

**1193-001-ALLS-PHCD-INHS DP-3 EMERGENCY**

Type III 24-hr 100-Year Rainfall=8.50"

Prepared by DiPrete Engineering

Printed 4/5/2022

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Head (feet) 0.20 0.40 0.60 0.80 1.00  
 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=2.57 cfs @ 12.12 hrs HW=288.07' TW=285.96' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 2.57 cfs @ 4.37 fps)

**Secondary OutFlow** Max=62.18 cfs @ 12.12 hrs HW=288.07' TW=285.68' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 62.18 cfs @ 2.31 fps)

**Summary for Pond 342.2: Drywell C (1.02 in/hr) (0.5' Deep)**

Inflow Area = 0.023 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af  
 Outflow = 0.23 cfs @ 12.01 hrs, Volume= 0.016 af, Atten= 3%, Lag= 0.5 min  
 Discarded = 0.01 cfs @ 9.54 hrs, Volume= 0.010 af  
 Primary = 0.22 cfs @ 12.01 hrs, Volume= 0.005 af  
 Routed to Pond 343 : 2X 15" Pipe

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.10' @ 12.01 hrs Surf.Area= 310 sf Storage= 117 cf

Plug-Flow detention time= 77.5 min calculated for 0.016 af (100% of inflow)  
 Center-of-Mass det. time= 77.5 min ( 812.4 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	998.50'	26 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 78 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	42 cf	<b>6.00'D x 1.50'H Pipe Storage</b> -Impervious
		78 cf	x 2.00 = 156 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
998.50	155	0	0
999.00	155	78	78

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	998.50'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate X 2.00</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.01 cfs @ 9.54 hrs HW=998.52' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.22 cfs @ 12.01 hrs HW=1,000.10' TW=309.11' (Dynamic Tailwater)

↑**2=Dome Grate** (Weir Controls 0.22 cfs @ 1.04 fps)

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**Summary for Pond 343: 2X 15" Pipe**

Inflow Area = 2.067 ac, 34.01% Impervious, Inflow Depth = 5.23" for 100-Year event  
 Inflow = 12.27 cfs @ 12.10 hrs, Volume= 0.901 af  
 Outflow = 12.27 cfs @ 12.10 hrs, Volume= 0.901 af, Atten= 0%, Lag= 0.0 min  
 Primary = 12.27 cfs @ 12.10 hrs, Volume= 0.901 af  
 Routed to Reach 344 : Swale

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 309.86' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	307.90'	<b>15.00" Round Culvert X 2.00</b> L= 44.8' Ke= 0.500 Inlet / Outlet Invert= 307.90' / 307.68' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

**Primary OutFlow** Max=12.26 cfs @ 12.10 hrs HW=309.86' TW=308.19' (Dynamic Tailwater)  
 ↑**1=Culvert** (Barrel Controls 12.26 cfs @ 5.00 fps)

**Summary for Pond 347: Forebay F West (278, 287)**

Inflow Area = 2.704 ac, 33.58% Impervious, Inflow Depth = 5.23" for 100-Year event  
 Inflow = 15.17 cfs @ 12.09 hrs, Volume= 1.178 af  
 Outflow = 15.17 cfs @ 12.09 hrs, Volume= 1.176 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.07 cfs @ 12.24 hrs, Volume= 0.092 af  
 Routed to Pond 350 : WQ Pond F (283, 287)(2.41 in/hr)  
 Secondary = 15.17 cfs @ 12.09 hrs, Volume= 1.084 af  
 Routed to Pond 352 : QP Pond F (280, 287.1) (2.41 in/hr)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 286.81' @ 12.34 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	281.00'	<b>6.00" Round Culvert X 2.00</b> L= 31.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 281.00' / 281.00' S= 0.0000 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#2	Secondary	285.00'	<b>19.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=1.02 cfs @ 12.24 hrs HW=286.67' TW=286.30' (Dynamic Tailwater)  
 ↑**1=Culvert** (Outlet Controls 1.02 cfs @ 2.59 fps)

**Secondary OutFlow** Max=13.07 cfs @ 12.09 hrs HW=285.43' TW=285.24' (Dynamic Tailwater)  
 ↑**2=Broad-Crested Rectangular Weir** (Weir Controls 13.07 cfs @ 1.59 fps)

**Summary for Pond 349.2: Drywell A (1.02 in/hr) (2' Deep)**

Inflow Area = 0.023 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af  
 Outflow = 0.22 cfs @ 12.01 hrs, Volume= 0.016 af, Atten= 4%, Lag= 0.6 min  
 Discarded = 0.00 cfs @ 2.98 hrs, Volume= 0.003 af  
 Primary = 0.22 cfs @ 12.01 hrs, Volume= 0.012 af  
 Routed to Pond 350 : WQ Pond F (283, 287)(2.41in/hr)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.28' @ 12.01 hrs Surf.Area= 58 sf Storage= 44 cf

Plug-Flow detention time= 71.4 min calculated for 0.016 af (100% of inflow)  
 Center-of-Mass det. time= 71.4 min ( 806.3 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#2	997.00'	38 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 116 cf Overall x 33.0% Voids
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		48 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.00	58	0	0
999.00	58	116	116

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Orifice</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.00 cfs @ 2.98 hrs HW=997.04' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.00 cfs)

**Primary OutFlow** Max=0.22 cfs @ 12.01 hrs HW=1,000.28' TW=285.93' (Dynamic Tailwater)  
 ↑2=Dome Orifice (Orifice Controls 0.22 cfs @ 2.55 fps)

**Summary for Pond 349.4: Drywell D (1.02 in/hr) (2' Deep)**

Inflow Area = 0.046 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.47 cfs @ 12.00 hrs, Volume= 0.032 af  
 Outflow = 0.46 cfs @ 12.00 hrs, Volume= 0.032 af, Atten= 1%, Lag= 0.2 min  
 Discarded = 0.00 cfs @ 2.87 hrs, Volume= 0.007 af  
 Primary = 0.46 cfs @ 12.00 hrs, Volume= 0.025 af  
 Routed to Pond 350 : WQ Pond F (283, 287)(2.41in/hr)

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Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.10' @ 12.00 hrs Surf.Area= 112 sf Storage= 83 cf

Plug-Flow detention time= 69.7 min calculated for 0.032 af (100% of inflow)  
 Center-of-Mass det. time= 69.8 min ( 804.7 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	997.00'	18 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		29 cf	x 4.00 = 114 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.00	28	0	0
999.00	28	56	56

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate X 4.00</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.00 cfs @ 2.87 hrs HW=997.04' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

**Primary OutFlow** Max=0.46 cfs @ 12.00 hrs HW=1,000.10' TW=285.93' (Dynamic Tailwater)

↑**2=Dome Grate** (Weir Controls 0.46 cfs @ 1.05 fps)

### Summary for Pond 350: WQ Pond F (283, 287)(2.41in/hr)

Inflow Area = 20.268 ac, 11.89% Impervious, Inflow Depth = 1.31" for 100-Year event  
 Inflow = 6.89 cfs @ 12.20 hrs, Volume= 2.204 af  
 Outflow = 7.40 cfs @ 12.41 hrs, Volume= 2.204 af, Atten= 0%, Lag= 12.4 min  
 Discarded = 0.37 cfs @ 12.40 hrs, Volume= 0.744 af  
 Primary = 7.03 cfs @ 12.41 hrs, Volume= 1.460 af  
 Routed to Pond 352 : QP Pond F (280, 287.1) (2.41 in/hr)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 286.79' @ 12.40 hrs Surf.Area= 6,604 sf Storage= 18,154 cf

Plug-Flow detention time= 183.9 min calculated for 2.204 af (100% of inflow)  
 Center-of-Mass det. time= 183.9 min ( 1,124.4 - 940.5 )

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Volume	Invert	Avail.Storage	Storage Description
#1	283.00'	19,581 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
283.00	2,554	0	0
284.00	4,088	3,321	3,321
286.00	5,845	9,933	13,254
287.00	6,809	6,327	19,581

Device	Routing	Invert	Outlet Devices
#1	Discarded	283.00'	<b>2.410 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	285.75'	<b>20.0' long x 14.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.64 2.67 2.70 2.65 2.64 2.65 2.65 2.63

**Discarded OutFlow** Max=0.37 cfs @ 12.40 hrs HW=286.78' (Free Discharge)  
 ↑**1=Exfiltration** (Exfiltration Controls 0.37 cfs)

**Primary OutFlow** Max=7.49 cfs @ 12.41 hrs HW=286.78' TW=286.78' (Dynamic Tailwater)  
 ↑**2=Broad-Crested Rectangular Weir** (Weir Controls 7.49 cfs @ 0.36 fps)

**Summary for Pond 352: QP Pond F (280, 287.1) (2.41 in/hr)**

Inflow Area = 20.892 ac, 11.54% Impervious, Inflow Depth = 3.62" for 100-Year event  
 Inflow = 83.39 cfs @ 12.12 hrs, Volume= 6.308 af  
 Outflow = 39.81 cfs @ 12.33 hrs, Volume= 4.503 af, Atten= 52%, Lag= 12.5 min  
 Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Secondary = 39.81 cfs @ 12.33 hrs, Volume= 4.503 af  
 Routed to Reach 352C : Wetland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 286.81' @ 12.33 hrs Surf.Area= 23,419 sf Storage= 94,693 cf

Plug-Flow detention time= 148.6 min calculated for 4.503 af (71% of inflow)  
 Center-of-Mass det. time= 59.8 min ( 894.2 - 834.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	280.00'	101,592 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
280.00	2,334	0	0
281.00	5,023	3,679	3,679
282.00	9,013	7,018	10,697
283.00	12,495	10,754	21,451
284.00	17,957	15,226	36,677
285.00	19,850	18,904	55,580
286.00	21,796	20,823	76,403
287.10	24,003	25,189	101,592

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Device	Routing	Invert	Outlet Devices
#1	Secondary	286.10'	<b>25.0' long x 16.0' breadth Overflow Weir</b> 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	280.00'	<b>0.482 in/hr Exfiltration X 0.00 over Surface area</b> Phase-In= 0.01'

**Discarded OutFlow** Max=0.00 cfs @ 0.00 hrs HW=280.00' (Free Discharge)

↳ **2=Exfiltration** ( Controls 0.00 cfs)

**Secondary OutFlow** Max=39.80 cfs @ 12.33 hrs HW=286.81' TW=282.25' (Dynamic Tailwater)

↳ **1=Overflow Weir** (Weir Controls 39.80 cfs @ 2.25 fps)

**Summary for Pond 352.2: Drywell D (1.02 in/hr) (2' Deep)**

Inflow Area = 0.069 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.70 cfs @ 12.00 hrs, Volume= 0.047 af  
 Outflow = 0.69 cfs @ 12.00 hrs, Volume= 0.047 af, Atten= 1%, Lag= 0.2 min  
 Discarded = 0.00 cfs @ 2.87 hrs, Volume= 0.010 af  
 Primary = 0.69 cfs @ 12.00 hrs, Volume= 0.037 af  
 Routed to Reach 352A : Upland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Peak Elev= 1,000.10' @ 12.00 hrs Surf.Area= 168 sf Storage= 124 cf

Plug-Flow detention time= 69.7 min calculated for 0.047 af (100% of inflow)

Center-of-Mass det. time= 69.8 min ( 804.7 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	997.00'	18 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		29 cf	x 6.00 = 172 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.00	28	0	0
999.00	28	56	56

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate X 6.00</b> C= 0.600 Limited to weir flow at low heads

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**Discarded OutFlow** Max=0.00 cfs @ 2.87 hrs HW=997.04' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

**Primary OutFlow** Max=0.69 cfs @ 12.00 hrs HW=1,000.10' TW=313.02' (Dynamic Tailwater)

↑**2=Dome Grate** (Weir Controls 0.69 cfs @ 1.05 fps)

**Summary for Pond 352.4: Drywell H (1.02 in/hr) (2' Deep)**

Inflow Area = 0.436 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 4.44 cfs @ 12.00 hrs, Volume= 0.300 af  
 Outflow = 4.39 cfs @ 12.00 hrs, Volume= 0.300 af, Atten= 1%, Lag= 0.2 min  
 Discarded = 0.05 cfs @ 6.33 hrs, Volume= 0.119 af  
 Primary = 4.34 cfs @ 12.00 hrs, Volume= 0.181 af  
 Routed to Reach 352B : Upland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.10' @ 12.00 hrs Surf.Area= 2,128 sf Storage= 1,487 cf

Plug-Flow detention time= 113.6 min calculated for 0.300 af (100% of inflow)  
 Center-of-Mass det. time= 113.6 min ( 848.6 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	997.00'	37 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 112 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		47 cf	x 38.00 = 1,789 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.00	56	0	0
999.00	56	112	112

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate X 38.00</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.05 cfs @ 6.33 hrs HW=997.04' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

**Primary OutFlow** Max=4.31 cfs @ 12.00 hrs HW=1,000.10' TW=335.03' (Dynamic Tailwater)

↑**2=Dome Grate** (Weir Controls 4.31 cfs @ 1.05 fps)

**Summary for Pond 353.2: Drywell B (1.02 in/hr) (1' Deep)**

Inflow Area = 0.069 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.70 cfs @ 12.00 hrs, Volume= 0.047 af  
 Outflow = 0.67 cfs @ 12.01 hrs, Volume= 0.047 af, Atten= 4%, Lag= 0.6 min  
 Discarded = 0.01 cfs @ 4.97 hrs, Volume= 0.014 af  
 Primary = 0.67 cfs @ 12.01 hrs, Volume= 0.033 af  
 Routed to Reach 354 : Swale G

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.28' @ 12.01 hrs Surf.Area= 285 sf Storage= 111 cf

Plug-Flow detention time= 49.0 min calculated for 0.047 af (100% of inflow)  
 Center-of-Mass det. time= 49.1 min ( 784.0 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	998.00'	31 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 95 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
			41 cf x 3.00 = 124 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
998.00	95	0	0
999.00	95	95	95

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	998.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate X 3.00</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.01 cfs @ 4.97 hrs HW=998.03' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.66 cfs @ 12.01 hrs HW=1,000.28' TW=169.81' (Dynamic Tailwater)  
 ↑2=Dome Grate (Orifice Controls 0.66 cfs @ 2.54 fps)

**Summary for Pond 356.2: Drywell A (1.02 in/hr) (2' Deep)**

Inflow Area = 0.069 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.70 cfs @ 12.00 hrs, Volume= 0.047 af  
 Outflow = 0.67 cfs @ 12.01 hrs, Volume= 0.047 af, Atten= 4%, Lag= 0.6 min  
 Discarded = 0.00 cfs @ 2.98 hrs, Volume= 0.010 af  
 Primary = 0.67 cfs @ 12.01 hrs, Volume= 0.037 af  
 Routed to Pond 357 : Forebay G (162.5, 167.5)

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Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.28' @ 12.01 hrs Surf.Area= 174 sf Storage= 132 cf

Plug-Flow detention time= 71.4 min calculated for 0.047 af (100% of inflow)  
 Center-of-Mass det. time= 71.4 min ( 806.3 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#2	997.00'	38 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 116 cf Overall x 33.0% Voids
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		48 cf	x 3.00 = 145 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.00	58	0	0
999.00	58	116	116

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Orifice X 3.00</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.00 cfs @ 2.98 hrs HW=997.04' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.00 cfs)

**Primary OutFlow** Max=0.67 cfs @ 12.01 hrs HW=1,000.28' TW=166.07' (Dynamic Tailwater)  
 ↑2=Dome Orifice (Orifice Controls 0.67 cfs @ 2.55 fps)

**Summary for Pond 356.4: Drywell C (1.02 in/hr) (0.5' Deep)**

Inflow Area = 0.023 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af  
 Outflow = 0.21 cfs @ 12.02 hrs, Volume= 0.016 af, Atten= 10%, Lag= 1.1 min  
 Discarded = 0.00 cfs @ 7.26 hrs, Volume= 0.007 af  
 Primary = 0.21 cfs @ 12.02 hrs, Volume= 0.009 af  
 Routed to Pond 357 : Forebay G (162.5, 167.5)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.24' @ 12.02 hrs Surf.Area= 155 sf Storage= 66 cf

Plug-Flow detention time= 63.9 min calculated for 0.016 af (100% of inflow)  
 Center-of-Mass det. time= 63.9 min ( 798.8 - 734.9 )

**1193-001-ALLS-PHCD-INHS DP-3 EMERGENCY**

Type III 24-hr 100-Year Rainfall=8.50"

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Volume	Invert	Avail.Storage	Storage Description
#1	998.50'	26 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 78 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	42 cf	<b>6.00'D x 1.50'H Pipe Storage</b> -Impervious
		78 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
998.50	155	0	0
999.00	155	78	78

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	998.50'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.00 cfs @ 7.26 hrs HW=998.52' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.00 cfs)

**Primary OutFlow** Max=0.21 cfs @ 12.02 hrs HW=1,000.24' TW=166.09' (Dynamic Tailwater)

↑2=Dome Grate (Orifice Controls 0.21 cfs @ 2.38 fps)

**Summary for Pond 356.6: Drywell D (1.02 in/hr) (2' Deep)**

Inflow Area = 0.172 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 1.75 cfs @ 12.00 hrs, Volume= 0.118 af  
 Outflow = 1.73 cfs @ 12.00 hrs, Volume= 0.118 af, Atten= 1%, Lag= 0.3 min  
 Discarded = 0.02 cfs @ 6.33 hrs, Volume= 0.047 af  
 Primary = 1.71 cfs @ 12.00 hrs, Volume= 0.072 af  
 Routed to Pond 357 : Forebay G (162.5, 167.5)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.07' @ 12.00 hrs Surf.Area= 840 sf Storage= 596 cf

Plug-Flow detention time= 114.1 min calculated for 0.118 af (100% of inflow)  
 Center-of-Mass det. time= 114.1 min ( 849.0 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	997.00'	18 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		29 cf	x 30.00 = 858 cf Total Available Storage

**1193-001-ALLS-PHCD-INHS DP-3 EMERGENCY**

Type III 24-hr 100-Year Rainfall=8.50"

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.00	28	0	0
999.00	28	56	56

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate X 30.00</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.02 cfs @ 6.33 hrs HW=997.04' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=1.69 cfs @ 12.00 hrs HW=1,000.06' TW=166.06' (Dynamic Tailwater)

↑**2=Dome Grate** (Weir Controls 1.69 cfs @ 0.83 fps)

**Summary for Pond 357: Forebay G (162.5, 167.5)**

Inflow Area = 12.302 ac, 13.14% Impervious, Inflow Depth = 4.00" for 100-Year event  
 Inflow = 36.60 cfs @ 12.14 hrs, Volume= 4.101 af  
 Outflow = 36.60 cfs @ 12.14 hrs, Volume= 4.101 af, Atten= 0%, Lag= 0.0 min  
 Primary = 9.43 cfs @ 12.14 hrs, Volume= 2.293 af  
 Routed to Pond 359 : WQ Pond G (162, 165.75) (2.41in/hr)  
 Secondary = 27.17 cfs @ 12.14 hrs, Volume= 1.808 af  
 Routed to Pond 362 : QP Pond G (161, 165.75) (2.41 in/hr)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 166.20' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	165.50'	<b>5.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> 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	Secondary	165.75'	<b>30.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=9.43 cfs @ 12.14 hrs HW=166.20' TW=163.49' (Dynamic Tailwater)

↑**1=Broad-Crested Rectangular Weir** (Weir Controls 9.43 cfs @ 2.68 fps)

**Secondary OutFlow** Max=27.16 cfs @ 12.14 hrs HW=166.20' TW=162.63' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 27.16 cfs @ 2.00 fps)

**Summary for Pond 359: WQ Pond G (162, 165.75) (2.41in/hr)**

Inflow Area = 12.438 ac, 13.00% Impervious, Inflow Depth = 2.27" for 100-Year event  
 Inflow = 9.85 cfs @ 12.13 hrs, Volume= 2.356 af  
 Outflow = 9.68 cfs @ 12.17 hrs, Volume= 2.356 af, Atten= 2%, Lag= 2.1 min  
 Discarded = 0.24 cfs @ 13.25 hrs, Volume= 0.448 af  
 Primary = 9.50 cfs @ 12.17 hrs, Volume= 1.907 af  
 Routed to Pond 362 : QP Pond G (161, 165.75) (2.41 in/hr)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 164.97' @ 13.25 hrs Surf.Area= 4,367 sf Storage= 9,764 cf

Plug-Flow detention time= 87.1 min calculated for 2.355 af (100% of inflow)  
 Center-of-Mass det. time= 87.1 min ( 992.6 - 905.5 )

Volume	Invert	Avail.Storage	Storage Description
#1	162.00'	13,424 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
162.00	2,285	0	0
164.00	3,620	5,905	5,905
165.75	4,973	7,519	13,424

Device	Routing	Invert	Outlet Devices
#1	Discarded	162.00'	<b>2.410 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	163.00'	<b>10.0' long x 15.5' breadth Broad-Crested Rectangular Weir</b> 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

**Discarded OutFlow** Max=0.24 cfs @ 13.25 hrs HW=164.97' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.24 cfs)

**Primary OutFlow** Max=9.50 cfs @ 12.17 hrs HW=163.50' TW=162.82' (Dynamic Tailwater)

↑2=Broad-Crested Rectangular Weir (Weir Controls 9.50 cfs @ 1.91 fps)

**Summary for Pond 362: QP Pond G (161, 165.75) (2.41 in/hr)**

Inflow Area = 15.979 ac, 10.12% Impervious, Inflow Depth = 3.65" for 100-Year event  
 Inflow = 44.59 cfs @ 12.16 hrs, Volume= 4.866 af  
 Outflow = 7.10 cfs @ 13.24 hrs, Volume= 4.866 af, Atten= 84%, Lag= 65.1 min  
 Discarded = 1.71 cfs @ 13.24 hrs, Volume= 3.891 af  
 Secondary = 5.39 cfs @ 13.24 hrs, Volume= 0.976 af  
 Routed to Reach 362A : Wetland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 164.97' @ 13.24 hrs Surf.Area= 30,703 sf Storage= 106,329 cf

Plug-Flow detention time= 535.6 min calculated for 4.866 af (100% of inflow)  
 Center-of-Mass det. time= 535.7 min ( 1,376.3 - 840.6 )

**1193-001-ALLS-PHCD-INHS DP-3 EMERGENCY**

Type III 24-hr 100-Year Rainfall=8.50"

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Volume	Invert	Avail.Storage	Storage Description
#1	161.00'	131,022 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
161.00	23,056	0	0
162.00	24,896	23,976	23,976
164.00	28,743	53,639	77,615
165.75	32,294	53,407	131,022

Device	Routing	Invert	Outlet Devices
#1	Discarded	161.00'	<b>2.410 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Secondary	164.75'	<b>20.0' long x 16.0' breadth Emergency Overflow Weir</b> 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

**Discarded OutFlow** Max=1.71 cfs @ 13.24 hrs HW=164.97' (Free Discharge)  
 ↳ **1=Exfiltration** (Exfiltration Controls 1.71 cfs)

**Secondary OutFlow** Max=5.39 cfs @ 13.24 hrs HW=164.97' TW=162.00' (Dynamic Tailwater)  
 ↳ **2=Emergency Overflow Weir** (Weir Controls 5.39 cfs @ 1.25 fps)

**Summary for Pond 365.2: Drywell G (1.02 in/hr) (1' Deep)**

Inflow Area = 0.023 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af  
 Outflow = 0.22 cfs @ 12.01 hrs, Volume= 0.016 af, Atten= 4%, Lag= 0.6 min  
 Discarded = 0.00 cfs @ 8.22 hrs, Volume= 0.008 af  
 Primary = 0.22 cfs @ 12.01 hrs, Volume= 0.008 af  
 Routed to Reach 365A : Upland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.27' @ 12.01 hrs Surf.Area= 190 sf Storage= 68 cf

Plug-Flow detention time= 63.6 min calculated for 0.016 af (100% of inflow)  
 Center-of-Mass det. time= 63.6 min ( 798.5 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	998.00'	63 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 190 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		73 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
998.00	190	0	0
999.00	190	190	190

**1193-001-ALLS-PHCD-INHS DP-3 EMERGENCY**

Type III 24-hr 100-Year Rainfall=8.50"

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Device	Routing	Invert	Outlet Devices
#1	Discarded	998.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Grate</b> C= 0.600 Limited to weir flow at low heads

**Discarded OutFlow** Max=0.00 cfs @ 8.22 hrs HW=998.03' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

**Primary OutFlow** Max=0.22 cfs @ 12.01 hrs HW=1,000.27' TW=370.14' (Dynamic Tailwater)

↑**2=Dome Grate** (Orifice Controls 0.22 cfs @ 2.51 fps)

**Summary for Pond 365.4: Drywell F (1.02 in/hr) (2' Deep)**

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event  
 Inflow = 1.64 cfs @ 12.00 hrs, Volume= 0.111 af  
 Outflow = 1.57 cfs @ 12.01 hrs, Volume= 0.111 af, Atten= 4%, Lag= 0.6 min  
 Discarded = 0.02 cfs @ 6.49 hrs, Volume= 0.045 af  
 Primary = 1.55 cfs @ 12.01 hrs, Volume= 0.066 af  
 Routed to Reach 365C : Wetland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1,000.28' @ 12.01 hrs Surf.Area= 812 sf Storage= 575 cf

Plug-Flow detention time= 115.5 min calculated for 0.111 af (100% of inflow)  
 Center-of-Mass det. time= 115.5 min ( 850.4 - 734.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,000.00'	10 cf	<b>Above Drywell (Prismatic)</b> Listed below (Recalc) -Impervious
#2	997.00'	77 cf	<b>Drywell Storage (Prismatic)</b> Listed below (Recalc) 232 cf Overall x 33.0% Voids
#3	999.00'	0 cf	<b>0.33'D x 1.50'H Pipe Storage</b> -Impervious
		87 cf	x 7.00 = 607 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,000.00	20	0	0
1,000.50	20	10	10

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.00	116	0	0
999.00	116	232	232

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	<b>1.020 in/hr Exfiltration over Surface area</b> Phase-In= 0.01'
#2	Primary	1,000.00'	<b>4.00" Horiz. Dome Orifice X 7.00</b> C= 0.600 Limited to weir flow at low heads

**1193-001-ALLS-PHCD-INHS DP-3 EMERGENCY**

*Type III 24-hr 100-Year Rainfall=8.50"*

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**Discarded OutFlow** Max=0.02 cfs @ 6.49 hrs HW=997.04' (Free Discharge)

↳ **1=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=1.55 cfs @ 12.01 hrs HW=1,000.28' TW=298.84' (Dynamic Tailwater)

↳ **2=Dome Orifice** (Orifice Controls 1.55 cfs @ 2.53 fps)

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#### A3.4.4.5 HydroCAD Volume Analysis

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

Type III 24-hr WQ Storm Rainfall=1.20"

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points  
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.  
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

<b>Link 117: DP-1: NW Wetland</b>	Inflow=0.01 cfs 0.000 af Primary=0.01 cfs 0.000 af
<b>Link 231: DP-2: Brushy Brook</b>	Inflow=0.10 cfs 0.008 af Primary=0.10 cfs 0.008 af
<b>Link 369: WQ Storm Primary Outflow Imported from 1193-001-ALLS-PHCD-INHS DP-3-Link 369.hce</b>	Inflow=0.03 cfs 0.012 af Area= 239.106 ac 3.24% Imperv. Primary=0.03 cfs 0.012 af
<b>Link 401: DP-4: NE Abutters</b>	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af
<b>Link 506: Site Convergence</b>	Inflow=0.32 cfs 0.323 af Primary=0.32 cfs 0.323 af
<b>Link POST: Brushy Brook/Sawmill Road Crossing</b>	Inflow=0.52 cfs 0.524 af Primary=0.52 cfs 0.524 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

Type III 24-hr 1-Year Rainfall=2.80"

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Link 117: DP-1: NW Wetland**

Inflow=1.40 cfs 0.504 af  
Primary=1.40 cfs 0.504 af

**Link 231: DP-2: Brushy Brook**

Inflow=0.66 cfs 0.284 af  
Primary=0.66 cfs 0.284 af

**Link** -Year Primary Outflow Imported from 1193-001-ALLS-PHCD-INHS DP-3-Link 369.hce  
Area= 239.106 ac 3.24% Imperv. Inflow=6.37 cfs 2.878 af  
Primary=6.37 cfs 2.878 af

**Link 401: DP-4: NE Abutters**

Inflow=0.59 cfs 0.233 af  
Primary=0.59 cfs 0.233 af

**Link 506: Site Convergence**

Inflow=12.04 cfs 13.343 af  
Primary=12.04 cfs 13.343 af

**Link POST: Brushy Brook/Sawmill Road Crossing**

Inflow=12.02 cfs 15.935 af  
Primary=12.02 cfs 15.935 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

Type III 24-hr 2-Year Rainfall=3.30"

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Link 117: DP-1: NW Wetland** Inflow=3.89 cfs 1.045 af  
Primary=3.89 cfs 1.045 af

**Link 231: DP-2: Brushy Brook** Inflow=2.70 cfs 0.570 af  
Primary=2.70 cfs 0.570 af

**Link 369: Year Primary Outflow Imported from 1193-001-ALLS-PHCD-INHS DP-3~Link 369.hce** Inflow=16.64 cfs 5.570 af  
Area= 239.106 ac 3.24% Imperv. Primary=16.64 cfs 5.570 af

**Link 401: DP-4: NE Abutters** Inflow=1.90 cfs 0.449 af  
Primary=1.90 cfs 0.449 af

**Link 506: Site Convergence** Inflow=22.61 cfs 26.626 af  
Primary=22.61 cfs 26.626 af

**Link POST: Brushy Brook/Sawmill Road Crossing** Inflow=22.60 cfs 31.173 af  
Primary=22.60 cfs 31.173 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

Type III 24-hr 10-Year Rainfall=4.90"

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Link 117: DP-1: NW Wetland**

Inflow=24.31 cfs 3.781 af  
Primary=24.31 cfs 3.781 af

**Link 231: DP-2: Brushy Brook**

Inflow=14.65 cfs 2.099 af  
Primary=14.65 cfs 2.099 af

10-Link Primary Outflow Imported from 1193-001-ALLS-PHCD-INHS DP-3~Link 369.hce Inflow=89.01 cfs 18.838 af  
Area= 239.106 ac 3.24% Imperv. Primary=89.01 cfs 18.838 af

**Link 401: DP-4: NE Abutters**

Inflow=10.34 cfs 1.473 af  
Primary=10.34 cfs 1.473 af

**Link 506: Site Convergence**

Inflow=108.37 cfs 92.024 af  
Primary=108.37 cfs 92.024 af

**Link POST: Brushy Brook/Sawmill Road Crossing**

Inflow=104.05 cfs 105.360 af  
Primary=104.05 cfs 105.360 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

Type III 24-hr 25-Year Rainfall=6.10"

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Link 117: DP-1: NW Wetland**

Inflow=45.53 cfs 6.414 af  
Primary=45.53 cfs 6.414 af

**Link 231: DP-2: Brushy Brook**

Inflow=27.05 cfs 3.659 af  
Primary=27.05 cfs 3.659 af

25-Year Link Primary Outflow Imported from 1193-001-ALLS-PHCD-INHS DP-3~Link 369.hce Inflow=170.42 cfs 32.315 af  
Area= 239.106 ac 3.24% Imperv. Primary=170.42 cfs 32.315 af

**Link 401: DP-4: NE Abutters**

Inflow=19.62 cfs 2.488 af  
Primary=19.62 cfs 2.488 af

**Link 506: Site Convergence**

Inflow=210.66 cfs 157.990 af  
Primary=210.66 cfs 157.990 af

**Link POST: Brushy Brook/Sawmill Road Crossing**

Inflow=204.11 cfs 179.759 af  
Primary=204.11 cfs 179.759 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

Type III 24-hr 100-Year Rainfall=8.50"

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Link 117: DP-1: NW Wetland**

Inflow=95.71 cfs 12.609 af  
Primary=95.71 cfs 12.609 af

**Link 231: DP-2: Brushy Brook**

Inflow=56.43 cfs 7.469 af  
Primary=56.43 cfs 7.469 af

100-Year Link Primary Outflow Imported from 1193-001-ALLS-PHCD-INHS DP-3~Link 369.hce Inflow=364.52 cfs 64.697 af  
Area= 239.106 ac 3.24% Imperv. Primary=364.52 cfs 64.697 af

**Link 401: DP-4: NE Abutters**

Inflow=42.25 cfs 4.934 af  
Primary=42.25 cfs 4.934 af

**Link 506: Site Convergence**

Inflow=459.30 cfs 318.220 af  
Primary=459.30 cfs 318.220 af

**Link POST: Brushy Brook/Sawmill Road Crossing**

Inflow=450.10 cfs 359.881 af  
Primary=450.10 cfs 359.881 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

*Type III 24-hr WQ Storm Rainfall=1.20"*

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Reach 502: Brushy Brook - To Dye Hill** Avg. Flow Depth=0.06' Max Vel=0.38 fps Inflow=0.32 cfs 0.350 af  
n=0.040 L=1,094.7' S=0.0046 '/' Capacity=168.72 cfs Outflow=0.32 cfs 0.330 af

**Pond 505: Culvert**

Peak Elev=128.05' Inflow=0.03 cfs 0.012 af  
Primary=0.03 cfs 0.012 af Secondary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.012 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

*Type III 24-hr 1-Year Rainfall=2.80"*

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Reach 502: Brushy Brook - To Dye Hill** Avg. Flow Depth=0.49' Max Vel=1.25 fps Inflow=12.05 cfs 10.936 af  
n=0.040 L=1,094.7' S=0.0046 '/ Capacity=168.72 cfs Outflow=12.04 cfs 10.694 af

**Pond 505: Culvert**

Peak Elev=128.78' Inflow=6.20 cfs 2.878 af

Primary=6.20 cfs 2.878 af Secondary=0.00 cfs 0.000 af Outflow=6.20 cfs 2.878 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

*Type III 24-hr 2-Year Rainfall=3.30"*

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Reach 502: Brushy Brook - To Dye Hill** Avg. Flow Depth=0.67' Max Vel=1.49 fps Inflow=22.63 cfs 21.794 af  
n=0.040 L=1,094.7' S=0.0046 '/ Capacity=168.72 cfs Outflow=22.61 cfs 21.414 af

**Pond 505: Culvert**

Peak Elev=129.38' Inflow=16.12 cfs 5.570 af

Primary=16.12 cfs 5.570 af Secondary=0.00 cfs 0.000 af Outflow=16.12 cfs 5.570 af

**1193-001-ALLS-PHCD-INHS DP-1,2,4**

*Type III 24-hr 10-Year Rainfall=4.90"*

Prepared by DiPrete Engineering

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 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

**Reach 502: Brushy Brook - To Dye Hill** Avg. Flow Depth=1.18' Max Vel=2.04 fps Inflow=72.51 cfs 74.896 af  
n=0.040 L=1,094.7' S=0.0046 '/' Capacity=168.72 cfs Outflow=72.46 cfs 74.014 af

**Pond 505: Culvert**

Peak Elev=139.35' Inflow=87.32 cfs 18.838 af  
Primary=76.35 cfs 18.566 af Secondary=10.97 cfs 0.272 af Outflow=87.32 cfs 18.838 af