

ROBERT LAGA
Chairman

NICHOLAS FANNIN
Vice Chairman

ROSE TROMBETTA
Secretary

TOWN OF CARMEL
ENVIRONMENTAL CONSERVATION BOARD



60 McAlpin Avenue
Mahopac, New York 10541
Tel. (845) 628-1500 - Ext. 190
www.ci.carmel.ny.us

BOARD MEMBERS

Edward Barnett
Vincent Turano
John Starace

ENVIRONMENTAL CONSERVATION BOARD AGENDA

OCTOBER 4, 2018 – 7:30 P.M.

SUBMISSION OF AN APPLICATION OR LETTER OF PERMISSION

<u>APPLICANT</u>	<u>ADDRESS</u>	<u>TAX MAP #</u>	<u>COMMENTS</u>
1. Meyers, Paul & Maria	56 Sycamore Road	76.5-1-21	Demolish Existing Home & Construct Modular Home

ELIGIBLE FOR A PERMIT

2. Sabatini & Scarfone	799 South Lake Blvd	75.43-1-17	Addition to Existing Porch
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MISCELLANEOUS

3. Minutes – 8/2/18, 9/6/18 & 9/20/18

Anthony S. Pisarri, P.E., P.C.
CONSULTING ENGINEER
3 Rosalind Drive
Cortlandt Manor, New York 10567

(914) 739-6580
(914) 734-9121 Fax

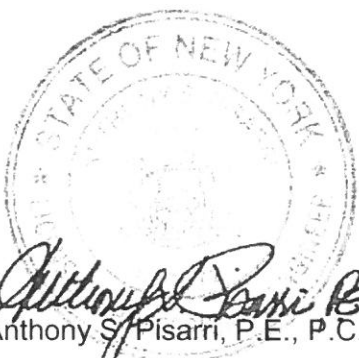
September 14, 2018

PROJECT NARRATIVE
MEYERS/PADILLA PROPERTY
56 SYCAMORE ROAD
MAHOPAC, NEW YORK

The work proposed for the site will include placing all erosion control measures prior to the start of any demolition. The placing of the erosion control will serve to be the limits of disturbance. All slopes will be topsoiled and seeded, unless exposed rock, to protect the slopes from erosion. Once the erosion control placement has been approved by the Town, demolition of the existing house will begin. The existing driveway will remain to be used as access to the site. The existing house will be removed and construction of the new residence will begin.

The new foundation will be excavated and constructed. The new house will be delivered and set on it's foundation. After the new house has been placed on the foundation and has been made weather tight all grading will be done as shown on the plan. All disturbed areas will be stabilized as per the New York Erosion and Sediment Control Manual. Maintenance of the erosion control measures shall be as noted on the plans.

When the grass has taken hold and the disturbed areas have stabilized, all remaining erosion control measures will be removed and the site completely cleaned up.



Anthony S. Pisarri, P.E., P.C.

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APPLICATION FOR WETLAND PERMIT OR LETTER OF PERMISSION

Name of Applicant: Paul Meyers & Maria Padila
Address of Applicant: 628 West 227th St Bronx NY Email: Vlcto@westchestermail.com
Telephone# 845-278-1700 Name and Address of Owner if different from Applicant:
Paul Meyers & Maria Padila, 628 West 227th St. Bronx NY 10463
Property Address: 56 Sycamore Rd. Mahopac, NY Tax Map # Sec. 76.5 Blot. 1 Lot 21
Agency Submitting Application if Applicable: _____
Location of Wetland: Rear Yard - Lake Mahopac
Size of Work Section & Specific Location: Disturbance area \approx 4,100 \pm in current home location
Will Project Utilize State Owned Lands? If Yes, Specify: NO

Type and extent of work (feet of new channel, yards of material to be removed, draining, dredging, filling, etc). A brief description of the regulated activity (attach supporting details).

Demo & remove existing house. Replace existing house with new Modular home including front porch, Rear Porch & deck, (1) Car Garage, & replace driveway.

Proposed Start Date: 11/1/18 Anticipated Completion Date: 5/28/19 Fee Paid \$ 1,000

CERTIFICATION

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief, false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. As a condition to the issuance of a permit, the applicant accepts full legal responsibility for all damage, direct or indirect, or whatever nature, and by whomever suffered, arising out of the project described here-in and agrees to indemnify and save harmless the Town of Carmel from suits, actions, damages and costs of every name and description resulting from the said project.

SIGNATURE

9/17/18

DATE

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

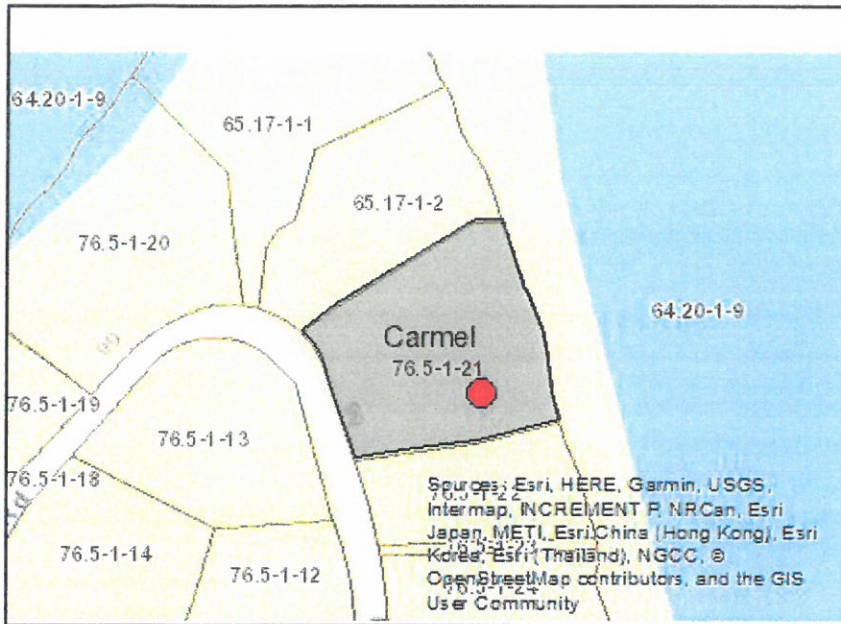
Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information							
Name of Action or Project: Plot Plan for 56 Sycamore Road, Mahopac, NY							
Project Location (describe, and attach a location map): 56 Sycamore Road, Mahopac, NY							
Brief Description of Proposed Action: Demolish existing residence and construct new modular residence.							
Name of Applicant or Sponsor: Meyers, Paul & Maria		Telephone: 845-278-1700					
		E-Mail:					
Address: 628 W. 227 Street							
City/PO: Bronx		State: New York	Zip Code: 10463				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">NO</td> <td style="width: 50%; padding: 2px;">YES</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> </tr> </table>	NO	YES	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NO	YES						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Building permit, wetland permit			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">NO</td> <td style="width: 50%; padding: 2px;">YES</td> </tr> <tr> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> </tr> </table>	NO	YES	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NO	YES						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
3.a. Total acreage of the site of the proposed action? 0.430 acres b. Total acreage to be physically disturbed? 0.094 acres c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.430 acres							
4. Check all land uses that occur on, adjoining and near the proposed action. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland							

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?	NO	YES	
If Yes, identify: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements?	NO	YES	
If the proposed action will exceed requirements, describe design features and technologies: Modular home exceeds energy code	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply?	NO	YES	
If No, describe method for providing potable water: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities?	NO	YES	
If No, describe method for providing wastewater treatment: _____ Existing on-site septic system	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____			
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input checked="" type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Long-eared Bat	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
16. Is the project site located in the 100 year flood plain?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources?	NO	YES	
If Yes,			
a. Will storm water discharges flow to adjacent properties? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?			
If Yes, briefly describe: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			

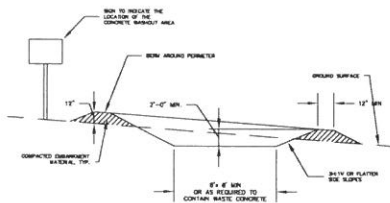
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____	NO	YES
_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	NO	YES
_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	NO	YES
_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor name: <u>Vincent Lefebvre</u> Date: <u>4/17/18</u> Signature: <u>[Signature]</u>		



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

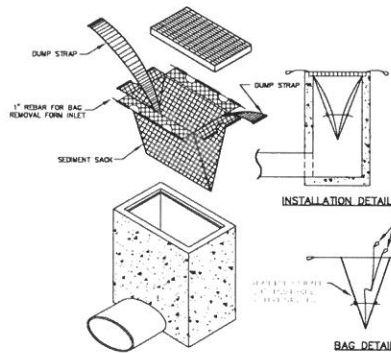


Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Northern Long-eared Bat
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No



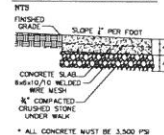
- NOTES:**
- Concrete washout area shall be installed prior to any concrete placement on site.
 - Vehicle tracking control is required if access to concrete washout area is off pavement.
 - Stops shall be placed at the construction entrance, at the washout area, and at the entrance of concrete trucks and pump rigs.
 - The concrete washout area shall be repaired and enlarged or altered out as necessary to maintain capacity for washed concrete.
 - At the end of construction, all concrete shall be removed from the site and disposed of at an approved waste site.
 - When an approved washing area is removed, the displaced area shall be sealed and roughed up or otherwise stabilized in a manner acceptable to the jurisdiction.

CONCRETE WASHOUT AREA



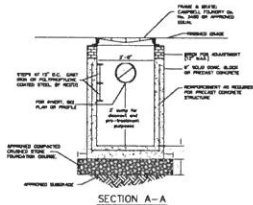
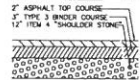
INLET PROTECTION DETAIL
N.T.S.

WALK DETAIL



* ALL CONCRETE MUST BE 3,500 PSI

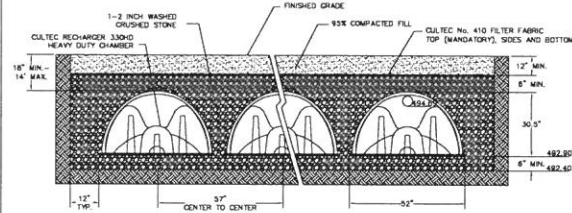
PAVEMENT SECTION



BUBBLER BASIN DETAIL
(Only required if existing catch basin needs to be replaced)

Cultec 330 XLHD Recharger System

CULTEC RECHARGER 330XLHD CHAMBER SYSTEM PAVED TRAFFIC APPLICATION TYPICAL CROSS SECTION DETAIL



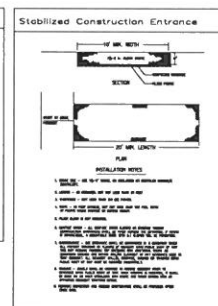
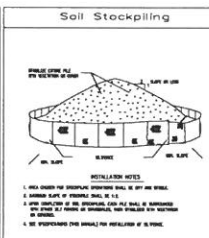
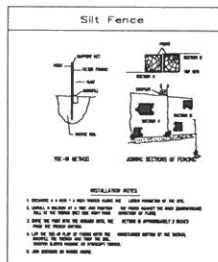
GENERAL NOTES:
RECHARGER 330XLHD BY CULTEC, INC. OF BROOKFIELD, CT.
ALL RECHARGER 330XLHD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES. ALL RECHARGER 330XLHD HEAVY DUTY UNITS ARE MARKED WITH A COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.

CULTEC, Inc.
P.O. Box 290
878 Federal Road
Brookfield, CT 06804 USA

PH: (203) 775-4416
PH: (800) 4-CULTEC
FX: (203) 775-1462
www.cultec.com



CULTEC Contactor® and Recharger®
Plastic Septic and Stormwater Chambers



**HYDROLOGY REPORT
FOR
MEYERS PROPERTY
56 SYCAMORE ROAD
MAHOPAC, NEW YORK**

1.) Existing Site Conditions:

The existing site is an 0.43 acre parcel along the easterly side of Sycamore Road located in the hamlet of Mahopac. It presently contains a residence, a paved driveway and a series of walks.

The site is sloped and drains towards Lake Mahopac which bounds this site to the east. That being the case, the site is located in the East of Hudson watershed which requires full attenuation of the 1 year storm (2.75 inches) for proper treatment of the runoff.

2.) Site Soils:

According to the USDA/NRCS web soils series, the soils located on the site are Charlton-Chatfield, Hydrolic group "B".

3.) Hydrology Computations:

The surface runoff calculations were determined using the HydroCad computer program for determining time of concentration (Tc) and run-off curve numbers (CN). For the existing conditions, the following was used:

Basin	Area	Tc	CN
Total Site	18,730 s.f.	5.4 min	65

4.) Existing Conditions Flows:

The above information was inserted into HydroCad program and the site analyzed for the 1, 10, and 100 yr storms. The following are the results:

Basin	1 yr	10 yr	100 yr
Total Site	0.13 cfs	0.76 cfs	2.28 cfs

5.) Proposed Development:

The proposal for the site is to demolish the existing house and construct a modular home. The existing septic system will be reused and the existing driveway made larger to accommodate the attached garage with the new home.

The anticipated increase in runoff will be mitigated by installing (8) Cultec 330 XLHD units to manufacturer's specifications and capturing and treating the runoff from the driveway and house. The remainder of the lot will be allowed to flow as it always has, towards Lake Mahopac.

6.) Hydrology Computations:

The surface runoff calculations were determined using the HydroCad computer program for determining time of concentration (Tc) and run-off curve numbers (CN). For the existing conditions, the following was used:

Basin	Area	Tc	CN
Drive and House	3833 s.f.	0.5 min	98
Remaining Lot	14,897 s.f.	5.4 min	63

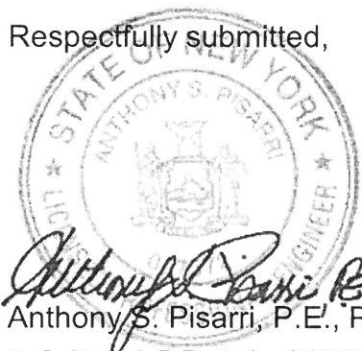
7.) Developed Conditions Flows:

The above information was inserted into HydroCad program and the site analyzed for the 1,10, and 100 yr storms. The following are the results:

Basin	1 yr	10 yr	100 yr
Drive and House*	0 cfs	0 cfs	0.26 cfs
Remaining Lot	.07 cfs	0.54 cfs	1.71 cfs
Peak at Lake	.07 cfs	0.54 cfs	1.71 cfs

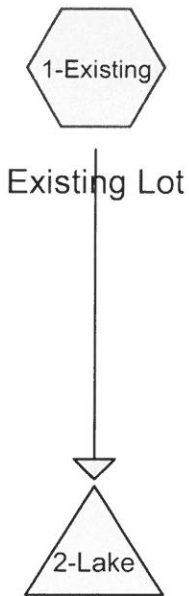
NOTE: Flow shown for Drive and House is the flow that does not exfiltrate into the soil. The existing catch basin acts as an overflow for the system and the overflow continues down to the lake. That flow will combine with the flow from the remaining lot. Since the peaks are different, it's not a direct add. The 0 flow for the 1 year and 10 year storms, House and Drive, indicates the cultecs adequately capture and treat the entire flows.

Respectfully submitted,

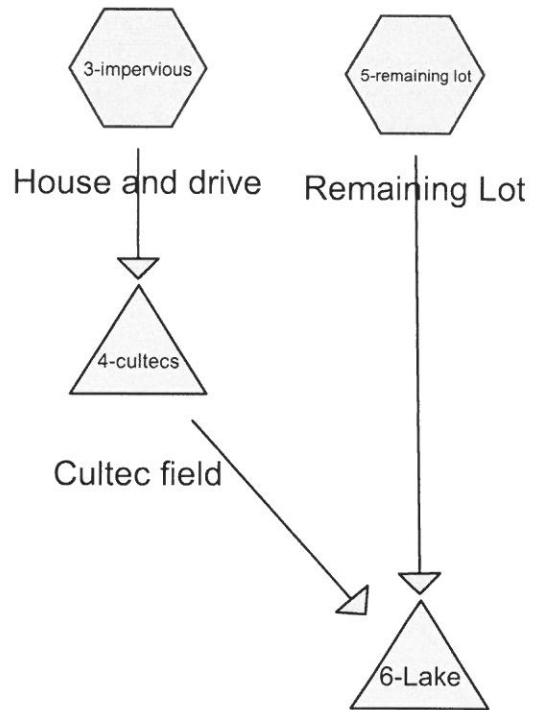


Anthony S. Pisarri, P.E., P.C.

A. S. Pisarri, P.E., P.C., CONSULTING ENGINEER, 3 Rosalind Drive, Cortlandt Manor, NY
9/27/2018



Lake Mahopac - Existing



Lake Mahopac - Proposed



Meyers - 56 Sycamore Road Mahopac

Prepared by Anthony S. Pisarri, P.E., P.C.

HydroCAD® 10.00-22 s/n 05580 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 1 Year Storm Rainfall=2.75"

Printed 9/27/2018

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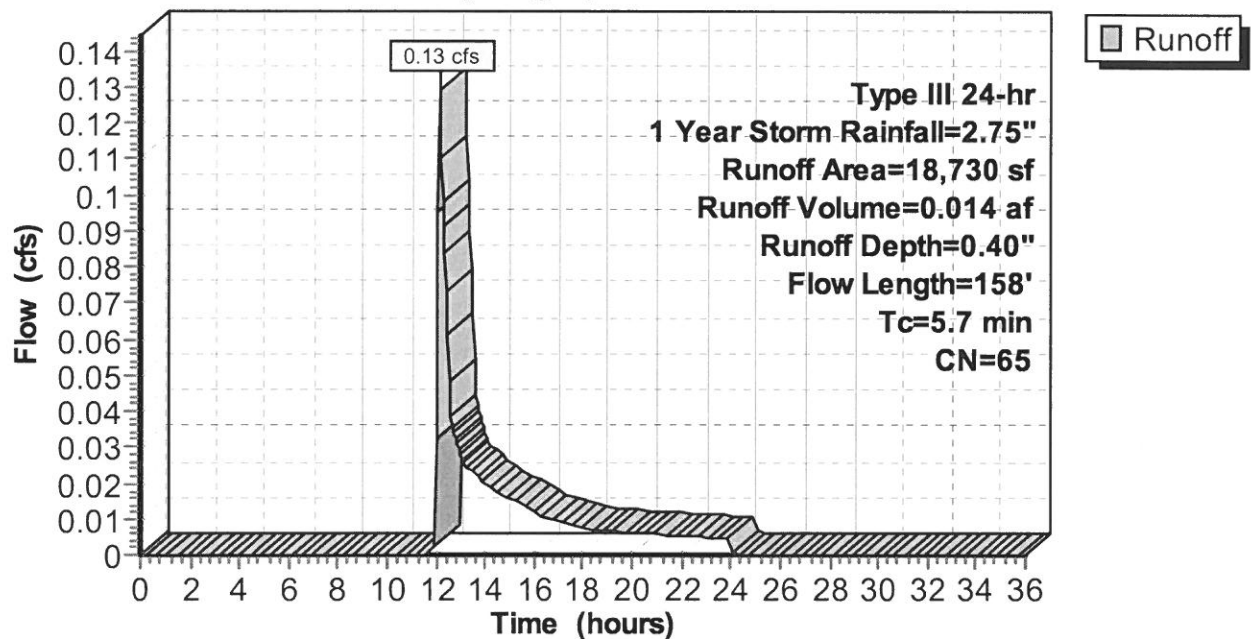
Summary for Subcatchment 1-Existing: Existing Lot

Runoff = 0.13 cfs @ 12.13 hrs, Volume= 0.014 af, Depth= 0.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 1 Year Storm Rainfall=2.75"

	Area (sf)	CN	Description
*	16,671	61	"B" soil, lawn good condition
*	2,059	98	existing impervious
	18,730	65	Weighted Average
	16,671		89.01% Pervious Area
	2,059		10.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	100	0.0900	0.32		Sheet Flow, existing lawn Grass: Short n= 0.150 P2= 3.33"
0.4	58	0.1030	2.25		Shallow Concentrated Flow, lower lawn area Short Grass Pasture Kv= 7.0 fps
5.7	158	Total			

Subcatchment 1-Existing: Existing Lot**Hydrograph**

Meyers - 56 Sycamore Road Mahopac

Prepared by Anthony S. Pisarri, P.E., P.C.

HydroCAD® 10.00-22 s/n 05580 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 1 Year Storm Rainfall=2.75"

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Page 3

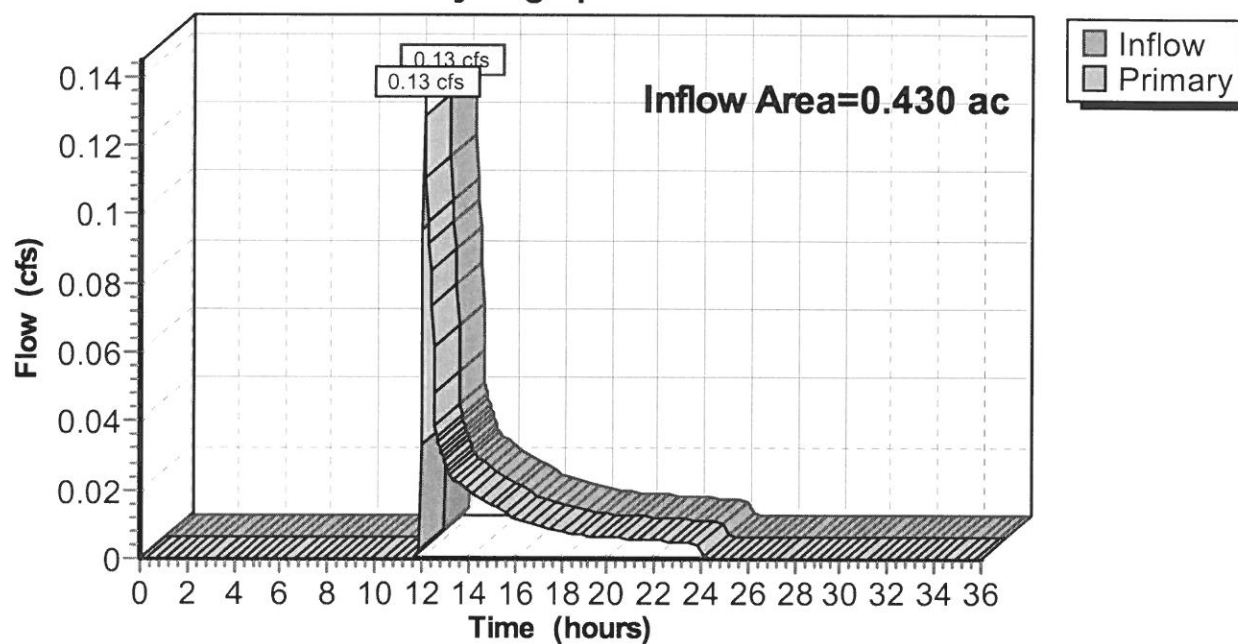
Summary for Pond 2-Lake: Lake Mahopac - Existing

Inflow Area = 0.430 ac, 10.99% Impervious, Inflow Depth = 0.40" for 1 Year Storm event
Inflow = 0.13 cfs @ 12.13 hrs, Volume= 0.014 af
Primary = 0.13 cfs @ 12.13 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3

Pond 2-Lake: Lake Mahopac - Existing

Hydrograph



Meyers - 56 Sycamore Road Mahopac

Prepared by Anthony S. Pisarri, P.E., P.C.

HydroCAD® 10.00-22 s/n 05580 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 1 Year Storm Rainfall=2.75"

Printed 9/27/2018

Page 4

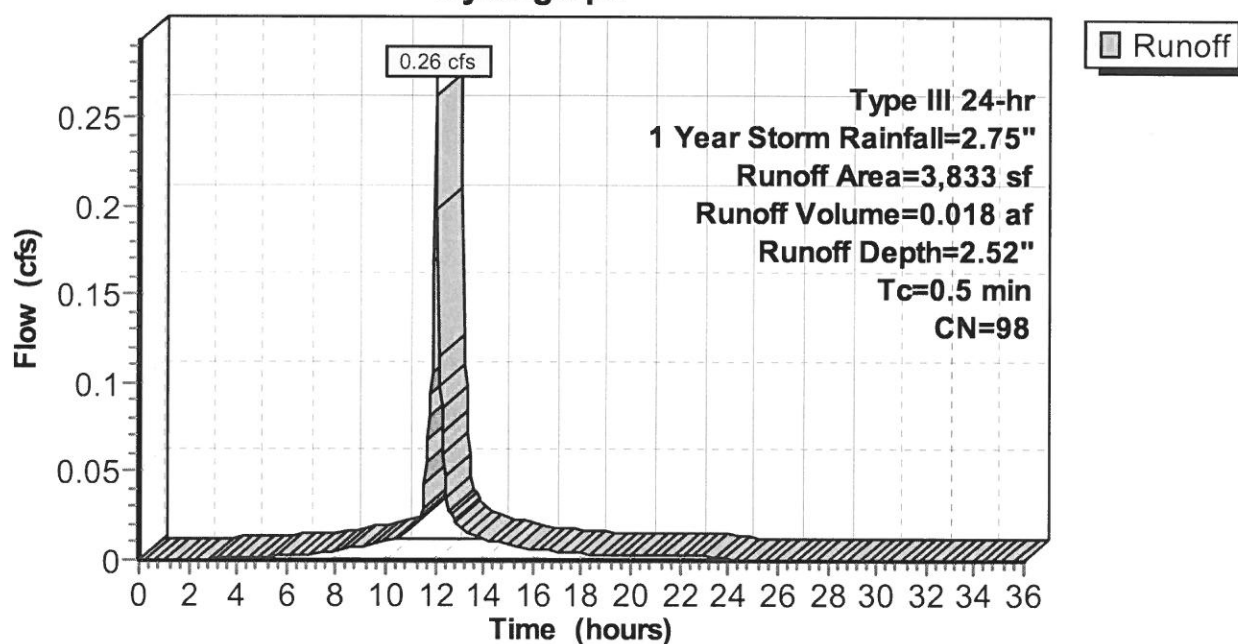
Summary for Subcatchment 3-impervious: House and drive

Runoff = 0.26 cfs @ 12.01 hrs, Volume= 0.018 af, Depth= 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 1 Year Storm Rainfall=2.75"

Area (sf)	CN	Description
* 3,833	98	house and driveway
3,833		100.00% Impervious Area

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

Subcatchment 3-impervious: House and drive**Hydrograph**

Meyers - 56 Sycamore Road Mahopac

Prepared by Anthony S. Pisarri, P.E., P.C.

HydroCAD® 10.00-22 s/n 05580 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 1 Year Storm Rainfall=2.75"

Printed 9/27/2018

Page 5

Summary for Pond 4-cultecs: Cultec field

Inflow Area = 0.088 ac, 100.00% Impervious, Inflow Depth = 2.52" for 1 Year Storm event
 Inflow = 0.26 cfs @ 12.01 hrs, Volume= 0.018 af
 Outflow = 0.05 cfs @ 11.76 hrs, Volume= 0.018 af, Atten= 81%, Lag= 0.0 min
 Discarded = 0.05 cfs @ 11.76 hrs, Volume= 0.018 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3
 Peak Elev= 493.25' @ 12.40 hrs Surf.Area= 365 sf Storage= 174 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 16.6 min (771.2 - 754.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	492.40'	332 cf	20.83'W x 17.50'L x 3.54'H Field A 1,291 cf Overall - 462 cf Embedded = 829 cf x 40.0% Voids
#2A	492.90'	462 cf	Cultec R-330XLHD x 8 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 4 rows
#3	495.90'	13 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 255 cf Overall x 5.0% Voids
806 cf			Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
495.90	255	0	0
496.90	255	255	255

Device	Routing	Invert	Outlet Devices
#1	Discarded	492.40'	6.000 in/hr Exfiltration over Surface area
#2	Primary	496.90'	2.0" x 2.0" Horiz. Orifice/Grate X 10.00 columns X 10 rows C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 11.76 hrs HW=492.45' (Free Discharge)

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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=492.40' TW=0.00' (Dynamic Tailwater)

↑ **2=Orifice/Grate** (Controls 0.00 cfs)

Meyers - 56 Sycamore Road Mahopac

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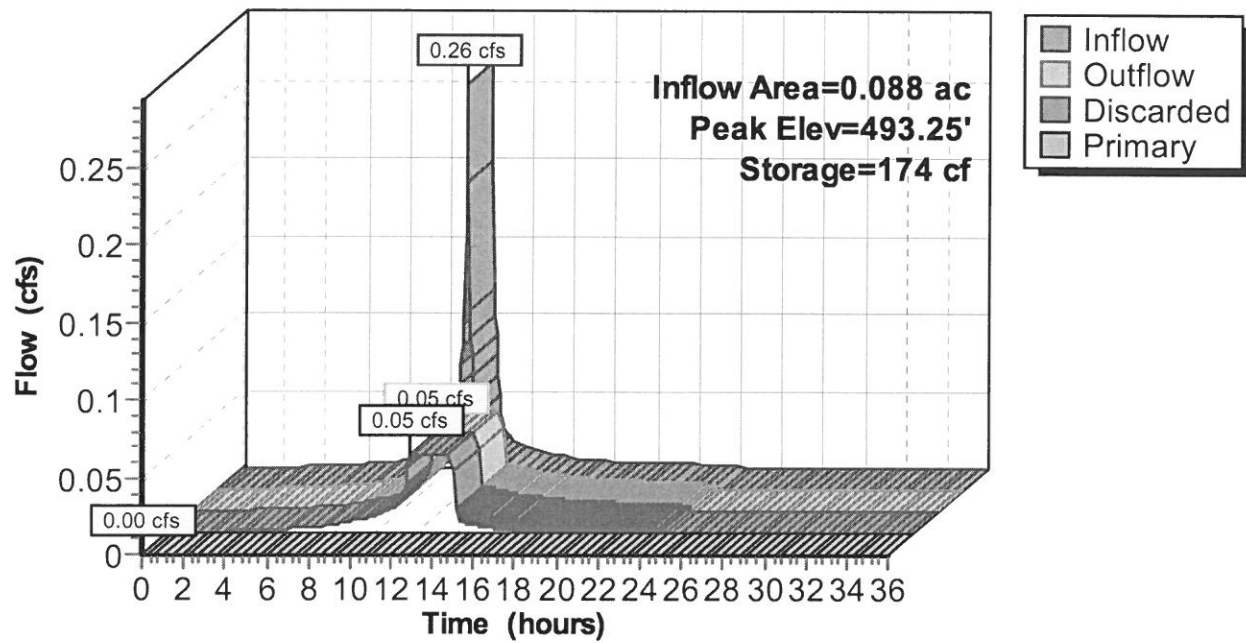
Type III 24-hr 1 Year Storm Rainfall=2.75"

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Pond 4-cultecs: Cultec field

Hydrograph



Meyers - 56 Sycamore Road Mahopac

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Type III 24-hr 1 Year Storm Rainfall=2.75"

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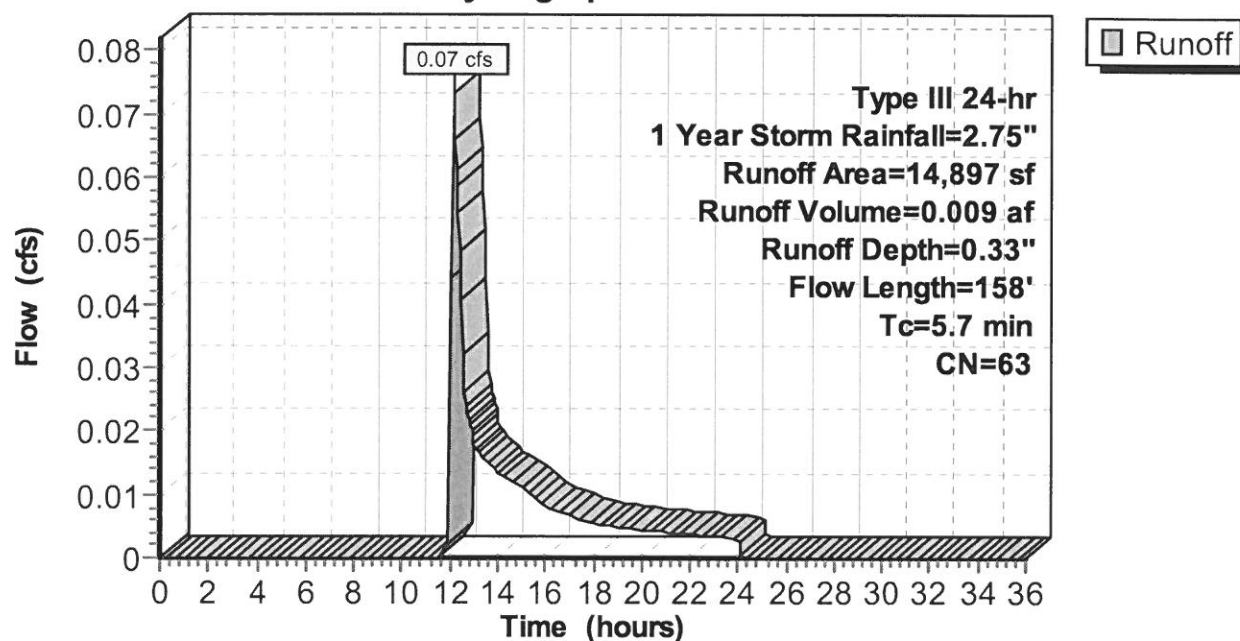
Summary for Subcatchment 5-remaining lot: Remaining Lot

Runoff = 0.07 cfs @ 12.14 hrs, Volume= 0.009 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 1 Year Storm Rainfall=2.75"

Area (sf)	CN	Description
* 14,196	61	"B" soil, lawn good condition
* 701	98	walks
14,897	63	Weighted Average
14,196		95.29% Pervious Area
701		4.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	100	0.0900	0.32		Sheet Flow, existing lawn Grass: Short n= 0.150 P2= 3.33"
0.4	58	0.1030	2.25		Shallow Concentrated Flow, lower lawn area Short Grass Pasture Kv= 7.0 fps
5.7	158	Total			

Subcatchment 5-remaining lot: Remaining Lot**Hydrograph**

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Type III 24-hr 1 Year Storm Rainfall=2.75"

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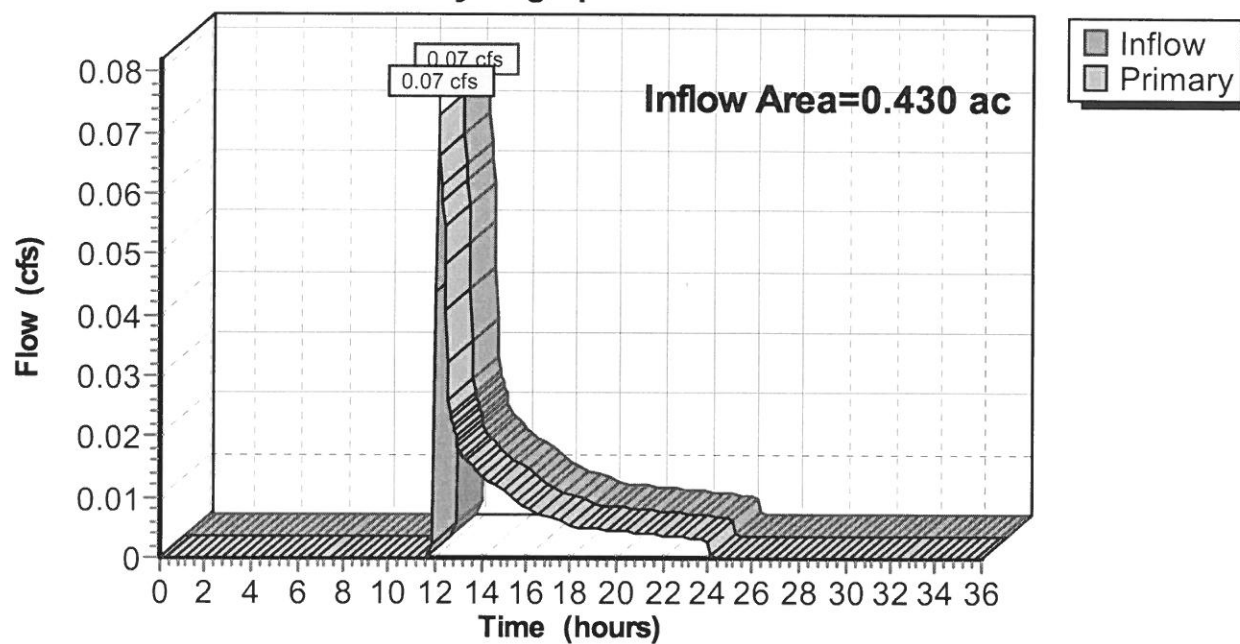
Summary for Pond 6-Lake: Lake Mahopac - Proposed

Inflow Area = 0.430 ac, 24.21% Impervious, Inflow Depth = 0.27" for 1 Year Storm event
Inflow = 0.07 cfs @ 12.14 hrs, Volume= 0.009 af
Primary = 0.07 cfs @ 12.14 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3

Pond 6-Lake: Lake Mahopac - Proposed

Hydrograph



Meyers - 56 Sycamore Road Mahopac

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Type III 24-hr 10 Year Storm Rainfall=4.98"

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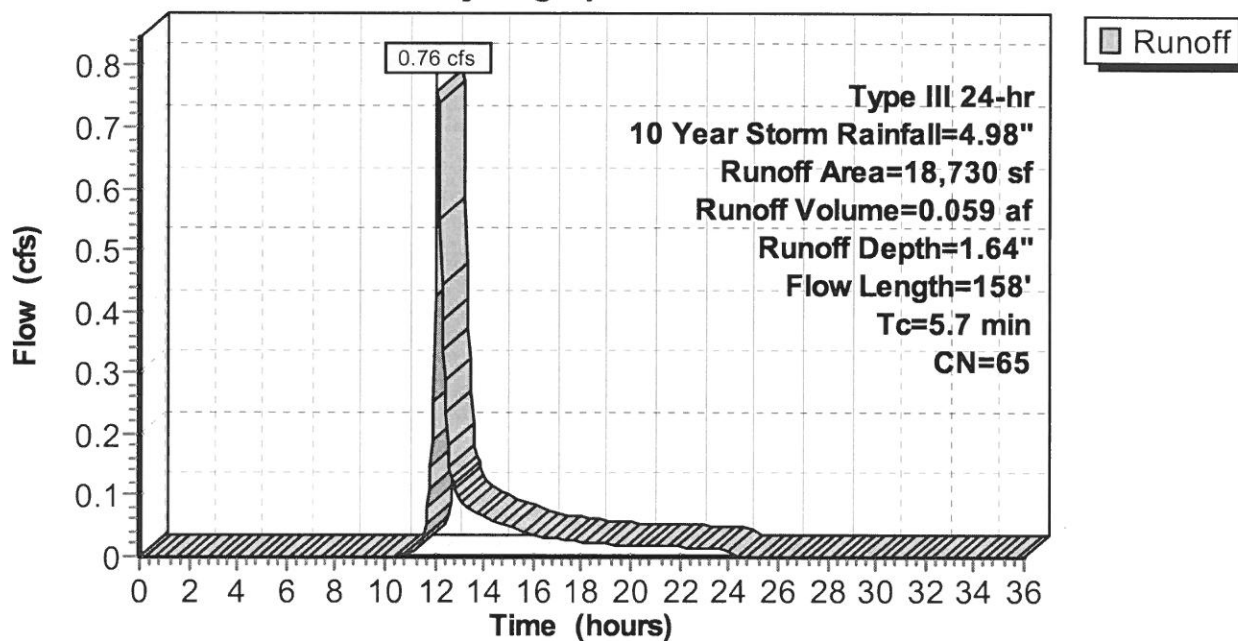
Summary for Subcatchment 1-Existing: Existing Lot

Runoff = 0.76 cfs @ 12.10 hrs, Volume= 0.059 af, Depth= 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 10 Year Storm Rainfall=4.98"

	Area (sf)	CN	Description
*	16,671	61	"B" soil, lawn good condition
*	2,059	98	existing impervious
	18,730	65	Weighted Average
	16,671		89.01% Pervious Area
	2,059		10.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	100	0.0900	0.32		Sheet Flow, existing lawn Grass: Short n= 0.150 P2= 3.33"
0.4	58	0.1030	2.25		Shallow Concentrated Flow, lower lawn area Short Grass Pasture Kv= 7.0 fps
5.7	158	Total			

Subcatchment 1-Existing: Existing Lot**Hydrograph**

Meyers - 56 Sycamore Road Mahopac

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Type III 24-hr 10 Year Storm Rainfall=4.98"

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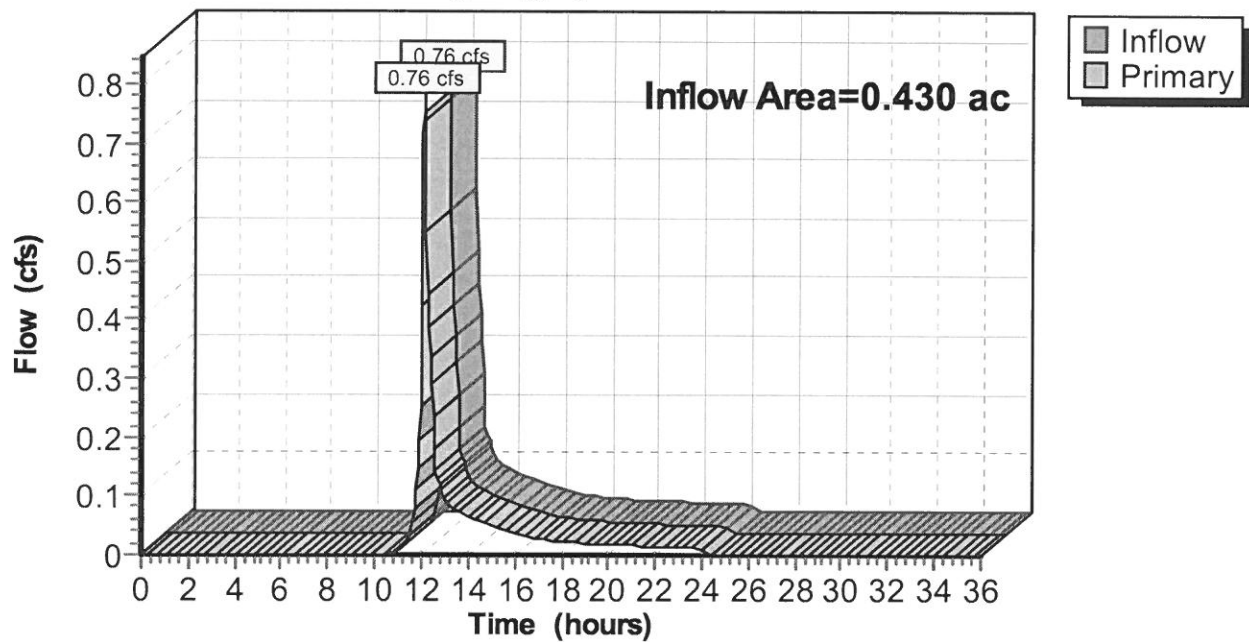
Summary for Pond 2-Lake: Lake Mahopac - Existing

Inflow Area = 0.430 ac, 10.99% Impervious, Inflow Depth = 1.64" for 10 Year Storm event
Inflow = 0.76 cfs @ 12.10 hrs, Volume= 0.059 af
Primary = 0.76 cfs @ 12.10 hrs, Volume= 0.059 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3

Pond 2-Lake: Lake Mahopac - Existing

Hydrograph



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Type III 24-hr 10 Year Storm Rainfall=4.98"

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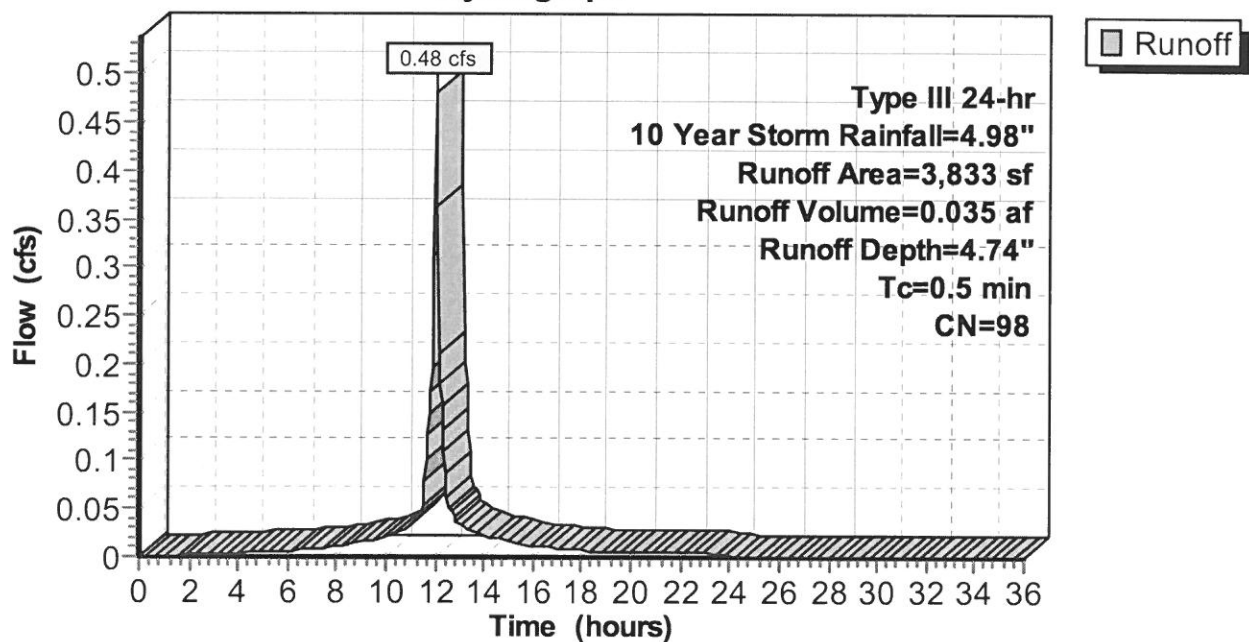
Summary for Subcatchment 3-impervious: House and drive

Runoff = 0.48 cfs @ 12.01 hrs, Volume= 0.035 af, Depth= 4.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 10 Year Storm Rainfall=4.98"

Area (sf)	CN	Description
* 3,833	98	house and driveway
3,833		100.00% Impervious Area

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

Subcatchment 3-impervious: House and drive**Hydrograph**

Meyers - 56 Sycamore Road Mahopac

Type III 24-hr 10 Year Storm Rainfall=4.98"

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Summary for Pond 4-cultecs: Cultec field

Inflow Area = 0.088 ac, 100.00% Impervious, Inflow Depth = 4.74" for 10 Year Storm event
 Inflow = 0.48 cfs @ 12.01 hrs, Volume= 0.035 af
 Outflow = 0.05 cfs @ 11.64 hrs, Volume= 0.035 af, Atten= 89%, Lag= 0.0 min
 Discarded = 0.05 cfs @ 11.64 hrs, Volume= 0.035 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3
 Peak Elev= 494.25' @ 12.56 hrs Surf.Area= 365 sf Storage= 456 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 54.6 min (797.6 - 743.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	492.40'	332 cf	20.83'W x 17.50'L x 3.54'H Field A 1,291 cf Overall - 462 cf Embedded = 829 cf x 40.0% Voids
#2A	492.90'	462 cf	Cultec R-330XLHD x 8 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 4 rows
#3	495.90'	13 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 255 cf Overall x 5.0% Voids
		806 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
495.90	255	0	0
496.90	255	255	255

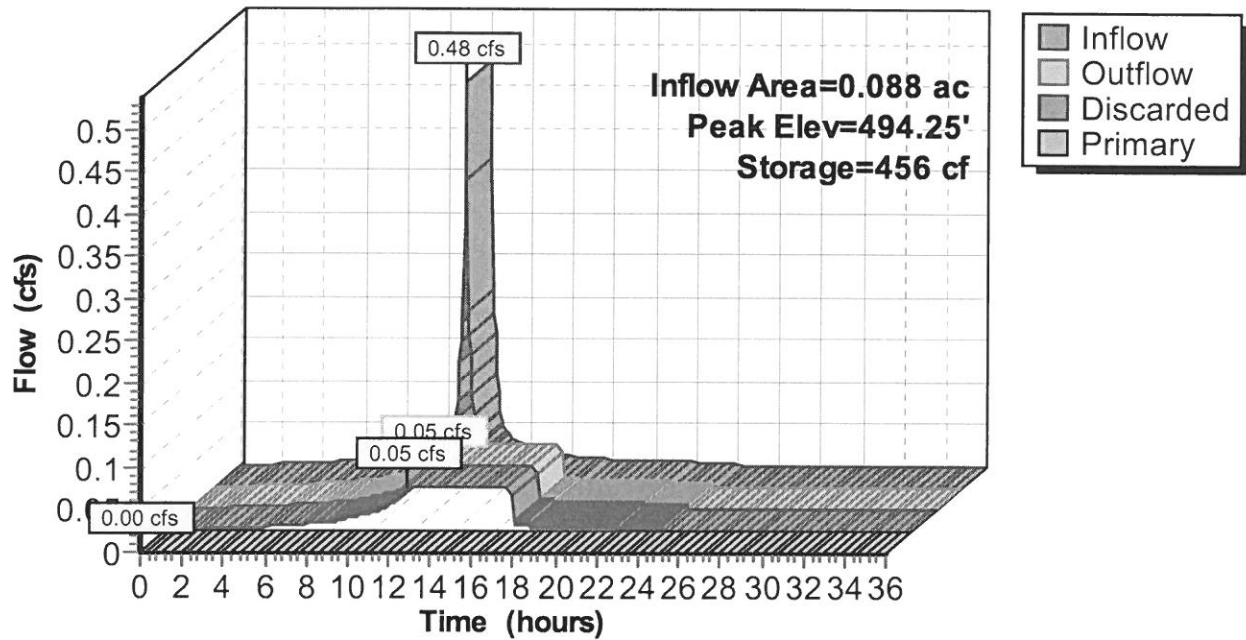
Device	Routing	Invert	Outlet Devices
#1	Discarded	492.40'	6.000 in/hr Exfiltration over Surface area
#2	Primary	496.90'	2.0" x 2.0" Horiz. Orifice/Grate X 10.00 columns X 10 rows C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.05 cfs @ 11.64 hrs HW=492.49' (Free Discharge)
 ↗ **1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=492.40' TW=0.00' (Dynamic Tailwater)
 ↗ **2=Orifice/Grate** (Controls 0.00 cfs)

Pond 4-cultecs: Cultec field

Hydrograph



Meyers - 56 Sycamore Road Mahopac

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Type III 24-hr 10 Year Storm Rainfall=4.98"

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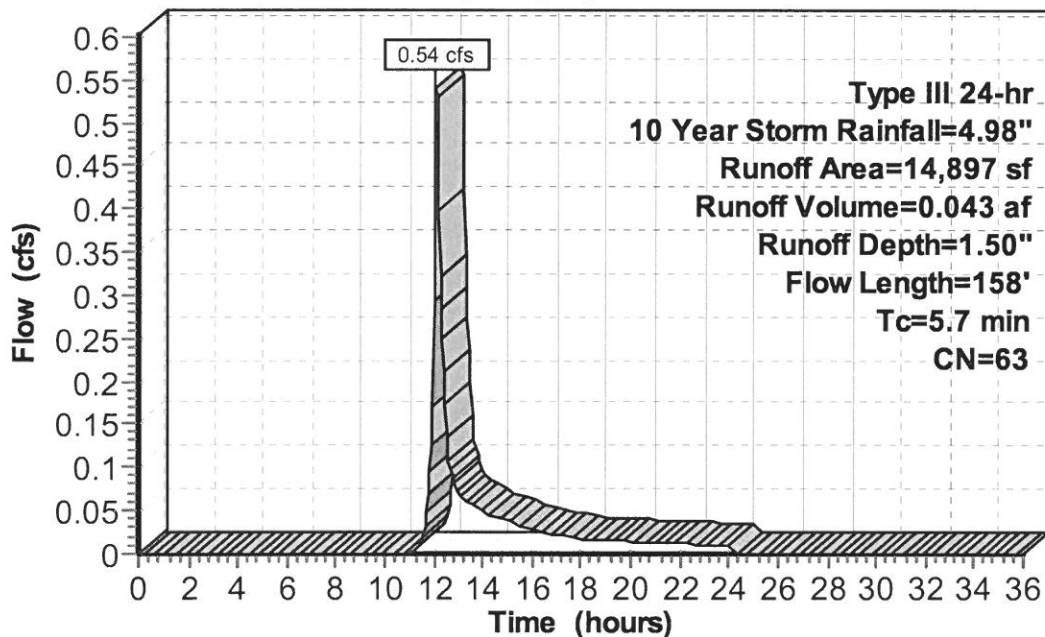
Summary for Subcatchment 5-remaining lot: Remaining Lot

Runoff = 0.54 cfs @ 12.10 hrs, Volume= 0.043 af, Depth= 1.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 10 Year Storm Rainfall=4.98"

	Area (sf)	CN	Description
*	14,196	61	"B" soil, lawn good condition
*	701	98	walks
	14,897	63	Weighted Average
	14,196		95.29% Pervious Area
	701		4.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	100	0.0900	0.32		Sheet Flow, existing lawn Grass: Short n= 0.150 P2= 3.33"
0.4	58	0.1030	2.25		Shallow Concentrated Flow, lower lawn area Short Grass Pasture Kv= 7.0 fps
5.7	158	Total			

Subcatchment 5-remaining lot: Remaining Lot**Hydrograph**

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Type III 24-hr 10 Year Storm Rainfall=4.98"

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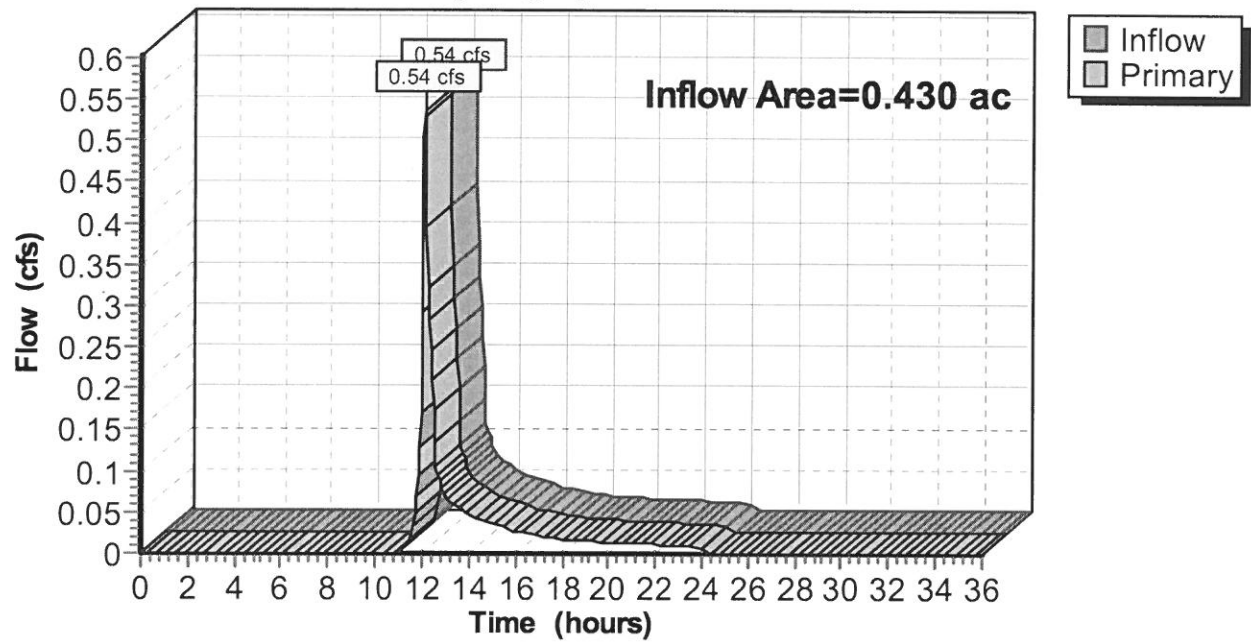
Summary for Pond 6-Lake: Lake Mahopac - Proposed

Inflow Area = 0.430 ac, 24.21% Impervious, Inflow Depth = 1.19" for 10 Year Storm event
Inflow = 0.54 cfs @ 12.10 hrs, Volume= 0.043 af
Primary = 0.54 cfs @ 12.10 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3

Pond 6-Lake: Lake Mahopac - Proposed

Hydrograph



Meyers - 56 Sycamore Road Mahopac

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Type III 24-hr 100 Year Storm Rainfall=8.92"

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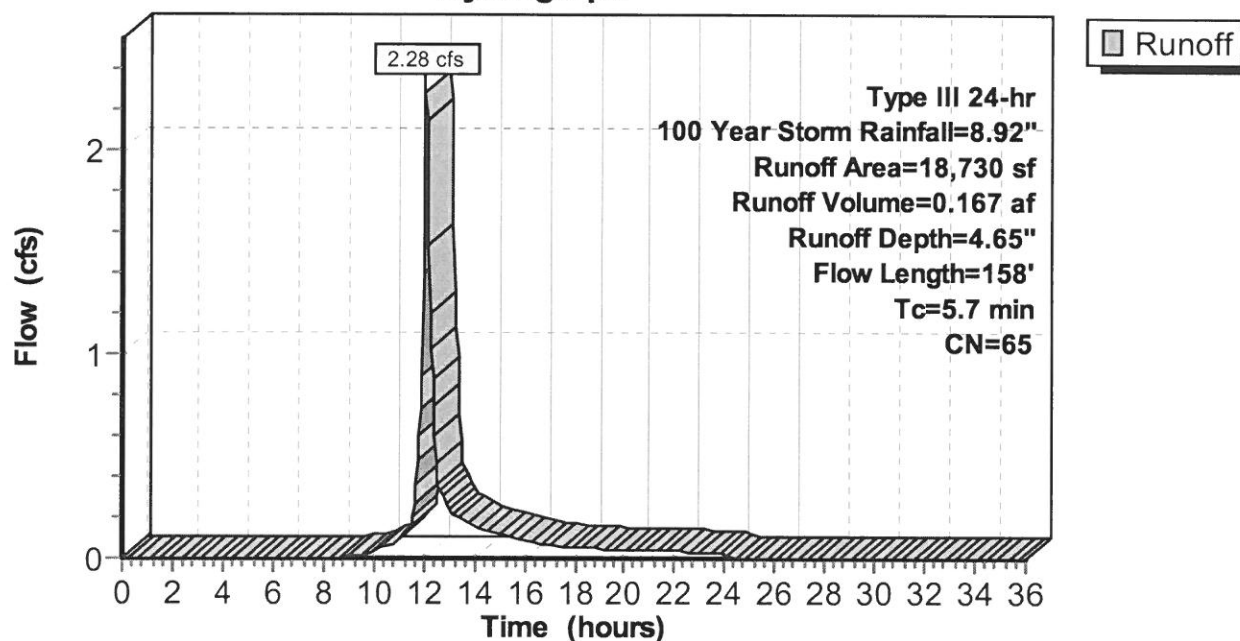
Summary for Subcatchment 1-Existing: Existing Lot

Runoff = 2.28 cfs @ 12.09 hrs, Volume= 0.167 af, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 100 Year Storm Rainfall=8.92"

	Area (sf)	CN	Description
*	16,671	61	"B" soil, lawn good condition
*	2,059	98	existing impervious
	18,730	65	Weighted Average
	16,671		89.01% Pervious Area
	2,059		10.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	100	0.0900	0.32		Sheet Flow, existing lawn Grass: Short n= 0.150 P2= 3.33"
0.4	58	0.1030	2.25		Shallow Concentrated Flow, lower lawn area Short Grass Pasture Kv= 7.0 fps
5.7	158	Total			

Subcatchment 1-Existing: Existing Lot**Hydrograph**

Meyers - 56 Sycamore Road Mahopac

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Type III 24-hr 100 Year Storm Rainfall=8.92"

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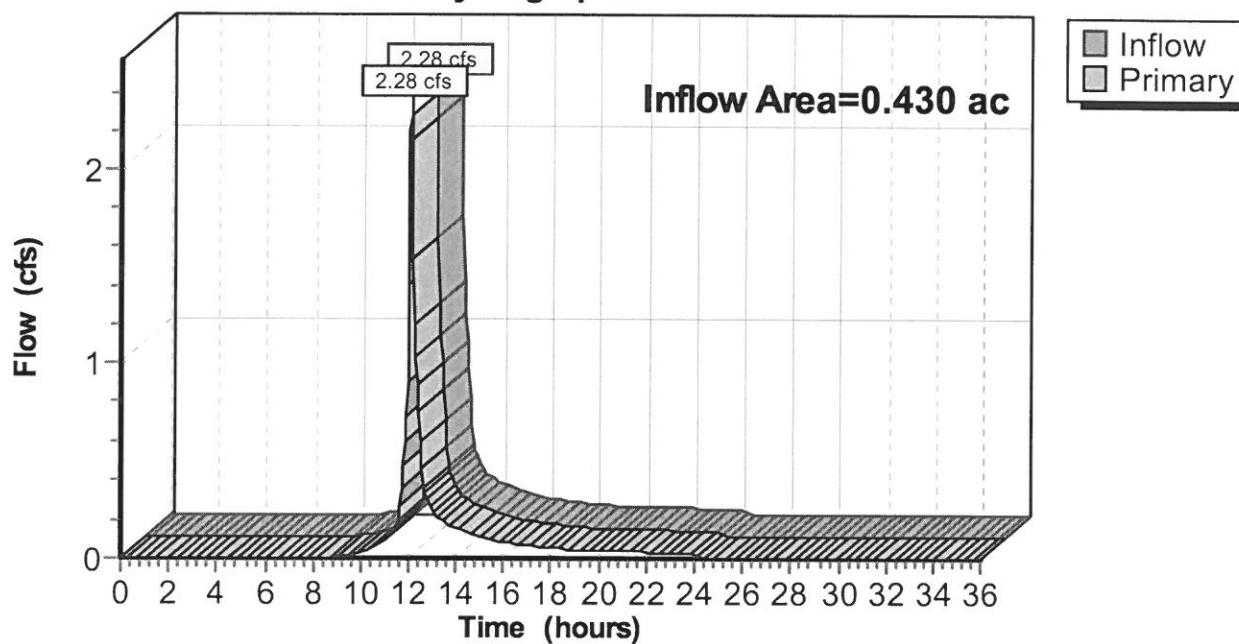
Summary for Pond 2-Lake: Lake Mahopac - Existing

Inflow Area = 0.430 ac, 10.99% Impervious, Inflow Depth = 4.65" for 100 Year Storm event
Inflow = 2.28 cfs @ 12.09 hrs, Volume= 0.167 af
Primary = 2.28 cfs @ 12.09 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3

Pond 2-Lake: Lake Mahopac - Existing

Hydrograph



Meyers - 56 Sycamore Road Mahopac

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Type III 24-hr 100 Year Storm Rainfall=8.92"

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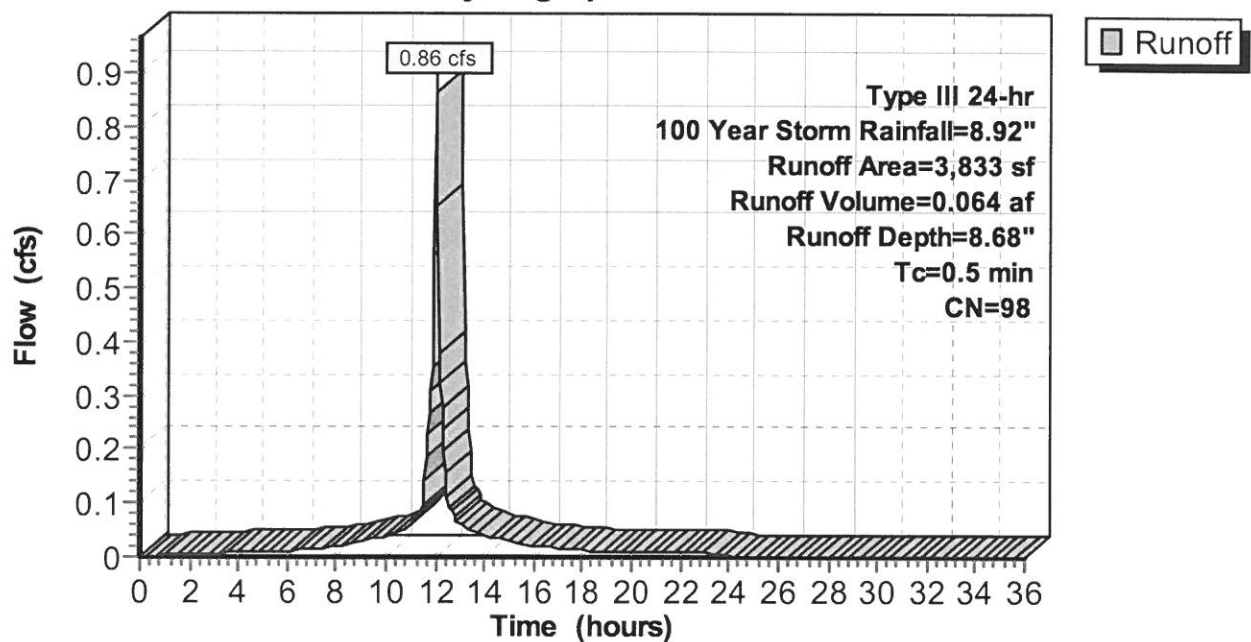
Summary for Subcatchment 3-impervious: House and drive

Runoff = 0.86 cfs @ 12.01 hrs, Volume= 0.064 af, Depth= 8.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 100 Year Storm Rainfall=8.92"

	Area (sf)	CN	Description
*	3,833	98	house and driveway
	3,833		100.00% Impervious Area

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

Subcatchment 3-impervious: House and drive**Hydrograph**

Meyers - 56 Sycamore Road Mahopac

Type III 24-hr 100 Year Storm Rainfall=8.92"

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Summary for Pond 4-cultecs: Cultec field

Inflow Area = 0.088 ac, 100.00% Impervious, Inflow Depth = 8.68" for 100 Year Storm event
 Inflow = 0.86 cfs @ 12.01 hrs, Volume= 0.064 af
 Outflow = 0.35 cfs @ 12.23 hrs, Volume= 0.064 af, Atten= 60%, Lag= 13.5 min
 Discarded = 0.09 cfs @ 12.18 hrs, Volume= 0.060 af
 Primary = 0.26 cfs @ 12.23 hrs, Volume= 0.004 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3
 Peak Elev= 496.91' @ 12.24 hrs Surf.Area= 620 sf Storage= 806 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 100.2 min (835.0 - 734.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	492.40'	332 cf	20.83'W x 17.50'L x 3.54'H Field A 1,291 cf Overall - 462 cf Embedded = 829 cf x 40.0% Voids
#2A	492.90'	462 cf	Cultec R-330XLHD x 8 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 4 rows
#3	495.90'	13 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 255 cf Overall x 5.0% Voids
		806 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
495.90	255	0	0
496.90	255	255	255

Device	Routing	Invert	Outlet Devices
#1	Discarded	492.40'	6.000 in/hr Exfiltration over Surface area
#2	Primary	496.90'	2.0" x 2.0" Horiz. Orifice/Grate X 10.00 columns X 10 rows C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.09 cfs @ 12.18 hrs HW=496.91' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=0.24 cfs @ 12.23 hrs HW=496.91' TW=0.00' (Dynamic Tailwater)
 ↳ **2=Orifice/Grate** (Weir Controls 0.24 cfs @ 0.34 fps)

Meyers - 56 Sycamore Road Mahopac

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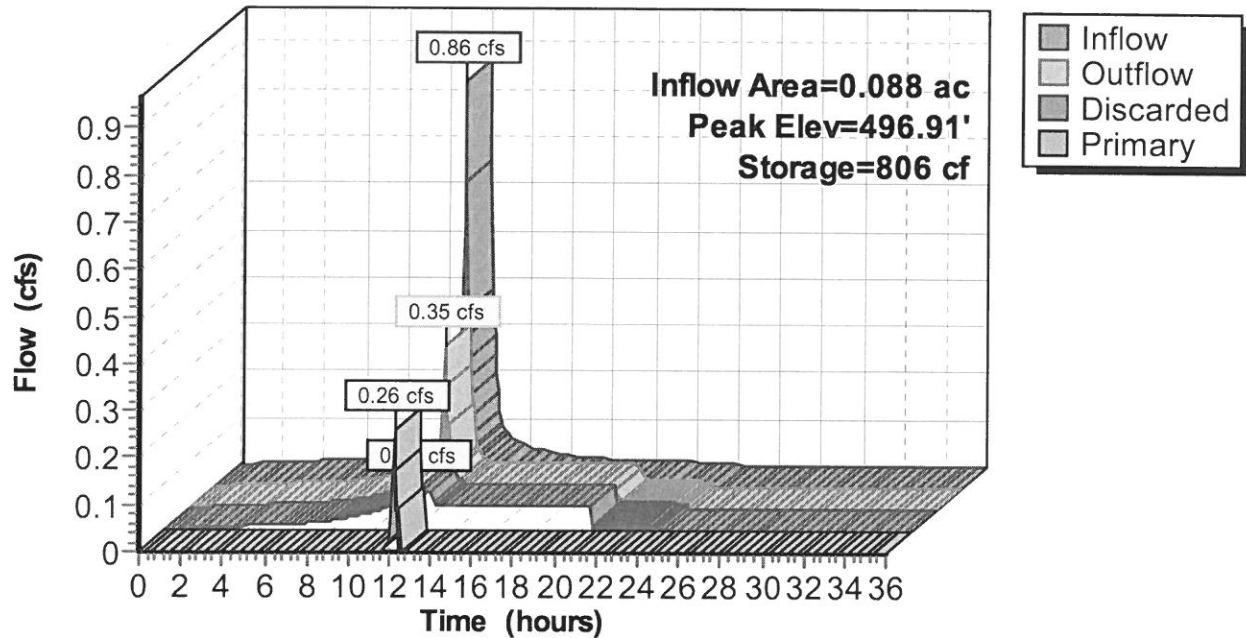
Type III 24-hr 100 Year Storm Rainfall=8.92"

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Pond 4-cultecs: Cultec field

Hydrograph



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Type III 24-hr 100 Year Storm Rainfall=8.92"

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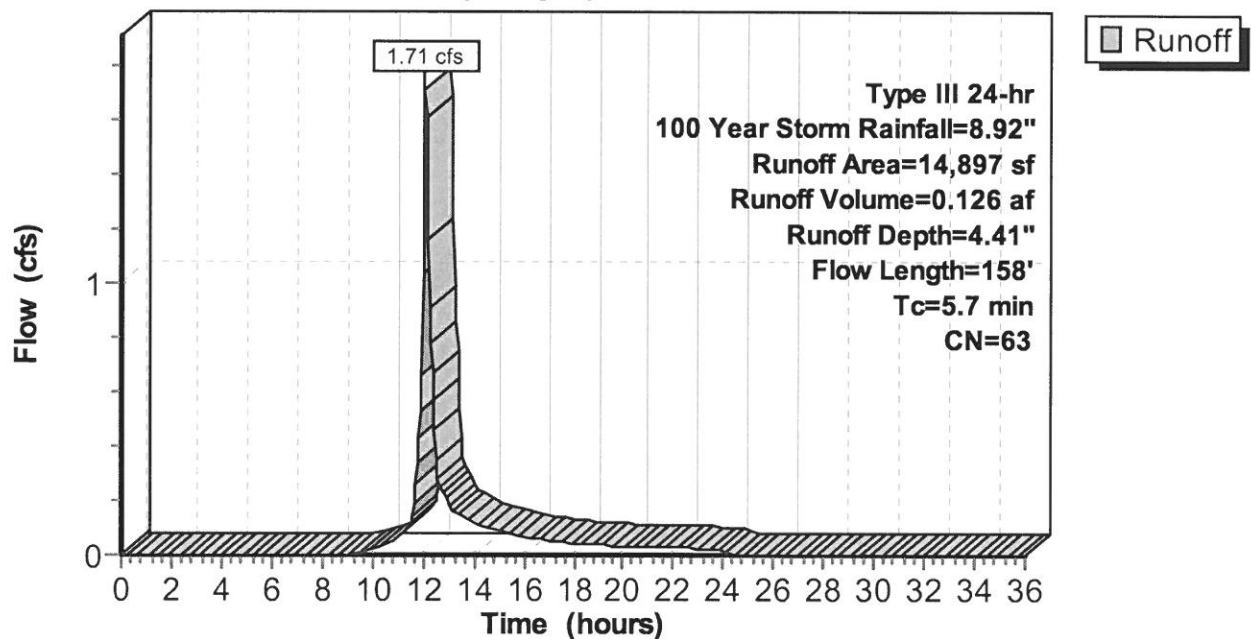
Summary for Subcatchment 5-remaining lot: Remaining Lot

Runoff = 1.71 cfs @ 12.09 hrs, Volume= 0.126 af, Depth= 4.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs
Type III 24-hr 100 Year Storm Rainfall=8.92"

	Area (sf)	CN	Description
*	14,196	61	"B" soil, lawn good condition
*	701	98	walks
	14,897	63	Weighted Average
	14,196		95.29% Pervious Area
	701		4.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	100	0.0900	0.32		Sheet Flow, existing lawn Grass: Short n= 0.150 P2= 3.33"
0.4	58	0.1030	2.25		Shallow Concentrated Flow, lower lawn area Short Grass Pasture Kv= 7.0 fps
5.7	158	Total			

Subcatchment 5-remaining lot: Remaining Lot**Hydrograph**

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Type III 24-hr 100 Year Storm Rainfall=8.92"

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Summary for Pond 6-Lake: Lake Mahopac - Proposed

Inflow Area = 0.430 ac, 24.21% Impervious, Inflow Depth = 3.61" for 100 Year Storm event
Inflow = 1.71 cfs @ 12.09 hrs, Volume= 0.129 af
Primary = 1.71 cfs @ 12.09 hrs, Volume= 0.129 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.06 hrs / 3

Pond 6-Lake: Lake Mahopac - Proposed

Hydrograph

