

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Pond 209: QP Pond B (163.5, 165.5)	Peak Elev=164.11'	Storage=2,253 cf	Inflow=10.00 cfs	0.632 af
	Discarded=0.26 cfs	0.150 af	Primary=9.43 cfs	0.482 af
			Outflow=9.69 cfs	0.632 af
Pond 211: 12" Pipe	Peak Elev=148.87'	Inflow=0.66 cfs	0.048 af	
	12.00" Round Culvert	n=0.012	L=64.1'	S=0.0050 '/
			Outflow=0.66 cfs	0.048 af
Pond 215: Forebay C (146, 150.5)	Peak Elev=148.67'	Inflow=1.43 cfs	0.108 af	
			Outflow=1.43 cfs	0.108 af
Pond 218: WQ Pond C (147.5, 150.5) (8.27in/hr)	Peak Elev=148.67'	Storage=412 cf	Inflow=1.66 cfs	0.139 af
	Discarded=0.10 cfs	0.064 af	Primary=1.43 cfs	0.075 af
			Outflow=1.53 cfs	0.139 af
Pond 220: 12" Pipe	Peak Elev=146.84'	Inflow=0.47 cfs	0.034 af	
	12.00" Round Culvert	n=0.012	L=38.9'	S=0.0298 '/
			Outflow=0.47 cfs	0.034 af
Pond 222: 12" Pipe	Peak Elev=146.85'	Inflow=0.49 cfs	0.037 af	
	12.00" Round Culvert	n=0.012	L=17.1'	S=0.0906 '/
			Outflow=0.49 cfs	0.037 af
Pond 223A: Bypass	Peak Elev=144.57'	Inflow=0.94 cfs	0.071 af	
	Primary=0.31 cfs	0.046 af	Secondary=0.66 cfs	0.025 af
			Outflow=0.94 cfs	0.071 af
Pond 223B: JF4-2-1	Peak Elev=144.51'	Inflow=0.31 cfs	0.046 af	
	12.00" Round Culvert	n=0.013	L=12.9'	S=0.0000 '/
			Outflow=0.31 cfs	0.046 af
Pond 224: 15" Pipe	Peak Elev=144.50'	Inflow=2.34 cfs	0.146 af	
	15.00" Round Culvert	n=0.012	L=69.9'	S=0.0064 '/
			Outflow=2.34 cfs	0.146 af
Pond 225.2: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.08'	Storage=405 cf	Inflow=1.68 cfs	0.112 af
	Discarded=0.01 cfs	0.032 af	Primary=1.64 cfs	0.080 af
			Outflow=1.66 cfs	0.112 af
Pond 226: Existing Depression Filled in	Peak Elev=166.35'	Storage=7,697 cf	Inflow=6.05 cfs	0.711 af
	Discarded=0.06 cfs	0.084 af	Primary=3.24 cfs	0.627 af
			Outflow=3.30 cfs	0.711 af
Pond 230.2: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.08'	Storage=20 cf	Inflow=0.08 cfs	0.005 af
	Discarded=0.00 cfs	0.002 af	Primary=0.08 cfs	0.004 af
			Outflow=0.08 cfs	0.005 af
Pond 233: Existing Depression (STA 6+00)	Peak Elev=160.67'	Storage=25,097 cf	Inflow=3.29 cfs	0.644 af
	Discarded=0.07 cfs	0.407 af	Primary=0.00 cfs	0.000 af
			Outflow=0.07 cfs	0.407 af
Pond 235: Existing Depression (STA 4+00)	Peak Elev=148.18'	Storage=233 cf	Inflow=0.09 cfs	0.017 af
	Discarded=0.02 cfs	0.017 af	Primary=0.00 cfs	0.000 af
			Outflow=0.02 cfs	0.017 af
Pond 363.2: Drywell A (1.02 in/hr) (2' Deep)	Peak Elev=1,000.15'	Storage=83 cf	Inflow=0.34 cfs	0.022 af
	Discarded=0.00 cfs	0.007 af	Primary=0.32 cfs	0.016 af
			Outflow=0.33 cfs	0.022 af
Pond 363.4: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.08'	Storage=142 cf	Inflow=0.58 cfs	0.039 af
	Discarded=0.00 cfs	0.011 af	Primary=0.57 cfs	0.028 af
			Outflow=0.58 cfs	0.039 af
Pond 364: Existing Depression (STA 19+00)	Peak Elev=203.58'	Storage=8,724 cf	Inflow=8.20 cfs	1.001 af
			Outflow=3.70 cfs	1.001 af
Pond 400.2: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.08'	Storage=121 cf	Inflow=0.50 cfs	0.034 af
	Discarded=0.00 cfs	0.010 af	Primary=0.49 cfs	0.024 af
			Outflow=0.50 cfs	0.034 af

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Pond 505: Culvert

Peak Elev=140.41' Inflow=168.15 cfs 32.315 af
Primary=80.14 cfs 27.270 af Secondary=88.01 cfs 5.045 af Outflow=168.15 cfs 32.315 af

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 293.954 af
Primary=210.66 cfs 293.954 af

Link POST: Brushy Brook/Sawmill Road Crossing

Inflow=204.11 cfs 317.859 af
Primary=204.11 cfs 317.859 af

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 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

Subcatchment3CAT: CAT	Runoff Area=155.800 ac 0.10% Impervious Runoff Depth=1.74" Flow Length=1,898' Tc=46.4 min CN=57 Runoff=132.24 cfs 22.553 af
Subcatchment300: Subcat 300	Runoff Area=6.256 ac 0.00% Impervious Runoff Depth=1.66" Flow Length=698' Tc=27.5 min CN=56 Runoff=6.47 cfs 0.863 af
Subcatchment301: Subcat 301	Runoff Area=0.617 ac 32.74% Impervious Runoff Depth=3.17" Flow Length=288' Tc=6.0 min CN=73 Runoff=2.29 cfs 0.163 af
Subcatchment301.1: Lots 47 & 51	Runoff Area=0.046 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.34 cfs 0.022 af
Subcatchment301.3: Lots 45, 46, & 50	Runoff Area=0.069 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.50 cfs 0.034 af
Subcatchment301.5: Lots 48 & 49 Half of	Runoff Area=0.057 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.42 cfs 0.028 af
Subcatchment304: Subcat 304	Runoff Area=1.814 ac 8.43% Impervious Runoff Depth=2.16" Flow Length=235' Tc=6.2 min CN=62 Runoff=4.39 cfs 0.326 af
Subcatchment304.1: Lots 63, 64, & Half of	Runoff Area=0.057 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.42 cfs 0.028 af
Subcatchment305: Subcat 305	Runoff Area=0.027 ac 0.00% Impervious Runoff Depth=2.51" Tc=0.0 min CN=66 Runoff=0.10 cfs 0.006 af
Subcatchment307: Subcat 307	Runoff Area=1.076 ac 34.01% Impervious Runoff Depth=3.27" Flow Length=267' Tc=6.0 min CN=74 Runoff=4.13 cfs 0.293 af
Subcatchment309: Subcat 309	Runoff Area=0.886 ac 32.51% Impervious Runoff Depth=3.17" Flow Length=319' Tc=6.4 min CN=73 Runoff=3.25 cfs 0.234 af
Subcatchment310: Subcat 310	Runoff Area=0.057 ac 0.00% Impervious Runoff Depth=2.33" Tc=0.0 min CN=64 Runoff=0.19 cfs 0.011 af
Subcatchment312: Subcat 312	Runoff Area=0.426 ac 0.00% Impervious Runoff Depth=1.82" Flow Length=221' Tc=6.2 min CN=58 Runoff=0.84 cfs 0.065 af
Subcatchment313: Subcat 313	Runoff Area=0.212 ac 0.00% Impervious Runoff Depth=2.79" Tc=0.0 min CN=69 Runoff=0.84 cfs 0.049 af
Subcatchment313.1: Lot 62	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment315: Subcat 315	Runoff Area=0.243 ac 0.00% Impervious Runoff Depth=1.66" Flow Length=243' Tc=17.4 min CN=56 Runoff=0.30 cfs 0.033 af

1193-001-ALLS-PHCD-INHS DP-3*Type III 24-hr 25-Year Rainfall=6.10"*

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Subcatchment316: Subcat 316	Runoff Area=0.445 ac 0.00% Impervious Runoff Depth=3.97" Tc=0.0 min CN=81 Runoff=2.52 cfs 0.148 af
Subcatchment318: Subcat 318	Runoff Area=0.486 ac 32.51% Impervious Runoff Depth=3.17" Flow Length=382' Tc=6.0 min CN=73 Runoff=1.81 cfs 0.128 af
Subcatchment321: Subcat 321	Runoff Area=2.324 ac 32.40% Impervious Runoff Depth=3.17" Flow Length=123' Tc=6.5 min CN=73 Runoff=8.49 cfs 0.614 af
Subcatchment321.1: Half of Lot 72	Runoff Area=0.011 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.08 cfs 0.005 af
Subcatchment324: Subcat 324	Runoff Area=2.234 ac 25.51% Impervious Runoff Depth=2.79" Flow Length=260' Tc=6.0 min CN=69 Runoff=7.26 cfs 0.520 af
Subcatchment325: Subcat 325	Runoff Area=0.038 ac 0.00% Impervious Runoff Depth=2.51" Tc=0.0 min CN=66 Runoff=0.13 cfs 0.008 af
Subcatchment325.1: Lots 81 & 82	Runoff Area=0.046 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.34 cfs 0.022 af
Subcatchment327: Subcat 327	Runoff Area=0.805 ac 0.00% Impervious Runoff Depth=1.74" Flow Length=417' Tc=6.0 min CN=57 Runoff=1.51 cfs 0.117 af
Subcatchment328: Subcat 328	Runoff Area=0.129 ac 0.00% Impervious Runoff Depth=3.27" Tc=0.0 min CN=74 Runoff=0.61 cfs 0.035 af
Subcatchment328.1: Lot 83	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment328.3: Lot 84 & Half of 85	Runoff Area=0.034 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.25 cfs 0.017 af
Subcatchment330: Subcat 330	Runoff Area=0.071 ac 0.00% Impervious Runoff Depth=2.07" Flow Length=80' Slope=0.0979 '/' Tc=6.0 min CN=61 Runoff=0.17 cfs 0.012 af
Subcatchment331: Subcat 331	Runoff Area=0.490 ac 0.00% Impervious Runoff Depth=3.87" Tc=0.0 min CN=80 Runoff=2.71 cfs 0.158 af
Subcatchment333: Subcat 333	Runoff Area=12.560 ac 0.33% Impervious Runoff Depth=1.82" Flow Length=1,068' Tc=8.7 min CN=58 Runoff=22.62 cfs 1.904 af
Subcatchment334: Subcat 334	Runoff Area=1.962 ac 32.01% Impervious Runoff Depth=3.17" Flow Length=1,330' Tc=6.0 min CN=73 Runoff=7.30 cfs 0.519 af
Subcatchment334.1: Lots	Runoff Area=0.138 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=1.01 cfs 0.067 af
Subcatchment334.3: Lot 93	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment334.5: Lots 95-105, 109,	Runoff Area=0.345 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=2.52 cfs 0.169 af

Subcatchment334.7: Lot 106	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment337: Subcat 337	Runoff Area=26,746 sf 36.49% Impervious Runoff Depth=3.37" Flow Length=326' Tc=6.0 min CN=75 Runoff=2.43 cfs 0.172 af
Subcatchment339: Subcat 339	Runoff Area=0.702 ac 0.00% Impervious Runoff Depth=1.90" Flow Length=145' Tc=11.6 min CN=59 Runoff=1.21 cfs 0.111 af
Subcatchment339.1: Half of Lot 90	Runoff Area=0.011 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.08 cfs 0.005 af
Subcatchment340: Subcat 340	Runoff Area=0.038 ac 0.00% Impervious Runoff Depth=2.70" Tc=0.0 min CN=68 Runoff=0.14 cfs 0.008 af
Subcatchment342: Subcat 342	Runoff Area=2.044 ac 33.27% Impervious Runoff Depth=3.17" Flow Length=1,406' Tc=6.9 min CN=73 Runoff=7.36 cfs 0.540 af
Subcatchment342.1: Lot 107	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment345: Subcat 345	Runoff Area=0.572 ac 35.84% Impervious Runoff Depth=3.27" Flow Length=50' Slope=0.2213 '/' Tc=6.0 min CN=74 Runoff=2.19 cfs 0.156 af
Subcatchment346: Subcat 346	Runoff Area=0.065 ac 0.00% Impervious Runoff Depth=2.16" Tc=0.0 min CN=62 Runoff=0.19 cfs 0.012 af
Subcatchment348: Subcat 348	Runoff Area=0.910 ac 0.00% Impervious Runoff Depth=1.82" Flow Length=352' Tc=13.6 min CN=58 Runoff=1.41 cfs 0.138 af
Subcatchment349: Subcat 349	Runoff Area=0.169 ac 0.00% Impervious Runoff Depth=2.42" Tc=0.0 min CN=65 Runoff=0.58 cfs 0.034 af
Subcatchment349.1: Lot 115	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment349.3: Lots 116 & 117	Runoff Area=0.046 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.34 cfs 0.022 af
Subcatchment351: Subcat 351	Runoff Area=0.624 ac 0.00% Impervious Runoff Depth=2.33" Tc=0.0 min CN=64 Runoff=2.04 cfs 0.121 af
Subcatchment352.1: Half of 55, 65, 72, 85,	Runoff Area=0.069 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.50 cfs 0.034 af
Subcatchment352.3: Lots 56-60, 66, 68,	Runoff Area=0.460 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=3.35 cfs 0.225 af
Subcatchment353: Subcat 353	Runoff Area=4.008 ac 31.01% Impervious Runoff Depth=3.08" Flow Length=2,082' Tc=6.5 min CN=72 Runoff=14.18 cfs 1.027 af

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Subcatchment 353.1: Lot 134-136	Runoff Area=0.069 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.50 cfs 0.034 af
Subcatchment 355: Subcat 355	Runoff Area=7.910 ac 0.52% Impervious Runoff Depth=1.74" Flow Length=1,048' Tc=20.8 min CN=57 Runoff=9.76 cfs 1.145 af
Subcatchment 356: Subcat 356	Runoff Area=0.051 ac 0.00% Impervious Runoff Depth=2.42" Tc=0.0 min CN=65 Runoff=0.17 cfs 0.010 af
Subcatchment 356.1: Lots 130-132	Runoff Area=0.069 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.50 cfs 0.034 af
Subcatchment 356.3: Lot 133	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment 356.5: Lots 127-129 &	Runoff Area=0.172 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=1.25 cfs 0.084 af
Subcatchment 358: Subcat 358	Runoff Area=0.136 ac 0.00% Impervious Runoff Depth=3.37" Tc=0.0 min CN=75 Runoff=0.66 cfs 0.038 af
Subcatchment 360: Subcat 360	Runoff Area=2.719 ac 0.00% Impervious Runoff Depth=1.58" Flow Length=849' Tc=17.7 min CN=55 Runoff=3.15 cfs 0.357 af
Subcatchment 361: Subcat 361	Runoff Area=0.822 ac 0.00% Impervious Runoff Depth=4.18" Tc=0.0 min CN=83 Runoff=4.87 cfs 0.286 af
Subcatchment 365: Subcat 365	Runoff Area=14.688 ac 0.00% Impervious Runoff Depth=1.74" Flow Length=405' Tc=19.5 min CN=57 Runoff=18.59 cfs 2.126 af
Subcatchment 365.1: Lot 67	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=0.17 cfs 0.011 af
Subcatchment 365.3: Lots 61, 69, 77-79,	Runoff Area=0.161 ac 100.00% Impervious Runoff Depth=5.86" Tc=0.0 min CN=98 Runoff=1.17 cfs 0.079 af
Subcatchment 366: Subcat 366	Runoff Area=4.682 ac 0.00% Impervious Runoff Depth=1.74" Flow Length=283' Tc=12.7 min CN=57 Runoff=6.99 cfs 0.678 af
Subcatchment 367: Subcat 367	Runoff Area=1.194 ac 0.00% Impervious Runoff Depth=0.78" Flow Length=257' Tc=10.4 min CN=44 Runoff=0.53 cfs 0.077 af
Subcatchment 368: Subcat 368	Runoff Area=6.156 ac 0.00% Impervious Runoff Depth=1.74" Flow Length=121' Tc=10.8 min CN=57 Runoff=9.75 cfs 0.891 af
Reach 303A: Swale D	Avg. Flow Depth=0.51' Max Vel=3.63 fps Inflow=7.42 cfs 1.083 af n=0.030 L=327.2' S=0.0235 '/' Capacity=80.81 cfs Outflow=7.40 cfs 1.083 af
Reach 303B: Swale D	Avg. Flow Depth=0.73' Max Vel=2.57 fps Inflow=9.22 cfs 1.429 af n=0.030 L=38.0' S=0.0079 '/' Capacity=46.84 cfs Outflow=9.22 cfs 1.429 af
Reach 317A: Wetland/Stream	Avg. Flow Depth=0.36' Max Vel=1.60 fps Inflow=7.99 cfs 1.410 af n=0.080 L=1,938.6' S=0.0605 '/' Capacity=627.13 cfs Outflow=7.02 cfs 1.410 af

Reach 317B: Wetland/Stream	Avg. Flow Depth=1.33'	Max Vel=2.89 fps	Inflow=138.72 cfs	23.963 af
	n=0.080 L=313.2'	S=0.0393 '/'	Capacity=505.24 cfs	Outflow=138.52 cfs 23.963 af
Reach 320: Road Swale	Avg. Flow Depth=0.19'	Max Vel=3.24 fps	Inflow=1.81 cfs	0.128 af
	n=0.030 L=676.0'	S=0.0567 '/'	Capacity=125.47 cfs	Outflow=1.65 cfs 0.128 af
Reach 320.1: Road Swale	Avg. Flow Depth=0.45'	Max Vel=5.70 fps	Inflow=10.06 cfs	0.743 af
	n=0.030 L=685.1'	S=0.0664 '/'	Capacity=135.84 cfs	Outflow=9.69 cfs 0.743 af
Reach 323: Swale E	Avg. Flow Depth=0.47'	Max Vel=5.32 fps	Inflow=9.72 cfs	0.746 af
	n=0.030 L=187.0'	S=0.0548 '/'	Capacity=123.41 cfs	Outflow=9.69 cfs 0.746 af
Reach 332A: Wetland	Avg. Flow Depth=0.11'	Max Vel=0.77 fps	Inflow=3.56 cfs	0.814 af
	n=0.080 L=485.8'	S=0.0525 '/'	Capacity=16,432.28 cfs	Outflow=3.37 cfs 0.814 af
Reach 335: Road Swale	Avg. Flow Depth=0.88'	Max Vel=6.28 fps	Inflow=30.65 cfs	2.604 af
	n=0.030 L=89.9'	S=0.0378 '/'	Capacity=102.51 cfs	Outflow=30.64 cfs 2.604 af
Reach 338A: Swale F	Avg. Flow Depth=0.78'	Max Vel=8.23 fps	Inflow=32.88 cfs	2.776 af
	n=0.030 L=118.4'	S=0.0747 '/'	Capacity=144.11 cfs	Outflow=32.86 cfs 2.776 af
Reach 338B: Swale F	Avg. Flow Depth=0.77'	Max Vel=8.61 fps	Inflow=34.00 cfs	2.891 af
	n=0.030 L=108.0'	S=0.0824 '/'	Capacity=151.32 cfs	Outflow=33.99 cfs 2.891 af
Reach 344: Swale	Avg. Flow Depth=0.38'	Max Vel=5.50 fps	Inflow=7.43 cfs	0.543 af
	n=0.030 L=239.5'	S=0.0739 '/'	Capacity=143.30 cfs	Outflow=7.39 cfs 0.543 af
Reach 344A: Swale	Avg. Flow Depth=0.48'	Max Vel=5.04 fps	Inflow=9.54 cfs	0.698 af
	n=0.030 L=114.9'	S=0.0479 '/'	Capacity=115.33 cfs	Outflow=9.52 cfs 0.698 af
Reach 352A: Upland	Avg. Flow Depth=0.02'	Max Vel=1.11 fps	Inflow=0.49 cfs	0.024 af
	n=0.030 L=356.4'	S=0.1058 '/'	Capacity=264.31 cfs	Outflow=0.39 cfs 0.024 af
Reach 352B: Upland	Avg. Flow Depth=0.03'	Max Vel=2.08 fps	Inflow=3.26 cfs	0.112 af
	n=0.030 L=187.0'	S=0.2118 '/'	Capacity=185.54 cfs	Outflow=3.10 cfs 0.112 af
Reach 352C: Wetland	Avg. Flow Depth=0.23'	Max Vel=1.52 fps	Inflow=16.42 cfs	3.063 af
	n=0.080 L=214.5'	S=0.0797 '/'	Capacity=1,215.81 cfs	Outflow=16.38 cfs 3.063 af
Reach 354: Swale G	Avg. Flow Depth=0.73'	Max Vel=3.26 fps	Inflow=14.40 cfs	1.048 af
	n=0.030 L=310.0'	S=0.0116 '/'	Capacity=66.09 cfs	Outflow=14.05 cfs 1.048 af
Reach 362A: Wetland	Avg. Flow Depth=0.10'	Max Vel=0.34 fps	Inflow=1.23 cfs	0.524 af
	n=0.080 L=163.6'	S=0.0116 '/'	Capacity=5,799.68 cfs	Outflow=1.23 cfs 0.524 af
Reach 365A: Upland	Avg. Flow Depth=0.03'	Max Vel=1.28 fps	Inflow=0.16 cfs	0.005 af
	n=0.030 L=141.4'	S=0.0693 '/'	Capacity=206.29 cfs	Outflow=0.15 cfs 0.005 af
Reach 365B: Upland	Avg. Flow Depth=0.44'	Max Vel=4.84 fps	Inflow=18.63 cfs	2.131 af
	n=0.030 L=1,125.5'	S=0.0547 '/'	Capacity=183.32 cfs	Outflow=18.01 cfs 2.131 af

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Reach 365C: Wetland	Avg. Flow Depth=0.22' Max Vel=1.43 fps Inflow=18.25 cfs 2.169 af n=0.080 L=734.6' S=0.0765 '/' Capacity=19,838.06 cfs Outflow=16.34 cfs 2.169 af
Reach 365D: Wetland	Avg. Flow Depth=0.27' Max Vel=1.02 fps Inflow=16.34 cfs 2.169 af n=0.080 L=140.0' S=0.0293 '/' Capacity=12,273.95 cfs Outflow=16.24 cfs 2.169 af
Reach 365E: Wetland	Avg. Flow Depth=0.43' Max Vel=1.43 fps Inflow=18.72 cfs 2.983 af n=0.080 L=385.1' S=0.0314 '/' Capacity=141.51 cfs Outflow=18.35 cfs 2.983 af
Reach 365F: Stream	Avg. Flow Depth=1.58' Max Vel=3.20 fps Inflow=155.49 cfs 26.946 af n=0.100 L=657.0' S=0.0597 '/' Capacity=135.25 cfs Outflow=154.44 cfs 26.946 af
Reach 366A: Wetland	Avg. Flow Depth=0.22' Max Vel=1.70 fps Inflow=8.13 cfs 0.790 af n=0.080 L=187.8' S=0.1070 '/' Capacity=12,003.67 cfs Outflow=8.03 cfs 0.790 af
Reach 366B: Wetland	Avg. Flow Depth=0.24' Max Vel=1.45 fps Inflow=8.24 cfs 0.814 af n=0.080 L=155.5' S=0.0675 '/' Capacity=9,534.40 cfs Outflow=8.15 cfs 0.814 af
Reach 367A: Wetland	Avg. Flow Depth=0.06' Max Vel=0.23 fps Inflow=0.53 cfs 0.077 af n=0.080 L=185.9' S=0.0086 '/' Capacity=4,992.74 cfs Outflow=0.41 cfs 0.077 af
Reach 368A: Wetland	Avg. Flow Depth=0.19' Max Vel=1.21 fps Inflow=9.75 cfs 0.891 af n=0.080 L=155.6' S=0.0675 '/' Capacity=1,118.59 cfs Outflow=9.50 cfs 0.891 af
Reach 368B: Stream	Avg. Flow Depth=1.14' Max Vel=2.20 fps Inflow=28.73 cfs 4.768 af n=0.100 L=1,788.3' S=0.0405 '/' Capacity=4,131.61 cfs Outflow=24.63 cfs 4.768 af
Reach 368C: Stream	Avg. Flow Depth=1.76' Max Vel=1.00 fps Inflow=24.63 cfs 4.768 af n=0.100 L=224.3' S=0.0049 '/' Capacity=1,436.98 cfs Outflow=24.43 cfs 4.768 af
Reach 368D: Stream	Avg. Flow Depth=2.83' Max Vel=2.82 fps Inflow=177.42 cfs 31.714 af n=0.100 L=1,451.6' S=0.0216 '/' Capacity=3,013.14 cfs Outflow=169.67 cfs 31.714 af
Reach 368E: Stream	Avg. Flow Depth=3.10' Max Vel=2.38 fps Inflow=170.36 cfs 32.238 af n=0.100 L=124.9' S=0.0136 '/' Capacity=2,393.94 cfs Outflow=170.29 cfs 32.238 af
Reach 368F: Stream	Avg. Flow Depth=3.06' Max Vel=2.44 fps Inflow=170.52 cfs 32.315 af n=0.100 L=157.2' S=0.0146 '/' Capacity=2,482.04 cfs Outflow=170.42 cfs 32.315 af
Pond 301.2: Drywell A (1.02 in/hr) (2' Deep)	Peak Elev=1,000.15' Storage=83 cf Inflow=0.34 cfs 0.022 af Discarded=0.00 cfs 0.007 af Primary=0.32 cfs 0.016 af Outflow=0.33 cfs 0.022 af
Pond 301.4: Drywell B (1.02 in/hr) (1' Deep)	Peak Elev=1,000.15' Storage=103 cf Inflow=0.50 cfs 0.034 af Discarded=0.01 cfs 0.013 af Primary=0.48 cfs 0.021 af Outflow=0.49 cfs 0.034 af
Pond 301.6: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.08' Storage=101 cf Inflow=0.42 cfs 0.028 af Discarded=0.00 cfs 0.008 af Primary=0.41 cfs 0.020 af Outflow=0.41 cfs 0.028 af
Pond 302: 3 x 15" Pipe	Peak Elev=378.92' Inflow=7.42 cfs 1.083 af 15.00" Round Culvert x 3.00 n=0.012 L=42.0' S=0.0050 '/' Outflow=7.42 cfs 1.083 af
Pond 304.2: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.08' Storage=101 cf Inflow=0.42 cfs 0.028 af Discarded=0.00 cfs 0.008 af Primary=0.41 cfs 0.020 af Outflow=0.41 cfs 0.028 af

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Pond 306: Forebay D North (367.5, 371) Peak Elev=370.12' Inflow=9.25 cfs 1.434 af
 Primary=1.72 cfs 0.803 af Secondary=7.52 cfs 0.631 af Outflow=9.25 cfs 1.434 af

Pond 308: 2 x 18" Pipe Peak Elev=368.22' Inflow=4.13 cfs 0.293 af
 18.00" Round Culvert x 2.00 n=0.013 L=59.0' S=0.0049 '/' Outflow=4.13 cfs 0.293 af

Pond 311: Forebay D South (364, 370) Peak Elev=368.22' Inflow=7.47 cfs 0.538 af
 Outflow=7.47 cfs 0.538 af

Pond 313.2: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=40 cf Inflow=0.17 cfs 0.011 af
 Discarded=0.00 cfs 0.003 af Primary=0.16 cfs 0.008 af Outflow=0.17 cfs 0.011 af

Pond 314: WQ Pond D (365.5, Peak Elev=368.22' Storage=8,735 cf Inflow=10.52 cfs 1.463 af
 Discarded=0.25 cfs 0.289 af Primary=6.11 cfs 1.175 af Outflow=6.32 cfs 1.463 af

Pond 317: QP Pond D (366.5, 370.25) (2.41 Peak Elev=368.22' Storage=17,034 cf Inflow=14.83 cfs 1.987 af
 Discarded=0.67 cfs 0.577 af Primary=7.99 cfs 1.410 af Secondary=0.00 cfs 0.000 af Outflow=8.67 cfs 1.987 af

Pond 319: 15" Pipe Peak Elev=381.51' Inflow=1.81 cfs 0.128 af
 15.00" Round Culvert n=0.013 L=100.5' S=0.0343 '/' Outflow=1.81 cfs 0.128 af

Pond 321.2: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=20 cf Inflow=0.08 cfs 0.005 af
 Discarded=0.00 cfs 0.002 af Primary=0.08 cfs 0.004 af Outflow=0.08 cfs 0.005 af

Pond 322: 24" Pipe Peak Elev=295.92' Inflow=9.72 cfs 0.746 af
 24.00" Round Culvert n=0.013 L=110.5' S=0.0308 '/' Outflow=9.72 cfs 0.746 af

Pond 325.2: Drywell E (1.02 in/hr) (1' Deep) Peak Elev=1,000.08' Storage=66 cf Inflow=0.34 cfs 0.022 af
 Discarded=0.00 cfs 0.008 af Primary=0.33 cfs 0.014 af Outflow=0.33 cfs 0.022 af

Pond 326: Forebay E (277.5, 282) Peak Elev=280.91' Inflow=16.68 cfs 1.288 af
 Primary=7.36 cfs 0.968 af Secondary=9.32 cfs 0.320 af Outflow=16.68 cfs 1.288 af

Pond 328.2: Drywell A (1.02 in/hr) (2' Deep) Peak Elev=1,000.15' Storage=41 cf Inflow=0.17 cfs 0.011 af
 Discarded=0.00 cfs 0.003 af Primary=0.16 cfs 0.008 af Outflow=0.16 cfs 0.011 af

Pond 328.4: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=61 cf Inflow=0.25 cfs 0.017 af
 Discarded=0.00 cfs 0.005 af Primary=0.24 cfs 0.012 af Outflow=0.24 cfs 0.017 af

Pond 329: WQ Pond E (279, 282)(1.02in/hr) Peak Elev=280.74' Storage=4,732 cf Inflow=9.27 cfs 1.139 af
 Discarded=0.08 cfs 0.194 af Primary=9.15 cfs 0.946 af Outflow=9.24 cfs 1.139 af

Pond 332: QP Pond E (276.50, 281) (1.02 Peak Elev=278.72' Storage=26,526 cf Inflow=19.74 cfs 1.436 af
 Discarded=0.33 cfs 0.623 af Primary=3.56 cfs 0.814 af Secondary=0.00 cfs 0.000 af Outflow=3.89 cfs 1.436 af

Pond 334.2: Drywell A (1.02 in/hr) (2' Deep) Peak Elev=1,000.15' Storage=248 cf Inflow=1.01 cfs 0.067 af
 Discarded=0.01 cfs 0.020 af Primary=0.97 cfs 0.047 af Outflow=0.98 cfs 0.067 af

Pond 334.4: Drywell B (1.02 in/hr) (1' Deep) Peak Elev=1,000.15' Storage=34 cf Inflow=0.17 cfs 0.011 af
 Discarded=0.00 cfs 0.004 af Primary=0.16 cfs 0.007 af Outflow=0.16 cfs 0.011 af

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Pond 334.6: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=607 cf Inflow=2.52 cfs 0.169 af
Discarded=0.02 cfs 0.049 af Primary=2.47 cfs 0.120 af Outflow=2.48 cfs 0.169 af

Pond 334.8: Drywell E (1.02 in/hr) (1' Deep) Peak Elev=1,000.08' Storage=33 cf Inflow=0.17 cfs 0.011 af
Discarded=0.00 cfs 0.004 af Primary=0.16 cfs 0.007 af Outflow=0.17 cfs 0.011 af

Pond 336: 3 x 30" Pipe Peak Elev=310.41' Inflow=30.64 cfs 2.604 af
30.00" Round Culvert x 3.00 n=0.012 L=42.2' S=0.0751 '/' Outflow=30.64 cfs 2.604 af

Pond 339.2: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=20 cf Inflow=0.08 cfs 0.005 af
Discarded=0.00 cfs 0.002 af Primary=0.08 cfs 0.004 af Outflow=0.08 cfs 0.005 af

Pond 341: Forebay F East (284.0, 289) Peak Elev=287.88' Inflow=34.05 cfs 2.900 af
Primary=2.25 cfs 1.305 af Secondary=31.80 cfs 1.595 af Outflow=34.05 cfs 2.900 af

Pond 342.2: Drywell C (1.02 in/hr) (0.5' Deep) Peak Elev=1,000.07' Storage=114 cf Inflow=0.17 cfs 0.011 af
Discarded=0.01 cfs 0.009 af Primary=0.13 cfs 0.002 af Outflow=0.13 cfs 0.011 af

Pond 343: 2X 15" Pipe Peak Elev=309.11' Inflow=7.43 cfs 0.543 af
15.00" Round Culvert x 2.00 n=0.012 L=44.8' S=0.0049 '/' Outflow=7.43 cfs 0.543 af

Pond 347: Forebay F West (278, 287) Peak Elev=285.31' Inflow=9.61 cfs 0.710 af
Primary=1.14 cfs 0.078 af Secondary=9.61 cfs 0.633 af Outflow=9.61 cfs 0.710 af

Pond 349.2: Drywell A (1.02 in/hr) (2' Deep) Peak Elev=1,000.15' Storage=41 cf Inflow=0.17 cfs 0.011 af
Discarded=0.00 cfs 0.003 af Primary=0.16 cfs 0.008 af Outflow=0.16 cfs 0.011 af

Pond 349.4: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=81 cf Inflow=0.34 cfs 0.022 af
Discarded=0.00 cfs 0.006 af Primary=0.33 cfs 0.016 af Outflow=0.33 cfs 0.022 af

Pond 350: WQ Pond F (283, 287)(2.41in/hr) Peak Elev=285.89' Storage=12,629 cf Inflow=3.98 cfs 1.578 af
Discarded=0.32 cfs 0.639 af Primary=2.83 cfs 0.939 af Outflow=3.15 cfs 1.578 af

Pond 352: QP Pond F (280, 287.1) (0.482 Peak Elev=284.33' Storage=42,702 cf Inflow=42.15 cfs 3.288 af
Discarded=0.00 cfs 0.000 af Primary=16.42 cfs 3.063 af Secondary=0.00 cfs 0.000 af Outflow=16.42 cfs 3.063 af

Pond 352.2: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=121 cf Inflow=0.50 cfs 0.034 af
Discarded=0.00 cfs 0.010 af Primary=0.49 cfs 0.024 af Outflow=0.50 cfs 0.034 af

Pond 352.4: Drywell H (1.02 in/hr) (2' Deep) Peak Elev=1,000.08' Storage=1,548 cf Inflow=3.35 cfs 0.225 af
Discarded=0.05 cfs 0.113 af Primary=3.26 cfs 0.112 af Outflow=3.31 cfs 0.225 af

Pond 353.2: Drywell B (1.02 in/hr) (1' Deep) Peak Elev=1,000.15' Storage=103 cf Inflow=0.50 cfs 0.034 af
Discarded=0.01 cfs 0.013 af Primary=0.48 cfs 0.021 af Outflow=0.49 cfs 0.034 af

Pond 356.2: Drywell A (1.02 in/hr) (2' Deep) Peak Elev=1,000.15' Storage=124 cf Inflow=0.50 cfs 0.034 af
Discarded=0.00 cfs 0.010 af Primary=0.48 cfs 0.024 af Outflow=0.49 cfs 0.034 af

Pond 356.4: Drywell C (1.02 in/hr) (0.5' Deep) Peak Elev=1,000.14' Storage=60 cf Inflow=0.17 cfs 0.011 af
Discarded=0.00 cfs 0.006 af Primary=0.16 cfs 0.005 af Outflow=0.16 cfs 0.011 af

Pond 356.6: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.05' Storage=588 cf Inflow=1.25 cfs 0.084 af
Discarded=0.02 cfs 0.042 af Primary=1.21 cfs 0.042 af Outflow=1.23 cfs 0.084 af

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Pond 357: Forebay G (162.5, 167.5) Peak Elev=166.05' Inflow=20.01 cfs 2.274 af
Primary=6.14 cfs 1.506 af Secondary=13.87 cfs 0.768 af Outflow=20.01 cfs 2.274 af

Pond 359: WQ Pond G (162, 165.75) Peak Elev=163.37' Storage=3,761 cf Inflow=6.41 cfs 1.544 af
Discarded=0.18 cfs 0.268 af Primary=6.10 cfs 1.276 af Outflow=6.28 cfs 1.544 af

Pond 362: QP Pond G (161, 165.75) (2.41 Peak Elev=163.30' Storage=57,863 cf Inflow=23.97 cfs 2.688 af
Discarded=1.53 cfs 2.164 af Primary=1.23 cfs 0.524 af Secondary=0.00 cfs 0.000 af Outflow=2.76 cfs 2.688 af

Pond 365.2: Drywell G (1.02 in/hr) (1' Deep) Peak Elev=1,000.14' Storage=66 cf Inflow=0.17 cfs 0.011 af
Discarded=0.00 cfs 0.007 af Primary=0.16 cfs 0.005 af Outflow=0.16 cfs 0.011 af

Pond 365.4: Drywell F (1.02 in/hr) (2' Deep) Peak Elev=1,000.15' Storage=557 cf Inflow=1.17 cfs 0.079 af
Discarded=0.02 cfs 0.040 af Primary=1.12 cfs 0.038 af Outflow=1.14 cfs 0.079 af

Link 369: DP-3 Central Wetland Inflow=170.42 cfs 32.315 af
Primary=170.42 cfs 32.315 af

A3.4.4.4 HydroCAD 100-Year Storm Analysis

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 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

Subcatchment 3CAT: CAT	Runoff Area=155.800 ac 0.10% Impervious Runoff Depth=3.36" Flow Length=1,898' Tc=46.4 min CN=57 Runoff=272.41 cfs 43.659 af
Subcatchment 5CAT: CAT	Runoff Area=1,824.049 ac 0.44% Impervious Runoff Depth>3.25" Tc=1,576.9 min CN=56 Runoff=241.20 cfs 493.384 af
Subcatchment 6CAT: CAT	Runoff Area=151.000 ac 1.89% Impervious Runoff Depth=3.60" Tc=240.2 min CN=59 Runoff=94.28 cfs 45.247 af
Subcatchment 10: Subcat 10	Runoff Area=41.919 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=1,373' Tc=26.9 min CN=56 Runoff=91.99 cfs 11.342 af
Subcatchment 11: Subcat 11	Runoff Area=2.030 ac 0.00% Impervious Runoff Depth=3.36" Flow Length=411' Tc=13.0 min CN=57 Runoff=6.22 cfs 0.569 af
Subcatchment 12: Subcat 12	Runoff Area=0.974 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=55' Slope=0.2988 1' Tc=6.0 min CN=55 Runoff=3.47 cfs 0.254 af
Subcatchment 13: Subcat 13	Runoff Area=2.694 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=491' Tc=13.2 min CN=55 Runoff=7.57 cfs 0.703 af
Subcatchment 20: Subcat 20	Runoff Area=25.460 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=2,221' Tc=16.4 min CN=55 Runoff=65.80 cfs 6.643 af
Subcatchment 21: Subcat 21	Runoff Area=2.815 ac 1.42% Impervious Runoff Depth=1.79" Flow Length=800' Tc=12.5 min CN=43 Runoff=3.90 cfs 0.420 af
Subcatchment 22: Subcat 22	Runoff Area=19.703 ac 0.00% Impervious Runoff Depth=3.02" Flow Length=2,492' Tc=23.5 min CN=54 Runoff=42.10 cfs 4.952 af
Subcatchment 23: Subcat 23	Runoff Area=3.914 ac 0.00% Impervious Runoff Depth=2.79" Flow Length=321' Tc=18.2 min CN=52 Runoff=8.45 cfs 0.909 af
Subcatchment 24: Subcat 23	Runoff Area=1.519 ac 0.00% Impervious Runoff Depth=2.45" Tc=6.0 min CN=49 Runoff=4.02 cfs 0.310 af
Subcatchment 26: Subcat 23	Runoff Area=0.481 ac 0.00% Impervious Runoff Depth=1.27" Tc=6.0 min CN=38 Runoff=0.48 cfs 0.051 af
Subcatchment 28: Subcat 23	Runoff Area=0.447 ac 0.00% Impervious Runoff Depth=1.48" Tc=6.0 min CN=40 Runoff=0.58 cfs 0.055 af
Subcatchment 30: Subcat 30	Runoff Area=52.199 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=1,651' Tc=31.1 min CN=55 Runoff=102.96 cfs 13.620 af
Subcatchment 31: Subcat 31	Runoff Area=2.111 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=329' Tc=10.5 min CN=55 Runoff=6.43 cfs 0.551 af

Subcatchment 32: Subcat 32	Runoff Area=6.856 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=299' Tc=17.1 min CN=56 Runoff=18.16 cfs 1.855 af
Subcatchment 33: Subcat 33	Runoff Area=1.295 ac 0.00% Impervious Runoff Depth=1.90" Flow Length=257' Tc=10.4 min CN=44 Runoff=2.09 cfs 0.205 af
Subcatchment 40: Subcat 40	Runoff Area=18.864 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=473' Tc=23.2 min CN=56 Runoff=44.11 cfs 5.104 af
Reach 11A: E-Series Wetland	Avg. Flow Depth=0.15' Max Vel=0.84 fps Inflow=6.22 cfs 0.569 af n=0.035 L=169.0' S=0.0083 '/ Capacity=10.89 cfs Outflow=5.95 cfs 0.569 af
Reach 11B: E-Series Wetland	Avg. Flow Depth=0.17' Max Vel=0.90 fps Inflow=8.13 cfs 0.823 af n=0.035 L=399.0' S=0.0085 '/ Capacity=11.05 cfs Outflow=7.34 cfs 0.823 af
Reach 11C: Upland	Avg. Flow Depth=0.21' Max Vel=3.79 fps Inflow=7.34 cfs 0.823 af n=0.030 L=314.9' S=0.0632 '/ Capacity=9,375.02 cfs Outflow=7.31 cfs 0.823 af
Reach 11D: Wetland	Avg. Flow Depth=0.31' Max Vel=2.20 fps Inflow=7.31 cfs 0.823 af n=0.080 L=227.3' S=0.0959 '/ Capacity=4,331.04 cfs Outflow=7.27 cfs 0.823 af
Reach 12A: E-Series Wetland	Avg. Flow Depth=0.09' Max Vel=1.06 fps Inflow=3.47 cfs 0.254 af n=0.035 L=52.0' S=0.0269 '/ Capacity=19.64 cfs Outflow=3.44 cfs 0.254 af
Reach 30A: Wetland	Avg. Flow Depth=0.78' Max Vel=3.22 fps Inflow=102.96 cfs 13.620 af n=0.080 L=367.5' S=0.0721 '/ Capacity=9,830.32 cfs Outflow=102.62 cfs 13.620 af
Reach 31A: Wetland	Avg. Flow Depth=0.15' Max Vel=1.14 fps Inflow=6.43 cfs 0.551 af n=0.080 L=166.3' S=0.0836 '/ Capacity=1,244.92 cfs Outflow=6.22 cfs 0.551 af
Reach 31B: Stream	Avg. Flow Depth=1.99' Max Vel=3.22 fps Inflow=105.68 cfs 14.171 af n=0.100 L=1,453.0' S=0.0438 '/ Capacity=4,296.43 cfs Outflow=99.83 cfs 14.171 af
Reach 31C: Stream	Avg. Flow Depth=2.25' Max Vel=2.69 fps Inflow=104.92 cfs 14.994 af n=0.100 L=334.9' S=0.0263 '/ Capacity=3,326.24 cfs Outflow=104.51 cfs 14.994 af
Reach 32A: Wetland	Avg. Flow Depth=0.20' Max Vel=1.10 fps Inflow=18.16 cfs 1.855 af n=0.080 L=131.8' S=0.0516 '/ Capacity=130.62 cfs Outflow=17.97 cfs 1.855 af
Reach 32B: Stream	Avg. Flow Depth=3.24' Max Vel=1.47 fps Inflow=114.53 cfs 16.849 af n=0.100 L=224.3' S=0.0049 '/ Capacity=1,436.98 cfs Outflow=113.88 cfs 16.849 af
Reach 32C: Wetland/Stream	Avg. Flow Depth=1.63' Max Vel=3.82 fps Inflow=272.41 cfs 43.659 af n=0.080 L=968.9' S=0.0532 '/ Capacity=587.79 cfs Outflow=269.62 cfs 43.659 af
Reach 32D: Stream	Avg. Flow Depth=3.84' Max Vel=3.38 fps Inflow=378.68 cfs 60.508 af n=0.100 L=1,576.5' S=0.0209 '/ Capacity=2,968.80 cfs Outflow=364.04 cfs 60.508 af
Reach 33A: Wetland	Avg. Flow Depth=0.10' Max Vel=0.28 fps Inflow=2.09 cfs 0.205 af n=0.080 L=185.9' S=0.0086 '/ Capacity=53.35 cfs Outflow=1.52 cfs 0.205 af

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Reach 33B: Stream	Avg. Flow Depth=4.12' Max Vel=2.95 fps Inflow=364.73 cfs 60.713 af n=0.100 L=157.2' S=0.0146 '/ Capacity=2,482.04 cfs Outflow=364.57 cfs 60.713 af
Reach 50: Northwest Wetland	Avg. Flow Depth=0.49' Max Vel=3.37 fps Inflow=96.88 cfs 12.045 af n=0.040 L=5,100.6' S=0.0368 '/ Capacity=6,500.92 cfs Outflow=68.20 cfs 12.045 af
Reach 51: Brushy Brook	Avg. Flow Depth=0.88' Max Vel=4.12 fps Inflow=115.88 cfs 12.924 af n=0.040 L=1,082.4' S=0.0273 '/ Capacity=502.04 cfs Outflow=111.19 cfs 12.924 af
Reach 52: Brushy Brook - To Dye Hill	Avg. Flow Depth=2.05' Max Vel=2.75 fps Inflow=241.21 cfs 518.353 af n=0.040 L=1,094.7' S=0.0046 '/ Capacity=168.72 cfs Outflow=241.00 cfs 518.322 af
Reach 53: Brushy Brook - From Dye Hill	Avg. Flow Depth=1.64' Max Vel=3.95 fps Inflow=241.00 cfs 518.322 af n=0.040 L=1,451.2' S=0.0117 '/ Capacity=270.20 cfs Outflow=240.92 cfs 518.291 af
Reach 54: Unnamed Stream - To Dye Hill	Avg. Flow Depth=2.05' Max Vel=5.99 fps Inflow=364.57 cfs 60.713 af n=0.040 L=1,451.7' S=0.0192 '/ Capacity=1,664.02 cfs Outflow=361.05 cfs 60.713 af
Reach 57: Brushy Brook	Avg. Flow Depth=2.35' Max Vel=3.53 fps Inflow=492.57 cfs 579.004 af n=0.040 L=1,381.0' S=0.0072 '/ Capacity=258.34 cfs Outflow=478.51 cfs 578.966 af
Pond 25: Existing Depression (STA 7+00)	Peak Elev=160.00' Storage=12,097 cf Inflow=4.02 cfs 0.310 af Discarded=0.03 cfs 0.213 af Primary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.213 af
Pond 27: Existing Depression (STA 6+00)	Peak Elev=154.18' Storage=1,529 cf Inflow=0.48 cfs 0.051 af Discarded=0.02 cfs 0.051 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.051 af
Pond 29: Existing Depression (STA 4+00)	Peak Elev=148.96' Storage=1,500 cf Inflow=0.58 cfs 0.055 af Discarded=0.02 cfs 0.055 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.055 af
Pond 55: Culvert	Peak Elev=142.02' Inflow=361.05 cfs 60.713 af Primary=85.56 cfs 40.170 af Secondary=275.48 cfs 20.543 af Outflow=361.05 cfs 60.713 af
Link 14: DP-1: NW Wetland	Inflow=96.88 cfs 12.045 af Primary=96.88 cfs 12.045 af
Link 29.2: DP-2: Brushy Brook	Inflow=115.88 cfs 12.924 af Primary=115.88 cfs 12.924 af
Link 34: DP-3: Central Wetland/Dye Hill Road Culvert	Inflow=364.57 cfs 60.713 af Primary=364.57 cfs 60.713 af
Link 41: DP-4: NE Abutters	Inflow=44.11 cfs 5.104 af Primary=44.11 cfs 5.104 af
Link 56: Site Convergence	Inflow=492.57 cfs 579.004 af Primary=492.57 cfs 579.004 af
Link PRE: Brushy Brook/Sawmill Road Crossing	Inflow=492.71 cfs 624.213 af Primary=492.71 cfs 624.213 af

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 3CAT: CAT

Runoff = 272.41 cfs @ 12.68 hrs, Volume= 43.659 af, Depth= 3.36"
 Routed to Reach 32C : Wetland/Stream

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
101.609	55	Woods, Good, HSG B
0.150	98	Impervious, HSG B
0.000	98	Water Surface, 0% imp, HSG B
54.041	61	>75% Grass cover, Good, HSG B
155.800	57	Weighted Average
155.650	57	99.90% Pervious Area
0.150	98	0.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.1	300	0.0363	0.12		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
6.3	1,598	0.0683	4.21		Shallow Concentrated Flow, B
					Unpaved Kv= 16.1 fps
46.4	1,898	Total			

Summary for Subcatchment 5CAT: CAT

Runoff = 241.20 cfs @ 33.29 hrs, Volume= 493.384 af, Depth> 3.25"
 Routed to Reach 52 : Brushy Brook - To Dye Hill Road

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
1,456.414	55	Woods, Good, HSG B
7.960	98	Impervious, HSG B
0.300	98	Water Surface, 0% imp, HSG B
359.375	61	>75% Grass cover, Good, HSG B
1,824.049	56	Weighted Average
1,816.089	56	99.56% Pervious Area
7.960	98	0.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1,576.9					Direct Entry,

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 6CAT: CAT

Runoff = 94.28 cfs @ 15.22 hrs, Volume= 45.247 af, Depth= 3.60"

Routed to Link PRE : Brushy Brook/Sawmill Road Crossing

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

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

Area (ac)	CN	Description
84.000	55	Woods, Good, HSG B
2.850	98	Impervious, HSG B
0.700	98	Water Surface, 0% imp, HSG B
63.450	61	>75% Grass cover, Good, HSG B
151.000	59	Weighted Average
148.150	58	98.11% Pervious Area
2.850	98	1.89% Impervious Area

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

Summary for Subcatchment 10: Subcat 10

Runoff = 91.99 cfs @ 12.40 hrs, Volume= 11.342 af, Depth= 3.25"

Routed to Link 14 : DP-1: NW Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

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

Area (ac)	CN	Description
0.792	48	Brush, Good, HSG B
0.806	96	Gravel surface, HSG B
40.321	55	Woods, Good, HSG B
41.919	56	Weighted Average
41.919	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.6	100	0.0189	0.08		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
3.2	751	0.0599	3.94		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
2.1	522	0.0132	4.17	624.91	Trap/Vee/Rect Channel Flow, C Bot.W=10.00' D=1.50' Z= 20.0 & 100.0 '/' Top.W=190.00' n= 0.035
26.9	1,373	Total			

Summary for Subcatchment 11: Subcat 11

Runoff = 6.22 cfs @ 12.18 hrs, Volume= 0.569 af, Depth= 3.36"
 Routed to Reach 11A : E-Series Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.095	48	Brush, Good, HSG B
0.094	96	Gravel surface, HSG B
1.841	55	Woods, Good, HSG B
2.030	57	Weighted Average
2.030	57	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0940	0.15		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
1.6	311	0.0424	3.32		Shallow Concentrated Flow, B
					Unpaved Kv= 16.1 fps
13.0	411	Total			

Summary for Subcatchment 12: Subcat 12

Runoff = 3.47 cfs @ 12.09 hrs, Volume= 0.254 af, Depth= 3.13"
 Routed to Reach 12A : E-Series Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.000	48	Brush, Good, HSG B
0.974	55	Woods, Good, HSG B
0.974	55	Weighted Average
0.974	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	55	0.2988	0.21		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
1.6					Direct Entry,
6.0	55	Total			

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 13: Subcat 13

Runoff = 7.57 cfs @ 12.19 hrs, Volume= 0.703 af, Depth= 3.13"
 Routed to Link 14 : DP-1: NW Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
2.694	55	Woods, Good, HSG B
2.694	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.9	100	0.0843	0.14		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
1.3	391	0.0899	4.83		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
13.2	491	Total			

Summary for Subcatchment 20: Subcat 20

Runoff = 65.80 cfs @ 12.23 hrs, Volume= 6.643 af, Depth= 3.13"
 Routed to Link 29.2 : DP-2: Brushy Brook

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.278	48	Brush, Good, HSG B
0.281	96	Gravel surface, HSG B
24.901	55	Woods, Good, HSG B
25.460	55	Weighted Average
25.460	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.7	94	0.1229	0.16		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
1.4	387	0.0851	4.70		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
0.6	936	0.0212	26.29235,754.35		Trap/Vee/Rect Channel Flow, C Bot.W=65.00' D=16.50' Z= 25.0 & 33.0 ' /' Top.W=1,022.00' n= 0.035
1.5	252	0.0190	2.80		Shallow Concentrated Flow, D Paved Kv= 20.3 fps
3.2	552	0.0315	2.86		Shallow Concentrated Flow, E Unpaved Kv= 16.1 fps
16.4	2,221	Total			

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 21: Subcat 21

Runoff = 3.90 cfs @ 12.20 hrs, Volume= 0.420 af, Depth= 1.79"

Routed to Link 29.2 : DP-2: Brushy Brook

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.917	30	Brush, Good, HSG A
0.126	48	Brush, Good, HSG B
0.042	96	Gravel surface, HSG A
0.064	96	Gravel surface, HSG B
0.040	98	Roofs, HSG A
0.681	30	Woods, Good, HSG A
0.943	55	Woods, Good, HSG B
2.815	43	Weighted Average
2.775	42	98.58% Pervious Area
0.040	98	1.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	100	0.1068	0.15		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.8	196	0.0596	3.93		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
0.4	148	0.0202	5.56	238.28	Trap/Vee/Rect Channel Flow, C Bot.W=5.00' D=1.30' Z= 10.0 & 33.0 '/' Top.W=60.90' n= 0.030
0.5	356	0.0452	12.47	299.18	Trap/Vee/Rect Channel Flow, D Bot.W=2.50' D=1.50' Z= 11.0 & 7.0 '/' Top.W=29.50' n= 0.022 Earth, clean & straight
12.5	800	Total			

Summary for Subcatchment 22: Subcat 22

Runoff = 42.10 cfs @ 12.35 hrs, Volume= 4.952 af, Depth= 3.02"

Routed to Link 29.2 : DP-2: Brushy Brook

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.033	30	Brush, Good, HSG A
0.685	48	Brush, Good, HSG B
0.131	96	Gravel surface, HSG B
1.004	30	Woods, Good, HSG A
17.850	55	Woods, Good, HSG B
19.703	54	Weighted Average
19.703	54	100.00% Pervious Area

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.7	101	0.1416	0.17		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
12.2	1,769	0.0225	2.42		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
0.3	433	0.0252	21.62	26,618.42	Trap/Vee/Rect Channel Flow, C Bot.W=5.00' D=11.30' Z= 5.9 & 12.5 ' Top.W=212.92' n= 0.035
1.3	189	0.0211	2.34		Shallow Concentrated Flow, D Unpaved Kv= 16.1 fps
23.5	2,492	Total			

Summary for Subcatchment 23: Subcat 23

Runoff = 8.45 cfs @ 12.27 hrs, Volume= 0.909 af, Depth= 2.79"
Routed to Link 29.2 : DP-2: Brushy Brook

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.020	30	Brush, Good, HSG A
0.000	98	Roofs, HSG A
0.488	30	Woods, Good, HSG A
3.406	55	Woods, Good, HSG B
3.914	52	Weighted Average
3.914	52	100.00% Pervious Area
0.000	98	0.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	100	0.0350	0.10		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
1.3	221	0.0334	2.94		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
18.2	321	Total			

Summary for Subcatchment 24: Subcat 23

Runoff = 4.02 cfs @ 12.10 hrs, Volume= 0.310 af, Depth= 2.45"
Routed to Pond 25 : Existing Depression (STA 7+00)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.284	30	Brush, Good, HSG A
0.185	48	Brush, Good, HSG B
0.011	96	Gravel surface, HSG A
0.030	96	Gravel surface, HSG B
0.119	30	Woods, Good, HSG A
0.889	55	Woods, Good, HSG B
1.519	49	Weighted Average
1.519	49	100.00% Pervious Area

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

Summary for Subcatchment 26: Subcat 23

Runoff = 0.48 cfs @ 12.12 hrs, Volume= 0.051 af, Depth= 1.27"
 Routed to Pond 27 : Existing Depression (STA 6+00)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.314	30	Brush, Good, HSG A
0.080	48	Brush, Good, HSG B
0.023	96	Gravel surface, HSG A
0.020	30	Woods, Good, HSG A
0.044	55	Woods, Good, HSG B
0.481	38	Weighted Average
0.481	38	100.00% Pervious Area

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

Summary for Subcatchment 28: Subcat 23

Runoff = 0.58 cfs @ 12.11 hrs, Volume= 0.055 af, Depth= 1.48"
 Routed to Pond 29 : Existing Depression (STA 4+00)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.205	30	Brush, Good, HSG A
0.008	48	Brush, Good, HSG B
0.010	96	Gravel surface, HSG A
0.069	30	Woods, Good, HSG A
0.155	55	Woods, Good, HSG B
0.447	40	Weighted Average
0.447	40	100.00% Pervious Area

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

Summary for Subcatchment 30: Subcat 30

Runoff = 102.96 cfs @ 12.47 hrs, Volume= 13.620 af, Depth= 3.13"
 Routed to Reach 30A : Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
5.172	48	Brush, Good, HSG B
1.065	96	Gravel surface, HSG B
45.962	55	Woods, Good, HSG B
52.199	55	Weighted Average
52.199	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.4	100	0.0140	0.07		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
5.5	1,149	0.0468	3.48		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
1.2	402	0.1186	5.54		Shallow Concentrated Flow, C Unpaved Kv= 16.1 fps
31.1	1,651	Total			

Summary for Subcatchment 31: Subcat 31

Runoff = 6.43 cfs @ 12.15 hrs, Volume= 0.551 af, Depth= 3.13"
 Routed to Reach 31A : Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.023	48	Brush, Good, HSG B
0.023	96	Gravel surface, HSG B
2.065	55	Woods, Good, HSG B
2.111	55	Weighted Average
2.111	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.1440	0.17		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.9	229	0.0683	4.21		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
10.5	329	Total			

Summary for Subcatchment 32: Subcat 32

Runoff = 18.16 cfs @ 12.25 hrs, Volume= 1.855 af, Depth= 3.25"
Routed to Reach 32A : Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.134	48	Brush, Good, HSG B
0.136	96	Gravel surface, HSG B
6.586	55	Woods, Good, HSG B
6.856	56	Weighted Average
6.856	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	100	0.0390	0.10		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.9	199	0.0498	3.59		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
17.1	299	Total			

Summary for Subcatchment 33: Subcat 33

Runoff = 2.09 cfs @ 12.17 hrs, Volume= 0.205 af, Depth= 1.90"
Routed to Reach 33A : Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.066	39	>75% Grass cover, Good, HSG A
0.508	30	Woods, Good, HSG A
0.722	55	Woods, Good, HSG B
1.295	44	Weighted Average
1.295	44	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.1480	0.18		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.9	157	0.0350	3.01		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
10.4	257	Total			

Summary for Subcatchment 40: Subcat 40

Runoff = 44.11 cfs @ 12.35 hrs, Volume= 5.104 af, Depth= 3.25"
 Routed to Link 41 : DP-4: NE Abutters

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.337	48	Brush, Good, HSG B
0.337	96	Gravel surface, HSG B
18.189	55	Woods, Good, HSG B
18.864	56	Weighted Average
18.864	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.6	100	0.0190	0.08		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
1.6	373	0.0560	3.81		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
23.2	473	Total			

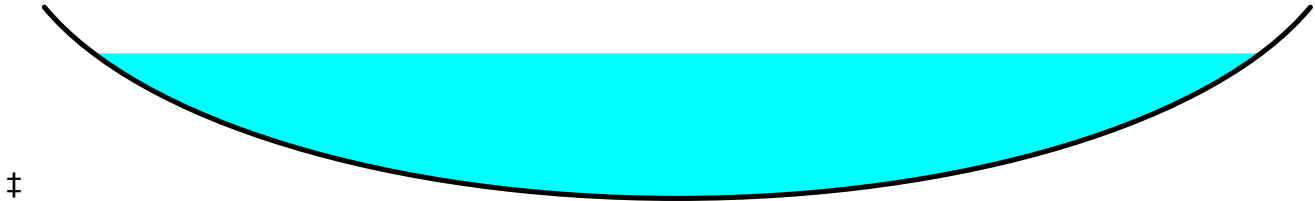
Summary for Reach 11A: E-Series Wetland

Inflow Area = 2.030 ac, 0.00% Impervious, Inflow Depth = 3.36" for 100-Year event
 Inflow = 6.22 cfs @ 12.18 hrs, Volume= 0.569 af
 Outflow = 5.95 cfs @ 12.23 hrs, Volume= 0.569 af, Atten= 4%, Lag= 2.6 min
 Routed to Reach 11B : E-Series Wetland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.84 fps, Min. Travel Time= 3.4 min
 Avg. Velocity = 0.25 fps, Avg. Travel Time= 11.4 min

Peak Storage= 1,201 cf @ 12.23 hrs
Average Depth at Peak Storage= 0.15' , Surface Width= 70.44'
Bank-Full Depth= 0.20' Flow Area= 10.8 sf, Capacity= 10.89 cfs

81.00' x 0.20' deep Parabolic Channel, n= 0.035 Earth, dense weeds
Length= 169.0' Slope= 0.0083 '/
Inlet Invert= 247.60', Outlet Invert= 246.20'



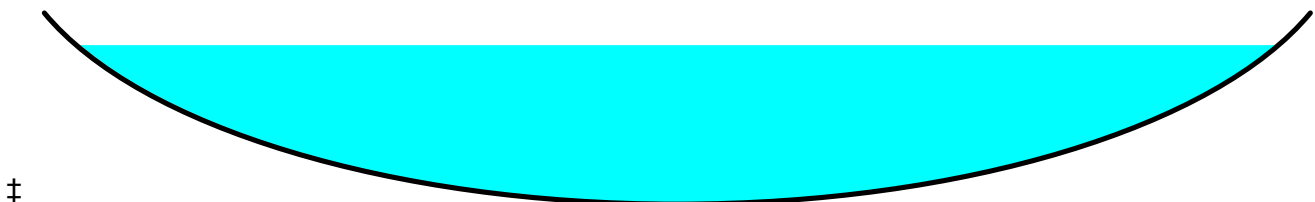
Summary for Reach 11B: E-Series Wetland

Inflow Area = 3.004 ac, 0.00% Impervious, Inflow Depth = 3.29" for 100-Year event
Inflow = 8.13 cfs @ 12.19 hrs, Volume= 0.823 af
Outflow = 7.34 cfs @ 12.29 hrs, Volume= 0.823 af, Atten= 10%, Lag= 5.6 min
Routed to Reach 11C : Upland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.90 fps, Min. Travel Time= 7.4 min
Avg. Velocity = 0.21 fps, Avg. Travel Time= 31.5 min

Peak Storage= 3,246 cf @ 12.29 hrs
Average Depth at Peak Storage= 0.17' , Surface Width= 73.70'
Bank-Full Depth= 0.20' Flow Area= 10.8 sf, Capacity= 11.05 cfs

81.00' x 0.20' deep Parabolic Channel, n= 0.035 Earth, dense weeds
Length= 399.0' Slope= 0.0085 '/
Inlet Invert= 246.20', Outlet Invert= 242.80'



Summary for Reach 11C: Upland

Inflow Area = 3.004 ac, 0.00% Impervious, Inflow Depth = 3.29" for 100-Year event
Inflow = 7.34 cfs @ 12.29 hrs, Volume= 0.823 af
Outflow = 7.31 cfs @ 12.30 hrs, Volume= 0.823 af, Atten= 0%, Lag= 1.0 min
Routed to Reach 11D : Wetland

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

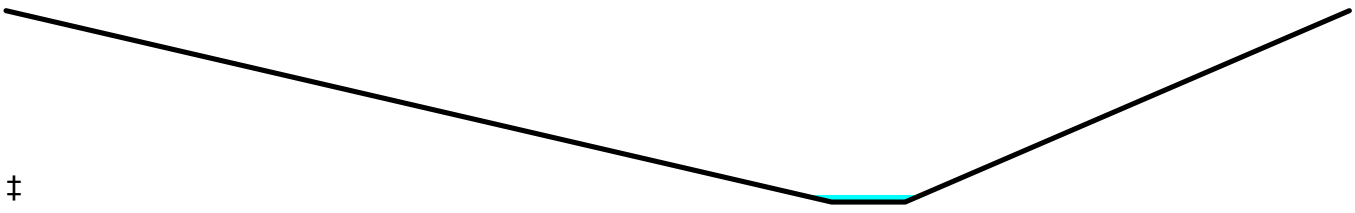
Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.79 fps, Min. Travel Time= 1.4 min
Avg. Velocity = 1.81 fps, Avg. Travel Time= 2.9 min

Peak Storage= 608 cf @ 12.30 hrs
Average Depth at Peak Storage= 0.21' , Surface Width= 11.56'
Bank-Full Depth= 5.50' Flow Area= 371.3 sf, Capacity= 9,375.02 cfs

7.00' x 5.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 14.3 7.7 '/' Top Width= 128.00'
Length= 314.9' Slope= 0.0632 '/'
Inlet Invert= 242.80', Outlet Invert= 222.90'



Summary for Reach 11D: Wetland

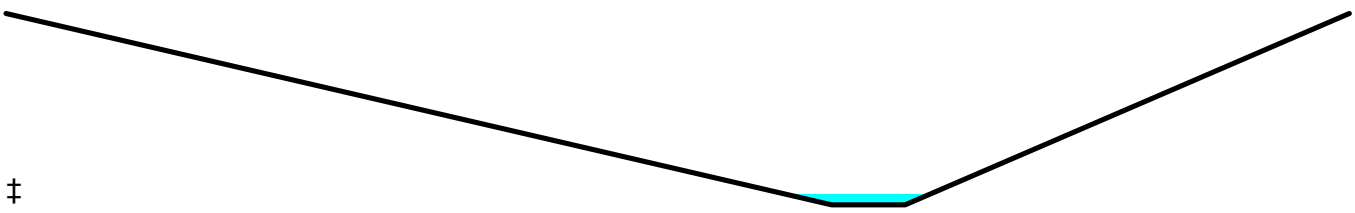
Inflow Area =	3.004 ac,	0.00% Impervious,	Inflow Depth = 3.29"	for 100-Year event
Inflow =	7.31 cfs @ 12.30 hrs,	Volume=	0.823 af	
Outflow =	7.27 cfs @ 12.33 hrs,	Volume=	0.823 af,	Atten= 1%, Lag= 1.3 min

Routed to Reach 31C : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.20 fps, Min. Travel Time= 1.7 min
Avg. Velocity = 0.89 fps, Avg. Travel Time= 4.2 min

Peak Storage= 750 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.31' , Surface Width= 13.92'
Bank-Full Depth= 5.50' Flow Area= 371.3 sf, Capacity= 4,331.04 cfs

7.00' x 5.50' deep channel, n= 0.080
Side Slope Z-value= 14.3 7.7 '/' Top Width= 128.00'
Length= 227.3' Slope= 0.0959 '/'
Inlet Invert= 222.90', Outlet Invert= 201.10'



Summary for Reach 12A: E-Series Wetland

Inflow Area = 0.974 ac, 0.00% Impervious, Inflow Depth = 3.13" for 100-Year event
Inflow = 3.47 cfs @ 12.09 hrs, Volume= 0.254 af
Outflow = 3.44 cfs @ 12.10 hrs, Volume= 0.254 af, Atten= 1%, Lag= 0.6 min
Routed to Reach 11B : E-Series Wetland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.06 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 0.37 fps, Avg. Travel Time= 2.3 min

Peak Storage= 168 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 54.20'
Bank-Full Depth= 0.20' Flow Area= 10.8 sf, Capacity= 19.64 cfs

81.00' x 0.20' deep Parabolic Channel, n= 0.035 Earth, dense weeds
Length= 52.0' Slope= 0.0269 '/'
Inlet Invert= 247.60', Outlet Invert= 246.20'



Summary for Reach 30A: Wetland

Inflow Area = 52.199 ac, 0.00% Impervious, Inflow Depth = 3.13" for 100-Year event
Inflow = 102.96 cfs @ 12.47 hrs, Volume= 13.620 af
Outflow = 102.62 cfs @ 12.48 hrs, Volume= 13.620 af, Atten= 0%, Lag= 0.9 min
Routed to Reach 31B : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.22 fps, Min. Travel Time= 1.9 min
Avg. Velocity = 1.34 fps, Avg. Travel Time= 4.6 min

Peak Storage= 11,705 cf @ 12.48 hrs
Average Depth at Peak Storage= 0.78' , Surface Width= 61.37'
Bank-Full Depth= 6.40' Flow Area= 750.9 sf, Capacity= 9,830.32 cfs

176.00' x 6.40' deep Parabolic Channel, n= 0.080 Earth, long dense weeds
Length= 367.5' Slope= 0.0721 '/'
Inlet Invert= 291.30', Outlet Invert= 264.80'



Summary for Reach 31A: Wetland

Inflow Area = 2.111 ac, 0.00% Impervious, Inflow Depth = 3.13" for 100-Year event
Inflow = 6.43 cfs @ 12.15 hrs, Volume= 0.551 af
Outflow = 6.22 cfs @ 12.18 hrs, Volume= 0.551 af, Atten= 3%, Lag= 1.8 min
Routed to Reach 31B : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.14 fps, Min. Travel Time= 2.4 min
Avg. Velocity = 0.45 fps, Avg. Travel Time= 6.2 min

Peak Storage= 903 cf @ 12.18 hrs
Average Depth at Peak Storage= 0.15' , Surface Width= 55.35'
Bank-Full Depth= 1.70' Flow Area= 213.3 sf, Capacity= 1,244.92 cfs

188.20' x 1.70' deep Parabolic Channel, n= 0.080 Earth, long dense weeds
Length= 166.3' Slope= 0.0836 '/'
Inlet Invert= 278.70', Outlet Invert= 264.80'



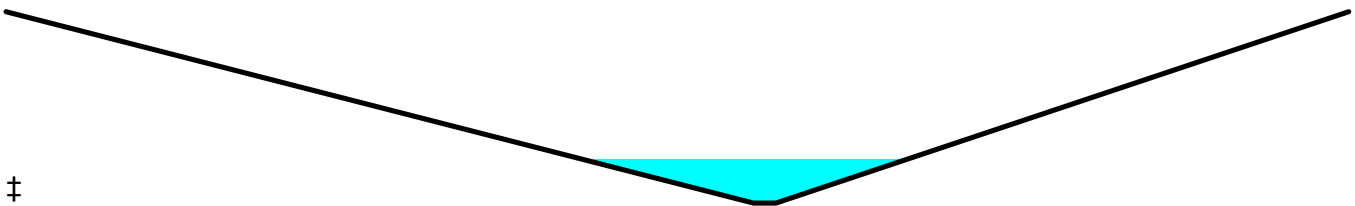
Summary for Reach 31B: Stream

Inflow Area = 54.310 ac, 0.00% Impervious, Inflow Depth = 3.13" for 100-Year event
Inflow = 105.68 cfs @ 12.48 hrs, Volume= 14.171 af
Outflow = 99.83 cfs @ 12.58 hrs, Volume= 14.171 af, Atten= 6%, Lag= 5.9 min
Routed to Reach 31C : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.22 fps, Min. Travel Time= 7.5 min
Avg. Velocity = 1.29 fps, Avg. Travel Time= 18.8 min

Peak Storage= 45,009 cf @ 12.58 hrs
Average Depth at Peak Storage= 1.99' , Surface Width= 29.09'
Bank-Full Depth= 8.60' Flow Area= 520.1 sf, Capacity= 4,296.43 cfs

2.00' x 8.60' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 7.7 5.9 '/' Top Width= 118.96'
Length= 1,453.0' Slope= 0.0438 '/'
Inlet Invert= 264.80', Outlet Invert= 201.10'



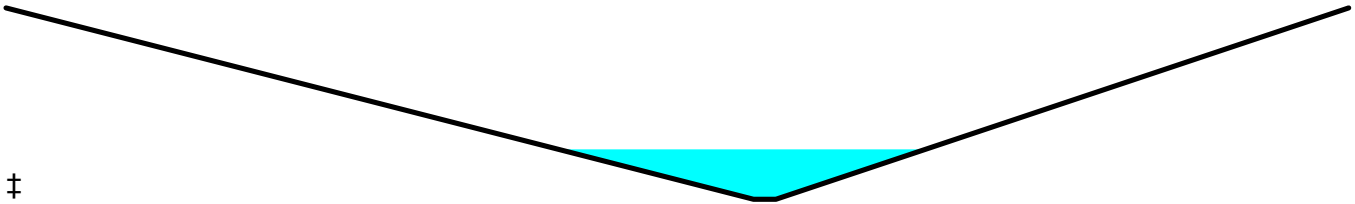
Summary for Reach 31C: Stream

Inflow Area = 57.314 ac, 0.00% Impervious, Inflow Depth = 3.14" for 100-Year event
Inflow = 104.92 cfs @ 12.57 hrs, Volume= 14.994 af
Outflow = 104.51 cfs @ 12.59 hrs, Volume= 14.994 af, Atten= 0%, Lag= 1.6 min
Routed to Reach 32B : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.69 fps, Min. Travel Time= 2.1 min
Avg. Velocity = 0.98 fps, Avg. Travel Time= 5.7 min

Peak Storage= 13,007 cf @ 12.59 hrs
Average Depth at Peak Storage= 2.25', Surface Width= 32.56'
Bank-Full Depth= 8.60' Flow Area= 520.1 sf, Capacity= 3,326.24 cfs

2.00' x 8.60' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 7.7 5.9 '/' Top Width= 118.96'
Length= 334.9' Slope= 0.0263 '/'
Inlet Invert= 201.10', Outlet Invert= 192.30'



Summary for Reach 32A: Wetland

Inflow Area = 6.856 ac, 0.00% Impervious, Inflow Depth = 3.25" for 100-Year event
Inflow = 18.16 cfs @ 12.25 hrs, Volume= 1.855 af
Outflow = 17.97 cfs @ 12.27 hrs, Volume= 1.855 af, Atten= 1%, Lag= 1.4 min
Routed to Reach 32B : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.10 fps, Min. Travel Time= 2.0 min
Avg. Velocity = 0.39 fps, Avg. Travel Time= 5.7 min

Peak Storage= 2,150 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.20', Surface Width= 122.24'
Bank-Full Depth= 0.50' Flow Area= 64.4 sf, Capacity= 130.62 cfs

193.20' x 0.50' deep Parabolic Channel, n= 0.080
Length= 131.8' Slope= 0.0516 '/'
Inlet Invert= 199.10', Outlet Invert= 192.30'



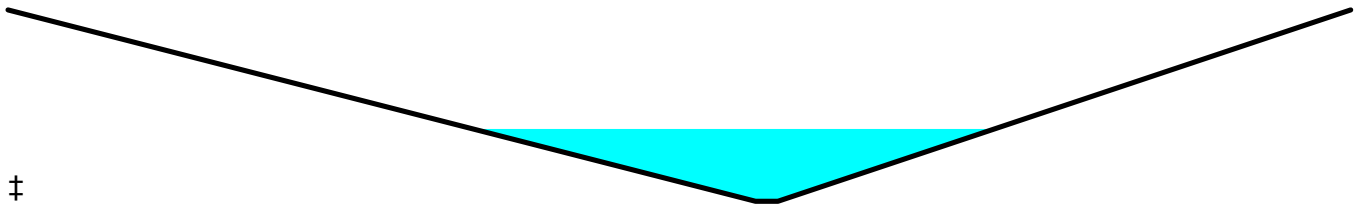
Summary for Reach 32B: Stream

Inflow Area = 64.170 ac, 0.00% Impervious, Inflow Depth = 3.15" for 100-Year event
 Inflow = 114.53 cfs @ 12.57 hrs, Volume= 16.849 af
 Outflow = 113.88 cfs @ 12.61 hrs, Volume= 16.849 af, Atten= 1%, Lag= 2.0 min
 Routed to Reach 32D : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 1.47 fps, Min. Travel Time= 2.6 min
 Avg. Velocity = 0.49 fps, Avg. Travel Time= 7.6 min

Peak Storage= 17,428 cf @ 12.61 hrs
 Average Depth at Peak Storage= 3.24' , Surface Width= 46.01'
 Bank-Full Depth= 8.60' Flow Area= 520.1 sf, Capacity= 1,436.98 cfs

2.00' x 8.60' deep channel, n= 0.100 Earth, dense brush, high stage
 Side Slope Z-value= 7.7 5.9 '/' Top Width= 118.96'
 Length= 224.3' Slope= 0.0049 '/'
 Inlet Invert= 192.30', Outlet Invert= 191.20'



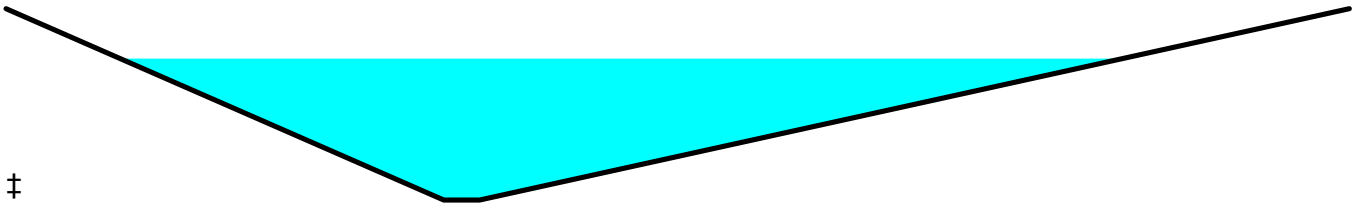
Summary for Reach 32C: Wetland/Stream

Inflow Area = 155.800 ac, 0.10% Impervious, Inflow Depth = 3.36" for 100-Year event
 Inflow = 272.41 cfs @ 12.68 hrs, Volume= 43.659 af
 Outflow = 269.62 cfs @ 12.73 hrs, Volume= 43.659 af, Atten= 1%, Lag= 2.7 min
 Routed to Reach 32D : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.82 fps, Min. Travel Time= 4.2 min
 Avg. Velocity = 1.44 fps, Avg. Travel Time= 11.2 min

Peak Storage= 68,395 cf @ 12.73 hrs
 Average Depth at Peak Storage= 1.63' , Surface Width= 83.74'
 Bank-Full Depth= 2.20' Flow Area= 126.6 sf, Capacity= 587.79 cfs

3.00' x 2.20' deep channel, n= 0.080
 Side Slope Z-value= 16.6 33.0 '/' Top Width= 112.12'
 Length= 968.9' Slope= 0.0532 '/'
 Inlet Invert= 242.70', Outlet Invert= 191.20'



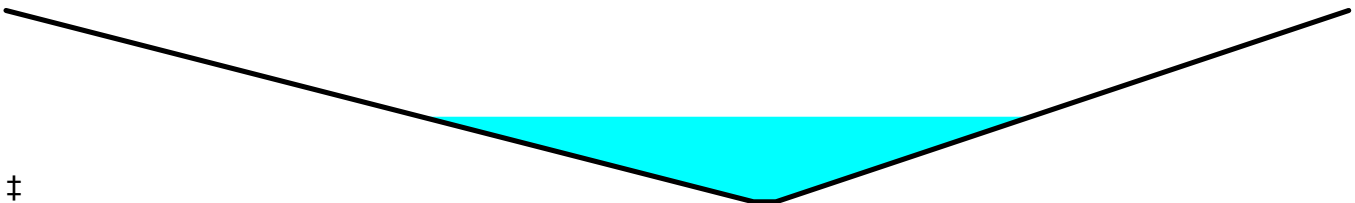
Summary for Reach 32D: Stream

Inflow Area = 219.970 ac, 0.07% Impervious, Inflow Depth = 3.30" for 100-Year event
 Inflow = 378.68 cfs @ 12.68 hrs, Volume= 60.508 af
 Outflow = 364.04 cfs @ 12.79 hrs, Volume= 60.508 af, Atten= 4%, Lag= 6.5 min
 Routed to Reach 33B : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.38 fps, Min. Travel Time= 7.8 min
 Avg. Velocity = 1.12 fps, Avg. Travel Time= 23.4 min

Peak Storage= 169,929 cf @ 12.79 hrs
 Average Depth at Peak Storage= 3.84' , Surface Width= 54.18'
 Bank-Full Depth= 8.60' Flow Area= 520.1 sf, Capacity= 2,968.80 cfs

2.00' x 8.60' deep channel, n= 0.100 Earth, dense brush, high stage
 Side Slope Z-value= 7.7 5.9 '/' Top Width= 118.96'
 Length= 1,576.5' Slope= 0.0209 '/'
 Inlet Invert= 191.20', Outlet Invert= 158.20'



Summary for Reach 33A: Wetland

Inflow Area = 1.295 ac, 0.00% Impervious, Inflow Depth = 1.90" for 100-Year event
 Inflow = 2.09 cfs @ 12.17 hrs, Volume= 0.205 af
 Outflow = 1.52 cfs @ 12.32 hrs, Volume= 0.205 af, Atten= 27%, Lag= 9.4 min
 Routed to Reach 33B : Stream

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.28 fps, Min. Travel Time= 11.2 min
 Avg. Velocity = 0.09 fps, Avg. Travel Time= 33.8 min

Peak Storage= 1,018 cf @ 12.32 hrs
 Average Depth at Peak Storage= 0.10' , Surface Width= 84.96'
 Bank-Full Depth= 0.50' Flow Area= 64.4 sf, Capacity= 53.35 cfs

193.20' x 0.50' deep Parabolic Channel, n= 0.080
Length= 185.9' Slope= 0.0086 '/'
Inlet Invert= 159.80', Outlet Invert= 158.20'



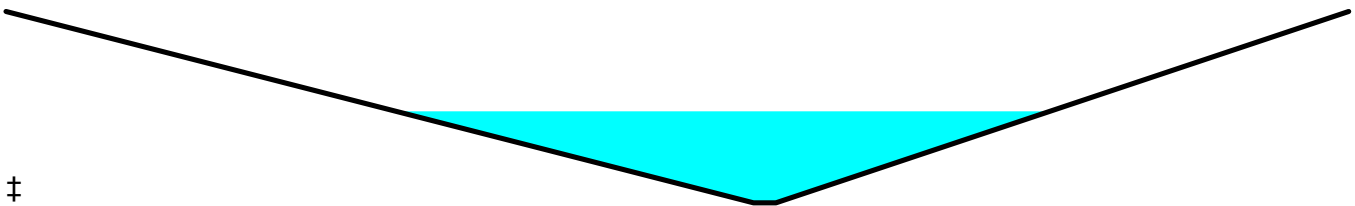
Summary for Reach 33B: Stream

Inflow Area = 221.266 ac, 0.07% Impervious, Inflow Depth = 3.29" for 100-Year event
Inflow = 364.73 cfs @ 12.79 hrs, Volume= 60.713 af
Outflow = 364.57 cfs @ 12.80 hrs, Volume= 60.713 af, Atten= 0%, Lag= 0.7 min
Routed to Link 34 : DP-3: Central Wetland/Dye Hill Road Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.95 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 0.97 fps, Avg. Travel Time= 2.7 min

Peak Storage= 19,401 cf @ 12.80 hrs
Average Depth at Peak Storage= 4.12' , Surface Width= 57.97'
Bank-Full Depth= 8.60' Flow Area= 520.1 sf, Capacity= 2,482.04 cfs

2.00' x 8.60' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 7.7 5.9 '/' Top Width= 118.96'
Length= 157.2' Slope= 0.0146 '/'
Inlet Invert= 158.20', Outlet Invert= 155.90'



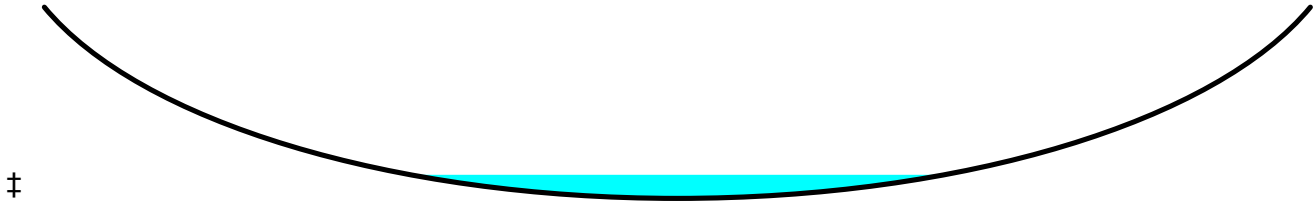
Summary for Reach 50: Northwest Wetland

Inflow Area = 44.613 ac, 0.00% Impervious, Inflow Depth = 3.24" for 100-Year event
Inflow = 96.88 cfs @ 12.40 hrs, Volume= 12.045 af
Outflow = 68.20 cfs @ 12.65 hrs, Volume= 12.045 af, Atten= 30%, Lag= 15.3 min
Routed to Reach 52 : Brushy Brook - To Dye Hill Road

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.37 fps, Min. Travel Time= 25.2 min
Avg. Velocity = 1.06 fps, Avg. Travel Time= 80.5 min

Peak Storage= 103,119 cf @ 12.65 hrs
Average Depth at Peak Storage= 0.49' , Surface Width= 62.15'
Bank-Full Depth= 4.00' Flow Area= 474.7 sf, Capacity= 6,500.92 cfs

178.00' x 4.00' deep Parabolic Channel, n= 0.040
Length= 5,100.6' Slope= 0.0368 '/'
Inlet Invert= 335.80', Outlet Invert= 148.00'



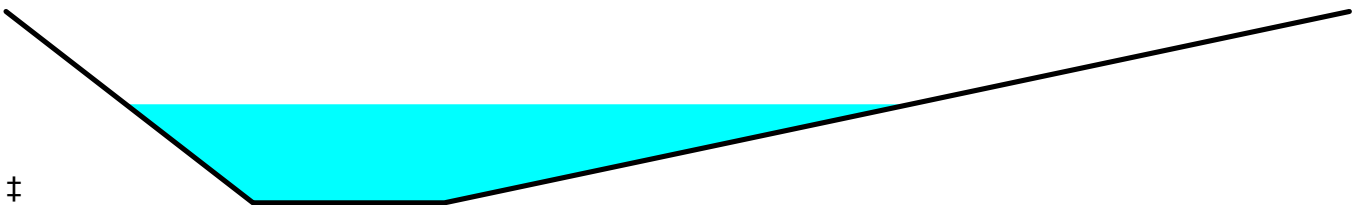
Summary for Reach 51: Brushy Brook

Inflow Area = 54.338 ac, 0.07% Impervious, Inflow Depth = 2.85" for 100-Year event
Inflow = 115.88 cfs @ 12.27 hrs, Volume= 12.924 af
Outflow = 111.19 cfs @ 12.33 hrs, Volume= 12.924 af, Atten= 4%, Lag= 3.9 min
Routed to Reach 52 : Brushy Brook - To Dye Hill Road

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.12 fps, Min. Travel Time= 4.4 min
Avg. Velocity = 1.41 fps, Avg. Travel Time= 12.8 min

Peak Storage= 29,218 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.88' , Surface Width= 49.11'
Bank-Full Depth= 1.72' Flow Area= 82.8 sf, Capacity= 502.04 cfs

12.00' x 1.72' deep channel, n= 0.040
Side Slope Z-value= 9.0 33.0 '/' Top Width= 84.24'
Length= 1,082.4' Slope= 0.0273 '/'
Inlet Invert= 177.60', Outlet Invert= 148.00'



Summary for Reach 52: Brushy Brook - To Dye Hill Road

Inflow Area = 1,923.001 ac, 0.42% Impervious, Inflow Depth > 3.23" for 100-Year event
Inflow = 241.21 cfs @ 33.29 hrs, Volume= 518.353 af
Outflow = 241.00 cfs @ 33.38 hrs, Volume= 518.322 af, Atten= 0%, Lag= 5.1 min
Routed to Reach 53 : Brushy Brook - From Dye Hill Road

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

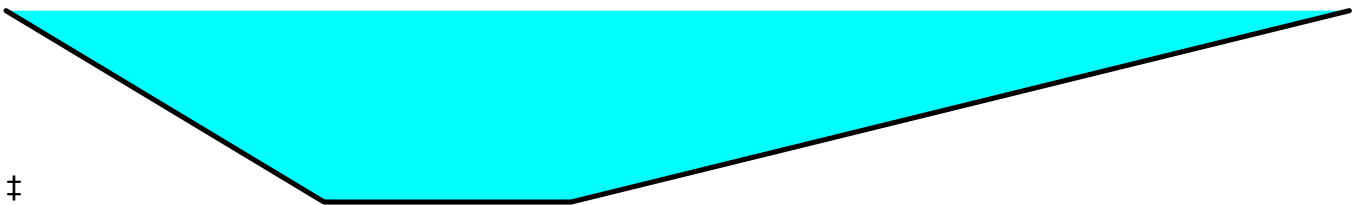
Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.75 fps, Min. Travel Time= 6.6 min
Avg. Velocity = 1.66 fps, Avg. Travel Time= 11.0 min

Peak Storage= 96,056 cf @ 33.38 hrs
Average Depth at Peak Storage= 2.05' , Surface Width= 75.45'
Bank-Full Depth= 1.72' Flow Area= 66.5 sf, Capacity= 168.72 cfs

12.00' x 1.72' deep channel, n= 0.040
Side Slope Z-value= 9.0 22.0 '/' Top Width= 65.32'
Length= 1,094.7' Slope= 0.0046 '/'
Inlet Invert= 150.00', Outlet Invert= 145.00'



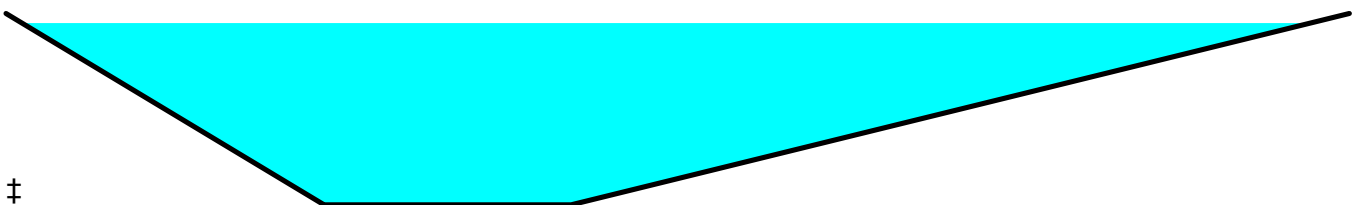
Summary for Reach 53: Brushy Brook - From Dye Hill Road

Inflow Area = 1,923.001 ac, 0.42% Impervious, Inflow Depth > 3.23" for 100-Year event
Inflow = 241.00 cfs @ 33.38 hrs, Volume= 518.322 af
Outflow = 240.92 cfs @ 33.46 hrs, Volume= 518.291 af, Atten= 0%, Lag= 5.2 min
Routed to Link 56 : Site Convergence

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.95 fps, Min. Travel Time= 6.1 min
Avg. Velocity = 2.35 fps, Avg. Travel Time= 10.3 min

Peak Storage= 88,611 cf @ 33.46 hrs
Average Depth at Peak Storage= 1.64' , Surface Width= 62.69'
Bank-Full Depth= 1.72' Flow Area= 66.5 sf, Capacity= 270.20 cfs

12.00' x 1.72' deep channel, n= 0.040
Side Slope Z-value= 9.0 22.0 '/' Top Width= 65.32'
Length= 1,451.2' Slope= 0.0117 '/'
Inlet Invert= 145.00', Outlet Invert= 128.00'



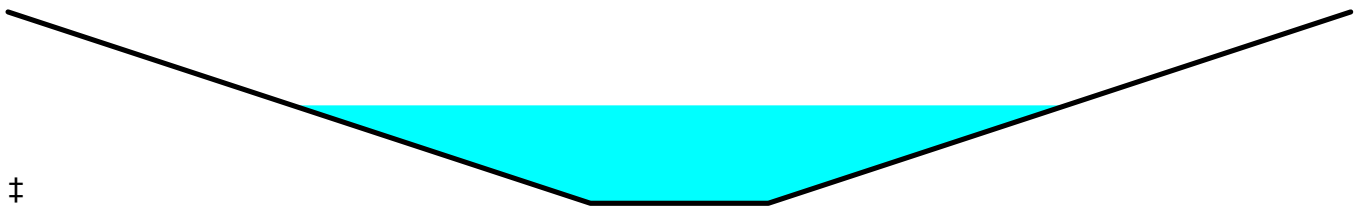
Summary for Reach 54: Unnamed Stream - To Dye Hill Road

Inflow Area = 221.266 ac, 0.07% Impervious, Inflow Depth = 3.29" for 100-Year event
Inflow = 364.57 cfs @ 12.80 hrs, Volume= 60.713 af
Outflow = 361.05 cfs @ 12.86 hrs, Volume= 60.713 af, Atten= 1%, Lag= 3.2 min
Routed to Pond 55 : Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.99 fps, Min. Travel Time= 4.0 min
Avg. Velocity = 1.85 fps, Avg. Travel Time= 13.1 min

Peak Storage= 87,531 cf @ 12.86 hrs
Average Depth at Peak Storage= 2.05' , Surface Width= 47.87'
Bank-Full Depth= 4.00' Flow Area= 188.0 sf, Capacity= 1,664.02 cfs

11.00' x 4.00' deep channel, n= 0.040
Side Slope Z-value= 9.0 ' / ' Top Width= 83.00'
Length= 1,451.7' Slope= 0.0192 ' / '
Inlet Invert= 155.90', Outlet Invert= 128.00'



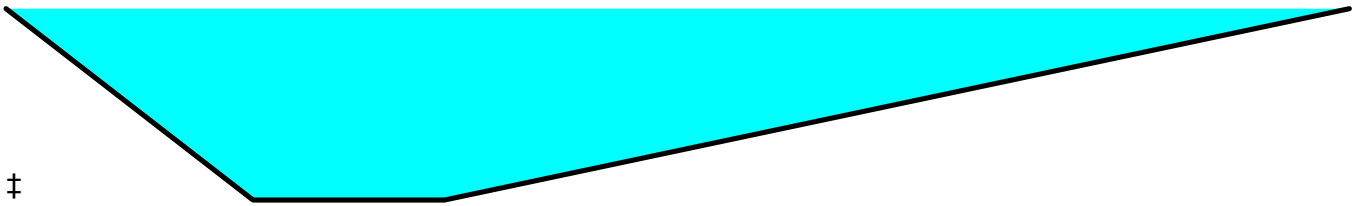
Summary for Reach 57: Brushy Brook

Inflow Area = 2,144.266 ac, 0.38% Impervious, Inflow Depth > 3.24" for 100-Year event
Inflow = 492.57 cfs @ 12.81 hrs, Volume= 579.004 af
Outflow = 478.51 cfs @ 12.91 hrs, Volume= 578.966 af, Atten= 3%, Lag= 5.9 min
Routed to Link PRE : Brushy Brook/Sawmill Road Crossing

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.53 fps, Min. Travel Time= 6.5 min
Avg. Velocity = 1.90 fps, Avg. Travel Time= 12.1 min

Peak Storage= 187,211 cf @ 12.91 hrs
Average Depth at Peak Storage= 2.35' , Surface Width= 110.68'
Bank-Full Depth= 1.72' Flow Area= 82.8 sf, Capacity= 258.34 cfs

12.00' x 1.72' deep channel, n= 0.040 Winding stream, pools & shoals
Side Slope Z-value= 9.0 33.0 ' / ' Top Width= 84.24'
Length= 1,381.0' Slope= 0.0072 ' / '
Inlet Invert= 128.00', Outlet Invert= 118.00'



Summary for Pond 25: Existing Depression (STA 7+00)

Inflow Area = 1.519 ac, 0.00% Impervious, Inflow Depth = 2.45" for 100-Year event
 Inflow = 4.02 cfs @ 12.10 hrs, Volume= 0.310 af
 Outflow = 0.03 cfs @ 24.08 hrs, Volume= 0.213 af, Atten= 99%, Lag= 719.2 min
 Discarded = 0.03 cfs @ 24.08 hrs, Volume= 0.213 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Pond 27 : Existing Depression (STA 6+00)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 160.00' @ 24.08 hrs Surf.Area= 5,568 sf Storage= 12,097 cf

Plug-Flow detention time= 2,435.2 min calculated for 0.213 af (69% of inflow)
 Center-of-Mass det. time= 2,326.6 min (3,195.9 - 869.3)

Volume	Invert	Avail.Storage	Storage Description		
#1	156.00'	68,727 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
156.00	324	127.0	0	0	324
158.00	3,422	306.0	3,199	3,199	6,507
160.00	5,569	329.0	8,904	12,104	7,831
162.00	9,357	425.0	14,763	26,867	13,641
164.00	15,600	625.0	24,693	51,559	30,385
165.00	18,784	652.0	17,167	68,727	33,202

Device	Routing	Invert	Outlet Devices	
#1	Discarded	156.00'	0.270 in/hr Exfiltration TH #95-111 over Surface area Phase-In= 0.01'	
#2	Primary	164.00'	Grass Weir, Cv= 2.62 (C= 3.28)	
			Head (feet) 0.00 1.00	
			Width (feet) 32.00 73.50	

Discarded OutFlow Max=0.03 cfs @ 24.08 hrs HW=160.00' (Free Discharge)

↑1=Exfiltration TH #95-111 (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=156.00' TW=152.00' (Dynamic Tailwater)

↑2=Grass Weir (Controls 0.00 cfs)

Summary for Pond 27: Existing Depression (STA 6+00)

Inflow Area = 2.000 ac, 0.00% Impervious, Inflow Depth = 0.31" for 100-Year event
 Inflow = 0.48 cfs @ 12.12 hrs, Volume= 0.051 af
 Outflow = 0.02 cfs @ 22.63 hrs, Volume= 0.051 af, Atten= 96%, Lag= 630.5 min
 Discarded = 0.02 cfs @ 22.63 hrs, Volume= 0.051 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link 29.2 : DP-2: Brushy Brook
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Pond 29 : Existing Depression (STA 4+00)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 154.18' @ 22.63 hrs Surf.Area= 1,462 sf Storage= 1,529 cf

Plug-Flow detention time= 1,128.3 min calculated for 0.051 af (100% of inflow)
 Center-of-Mass det. time= 1,128.5 min (2,038.2 - 909.8)

Volume	Invert	Avail.Storage	Storage Description			
#1	152.00'	70,929 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
152.00	140	45.0	0	0	140	
154.00	1,344	144.0	1,279	1,279	1,641	
156.00	2,942	203.0	4,183	5,462	3,307	
158.00	4,034	248.0	6,947	12,409	4,983	
160.00	5,104	274.0	9,117	21,526	6,183	
162.00	6,330	305.0	11,412	32,938	7,724	
164.00	9,050	395.0	15,299	48,237	12,786	
165.00	11,460	513.0	10,231	58,468	21,325	
166.00	13,489	525.0	12,461	70,929	22,443	

Device	Routing	Invert	Outlet Devices			
#1	Discarded	152.00'	0.520 in/hr Exfiltration TH #95-105 over Surface area Phase-In= 0.01'			
#2	Primary	165.00'	Grass Weir to DP, Cv= 2.62 (C= 3.28)			
			Head (feet) 0.00 1.00			
			Width (feet) 4.00 36.00			
#3	Secondary	164.00'	Grass Weir to Depression, Cv= 2.62 (C= 3.28)			
			Head (feet) 0.00 1.00 2.00			
			Width (feet) 32.00 73.50 101.00			

Discarded OutFlow Max=0.02 cfs @ 22.63 hrs HW=154.18' (Free Discharge)
 ↑1=Exfiltration TH #95-105 (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=152.00' TW=0.00' (Dynamic Tailwater)
 ↑2=Grass Weir to DP (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=152.00' TW=148.00' (Dynamic Tailwater)
 ↑3=Grass Weir to Depression (Controls 0.00 cfs)

Summary for Pond 29: Existing Depression (STA 4+00)

Inflow Area = 0.447 ac, 0.00% Impervious, Inflow Depth = 1.48" for 100-Year event
 Inflow = 0.58 cfs @ 12.11 hrs, Volume= 0.055 af
 Outflow = 0.02 cfs @ 20.02 hrs, Volume= 0.055 af, Atten= 96%, Lag= 474.4 min
 Discarded = 0.02 cfs @ 20.02 hrs, Volume= 0.055 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link 29.2 : DP-2: Brushy Brook

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 148.96' @ 20.02 hrs Surf.Area= 1,857 sf Storage= 1,500 cf

Plug-Flow detention time= 772.8 min calculated for 0.055 af (100% of inflow)
 Center-of-Mass det. time= 772.8 min (1,673.0 - 900.2)

Volume	Invert	Avail.Storage	Storage Description			
#1	148.00'	18,588 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
148.00	1,274	143.0	0	0	1,274	
150.00	2,605	198.0	3,800	3,800	2,805	
152.00	3,640	228.0	6,216	10,017	3,908	
154.00	4,966	280.0	8,572	18,588	6,070	

Device	Routing	Invert	Outlet Devices			
#1	Discarded	148.00'	0.520 in/hr Exfiltration TH #95-100 over Surface area Phase-In= 0.01'			
#2	Primary	153.00'	Grass Weir, Cv= 2.62 (C= 3.28)			
			Head (feet) 0.00 1.00 3.00			
			Width (feet) 1.00 17.00 99.00			

Discarded OutFlow Max=0.02 cfs @ 20.02 hrs HW=148.96' (Free Discharge)
 ↑1=Exfiltration TH #95-100 (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=148.00' TW=0.00' (Dynamic Tailwater)
 ↑2=Grass Weir (Controls 0.00 cfs)

Summary for Pond 55: Culvert

Inflow Area = 221.266 ac, 0.07% Impervious, Inflow Depth = 3.29" for 100-Year event
 Inflow = 361.05 cfs @ 12.86 hrs, Volume= 60.713 af
 Outflow = 361.05 cfs @ 12.86 hrs, Volume= 60.713 af, Atten= 0%, Lag= 0.0 min
 Primary = 85.56 cfs @ 12.86 hrs, Volume= 40.170 af
 Routed to Link 56 : Site Convergence
 Secondary = 275.48 cfs @ 12.86 hrs, Volume= 20.543 af
 Routed to Link 56 : Site Convergence

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 142.02' @ 12.86 hrs

1193-001-ALLS-EHCD-INHS

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

Prepared by DiPrete Engineering

Printed 4/5/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Device	Routing	Invert	Outlet Devices
#1	Primary	128.00'	18.00" Round Culvert L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 128.00' / 125.00' S= 0.1000 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Primary	128.00'	24.00" Round Culvert L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 128.00' / 125.00' S= 0.1000 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#3	Secondary	139.00'	20.0' long x 24.0' breadth Road 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

Primary OutFlow Max=85.56 cfs @ 12.86 hrs HW=142.02' TW=0.00' (Dynamic Tailwater)↑ **1=Culvert** (Inlet Controls 30.99 cfs @ 17.54 fps)↑ **2=Culvert** (Inlet Controls 54.57 cfs @ 17.37 fps)**Secondary OutFlow** Max=275.45 cfs @ 12.86 hrs HW=142.02' TW=0.00' (Dynamic Tailwater)↑ **3=Road** (Weir Controls 275.45 cfs @ 4.57 fps)**Summary for Link 14: DP-1: NW Wetland**

Inflow Area = 44.613 ac, 0.00% Impervious, Inflow Depth = 3.24" for 100-Year event
 Inflow = 96.88 cfs @ 12.40 hrs, Volume= 12.045 af
 Primary = 96.88 cfs @ 12.40 hrs, Volume= 12.045 af, Atten= 0%, Lag= 0.0 min
 Routed to Reach 50 : Northwest Wetland

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Summary for Link 29.2: DP-2: Brushy Brook

Inflow Area = 54.338 ac, 0.07% Impervious, Inflow Depth = 2.85" for 100-Year event
 Inflow = 115.88 cfs @ 12.27 hrs, Volume= 12.924 af
 Primary = 115.88 cfs @ 12.27 hrs, Volume= 12.924 af, Atten= 0%, Lag= 0.0 min
 Routed to Reach 51 : Brushy Brook

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Summary for Link 34: DP-3: Central Wetland/Dye Hill Road Culvert

Inflow Area = 221.266 ac, 0.07% Impervious, Inflow Depth = 3.29" for 100-Year event
 Inflow = 364.57 cfs @ 12.80 hrs, Volume= 60.713 af
 Primary = 364.57 cfs @ 12.80 hrs, Volume= 60.713 af, Atten= 0%, Lag= 0.0 min
 Routed to Reach 54 : Unnamed Stream - To Dye Hill Road

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Summary for Link 41: DP-4: NE Abutters

Inflow Area = 18.864 ac, 0.00% Impervious, Inflow Depth = 3.25" for 100-Year event
Inflow = 44.11 cfs @ 12.35 hrs, Volume= 5.104 af
Primary = 44.11 cfs @ 12.35 hrs, Volume= 5.104 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Summary for Link 56: Site Convergence

Inflow Area = 2,144.266 ac, 0.38% Impervious, Inflow Depth > 3.24" for 100-Year event
Inflow = 492.57 cfs @ 12.81 hrs, Volume= 579.004 af
Primary = 492.57 cfs @ 12.81 hrs, Volume= 579.004 af, Atten= 0%, Lag= 0.0 min
Routed to Reach 57 : Brushy Brook

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Summary for Link PRE: Brushy Brook/Sawmill Road Crossing

Inflow Area = 2,295.266 ac, 0.48% Impervious, Inflow Depth > 3.26" for 100-Year event
Inflow = 492.71 cfs @ 12.92 hrs, Volume= 624.213 af
Primary = 492.71 cfs @ 12.92 hrs, Volume= 624.213 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs

Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 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

Subcatchment 5CAT: CAT	Runoff Area=1,824.049 ac 0.44% Impervious Runoff Depth>3.25" Tc=1,576.9 min CN=56 Runoff=241.20 cfs 493.384 af
Subcatchment 6CAT: CAT	Runoff Area=151.000 ac 1.89% Impervious Runoff Depth=3.60" Tc=240.2 min CN=59 Runoff=94.28 cfs 45.247 af
Subcatchment 100: Subcat 100	Runoff Area=4.457 ac 32.24% Impervious Runoff Depth=5.26" Flow Length=3,147' Tc=7.9 min CN=73 Runoff=25.65 cfs 1.952 af
Subcatchment 100.1: Half Lot 24	Runoff Area=0.011 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.11 cfs 0.008 af
Subcatchment 103: Subcat 103	Runoff Area=2.845 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=316' Tc=11.8 min CN=56 Runoff=8.68 cfs 0.770 af
Subcatchment 103.1: Lot 18	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.23 cfs 0.016 af
Subcatchment 103.3: Lot 19	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.23 cfs 0.016 af
Subcatchment 104: Subcat 104	Runoff Area=0.089 ac 0.00% Impervious Runoff Depth=4.18" Tc=0.0 min CN=64 Runoff=0.54 cfs 0.031 af
Subcatchment 106: Subcat 106	Runoff Area=0.352 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=384' Tc=12.5 min CN=56 Runoff=1.05 cfs 0.095 af
Subcatchment 107: Subcat 107	Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=4.78" Tc=0.0 min CN=69 Runoff=0.62 cfs 0.036 af
Subcatchment 109: Subcat 109	Runoff Area=0.888 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=401' Tc=10.8 min CN=55 Runoff=2.68 cfs 0.232 af
Subcatchment 110: Subcat 110	Runoff Area=0.378 ac 0.00% Impervious Runoff Depth=6.22" Tc=0.0 min CN=81 Runoff=3.29 cfs 0.196 af
Subcatchment 112: Subcat 112	Runoff Area=2.455 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=558' Tc=13.8 min CN=56 Runoff=7.07 cfs 0.664 af
Subcatchment 113: Subcat 113	Runoff Area=30.875 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=1,373' Tc=27.2 min CN=56 Runoff=67.34 cfs 8.354 af
Subcatchment 114: Subcat 114	Runoff Area=1.138 ac 0.00% Impervious Runoff Depth=3.60" Flow Length=118' Tc=16.6 min CN=59 Runoff=3.43 cfs 0.341 af
Subcatchment 114.1: Lot 20	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.23 cfs 0.016 af

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

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

Prepared by DiPrete Engineering

Printed 4/7/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Subcatchment 114.3: Lots 21-23	Runoff Area=0.069 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.70 cfs 0.047 af
Subcatchment 115: Subcat 115	Runoff Area=0.974 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=55' Slope=0.3007 '/' Tc=6.0 min CN=55 Runoff=3.47 cfs 0.254 af
Subcatchment 116: Lots 38 & 39	Runoff Area=0.046 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.47 cfs 0.032 af
Subcatchment 116.2: Lots 40 & 42	Runoff Area=0.046 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.47 cfs 0.032 af
Subcatchment 116.4: Lots 43 & 44	Runoff Area=0.046 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.47 cfs 0.032 af
Subcatchment 116.6: Lots 25-37 & Half Lot	Runoff Area=0.310 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=3.16 cfs 0.213 af
Subcatchment 116.8: Lot 41	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.23 cfs 0.016 af
Subcatchment 200: Subcat 200	Runoff Area=0.150 ac 41.07% Impervious Runoff Depth=4.18" Flow Length=126' Tc=6.0 min CN=64 Runoff=0.73 cfs 0.052 af
Subcatchment 202: Subcat 202	Runoff Area=3.303 ac 27.40% Impervious Runoff Depth=4.78" Flow Length=1,383' Tc=10.3 min CN=69 Runoff=16.02 cfs 1.315 af
Subcatchment 203: Subcat 203	Runoff Area=0.042 ac 0.00% Impervious Runoff Depth=3.36" Tc=0.0 min CN=57 Runoff=0.20 cfs 0.012 af
Subcatchment 203.1: Lot 7	Runoff Area=0.023 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.23 cfs 0.016 af
Subcatchment 205: Subcat 205	Runoff Area=0.140 ac 0.00% Impervious Runoff Depth=5.26" Tc=0.0 min CN=73 Runoff=1.05 cfs 0.061 af
Subcatchment 207: Subcat 207	Runoff Area=0.856 ac 0.00% Impervious Runoff Depth=1.37" Flow Length=227' Tc=11.4 min CN=39 Runoff=0.81 cfs 0.098 af
Subcatchment 208: Subcat 208	Runoff Area=0.189 ac 0.00% Impervious Runoff Depth=3.25" Tc=0.0 min CN=56 Runoff=0.86 cfs 0.051 af
Subcatchment 210: Subcat 210	Runoff Area=10,759 sf 35.43% Impervious Runoff Depth=4.18" Flow Length=283' Tc=6.0 min CN=64 Runoff=1.21 cfs 0.086 af
Subcatchment 212: Subcat 212	Runoff Area=12,371 sf 28.70% Impervious Runoff Depth=3.48" Flow Length=235' Tc=6.0 min CN=58 Runoff=1.14 cfs 0.082 af
Subcatchment 213: Subcat 213	Runoff Area=0.104 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=82' Tc=6.0 min CN=56 Runoff=0.39 cfs 0.028 af
Subcatchment 214: Subcat 214	Runoff Area=0.013 ac 0.00% Impervious Runoff Depth=4.30" Tc=0.0 min CN=65 Runoff=0.08 cfs 0.005 af

Subcatchment216: Subcat 216	Runoff Area=0.415 ac 0.00% Impervious Runoff Depth=1.90" Flow Length=198' Tc=6.0 min CN=44 Runoff=0.78 cfs 0.066 af
Subcatchment217: Subcat 217	Runoff Area=0.020 ac 0.00% Impervious Runoff Depth=4.54" Tc=0.0 min CN=67 Runoff=0.13 cfs 0.008 af
Subcatchment219: Subcat 219	Runoff Area=0.144 ac 25.35% Impervious Runoff Depth=4.78" Flow Length=114' Tc=6.0 min CN=69 Runoff=0.81 cfs 0.057 af
Subcatchment221: Subcat 221	Runoff Area=0.166 ac 22.11% Impervious Runoff Depth=4.66" Flow Length=99' Tc=7.9 min CN=68 Runoff=0.85 cfs 0.064 af
Subcatchment225: Subcat 225	Runoff Area=3.655 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=873' Tc=18.2 min CN=56 Runoff=9.44 cfs 0.989 af
Subcatchment225.1: Lots 1-6 & 8-11	Runoff Area=0.230 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=2.34 cfs 0.158 af
Subcatchment225.3: Pond Bottom	Runoff Area=0.874 ac 0.00% Impervious Runoff Depth=3.36" Flow Length=873' Tc=18.2 min CN=57 Runoff=2.35 cfs 0.245 af
Subcatchment227: Subcat 227	Runoff Area=3.829 ac 0.00% Impervious Runoff Depth=2.90" Flow Length=321' Tc=9.0 min CN=53 Runoff=11.21 cfs 0.926 af
Subcatchment228: Subcat 228	Runoff Area=4.107 ac 0.00% Impervious Runoff Depth=2.34" Flow Length=702' Tc=18.8 min CN=48 Runoff=7.02 cfs 0.800 af
Subcatchment229: Subcat 229	Runoff Area=9.105 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=268' Tc=18.6 min CN=55 Runoff=22.34 cfs 2.376 af
Subcatchment230: Subcat 230	Runoff Area=0.079 ac 27.75% Impervious Runoff Depth=4.90" Tc=6.0 min CN=70 Runoff=0.45 cfs 0.032 af
Subcatchment230.1: Half of Lot 12	Runoff Area=0.011 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.11 cfs 0.008 af
Subcatchment232: Subcat 225	Runoff Area=0.482 ac 0.00% Impervious Runoff Depth=1.27" Tc=6.0 min CN=38 Runoff=0.48 cfs 0.051 af
Subcatchment234: Subcat 225	Runoff Area=0.442 ac 0.00% Impervious Runoff Depth=1.37" Tc=6.0 min CN=39 Runoff=0.51 cfs 0.051 af
Subcatchment363: Subcat 363	Runoff Area=6.940 ac 0.00% Impervious Runoff Depth=3.25" Flow Length=706' Tc=21.2 min CN=56 Runoff=16.85 cfs 1.878 af
Subcatchment363.1: Lot 13 & 17	Runoff Area=0.046 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.47 cfs 0.032 af
Subcatchment363.3: Lots 14-16 & Half	Runoff Area=0.080 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.81 cfs 0.055 af

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

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

Prepared by DiPrete Engineering

Printed 4/7/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Subcatchment400: Subcat 400	Runoff Area=18.767 ac 0.00% Impervious Runoff Depth=3.13" Flow Length=473' Tc=23.2 min CN=55 Runoff=42.10 cfs 4.897 af
Subcatchment400.1: Lots 53 & 54, half of	Runoff Area=0.069 ac 100.00% Impervious Runoff Depth=8.26" Tc=0.0 min CN=98 Runoff=0.70 cfs 0.047 af
Reach 102A: Swale A	Avg. Flow Depth=1.16' Max Vel=3.77 fps Inflow=29.34 cfs 2.602 af n=0.030 L=270.7' S=0.0100 '/ Capacity=75.75 cfs Outflow=28.99 cfs 2.602 af
Reach 102B: Swale A	Avg. Flow Depth=1.30' Max Vel=4.01 fps Inflow=37.56 cfs 3.396 af n=0.030 L=172.0' S=0.0099 '/ Capacity=75.40 cfs Outflow=37.43 cfs 3.396 af
Reach 114A: E-Series Wetland	Avg. Flow Depth=0.12' Max Vel=0.72 fps Inflow=3.71 cfs 0.390 af n=0.035 L=169.0' S=0.0083 '/ Capacity=10.89 cfs Outflow=3.57 cfs 0.390 af
Reach 114B: E-Series Wetland	Avg. Flow Depth=0.14' Max Vel=0.81 fps Inflow=5.78 cfs 0.644 af n=0.035 L=399.0' S=0.0085 '/ Capacity=11.05 cfs Outflow=5.22 cfs 0.644 af
Reach 114C: Upland	Avg. Flow Depth=0.25' Max Vel=3.16 fps Inflow=5.22 cfs 0.644 af n=0.030 L=92.3' S=0.0520 '/ Capacity=85.00 cfs Outflow=5.22 cfs 0.644 af
Reach 114D: Roadway Swale	Avg. Flow Depth=0.78' Max Vel=7.35 fps Inflow=29.34 cfs 2.596 af n=0.030 L=175.8' S=0.0597 '/ Capacity=128.82 cfs Outflow=29.30 cfs 2.596 af
Reach 115A: E-Series Wetland	Avg. Flow Depth=0.09' Max Vel=1.06 fps Inflow=3.47 cfs 0.254 af n=0.035 L=52.0' S=0.0269 '/ Capacity=19.64 cfs Outflow=3.44 cfs 0.254 af
Reach 364A: To DP-2	Avg. Flow Depth=0.01' Max Vel=1.87 fps Inflow=4.94 cfs 1.946 af n=0.035 L=152.0' S=0.0218 '/ Capacity=502,646.54 cfs Outflow=4.94 cfs 1.946 af
Reach 364B: To DP-2	Avg. Flow Depth=0.02' Max Vel=2.18 fps Inflow=26.13 cfs 4.322 af n=0.035 L=404.5' S=0.0294 '/ Capacity=584,231.15 cfs Outflow=25.31 cfs 4.322 af
Reach 500: Northwest Wetland	Avg. Flow Depth=0.49' Max Vel=3.40 fps Inflow=95.71 cfs 12.609 af n=0.040 L=5,100.6' S=0.0368 '/ Capacity=6,500.92 cfs Outflow=69.62 cfs 12.609 af
Reach 501: Brushy Brook	Avg. Flow Depth=0.63' Max Vel=3.40 fps Inflow=56.43 cfs 7.469 af n=0.040 L=1,082.4' S=0.0273 '/ Capacity=502.04 cfs Outflow=53.97 cfs 7.469 af
Reach 502: Brushy Brook - To Dye	Avg. Flow Depth=2.05' Max Vel=2.75 fps Inflow=241.21 cfs 513.461 af n=0.040 L=1,094.7' S=0.0046 '/ Capacity=168.72 cfs Outflow=241.00 cfs 513.431 af
Reach 503: Brushy Brook - From	Avg. Flow Depth=1.64' Max Vel=3.95 fps Inflow=241.00 cfs 513.431 af n=0.040 L=1,451.2' S=0.0117 '/ Capacity=270.20 cfs Outflow=240.92 cfs 513.400 af
Reach 504: Unnamed Stream - To	Avg. Flow Depth=2.05' Max Vel=5.99 fps Inflow=364.52 cfs 64.697 af n=0.040 L=1,451.7' S=0.0192 '/ Capacity=1,664.02 cfs Outflow=361.46 cfs 64.697 af
Reach 507: Brushy Brook	Avg. Flow Depth=2.41' Max Vel=3.09 fps Inflow=459.30 cfs 578.097 af n=0.040 L=1,831.0' S=0.0055 '/ Capacity=224.36 cfs Outflow=433.51 cfs 578.040 af
Pond 100.2: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.10' Storage=21 cf Inflow=0.11 cfs 0.008 af Discarded=0.00 cfs 0.002 af Primary=0.11 cfs 0.006 af Outflow=0.11 cfs 0.008 af

Pond 101: 2 x 24" Pipe	Peak Elev=229.76'	Inflow=29.34 cfs	2.602 af
24.00" Round Culvert x 2.00 n=0.013 L=86.3' S=0.0053 '/'	Outflow=29.34 cfs	2.602 af	
Pond 103.2: Drywell A (1.02 in/hr) (2' Deep)	Peak Elev=1,000.28'	Storage=44 cf	Inflow=0.23 cfs
Discarded=0.00 cfs	0.003 af	Primary=0.22 cfs	0.012 af
Outflow=0.22 cfs	0.016 af		
Pond 103.4: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.10'	Storage=41 cf	Inflow=0.23 cfs
Discarded=0.00 cfs	0.003 af	Primary=0.23 cfs	0.012 af
Outflow=0.23 cfs	0.016 af		
Pond 105: Forebay A (219.5, 224.6)	Peak Elev=223.62'	Inflow=37.64 cfs	3.427 af
	Outflow=37.64 cfs	3.427 af	
Pond 108: WQ Pond A (219.5, 224.50)(1.02	Peak Elev=223.42'	Storage=7,484 cf	Inflow=38.91 cfs
Discarded=0.07 cfs	0.174 af	Primary=35.61 cfs	3.385 af
Outflow=35.67 cfs	3.558 af		
Pond 111: QP Pond A (220,	Peak Elev=223.41'	Storage=37,338 cf	Inflow=39.51 cfs
Discarded=0.31 cfs	0.466 af	Primary=22.78 cfs	3.347 af
Secondary=0.00 cfs	0.000 af	Outflow=23.09 cfs	3.812 af
Pond 114.2: Drywell B (1.02 in/hr) (1' Deep)	Peak Elev=1,000.28'	Storage=37 cf	Inflow=0.23 cfs
Discarded=0.00 cfs	0.005 af	Primary=0.22 cfs	0.011 af
Outflow=0.22 cfs	0.016 af		
Pond 114.4: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.10'	Storage=124 cf	Inflow=0.70 cfs
Discarded=0.00 cfs	0.010 af	Primary=0.69 cfs	0.037 af
Outflow=0.69 cfs	0.047 af		
Pond 116.1: Drywell A (1.02 in/hr) (2' Deep)	Peak Elev=1,000.28'	Storage=88 cf	Inflow=0.47 cfs
Discarded=0.00 cfs	0.007 af	Primary=0.45 cfs	0.025 af
Outflow=0.45 cfs	0.032 af		
Pond 116.3: Drywell B (1.02 in/hr) (1' Deep)	Peak Elev=1,000.28'	Storage=74 cf	Inflow=0.47 cfs
Discarded=0.00 cfs	0.009 af	Primary=0.44 cfs	0.022 af
Outflow=0.45 cfs	0.032 af		
Pond 116.5: Drywell C (1.02 in/hr) (0.5' Deep)	Peak Elev=1,000.24'	Storage=131 cf	Inflow=0.47 cfs
Discarded=0.01 cfs	0.014 af	Primary=0.42 cfs	0.018 af
Outflow=0.42 cfs	0.032 af		
Pond 116.7: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.10'	Storage=558 cf	Inflow=3.16 cfs
Discarded=0.02 cfs	0.045 af	Primary=3.10 cfs	0.168 af
Outflow=3.12 cfs	0.213 af		
Pond 116.9: Drywell E (1.02 in/hr) (1' Deep)	Peak Elev=1,000.10'	Storage=34 cf	Inflow=0.23 cfs
Discarded=0.00 cfs	0.005 af	Primary=0.23 cfs	0.011 af
Outflow=0.23 cfs	0.016 af		
Pond 201: 12" Pipe	Peak Elev=165.72'	Inflow=0.73 cfs	0.052 af
12.00" Round Culvert n=0.012 L=64.8' S=0.0049 '/'	Outflow=0.73 cfs	0.052 af	
Pond 203.2: Drywell D (1.02 in/hr) (2' Deep)	Peak Elev=1,000.10'	Storage=41 cf	Inflow=0.23 cfs
Discarded=0.00 cfs	0.003 af	Primary=0.23 cfs	0.012 af
Outflow=0.23 cfs	0.016 af		
Pond 204: Forebay B (162.5, 166.25)	Peak Elev=165.68'	Inflow=16.81 cfs	1.392 af
Primary=1.63 cfs	0.772 af	Secondary=15.17 cfs	0.619 af
Outflow=16.81 cfs	1.392 af		
Pond 206: WQ Pond B (164, 165.5) (2.41	Peak Elev=164.53'	Storage=1,962 cf	Inflow=2.50 cfs
Discarded=0.22 cfs	0.308 af	Primary=2.16 cfs	0.526 af
Outflow=2.38 cfs	0.833 af		

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

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

Prepared by DiPrete Engineering

Printed 4/7/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Pond 209: QP Pond B (163.5, 165.5) Peak Elev=164.27' Storage=3,004 cf Inflow=18.11 cfs 1.294 af
Discarded=0.27 cfs 0.225 af Primary=17.44 cfs 1.069 af Outflow=17.71 cfs 1.294 af

Pond 211: 12" Pipe Peak Elev=149.29' Inflow=1.21 cfs 0.086 af
12.00" Round Culvert n=0.012 L=64.1' S=0.0050 ' Outflow=1.21 cfs 0.086 af

Pond 215: Forebay C (146, 150.5) Peak Elev=149.17' Inflow=2.77 cfs 0.201 af
Outflow=2.77 cfs 0.201 af

Pond 218: WQ Pond C (147.5, 150.5) (8.27in/hr) Peak Elev=149.17' Storage=699 cf Inflow=3.61 cfs 0.275 af
Discarded=0.12 cfs 0.082 af Primary=3.10 cfs 0.193 af Outflow=3.22 cfs 0.275 af

Pond 220: 12" Pipe Peak Elev=146.96' Inflow=0.81 cfs 0.057 af
12.00" Round Culvert n=0.012 L=38.9' S=0.0298 ' Outflow=0.81 cfs 0.057 af

Pond 222: 12" Pipe Peak Elev=146.97' Inflow=0.85 cfs 0.064 af
12.00" Round Culvert n=0.012 L=17.1' S=0.0906 ' Outflow=0.85 cfs 0.064 af

Pond 223A: Bypass Peak Elev=145.07' Inflow=1.64 cfs 0.122 af
Primary=0.75 cfs 0.072 af Secondary=0.93 cfs 0.050 af Outflow=1.64 cfs 0.122 af

Pond 223B: JF4-2-1 Peak Elev=145.03' Inflow=0.75 cfs 0.072 af
12.00" Round Culvert n=0.013 L=12.9' S=0.0000 ' Outflow=0.75 cfs 0.072 af

Pond 224: 15" Pipe Peak Elev=145.00' Inflow=4.67 cfs 0.314 af
15.00" Round Culvert n=0.012 L=69.9' S=0.0064 ' Outflow=4.67 cfs 0.314 af

Pond 225.2: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.10' Storage=413 cf Inflow=2.34 cfs 0.158 af
Discarded=0.01 cfs 0.033 af Primary=2.30 cfs 0.125 af Outflow=2.32 cfs 0.158 af

Pond 226: Existing Depression Filled in Peak Elev=166.97' Storage=13,859 cf Inflow=12.43 cfs 1.359 af
Discarded=0.06 cfs 0.094 af Primary=7.28 cfs 1.265 af Outflow=7.34 cfs 1.359 af

Pond 230.2: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.10' Storage=21 cf Inflow=0.11 cfs 0.008 af
Discarded=0.00 cfs 0.002 af Primary=0.11 cfs 0.006 af Outflow=0.11 cfs 0.008 af

Pond 233: Existing Depression (STA 6+00) Peak Elev=164.42' Storage=52,234 cf Inflow=7.46 cfs 1.316 af
Discarded=0.12 cfs 0.670 af Primary=0.00 cfs 0.000 af Outflow=0.12 cfs 0.670 af

Pond 235: Existing Depression (STA 4+00) Peak Elev=148.88' Storage=1,343 cf Inflow=0.51 cfs 0.051 af
Discarded=0.02 cfs 0.051 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.051 af

Pond 363.2: Drywell A (1.02 in/hr) (2' Deep) Peak Elev=1,000.28' Storage=88 cf Inflow=0.47 cfs 0.032 af
Discarded=0.00 cfs 0.007 af Primary=0.45 cfs 0.025 af Outflow=0.45 cfs 0.032 af

Pond 363.4: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.10' Storage=145 cf Inflow=0.81 cfs 0.055 af
Discarded=0.00 cfs 0.012 af Primary=0.80 cfs 0.043 af Outflow=0.81 cfs 0.055 af

Pond 364: Existing Depression (STA Peak Elev=204.87' Storage=24,875 cf Inflow=17.14 cfs 1.946 af
Outflow=4.94 cfs 1.946 af

Pond 400.2: Drywell D (1.02 in/hr) (2' Deep) Peak Elev=1,000.10' Storage=124 cf Inflow=0.70 cfs 0.047 af
Discarded=0.00 cfs 0.010 af Primary=0.69 cfs 0.037 af Outflow=0.69 cfs 0.047 af

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

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

Prepared by DiPrete Engineering

Printed 4/7/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Pond 505: Culvert

Peak Elev=142.02' Inflow=361.46 cfs 64.697 af
Primary=85.57 cfs 42.118 af Secondary=275.89 cfs 22.579 af Outflow=361.46 cfs 64.697 af

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 578.097 af
Primary=459.30 cfs 578.097 af

Link POST: Brushy Brook/Sawmill Road Crossing

Inflow=450.10 cfs 623.288 af
Primary=450.10 cfs 623.288 af

Summary for Subcatchment 5CAT: CAT

Runoff = 241.20 cfs @ 33.29 hrs, Volume= 493.384 af, Depth> 3.25"

Routed to Reach 502 : Brushy Brook - To Dye Hill Road

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
1,456.414	55	Woods, Good, HSG B
7.960	98	Impervious, HSG B
0.300	98	Water Surface, 0% imp, HSG B
359.375	61	>75% Grass cover, Good, HSG B
1,824.049	56	Weighted Average
1,816.089	56	99.56% Pervious Area
7.960	98	0.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1,576.9					Direct Entry,

Summary for Subcatchment 6CAT: CAT

Runoff = 94.28 cfs @ 15.22 hrs, Volume= 45.247 af, Depth= 3.60"

Routed to Link POST : Brushy Brook/Sawmill Road Crossing

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
84.000	55	Woods, Good, HSG B
2.850	98	Impervious, HSG B
0.700	98	Water Surface, 0% imp, HSG B
63.450	61	>75% Grass cover, Good, HSG B
151.000	59	Weighted Average
148.150	58	98.11% Pervious Area
2.850	98	1.89% Impervious Area

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

Summary for Subcatchment 100: Subcat 100

Runoff = 25.65 cfs @ 12.11 hrs, Volume= 1.952 af, Depth= 5.26"

Routed to Reach 114D : Roadway Swale

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
3.017	61	>75% Grass cover, Good, HSG B
1.425	98	Impervious, HSG B
0.000	98	Roofs, HSG B
0.003	55	Woods, Good, HSG B
* 0.012	98	Paved Waterways, HSG A
4.457	73	Weighted Average
3.020	61	67.76% Pervious Area
1.437	98	32.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6	47	0.1120	0.30		Sheet Flow, A Grass: Short n= 0.150 P2= 3.30"
5.3	3,100	0.0484	9.66	115.97	Trap/Vee/Rect Channel Flow, B Bot.W=2.00' D=1.50' Z= 4.0 ' Top.W=14.00' n= 0.030
7.9	3,147	Total			

Summary for Subcatchment 100.1: Half Lot 24

Runoff = 0.11 cfs @ 12.00 hrs, Volume= 0.008 af, Depth= 8.26"
Routed to Pond 100.2 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.011	98	Roofs, HSG B
0.011	98	100.00% Impervious Area

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

Summary for Subcatchment 103: Subcat 103

Runoff = 8.68 cfs @ 12.17 hrs, Volume= 0.770 af, Depth= 3.25"
Routed to Reach 102B : Swale A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.663	61	>75% Grass cover, Good, HSG B
0.000	98	Roofs, HSG B
2.182	55	Woods, Good, HSG B
2.845	56	Weighted Average
2.845	56	100.00% Pervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.1	100	0.1007	0.15		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
0.7	216	0.1102	5.34		Shallow Concentrated Flow, B
					Unpaved Kv= 16.1 fps
11.8	316	Total			

Summary for Subcatchment 103.1: Lot 18

Runoff = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Depth= 8.26"
 Routed to Pond 103.2 : Drywell A (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.023	98	Roofs, HSG B
0.023	98	100.00% Impervious Area

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

Summary for Subcatchment 103.3: Lot 19

Runoff = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Depth= 8.26"
 Routed to Pond 103.4 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.023	98	Roofs, HSG B
0.023	98	100.00% Impervious Area

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

Summary for Subcatchment 104: Subcat 104

Runoff = 0.54 cfs @ 12.00 hrs, Volume= 0.031 af, Depth= 4.18"
 Routed to Pond 105 : Forebay A (219.5, 224.6)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.083	61	>75% Grass cover, Good, HSG B
0.006	98	Water Surface, 0% imp, HSG B
0.089	64	Weighted Average
0.089	64	100.00% Pervious Area

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

Summary for Subcatchment 106: Subcat 106

Runoff = 1.05 cfs @ 12.18 hrs, Volume= 0.095 af, Depth= 3.25"
 Routed to Pond 108 : WQ Pond A (219.5, 224.50)(1.02 in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.030	61	>75% Grass cover, Good, HSG B
0.322	55	Woods, Good, HSG B
0.352	56	Weighted Average
0.352	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	100	0.0927	0.15		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
1.0	284	0.0929	4.91		Shallow Concentrated Flow, B
					Unpaved Kv= 16.1 fps
12.5	384	Total			

Summary for Subcatchment 107: Subcat 107

Runoff = 0.62 cfs @ 12.00 hrs, Volume= 0.036 af, Depth= 4.78"
 Routed to Pond 108 : WQ Pond A (219.5, 224.50)(1.02 in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.070	61	>75% Grass cover, Good, HSG B
0.020	98	Water Surface, 0% imp, HSG B
0.090	69	Weighted Average
0.090	69	100.00% Pervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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

Summary for Subcatchment 109: Subcat 109

Runoff = 2.68 cfs @ 12.16 hrs, Volume= 0.232 af, Depth= 3.13"
 Routed to Pond 111 : QP Pond A (220, 224.5)(1.02in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.027	61	>75% Grass cover, Good, HSG B
0.861	55	Woods, Good, HSG B
0.888	55	Weighted Average
0.888	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.7	100	0.1397	0.17		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
1.1	301	0.0861	4.72		Shallow Concentrated Flow, B
					Unpaved Kv= 16.1 fps
10.8	401	Total			

Summary for Subcatchment 110: Subcat 110

Runoff = 3.29 cfs @ 12.00 hrs, Volume= 0.196 af, Depth= 6.22"
 Routed to Pond 111 : QP Pond A (220, 224.5)(1.02in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.177	61	>75% Grass cover, Good, HSG B
0.201	98	Water Surface, 0% imp, HSG B
0.378	81	Weighted Average
0.378	81	100.00% Pervious Area

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

Summary for Subcatchment 112: Subcat 112

Runoff = 7.07 cfs @ 12.20 hrs, Volume= 0.664 af, Depth= 3.25"
 Routed to Link 117 : DP-1: NW Wetland

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.246	61	>75% Grass cover, Good, HSG B
2.208	55	Woods, Good, HSG B
2.455	56	Weighted Average
2.455	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	100	0.0807	0.14		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
1.7	458	0.0801	4.56		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
13.8	558	Total			

Summary for Subcatchment 113: Subcat 113

Runoff = 67.34 cfs @ 12.40 hrs, Volume= 8.354 af, Depth= 3.25"
Routed to Link 117 : DP-1: NW Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
3.167	61	>75% Grass cover, Good, HSG B
0.000	98	Impervious, HSG B
0.000	98	Roofs, HSG B
27.708	55	Woods, Good, HSG B
30.875	56	Weighted Average
30.875	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.6	100	0.0189	0.08		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
3.2	751	0.0599	3.94		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
2.4	522	0.0515	3.65	583.53	Trap/Vee/Rect Channel Flow, C Bot.W=15.00' D=1.50' Z= 22.0 & 100.0 ' Top.W=198.00' n= 0.080 Earth, long dense weeds
27.2	1,373	Total			

Summary for Subcatchment 114: Subcat 114

Runoff = 3.43 cfs @ 12.23 hrs, Volume= 0.341 af, Depth= 3.60"
Routed to Reach 114A : E-Series Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.831	61	>75% Grass cover, Good, HSG B
0.000	98	Roofs, HSG B
0.307	55	Woods, Good, HSG B
1.138	59	Weighted Average
1.138	59	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.4	100	0.0379	0.10		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.2	18	0.0113	1.71		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
16.6	118	Total			

Summary for Subcatchment 114.1: Lot 20

Runoff = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Depth= 8.26"
 Routed to Pond 114.2 : Drywell B (1.02 in/hr) (1' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.023	98	Roofs, HSG B
0.023	98	100.00% Impervious Area

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

Summary for Subcatchment 114.3: Lots 21-23

Runoff = 0.70 cfs @ 12.00 hrs, Volume= 0.047 af, Depth= 8.26"
 Routed to Pond 114.4 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.069	98	Roofs, HSG B
0.069	98	100.00% Impervious Area

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

Summary for Subcatchment 115: Subcat 115

Runoff = 3.47 cfs @ 12.09 hrs, Volume= 0.254 af, Depth= 3.13"
 Routed to Reach 115A : E-Series Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.974	55	Woods, Good, HSG B
0.974	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	55	0.3007	0.21		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
1.6					Direct Entry,
6.0	55	Total			

Summary for Subcatchment 116: Lots 38 & 39

Runoff = 0.47 cfs @ 12.00 hrs, Volume= 0.032 af, Depth= 8.26"
 Routed to Pond 116.1 : Drywell A (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.046	98	Roofs, HSG B
0.046	98	100.00% Impervious Area

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

Summary for Subcatchment 116.2: Lots 40 & 42

Runoff = 0.47 cfs @ 12.00 hrs, Volume= 0.032 af, Depth= 8.26"
 Routed to Pond 116.3 : Drywell B (1.02 in/hr) (1' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.046	98	Roofs, HSG B
0.046	98	100.00% Impervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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

Summary for Subcatchment 116.4: Lots 43 & 44

Runoff = 0.47 cfs @ 12.00 hrs, Volume= 0.032 af, Depth= 8.26"
 Routed to Pond 116.5 : Drywell C (1.02 in/hr) (0.5' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.046	98	Roofs, HSG B
0.046	98	100.00% Impervious Area

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

Summary for Subcatchment 116.6: Lots 25-37 & Half Lot 24

Runoff = 3.16 cfs @ 12.00 hrs, Volume= 0.213 af, Depth= 8.26"
 Routed to Pond 116.7 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.310	98	Roofs, HSG B
0.310	98	100.00% Impervious Area

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

Summary for Subcatchment 116.8: Lot 41

Runoff = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Depth= 8.26"
 Routed to Pond 116.9 : Drywell E (1.02 in/hr) (1' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.023	98	Roofs, HSG B
0.023	98	100.00% Impervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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

Summary for Subcatchment 200: Subcat 200

Runoff = 0.73 cfs @ 12.09 hrs, Volume= 0.052 af, Depth= 4.18"
 Routed to Pond 201 : 12" Pipe

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.086	39	>75% Grass cover, Good, HSG A
0.002	61	>75% Grass cover, Good, HSG B
0.057	98	Impervious, HSG A
0.004	98	Impervious, HSG B
0.150	64	Weighted Average
0.088	40	58.93% Pervious Area
0.061	98	41.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	8	0.1788	0.25		Sheet Flow, A Grass: Short n= 0.150 P2= 3.30"
0.3	118	0.0195	6.13	73.61	Trap/Vee/Rect Channel Flow, B Bot.W=2.00' D=1.50' Z= 4.0 '/' Top.W=14.00' n= 0.030
5.2					Direct Entry,
6.0	126	Total			

Summary for Subcatchment 202: Subcat 202

Runoff = 16.02 cfs @ 12.14 hrs, Volume= 1.315 af, Depth= 4.78"
 Routed to Pond 204 : Forebay B (162.5, 166.25)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.206	39	>75% Grass cover, Good, HSG A
2.156	61	>75% Grass cover, Good, HSG B
0.062	98	Impervious, HSG A
0.837	98	Impervious, HSG B
0.000	98	Roofs, HSG B
0.036	30	Woods, Good, HSG A
* 0.006	98	Paved Waterways, HSG B
3.303	69	Weighted Average
2.398	59	72.60% Pervious Area
0.905	98	27.40% Impervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.8	92	0.0401	0.22		Sheet Flow, A
					Grass: Short n= 0.150 P2= 3.30"
0.1	20	0.0297	3.50		Shallow Concentrated Flow, B
					Paved Kv= 20.3 fps
0.1	32	0.0752	4.42		Shallow Concentrated Flow, C
					Unpaved Kv= 16.1 fps
3.3	1,239	0.0201	6.23	74.73	Trap/Vee/Rect Channel Flow, D
					Bot.W=2.00' D=1.50' Z= 4.0 ' Top.W=14.00' n= 0.030
10.3	1,383	Total			

Summary for Subcatchment 203: Subcat 203

Runoff = 0.20 cfs @ 12.00 hrs, Volume= 0.012 af, Depth= 3.36"
Routed to Pond 204 : Forebay B (162.5, 166.25)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.029	39	>75% Grass cover, Good, HSG A
0.000	98	Impervious, HSG A
0.013	98	Water Surface, 0% imp, HSG A
0.042	57	Weighted Average
0.042	57	100.00% Pervious Area
0.000	98	0.00% Impervious Area

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

Summary for Subcatchment 203.1: Lot 7

Runoff = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Depth= 8.26"
Routed to Pond 203.2 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.023	98	Roofs, HSG B
0.023	98	100.00% Impervious Area

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

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 205: Subcat 205

Runoff = 1.05 cfs @ 12.00 hrs, Volume= 0.061 af, Depth= 5.26"

Routed to Pond 206 : WQ Pond B (164, 165.5) (2.41 in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.060	39	>75% Grass cover, Good, HSG A
0.080	98	Water Surface, 0% imp, HSG A
0.001	30	Woods, Good, HSG A
0.140	73	Weighted Average
0.140	73	100.00% Pervious Area

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

Summary for Subcatchment 207: Subcat 207

Runoff = 0.81 cfs @ 12.20 hrs, Volume= 0.098 af, Depth= 1.37"

Routed to Pond 209 : QP Pond B (163.5, 165.5) (2.41in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.075	39	>75% Grass cover, Good, HSG A
0.495	30	Woods, Good, HSG A
0.287	55	Woods, Good, HSG B
0.856	39	Weighted Average
0.856	39	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	100	0.1059	0.15		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.5	127	0.0825	4.62		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
11.4	227	Total			

Summary for Subcatchment 208: Subcat 208

Runoff = 0.86 cfs @ 12.00 hrs, Volume= 0.051 af, Depth= 3.25"

Routed to Pond 209 : QP Pond B (163.5, 165.5) (2.41in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.134	39	>75% Grass cover, Good, HSG A
0.054	98	Water Surface, 0% imp, HSG A
0.189	56	Weighted Average
0.189	56	100.00% Pervious Area

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

Summary for Subcatchment 210: Subcat 210

Runoff = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af, Depth= 4.18"
 Routed to Pond 211 : 12" Pipe

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (sf)	CN	Description
4,966	39	>75% Grass cover, Good, HSG A
1,589	61	>75% Grass cover, Good, HSG B
3,093	98	Impervious, HSG A
653	98	Impervious, HSG B
392	55	Woods, Good, HSG B
* 66	98	Paved Waterways, HSG B
10,759	64	Weighted Average
6,947	45	64.57% Pervious Area
3,812	98	35.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	10	0.2707	0.31		Sheet Flow, A Grass: Short n= 0.150 P2= 3.30"
0.4	273	0.0549	10.29	123.51	Trap/Vee/Rect Channel Flow, B Bot.W=2.00' D=1.50' Z= 4.0 ' Top.W=14.00' n= 0.030
5.1					Direct Entry,
6.0	283	Total			

Summary for Subcatchment 212: Subcat 212

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.082 af, Depth= 3.48"
 Routed to Pond 215 : Forebay C (146, 150.5)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (sf)	CN	Description
6,447	39	>75% Grass cover, Good, HSG A
1,589	61	>75% Grass cover, Good, HSG B
2,875	98	Impervious, HSG A
610	98	Impervious, HSG B
784	30	Woods, Good, HSG A
*	66	Paved Waterways, HSG B
12,371	58	Weighted Average
8,820	42	71.30% Pervious Area
3,551	98	28.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	56	0.1422	0.34		Sheet Flow, A Grass: Short n= 0.150 P2= 3.30"
0.3	179	0.0676	11.42	137.05	Trap/Vee/Rect Channel Flow, B Bot.W=2.00' D=1.50' Z= 4.0 ' Top.W=14.00' n= 0.030
2.9					Direct Entry,
6.0	235	Total			

Summary for Subcatchment 213: Subcat 213

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.028 af, Depth= 3.25"
Routed to Pond 215 : Forebay C (146, 150.5)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.025	61	>75% Grass cover, Good, HSG B
0.080	55	Woods, Good, HSG B
0.104	56	Weighted Average
0.104	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	34	0.1292	0.13		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.1	48	0.2119	7.41		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
1.7					Direct Entry,
6.0	82	Total			

Summary for Subcatchment 214: Subcat 214

Runoff = 0.08 cfs @ 12.00 hrs, Volume= 0.005 af, Depth= 4.30"
Routed to Pond 215 : Forebay C (146, 150.5)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
0.012	61	>75% Grass cover, Good, HSG B
0.001	98	Water Surface, 0% imp, HSG B
0.013	65	Weighted Average
0.013	65	100.00% Pervious Area

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

Summary for Subcatchment 216: Subcat 216

Runoff = 0.78 cfs @ 12.10 hrs, Volume= 0.066 af, Depth= 1.90"
 Routed to Pond 218 : WQ Pond C (147.5, 150.5) (8.27in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.036	39	>75% Grass cover, Good, HSG A
0.035	61	>75% Grass cover, Good, HSG B
0.170	30	Woods, Good, HSG A
0.175	55	Woods, Good, HSG B
0.415	44	Weighted Average
0.415	44	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	67	0.0657	0.26		Sheet Flow, A Grass: Short n= 0.150 P2= 3.30"
0.4	131	0.1072	5.27		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
1.2					Direct Entry,
6.0	198	Total			

Summary for Subcatchment 217: Subcat 217

Runoff = 0.13 cfs @ 12.00 hrs, Volume= 0.008 af, Depth= 4.54"
 Routed to Pond 218 : WQ Pond C (147.5, 150.5) (8.27in/hr)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.017	61	>75% Grass cover, Good, HSG B
0.003	98	Water Surface, 0% imp, HSG B
0.020	67	Weighted Average
0.020	67	100.00% Pervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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

Summary for Subcatchment 219: Subcat 219

Runoff = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af, Depth= 4.78"
 Routed to Pond 220 : 12" Pipe

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.069	61	>75% Grass cover, Good, HSG B
0.037	98	Impervious, HSG B
0.039	55	Woods, Good, HSG B
0.144	69	Weighted Average
0.108	59	74.65% Pervious Area
0.037	98	25.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	28	0.0831	0.24		Sheet Flow, A Grass: Short n= 0.150 P2= 3.30"
0.2	86	0.0348	8.19	98.33	Trap/Vee/Rect Channel Flow, B Bot.W=2.00' D=1.50' Z= 4.0 '/' Top.W=14.00' n= 0.030
3.8					Direct Entry,
6.0	114	Total			

Summary for Subcatchment 221: Subcat 221

Runoff = 0.85 cfs @ 12.11 hrs, Volume= 0.064 af, Depth= 4.66"
 Routed to Pond 222 : 12" Pipe

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.096	61	>75% Grass cover, Good, HSG B
0.037	98	Impervious, HSG B
0.033	55	Woods, Good, HSG B
0.166	68	Weighted Average
0.129	59	77.89% Pervious Area
0.037	98	22.11% Impervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	68	0.1096	0.14		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
0.0	31	0.3136	24.60	295.19	Trap/Vee/Rect Channel Flow, B
					Bot.W=2.00' D=1.50' Z= 4.0 '/' Top.W=14.00' n= 0.030
7.9	99	Total			

Summary for Subcatchment 225: Subcat 225

Runoff = 9.44 cfs @ 12.27 hrs, Volume= 0.989 af, Depth= 3.25"
Routed to Pond 226 : Existing Depression Filled in (STA 7+00)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.805	61	>75% Grass cover, Good, HSG B
0.000	98	Roofs, HSG B
2.850	55	Woods, Good, HSG B
3.655	56	Weighted Average
3.655	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0658	0.13		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
5.1	773	0.0248	2.54		Shallow Concentrated Flow, B
					Unpaved Kv= 16.1 fps
18.2	873	Total			

Summary for Subcatchment 225.1: Lots 1-6 & 8-11

Runoff = 2.34 cfs @ 12.00 hrs, Volume= 0.158 af, Depth= 8.26"
Routed to Pond 225.2 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.230	98	Roofs, HSG B
0.230	98	100.00% Impervious Area

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

Summary for Subcatchment 225.3: Pond Bottom

Runoff = 2.35 cfs @ 12.27 hrs, Volume= 0.245 af, Depth= 3.36"

Routed to Pond 226 : Existing Depression Filled in (STA 7+00)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.022	39	>75% Grass cover, Good, HSG A
0.470	61	>75% Grass cover, Good, HSG B
0.000	98	Roofs, HSG B
0.024	30	Woods, Good, HSG A
0.358	55	Woods, Good, HSG B
0.874	57	Weighted Average
0.874	57	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0658	0.13		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
5.1	773	0.0248	2.54		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
18.2	873	Total			

Summary for Subcatchment 227: Subcat 227

Runoff = 11.21 cfs @ 12.13 hrs, Volume= 0.926 af, Depth= 2.90"

Routed to Link 231 : DP-2: Brushy Brook

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.100	39	>75% Grass cover, Good, HSG A
0.179	61	>75% Grass cover, Good, HSG B
0.330	30	Woods, Good, HSG A
3.220	55	Woods, Good, HSG B
3.829	53	Weighted Average
3.829	53	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0350	0.22		Sheet Flow, A Grass: Short n= 0.150 P2= 3.30"
1.3	221	0.0334	2.94		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
9.0	321	Total			

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 228: Subcat 228

Runoff = 7.02 cfs @ 12.29 hrs, Volume= 0.800 af, Depth= 2.34"

Routed to Link 231 : DP-2: Brushy Brook

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.043	39	>75% Grass cover, Good, HSG A
0.243	61	>75% Grass cover, Good, HSG B
0.089	30	Brush, Good, HSG A
0.256	48	Brush, Good, HSG B
0.000	98	Roofs, HSG B
1.001	30	Woods, Good, HSG A
2.475	55	Woods, Good, HSG B
4.107	48	Weighted Average
4.107	48	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.7	81	0.0235	0.08		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.8	432	0.0252	9.29	10,857.24	Trap/Vee/Rect Channel Flow, B Bot.W=5.00' D=11.00' Z= 5.9 & 12.5 ' Top.W=207.40' n= 0.080 Earth, long dense weeds
1.3	189	0.0211	2.34		Shallow Concentrated Flow, C Unpaved Kv= 16.1 fps
18.8	702	Total			

Summary for Subcatchment 229: Subcat 229

Runoff = 22.34 cfs @ 12.27 hrs, Volume= 2.376 af, Depth= 3.13"

Routed to Reach 364B : To DP-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.543	61	>75% Grass cover, Good, HSG B
0.000	98	Roofs, HSG B
8.562	55	Woods, Good, HSG B
9.105	55	Weighted Average
9.105	55	100.00% Pervious Area

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	100	0.0350	0.10		Sheet Flow, A
					Woods: Light underbrush n= 0.400 P2= 3.30"
1.7	168	0.0101	1.62		Shallow Concentrated Flow, B
					Unpaved Kv= 16.1 fps
18.6	268	Total			

Summary for Subcatchment 230: Subcat 230

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 4.90"
 Routed to Link 231 : DP-2: Brushy Brook

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.037	61	>75% Grass cover, Good, HSG B
0.022	98	Impervious, HSG B
0.020	55	Woods, Good, HSG B
0.079	70	Weighted Average
0.057	59	72.25% Pervious Area
0.022	98	27.75% Impervious Area

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

Summary for Subcatchment 230.1: Half of Lot 12

Runoff = 0.11 cfs @ 12.00 hrs, Volume= 0.008 af, Depth= 8.26"
 Routed to Pond 230.2 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.011	98	Roofs, HSG B
0.011	98	100.00% Impervious Area

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

Summary for Subcatchment 232: Subcat 225

Runoff = 0.48 cfs @ 12.12 hrs, Volume= 0.051 af, Depth= 1.27"
 Routed to Pond 233 : Existing Depression (STA 6+00)

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.116	39	>75% Grass cover, Good, HSG A
0.011	61	>75% Grass cover, Good, HSG B
0.088	30	Brush, Good, HSG A
0.021	48	Brush, Good, HSG B
0.172	30	Woods, Good, HSG A
0.074	55	Woods, Good, HSG B
0.482	38	Weighted Average
0.482	38	100.00% Pervious Area

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

Summary for Subcatchment 234: Subcat 225

Runoff = 0.51 cfs @ 12.11 hrs, Volume= 0.051 af, Depth= 1.37"
 Routed to Pond 235 : Existing Depression (STA 4+00)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.010	39	>75% Grass cover, Good, HSG A
0.200	30	Brush, Good, HSG A
0.008	48	Brush, Good, HSG B
0.069	30	Woods, Good, HSG A
0.155	55	Woods, Good, HSG B
0.442	39	Weighted Average
0.442	39	100.00% Pervious Area

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

Summary for Subcatchment 363: Subcat 363

Runoff = 16.85 cfs @ 12.32 hrs, Volume= 1.878 af, Depth= 3.25"
 Routed to Pond 364 : Existing Depression (STA 19+00)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Area (ac)	CN	Description
1.580	61	>75% Grass cover, Good, HSG B
0.000	98	Roofs, HSG B
5.360	55	Woods, Good, HSG B
6.940	56	Weighted Average
6.940	56	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.9	81	0.0135	0.06		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
0.3	625	0.0256	33.76544	992.44	Trap/Vee/Rect Channel Flow, B Bot.W=500.00' D=16.50' Z= 25.0 & 33.0 ' Top.W=1,457.00' n= 0.035
21.2	706	Total			

Summary for Subcatchment 363.1: Lot 13 & 17

Runoff = 0.47 cfs @ 12.00 hrs, Volume= 0.032 af, Depth= 8.26"
 Routed to Pond 363.2 : Drywell A (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.046	98	Roofs, HSG B
0.046	98	100.00% Impervious Area

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

Summary for Subcatchment 363.3: Lots 14-16 & Half of 12

Runoff = 0.81 cfs @ 12.00 hrs, Volume= 0.055 af, Depth= 8.26"
 Routed to Pond 363.4 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.080	98	Roofs, HSG B
0.080	98	100.00% Impervious Area

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

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Summary for Subcatchment 400: Subcat 400

Runoff = 42.10 cfs @ 12.35 hrs, Volume= 4.897 af, Depth= 3.13"
 Routed to Link 401 : DP-4: NE Abutters

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.919	61	>75% Grass cover, Good, HSG B
0.000	98	Roofs, HSG B
17.848	55	Woods, Good, HSG B
18.767	55	Weighted Average
18.767	55	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.6	100	0.0190	0.08		Sheet Flow, A Woods: Light underbrush n= 0.400 P2= 3.30"
1.6	373	0.0560	3.81		Shallow Concentrated Flow, B Unpaved Kv= 16.1 fps
23.2	473	Total			

Summary for Subcatchment 400.1: Lots 53 & 54, half of 52 & 55

Runoff = 0.70 cfs @ 12.00 hrs, Volume= 0.047 af, Depth= 8.26"
 Routed to Pond 400.2 : Drywell D (1.02 in/hr) (2' Deep)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100-Year Rainfall=8.50"

Area (ac)	CN	Description
0.069	98	Roofs, HSG B
0.069	98	100.00% Impervious Area

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

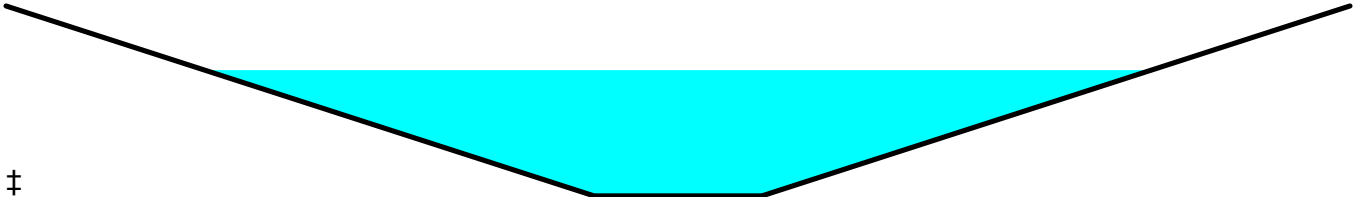
Summary for Reach 102A: Swale A

Inflow Area = 6.672 ac, 23.08% Impervious, Inflow Depth = 4.68" for 100-Year event
 Inflow = 29.34 cfs @ 12.12 hrs, Volume= 2.602 af
 Outflow = 28.99 cfs @ 12.14 hrs, Volume= 2.602 af, Atten= 1%, Lag= 0.9 min
 Routed to Reach 102B : Swale A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.77 fps, Min. Travel Time= 1.2 min
 Avg. Velocity= 1.04 fps, Avg. Travel Time= 4.3 min

Peak Storage= 2,082 cf @ 12.14 hrs
Average Depth at Peak Storage= 1.16' , Surface Width= 11.27'
Bank-Full Depth= 1.75' Flow Area= 15.8 sf, Capacity= 75.75 cfs

2.00' x 1.75' deep channel, n= 0.030
Side Slope Z-value= 4.0 '/' Top Width= 16.00'
Length= 270.7' Slope= 0.0100 '/'
Inlet Invert= 227.10', Outlet Invert= 224.40'



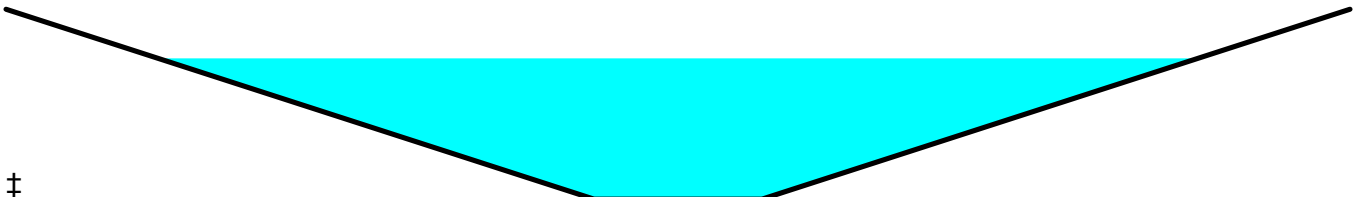
Summary for Reach 102B: Swale A

Inflow Area = 9.563 ac, 16.58% Impervious, Inflow Depth = 4.26" for 100-Year event
Inflow = 37.56 cfs @ 12.15 hrs, Volume= 3.396 af
Outflow = 37.43 cfs @ 12.15 hrs, Volume= 3.396 af, Atten= 0%, Lag= 0.5 min
Routed to Pond 105 : Forebay A (219.5, 224.6)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.01 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 1.10 fps, Avg. Travel Time= 2.6 min

Peak Storage= 1,605 cf @ 12.15 hrs
Average Depth at Peak Storage= 1.30' , Surface Width= 12.38'
Bank-Full Depth= 1.75' Flow Area= 15.8 sf, Capacity= 75.40 cfs

2.00' x 1.75' deep channel, n= 0.030
Side Slope Z-value= 4.0 '/' Top Width= 16.00'
Length= 172.0' Slope= 0.0099 '/'
Inlet Invert= 224.40', Outlet Invert= 222.70'



Summary for Reach 114A: E-Series Wetland

Inflow Area = 1.230 ac, 7.48% Impervious, Inflow Depth = 3.80" for 100-Year event
Inflow = 3.71 cfs @ 12.23 hrs, Volume= 0.390 af
Outflow = 3.57 cfs @ 12.28 hrs, Volume= 0.390 af, Atten= 4%, Lag= 2.9 min
Routed to Reach 114B : E-Series Wetland

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

Max. Velocity= 0.72 fps, Min. Travel Time= 3.9 min

Avg. Velocity = 0.22 fps, Avg. Travel Time= 13.0 min

Peak Storage= 843 cf @ 12.28 hrs

Average Depth at Peak Storage= 0.12' , Surface Width= 62.61'

Bank-Full Depth= 0.20' Flow Area= 10.8 sf, Capacity= 10.89 cfs

81.00' x 0.20' deep Parabolic Channel, n= 0.035 Earth, dense weeds

Length= 169.0' Slope= 0.0083 '/'

Inlet Invert= 247.60', Outlet Invert= 246.20'



Summary for Reach 114B: E-Series Wetland

Inflow Area = 2.204 ac, 4.17% Impervious, Inflow Depth = 3.50" for 100-Year event

Inflow = 5.78 cfs @ 12.12 hrs, Volume= 0.644 af

Outflow = 5.22 cfs @ 12.31 hrs, Volume= 0.644 af, Atten= 10%, Lag= 11.0 min

Routed to Reach 114C : Upland

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

Max. Velocity= 0.81 fps, Min. Travel Time= 8.2 min

Avg. Velocity = 0.20 fps, Avg. Travel Time= 34.0 min

Peak Storage= 2,564 cf @ 12.31 hrs

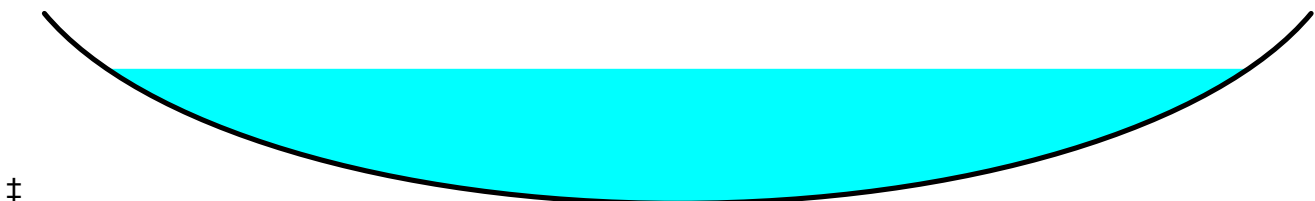
Average Depth at Peak Storage= 0.14' , Surface Width= 68.13'

Bank-Full Depth= 0.20' Flow Area= 10.8 sf, Capacity= 11.05 cfs

81.00' x 0.20' deep Parabolic Channel, n= 0.035 Earth, dense weeds

Length= 399.0' Slope= 0.0085 '/'

Inlet Invert= 246.20', Outlet Invert= 242.80'



Summary for Reach 114C: Upland

Inflow Area = 2.204 ac, 4.17% Impervious, Inflow Depth = 3.50" for 100-Year event

Inflow = 5.22 cfs @ 12.31 hrs, Volume= 0.644 af

Outflow = 5.22 cfs @ 12.31 hrs, Volume= 0.644 af, Atten= 0%, Lag= 0.4 min

Routed to Reach 114D : Roadway Swale

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

Max. Velocity= 3.16 fps, Min. Travel Time= 0.5 min

Avg. Velocity = 1.03 fps, Avg. Travel Time= 1.5 min

Peak Storage= 153 cf @ 12.31 hrs

Average Depth at Peak Storage= 0.25' , Surface Width= 11.18'

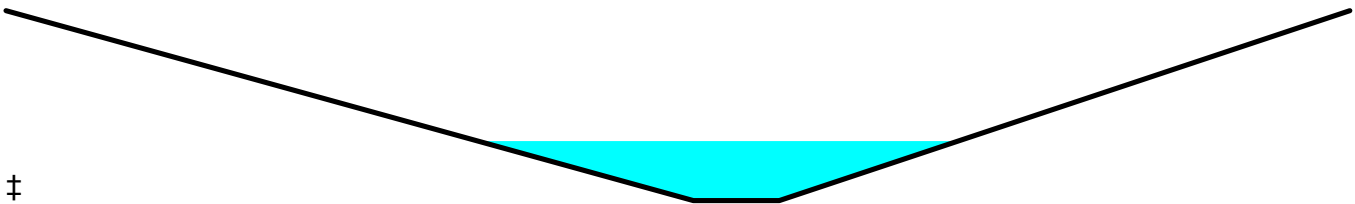
Bank-Full Depth= 0.80' Flow Area= 13.3 sf, Capacity= 85.00 cfs

2.00' x 0.80' deep channel, n= 0.030 Earth, grassed & winding

Side Slope Z-value= 20.0 16.6 '/' Top Width= 31.28'

Length= 92.3' Slope= 0.0520 '/'

Inlet Invert= 242.80', Outlet Invert= 238.00'



Summary for Reach 114D: Roadway Swale

Inflow Area = 6.661 ac, 22.95% Impervious, Inflow Depth = 4.68" for 100-Year event

Inflow = 29.34 cfs @ 12.12 hrs, Volume= 2.596 af

Outflow = 29.30 cfs @ 12.12 hrs, Volume= 2.596 af, Atten= 0%, Lag= 0.3 min

Routed to Pond 101 : 2 x 24" Pipe

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

Max. Velocity= 7.35 fps, Min. Travel Time= 0.4 min

Avg. Velocity = 2.07 fps, Avg. Travel Time= 1.4 min

Peak Storage= 701 cf @ 12.12 hrs

Average Depth at Peak Storage= 0.78' , Surface Width= 8.23'

Bank-Full Depth= 1.50' Flow Area= 12.0 sf, Capacity= 128.82 cfs

2.00' x 1.50' deep channel, n= 0.030 Earth, grassed & winding

Side Slope Z-value= 4.0 '/' Top Width= 14.00'

Length= 175.8' Slope= 0.0597 '/'

Inlet Invert= 238.00', Outlet Invert= 227.50'



Summary for Reach 115A: E-Series Wetland

Inflow Area = 0.974 ac, 0.00% Impervious, Inflow Depth = 3.13" for 100-Year event
Inflow = 3.47 cfs @ 12.09 hrs, Volume= 0.254 af
Outflow = 3.44 cfs @ 12.10 hrs, Volume= 0.254 af, Atten= 1%, Lag= 0.6 min
Routed to Reach 114B : E-Series Wetland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.06 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 0.37 fps, Avg. Travel Time= 2.3 min

Peak Storage= 168 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 54.20'
Bank-Full Depth= 0.20' Flow Area= 10.8 sf, Capacity= 19.64 cfs

81.00' x 0.20' deep Parabolic Channel, n= 0.035 Earth, dense weeds
Length= 52.0' Slope= 0.0269 '/'
Inlet Invert= 247.60', Outlet Invert= 246.20'



Summary for Reach 364A: To DP-2

Inflow Area = 7.066 ac, 1.78% Impervious, Inflow Depth = 3.30" for 100-Year event
Inflow = 4.94 cfs @ 12.90 hrs, Volume= 1.946 af
Outflow = 4.94 cfs @ 12.93 hrs, Volume= 1.946 af, Atten= 0%, Lag= 1.4 min
Routed to Reach 364B : To DP-2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.87 fps, Min. Travel Time= 1.4 min
Avg. Velocity = 1.87 fps, Avg. Travel Time= 1.4 min

Peak Storage= 401 cf @ 12.93 hrs
Average Depth at Peak Storage= 0.01' , Surface Width= 500.30'
Bank-Full Depth= 16.50' Flow Area= 16,145.3 sf, Capacity= 502,646.54 cfs

500.00' x 16.50' deep channel, n= 0.035
Side Slope Z-value= 25.0 33.0 '/' Top Width= 1,457.00'
Length= 152.0' Slope= 0.0218 '/'
Inlet Invert= 193.21', Outlet Invert= 189.90'



Summary for Reach 364B: To DP-2

Inflow Area = 16.171 ac, 0.78% Impervious, Inflow Depth = 3.21" for 100-Year event
Inflow = 26.13 cfs @ 12.28 hrs, Volume= 4.322 af
Outflow = 25.31 cfs @ 12.34 hrs, Volume= 4.322 af, Atten= 3%, Lag= 3.3 min
Routed to Link 231 : DP-2: Brushy Brook

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.18 fps, Min. Travel Time= 3.1 min
Avg. Velocity = 2.18 fps, Avg. Travel Time= 3.1 min

Peak Storage= 4,703 cf @ 12.34 hrs
Average Depth at Peak Storage= 0.02' , Surface Width= 501.34'
Bank-Full Depth= 16.50' Flow Area= 16,145.3 sf, Capacity= 584,231.15 cfs

500.00' x 16.50' deep channel, n= 0.035
Side Slope Z-value= 25.0 33.0 '/' Top Width= 1,457.00'
Length= 404.5' Slope= 0.0294 '/'
Inlet Invert= 189.90', Outlet Invert= 178.00'



Summary for Reach 500: Northwest Wetland

Inflow Area = 45.161 ac, 4.55% Impervious, Inflow Depth = 3.35" for 100-Year event
Inflow = 95.71 cfs @ 12.39 hrs, Volume= 12.609 af
Outflow = 69.62 cfs @ 12.67 hrs, Volume= 12.609 af, Atten= 27%, Lag= 16.6 min
Routed to Reach 502 : Brushy Brook - To Dye Hill Road

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.40 fps, Min. Travel Time= 25.0 min
Avg. Velocity = 1.04 fps, Avg. Travel Time= 81.7 min

Peak Storage= 104,584 cf @ 12.67 hrs
Average Depth at Peak Storage= 0.49' , Surface Width= 62.44'
Bank-Full Depth= 4.00' Flow Area= 474.7 sf, Capacity= 6,500.92 cfs

178.00' x 4.00' deep Parabolic Channel, n= 0.040
Length= 5,100.6' Slope= 0.0368 '/'
Inlet Invert= 335.80', Outlet Invert= 148.00'



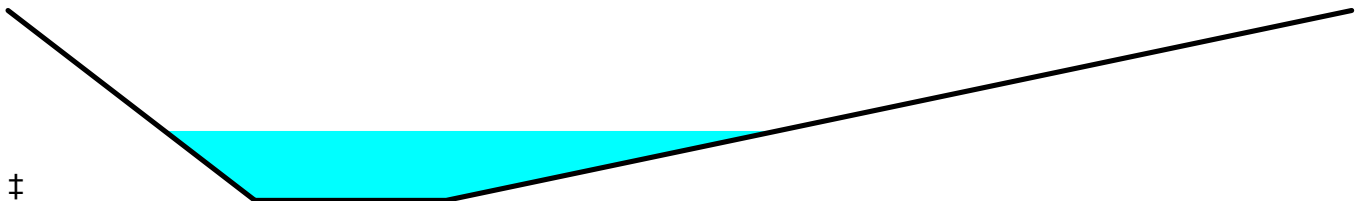
Summary for Reach 501: Brushy Brook

Inflow Area = 35.977 ac, 4.50% Impervious, Inflow Depth = 2.49" for 100-Year event
 Inflow = 56.43 cfs @ 12.21 hrs, Volume= 7.469 af
 Outflow = 53.97 cfs @ 12.30 hrs, Volume= 7.469 af, Atten= 4%, Lag= 5.6 min
 Routed to Reach 502 : Brushy Brook - To Dye Hill Road

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.40 fps, Min. Travel Time= 5.3 min
 Avg. Velocity = 1.12 fps, Avg. Travel Time= 16.2 min

Peak Storage= 17,163 cf @ 12.30 hrs
 Average Depth at Peak Storage= 0.63' , Surface Width= 38.42'
 Bank-Full Depth= 1.72' Flow Area= 82.8 sf, Capacity= 502.04 cfs

12.00' x 1.72' deep channel, n= 0.040
 Side Slope Z-value= 9.0 33.0 '/' Top Width= 84.24'
 Length= 1,082.4' Slope= 0.0273 '/'
 Inlet Invert= 177.60', Outlet Invert= 148.00'



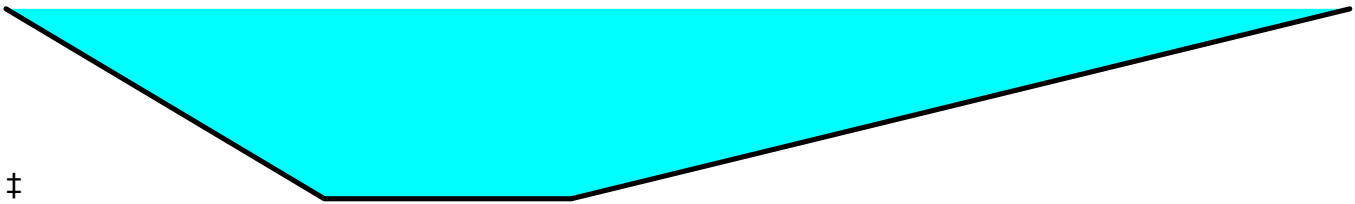
Summary for Reach 502: Brushy Brook - To Dye Hill Road

Inflow Area = 1,905.188 ac, 0.61% Impervious, Inflow Depth > 3.23" for 100-Year event
 Inflow = 241.21 cfs @ 33.29 hrs, Volume= 513.461 af
 Outflow = 241.00 cfs @ 33.38 hrs, Volume= 513.431 af, Atten= 0%, Lag= 5.1 min
 Routed to Reach 503 : Brushy Brook - From Dye Hill Road

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 2.75 fps, Min. Travel Time= 6.6 min
 Avg. Velocity = 1.62 fps, Avg. Travel Time= 11.3 min

Peak Storage= 96,056 cf @ 33.38 hrs
 Average Depth at Peak Storage= 2.05' , Surface Width= 75.45'
 Bank-Full Depth= 1.72' Flow Area= 66.5 sf, Capacity= 168.72 cfs

12.00' x 1.72' deep channel, n= 0.040
 Side Slope Z-value= 9.0 22.0 '/' Top Width= 65.32'
 Length= 1,094.7' Slope= 0.0046 '/'
 Inlet Invert= 150.00', Outlet Invert= 145.00'



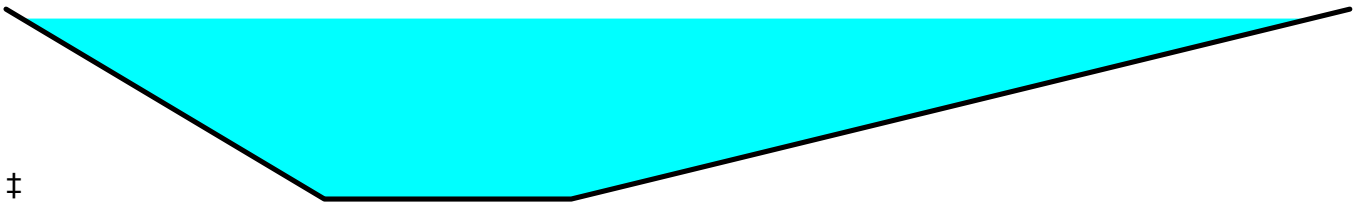
Summary for Reach 503: Brushy Brook - From Dye Hill Road

Inflow Area = 1,905.188 ac, 0.61% Impervious, Inflow Depth > 3.23" for 100-Year event
 Inflow = 241.00 cfs @ 33.38 hrs, Volume= 513.431 af
 Outflow = 240.92 cfs @ 33.46 hrs, Volume= 513.400 af, Atten= 0%, Lag= 5.2 min
 Routed to Link 506 : Site Convergence

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.95 fps, Min. Travel Time= 6.1 min
 Avg. Velocity = 2.29 fps, Avg. Travel Time= 10.5 min

Peak Storage= 88,611 cf @ 33.46 hrs
 Average Depth at Peak Storage= 1.64' , Surface Width= 62.69'
 Bank-Full Depth= 1.72' Flow Area= 66.5 sf, Capacity= 270.20 cfs

12.00' x 1.72' deep channel, n= 0.040
 Side Slope Z-value= 9.0 22.0 '/' Top Width= 65.32'
 Length= 1,451.2' Slope= 0.0117 '/'
 Inlet Invert= 145.00', Outlet Invert= 128.00'



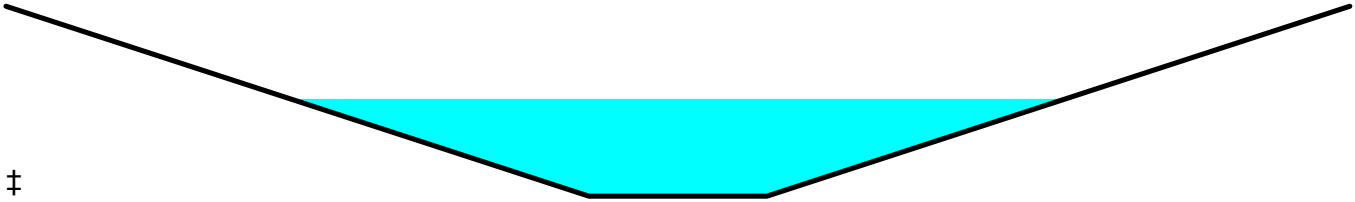
Summary for Reach 504: Unnamed Stream - To Dye Hill Road

Inflow Area = 239.106 ac, 3.24% Impervious, Inflow Depth = 3.25" for 100-Year event
 Inflow = 364.52 cfs @ 12.81 hrs, Volume= 64.697 af
 Outflow = 361.46 cfs @ 12.86 hrs, Volume= 64.697 af, Atten= 1%, Lag= 3.2 min
 Routed to Pond 505 : Culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 5.99 fps, Min. Travel Time= 4.0 min
 Avg. Velocity = 1.73 fps, Avg. Travel Time= 14.0 min

Peak Storage= 87,605 cf @ 12.86 hrs
 Average Depth at Peak Storage= 2.05' , Surface Width= 47.89'
 Bank-Full Depth= 4.00' Flow Area= 188.0 sf, Capacity= 1,664.02 cfs

11.00' x 4.00' deep channel, n= 0.040
 Side Slope Z-value= 9.0 '/' Top Width= 83.00'
 Length= 1,451.7' Slope= 0.0192 '/'
 Inlet Invert= 155.90', Outlet Invert= 128.00'



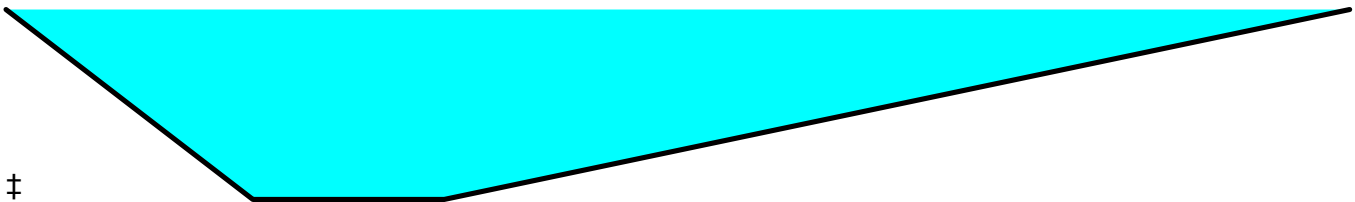
Summary for Reach 507: Brushy Brook

Inflow Area = 2,144.293 ac, 0.90% Impervious, Inflow Depth > 3.24" for 100-Year event
 Inflow = 459.30 cfs @ 12.84 hrs, Volume= 578.097 af
 Outflow = 433.51 cfs @ 13.00 hrs, Volume= 578.040 af, Atten= 6%, Lag= 9.1 min
 Routed to Link POST : Brushy Brook/Sawmill Road Crossing

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Max. Velocity= 3.09 fps, Min. Travel Time= 9.9 min
 Avg. Velocity = 1.69 fps, Avg. Travel Time= 18.1 min

Peak Storage= 257,281 cf @ 13.00 hrs
 Average Depth at Peak Storage= 2.41' , Surface Width= 113.16'
 Bank-Full Depth= 1.72' Flow Area= 82.8 sf, Capacity= 224.36 cfs

12.00' x 1.72' deep channel, n= 0.040 Winding stream, pools & shoals
 Side Slope Z-value= 9.0 33.0 '/' Top Width= 84.24'
 Length= 1,831.0' Slope= 0.0055 '/'
 Inlet Invert= 128.00', Outlet Invert= 118.00'



Summary for Pond 100.2: Drywell D (1.02 in/hr) (2' Deep)

Inflow Area = 0.011 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event
 Inflow = 0.11 cfs @ 12.00 hrs, Volume= 0.008 af
 Outflow = 0.11 cfs @ 12.00 hrs, Volume= 0.008 af, Atten= 1%, Lag= 0.2 min
 Discarded = 0.00 cfs @ 3.01 hrs, Volume= 0.002 af
 Primary = 0.11 cfs @ 12.00 hrs, Volume= 0.006 af
 Routed to Pond 101 : 2 x 24" Pipe

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= 28 sf Storage= 21 cf

Plug-Flow detention time= 72.2 min calculated for 0.008 af (100% of inflow)

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Center-of-Mass det. time= 72.2 min (807.1 - 734.9)

Volume	Invert	Avail.Storage	Storage Description
#1	997.00'	18 cf	Drywell Storage (Prismatic) Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		29 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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 3.01 hrs HW=997.04' (Free Discharge)
 ↳1=**Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.11 cfs @ 12.00 hrs HW=1,000.10' TW=228.96' (Dynamic Tailwater)
 ↳2=**Dome Grate** (Weir Controls 0.11 cfs @ 1.04 fps)

Summary for Pond 101: 2 x 24" Pipe

Inflow Area = 6.672 ac, 23.08% Impervious, Inflow Depth = 4.68" for 100-Year event
 Inflow = 29.34 cfs @ 12.12 hrs, Volume= 2.602 af
 Outflow = 29.34 cfs @ 12.12 hrs, Volume= 2.602 af, Atten= 0%, Lag= 0.0 min
 Primary = 29.34 cfs @ 12.12 hrs, Volume= 2.602 af
 Routed to Reach 102A : Swale A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 229.76' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	227.56'	24.00" Round Culvert X 2.00 L= 86.3' Ke= 0.500 Inlet / Outlet Invert= 227.56' / 227.10' S= 0.0053 '/ Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=29.30 cfs @ 12.12 hrs HW=229.76' TW=228.25' (Dynamic Tailwater)
 ↳1=**Culvert** (Barrel Controls 29.30 cfs @ 5.29 fps)

Summary for Pond 103.2: 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 Reach 102B : Swale A

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	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#2	997.00'	38 cf	Drywell Storage (Prismatic) Listed below (Recalc) 116 cf Overall x 33.0% Voids
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Orifice 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=225.32' (Dynamic Tailwater)
 ↑2=Dome Orifice (Orifice Controls 0.22 cfs @ 2.55 fps)

Summary for Pond 103.4: Drywell D (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 = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Atten= 1%, Lag= 0.2 min
 Discarded = 0.00 cfs @ 2.87 hrs, Volume= 0.003 af
 Primary = 0.23 cfs @ 12.00 hrs, Volume= 0.012 af
 Routed to Reach 102B : Swale A

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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= 56 sf Storage= 41 cf

Plug-Flow detention time= 69.7 min calculated for 0.016 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	Drywell Storage (Prismatic) Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		29 cf	x 2.00 = 57 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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 2.00 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=0.23 cfs @ 12.00 hrs HW=1,000.10' TW=225.30' (Dynamic Tailwater)

↑**2=Dome Grate** (Weir Controls 0.23 cfs @ 1.05 fps)

Summary for Pond 105: Forebay A (219.5, 224.6)

Inflow Area = 9.652 ac, 16.43% Impervious, Inflow Depth = 4.26" for 100-Year event
 Inflow = 37.64 cfs @ 12.15 hrs, Volume= 3.427 af
 Outflow = 37.64 cfs @ 12.15 hrs, Volume= 3.427 af, Atten= 0%, Lag= 0.0 min
 Primary = 37.64 cfs @ 12.15 hrs, Volume= 3.427 af
 Routed to Pond 108 : WQ Pond A (219.5, 224.50)(1.02 in/hr)

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

Peak Elev= 223.62' @ 12.17 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	222.50'	10.0' 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

Primary OutFlow Max=37.16 cfs @ 12.15 hrs HW=223.61' TW=222.77' (Dynamic Tailwater)

↑1=**Broad-Crested Rectangular Weir** (Weir Controls 37.16 cfs @ 3.34 fps)

Summary for Pond 108: WQ Pond A (219.5, 224.5)(1.02 in/hr)

Inflow Area = 10.094 ac, 15.71% Impervious, Inflow Depth = 4.23" for 100-Year event
 Inflow = 38.91 cfs @ 12.15 hrs, Volume= 3.558 af
 Outflow = 35.67 cfs @ 12.15 hrs, Volume= 3.558 af, Atten= 8%, Lag= 0.0 min
 Discarded = 0.07 cfs @ 12.43 hrs, Volume= 0.174 af
 Primary = 35.61 cfs @ 12.15 hrs, Volume= 3.385 af
 Routed to Pond 111 : QP Pond A (220, 224.5)(1.02in/hr)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 223.42' @ 12.43 hrs Surf.Area= 3,072 sf Storage= 7,484 cf

Plug-Flow detention time= 48.9 min calculated for 3.558 af (100% of inflow)
 Center-of-Mass det. time= 49.1 min (888.2 - 839.1)

Volume	Invert	Avail.Storage	Storage Description
#1	219.50'	11,197 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
219.50	883	0	0
220.00	1,111	499	499
222.00	2,165	3,276	3,775
224.00	3,446	5,611	9,386
224.50	3,801	1,812	11,197

Device	Routing	Invert	Outlet Devices
#1	Discarded	219.50'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	222.20'	51.5' long x 16.0' 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

Discarded OutFlow Max=0.07 cfs @ 12.43 hrs HW=223.42' (Free Discharge)

↑1=**Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=26.33 cfs @ 12.15 hrs HW=222.73' TW=222.67' (Dynamic Tailwater)

↑2=**Broad-Crested Rectangular Weir** (Weir Controls 26.33 cfs @ 0.97 fps)

Summary for Pond 111: QP Pond A (220, 224.5)(1.02in/hr)

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Inflow Area = 11.361 ac, 13.96% Impervious, Inflow Depth = 4.03" for 100-Year event
 Inflow = 39.51 cfs @ 12.15 hrs, Volume= 3.812 af
 Outflow = 23.09 cfs @ 12.42 hrs, Volume= 3.812 af, Atten= 42%, Lag= 16.3 min
 Discarded = 0.31 cfs @ 12.42 hrs, Volume= 0.466 af
 Primary = 22.78 cfs @ 12.42 hrs, Volume= 3.347 af
 Routed to Link 117 : DP-1: NW Wetland
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link 117 : DP-1: NW Wetland

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 223.41' @ 12.42 hrs Surf.Area= 13,194 sf Storage= 37,338 cf

Plug-Flow detention time= 71.5 min calculated for 3.812 af (100% of inflow)
 Center-of-Mass det. time= 71.5 min (913.3 - 841.7)

Volume	Invert	Avail.Storage	Storage Description
#1	220.00'	52,485 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
220.00	8,776	0	0
222.00	11,271	20,047	20,047
224.00	13,992	25,263	45,310
224.50	14,707	7,175	52,485

Device	Routing	Invert	Outlet Devices
#1	Discarded	220.00'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	220.65'	36.00" Round Culvert L= 33.5' CPP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 220.65' / 219.50' S= 0.0343 ' / ' Cc= 0.900 n= 0.012, Flow Area= 7.07 sf
#3	Device 2	220.65'	24.00" W x 13.00" H Vert. Orifice #1 C= 0.600 Limited to weir flow at low heads
#4	Device 2	222.25'	24.00" W x 11.00" H Vert. Orifice #2 C= 0.600 Limited to weir flow at low heads
#5	Secondary	223.50'	25.0' long x 14.0' breadth Emergency Overflow Weir 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=0.31 cfs @ 12.42 hrs HW=223.41' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.31 cfs)

Primary OutFlow Max=22.78 cfs @ 12.42 hrs HW=223.41' TW=0.00' (Dynamic Tailwater)
 ↑ **2=Culvert** (Passes 22.78 cfs of 34.00 cfs potential flow)
 ↑ **3=Orifice #1** (Orifice Controls 15.51 cfs @ 7.16 fps)
 ↑ **4=Orifice #2** (Orifice Controls 7.27 cfs @ 3.97 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=220.00' TW=0.00' (Dynamic Tailwater)
 ↑ **5=Emergency Overflow Weir** (Controls 0.00 cfs)

Summary for Pond 114.2: Drywell B (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 @ 4.97 hrs, Volume= 0.005 af
 Primary = 0.22 cfs @ 12.01 hrs, Volume= 0.011 af
 Routed to Reach 114A : E-Series 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= 95 sf Storage= 37 cf

Plug-Flow detention time= 49.0 min calculated for 0.016 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	Drywell Storage (Prismatic) Listed below (Recalc) 95 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		41 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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 4.97 hrs HW=998.03' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.22 cfs @ 12.01 hrs HW=1,000.28' TW=247.68' (Dynamic Tailwater)
 ↑2=Dome Grate (Orifice Controls 0.22 cfs @ 2.54 fps)

Summary for Pond 114.4: 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 114A : E-Series Wetland

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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	Drywell Storage (Prismatic) Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 6.00 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=0.69 cfs @ 12.00 hrs HW=1,000.10' TW=247.68' (Dynamic Tailwater)
 ↑**2=Dome Grate** (Weir Controls 0.69 cfs @ 1.05 fps)

Summary for Pond 116.1: Drywell A (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 = 0.45 cfs @ 12.01 hrs, Volume= 0.032 af, Atten= 4%, Lag= 0.6 min
 Discarded = 0.00 cfs @ 2.98 hrs, Volume= 0.007 af
 Primary = 0.45 cfs @ 12.01 hrs, Volume= 0.025 af
 Routed to Link 117 : DP-1: NW 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= 116 sf Storage= 88 cf

Plug-Flow detention time= 71.4 min calculated for 0.032 af (100% of inflow)
 Center-of-Mass det. time= 71.4 min (806.3 - 734.9)

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Volume	Invert	Avail.Storage	Storage Description
#1	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#2	997.00'	38 cf	Drywell Storage (Prismatic) Listed below (Recalc) 116 cf Overall x 33.0% Voids
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		48 cf	x 2.00 = 97 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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Orifice X 2.00 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=0.44 cfs @ 12.01 hrs HW=1,000.28' TW=0.00' (Dynamic Tailwater)
 ↳2=Dome Orifice (Orifice Controls 0.44 cfs @ 2.55 fps)

Summary for Pond 116.3: Drywell B (1.02 in/hr) (1' 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 = 0.45 cfs @ 12.01 hrs, Volume= 0.032 af, Atten= 4%, Lag= 0.6 min
 Discarded = 0.00 cfs @ 4.97 hrs, Volume= 0.009 af
 Primary = 0.44 cfs @ 12.01 hrs, Volume= 0.022 af
 Routed to Link 117 : DP-1: NW 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= 190 sf Storage= 74 cf

Plug-Flow detention time= 49.0 min calculated for 0.032 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	Drywell Storage (Prismatic) Listed below (Recalc) 95 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		41 cf	x 2.00 = 83 cf Total Available Storage

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 2.00 C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 4.97 hrs HW=998.03' (Free Discharge)

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

Primary OutFlow Max=0.44 cfs @ 12.01 hrs HW=1,000.28' TW=0.00' (Dynamic Tailwater)

↑**2=Dome Grate** (Orifice Controls 0.44 cfs @ 2.54 fps)

Summary for Pond 116.5: Drywell C (1.02 in/hr) (0.5' 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 = 0.42 cfs @ 12.02 hrs, Volume= 0.032 af, Atten= 10%, Lag= 1.1 min
 Discarded = 0.01 cfs @ 7.26 hrs, Volume= 0.014 af
 Primary = 0.42 cfs @ 12.02 hrs, Volume= 0.018 af
 Routed to Link 117 : DP-1: NW Wetland

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= 310 sf Storage= 131 cf

Plug-Flow detention time= 63.9 min calculated for 0.032 af (100% of inflow)
 Center-of-Mass det. time= 63.9 min (798.8 - 734.9)

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

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 2.00 C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 7.26 hrs HW=998.52' (Free Discharge)

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

Primary OutFlow Max=0.41 cfs @ 12.02 hrs HW=1,000.24' TW=0.00' (Dynamic Tailwater)

↑**2=Dome Grate** (Orifice Controls 0.41 cfs @ 2.38 fps)

Summary for Pond 116.7: Drywell D (1.02 in/hr) (2' Deep)

Inflow Area = 0.310 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event
 Inflow = 3.16 cfs @ 12.00 hrs, Volume= 0.213 af
 Outflow = 3.12 cfs @ 12.00 hrs, Volume= 0.213 af, Atten= 1%, Lag= 0.2 min
 Discarded = 0.02 cfs @ 2.88 hrs, Volume= 0.045 af
 Primary = 3.10 cfs @ 12.00 hrs, Volume= 0.168 af
 Routed to Link 117 : DP-1: NW Wetland

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= 756 sf Storage= 558 cf

Plug-Flow detention time= 69.8 min calculated for 0.213 af (100% of inflow)

Center-of-Mass det. time= 69.8 min (804.8 - 734.9)

Volume	Invert	Avail.Storage	Storage Description
#1	997.00'	18 cf	Drywell Storage (Prismatic) Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		29 cf	x 27.00 = 772 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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 27.00 C= 0.600

Limited to weir flow at low heads

Discarded OutFlow Max=0.02 cfs @ 2.88 hrs HW=997.04' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=3.08 cfs @ 12.00 hrs HW=1,000.10' TW=0.00' (Dynamic Tailwater)

↑2=Dome Grate (Weir Controls 3.08 cfs @ 1.05 fps)

Summary for Pond 116.9: Drywell E (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 = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Atten= 1%, Lag= 0.2 min
 Discarded = 0.00 cfs @ 4.65 hrs, Volume= 0.005 af
 Primary = 0.23 cfs @ 12.00 hrs, Volume= 0.011 af
 Routed to Link 117 : DP-1: NW Wetland

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= 90 sf Storage= 34 cf

Plug-Flow detention time= 47.7 min calculated for 0.016 af (100% of inflow)
 Center-of-Mass det. time= 47.7 min (782.6 - 734.9)

Volume	Invert	Avail.Storage	Storage Description
#1	998.00'	15 cf	Drywell Storage (Prismatic) Listed below (Recalc) 45 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		25 cf	x 2.00 = 50 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
998.00	45	0	0
999.00	45	45	45

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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 2.00 C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 4.65 hrs HW=998.03' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.23 cfs @ 12.00 hrs HW=1,000.10' TW=0.00' (Dynamic Tailwater)

↑2=Dome Grate (Weir Controls 0.23 cfs @ 1.05 fps)

Summary for Pond 201: 12" Pipe

Inflow Area = 0.150 ac, 41.07% Impervious, Inflow Depth = 4.18" for 100-Year event
 Inflow = 0.73 cfs @ 12.09 hrs, Volume= 0.052 af
 Outflow = 0.73 cfs @ 12.09 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.73 cfs @ 12.09 hrs, Volume= 0.052 af
 Routed to Pond 204 : Forebay B (162.5, 166.25)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 165.72' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	164.57'	12.00" Round Culvert L= 64.8' Ke= 0.500 Inlet / Outlet Invert= 164.57' / 164.25' S= 0.0049 '/ Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.63 cfs @ 12.09 hrs HW=165.69' TW=165.65' (Dynamic Tailwater)
 ←1=Culvert (Outlet Controls 0.63 cfs @ 0.90 fps)

Summary for Pond 203.2: Drywell D (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 = 0.23 cfs @ 12.00 hrs, Volume= 0.016 af, Atten= 1%, Lag= 0.2 min
 Discarded = 0.00 cfs @ 2.87 hrs, Volume= 0.003 af
 Primary = 0.23 cfs @ 12.00 hrs, Volume= 0.012 af
 Routed to Pond 204 : Forebay B (162.5, 166.25)

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= 56 sf Storage= 41 cf

Plug-Flow detention time= 69.7 min calculated for 0.016 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	Drywell Storage (Prismatic) Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
		29 cf	x 2.00 = 57 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

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Device	Routing	Invert	Outlet Devices
#1	Discarded	997.00'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 2.00 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=0.23 cfs @ 12.00 hrs HW=1,000.10' TW=165.54' (Dynamic Tailwater)↑**2=Dome Grate** (Weir Controls 0.23 cfs @ 1.05 fps)**Summary for Pond 204: Forebay B (162.5, 166.25)**

Inflow Area = 3.518 ac, 28.13% Impervious, Inflow Depth = 4.75" for 100-Year event
 Inflow = 16.81 cfs @ 12.14 hrs, Volume= 1.392 af
 Outflow = 16.81 cfs @ 12.14 hrs, Volume= 1.392 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.63 cfs @ 12.14 hrs, Volume= 0.772 af
 Routed to Pond 206 : WQ Pond B (164, 165.5) (2.41 in/hr)
 Secondary = 15.17 cfs @ 12.14 hrs, Volume= 0.619 af
 Routed to Pond 209 : QP Pond B (163.5, 165.5) (2.41in/hr)

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

Peak Elev= 165.68' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	164.50'	6.00" Round Culvert X 2.00 L= 15.5' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 164.50' / 164.50' S= 0.0000 1' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#2	Secondary	165.30'	22.0' 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

Primary OutFlow Max=1.63 cfs @ 12.14 hrs HW=165.68' TW=164.53' (Dynamic Tailwater)↑**1=Culvert** (Barrel Controls 1.63 cfs @ 4.16 fps)**Secondary OutFlow** Max=15.17 cfs @ 12.14 hrs HW=165.68' TW=164.26' (Dynamic Tailwater)↑**2=Broad-Crested Rectangular Weir** (Weir Controls 15.17 cfs @ 1.80 fps)**Summary for Pond 206: WQ Pond B (164, 165.5) (2.41 in/hr)**

Inflow Area = 3.658 ac, 27.05% Impervious, Inflow Depth = 2.73" for 100-Year event
 Inflow = 2.50 cfs @ 12.00 hrs, Volume= 0.833 af
 Outflow = 2.38 cfs @ 12.03 hrs, Volume= 0.833 af, Atten= 5%, Lag= 1.8 min
 Discarded = 0.22 cfs @ 12.03 hrs, Volume= 0.308 af
 Primary = 2.16 cfs @ 12.03 hrs, Volume= 0.526 af
 Routed to Pond 209 : QP Pond B (163.5, 165.5) (2.41in/hr)

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

Peak Elev= 164.53' @ 12.03 hrs Surf.Area= 3,878 sf Storage= 1,962 cf

Plug-Flow detention time= 42.3 min calculated for 0.833 af (100% of inflow)

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Center-of-Mass det. time= 42.3 min (935.9 - 893.6)

Volume	Invert	Avail.Storage	Storage Description
#1	164.00'	6,065 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
164.00	3,471	0	0
165.50	4,615	6,065	6,065

Device	Routing	Invert	Outlet Devices
#1	Discarded	164.00'	2.410 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	164.45'	35.0' long x 11.3' 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) 2.54 2.60 2.70 2.68 2.67 2.68 2.66 2.64

Discarded OutFlow Max=0.22 cfs @ 12.03 hrs HW=164.53' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.22 cfs)

Primary OutFlow Max=2.16 cfs @ 12.03 hrs HW=164.53' TW=164.12' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 2.16 cfs @ 0.74 fps)

Summary for Pond 209: QP Pond B (163.5, 165.5) (2.41in/hr)

Inflow Area = 4.703 ac, 21.04% Impervious, Inflow Depth = 3.30" for 100-Year event
 Inflow = 18.11 cfs @ 12.14 hrs, Volume= 1.294 af
 Outflow = 17.71 cfs @ 12.17 hrs, Volume= 1.294 af, Atten= 2%, Lag= 1.5 min
 Discarded = 0.27 cfs @ 12.17 hrs, Volume= 0.225 af
 Primary = 17.44 cfs @ 12.17 hrs, Volume= 1.069 af
 Routed to Link 231 : DP-2: Brushy Brook

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 164.27' @ 12.17 hrs Surf.Area= 4,850 sf Storage= 3,004 cf

Plug-Flow detention time= 13.6 min calculated for 1.294 af (100% of inflow)
 Center-of-Mass det. time= 13.6 min (820.9 - 807.3)

Volume	Invert	Avail.Storage	Storage Description
#1	163.50'	9,797 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
163.50	2,374	0	0
164.00	4,553	1,732	1,732
165.50	6,201	8,066	9,797

Device	Routing	Invert	Outlet Devices
#1	Discarded	163.50'	2.410 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	163.80'	20.0' long x 20.2' 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

Discarded OutFlow Max=0.27 cfs @ 12.17 hrs HW=164.27' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.27 cfs)

Primary OutFlow Max=17.42 cfs @ 12.17 hrs HW=164.27' TW=0.00' (Dynamic Tailwater)

↑2=Broad-Crested Rectangular Weir (Weir Controls 17.42 cfs @ 1.85 fps)

Summary for Pond 211: 12" Pipe

Inflow Area = 0.247 ac, 35.43% Impervious, Inflow Depth = 4.18" for 100-Year event
 Inflow = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af
 Outflow = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af
 Routed to Pond 215 : Forebay C (146, 150.5)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 149.29' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	148.32'	12.00" Round Culvert L= 64.1' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 148.32' / 148.00' S= 0.0050 1' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.07 cfs @ 12.09 hrs HW=149.21' TW=149.05' (Dynamic Tailwater)

↑1=Culvert (Outlet Controls 1.07 cfs @ 1.92 fps)

Summary for Pond 215: Forebay C (146, 150.5)

Inflow Area = 0.648 ac, 26.08% Impervious, Inflow Depth = 3.73" for 100-Year event
 Inflow = 2.77 cfs @ 12.09 hrs, Volume= 0.201 af
 Outflow = 2.77 cfs @ 12.09 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.77 cfs @ 12.09 hrs, Volume= 0.201 af
 Routed to Pond 218 : WQ Pond C (147.5, 150.5) (8.27in/hr)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 149.17' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	148.00'	6.0' 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

Primary OutFlow Max=0.00 cfs @ 12.09 hrs HW=149.05' TW=149.08' (Dynamic Tailwater)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 218: WQ Pond C (147.5, 150.5) (8.27in/hr)

Inflow Area = 1.084 ac, 15.60% Impervious, Inflow Depth = 3.04" for 100-Year event
 Inflow = 3.61 cfs @ 12.09 hrs, Volume= 0.275 af
 Outflow = 3.22 cfs @ 12.14 hrs, Volume= 0.275 af, Atten= 11%, Lag= 2.6 min
 Discarded = 0.12 cfs @ 12.14 hrs, Volume= 0.082 af
 Primary = 3.10 cfs @ 12.14 hrs, Volume= 0.193 af
 Routed to Pond 224 : 15" Pipe

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 149.17' @ 12.14 hrs Surf.Area= 638 sf Storage= 699 cf

Plug-Flow detention time= 12.7 min calculated for 0.275 af (100% of inflow)
 Center-of-Mass det. time= 12.8 min (864.4 - 851.7)

Volume	Invert	Avail.Storage	Storage Description
#1	147.50'	1,795 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
147.50	224	0	0
148.00	323	137	137
150.00	862	1,185	1,322
150.50	1,032	474	1,795

Device	Routing	Invert	Outlet Devices
#1	Discarded	147.50'	8.270 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Device 3	148.00'	12.00" Round Culvert L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 148.00' / 147.61' S= 0.0087 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#3	Device 4	147.61'	12.00" Round Culvert L= 129.8' Ke= 0.500 Inlet / Outlet Invert= 147.61' / 144.09' S= 0.0271 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#4	Primary	144.09'	12.00" Round Culvert L= 57.9' Ke= 0.500 Inlet / Outlet Invert= 144.09' / 143.80' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Discarded OutFlow Max=0.12 cfs @ 12.14 hrs HW=149.17' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=3.09 cfs @ 12.14 hrs HW=149.17' TW=144.99' (Dynamic Tailwater)

↑4=Culvert (Passes 3.09 cfs of 7.38 cfs potential flow)
 ↑3=Culvert (Passes 3.09 cfs of 3.89 cfs potential flow)
 ↑2=Culvert (Inlet Controls 3.09 cfs @ 3.94 fps)

Summary for Pond 220: 12" Pipe

Inflow Area = 0.144 ac, 25.35% Impervious, Inflow Depth = 4.78" for 100-Year event
 Inflow = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af
 Outflow = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af
 Routed to Pond 223A : Bypass

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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

Peak Elev= 146.96' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	146.50'	12.00" Round FES-C6 L= 38.9' Ke= 0.500 Inlet / Outlet Invert= 146.50' / 145.34' S= 0.0298 '/ Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.81 cfs @ 12.09 hrs HW=146.96' TW=144.97' (Dynamic Tailwater)↑**1=FES-C6** (Inlet Controls 0.81 cfs @ 2.30 fps)**Summary for Pond 222: 12" Pipe**

Inflow Area = 0.166 ac, 22.11% Impervious, Inflow Depth = 4.66" for 100-Year event
 Inflow = 0.85 cfs @ 12.11 hrs, Volume= 0.064 af
 Outflow = 0.85 cfs @ 12.11 hrs, Volume= 0.064 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.85 cfs @ 12.11 hrs, Volume= 0.064 af
 Routed to Pond 223A : Bypass

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

Peak Elev= 146.97' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	146.50'	12.00" Round FES-C7 L= 17.1' Ke= 0.500 Inlet / Outlet Invert= 146.50' / 144.95' S= 0.0906 '/ Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.85 cfs @ 12.11 hrs HW=146.97' TW=145.05' (Dynamic Tailwater)↑**1=FES-C7** (Inlet Controls 0.85 cfs @ 2.33 fps)**Summary for Pond 223A: Bypass**

Inflow Area = 0.310 ac, 23.62% Impervious, Inflow Depth = 4.71" for 100-Year event
 Inflow = 1.64 cfs @ 12.10 hrs, Volume= 0.122 af
 Outflow = 1.64 cfs @ 12.10 hrs, Volume= 0.122 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.75 cfs @ 12.09 hrs, Volume= 0.072 af
 Routed to Pond 223B : JF4-2-1
 Secondary = 0.93 cfs @ 12.13 hrs, Volume= 0.050 af
 Routed to Pond 224 : 15" Pipe

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

Peak Elev= 145.07' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	144.17'	12.00" Round WQ Outlet L= 11.9' Ke= 0.500 Inlet / Outlet Invert= 144.17' / 144.17' S= 0.0000 '/ Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 3	144.35'	5.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#3	Secondary	143.87'	12.00" Round QP Outlet L= 14.0' Ke= 0.500 Inlet / Outlet Invert= 143.87' / 143.80' S= 0.0050 '/ Cc= 0.900

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.38 cfs @ 12.09 hrs HW=144.98' TW=144.97' (Dynamic Tailwater)

↑1=WQ Outlet (Outlet Controls 0.38 cfs @ 0.76 fps)

Secondary OutFlow Max=0.99 cfs @ 12.13 hrs HW=145.06' TW=145.00' (Dynamic Tailwater)

↑3=QP Outlet (Inlet Controls 0.99 cfs @ 1.26 fps)

↑2=Sharp-Crested Rectangular Weir (Passes 0.99 cfs of 4.49 cfs potential flow)

Summary for Pond 223B: JF4-2-1

Inflow Area = 0.310 ac, 23.62% Impervious, Inflow Depth = 2.77" for 100-Year event

Inflow = 0.75 cfs @ 12.09 hrs, Volume= 0.072 af

Outflow = 0.75 cfs @ 12.09 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min

Primary = 0.75 cfs @ 12.09 hrs, Volume= 0.072 af

Routed to Pond 224 : 15" Pipe

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

Peak Elev= 145.03' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	143.67'	12.00" Round Culvert L= 12.9' Ke= 0.500 Inlet / Outlet Invert= 143.67' / 143.67' S= 0.0000 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.23 cfs @ 12.09 hrs HW=144.97' TW=144.96' (Dynamic Tailwater)

↑1=Culvert (Inlet Controls 0.23 cfs @ 0.30 fps)

Summary for Pond 224: 15" Pipe

Inflow Area = 1.394 ac, 17.38% Impervious, Inflow Depth = 2.71" for 100-Year event

Inflow = 4.67 cfs @ 12.12 hrs, Volume= 0.314 af

Outflow = 4.67 cfs @ 12.12 hrs, Volume= 0.314 af, Atten= 0%, Lag= 0.0 min

Primary = 4.67 cfs @ 12.12 hrs, Volume= 0.314 af

Routed to Link 231 : DP-2: Brushy Brook

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

Peak Elev= 145.00' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	143.67'	15.00" Round DMH-C10 to FES-C11 L= 69.9' Ke= 0.500 Inlet / Outlet Invert= 143.67' / 143.22' S= 0.0064 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=4.67 cfs @ 12.12 hrs HW=145.00' TW=0.00' (Dynamic Tailwater)

↑1=DMH-C10 to FES-C11 (Barrel Controls 4.67 cfs @ 4.43 fps)

Summary for Pond 225.2: Drywell D (1.02 in/hr) (2' Deep)

Inflow Area = 0.230 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event
 Inflow = 2.34 cfs @ 12.00 hrs, Volume= 0.158 af
 Outflow = 2.32 cfs @ 12.00 hrs, Volume= 0.158 af, Atten= 1%, Lag= 0.2 min
 Discarded = 0.01 cfs @ 2.87 hrs, Volume= 0.033 af
 Primary = 2.30 cfs @ 12.00 hrs, Volume= 0.125 af
 Routed to Pond 226 : Existing Depression Filled in (STA 7+00)

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= 560 sf Storage= 413 cf

Plug-Flow detention time= 69.7 min calculated for 0.158 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	Drywell Storage (Prismatic) Listed below (Recalc) 56 cf Overall x 33.0% Voids
#2	1,000.00'	10 cf	Above Drywell (Prismatic) Listed below (Recalc) -Impervious
#3	999.00'	0 cf	0.33'D x 1.50'H Pipe Storage -Impervious
			29 cf x 20.00 = 572 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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate X 20.00 C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 2.87 hrs HW=997.04' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=2.29 cfs @ 12.00 hrs HW=1,000.10' TW=166.03' (Dynamic Tailwater)
 ↑2=Dome Grate (Weir Controls 2.29 cfs @ 1.05 fps)

Summary for Pond 226: Existing Depression Filled in (STA 7+00)

Inflow Area = 4.759 ac, 4.83% Impervious, Inflow Depth = 3.43" for 100-Year event
 Inflow = 12.43 cfs @ 12.26 hrs, Volume= 1.359 af
 Outflow = 7.34 cfs @ 12.55 hrs, Volume= 1.359 af, Atten= 41%, Lag= 17.1 min
 Discarded = 0.06 cfs @ 12.55 hrs, Volume= 0.094 af
 Primary = 7.28 cfs @ 12.55 hrs, Volume= 1.265 af
 Routed to Pond 233 : Existing Depression (STA 6+00)

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 166.97' @ 12.55 hrs Surf.Area= 10,233 sf Storage= 13,859 cf

Plug-Flow detention time= 53.9 min calculated for 1.359 af (100% of inflow)
 Center-of-Mass det. time= 53.9 min (906.7 - 852.8)

Volume	Invert	Avail.Storage	Storage Description
#1	165.50'	24,953 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.50	8,574	0	0
168.00	11,388	24,953	24,953

Device	Routing	Invert	Outlet Devices
#1	Primary	165.50'	18.00" Round END-1 to FES-2 L= 105.7' Ke= 0.500 Inlet / Outlet Invert= 165.50' / 160.00' S= 0.0520 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Discarded	165.50'	0.270 in/hr Exfiltration TH #95-111 over Surface area Phase-In= 0.01'

Discarded OutFlow Max=0.06 cfs @ 12.55 hrs HW=166.97' (Free Discharge)

↳2=Exfiltration TH #95-111 (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=7.28 cfs @ 12.55 hrs HW=166.97' TW=157.69' (Dynamic Tailwater)

↳1=END-1 to FES-2 (Inlet Controls 7.28 cfs @ 4.13 fps)

Summary for Pond 230.2: Drywell D (1.02 in/hr) (2' Deep)

Inflow Area = 0.011 ac, 100.00% Impervious, Inflow Depth = 8.26" for 100-Year event
 Inflow = 0.11 cfs @ 12.00 hrs, Volume= 0.008 af
 Outflow = 0.11 cfs @ 12.00 hrs, Volume= 0.008 af, Atten= 1%, Lag= 0.2 min
 Discarded = 0.00 cfs @ 3.01 hrs, Volume= 0.002 af
 Primary = 0.11 cfs @ 12.00 hrs, Volume= 0.006 af
 Routed to Link 231 : DP-2: Brushy Brook

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= 28 sf Storage= 21 cf

Plug-Flow detention time= 72.2 min calculated for 0.008 af (100% of inflow)
 Center-of-Mass det. time= 72.2 min (807.1 - 734.9)

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

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

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

Prepared by DiPrete Engineering

Printed 4/6/2022

HydroCAD® 10.10-6a s/n 01125 © 2020 HydroCAD Software Solutions LLC

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'	1.020 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Primary	1,000.00'	4.00" Horiz. Dome Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 3.01 hrs HW=997.04' (Free Discharge)

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

Primary OutFlow Max=0.11 cfs @ 12.00 hrs HW=1,000.10' TW=0.00' (Dynamic Tailwater)

↑**2=Dome Grate** (Weir Controls 0.11 cfs @ 1.04 fps)

Summary for Pond 233: Existing Depression (STA 6+00)

Inflow Area = 5.241 ac, 4.39% Impervious, Inflow Depth = 3.01" for 100-Year event
 Inflow = 7.46 cfs @ 12.52 hrs, Volume= 1.316 af
 Outflow = 0.12 cfs @ 24.89 hrs, Volume= 0.670 af, Atten= 98%, Lag= 742.2 min
 Discarded = 0.12 cfs @ 24.89 hrs, Volume= 0.670 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link 231 : DP-2: Brushy Brook

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
 Peak Elev= 164.42' @ 24.89 hrs Surf.Area= 10,026 sf Storage= 52,234 cf

Plug-Flow detention time= 2,395.2 min calculated for 0.670 af (51% of inflow)
 Center-of-Mass det. time= 2,266.5 min (3,156.9 - 890.4)

Volume	Invert	Avail.Storage	Storage Description
#1	152.00'	70,779 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
152.00	140	45.0	0	0	140
154.00	1,344	144.0	1,279	1,279	1,641
156.00	2,942	203.0	4,183	5,462	3,307
158.00	4,034	248.0	6,947	12,409	4,983
160.00	5,104	274.0	9,117	21,526	6,183
162.00	6,330	305.0	11,412	32,938	7,724
164.00	9,050	395.0	15,299	48,237	12,786
165.00	11,460	513.0	10,231	58,468	21,325
166.00	13,181	524.0	12,310	70,779	22,370