

INLAND WETLANDS
COMMISSION
Telephone (203) 563-0180
Fax (203) 563-0284



TOWN HALL
238 Danbury Road
Wilton, Connecticut 06897

APPLICATION FOR A SIGNIFICANT REGULATED ACTIVITY

For Office Use Only:

Filing Fee \$ _____	WET# _____
Date of Submission _____	Wilton Land Record Map# _____
Date of Acceptance _____	Volume # _____ Page # _____
	Assessor's Map # _____ Lot# _____

APPLICANT INFORMATION:

Applicant Sycamore, LLC
Address 375 Fairfield Avenue Building # 2
Stamford, CT 06902
Telephone 203-856-0578
Email jeremi@jablonskiassociates.com

Agent (if applicable) Douglas DiVesta, PE
Address 51 Painter Ridge Road
Roxbury, CT 06783
Telephone 860-354-4226
Email dceainc@charter.net

PROJECT INFORMATION:

Property Address 21 Edith Lane
Acres of altered Wetlands On-Site 0
Linear Feet of Watercourse 0
Linear Feet of Open Water 0
Sq. Ft. of proposed and/or altered impervious coverage 4,121 +/- sf

Site Acreage 1.163 +/- Ac
Cu. Yds. of Material Excavated 0
Cu. Yds. of Material to be Deposited 2620 +/- cy
Acres of altered upland buffer .176 +/- ac
Sq. Ft. of disturbed land in regulated area 7,667 +/- sf

APPLICATION REQUIREMENTS:

Is The Site Within a Public Water Supply
Watershed Boundary? NO ☒ YES* ☐

Is The Site Within 500 Feet of a Town Boundary?
NO ☒ YES* ☐

* If the answer is yes, then the applicant is responsible for notifying the appropriate water authority and/or adjoining community's Wetlands Department. Instructions for notification are available at the office of the commission.

Project Description and Purpose: _____

See attached sheet

In addition, the applicant shall provide eleven (11) collated copies of the following information as well as an electronic submission via email to mike.conklin@wiltonct.org & elizabeth.larkin@wiltonct.org **

- ☒ A. Written consent from the owner authorizing the agent to act on his/her behalf
- ☒ B. A Location Map at a scale of 1" = 800'
- ☒ C. **A Site Plan showing existing and proposed features at a scale not to exceed 1" = 40'** accurate to the level of a A-2 property and T-2 topographic surveys
- ☒ D. Sketch Plans depicting the alternatives considered
- ☒ E. Engineering Reports and Analysis and additional drawing to fully describe the proposed project
- ☒ F. Sedimentation and Erosion Control Plan, including the Construction Sequence
- ☒ G. Names and addresses of adjoining property owners
- ☒ H. A narrative describing, in detail
 - a. the proposed activity
 - b. the alternatives considered
 - c. impacts
 - d. proposed mitigation measures
- ☒ I. Soils Report prepared by a Certified Soil Scientist and Wetlands Map prepared by a Registered Land Surveyor
- ☐ J. A Biological Evaluation prepared by a biologist or other qualified professional
- ☒ K. Description of the chemical and physical characteristics of fill material to be used in the Regulated Area
- ☒ L. Description and maps detailing the watershed of the Regulated Area
- ☒ M. Envelopes addressed to adjacent neighbors, the applicant, and/or agent, with certified postage and no return address

****Application materials shall be collated and copies of documents more than two pages in length shall be double sided.**

See Section 7 of the Wetlands and Watercourses Regulations of the Town of Wilton for a more detailed description of applications requirements.

The Applicant or his/her agent certifies that he is familiar with the information provided in this application and is aware of the penalties for obtaining a permit through deception, inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspections of the subject property by the Commissioners and designated agents of the Commission or consultants to the Commission, at reasonable times, both before and after a final decision has been rendered.

Applicant's Signature: _____ Date: 11/14/22

Agent's Signature (if applicable): Douglas Wilton Date: 1/17/22

Applicant: Sycamore, LLC

Project Location: 21 Edith Lane, Wilton

Additional Information for Inland Wetlands Commission Application:

Project Description and Purpose:

The proposed activity is to construct a new single family residence on 1.163 acres. Other activities include the installation of a septic system, storm water management system consisting of a subsurface hollow chambers, underground utilities, installation of a driveway to access the proposed dwelling site and grading associated with the construction of the single family residence.

Item H. a. The Proposed Activity

The proposed activity is to construct a single family residence on a 1.163± acre parcel located at 21 Edith Lane. Other work associated with the construction of the proposed single family residence is the installation of a septic system and a stormwater management system and grading associated with the construction of the residence.

Item H. b. The Alternative Considered

Alternative # 1

Alternative considered is to construct three-bedroom residence within this lot with the entire septic located within the regulated area of the wetlands. Only a small portion of the proposed patio will be within the upland review area. The proposed septic leaching field would be 76 feet from the wetlands and the proposed grading will encroach closer. In order to control the peak rate of runoff and collect and detain the water quality volume the detention system would be placed in the south east portion of the property. This would require tree removal, installation of a collection pipe down a steep slope. The level spreader would be within 10 feet from the wetlands. It would require filling and grading also within 10 feet of the wetlands.

This alternative was not considered due to stormwater management system being adjacent to the actual wetlands.

Alternative # 2

Alternative considered is to construct three-bedroom residence within this lot with the entire septic located within the regulated area of the wetlands. Only a small portion of the proposed patio will be within the upland review area. The proposed septic leaching field would be 76 feet from the wetlands and the proposed grading will encroach closer. The stormwater management system would be located closer to the proposed house. Due to the limit area, a larger hollow chamber had to be used which will require some filling around it. The level spreader would be approximately 77 feet from the closes point of the wetlands. Additional grading will be required which will encroach to approximately 54 feet from the closes point of the wetlands.

This alternative was considered and is the one before the Commission for approval.

Item H. c. Impacts

The proposed construction of the new single family residence and driveway will be outside of the 100-foot regulated area. A small portion of the proposed patio and along with the other proposed site work associated with the construction activity will be within the 100-foot regulated area of the on-site wetlands. These activities will not result in long-term environmental impact to the natural ecosystems. All construction activity has been planned to occur within a previously developed parcel of land.

During the anticipated construction period the potential for environmental impacts resulting from erosion and sedimentation is possible. This potential for environmental impact can be managed and controlled with the proper installation and maintenance of sediment and erosion control devices. During and after construction, the surface stormwater runoff patterns will remain generally the same.

Item H. d. Proposed Mitigation Measures

Collecting and treating the runoff from the proposed impervious surfaces will provide a beneficial impact to the natural resources. The construction of a new septic system meeting all of the current State and Local Health Code will have a positive impact.

Erosion controls will be installed prior to the commencement of construction related activities. These controls will be maintained in proper working order throughout the construction phase and will be removed after all construction is completed and disturbed site areas have been restored to a quality residential landscape condition. It is also proposed to collect the runoff from the impervious areas and convey the flow to the subsurface bio-retention/stormwater management area. The subsurface bio-retention/stormwater management system will act as a primary treatment system to capture the water quality volume, below the outlet invert, consisting of the first inch of runoff from the impervious areas as well as controlling the peak rate of runoff from the proposed development. The subsurface bio-retention/stormwater management system will promote infiltration into the surrounding ground to reduce the nutrient loads to natural resources.

Item K. Description of the chemical and physical characteristics of fill material to be used in the Regulate Area.

The fill that will be deposited with the regulated areas will be a select fill within the area of the proposed septic system meeting the State and Local Health Codes. Other fill material that will be deposited will be material that is removed from excavation from the site and if material needs to be imported to the site will be a clean fill free of organic material.

Sycamore, LLC
375 Fairfield Avenue
Building # 2
Stamford, CT 06902
203-856-0578

January 12, 2022


Inland Wetlands Commission
Town of Wilton
Town Annex
238 Danbury Road
Wilton, CT 06897

Re: 21 Edith Lane, Wilton, Connecticut

To Whom It May Concern:

We hereby authorize Douglas DiVesta, P.E. of DiVesta Civil Engineering, LLC at 51 Painter Ridge Road, Roxbury, CT to be our agent as it relates to the matters before the Inland Wetlands Commission. He is authorized to present plans in our interest concerning our property at 21 Edith Lane, Wilton.

Very truly yours,



Jeremi Jablonski
Member

DD/dd
21-088 - Itr Agent Auth. 01-12-22

ADJACENT PROPERTY OWNERS

APPLICANT: Sycamore, LLC

ADDRESS: 21 Edith Lane

Map/Lot Number: Map 84, Lot 69

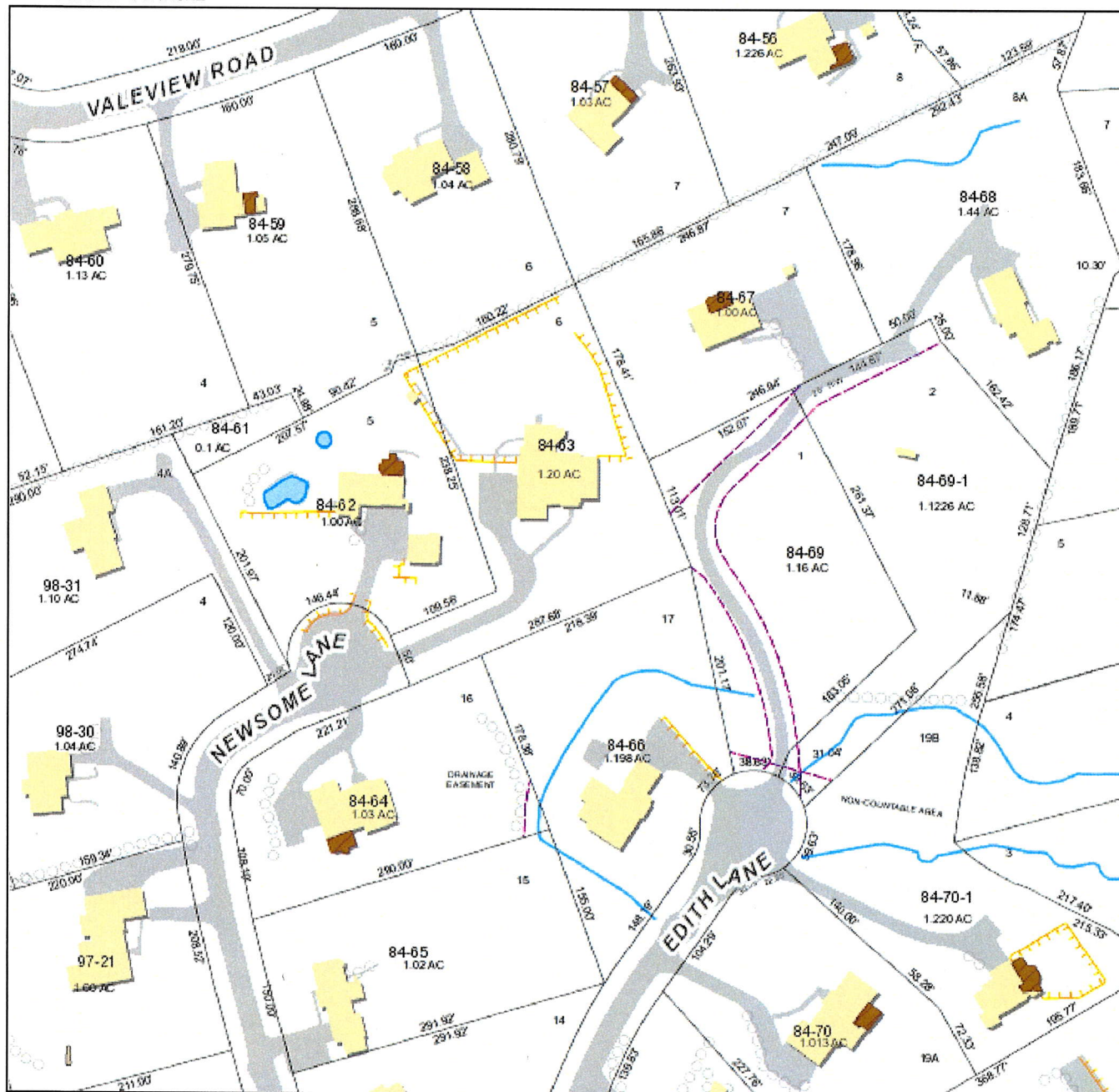
Map	Lot	Name & Address
84	49	Nianhua Li 19 Kent Hills Lane Wilton, CT 06897
84	50	Corey Clayton 23 Kent Hills Lane Wilton, CT 06897
84	63	Olin & Pamela Lancaster 30 Newsome Lane Wilton, CT 06897
84	66	Edwin & Ellen Whitin 16 Edith Lane Wilton, CT 06897
84	67	Susan Zecca 18 Edith Lane Wilton, CT 06897
84	68	William & Jacqueline Heyde 23 Edith Lane Wilton, CT 06897
84	70	David & Lisa Finn 17 Edith Lane Wilton, CT 06897
84	70-1	Michael Lomsky 19 Edith Lane Wilton, CT 06897
84	69-1	Kasia & Marek Mirota 23 Edith Lane Wilton, CT 06897

Town of Wilton

Geographic Information System (GIS)



Date Printed: 1/17/2022



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Wilton and its mapping contractors assume no legal responsibility for the information contained herein.

Zoning Effective: July 28, 2017

Planimetrics Updated: 2014

Approximate Scale: 1 inch = 150 feet

0 150
Feet





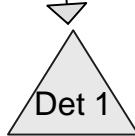
Pre Development - Sub
Catchment # 1



Post Development - Sub
Catchment # 1



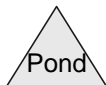
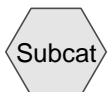
Post Development - Sub
Catchment # 2



Detention Basin # 1



Design Point South
Property Line



Routing Diagram for Hydrology Calculations 12-27-21

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Hydrology Calculations 12-27-21

Type III 24-hr 2 year storm event Rainfall=3.55"

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

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Post 1: Post Development - Runoff Area=6,696 sf 61.54% Impervious Runoff Depth=2.59"
Tc=5.0 min CN=91 Runoff=0.47 cfs 0.033 af

Subcatchment Post 2: Post Development - Runoff Area=43,964 sf 11.33% Impervious Runoff Depth=1.54"
Flow Length=201' Tc=5.7 min CN=78 Runoff=1.82 cfs 0.129 af

Subcatchment Pre 1: Pre Development - Runoff Area=50,660 sf 12.35% Impervious Runoff Depth=1.47"
Flow Length=160' Tc=7.1 min CN=77 Runoff=1.89 cfs 0.142 af

Pond Det 1: Detention Basin # 1 Peak Elev=275.01' Storage=559 cf Inflow=0.47 cfs 0.033 af
Discarded=0.02 cfs 0.025 af Primary=0.09 cfs 0.008 af Outflow=0.11 cfs 0.033 af

Link Post: Design Point South Property Line

Inflow=1.82 cfs 0.138 af
Primary=1.82 cfs 0.138 af

Total Runoff Area = 2.326 ac Runoff Volume = 0.305 af Average Runoff Depth = 1.57"
84.84% Pervious = 1.973 ac 15.16% Impervious = 0.353 ac

Summary for Subcatchment Post 1: Post Development - Sub Catchment # 1

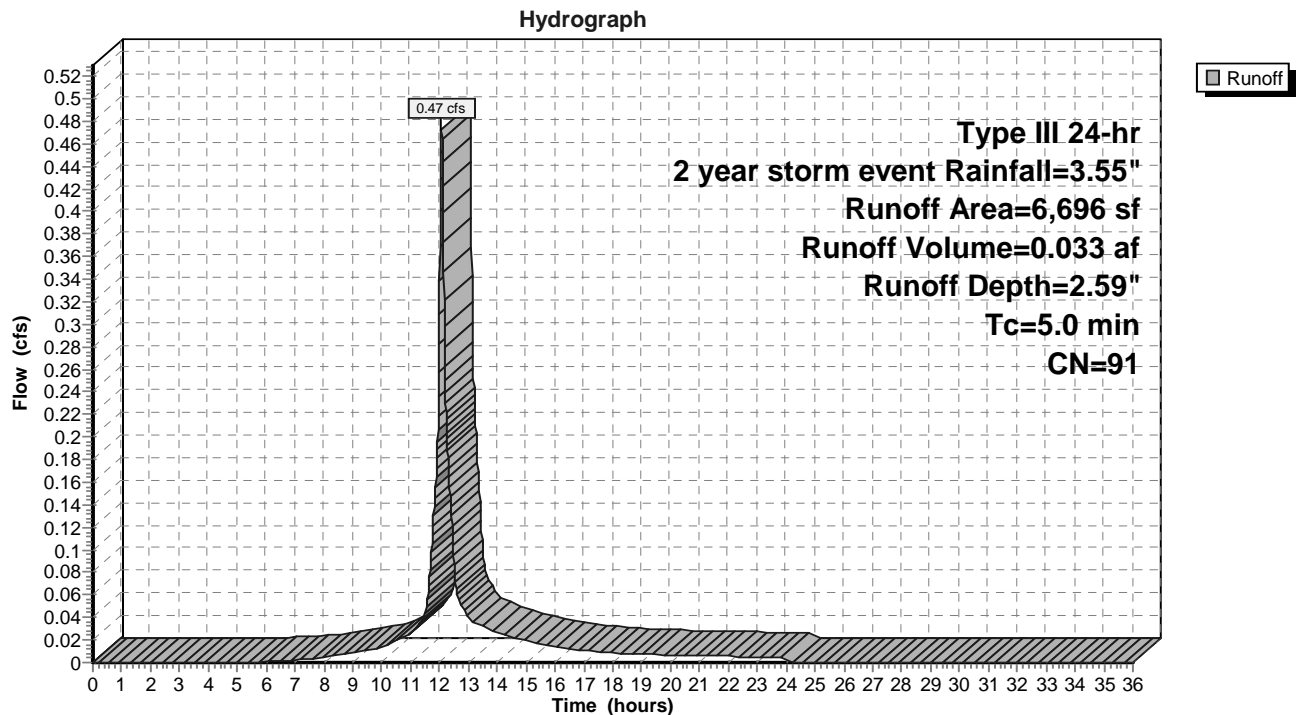
Runoff = 0.47 cfs @ 12.07 hrs, Volume= 0.033 af, Depth= 2.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 year storm event Rainfall=3.55"

	Area (sf)	CN	Description
*	2,356	98	Proposed roof
*	1,150	98	Proposed driveway
	2,575	79	50-75% Grass cover, Fair, HSG C
*	615	98	patio
	6,696	91	Weighted Average
	2,575		38.46% Pervious Area
	4,121		61.54% Impervious Area

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

Subcatchment Post 1: Post Development - Sub Catchment # 1



Hydrology Calculations 12-27-21

Type III 24-hr 2 year storm event Rainfall=3.55"

Prepared by DiVesta Civil Engineering Associates, Inc.

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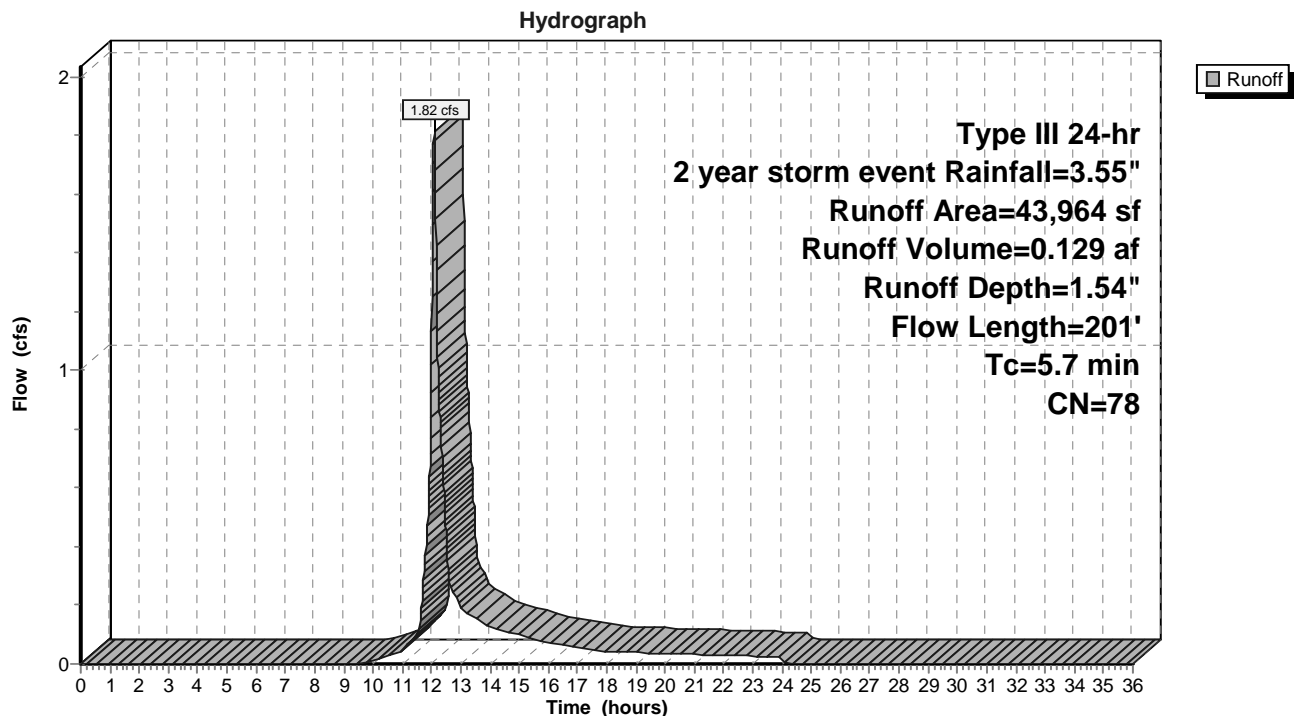
Summary for Subcatchment Post 2: Post Development - Sub Catchment # 2

Runoff = 1.82 cfs @ 12.09 hrs, Volume= 0.129 af, Depth= 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 year storm event Rainfall=3.55"

	Area (sf)	CN	Description
*	4,864	98	existing driveway
	6,497	79	Woods, Fair, HSG D
	10,932	79	50-75% Grass cover, Fair, HSG C
	21,553	73	Woods, Fair, HSG C
*	118	98	driveway
	43,964	78	Weighted Average
	38,982		88.67% Pervious Area
	4,982		11.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	78	0.1860	0.29		Sheet Flow, sheet flow
					Grass: Dense n= 0.240 P2= 3.55"
1.1	123	0.1460	1.91		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
5.7	201	Total			

Subcatchment Post 2: Post Development - Sub Catchment # 2

Hydrology Calculations 12-27-21

Type III 24-hr 2 year storm event Rainfall=3.55"

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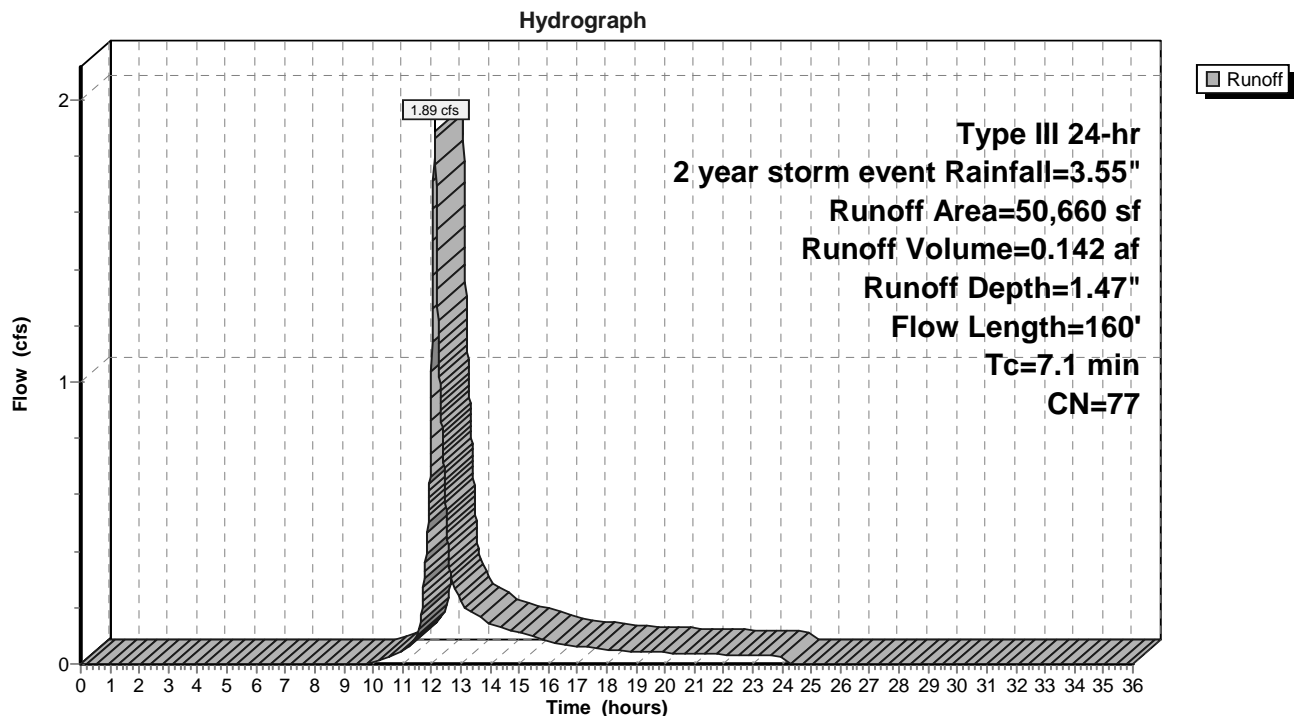
Summary for Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Runoff = 1.89 cfs @ 12.11 hrs, Volume= 0.142 af, Depth= 1.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 year storm event Rainfall=3.55"

	Area (sf)	CN	Description
*	4,864	98	ex driveway
	6,497	79	Woods, Fair, HSG D
*	1,395	98	ex roof area
	2,790	79	50-75% Grass cover, Fair, HSG C
	35,114	73	Woods, Fair, HSG C
	50,660	77	Weighted Average
	44,401		87.65% Pervious Area
	6,259		12.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	86	0.2550	0.22		Sheet Flow, sheet flow
					Woods: Light underbrush n= 0.400 P2= 3.55"
0.6	74	0.1710	2.07		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
7.1	160	Total			

Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Hydrology Calculations 12-27-21

Type III 24-hr 2 year storm event Rainfall=3.55"

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Summary for Pond Det 1: Detention Basin # 1

Inflow Area = 0.154 ac, 61.54% Impervious, Inflow Depth = 2.59" for 2 year storm event event
 Inflow = 0.47 cfs @ 12.07 hrs, Volume= 0.033 af
 Outflow = 0.11 cfs @ 12.47 hrs, Volume= 0.033 af, Atten= 78%, Lag= 24.0 min
 Discarded = 0.02 cfs @ 10.50 hrs, Volume= 0.025 af
 Primary = 0.09 cfs @ 12.47 hrs, Volume= 0.008 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 275.01' @ 12.47 hrs Surf.Area= 520 sf Storage= 559 cf

Plug-Flow detention time= 170.3 min calculated for 0.033 af (100% of inflow)

Center-of-Mass det. time= 170.3 min (968.0 - 797.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	273.40'	369 cf	16.00'W x 32.50'L x 3.04'H Field A 1,582 cf Overall - 659 cf Embedded = 922 cf x 40.0% Voids
#2A	273.90'	659 cf	Cultec R-330XLHD x 12 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 3 rows
		1,028 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	274.60'	2.0" Vert. Orifice/Grate C= 0.600
#2	Primary	274.90'	3.5" Vert. Orifice/Grate C= 0.600
#3	Primary	276.00'	2.5" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Discarded	273.40'	1.500 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.02 cfs @ 10.50 hrs HW=273.43' (Free Discharge)↑**4=Exfiltration** (Exfiltration Controls 0.02 cfs)**Primary OutFlow** Max=0.09 cfs @ 12.47 hrs HW=275.01' (Free Discharge)↑**1=Orifice/Grate** (Orifice Controls 0.06 cfs @ 2.76 fps)↑**2=Orifice/Grate** (Orifice Controls 0.03 cfs @ 1.14 fps)↑**3=Orifice/Grate** (Controls 0.00 cfs)

Pond Det 1: Detention Basin # 1 - Chamber Wizard Field A**Chamber Model = Cultec R-330XLHD (Cultec Recharger® 330XLHD)**

Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf

Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap

Row Length Adjustment= +1.50' x 7.45 sf x 3 rows

4 Chambers/Row x 7.00' Long +1.50' Row Adjustment = 29.50' Row Length +18.0" End Stone x 2 = 32.50' Base Length

3 Rows x 52.0" Wide + 18.0" Side Stone x 2 = 16.00' Base Width

6.0" Base + 30.5" Chamber Height = 3.04' Field Height

12 Chambers x 52.2 cf +1.50' Row Adjustment x 7.45 sf x 3 Rows = 659.4 cf Chamber Storage

1,581.7 cf Field - 659.4 cf Chambers = 922.3 cf Stone x 40.0% Voids = 368.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,028.3 cf = 0.024 af

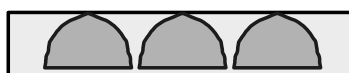
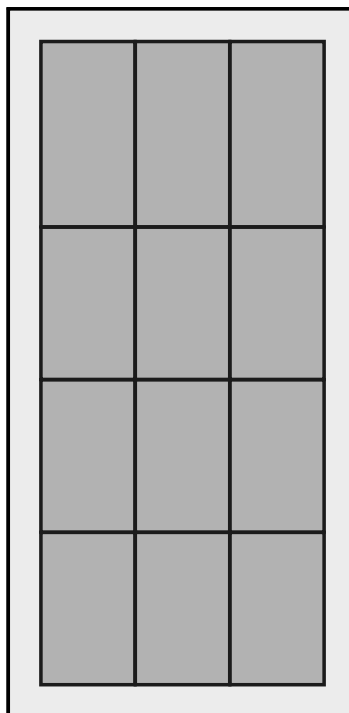
Overall Storage Efficiency = 65.0%

Overall System Size = 32.50' x 16.00' x 3.04'

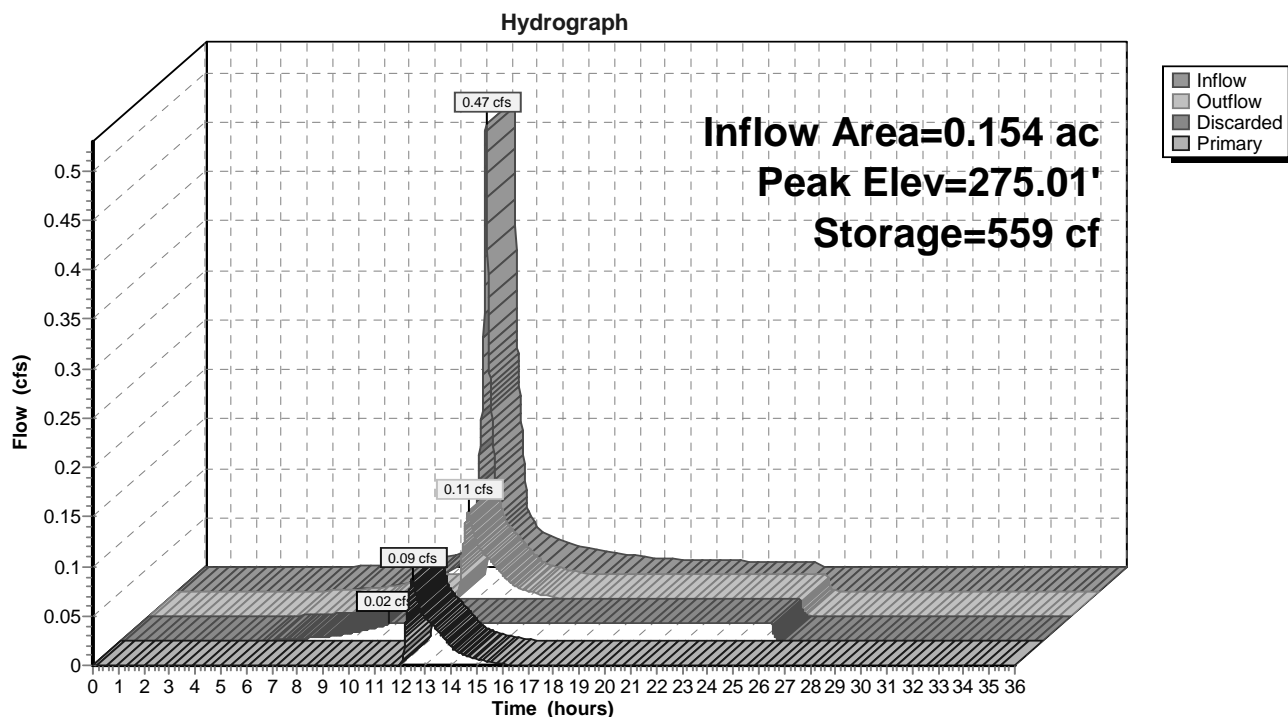
12 Chambers

58.6 cy Field

34.2 cy Stone



Pond Det 1: Detention Basin # 1

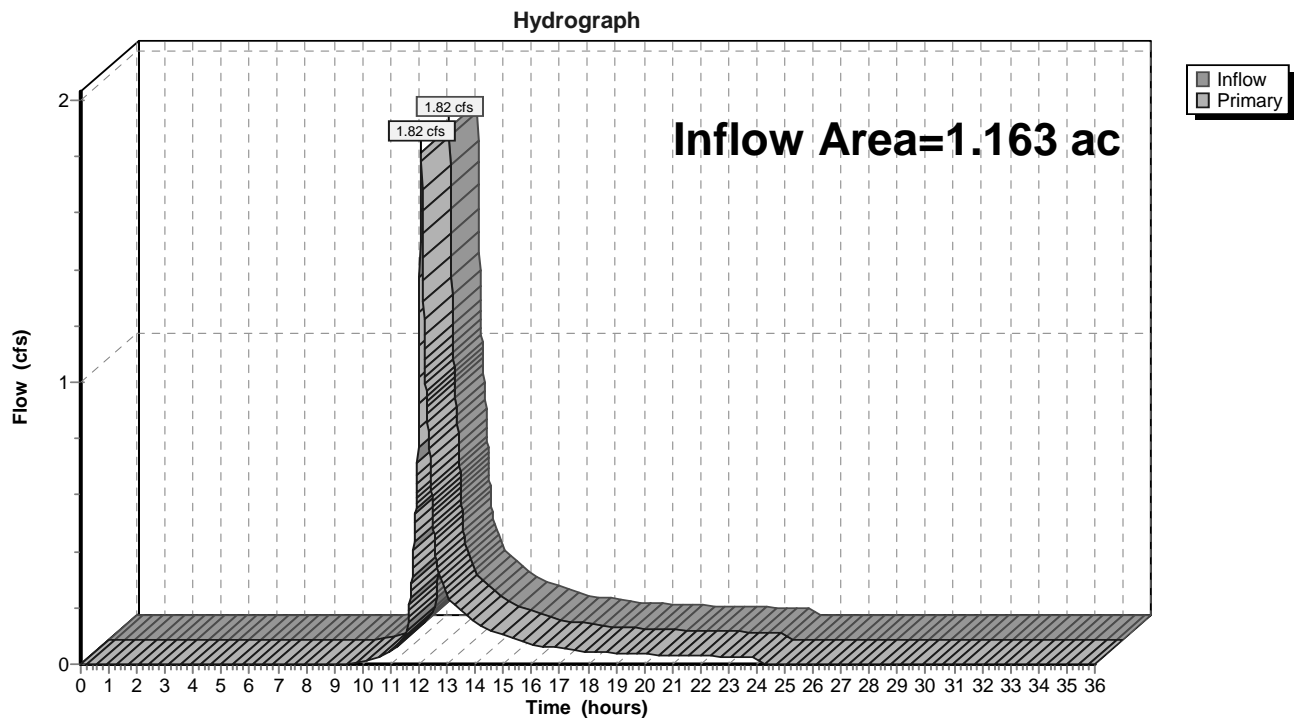


Summary for Link Post: Design Point South Property Line

Inflow Area = 1.163 ac, 17.97% Impervious, Inflow Depth = 1.42" for 2 year storm event event
 Inflow = 1.82 cfs @ 12.09 hrs, Volume= 0.138 af
 Primary = 1.82 cfs @ 12.09 hrs, Volume= 0.138 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link Post: Design Point South Property Line



Hydrology Calculations 12-27-21

Type III 24-hr 10 year storm event Rainfall=5.42"

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

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Post 1: Post Development - Runoff Area=6,696 sf 61.54% Impervious Runoff Depth=4.39"
Tc=5.0 min CN=91 Runoff=0.78 cfs 0.056 af

Subcatchment Post 2: Post Development - Runoff Area=43,964 sf 11.33% Impervious Runoff Depth=3.07"
Flow Length=201' Tc=5.7 min CN=78 Runoff=3.68 cfs 0.258 af

Subcatchment Pre 1: Pre Development - Runoff Area=50,660 sf 12.35% Impervious Runoff Depth=2.98"
Flow Length=160' Tc=7.1 min CN=77 Runoff=3.91 cfs 0.289 af

Pond Det 1: Detention Basin # 1 Peak Elev=275.58' Storage=773 cf Inflow=0.78 cfs 0.056 af
Discarded=0.02 cfs 0.030 af Primary=0.33 cfs 0.026 af Outflow=0.35 cfs 0.056 af

Link Post: Design Point South Property Line

Inflow=3.92 cfs 0.285 af
Primary=3.92 cfs 0.285 af

Total Runoff Area = 2.326 ac Runoff Volume = 0.603 af Average Runoff Depth = 3.11"
84.84% Pervious = 1.973 ac 15.16% Impervious = 0.353 ac

Hydrology Calculations 12-27-21

Type III 24-hr 10 ysear storm event Rainfall=5.42"

Prepared by DiVesta Civil Engineering Associates, Inc.

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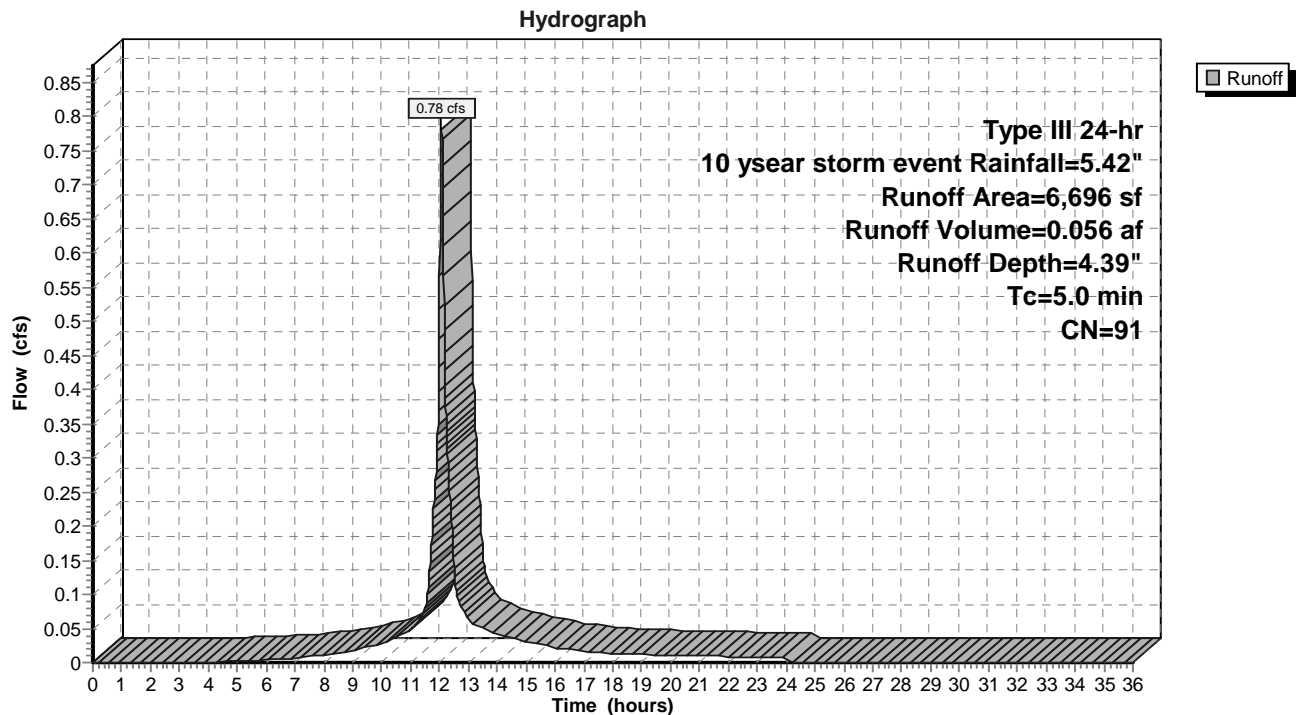
Summary for Subcatchment Post 1: Post Development - Sub Catchment # 1

Runoff = 0.78 cfs @ 12.07 hrs, Volume= 0.056 af, Depth= 4.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 ysear storm event Rainfall=5.42"

	Area (sf)	CN	Description
*	2,356	98	Proposed roof
*	1,150	98	Proposed driveway
	2,575	79	50-75% Grass cover, Fair, HSG C
*	615	98	patio
	6,696	91	Weighted Average
	2,575		38.46% Pervious Area
	4,121		61.54% Impervious Area

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

Subcatchment Post 1: Post Development - Sub Catchment # 1

Hydrology Calculations 12-27-21

Type III 24-hr 10 ysear storm event Rainfall=5.42"

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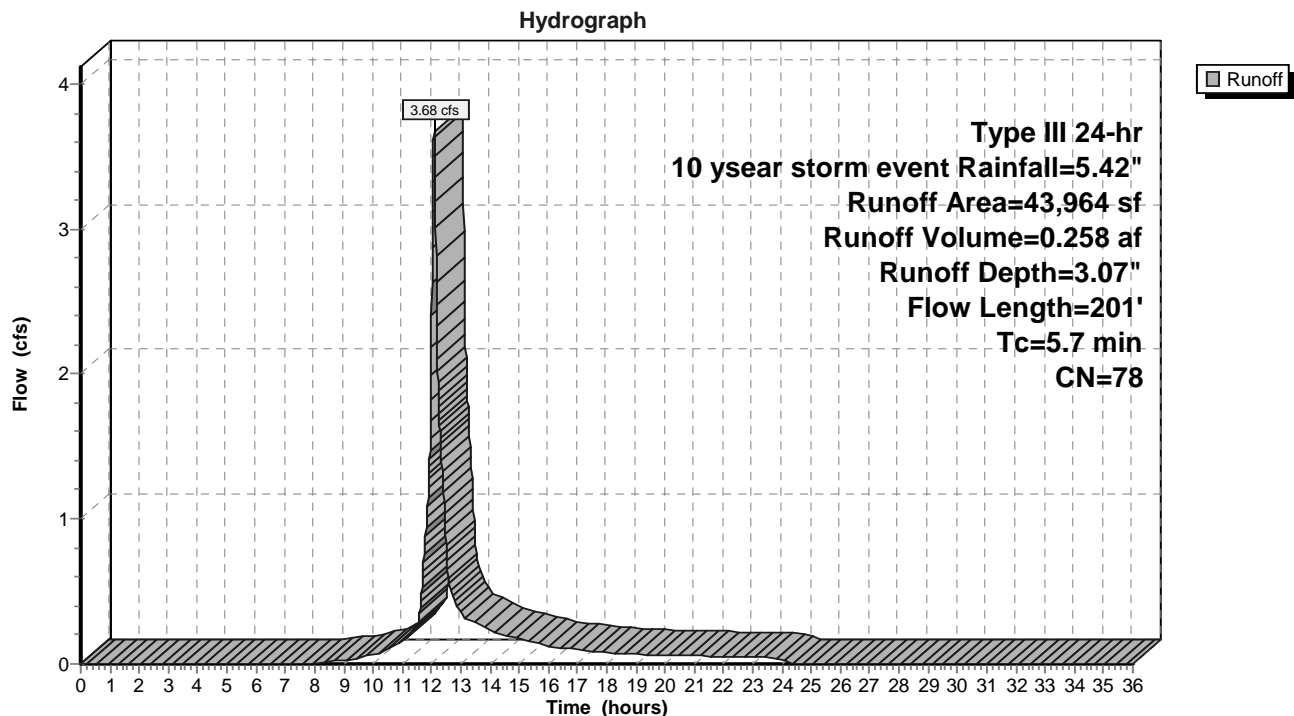
Summary for Subcatchment Post 2: Post Development - Sub Catchment # 2

Runoff = 3.68 cfs @ 12.08 hrs, Volume= 0.258 af, Depth= 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 ysear storm event Rainfall=5.42"

	Area (sf)	CN	Description
*	4,864	98	existing driveway
	6,497	79	Woods, Fair, HSG D
	10,932	79	50-75% Grass cover, Fair, HSG C
	21,553	73	Woods, Fair, HSG C
*	118	98	driveway
	43,964	78	Weighted Average
	38,982		88.67% Pervious Area
	4,982		11.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	78	0.1860	0.29		Sheet Flow, sheet flow
					Grass: Dense n= 0.240 P2= 3.55"
1.1	123	0.1460	1.91		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
5.7	201	Total			

Subcatchment Post 2: Post Development - Sub Catchment # 2

Hydrology Calculations 12-27-21

Type III 24-hr 10 ysear storm event Rainfall=5.42"

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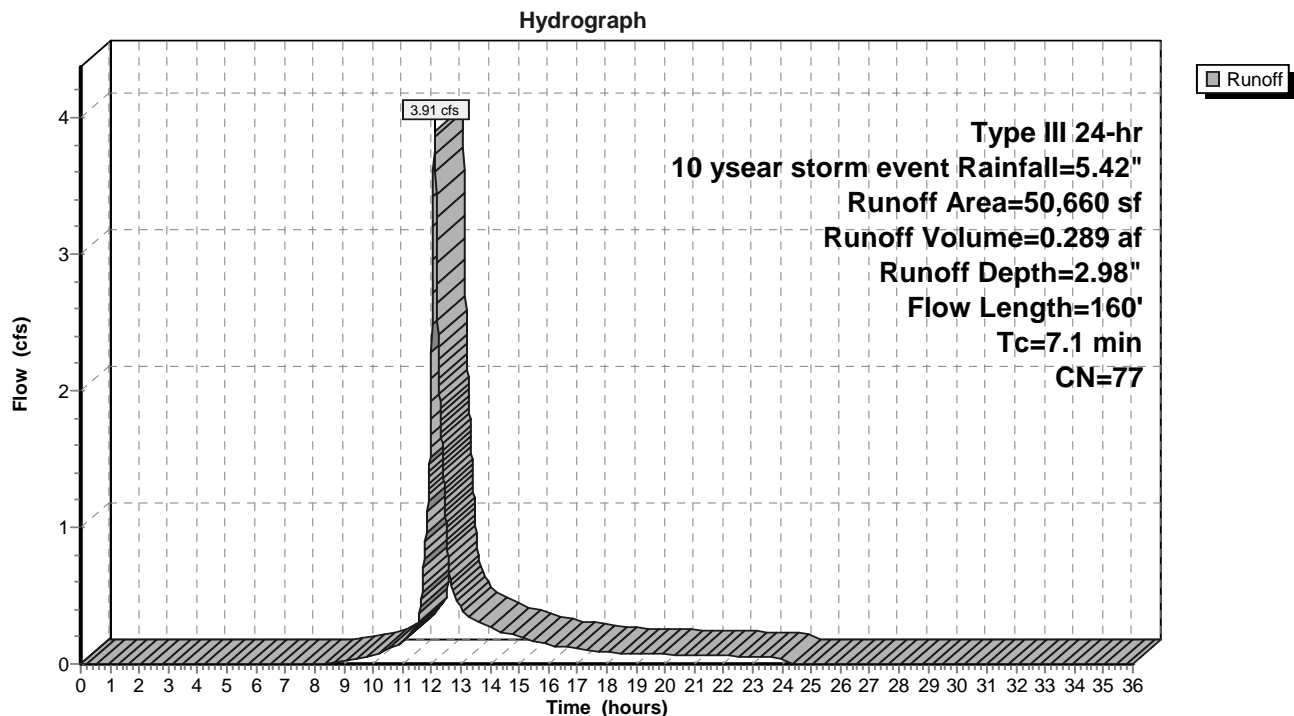
Summary for Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Runoff = 3.91 cfs @ 12.10 hrs, Volume= 0.289 af, Depth= 2.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 ysear storm event Rainfall=5.42"

	Area (sf)	CN	Description
*	4,864	98	ex driveway
	6,497	79	Woods, Fair, HSG D
*	1,395	98	ex roof area
	2,790	79	50-75% Grass cover, Fair, HSG C
	35,114	73	Woods, Fair, HSG C
	50,660	77	Weighted Average
	44,401		87.65% Pervious Area
	6,259		12.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	86	0.2550	0.22		Sheet Flow, sheet flow
					Woods: Light underbrush n= 0.400 P2= 3.55"
0.6	74	0.1710	2.07		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
7.1	160	Total			

Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Hydrology Calculations 12-27-21

Type III 24-hr 10 ysear storm event Rainfall=5.42"

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Summary for Pond Det 1: Detention Basin # 1

Inflow Area = 0.154 ac, 61.54% Impervious, Inflow Depth = 4.39" for 10 ysear storm event event
 Inflow = 0.78 cfs @ 12.07 hrs, Volume= 0.056 af
 Outflow = 0.35 cfs @ 12.23 hrs, Volume= 0.056 af, Atten= 55%, Lag= 9.4 min
 Discarded = 0.02 cfs @ 9.05 hrs, Volume= 0.030 af
 Primary = 0.33 cfs @ 12.23 hrs, Volume= 0.026 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 275.58' @ 12.23 hrs Surf.Area= 520 sf Storage= 773 cf

Plug-Flow detention time= 133.3 min calculated for 0.056 af (100% of inflow)

Center-of-Mass det. time= 133.4 min (916.7 - 783.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	273.40'	369 cf	16.00'W x 32.50'L x 3.04'H Field A 1,582 cf Overall - 659 cf Embedded = 922 cf x 40.0% Voids
#2A	273.90'	659 cf	Cultec R-330XLHD x 12 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 3 rows
		1,028 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	274.60'	2.0" Vert. Orifice/Grate C= 0.600
#2	Primary	274.90'	3.5" Vert. Orifice/Grate C= 0.600
#3	Primary	276.00'	2.5" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Discarded	273.40'	1.500 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.02 cfs @ 9.05 hrs HW=273.43' (Free Discharge)↑**4=Exfiltration** (Exfiltration Controls 0.02 cfs)**Primary OutFlow** Max=0.33 cfs @ 12.23 hrs HW=275.58' (Free Discharge)↑**1=Orifice/Grate** (Orifice Controls 0.10 cfs @ 4.55 fps)↑**2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 3.51 fps)↑**3=Orifice/Grate** (Controls 0.00 cfs)

Pond Det 1: Detention Basin # 1 - Chamber Wizard Field A**Chamber Model = Cultec R-330XLHD (Cultec Recharger® 330XLHD)**

Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf

Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap

Row Length Adjustment= +1.50' x 7.45 sf x 3 rows

4 Chambers/Row x 7.00' Long +1.50' Row Adjustment = 29.50' Row Length +18.0" End Stone x 2 = 32.50' Base Length

3 Rows x 52.0" Wide + 18.0" Side Stone x 2 = 16.00' Base Width

6.0" Base + 30.5" Chamber Height = 3.04' Field Height

12 Chambers x 52.2 cf +1.50' Row Adjustment x 7.45 sf x 3 Rows = 659.4 cf Chamber Storage

1,581.7 cf Field - 659.4 cf Chambers = 922.3 cf Stone x 40.0% Voids = 368.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,028.3 cf = 0.024 af

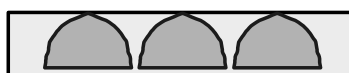
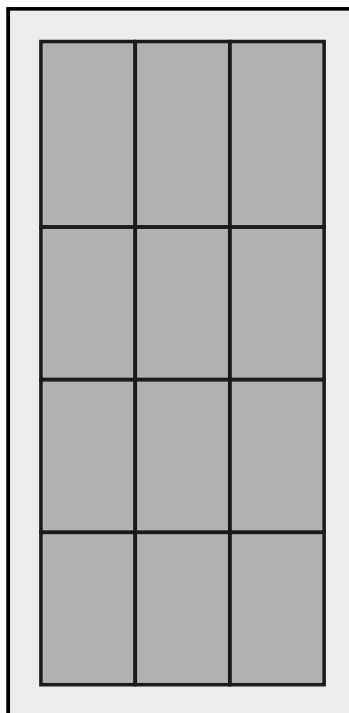
Overall Storage Efficiency = 65.0%

Overall System Size = 32.50' x 16.00' x 3.04'

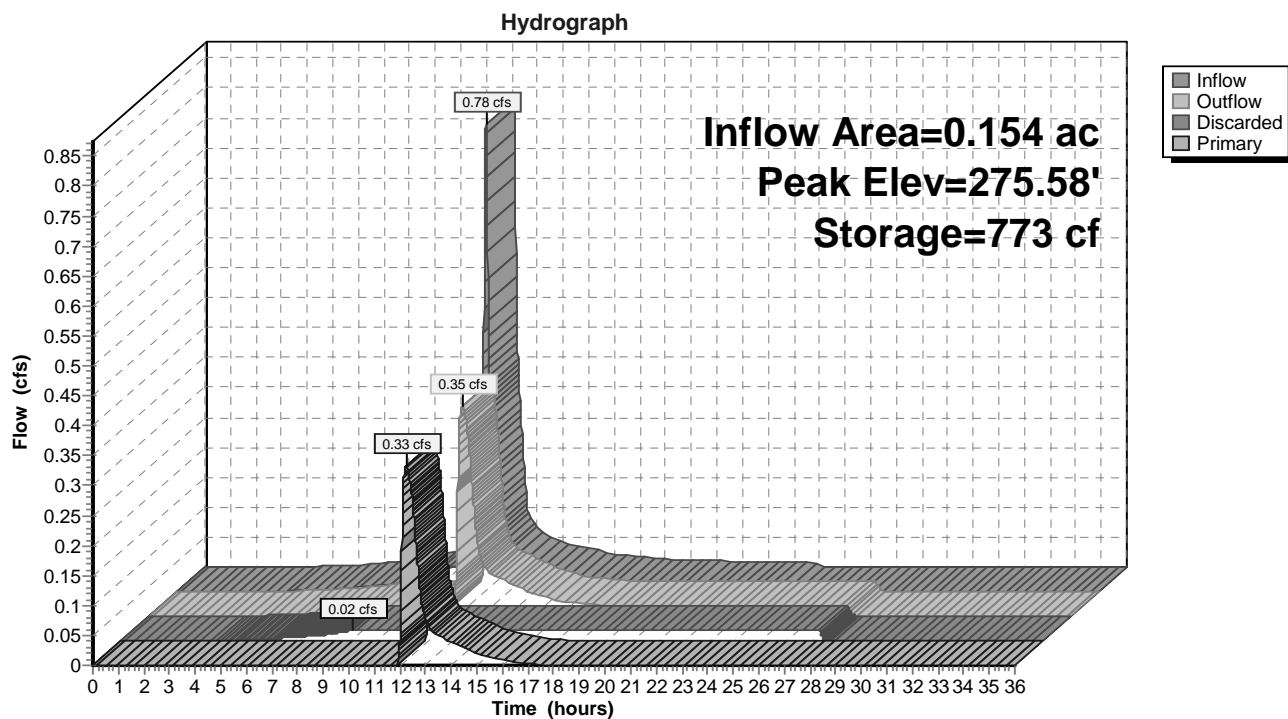
12 Chambers

58.6 cy Field

34.2 cy Stone



Pond Det 1: Detention Basin # 1

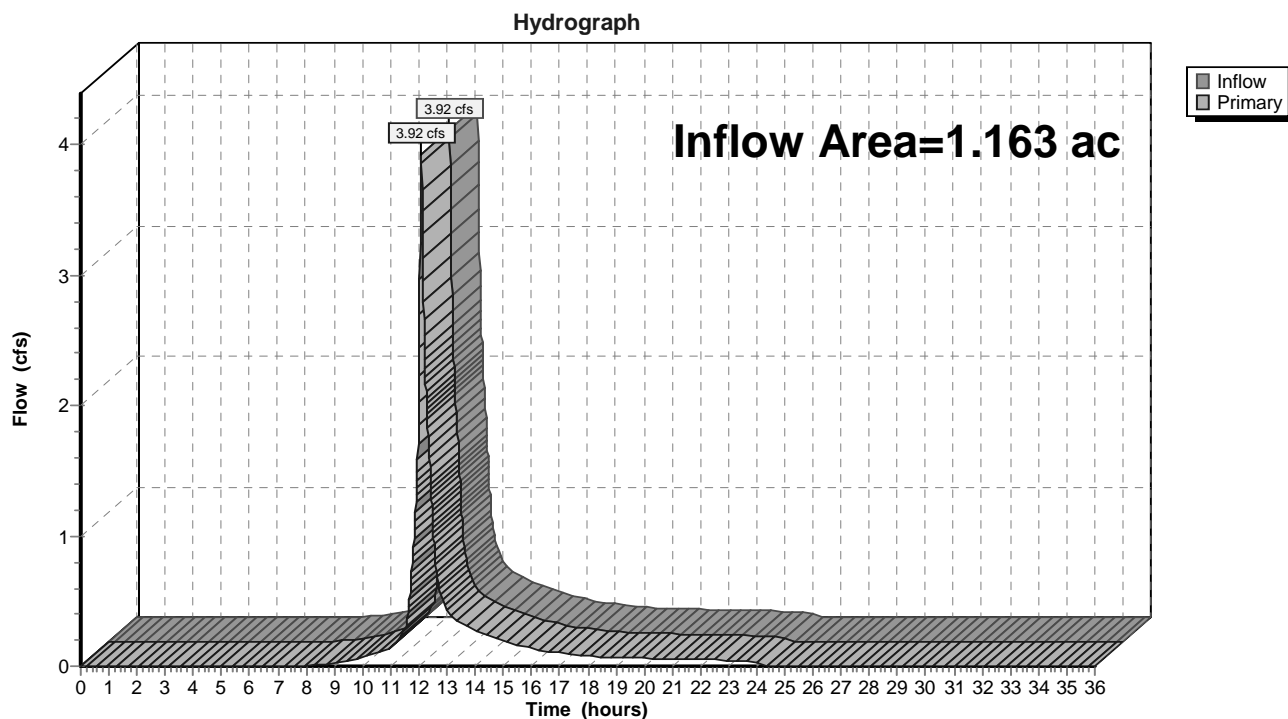


Summary for Link Post: Design Point South Property Line

Inflow Area = 1.163 ac, 17.97% Impervious, Inflow Depth = 2.94" for 10 ysear storm event event
 Inflow = 3.92 cfs @ 12.09 hrs, Volume= 0.285 af
 Primary = 3.92 cfs @ 12.09 hrs, Volume= 0.285 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link Post: Design Point South Property Line



Hydrology Calculations 12-27-21

Type III 24-hr 25 year storm event Rainfall=6.58"

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

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Post 1: Post Development - Runoff Area=6,696 sf 61.54% Impervious Runoff Depth=5.53"
Tc=5.0 min CN=91 Runoff=0.97 cfs 0.071 af

Subcatchment Post 2: Post Development - Runoff Area=43,964 sf 11.33% Impervious Runoff Depth=4.10"
Flow Length=201' Tc=5.7 min CN=78 Runoff=4.88 cfs 0.344 af

Subcatchment Pre 1: Pre Development - Runoff Area=50,660 sf 12.35% Impervious Runoff Depth=3.99"
Flow Length=160' Tc=7.1 min CN=77 Runoff=5.23 cfs 0.387 af

Pond Det 1: Detention Basin # 1 Peak Elev=276.03' Storage=926 cf Inflow=0.97 cfs 0.071 af
Discarded=0.02 cfs 0.032 af Primary=0.46 cfs 0.038 af Outflow=0.47 cfs 0.071 af

Link Post: Design Point South Property Line

Inflow=5.25 cfs 0.383 af
Primary=5.25 cfs 0.383 af

Total Runoff Area = 2.326 ac Runoff Volume = 0.802 af Average Runoff Depth = 4.14"
84.84% Pervious = 1.973 ac 15.16% Impervious = 0.353 ac

Hydrology Calculations 12-27-21

Type III 24-hr 25 year storm event Rainfall=6.58"

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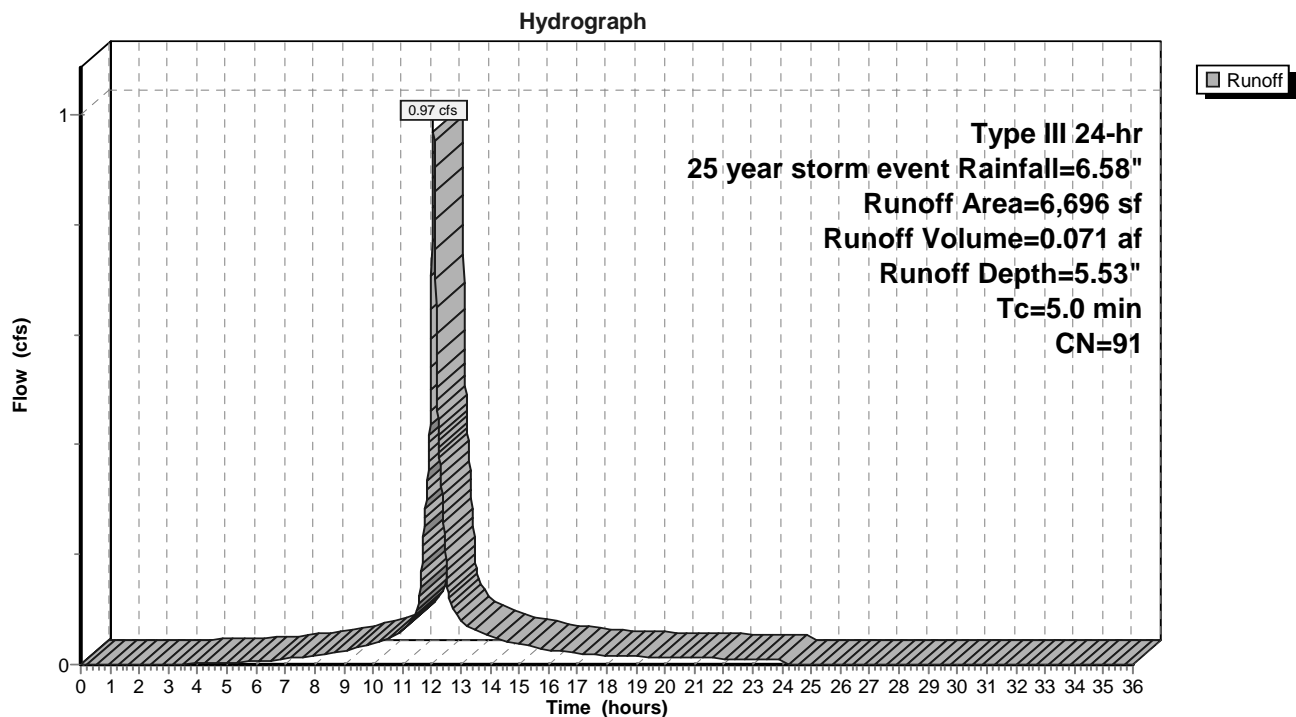
Summary for Subcatchment Post 1: Post Development - Sub Catchment # 1

Runoff = 0.97 cfs @ 12.07 hrs, Volume= 0.071 af, Depth= 5.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm event Rainfall=6.58"

	Area (sf)	CN	Description
*	2,356	98	Proposed roof
*	1,150	98	Proposed driveway
	2,575	79	50-75% Grass cover, Fair, HSG C
*	615	98	patio
	6,696	91	Weighted Average
	2,575		38.46% Pervious Area
	4,121		61.54% Impervious Area

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

Subcatchment Post 1: Post Development - Sub Catchment # 1

Hydrology Calculations 12-27-21

Type III 24-hr 25 year storm event Rainfall=6.58"

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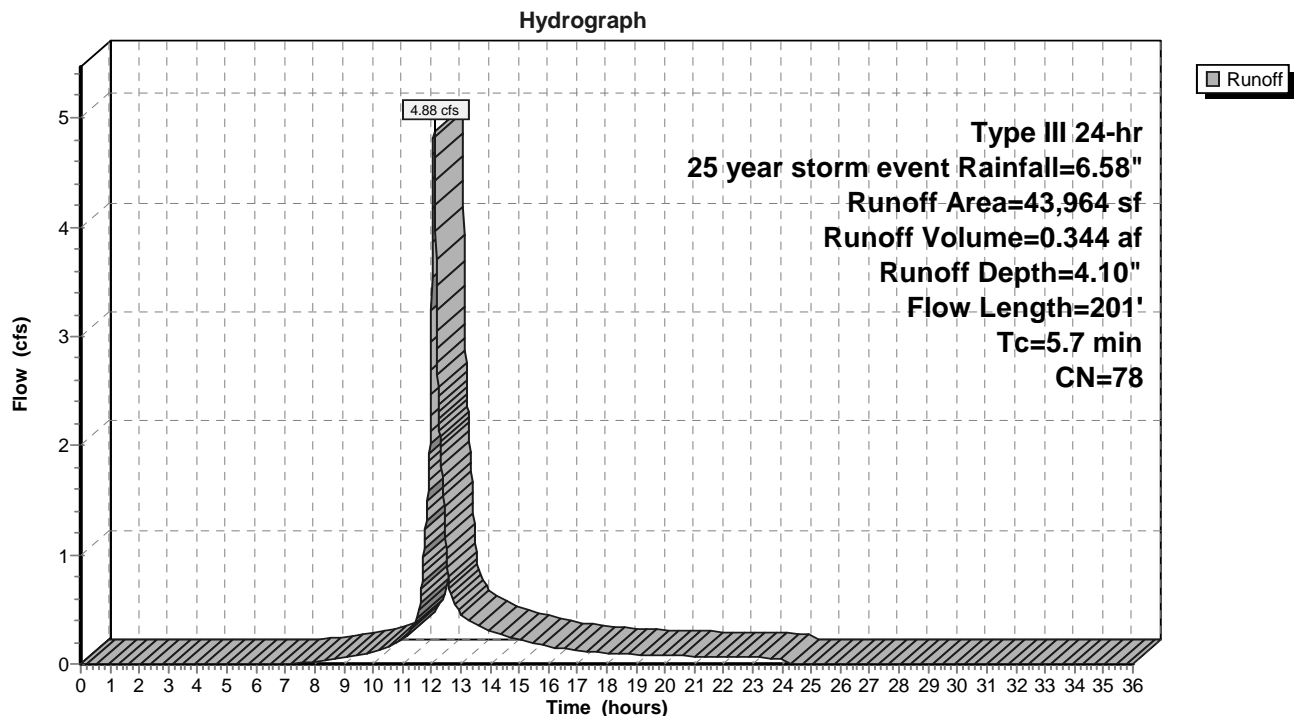
Summary for Subcatchment Post 2: Post Development - Sub Catchment # 2

Runoff = 4.88 cfs @ 12.08 hrs, Volume= 0.344 af, Depth= 4.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm event Rainfall=6.58"

	Area (sf)	CN	Description
*	4,864	98	existing driveway
	6,497	79	Woods, Fair, HSG D
	10,932	79	50-75% Grass cover, Fair, HSG C
	21,553	73	Woods, Fair, HSG C
*	118	98	driveway
	43,964	78	Weighted Average
	38,982		88.67% Pervious Area
	4,982		11.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	78	0.1860	0.29		Sheet Flow, sheet flow
					Grass: Dense n= 0.240 P2= 3.55"
1.1	123	0.1460	1.91		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
5.7	201	Total			

Subcatchment Post 2: Post Development - Sub Catchment # 2

Hydrology Calculations 12-27-21

Type III 24-hr 25 year storm event Rainfall=6.58"

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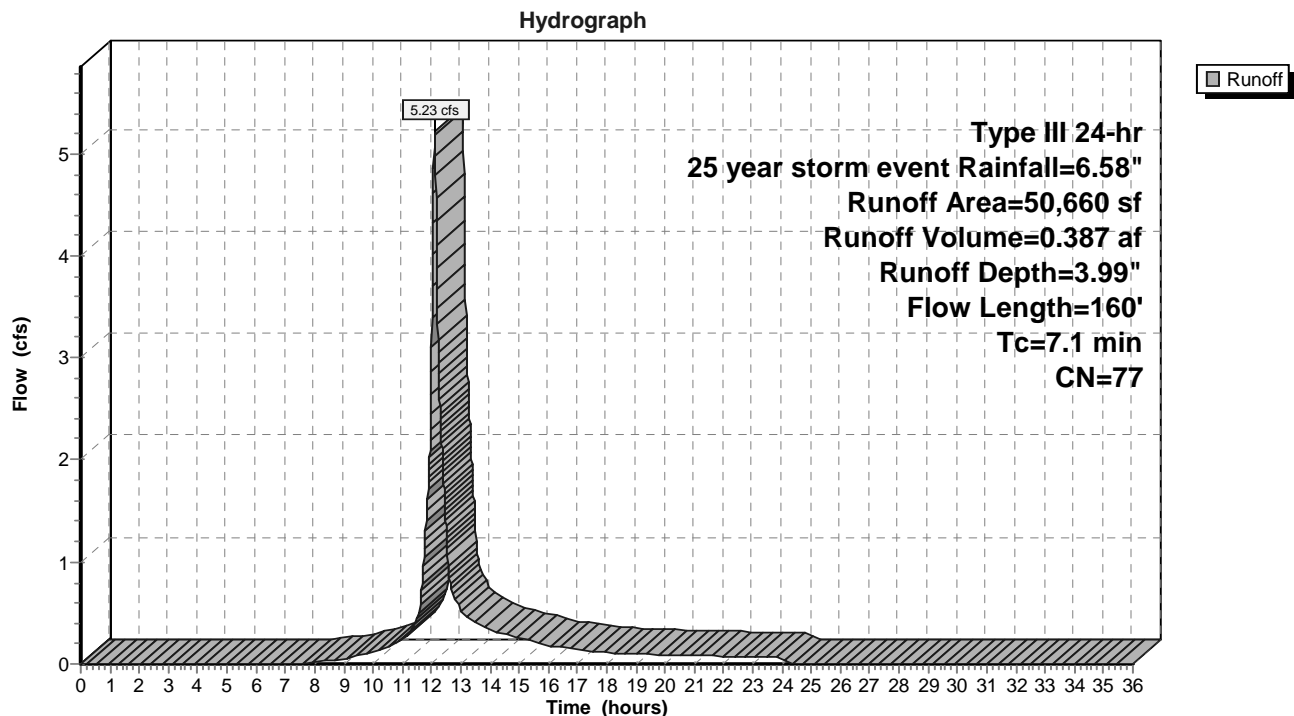
Summary for Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Runoff = 5.23 cfs @ 12.10 hrs, Volume= 0.387 af, Depth= 3.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 year storm event Rainfall=6.58"

	Area (sf)	CN	Description
*	4,864	98	ex driveway
	6,497	79	Woods, Fair, HSG D
*	1,395	98	ex roof area
	2,790	79	50-75% Grass cover, Fair, HSG C
	35,114	73	Woods, Fair, HSG C
	50,660	77	Weighted Average
	44,401		87.65% Pervious Area
	6,259		12.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	86	0.2550	0.22		Sheet Flow, sheet flow
					Woods: Light underbrush n= 0.400 P2= 3.55"
0.6	74	0.1710	2.07		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
7.1	160	Total			

Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Hydrology Calculations 12-27-21

Type III 24-hr 25 year storm event Rainfall=6.58"

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Summary for Pond Det 1: Detention Basin # 1

Inflow Area = 0.154 ac, 61.54% Impervious, Inflow Depth = 5.53" for 25 year storm event event
 Inflow = 0.97 cfs @ 12.07 hrs, Volume= 0.071 af
 Outflow = 0.47 cfs @ 12.20 hrs, Volume= 0.071 af, Atten= 51%, Lag= 7.9 min
 Discarded = 0.02 cfs @ 8.43 hrs, Volume= 0.032 af
 Primary = 0.46 cfs @ 12.20 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 276.03' @ 12.20 hrs Surf.Area= 520 sf Storage= 926 cf

Plug-Flow detention time= 121.5 min calculated for 0.071 af (100% of inflow)

Center-of-Mass det. time= 121.5 min (898.8 - 777.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	273.40'	369 cf	16.00'W x 32.50'L x 3.04'H Field A 1,582 cf Overall - 659 cf Embedded = 922 cf x 40.0% Voids
#2A	273.90'	659 cf	Cultec R-330XLHD x 12 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 3 rows
		1,028 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	274.60'	2.0" Vert. Orifice/Grate C= 0.600
#2	Primary	274.90'	3.5" Vert. Orifice/Grate C= 0.600
#3	Primary	276.00'	2.5" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Discarded	273.40'	1.500 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.02 cfs @ 8.43 hrs HW=273.43' (Free Discharge)↑**4=Exfiltration** (Exfiltration Controls 0.02 cfs)**Primary OutFlow** Max=0.46 cfs @ 12.20 hrs HW=276.03' (Free Discharge)↑**1=Orifice/Grate** (Orifice Controls 0.12 cfs @ 5.60 fps)↑**2=Orifice/Grate** (Orifice Controls 0.32 cfs @ 4.79 fps)↑**3=Orifice/Grate** (Weir Controls 0.01 cfs @ 0.60 fps)

Pond Det 1: Detention Basin # 1 - Chamber Wizard Field A**Chamber Model = Cultec R-330XLHD (Cultec Recharger® 330XLHD)**

Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf

Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap

Row Length Adjustment= +1.50' x 7.45 sf x 3 rows

4 Chambers/Row x 7.00' Long +1.50' Row Adjustment = 29.50' Row Length +18.0" End Stone x 2 = 32.50' Base Length

3 Rows x 52.0" Wide + 18.0" Side Stone x 2 = 16.00' Base Width

6.0" Base + 30.5" Chamber Height = 3.04' Field Height

12 Chambers x 52.2 cf +1.50' Row Adjustment x 7.45 sf x 3 Rows = 659.4 cf Chamber Storage

1,581.7 cf Field - 659.4 cf Chambers = 922.3 cf Stone x 40.0% Voids = 368.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,028.3 cf = 0.024 af

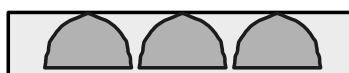
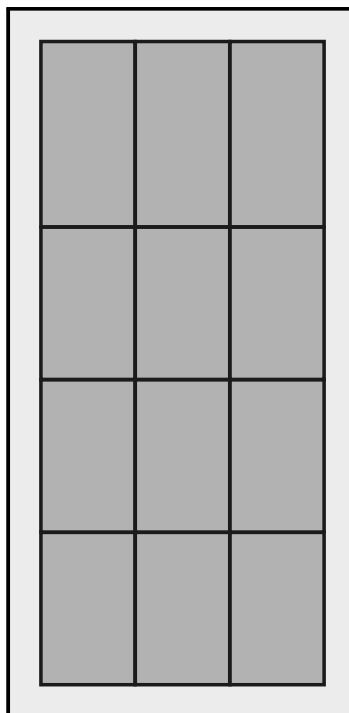
Overall Storage Efficiency = 65.0%

Overall System Size = 32.50' x 16.00' x 3.04'

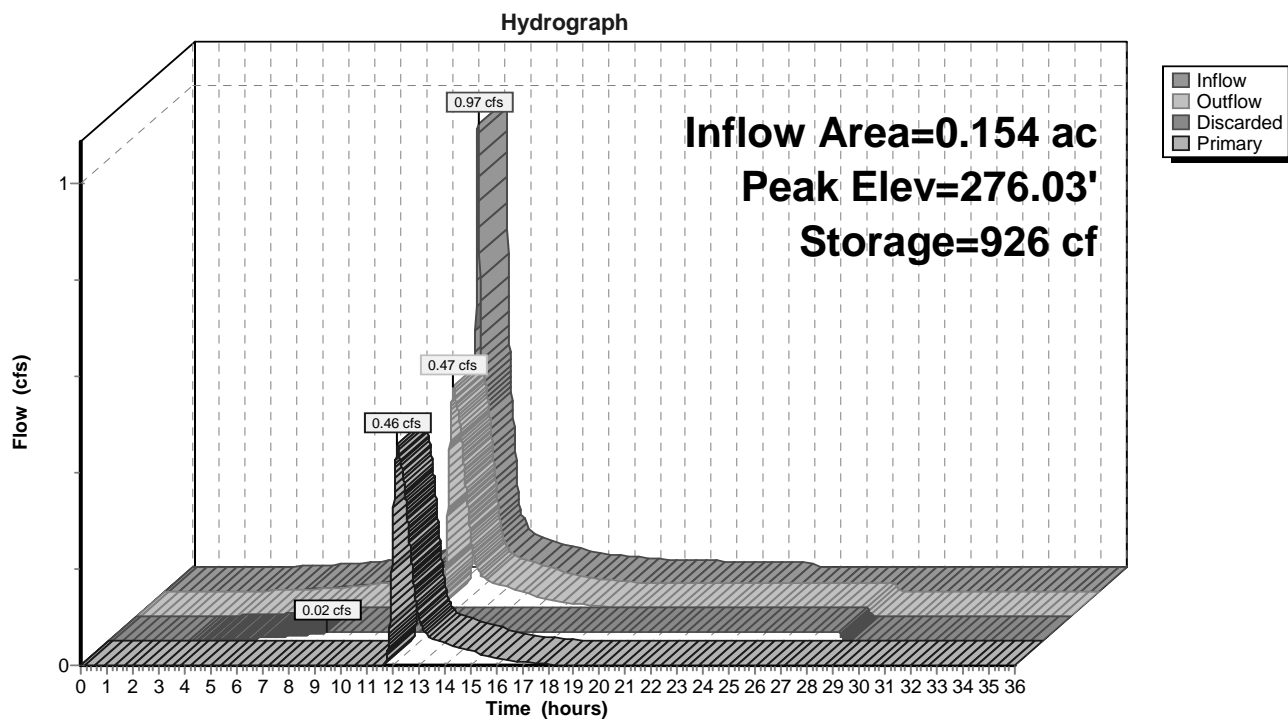
12 Chambers

58.6 cy Field

34.2 cy Stone



Pond Det 1: Detention Basin # 1

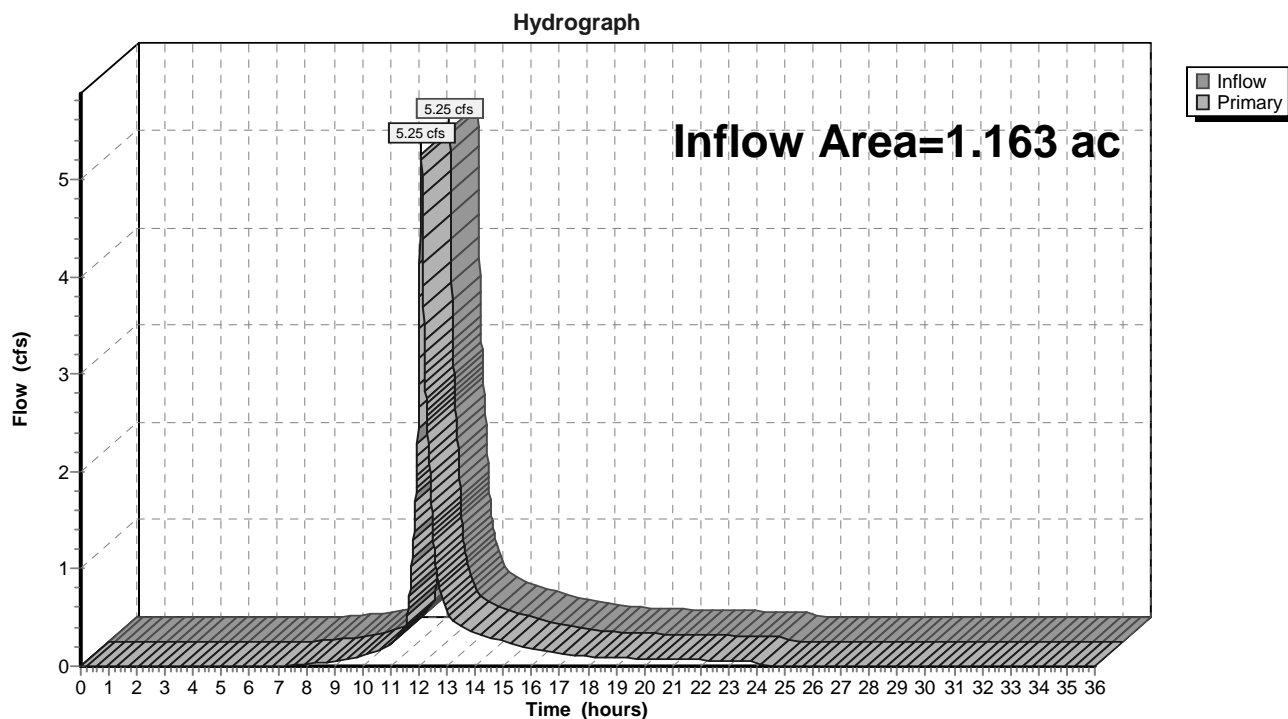


Summary for Link Post: Design Point South Property Line

Inflow Area = 1.163 ac, 17.97% Impervious, Inflow Depth = 3.95" for 25 year storm event event
 Inflow = 5.25 cfs @ 12.09 hrs, Volume= 0.383 af
 Primary = 5.25 cfs @ 12.09 hrs, Volume= 0.383 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link Post: Design Point South Property Line



Hydrology Calculations 12-27-21*Type III 24-hr 50 year storm event Rainfall=7.45"*

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

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Post 1: Post Development - Runoff Area=6,696 sf 61.54% Impervious Runoff Depth=6.38"
Tc=5.0 min CN=91 Runoff=1.11 cfs 0.082 af

Subcatchment Post 2: Post Development - Runoff Area=43,964 sf 11.33% Impervious Runoff Depth=4.88"
Flow Length=201' Tc=5.7 min CN=78 Runoff=5.80 cfs 0.411 af

Subcatchment Pre 1: Pre Development - Runoff Area=50,660 sf 12.35% Impervious Runoff Depth=4.77"
Flow Length=160' Tc=7.1 min CN=77 Runoff=6.23 cfs 0.463 af

Pond Det 1: Detention Basin # 1 Peak Elev=276.34' Storage=1,006 cf Inflow=1.11 cfs 0.082 af
Discarded=0.02 cfs 0.034 af Primary=0.60 cfs 0.048 af Outflow=0.61 cfs 0.082 af

Link Post: Design Point South Property LineInflow=6.23 cfs 0.459 af
Primary=6.23 cfs 0.459 af

Total Runoff Area = 2.326 ac Runoff Volume = 0.955 af Average Runoff Depth = 4.93"
84.84% Pervious = 1.973 ac 15.16% Impervious = 0.353 ac

Hydrology Calculations 12-27-21

Type III 24-hr 50 ysar storm event Rainfall=7.45"

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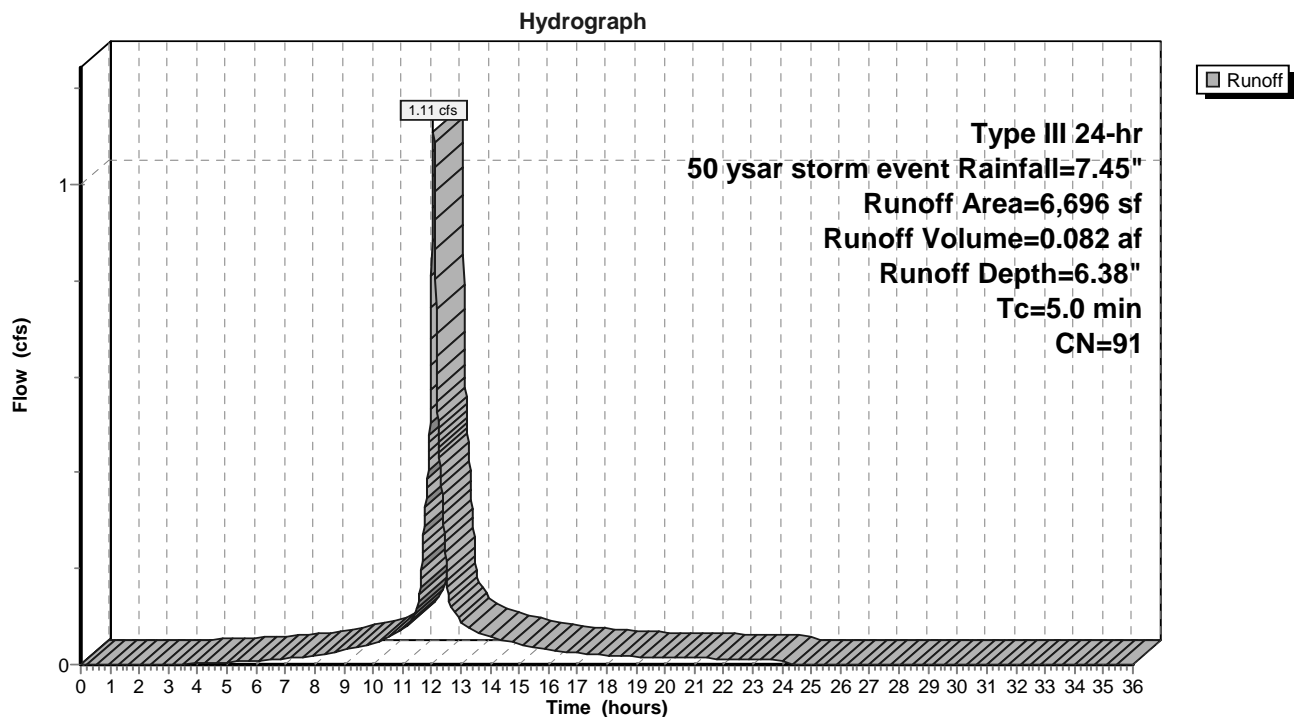
Summary for Subcatchment Post 1: Post Development - Sub Catchment # 1

Runoff = 1.11 cfs @ 12.07 hrs, Volume= 0.082 af, Depth= 6.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 ysar storm event Rainfall=7.45"

	Area (sf)	CN	Description
*	2,356	98	Proposed roof
*	1,150	98	Proposed driveway
	2,575	79	50-75% Grass cover, Fair, HSG C
*	615	98	patio
	6,696	91	Weighted Average
	2,575		38.46% Pervious Area
	4,121		61.54% Impervious Area

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

Subcatchment Post 1: Post Development - Sub Catchment # 1

Hydrology Calculations 12-27-21

Type III 24-hr 50 yrar storm event Rainfall=7.45"

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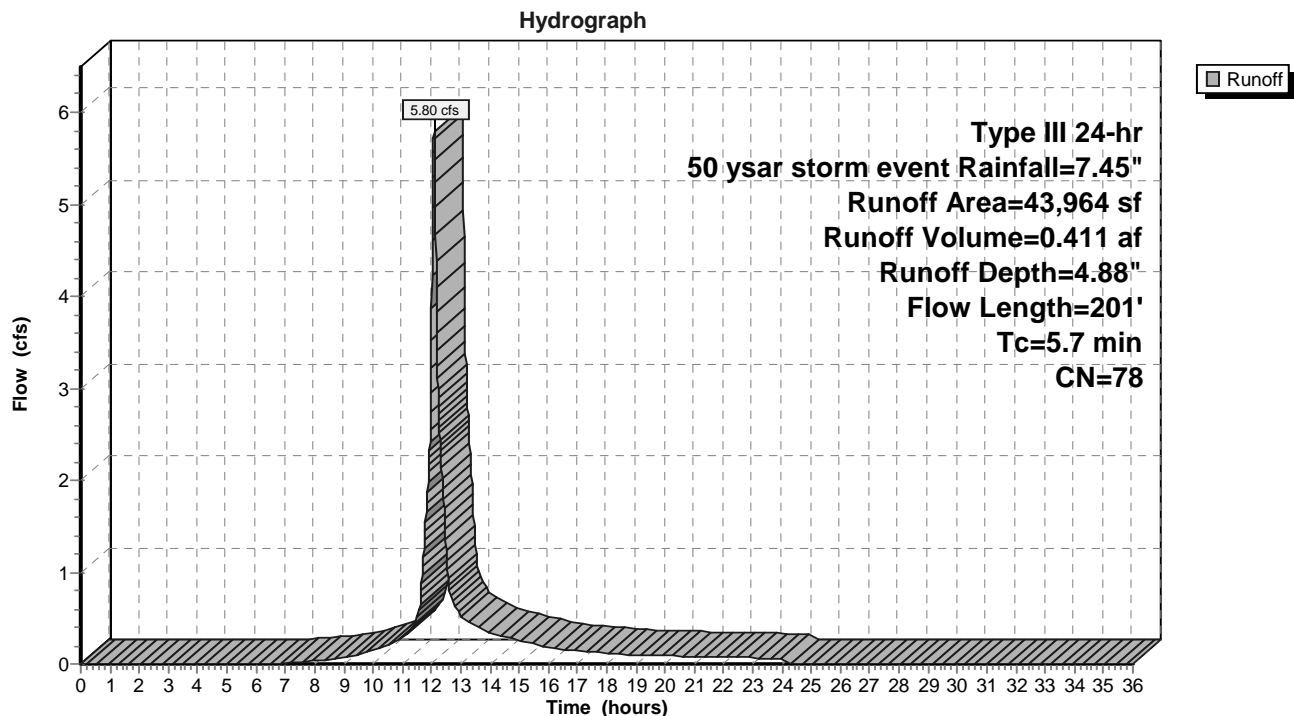
Summary for Subcatchment Post 2: Post Development - Sub Catchment # 2

Runoff = 5.80 cfs @ 12.08 hrs, Volume= 0.411 af, Depth= 4.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 yrar storm event Rainfall=7.45"

	Area (sf)	CN	Description
*	4,864	98	existing driveway
	6,497	79	Woods, Fair, HSG D
	10,932	79	50-75% Grass cover, Fair, HSG C
	21,553	73	Woods, Fair, HSG C
*	118	98	driveway
	43,964	78	Weighted Average
	38,982		88.67% Pervious Area
	4,982		11.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	78	0.1860	0.29		Sheet Flow, sheet flow
					Grass: Dense n= 0.240 P2= 3.55"
1.1	123	0.1460	1.91		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
5.7	201	Total			

Subcatchment Post 2: Post Development - Sub Catchment # 2

Hydrology Calculations 12-27-21

Type III 24-hr 50 year storm event Rainfall=7.45"

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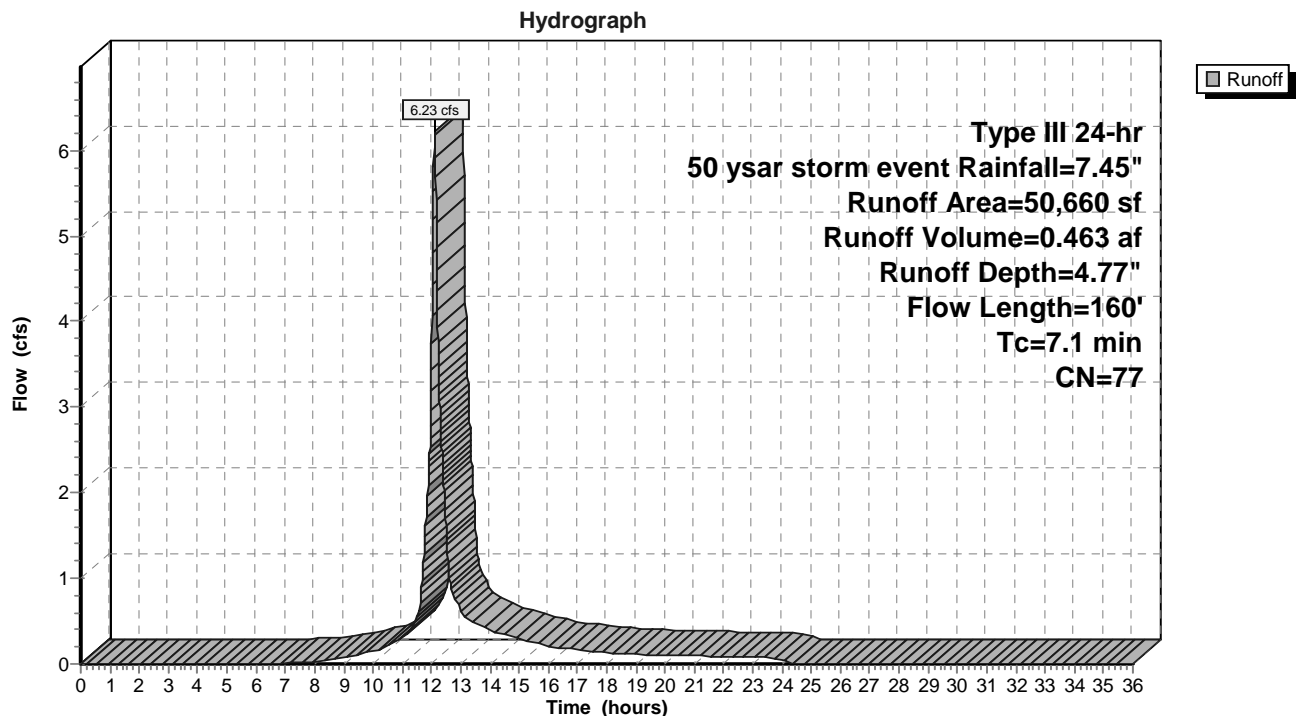
Summary for Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Runoff = 6.23 cfs @ 12.10 hrs, Volume= 0.463 af, Depth= 4.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 year storm event Rainfall=7.45"

	Area (sf)	CN	Description
*	4,864	98	ex driveway
	6,497	79	Woods, Fair, HSG D
*	1,395	98	ex roof area
	2,790	79	50-75% Grass cover, Fair, HSG C
	35,114	73	Woods, Fair, HSG C
	50,660	77	Weighted Average
	44,401		87.65% Pervious Area
	6,259		12.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	86	0.2550	0.22		Sheet Flow, sheet flow
					Woods: Light underbrush n= 0.400 P2= 3.55"
0.6	74	0.1710	2.07		Shallow Concentrated Flow, shallow concentrated flow
					Woodland Kv= 5.0 fps
7.1	160	Total			

Subcatchment Pre 1: Pre Development - Sub Catchment # 1

Hydrology Calculations 12-27-21

Type III 24-hr 50 year storm event Rainfall=7.45"

Prepared by DiVesta Civil Engineering Associates, Inc.

Printed 1/12/2022

HydroCAD® 10.00-19 s/n 02695 © 2016 HydroCAD Software Solutions LLC

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Summary for Pond Det 1: Detention Basin # 1

Inflow Area = 0.154 ac, 61.54% Impervious, Inflow Depth = 6.38" for 50 year storm event event
 Inflow = 1.11 cfs @ 12.07 hrs, Volume= 0.082 af
 Outflow = 0.61 cfs @ 12.18 hrs, Volume= 0.082 af, Atten= 45%, Lag= 6.4 min
 Discarded = 0.02 cfs @ 8.01 hrs, Volume= 0.034 af
 Primary = 0.60 cfs @ 12.18 hrs, Volume= 0.048 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 276.34' @ 12.18 hrs Surf.Area= 520 sf Storage= 1,006 cf

Plug-Flow detention time= 114.4 min calculated for 0.082 af (100% of inflow)

Center-of-Mass det. time= 114.4 min (888.1 - 773.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	273.40'	369 cf	16.00'W x 32.50'L x 3.04'H Field A 1,582 cf Overall - 659 cf Embedded = 922 cf x 40.0% Voids
#2A	273.90'	659 cf	Cultec R-330XLHD x 12 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 3 rows
		1,028 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	274.60'	2.0" Vert. Orifice/Grate C= 0.600
#2	Primary	274.90'	3.5" Vert. Orifice/Grate C= 0.600
#3	Primary	276.00'	2.5" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Discarded	273.40'	1.500 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.02 cfs @ 8.01 hrs HW=273.43' (Free Discharge)↑**4=Exfiltration** (Exfiltration Controls 0.02 cfs)**Primary OutFlow** Max=0.60 cfs @ 12.18 hrs HW=276.34' (Free Discharge)↑**1=Orifice/Grate** (Orifice Controls 0.14 cfs @ 6.19 fps)↑**2=Orifice/Grate** (Orifice Controls 0.37 cfs @ 5.47 fps)↑**3=Orifice/Grate** (Orifice Controls 0.10 cfs @ 2.80 fps)

Pond Det 1: Detention Basin # 1 - Chamber Wizard Field A**Chamber Model = Cultec R-330XLHD (Cultec Recharger® 330XLHD)**

Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf

Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap

Row Length Adjustment= +1.50' x 7.45 sf x 3 rows

4 Chambers/Row x 7.00' Long +1.50' Row Adjustment = 29.50' Row Length +18.0" End Stone x 2 = 32.50' Base Length

3 Rows x 52.0" Wide + 18.0" Side Stone x 2 = 16.00' Base Width

6.0" Base + 30.5" Chamber Height = 3.04' Field Height

12 Chambers x 52.2 cf +1.50' Row Adjustment x 7.45 sf x 3 Rows = 659.4 cf Chamber Storage

1,581.7 cf Field - 659.4 cf Chambers = 922.3 cf Stone x 40.0% Voids = 368.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,028.3 cf = 0.024 af

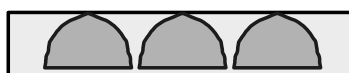
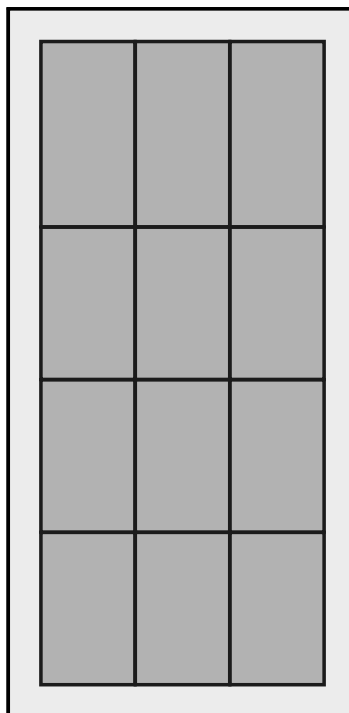
Overall Storage Efficiency = 65.0%

Overall System Size = 32.50' x 16.00' x 3.04'

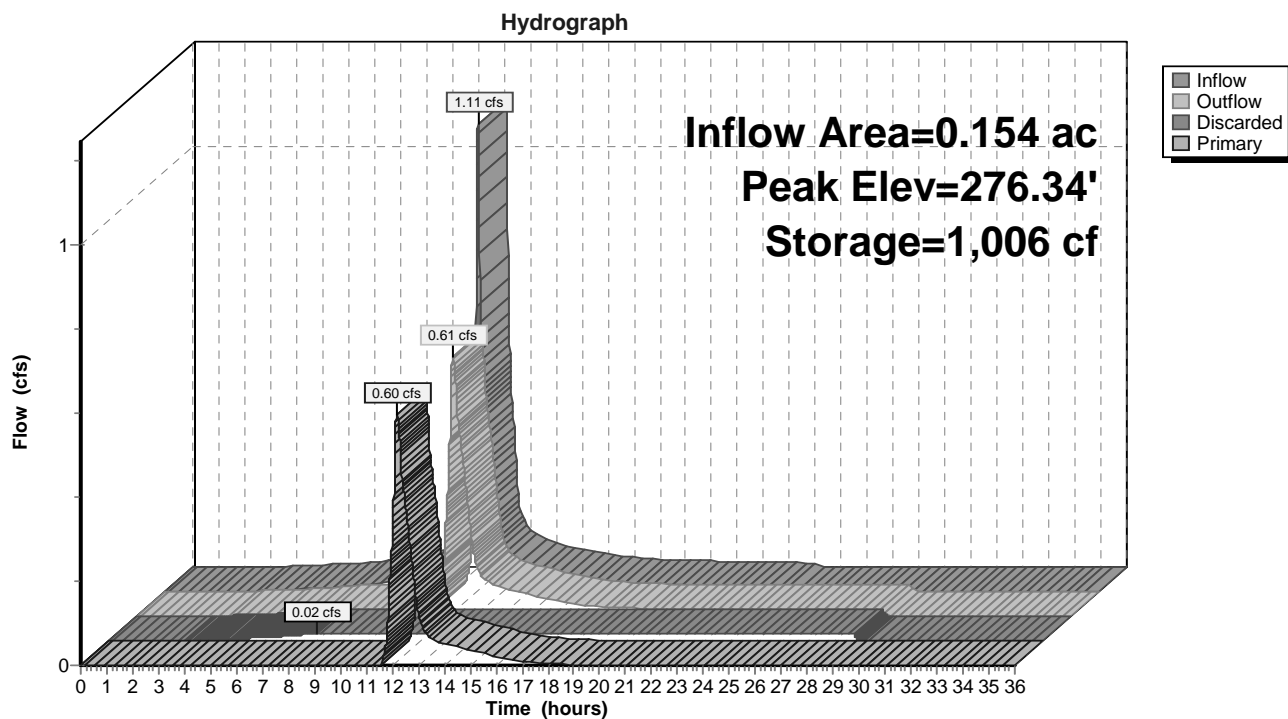
12 Chambers

58.6 cy Field

34.2 cy Stone



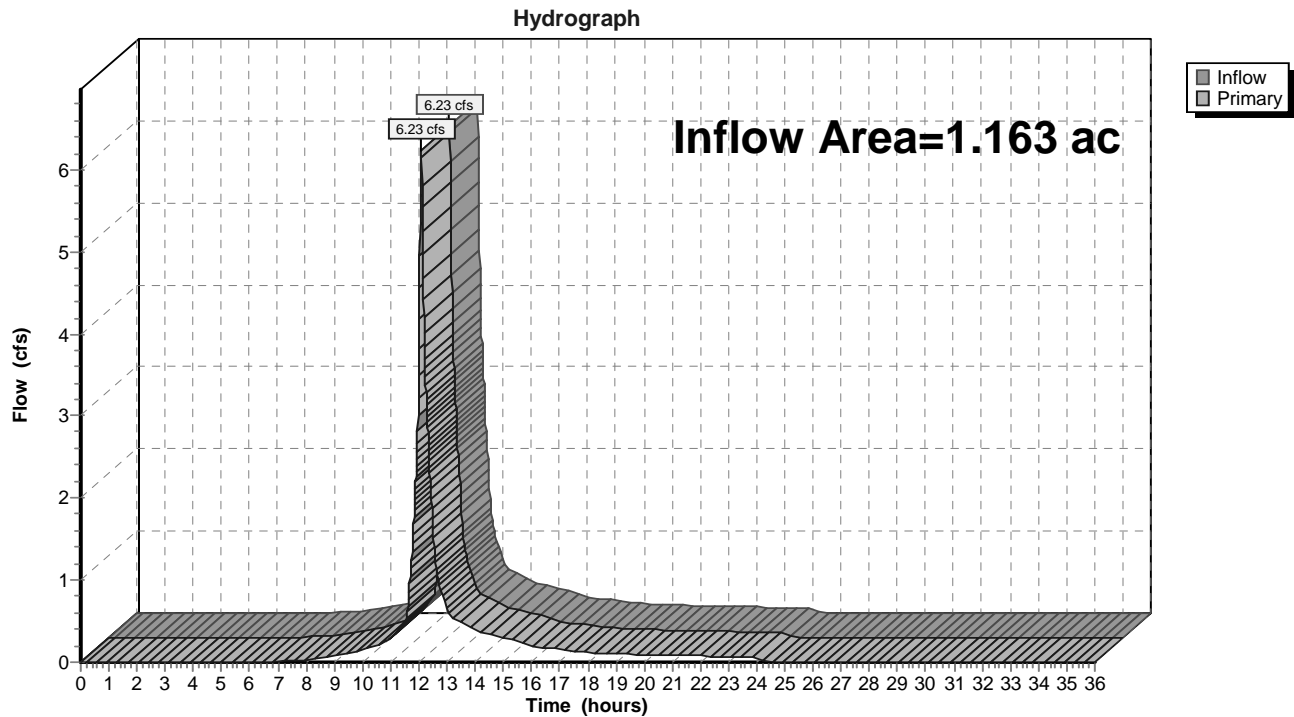
Pond Det 1: Detention Basin # 1



Summary for Link Post: Design Point South Property Line

Inflow Area = 1.163 ac, 17.97% Impervious, Inflow Depth = 4.73" for 50 year storm event event
Inflow = 6.23 cfs @ 12.09 hrs, Volume= 0.459 af
Primary = 6.23 cfs @ 12.09 hrs, Volume= 0.459 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link Post: Design Point South Property Line

Site Engineering Report

Sycamore, LLC
21 Edith Lane
Wilton, Connecticut

Prepared for:

Sycamore, LLC
375 Fairfield Avenue
Building # 2
Stamford, CT 06902

Date Prepared:

January, 2022

Prepared by:

DiVesta Civil Engineering, LLC

51 Painter Ridge Road
Roxbury, Connecticut 06783
(860) 354-4226
dceainc@charter.net

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- Appendix A: Water Quality Volume Calculations
- Appendix B: Hydrology Calculations
- Appendix C: Wetlands Report / Web Soils

DiVesta Civil Engineering, LLC

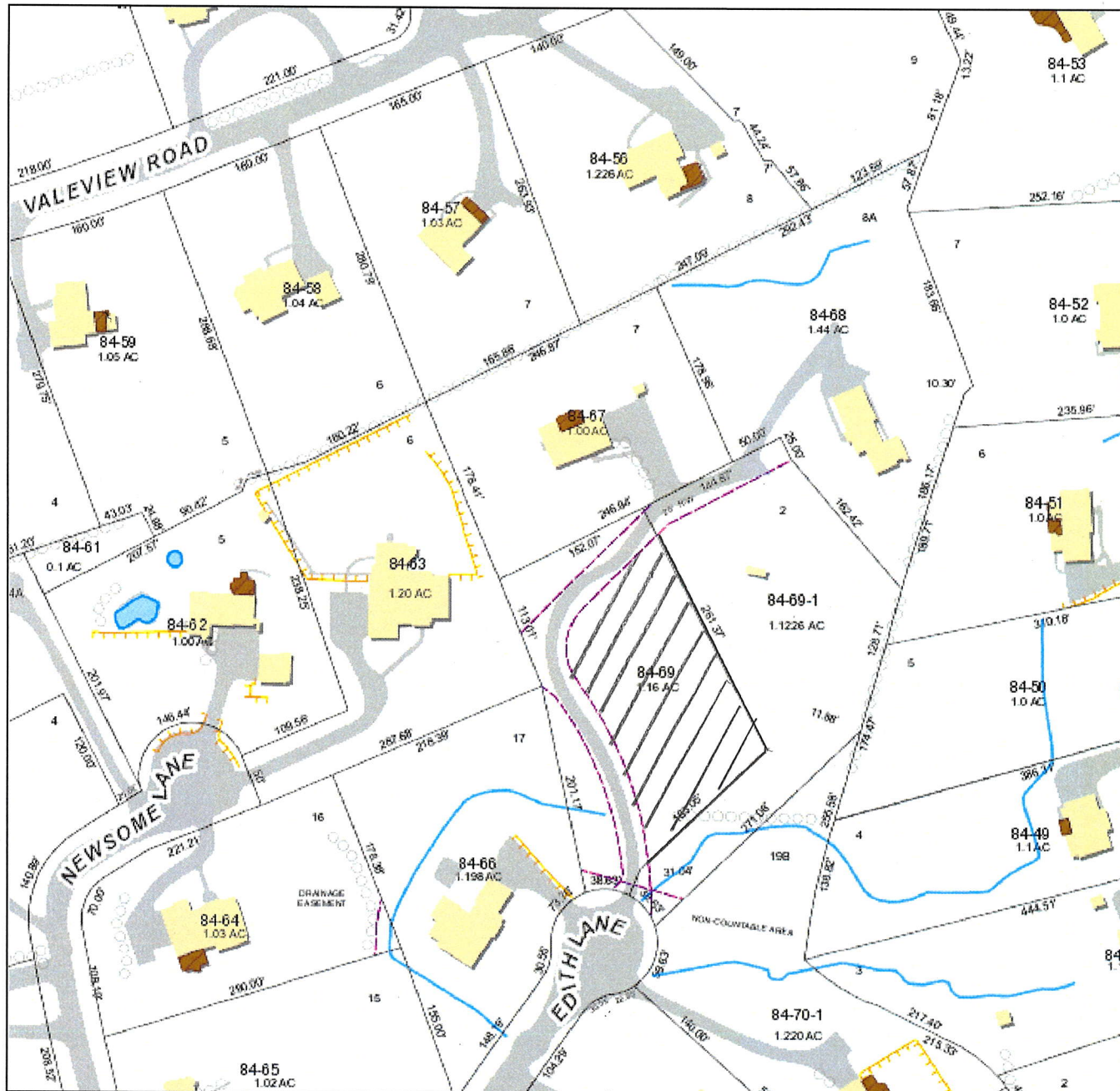
51 Painter Ridge Road
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Town of Wilton

Geographic Information System (GIS)



Date Printed: 12/30/2021



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Wilton and its mapping contractors assume no legal responsibility for the information contained herein.

Zoning Effective: July 28, 2017

Planimetrics Updated: 2014

Approximate Scale: 1 inch = 150 feet

0 150
Feet



I. Introduction

This report has been prepared to present technical information in support of the application for the construction of a single family residence on a 1.163± acre parcel located at 21 Edith Lane. Other work associated with the construction of the proposed single family residence is the installation of a septic system and a stormwater management system and grading associated with the construction of the residence. The parcel is located in the R-1A zone of Wilton.

II. Existing Conditions

The 1.163± acre parcel is comprised of a single lot. Access to the property is via paved common driveway serving three other properties plus this vacant lot.

The property consists of mild to steep slopes comprising a small area of open lawn and mature trees throughout. There are areas of ledge outcropping in the south central portion of the lot. The property slopes in two directions from the high point that is located in the easterly central portion of the property.

The site was checked by MB Soil Mapping on March 21, 2008. Wetlands were field identified on the southwest portion of the property. The wetlands flags were field located by William W. Seymour & Associates, P.C. of Darien, CT and placed on the map. Please see the appendix for the report from MB Soil Mapping.

III. Proposed Activity

It is proposed to construct a new single family residence on the upper portion of the property with direct access from the paved common driveway. It is proposed to construct a 3 bedroom residence in the same general location as the previous proposal for the subdivision. Access will be by a paved driveway off of the common driveway. The proposed septic system will be in the same general area as the original subdivision plan. The stormwater management system will be located in an area where there is adequate soil to disperse the collected runoff from the proposed driveway, roof area, patio and a portion of the lawn. The proposed grading is similar to what was originally done for the previous site plan.

The proposed activity will be within the upland review area similar to what was approved for the proposed subdivision with the exception of the stormwater management system which was moved slightly to be able to disperse the runoff collected from the proposed house, driveway and a portion of the lawn area adjacent and east of the house.

IV. Site Utilities

a. On-Site Subsurface Sewage Disposal System

The proposed on-site subsurface sewage disposal system has been designed for a 3 bedroom house.

b. Water

The proposed residence will be served by an individual well.

c. Wetlands

The wetlands that were field identified by Mr. Marc Beroz are located in the southwest portion of the property. There are approximately .14 acres of wetlands on the property. Please see the appendix for Mr. Beroz's wetlands report.

d. Storm Drainage

1. Existing Site Runoff Characteristics:

Based on the existing topography the runoff from this site typically drains from east to west and then southerly towards the existing wetlands. In developing the pre-development hydrology we used the current property conditions which consist of a small portion of lawn that was around the existing house, a portion of the existing house, the existing paved driveway, woods, and wetlands.

2. Developed Condition Site Runoff Characteristics:

Development of the site will include the construction of a new single family residence, a driveway to access the garage from the common driveway, wooded areas and lawn areas. The analysis that was conducted on this site was to compare the pre-development conditions which consist of a partially undeveloped parcel of land and compare it to the post-development conditions which will consist of the proposed house, driveway, other impervious areas and lawn. The goal for the project is to manage the runoff so that post-development peak rate of runoff will be equal to or less than pre-development peak rate of runoff.

It is proposed to collect the runoff from the proposed residence, a portion of the lawn area on the east side of the house, the proposed driveway and the patio and direct the runoff to the subsurface stormwater management system consisting of Cultec Rechargers. The areas below the outlet inverts for the system will handle the water quality volume. Once the runoff enters the chambers the flow will be metered out through a series of orifices and be directed to a level spreader where the flow will sheet flow in a southern direction. Adding this outlet flow from the detention system to the remaining flows from the site provides a flow that is equal to or less than pre-development flows for all design storms. (Please see the chart below for a summary of our findings.)

The methodology used to determine the peak rate of runoff was TR-20 computer model by HydroCAD. The 2, 10, 25 and 50 year, 24-hour design storms were used for the analysis of this property. We calculated the runoff for the whole site to determine the peak rate of runoff from the site. We looked at the pre-development conditions and then compared it to the post-development conditions with detention.

Summary

	2 Year Storm Event (cfs)	10 Year Storm Event (cfs)	25 Year Storm Event (cfs)	50 Year Storm Event (cfs)
Pre Development	1.9	3.9	5.2	6.2
Post Development	1.8	3.9	5.2	6.2

Based on our findings the post-development peak rate of runoff from the proposed site plan will be less than or equal to pre-development conditions for the 2, 10, 25 and 50-year design storms.

V. Sedimentation and Erosion Control Narrative

The proposal consists of the construction of a new single-family dwelling on the last vacant lot that was created in 2008 by subdivision. The newly created lot consisting of 1.163± acres will be accessed from a common driveway from Edith Lane.

The site currently contains mild to steep slopes. The topography generally slopes from a high point located in the northeast portion of the property and the runoff flows in a westerly then a southerly direction towards the southern property line. Regrading will occur around the proposed new dwelling, the septic area, driveway and the detention system. All regrading around the house site will have a minimum ratio of two horizontal to one vertical slope or flatter. Care should be taken during the initial stage of excavation for the house to control runoff.

Prior to any excavation the perimeter silt fence and/or staked haybales shall be installed and maintained throughout the life of the project until all areas have been stabilized. Once the excavation has started for the driveway an anti-tracking pad will be installed at the entrances. When the catch basins are installed, hay bale rings will be installed around the catch basins. At the end of the workday and weekend and during rain events, staked hay bales are to be installed at the driveway entrances.

A temporary construction access will need to be installed to the detention system. Once the stormwater management system has been completed the access shall be restored.

Reference is made to the Sedimentation and Erosion Controls on the site plan, which are, along with this text included in the report, part of the Sedimentation and Erosion Control Plan for this project.

A. Sequence of Construction

Existing Driveway to the Proposed Dwelling

1. Shall remain as is.
2. Driveway shall be cleaned daily or as needed to keep sediment from washing from the

pavement.

Proposed Lot

1. Stake property lines
2. Remove trees and stumps from the work area which will include the house, driveway, septic leaching area and the detention system.
3. Install silt fence before excavation begins on-site.
4. Strip and stockpile topsoil for future use.
5. Rough grade the driveway.
6. Install the anti-tracking pad.
7. Start excavating for the foundation.
8. Install the underground utilities from the existing overhead poles.
9. Start construction of the house.
10. Install septic system as per the approved design.
11. Prepare final grading over septic area; protect from vehicle traffic; spread topsoil/loam; rake and seed.
12. Install proposed detention system.
13. Install drainage system in driveway
14. Install hay bales around the installed catch basins.
15. Final grading around the house, spread topsoil/loam rake and seed.
16. Remove silt fence once area has been stabilized.

Sycamore, LLC

Appendix A:
**Water Quality Volume
Calculations**

DiVesta Civil Engineering, LLC

51 Painter Ridge Road
Roxbury, Connecticut 06783
(860) 354-4226
dceainc@charter.net

Water Quality Volume (WQV)
Calculations

Sycamore, LLC
21 Edith Lane
Wilton, Connecticut
Dated: 12/27/21

Water Quality Volume Calculations

Water Quality Volume (WQV) = ((1") (R) (A)) / 12

Where:

A = total area in square feet

R = 0.05 + 0.009 (I)

I = percent impervious cover

Proposed Site Sub Catchment #1, Available Storage = 393 cf @ elevation 274.6±

A = 6,696 sf (proposed roof, patio, lawn & driveway)

I = (4,121/6,696) = .6154 = 61.54%

R = 0.05 + 0.009 (61.54%)

R = 0.6039

WQV = ((1") (R) (A)) / 12

WQV = ((1") (0.6039) (6,696 sf)) / 12

WQV = 337 cu-ft (required)

Sycamore, LLC

Appendix B:

Hydrology Calculations

DiVesta Civil Engineering, LLC

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Sycamore, LLC

Appendix C:
Wetlands Report / Web Soils

DiVesta Civil Engineering, LLC

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MB Soil Mapping

Soil and Environmental Consulting

Marc B. Beroz
Phone & Fax (860) 349-3334

102 Creamery Road
Durham, CT 06422

Mr. David Desola
336 Windsor St
Cambridge, MA 02141-1340

March 22, 2008

JOB NO. 08C21M1

Dear Mr. Desola:

RE: 21 EDITH LANE, WILTON, CT

At your request, I made an on-site investigation of the 2.389 acre property located at 21 Edith Lane in Wilton, Connecticut. The purpose of my visit was to identify the Connecticut inland wetland and watercourse boundaries. The field work was done on March 21, 2008.

The wetland boundaries are marked with blue flagging labeled MB 1 through MB 30. Please refer to the enclosed sketch for the approximate location of the inland wetland boundaries and key wetland flag numbers.

The soil map and narrative are a refinement of data contained in the Soil Survey of Fairfield County, Connecticut. The symbols on the sketch identify map units. Each map unit has a unique combination of soils. Areas with the same symbol have similar composition. The following map unit descriptions are based on the data collected at this particular site. For this reason, there may be some differences between these descriptions and map unit symbols and those provided in the soil survey report.

WETLAND SOILS

Map Unit Rn

The Rn undifferentiated map unit consists primarily Leicester and Whitman soils on 0 to 8 percent slopes. Both soils formed in loose till.

Leicester soils are very deep and poorly drained. Typically they have a fine sandy loam or loam surface layer and subsoil over a friable fine sandy loam or sandy loam substratum. The substratum extends to a depth of 60 inches or more. Leicester soils have a high water table within 20 inches of the soil surface during the late fall through spring months.

Whitman soils are very deep and very poorly drained. Typically, they have a muck, mucky loam or mucky fine sandy loam surface

layer over a loam or fine sandy loam subsoil and substratum. The substratum materials extend to a depth of 60 inches or more. Depth to the seasonal high water table is less than 6 inches for most of the year.

Included in mapping are soils that have been disturbed by prior land use activities.

NON-WETLAND SOILS

The non-wetland soils were not studied in detail. Observations were made of these soils only in the process of identifying the wetland sites. The following descriptions do not constitute a detailed soil survey, but may be used as an aid in site planning.

Map Units CrC and CrE

The CrC and CrE complex map units consist primarily of three dominant soils and areas of rock outcrop that are so intermingled on the landscape that they could not be separated on the map.

The first soil is named Charlton. Charlton soils are very deep and well drained. Typically they have a fine sandy loam surface layer and subsoil over a friable fine sandy loam or sandy loam substratum. Depth to bedrock is greater than 60 inches.

The second soil is named Chatfield. Chatfield soils are moderately deep and well drained. Typically they have a fine sandy loam surface layer and subsoil over hard bedrock at a 20 to 40 inch depth.

The third soil is named Hollis. Hollis soils are shallow and well drained. Typically they have a fine sandy loam or loam surface layer and subsoil over hard bedrock at a 10 to 20 inch depth.

The Rock outcrop consists of exposures of consolidated bedrock.

Included in mapping are soils 40 to 60 inch deep over bedrock; soils less than 10 inches deep over bedrock; and soils that have been disturbed by prior land use activities. Map Unit CrC also has an inclusion of moderately well drained soils where mapped adjacent to the wetlands.

Slopes are dominantly 3 to 15 percent in map unit CrC and 15 to 45 percent in map unit CrE.

Map Unit HpC

The HpC complex map unit consists primarily of Hollis soils and areas of rock outcrop that are so intermingled on the landscape that they could not be separated on the map. Slopes are dominantly 3 to 15 percent but are steeper along the south edge of the delineation.

March 22, 2008

Hollis soils are shallow and well drained. Typically they have a fine sandy loam or loam surface layer and subsoil over hard bedrock at a 10 to 20 inch depth.

The rock outcrops consist of exposures of consolidated bedrock.

Included in mapping are soils greater than 20 inches deep over bedrock and soils less than 10 inches deep to bedrock.

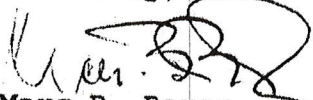
Map Unit UD

The UD map unit consists primarily of man-made, well drained and moderately well drained soils in cut and/or fill areas. The soils are named Udorthents. Slopes are dominantly 0 to 15 percent. The fill is mostly earthy materials but may also contain minor amounts of non-earthy materials such as pieces of concrete, brick, wood, metal and glass. In cut areas the natural topsoil and subsoil layers have been removed and the substratum materials are now at the soil surface.

The identification of the soils on this site was based on field observations and the guidelines of the National Cooperative Soil Survey Program.







Please contact me if you have any questions.

Sincerely,


Marc B. Beroz
Soil Scientist

21 EDITH LANE
WILTON, CT

MAP LEGEND

 APPROXIMATE LOCATION OF FLAGGED INLAND WETLAND BOUNDARIES
 WETLAND BOUNDARIES - NOT FLAGGED
 OTHER SOIL MAP UNIT DELINEATION LINES
 SOIL MAP UNIT SYMBOLS
 APPROXIMATE LOCATION OF KEY INLAND WETLAND FLAGS
 INLAND WETLAND SOILS

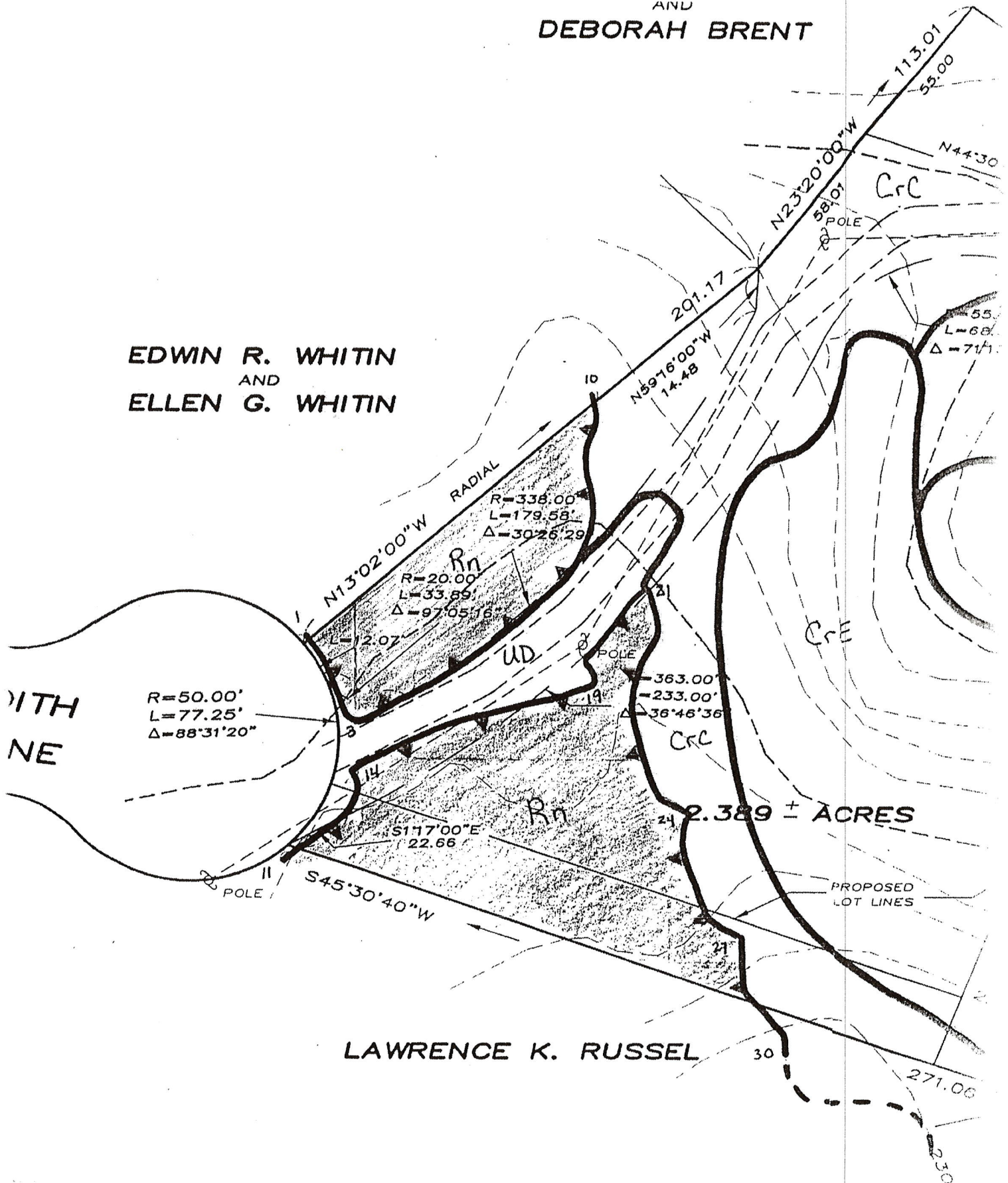
MAP
UNIT
SYM

MAP UNIT NAME

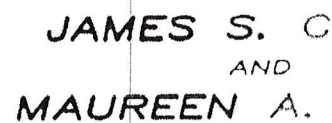
CrC	Charlton-Chatfield-Hollis-Rock Outcrop complex, 3 to 15 percent slopes
CrE	Charlton-Chatfield-Hollis-Rock Outcrop complex, 15 to 45 percent slopes
HpC	Hollis-Rock outcrop complex, 3 to 15 percent slopes
Rn	Leicester and Whitman extremely stony fine sandy loams, 0 to 8 percent slopes
UD	Udorthents, 0 to 15 percent slopes

AND
DEBORAH BRENT

EDWIN R. WHITIN
AND
ELLEN G. WHITIN



NT



Soil Map—State of Connecticut
(21 Edith Lane, Wilton)


















































Map Scale: 1:1,660 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)		Area of Interest (AOI)	
Soils		Soils	
	Soil Map Unit Polygons		Stony Spot
	Soil Map Unit Lines		Very Stony Spot
	Soil Map Unit Points		Wet Spot
	Special Point Features		Other
	Blowout		Special Line Features
	Borrow Pit		Water Features
	Clay Spot		Streams and Canals
	Closed Depression		Transportation
	Gravel Pit		Rails
	Gravelly Spot		Interstate Highways
	Landfill		US Routes
	Lava Flow		Major Roads
	Marsh or swamp		Local Roads
	Mine or Quarry		Background
	Miscellaneous Water		Aerial Photography
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 21, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 5, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	5.2	37.2%
60B	Canton and Charlton fine sandy loams, 3 to 8 percent slopes	3.9	27.6%
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	0.0	0.1%
73E	Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	4.0	28.7%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	0.9	6.5%
Totals for Area of Interest		14.0	100.0%

State of Connecticut

73E—Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky

Map Unit Setting

National map unit symbol: 9lql

Elevation: 0 to 1,200 feet

Mean annual precipitation: 43 to 56 inches

Mean annual air temperature: 45 to 55 degrees F

Frost-free period: 140 to 185 days

Farmland classification: Not prime farmland

Map Unit Composition

Charlton and similar soils: 45 percent

Chatfield and similar soils: 30 percent

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Hills

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy melt-out till derived from granite and/or schist and/or gneiss

Typical profile

Ap - 0 to 4 inches: fine sandy loam

Bw1 - 4 to 7 inches: fine sandy loam

Bw2 - 7 to 19 inches: fine sandy loam

Bw3 - 19 to 27 inches: gravelly fine sandy loam

C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 45 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Description of Chatfield

Setting

Landform: Ridges, hills
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Coarse-loamy melt-out till derived from granite and/or schist and/or gneiss

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material
A - 1 to 6 inches: gravelly fine sandy loam
Bw1 - 6 to 15 inches: gravelly fine sandy loam
Bw2 - 15 to 29 inches: gravelly fine sandy loam
2R - 29 to 80 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 45 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 10 percent
Hydric soil rating: No

Sutton

Percent of map unit: 5 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Leicester

Percent of map unit: 5 percent

Landform: Drainageways, depressions

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: Yes

Hollis

Percent of map unit: 3 percent

Landform: Ridges, hills

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Unnamed, sandy subsoil

Percent of map unit: 1 percent

Hydric soil rating: No

Unnamed, red parent material

Percent of map unit: 1 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: State of Connecticut

Survey Area Data: Version 21, Sep 7, 2021

State of Connecticut

45B—Woodbridge fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t2ql
Elevation: 0 to 1,470 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Woodbridge, fine sandy loam, and similar soils: 82 percent
Minor components: 18 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodbridge, Fine Sandy Loam

Setting

Landform: Ground moraines, drumlins, hills
Landform position (two-dimensional): Summit, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 7 inches: fine sandy loam
Bw1 - 7 to 18 inches: fine sandy loam
Bw2 - 18 to 30 inches: fine sandy loam
Cd - 30 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D

Ecological site: F144AY037MA - Moist Dense Till Uplands
Hydric soil rating: No

Minor Components

Paxton

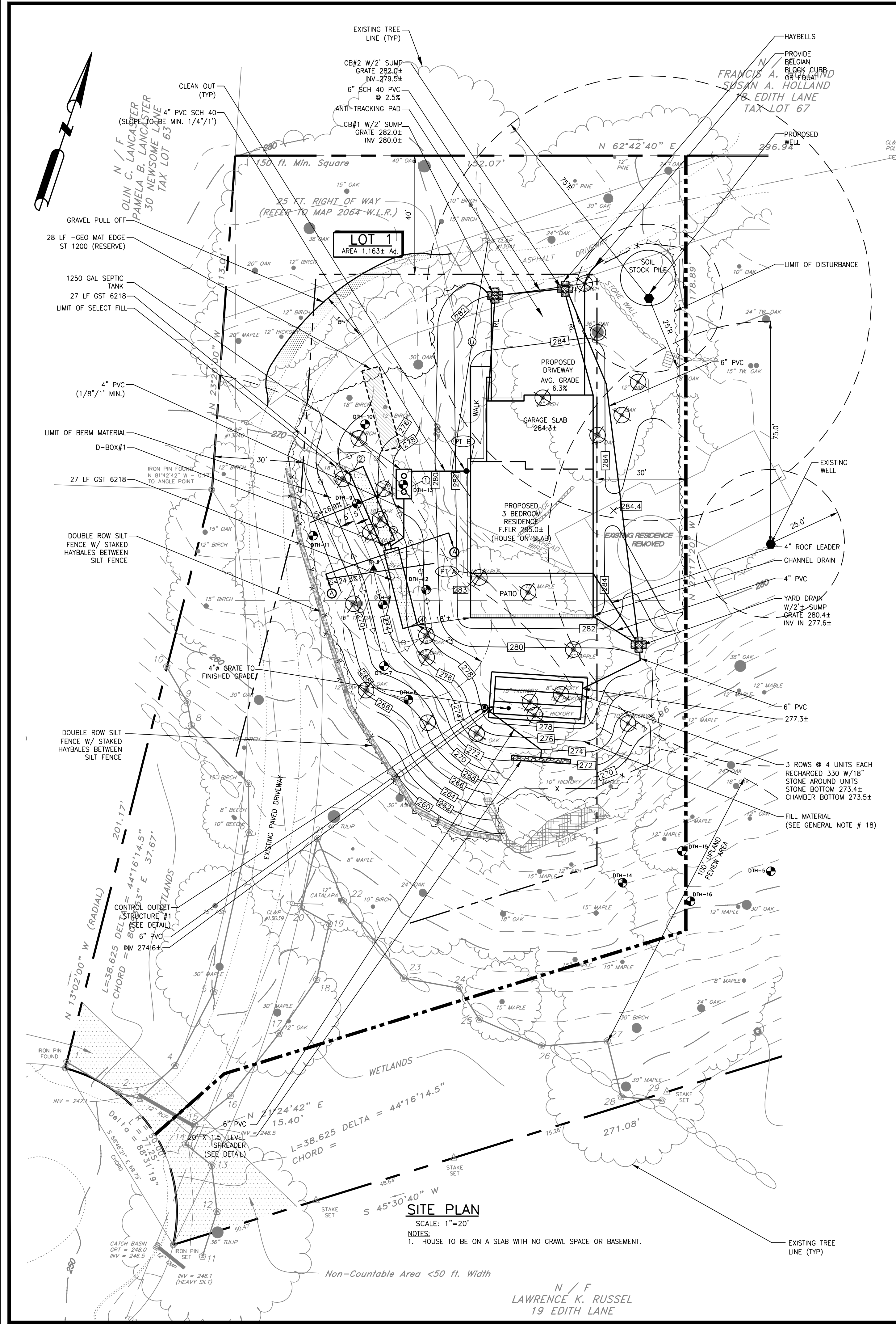
Percent of map unit: 10 percent
Landform: Drumlins, ground moraines, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

Ridgebury

Percent of map unit: 8 percent
Landform: Depressions, ground moraines, hills, drainageways
Landform position (two-dimensional): Toeslope, backslope, footslope
Landform position (three-dimensional): Base slope, head slope, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: State of Connecticut
Survey Area Data: Version 21, Sep 7, 2021



GENERAL NOTES:

1. LOT LINES AND TOPOGRAPHIC INFORMATION HAVE BEEN TAKEN FROM PLANS PREPARED BY WILLIAM W. SEYMOUR & ASSOCIATES, P.C., DARIEN, CT, TITLED TOPOGRAPHIC SURVEY PREPARED FOR WILFRED DESOLA DATED APRIL 23, 2008 REVISED JULY 18, 2008.
2. THE PROPERTY LINES ARE TO BE STAKED PRIOR TO CONSTRUCTION OF THE DWELLING OR INSTALLATION OF THE SEPTIC SYSTEM.
3. FIELD DATA COLLECTED BY DVESTA CIVIL ENGINEERING ASSOCIATES, INC. DATED 5/6/2008.
4. THERE IS NO APPARENT INTERFERENCE WITH WELLS OR SEPTIC SYSTEMS ON ADJACENT PROPERTIES.
5. LOCATION OF EXISTING LEACHING SYSTEM AND RELATED STRUCTURES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS AND SURVEY, AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY.
6. THE CONTRACTOR MUST OBTAIN ALL NECESSARY PERMITS FROM THE LOCAL AGENCIES PRIOR TO CONSTRUCTION.
7. BASED ON AN OBSERVED PERCOLATION RATE OF 1"/22.4 MIN., A 3 BEDROOM DWELLING AND A 1,250 GALLON TWO COMPARTMENT SEPTIC TANK, 750 SQ. FT. OF EFFECTIVE LEACHING AREA MUST BE PROVIDED AS PER THE STATE OF CONNECTICUT HEALTH CODE. INSTALL 54 LINEAR FEET OF GST 6218 PROVIDING 756.0 SQ. FT. OF EFFECTIVE LEACHING AREA. ENDS OF PIPES SHALL BE CAPPED PER MANUFACTURE SPECIFICATIONS.
8. PROVIDE A 1,250 GALLON TWO COMPARTMENT PRE-CAST CONCRETE SEPTIC TANK AS MANUFACTURED BY M&M PRE-CAST OR EQUAL. INLET AND OUTLET PIPES SHALL ALSO BE SEALED WATERTIGHT. CLEANOUT MANHOLES SHALL BE LOCATED AT A DEPTH NOT GREATER THAN 12" BELOW FINAL GRADE. RISERS SHALL BE WATERTIGHT AND SEALED ON TOP OF THE TANK. SEPTIC TANK IS TO HAVE AN APPROVED OUTLET FILTER AND MEET THE CURRENT HEALTH CODE.
9. HOUSE SEWER TO BE CONSTRUCTED OF 4" SCH 40 PVC. MINIMUM PITCH ON HOUSE SEWER FROM HOUSE TO SEPTIC TANK TO BE ONE-QUARTER-INCH PER FOOT AND SEWER FROM SEPTIC TANK TO LEACHING SYSTEM TO BE ONE-EIGHTH-INCH PER FOOT. ALL EFFLUENT PIPES DISPERSING FLOWS TO DISTRIBUTION BOXES TO BE 4" SOLID PVC (ASTM D3033 OR 3034, SDR 35) WITH SOLVENT SEALED JOINTS OR EQUAL. CHANGES IN DIRECTION TO BE MADE WITH THE APPROPRIATE COMMERCIAL MANUFACTURED FITTINGS. ALL PIPES TO BE PROPERLY GROUTED INTO SEPTIC TANK, PUMP CHAMBER AND DISTRIBUTION BOXES AND PROPERLY SUPPORTED. USE DISTRIBUTION BOX DB-5 AND/OR DB-3 AS MANUFACTURED BY M&M SEPTIC TANK CO. PERFORATED EFFLUENT DISTRIBUTION PIPE TO BE 2" DIAMETER DIAMETER ASTM D2729 PVC PIPE AS PER MANUFACTURED SPECIFICATIONS.
10. SEPTIC TANK SHALL BE LAID LEVEL ON A 6" BED OF CRUSHED STONE.
11. CLEAR LEACHING AREA OF TREES AND SHRUBS BY CUTTING VEGETATION FLUSH WITH EXISTING GRADE. STUMPS SHALL BE REMOVED AND DISPOSED OF PROPERLY. REMOVE TOPSOIL AND SCARIFY GROUND SURFACE WITH BUCKET TEETH OR HARROW TO A DEPTH OF 6" (MIN) BEFORE PLACING SELECT BACKFILL MATERIAL. PROTECT THE PREPARED SURFACE FROM MACHINE OR VEHICULAR TRAFFIC.
12. REMOVE ALL ROCKS OF 18" OR LARGER BEFORE THE INSTALLATION OF THE SEPTIC LEACHING TRENCHES. THE AREA WHERE THE ROCKS HAVE BEEN REMOVED SELECT FILL IS TO BE PLACED AND COMPACTED. FINISH GRADE OF THE PROPOSED SEPTIC SYSTEM AREA WITH SELECT BACKFILL MATERIAL, IF REQUIRED, TO A DEPTH AND SLOPE AS SHOWN ON THE SITE PROFILE.
13. SELECT BACKFILL MATERIAL SHALL BE A CLEAN, BANK-RUN SAND OR GRAVEL FILL WITH NO MORE THAN 5% (PREFERABLY 2%) FINES PASSING A NUMBER 200 SIEVE. IT SHALL HAVE A PERCOLATION RATE EQUAL TO OR FASTER THAN THE UNDERLYING NATURALLY OCCURRING SOIL. DRY SEIVE GRADATION SHALL BE AS FOLLOWS:

SIEVE SIZE: #4 #10 #40 #100 #200
% PASSING: 100 70-100 10-50 0-5 0-2.5

THE CONTRACTOR IS TO PROVIDE A COPY OF THE SEIVE ANALYSIS FROM A CERTIFIED TESTING LAB, AS WELL AS A SAMPLE OF THE MATERIAL TO THE ENGINEER OF RECORD AND SANITARIAN. THE SEIVE ANALYSIS SHALL HAVE A CURRENT DATE AND JOB LOCATION. THE ENGINEER OF RECORD AND THE SANITARIAN MUST APPROVE THE SELECT FILL PRIOR TO ITS PLACEMENT. NOTE: PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10%, AND THE #200 SIEVE DOES NOT EXCEED 5%.
14. THE RESPONSIBILITY FOR THE PREPARATION OF A LEACHING AREA UTILIZING SELECT MATERIAL IS THAT OF THE LICENSED INSTALLER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SITUATION ONCE EXPOSED.
15. SELECT FILL SHALL BE PERCED IN PLACE AND APPROVED BY THE ENGINEER.
16. NON-SELECT FILL SHALL BE A CLEAN LOAM OR BETTER FREE OF ORGANIC MATTER.
17. GRAVEL FILL TO BE DUMPED AT THE EDGE OF PREPARED LEACHING AREA AND PUSHED ONTO HARROWED SURFACE WITH TRACK MACHINE IN 12" (MAX) LIFTS. GRAVEL TO BE COMPACTED TO 90% - 95% PROCTOR DENSITY - MODIFIED OPTIMUM DENSITY ASTM 1557 METHOD "C".
18. BERM MATERIAL SHALL BE PLACED AS DIMENSIONED ON PLAN. THIS MATERIAL SHALL CONSIST OF CLEAN, SANDY LOAM, FREE OF LARGE STONES AND DEBRIS THAT MAY CREATE LARGE VOIDS, AND BE RATED AT ONE INCH IN 15 TO 25 MINUTE PERCOLATION. THE MATERIAL EXCAVATED FROM TRENCHES CAN BE USED AS LONG AS IT MEETS THIS SPECIFICATION. USE GRASS OR PLANTINGS TO STABILIZE EMBANKMENT.
19. CONTRACTOR TO NOTIFY ENGINEER AND HEALTH DEPARTMENT WITHIN 24 HOURS BEFORE COMMENCING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE INSTALLER TO KEEP BOTH THE ENGINEER OF RECORD AND THE TOWN OF WILTON HEALTH DEPARTMENT INFORMED OF CONSTRUCTION PROGRESS. ENGINEER SHALL ALSO BE NOTIFIED AT LEAST ONCE DURING CONSTRUCTION AND FOR FINAL INSPECTION.
20. UNDERGROUND SOIL INFORMATION HAS BEEN OBTAINED FROM DEEP TEST HOLES WITHIN THE AREA OF THE PROPOSED SYSTEM AS SHOWN OF THE PLAN. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE WILTON HEALTH DEPARTMENT, AND THE ENGINEER OF RECORD, SHOULD CONDITIONS ENCOUNTERED DIFFER FROM THOSE STATED ON THIS PLAN. THIS INCLUDES DEPTH OF LEDGE, AND OBSERVED GROUNDWATER DEPTH.
21. DURING CONSTRUCTION, ANY DEVIATION FROM THIS PLAN MUST BE APPROVED BY THE WILTON HEALTH DEPARTMENT, AND THE ENGINEER OF RECORD.
22. INSTALLATION OF THIS SYSTEM IS UNDER THE JURISDICTION OF THE TOWN OF WILTON SANITARIAN. ALL PARTS OF THE PROPOSED SUB-SURFACE SEWAGE DISPOSAL SYSTEM SHALL BE A MINIMUM OF 25 FEET FROM THE PROPOSED RESIDENCE AND A MINIMUM OF 15 FEET FROM ALL PROPERTY LINES. 25 FEET FROM THE DOWN GRADIENT PROPERTY LINE AND SHALL CONFORM TO ALL APPLICABLE LOCAL AND/OR STATE CODES. WHEN ARTESIAN WELL WATER SUPPLY ARE TO BE UTILIZED, NO WATER LINE SHALL BE WITHIN 10 FT. OF ANY PORTION OF THE SEPTIC SYSTEM.
23. EROSION AND SEDIMENT CONTROL MEASURES SPECIFIED IN THE PLAN SHALL BE MAINTAINED UNTIL DISTURBED AREAS HAVE BEEN STABILIZED.
24. THIS DESIGN CONFORMS TO APPLICABLE CODES AND ACCEPTED PRACTICE. NO OTHER WARRANTY IS EXPRESSED OR IMPLIED. THE DESIGN OF THIS SEWAGE DISPOSAL SYSTEM IS IN CONFORMANCE WITH STATE AND LOCAL SANITARY CODE REQUIREMENTS AS WELL AS ACCEPTED PROFESSIONAL DESIGN PRINCIPLES. IT IS IN NO WAY A GUARANTEE AGAINST FAILURE DUE TO UNDETERMINABLE FUTURE CIRCUMSTANCES INVOLVING INSTALLATION, SITE GRADING, WATER USAGE AND MAINTENANCE OF THE SYSTEM OR VARIATIONS IN SOIL OR GROUND WATER CONDITIONS BEYOND THE SCOPE OF NORMAL FIELD INVESTIGATION.
25. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT RECORD DRAWINGS TO THE WILTON HEALTH DEPARTMENT AND THE ENGINEER. THE RECORD DRAWINGS SHALL GIVE TWO (2) TIES TO ALL DISTRIBUTION BOXES, LOCATION OF TANKS AND LEACHING FIELD AND INVERT ELEVATIONS.
26. RECORD DIMENSIONS ARE TO BE SUBMITTED BY THE ENGINEER TO THE DEPARTMENT OF HEALTH UPON COMPLETION, INSPECTION AND FIELD APPROVAL OF THE SYSTEM.
27. THE CONTRACTOR IS TO VERIFY TOPOGRAPHIC INFORMATION AND LOCATIONS OF ALL UTILITIES PRIOR TO INSTALLATION OF THE SEPTIC SYSTEM.
28. THE CONTRACTOR IS TO CONTACT CALL BEFORE YOU DIG TO HAVE ALL UTILITY LINES CLEARLY MARKED PRIOR TO ANY EXCAVATION.
29. WATER CONSERVATION DEVICES ARE RECOMMENDED TO BE INSTALLED ON ALL FAUCETS, SHOWERHEADS AND TOILETS.
30. THIS SYSTEM IS NOT DESIGNED FOR THE DISCHARGES FROM GARBAGE DISPOSALS. A LARGE STYLE TUB OR WATER TREATMENT DEVICES. IF A GARBAGE DISPOSAL OR A LARGE STYLE TUB OF 100 TO 200 GALLONS IS USED, THEN THE SEPTIC TANK CAPACITY SHALL BE INCREASED BY 250 GALLONS FOR EACH.
31. THERE SHALL BE NO ROOF LEADERS, SUMP PUMPS, FOUNDATION DRAINS, YARD DRAINS OR OTHER CONTINUOUS SOURCE OF WATER THAT DISCHARGES INTO THE SUBSURFACE DISPOSAL SYSTEM. FINAL GRADE OF THE SITE AND SEPTIC AREA TO PREVENT SURFACE DRAINAGE FROM ENTERING THE SYSTEM.
32. THE LEACHING AREA SHALL BE LOCATED BY FIELD STAKES OR MARKERS, PRIOR TO ANY SITE WORK, IN ORDER TO CLEARLY IDENTIFY THE LEACHING AREA AND TO PROTECT IT FROM ALL CONSTRUCTION TRAFFIC & POTENTIAL DAMAGE.
33. A SCARIFICATION INSPECTION BY THE HEALTH DEPARTMENT SANITARIAN, DESIGN ENGINEER, AND THE LICENSED INSTALLER OF RECORD SHALL BE CONDUCTED PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR FILL IN THE PRIMARY LEACHING AREA. IF THERE ARE ANY PROBLEMS NOTED DURING INSPECTION (BY THE SANITARIAN, ENGINEER, OR INSTALLER) FURTHER TESTING AND/OR PERMIT REVOCATION MAY TAKE PLACE IN ORDER TO CONFIRM CONFORMANCE WITH THE PROPOSED DESIGN CRITERIA AND PROTECTION OF THE SDDS.

GENERAL CONSTRUCTION NOTES:

1. ANY WALLS OVER 5 FEET IN HEIGHT WILL REQUIRE A 4 FOOT HIGH SAFETY FENCE.
2. A BUILDING PERMIT WILL BE REQUIRED ON ANY RETAINING WALLS MEASURING 4 FEET OR GREATER IN HEIGHT.
3. IF BLASTING IS REQUIRED A CONNECTICUT LICENSED BLASTER SHALL OBTAIN A PERMIT FROM THE FIRE MARSHAL AND CONDUCT A PRE BLAST SURVEY OF SURROUNDING HOMES AND WELLS WITHIN 200 FEET OF AREA TO BE BLASTED.
4. A TEMPORARY COVER OF RYE GRASS SHALL BE PLANTED IN AREAS OF EXPOSED SOIL THAT ARE TO BE EXPOSED FOR MORE THAN 30 DAYS.
5. THERE ARE NO EXISTING WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEMS.
6. THERE ARE NO EXISTING SEPTIC SYSTEMS WITHIN 75' OF THE PROPOSED WELLS.
7. THERE HAS BEEN NO KNOWN WELL FAILURES IN THE AREA BASED ON HEALTH DEPARTMENT RECORDS.
8. IF REQUIRED OR RECOMMENDED BY THE WILTON HEALTH DEPARTMENT ADDITIONAL DEEP TEST HOLES WILL BE PROVIDED DURING THE DESIGN PHASE OF THE SEPTIC SYSTEMS.
9. WATER SUPPLY WELLS SHALL BE CONSTRUCTED AND APPROVED AFTER FOUNDATION COMPLETION BUT PRIOR TO CONTINUATION OF HOUSE CONSTRUCTION.

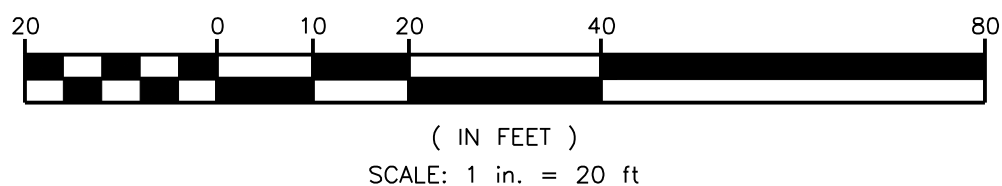
EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE CONSTRUCTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AND TOWN OF WILTON REGULATIONS.
2. ALL CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLAN(S).
3. ALL CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE TOWN PRIOR TO COMMENCEMENT OF ANY WORK, INCLUDING PRE-CONSTRUCTION CLEARING AND GRUBBING.
4. ALL CONTROL MEASURES SHALL BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS HAVE BEEN THOROUGHLY STABILIZED.
5. NO CONTROL MEASURES SHALL BE REMOVED WITHOUT APPROVAL FROM THE TOWN.
6. ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE TOWN OR ITS AUTHORIZED AGENT.
7. THE LIMITS OF CLEARING, GRADING AND DISTURBANCE, AS SHOWN ON THE PLAN(S), SHALL BE KEPT TO A MINIMUM WITHIN THE APPROVED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE THE LIMITS OF CLEARING SHALL REMAIN TOTALLY UNDISTURBED.
8. ANY CONTROL MEASURES RETAINING SEDIMENT OVER ½ THEIR HEIGHT SHALL HAVE THE SEDIMENT IMMEDIATELY REMOVED, AND ALL DAMAGED CONTROL MEASURES SHALL BE REMOVED AND REPLACED.
9. ALL CATCH BASINS LOCATED DOWN-GRADE OF THE SITE SHALL BE PROTECTED BY PLACING FILTER FABRIC BENEATH THE GRATE UNTIL ALL DISTURBED AREAS HAVE BEEN THOROUGHLY STABILIZED.
10. ALL NEW AND EXISTING CATCH BASINS LOCATED ON THE SITE SHALL BE PROTECTED BY STAKED HAYBALES AND BY PLACING FILTER FABRIC BENEATH THE GRATE UNTIL ALL DISTURBED AREAS HAVE BEEN THOROUGHLY STABILIZED.
11. ALL SEDIMENT SHALL BE IMMEDIATELY REMOVED FROM NEW AND EXISTING DRAINAGE STRUCTURES AND PIPING IMPACTED BY THE PROPOSED CONSTRUCTION.
12. SEDIMENT REMOVED FROM CONTROL MEASURES AND DRAINAGE FACILITIES SHALL BE DISPOSED OF IN A MANNER THAT IS CONSISTENT WITH STATE AND LOCAL REGULATIONS.
13. THE PLANTING SEASONS FOR THE SPECIFIED SEED MIXTURE SHALL BE AS DEFINED IN THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, UNLESS DIRECTED OTHERWISE BY THE TOWN. OUTSIDE OF THESE SPECIFIED DATES, AREAS WILL BE STABILIZED WITH HAYBALE CHECK DAMS, FILTER FABRIC, OR WOODCHIP MULCH AS REQUIRED TO CONTROL EROSION.
14. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ENSURE THAT NO DRAINAGE FROM TOWN ROADS ENTERS THE SITE DURING OR AFTER CONSTRUCTION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF THE CONTRACT. THE CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC ON ADJACENT ROADWAYS.
16. TEMPORARY STOCKPILING OF CONSTRUCTION MATERIALS SHALL ONLY BE ALLOWED IN THE LOCATIONS SHOWN ON THE PLAN(S). STOCKPILE AREAS SHALL BE FULLY ENCLOSED BY SILT FENCE.
17. ALL GROUNDWATER EXTRACTED DURING DEWATERING OF EXCAVATIONS SHALL BE DIRECTED TO A TEMPORARY SEDIMENTATION BASIN.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENTATION CONTROL PLAN. THIS INCLUDES THE INSTALLATION AND MAINTENANCE OF ALL CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFYING THE TOWN OF ANY TRANSFER OF THIS RESPONSIBILITY.

LEGEND

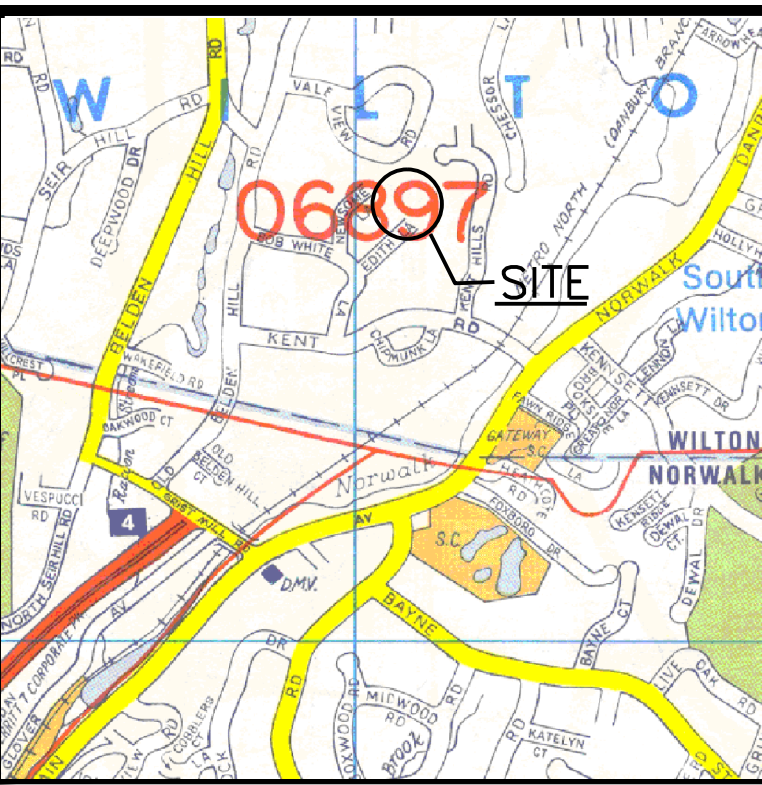
- EXISTING CONTOURS
- PROPOSED CONTOUR
- LIMIT OF SELECT FILL
- PROPOSED PROPERTY LINE
- EXISTING PROPERTY LINE
- BUILDING SETBACK LINE
- SILT FENCE
- BERM MATERIAL LINE
- DEEP TEST HOLES
- PERCOLATION TEST HOLE
- SPOT ELEVATION
- PROPOSED RETAINING WALL
- WELL LOCATION
- TREES TO BE REMOVED
- 100' UPLAND REVIEW AREA
- TREES PROTECTION
- LIMIT OF DISTURBANCE
- UNDER GROUND UTILITIES

GRAPHIC SCALE



IMPORTANT NOTE:

Additional underground utilities may exist Prior to any excavation or construction, Contact:
"CALL BEFORE YOU DIG"
1-800-922-4455



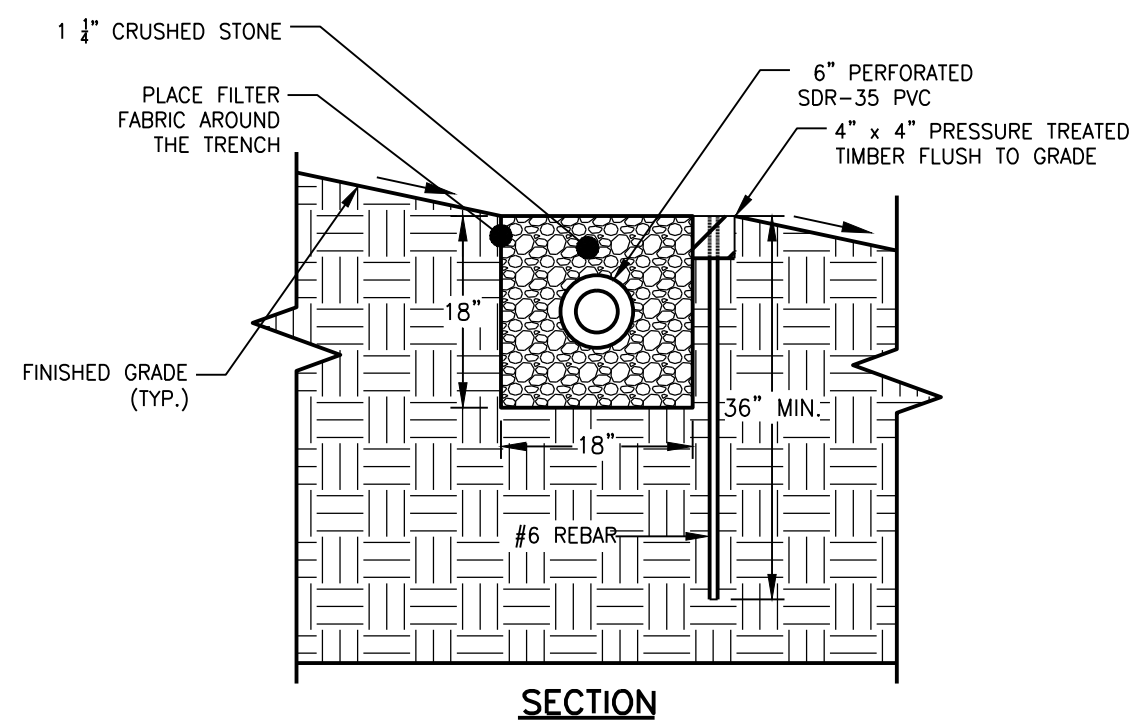
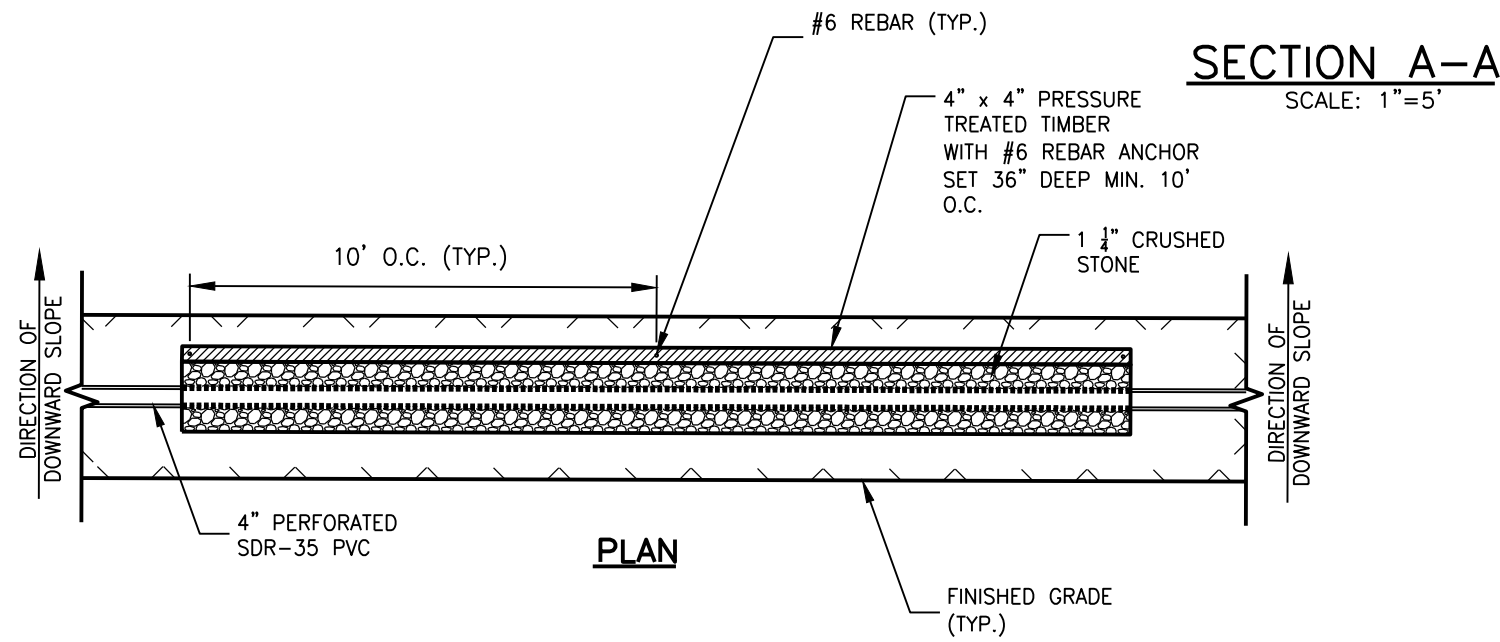
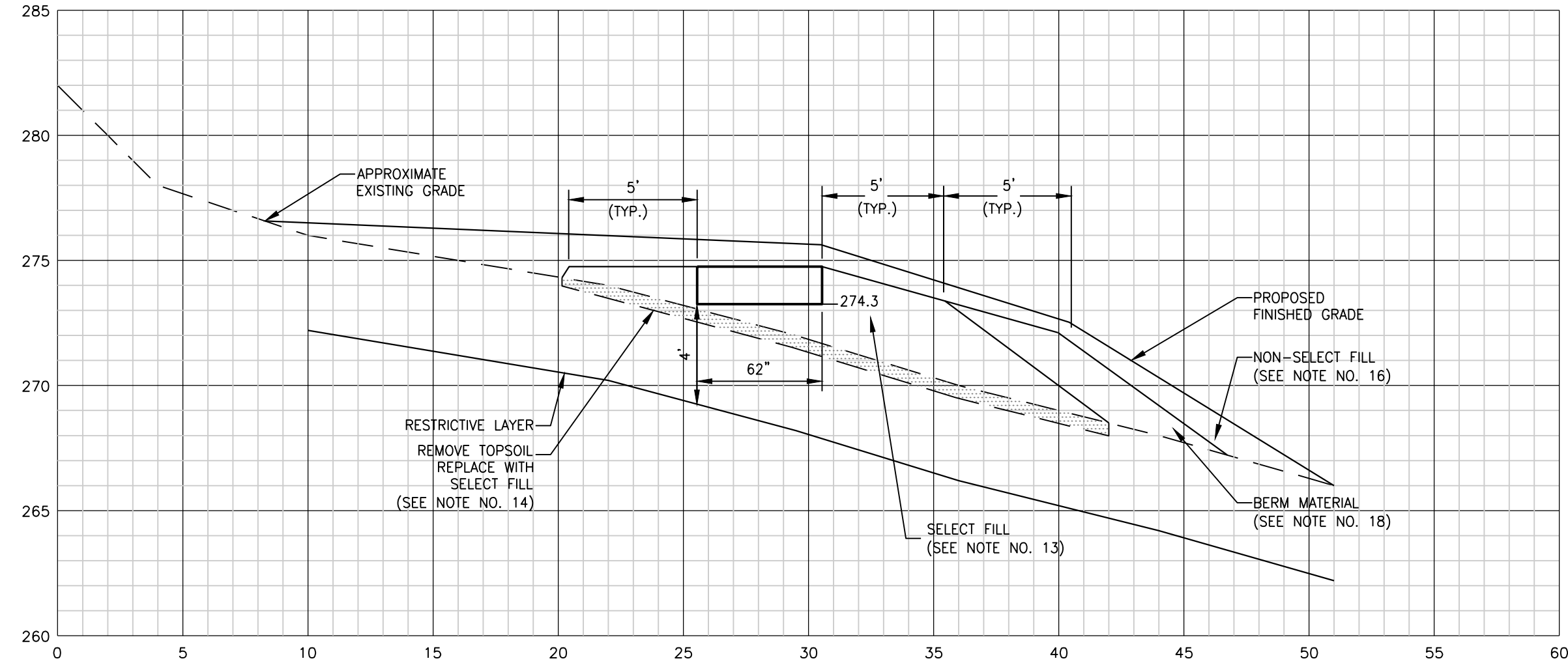
LOCATION MAP
SCALE: N.T.S.

NO.	DATE	REV. BY	DESCRIPTION	ISSUE / REVISION
1	01/07/22	SDI	FOR SUBMISSION TO HEALTH DEPARTMENT	

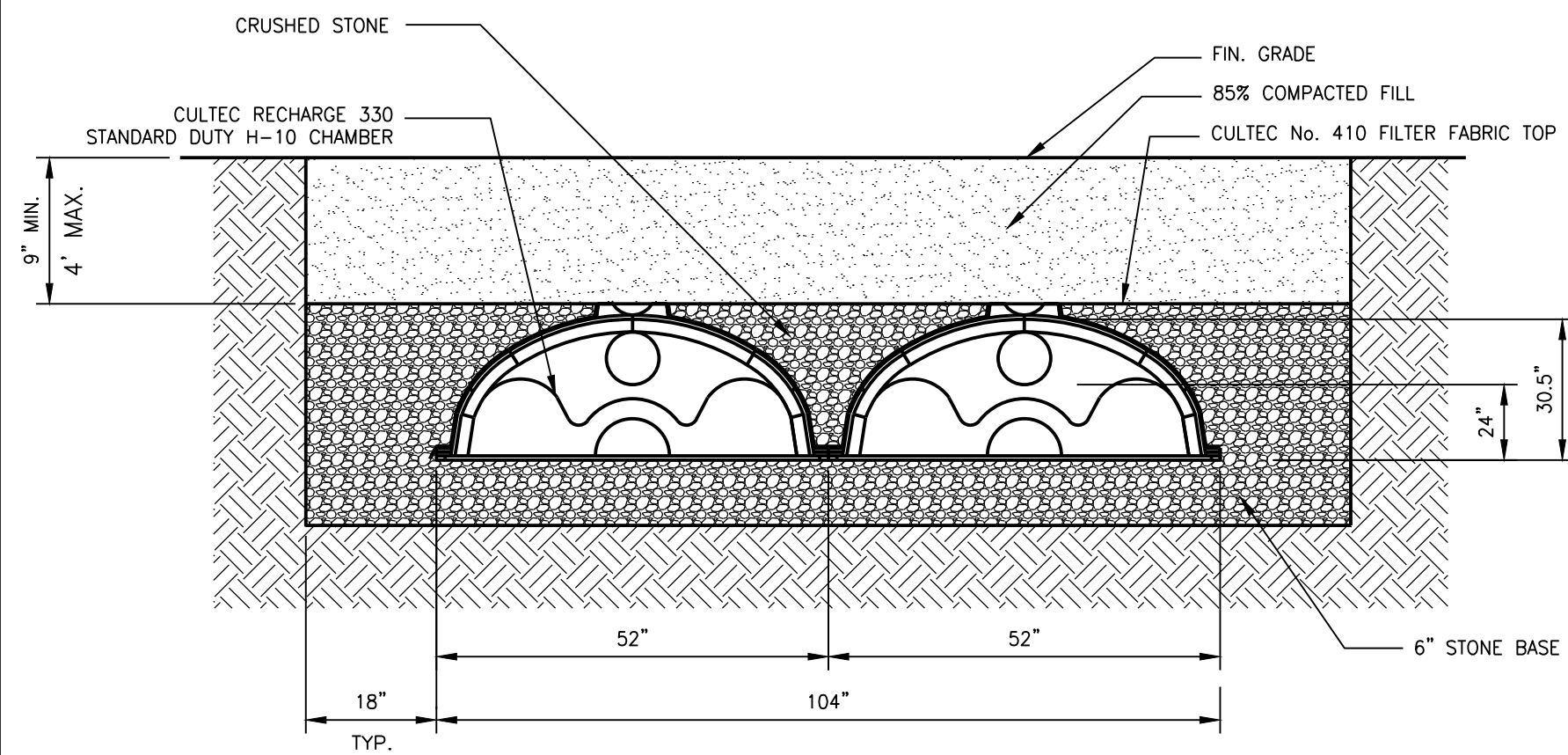
Divesta Civil Engineering, LLC
51 Painter Ridge Road
Roxbury, Connecticut 06783
Phone 860-354-4226 E-mail dceainfo@charter.net

SYCAMORE, LLC
21 EDITH LANE
WILTON, CONNECTICUT
PROPOSED ON-SITE SUBSURFACE SEWAGE DISPOSAL SYSTEM

STAMP:
DRAWING NO. 21-088
DRAWN BY: SDI APPROVED BY: DD
SCALE: 1"=20' DRAWING DATE: 01/07/22
SHEET NO. 1 of 3



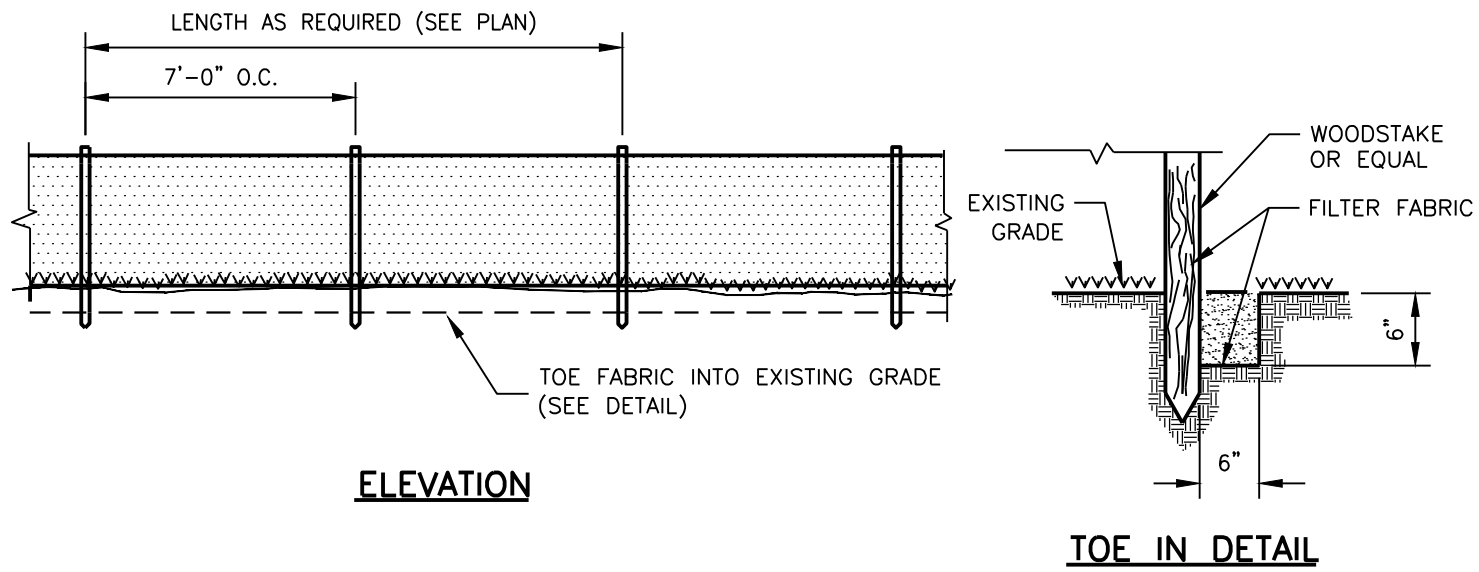
LEVEL SPREADER DETAIL
N.T.S.



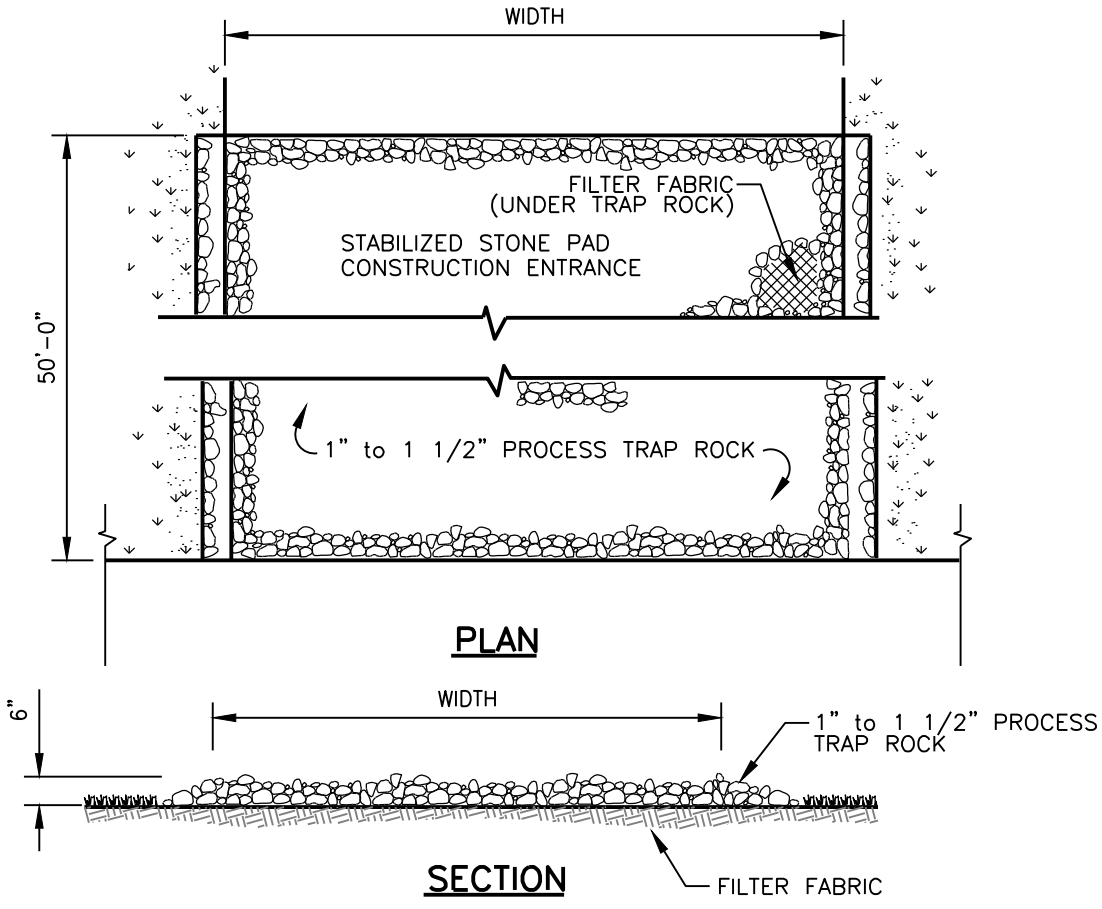
MLSS REQUIREMENT

No. OF BEDROOMS	PERCOLATION RATE DESIGN	LIMITING FACTORS—FOR INSTALLATION				HYDRAULIC FACTOR			FLOW FACTOR (FF)	PERCOLATION FACTOR (PF)	MLSS (FEET) (HF*FF*PF)	ACTUAL SPREAD (FEET)	ELA SF (REQUIRED)	ELA SF (PROVIDED)
		LEDGE (INCHES)	HARDPAN (INCHES)	MOTTILING (INCHES)	GROUNDWATER (INCHES)	SLOPE (%)	(HF)	DEPTH (INCHES)						
3	20–30.1	57	40	46	52	>15	20	30	1.5	1.5	45	54	750	756

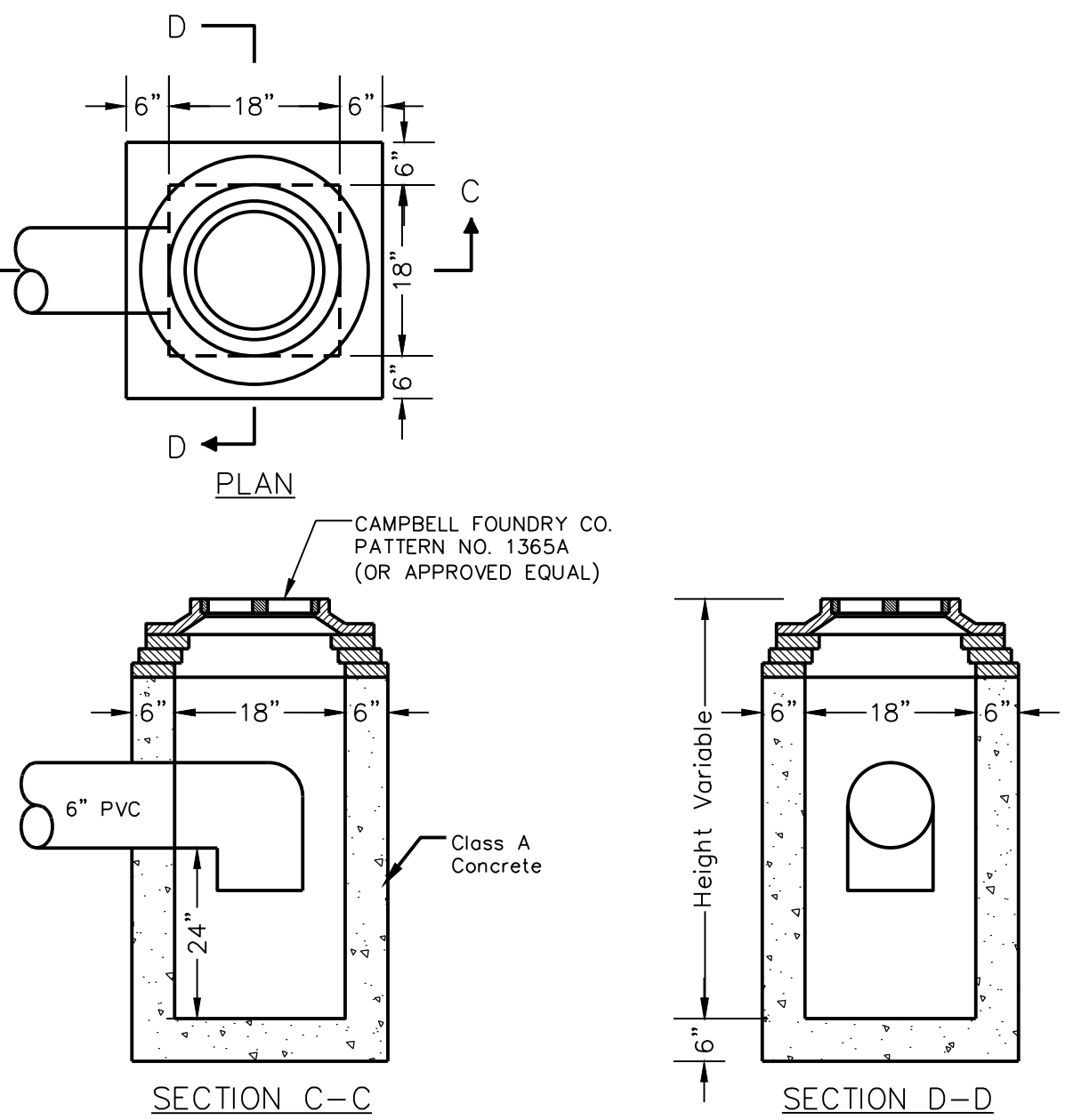
SYSTEM		RECEIVING SOILS		ADJUSTED HYDRAULIC FACTOR	
DT # 8 = 40	DT # 9 = 46	DT # 11 = 17	(17)/1=17	(43+17)/2=30	
AVERAGE OF SYSTEM 43.00		AVERAGE OF RECEIVING 17.00			



SILTATION FENCE DETAIL
N.T.S.

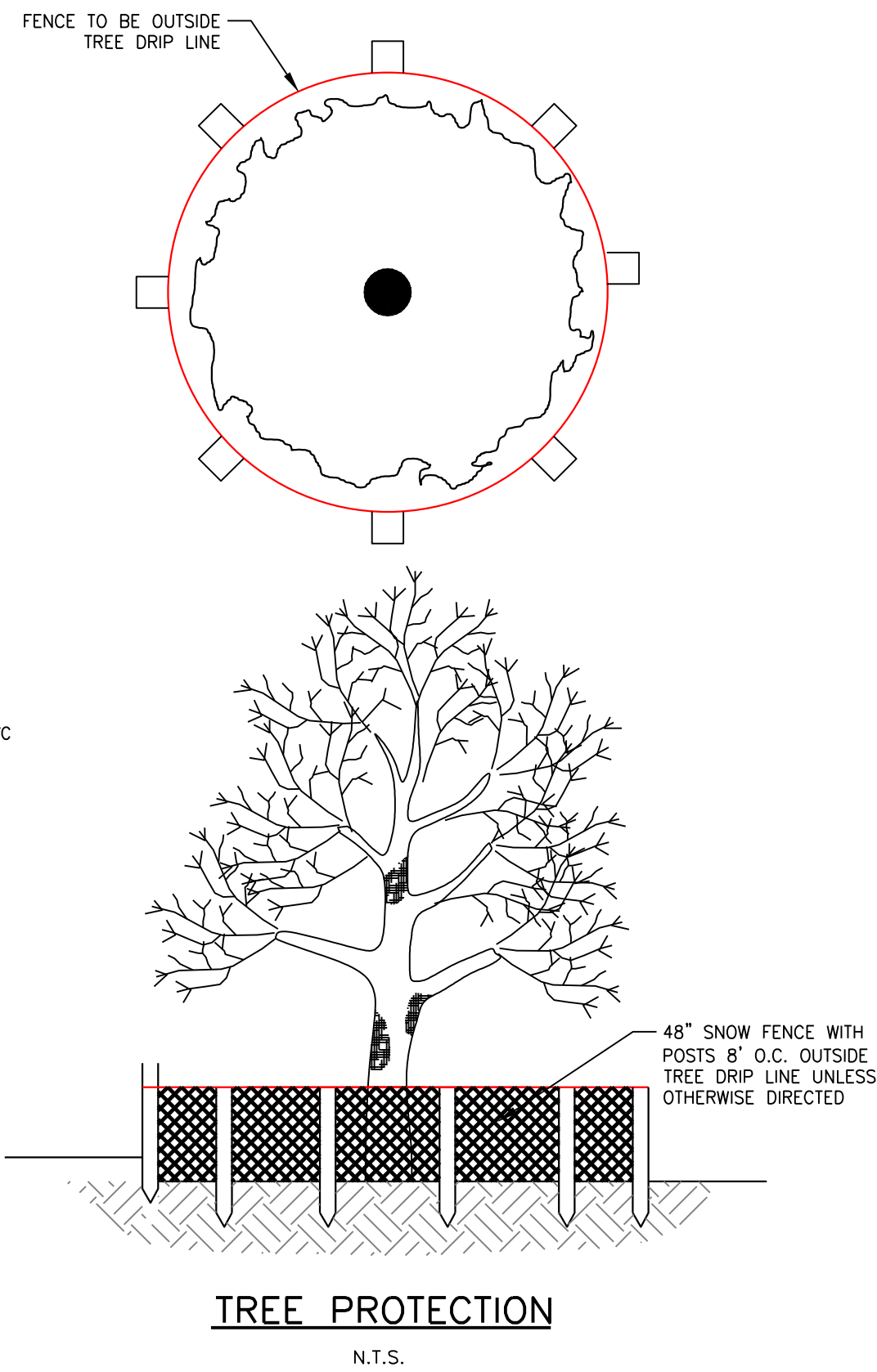
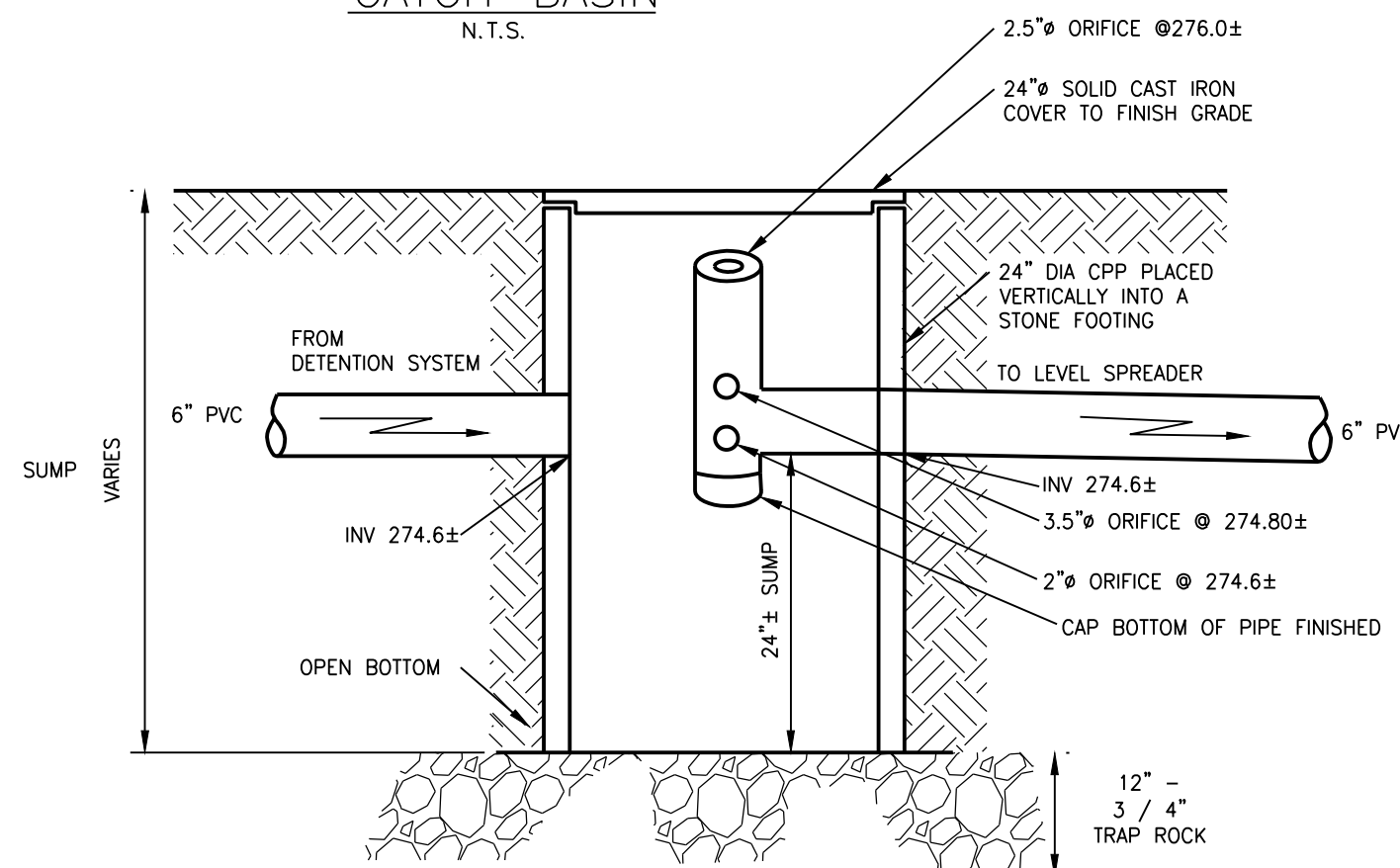


ANTI-TRACKING PAD DETAIL
N.T.S.



NOTE: PROVIDE A 90 DEGREE ELBOW ON THE OUTLET PIPE OF EACH CATCH BASIN

CATCH-BASIN
N.T.S.



DEEP TEST HOLES LOG

DATE 05/06/08

DEEP TEST HOLE #6

LEDGE @ 6"

DEEP TEST HOLE #7

LEDGE @ 12"

DEEP TEST HOLE #9

0" - 6" TOPSOIL
6" - 46" RED BROWN SILTY LOAM
46" - 57" GRAY SANDY HARDPAN
REFUSAL @ 57"
NO GROUNDWATER
MOTTILING @ 46"
ROOTS TO 46"

DEEP TEST HOLE #11

0" - 9" TOPSOIL
9" - 17" RED BROWN SILTY LOAM
17" - 65" MOTTLED SILTY LOAM
NO LEDGE
GROUNDWATER @ 19"
MOTTILING @ 17"
ROOTS TO 17"

DEEP TEST HOLE #13

LEDGE @ 17"

DEEP TEST HOLE #15

0" - 5" TOPSOIL
5" - 39" RED BROWN SILTY LOAM
39" - 52" OLIVE BROWN SANDY LOAM
LEDGE @ 52"
NO GROUNDWATER
NO MOTTILING
ROOTS TO 39"

DEEP TEST HOLE #8

0" - 6" TOPSOIL
6" - 40" RED BROWN SILTY LOAM
40" - 60" GRAY SANDY HARDPAN
REFUSAL @ 60"
GROUNDWATER @ 52"
NO MOTTILING
ROOTS TO 40"

DEEP TEST HOLE #10

0" - 5" TOPSOIL
5" - 45" RED BROWN SILTY LOAM
45" - 60" GRAY MOTTLED HARDPAN
REFUSAL @ 60"
NO GROUNDWATER
MOTTILING @ 45"
ROOTS TO 45"

DEEP TEST HOLE #12

0" - 25" MISC FILL
25" - 48" RED BROWN SILTY LOAM
48" - 60" OLIVE BR MOD COMP SANDY LOAM
LEDGE @ 57"
NO GROUNDWATER
MOTTILING @ 41"
ROOTS TO 48"

DEEP TEST HOLE #14

0" - 9" TOPSOIL
9" - 35" RED BROWN SILTY LOAM
35" - 42" OLIVE BROWN SANDY LOAM
LEDGE @ 42"
NO GROUNDWATER
NO MOTTILING
ROOTS TO 29"

DEEP TEST HOLE #16

0" - 5" TOPSOIL
5" - 40" RED BROWN SILTY LOAM
40" - 61" GRAY SANDY HARDPAN
LEDGE @ 61"
NO GROUNDWATER
NO MOTTILING
ROOTS TO 40"

PERCOLATION TEST HOLES LOG:

DATE 05/06/08

PERC HOLEP-3

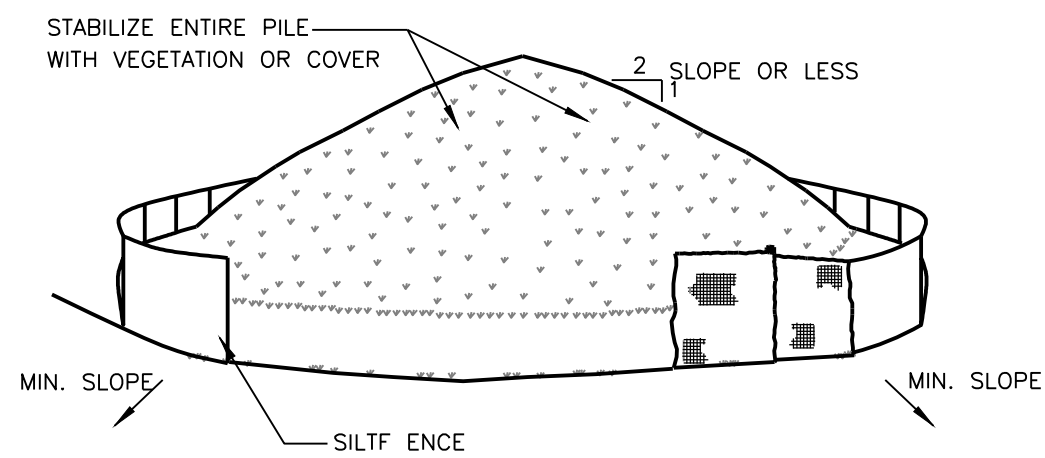
DEPTH: 20	INCHES	DIAMETER: 9		INCHES
HEAD: 12	INCHES	PRESOAK: 10:53 A.M.		
TIME (INCHES)	DEPTH (INCHES)	DROP (MINUTES)	INTERVAL (MIN./INCH)	RATE
17.47	8.50			
18.06	11.38	2.88	19.00	6.61
18.20	12.00	0.63	14.00	22.40
18.41	13.00	1.00	21.00	21.00
18.51	13.50	0.50	10.00	20.00
FINAL PERCOLATION RATE			22.40 MIN/INCH	

TABLE OF INVERTS

CIP @ HOUSE	277.02 (MIN.)
SEPTIC TANK	
INLET	276.61
OUTLET	276.26
D -BOX #1	
INLET	276.05
LATERAL	275.80
GST6218 INVERT #1	275.80
GST6218 BOTTOM #1	274.30

TABLE OF TIES

(ALL DIMENSIONS ARE IN FEET)			
	PT A	PT B	
1	38	24	
2	33	40	
3	29	40	
4	27	59	



SOIL STOCKPILING
N.T.S.

INSTALLATION NOTES

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.

IMPORTANT NOTE:

Additional underground utilities may exist Prior to any excavation or construction, Contact:

"CALL BEFORE YOU DIG"
1-800-922-4455

FOR SUBMISSION TO HEALTH DEPARTMENT		SDI	REV. BY	DESCRIPTION	ISSUE / REVISION
NO.	DATE				
1	01/07/22				

Divesta Civil Engineering, LLC

51 Painter Ridge Road
Roxbury, Connecticut 06783
Phone 860-354-4226 Fax 860-354-4226
E-mail dceainfo@charter.net

PROJECT TITLE:
SYCAMORE, LLC
21 EDITH LANE
WILTON, CONNECTICUT
DETAILS

STAMP:

NOT VALID WITHOUT ORIGINAL SEAL AND SIGNATURE

DRAWING NO.

21-088

DRAWN BY:

SDI

APPROVED BY:

DD

SCALE:

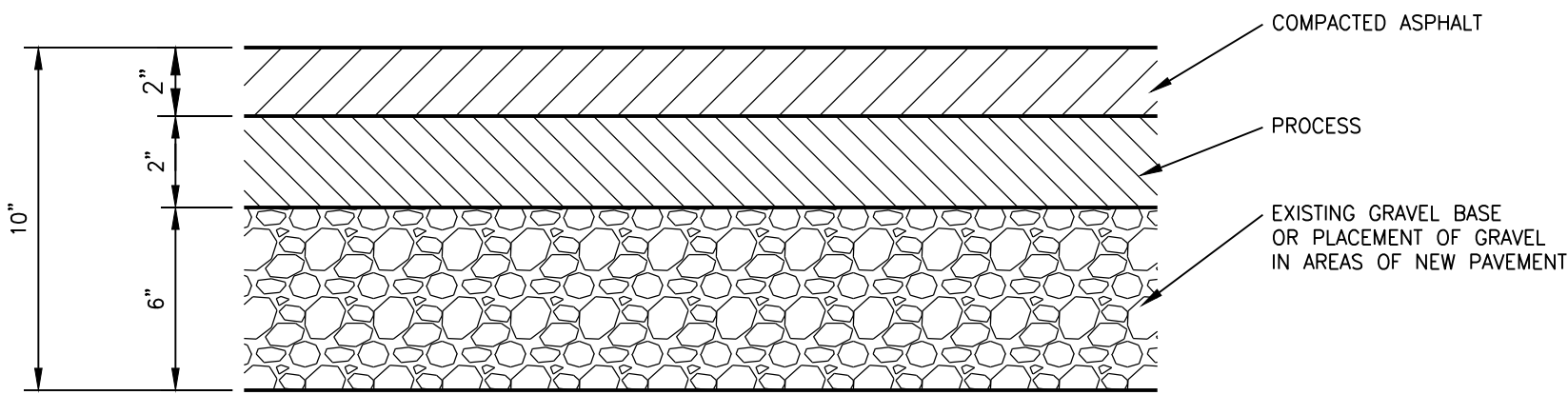
AS NOTED

DRAWING DATE:

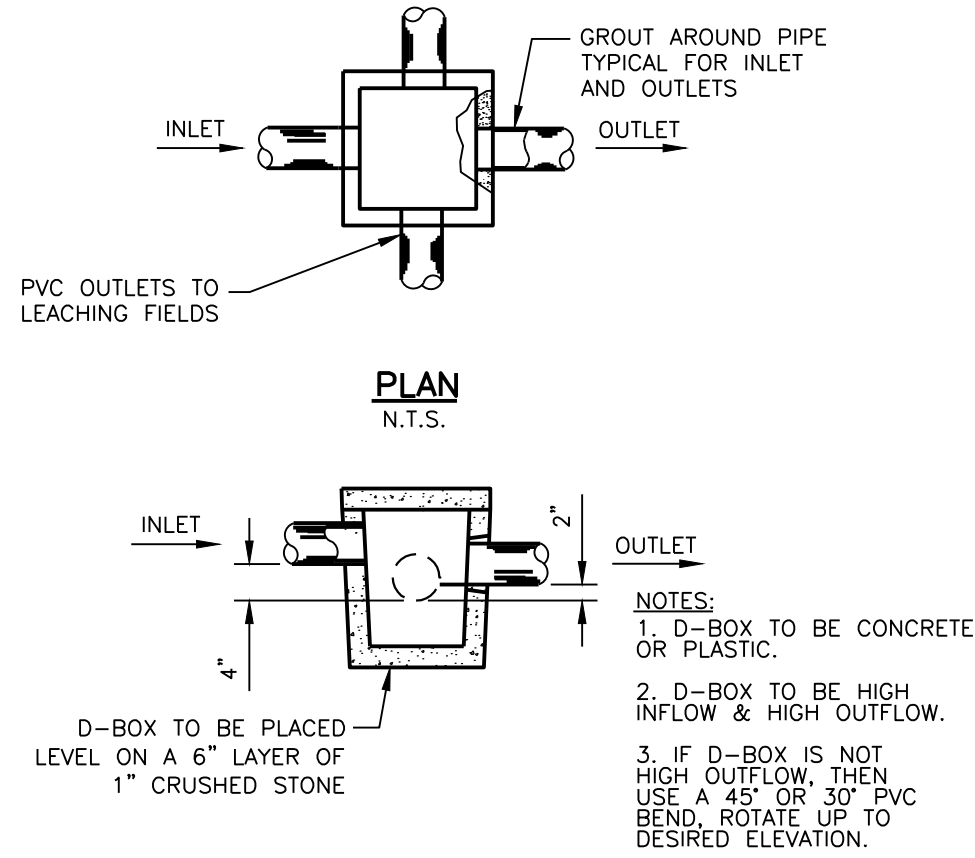
01/07/22

SHEET NO.

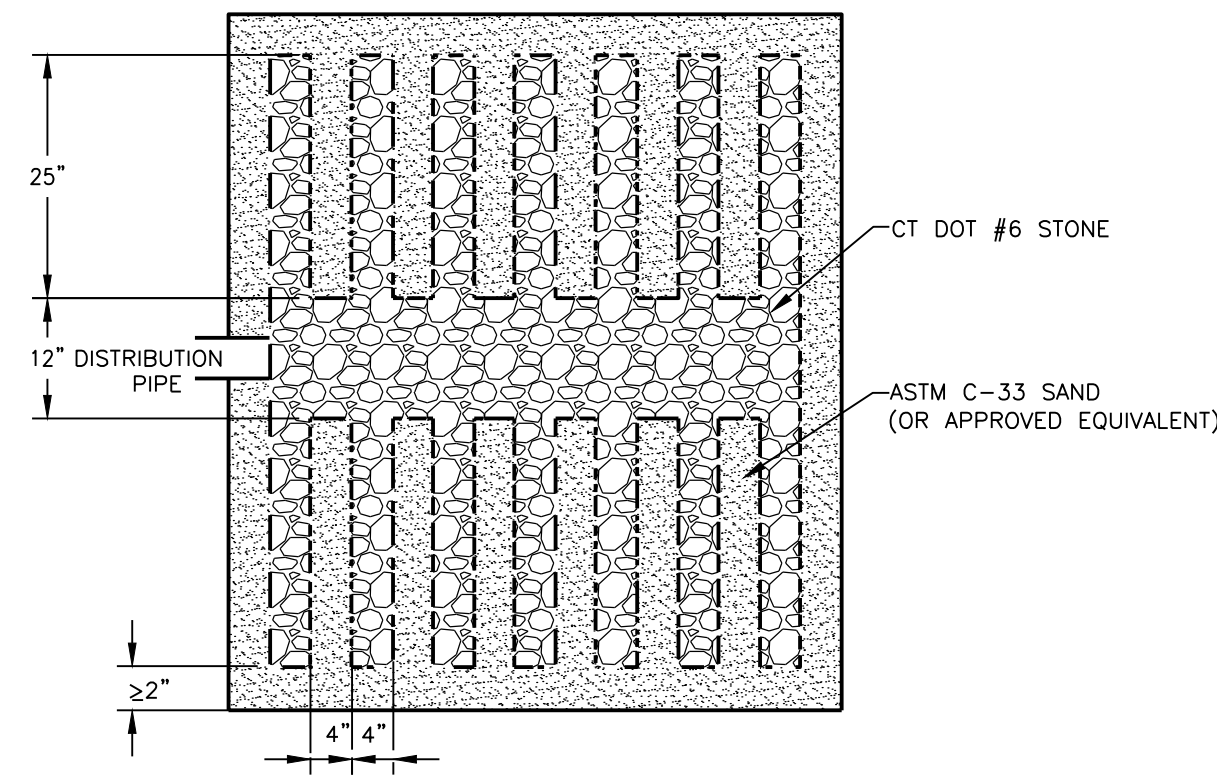
2 of 3



TYPICAL DRIVEWAY
N.T.S.

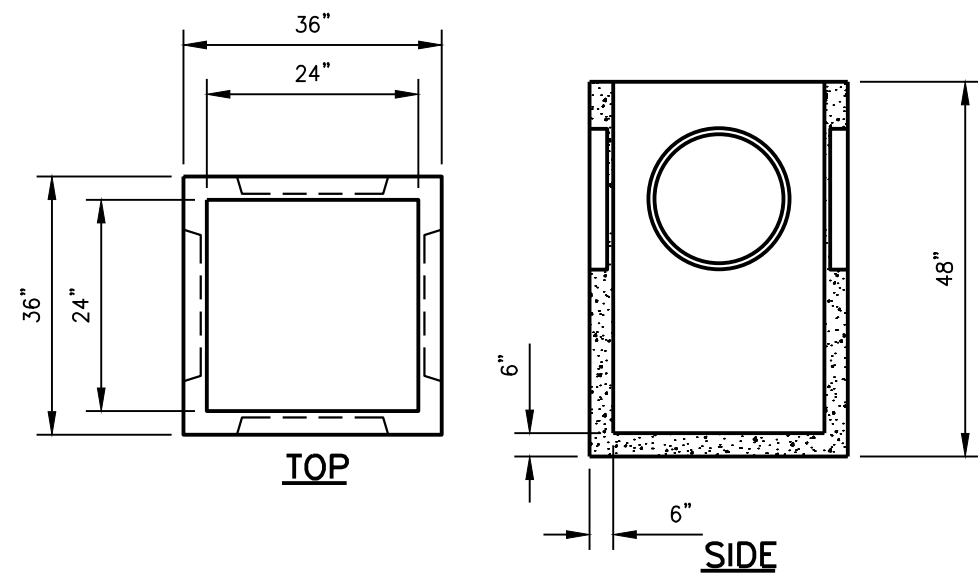


DISTRIBUTION BOX
N.T.S.
SEE SITE PLAN FOR PIPING ORIENTATION

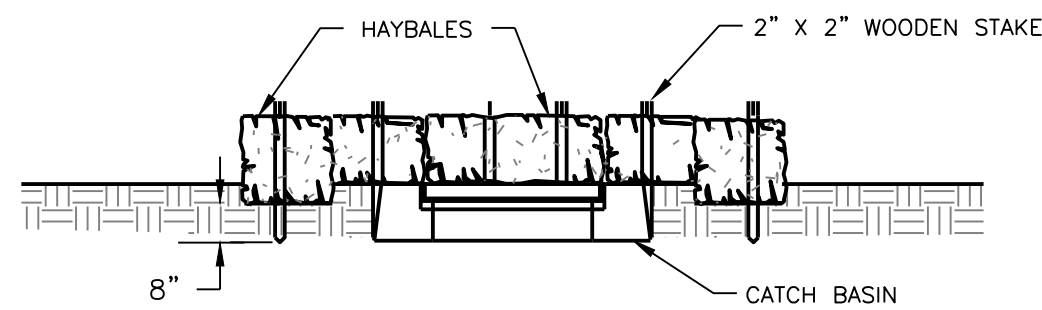
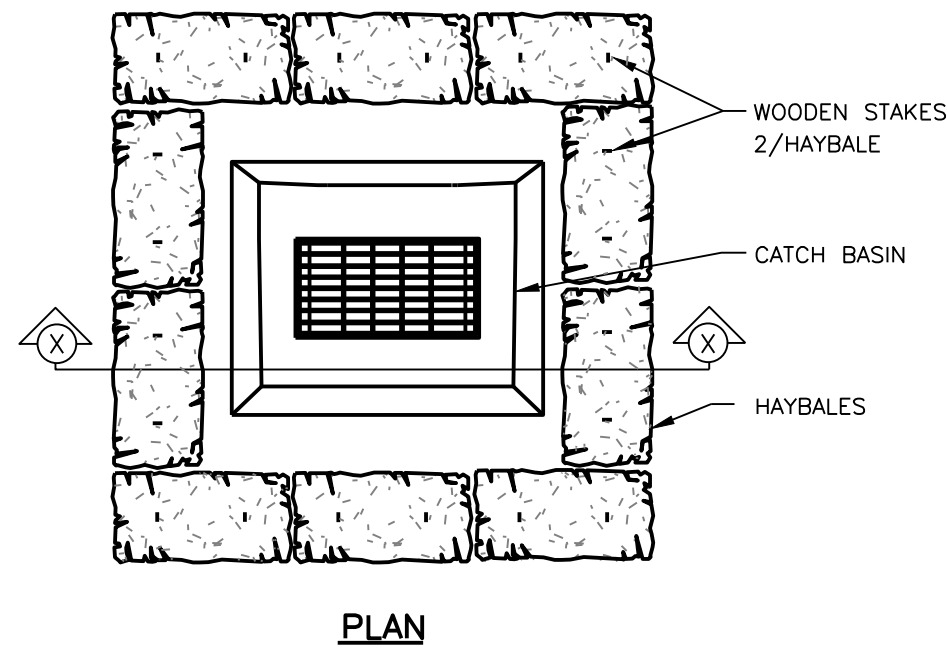
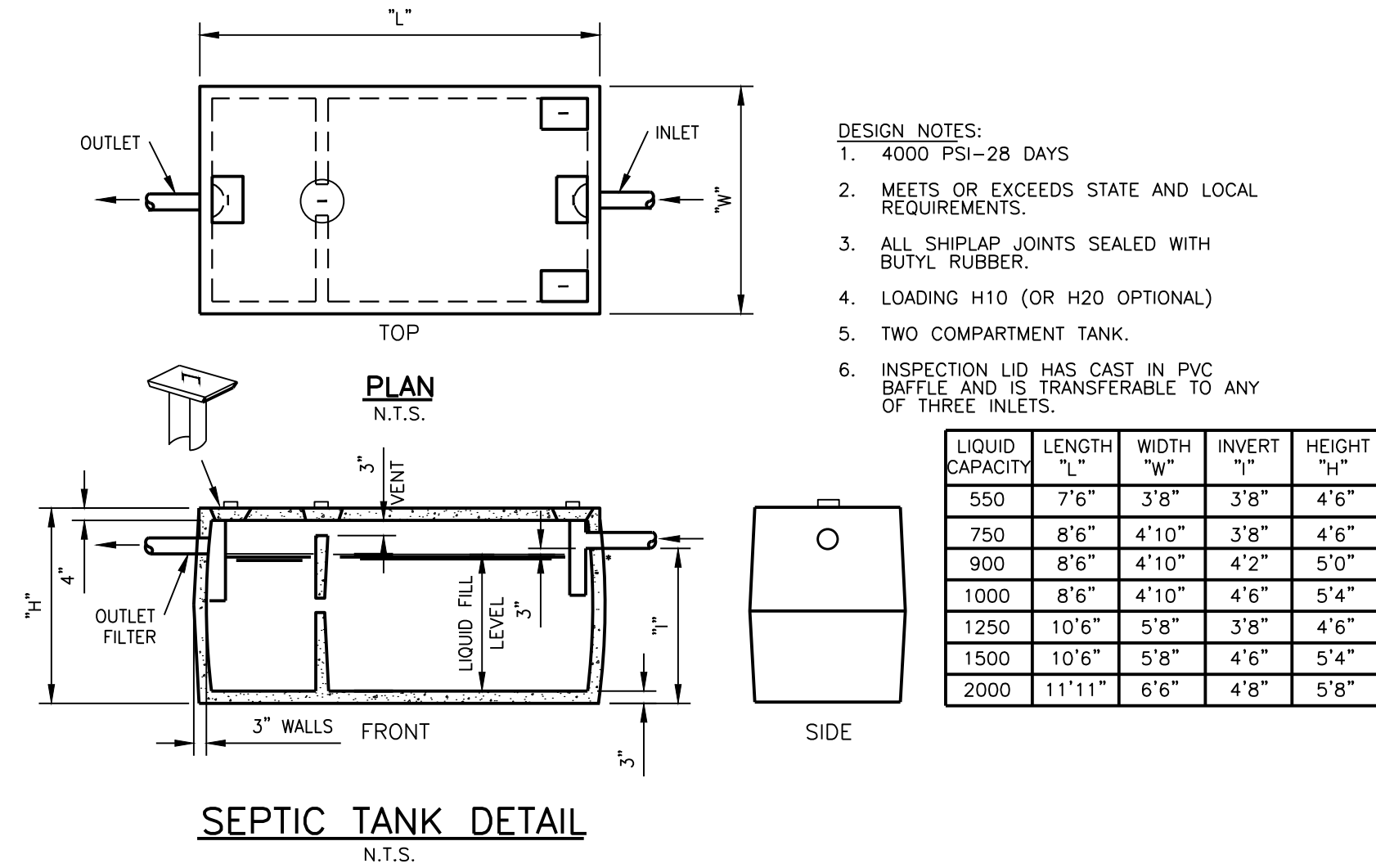


GST 6218
N.T.S.

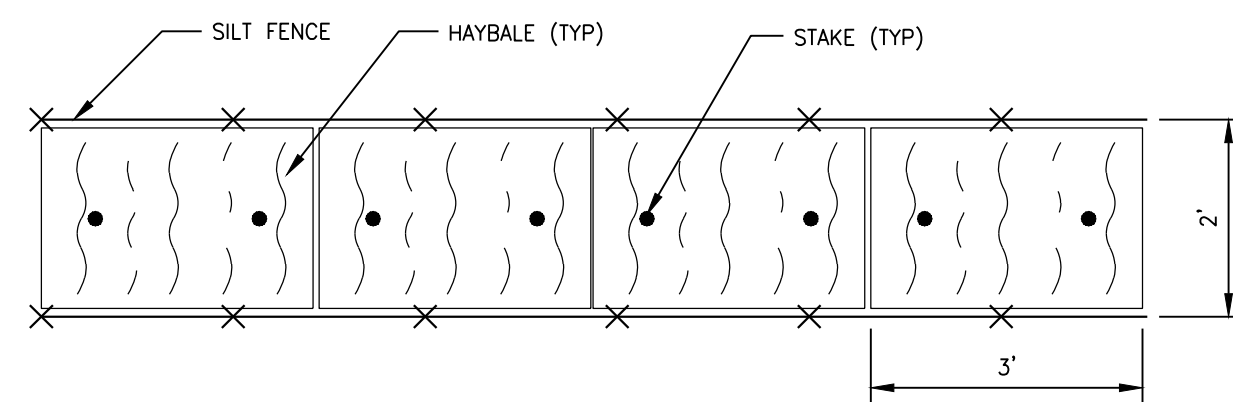
NOTE:
*3" MIN. I.D., ASTM D-3034, SDR 35 PIPE FOR GRAVITY APPLICATIONS
0.75" MIN. I.D., ASTM D-2865, SCH 40 PVC PIPE FOR PRESSURE APPLICATIONS



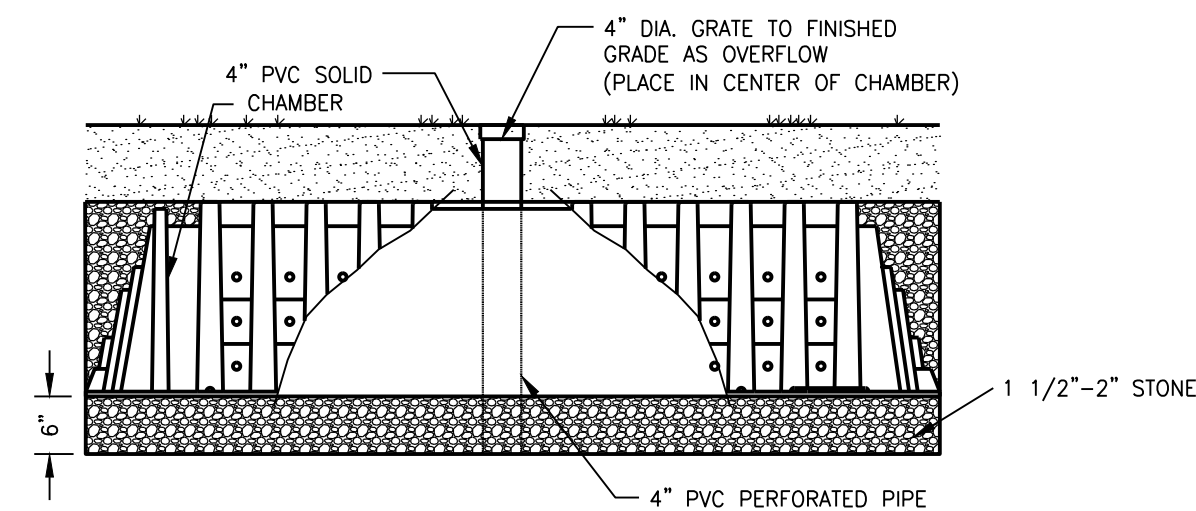
2' x 2' AREA DRAIN DETAIL
SCALE: N.T.S.



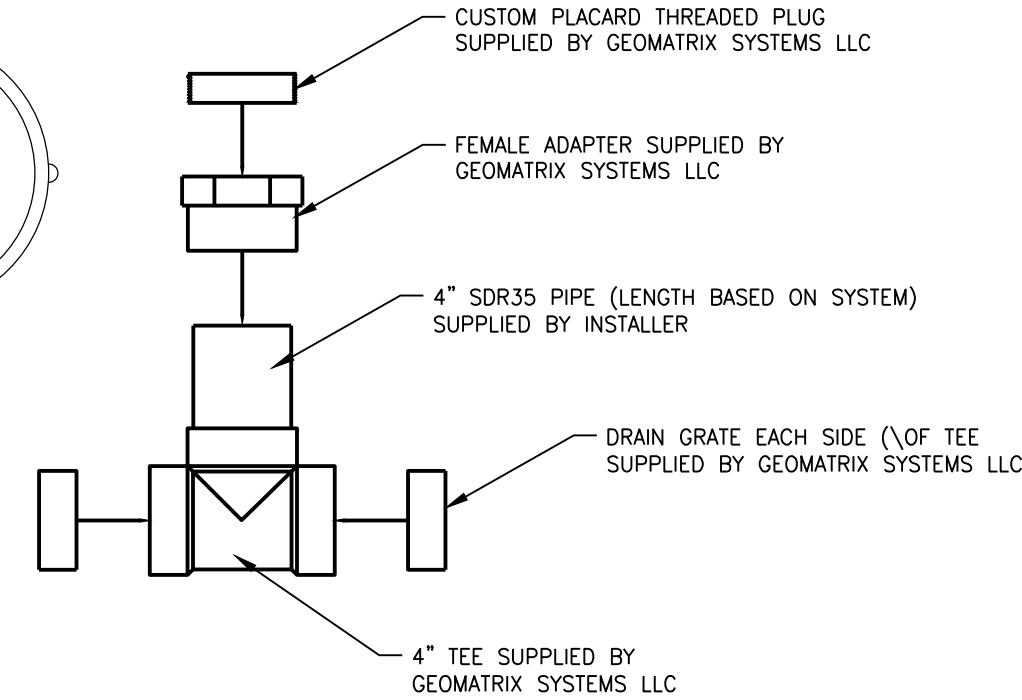
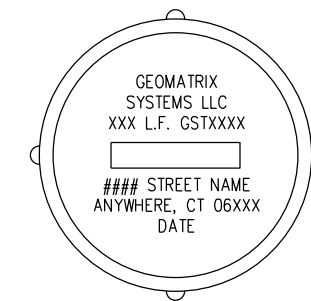
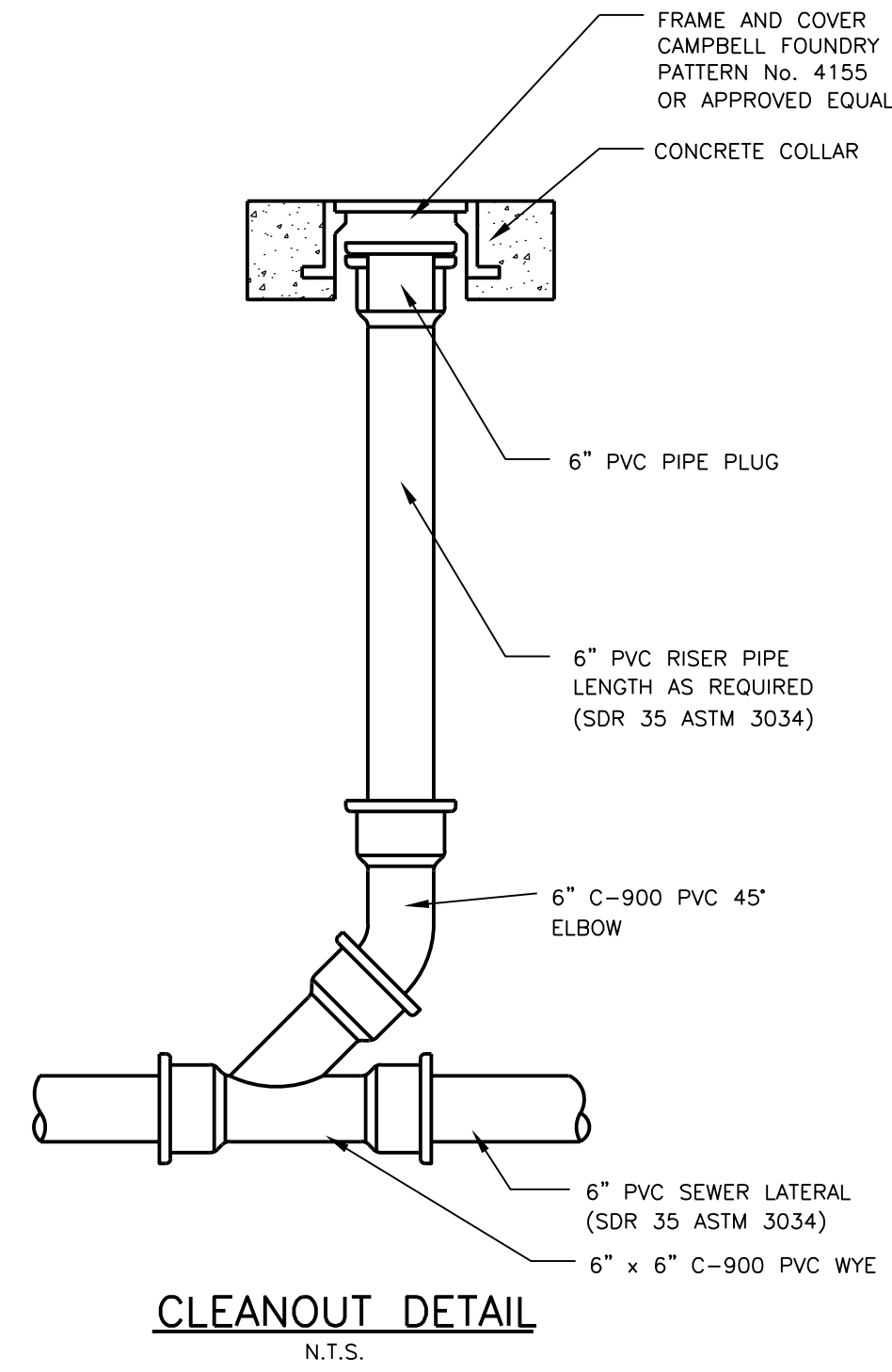
SECTION X-X
HAYBALES AT CB
N.T.S.



DOUBLE ROW SILT FENCE DETAIL
N.T.S.



TYPICAL 4" DIA. OVERFLOW
N.T.S.



GEOMATRIX GST LEACHING SYSTEM
INSPECTION PORT DETAIL
N.T.S.

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DIVESTA Civil Engineering, LLC

51 Painter Ridge Road
Roxbury, Connecticut 06783
Phone 860-354-4226 Fax 860-354-4226
E-mail dceainc@charter.net

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SHEET NO. 3 OF 3	