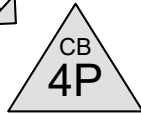
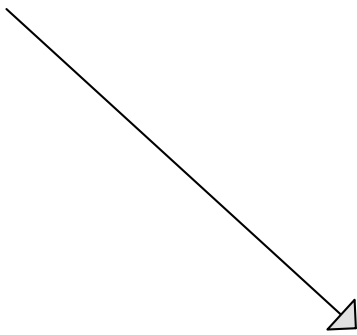
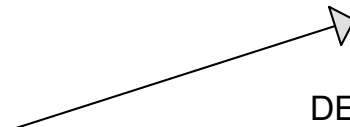


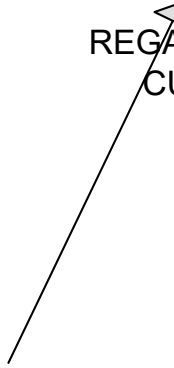
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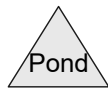
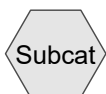
DESIGN POINT



REGATTA VIEW
CULVERT



-



Drainage Diagram for PRE REGATTA VIEW
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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
6.500	30	Woods, Good, HSG A (A1)
1.090	39	>75% Grass cover, Good, HSG A (1S)
0.210	43	Woods/grass comb., Fair, HSG A (A1)
1.340	98	Paved parking & roofs (1S)
9.140		TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Goup	Subcatchment Numbers
7.800	HSG A	1S, A1
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
1.340	Other	1S
9.140		TOTAL AREA

PRE REGATTA VIEW

Type II 24-hr 1yr Rainfall=2.15"

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Time span=0.00-100.00 hrs, dt=0.04 hrs, 2501 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1S: -

Runoff Area=2.430 ac 55.14% Impervious Runoff Depth=0.36"
Flow Length=1,300' Tc=48.7 min CN=72 Runoff=0.38 cfs 0.072 af

Subcatchment A1: -

Runoff Area=6.710 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=870' Tc=64.7 min CN=30 Runoff=0.00 cfs 0.000 af

Pond 4P: REGATTA VIEW CULVERT

Peak Elev=257.07' Inflow=0.38 cfs 0.072 af
18.0" x 80.0' Culvert Outflow=0.38 cfs 0.072 af

Link A: DESIGN POINT

Inflow=0.38 cfs 0.072 af
Primary=0.38 cfs 0.072 af

Total Runoff Area = 9.140 ac Runoff Volume = 0.072 af Average Runoff Depth = 0.10"
85.34% Pervious = 7.800 ac 14.66% Impervious = 1.340 ac

PRE REGATTA VIEW

Type II 24-hr 1yr Rainfall=2.15"

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Summary for Subcatchment 1S: -

Runoff = 0.38 cfs @ 12.59 hrs, Volume= 0.072 af, Depth= 0.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
Type II 24-hr 1yr Rainfall=2.15"

Area (ac)	CN	Description
1.340	98	Paved parking & roofs
1.090	39	>75% Grass cover, Good, HSG A
2.430	72	Weighted Average
1.090		Pervious Area
1.340		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"
34.1	1,200	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
48.7	1,300	Total			

Summary for Subcatchment A1: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
Type II 24-hr 1yr Rainfall=2.15"

Area (ac)	CN	Description
6.500	30	Woods, Good, HSG A
0.210	43	Woods/grass comb., Fair, HSG A
6.710	30	Weighted Average
6.710		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.1	100	0.0100	0.05		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50"
28.8	610	0.0050	0.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
3.8	160	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
64.7	870	Total			

PRE REGATTA VIEW

Type II 24-hr 1yr Rainfall=2.15"

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Summary for Pond 4P: REGATTA VIEW CULVERT

Inflow Area = 9.140 ac, 14.66% Impervious, Inflow Depth = 0.10" for 1yr event
 Inflow = 0.38 cfs @ 12.59 hrs, Volume= 0.072 af
 Outflow = 0.38 cfs @ 12.59 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.38 cfs @ 12.59 hrs, Volume= 0.072 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
 Peak Elev= 257.07' @ 12.59 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	256.80'	18.0" x 80.0' long Culvert CPP, end-section conforming to fill, Ke= 0.500 Outlet Invert= 256.15' S= 0.0081 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean

Primary OutFlow Max=0.38 cfs @ 12.59 hrs HW=257.07' TW=0.00' (Dynamic Tailwater)
 ↑**1=Culvert** (Inlet Controls 0.38 cfs @ 1.77 fps)

Summary for Link A: DESIGN POINT

Inflow Area = 9.140 ac, 14.66% Impervious, Inflow Depth = 0.10" for 1yr event
 Inflow = 0.38 cfs @ 12.59 hrs, Volume= 0.072 af
 Primary = 0.38 cfs @ 12.59 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs

PRE REGATTA VIEW

Type II 24-hr 10yr Rainfall=3.90"

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Time span=0.00-100.00 hrs, dt=0.04 hrs, 2501 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1S: -

Runoff Area=2.430 ac 55.14% Impervious Runoff Depth=1.39"
Flow Length=1,300' Tc=48.7 min CN=72 Runoff=1.97 cfs 0.282 af

Subcatchment A1: -

Runoff Area=6.710 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=870' Tc=64.7 min CN=30 Runoff=0.00 cfs 0.000 af

Pond 4P: REGATTA VIEW CULVERT

Peak Elev=257.44' Inflow=1.97 cfs 0.282 af
18.0" x 80.0' Culvert Outflow=1.97 cfs 0.282 af

Link A: DESIGN POINT

Inflow=1.97 cfs 0.282 af
Primary=1.97 cfs 0.282 af

Total Runoff Area = 9.140 ac Runoff Volume = 0.282 af Average Runoff Depth = 0.37"
85.34% Pervious = 7.800 ac 14.66% Impervious = 1.340 ac

PRE REGATTA VIEW

Type II 24-hr 10yr Rainfall=3.90"

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Summary for Subcatchment 1S: -

Runoff = 1.97 cfs @ 12.51 hrs, Volume= 0.282 af, Depth= 1.39"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
Type II 24-hr 10yr Rainfall=3.90"

Area (ac)	CN	Description
1.340	98	Paved parking & roofs
1.090	39	>75% Grass cover, Good, HSG A
2.430	72	Weighted Average
1.090		Pervious Area
1.340		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"
34.1	1,200	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
48.7	1,300	Total			

Summary for Subcatchment A1: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
Type II 24-hr 10yr Rainfall=3.90"

Area (ac)	CN	Description
6.500	30	Woods, Good, HSG A
0.210	43	Woods/grass comb., Fair, HSG A
6.710	30	Weighted Average
6.710		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.1	100	0.0100	0.05		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50"
28.8	610	0.0050	0.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
3.8	160	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
64.7	870	Total			

PRE REGATTA VIEW

Type II 24-hr 10yr Rainfall=3.90"

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Summary for Pond 4P: REGATTA VIEW CULVERT

Inflow Area = 9.140 ac, 14.66% Impervious, Inflow Depth = 0.37" for 10yr event
 Inflow = 1.97 cfs @ 12.51 hrs, Volume= 0.282 af
 Outflow = 1.97 cfs @ 12.51 hrs, Volume= 0.282 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.97 cfs @ 12.51 hrs, Volume= 0.282 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
 Peak Elev= 257.44' @ 12.51 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	256.80'	18.0" x 80.0' long Culvert CPP, end-section conforming to fill, Ke= 0.500 Outlet Invert= 256.15' S= 0.0081 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean

Primary OutFlow Max=1.97 cfs @ 12.51 hrs HW=257.44' TW=0.00' (Dynamic Tailwater)
 ↑1=Culvert (Inlet Controls 1.97 cfs @ 2.73 fps)

Summary for Link A: DESIGN POINT

Inflow Area = 9.140 ac, 14.66% Impervious, Inflow Depth = 0.37" for 10yr event
 Inflow = 1.97 cfs @ 12.51 hrs, Volume= 0.282 af
 Primary = 1.97 cfs @ 12.51 hrs, Volume= 0.282 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs

PRE REGATTA VIEW

Type II 24-hr 100yr Rainfall=6.25"

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Time span=0.00-100.00 hrs, dt=0.04 hrs, 2501 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1S: -

Runoff Area=2.430 ac 55.14% Impervious Runoff Depth=3.20"
Flow Length=1,300' Tc=48.7 min CN=72 Runoff=4.79 cfs 0.648 af

Subcatchment A1: -

Runoff Area=6.710 ac 0.00% Impervious Runoff Depth=0.10"
Flow Length=870' Tc=64.7 min CN=30 Runoff=0.07 cfs 0.056 af

Pond 4P: REGATTA VIEW CULVERT

Peak Elev=257.89' Inflow=4.79 cfs 0.704 af
18.0" x 80.0' Culvert Outflow=4.79 cfs 0.704 af

Link A: DESIGN POINT

Inflow=4.79 cfs 0.704 af
Primary=4.79 cfs 0.704 af

Total Runoff Area = 9.140 ac Runoff Volume = 0.704 af Average Runoff Depth = 0.92"
85.34% Pervious = 7.800 ac 14.66% Impervious = 1.340 ac

PRE REGATTA VIEW

Type II 24-hr 100yr Rainfall=6.25"

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Summary for Subcatchment 1S: -

Runoff = 4.79 cfs @ 12.49 hrs, Volume= 0.648 af, Depth= 3.20"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
Type II 24-hr 100yr Rainfall=6.25"

Area (ac)	CN	Description
1.340	98	Paved parking & roofs
1.090	39	>75% Grass cover, Good, HSG A
2.430	72	Weighted Average
1.090		Pervious Area
1.340		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.6	100	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"
34.1	1,200	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
48.7	1,300	Total			

Summary for Subcatchment A1: -

Runoff = 0.07 cfs @ 16.18 hrs, Volume= 0.056 af, Depth= 0.10"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
Type II 24-hr 100yr Rainfall=6.25"

Area (ac)	CN	Description
6.500	30	Woods, Good, HSG A
0.210	43	Woods/grass comb., Fair, HSG A
6.710	30	Weighted Average
6.710		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.1	100	0.0100	0.05		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.50"
28.8	610	0.0050	0.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
3.8	160	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
64.7	870	Total			

PRE REGATTA VIEW

Type II 24-hr 100yr Rainfall=6.25"

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Summary for Pond 4P: REGATTA VIEW CULVERT

Inflow Area = 9.140 ac, 14.66% Impervious, Inflow Depth = 0.92" for 100yr event
Inflow = 4.79 cfs @ 12.49 hrs, Volume= 0.704 af
Outflow = 4.79 cfs @ 12.49 hrs, Volume= 0.704 af, Atten= 0%, Lag= 0.0 min
Primary = 4.79 cfs @ 12.49 hrs, Volume= 0.704 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs
Peak Elev= 257.89' @ 12.49 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	256.80'	18.0" x 80.0' long Culvert CPP, end-section conforming to fill, Ke= 0.500 Outlet Invert= 256.15' S= 0.0081 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean

Primary OutFlow Max=4.79 cfs @ 12.49 hrs HW=257.88' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Barrel Controls 4.79 cfs @ 4.89 fps)

Summary for Link A: DESIGN POINT

Inflow Area = 9.140 ac, 14.66% Impervious, Inflow Depth = 0.92" for 100yr event
Inflow = 4.79 cfs @ 12.49 hrs, Volume= 0.704 af
Primary = 4.79 cfs @ 12.49 hrs, Volume= 0.704 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-100.00 hrs, dt= 0.04 hrs