outlet Invert= 220.92' / 220.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.14 cfs @ 12.09 hrs HW=221.59' TW=220.64' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 1.14 cfs @ 2.90 fps)

Summary for Pond D31: DMH#31

Inflow Area = 63,140 sf, 28.73% Impervious, Inflow Depth > 5.54" for 100YR event
Inflow = 7.60 cfs @ 12.16 hrs, Volume= 29,155 cf
Outflow = 7.60 cfs @ 12.16 hrs, Volume= 29,155 cf, Atten= 0%, Lag= 0.0 min
Primary = 7.60 cfs @ 12.16 hrs, Volume= 29,155 cf
Routed to Pond D4 : DMH#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 226.91' @ 12.16 hrs
Flood Elev= 229.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.63'	**15.0" Round Culvert** L= 288.5' Ke= 0.500 Inlet / Outlet Invert= 224.63' / 213.09' S= 0.0400 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=7.50 cfs @ 12.16 hrs HW=226.87' TW=214.77' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 7.50 cfs @ 6.12 fps)

Summary for Pond D34: DMH #34

Inflow Area = 23,255 sf,100.00% Impervious, Inflow Depth > 8.81" for 100YR event
Inflow = 4.64 cfs @ 12.09 hrs, Volume= 17,082 cf
Outflow = 4.64 cfs @ 12.09 hrs, Volume= 17,082 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.64 cfs @ 12.09 hrs, Volume= 17,082 cf
Routed to Pond OCS1 : OCS#1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 200.07' @ 12.09 hrs
Flood Elev= 202.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	198.07'	**12.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 198.07' / 197.03' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.52 cfs @ 12.09 hrs HW=200.00' TW=196.90' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 4.52 cfs @ 5.75 fps)

Summary for Pond D35: DMH #35

Inflow Area = 21,746 sf, 79.51% Impervious, Inflow Depth > 7.90" for 100YR event
Inflow = 4.10 cfs @ 12.09 hrs, Volume= 14,316 cf
Outflow = 4.10 cfs @ 12.09 hrs, Volume= 14,316 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.10 cfs @ 12.09 hrs, Volume= 14,316 cf
Routed to Pond D25 : DMH #25

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.61' @ 12.09 hrs
Flood Elev= 215.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.28'	**15.0" Round Culvert** L= 171.5' Ke= 0.500 Inlet / Outlet Invert= 212.28' / 209.71' S= 0.0150 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=4.02 cfs @ 12.09 hrs HW=213.55' TW=212.53' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 4.02 cfs @ 4.00 fps)

Summary for Pond D4: DMH#4

Inflow Area = 73,240 sf, 37.72% Impervious, Inflow Depth > 5.96" for 100YR event
Inflow = 9.15 cfs @ 12.14 hrs, Volume= 36,354 cf
Outflow = 9.15 cfs @ 12.14 hrs, Volume= 36,354 cf, Atten= 0%, Lag= 0.0 min
Primary = 9.15 cfs @ 12.14 hrs, Volume= 36,354 cf
Routed to Pond D2 : DMH#2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 215.03' @ 12.14 hrs
Flood Elev= 217.64'

Device	Routing	Invert	Outlet Devices
#1	Primary	210.34'	**15.0" Round Culvert** L= 222.3' Ke= 0.500 Inlet / Outlet Invert= 210.34' / 207.01' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=9.07 cfs @ 12.14 hrs HW=214.90' TW=209.88' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 9.07 cfs @ 7.39 fps)

Summary for Pond D5: DMH #5

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 8.75" for 100YR event
Inflow = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf
Outflow = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf
Routed to Pond D6 : DMH #6

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 210.62' @ 12.09 hrs
Flood Elev= 212.97'

Device	Routing	Invert	Outlet Devices
#1	Primary	209.09'	**18.0" Round Culvert** L= 183.0' Ke= 0.500 Inlet / Outlet Invert= 209.09' / 208.17' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=5.90 cfs @ 12.09 hrs HW=210.59' TW=209.48' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 5.90 cfs @ 4.16 fps)

Summary for Pond D6: DMH #6

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 8.75" for 100YR event
Inflow = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf
Outflow = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf
Routed to Pond D7 : DMH #7

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 209.51' @ 12.09 hrs
Flood Elev= 214.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	208.07'	**18.0" Round Culvert** L= 299.7' Ke= 0.500 Inlet / Outlet Invert= 208.07' / 206.57' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=5.90 cfs @ 12.09 hrs HW=209.48' TW=207.71' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 5.90 cfs @ 4.42 fps)

Summary for Pond D7: DMH #7

Inflow Area = 30,441 sf, 96.76% Impervious, Inflow Depth > 8.75" for 100YR event
Inflow = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf
Outflow = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.07 cfs @ 12.09 hrs, Volume= 22,196 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.73' @ 12.09 hrs
Flood Elev= 213.17'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 44.2' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 204.04' S= 0.0550 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=5.90 cfs @ 12.09 hrs HW=207.71' TW=202.97' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 5.90 cfs @ 3.79 fps)

Summary for Pond D8: DMH #8

Inflow Area = 18,765 sf, 91.12% Impervious, Inflow Depth > 8.27" for 100YR event
Inflow = 3.66 cfs @ 12.09 hrs, Volume= 12,929 cf
Outflow = 3.66 cfs @ 12.09 hrs, Volume= 12,929 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.66 cfs @ 12.09 hrs, Volume= 12,929 cf
Routed to Pond D9 : DMH #9

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.04' @ 12.09 hrs
Flood Elev= 204.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.57'	**12.0" Round Culvert** L= 87.7' Ke= 0.500 Inlet / Outlet Invert= 200.57' / 200.13' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.57 cfs @ 12.09 hrs HW=202.93' TW=201.57' (Dynamic Tailwater)
└─**1=Culvert** (Outlet Controls 3.57 cfs @ 4.54 fps)

Summary for Pond D9: DMH #9

Inflow Area = 18,765 sf, 91.12% Impervious, Inflow Depth > 8.27" for 100YR event
Inflow = 3.66 cfs @ 12.09 hrs, Volume= 12,929 cf
Outflow = 3.66 cfs @ 12.09 hrs, Volume= 12,929 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.66 cfs @ 12.09 hrs, Volume= 12,929 cf
Routed to Pond P207 : INFILTRATION POND #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 201.60' @ 12.09 hrs
Flood Elev= 204.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	200.03'	**12.0" Round Culvert** L= 11.9' Ke= 0.500 Inlet / Outlet Invert= 200.03' / 199.97' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.57 cfs @ 12.09 hrs HW=201.57' TW=198.45' (Dynamic Tailwater)
└─**1=Culvert** (Barrel Controls 3.57 cfs @ 4.54 fps)

Summary for Pond DE61: DRIP #61

Inflow Area = 4,247 sf, 92.68% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.84 cfs @ 12.09 hrs, Volume= 3,034 cf
Outflow = 0.69 cfs @ 12.15 hrs, Volume= 2,884 cf, Atten= 18%, Lag= 3.6 min
Discarded = 0.00 cfs @ 2.75 hrs, Volume= 211 cf
Primary = 0.69 cfs @ 12.15 hrs, Volume= 2,673 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 213.59' @ 12.15 hrs Surf.Area= 665 sf Storage= 372 cf

Plug-Flow detention time= 56.7 min calculated for 2,884 cf (95% of inflow)
Center-of-Mass det. time= 27.9 min (777.6 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.75 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.69 cfs @ 12.15 hrs HW=213.58' TW=208.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.69 cfs @ 3.49 fps)

Summary for Pond DE62: DRIP #62

Inflow Area = 4,247 sf, 92.68% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.84 cfs @ 12.09 hrs, Volume= 3,034 cf
Outflow = 0.69 cfs @ 12.15 hrs, Volume= 2,884 cf, Atten= 18%, Lag= 3.6 min
Discarded = 0.00 cfs @ 2.75 hrs, Volume= 211 cf
Primary = 0.69 cfs @ 12.15 hrs, Volume= 2,673 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 213.59' @ 12.15 hrs Surf.Area= 665 sf Storage= 372 cf

Plug-Flow detention time= 56.7 min calculated for 2,884 cf (95% of inflow)
Center-of-Mass det. time= 27.9 min (777.6 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	212.19'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.19	665	0.0	0	0
212.20	665	40.0	3	3
214.19	665	40.0	529	532
214.20	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	212.70'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 212.70' / 212.65' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	212.19'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.75 hrs HW=212.21' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.69 cfs @ 12.15 hrs HW=213.58' TW=208.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.69 cfs @ 3.49 fps)

Summary for Pond DE63: DRIP #63

Inflow Area = 3,013 sf, 88.68% Impervious, Inflow Depth > 8.45" for 100YR event
Inflow = 0.60 cfs @ 12.09 hrs, Volume= 2,122 cf
Outflow = 0.52 cfs @ 12.14 hrs, Volume= 2,032 cf, Atten= 12%, Lag= 3.0 min
Discarded = 0.00 cfs @ 2.95 hrs, Volume= 127 cf
Primary = 0.52 cfs @ 12.14 hrs, Volume= 1,906 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.20' @ 12.13 hrs Surf.Area= 404 sf Storage= 196 cf

Plug-Flow detention time= 48.1 min calculated for 2,032 cf (96% of inflow)
Center-of-Mass det. time= 23.0 min (777.0 - 754.1)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	404	0.0	0	0
207.00	404	40.0	2	2
208.99	404	40.0	322	323
209.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 207.50' / 207.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.95 hrs HW=207.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.51 cfs @ 12.14 hrs HW=208.19' TW=202.14' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.51 cfs @ 2.62 fps)

Summary for Pond DE64: DRIP #64

Inflow Area = 3,470 sf, 91.59% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.69 cfs @ 12.09 hrs, Volume= 2,479 cf
Outflow = 0.60 cfs @ 12.14 hrs, Volume= 2,374 cf, Atten= 13%, Lag= 3.0 min
Discarded = 0.00 cfs @ 2.55 hrs, Volume= 149 cf
Primary = 0.60 cfs @ 12.14 hrs, Volume= 2,224 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.28' @ 12.14 hrs Surf.Area= 470 sf Storage= 242 cf

Plug-Flow detention time= 49.3 min calculated for 2,369 cf (96% of inflow)
Center-of-Mass det. time= 24.3 min (774.0 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	204.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.99	470	0.0	0	0
205.00	470	40.0	2	2
206.99	470	40.0	374	376
207.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	206.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	205.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 205.50' / 205.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	204.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.55 hrs HW=205.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.59 cfs @ 12.14 hrs HW=206.27' TW=202.13' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.59 cfs @ 2.98 fps)

Summary for Pond DE65: DRIP #65

Inflow Area = 3,016 sf, 88.69% Impervious, Inflow Depth > 8.45" for 100YR event
Inflow = 0.60 cfs @ 12.09 hrs, Volume= 2,124 cf
Outflow = 0.52 cfs @ 12.14 hrs, Volume= 2,034 cf, Atten= 12%, Lag= 3.0 min
Discarded = 0.00 cfs @ 2.95 hrs, Volume= 127 cf
Primary = 0.52 cfs @ 12.14 hrs, Volume= 1,908 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.21' @ 12.13 hrs Surf.Area= 404 sf Storage= 196 cf

Plug-Flow detention time= 47.7 min calculated for 2,030 cf (96% of inflow)
Center-of-Mass det. time= 23.0 min (777.0 - 754.1)

Volume	Invert	Avail.Storage	Storage Description
#1	205.99'	327 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.99	404	0.0	0	0
206.00	404	40.0	2	2
207.99	404	40.0	322	323
208.00	404	100.0	4	327

Device	Routing	Invert	Outlet Devices
#1	Primary	207.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.50' / 206.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.95 hrs HW=206.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.51 cfs @ 12.14 hrs HW=207.19' TW=202.14' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.51 cfs @ 2.62 fps)

Summary for Pond DE66: DRIP #66

Inflow Area = 3,407 sf, 91.46% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.68 cfs @ 12.09 hrs, Volume= 2,434 cf
Outflow = 0.59 cfs @ 12.14 hrs, Volume= 2,329 cf, Atten= 13%, Lag= 3.0 min
Discarded = 0.00 cfs @ 2.10 hrs, Volume= 149 cf
Primary = 0.58 cfs @ 12.14 hrs, Volume= 2,180 cf
Routed to Reach 12R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 209.07' @ 12.14 hrs Surf.Area= 470 sf Storage= 240 cf

Plug-Flow detention time= 50.3 min calculated for 2,329 cf (96% of inflow)
Center-of-Mass det. time= 24.6 min (774.2 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	207.79'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.79	470	0.0	0	0
207.80	470	40.0	2	2
209.79	470	40.0	374	376
209.80	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.70'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.30'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.30' / 208.25' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.79'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.10 hrs HW=207.80' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.57 cfs @ 12.14 hrs HW=209.05' TW=202.14' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.57 cfs @ 2.93 fps)

Summary for Pond DE67: DRIP #67

Inflow Area = 3,481 sf, 91.61% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.69 cfs @ 12.09 hrs, Volume= 2,487 cf
Outflow = 0.60 cfs @ 12.14 hrs, Volume= 2,382 cf, Atten= 13%, Lag= 3.0 min
Discarded = 0.00 cfs @ 2.55 hrs, Volume= 149 cf
Primary = 0.60 cfs @ 12.14 hrs, Volume= 2,232 cf
Routed to Reach 8R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 209.28' @ 12.14 hrs Surf.Area= 470 sf Storage= 242 cf

Plug-Flow detention time= 49.2 min calculated for 2,377 cf (96% of inflow)
Center-of-Mass det. time= 24.3 min (773.9 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	470	0.0	0	0
208.00	470	40.0	2	2
209.99	470	40.0	374	376
210.00	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	209.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 208.45' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	207.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.55 hrs HW=208.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.59 cfs @ 12.14 hrs HW=209.27' TW=208.08' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.59 cfs @ 2.99 fps)

Summary for Pond DE68: DRIP #68

Inflow Area = 4,212 sf, 92.62% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.84 cfs @ 12.09 hrs, Volume= 3,009 cf
Outflow = 0.68 cfs @ 12.15 hrs, Volume= 2,863 cf, Atten= 19%, Lag= 3.7 min
Discarded = 0.00 cfs @ 2.75 hrs, Volume= 211 cf
Primary = 0.68 cfs @ 12.15 hrs, Volume= 2,652 cf
Routed to Pond OCS4 : OCS#4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 208.26' @ 12.15 hrs Surf.Area= 665 sf Storage= 338 cf

Plug-Flow detention time= 54.9 min calculated for 2,863 cf (95% of inflow)
Center-of-Mass det. time= 26.5 min (776.1 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	206.99'	539 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.99	665	0.0	0	0
207.00	665	40.0	3	3
208.99	665	40.0	529	532
209.00	665	100.0	7	539

Device	Routing	Invert	Outlet Devices
#1	Primary	208.90'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.50'	**6.0" Round Culvert** L= 20.0' Ke= 0.500 Inlet / Outlet Invert= 207.50' / 206.00' S= 0.0750 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.99'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.75 hrs HW=207.01' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.67 cfs @ 12.15 hrs HW=208.26' TW=205.72' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Inlet Controls 0.67 cfs @ 3.44 fps)

Summary for Pond DE69: DRIP #69

Inflow Area = 3,480 sf, 91.61% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.69 cfs @ 12.09 hrs, Volume= 2,486 cf
Outflow = 0.60 cfs @ 12.14 hrs, Volume= 2,381 cf, Atten= 13%, Lag= 3.0 min
Discarded = 0.00 cfs @ 2.55 hrs, Volume= 149 cf
Primary = 0.60 cfs @ 12.14 hrs, Volume= 2,232 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.78' @ 12.14 hrs Surf.Area= 470 sf Storage= 242 cf

Plug-Flow detention time= 49.2 min calculated for 2,376 cf (96% of inflow)
Center-of-Mass det. time= 24.3 min (773.9 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	205.49'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.49	470	0.0	0	0
205.50	470	40.0	2	2
207.49	470	40.0	374	376
207.50	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.00' / 205.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.55 hrs HW=205.51' (Free Discharge)
└—**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.59 cfs @ 12.14 hrs HW=206.77' TW=203.04' (Dynamic Tailwater)
├—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└—**2=Culvert** (Barrel Controls 0.59 cfs @ 2.99 fps)

Summary for Pond DE70: DRIP #70

Inflow Area = 3,476 sf, 91.60% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.69 cfs @ 12.09 hrs, Volume= 2,483 cf
Outflow = 0.60 cfs @ 12.14 hrs, Volume= 2,378 cf, Atten= 13%, Lag= 3.0 min
Discarded = 0.00 cfs @ 2.05 hrs, Volume= 149 cf
Primary = 0.60 cfs @ 12.14 hrs, Volume= 2,229 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.18' @ 12.14 hrs Surf.Area= 470 sf Storage= 242 cf

Plug-Flow detention time= 49.2 min calculated for 2,373 cf (96% of inflow)
Center-of-Mass det. time= 24.3 min (773.9 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	205.89'	381 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.89	470	0.0	0	0
205.90	470	40.0	2	2
207.89	470	40.0	374	376
207.90	470	100.0	5	381

Device	Routing	Invert	Outlet Devices
#1	Primary	207.80'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	206.40'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 206.40' / 206.35' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	205.89'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 2.05 hrs HW=205.90' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.59 cfs @ 12.14 hrs HW=207.17' TW=203.04' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.59 cfs @ 2.99 fps)

Summary for Pond DE71: DRIP #71

Inflow Area = 4,210 sf, 92.61% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 0.84 cfs @ 12.09 hrs, Volume= 3,008 cf
Outflow = 0.69 cfs @ 12.15 hrs, Volume= 2,858 cf, Atten= 18%, Lag= 3.6 min
Discarded = 0.00 cfs @ 3.10 hrs, Volume= 211 cf
Primary = 0.68 cfs @ 12.15 hrs, Volume= 2,647 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.88' @ 12.15 hrs Surf.Area= 665 sf Storage= 370 cf

Plug-Flow detention time= 56.6 min calculated for 2,852 cf (95% of inflow)
Center-of-Mass det. time= 28.0 min (777.7 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	206.49'	805 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.49	665	0.0	0	0
206.50	665	40.0	3	3
209.49	665	40.0	795	798
209.50	665	100.0	7	805

Device	Routing	Invert	Outlet Devices
#1	Primary	209.40'	**180.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	207.00'	**6.0" Round Culvert** L= 10.0' Ke= 0.500 Inlet / Outlet Invert= 207.00' / 206.95' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Discarded	206.49'	**0.170 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 3.10 hrs HW=206.52' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.68 cfs @ 12.15 hrs HW=207.88' TW=203.05' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Barrel Controls 0.68 cfs @ 3.47 fps)

Summary for Pond DECH: DRIP #CH

Inflow Area = 6,262 sf, 92.70% Impervious, Inflow Depth > 8.57" for 100YR event
Inflow = 1.24 cfs @ 12.09 hrs, Volume= 4,474 cf
Outflow = 1.08 cfs @ 12.20 hrs, Volume= 4,473 cf, Atten= 13%, Lag= 6.6 min
Discarded = 0.04 cfs @ 8.85 hrs, Volume= 2,032 cf
Primary = 1.05 cfs @ 12.20 hrs, Volume= 2,441 cf
Routed to Pond CB18 : CB #18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 210.92' @ 12.18 hrs Surf.Area= 636 sf Storage= 746 cf

Plug-Flow detention time= 23.0 min calculated for 4,464 cf (100% of inflow)
Center-of-Mass det. time= 22.8 min (772.5 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1	207.99'	770 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
207.99	636	0.0	0	0
208.00	636	40.0	3	3
210.99	636	40.0	761	763
211.00	636	100.0	6	770

Device	Routing	Invert	Outlet Devices
#1	Primary	210.90'	**160.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#2	Primary	208.50'	**4.0" Round Culvert** L= 80.0' Ke= 0.500 Inlet / Outlet Invert= 208.50' / 205.10' S= 0.0425 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.09 sf
#3	Discarded	207.99'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.04 cfs @ 8.85 hrs HW=208.02' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=1.03 cfs @ 12.20 hrs HW=210.91' TW=206.78' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Weir Controls 0.62 cfs @ 0.31 fps)
└─**2=Culvert** (Outlet Controls 0.40 cfs @ 4.64 fps)

Summary for Pond DMH32: DMH #32

Inflow Area = 20,278 sf, 79.11% Impervious, Inflow Depth > 8.24" for 100YR event
Inflow = 3.97 cfs @ 12.09 hrs, Volume= 13,927 cf
Outflow = 3.97 cfs @ 12.09 hrs, Volume= 13,927 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.97 cfs @ 12.09 hrs, Volume= 13,927 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 204.19' @ 12.09 hrs
Flood Elev= 206.16'

Device	Routing	Invert	Outlet Devices
#1	Primary	202.59'	**12.0" Round Culvert** L= 19.2' Ke= 0.500 Inlet / Outlet Invert= 202.59' / 201.57' S= 0.0531 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.87 cfs @ 12.09 hrs HW=204.14' TW=202.97' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 3.87 cfs @ 4.92 fps)

Summary for Pond OCS1: OCS#1

Inflow Area = 48,573 sf, 81.99% Impervious, Inflow Depth > 8.37" for 100YR event
Inflow = 9.51 cfs @ 12.09 hrs, Volume= 33,884 cf
Outflow = 9.51 cfs @ 12.09 hrs, Volume= 33,884 cf, Atten= 0%, Lag= 0.0 min
Primary = 9.51 cfs @ 12.09 hrs, Volume= 33,884 cf
Routed to Pond P206 : STORMTECH INFILTRATION SYSTEM #2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 196.96' @ 12.11 hrs
Flood Elev= 201.48'

Device	Routing	Invert	Outlet Devices
#1	Primary	195.00'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=9.29 cfs @ 12.09 hrs HW=196.91' TW=196.52' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 9.29 cfs @ 3.01 fps)

Summary for Pond OCS3: OCS#3

Inflow Area = 54,250 sf, 81.93% Impervious, Inflow Depth > 7.85" for 100YR event
Inflow = 9.71 cfs @ 12.09 hrs, Volume= 35,473 cf
Outflow = 9.71 cfs @ 12.09 hrs, Volume= 35,473 cf, Atten= 0%, Lag= 0.0 min
Primary = 9.71 cfs @ 12.09 hrs, Volume= 35,473 cf
Routed to Pond p204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 206.75' @ 12.11 hrs
Flood Elev= 209.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=9.49 cfs @ 12.09 hrs HW=206.62' TW=205.37' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 9.49 cfs @ 5.37 fps)

Summary for Pond OCS4: OCS#4

Inflow Area = 17,972 sf, 28.85% Impervious, Inflow Depth > 6.37" for 100YR event
Inflow = 2.79 cfs @ 12.10 hrs, Volume= 9,535 cf
Outflow = 2.79 cfs @ 12.10 hrs, Volume= 9,535 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.79 cfs @ 12.10 hrs, Volume= 9,535 cf
Routed to Pond P204 : STORMTECH INFILTRATION SYSTEM #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.75' @ 12.17 hrs
Flood Elev= 208.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	203.10'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.77 cfs @ 12.10 hrs HW=205.54' TW=205.44' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 2.77 cfs @ 1.57 fps)

Summary for Pond OCS6: OCS #6

Inflow Area = 16,111 sf, 93.77% Impervious, Inflow Depth > 8.65" for 100YR event
Inflow = 3.20 cfs @ 12.09 hrs, Volume= 11,616 cf
Outflow = 3.20 cfs @ 12.09 hrs, Volume= 11,616 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.20 cfs @ 12.09 hrs, Volume= 11,616 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.53' @ 12.34 hrs
Flood Elev= 206.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.20'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.12 cfs @ 12.09 hrs HW=203.63' TW=202.95' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 3.12 cfs @ 3.97 fps)

Summary for Pond OCS7: OCS #7

Inflow Area = 15,875 sf, 92.67% Impervious, Inflow Depth > 8.61" for 100YR event
Inflow = 3.15 cfs @ 12.09 hrs, Volume= 11,388 cf
Outflow = 3.15 cfs @ 12.09 hrs, Volume= 11,388 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.15 cfs @ 12.09 hrs, Volume= 11,388 cf
Routed to Pond P213 : Stormtech Infiltration System #3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.53' @ 12.34 hrs
Flood Elev= 206.47'

Device	Routing	Invert	Outlet Devices
#1	Primary	201.78'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.07 cfs @ 12.09 hrs HW=203.61' TW=202.95' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 3.07 cfs @ 3.90 fps)

Summary for Pond P204: STORMTECH INFILTRATION SYSTEM #1

Inflow Area = 72,222 sf, 68.72% Impervious, Inflow Depth > 7.48" for 100YR event
Inflow = 12.49 cfs @ 12.09 hrs, Volume= 45,008 cf
Outflow = 9.06 cfs @ 12.18 hrs, Volume= 42,342 cf, Atten= 27%, Lag= 5.6 min
Discarded = 0.09 cfs @ 6.70 hrs, Volume= 6,554 cf
Primary = 8.98 cfs @ 12.18 hrs, Volume= 35,788 cf
Routed to Reach 20r : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 205.68' @ 12.18 hrs Surf.Area= 5,670 sf Storage= 11,436 cf
Flood Elev= 208.75' Surf.Area= 5,670 sf Storage= 13,379 cf

Plug-Flow detention time= 78.8 min calculated for 42,342 cf (94% of inflow)
Center-of-Mass det. time= 46.3 min (812.3 - 766.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	202.50'	5,923 cf	**77.50'W x 67.70'L x 4.08'H STORMTECH SC-740** 21,423 cf Overall - 6,615 cf Embedded = 14,808 cf x 40.0% Voids
#2A	203.08'	6,615 cf	**ADS_StormTech SC-740 +Cap** x 144 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 144 Chambers in 16 Rows
#3B	202.50'	427 cf	**6.25'W x 67.70'L x 3.50'H ISOLATOR ROW** 1,481 cf Overall - 413 cf Embedded = 1,067 cf x 40.0% Voids
#4B	203.00'	413 cf	**ADS_StormTech SC-740 +Cap** x 9 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
		13,379 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.75'	**15.0" Round Culvert** L= 35.0' Ke= 0.500 Inlet / Outlet Invert= 202.75' / 201.00' S= 0.0500 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	204.75'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#3	Device 1	203.25'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Discarded	202.50'	**0.660 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.09 cfs @ 6.70 hrs HW=202.56' (Free Discharge)
└─**4=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=8.95 cfs @ 12.18 hrs HW=205.67' TW=200.25' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 8.95 cfs @ 7.29 fps)
  ├─**2=Broad-Crested Rectangular Weir** (Passes < 11.63 cfs potential flow)
  └─**3=Orifice/Grate** (Passes < 2.43 cfs potential flow)

Summary for Pond P205: INFILTRATION POND #3

Inflow Area = 88,676 sf, 39.42% Impervious, Inflow Depth > 6.05" for 100YR event
Inflow = 11.50 cfs @ 12.12 hrs, Volume= 44,711 cf
Outflow = 10.54 cfs @ 12.18 hrs, Volume= 38,922 cf, Atten= 8%, Lag= 3.6 min
Discarded = 0.32 cfs @ 12.18 hrs, Volume= 16,679 cf
Primary = 10.22 cfs @ 12.18 hrs, Volume= 22,242 cf
Routed to Reach 18R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 207.05' @ 12.18 hrs Surf.Area= 5,673 sf Storage= 9,818 cf

Plug-Flow detention time= 106.9 min calculated for 38,841 cf (87% of inflow)
Center-of-Mass det. time= 49.0 min (852.1 - 803.0)

Volume	Invert	Avail.Storage	Storage Description
#1	205.00'	15,630 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
205.00	3,939	0	0
206.00	4,756	4,348	4,348
207.00	5,627	5,192	9,539
208.00	6,555	6,091	15,630

Device	Routing	Invert	Outlet Devices
#1	Primary	206.65'	**15.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	205.00'	**2.410 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.32 cfs @ 12.18 hrs HW=207.05' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.32 cfs)

Primary OutFlow Max=10.09 cfs @ 12.18 hrs HW=207.05' TW=203.11' (Dynamic Tailwater)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 10.09 cfs @ 1.70 fps)

Summary for Pond P206: STORMTECH INFILTRATION SYSTEM #2

Inflow Area = 59,746 sf, 80.70% Impervious, Inflow Depth > 8.34" for 100YR event
Inflow = 11.69 cfs @ 12.09 hrs, Volume= 41,528 cf
Outflow = 9.22 cfs @ 12.16 hrs, Volume= 41,523 cf, Atten= 21%, Lag= 4.2 min
Discarded = 0.49 cfs @ 10.15 hrs, Volume= 26,156 cf
Primary = 8.72 cfs @ 12.16 hrs, Volume= 15,367 cf
Routed to Link AP4 : ANALYSIS POINT #4

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 196.64' @ 12.16 hrs Surf.Area= 6,072 sf Storage= 8,490 cf

Plug-Flow detention time= 54.2 min calculated for 41,523 cf (100% of inflow)
Center-of-Mass det. time= 54.1 min (808.9 - 754.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	194.67'	1,786 cf	**39.50'W x 53.46'L x 3.33'H FIELD A** 7,038 cf Overall - 2,573 cf Embedded = 4,466 cf x 40.0% Voids
#2A	195.00'	2,573 cf	**ADS_StormTech SC-740 +Cap** x 56 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 56 Chambers in 8 Rows
#3B	194.67'	3,296 cf	**58.50'W x 67.70'L x 3.33'H FIELD B** 13,201 cf Overall - 4,962 cf Embedded = 8,239 cf x 40.0% Voids
#4B	195.00'	4,962 cf	**ADS_StormTech SC-740 +Cap** x 108 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 108 Chambers in 12 Rows
		12,616 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 30.0' Ke= 0.200 Inlet / Outlet Invert= 194.65' / 194.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	195.85'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Discarded	194.67'	**3.500 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=0.49 cfs @ 10.15 hrs HW=194.71' (Free Discharge)
└─**3=Exfiltration** (Exfiltration Controls 0.49 cfs)

Primary OutFlow Max=8.69 cfs @ 12.16 hrs HW=196.63' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 8.69 cfs of 8.71 cfs potential flow)
  └─**2=Sharp-Crested Rectangular Weir** (Weir Controls 8.69 cfs @ 2.89 fps)

Summary for Pond P207: INFILTRATION POND #2

Inflow Area = 129,716 sf, 63.13% Impervious, Inflow Depth > 7.72" for 100YR event
Inflow = 23.17 cfs @ 12.09 hrs, Volume= 83,435 cf
Outflow = 11.39 cfs @ 12.28 hrs, Volume= 83,408 cf, Atten= 51%, Lag= 11.2 min
Discarded = 1.15 cfs @ 12.28 hrs, Volume= 51,829 cf
Primary = 10.24 cfs @ 12.28 hrs, Volume= 31,579 cf
Routed to Reach 10R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 198.98' @ 12.28 hrs Surf.Area= 13,476 sf Storage= 25,795 cf

Plug-Flow detention time= 81.6 min calculated for 83,235 cf (100% of inflow)
Center-of-Mass det. time= 81.2 min (853.3 - 772.1)

Volume	Invert	Avail.Storage	Storage Description
#1	196.80'	40,260 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.80	10,100	0	0
198.00	12,000	13,260	13,260
200.00	15,000	27,000	40,260

Device	Routing	Invert	Outlet Devices
#1	Primary	198.80'	**20.0' long x 21.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	194.75'	**15.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 194.75' / 194.55' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#3	Device 2	198.80'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads
#4	Device 2	197.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Discarded	196.80'	**3.690 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=1.15 cfs @ 12.28 hrs HW=198.98' (Free Discharge)
└─**5=Exfiltration** (Exfiltration Controls 1.15 cfs)

Primary OutFlow Max=10.13 cfs @ 12.28 hrs HW=198.98' TW=192.58' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Weir Controls 4.17 cfs @ 1.14 fps)
└─**2=Culvert** (Passes 5.95 cfs of 11.22 cfs potential flow)
  ├─**3=Orifice/Grate** (Weir Controls 4.07 cfs @ 1.40 fps)
  └─**4=Orifice/Grate** (Orifice Controls 1.88 cfs @ 5.38 fps)

Summary for Pond P210: POCKET WETLAND #1

Inflow Area = 62,582 sf, 52.00% Impervious, Inflow Depth > 7.20" for 100YR event
Inflow = 10.93 cfs @ 12.09 hrs, Volume= 37,524 cf
Outflow = 3.51 cfs @ 12.40 hrs, Volume= 20,698 cf, Atten= 68%, Lag= 18.8 min
Primary = 3.51 cfs @ 12.40 hrs, Volume= 20,698 cf
Routed to Reach 15R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Starting Elev= 201.00' Surf.Area= 376 sf Storage= 591 cf
Peak Elev= 204.66' @ 12.40 hrs Surf.Area= 9,782 sf Storage= 20,706 cf (20,115 cf above start)

Plug-Flow detention time= 286.6 min calculated for 20,065 cf (53% of inflow)
Center-of-Mass det. time= 160.9 min (933.1 - 772.2)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	43,190 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	218	0	0
200.00	294	256	256
201.00	376	335	591
202.00	3,991	2,184	2,775
204.00	8,073	12,064	14,839
206.00	13,272	21,345	36,184
206.50	14,753	7,006	43,190

Device	Routing	Invert	Outlet Devices
#1	Primary	205.10'	**20.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	202.25'	**12.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 202.25' / 202.03' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	202.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 2	204.50'	**6.0" x 6.0" Horiz. Orifice/Grate X 6.00 columns** X 6 rows C= 0.600 in 48.0" x 48.0" Grate (56% open area) Limited to weir flow at low heads

Primary OutFlow Max=3.50 cfs @ 12.40 hrs HW=204.66' TW=202.13' (Dynamic Tailwater)
├─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
└─**2=Culvert** (Passes 3.50 cfs of 4.74 cfs potential flow)
  ├─**3=Orifice/Grate** (Orifice Controls 0.25 cfs @ 7.23 fps)
  └─**4=Orifice/Grate** (Weir Controls 3.26 cfs @ 1.30 fps)

Summary for Pond P212: INFILTRATION POND #1

Inflow Area = 241,078 sf, 59.10% Impervious, Inflow Depth > 6.77" for 100YR event
Inflow = 32.18 cfs @ 12.10 hrs, Volume= 135,950 cf
Outflow = 29.18 cfs @ 12.16 hrs, Volume= 131,516 cf, Atten= 9%, Lag= 3.6 min
Discarded = 1.49 cfs @ 12.16 hrs, Volume= 74,502 cf
Primary = 27.69 cfs @ 12.16 hrs, Volume= 57,014 cf
Routed to Reach R211 : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.05' @ 12.16 hrs Surf.Area= 12,518 sf Storage= 29,225 cf

Plug-Flow detention time= 101.4 min calculated for 131,516 cf (97% of inflow)
Center-of-Mass det. time= 81.9 min (855.2 - 773.3)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	41,774 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	4,354	0	0	4,354
201.00	9,360	6,699	6,699	9,368
202.00	10,993	10,166	16,865	11,040
204.00	13,976	24,909	41,774	14,126

Device	Routing	Invert	Outlet Devices
#1	Primary	202.50'	**25.0' long x 20.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	200.00'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'

Discarded OutFlow Max=1.49 cfs @ 12.16 hrs HW=203.05' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 1.49 cfs)

Primary OutFlow Max=27.29 cfs @ 12.16 hrs HW=203.05' TW=200.43' (Dynamic Tailwater)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 27.29 cfs @ 2.00 fps)

Summary for Pond P213: Stormtech Infiltration System #3

Inflow Area = 31,986 sf, 93.23% Impervious, Inflow Depth > 8.63" for 100YR event
Inflow = 6.35 cfs @ 12.09 hrs, Volume= 23,003 cf
Outflow = 2.27 cfs @ 12.36 hrs, Volume= 23,001 cf, Atten= 64%, Lag= 16.5 min
Discarded = 0.39 cfs @ 10.95 hrs, Volume= 19,325 cf
Primary = 1.88 cfs @ 12.36 hrs, Volume= 3,677 cf
Routed to Pond P212 : INFILTRATION POND #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 204.44' @ 12.36 hrs Surf.Area= 3,317 sf Storage= 7,117 cf

Plug-Flow detention time= 91.4 min calculated for 23,001 cf (100% of inflow)
Center-of-Mass det. time= 91.3 min (838.2 - 746.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.95'	2,990 cf	**49.00'W x 67.70'L x 3.50'H Field A** 11,610 cf Overall - 4,135 cf Embedded = 7,475 cf x 40.0% Voids
#2A	201.45'	4,135 cf	**ADS_StormTech SC-740 +Cap** x 90 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 90 Chambers in 10 Rows
		7,125 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	202.30'	**12.0" Round Culvert** L= 60.0' Ke= 0.500 Inlet / Outlet Invert= 202.30' / 202.00' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.95'	**5.130 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#3	Device 1	204.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	203.35'	**6.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.39 cfs @ 10.95 hrs HW=200.99' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.39 cfs)

Primary OutFlow Max=1.83 cfs @ 12.36 hrs HW=204.44' TW=202.93' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.83 cfs of 4.11 cfs potential flow)
  ├─**3=Sharp-Crested Rectangular Weir** (Weir Controls 1.06 cfs @ 1.42 fps)
  └─**4=Orifice/Grate** (Orifice Controls 0.77 cfs @ 4.62 fps)

Summary for Pond P214: STORMTECH INFILTRATION SYSTEM #4

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=2)

Inflow Area = 32,665 sf, 94.81% Impervious, Inflow Depth > 8.54" for 100YR event
Inflow = 6.45 cfs @ 12.09 hrs, Volume= 23,257 cf
Outflow = 1.84 cfs @ 12.42 hrs, Volume= 23,256 cf, Atten= 72%, Lag= 20.2 min
Discarded = 0.61 cfs @ 11.50 hrs, Volume= 20,934 cf
Primary = 1.22 cfs @ 12.42 hrs, Volume= 2,322 cf
Routed to Reach 9R : OVERLAND FLOW

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 203.26' @ 12.42 hrs Surf.Area= 3,201 sf Storage= 6,493 cf

Plug-Flow detention time= 52.8 min calculated for 23,208 cf (100% of inflow)
Center-of-Mass det. time= 52.6 min (801.2 - 748.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	200.00'	1,851 cf	**30.00'W x 67.70'L x 3.50'H Field A** 7,108 cf Overall - 2,481 cf Embedded = 4,627 cf x 40.0% Voids
#2A	200.50'	2,481 cf	**ADS_StormTech SC-740 +Cap** x 54 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 54 Chambers in 6 Rows
#3B	200.00'	1,087 cf	**25.25'W x 46.34'L x 3.50'H Field B** 4,095 cf Overall - 1,378 cf Embedded = 2,717 cf x 40.0% Voids
#4B	200.50'	1,378 cf	**ADS_StormTech SC-740 +Cap** x 30 Inside #3 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 30 Chambers in 5 Rows
		6,797 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	201.00'	**12.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 201.00' / 200.88' S= 0.0048 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Discarded	200.00'	**8.280 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#3	Device 1	203.40'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	202.40'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.61 cfs @ 11.50 hrs HW=200.04' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.61 cfs)

Primary OutFlow Max=1.22 cfs @ 12.42 hrs HW=203.26' TW=201.88' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.22 cfs of 4.44 cfs potential flow)
  ├─**3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 1.22 cfs @ 3.48 fps)

Summary for Link AP1: ANALYSIS POINT 1

Inflow Area = 9,943 sf, 92.79% Impervious, Inflow Depth > 8.45" for 100YR event
Inflow = 1.96 cfs @ 12.09 hrs, Volume= 7,004 cf
Primary = 1.96 cfs @ 12.09 hrs, Volume= 7,004 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP2: ANALYSIS POINT 2

Inflow Area = 816,898 sf, 39.51% Impervious, Inflow Depth > 5.80" for 100YR event
Inflow = 52.47 cfs @ 12.41 hrs, Volume= 394,820 cf
Primary = 52.47 cfs @ 12.41 hrs, Volume= 394,820 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP3: ANALYSIS POINT 3

Inflow Area =	55,420 sf,	16.57% Impervious,	Inflow Depth > 5.38"	for 100YR event	
Inflow =	7.86 cfs @	12.09 hrs,	Volume=	24,862 cf	
Primary =	7.86 cfs @	12.09 hrs,	Volume=	24,862 cf,	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Link AP4: ANALYSIS POINT #4

Inflow Area =	1,691,659 sf,	25.34% Impervious,	Inflow Depth > 4.21"	for 100YR event	
Inflow =	98.54 cfs @	12.49 hrs,	Volume=	593,282 cf	
Primary =	98.54 cfs @	12.49 hrs,	Volume=	593,282 cf,	Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Stage-Area-Storage for Pond P204: STORMTECH INFILTRATION SYSTEM #1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.50	**5,670**	0
202.60	5,670	227
202.70	5,670	454
202.80	5,670	680
202.90	5,670	907
203.00	5,670	1,134
203.10	5,670	1,413
203.20	5,670	1,883
203.30	5,670	2,350
203.40	5,670	2,815
203.50	5,670	3,277
203.60	5,670	3,735
203.70	5,670	4,189
203.80	5,670	4,638
203.90	5,670	5,083
204.00	5,670	5,524
204.10	5,670	5,958
204.20	5,670	6,387
204.30	5,670	6,810
204.40	5,670	7,225
204.50	5,670	7,633
204.60	5,670	8,033
204.70	5,670	8,425
204.80	5,670	8,805
204.90	5,670	9,174
205.00	5,670	9,531
205.10	5,670	9,873
205.20	5,670	10,199
205.30	5,670	10,500
205.40	5,670	10,770
205.50	5,670	11,016
205.60	5,670	11,248
205.70	5,670	11,474
205.80	5,670	11,701
205.90	5,670	11,928
206.00	5,670	12,155
206.10	5,670	12,365
206.20	5,670	12,574
206.30	5,670	12,784
206.40	5,670	12,994
206.50	5,670	**13,204**
206.60	5,670	**13,379**
206.70	5,670	13,379
206.80	5,670	13,379
206.90	5,670	13,379
207.00	5,670	13,379
207.10	5,670	13,379
207.20	5,670	13,379
207.30	5,670	13,379
207.40	5,670	13,379
207.50	5,670	13,379
207.60	5,670	13,379
207.70	5,670	13,379
207.80	5,670	13,379
207.90	5,670	13,379
208.00	5,670	13,379
208.10	5,670	13,379
208.20	5,670	13,379
208.30	5,670	13,379
208.40	5,670	13,379
208.50	5,670	13,379
208.60	5,670	13,379
208.70	5,670	13,379

Stage-Area-Storage for Pond P205: INFILTRATION POND #3

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.00	3,939	0	207.60	6,184	13,082
205.05	3,980	198	207.65	6,230	13,393
205.10	4,021	398	207.70	6,277	13,705
205.15	4,062	600	207.75	6,323	14,020
205.20	4,102	804	207.80	6,369	14,338
205.25	4,143	1,010	207.85	6,416	14,657
205.30	4,184	1,218	207.90	6,462	14,979
205.35	4,225	1,429	207.95	6,509	15,303
205.40	4,266	1,641	208.00	**6,555**	**15,630**
205.45	4,307	1,855			
205.50	4,348	2,072			
205.55	4,388	2,290			
205.60	4,429	2,510			
205.65	4,470	2,733			
205.70	4,511	2,957			
205.75	4,552	3,184			
205.80	4,593	3,413			
205.85	4,633	3,643			
205.90	4,674	3,876			
205.95	4,715	4,111			
206.00	4,756	4,348			
206.05	4,800	4,586			
206.10	4,843	4,827			
206.15	4,887	5,071			
206.20	4,930	5,316			
206.25	4,974	5,564			
206.30	5,017	5,813			
206.35	5,061	6,065			
206.40	5,104	6,320			
206.45	5,148	6,576			
206.50	5,192	6,834			
206.55	5,235	7,095			
206.60	5,279	7,358			
206.65	5,322	7,623			
206.70	5,366	7,890			
206.75	5,409	8,159			
206.80	5,453	8,431			
206.85	5,496	8,705			
206.90	5,540	8,981			
206.95	5,583	9,259			
207.00	5,627	9,539			
207.05	5,673	9,822			
207.10	5,720	10,106			
207.15	5,766	10,393			
207.20	5,813	10,683			
207.25	5,859	10,975			
207.30	5,905	11,269			
207.35	5,952	11,565			
207.40	5,998	11,864			
207.45	6,045	12,165			
207.50	6,091	12,469			
207.55	6,137	12,774			

Stage-Area-Storage for Pond P206: STORMTECH INFILTRATION SYSTEM #2

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.67	**6,072**	0
194.72	6,072	121
194.77	6,072	243
194.82	6,072	364
194.87	6,072	486
194.92	6,072	607
194.97	6,072	729
195.02	6,072	893
195.07	6,072	1,145
195.12	6,072	1,397
195.17	6,072	1,648
195.22	6,072	1,898
195.27	6,072	2,147
195.32	6,072	2,396
195.37	6,072	2,644
195.42	6,072	2,891
195.47	6,072	3,137
195.52	6,072	3,382
195.57	6,072	3,626
195.62	6,072	3,868
195.67	6,072	4,110
195.72	6,072	4,350
195.77	6,072	4,590
195.82	6,072	4,827
195.87	6,072	5,064
195.92	6,072	5,299
195.97	6,072	5,533
196.02	6,072	5,765
196.07	6,072	5,996
196.12	6,072	6,225
196.17	6,072	6,453
196.22	6,072	6,678
196.27	6,072	6,902
196.32	6,072	7,124
196.37	6,072	7,343
196.42	6,072	7,561
196.47	6,072	7,777
196.52	6,072	7,990
196.57	6,072	8,201
196.62	6,072	8,410
196.67	6,072	8,616
196.72	6,072	8,818
196.77	6,072	9,018
196.82	6,072	9,214
196.87	6,072	9,407
196.92	6,072	9,597
196.97	6,072	9,783
197.02	6,072	9,965
197.07	6,072	10,142
197.12	6,072	10,315
197.17	6,072	10,481
197.22	6,072	10,639
197.27	6,072	10,788
197.32	6,072	10,930
197.37	6,072	11,064
197.42	6,072	11,194
197.47	6,072	11,320
197.52	6,072	11,442
197.57	6,072	11,564
197.62	6,072	11,685
197.67	6,072	11,807
197.72	6,072	11,928
197.77	6,072	12,050
197.82	6,072	12,171
197.87	6,072	12,292
197.92	6,072	12,414
197.97	6,072	**12,535**

Stage-Area-Storage for Pond P207: INFILTRATION POND #2

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.80	10,100	0	199.40	14,100	31,530
196.85	10,179	507	199.45	14,175	32,237
196.90	10,258	1,018	199.50	14,250	32,947
196.95	10,338	1,533	199.55	14,325	33,662
197.00	10,417	2,052	199.60	14,400	34,380
197.05	10,496	2,574	199.65	14,475	35,102
197.10	10,575	3,101	199.70	14,550	35,828
197.15	10,654	3,632	199.75	14,625	36,557
197.20	10,733	4,167	199.80	14,700	37,290
197.25	10,812	4,705	199.85	14,775	38,027
197.30	10,892	5,248	199.90	14,850	38,767
197.35	10,971	5,794	199.95	14,925	39,512
197.40	11,050	6,345	200.00	**15,000**	**40,260**
197.45	11,129	6,899			
197.50	11,208	7,458			
197.55	11,288	8,020			
197.60	11,367	8,587			
197.65	11,446	9,157			
197.70	11,525	9,731			
197.75	11,604	10,309			
197.80	11,683	10,892			
197.85	11,763	11,478			
197.90	11,842	12,068			
197.95	11,921	12,662			
198.00	12,000	13,260			
198.05	12,075	13,862			
198.10	12,150	14,468			
198.15	12,225	15,077			
198.20	12,300	15,690			
198.25	12,375	16,307			
198.30	12,450	16,928			
198.35	12,525	17,552			
198.40	12,600	18,180			
198.45	12,675	18,812			
198.50	12,750	19,447			
198.55	12,825	20,087			
198.60	12,900	20,730			
198.65	12,975	21,377			
198.70	13,050	22,028			
198.75	13,125	22,682			
198.80	13,200	23,340			
198.85	13,275	24,002			
198.90	13,350	24,667			
198.95	13,425	25,337			
199.00	13,500	26,010			
199.05	13,575	26,687			
199.10	13,650	27,368			
199.15	13,725	28,052			
199.20	13,800	28,740			
199.25	13,875	29,432			
199.30	13,950	30,128			
199.35	14,025	30,827			

Stage-Area-Storage for Pond P210: POCKET WETLAND #1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.00	218	0
199.10	226	22
199.20	233	45
199.30	241	69
199.40	248	93
199.50	256	119
199.60	264	144
199.70	271	171
199.80	279	199
199.90	286	227
200.00	294	256
200.10	302	286
200.20	310	316
200.30	319	348
200.40	327	380
200.50	335	413
200.60	343	447
200.70	351	482
200.80	360	517
200.90	368	554
201.00	376	591
201.10	737	647
201.20	1,099	738
201.30	1,461	866
201.40	1,822	1,031
201.50	2,184	1,231
201.60	2,545	1,467
201.70	2,906	1,740
201.80	3,268	2,049
201.90	3,630	2,393
202.00	3,991	2,775
202.10	4,195	3,184
202.20	4,399	3,614
202.30	4,603	4,064
202.40	4,807	4,534
202.50	5,012	5,025
202.60	5,216	5,536
202.70	5,420	6,068
202.80	5,624	6,620
202.90	5,828	7,193
203.00	6,032	7,786
203.10	6,236	8,399
203.20	6,440	9,033
203.30	6,644	9,687
203.40	6,848	10,362
203.50	7,053	11,057
203.60	7,257	11,773
203.70	7,461	12,508
203.80	7,665	13,265
203.90	7,869	14,041
204.00	8,073	14,839
204.10	8,333	15,659

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.20	8,593	16,505
204.30	8,853	17,377
204.40	9,113	18,276
204.50	9,373	19,200
204.60	9,633	20,150
204.70	9,893	21,126
204.80	10,153	22,129
204.90	10,413	23,157
205.00	10,673	24,211
205.10	10,932	25,291
205.20	11,192	26,398
205.30	11,452	27,530
205.40	11,712	28,688
205.50	11,972	29,872
205.60	12,232	31,083
205.70	12,492	32,319
205.80	12,752	33,581
205.90	13,012	34,869
206.00	13,272	36,184
206.10	13,568	37,526
206.20	13,864	38,897
206.30	14,161	40,298
206.40	14,457	41,729
206.50	**14,753**	**43,190**

Stage-Area-Storage for Pond P212: INFILTRATION POND #1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.00	4,354	0	202.60	11,850	23,716
200.05	4,559	223	202.65	11,923	24,311
200.10	4,769	456	202.70	11,996	24,909
200.15	4,984	700	202.75	12,070	25,510
200.20	5,204	955	202.80	12,143	26,116
200.25	5,428	1,220	202.85	12,217	26,725
200.30	5,657	1,497	202.90	12,291	27,337
200.35	5,891	1,786	202.95	12,365	27,954
200.40	6,129	2,087	203.00	12,440	28,574
200.45	6,372	2,399	203.05	12,514	29,198
200.50	6,620	2,724	203.10	12,589	29,825
200.55	6,873	3,061	203.15	12,665	30,457
200.60	7,130	3,411	203.20	12,740	31,092
200.65	7,393	3,774	203.25	12,815	31,731
200.70	7,659	4,151	203.30	12,891	32,373
200.75	7,931	4,540	203.35	12,967	33,020
200.80	8,207	4,944	203.40	13,044	33,670
200.85	8,488	5,361	203.45	13,120	34,324
200.90	8,774	5,793	203.50	13,197	34,982
200.95	9,065	6,239	203.55	13,274	35,644
201.00	9,360	6,699	203.60	13,351	36,309
201.05	9,439	7,169	203.65	13,428	36,979
201.10	9,517	7,643	203.70	13,506	37,652
201.15	9,597	8,121	203.75	13,584	38,329
201.20	9,676	8,603	203.80	13,662	39,011
201.25	9,756	9,089	203.85	13,740	39,696
201.30	9,836	9,578	203.90	13,818	40,385
201.35	9,917	10,072	203.95	13,897	41,077
201.40	9,997	10,570	204.00	**13,976**	**41,774**
201.45	10,079	11,072			
201.50	10,160	11,578			
201.55	10,242	12,088			
201.60	10,324	12,602			
201.65	10,407	13,120			
201.70	10,489	13,643			
201.75	10,572	14,169			
201.80	10,656	14,700			
201.85	10,740	15,235			
201.90	10,824	15,774			
201.95	10,908	16,317			
202.00	10,993	16,865			
202.05	11,063	17,416			
202.10	11,134	17,971			
202.15	11,204	18,530			
202.20	11,275	19,092			
202.25	11,346	19,657			
202.30	11,418	20,226			
202.35	11,489	20,799			
202.40	11,561	21,375			
202.45	11,633	21,955			
202.50	11,705	22,538			
202.55	11,778	23,126			

Stage-Area-Storage for Pond P213: Stormtech Infiltration System #3

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.95	**3,317**	0
201.00	3,317	66
201.05	3,317	133
201.10	3,317	199
201.15	3,317	265
201.20	3,317	332
201.25	3,317	398
201.30	3,317	464
201.35	3,317	531
201.40	3,317	597
201.45	3,317	663
201.50	3,317	801
201.55	3,317	939
201.60	3,317	1,076
201.65	3,317	1,214
201.70	3,317	1,350
201.75	3,317	1,487
201.80	3,317	1,623
201.85	3,317	1,758
201.90	3,317	1,893
201.95	3,317	2,027
202.00	3,317	2,161
202.05	3,317	2,294
202.10	3,317	2,427
202.15	3,317	2,558
202.20	3,317	2,690
202.25	3,317	2,820
202.30	3,317	2,950
202.35	3,317	3,079
202.40	3,317	3,207
202.45	3,317	3,335
202.50	3,317	3,461
202.55	3,317	3,587
202.60	3,317	3,712
202.65	3,317	3,836
202.70	3,317	3,958
202.75	3,317	4,080
202.80	3,317	4,201
202.85	3,317	4,320
202.90	3,317	4,439
202.95	3,317	4,556
203.00	3,317	4,672
203.05	3,317	4,787
203.10	3,317	4,900
203.15	3,317	5,012
203.20	3,317	5,121
203.25	3,317	5,229
203.30	3,317	5,335
203.35	3,317	5,440
203.40	3,317	5,542
203.45	3,317	5,643
203.50	3,317	5,741
203.55	3,317	5,836
203.60	3,317	5,928
203.65	3,317	6,016
203.70	3,317	6,099
203.75	3,317	6,178
203.80	3,317	6,252
203.85	3,317	6,324
203.90	3,317	6,394
203.95	3,317	6,461
204.00	3,317	6,528
204.05	3,317	6,594
204.10	3,317	6,660
204.15	3,317	6,727
204.20	3,317	6,793
204.25	3,317	6,859
204.30	3,317	6,926
204.35	3,317	6,992
204.40	3,317	7,058
204.45	3,317	**7,125**

Stage-Area-Storage for Pond P214: STORMTECH INFILTRATION SYSTEM #4

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.00	**3,201**	0	202.60	3,201	5,556
200.05	3,201	64	202.65	3,201	5,644
200.10	3,201	128	202.70	3,201	5,728
200.15	3,201	192	202.75	3,201	5,808
200.20	3,201	256	202.80	3,201	5,884
200.25	3,201	320	202.85	3,201	5,955
200.30	3,201	384	202.90	3,201	6,024
200.35	3,201	448	202.95	3,201	6,091
200.40	3,201	512	203.00	3,201	6,156
200.45	3,201	576	203.05	3,201	6,220
200.50	3,201	640	203.10	3,201	6,284
200.55	3,201	771	203.15	3,201	6,349
200.60	3,201	902	203.20	3,201	6,413
200.65	3,201	1,032	203.25	3,201	6,477
200.70	3,201	1,162	203.30	3,201	6,541
200.75	3,201	1,292	203.35	3,201	6,605
200.80	3,201	1,421	203.40	3,201	6,669
200.85	3,201	1,550	203.45	3,201	6,733
200.90	3,201	1,679	203.50	3,201	**6,797**
200.95	3,201	1,807			
201.00	3,201	1,934			
201.05	3,201	2,061			
201.10	3,201	2,187			
201.15	3,201	2,313			
201.20	3,201	2,438			
201.25	3,201	2,563			
201.30	3,201	2,687			
201.35	3,201	2,810			
201.40	3,201	2,932			
201.45	3,201	3,054			
201.50	3,201	3,175			
201.55	3,201	3,296			
201.60	3,201	3,415			
201.65	3,201	3,534			
201.70	3,201	3,651			
201.75	3,201	3,768			
201.80	3,201	3,884			
201.85	3,201	3,998			
201.90	3,201	4,112			
201.95	3,201	4,225			
202.00	3,201	4,336			
202.05	3,201	4,447			
202.10	3,201	4,556			
202.15	3,201	4,664			
202.20	3,201	4,770			
202.25	3,201	4,874			
202.30	3,201	4,977			
202.35	3,201	5,078			
202.40	3,201	5,178			
202.45	3,201	5,276			
202.50	3,201	5,371			
202.55	3,201	5,465			

Pocket Wetland Sizing
P210
Site Location: 55 Summer Street - Walpole, MA

HOWARD STEIN HUDSON
Engineers + Planners

Date: 06/20/2023
By: PB
Checked: KE

Design Criteria	Pocket Wetland (req.)	Pocket Wetland (P205)
Minimum Drainage Area (Ac.)	≥ 1 to 10	**1.4**
Constructed Wetland Surface Area/Watershed Ratio	≥ 0.01	**0.14**
Length to Width Ratio (min.)	≥ 2:1	**12:1**
Extended Detention (ED)	OPTIONAL	**NO**
Allocation of WQv Volume (wet pools/low and high marsh/ED) in %	20/80/02	**24/76/0**
Allocation of Surface Area (wet pools/low marsh/high marsh/semi-wet) in %	10/45/40/5	**9/43/43/5**
Sediment Forebay	REQUIRED	**YES**
Micropool	REQUIRED	**YES**
Oulet Configuration	Hooded Broad-Crested Weir	**Multi-Stage Discharge Outlet Structure**
Target Allocations	**Pocket Wetland**	**Pocket Wetland**
% Surface Area (Req.)		**8,465**
Sediment Forebay	5%	**5%**
Micropool	5%	**4%**
Deep Water Channel	0%	**0%**
Lo Marsh	45%	**43%**
High Marsh	40%	**43%**
Semi-Wet	5%	**5%**
% WQv Volume (Req.)		**2,619**
Sediment Forebay	10%	**10%**
Micropool	10%	**14%**
Deep Water Channel	0%	**0%**
Lo Marsh and High Marsh	80%	**76%**

Designed Surface Area (sf)	
Sediment Forebay	392
Micropool	376
Deep Water	0
Lo Marsh	3615
High Marsh	3674
Semi-Wet	408

Designed Water Quality Volume (cf)	
Sediment Forebay	267
Micropool	376