

depression storage

OFFSITE



Routing Diagram for 5293-POST

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Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	3.25	2
2	10-year	Type III 24-hr		Default	24.00	1	4.98	2
3	25-year	Type III 24-hr		Default	24.00	1	6.05	2
4	100-year	Type III 24-hr		Default	24.00	1	7.71	2

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Page 3

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.638	30	Woods, Good, HSG A (3S)
0.755	55	Woods, Good, HSG B (3S)

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Page 4

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
2.638	HSG A	3S
0.755	HSG B	3S
0.000	HSG C	
0.000	HSG D	
0.000	Other	

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Page 5

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
2.638	0.755	0.000	0.000	0.000	3.393	Woods, Good	3S

5293-POST

Type III 24-hr 100-year Rainfall=7.71"

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Page 6

Summary for Subcatchment 3S: OFFSITE

Runoff = 1.04 cfs @ 12.57 hrs, Volume= 0.223 af, Depth= 0.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-year Rainfall=7.71"

Area (sf)	CN	Description
32,905	55	Woods, Good, HSG B
114,895	30	Woods, Good, HSG A
147,800	36	Weighted Average
147,800		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	50	0.1700	0.09		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 3.10"
2.0	125	0.1700	1.03		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
15.0	370	0.0270	0.41		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
26.3	545	Total			

Summary for Pond 4P: depression storage

Inflow Area = 3.393 ac, 0.00% Impervious, Inflow Depth = 0.79" for 100-year event
 Inflow = 1.04 cfs @ 12.57 hrs, Volume= 0.223 af
 Outflow = 0.23 cfs @ 15.92 hrs, Volume= 0.223 af, Atten= 78%, Lag= 200.6 min
 Discarded = 0.23 cfs @ 15.92 hrs, Volume= 0.223 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 369.98' @ 15.92 hrs Surf.Area= 3,302 sf Storage= 3,266 cf

Plug-Flow detention time= 188.7 min calculated for 0.223 af (100% of inflow)
 Center-of-Mass det. time= 188.7 min (1,143.4 - 954.7)

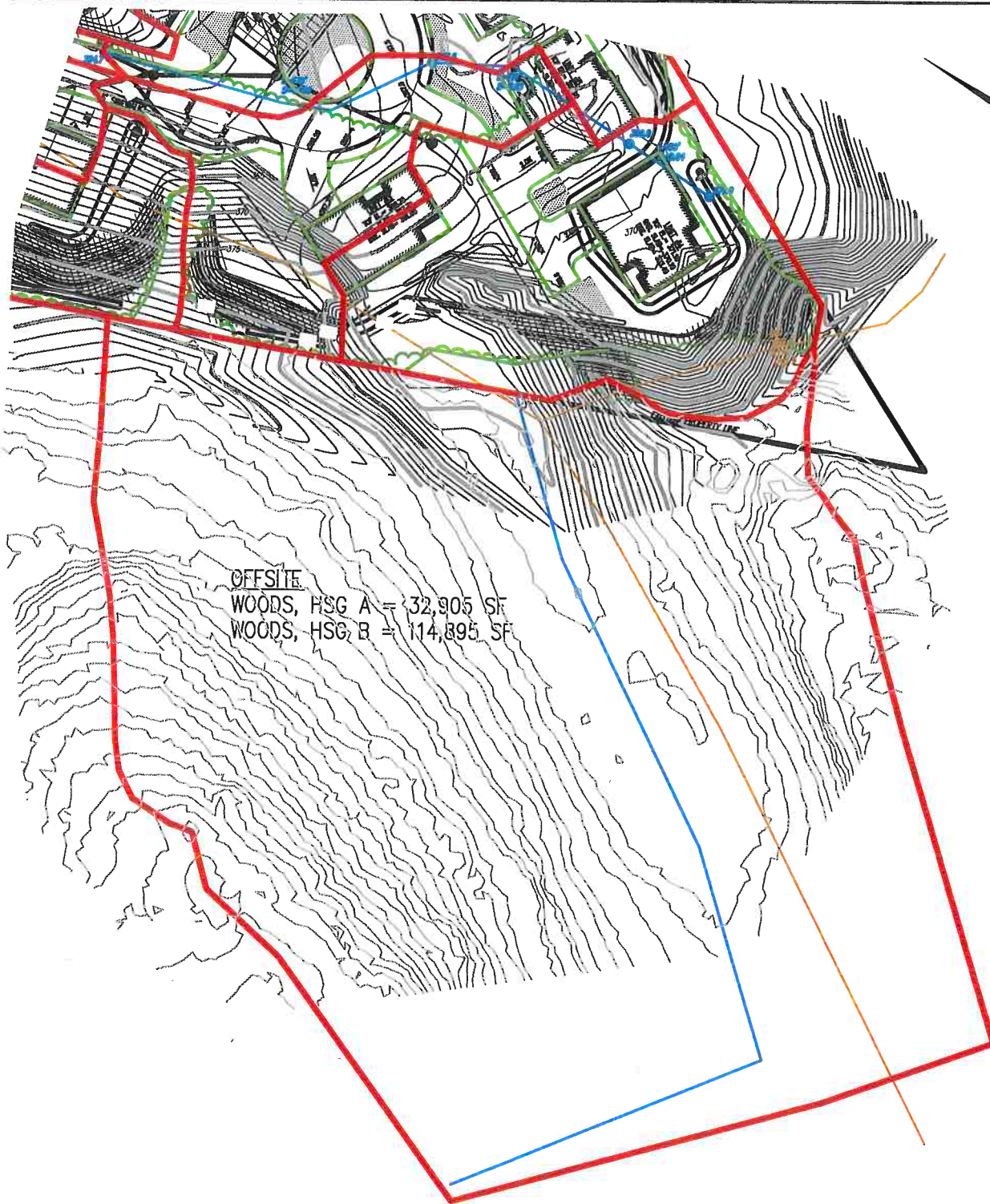
Volume	Invert	Avail.Storage	Storage Description
#1	368.00'	3,327 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
368.00	7	18.0	0	0	7
369.00	1,980	205.0	702	702	3,327
370.00	3,330	300.0	2,626	3,327	7,153

Device	Routing	Invert	Outlet Devices
#1	Discarded	368.00'	2.410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 365.00'

Discarded OutFlow Max=0.23 cfs @ 15.92 hrs HW=369.98' (Free Discharge)

↑1=Exfiltration (Controls 0.23 cfs)



OFFSITE WATERSHED ANALYSIS

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JOB NUMBER: 5293-M

DATE: 5/27/22

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SCALE: 1" = 80'